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Revisiones

El índice de revisión del catálogo está indicado en la Pág. 582. En la dirección www.bonfiglioli.com se encuentran disponibles los catálogos con las revisiones actualizadas.

# INFORMACIÓN GENERAL

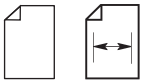
## 1 SÍMBOLOS Y UNIDADES DE MEDIDA

| Símbolos | Unidades de medida | Descripción |
|---|---|---|
| $A_{N\ 1,\ 2}$ | [N] | Carga axial nominal |
| $f_s$ | – | Factor de servicio |
| $f_T$ | – | Factor térmico |
| $f_{TP}$ | – | Factor de temperatura |
| **i** | – | Relación de reducción |
| **I** | – | Relación de intermitencia |
| $J_C$ | [Kgm$^2$] | Momento de inercia de la carga |
| $J_M$ | [Kgm$^2$] | Momento de inercia del motor |
| $J_R$ | [Kgm$^2$] | Momento de inercia del reductor |
| **K** | – | Factor de aceleración de las masas |
| $K_r$ | – | Constante de transmisión |
| $M_{1,\ 2}$ | [Nm] | Par |
| $M_{c\ 1,\ 2}$ | [Nm] | Par de cálculo |
| $M_{n\ 1,\ 2}$ | [Nm] | Par nominal |
| $M_{r\ 1,\ 2}$ | [Nm] | Par requerido |

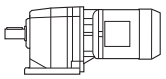
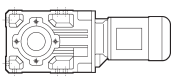
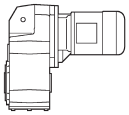
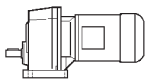
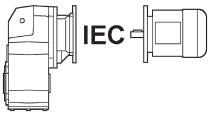
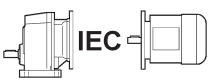
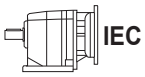
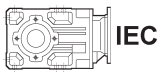
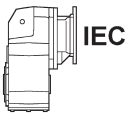
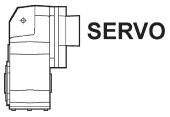
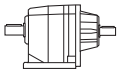
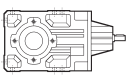
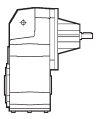
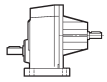
| Símbolos | Unidades de medida | Descripción |
|---|---|---|
| $n_{1,\ 2}$ | [min$^{-1}$] | Velocidad |
| $P_{1,\ 2}$ | [kW] | Potencia |
| $P_{N\ 1,\ 2}$ | [kW] | Potencia nominal |
| $P_{R\ 1,\ 2}$ | [kW] | Potencia requerida |
| $R_{C\ 1,\ 2}$ | [N] | Carga radial de cálculo |
| $R_{N\ 1,\ 2}$ | [N] | Carga radial nominal |
| **S** | – | Factor de seguridad |
| $t_a$ | [°C] | Temperatura ambiente |
| $t_f$ | [min] | Tiempo de funcionamiento con carga constante |
| $t_r$ | [min] | Tiempo de reposo |
| $\eta_d$ | – | Rendimiento dinámico |
| $\eta_s$ | – | Rendimiento estático |
| $\varphi$ | – | Juego angular del eje lento (con eje rápido bloqueado) |

$_1$ valor correspondiente al eje de entrada

$_2$ valor correspondiente al eje de salida

| | |
|---|---|
|  | Este símbolo indica informaciones técnicas de particular importancia que no se han de desatender |
|  | Este símbolo indica la página en la que se encuentra la información. |
|  | Este símbolo muestra las referencias angulares para la indicación de la dirección de la carga radial (el eje está visto de frente). |

| | |
|---|---|
|  | Símbolo que hace referencia al peso de los reductores y motorreductores. Los valores indicados en las tablas de los motorreductores incluyen tanto el peso del motor de 4 polos como el peso del lubricante que contiene, según lo indicado por BONFIGLIOLI RIDUTTORI. |

| Serie C | Serie A | Serie F | Serie S | |
|---|---|---|---|---|
|  |  |  |  | Motorreductor con motor integrado. |
|  |  |  |  | Motorreductor con motor IEC. |
|  |  |  |  | Reductor predispuesto para acoplamiento a motor de tipo IEC. |
|  |  |  | | Reductor predispuesto para acoplar a servomotor. |
|  |  |  |  | Reductor con eje de entrada cilíndrico. |

## 2 PAR

### 2.1 Par nominal $M_{n2}$ [Nm]

Es el par transmisible en la salida con carga continua uniforme, referido a la velocidad de entrada $n_1$ y a la correspondiente velocidad de salida $n_2$.
Se calcula sobre la base de un factor de servicio $f_s$ = 1.

### 2.2 Par resistente $M_{r2}$ [Nm]

Representa el par solicitado por la aplicación en cuestión y deberá ser siempre igual o menor que el par de salida nominal $M_{n2}$ del reductor seleccionado.

### 2.3 Par de cálculo $M_{c2}$ [Nm]

Es el valor del par que se utiliza para la selección del reductor considerando el par solicitado $M_{r2}$ y el factor de servicio $f_s$ y se obtiene con la formula:

$$M_{c2} = M_{r2} \cdot f_s < M_{n2} \quad (1)$$

## 3 POTENCIA

### 3.1 Potencia nominal a la entrada $P_{n1}$ [kW]

En las tablas de selección de reductores, es la potencia aplicable a la entrada referida a la velocidad $n_1$, considerando un factor de servicio $f_s$ = 1

## 4 POTENCIA TÉRMICA $P_t$ [kW]

$P_t$ es el valor que indica el límite térmico del reductor y representa la potencia transmisible en servicio continuo, a la temperatura ambiente $t_a$ = 20ºC, sin que se produzcan daños en los elementos del reductor o degradación del lubricante. Ver. tab (A1).
En el caso de servicio intermitente o de temperatura ambiente Inferior a los 20ºC, el valor de $P_t$ debe ser corregido por medio del factor $f_t$, indicado en la tabla (A2), es decir: $P_t' = P_t \times f_t$.

Para los reductores con más de dos etapas de reducción y/o con relación de reducción i > 45, la verificación de la potencia térmica no es necesaria ya que ésta ultima es con seguridad inferior a la potencia mecánica transmisible.

(A 1)

| $P_t$ [kW] 20 °C | | |
|---|---|---|
|  | $n_1$ = 1400 min$^{-1}$ | $n_1$ = 2800 min$^{-1}$ |
| **C 05 2** | — | — |
| **C 12 2** | — | — |
| **C 22 2** | — | — |
| **C 32 2** | — | 4.5 |
| **C 36 2** | 6.5 | 5.0 |
| **C 41 2** | 8.0 | 6.0 |
| **C 51 2** | 11.0 | 7.8 |
| **C 61 2** | 14.0 | 10.0 |
| **C 70 2** | 21 | 16.0 |
| **C 80 2** | 32 | 24 |
| **C 90 2** | 43 | 32 |
| **C 100 2** | 59 | 42 |

| $P_t$ [kW] 20 °C | | |
|---|---|---|
|  | $n_1$ = 1400 min$^{-1}$ | $n_1$ = 2800 min$^{-1}$ |
| **A 05 2** | 3.2 | 2.4 |
| **A 10 2** | 4.8 | 4.0 |
| **A 20 2** | 6.0 | 5.4 |
| **A 30 2** | 8.0 | 6.6 |
| **A 35 2** | 9.5 | 8.2 |
| **A 41 2** | 11.5 | 9.6 |
| **A 50 2** | 20 | 18.0 |
| **A 55 2** | 21 | 18.0 |
| **A 60 2** | 27 | 23 |
| **A 70 3** | 31 | 26 |
| **A 80 3** | 44 | 39 |
| **A 90 3** | 64 | 57 |

| $P_t$ [kW] 20 °C | | |
|---|---|---|
|  | $n_1$ = 1400 min$^{-1}$ | $n_1$ = 2800 min$^{-1}$ |
| **F 10 2** | 3.8 | 2.7 |
| **F 20 2** | 9.1 | 6.5 |
| **F 25 2** | 10.2 | 7.4 |
| **F 31 2** | 11.7 | 8.5 |
| **F 41 2** | 14.3 | 10.4 |
| **F 51 2** | 21.5 | 15.0 |
| **F 60 3** | 26.0 | 18.9 |
| **F 70 3** | 36.4 | 26.0 |
| **F 80 3** | 52 | 36 |
| **F 90 3** | 75 | 53 |

| $P_t$ [kW] 20 °C | | |
|---|---|---|
|  | $n_1$ = 1400 min$^{-1}$ | $n_1$ = 2800 min$^{-1}$ |
| **S 10 1** | 5.5 | 4.9 |
| **S 20 1** | 7.8 | 7.2 |
| **S 30 1** | 10.0 | 9.1 |
| **S 40 1** | 15.6 | 14.3 |
| **S 50 1** | 21 | 18.9 |

(A 2)

| $f_t$ | | | | | |
|---|---|---|---|---|---|
| $t_a$ [°C] | Servicio continuo | Servicio intermitente | | | |
| | | Grado de intermitencia [ I ] | | | |
| | | **80%** | **60%** | **40%** | **20%** |
| 40 | 0.80 | 1.1 | 1.3 | 1.5 | 1.6 |
| 30 | 0.85 | 1.3 | 1.5 | 1.6 | 1.8 |
| 20 | 1.0 | 1.5 | 1.6 | 1.8 | 2.0 |
| 10 | 1.15 | 1.6 | 1.8 | 2.0 | 2.3 |

La relación de intermitencia (I)% se obtiene a partir de la relación entre el tiempo de funcionamiento en carga $t_f$ y el tiempo total ($t_f + t_f$), expresado en porcentaje.

$$I = \frac{t_f}{t_f + t_r} \cdot 100 \qquad (2)$$

Deberá cumplirse la condición:

$$P_{r1} \leq P_t \times f_t \qquad (3)$$

## 5 RENDIMIENTO

### 5.1 Rendimiento dinámico $\eta_d$

Viene dado por la relación entre la potencia de salida $P_2$ y la potencia de entrada $P_1$, según la relación:

$$\eta_d = \frac{P_2}{P_1} \cdot 100 \qquad [\%] \qquad (4)$$

(A 3)

|  | **2 x**  | **3 x**  | **4 x**  |
|---|---|---|---|
| $\eta_d$ | 95% | 93% | 90% |

|  | **2 x**  | **3 x**  | **4 x**  |
|---|---|---|---|
| $\eta_d$ | 94% | 91% | 89% |

|  | **2 x**  | **3 x**  | **4 x**  |
|---|---|---|---|
| $\eta_d$ | 95% | 93% | 90% |

|  | **1 x**  |
|---|---|
| $\eta_d$ | 98% |

## 6 RELACIÓN DE REDUCCIÓN

El valor de la relación de reducción de la velocidad, identificado por el símbolo [ i ], se calcula a partir de la velocidad de entrada $n_1$ y de la velocidad de salida $n_2$ utilizando la siguiente expresión:

$$i = \frac{n_1}{n_2} \quad (5)$$

En el catálogo, la relación de reducción es normalmente, un número con un sólo decimal o ninguno si i > 1000.
Si se precisa conocer el número completo con todos los decimales, consúltese el Servicio Técnico de Bonfiglioli Riduttori.

## 7 VELOCIDAD ANGULAR

### 7.1 Velocidad a la entrada $n_1$ [$min^{-1}$]

Es la velocidad correspondiente al tipo de motorización seleccionado; los valores de catálogo se refieren a las velocidades de los motores eléctricos de simple y doble polaridad utilizados habitualmente.
Si el reductor es accionado por un mecanismo de transmisión a la entrada, es preferible utilizar velocidades inferiores a 1400 r.p.m. con el fin de garantizar condiciones optimas de funcionamiento.
Se admiten velocidades a la entrada superiores, teniendo en cuenta la evidente disminución del par nominal $M_{n2}$ del reductor.

### 7.2 Velocidad a la salida $n_2$ [$min^{-1}$]

Se obtiene a partir de la velocidad a la entrada $n_1$ y de la relación de reducción **i**, según la ecuación:

$$n_2 = \frac{n_1}{i} \quad (6)$$

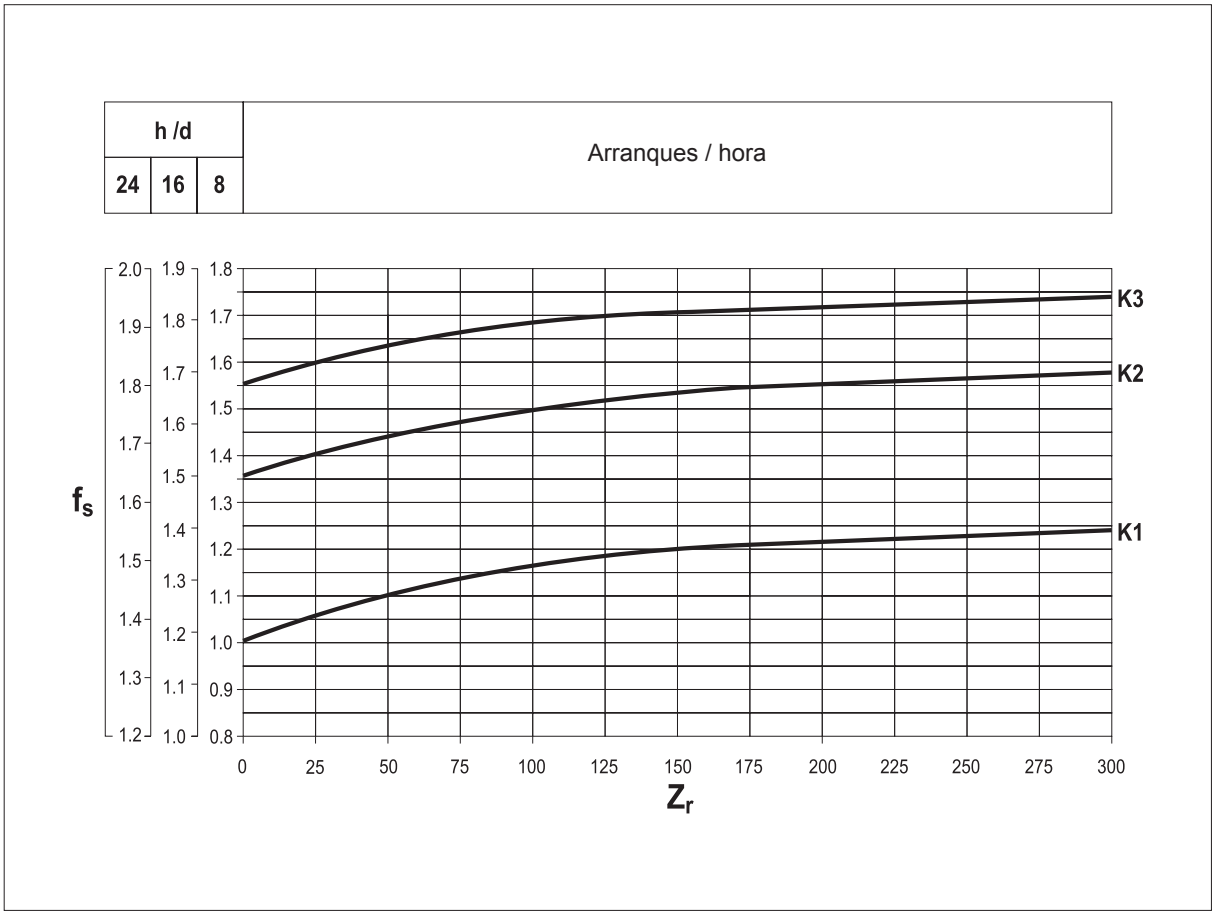
## 8 MOMENTO DE INERCIA $J_r$ [$Kgm^2$]

Los momentos de inercia indicados en el catálogo se refieren al eje de entrada del reductor por lo que, en el caso de acoplamiento directo, ya están referidos a la velocidad del motor.

## 9 FACTOR DE SERVICIO $f_s$

El factor de servicio es el parámetro que traduce a un valor numérico la dificultad del servicio a que el reductor estará solicitado, teniendo en cuenta, con inevitable aproximación, el funcionamiento diario, las variaciones de la carga y las posibles sobrecargas, conjuntamente con la aplicación específica del reductor.
En el gráfico (A4) abajo expuesto, el factor de servicio se obtiene después de haber seleccionado la columna correspondiente a las horas de funcionamiento diarias, por intersección entre el número de arranques / horas y una de las curvas (K1, K2, K3). Las curvas K_ están asociadas a la naturaleza del servicio (aproximadamente: uniforme, medio y pesado) a través del factor de aceleración de las masas K, ligado a la relación entre las inercias de las masas conducidas y el motor.
Independientemente del valor del factor de servicio así obtenido, destacamos que existen aplicaciones entre las cuales, como por ejemplo la elevación de cargas, para las que la rotura de un elemento del reductor, podría representar un riesgo de lesiones del personal que opere en las proximidades.
En caso de dudas de la aplicación concernientes a los posibles riesgos, aconsejamos consultar previamente con nuestro Servicio Técnico.

(A 4)



## 9.1 Factor de aceleración de las masas, K

El parámetro sirve para la seleccionar la curva correspondiente a un determinado tipo de carga. El valor se obtiene de la relación:

(A 5)

$$K = \frac{J_c}{J_m}$$

→

$J_c$ = Momento de inercia de las masas conducidas, referido al eje del motor

$J_m$ = Momento de inercia del motor

| | | |
|---|---|---|
| **K ≤ 0,25** | → **K1** | Carga uniforme |
| **0,25 < K ≤ 3** | → **K2** | Carga con choques moderados |
| **3 < K ≤ 10** | → **K3** | Carga con choques fuertes |
| **K > 10** | → | Se recomienda contactar con nuestro Servicio Técnico. |

# 10 MANTENIMIENTO

Los reductores suministrados con lubricación permanente no necesitan sustituciones periódicas del aceite.
Para los otros tipos se recomienda una primera sustitución del lubricante una vez transcurridas las primeras 300 horas de funcionamiento, procediendo a un cuidadoso lavado interno con los detergentes adecuados. Evitar la mezcla de aceites minerales con aceites sintéticos.
Controlar periódicamente el nivel del lubricante efectuando la sustitución indicados en los intervalos indicados en la tabla (A6).

(A 6)

| Temperatura del aceite [°C] | Intervalo de lubricación [h] | |
|---|---|---|
| | Aceite mineral | Aceite sintético |
| < 65 | 8000 | 25000 |
| 65 - 80 | 4000 | 15000 |
| 80 - 95 | 2000 | 12500 |

## 11 SELECCIÓN

Para seleccionar correctamente un reductor o un motorreductor es necesario disponer de algunos datos fundamentales que hemos resumido en la tabla (A7).
Si el clientelo desea, esta tabla podrá ser cumplimentada y remitida a nuestro Servicio Técnico que se encargará de la selección de la motorización más adecuada para la aplicación indicada.

(A 7)

| | | |
|---|---|---|
| | Tipo de aplicación ..... | |
| $P_{r2}$ | Potencia de salida a $n_2$ máx | .....kW |
| $P_{r2}$' | Potencia de salida a $n_2$ min | .....kW |
| $M_{r2}$ | Par torsor de salida a $n_2$ máx | .....Nm |
| $n_2$ | Velocidad de giro a la salida máx | .....$min^{-1}$ |
| $n_2$' | Velocidad de giro a la salida mín | .....$min^{-1}$ |
| $n_1$ | Velocidad de giro a la entrada máx | .....$min^{-1}$ |
| $n_1$' | Velocidad de giro a la entrada mín | .....$min^{-1}$ |
| $R_{c2}$ | Carga radial sobre el eje de salida | .....N |
| $x_2$ | Distancia de aplicación de la carga (*) | .....mm |
| | Orientación de la carga en la salida | .....   |
| | Sentido de giro del eje de salida (O-AO) (**) | ..... |
| $R_{c1}$ | Carga radial sobre el eje de entrada | .....N |
| $x_1$ | Distancia de aplicación de la carga (*) | .....mm |
| | Orientación de la carga el eje de entrada | .....   |
| | Sentido de giro del eje de entrada (O-AO) (**) | ..... |
| $A_{c2}$ | Carga axial sobre el eje de salida (+/–) (***) | .....N |

| | | |
|---|---|---|
| $A_{c1}$ | Carga axial sobre el eje a la entrada (+/–) (***) | .....N |
| $J_c$ | Momento de inercia de la carga | .....$Kgm^2$ |
| $t_a$ | Temperatura ambiente | .....C° |
| | Eltura sobre el nivel del mar | .....m |
| | Tipo de servicio según normas CEI | S...../.....% |
| Z | Frecuencia de arranque | .....1/h |
| | Tensión de alimentación del motor | .....V |
| | Tensión de alimentación del freno | .....V |
| | Frecuencia | .....Hz |
| $M_b$ | Par de frenado | .....Nm |
| | Grado de protección del motor | IP..... |
| | Clase de aislamiento | ..... |

(*) La distancia x1-2 es la comprendida entre el punto de aplicación de la fuerza y el resalte del eje. (Si no se indica, se considerará que la fuerza actúa sobre el punto medio de la parte externa del eje).

(**) O = Horario
AO = Anti – horario

(***) + = compresión
– = tracción

## 11.1 Selección de los motorreductores

a) Determinar el factor de servicio $f_s$ en función del tipo de carga (factor K), del número de arranques por hora $Z_r$ y del numero de horas de funcionamiento.

b) A partir del par $M_{r2}$, conociendo $n_2$, y el rendimiento dinámico $\eta_d$, calcular la potencia de entrada.

$$P_{r1} = \frac{M_{r2} \cdot n_2}{9550 \cdot \eta_d} \text{ [kW]} \quad (7)$$

El valor de $\eta_d$ para el reductor en cuestión se obtiene con las indicaciones del párrafo 5.

c) Buscar en las tablas de datos técnicos de los motorreductores la que corresponda a una potencia normalizada $P_n$:

$$P_n \geq P_{r1} \quad (8)$$

Si no se indica lo contrario, la potencia $P_n$ de los motores indicada en el catálogo, se refiere al servicio continuo S1.
Para los motores utilizados en condiciones distintas de S1, será necesario identificar el tipo de servicio previsto de acuerdo con las normas CEI 2-3/IEC 34-1.
En particular, para servicios de S2 a S8 y para tamaños de motores iguales o inferiores a 132, es posible obtener un incremento de la potencia con respecto a la prevista para el servicio continuo. Por lo tanto, la condición a satisfacer será:

$$P_n \geq \frac{P_{r1}}{f_m} \quad (9)$$

El factor de incremento $f_m$ se obtiene de la tabla (A8).

## 11.2 Relación de intermitencia

$$I = \frac{t_f}{t_f + t_r} \cdot 100 \quad (10)$$

$t_f$ = tiempo de funcionamiento carga constante
$t_r$ = tiempo de reposo

(A 8)

| | SERVICIO | | | | | | |
|---|---|---|---|---|---|---|---|
| | **S2** | | | **S3*** | | | **S4 - S8** |
| | Duración del ciclo [min] | | | Relación de intermitencia (I) | | | Contacte con el Servicio Técnico de Bonfiglioli Riduottori |
| | **10** | **30** | **60** | **25%** | **40%** | **60%** | |
| $f_m$ | 1.35 | 1.15 | 1.05 | 1.25 | 1.15 | 1.1 | |

* La duración del ciclo deberá ser, no obstante, igual o inferior a 10 minutos. Si fuese superior, consulte con nuestro Servicio Técnico.

En la sección correspondiente a la potencia instalada $\mathbf{P_n}$, seleccionar en esta el reductor o el motorreductor que desarrolle la velocidad de funcionamiento mas próxima a la velocidad $\mathbf{n_2}$ deseada y para la cual el factor de seguridad **S** sea igual o superior al factor de servicio $\mathbf{f_s}$.

El factor de seguridad se obtiene según la formula:

$$S = \frac{M_{n2}}{M_2} = \frac{P_{n1}}{P_1} \quad (11)$$

Las tablas de datos técnicos de los motorreductores se refieren a la velocidad de motores de 2, 4 y 6 polos alimentados a 50 Hz. Si se prevé la utilización de motores con velocidades distintas a las indicadas, la selección deberá realizarse de acuerdo con el procedimiento de selección de reductores.

### 11.3 Selección de reductores y reductores predispuestos para motores IEC

a) Determinar el factor de servicio $f_s$.

b) Conociendo el par de salida $M_{r2}$ de salida requerido por la aplicación, se procede a la definición del par de cálculo:

$$M_{c2} = M_{r2} \cdot f_s \quad (12)$$

c) A partir de la velocidad a la salida $n_2$ requerida y la de la entrada $n_1$ disponible, se calcula la relación de reducción:

$$i = \frac{n_1}{n_2} \quad (13)$$

Disponiendo de los datos de $M_{c2}$ y de i, se buscará en las tablas correspondientes a la velocidad $n_1$ el reductor que, en función de la relación de reducción [i] más próxima a la calculada, tenga un par nominal:

$$M_{n2} \geq M_{c2} \quad (14)$$

Si al reductor seleccionado debe acoplarse un motor eléctrico, verificar la compatibilidad consultando el párrafo “PREDISPOSICIONES POSIBLES”.

## 12 VERIFICACIONES

Una vez realizada la selección del reductor, o motorreductor, se recomienda efectuar las siguientes verificaciones:

a) Potencia térmica
Asegurarse que la potencia térmica del reductor tenga un valor igual o mayor a la potencia requerida por la aplicación según la ecuación (3) en la Pág. 6; en caso contrario, seleccionar un reductor de tamaño superior o bien prever un sistema de refrigeración forzada.

b) Par máximo
En general, el par máximo (entendido como pico de carga instantáneo) aplicable al reductor no deberá superar el 200 % del par nominal $M_{n2}$; por lo tanto, verificar que este límite no sea superado, adoptando si fuese necesario, los dispositivos adecuados para la limitación del par.
Para los motores trifásicos de doble polaridad es necesario prestar especial atención al par de conmutación instantáneo que se genera durante la conmutación de alta a baja velocidad, ya que este valor puede ser decididamente más alto que el propio par máximo. Un método simple y económico de reducir dicho par consiste en alimentar sólo dos fases del motor durante la conmutación (el tiempo de alimentación a dos fases puede ser regulado a través de un relé temporizado):

$M_{g2} = 0.5 \cdot M_{g3}$
$M_{g2}$ = Par de conmutación alimentando 2 fases
$M_{g3}$ = Par de conmutación alimentando 3 fases

En todo caso, se recomienda contactar nuestro Servicio Técnico.

c) Cargas radiales
Verificar que las cargas radiales que actúan sobre los ejes de entrada y/o salida se encuentren dentro de los valores
de catálogo admitidos. Si son superiores, aumentar el tamaño del reductor o modificar el apoyo de las cargas.
Recordamos que todos los valores indicados en el catálogo se refieren a cargas aplicadas en el punto medio de la parte externa del eje por lo que, en fase de verificación, es indispensable tener en cuenta esta condición procediendo a determinar, en caso necesario, con las fórmulas adecuadas, la carga admisible a la distancia $x_{1-2}$ deseada. Véanse los párrafos correspondientes a las cargas radiales.

d) Cargas axiales
También, las posibles cargas axiales deben ser comparadas con las admisibles.
En el caso de cargas axiales muy elevadas o combinadas con cargas radiales, se recomienda consultar con nuestro Servicio Técnico.

e) Arranques / hora
Para servicios diferentes de S1, con un número destacado de arranques / hora se deberá tener en cuenta un factor Z (determinable con las indicaciones presentes en el capítulo de motores) que define el número máximo de arranques específico para la aplicación requerida.

## 13 INSTALACIÓN

Es muy importante para la instalación del reductor, atenerse a las siguientes normas:

a) Asegurarse de que la fijación del reductor sea estable para evitar vibraciones. Instalar (si se prevé choques, sobrecargas prolongadas o posibles atascos) acoplamientos hidráulicos, embragues, limitadores de par, etc.

b) En fase de pintura se deberán proteger las superficies mecanizadas y el labio externo de los retenes para evitar que la pintura reseque la goma, perjudicando la estanqueidad del propio retén.

c) Los elementos que van acoplados a los ejes de salida del reductor deben ser mecanizados con tolerancia ISO H7 para evitar (ajustes forzados) bloqueos excesivos, durante la fase de montaje que podrían producir daños irreparables en el reductor. Para el montaje y desmontaje de dichos elementos se recomienda el empleo de tirantes y extractores adecuados, utilizando el taladro roscado presente en los extremos de los ejes.

d) Las superficies de contacto deberán estar limpias y ser tratadas con productos protectores antes del montaje, para evitar la oxidación y el consiguiente bloqueo de las piezas.

e) Antes de la puesta en marcha del reductor, verificar que la maquina que lo incorpora esté conforme a las disposiciones de la Directiva Máquinas 89/392 y sucesivas actualizaciones.

f) Antes de la puesta en marcha de la maquina, asegurarse que la posición del nivel de lubricante esté conforme a la posición de montaje del reductor y que la viscosidad sea la adecuada al tipo de carga (consultar el Manual de Uso y Mantenimiento disponible en la página web www.bonfiglioli.com).

g) En el caso de instalación al aire libre es necesario aplicar protecciones adecuadas con la finalidad de evitar la exposición directa a los agentes atmosféricos y a la radiación solar.

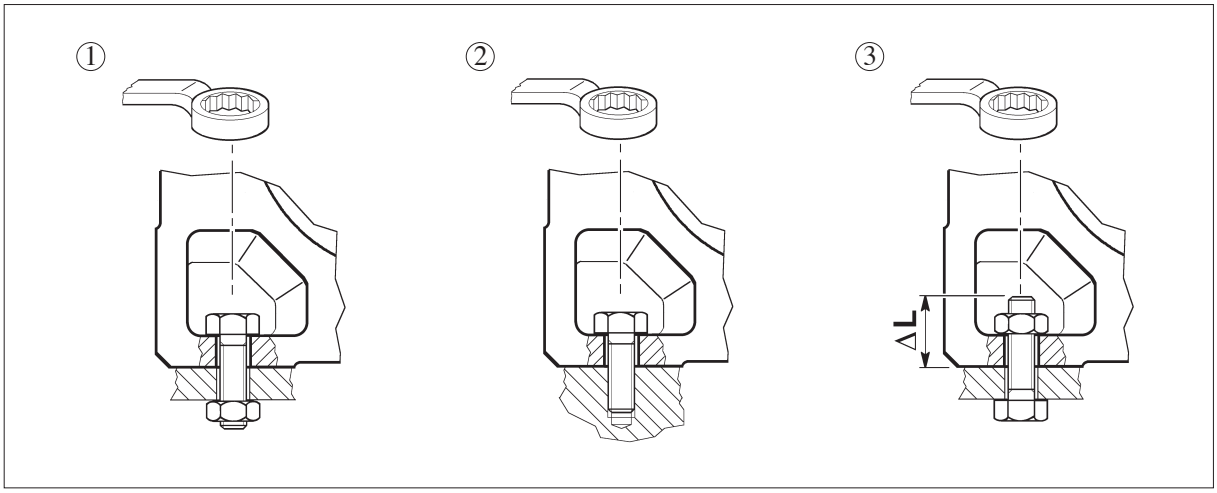
### 13.1 Montaje del servomotor mediante aro de apriete (entrada tipo SC)

Girar el aro de apriete hasta alinear la entalla en correspondencia con la existente en el eje de entrada del reductor.
Si el eje del motor está dotado de chaveta, esta debe eliminarse y el chavetero correspondiente debe hallarse alineado sobre el mismo plano, dispuesto en la misma parte del tornillo de apriete Una vez orientado así el eje del motor, situar la brida a tope con la brida del reductor y apretar los tornillos de fijación.
Introducir una llave dinamométrica a través del taladro situado en la cara lateral de la brida y apretar el tornillo con el par indicado en la tabla de dimensiones.

## 14 INSTRUCCIONES DE INSTALACION

Los esquemas incluidos en la tabla (A9) se representan 3 formas posibles para la instalación de los reductores tipo A, a la estructura de la máquina operadora. Para cada uno de estos casos, en la tabla (A10) están indicadas las dimensiones de los tornillos hexagonales a utilizar. Además, para facilitar el montaje aconsejamos el uso de una llave del tipo mostrado en la tabla (A9).

(A 9)




(A 10)

| | Tipo de tornillo | | | |
|---|---|---|---|---|
| | ① | ② | ③ | **ΔL** (mm) |
| **A 05** | M8x22 | M8x20 | M8x ... | 22 |
| **A 10** | M8x25 | M8x20 | M8x … | 20 |
| **A 20** | M8x25 | M8x20 | M8x … | 20 |
| **A 30** | M10x30 | M10x25 | M10x … | 25 |
| **A 35** | M10x30 | M10x25 | M10x ... | 25 |
| **A 41** | M12x35 | M12x30 | M12x … | 30 |

| | Tipo de tornillo | | | |
|---|---|---|---|---|
| | ① | ② | ③ | **ΔL** (mm) |
| **A 50** | M14x45 | M14x40 | M14x … | 35 |
| **A 55** | M14x40 | M14x40 | M14x ... | 35 |
| **A 60** | M16x50 | M16x45 | M16x … | 40 |
| **A 70** | M20x60 | M20x55 | M20x … | 45 |
| **A 80** | M24x70 | M24x65 | M24x … | 55 |
| **A 90** | M24x90 | M24x80 | M24x … | 65 |

## 15 ALMACENAJE

Para un correcto almacenaje de los productos recibidos es necesario respetar las reglas siguientes:

a) Excluir las zonas al aire libre, zonas expuestas a la intemperie o con excesiva humedad.

b) Evitar el contacto directo con el pavimento interponiendo siempre bases de madera o similares.

c) Para periodos de almacenaje prolongados, las superficies de unión como bridas, ejes y acoplamientos deberán protegerse con productos antioxidantes adecuados (Mobilarma 248 o equivalente).

En este caso, los reductores deberán ser posicionados con el tapón respiradero en la posición más alta y llenados totalmente de aceite.
Antes de su puesta en marcha, los reductores deberá restablecerse el nivel con la correcta cantidad y el tipo de lubricante.

## 16 CONDICIONES DE SUMINISTRO

Los reductores se suministran como sigue:

a) Preparados para su instalación en la posición de montaje especificada en el pedido.

b) Verificados de acuerdo con las especificaciones internas;

c) Con las superficies de acoplamiento sin pintar;

d) Equipados con las tuercas y espárragos de montaje previstos para el montaje de motores (versión IEC).

e) Equipados con protecciones de material plástico en los ejes;

f) Equipados con cáncamos de suspensión (cuando corresponda).

## 17 ESPECIFICACIONES DE PINTURA

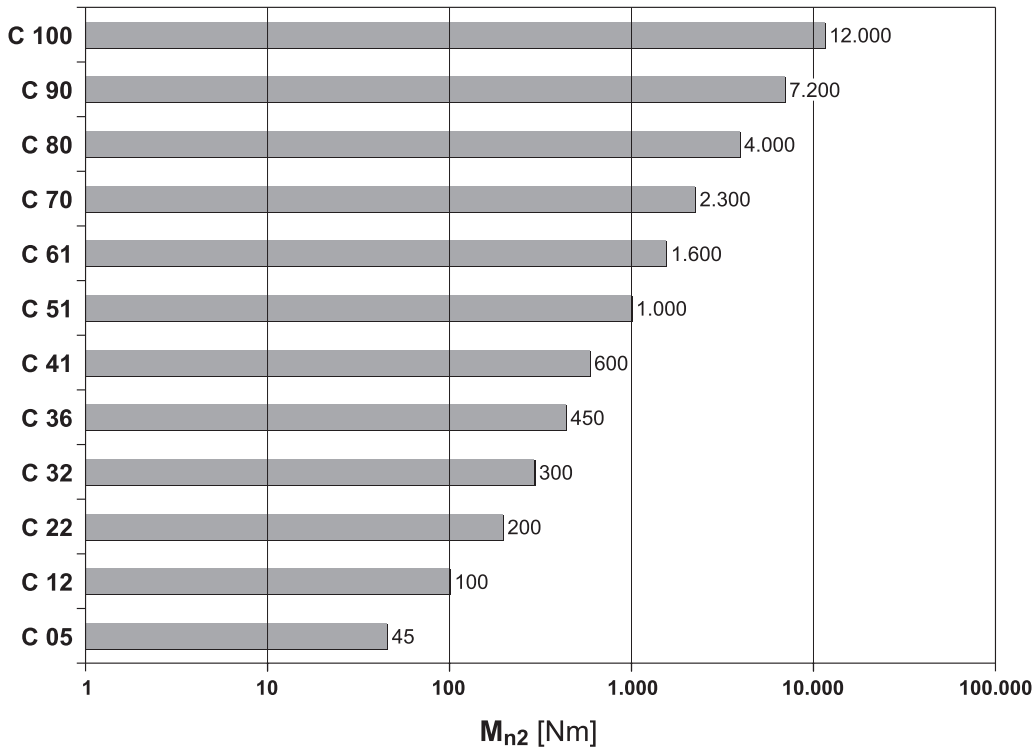
Las especificaciones de las pinturas aplicadas sobre los reductores (cuando corresponda) podrán ser solicitadas a las filiales o a los distribuidores que hayan suministrado los equipos.

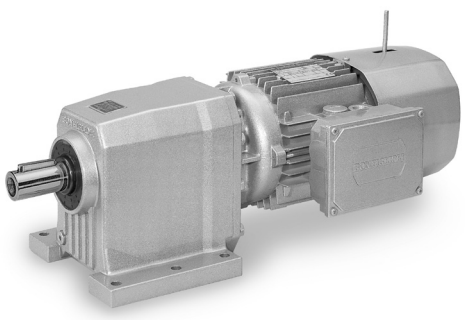


## 18 CARACTERÍSTICAS CONSTRUCTIVAS

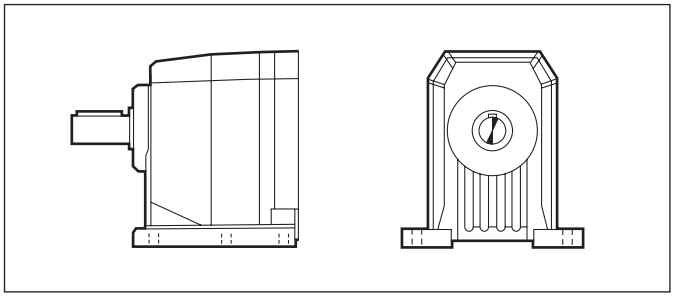
Las principales características constructivas son:
- modularidad
- diseño compacto
- montajes universales
- rendimientos elevados
- bajo nivel de ruido
- engranajes de acero aleado cementados y templados
- cajas de aluminio sin pintar en los tamaños 05, 12, 22, 32, y de fundición de alta resistencia, pintadas, para el resto de tamaños
- ejes de entrada y salida de acero de alta resistencia.

(B 11)



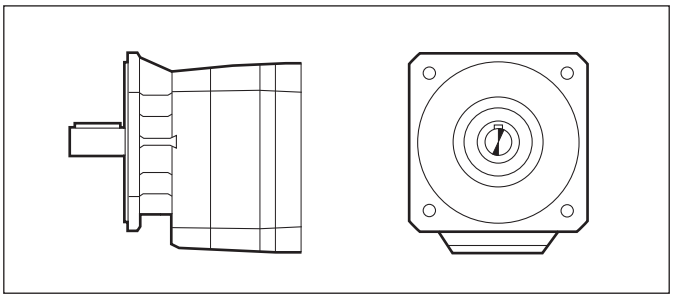
## 19 FORMAS CONSTRUCTIVAS



# P

**Patas integradas**

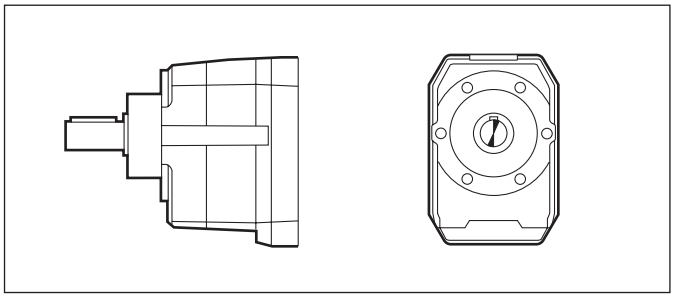
**C 05 ... C 100**



# F

**Brida integrada**

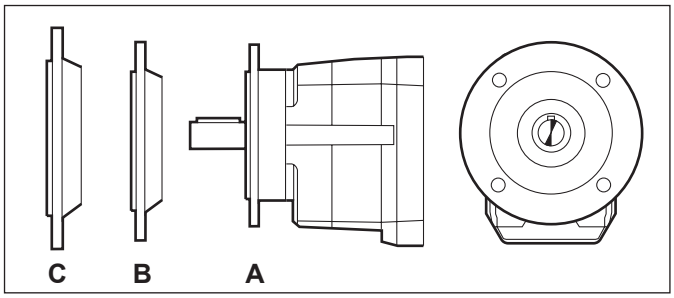
**C 05 ... C 32**
**C 70 ... C 100**



# U

**Caja universal UNIBOX**

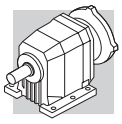
**C 12 ... C 61**




# UF

**UNIBOX brida de salida intercambiable**

**C 12 ... C 61**



## 20 DESIGNACIÓN

REDUCTOR

**C 32 2 F 52.4 S1 B5 .....**

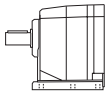
OPCIONES 22

POSICIÓN DE MONTAJE

C...P: **B3** (estandar), B6, B7, B8, V5, V6

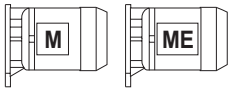
C...F/U/UF: **B5** (estandar), B51, B53, B52, V1, V3 24

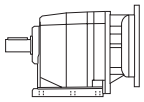
IDENTIFICACIÓN DE LA ENTRADA



(C05...C100)

**S05 ... S5**

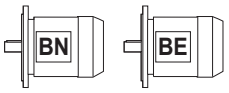


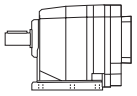



(C12...C100)

**IEC_**

**P63 ... P180**

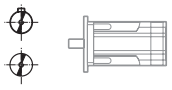


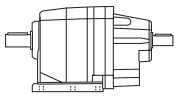



(C12...C61)

**SK_**

**SC_**



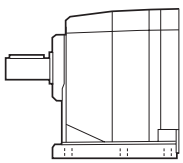


(C12...C100)

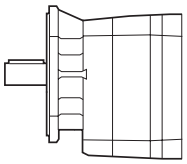
**HS**

RELACIÓN DE REDUCCIÓN

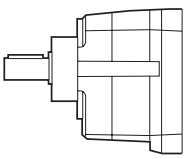
FORMA CONSTRUCTIVA



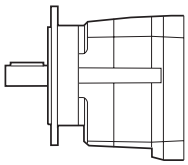
**P**
(C05...C100)



**F**
(C05...C32)
(C70...C100)



**U**
(C12...C61)

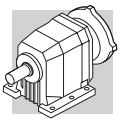


**UFA**
**UFB**
**UFC**
(C12...C61)

Nº DE ETAPAS DE REDUCCIÓN
**2**, **3**, **4**

TAMAÑO REDUCTOR
**05**, **12**, **22**, **32**, **36**, **41**, **51**, **61**, **70**, **80**, **90**, **100**

TIPO: **C** = Coaxial



MOTOR | FRENO

**M 1LA 4** 230/400-50 IP54 CLF ..... **W FD** 7.5 R SB 220 SA .....

OPCIONES 22

ALIMENTACIÓN FRENO 526 531 536 539

TIPO RECTIFICADOR AC/DC
**NB**, **SB**, **NBR**, **SBR** 527 532

PALANCA DESBLOQUEO FRENO
**R**, **RM** 541

PAR DE FRENADO 528 533 536 539

TIPO DE FRENO
**FD**, **AFD** (freno c.c.)
**FA**, **BA** (freno c.a.) 525 530 535 538

POSICIÓN CAJA DE BORNES
**W** (por defecto), **N**, **E**, **S** 24

FORMA CONSTRUCTIVA
— (motor integrado)
**B5** (motor IEC)

CLASE DE AISLAMIENTO
**CL F** estandar
**CL H** opción 492 519

GRADO DE PROTECCIÓN
**IP55** standard (IP54 - motor freno) 492 514

TENSIÓN - FRECUENCIA 488 517

NÚMERO DE POLOS
**2**, **4**, **6**, **2/4**, **2/6**, **2/8**, **2/12**, **4/6**, **4/8**

TAMAÑO MOTOR
**0B ... 5LA** (motor integrado)
**63A ... 280M** (motor IEC)

TIPO MOTOR
**M** = trifásico integrado
**BN** = trifásico IEC
**ME** = trifásico integrado, clase IE2
**BE** = trifásico IEC, clase IE2

## 20.1 Opciones reductores

**SO**
Los reductores C05, C12, C22, C32, C36, C41, normalmente suministrados con lubricante por parte de BONFIGLIOLI RIDUTTORI, se suministran sin Lubricante.

**LO**
Los reductores C51, C61, C70, C80, C90, C100, normalmente suministrados sin aceite lubricante, pueden solicitarse con aceite sintético del tipo utilizado normalmente por BONFIGLIOLI RIDUTTORI y llenados de acuerdo con la posición de montaje solicitada.

**DL**
Eje lento con doble retén.

**DV**
Dos retenes en el eje de entrada. (Disponible únicamente en los motorreductores compactos).

**VV**
Reten de fluoro-elastómero en el eje rápido.

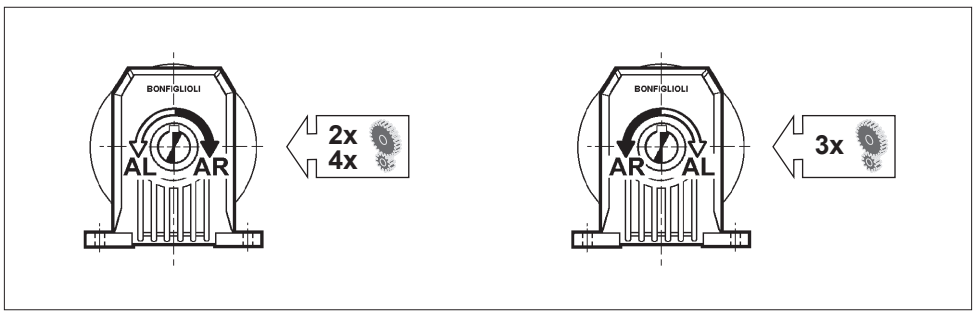
**PV**
Todos los retenes de fluoro-elastómero.

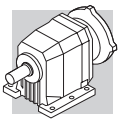
## 20.2 Opciones motores

**AA, AC, AD**
Posición angular de la palanca de desbloqueo del freno con respecto a la caja de bornes, vista desde el lado del ventilador. Posición normalizada = 90º en sentido horario. AA = 0º, AC = 180º, AD = 90º en sentido antihorario.

**AL, AR**
Para los motorreductores equipados con motor compacto serie M ó ME, está disponible la opción antirretorno, colocado en el mismo motor como se indica en la sección de motores eléctricos de este catálogo. La tabla B12 muestra el sentido de rotación libre del reductor en base al cual se debe de hacer la selección de la opción.

(B 12)





**CF**
Filtro capacitativo.

**D3**
n° 3 sonda bimetálica en los bobinados con temperatura a 150 ºC .

**E3**
nº 3 termistores en el bobinado, con temperatura 150 ºC.

**F1**
Volante de inercia.

**H1**
Resistencias de caldeo Alimentación normalizada 230 V ± 10 %.

**PN**
Potencia a 60 Hz. Correspondiente a la potencia normalizada a 50 Hz.

**PS**
Doble eje (excluye posiciones RC y U1).

**RC**
Sombrerete antilluvia (excluye opción PS).

**RV**
Equilibrado del rotor para grado de vibración R.

**TC**
La opción de sombrerete tipo TC, deberá ser especificada para instalaciones en ambientes propios de la industria textil.
Esta opción excluye las variantes EN_ y no es aplicable a motores con freno de tipo BA.

**TP**
Tropicalización.

**U1**
Ventilación forzada (excluye opción PS y CUS).

**U2**
Ventilador sin caja de bornes, precableado interiormente. Excluye la opción PS y CUS.
Disponible para motores:
BN 71,
BE 80 ... BE 132,
M1,
ME2 ... ME4.

**Para mayor información sobre las opciones, consultar el correspondiente capitulo en la sección de motores eléctricos.**

## 21 LUBRICACIÓN

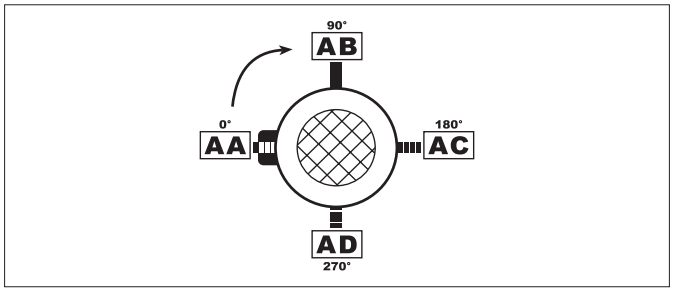
Los componentes internos de los reductores Bonfiglioli se lubrican mediante un sistema mixto de inmersión y barboteo del aceite. Los tamaños C05, C12, C22, C32, C36 y C41 se suministran normalmente desde fábrica con la carga de aceite.
Los grupos C51 y superiores se suministran sin aceite y es responsabilidad del usuario el llenado de aceite antes de la puesta en servicio. En ambos casos, según la versión, antes de la puesta en marcha será necesario substituir el tapón ciego usado en transporte por un tapón depresor que se suministran el reductor.
Para las tablas de situación de los tapones y de la cantidad de lubricante, consultar el Manual de uso y mantenimiento (disponible en www.bonfiglioli.com).
El lubricante ”long life” que se suministra de serie es de naturaleza sintética y a menos que sea contaminado por agentes externos, no requiere sustituirse periódicamente durante toda la vida del reductor. El funcionamiento del reductor está calculado para una temperatura ambiente de entre -20ºC y +40ºC. Para temperaturas ambiente comprendidas entre -20ºC y -10ºC , solo se debe poner en funcionamiento el reductor después de haber efectuado un calentamiento progresivo y homogéneo del grupo o, en todo caso, hacerlo funcionar sin carga. La carga podrá ser aplicada al eje del reductor cuando la temperatura del mismo alcance los -10ºC o más.

## 22 POSICION DE MONTAJE Y ORIENTACIÓN DE LA CAJA DE BORNES

La orientación de la caja de bornes del motor se identifica observando el motor por el lado del ventilador; la orientación estándar está resaltada en negrita (W).

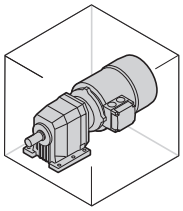
**Posición angular de la palanca del desbloqueo del freno**
En los motores freno, la palanca de desbloqueo del freno (opcional) tiene la orientación estándar a 90º respecto a la caja de bornes (posición AB); en caso de requerir una orientación distinta, especifíquese mediante los correspondientes códigos de opciones.

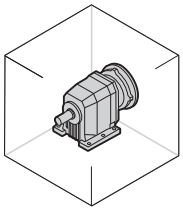
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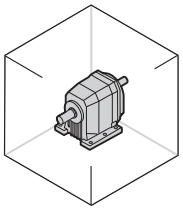


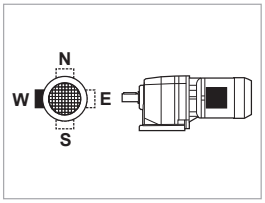
# C ... P

## B3

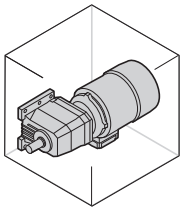

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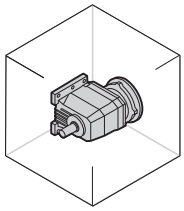

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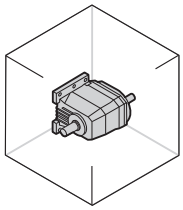

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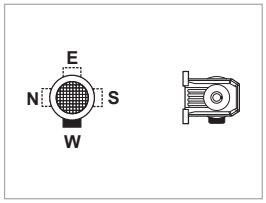



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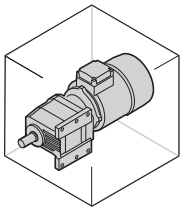

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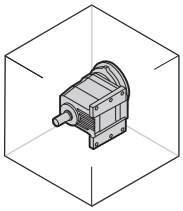

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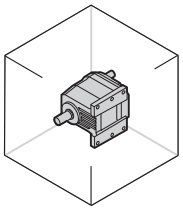

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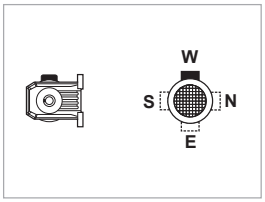



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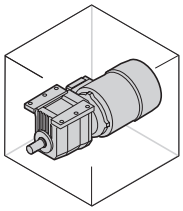

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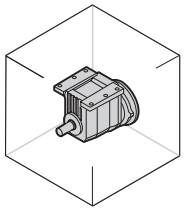

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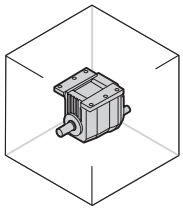

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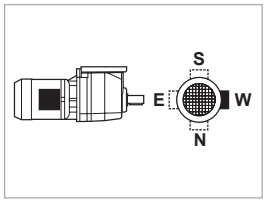



## B8

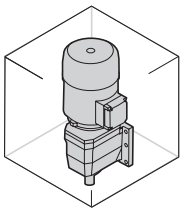

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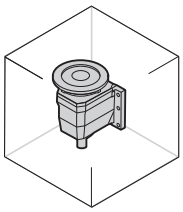

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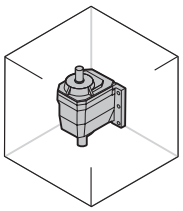

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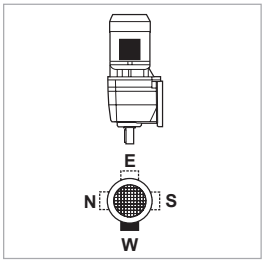



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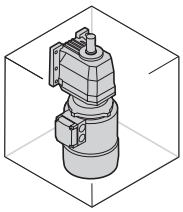

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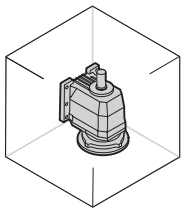

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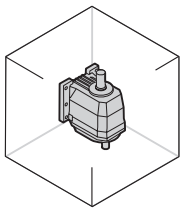

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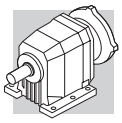

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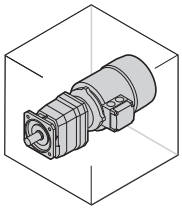



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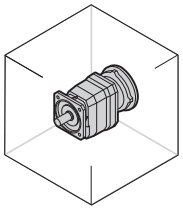


# C ... F C ... U C ... UF

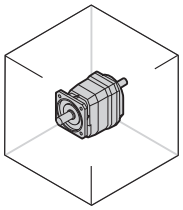
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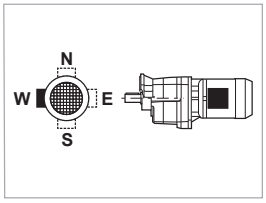
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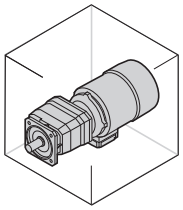
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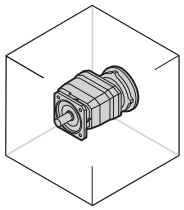
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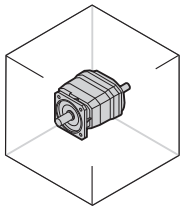

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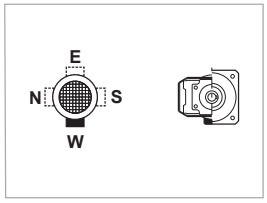
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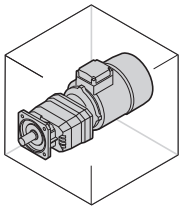
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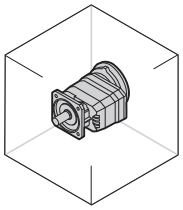
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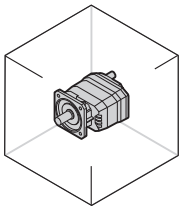

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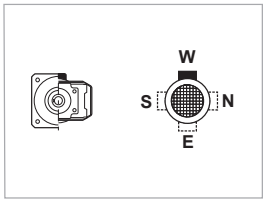
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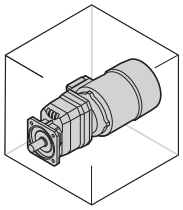
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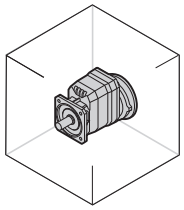
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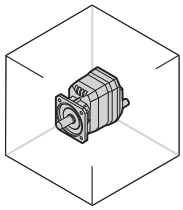

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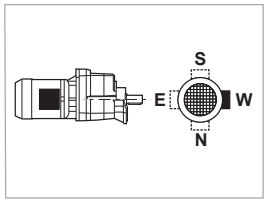
_S



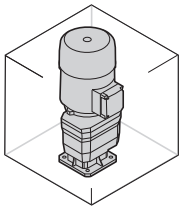
_P(IEC) _SK / _SC



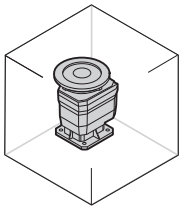
_HS



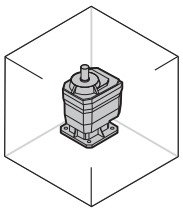

## V1



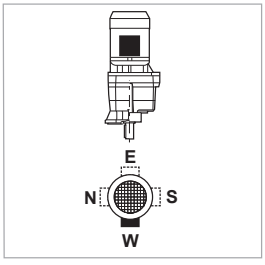
_S



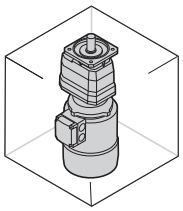
_P(IEC) _SK / _SC



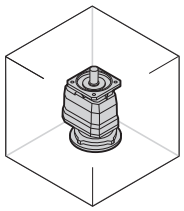
_HS



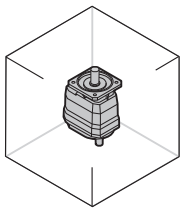

## V3



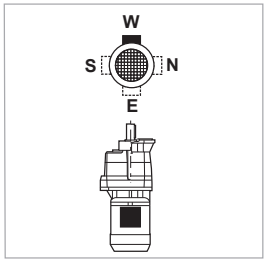
_S



_P(IEC) _SK / _SC



_HS




**W** = Default

## 23 CARGAS RADIALES

Los órganos de transmisión acoplados en los ejes de entrada y/o de salida del reductor generan una fuerza cuya resultante actúa en sentido radial sobre el mismo eje.
El valor de dichas cargas debe ser compatible con la capacidad del sistema eje – rodamientos del reductor para soportarlas, en particular el valor absoluto de la carga aplicada ($R_{c1}$ para el eje de entrada, $R_{c2}$ para el eje de salida) deberá ser inferior al valor nominal ($R_{n1}$ para el eje de entrada, $R_{n2}$ para el de salida) indicado en las tablas de datos técnicos.
En las siguientes fórmulas, el subíndice (1) se refiere a los valores correspondientes al eje rápido y el subíndice (2) a los valores correspondientes al eje lento. La carga generada por un sistema de transmisión externo puede ser calculada, con una buena aproximación, mediante la siguiente formula:

$$R_{c1}\,[N] = \frac{2000 \cdot M_1\,[Nm] \cdot K_r}{d\,[mm]} \quad ; \quad R_{c2}\,[N] = \frac{2000 \cdot M_2\,[Nm] \cdot K_r}{d\,[mm]} \qquad (15)$$

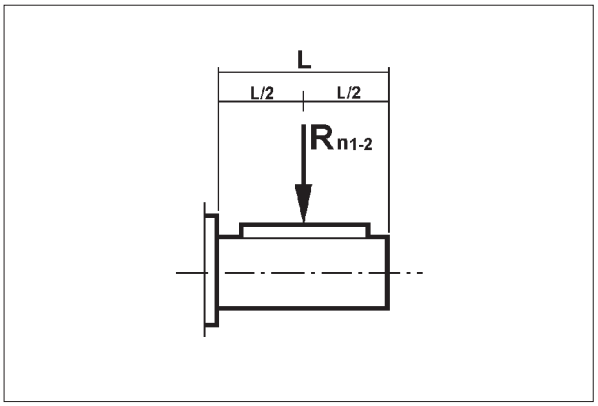
(B 14)

| | |
|---|---|
| **$M_1$** [Nm] | Par aplicado en el eje de entrada |
| **$M_2$** [Nm] | Par suministrado en el eje de salida |
| **d** [mm] | Diámetro primitivo de la pieza montada sobre el eje |
| **$K_r$ = 1** | Transmisión por cadena |

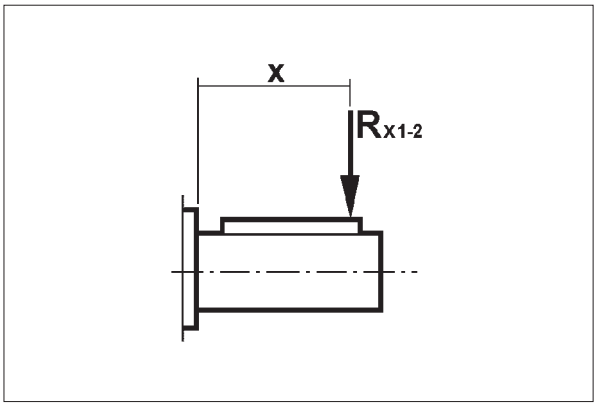
| | |
|---|---|
| **$K_r$ = 1,25** | Transmisión por engranaje |
| **$K_r$ = 1,5** | Transmisión por correa trapecial |
| **$K_r$ = 2,0** | Transmisión por correa plana |

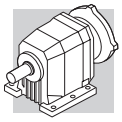
Dependiendo del punto de aplicación de la carga sobre el eje, la verificación de compatibilidad se procederá de diverso modo diverso y en particular:

(B 15)




(B 16)





**a) Aplicación de la carga en el punto medio del eje, tabla (B15)**

La carga anteriormente calculada se deberá comparar con los correspondientes valores nominales indicados en el catálogo y deberá verificarse:

$R_{c1} \leq R_{n1}$ [eje de entrada]

o

$R_{c2} \leq R_{n2}$ [eje de salida]

**b) Aplicaciones desplazadas de la mitad del eje, tabla (B16)**

Cuando la carga se aplica a una distancia “x” del resalte del eje se debe recalcular el valor admisible a dicha distancia.
El nuevo valor se distingue con el símbolo $R_{x1}$ (eje rápido) y $R_{x2}$ (eje lento) y se obtiene a partir de los valores de catalogo $R_{n1}$ y $R_{n2}$ respectivamente a través del Factor.

$$\frac{a}{b+x} \qquad (16)$$

(B 17)

| | **Constantes del reductor** | | | | | |
|---|---|---|---|---|---|---|
| | Eje de salida | | | Eje de entrada | | |
| | **a** | **b** | **c** | **a** | **b** | **c** |
| **C 05 2** | 38 | 18 | 250 | — | — | — |
| **C 12 2** | 46 | 26 | 450 | 21 | 1 | 300 |
| **C 22 2** | 53 | 28 | 550 | 40 | 20 | 350 |
| **C 22 3** | 53 | 28 | 550 | 21 | 1 | 300 |
| **C 32 2** | 60.5 | 30.5 | 750 | 41.5 | 21.5 | 350 |
| **C 32 3** | 60.5 | 30.5 | 750 | 21 | 1 | 300 |
| **C 36 2 - C 36 3** | 69.5 | 34.5 | 800 | 51.5 | 26.5 | 450 |
| **C 36 4** | 69.5 | 34.5 | 800 | 21 | 1 | 300 |
| **C 41 2 - C 41 3** | 69.5 | 34.5 | 850 | 51.5 | 26.5 | 450 |
| **C 41 4** | 69.5 | 34.5 | 850 | 40 | 20 | 350 |
| **C 51 2 - C 51 3** | 76.5 | 36.5 | 900 | 51.5 | 26.5 | 450 |
| **C 51 4** | 76.5 | 36.5 | 900 | 41.5 | 21.5 | 350 |
| **C 61 2 - C 61 3** | 95.5 | 45.5 | 1000 | 57.5 | 27.5 | 450 |
| **C 61 4** | 95.5 | 45.5 | 1000 | 51.5 | 26.5 | 450 |
| **C 70 2 - C 70 3** | 114 | 54 | 1200 | 86 | 31 | 1000 |
| **C 70 4** | 114 | 54 | 1200 | 49.5 | 24.5 | 450 |
| **C 80 2 - C 80 3** | 131 | 61 | 1500 | 86 | 31 | 1000 |
| **C 80 4** | 131 | 61 | 1500 | 49.5 | 24.5 | 450 |
| **C 90 2 - C 90 3** | 161 | 76 | 2000 | 116 | 46 | 1400 |
| **C 90 4** | 161 | 76 | 2000 | 49.5 | 24.5 | 450 |
| **C 100 2 - C 100 3** | 163.5 | 58.5 | 2500 | 116 | 46 | 1400 |
| **C 100 4** | 163.5 | 58.5 | 2500 | 49.5 | 24.5 | 450 |

El procedimiento de verificación comporta los pasos sucesivos que aquí se indican.

**EJE DE ENTRADA**

1. Cálculo de:

$$R_{x1} = R_{n1} \cdot \frac{a}{b + x} \quad (17)$$

NOTA. Siempre que se cumpla:

$$\frac{L}{2} \leq x \leq c \quad (18)$$

Finalmente será necesario comprobar que:

$$R_{c1} \leq R_{x1} \quad (19)$$

**EJE DE SALIDA**

1. Cálculo de:

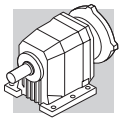
$$R_{x2} = R_{n2} \cdot \frac{a}{b + x} \quad (20)$$

NOTA. Siempre que se cumpla:

$$\frac{L}{2} \leq x \leq c \quad (21)$$

Finalmente será necesario comprobar que:

$$R_{c2} \leq R_{x2} \quad (22)$$

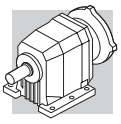


## 24 CARGAS AXIALES, $A_{n1}$, $A_{n2}$

Las cargas axiales máximas admisibles en el eje de entrada [$A_{n1}$] y en el de salida [$A_{n2}$] se pueden obtener a partir de los correspondientes valores de la carga radial [$R_{n1}$] y [$R_{n2}$] mediante las siguientes expresiones:

$$A_{n1} = R_{n1} \cdot 0,2$$
$$A_{n2} = R_{n2} \cdot 0,2 \qquad (23)$$

Los valores de las cargas axiales admisibles así calculados, están referidos a cargas axiales actuando contemporáneamente con las cargas radiales nominales.
Únicamente en el caso en que la carga radial que actúe sobre el eje del reductor sea nula, se podrá considerar que la carga axial admisible [$A_n$] es el 50% del valor de la carga radial [$R_n$] admisible para el eje en cuestión.
Ante cargas axiales que superen los valores admisibles o de fuerzas axiales que resulten claramente dominantes sobre las cargas radiales, se recomienda contacten con el Servicio Técnico de Bonfiglioli Riduttori para una verificación puntual.

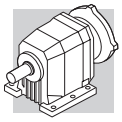


## 25 DATOS TÉCNICOS MOTORREDUCTORES

La selección de los motores sin freno cumplen las prescripciones del reglamiento CE 640/2009 (ver paragrafo **M1.1** de este catalogo): para potencias nominales iguales o superiores a 0.75kW,deve preverse motores BE/ME (se contempla en la sección **M1** de este catalogo). Para potencias nominales inferiores a 0.75kW,pueden preverse motores BN/M (ver sección **M2** de este catalogo).
La regulación CE 640/2009 no se aplica a los motores freno, por lo tanto la selección de los motores freno tiene cuenta de los motores BN/M, a prescindir delos valores de la potencia nominal. Los motores BE/ME freno están disponibles bajo demanda.

# 0.09 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **1.0** | 760 | 0.8 | 855.5 | 7000 | **C414_855.5 S05 M05A6** | 135 | **C414_855.5 P63 BN63A6** | 136 |
| **1.2** | 654 | 0.9 | 735.9 | 7000 | **C414_735.9 S05 M05A6** | 135 | **C414_735.9 P63 BN63A6** | 136 |
| **1.3** | 597 | 1.0 | 671.3 | 7000 | **C414_671.3 S05 M05A6** | 135 | **C414_671.3 P63 BN63A6** | 136 |
| **1.5** | 511 | 0.9 | 574.7 | 6500 | **C364_574.7 S05 M05A6** | 131 | **C364_574.7 P63 BN63A6** | 136 |
| **1.6** | 483 | 1.2 | 543.5 | 7000 | **C414_543.5 S05 M05A6** | 135 | **C414_543.5 P63 BN63A6** | 136 |
| **1.6** | 489 | 0.9 | 848.5 | 6500 | **C364_848.5 S0 M0B4** | 131 | **C364_848.5 P56 BN56B4** | 136 |
| **1.8** | 434 | 1.0 | 754.2 | 6500 | **C364_754.2 S0 M0B4** | 131 | **C364_754.2 P56 BN56B4** | 136 |
| **1.9** | 407 | 1.1 | 458.4 | 6500 | **C364_458.4 S05 M05A6** | 131 | **C364_458.4 P63 BN63A6** | 136 |
| **2.0** | 400 | 1.5 | 450.2 | 7000 | **C414_450.2 S05 M05A6** | 135 | **C414_450.2 P63 BN63A6** | 136 |
| **2.0** | 384 | 1.2 | 665.9 | 6500 | **C364_665.9 S0 M0B4** | 131 | **C364_665.9 P56 BN56B4** | 136 |
| **2.3** | 331 | 1.4 | 574.7 | 6500 | **C364_574.7 S0 M0B4** | 131 | **C364_574.7 P56 BN56B4** | 136 |
| **2.6** | 301 | 1.5 | 341.7 | 6500 | **C364_341.7 S05 M05A6** | 131 | **C364_341.7 P63 BN63A6** | 136 |
| **2.6** | 296 | 2.0 | 333.4 | 7000 | **C414_333.4 S05 M05A6** | 135 | **C414_333.4 P63 BN63A6** | 136 |
| **2.6** | 298 | 1.5 | 517.2 | 6500 | **C364_517.2 S0 M0B4** | 131 | **C364_517.2 P56 BN56B4** | 136 |
| **2.9** | 264 | 1.7 | 458.4 | 6500 | **C364_458.4 S0 M0B4** | 131 | **C364_458.4 P56 BN56B4** | 136 |
| **3.2** | 250 | 1.1 | 274.7 | 5500 | **C323_274.7 S05 M05A6** | 127 | **C323_274.7 P63 BN63A6** | 128 |
| **3.2** | 242 | 1.9 | 420.2 | 6500 | **C364_420.2 S0 M0B4** | 131 | **C364_420.2 P56 BN56B4** | 136 |
| **3.6** | 218 | 2.1 | 377.9 | 6500 | **C364_377.9 S0 M0B4** | 131 | **C364_377.9 P56 BN56B4** | 136 |
| **3.9** | 205 | 1.0 | 225.8 | 5000 | **C223_225.8 S05 M05A6** | 123 | **C223_225.8 P63 BN63A6** | 124 |
| **4.0** | 197 | 2.3 | 341.7 | 6500 | **C364_341.7 S0 M0B4** | 131 | **C364_341.7 P56 BN56B4** | 136 |
| **4.1** | 196 | 1.5 | 215.6 | 5500 | **C323_215.6 S05 M05A6** | 127 | **C323_215.6 P63 BN63A6** | 128 |
| **4.2** | 184 | 2.4 | 318.9 | 6500 | **C364_318.9 S0 M0B4** | 131 | **C364_318.9 P56 BN56B4** | 136 |
| **4.6** | 168 | 2.7 | 290.9 | 6500 | **C364_290.9 S0 M0B4** | 131 | **C364_290.9 P56 BN56B4** | 136 |
| **4.9** | 162 | 1.2 | 178.5 | 5000 | **C223_178.5 S05 M05A6** | 123 | **C223_178.5 P63 BN63A6** | 124 |
| **4.9** | 163 | 1.6 | 274.7 | 5500 | **C323_274.7 S0 M0B4** | 127 | **C323_274.7 P56 BN56B4** | 128 |
| **5.2** | 155 | 1.0 | 261.0 | 5000 | **C223_261.0 S0 M0B4** | 123 | **C223_261.0 P56 BN56B4** | 124 |
| **5.3** | 147 | 3.1 | 255.0 | 6500 | **C364_255.0 S0 M0B4** | 131 | **C364_255.0 P56 BN56B4** | 136 |
| **5.5** | 145 | 1.8 | 244.2 | 5500 | **C323_244.2 S0 M0B4** | 127 | **C323_244.2 P56 BN56B4** | 128 |
| **5.8** | 138 | 1.5 | 151.7 | 5000 | **C223_151.7 S05 M05A6** | 123 | **C223_151.7 P63 BN63A6** | 124 |
| **5.9** | 135 | 2.2 | 148.4 | 5500 | **C323_148.4 S05 M05A6** | 127 | **C323_148.4 P63 BN63A6** | 128 |
| **6.0** | 134 | 1.4 | 225.8 | 5000 | **C223_225.8 S0 M0B4** | 123 | **C223_225.8 P56 BN56B4** | 124 |
| **6.3** | 128 | 2.3 | 215.6 | 5500 | **C323_215.6 S0 M0B4** | 127 | **C323_215.6 P56 BN56B4** | 128 |
| **6.7** | 119 | 1.6 | 200.7 | 5000 | **C223_200.7 S0 M0B4** | 123 | **C223_200.7 P56 BN56B4** | 124 |
| **7.2** | 111 | 1.8 | 122.2 | 5000 | **C223_122.2 S05 M05A6** | 123 | **C223_122.2 P63 BN63A6** | 124 |
| **7.2** | 111 | 2.7 | 122.4 | 5500 | **C323_122.4 S05 M05A6** | 127 | **C323_122.4 P63 BN63A6** | 128 |
| **7.3** | 111 | 2.7 | 186.0 | 5500 | **C323_186.0 S0 M0B4** | 127 | **C323_186.0 P56 BN56B4** | 128 |
| **7.6** | 106 | 1.9 | 178.5 | 5000 | **C223_178.5 S0 M0B4** | 123 | **C223_178.5 P56 BN56B4** | 124 |
| **7.9** | 102 | 2.0 | 112.0 | 5000 | **C223_112.0 S05 M05A6** | 123 | **C223_112.0 P63 BN63A6** | 124 |
| **8.1** | 100 | 3.0 | 167.4 | 5500 | **C323_167.4 S0 M0B4** | 127 | **C323_167.4 P56 BN56B4** | 128 |
| **8.8** | 91 | 2.2 | 100.2 | 5000 | **C223_100.2 S05 M05A6** | 123 | **C223_100.2 P63 BN63A6** | 124 |
| **8.9** | 90 | 2.2 | 151.7 | 5000 | **C223_151.7 S0 M0B4** | 123 | **C223_151.7 P56 BN56B4** | 124 |
| **9.9** | 81 | 2.5 | 136.5 | 5000 | **C223_136.5 S0 M0B4** | 123 | **C223_136.5 P56 BN56B4** | 124 |

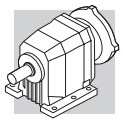


## 0.09 kW

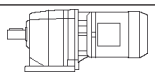
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **10.7** | 75 | 2.7 | 82.6 | 5000 | **C223_82.6 S05 M05A6** | 123 | **C223_82.6 P63 BN63A6** | 124 |
| **11.0** | 73 | 2.8 | 122.2 | 5000 | **C223_122.2 S0 M0B4** | 123 | **C223_122.2 P56 BN56B4** | 124 |
| **12.1** | 67 | 3.0 | 112.0 | 5000 | **C223_112.0 S0 M0B4** | 123 | **C223_112.0 P56 BN56B4** | 124 |
| **13.3** | 61 | 1.5 | 66.2 | 2000 | **C122_66.2 S05 M05A6** | 119 | **C122_66.2 P63 BN63A6** | 120 |
| **16.0** | 51 | 1.8 | 55.2 | 2000 | **C122_55.2 S05 M05A6** | 119 | **C122_55.2 P63 BN63A6** | 120 |
| **18.5** | 44 | 2.0 | 47.6 | 2000 | **C122_47.6 S05 M05A6** | 119 | **C122_47.6 P63 BN63A6** | 120 |
| **19.7** | 42 | 1.1 | 44.7 | 1170 | **C052_44.7 S05 M05A6** | 118 | | |
| **20.4** | 40 | 2.2 | 66.2 | 2000 | **C122_66.2 S0 M0B4** | 119 | **C122_66.2 P56 BN56B4** | 120 |
| **20.8** | 39 | 2.3 | 42.3 | 2000 | **C122_42.3 S05 M05A6** | 119 | **C122_42.3 P63 BN63A6** | 120 |
| **21.8** | 38 | 1.2 | 40.3 | 1150 | **C052_40.3 S05 M05A6** | 118 | | |
| **23.8** | 34 | 2.6 | 37.0 | 2000 | **C122_37.0 S05 M05A6** | 119 | **C122_37.0 P63 BN63A6** | 120 |
| **24.2** | 34 | 1.3 | 36.4 | 1140 | **C052_36.4 S05 M05A6** | 118 | | |
| **24.5** | 34 | 2.7 | 55.2 | 2000 | **C122_55.2 S0 M0B4** | 119 | **C122_55.2 P56 BN56B4** | 120 |
| **26.8** | 31 | 1.5 | 32.8 | 1110 | **C052_32.8 S05 M05A6** | 118 | | |
| **26.8** | 31 | 2.9 | 32.8 | 2000 | **C122_32.8 S05 M05A6** | 119 | **C122_32.8 P63 BN63A6** | 120 |
| **28.4** | 29 | 3.1 | 47.6 | 2000 | **C122_47.6 S0 M0B4** | 119 | **C122_47.6 P56 BN56B4** | 120 |
| **30** | 27 | 1.7 | 44.7 | 1170 | **C052_44.7 S0 M0B4** | 118 | | |
| **33** | 25 | 1.8 | 40.3 | 990 | **C052_40.3 S0 M0B4** | 118 | | |
| **37** | 22 | 2.0 | 36.4 | 980 | **C052_36.4 S0 M0B4** | 118 | | |
| **41** | 20 | 2.3 | 32.8 | 960 | **C052_32.8 S0 M0B4** | 118 | | |
| **42** | 19 | 2.3 | 21.0 | 1020 | **C052_21.0 S05 M05A6** | 118 | | |
| **50** | 16 | 2.7 | 27.1 | 930 | **C052_27.1 S0 M0B4** | 118 | | |
| **56** | 15 | 3.1 | 15.6 | 950 | **C052_15.6 S05 M05A6** | 118 | | |
| **66** | 12 | 6.5 | 13.4 | 2000 | **C122_13.4 S05 M05A6** | 119 | **C122_13.4 P63 BN63A6** | 120 |
| **71** | 12 | 3.9 | 12.5 | 900 | **C052_12.5 S05 M05A6** | 118 | | |
| **74** | 11 | 7.0 | 11.9 | 2000 | **C122_11.9 S05 M05A6** | 119 | **C122_11.9 P63 BN63A6** | 120 |
| **78** | 10 | 4.3 | 11.2 | 880 | **C052_11.2 S05 M05A6** | 118 | | |
| **88** | 9 | 7.7 | 10.1 | 2000 | **C122_10.1 S05 M05A6** | 119 | **C122_10.1 P63 BN63A6** | 120 |
| **95** | 9 | 5.2 | 9.3 | 830 | **C052_9.3 S05 M05A6** | 118 | | |
| **100** | 8 | 8.4 | 8.8 | 2000 | **C122_8.8 S05 M05A6** | 119 | **C122_8.8 P63 BN63A6** | 120 |
| **119** | 7 | 6.5 | 7.4 | 780 | **C052_7.4 S05 M05A6** | 118 | | |
| **132** | 6 | 7.3 | 6.7 | 760 | **C052_6.7 S05 M05A6** | 118 | | |
| **146** | 6 | 10.9 | 6.2 | 1960 | **C122_6.2 S05 M05A6** | 119 | **C122_6.2 P63 BN63A6** | 120 |
| **157** | 5 | 11.1 | 5.6 | 1850 | **C122_5.6 S05 M05A6** | 119 | **C122_5.6 P63 BN63A6** | 120 |
| **159** | 5 | 8.8 | 5.5 | 720 | **C052_5.5 S05 M05A6** | 118 | | |
| **187** | 4 | 12.6 | 4.9 | 1810 | **C122_4.9 S05 M05A6** | 119 | **C122_4.9 P63 BN63A6** | 120 |
| **205** | 4 | 13.0 | 4.3 | 1730 | **C122_4.3 S05 M05A6** | 119 | **C122_4.3 P63 BN63A6** | 120 |
| **249** | 3 | 15.0 | 3.7 | 1650 | **C122_3.7 S05 M05A6** | 119 | **C122_3.7 P63 BN63A6** | 120 |
| **275** | 3 | 15.4 | 3.2 | 1580 | **C122_3.2 S05 M05A6** | 119 | **C122_3.2 P63 BN63A6** | 120 |
| **329** | 2 | 17.3 | 2.8 | 1510 | **C122_2.8 S05 M05A6** | 119 | **C122_2.8 P63 BN63A6** | 120 |

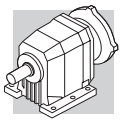
## 0.12 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.98** | 1061 | 0.9 | 884.9 | 10000 | | | **C514_884.9 P63 BN63B6** | 140 |
| **1.2** | 860 | 1.2 | 717.7 | 10000 | | | **C514_717.7 P63 BN63B6** | 140 |
| **1.5** | 681 | 0.9 | 855.5 | 7000 | **C414_855.5 S05 M05A4** | 135 | **C414_855.5 P63 BN63A4** | 136 |
| **1.6** | 643 | 1.6 | 808.0 | 10000 | | | **C514_808.0 P63 BN63A4** | 140 |
| **1.7** | 621 | 1.0 | 780.4 | 7000 | **C414_780.4 S05 M05A4** | 135 | **C414_780.4 P63 BN63A4** | 136 |
| **1.8** | 586 | 1.0 | 735.9 | 7000 | **C414_735.9 S05 M05A4** | 135 | **C414_735.9 P63 BN63A4** | 136 |
| **2.0** | 534 | 1.1 | 671.3 | 7000 | **C414_671.3 S05 M05A4** | 135 | **C414_671.3 P63 BN63A4** | 136 |
| **2.0** | 509 | 0.9 | 665.9 | 6500 | **C364_665.9 S05 M05A4** | 131 | **C364_665.9 P63 BN63A4** | 136 |
| **2.2** | 474 | 1.3 | 595.8 | 7000 | **C414_595.8 S05 M05A4** | 135 | **C414_595.8 P63 BN63A4** | 136 |
| **2.3** | 440 | 1.0 | 574.7 | 6500 | **C364_574.7 S05 M05A4** | 131 | **C364_574.7 P63 BN63A4** | 136 |
| **2.4** | 433 | 1.4 | 543.5 | 7000 | **C414_543.5 S05 M05A4** | 135 | **C414_543.5 P63 BN63A4** | 136 |
| **2.6** | 396 | 1.1 | 517.2 | 6500 | **C364_517.2 S05 M05A4** | 131 | **C364_517.2 P63 BN63A4** | 136 |



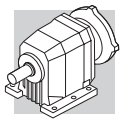
# 0.12 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **2.7** | 393 | 1.5 | 493.5 | 7000 | **C414_493.5 S05 M05A4** | 135 | **C414_493.5 P63 BN63A4** | 136 |
| **2.9** | 351 | 1.3 | 458.4 | 6500 | **C364_458.4 S05 M05A4** | 131 | **C364_458.4 P63 BN63A4** | 136 |
| **2.9** | 358 | 1.7 | 450.2 | 7000 | **C414_450.2 S05 M05A4** | 135 | **C414_450.2 P63 BN63A4** | 136 |
| **3.1** | 333 | 1.8 | 418.5 | 7000 | **C414_418.5 S05 M05A4** | 135 | **C414_418.5 P63 BN63A4** | 136 |
| **3.2** | 321 | 1.4 | 420.2 | 6500 | **C364_420.2 S05 M05A4** | 131 | **C364_420.2 P63 BN63A4** | 136 |
| **3.4** | 304 | 2.0 | 381.8 | 7000 | **C414_381.8 S05 M05A4** | 135 | **C414_381.8 P63 BN63A4** | 136 |
| **3.6** | 289 | 1.6 | 377.9 | 6500 | **C364_377.9 S05 M05A4** | 131 | **C364_377.9 P63 BN63A4** | 136 |
| **3.9** | 265 | 2.3 | 333.4 | 7000 | **C414_333.4 S05 M05A4** | 135 | **C414_333.4 P63 BN63A4** | 136 |
| **4.0** | 261 | 1.7 | 341.7 | 6500 | **C364_341.7 S05 M05A4** | 131 | **C364_341.7 P63 BN63A4** | 136 |
| **4.2** | 244 | 1.8 | 318.9 | 6500 | **C364_318.9 S05 M05A4** | 131 | **C364_318.9 P63 BN63A4** | 136 |
| **4.3** | 242 | 2.5 | 304.2 | 7000 | **C414_304.2 S05 M05A4** | 135 | **C414_304.2 P63 BN63A4** | 136 |
| **4.6** | 223 | 2.0 | 290.9 | 6500 | **C364_290.9 S05 M05A4** | 131 | **C364_290.9 P63 BN63A4** | 136 |
| **4.9** | 219 | 0.9 | 178.5 | 5000 | **C223_178.5 S05 M05B6** | 123 | **C223_178.5 P63 BN63B6** | 124 |
| **4.9** | 217 | 1.2 | 274.7 | 5500 | **C323_274.7 S05 M05A4** | 127 | **C323_274.7 P63 BN63A4** | 128 |
| **5.0** | 209 | 2.9 | 263.0 | 7000 | **C414_263.0 S05 M05A4** | 135 | **C414_263.0 P63 BN63A4** | 136 |
| **5.3** | 195 | 2.3 | 255.0 | 6500 | **C364_255.0 S05 M05A4** | 131 | **C364_255.0 P63 BN63A4** | 136 |
| **5.5** | 193 | 1.3 | 244.2 | 5500 | **C323_244.2 S05 M05A4** | 127 | **C323_244.2 P63 BN63A4** | 128 |
| **5.8** | 177 | 2.5 | 230.9 | 6500 | **C364_230.9 S05 M05A4** | 131 | **C364_230.9 P63 BN63A4** | 136 |
| **6.0** | 178 | 1.0 | 225.8 | 5000 | **C223_225.8 S05 M05A4** | 123 | **C223_225.8 P63 BN63A4** | 124 |
| **6.3** | 170 | 1.8 | 215.6 | 5500 | **C323_215.6 S05 M05A4** | 127 | **C323_215.6 P63 BN63A4** | 128 |
| **6.5** | 163 | 2.8 | 206.4 | 6500 | **C363_206.4 S05 M05A4** | 131 | **C363_206.4 P63 BN63A4** | 132 |
| **6.7** | 159 | 1.2 | 200.7 | 5000 | **C223_200.7 S05 M05A4** | 123 | **C223_200.7 P63 BN63A4** | 124 |
| **7.3** | 147 | 2.0 | 186.0 | 5500 | **C323_186.0 S05 M05A4** | 127 | **C323_186.0 P63 BN63A4** | 128 |
| **7.4** | 145 | 3.1 | 183.5 | 6500 | **C363_183.5 S05 M05A4** | 131 | **C363_183.5 P63 BN63A4** | 132 |
| **7.6** | 141 | 1.4 | 178.5 | 5000 | **C223_178.5 S05 M05A4** | 123 | **C223_178.5 P63 BN63A4** | 124 |
| **8.1** | 132 | 2.3 | 167.4 | 5500 | **C323_167.4 S05 M05A4** | 127 | **C323_167.4 P63 BN63A4** | 128 |
| **8.9** | 120 | 1.7 | 151.7 | 5000 | **C223_151.7 S05 M05A4** | 123 | **C223_151.7 P63 BN63A4** | 124 |
| **9.1** | 117 | 2.6 | 148.4 | 5500 | **C323_148.4 S05 M05A4** | 127 | **C323_148.4 P63 BN63A4** | 128 |
| **9.9** | 108 | 1.9 | 136.5 | 5000 | **C223_136.5 S05 M05A4** | 123 | **C223_136.5 P63 BN63A4** | 124 |
| **9.9** | 108 | 2.8 | 136.0 | 5500 | **C323_136.0 S05 M05A4** | 127 | **C323_136.0 P63 BN63A4** | 128 |
| **11.0** | 97 | 3.1 | 122.4 | 5500 | **C323_122.4 S05 M05A4** | 127 | **C323_122.4 P63 BN63A4** | 128 |
| **11.0** | 97 | 2.1 | 122.2 | 5000 | **C223_122.2 S05 M05A4** | 123 | **C223_122.2 P63 BN63A4** | 124 |
| **12.1** | 89 | 2.3 | 112.0 | 5000 | **C223_112.0 S05 M05A4** | 123 | **C223_112.0 P63 BN63A4** | 124 |
| **13.5** | 79 | 2.5 | 100.2 | 5000 | **C223_100.2 S05 M05A4** | 123 | **C223_100.2 P63 BN63A4** | 124 |
| **15.3** | 70 | 2.9 | 88.5 | 5000 | **C223_88.5 S05 M05A4** | 123 | **C223_88.5 P63 BN63A4** | 124 |
| **16.3** | 65 | 3.1 | 82.6 | 5000 | **C223_82.6 S05 M05A4** | 123 | **C223_82.6 P63 BN63A4** | 124 |
| **20.4** | 53 | 1.7 | 66.2 | 2000 | **C122_66.2 S05 M05A4** | 119 | **C122_66.2 P63 BN63A4** | 120 |
| **21.3** | 51 | 2.5 | 63.3 | 5000 | **C222_63.3 S05 M05A4** | 123 | **C222_63.3 P63 BN63A4** | 124 |
| **24.5** | 45 | 2.0 | 55.2 | 2000 | **C122_55.2 S05 M05A4** | 119 | **C122_55.2 P63 BN63A4** | 120 |
| **24.7** | 44 | 3.5 | 54.7 | 5000 | **C222_54.7 S05 M05A4** | 123 | **C222_54.7 P63 BN63A4** | 124 |
| **28.4** | 38 | 2.3 | 47.6 | 2000 | **C122_47.6 S05 M05A4** | 119 | **C122_47.6 P63 BN63A4** | 120 |
| **29.3** | 37 | 1.2 | 44.7 | 1010 | **C052_44.7 S05 M05A4** | 118 | | |
| **32** | 34 | 2.6 | 42.3 | 2000 | **C122_42.3 S05 M05A4** | 119 | **C122_42.3 P63 BN63A4** | 120 |
| **33** | 34 | 1.3 | 40.3 | 990 | **C052_40.3 S05 M05A4** | 118 | | |
| **36** | 30 | 1.5 | 36.4 | 980 | **C052_36.4 S05 M05A4** | 118 | | |
| **36** | 30 | 3.0 | 37.0 | 2000 | **C122_37.0 S05 M05A4** | 119 | **C122_37.0 P63 BN63A4** | 120 |
| **40** | 27 | 1.6 | 32.8 | 960 | **C052_32.8 S05 M05A4** | 118 | | |
| **41** | 26 | 3.4 | 32.8 | 2000 | **C122_32.8 S05 M05A4** | 119 | **C122_32.8 P63 BN63A4** | 120 |
| **48** | 23 | 2.0 | 27.1 | 930 | **C052_27.1 S05 M05A4** | 118 | | |
| **56** | 20 | 2.3 | 15.6 | 900 | **C052_15.6 S05 M05B6** | 118 | | |
| **62** | 18 | 2.6 | 21.0 | 890 | **C052_21.0 S05 M05A4** | 118 | | |
| **69** | 16 | 2.5 | 18.9 | 860 | **C052_18.9 S05 M05A4** | 118 | | |
| **78** | 14 | 3.2 | 11.2 | 850 | **C052_11.2 S05 M05B6** | 118 | | |
| **84** | 13 | 3.1 | 15.6 | 820 | **C052_15.6 S05 M05A4** | 118 | | |
| **105** | 10 | 3.8 | 12.5 | 780 | **C052_12.5 S05 M05A4** | 118 | | |
| **117** | 9 | 4.3 | 11.2 | 760 | **C052_11.2 S05 M05A4** | 118 | | |
| **130** | 8 | 5.4 | 6.7 | 740 | **C052_6.7 S05 M05B6** | 118 | | |
| **141** | 8 | 3.9 | 9.3 | 720 | **C052_9.3 S05 M05A4** | 118 | | |
| **177** | 6 | 4.8 | 7.4 | 680 | **C052_7.4 S05 M05A4** | 118 | | |
| **196** | 6 | 5.4 | 6.7 | 660 | **C052_6.7 S05 M05A4** | 118 | | |



# 0.18 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.66** | 2367 | 1.0 | 1362 | 25000 | | | **C704_1362 P71 BN71A6** | 148 |
| **0.84** | 1858 | 1.2 | 1069 | 25000 | | | **C704_1069 P71 BN71A6** | 148 |
| **1.2** | 1262 | 1.3 | 726.3 | 16000 | **C614_726.3 S1 M1SC6** | 143 | **C614_726.3 P71 BN71A6** | 144 |
| **1.3** | 1248 | 0.8 | 717.7 | 10000 | **C514_717.7 S1 M1SC6** | 139 | **C514_717.7 P71 BN71A6** | 140 |
| **1.5** | 1049 | 1.0 | 884.9 | 10000 | | | **C514_884.9 P63 BN63B4** | 140 |
| **1.6** | 958 | 1.0 | 808.0 | 10000 | | | **C514_808.0 P63 BN63B4** | 140 |
| **1.6** | 955 | 1.0 | 549.7 | 10000 | **C514_549.7 S1 M1SC6** | 139 | **C514_549.7 P71 BN71A6** | 140 |
| **1.8** | 861 | 1.9 | 726.3 | 16000 | | | **C614_726.3 P63 BN63B4** | 144 |
| **1.8** | 851 | 1.2 | 717.7 | 10000 | | | **C514_717.7 P63 BN63B4** | 140 |
| **1.9** | 806 | 1.2 | 463.9 | 10000 | **C514_463.9 S1 M1SC6** | 139 | **C514_463.9 P71 BN71A6** | 140 |
| **1.9** | 803 | 2.0 | 462.0 | 16000 | **C614_462.0 S1 M1SC6** | 143 | **C614_462.0 P71 BN71A6** | 144 |
| **2.0** | 796 | 0.8 | 671.3 | 7000 | **C414_671.3 S05 M05B4** | 135 | **C414_671.3 P63 BN63B4** | 136 |
| **2.0** | 783 | 0.8 | 450.2 | 7000 | **C414_450.2 S1 M1SC6** | 135 | **C414_450.2 P71 BN71A6** | 136 |
| **2.0** | 777 | 1.3 | 655.4 | 10000 | | | **C514_655.4 P63 BN63B4** | 140 |
| **2.2** | 727 | 0.8 | 418.5 | 7000 | **C414_418.5 S1 M1SC6** | 135 | **C414_418.5 P71 BN71A6** | 136 |
| **2.2** | 723 | 1.4 | 415.7 | 10000 | **C514_415.7 S1 M1SC6** | 139 | **C514_415.7 P71 BN71A6** | 140 |
| **2.2** | 706 | 0.8 | 595.8 | 7000 | **C414_595.8 S05 M05B4** | 135 | **C414_595.8 P63 BN63B4** | 136 |
| **2.4** | 660 | 1.5 | 379.6 | 10000 | **C514_379.6 S1 M1SC6** | 139 | **C514_379.6 P71 BN71A6** | 140 |
| **2.4** | 644 | 0.9 | 543.5 | 7000 | **C414_543.5 S05 M05B4** | 135 | **C414_543.5 P63 BN63B4** | 136 |
| **2.6** | 587 | 0.8 | 341.7 | 6300 | **C364_341.7 S1 M1SC6** | 131 | **C364_341.7 P71 BN71A6** | 136 |
| **2.7** | 585 | 1.0 | 493.5 | 7000 | **C414_493.5 S05 M05B4** | 135 | **C414_493.5 P63 BN63B4** | 136 |
| **2.9** | 534 | 1.1 | 450.2 | 7000 | **C414_450.2 S05 M05B4** | 135 | **C414_450.2 P63 BN63B4** | 136 |
| **2.9** | 536 | 0.8 | 458.4 | 6500 | **C364_458.4 S05 M05B4** | 131 | **C364_458.4 P63 BN63B4** | 136 |
| **3.1** | 492 | 0.9 | 420.2 | 6500 | **C364_420.2 S05 M05B4** | 131 | **C364_420.2 P63 BN63B4** | 136 |
| **3.2** | 496 | 1.2 | 418.5 | 7000 | **C414_418.5 S05 M05B4** | 135 | **C414_418.5 P63 BN63B4** | 136 |
| **3.5** | 452 | 1.3 | 381.8 | 7000 | **C414_381.8 S05 M05B4** | 135 | **C414_381.8 P63 BN63B4** | 136 |
| **3.5** | 442 | 1.0 | 377.9 | 6500 | **C364_377.9 S05 M05B4** | 131 | **C364_377.9 P63 BN63B4** | 136 |
| **3.9** | 400 | 1.1 | 341.7 | 6500 | **C364_341.7 S05 M05B4** | 131 | **C364_341.7 P63 BN63B4** | 136 |
| **4.0** | 395 | 1.5 | 333.4 | 7000 | **C414_333.4 S05 M05B4** | 135 | **C414_333.4 P63 BN63B4** | 136 |
| **4.1** | 373 | 1.2 | 318.9 | 6500 | **C364_318.9 S05 M05B4** | 131 | **C364_318.9 P63 BN63B4** | 136 |
| **4.3** | 371 | 1.6 | 209.1 | 7000 | **C413_209.1 S1 M1SC6** | 135 | **C413_209.1 P71 BN71A6** | 136 |
| **4.3** | 360 | 1.7 | 304.2 | 7000 | **C414_304.2 S05 M05B4** | 135 | **C414_304.2 P63 BN63B4** | 136 |
| **4.5** | 340 | 1.3 | 290.9 | 6500 | **C364_290.9 S05 M05B4** | 131 | **C364_290.9 P63 BN63B4** | 136 |
| **4.7** | 339 | 1.8 | 190.8 | 7000 | **C413_190.8 S1 M1SC6** | 135 | **C413_190.8 P71 BN71A6** | 136 |
| **4.8** | 330 | 0.9 | 186.0 | 5500 | **C323_186.0 S1 M1SC6** | 127 | **C323_186.0 P71 BN71A6** | 128 |
| **5.0** | 312 | 1.9 | 263.0 | 7000 | **C414_263.0 S05 M05B4** | 135 | **C414_263.0 P63 BN63B4** | 136 |
| **5.2** | 298 | 1.5 | 255.0 | 6500 | **C364_255.0 S05 M05B4** | 131 | **C364_255.0 P63 BN63B4** | 136 |
| **5.4** | 297 | 1.0 | 167.4 | 5500 | **C323_167.4 S1 M1SC6** | 127 | **C323_167.4 P71 BN71A6** | 128 |
| **5.4** | 295 | 0.9 | 244.2 | 5500 | **C323_244.2 S05 M05B4** | 127 | **C323_244.2 P63 BN63B4** | 128 |
| **5.7** | 270 | 1.7 | 230.9 | 6500 | **C364_230.9 S05 M05B4** | 131 | **C364_230.9 P63 BN63B4** | 136 |
| **6.1** | 261 | 1.2 | 215.6 | 5500 | **C323_215.6 S05 M05B4** | 127 | **C323_215.6 P63 BN63B4** | 128 |
| **6.4** | 250 | 1.8 | 206.4 | 6500 | **C363_206.4 S05 M05B4** | 131 | **C363_206.4 P63 BN63B4** | 132 |
| **7.1** | 225 | 1.3 | 186.0 | 5500 | **C323_186.0 S05 M05B4** | 127 | **C323_186.0 P63 BN63B4** | 128 |
| **7.2** | 222 | 2.0 | 183.5 | 6500 | **C363_183.5 S05 M05B4** | 131 | **C363_183.5 P63 BN63B4** | 132 |
| **7.4** | 216 | 0.9 | 178.5 | 5000 | **C223_178.5 S05 M05B4** | 123 | **C223_178.5 P63 BN63B4** | 124 |
| **7.9** | 202 | 1.5 | 167.4 | 5500 | **C323_167.4 S05 M05B4** | 127 | **C323_167.4 P63 BN63B4** | 128 |
| **8.1** | 196 | 2.3 | 162.0 | 6500 | **C363_162.0 S05 M05B4** | 131 | **C363_162.0 P63 BN63B4** | 132 |
| **8.7** | 183 | 1.1 | 151.7 | 5000 | **C223_151.7 S05 M05B4** | 123 | **C223_151.7 P63 BN63B4** | 124 |
| **8.9** | 179 | 1.7 | 148.4 | 5500 | **C323_148.4 S05 M05B4** | 127 | **C323_148.4 P63 BN63B4** | 128 |
| **9.4** | 169 | 2.7 | 139.8 | 6500 | **C363_139.8 S05 M05B4** | 131 | **C363_139.8 P63 BN63B4** | 132 |
| **9.7** | 165 | 1.2 | 136.5 | 5000 | **C223_136.5 S05 M05B4** | 123 | **C223_136.5 P63 BN63B4** | 124 |
| **9.7** | 164 | 1.8 | 136.0 | 5500 | **C323_136.0 S05 M05B4** | 127 | **C323_136.0 P63 BN63B4** | 128 |
| **10.5** | 152 | 3.0 | 125.8 | 6500 | **C363_125.8 S05 M05B4** | 131 | **C363_125.8 P63 BN63B4** | 132 |
| **10.8** | 148 | 2.0 | 122.4 | 5500 | **C323_122.4 S05 M05B4** | 127 | **C323_122.4 P63 BN63B4** | 128 |
| **10.8** | 148 | 1.4 | 122.2 | 5000 | **C223_122.2 S05 M05B4** | 123 | **C223_122.2 P63 BN63B4** | 124 |
| **11.8** | 135 | 1.5 | 112.0 | 5000 | **C223_112.0 S05 M05B4** | 123 | **C223_112.0 P63 BN63B4** | 124 |
| **11.8** | 135 | 3.3 | 111.5 | 6500 | **C363_111.5 S05 M05B4** | 131 | **C363_111.5 P63 BN63B4** | 132 |
| **11.9** | 134 | 2.2 | 110.6 | 5500 | **C323_110.6 S05 M05B4** | 127 | **C323_110.6 P63 BN63B4** | 128 |
| **12.8** | 125 | 2.4 | 103.3 | 5500 | **C323_103.3 S05 M05B4** | 127 | **C323_103.3 P63 BN63B4** | 128 |
| **12.9** | 124 | 3.6 | 102.2 | 6500 | **C363_102.2 S05 M05B4** | 131 | **C363_102.2 P63 BN63B4** | 132 |

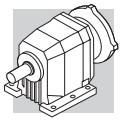


# 0.18 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **13.2** | 121 | 1.7 | 100.2 | 5000 | **C223_100.2 S05 M05B4** | 123 | **C223_100.2 P63 BN63B4** | 124 |
| **14.0** | 114 | 2.6 | 94.2 | 5500 | **C323_94.2 S05 M05B4** | 127 | **C323_94.2 P63 BN63B4** | 128 |
| **14.9** | 107 | 1.9 | 88.5 | 5000 | **C223_88.5 S05 M05B4** | 123 | **C223_88.5 P63 BN63B4** | 124 |
| **16.0** | 100 | 2.0 | 82.6 | 5000 | **C223_82.6 S05 M05B4** | 123 | **C223_82.6 P63 BN63B4** | 124 |
| **16.0** | 100 | 3.0 | 82.6 | 5500 | **C323_82.6 S05 M05B4** | 127 | **C323_82.6 P63 BN63B4** | 128 |
| **17.6** | 90 | 2.2 | 74.8 | 5000 | **C223_74.8 S05 M05B4** | 123 | **C223_74.8 P63 BN63B4** | 124 |
| **17.7** | 90 | 3.2 | 74.7 | 5500 | **C323_74.7 S05 M05B4** | 127 | **C323_74.7 P63 BN63B4** | 128 |
| **19.8** | 83 | 2.6 | 66.8 | 5500 | **C322_66.8 S05 M05B4** | 127 | **C322_66.8 P63 BN63B4** | 128 |
| **20.0** | 82 | 1.1 | 66.2 | 2000 | **C122_66.2 S05 M05B4** | 119 | **C122_66.2 P63 BN63B4** | 120 |
| **20.2** | 79 | 2.5 | 65.3 | 5000 | **C223_65.3 S05 M05B4** | 123 | **C223_65.3 P63 BN63B4** | 124 |
| **20.9** | 78 | 1.7 | 63.3 | 5000 | **C222_63.3 S05 M05B4** | 123 | **C222_63.3 P63 BN63B4** | 124 |
| **22.0** | 73 | 2.6 | 60.0 | 5000 | **C223_60.0 S05 M05B4** | 123 | **C223_60.0 P63 BN63B4** | 124 |
| **22.2** | 73 | 2.9 | 59.4 | 5500 | **C322_59.4 S05 M05B4** | 127 | **C322_59.4 P63 BN63B4** | 128 |
| **23.9** | 68 | 1.3 | 55.2 | 2000 | **C122_55.2 S05 M05B4** | 119 | **C122_55.2 P63 BN63B4** | 120 |
| **24.1** | 68 | 2.3 | 54.7 | 5000 | **C222_54.7 S05 M05B4** | 123 | **C222_54.7 P63 BN63B4** | 124 |
| **27.1** | 60 | 2.6 | 48.6 | 5000 | **C222_48.6 S05 M05B4** | 123 | **C222_48.6 P63 BN63B4** | 124 |
| **27.7** | 59 | 1.5 | 47.6 | 2000 | **C122_47.6 S05 M05B4** | 119 | **C122_47.6 P63 BN63B4** | 120 |
| **31** | 53 | 3.6 | 43.3 | 5000 | **C222_43.3 S05 M05B4** | 123 | **C222_43.3 P63 BN63B4** | 124 |
| **31** | 52 | 1.7 | 42.3 | 2000 | **C122_42.3 S05 M05B4** | 119 | **C122_42.3 P63 BN63B4** | 120 |
| **33** | 50 | 0.9 | 40.3 | 850 | **C052_40.3 S05 M05B4** | 118 | | |
| **36** | 45 | 1.0 | 36.4 | 850 | **C052_36.4 S05 M05B4** | 118 | | |
| **36** | 46 | 2.0 | 37.0 | 2000 | **C122_37.0 S05 M05B4** | 119 | **C122_37.0 P63 BN63B4** | 120 |
| **40** | 40 | 2.2 | 32.8 | 2000 | **C122_32.8 S05 M05B4** | 119 | **C122_32.8 P63 BN63B4** | 120 |
| **40** | 41 | 1.1 | 32.8 | 840 | **C052_32.8 S05 M05B4** | 118 | | |
| **45** | 36 | 2.5 | 29.5 | 2000 | **C122_29.5 S05 M05B4** | 119 | **C122_29.5 P63 BN63B4** | 120 |
| **49** | 34 | 1.3 | 27.1 | 820 | **C052_27.1 S05 M05B4** | 118 | | |
| **52** | 31 | 2.8 | 25.4 | 2000 | **C122_25.4 S05 M05B4** | 119 | **C122_25.4 P63 BN63B4** | 120 |
| **57** | 29 | 3.0 | 23.2 | 2000 | **C122_23.2 S05 M05B4** | 119 | **C122_23.2 P63 BN63B4** | 120 |
| **63** | 26 | 1.7 | 21.0 | 810 | **C052_21.0 S05 M05B4** | 118 | | |
| **64** | 25 | 3.2 | 20.6 | 2000 | **C122_20.6 S05 M05B4** | 119 | **C122_20.6 P63 BN63B4** | 120 |
| **70** | 23 | 1.7 | 18.9 | 790 | **C052_18.9 S05 M05B4** | 118 | | |
| **72** | 23 | 3.4 | 18.4 | 2000 | **C122_18.4 S05 M05B4** | 119 | **C122_18.4 P63 BN63B4** | 120 |
| **77** | 21 | 3.6 | 17.2 | 2000 | **C122_17.2 S05 M05B4** | 119 | **C122_17.2 P63 BN63B4** | 120 |
| **85** | 19 | 2.1 | 15.6 | 760 | **C052_15.6 S05 M05B4** | 118 | | |
| **106** | 15 | 2.6 | 12.5 | 740 | **C052_12.5 S05 M05B4** | 118 | | |
| **118** | 14 | 2.9 | 11.2 | 720 | **C052_11.2 S05 M05B4** | 118 | | |
| **142** | 11 | 2.6 | 9.3 | 690 | **C052_9.3 S05 M05B4** | 118 | | |
| **178** | 9 | 3.3 | 7.4 | 650 | **C052_7.4 S05 M05B4** | 118 | | |
| **197** | 8 | 3.6 | 6.7 | 640 | **C052_6.7 S05 M05B4** | 118 | | |
| **229** | 7 | 7.4 | 11.9 | 1670 | **C122_11.9 S05 M05A2** | 119 | **C122_11.9 P63 BN63A2** | 120 |
| **240** | 7 | 4.4 | 5.5 | 600 | **C052_5.5 S05 M05B4** | 118 | | |
| **268** | 6 | 8.1 | 10.1 | 1600 | **C122_10.1 S05 M05A2** | 119 | **C122_10.1 P63 BN63A2** | 120 |
| **310** | 5 | 8.9 | 8.8 | 1530 | **C122_8.8 S05 M05A2** | 119 | **C122_8.8 P63 BN63A2** | 120 |
| **354** | 5 | 9.8 | 7.6 | 1470 | **C122_7.6 S05 M05A2** | 119 | **C122_7.6 P63 BN63A2** | 120 |
| **440** | 4 | 11.3 | 6.2 | 1390 | **C122_6.2 S05 M05A2** | 119 | **C122_6.2 P63 BN63A2** | 120 |
| **488** | 3 | 11.9 | 5.6 | 1300 | **C122_5.6 S05 M05A2** | 119 | **C122_5.6 P63 BN63A2** | 120 |
| **577** | 3 | 13.4 | 4.9 | 1250 | **C122_4.9 S05 M05A2** | 119 | **C122_4.9 P63 BN63A2** | 120 |
| **635** | 3 | 14.0 | 4.3 | 1190 | **C122_4.3 S05 M05A2** | 119 | **C122_4.3 P63 BN63A2** | 120 |
| **770** | 2 | 16.0 | 3.7 | 1140 | **C122_3.7 S05 M05A2** | 119 | **C122_3.7 P63 BN63A2** | 120 |
| **853** | 2 | 16.7 | 3.2 | 1090 | **C122_3.2 S05 M05A2** | 119 | **C122_3.2 P63 BN63A2** | 120 |
| **1015** | 2 | 18.7 | 2.8 | 1040 | **C122_2.8 S05 M05A2** | 119 | **C122_2.8 P63 BN63A2** | 120 |

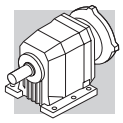
# 0.25 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.61** | 3575 | 1.1 | 1481 | 35000 | | | **C804_1481 P71 BN71B6** | 151 |
| **0.77** | 2820 | 1.4 | 1168 | 35000 | | | **C804_1168 P71 BN71B6** | 151 |
| **1.2** | 1753 | 0.9 | 726.3 | 16000 | **C614_726.3 S1 M1SD6** | 143 | **C614_726.3 P71 BN71B6** | 144 |

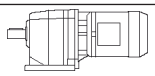


# 0.25 kW

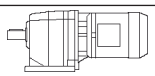
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **1.6** | 1330 | 0.8 | 808.0 | 10000 | | | **C514_808.0 P63 BN63C4** | 140 |
| **1.6** | 1327 | 0.8 | 549.7 | 10000 | **C514_549.7 S1 M1SD6** | 139 | **C514_549.7 P71 BN71B6** | 140 |
| **1.9** | 1134 | 0.9 | 717.7 | 10000 | | | **C514_717.7 P71 BN71A4** | 140 |
| **1.9** | 1120 | 0.9 | 463.9 | 10000 | **C514_463.9 S1 M1SD6** | 139 | **C514_463.9 P71 BN71B6** | 140 |
| **2.0** | 1101 | 1.5 | 668.8 | 16000 | | | **C614_668.8 P63 BN63C4** | 144 |
| **2.4** | 894 | 1.8 | 370.1 | 16000 | **C614_370.1 S1 M1SD6** | 143 | **C614_370.1 P71 BN71B6** | 144 |
| **2.5** | 869 | 1.2 | 549.7 | 10000 | | | **C514_549.7 P71 BN71A4** | 140 |
| **2.9** | 741 | 0.8 | 450.2 | 7000 | **C414_450.2 S05 M05C4** | 135 | **C414_450.2 P71 BN71A4** | 136 |
| **3.2** | 689 | 0.9 | 418.5 | 7000 | **C414_418.5 S05 M05C4** | 135 | **C414_418.5 P71 BN71A4** | 136 |
| **3.2** | 684 | 1.5 | 415.7 | 10000 | | | **C514_415.7 P71 BN71A4** | 140 |
| **3.5** | 628 | 1.0 | 381.8 | 7000 | **C414_381.8 S05 M05C4** | 135 | **C414_381.8 P71 BN71A4** | 136 |
| **3.5** | 625 | 1.6 | 379.6 | 10000 | | | **C514_379.6 P71 BN71A4** | 140 |
| **3.8** | 567 | 0.8 | 344.3 | 6500 | **C364_344.3 S05 M05C4** | 131 | **C364_344.3 P71 BN71A4** | 136 |
| **4.0** | 549 | 1.1 | 333.4 | 7000 | **C414_333.4 S05 M05C4** | 135 | **C414_333.4 P71 BN71A4** | 136 |
| **4.0** | 537 | 1.9 | 326.1 | 10000 | | | **C514_326.1 P71 BN71A4** | 140 |
| **4.2** | 511 | 0.9 | 318.9 | 6500 | **C364_318.9 S05 M05C4** | 131 | **C364_318.9 P71 BN71A4** | 136 |
| **4.3** | 501 | 1.2 | 304.2 | 7000 | **C414_304.2 S05 M05C4** | 135 | **C414_304.2 P71 BN71A4** | 136 |
| **4.4** | 490 | 2.0 | 297.8 | 10000 | | | **C514_297.8 P71 BN71A4** | 140 |
| **4.6** | 466 | 1.0 | 290.9 | 6500 | **C364_290.9 S05 M05C4** | 131 | **C364_290.9 P71 BN71A4** | 136 |
| **5.0** | 434 | 2.3 | 263.8 | 10000 | | | **C514_263.8 P71 BN71A4** | 140 |
| **5.0** | 433 | 1.4 | 263.0 | 7000 | **C414_263.0 S05 M05C4** | 135 | **C414_263.0 P71 BN71A4** | 136 |
| **5.3** | 409 | 1.1 | 255.0 | 6500 | **C364_255.0 S05 M05C4** | 131 | **C364_255.0 P71 BN71A4** | 136 |
| **5.5** | 395 | 1.5 | 239.9 | 7000 | **C414_239.9 S05 M05C4** | 135 | **C414_239.9 P71 BN71A4** | 136 |
| **5.8** | 370 | 1.2 | 230.9 | 6500 | **C364_230.9 S05 M05C4** | 131 | **C364_230.9 P71 BN71A4** | 136 |
| **6.3** | 350 | 2.9 | 216.7 | 10000 | | | **C513_216.7 P71 BN71A4** | 140 |
| **6.5** | 342 | 1.3 | 206.4 | 6500 | **C363_206.4 S05 M05C4** | 131 | **C363_206.4 P71 BN71A4** | 132 |
| **7.2** | 308 | 1.9 | 190.8 | 7000 | | | **C413_190.8 P71 BN71A4** | 136 |
| **7.2** | 308 | 1.0 | 186.0 | 5500 | **C323_186.0 S05 M05C4** | 127 | **C323_186.0 P71 BN71A4** | 128 |
| **7.3** | 304 | 1.5 | 183.5 | 6500 | **C363_183.5 S05 M05C4** | 131 | **C363_183.5 P71 BN71A4** | 132 |
| **8.0** | 277 | 1.1 | 167.4 | 5500 | **C323_167.4 S05 M05C4** | 127 | **C323_167.4 P71 BN71A4** | 128 |
| **8.3** | 268 | 1.7 | 162.0 | 6500 | **C363_162.0 S05 M05C4** | 131 | **C363_162.0 P71 BN71A4** | 132 |
| **8.4** | 265 | 2.3 | 164.1 | 7000 | | | **C413_164.1 P71 BN71A4** | 136 |
| **9.0** | 246 | 1.2 | 148.4 | 5500 | **C323_148.4 S05 M05C4** | 127 | **C323_148.4 P71 BN71A4** | 128 |
| **9.6** | 231 | 1.9 | 139.8 | 6500 | **C363_139.8 S05 M05C4** | 131 | **C363_139.8 P71 BN71A4** | 132 |
| **9.8** | 226 | 0.9 | 136.5 | 5000 | **C223_136.5 S05 M05C4** | 123 | **C223_136.5 P71 BN71A4** | 124 |
| **9.9** | 225 | 1.3 | 136.0 | 5500 | **C323_136.0 S05 M05C4** | 127 | **C323_136.0 P71 BN71A4** | 128 |
| **10.3** | 215 | 2.8 | 132.9 | 7000 | | | **C413_132.9 P71 BN71A4** | 136 |
| **10.7** | 208 | 2.2 | 125.8 | 6500 | **C363_125.8 S05 M05C4** | 131 | **C363_125.8 P71 BN71A4** | 132 |
| **11.0** | 203 | 1.5 | 122.4 | 5500 | **C323_122.4 S05 M05C4** | 127 | **C323_122.4 P71 BN71A4** | 128 |
| **11.0** | 202 | 1.0 | 122.2 | 5000 | **C223_122.2 S05 M05C4** | 123 | **C223_122.2 P71 BN71A4** | 124 |
| **12.0** | 185 | 1.1 | 112.0 | 5000 | **C223_112.0 S05 M05C4** | 123 | **C223_112.0 P71 BN71A4** | 124 |
| **12.0** | 185 | 2.4 | 111.5 | 6500 | **C363_111.5 S05 M05C4** | 131 | **C363_111.5 P71 BN71A4** | 132 |
| **12.1** | 183 | 1.6 | 110.6 | 5500 | **C323_110.6 S05 M05C4** | 127 | **C323_110.6 P71 BN71A4** | 128 |
| **13.0** | 171 | 1.8 | 103.3 | 5500 | **C323_103.3 S05 M05C4** | 127 | **C323_103.3 P71 BN71A4** | 128 |
| **13.1** | 169 | 2.7 | 102.2 | 6500 | **C363_102.2 S05 M05C4** | 131 | **C363_102.2 P71 BN71A4** | 132 |
| **13.4** | 166 | 1.2 | 100.2 | 5000 | **C223_100.2 S05 M05C4** | 123 | **C223_100.2 P71 BN71A4** | 124 |
| **14.2** | 156 | 1.9 | 94.2 | 5500 | **C323_94.2 S05 M05C4** | 127 | **C323_94.2 P71 BN71A4** | 128 |
| **14.6** | 152 | 3.0 | 91.9 | 6500 | **C363_91.9 S05 M05C4** | 131 | **C363_91.9 P71 BN71A4** | 132 |
| **15.1** | 147 | 1.4 | 88.5 | 5000 | **C223_88.5 S05 M05C4** | 123 | **C223_88.5 P71 BN71A4** | 124 |
| **16.2** | 137 | 1.5 | 82.6 | 5000 | **C223_82.6 S05 M05C4** | 123 | **C223_82.6 P71 BN71A4** | 124 |
| **16.2** | 137 | 2.2 | 82.6 | 5500 | **C323_82.6 S05 M05C4** | 127 | **C323_82.6 P71 BN71A4** | 128 |
| **17.9** | 124 | 1.6 | 74.8 | 5000 | **C223_74.8 S05 M05C4** | 123 | **C223_74.8 P71 BN71A4** | 124 |
| **17.9** | 124 | 2.3 | 74.7 | 5500 | **C323_74.7 S05 M05C4** | 127 | **C323_74.7 P71 BN71A4** | 128 |
| **20.1** | 113 | 1.9 | 66.8 | 5500 | **C322_66.8 S05 M05C4** | 127 | **C322_66.8 P71 BN71A4** | 128 |
| **20.3** | 112 | 0.8 | 66.2 | 2000 | **C122_66.2 S05 M05C4** | 119 | **C122_66.2 P71 BN71A4** | 120 |
| **20.5** | 108 | 1.8 | 65.3 | 5000 | **C223_65.3 S05 M05C4** | 123 | **C223_65.3 P71 BN71A4** | 124 |
| **21.2** | 107 | 1.2 | 63.3 | 5000 | **C222_63.3 S05 M05C4** | 123 | **C222_63.3 P71 BN71A4** | 124 |
| **22.3** | 99 | 1.9 | 60.0 | 5000 | **C223_60.0 S05 M05C4** | 123 | **C223_60.0 P71 BN71A4** | 124 |
| **22.6** | 100 | 2.1 | 59.4 | 5500 | **C322_59.4 S05 M05C4** | 127 | **C322_59.4 P71 BN71A4** | 128 |
| **24.3** | 93 | 1.0 | 55.2 | 2000 | **C122_55.2 S05 M05C4** | 119 | **C122_55.2 P71 BN71A4** | 120 |

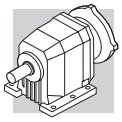


# 0.25 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **24.5** | 93 | 1.7 | 54.7 | 5000 | **C222_54.7 S05 M05C4** | 123 | **C222_54.7 P71 BN71A4** | 124 |
| **25.6** | 89 | 3.4 | 52.4 | 5500 | **C322_52.4 S05 M05C4** | 127 | **C322_52.4 P71 BN71A4** | 128 |
| **27.5** | 82 | 1.9 | 48.6 | 5000 | **C222_48.6 S05 M05C4** | 123 | **C222_48.6 P71 BN71A4** | 124 |
| **28.1** | 80 | 1.1 | 47.6 | 2000 | **C122_47.6 S05 M05C4** | 119 | **C122_47.6 P71 BN71A4** | 120 |
| **31** | 73 | 2.6 | 43.3 | 4750 | **C222_43.3 S05 M05C4** | 123 | **C222_43.3 P71 BN71A4** | 124 |
| **32** | 72 | 1.3 | 42.3 | 2000 | **C122_42.3 S05 M05C4** | 119 | **C122_42.3 P71 BN71A4** | 120 |
| **36** | 63 | 1.4 | 37.0 | 2000 | **C122_37.0 S05 M05C4** | 119 | **C122_37.0 P71 BN71A4** | 120 |
| **36** | 62 | 3.2 | 36.8 | 4540 | **C222_36.8 S05 M05C4** | 123 | **C222_36.8 P71 BN71A4** | 124 |
| **40** | 56 | 3.6 | 33.1 | 4500 | **C222_33.1 S05 M05C4** | 123 | **C222_33.1 P71 BN71A4** | 124 |
| **41** | 55 | 1.6 | 32.8 | 2000 | **C122_32.8 S05 M05C4** | 119 | **C122_32.8 P71 BN71A4** | 120 |
| **45** | 50 | 1.8 | 29.5 | 2000 | **C122_29.5 S05 M05C4** | 119 | **C122_29.5 P71 BN71A4** | 120 |
| **49** | 47 | 1.0 | 27.1 | 700 | **C052_27.1 S05 M05C4** | 118 | | |
| **53** | 43 | 2.1 | 25.4 | 2000 | **C122_25.4 S05 M05C4** | 119 | **C122_25.4 P71 BN71A4** | 120 |
| **58** | 39 | 2.2 | 23.2 | 2000 | **C122_23.2 S05 M05C4** | 119 | **C122_23.2 P71 BN71A4** | 120 |
| **63** | 36 | 1.2 | 21.0 | 720 | **C052_21.0 S05 M05C4** | 118 | | |
| **65** | 35 | 2.4 | 20.6 | 2000 | **C122_20.6 S05 M05C4** | 119 | **C122_20.6 P71 BN71A4** | 120 |
| **70** | 33 | 1.2 | 18.9 | 710 | **C052_18.9 S05 M05C4** | 118 | | |
| **73** | 31 | 2.5 | 18.4 | 2000 | **C122_18.4 S05 M05C4** | 119 | **C122_18.4 P71 BN71A4** | 120 |
| **78** | 29 | 2.6 | 17.2 | 2000 | **C122_17.2 S05 M05C4** | 119 | **C122_17.2 P71 BN71A4** | 120 |
| **85** | 27 | 1.5 | 15.6 | 700 | **C052_15.6 S05 M05C4** | 118 | | |
| **87** | 26 | 2.8 | 15.4 | 2000 | **C122_15.4 S05 M05C4** | 119 | **C122_15.4 P71 BN71A4** | 120 |
| **100** | 23 | 3.1 | 13.4 | 2000 | **C122_13.4 S05 M05C4** | 119 | **C122_13.4 P71 BN71A4** | 120 |
| **106** | 22 | 1.9 | 12.5 | 690 | **C052_12.5 S05 M05C4** | 118 | | |
| **113** | 20 | 3.3 | 11.9 | 2000 | **C122_11.9 S05 M05C4** | 119 | **C122_11.9 P71 BN71A4** | 120 |
| **118** | 19 | 2.1 | 11.2 | 670 | **C052_11.2 S05 M05C4** | 118 | | |
| **133** | 17 | 3.7 | 10.1 | 1980 | **C122_10.1 S05 M05C4** | 119 | **C122_10.1 P71 BN71A4** | 120 |
| **142** | 16 | 1.9 | 9.3 | 650 | **C052_9.3 S05 M05C4** | 118 | | |
| **157** | 14 | 4.2 | 17.2 | 1870 | **C122_17.2 S05 M05B2** | 119 | **C122_17.2 P63 BN63B2** | 120 |
| **178** | 13 | 2.4 | 7.4 | 620 | **C052_7.4 S05 M05C4** | 118 | | |
| **197** | 12 | 2.6 | 6.7 | 610 | **C052_6.7 S05 M05C4** | 118 | | |
| **204** | 11 | 5.0 | 13.4 | 1710 | **C122_13.4 S05 M05B2** | 119 | **C122_13.4 P63 BN63B2** | 120 |
| **230** | 10 | 5.4 | 11.9 | 1660 | **C122_11.9 S05 M05B2** | 119 | **C122_11.9 P63 BN63B2** | 120 |
| **240** | 9 | 3.2 | 5.5 | 580 | **C052_5.5 S05 M05C4** | 118 | | |
| **268** | 8 | 5.8 | 10.1 | 1590 | **C122_10.1 S05 M05B2** | 119 | **C122_10.1 P63 BN63B2** | 120 |
| **311** | 7 | 6.5 | 8.8 | 1510 | **C122_8.8 S05 M05B2** | 119 | **C122_8.8 P63 BN63B2** | 120 |
| **354** | 6 | 7.0 | 7.6 | 1460 | **C122_7.6 S05 M05B2** | 119 | **C122_7.6 P63 BN63B2** | 120 |
| **442** | 5 | 8.2 | 6.2 | 1350 | **C122_6.2 S05 M05B2** | 119 | **C122_6.2 P63 BN63B2** | 120 |
| **489** | 5 | 8.6 | 5.6 | 1290 | **C122_5.6 S05 M05B2** | 119 | **C122_5.6 P63 BN63B2** | 120 |
| **577** | 4 | 9.7 | 4.9 | 1240 | **C122_4.9 S05 M05B2** | 119 | **C122_4.9 P63 BN63B2** | 120 |
| **637** | 4 | 10.1 | 4.3 | 1180 | **C122_4.3 S05 M05B2** | 119 | **C122_4.3 P63 BN63B2** | 120 |
| **770** | 3 | 11.5 | 3.7 | 1130 | **C122_3.7 S05 M05B2** | 119 | **C122_3.7 P63 BN63B2** | 120 |
| **856** | 3 | 12.1 | 3.2 | 1080 | **C122_3.2 S05 M05B2** | 119 | **C122_3.2 P63 BN63B2** | 120 |
| **979** | 2 | 13.0 | 2.8 | 1030 | **C122_2.8 S05 M05B2** | 119 | **C122_2.8 P63 BN63B2** | 120 |

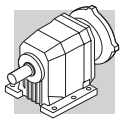
# 0.37 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **0.73** | 4382 | 1.6 | 1240 | 60000 | **C904_1240 S1 M1LA6** | 153 | **C904_1240 P80 BN80A6** | 154 |
| **0.78** | 4127 | 1.0 | 1168 | 35000 | | | **C804_1168 P80 BN80A6** | 151 |
| **0.93** | 3476 | 1.2 | 1481 | 35000 | | | **C804_1481 P71 BN71B4** | 151 |
| **1.2** | 2741 | 1.5 | 1168 | 35000 | | | **C804_1168 P71 BN71B4** | 151 |
| **1.4** | 2220 | 1.8 | 945.7 | 35000 | | | **C804_945.7 P71 BN71B4** | 151 |
| **1.5** | 2165 | 1.1 | 922.6 | 25000 | | | **C704_922.6 P71 BN71B4** | 148 |
| **1.7** | 1869 | 0.9 | 796.1 | 16000 | **C614_796.1 S1 M1SD4** | 143 | **C614_796.1 P71 BN71B4** | 144 |
| **2.0** | 1570 | 1.0 | 668.8 | 16000 | **C614_668.8 S1 M1SD4** | 143 | **C614_668.8 P71 BN71B4** | 144 |
| **2.1** | 1543 | 1.5 | 657.3 | 25000 | | | **C704_657.3 P71 BN71B4** | 148 |



# 0.37 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **2.4** | 1341 | 1.2 | 571.2 | 16000 | **C614_571.2 S1 M1SD4** | 143 | **C614_571.2 P71 BN71B4** | 144 |
| **2.5** | 1302 | 1.8 | 554.7 | 25000 | | | **C704_554.7 P71 BN71B4** | 148 |
| **2.5** | 1290 | 0.8 | 549.7 | 10000 | **C514_549.7 S1 M1SD4** | 139 | **C514_549.7 P71 BN71B4** | 140 |
| **2.6** | 1223 | 1.3 | 521.1 | 16000 | **C614_521.1 S1 M1SD4** | 143 | **C614_521.1 P71 BN71B4** | 144 |
| **3.3** | 989 | 1.6 | 421.5 | 16000 | **C614_421.5 S1 M1SD4** | 143 | **C614_421.5 P71 BN71B4** | 144 |
| **3.3** | 976 | 1.0 | 415.7 | 10000 | **C514_415.7 S1 M1SD4** | 139 | **C514_415.7 P71 BN71B4** | 140 |
| **3.3** | 961 | 2.4 | 409.4 | 25000 | | | **C704_409.4 P71 BN71B4** | 148 |
| **3.6** | 891 | 1.1 | 379.6 | 10000 | **C514_379.6 S1 M1SD4** | 139 | **C514_379.6 P71 BN71B4** | 140 |
| **3.7** | 869 | 1.8 | 370.1 | 16000 | **C614_370.1 S1 M1SD4** | 143 | **C614_370.1 P71 BN71B4** | 144 |
| **4.1** | 793 | 2.0 | 337.7 | 16000 | **C614_337.7 S1 M1SD4** | 143 | **C614_337.7 P71 BN71B4** | 144 |
| **4.1** | 783 | 0.8 | 333.4 | 7000 | **C414_333.4 S1 M1SD4** | 135 | **C414_333.4 P71 BN71B4** | 136 |
| **4.2** | 765 | 1.3 | 326.1 | 10000 | **C514_326.1 S1 M1SD4** | 139 | **C514_326.1 P71 BN71B4** | 140 |
| **4.6** | 699 | 1.4 | 297.8 | 10000 | **C514_297.8 S1 M1SD4** | 139 | **C514_297.8 P71 BN71B4** | 140 |
| **5.2** | 619 | 1.6 | 263.8 | 10000 | **C514_263.8 S1 M1SD4** | 139 | **C514_263.8 P71 BN71B4** | 140 |
| **5.2** | 617 | 1.0 | 263.0 | 7000 | **C414_263.0 S1 M1SD4** | 135 | **C414_263.0 P71 BN71B4** | 136 |
| **5.9** | 540 | 0.8 | 230.9 | 6300 | **C364_230.9 S1 M1SD4** | 131 | **C364_230.9 P71 BN71B4** | 136 |
| **6.3** | 520 | 1.9 | 216.7 | 10000 | **C513_216.7 S1 M1SD4** | 139 | **C513_216.7 P71 BN71B4** | 140 |
| **6.6** | 502 | 1.2 | 209.1 | 7000 | **C413_209.1 S1 M1SD4** | 135 | **C413_209.1 P71 BN71B4** | 136 |
| **6.6** | 499 | 0.9 | 206.4 | 6500 | **C363_206.4 S1 M1SD4** | 131 | **C363_206.4 P71 BN71B4** | 132 |
| **6.9** | 475 | 2.1 | 197.9 | 10000 | **C513_197.9 S1 M1SD4** | 139 | **C513_197.9 P71 BN71B4** | 140 |
| **7.2** | 458 | 1.3 | 190.8 | 7000 | **C413_190.8 S1 M1SD4** | 135 | **C413_190.8 P71 BN71B4** | 136 |
| **7.5** | 444 | 1.0 | 183.5 | 6500 | **C363_183.5 S1 M1SD4** | 131 | **C363_183.5 P71 BN71B4** | 132 |
| **7.6** | 431 | 1.4 | 179.9 | 7000 | **C413_179.9 S1 M1SD4** | 135 | **C413_179.9 P71 BN71B4** | 136 |
| **7.8** | 422 | 2.4 | 175.8 | 10000 | **C513_175.8 S1 M1SD4** | 139 | **C513_175.8 P71 BN71B4** | 140 |
| **8.3** | 394 | 1.5 | 164.1 | 7000 | **C413_164.1 S1 M1SD4** | 135 | **C413_164.1 P71 BN71B4** | 136 |
| **8.5** | 385 | 2.6 | 160.5 | 10000 | **C513_160.5 S1 M1SD4** | 139 | **C513_160.5 P71 BN71B4** | 140 |
| **8.5** | 392 | 1.1 | 162.0 | 6500 | **C363_162.0 S1 M1SD4** | 131 | **C363_162.0 P71 BN71B4** | 132 |
| **9.4** | 349 | 1.7 | 145.6 | 7000 | **C413_145.6 S1 M1SD4** | 135 | **C413_145.6 P71 BN71B4** | 136 |
| **9.8** | 338 | 1.3 | 139.8 | 6500 | **C363_139.8 S1 M1SD4** | 131 | **C363_139.8 P71 BN71B4** | 132 |
| **10.1** | 329 | 0.9 | 136.0 | 5500 | **C323_136.0 S1 M1SD4** | 127 | **C323_136.0 P71 BN71B4** | 128 |
| **10.3** | 319 | 1.9 | 132.9 | 7000 | **C413_132.9 S1 M1SD4** | 135 | **C413_132.9 P71 BN71B4** | 136 |
| **10.9** | 304 | 1.5 | 125.8 | 6500 | **C363_125.8 S1 M1SD4** | 131 | **C363_125.8 P71 BN71B4** | 132 |
| **11.2** | 296 | 1.0 | 122.4 | 5500 | **C323_122.4 S1 M1SD4** | 127 | **C323_122.4 P71 BN71B4** | 128 |
| **11.4** | 289 | 2.1 | 120.6 | 7000 | **C413_120.6 S1 M1SD4** | 135 | **C413_120.6 P71 BN71B4** | 136 |
| **12.3** | 270 | 1.7 | 111.5 | 6500 | **C363_111.5 S1 M1SD4** | 131 | **C363_111.5 P71 BN71B4** | 132 |
| **12.4** | 264 | 2.3 | 110.1 | 7000 | **C413_110.1 S1 M1SD4** | 135 | **C413_110.1 P71 BN71B4** | 136 |
| **12.4** | 267 | 1.1 | 110.6 | 5500 | **C323_110.6 S1 M1SD4** | 127 | **C323_110.6 P71 BN71B4** | 128 |
| **13.3** | 250 | 1.2 | 103.3 | 5500 | **C323_103.3 S1 M1SD4** | 127 | **C323_103.3 P71 BN71B4** | 128 |
| **13.4** | 245 | 2.4 | 102.3 | 7000 | **C413_102.3 S1 M1SD4** | 135 | **C413_102.3 P71 BN71B4** | 136 |
| **13.4** | 247 | 1.8 | 102.2 | 6500 | **C363_102.2 S1 M1SD4** | 131 | **C363_102.2 P71 BN71B4** | 132 |
| **14.5** | 228 | 1.3 | 94.2 | 5500 | **C323_94.2 S1 M1SD4** | 127 | **C323_94.2 P71 BN71B4** | 128 |
| **14.7** | 224 | 2.7 | 93.3 | 7000 | **C413_93.3 S1 M1SD4** | 135 | **C413_93.3 P71 BN71B4** | 136 |
| **14.9** | 222 | 2.0 | 91.9 | 6500 | **C363_91.9 S1 M1SD4** | 131 | **C363_91.9 P71 BN71B4** | 132 |
| **15.5** | 214 | 0.9 | 88.5 | 4850 | **C223_88.5 S1 M1SD4** | 123 | **C223_88.5 P71 BN71B4** | 124 |
| **16.5** | 201 | 2.2 | 83.1 | 6500 | **C363_83.1 S1 M1SD4** | 131 | **C363_83.1 P71 BN71B4** | 132 |
| **16.6** | 200 | 1.0 | 82.6 | 5000 | **C223_82.6 S1 M1SD4** | 123 | **C223_82.6 P71 BN71B4** | 124 |
| **16.6** | 200 | 1.5 | 82.6 | 5500 | **C323_82.6 S1 M1SD4** | 127 | **C323_82.6 P71 BN71B4** | 128 |
| **16.8** | 196 | 3.1 | 81.5 | 7000 | **C413_81.5 S1 M1SD4** | 135 | **C413_81.5 P71 BN71B4** | 136 |
| **17.7** | 188 | 2.4 | 77.6 | 6500 | **C363_77.6 S1 M1SD4** | 131 | **C363_77.6 P71 BN71B4** | 132 |
| **18.3** | 181 | 1.1 | 74.8 | 5000 | **C223_74.8 S1 M1SD4** | 123 | **C223_74.8 P71 BN71B4** | 124 |
| **18.3** | 181 | 1.6 | 74.7 | 5500 | **C323_74.7 S1 M1SD4** | 127 | **C323_74.7 P71 BN71B4** | 128 |
| **18.4** | 178 | 3.4 | 74.4 | 7000 | **C413_74.4 S1 M1SD4** | 135 | **C413_74.4 P71 BN71B4** | 136 |
| **19.4** | 171 | 2.6 | 70.8 | 6500 | **C363_70.8 S1 M1SD4** | 131 | **C363_70.8 P71 BN71B4** | 132 |
| **20.5** | 165 | 1.3 | 66.8 | 5500 | **C322_66.8 S1 M1SD4** | 127 | **C322_66.8 P71 BN71B4** | 128 |
| **21.0** | 158 | 1.3 | 65.3 | 5000 | **C223_65.3 S1 M1SD4** | 123 | **C223_65.3 P71 BN71B4** | 124 |
| **21.7** | 156 | 0.8 | 63.3 | 4850 | **C222_63.3 S1 M1SD4** | 123 | **C222_63.3 P71 BN71B4** | 124 |
| **22.1** | 150 | 3.0 | 62.0 | 6500 | **C363_62.0 S1 M1SD4** | 131 | **C363_62.0 P71 BN71B4** | 132 |
| **22.8** | 145 | 1.3 | 60.0 | 5000 | **C223_60.0 S1 M1SD4** | 123 | **C223_60.0 P71 BN71B4** | 124 |
| **23.1** | 147 | 1.5 | 59.4 | 5500 | **C322_59.4 S1 M1SD4** | 127 | **C322_59.4 P71 BN71B4** | 128 |
| **25.0** | 135 | 1.1 | 54.7 | 5000 | **C222_54.7 S1 M1SD4** | 123 | **C222_54.7 P71 BN71B4** | 124 |

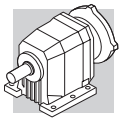


# 0.37 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **26.1** | 130 | 2.3 | 52.4 | 5500 | **C322_52.4 S1 M1SD4** | 127 | **C322_52.4 P71 BN71B4** | 128 |
| **28.2** | 120 | 1.3 | 48.6 | 4850 | **C222_48.6 S1 M1SD4** | 123 | **C222_48.6 P71 BN71B4** | 124 |
| **30** | 112 | 2.7 | 45.3 | 5500 | **C322_45.3 S1 M1SD4** | 127 | **C322_45.3 P71 BN71B4** | 128 |
| **32** | 107 | 1.8 | 43.3 | 4530 | **C222_43.3 S1 M1SD4** | 123 | **C222_43.3 P71 BN71B4** | 124 |
| **34** | 101 | 3.0 | 40.7 | 5500 | **C322_40.7 S1 M1SD4** | 127 | **C322_40.7 P71 BN71B4** | 128 |
| **37** | 91 | 1.0 | 37.0 | 2000 | **C122_37.0 S1 M1SD4** | 119 | **C122_37.0 P71 BN71B4** | 120 |
| **37** | 91 | 2.2 | 36.8 | 4360 | **C222_36.8 S1 M1SD4** | 123 | **C222_36.8 P71 BN71B4** | 124 |
| **38** | 89 | 3.4 | 36.1 | 5500 | **C322_36.1 S1 M1SD4** | 127 | **C322_36.1 P71 BN71B4** | 128 |
| **41** | 82 | 2.4 | 33.1 | 4240 | **C222_33.1 S1 M1SD4** | 123 | **C222_33.1 P71 BN71B4** | 124 |
| **42** | 81 | 1.1 | 32.8 | 2000 | **C122_32.8 S1 M1SD4** | 119 | **C122_32.8 P71 BN71B4** | 120 |
| **46** | 73 | 2.7 | 29.6 | 4130 | **C222_29.6 S1 M1SD4** | 123 | **C222_29.6 P71 BN71B4** | 124 |
| **46** | 73 | 1.2 | 29.5 | 2000 | **C122_29.5 S1 M1SD4** | 119 | **C122_29.5 P71 BN71B4** | 120 |
| **50** | 67 | 3.0 | 27.2 | 4100 | **C222_27.2 S1 M1SD4** | 123 | **C222_27.2 P71 BN71B4** | 124 |
| **54** | 63 | 1.4 | 25.4 | 2000 | **C122_25.4 S1 M1SD4** | 119 | **C122_25.4 P71 BN71B4** | 120 |
| **56** | 60 | 3.3 | 24.3 | 3920 | **C222_24.3 S1 M1SD4** | 123 | **C222_24.3 P71 BN71B4** | 124 |
| **59** | 57 | 1.5 | 23.2 | 2000 | **C122_23.2 S1 M1SD4** | 119 | **C122_23.2 P71 BN71B4** | 120 |
| **66** | 51 | 1.6 | 20.6 | 2000 | **C122_20.6 S1 M1SD4** | 119 | **C122_20.6 P71 BN71B4** | 120 |
| **74** | 45 | 1.7 | 18.4 | 2000 | **C122_18.4 S1 M1SD4** | 119 | **C122_18.4 P71 BN71B4** | 120 |
| **80** | 42 | 1.8 | 17.2 | 2000 | **C122_17.2 S1 M1SD4** | 119 | **C122_17.2 P71 BN71B4** | 120 |
| **88** | 39 | 1.0 | 15.6 | 580 | **C052_15.6 S1 M1SD4** | 118 | | |
| **89** | 38 | 1.9 | 15.4 | 2000 | **C122_15.4 S1 M1SD4** | 119 | **C122_15.4 P71 BN71B4** | 120 |
| **102** | 33 | 2.1 | 13.4 | 2000 | **C122_13.4 S1 M1SD4** | 119 | **C122_13.4 P71 BN71B4** | 120 |
| **110** | 31 | 1.3 | 12.5 | 600 | **C052_12.5 S1 M1SD4** | 118 | | |
| **115** | 29 | 2.3 | 11.9 | 2000 | **C122_11.9 S1 M1SD4** | 119 | **C122_11.9 P71 BN71B4** | 120 |
| **122** | 28 | 1.4 | 11.2 | 590 | **C052_11.2 S1 M1SD4** | 118 | | |
| **136** | 25 | 2.5 | 10.1 | 1930 | **C122_10.1 S1 M1SD4** | 119 | **C122_10.1 P71 BN71B4** | 120 |
| **147** | 23 | 1.3 | 9.3 | 580 | **C052_9.3 S1 M1SD4** | 118 | | |
| **155** | 22 | 2.7 | 8.8 | 1850 | **C122_8.8 S1 M1SD4** | 119 | **C122_8.8 P71 BN71B4** | 120 |
| **164** | 20 | 2.2 | 5.5 | 570 | **C052_5.5 S1 M1LA6** | 118 | | |
| **180** | 19 | 3.0 | 7.6 | 1780 | **C122_7.6 S1 M1SD4** | 119 | **C122_7.6 P71 BN71B4** | 120 |
| **185** | 18 | 1.6 | 7.4 | 570 | **C052_7.4 S1 M1SD4** | 118 | | |
| **204** | 17 | 1.8 | 6.7 | 560 | **C052_6.7 S1 M1SD4** | 118 | | |
| **220** | 15 | 3.4 | 6.2 | 1650 | **C122_6.2 S1 M1SD4** | 119 | **C122_6.2 P71 BN71B4** | 120 |
| **235** | 14 | 3.7 | 11.9 | 1610 | **C122_11.9 S05 M05C2** | 119 | **C122_11.9 P71 BN71A2** | 120 |
| **249** | 14 | 2.2 | 5.5 | 540 | **C052_5.5 S1 M1SD4** | 118 | | |
| **273** | 12 | 4.0 | 10.1 | 1570 | **C122_10.1 S05 M05C2** | 119 | **C122_10.1 P71 BN71A2** | 120 |
| **318** | 11 | 4.5 | 8.8 | 1500 | **C122_8.8 S05 M05C2** | 119 | **C122_8.8 P71 BN71A2** | 120 |
| **361** | 9 | 4.8 | 7.6 | 1440 | **C122_7.6 S05 M05C2** | 119 | **C122_7.6 P71 BN71A2** | 120 |
| **452** | 7 | 5.7 | 6.2 | 1350 | **C122_6.2 S05 M05C2** | 119 | **C122_6.2 P71 BN71A2** | 120 |
| **500** | 7 | 6.0 | 5.6 | 1290 | **C122_5.6 S05 M05C2** | 119 | **C122_5.6 P71 BN71A2** | 120 |
| **577** | 6 | 6.5 | 4.9 | 1230 | **C122_4.9 S05 M05C2** | 119 | **C122_4.9 P71 BN71A2** | 120 |
| **651** | 5 | 7.0 | 4.3 | 1180 | **C122_3.2 S05 M05C2** | 119 | **C122_3.2 P71 BN71A2** | 120 |
| **770** | 4 | 7.8 | 3.7 | 1120 | **C122_3.7 S05 M05C2** | 119 | **C122_3.7 P71 BN71A2** | 120 |
| **875** | 4 | 8.4 | 3.2 | 1080 | **C122_3.2 S05 M05C2** | 119 | **C122_3.2 P71 BN71A2** | 120 |
| **1015** | 3 | 9.1 | 2.8 | 1030 | **C122_2.8 S05 M05C2** | 119 | **C122_2.8 P71 BN71A2** | 120 |

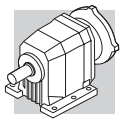
# 0.55 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.74** | 6442 | 1.1 | 1240 | 60000 | **C904_1240 S2 M2SA6** | 153 | **C904_1240 P80 BN80B6** | 154 |
| **0.85** | 5616 | 2.1 | 1081 | 85000 | **C1004_1081 S2 M2SA6** | 156 | **C1004_1081 P80 BN80B6** | 157 |
| **1.0** | 4792 | 1.5 | 922.3 | 60000 | **C904_922.3 S2 M2SA6** | 153 | **C904_922.3 P80 BN80B6** | 154 |
| **1.1** | 4381 | 0.9 | 1274 | 35000 | **C804_1274 S1 M1LA4** | 150 | **C804_1274 P80 BN80A4** | 151 |
| **1.1** | 4295 | 1.7 | 1240 | 60000 | **C904_1240 S1 M1LA4** | 153 | **C904_1240 P80 BN80A4** | 154 |
| **1.3** | 3549 | 1.1 | 1032 | 35000 | **C804_1032 S1 M1LA4** | 150 | **C804_1032 P80 BN80A4** | 151 |
| **1.4** | 3484 | 2.1 | 1006 | 60000 | **C904_1006 S1 M1LA4** | 153 | **C904_1006 P80 BN80A4** | 154 |

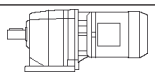


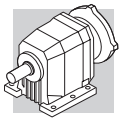
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| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **1.6** | 2939 | 1.4 | 854.6 | 35000 | **C804_854.6 S1 M1LA4** | 150 | **C804_854.6 P80 BN80A4** | 151 |
| **1.6** | 2923 | 2.5 | 844.0 | 65000 | **C904_844.0 S1 M1LA4** | 153 | **C904_844.0 P80 BN80A4** | 154 |
| **1.9** | 2531 | 0.9 | 736.0 | 25000 | **C704_736.0 S1 M1LA4** | 147 | **C704_736.0 P80 BN80A4** | 148 |
| **1.9** | 2492 | 1.6 | 724.7 | 35000 | **C804_724.7 S1 M1LA4** | 150 | **C804_724.7 P80 BN80A4** | 151 |
| **2.1** | 2284 | 1.8 | 664.3 | 35000 | **C804_664.3 S1 M1LA4** | 150 | **C804_664.3 P80 BN80A4** | 151 |
| **2.1** | 2260 | 1.0 | 657.3 | 25000 | **C704_657.3 S1 M1LA4** | 147 | **C704_657.3 P80 BN80A4** | 148 |
| **2.4** | 1978 | 0.8 | 571.2 | 16000 | **C614_571.2 S1 M1LA4** | 143 | **C614_571.2 P80 BN80A4** | 144 |
| **2.5** | 1907 | 1.2 | 554.7 | 25000 | **C704_554.7 S1 M1LA4** | 147 | **C704_554.7 P80 BN80A4** | 148 |
| **2.6** | 1820 | 2.2 | 529.3 | 35000 | **C804_529.3 S1 M1LA4** | 150 | **C804_529.3 P80 BN80A4** | 151 |
| **3.0** | 1600 | 1.0 | 462.0 | 16000 | **C614_462.0 S1 M1LA4** | 143 | **C614_462.0 P80 BN80A4** | 144 |
| **3.1** | 1566 | 2.6 | 455.4 | 35000 | **C804_455.4 S1 M1LA4** | 150 | **C804_455.4 P80 BN80A4** | 151 |
| **3.1** | 1525 | 1.5 | 443.5 | 25000 | **C704_443.5 S1 M1LA4** | 147 | **C704_443.5 P80 BN80A4** | 148 |
| **3.3** | 1460 | 1.1 | 421.5 | 16000 | **C614_421.5 S1 M1LA4** | 143 | **C614_421.5 P80 BN80A4** | 144 |
| **3.6** | 1315 | 0.8 | 379.6 | 10000 | **C514_379.6 S1 M1LA4** | 139 | **C514_379.6 P80 BN80A4** | 140 |
| **3.7** | 1282 | 1.2 | 370.1 | 16000 | **C614_370.1 S1 M1LA4** | 143 | **C614_370.1 P80 BN80A4** | 144 |
| **3.8** | 1254 | 3.2 | 364.7 | 35000 | **C804_364.7 S1 M1LA4** | 150 | **C804_364.7 P80 BN80A4** | 151 |
| **4.0** | 1184 | 1.9 | 344.3 | 25000 | **C704_344.3 S1 M1LA4** | 147 | **C704_344.3 P80 BN80A4** | 148 |
| **4.1** | 1170 | 1.4 | 337.7 | 16000 | **C614_337.7 S1 M1LA4** | 143 | **C614_337.7 P80 BN80A4** | 144 |
| **4.2** | 1130 | 0.9 | 326.1 | 10000 | **C514_326.1 S1 M1LA4** | 139 | **C514_326.1 P80 BN80A4** | 140 |
| **4.6** | 1031 | 1.0 | 297.8 | 10000 | **C514_297.8 S1 M1LA4** | 139 | **C514_297.8 P80 BN80A4** | 140 |
| **5.0** | 953 | 1.7 | 275.3 | 16000 | **C614_275.3 S1 M1LA4** | 143 | **C614_275.3 P80 BN80A4** | 144 |
| **5.1** | 936 | 2.5 | 272.2 | 25000 | **C704_272.2 S1 M1LA4** | 147 | **C704_272.2 P80 BN80A4** | 148 |
| **5.2** | 914 | 1.1 | 263.8 | 10000 | **C514_263.8 S1 M1LA4** | 139 | **C514_263.8 P80 BN80A4** | 140 |
| **5.7** | 834 | 1.2 | 240.9 | 10000 | **C514_240.9 S1 M1LA4** | 139 | **C514_240.9 P80 BN80A4** | 140 |
| **5.8** | 847 | 2.7 | 239.3 | 25000 | | | **C703_239.3 P80 BN80A4** | 148 |
| **5.8** | 825 | 1.9 | 238.3 | 16000 | **C614_238.3 S1 M1LA4** | 143 | **C614_238.3 P80 BN80A4** | 144 |
| **6.2** | 782 | 2.9 | 220.9 | 25000 | | | **C703_220.9 P80 BN80A4** | 148 |
| **6.3** | 753 | 2.1 | 217.4 | 16000 | **C614_217.4 S1 M1LA4** | 143 | **C614_217.4 P80 BN80A4** | 144 |
| **6.4** | 767 | 1.3 | 216.7 | 10000 | **C513_216.7 S1 M1LA4** | 139 | **C513_216.7 P80 BN80A4** | 140 |
| **7.0** | 700 | 1.4 | 197.9 | 10000 | **C513_197.9 S1 M1LA4** | 139 | **C513_197.9 P80 BN80A4** | 140 |
| **7.0** | 693 | 2.3 | 195.8 | 16000 | | | **C613_195.8 P80 BN80A4** | 143 |
| **7.1** | 687 | 3.3 | 194.1 | 25000 | | | **C703_194.1 P80 BN80A4** | 148 |
| **7.7** | 637 | 0.9 | 179.9 | 7000 | **C413_179.9 S1 M1LA4** | 135 | **C413_179.9 P80 BN80A4** | 136 |
| **7.7** | 632 | 2.5 | 178.6 | 16000 | | | **C613_178.6 P80 BN80A4** | 143 |
| **7.9** | 622 | 1.6 | 175.8 | 10000 | **C513_175.8 S1 M1LA4** | 139 | **C513_175.8 P80 BN80A4** | 140 |
| **8.4** | 582 | 2.7 | 164.5 | 16000 | | | **C613_164.5 P80 BN80A4** | 143 |
| **8.4** | 581 | 1.0 | 164.1 | 7000 | **C413_164.1 S1 M1LA4** | 135 | **C413_164.1 P80 BN80A4** | 136 |
| **8.6** | 568 | 1.8 | 160.5 | 10000 | **C513_160.5 S1 M1LA4** | 139 | **C513_160.5 P80 BN80A4** | 140 |
| **9.2** | 531 | 3.0 | 150.0 | 16000 | | | **C613_150.0 P80 BN80A4** | 143 |
| **9.4** | 522 | 1.9 | 147.4 | 10000 | **C513_147.4 S1 M1LA4** | 139 | **C513_147.4 P80 BN80A4** | 140 |
| **9.5** | 516 | 1.2 | 145.6 | 7000 | **C413_145.6 S1 M1LA4** | 135 | **C413_145.6 P80 BN80A4** | 136 |
| **9.8** | 497 | 3.2 | 140.5 | 16000 | | | **C613_140.5 P80 BN80A4** | 143 |
| **9.9** | 494 | 0.9 | 139.8 | 6500 | **C363_139.8 S1 M1LA4** | 131 | **C363_139.8 P80BN80A4** | 132 |
| **10.3** | 477 | 2.1 | 134.6 | 10000 | **C513_134.6 S1 M1LA4** | 139 | **C513_134.6 P80 BN80A4** | 140 |
| **10.4** | 470 | 1.3 | 132.9 | 7000 | **C413_132.9 S1 M1LA4** | 135 | **C413_132.9 P80 BN80A4** | 136 |
| **11.0** | 445 | 1.0 | 125.8 | 6500 | **C363_125.8 S1 M1LA4** | 131 | **C363_125.8 P80BN80A4** | 132 |
| **11.1** | 440 | 2.3 | 124.4 | 10000 | **C513_124.4 S1 M1LA4** | 139 | **C513_124.4 P80 BN80A4** | 140 |
| **11.4** | 427 | 1.4 | 120.6 | 7000 | **C413_120.6 S1 M1LA4** | 135 | **C413_120.6 P80 BN80A4** | 136 |
| **12.1** | 402 | 2.5 | 113.6 | 10000 | **C513_113.6 S1 M1LA4** | 139 | **C513_113.6 P80 BN80A4** | 140 |
| **12.4** | 394 | 1.1 | 111.5 | 6500 | **C363_111.5 S1 M1LA4** | 131 | **C363_111.5 P80BN80A4** | 132 |
| **12.5** | 390 | 1.5 | 110.1 | 7000 | **C413_110.1 S1 M1LA4** | 135 | **C413_110.1 P80 BN80A4** | 136 |
| **13.5** | 362 | 1.7 | 102.3 | 7000 | **C413_102.3 S1 M1LA4** | 135 | **C413_102.3 P80 BN80A4** | 136 |
| **13.5** | 361 | 1.2 | 102.2 | 6500 | **C363_102.2 S1 M1LA4** | 131 | **C363_102.2 P80BN80A4** | 132 |
| **13.6** | 360 | 2.8 | 101.8 | 10000 | **C513_101.8 S1 M1LA4** | 139 | **C513_101.8 P80 BN80A4** | 140 |
| **14.7** | 333 | 0.9 | 94.2 | 5500 | **C323_94.2 S1 M1LA4** | 127 | **C323_94.2 P80BN80A4** | 128 |
| **14.8** | 330 | 1.8 | 93.3 | 7000 | **C413_93.3 S1 M1LA4** | 135 | **C413_93.3 P80 BN80A4** | 136 |
| **14.8** | 329 | 3.0 | 93.0 | 10000 | **C513_93.0 S1 M1LA4** | 139 | **C513_93.0 P80 BN80A4** | 140 |
| **15.0** | 325 | 1.4 | 91.9 | 6500 | **C363_91.9 S1 M1LA4** | 131 | **C363_91.9 P80BN80A4** | 132 |
| **16.6** | 294 | 1.5 | 83.1 | 6500 | **C363_83.1 S1 M1LA4** | 131 | **C363_83.1 P80BN80A4** | 132 |
| **16.7** | 292 | 1.0 | 82.6 | 5500 | **C323_82.6 S1 M1LA4** | 127 | **C323_82.6 P80BN80A4** | 128 |

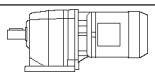


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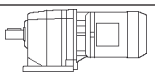
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **16.9** | 289 | 2.1 | 81.5 | 7000 | **C413_81.5 S1 M1LA4** | 135 | **C413_81.5 P80 BN80A4** | 136 |
| **17.5** | 284 | 1.1 | 52.4 | 5500 | **C322_52.4 S2 M2SA6** | 127 | **C322_52.4 P80 BN80B6** | 128 |
| **17.8** | 274 | 1.6 | 77.6 | 6500 | **C363_77.6 S1 M1LA4** | 131 | **C363_77.6 P80BN80A4** | 132 |
| **18.5** | 264 | 1.1 | 74.7 | 5500 | **C323_74.7 S1 M1LA4** | 127 | **C323_74.7 P80BN80A4** | 128 |
| **18.6** | 263 | 2.3 | 74.4 | 7000 | **C413_74.4 S1 M1LA4** | 135 | **C413_74.4 P80 BN80A4** | 136 |
| **19.5** | 250 | 1.8 | 70.8 | 6500 | **C363_70.8 S1 M1LA4** | 131 | **C363_70.8 P80BN80A4** | 132 |
| **20.7** | 241 | 0.9 | 66.8 | 5500 | **C322_66.8 S1 M1LA4** | 127 | **C322_66.8 P80BN80A4** | 128 |
| **21.5** | 228 | 2.6 | 64.3 | 7000 | **C413_64.3 S1 M1LA4** | 135 | **C413_64.3 P80 BN80A4** | 136 |
| **22.2** | 219 | 2.1 | 62.0 | 6500 | **C363_62.0 S1 M1LA4** | 131 | **C363_62.0 P80BN80A4** | 132 |
| **22.6** | 221 | 1.4 | 40.7 | 5500 | **C322_40.7 S2 M2SA6** | 127 | **C322_40.7 P80 BN80B6** | 128 |
| **23.0** | 212 | 0.9 | 60.0 | 4280 | **C223_60.0 S1 M1LA4** | 123 | **C223_60.0 P80BN80A4** | 124 |
| **23.2** | 214 | 1.0 | 59.4 | 5500 | **C322_59.4 S1 M1LA4** | 127 | **C322_59.4 P80BN80A4** | 128 |
| **23.5** | 208 | 2.9 | 58.7 | 7000 | **C413_58.7 S1 M1LA4** | 135 | **C413_58.7 P80 BN80A4** | 136 |
| **24.6** | 198 | 2.3 | 56.2 | 6500 | **C363_56.2 S1 M1LA4** | 131 | **C363_56.2 P80BN80A4** | 132 |
| **26.3** | 189 | 1.6 | 52.4 | 5500 | **C322_52.4 S1 M1LA4** | 127 | **C322_52.4 P80BN80A4** | 128 |
| **26.8** | 182 | 3.3 | 51.5 | 7000 | **C413_51.5 S1 M1LA4** | 135 | **C413_51.5 P80 BN80A4** | 136 |
| **27.8** | 180 | 1.1 | 33.1 | 4270 | **C222_33.1 S2 M2SA6** | 123 | **C222_33.1 P80 BN80B6** | 124 |
| **28.7** | 170 | 2.6 | 48.2 | 6500 | **C363_48.2 S1 M1LA4** | 131 | **C363_48.2 P80BN80A4** | 132 |
| **30** | 163 | 1.8 | 45.3 | 5500 | **C322_45.3 S1 M1LA4** | 127 | **C322_45.3 P80BN80A4** | 128 |
| **31** | 162 | 3.1 | 44.8 | 7000 | **C412_44.8 S1 M1LA4** | 135 | **C412_44.8 P80 BN80A4** | 136 |
| **32** | 154 | 2.9 | 43.5 | 6500 | **C363_43.5 S1 M1LA4** | 131 | **C363_43.5 P80BN80A4** | 132 |
| **32** | 156 | 1.2 | 43.3 | 4190 | **C222_43.3 S1 M1LA4** | 123 | **C222_43.3 P80BN80A4** | 124 |
| **34** | 147 | 2.0 | 40.7 | 5500 | **C322_40.7 S1 M1LA4** | 127 | **C322_40.7 P80BN80A4** | 128 |
| **36** | 135 | 3.3 | 38.1 | 6500 | **C363_38.1 S1 M1LA4** | 131 | **C363_38.1 P80BN80A4** | 132 |
| **38** | 133 | 1.5 | 36.8 | 4070 | **C222_36.8 S1 M1LA4** | 123 | **C222_36.8 P80BN80A4** | 124 |
| **38** | 130 | 2.3 | 36.1 | 5500 | **C322_36.1 S1 M1LA4** | 127 | **C322_36.1 P80BN80A4** | 128 |
| **42** | 119 | 1.7 | 33.1 | 3970 | **C222_33.1 S1 M1LA4** | 123 | **C222_33.1 P80BN80A4** | 124 |
| **42** | 119 | 2.5 | 33.1 | 5500 | **C322_33.1 S1 M1LA4** | 127 | **C322_33.1 P80BN80A4** | 128 |
| **46** | 107 | 2.8 | 29.8 | 5500 | **C322_29.8 S1 M1LA4** | 127 | **C322_29.8 P80BN80A4** | 128 |
| **47** | 107 | 1.9 | 29.6 | 3890 | **C222_29.6 S1 M1LA4** | 123 | **C222_29.6 P80BN80A4** | 124 |
| **47** | 106 | 0.8 | 29.5 | 1820 | **C122_29.5 S1 M1LA4** | 119 | **C122_29.5 P80BN80A4** | 120 |
| **51** | 98 | 2.0 | 27.2 | 3860 | **C222_27.2 S1 M1LA4** | 123 | **C222_27.2 P80BN80A4** | 124 |
| **51** | 97 | 3.1 | 26.9 | 5500 | **C322_26.9 S1 M1LA4** | 127 | **C322_26.9 P80BN80A4** | 128 |
| **54** | 92 | 1.0 | 25.4 | 2000 | **C122_25.4 S1 M1LA4** | 119 | **C122_25.4 P80BN80A4** | 120 |
| **55** | 91 | 3.3 | 25.1 | 5500 | **C322_25.1 S1 M1LA4** | 127 | **C322_25.1 P80BN80A4** | 128 |
| **57** | 88 | 2.3 | 24.3 | 3720 | **C222_24.3 S1 M1LA4** | 123 | **C222_24.3 P80BN80A4** | 124 |
| **59** | 84 | 1.0 | 23.2 | 2000 | **C122_23.2 S1 M1LA4** | 119 | **C122_23.2 P80BN80A4** | 120 |
| **64** | 77 | 2.5 | 21.5 | 3700 | **C222_21.5 S1 M1LA4** | 123 | **C222_21.5 P80BN80A4** | 124 |
| **67** | 74 | 1.1 | 20.6 | 2000 | **C122_20.6 S1 M1LA4** | 119 | **C122_20.6 P80BN80A4** | 120 |
| **69** | 72 | 2.6 | 20.0 | 3560 | **C222_20.0 S1 M1LA4** | 123 | **C222_20.0 P80BN80A4** | 124 |
| **75** | 66 | 1.2 | 18.4 | 2000 | **C122_18.4 S1 M1LA4** | 119 | **C122_18.4 P80BN80A4** | 120 |
| **76** | 65 | 2.8 | 18.1 | 3500 | **C222_18.1 S1 M1LA4** | 123 | **C222_18.1 P80BN80A4** | 124 |
| **80** | 62 | 1.2 | 17.2 | 2000 | **C122_17.2 S1 M1LA4** | 119 | **C122_17.2 P80BN80A4** | 120 |
| **87** | 57 | 3.1 | 15.8 | 3350 | **C222_15.8 S1 M1LA4** | 123 | **C222_15.8 P80BN80A4** | 124 |
| **89** | 56 | 1.3 | 15.4 | 2000 | **C122_15.4 S1 M1LA4** | 119 | **C122_15.4 P80BN80A4** | 120 |
| **95** | 53 | 3.2 | 14.5 | 3300 | **C222_14.5 S1 M1LA4** | 123 | **C222_14.5 P80BN80A4** | 124 |
| **103** | 48 | 1.4 | 13.4 | 1990 | **C122_13.4 S1 M1LA4** | 119 | **C122_13.4 P80BN80A4** | 120 |
| **116** | 43 | 1.6 | 11.9 | 1920 | **C122_11.9 S1 M1LA4** | 119 | **C122_11.9 P80BN80A4** | 120 |
| **121** | 41 | 1.6 | 7.6 | 1910 | **C122_7.6 S2 M2SA6** | 119 | **C122_7.6 P80 BN80B6** | 120 |
| **123** | 40 | 1.0 | 11.2 | 480 | **C052_11.2 S1 M1LA4** | 118 | | |
| **137** | 36 | 1.7 | 10.1 | 1850 | **C122_10.1 S1 M1LA4** | 119 | **C122_10.1 P80BN80A4** | 120 |
| **151** | 33 | 3.3 | 6.1 | 2860 | **C222_6.1 S2 M2SA6** | 123 | **C222_6.1 P80 BN80B6** | 124 |
| **156** | 32 | 1.9 | 8.8 | 1780 | **C122_8.8 S1 M1LA4** | 119 | **C122_8.8 P80BN80A4** | 120 |
| **181** | 28 | 2.0 | 7.6 | 1720 | **C122_7.6 S1 M1LA4** | 119 | **C122_7.6 P80BN80A4** | 120 |
| **186** | 27 | 1.1 | 7.4 | 460 | **C052_7.4 S1 M1LA4** | 118 | | |
| **206** | 24 | 1.2 | 6.7 | 450 | **C052_6.7 S1 M1LA4** | 118 | | |
| **221** | 22 | 2.4 | 6.2 | 1590 | **C122_6.2 S1 M1LA4** | 119 | **C122_6.2 P80BN80A4** | 120 |
| **237** | 21 | 2.5 | 11.9 | 1580 | **C122_11.9 S1 M1SD2** | 119 | **C122_11.9 P71 BN71B2** | 120 |
| **246** | 20 | 2.5 | 5.6 | 1540 | **C122_5.6 S1 M1LA4** | 119 | **C122_5.6 P80BN80A4** | 120 |
| **251** | 20 | 1.5 | 5.5 | 430 | **C052_5.5 S1 M1LA4** | 118 | | |

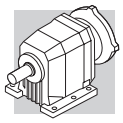


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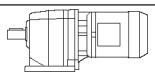
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **279** | 18 | 2.7 | 10.1 | 1530 | **C122_10.1 S1 M1SD2** | 119 | **C122_10.1 P71 BN71B2** | 120 |
| **283** | 18 | 2.7 | 4.9 | 1490 | **C122_4.9 S1 M1LA4** | 119 | **C122_4.9 P80BN80A4** | 120 |
| **320** | 16 | 3.0 | 8.8 | 1470 | **C122_8.8 S1 M1SD2** | 119 | **C122_8.8 P71 BN71B2** | 120 |
| **320** | 16 | 2.9 | 4.3 | 1420 | **C122_4.3 S1 M1LA4** | 119 | **C122_4.3 P80BN80A4** | 120 |
| **369** | 14 | 3.3 | 7.6 | 1410 | **C122_7.6 S1 M1SD2** | 119 | **C122_7.6 P71 BN71B2** | 120 |
| **378** | 13 | 3.2 | 3.7 | 1370 | **C122_3.7 S1 M1LA4** | 119 | **C122_3.7 P80BN80A4** | 120 |
| **451** | 11 | 3.8 | 6.2 | 1300 | **C122_6.2 S1 M1SD2** | 119 | **C122_6.2 P71 BN71B2** | 120 |
| **504** | 10 | 4.0 | 5.6 | 1260 | **C122_5.6 S1 M1SD2** | 119 | **C122_5.6 P71 BN71B2** | 120 |
| **577** | 9 | 4.4 | 4.9 | 1210 | **C122_4.9 S1 M1SD2** | 119 | **C122_4.9 P71 BN71B2** | 120 |
| **656** | 8 | 4.7 | 4.3 | 1170 | **C122_4.3 S1 M1SD2** | 119 | **C122_4.3 P71 BN71B2** | 120 |
| **770** | 6 | 5.2 | 3.7 | 1110 | **C122_3.7 S1 M1SD2** | 119 | **C122_3.7 P71 BN71B2** | 120 |
| **881** | 6 | 5.7 | 3.2 | 990 | **C122_3.2 S1 M1SD2** | 119 | **C122_3.2 P71 BN71B2** | 120 |
| **1007** | 5 | 6.1 | 2.8 | 950 | **C122_2.8 S1 M1SD2** | 119 | **C122_2.8 P71 BN71B2** | 120 |

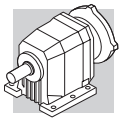
## 0.75 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **0.86** | 7413 | 1.6 | 1081 | 85000 | **C1004_1081 S3 ME3SA6** | 156 | **C1004_1081 P90 BE90S6** | 157 |
| **0.93** | 6973 | 1.0 | 1006 | 60000 | **C904_1006 S3 ME3SA6** | 153 | **C904_1006 P90 BE90S6** | 154 |
| **1.2** | 5582 | 1.3 | 1240 | 60000 | **C904_1240 S2 ME2SB4** | 153 | **C904_1240 P80 BE80B4** | 154 |
| **1.3** | 5117 | 1.4 | 1137 | 60000 | **C904_1137 S2 ME2SB4** | 153 | **C904_1137 P80 BE80B4** | 154 |
| **1.3** | 4865 | 2.5 | 1081 | 85000 | **C1004_1081 S2 ME2SB4** | 156 | **C1004_1081 P80 BE80B4** | 157 |
| **1.4** | 4528 | 1.6 | 1006 | 60000 | **C904_1006 S2 ME2SB4** | 153 | **C904_1006 P80 BE80B4** | 154 |
| **1.4** | 4517 | 2.7 | 1004 | 85000 | **C1004_1004 S2 ME2SB4** | 156 | **C1004_1004 P80 BE80B4** | 157 |
| **1.5** | 4256 | 0.9 | 945.7 | 35000 | **C804_945.7 S2 ME2SB4** | 150 | **C804_945.7 P80 BE80B4** | 151 |
| **1.6** | 4150 | 1.7 | 922.3 | 60000 | **C904_922.3 S2 ME2SB4** | 153 | **C904_922.3 P80 BE80B4** | 154 |
| **1.6** | 4087 | 2.9 | 908.2 | 85000 | **C1004_908.2 S2 ME2SB4** | 156 | **C1004_908.2 P80 BE80B4** | 157 |
| **1.7** | 3846 | 1.0 | 854.6 | 35000 | **C804_854.6 S2 ME2SB4** | 150 | **C804_854.6 P80 BE80B4** | 151 |
| **1.7** | 3798 | 1.9 | 844.0 | 6000 | **C904_844.0 S2 ME2SB4** | 153 | **C904_844.0 P80 BE80B4** | 154 |
| **1.8** | 3525 | 1.1 | 783.4 | 35000 | **C804_783.4 S2 ME2SB4** | 150 | **C804_783.4 P80 BE80B4** | 151 |
| **1.8** | 3481 | 2.1 | 773.6 | 60000 | **C904_773.6 S2 ME2SB4** | 153 | **C904_773.6 P80 BE80B4** | 154 |
| **2.0** | 3261 | 1.2 | 724.7 | 35000 | **C804_724.7 S2 ME2SB4** | 150 | **C804_724.7 P80 BE80B4** | 151 |
| **2.0** | 3205 | 2.2 | 712.2 | 60000 | **C904_712.2 S2 ME2SB4** | 153 | **C904_712.2 P80 BE80B4** | 154 |
| **2.2** | 2989 | 1.3 | 664.3 | 35000 | **C804_664.3 S2 ME2SB4** | 150 | **C804_664.3 P80 BE80B4** | 151 |
| **2.2** | 2938 | 2.5 | 652.8 | 60000 | **C904_652.8 S2 ME2SB4** | 153 | **C904_652.8 P80 BE80B4** | 154 |
| **2.5** | 2623 | 2.7 | 582.8 | 60000 | **C904_582.8 S2 ME2SB4** | 153 | **C904_582.8 P80 BE80B4** | 154 |
| **2.5** | 2598 | 1.5 | 577.4 | 35000 | **C804_577.4 S2 ME2SB4** | 150 | **C804_577.4 P80 BE80B4** | 151 |
| **2.6** | 2496 | 0.9 | 554.7 | 25000 | **C704_554.7 S2 ME2SB4** | 147 | **C704_554.7 P80 BE80B4** | 148 |
| **2.7** | 2404 | 3.0 | 534.2 | 60000 | **C904_534.2 S2 ME2SB4** | 153 | **C904_534.2 P80 BE80B4** | 154 |
| **2.7** | 2382 | 1.7 | 529.3 | 35000 | **C804_529.3 S2 ME2SB4** | 150 | **C804_529.3 P80 BE80B4** | 151 |
| **2.8** | 2304 | 1.0 | 512.0 | 25000 | **C704_512.0 S2 ME2SB4** | 147 | **C704_512.0 P80 BE80B4** | 148 |
| **3.1** | 2049 | 2.0 | 455.4 | 35000 | **C804_455.4 S2 ME2SB4** | 150 | **C804_455.4 P80 BE80B4** | 151 |
| **3.2** | 1996 | 1.2 | 443.5 | 25000 | **C704_443.5 S2 ME2SB4** | 147 | **C704_443.5 P80 BE80B4** | 148 |
| **3.4** | 1897 | 0.8 | 421.5 | 16000 | **C614_421.5 S2 ME2SB4** | 143 | **C614_421.5 P80 BE80B4** | 144 |
| **3.4** | 1879 | 2.1 | 417.5 | 35000 | **C804_417.5 S2 ME2SB4** | 150 | **C804_417.5 P80 BE80B4** | 151 |
| **3.5** | 1842 | 1.2 | 409.4 | 25000 | **C704_409.4 S2 ME2SB4** | 147 | **C704_409.4 P80 BE80B4** | 148 |
| **3.9** | 1666 | 1.0 | 370.1 | 16000 | **C614_370.1 S2 ME2SB4** | 143 | **C614_370.1 P80 BE80B4** | 144 |
| **3.9** | 1696 | 1.4 | 239.3 | 25000 | **C703_239.3 S3 ME3SA6** | 147 | **C703_239.3 P90 BE90S6** | 148 |
| **3.9** | 1641 | 2.4 | 364.7 | 35000 | **C804_364.7 S2 ME2SB4** | 150 | **C804_364.7 P80 BE80B4** | 151 |
| **4.2** | 1550 | 1.5 | 344.3 | 25000 | **C704_344.3 S2 ME2SB4** | 147 | **C704_344.3 P80 BE80B4** | 148 |
| **4.2** | 1520 | 1.1 | 337.7 | 16000 | **C614_337.7 S2 ME2SB4** | 143 | **C614_337.7 P80 BE80B4** | 144 |
| **4.3** | 1504 | 2.7 | 334.3 | 35000 | **C804_334.3 S2 ME2SB4** | 150 | **C804_334.3 P80 BE80B4** | 151 |
| **4.3** | 1529 | 2.6 | 215.8 | 35000 | **C803_215.8 S3 ME3SA6** | 150 | **C803_215.8 P90 BE90S6** | 151 |
| **4.5** | 1430 | 1.6 | 317.9 | 25000 | **C704_317.9 S2 ME2SB4** | 147 | **C704_317.9 P80 BE80B4** | 148 |
| **4.7** | 1358 | 1.2 | 301.7 | 16000 | **C614_301.7 S2 ME2SB4** | 143 | **C614_301.7 P80 BE80B4** | 144 |

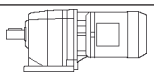


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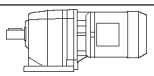
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **4.8** | 1387 | 1.2 | 195.8 | 16000 | **C613_195.8 S3 ME3SA6** | 143 | **C613_195.8 P90 BE90S6** | 144 |
| **5.2** | 1239 | 1.3 | 275.3 | 16000 | **C614_275.3 S2 ME2SB4** | 143 | **C614_275.3 P80 BE80B4** | 144 |
| **5.2** | 1265 | 1.3 | 178.6 | 16000 | **C613_178.6 S3 ME3SA6** | 143 | **C613_178.6 P90 BE90S6** | 144 |
| **5.3** | 1225 | 1.9 | 272.2 | 25000 | **C704_272.2 S2 ME2SB4** | 147 | **C704_272.2 P80 BE80B4** | 148 |
| **5.4** | 1187 | 0.8 | 263.8 | 10000 | **C514_263.8 S2 ME2SB4** | 139 | **C514_263.8 P80 BE80B4** | 140 |
| **5.7** | 1165 | 1.4 | 164.5 | 16000 | **C613_164.5 S3 ME3SA6** | 143 | **C613_164.5 P90 BE90S6** | 144 |
| **5.7** | 1131 | 2.0 | 251.3 | 25000 | **C704_251.3 S2 ME2SB4** | 147 | **C704_251.3 P80 BE80B4** | 148 |
| **5.9** | 1084 | 0.9 | 240.9 | 10000 | **C514_240.9 S2 ME2SB4** | 139 | **C514_240.9 P80 BE80B4** | 140 |
| **6.0** | 1113 | 2.1 | 239.3 | 25000 | **C703_239.3 S2 ME2SB4** | 147 | **C703_239.3 P80 BE80B4** | 148 |
| **6.0** | 1072 | 1.5 | 238.3 | 16000 | **C614_238.3 S2 ME2SB4** | 143 | **C614_238.3 P80 BE80B4** | 144 |
| **6.5** | 1027 | 2.2 | 220.9 | 25000 | **C703_220.9 S2 ME2SB4** | 147 | **C703_220.9 P80 BE80B4** | 148 |
| **6.6** | 978 | 1.6 | 217.4 | 16000 | **C614_217.4 S2 ME2SB4** | 143 | **C614_217.4 P80 BE80B4** | 144 |
| **6.6** | 1008 | 1.0 | 216.7 | 10000 | **C513_216.7 S2 ME2SB4** | 139 | **C513_216.7 P80 BE80B4** | 140 |
| **7.2** | 920 | 1.1 | 197.9 | 10000 | **C513_197.9 S2 ME2SB4** | 139 | **C513_197.9 P80 BE80B4** | 140 |
| **7.3** | 881 | 1.8 | 195.8 | 16000 | **C613_195.8 S2 ME2SB4** | 143 | **C613_195.8 P80 BE80B4** | 144 |
| **7.4** | 903 | 2.5 | 194.1 | 25000 | **C703_194.1 S2 ME2SB4** | 147 | **C703_194.1 P80 BE80B4** | 148 |
| **8.0** | 833 | 2.8 | 179.2 | 25000 | **C703_179.2 S2 ME2SB4** | 147 | **C703_179.2 P80 BE80B4** | 148 |
| **8.0** | 804 | 2.0 | 178.6 | 16000 | **C613_178.6 S2 ME2SB4** | 143 | **C613_178.6 P80 BE80B4** | 144 |
| **8.1** | 817 | 1.2 | 175.8 | 10000 | **C513_175.8 S2 ME2SB4** | 139 | **C513_175.8 P80 BE80B4** | 140 |
| **8.7** | 740 | 2.2 | 164.5 | 16000 | **C613_164.5 S2 ME2SB4** | 143 | **C613_164.5 P80 BE80B4** | 144 |
| **8.8** | 757 | 3.0 | 162.8 | 25000 | **C703_162.8 S2 ME2SB4** | 147 | **C703_162.8 P80 BE80B4** | 148 |
| **8.9** | 746 | 1.3 | 160.5 | 10000 | **C513_160.5 S2 ME2SB4** | 139 | **C513_160.5 P80 BE80B4** | 140 |
| **9.5** | 675 | 2.4 | 150.0 | 16000 | **C613_150.0 S2 ME2SB4** | 143 | **C613_150.0 P80 BE80B4** | 144 |
| **9.7** | 686 | 1.5 | 147.4 | 10000 | **C513_147.4 S2 ME2SB4** | 139 | **C513_147.4 P80 BE80B4** | 140 |
| **10.2** | 632 | 2.5 | 140.5 | 16000 | **C613_140.5 S2 ME2SB4** | 143 | **C613_140.5 P80 BE80B4** | 144 |
| **10.6** | 626 | 1.6 | 134.6 | 10000 | **C513_134.6 S2 ME2SB4** | 139 | **C513_134.6 P80 BE80B4** | 140 |
| **10.8** | 618 | 1.0 | 132.9 | 7000 | **C413_132.9 S2 ME2SB4** | 135 | **C413_132.9 P80 BE80B4** | 136 |
| **11.2** | 577 | 2.8 | 128.1 | 16000 | **C613_128.1 S2 ME2SB4** | 143 | **C613_128.1 P80 BE80B4** | 144 |
| **11.5** | 579 | 1.7 | 124.4 | 10000 | **C513_124.4 S2 ME2SB4** | 139 | **C513_124.4 P80 BE80B4** | 140 |
| **11.9** | 561 | 1.1 | 120.6 | 7000 | **C413_120.6 S2 ME2SB4** | 135 | **C413_120.6 P80 BE80B4** | 136 |
| **12.6** | 511 | 3.1 | 113.6 | 16000 | **C613_113.6 S2 ME2SB4** | 143 | **C613_113.6 P80 BE80B4** | 144 |
| **12.6** | 528 | 1.9 | 113.6 | 10000 | **C513_113.6 S2 ME2SB4** | 139 | **C513_113.6 P80 BE80B4** | 140 |
| **13.0** | 512 | 1.2 | 110.1 | 7000 | **C413_110.1 S2 ME2SB4** | 135 | **C413_110.1 P80 BE80B4** | 136 |
| **13.8** | 466 | 3.4 | 103.6 | 16000 | **C613_103.6 S2 ME2SB4** | 143 | **C613_103.6 P80 BE80B4** | 144 |
| **14.0** | 476 | 1.3 | 102.3 | 7000 | **C413_102.3 S2 ME2SB4** | 135 | **C413_102.3 P80 BE80B4** | 136 |
| **14.0** | 475 | 0.9 | 102.2 | 6500 | **C363_102.2 S2 ME2SB4** | 131 | **C363_102.2 P80 BE80B4** | 132 |
| **14.0** | 473 | 2.1 | 101.8 | 10000 | **C513_101.8 S2 ME2SB4** | 139 | **C513_101.8 P80 BE80B4** | 140 |
| **15.3** | 434 | 1.4 | 93.3 | 7000 | **C413_93.3 S2 ME2SB4** | 135 | **C413_93.3 P80 BE80B4** | 136 |
| **15.4** | 432 | 2.3 | 93.0 | 10000 | **C513_93.0 S2 ME2SB4** | 139 | **C513_93.0 P80 BE80B4** | 140 |
| **15.6** | 427 | 1.1 | 91.9 | 6500 | **C363_91.9 S2 ME2SB4** | 131 | **C363_91.9 P80 BE80B4** | 132 |
| **17.2** | 387 | 1.2 | 83.1 | 6500 | **C363_83.1 S2 ME2SB4** | 131 | **C363_83.1 P80 BE80B4** | 132 |
| **17.5** | 379 | 1.6 | 81.5 | 7000 | **C413_81.5 S2 ME2SB4** | 135 | **C413_81.5 P80 BE80B4** | 136 |
| **17.9** | 371 | 2.7 | 79.9 | 10000 | **C513_79.9 S2 ME2SB4** | 139 | **C513_79.9 P80 BE80B4** | 140 |
| **18.4** | 361 | 1.2 | 77.6 | 6500 | **C363_77.6 S2 ME2SB4** | 131 | **C363_77.6 P80 BE80B4** | 132 |
| **19.2** | 346 | 1.7 | 74.4 | 7000 | **C413_74.4 S2 ME2SB4** | 135 | **C413_74.4 P80 BE80B4** | 136 |
| **19.6** | 339 | 2.9 | 72.9 | 10000 | **C513_72.9 S2 ME2SB4** | 139 | **C513_72.9 P80 BE80B4** | 140 |
| **20.2** | 329 | 1.4 | 70.8 | 6500 | **C363_70.8 S2 ME2SB4** | 131 | **C363_70.8 P80 BE80B4** | 132 |
| **22.1** | 300 | 3.3 | 64.6 | 10000 | **C513_64.6 S2 ME2SB4** | 139 | **C513_64.6 P80 BE80B4** | 140 |
| **22.2** | 299 | 2.0 | 64.3 | 7000 | **C413_64.3 S2 ME2SB4** | 135 | **C413_64.3 P80 BE80B4** | 136 |
| **23.0** | 295 | 1.0 | 40.7 | 5500 | **C322_40.7 S3 ME3SA6** | 127 | **C322_40.7 P90 BE90S6** | 128 |
| **23.1** | 288 | 1.6 | 62.0 | 6500 | **C363_62.0 S2 ME2SB4** | 131 | **C363_62.0 P80 BE80B4** | 132 |
| **24.4** | 273 | 2.2 | 58.7 | 7000 | **C413_58.7 S2 ME2SB4** | 135 | **C413_58.7 P80 BE80B4** | 136 |
| **25.1** | 271 | 2.9 | 57.0 | 10000 | **C512_57.0 S2 ME2SB4** | 139 | **C512_57.0 P80 BE80B4** | 140 |
| **25.5** | 261 | 1.7 | 56.2 | 6500 | **C363_56.2 S2 ME2SB4** | 131 | **C363_56.2 P80 BE80B4** | 132 |
| **27.3** | 249 | 1.2 | 52.4 | 5500 | **C322_52.4 S2 ME2SB4** | 127 | **C322_52.4 P80 BE80B4** | 128 |
| **27.8** | 239 | 2.5 | 51.5 | 7000 | **C413_51.5 S2 ME2SB4** | 135 | **C413_51.5 P80 BE80B4** | 136 |
| **27.8** | 244 | 2.9 | 51.4 | 10000 | **C512_51.4 S2 ME2SB4** | 139 | **C512_51.4 P80 BE80B4** | 140 |
| **29.7** | 224 | 2.0 | 48.2 | 6500 | **C363_48.2 S2 ME2SB4** | 131 | **C363_48.2 P80 BE80B4** | 132 |

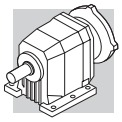


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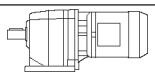
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **29.9** | 227 | 3.5 | 47.8 | 10000 | **C512_47.8 S2 ME2SB4** | 139 | **C512_47.8 P80 BE80B4** | 140 |
| **30** | 218 | 2.7 | 47.0 | 7000 | **C413_47.0 S2 ME2SB4** | 135 | **C413_47.0 P80 BE80B4** | 136 |
| **32** | 215 | 1.4 | 45.3 | 5500 | **C322_45.3 S2 ME2SB4** | 127 | **C322_45.3 P80 BE80B4** | 128 |
| **32** | 213 | 2.4 | 44.8 | 7000 | **C412_44.8 S2 ME2SB4** | 135 | **C412_44.8 P80 BE80B4** | 136 |
| **33** | 202 | 2.2 | 43.5 | 6500 | **C363_43.5 S2 ME2SB4** | 131 | **C363_43.5 P80 BE80B4** | 132 |
| **33** | 206 | 0.9 | 43.3 | 3810 | **C222_43.3 S2 ME2SB4** | 123 | **C222_43.3 P80 BE80B4** | 124 |
| **35** | 193 | 1.6 | 40.7 | 5500 | **C322_40.7 S2 ME2SB4** | 127 | **C322_40.7 P80 BE80B4** | 128 |
| **38** | 177 | 2.5 | 38.1 | 6500 | **C363_38.1 S2 ME2SB4** | 131 | **C363_38.1 P80 BE80B4** | 132 |
| **39** | 176 | 2.8 | 37.1 | 7000 | **C412_37.1 S2 ME2SB4** | 135 | **C412_37.1 P80 BE80B4** | 136 |
| **39** | 175 | 1.1 | 36.8 | 3750 | **C222_36.8 S2 ME2SB4** | 123 | **C222_36.8 P80 BE80B4** | 124 |
| **40** | 171 | 1.7 | 36.1 | 5500 | **C322_36.1 S2 ME2SB4** | 127 | **C322_36.1 P80 BE80B4** | 128 |
| **41** | 161 | 2.8 | 34.6 | 6500 | **C363_34.6 S2 ME2SB4** | 131 | **C363_34.6 P80 BE80B4** | 132 |
| **43** | 159 | 3.2 | 33.4 | 7000 | **C412_33.4 S2 ME2SB4** | 135 | **C412_33.4 P80 BE80B4** | 136 |
| **43** | 157 | 1.3 | 33.1 | 3680 | **C222_33.1 S2 ME2SB4** | 123 | **C222_33.1 P80 BE80B4** | 124 |
| **43** | 157 | 1.9 | 33.1 | 5500 | **C322_33.1 S2 ME2SB4** | 127 | **C322_33.1 P80 BE80B4** | 128 |
| **48** | 141 | 2.1 | 29.8 | 5500 | **C322_29.8 S2 ME2SB4** | 127 | **C322_29.8 P80 BE80B4** | 128 |
| **48** | 141 | 1.4 | 29.6 | 3630 | **C222_29.6 S2 ME2SB4** | 123 | **C222_29.6 P80 BE80B4** | 124 |
| **50** | 134 | 3.4 | 28.7 | 6490 | **C363_28.7 S2 ME2SB4** | 131 | **C363_28.7 P80 BE80B4** | 132 |
| **53** | 129 | 1.6 | 27.2 | 3600 | **C222_27.2 S2 ME2SB4** | 123 | **C222_27.2 P80 BE80B4** | 124 |
| **53** | 128 | 2.3 | 26.9 | 5500 | **C322_26.9 S2 ME2SB4** | 127 | **C322_26.9 P80 BE80B4** | 128 |
| **57** | 119 | 2.5 | 25.1 | 5460 | **C322_25.1 S2 ME2SB4** | 127 | **C322_25.1 P80 BE80B4** | 128 |
| **59** | 115 | 1.7 | 24.3 | 3510 | **C222_24.3 S2 ME2SB4** | 123 | **C222_24.3 P80 BE80B4** | 124 |
| **62** | 109 | 2.7 | 22.9 | 5300 | **C322_22.9 S2 ME2SB4** | 127 | **C322_22.9 P80 BE80B4** | 128 |
| **67** | 102 | 1.9 | 21.5 | 3480 | **C222_21.5 S2 ME2SB4** | 123 | **C222_21.5 P80 BE80B4** | 124 |
| **71** | 95 | 3.1 | 20.1 | 5150 | **C322_20.1 S2 ME2SB4** | 127 | **C322_20.1 P80 BE80B4** | 128 |
| **71** | 95 | 2.0 | 20.0 | 3380 | **C222_20.0 S2 ME2SB4** | 123 | **C222_20.0 P80 BE80B4** | 124 |
| **79** | 86 | 2.1 | 18.1 | 3350 | **C222_18.1 S2 ME2SB4** | 123 | **C222_18.1 P80 BE80B4** | 124 |
| **83** | 82 | 0.9 | 17.2 | 1750 | **C122_17.2 S2 ME2SB4** | 119 | **C122_17.2 P80 BE80B4** | 120 |
| **90** | 75 | 2.3 | 15.8 | 3210 | **C222_15.8 S2 ME2SB4** | 123 | **C222_15.8 P80 BE80B4** | 124 |
| **93** | 73 | 1.0 | 15.4 | 1920 | **C122_15.4 S2 ME2SB4** | 119 | **C122_15.4 P80 BE80B4** | 120 |
| **98** | 69 | 2.4 | 14.5 | 3200 | **C222_14.5 S2 ME2SB4** | 123 | **C222_14.5 P80 BE80B4** | 124 |
| **107** | 64 | 1.1 | 13.4 | 1870 | **C122_13.4 S2 ME2SB4** | 119 | **C122_13.4 P80 BE80B4** | 120 |
| **115** | 59 | 2.7 | 12.4 | 3030 | **C222_12.4 S2 ME2SB4** | 123 | **C222_12.4 P80 BE80B4** | 124 |
| **120** | 56 | 1.2 | 11.9 | 1780 | **C122_11.9 S2 ME2SB4** | 119 | **C122_11.9 P80 BE80B4** | 120 |
| **129** | 53 | 2.9 | 11.1 | 2980 | **C222_11.1 S2 ME2SB4** | 123 | **C222_11.1 P80 BE80B4** | 124 |
| **142** | 48 | 1.3 | 10.1 | 1760 | **C122_10.1 S2 ME2SB4** | 119 | **C122_10.1 P80 BE80B4** | 120 |
| **148** | 46 | 3.2 | 9.6 | 2840 | **C222_9.6 S2 ME2SB4** | 123 | **C222_9.6 P80 BE80B4** | 124 |
| **162** | 42 | 1.4 | 8.8 | 1700 | **C122_8.8 S2 ME2SB4** | 119 | **C122_8.8 P80 BE80B4** | 120 |
| **165** | 41 | 3.4 | 8.7 | 2760 | **C222_8.7 S2 ME2SB4** | 123 | **C222_8.7 P80 BE80B4** | 124 |
| **188** | 36 | 1.5 | 7.6 | 1650 | **C122_7.6 S2 ME2SB4** | 119 | **C122_7.6 P80 BE80B4** | 120 |
| **229** | 30 | 1.8 | 6.2 | 1530 | **C122_6.2 S2 ME2SB4** | 119 | **C122_6.2 P80 BE80B4** | 120 |
| **240** | 28 | 2.4 | 11.9 | 1520 | **C122_11.9 S2 ME2SA2** | 119 | **C122_11.9 P80 BE80A2** | 120 |
| **255** | 27 | 1.9 | 5.6 | 1470 | **C122_5.6 S2 ME2SB4** | 119 | **C122_5.6 P80 BE80B4** | 120 |
| **283** | 24 | 2.6 | 10.1 | 1490 | **C122_10.1 S2 ME2SA2** | 119 | **C122_10.1 P80 BE80A2** | 120 |
| **294** | 23 | 2.1 | 4.9 | 1440 | **C122_4.9 S2 ME2SB4** | 119 | **C122_4.9 P80 BE80B4** | 120 |
| **323** | 21 | 2.8 | 8.8 | 1420 | **C122_8.8 S2 ME2SA2** | 119 | **C122_8.8 P80 BE80A2** | 120 |
| **332** | 20 | 2.2 | 4.3 | 1370 | **C122_4.3 S2 ME2SB4** | 119 | **C122_4.3 P80 BE80B4** | 120 |
| **374** | 18 | 3.1 | 7.6 | 1380 | **C122_7.6 S2 ME2SA2** | 119 | **C122_7.6 P80 BE80A2** | 120 |
| **392** | 17 | 2.4 | 3.7 | 1330 | **C122_3.7 S2 ME2SB4** | 119 | **C122_3.7 P80 BE80B4** | 120 |
| **446** | 15 | 2.6 | 3.2 | 1280 | **C122_3.2 S2 ME2SB4** | 119 | **C122_3.2 P80 BE80B4** | 120 |
| **457** | 15 | 3.6 | 6.2 | 1280 | **C122_6.2 S2 ME2SA2** | 119 | **C122_6.2 P80 BE80A2** | 120 |
| **509** | 13 | 3.8 | 5.6 | 1240 | **C122_5.6 S2 ME2SA2** | 119 | **C122_5.6 P80 BE80A2** | 120 |
| **517** | 13 | 2.8 | 2.8 | 1230 | **C122_2.8 S2 ME2SB4** | 119 | **C122_2.8 P80 BE80B4** | 120 |
| **585** | 12 | 4.1 | 4.9 | 1190 | **C122_4.9 S2 ME2SA2** | 119 | **C122_4.9 P80 BE80A2** | 120 |
| **661** | 10 | 4.4 | 4.3 | 1050 | **C122_4.3 S2 ME2SA2** | 119 | **C122_4.3 P80 BE80A2** | 120 |
| **781** | 9 | 4.8 | 3.7 | 1090 | **C122_3.7 S2 ME2SA2** | 119 | **C122_3.7 P80 BE80A2** | 120 |
| **889** | 8 | 5.2 | 3.2 | 1050 | **C122_3.2 S2 ME2SA2** | 119 | **C122_3.2 P80 BE80A2** | 120 |
| **1030** | 7 | 5.6 | 2.8 | 1010 | **C122_2.8 S2 ME2SA2** | 119 | **C122_2.8 P80 BE80A2** | **120** |

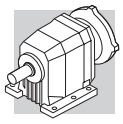
# 1.1 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.87** | 10815 | 1.1 | 1081 | 85000 | **C1004_1081 S3 ME3LA6** | 156 | **C1004_1081 P100 BE100M6** | 157 |
| **0.94** | 10043 | 1.2 | 1004 | 85000 | **C1004_908.2 S3 ME3LA6** | 156 | **C1004_908.2 P100 BE100M6** | 157 |
| **1.3** | 7573 | 1.0 | 1137 | 60000 | **C904_1137 S3 ME3SA4** | 153 | **C904_1137 P90 BE90S4** | 154 |
| **1.3** | 7200 | 1.7 | 1081 | 85000 | **C1004_1081 S3 ME3SA4** | 156 | **C1004_1081 P90 BE90S4** | 157 |
| **1.4** | 6701 | 1.1 | 1006 | 60000 | **C904_1006 S3 ME3SA4** | 153 | **C904_1006 P90 BE90S4** | 154 |
| **1.4** | 6686 | 1.8 | 1004 | 85000 | **C1004_1004 S3 ME3SA4** | 156 | **C1004_1004 P90 BE90S4** | 157 |
| **1.6** | 6143 | 1.2 | 922.3 | 60000 | **C904_922.3 S3 ME3SA4** | 153 | **C904_922.3 P90 BE90S4** | 154 |
| **1.6** | 6049 | 2.0 | 908.2 | 85000 | **C1004_908.2 S3 ME3SA4** | 156 | **C1004_908.2 P90 BE90S4** | 157 |
| **1.7** | 5621 | 1.3 | 844.0 | 60000 | **C904_844.0 S3 ME3SA4** | 153 | **C904_844.0 P90 BE90S4** | 154 |
| **1.7** | 5617 | 2.1 | 843.3 | 85000 | **C1004_843.3 S3 ME3SA4** | 156 | **C1004_843.3 P90 BE90S4** | 157 |
| **1.8** | 5166 | 2.3 | 775.7 | 85000 | **C1004_775.7 S3 ME3SA4** | 156 | **C1004_775.7 P90 BE90S4** | 157 |
| **1.8** | 5152 | 1.4 | 773.6 | 60000 | **C904_773.6 S3 ME3SA4** | 153 | **C904_773.6 P90 BE90S4** | 154 |
| **2.0** | 4797 | 2.5 | 720.3 | 85000 | **C1004_720.3 S3 ME3SA4** | 156 | **C1004_720.3 P90 BE90S4** | 157 |
| **2.0** | 4743 | 1.5 | 712.2 | 60000 | **C904_712.2 S3 ME3SA4** | 153 | **C904_712.2 P90 BE90S4** | 154 |
| **2.2** | 4424 | 0.9 | 664.3 | 35000 | **C804_664.3 S3 ME3SA4** | 150 | **C804_664.3 P90 BE90S4** | 151 |
| **2.2** | 4348 | 1.7 | 652.8 | 60000 | **C904_652.8 S3 ME3SA4** | 153 | **C904_652.8 P90 BE90S4** | 154 |
| **2.3** | 4179 | 2.9 | 627.4 | 85000 | **C1004_627.4 S3 ME3SA4** | 156 | **C1004_627.4 P90 BE90S4** | 157 |
| **2.5** | 3881 | 1.9 | 582.8 | 60000 | **C904_582.8 S3 ME3SA4** | 153 | **C904_582.8 P90 BE90S4** | 154 |
| **2.5** | 3845 | 1.0 | 577.4 | 35000 | **C804_577.4 S3 ME3SA4** | 150 | **C804_577.4 P90 BE90S4** | 151 |
| **2.7** | 3558 | 2.0 | 534.2 | 60000 | **C904_534.2 S3 ME3SA4** | 153 | **C904_534.2 P90 BE90S4** | 154 |
| **2.7** | 3525 | 1.1 | 529.3 | 35000 | **C804_529.3 S3 ME3SA4** | 150 | **C804_529.3 P90 BE90S4** | 151 |
| **3.1** | 3045 | 2.4 | 457.1 | 60000 | **C904_457.1 S3 ME3SA4** | 153 | **C904_457.1 P90 BE90S4** | 154 |
| **3.1** | 3033 | 1.3 | 455.4 | 35000 | **C804_455.4 S3 ME3SA4** | 150 | **C804_455.4 P90 BE90S4** | 151 |
| **3.4** | 2791 | 2.6 | 419.0 | 60000 | **C904_419.0 S3 ME3SA4** | 153 | **C904_419.0 P90 BE90S4** | 154 |
| **3.4** | 2780 | 1.4 | 417.5 | 35000 | **C804_417.5 S3 ME3SA4** | 150 | **C804_417.5 P90 BE90S4** | 151 |
| **3.9** | 2463 | 2.9 | 369.8 | 60000 | **C904_369.8 S3 ME3SA4** | 153 | **C904_369.8 P90 BE90S4** | 154 |
| **3.9** | 2429 | 1.6 | 364.7 | 35000 | **C804_364.7 S3 ME3SA4** | 150 | **C804_364.7 P90 BE90S4** | 151 |
| **4.2** | 2293 | 1.0 | 344.3 | 25000 | **C704_344.3 S3 ME3SA4** | 147 | **C704_344.3 P90 BE90S4** | 148 |
| **4.3** | 2226 | 1.8 | 334.3 | 35000 | **C804_334.3 S3 ME3SA4** | 150 | **C804_334.3 P90 BE90S4** | 151 |
| **4.5** | 2117 | 1.1 | 317.9 | 25000 | **C704_317.9 S3 ME3SA4** | 147 | **C704_317.9 P90 BE90S4** | 148 |
| **4.7** | 2010 | 0.8 | 301.7 | 16000 | **C614_301.7 S3 ME3SA4** | 143 | **C614_301.7 P90 BE90S4** | 144 |
| **5.0** | 1903 | 2.1 | 285.7 | 35000 | **C804_285.7 S3 ME3SA4** | 150 | **C804_285.7 P90 BE90S4** | 151 |
| **5.2** | 1833 | 0.9 | 275.3 | 16000 | **C614_275.3 S3 ME3SA4** | 143 | **C614_275.3 P90 BE90S4** | 144 |
| **5.3** | 1813 | 1.3 | 272.2 | 25000 | **C704_272.2 S3 ME3SA4** | 147 | **C704_272.2 P90 BE90S4** | 148 |
| **5.5** | 1744 | 2.3 | 261.9 | 35000 | **C804_261.9 S3 ME3SA4** | 150 | **C804_261.9 P90 BE90S4** | 151 |
| **5.7** | 1674 | 1.4 | 251.3 | 25000 | **C704_251.3 S3 ME3SA4** | 147 | **C704_251.3 P90 BE90S4** | 148 |
| **5.7** | 1700 | 0.9 | 164.5 | 16000 | **C613_164.5 S3 ME3LA6** | 143 | **C613_164.5 P100 BE100M6** | 144 |
| **6.0** | 1647 | 1.4 | 239.3 | 25000 | **C703_239.3 S3 ME3SA4** | 147 | **C703_239.3 P90 BE90S4** | 148 |
| **6.0** | 1587 | 1.0 | 238.3 | 16000 | **C614_238.3 S3 ME3SA4** | 143 | **C614_238.3 P90 BE90S4** | 144 |
| **6.3** | 1551 | 1.0 | 150.0 | 16000 | **C613_150.0 S3 ME3LA6** | 143 | **C613_150.0 P100 BE100M6** | 144 |
| **6.5** | 1520 | 1.5 | 220.9 | 25000 | **C703_220.9 S3 ME3SA4** | 147 | **C703_220.9 P90 BE90S4** | 148 |
| **6.6** | 1448 | 1.1 | 217.4 | 16000 | **C614_217.4 S3 ME3SA4** | 143 | **C614_217.4 P90 BE90S4** | 144 |
| **6.6** | 1485 | 2.7 | 215.8 | 35000 | **C803_215.8 S3 ME3SA4** | 150 | **C803_215.8 P90 BE90S4** | 151 |
| **7.2** | 1362 | 2.8 | 197.9 | 35000 | **C803_197.9 S3 ME3SA4** | 150 | **C803_197.9 P90 BE90S4** | 151 |
| **7.3** | 1304 | 1.2 | 195.8 | 16000 | **C613_195.8 S3 ME3SA4** | 143 | **C613_195.8 P90 BE90S4** | 144 |
| **7.4** | 1336 | 1.7 | 194.1 | 25000 | **C703_194.1 S3 ME3SA4** | 147 | **C703_194.1 P90 BE90S4** | 148 |
| **8.0** | 1233 | 1.9 | 179.2 | 25000 | **C703_179.2 S3 ME3SA4** | 147 | **C703_179.2 P90 BE90S4** | 148 |
| **8.0** | 1189 | 1.3 | 178.6 | 16000 | **C613_178.6 S3 ME3SA4** | 143 | **C613_178.6 P90 BE90S4** | 144 |
| **8.5** | 1163 | 3.4 | 169.0 | 35000 | **C803_169.0 S3 ME3SA4** | 150 | **C803_169.0 P90 BE90S4** | 151 |
| **8.7** | 1095 | 1.5 | 164.5 | 16000 | **C613_164.5 S3 ME3SA4** | 143 | **C613_164.5 P90 BE90S4** | 144 |
| **8.8** | 1121 | 2.1 | 162.8 | 25000 | **C703_162.8 S3 ME3SA4** | 147 | **C703_162.8 P90 BE90S4** | 148 |
| **8.9** | 1105 | 0.9 | 160.5 | 10000 | **C513_160.5 S3 ME3SA4** | 139 | **C513_160.5 P90 BE90S4** | 140 |
| **9.5** | 1034 | 2.2 | 150.3 | 25000 | **C703_150.3 S3 ME3SA4** | 147 | **C703_150.3 P90 BE90S4** | 148 |
| **9.5** | 999 | 1.6 | 150.0 | 16000 | **C613_150.0 S3 ME3SA4** | 143 | **C613_150.0 P90 BE90S4** | 144 |
| **9.7** | 1015 | 1.0 | 147.4 | 10000 | **C513_147.4 S3 ME3SA4** | 139 | **C513_147.4 P90 BE90S4** | 140 |
| **10.2** | 935 | 1.7 | 140.5 | 16000 | **C613_140.5 S3 ME3SA4** | 143 | **C613_140.5 P90 BE90S4** | 144 |
| **10.4** | 946 | 2.4 | 137.4 | 25000 | **C703_137.4 S3 ME3SA4** | 147 | **C703_137.4 P90 BE90S4** | 148 |

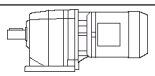


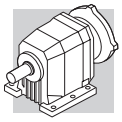
# 1.1 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **10.6** | 926 | 1.1 | 134.6 | 10000 | **C513_134.6 S3 ME3SA4** | 139 | **C513_134.6 P90 BE90S4** | 140 |
| **11.2** | 853 | 1.9 | 128.1 | 16000 | **C613_128.1 S3 ME3SA4** | 143 | **C613_128.1 P90 BE90S4** | 144 |
| **11.3** | 873 | 2.6 | 126.8 | 25000 | **C703_126.8 S3 ME3SA4** | 147 | **C703_126.8 P90 BE90S4** | 148 |
| **11.5** | 856 | 1.2 | 124.4 | 10000 | **C513_124.4 S3 ME3SA4** | 139 | **C513_124.4 P90 BE90S4** | 140 |
| **12.6** | 757 | 2.1 | 113.6 | 16000 | **C613_113.6 S3 ME3SA4** | 143 | **C613_113.6 P90 BE90S4** | 144 |
| **12.6** | 782 | 1.3 | 113.6 | 10000 | **C513_113.6 S3 ME3SA4** | 139 | **C513_113.6 P90 BE90S4** | 140 |
| **12.7** | 774 | 3.0 | 112.4 | 25000 | **C703_112.4 S3 ME3SA4** | 147 | **C703_112.4 P90 BE90S4** | 148 |
| **13.8** | 690 | 2.3 | 103.6 | 16000 | **C613_103.6 S3 ME3SA4** | 143 | **C613_103.6 P90 BE90S4** | 144 |
| **14.0** | 701 | 1.4 | 101.8 | 10000 | **C513_101.8 S3 ME3SA4** | 139 | **C513_101.8 P90 BE90S4** | 140 |
| **15.3** | 642 | 0.9 | 93.3 | 7000 | **C413_93.3 S3 ME3SA4** | 135 | **C413_93.3 P90 BE90S4** | 136 |
| **15.4** | 640 | 1.6 | 93.0 | 10000 | **C513_93.0 S3 ME3SA4** | 139 | **C513_93.0 P90 BE90S4** | 140 |
| **15.7** | 606 | 2.6 | 91.0 | 16000 | **C613_91.0 S3 ME3SA4** | 143 | **C613_91.0 P90 BE90S4** | 144 |
| **17.2** | 553 | 2.9 | 83.0 | 16000 | **C613_83.0 S3 ME3SA4** | 143 | **C613_83.0 P90 BE90S4** | 144 |
| **17.5** | 561 | 1.1 | 81.5 | 7000 | **C413_81.5 S3 ME3SA4** | 135 | **C413_81.5 P90 BE90S4** | 136 |
| **17.9** | 550 | 1.8 | 79.9 | 10000 | **C513_79.9 S3 ME3SA4** | 139 | **C513_79.9 P90 BE90S4** | 140 |
| **19.2** | 512 | 1.2 | 74.4 | 7000 | **C413_74.4 S3 ME3SA4** | 135 | **C413_74.4 P90 BE90S4** | 136 |
| **19.3** | 494 | 3.2 | 74.2 | 16000 | **C613_74.2 S3 ME3SA4** | 143 | **C613_74.2 P90 BE90S4** | 144 |
| **19.6** | 502 | 2.0 | 72.9 | 10000 | **C513_72.9 S3 ME3SA4** | 139 | **C513_72.9 P90 BE90S4** | 140 |
| **20.2** | 487 | 0.9 | 70.8 | 6500 | **C363_70.8 S3 ME3SA4** | 131 | **C363_70.8 P90 BE90S4** | 132 |
| **21.1** | 451 | 3.5 | 67.7 | 16000 | **C613_67.7 S3 ME3SA4** | 143 | **C613_67.7 P90 BE90S4** | 144 |
| **22.1** | 445 | 2.2 | 64.6 | 10000 | **C513_64.6 S3 ME3SA4** | 139 | **C513_64.6 P90 BE90S4** | 140 |
| **22.2** | 442 | 1.4 | 64.3 | 7000 | **C413_64.3 S3 ME3SA4** | 135 | **C413_64.3 P90 BE90S4** | 136 |
| **23.1** | 427 | 1.1 | 62.0 | 6500 | **C363_62.0 S3 ME3SA4** | 131 | **C363_62.0 P90 BE90S4** | 132 |
| **24.2** | 406 | 2.5 | 59.0 | 10000 | **C513_59.0 S3 ME3SA4** | 139 | **C513_59.0 P90 BE90S4** | 140 |
| **24.4** | 404 | 1.5 | 58.7 | 7000 | **C413_58.7 S3 ME3SA4** | 135 | **C413_58.7 P90 BE90S4** | 136 |
| **25.1** | 401 | 2.0 | 57.0 | 10000 | **C512_57.0 S3 ME3SA4** | 139 | **C512_57.0 P90 BE90S4** | 140 |
| **25.5** | 387 | 1.2 | 56.2 | 6500 | **C363_56.2 S3 ME3SA4** | 131 | **C363_56.2 P90 BE90S4** | 132 |
| **27.8** | 354 | 1.7 | 51.5 | 7000 | **C413_51.5 S3 ME3SA4** | 135 | **C413_51.5 P90 BE90S4** | 136 |
| **27.8** | 361 | 1.9 | 51.4 | 10000 | **C512_51.4 S3 ME3SA4** | 139 | **C512_51.4 P90 BE90S4** | 140 |
| **27.9** | 352 | 2.8 | 51.2 | 10000 | **C513_51.2 S3 ME3SA4** | 139 | **C513_51.2 P90 BE90S4** | 140 |
| **29.7** | 331 | 1.4 | 48.2 | 6500 | **C363_48.2 S3 ME3SA4** | 131 | **C363_48.2 P90 BE90S4** | 132 |
| **29.9** | 336 | 2.4 | 47.8 | 10000 | **C512_47.8 S3 ME3SA4** | 139 | **C512_47.8 P90 BE90S4** | 140 |
| **30** | 323 | 1.9 | 47.0 | 7000 | **C413_47.0 S3 ME3SA4** | 135 | **C413_47.0 P90 BE90S4** | 136 |
| **31** | 322 | 3.1 | 46.7 | 10000 | **C513_46.7 S3 ME3SA4** | 139 | **C513_46.7 P90 BE90S4** | 140 |
| **32** | 318 | 0.9 | 45.3 | 5500 | **C322_45.3 S3 ME3SA4** | 127 | **C322_45.3 P90 BE90S4** | 128 |
| **32** | 315 | 1.6 | 44.8 | 7000 | **C412_44.8 S3 ME3SA4** | 135 | **C412_44.8 P90 BE90S4** | 136 |
| **33** | 299 | 1.5 | 43.5 | 6500 | **C363_43.5 S3 ME3SA4** | 131 | **C363_43.5 P90 BE90S4** | 132 |
| **33** | 303 | 2.5 | 43.1 | 10000 | **C512_43.1 S3 ME3SA4** | 139 | **C512_43.1 P90 BE90S4** | 140 |
| **35** | 286 | 1.0 | 40.7 | 5500 | **C322_40.7 S3 ME3SA4** | 127 | **C322_40.7 P90 BE90S4** | 128 |
| **35** | 284 | 2.8 | 40.4 | 10000 | **C512_40.4 S3 ME3SA4** | 139 | **C512_40.4 P90 BE90S4** | 140 |
| **35** | 278 | 2.2 | 40.3 | 7000 | **C413_40.3 S3 ME3SA4** | 135 | **C413_40.3 P90 BE90S4** | 136 |
| **38** | 262 | 1.7 | 38.1 | 6500 | **C363_38.1 S3 ME3SA4** | 131 | **C363_38.1 P90 BE90S4** | 132 |
| **39** | 261 | 1.9 | 37.1 | 7000 | **C412_37.1 S3 ME3SA4** | 135 | **C412_37.1 P90 BE90S4** | 136 |
| **39** | 256 | 3.1 | 36.4 | 10000 | **C512_36.4 S3 ME3SA4** | 139 | **C512_36.4 P90 BE90S4** | 140 |
| **40** | 254 | 1.2 | 36.1 | 5500 | **C322_36.1 S3 ME3SA4** | 127 | **C322_36.1 P90 BE90S4** | 128 |
| **41** | 238 | 1.9 | 34.6 | 6300 | **C363_34.6 S3 ME3SA4** | 131 | **C363_34.6 P90 BE90S4** | 132 |
| **43** | 235 | 2.1 | 33.4 | 7000 | **C412_33.4 S3 ME3SA4** | 135 | **C412_33.4 P90 BE90S4** | 136 |
| **43** | 233 | 1.3 | 33.1 | 5420 | **C322_33.1 S3 ME3SA4** | 127 | **C322_33.1 P90 BE90S4** | 128 |
| **45** | 221 | 2.3 | 31.4 | 7000 | **C412_31.4 S3 ME3SA4** | 135 | **C412_31.4 P90 BE90S4** | 136 |
| **48** | 209 | 1.4 | 29.8 | 5360 | **C322_29.8 S3 ME3SA4** | 127 | **C322_29.8 P90 BE90S4** | 128 |
| **48** | 208 | 1.0 | 29.6 | 3190 | **C222_29.6 S3 ME3SA4** | 123 | **C222_29.6 P90 BE90S4** | 124 |
| **50** | 198 | 2.3 | 28.7 | 6190 | **C363_28.7 S3 ME3SA4** | 131 | **C363_28.7 P90 BE90S4** | 132 |
| **51** | 199 | 2.5 | 28.3 | 7000 | **C412_28.3 S3 ME3SA4** | 135 | **C412_28.3 P90 BE90S4** | 136 |
| **53** | 191 | 1.0 | 27.2 | 3160 | **C222_27.2 S3 ME3SA4** | 123 | **C222_27.2 P90 BE90S4** | 124 |
| **53** | 189 | 1.6 | 26.9 | 5220 | **C322_26.9 S3 ME3SA4** | 127 | **C322_26.9 P90 BE90S4** | 128 |
| **55** | 180 | 2.4 | 26.2 | 5930 | **C363_26.2 S3 ME3SA4** | 131 | **C363_26.2 P90 BE90S4** | 132 |
| **57** | 177 | 1.7 | 25.1 | 5180 | **C322_25.1 S3 ME3SA4** | 127 | **C322_25.1 P90 BE90S4** | 128 |



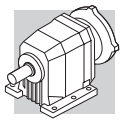
# 1.1 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **57** | 176 | 2.8 | 25.0 | 6950 | **C412_25.0 S3 ME3SA4** | 135 | **C412_25.0 P90 BE90S4** | 136 |
| **59** | 171 | 1.2 | 24.3 | 3150 | **C222_24.3 S3 ME3SA4** | 123 | **C222_24.3 P90 BE90S4** | 124 |
| **62** | 161 | 1.8 | 22.9 | 5050 | **C322_22.9 S3 ME3SA4** | 127 | **C322_22.9 P90 BE90S4** | 128 |
| **63** | 159 | 3.2 | 22.6 | 6810 | **C412_22.6 S3 ME3SA4** | 135 | **C412_22.6 P90 BE90S4** | 136 |
| **65** | 152 | 2.8 | 22.1 | 5680 | **C363_22.1 S3 ME3SA4** | 131 | **C363_22.1 P90 BE90S4** | 132 |
| **67** | 151 | 1.3 | 21.5 | 3120 | **C222_21.5 S3 ME3SA4** | 123 | **C222_21.5 P90 BE90S4** | 124 |
| **71** | 141 | 2.1 | 20.1 | 4920 | **C322_20.1 S3 ME3SA4** | 127 | **C322_20.1 P90 BE90S4** | 128 |
| **71** | 141 | 1.3 | 20.0 | 3080 | **C222_20.0 S3 ME3SA4** | 123 | **C222_20.0 P90 BE90S4** | 124 |
| **75** | 134 | 2.8 | 19.0 | 5580 | **C362_19.0 S3 ME3SA4** | 131 | **C362_19.0 P90 BE90S4** | 132 |
| **79** | 128 | 2.2 | 18.2 | 4760 | **C322_18.2 S3 ME3SA4** | 127 | **C322_18.2 P90 BE90S4** | 128 |
| **79** | 127 | 1.4 | 18.1 | 3020 | **C222_18.1 S3 ME3SA4** | 123 | **C222_18.1 P90 BE90S4** | 124 |
| **83** | 121 | 3.1 | 17.2 | 5300 | **C362_17.2 S3 ME3SA4** | 131 | **C362_17.2 P90 BE90S4** | 132 |
| **90** | 111 | 1.6 | 15.8 | 2970 | **C222_15.8 S3 ME3SA4** | 123 | **C222_15.8 P90 BE90S4** | 124 |
| **92** | 110 | 2.5 | 15.6 | 4630 | **C322_15.6 S3 ME3SA4** | 127 | **C322_15.6 P90 BE90S4** | 128 |
| **98** | 102 | 1.6 | 14.5 | 2940 | **C222_14.5 S3 ME3SA4** | 123 | **C222_14.5 P90 BE90S4** | 124 |
| **102** | 99 | 2.5 | 14.1 | 4480 | **C322_14.1 S3 ME3SA4** | 127 | **C322_14.1 P90 BE90S4** | 128 |
| **115** | 87 | 1.8 | 12.4 | 2840 | **C222_12.4 S3 ME3SA4** | 123 | **C222_12.4 P90 BE90S4** | 124 |
| **116** | 87 | 2.8 | 12.3 | 4350 | **C322_12.3 S3 ME3SA4** | 127 | **C322_12.3 P90 BE90S4** | 128 |
| **128** | 79 | 2.9 | 11.2 | 4200 | **C322_11.2 S3 ME3SA4** | 127 | **C322_11.2 P90 BE90S4** | 128 |
| **129** | 78 | 2.0 | 11.1 | 2800 | **C222_11.1 S3 ME3SA4** | 123 | **C222_11.1 P90 BE90S4** | 124 |
| **142** | 71 | 0.9 | 10.1 | 1400 | **C122_10.1 S3 ME3SA4** | 119 | **C122_10.1 P90 BE90S4** | 120 |
| **148** | 68 | 2.1 | 9.6 | 2700 | **C222_9.6 S3 ME3SA4** | 123 | **C222_9.6 P90 BE90S4** | 124 |
| **154** | 65 | 3.4 | 9.3 | 4030 | **C322_6.3 S3 ME3SA4** | 127 | **C322_6.3 P90 BE90S4** | 128 |
| **162** | 62 | 1.0 | 8.8 | 1560 | **C122_8.8 S3 ME3SA4** | 119 | **C122_8.8 P90 BE90S4** | 120 |
| **165** | 61 | 2.3 | 8.7 | 2630 | **C222_8.7 S3 ME3SA4** | 123 | **C222_8.7 P90 BE90S4** | 124 |
| **188** | 54 | 1.0 | 7.6 | 1550 | **C122_7.6 S3 ME3SA4** | 119 | **C122_7.6 P90 BE90S4** | 120 |
| **202** | 50 | 2.6 | 7.1 | 2510 | **C222_7.1 S3 ME3SA4** | 123 | **C222_7.1 P90 BE90S4** | 124 |
| **229** | 44 | 1.2 | 6.2 | 1220 | **C122_6.2 S3 ME3SA4** | 119 | **C122_6.2 P90 BE90S4** | 120 |
| **235** | 43 | 2.5 | 6.1 | 2380 | **C222_6.1 S3 ME3SA4** | 123 | **C222_6.1 P90 BE90S4** | 124 |
| **238** | 42 | 1.6 | 11.9 | 1420 | **C122_11.9 S2 ME2SB2** | 119 | **C122_11.9 P90 BE90B2** | 120 |
| **255** | 39 | 3.9 | 11.1 | 2980 | **C222_11.1 S2 ME2SB2** | 123 | **C222_11.1 P90 BE90B2** | 124 |
| **255** | 39 | 1.3 | 5.6 | 1270 | **C122_5.6 S3 ME3SA4** | 119 | **C122_5.6 P90 BE90S4** | 120 |
| **256** | 39 | 2.6 | 5.6 | 2350 | **C222_5.6 S3 ME3SA4** | 123 | **C222_5.6 P90 BE90S4** | 124 |
| **259** | 39 | 1.1 | 3.7 | 1320 | **C122_3.7 S3 ME3LA6** | 119 | **C122_3.7 P100 BE100M6** | 120 |
| **281** | 35 | 1.8 | 10.1 | 1420 | **C122_10.1 S2 ME2SB2** | 119 | **C122_10.1 P90 BE90B2** | 120 |
| **294** | 34 | 1.4 | 4.9 | 1370 | **C122_4.9 S3 ME3SA4** | 119 | **C122_4.9 P90 BE90S4** | 120 |
| **300** | 34 | 3.0 | 4.8 | 2240 | **C222_4.8 S3 ME3SA4** | 123 | **C222_4.8 P90 BE90S4** | 124 |
| **320** | 31 | 1.9 | 8.8 | 1370 | **C122_8.8 S2 ME2SB2** | 119 | **C122_8.8 P90 BE90B2** | 120 |
| **332** | 30 | 1.5 | 4.3 | 1320 | **C122_4.3 S3 ME3SA4** | 119 | **C122_4.3 P90 BE90S4** | 120 |
| **336** | 30 | 3.1 | 4.3 | 2200 | **C222_4.3 S3 ME3SA4** | 123 | **C222_4.3 P90 BE90S4** | 124 |
| **341** | 29 | 1.3 | 2.8 | 1320 | **C122_2.8 S3 M3SA6** | 119 | **C122_2.8 P90 BN90L6** | 120 |
| **347** | 29 | 2.8 | 2.7 | 2160 | **C222_2.7 S3 M3SA6** | 123 | **C222_2.7 P90 BN90L6** | 124 |
| **371** | 27 | 2.1 | 7.6 | 1330 | **C122_7.6 S2 ME2SB2** | 119 | **C122_7.6 P90 BE90B2** | 120 |
| **386** | 26 | 3.5 | 3.7 | 2090 | **C222_3.7 S3 ME3SA4** | 123 | **C222_3.7 P90 BE90S4** | 124 |
| **392** | 26 | 1.6 | 3.7 | 1280 | **C122_3.7 S3 ME3SA4** | 119 | **C122_3.7 P90 BE90S4** | 120 |
| **446** | 23 | 1.8 | 3.2 | 1230 | **C122_3.2 S3 ME3SA4** | 119 | **C122_3.2 P90 BE90S4** | 120 |
| **454** | 22 | 2.4 | 6.2 | 1230 | **C122_6.2 S2 ME2SB2** | 119 | **C122_6.2 P90 BE90B2** | 120 |
| **505** | 20 | 2.6 | 5.6 | 1190 | **C122_5.6 S2 ME2SB2** | 119 | **C122_5.6 P90 BE90B2** | 120 |
| **517** | 19 | 1.9 | 2.8 | 1190 | **C122_2.8 S3 ME3SA4** | 119 | **C122_2.8 P90 BE90S4** | 120 |
| **581** | 17 | 2.8 | 4.9 | 1150 | **C122_4.9 S2 ME2SB2** | 119 | **C122_4.9 P90 BE90B2** | 120 |
| **656** | 15 | 3.0 | 4.3 | 1110 | **C122_4.3 S2 ME2SB2** | 119 | **C122_4.3 P90 BE90B2** | 120 |
| **775** | 13 | 3.3 | 3.7 | 1070 | **C122_3.7 S2 ME2SB2** | 119 | **C122_3.7 P90 BE90B2** | 120 |
| **882** | 11 | 3.5 | 3.2 | 1020 | **C122_3.2 S2 ME2SB2** | 119 | **C122_3.2 P90 BE90B2** | 120 |
| **1023** | 10 | 3.8 | 2.8 | 980 | **C122_2.8 S2 ME2SB2** | 119 | **C122_2.8 P90 BE90B2** | 120 |

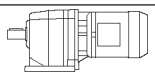


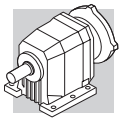
# 1.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **1.0** | 12390 | 1.0 | 908.2 | 85000 | **C1004_908.2 S3 ME3LB6** | 156 | **C1004_908.2 P100 BE100LA6** | 157 |
| **1.3** | 9730 | 1.2 | 1081 | 85000 | **C1004_1081 S3 ME3SB4** | 156 | **C1004_1081 P90 BE90LA4** | 157 |
| **1.4** | 9035 | 1.3 | 1004 | 85000 | **C1004_1004 S3 ME3SB4** | 156 | **C1004_1004 P90 BE90LA4** | 157 |
| **1.6** | 8174 | 1.5 | 908.2 | 85000 | **C1004_908.2 S3 ME3SB4** | 156 | **C1004_908.2 P90 BE90LA4** | 157 |
| **1.7** | 7596 | 0.9 | 844.0 | 60000 | **C904_844.0 S3 ME3SB4** | 153 | **C904_844.0 P90 BE90LA4** | 154 |
| **1.7** | 7590 | 1.6 | 843.3 | 85000 | **C1004_843.3 S3 ME3SB4** | 156 | **C1004_843.3 P90 BE90LA4** | 157 |
| **1.8** | 6981 | 1.7 | 775.7 | 85000 | **C1004_775.7 S3 ME3SB4** | 156 | **C1004_775.7 P90 BE90LA4** | 157 |
| **1.8** | 6963 | 1.0 | 773.6 | 60000 | **C904_773.6 S3 ME3SB4** | 153 | **C904_773.6 P90 BE90LA4** | 154 |
| **2.0** | 6483 | 1.9 | 720.3 | 85000 | **C1004_720.3 S3 ME3SB4** | 156 | **C1004_720.3 P90 BE90LA4** | 157 |
| **2.0** | 6410 | 1.1 | 712.2 | 60000 | **C904_712.2 S3 ME3SB4** | 153 | **C904_712.2 P90 BE90LA4** | 154 |
| **2.2** | 5875 | 1.2 | 652.8 | 60000 | **C904_652.8 S3 ME3SB4** | 153 | **C904_652.8 P90 BE90LA4** | 154 |
| **2.3** | 5647 | 2.1 | 627.4 | 85000 | **C1004_627.4 S3 ME3SB4** | 156 | **C1004_627.4 P90 BE90LA4** | 157 |
| **2.5** | 5245 | 1.4 | 582.8 | 60000 | **C904_582.8 S3 ME3SB4** | 153 | **C904_582.8 P90 BE90LA4** | 154 |
| **2.5** | 5243 | 2.3 | 582.6 | 85000 | **C1004_582.6 S3 ME3SB4** | 156 | **C1004_582.6 P90 BE90LA4** | 157 |
| **2.7** | 4808 | 1.5 | 534.2 | 60000 | **C904_534.2 S3 ME3SB4** | 153 | **C904_534.2 P90 BE90LA4** | 154 |
| **2.8** | 4524 | 2.7 | 502.6 | 85000 | **C1004_502.6 S3 ME3SB4** | 156 | **C1004_502.6 P90 BE90LA4** | 157 |
| **3.1** | 4201 | 2.9 | 466.7 | 85000 | **C1004_466.7 S3 ME3SB4** | 156 | **C1004_466.7 P90 BE90LA4** | 157 |
| **3.1** | 4114 | 1.8 | 457.1 | 60000 | **C904_457.1 S3 ME3SB4** | 153 | **C904_457.1 P90 BE90LA4** | 154 |
| **3.1** | 4099 | 1.0 | 455.4 | 35000 | **C804_455.4 S3 ME3SB4** | 150 | **C804_455.4 P90 BE90LA4** | 151 |
| **3.4** | 3771 | 1.9 | 419.0 | 60000 | **C904_419.0 S3 ME3SB4** | 153 | **C904_419.0 P90 BE90LA4** | 154 |
| **3.4** | 3757 | 1.1 | 417.5 | 35000 | **C804_417.5 S3 ME3SB4** | 150 | **C804_417.5 P90 BE90LA4** | 151 |
| **3.9** | 3328 | 2.2 | 369.8 | 60000 | **C904_369.8 S3 ME3SB4** | 153 | **C904_369.8 P90 BE90LA4** | 154 |
| **3.9** | 3282 | 1.2 | 364.7 | 35000 | **C804_364.7 S3 ME3SB4** | 150 | **C804_364.7 P90 BE90LA4** | 151 |
| **4.2** | 3051 | 2.4 | 339.0 | 60000 | **C904_339.0 S3 ME3SB4** | 153 | **C904_339.0 P90 BE90LA4** | 154 |
| **4.3** | 3008 | 1.3 | 334.3 | 35000 | **C804_334.3 S3 ME3SB4** | 150 | **C804_334.3 P90 BE90LA4** | 151 |
| **4.9** | 2636 | 2.7 | 292.9 | 60000 | **C904_292.9 S3 ME3SB4** | 153 | **C904_292.9 P90 BE90LA4** | 154 |
| **5.0** | 2571 | 1.6 | 285.7 | 35000 | **C804_285.7 S3 ME3SB4** | 150 | **C804_285.7 P90 BE90LA4** | 151 |
| **5.3** | 2450 | 0.9 | 272.2 | 25000 | **C704_272.2 S3 ME3SB4** | 147 | **C704_272.2 P90 BE90LA4** | 148 |
| **5.3** | 2416 | 3.0 | 268.5 | 60000 | **C904_268.5 S3 ME3SB4** | 153 | **C904_268.5 P90 BE90LA4** | 154 |
| **5.5** | 2357 | 1.7 | 261.9 | 35000 | **C804_261.9 S3 ME3SB4** | 150 | **C804_261.9 P90 BE90LA4** | 151 |
| **5.7** | 2262 | 1.0 | 251.3 | 25000 | **C704_251.3 S3 ME3SB4** | 147 | **C704_251.3 P90 BE90LA4** | 148 |
| **6.0** | 2226 | 1.0 | 239.3 | 25000 | **C703_239.3 S3 ME3SB4** | 147 | **C703_239.3 P90 BE90LA4** | 148 |
| **6.5** | 2054 | 1.1 | 220.9 | 25000 | **C703_220.9 S3 ME3SB4** | 147 | **C703_220.9 P90 BE90LA4** | 148 |
| **6.6** | 1957 | 0.8 | 217.4 | 16000 | **C614_217.4 S3 ME3SB4** | 143 | **C614_217.4 P90 BE90LA4** | 144 |
| **6.6** | 2007 | 2.0 | 215.8 | 35000 | **C803_215.8 S3 ME3SB4** | 150 | **C803_215.8 P90 BE90LA4** | 151 |
| **7.2** | 1840 | 2.1 | 197.9 | 35000 | **C803_197.9 S3 ME3SB4** | 150 | **C803_197.9 P90 BE90LA4** | 151 |
| **7.3** | 1762 | 0.9 | 195.8 | 16000 | **C613_195.8 S3 ME3SB4** | 143 | **C613_195.8 P90 BE90LA4** | 144 |
| **7.4** | 1805 | 1.3 | 194.1 | 25000 | **C703_194.1 S3 ME3SB4** | 147 | **C703_194.1 P90 BE90LA4** | 148 |
| **7.8** | 1715 | 2.3 | 184.4 | 35000 | **C803_184.4 S3 ME3SB4** | 150 | **C803_184.4 P90 BE90LA4** | 151 |
| **8.0** | 1666 | 1.4 | 179.2 | 25000 | **C703_179.2 S3 ME3SB4** | 147 | **C703_179.2 P90 BE90LA4** | 148 |
| **8.0** | 1607 | 1.0 | 178.6 | 16000 | **C613_178.6 S3 ME3SB4** | 143 | **C613_178.6 P90 BE90LA4** | 144 |
| **8.5** | 1572 | 2.5 | 169.0 | 35000 | **C803_169.0 S3 ME3SB4** | 150 | **C803_169.0 P90 BE90LA4** | 151 |
| **8.7** | 1480 | 1.1 | 164.5 | 16000 | **C613_164.5 S3 ME3SB4** | 143 | **C613_164.5 P90 BE90LA4** | 144 |
| **8.8** | 1514 | 1.5 | 162.8 | 25000 | **C703_162.8 S3 ME3SB4** | 147 | **C703_162.8 P90 BE90LA4** | 148 |
| **9.5** | 1398 | 1.6 | 150.3 | 25000 | **C703_150.3 S3 ME3SB4** | 147 | **C703_150.3 P90 BE90LA4** | 148 |
| **9.5** | 1350 | 1.2 | 150.0 | 16000 | **C613_150.0 S3 ME3SB4** | 143 | **C613_150.0 P90 BE90LA4** | 144 |
| **9.6** | 1387 | 2.9 | 149.1 | 35000 | **C803_149.1 S3 ME3SB4** | 150 | **C803_149.1 P90 BE90LA4** | 151 |
| **10.2** | 1264 | 1.3 | 140.5 | 16000 | **C613_140.5 S3 ME3SB4** | 143 | **C613_140.5 P90 BE90LA4** | 144 |
| **10.4** | 1278 | 1.8 | 137.4 | 25000 | **C703_137.4 S3 ME3SB4** | 147 | **C703_137.4 P90 BE90LA4** | 148 |
| **10.5** | 1271 | 3.1 | 136.7 | 35000 | **C803_136.7 S3 ME3SB4** | 150 | **C803_136.7 P90 BE90LA4** | 151 |
| **11.2** | 1153 | 1.4 | 128.1 | 16000 | **C613_128.1 S3 ME3SB4** | 143 | **C613_128.1 P90 BE90LA4** | 144 |
| **11.3** | 1180 | 1.9 | 126.8 | 25000 | **C703_126.8 S3 ME3SB4** | 147 | **C703_126.8 P90 BE90LA4** | 148 |
| **12.6** | 1022 | 1.6 | 113.6 | 16000 | **C613_113.6 S3 ME3SB4** | 143 | **C613_113.6 P90 BE90LA4** | 144 |
| **12.6** | 1057 | 0.9 | 113.6 | 10000 | **C513_113.6 S3 ME3SB4** | 139 | **C513_113.6 P90 BE90LA4** | 140 |
| **12.7** | 1046 | 2.2 | 112.4 | 25000 | **C703_112.4 S3 ME3SB4** | 147 | **C703_112.4 P90 BE90LA4** | 148 |
| **13.8** | 965 | 2.4 | 103.8 | 25000 | **C703_103.8 S3 ME3SB4** | 147 | **C703_103.8 P90 BE90LA4** | 148 |
| **13.8** | 933 | 1.7 | 103.6 | 16000 | **C613_103.6 S3 ME3SB4** | 143 | **C613_103.6 P90 BE90LA4** | 144 |



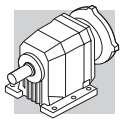
# 1.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **14.0** | 947 | 1.1 | 101.8 | 10000 | **C513_101.8 S3 ME3SB4** | 139 | **C513_101.8 P90 BE90LA4** | 140 |
| **15.4** | 865 | 1.2 | 93.0 | 10000 | **C513_93.0 S3 ME3SB4** | 139 | **C513_93.0 P90 BE90LA4** | 140 |
| **15.7** | 819 | 2.0 | 91.0 | 16000 | **C613_91.0 S3 ME3SB4** | 143 | **C613_91.0 P90 BE90LA4** | 144 |
| **16.2** | 820 | 2.8 | 88.2 | 25000 | **C703_88.2 S3 ME3SB4** | 147 | **C703_88.2 P90 BE90LA4** | 148 |
| **16.6** | 821 | 1.0 | 57.0 | 10000 | **C512_57.0 S3 ME3LB6** | 139 | **C512_57.0 P100 BE100LA6** | 140 |
| **17.2** | 747 | 2.1 | 83.0 | 16000 | **C613_83.0 S3 ME3SB4** | 143 | **C613_83.0 P90 BE90LA4** | 144 |
| **17.6** | 757 | 3.0 | 81.4 | 25000 | **C703_81.4 S3 ME3SB4** | 147 | **C703_81.4 P90 BE90LA4** | 148 |
| **17.9** | 743 | 1.3 | 79.9 | 10000 | **C513_79.9 S3 ME3SB4** | 139 | **C513_79.9 P90 BE90LA4** | 140 |
| **18.4** | 740 | 0.9 | 51.4 | 10000 | **C512_51.4 S3 ME3LB6** | 139 | **C512_51.4 P100 BE100LA6** | 140 |
| **19.3** | 668 | 2.4 | 74.2 | 16000 | **C613_74.2 S3 ME3SB4** | 143 | **C613_74.2 P90 BE90LA4** | 144 |
| **19.6** | 678 | 1.5 | 72.9 | 10000 | **C513_72.9 S3 ME3SB4** | 139 | **C513_72.9 P90 BE90LA4** | 140 |
| **19.8** | 689 | 1.2 | 47.8 | 10000 | **C512_47.8 S3 ME3LB6** | 139 | **C512_47.8 P100 BE100LA6** | 140 |
| **20.0** | 663 | 3.5 | 71.3 | 25000 | **C703_71.3 S3 ME3SB4** | 147 | **C703_71.3 P90 BE90LA4** | 148 |
| **21.1** | 609 | 2.6 | 67.7 | 16000 | **C613_67.7 S3 ME3SB4** | 143 | **C613_67.7 P90 BE90LA4** | 144 |
| **21.9** | 621 | 1.2 | 43.1 | 10000 | **C512_43.1 S3 ME3LB6** | 139 | **C512_43.1 P100 BE100LA6** | 140 |
| **22.1** | 601 | 1.7 | 64.6 | 10000 | **C513_64.6 S3 ME3SB4** | 139 | **C513_64.6 P90 BE90LA4** | 140 |
| **22.2** | 598 | 1.0 | 64.3 | 7000 | **C413_64.3 S3 ME3SB4** | 135 | **C413_64.3 P90 BE90LA4** | 136 |
| **24.2** | 549 | 1.8 | 59.0 | 10000 | **C513_59.0 S3 ME3SB4** | 139 | **C513_59.0 P90 BE90LA4** | 140 |
| **24.4** | 545 | 1.1 | 58.7 | 7000 | **C413_58.7 S3 ME3SB4** | 135 | **C413_58.7 P90 BE90LA4** | 136 |
| **24.4** | 527 | 3.0 | 58.6 | 16000 | **C613_58.6 S3 ME3SB4** | 143 | **C613_58.6 P90 BE90LA4** | 144 |
| **25.1** | 542 | 1.4 | 57.0 | 10000 | **C512_57.0 S3 ME3SB4** | 139 | **C512_57.0 P90 BE90LA4** | 140 |
| **26.7** | 481 | 3.3 | 53.5 | 16000 | **C613_53.5 S3 ME3SB4** | 143 | **C613_53.5 P90 BE90LA4** | 144 |
| **27.8** | 479 | 1.3 | 51.5 | 7000 | **C413_51.5 S3 ME3SB4** | 135 | **C413_51.5 P90 BE90LA4** | 136 |
| **27.8** | 488 | 1.4 | 51.4 | 10000 | **C512_51.4 S3 ME3SB4** | 139 | **C512_51.4 P90 BE90LA4** | 140 |
| **27.9** | 476 | 2.1 | 51.2 | 10000 | **C513_51.2 S3 ME3SB4** | 139 | **C513_51.2 P90 BE90LA4** | 140 |
| **29.7** | 448 | 1.0 | 48.2 | 6290 | **C363_48.2 S3 ME3SB4** | 131 | **C363_48.2 P90 BE90LA4** | 132 |
| **29.9** | 454 | 1.8 | 47.8 | 10000 | **C512_47.8 S3 ME3SB4** | 139 | **C512_47.8 P90 BE90LA4** | 140 |
| **30** | 437 | 1.4 | 47.0 | 7000 | **C413_47.0 S3 ME3SB4** | 135 | **C413_47.0 P90 BE90LA4** | 136 |
| **31** | 435 | 2.3 | 46.7 | 10000 | **C513_46.7 S3 ME3SB4** | 139 | **C513_46.7 P90 BE90LA4** | 140 |
| **32** | 425 | 1.2 | 44.8 | 7000 | **C412_44.8 S3 ME3SB4** | 135 | **C412_44.8 P90 BE90LA4** | 136 |
| **33** | 404 | 1.1 | 43.5 | 6110 | **C363_43.5 S3 ME3SB4** | 131 | **C363_43.5 P90 BE90LA4** | 132 |
| **33** | 410 | 1.9 | 43.1 | 10000 | **C512_43.1 S3 ME3SB4** | 139 | **C512_43.1 P90 BE90LA4** | 140 |
| **35** | 376 | 2.7 | 40.5 | 10000 | **C513_40.5 S3 ME3SB4** | 139 | **C513_40.5 P90 BE90LA4** | 140 |
| **35** | 383 | 2.1 | 40.4 | 10000 | **C512_40.4 S3 ME3SB4** | 139 | **C512_40.4 P90 BE90LA4** | 140 |
| **35** | 375 | 1.6 | 40.3 | 7000 | **C413_40.3 S3 ME3SB4** | 135 | **C413_40.3 P90 BE90LA4** | 136 |
| **38** | 354 | 1.3 | 38.1 | 6110 | **C363_38.1 S3 ME3SB4** | 131 | **C363_38.1 P90 BE90LA4** | 132 |
| **39** | 352 | 1.4 | 37.1 | 7000 | **C412_37.1 S3 ME3SB4** | 135 | **C412_37.1 P90 BE90LA4** | 136 |
| **39** | 344 | 2.9 | 37.0 | 10000 | **C513_37.0 S3 ME3SB4** | 139 | **C513_37.0 P90 BE90LA4** | 140 |
| **39** | 346 | 2.3 | 36.4 | 10000 | **C512_36.4 S3 ME3SB4** | 139 | **C512_36.4 P90 BE90LA4** | 140 |
| **40** | 343 | 0.9 | 36.1 | 5100 | **C322_36.1 S3 ME3SB4** | 127 | **C322_36.1 P90 BE90LA4** | 128 |
| **41** | 322 | 1.4 | 34.6 | 5950 | **C363_34.6 S3 ME3SB4** | 131 | **C363_34.6 P90 BE90LA4** | 132 |
| **43** | 317 | 1.6 | 33.4 | 7000 | **C412_33.4 S3 ME3SB4** | 135 | **C412_33.4 P90 BE90LA4** | 136 |
| **43** | 314 | 1.0 | 33.1 | 5050 | **C322_33.1 S3 ME3SB4** | 127 | **C322_33.1 P90 BE90LA4** | 128 |
| **43** | 314 | 2.5 | 33.0 | 10000 | **C512_33.0 S3 ME3SB4** | 139 | **C512_33.0 P90 BE90LA4** | 140 |
| **45** | 299 | 1.7 | 31.4 | 6990 | **C412_31.4 S3 ME3SB4** | 135 | **C412_31.4 P90 BE90LA4** | 136 |
| **48** | 283 | 2.8 | 29.8 | 10000 | **C512_29.8 S3 ME3SB4** | 139 | **C512_29.8 P90 BE90LA4** | 140 |
| **48** | 283 | 1.1 | 29.8 | 4970 | **C322_29.8 S3 ME3SB4** | 127 | **C322_29.8 P90 BE90LA4** | 128 |
| **50** | 267 | 1.7 | 28.7 | 5830 | **C363_28.7 S3 ME3SB4** | 131 | **C363_28.7 P90 BE90LA4** | 132 |
| **51** | 269 | 1.9 | 28.3 | 6830 | **C412_28.3 S3 ME3SB4** | 135 | **C412_28.3 P90 BE90LA4** | 136 |
| **53** | 256 | 1.2 | 26.9 | 4890 | **C322_26.9 S3 ME3SB4** | 127 | **C322_26.9 P90 BE90LA4** | 128 |
| **55** | 244 | 1.8 | 26.2 | 5710 | **C363_26.2 S3 ME3SB4** | 131 | **C363_26.2 P90 BE90LA4** | 132 |
| **55** | 246 | 3.2 | 25.9 | 10000 | **C512_25.9 S3 ME3SB4** | 139 | **C512_25.9 P90 BE90LA4** | 140 |
| **57** | 239 | 1.3 | 25.1 | 4840 | **C322_25.1 S3 ME3SB4** | 127 | **C322_25.1 P90 BE90LA4** | 128 |
| **57** | 238 | 2.1 | 25.0 | 6680 | **C412_25.0 S3 ME3SB4** | 135 | **C412_25.0 P90 BE90LA4** | 136 |
| **62** | 218 | 1.4 | 22.9 | 4750 | **C322_22.9 S3 ME3SB4** | 127 | **C322_22.9 P90 BE90LA4** | 128 |
| **63** | 214 | 2.3 | 22.6 | 6510 | **C412_22.6 S3 ME3SB4** | 135 | **C412_22.6 P90 BE90LA4** | 136 |
| **65** | 206 | 2.1 | 22.1 | 5530 | **C363_22.1 S3 ME3SB4** | 131 | **C363_22.1 P90 BE90LA4** | 132 |

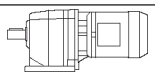


# 1.5 kW

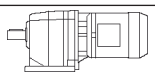
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **67** | 204 | 1.0 | 21.5 | 2600 | **C222_21.5 S3 ME3SB4** | 123 | **C222_21.5 P90 BE90LA4** | 124 |
| **71** | 191 | 1.5 | 20.1 | 4650 | **C322_20.1 S3 ME3SB4** | 127 | **C322_20.1 P90 BE90LA4** | 128 |
| **71** | 190 | 1.0 | 20.0 | 2740 | **C222_20.0 S3 ME3SB4** | 123 | **C222_20.0 P90 BE90LA4** | 124 |
| **72** | 188 | 2.6 | 19.8 | 6330 | **C412_19.8 S3 ME3SB4** | 135 | **C412_19.8 P90 BE90LA4** | 136 |
| **75** | 181 | 2.1 | 19.0 | 5330 | **C362_19.0 S3 ME3SB4** | 131 | **C362_19.0 P90 BE90LA4** | 132 |
| **79** | 173 | 1.6 | 18.2 | 4520 | **C322_18.2 S3 ME3SB4** | 127 | **C322_18.2 P90 BE90LA4** | 128 |
| **79** | 172 | 1.1 | 18.1 | 2700 | **C222_18.1 S3 ME3SB4** | 123 | **C222_18.1 P90 BE90LA4** | 124 |
| **80** | 169 | 2.8 | 17.8 | 6160 | **C412_17.8 S3 ME3SB4** | 135 | **C412_17.8 P90 BE90LA4** | 136 |
| **83** | 163 | 2.3 | 17.2 | 5140 | **C362_17.2 S3 ME3SB4** | 131 | **C362_17.2 P90 BE90LA4** | 132 |
| **90** | 150 | 1.2 | 15.8 | 2700 | **C222_15.8 S3 ME3SB4** | 123 | **C222_15.8 P90 BE90LA4** | 124 |
| **90** | 150 | 3.0 | 15.8 | 6000 | **C412_15.8 S3 ME3SB4** | 135 | **C412_15.8 P90 BE90LA4** | 136 |
| **92** | 148 | 1.8 | 15.6 | 4410 | **C322_15.6 S3 ME3SB4** | 127 | **C322_15.6 P90 BE90LA4** | 128 |
| **97** | 140 | 2.7 | 14.8 | 5030 | **C362_14.8 S3 ME3SB4** | 131 | **C362_14.8 P90 BE90LA4** | 132 |
| **98** | 138 | 1.2 | 14.5 | 2700 | **C222_14.5 S3 ME3SB4** | 123 | **C222_14.5 P90 BE90LA4** | 124 |
| **100** | 135 | 3.3 | 14.2 | 5830 | **C412_14.2 S3 ME3SB4** | 135 | **C412_14.2 P90 BE90LA4** | 136 |
| **102** | 134 | 1.9 | 14.1 | 4280 | **C322_14.1 S3 ME3SB4** | 127 | **C322_14.1 P90 BE90LA4** | 128 |
| **107** | 127 | 3.0 | 13.3 | 4890 | **C362_13.3 S3 ME3SB4** | 131 | **C362_13.3 P90 BE90LA4** | 132 |
| **115** | 118 | 1.4 | 12.4 | 2630 | **C222_12.4 S3 ME3SB4** | 123 | **C222_12.4 P90 BE90LA4** | 124 |
| **116** | 117 | 2.1 | 12.3 | 4180 | **C322_12.3 S3 ME3SB4** | 127 | **C322_12.3 P90 BE90LA4** | 128 |
| **123** | 111 | 3.4 | 11.7 | 4740 | **C362_11.7 S3 ME3SB4** | 131 | **C362_11.7 P90 BE90LA4** | 132 |
| **128** | 106 | 2.2 | 11.2 | 4050 | **C322_11.2 S3 ME3SB4** | 127 | **C322_11.2 P90 BE90LA4** | 128 |
| **129** | 105 | 1.5 | 11.1 | 2600 | **C222_11.1 S3 ME3SB4** | 123 | **C222_11.1 P90 BE90LA4** | 124 |
| **148** | 92 | 1.6 | 9.6 | 2530 | **C222_9.6 S3 ME3SB4** | 123 | **C222_9.6 P90 BE90LA4** | 124 |
| **154** | 88 | 2.5 | 9.3 | 3900 | **C322_9.3 S3 ME3SB4** | 127 | **C322_9.3 P90 BE90LA4** | 128 |
| **165** | 82 | 1.7 | 8.7 | 2470 | **C222_8.7 S3 ME3SB4** | 123 | **C222_8.7 P90 BE90LA4** | 124 |
| **169** | 81 | 2.6 | 8.5 | 3790 | **C322_8.5 S3 ME3SB4** | 127 | **C322_8.5 P90 BE90LA4** | 128 |
| **180** | 75 | 2.3 | 15.8 | 2440 | **C222_15.8 S3 ME3SA2** | 123 | **C222_15.8 P90 BE90SA2** | 124 |
| **191** | 71 | 2.2 | 5.0 | 3610 | **C322_5.0 S3 ME3LB6** | 127 | **C322_5.0 P100 BE100LA6** | 128 |
| **200** | 68 | 2.9 | 7.2 | 3640 | **C322_7.2 S3 ME3SB4** | 127 | **C322_7.2 P90 BE90LA4** | 128 |
| **202** | 67 | 1.9 | 7.1 | 2380 | **C222_7.1 S3 ME3SB4** | 123 | **C222_7.1 P90 BE90LA4** | 124 |
| **204** | 67 | 3.0 | 4.6 | 4050 | **C362_4.6 S3 ME3LB6** | 131 | **C362_4.6 P100 BE100LA6** | 132 |
| **228** | 60 | 2.6 | 6.3 | 3450 | **C322_6.3 S3 ME3SB4** | 127 | **C322_6.3 P90 BE90LA4** | 128 |
| **229** | 59 | 0.9 | 6.2 | 600 | **C122_6.2 S3 ME3SB4** | 119 | **C122_6.2 P90 BE90LA4** | 120 |
| **235** | 58 | 1.8 | 6.1 | 2250 | **C222_6.1 S3 ME3SB4** | 123 | **C222_6.1 P90 BE90LA4** | 124 |
| **240** | 57 | 1.2 | 11.9 | 1250 | **C122_11.9 S3 ME3SA2** | 119 | **C122_11.9 P90 BE90SA2** | 120 |
| **253** | 54 | 2.9 | 5.7 | 3320 | **C322_5.7 S3 ME3SB4** | 127 | **C322_5.7 P90 BE90LA4** | 128 |
| **255** | 53 | 1.7 | 3.7 | 2210 | **C222_3.7 S3 ME3LB6** | 123 | **C222_3.7 P100 BE100LA6** | 124 |
| **255** | 53 | 1.0 | 5.6 | 720 | **C122_5.6 S3 ME3SB4** | 119 | **C122_5.6 P90 BE90LA4** | 120 |
| **256** | 53 | 1.9 | 5.6 | 2200 | **C222_5.6 S3 ME3SB4** | 123 | **C222_5.6 P90 BE90LA4** | 124 |
| **284** | 48 | 1.3 | 10.1 | 1340 | **C122_10.1 S3 ME3SA2** | 119 | **C122_10.1 P90 BE90SA2** | 120 |
| **289** | 47 | 3.3 | 5.0 | 3240 | **C322_5.0 S3 ME3SB4** | 127 | **C322_5.0 P90 BE90LA4** | 128 |
| **294** | 46 | 1.0 | 4.9 | 840 | **C122_4.9 S3 ME3SB4** | 119 | **C122_4.9 P90 BE90LA4** | 120 |
| **300** | 45 | 2.2 | 4.8 | 2140 | **C222_4.8 S3 ME3SB4** | 123 | **C222_4.8 P90 BE90LA4** | 124 |
| **323** | 42 | 1.4 | 8.8 | 1300 | **C122_8.8 S3 ME3SA2** | 119 | **C122_8.8 P90 BE90SA2** | 120 |
| **330** | 41 | 3.3 | 8.7 | 2130 | **C222_8.7 S3 ME3SA2** | 123 | **C222_8.7 P90 BE90SA2** | 124 |
| **332** | 41 | 1.1 | 4.3 | 930 | **C122_4.3 S3 ME3SB4** | 119 | **C122_4.3 P90 BE90LA4** | 120 |
| **336** | 40 | 2.3 | 4.3 | 2100 | **C222_4.3 S3 ME3SB4** | 123 | **C222_4.3 P90 BE90LA4** | 124 |
| **341** | 40 | 0.9 | 2.8 | 1000 | **C122_2.8 S3 ME3LB6** | 119 | **C122_2.8 P100 BE100LA6** | 120 |
| **347** | 39 | 2.0 | 2.7 | 2060 | **C222_2.7 S3 ME3LB6** | 123 | **C222_2.7 P100 BE100LA6** | 124 |
| **375** | 36 | 1.5 | 7.6 | 1270 | **C122_7.6 S3 ME3SA2** | 119 | **C122_7.6 P90 BE90SA2** | 120 |
| **386** | 35 | 2.6 | 3.7 | 2020 | **C222_3.7 S3 ME3SB4** | 123 | **C222_3.7 P90 BE90LA4** | 124 |
| **392** | 35 | 1.2 | 3.7 | 1100 | **C122_3.7 S3 ME3SB4** | 119 | **C122_3.7 P90 BE90LA4** | 120 |
| **403** | 34 | 3.9 | 7.1 | 2030 | **C222_7.1 S3 ME3SA2** | 123 | **C222_7.1 P90 BE90SA2** | 124 |
| **430** | 32 | 2.7 | 3.3 | 2000 | **C222_3.3 S3 ME3SB4** | 123 | **C222_3.3 P90 BE90LA4** | 124 |
| **446** | 30 | 1.3 | 3.2 | 1120 | **C122_3.2 S3 ME3SB4** | 119 | **C122_3.2 P90 BE90LA4** | 120 |
| **458** | 30 | 1.8 | 6.2 | 1180 | **C122_6.2 S3 ME3SA2** | 119 | **C122_6.2 P90 BE90SA2** | 120 |
| **469** | 29 | 3.6 | 6.1 | 1920 | **C222_6.1 S3 ME3SA2** | 123 | **C222_6.1 P90 BE90SA2** | 124 |

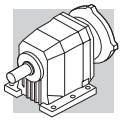


## 1.5 kW

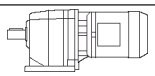
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **510** | 27 | 1.9 | 5.6 | 1140 | **C122_5.6 S3 ME3SA2** | 119 | **C122_5.6 P90 BE90SA2** | 120 |
| **511** | 27 | 3.8 | 5.6 | 1860 | **C222_5.6 S3 ME3SA2** | 123 | **C222_5.6 P90 BE90SA2** | 124 |
| **517** | 26 | 1.4 | 2.8 | 1140 | **C122_2.8 S3 ME3SB4** | 119 | **C122_2.8 P90 BE90LA4** | 120 |
| **525** | 26 | 3.1 | 2.7 | 1870 | **C222_2.7 S3 ME3SB4** | 123 | **C222_2.7 P90 BE90LA4** | 124 |
| **586** | 23 | 2.1 | 4.9 | 1110 | **C122_4.9 S3 ME3SA2** | 119 | **C122_4.9 P90 BE90SA2** | 120 |
| **599** | 23 | 4.4 | 4.8 | 1810 | **C222_4.8 S3 ME3SA2** | 123 | **C222_4.8 P90 BE90SA2** | 124 |
| **662** | 21 | 2.2 | 4.3 | 1070 | **C122_4.3 S3 ME3SA2** | 119 | **C122_4.3 P90 BE90SA2** | 120 |
| **782** | 17 | 2.4 | 3.7 | 1030 | **C122_3.7 S3 ME3SA2** | 119 | **C122_3.7 P90 BE90SA2** | 120 |
| **890** | 15 | 2.6 | 3.2 | 990 | **C122_3.2 S3 ME3SA2** | 119 | **C122_3.2 P90 BE90SA2** | 120 |
| **1032** | 13 | 2.8 | 2.8 | 960 | **C122_2.8 S3 ME3SA2** | 119 | **C122_2.8 P90 BE90SA2** | 120 |

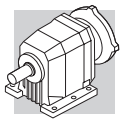
## 2.2 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **1.4** | 13281 | 0.9 | 1004 | 85000 | **C1004_1004 S3 ME3LA4** | 156 | **C1004_1004 P100 BE100LA4** | 157 |
| **1.6** | 12016 | 1.0 | 908.2 | 85000 | **C1004_908.2 S3 ME3LA4** | 156 | **C1004_908.2 P100 BE100LA4** | 157 |
| **1.7** | 11157 | 1.1 | 843.3 | 85000 | **C1004_843.3 S3 ME3LA4** | 156 | **C1004_843.3 P100 BE100LA4** | 157 |
| **1.8** | 10263 | 1.2 | 775.7 | 85000 | **C1004_775.7 S3 ME3LA4** | 156 | **C1004_775.7 P100 BE100LA4** | 157 |
| **2.0** | 9530 | 1.3 | 720.3 | 85000 | **C1004_720.3 S3 ME3LA4** | 156 | **C1004_720.3 P100 BE100LA4** | 157 |
| **2.3** | 8301 | 1.4 | 627.4 | 85000 | **C1004_627.4 S3 ME3LA4** | 156 | **C1004_627.4 P100 BE100LA4** | 157 |
| **2.5** | 7710 | 0.9 | 582.8 | 60000 | **C904_582.8 S3 ME3LA4** | 153 | **C904_582.8 P100 BE100LA4** | 154 |
| **2.5** | 7708 | 1.6 | 582.6 | 85000 | **C1004_582.6 S3 ME3LA4** | 156 | **C1004_582.6 P100 BE100LA4** | 157 |
| **2.7** | 7068 | 1.0 | 534.2 | 60000 | **C904_534.2 S3 ME3LA4** | 153 | **C904_534.2 P100 BE100LA4** | 154 |
| **2.8** | 6650 | 1.8 | 502.6 | 85000 | **C1004_502.6 S3 ME3LA4** | 156 | **C1004_502.6 P100 BE100LA4** | 157 |
| **3.1** | 6175 | 1.9 | 466.7 | 85000 | **C1004_466.7 S3 ME3LA4** | 156 | **C1004_466.7 P100 BE100LA4** | 157 |
| **3.1** | 6048 | 1.2 | 457.1 | 60000 | **C904_457.1 S3 ME3LA4** | 153 | **C904_457.1 P100 BE100LA4** | 154 |
| **3.4** | 5544 | 1.3 | 419.0 | 60000 | **C904_419.0 S3 ME3LA4** | 153 | **C904_419.0 P100 BE100LA4** | 154 |
| **3.5** | 5421 | 2.2 | 409.8 | 85000 | **C1004_409.8 S3 ME3LA4** | 156 | **C1004_409.8 P100 BE100LA4** | 157 |
| **3.8** | 5034 | 2.4 | 380.5 | 85000 | **C1004_380.5 S3 ME3LA4** | 156 | **C1004_380.5 P100 BE100LA4** | 157 |
| **3.9** | 4892 | 1.5 | 369.8 | 60000 | **C904_369.8 S3 ME3LA4** | 153 | **C904_369.8 P100 BE100LA4** | 154 |
| **4.2** | 4484 | 1.6 | 339.0 | 60000 | **C904_339.0 S3 ME3LA4** | 153 | **C904_339.0 P100 BE100LA4** | 154 |
| **4.3** | 4422 | 0.9 | 334.3 | 35000 | **C804_334.3 S3 ME3LA4** | 150 | **C804_334.3 P100 BE100LA4** | 151 |
| **4.4** | 4282 | 2.8 | 323.6 | 85000 | **C1004_323.6 S3 ME3LA4** | 156 | **C1004_323.6 P100 BE100LA4** | 157 |
| **4.9** | 3875 | 1.9 | 292.9 | 60000 | **C904_292.9 S3 ME3LA4** | 153 | **C904_292.9 P100 BE100LA4** | 154 |
| **5.0** | 3779 | 1.1 | 285.7 | 35000 | **C804_285.7 S3 ME3LA4** | 150 | **C804_285.7 P100 BE100LA4** | 151 |
| **5.3** | 3552 | 2.0 | 268.5 | 60000 | **C904_268.5 S3 ME3LA4** | 153 | **C904_268.5 P100 BE100LA4** | 154 |
| **5.5** | 3464 | 1.2 | 261.9 | 35000 | **C804_261.9 S3 ME3LA4** | 150 | **C804_261.9 P100 BE100LA4** | 151 |
| **6.2** | 3065 | 2.3 | 231.7 | 60000 | **C904_231.7 S3 ME3LA4** | 153 | **C904_231.7 P100 BE100LA4** | 154 |
| **6.6** | 2951 | 1.4 | 215.8 | 35000 | **C803_215.8 S3 ME3LA4** | 150 | **C803_215.8 P100 BE100LA4** | 151 |
| **6.7** | 2810 | 2.6 | 212.4 | 60000 | **C904_212.4 S3 ME3LA4** | 153 | **C904_212.4 P100 BE100LA4** | 154 |
| **7.2** | 2705 | 1.4 | 197.9 | 35000 | **C803_197.9 S3 ME3LA4** | 150 | **C803_197.9 P100 BE100LA4** | 151 |
| **7.8** | 2520 | 1.6 | 184.4 | 35000 | **C803_184.4 S3 ME3LA4** | 150 | **C803_184.4 P100 BE100LA4** | 151 |
| **8.0** | 2450 | 0.9 | 179.2 | 25000 | **C703_179.2 S3 ME3LA4** | 147 | **C703_179.2 P100 BE100LA4** | 148 |
| **8.5** | 2310 | 1.7 | 169.0 | 35000 | **C803_169.0 S3 ME3LA4** | 150 | **C803_169.0 P100 BE100LA4** | 151 |
| **8.8** | 2226 | 1.0 | 162.8 | 25000 | **C703_162.8 S3 ME3LA4** | 147 | **C703_162.8 P100 BE100LA4** | 148 |
| **9.5** | 2055 | 1.1 | 150.3 | 25000 | **C703_150.3 S3 ME3LA4** | 147 | **C703_150.3 P100 BE100LA4** | 148 |
| **9.6** | 2038 | 2.0 | 149.1 | 35000 | **C803_149.1 S3 ME3LA4** | 150 | **C803_149.1 P100 BE100LA4** | 151 |
| **10.4** | 1878 | 1.2 | 137.4 | 25000 | **C703_137.4 S3 ME3LA4** | 147 | **C703_137.4 P100 BE100LA4** | 148 |
| **10.5** | 1869 | 2.1 | 136.7 | 35000 | **C803_136.7 S3 ME3LA4** | 150 | **C803_136.7 P100 BE100LA4** | 151 |
| **11.2** | 1695 | 0.9 | 128.1 | 16000 | **C613_128.1 S3 ME3LA4** | 143 | **C613_128.1 P100 BE100LA4** | 144 |
| **11.3** | 1734 | 1.3 | 126.8 | 25000 | **C703_126.8 S3 ME3LA4** | 147 | **C703_126.8 P100 BE100LA4** | 148 |
| **12.0** | 1633 | 2.4 | 119.5 | 35000 | **C803_119.5 S3 ME3LA4** | 150 | **C803_119.5 P100 BE100LA4** | 151 |
| **12.6** | 1503 | 1.1 | 113.6 | 16000 | **C613_113.6 S3 ME3LA4** | 143 | **C613_113.6 P100 BE100LA4** | 144 |

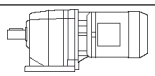


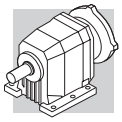
# 2.2 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **12.7** | 1537 | 1.5 | 112.4 | 25000 | **C703_112.4 S3 ME3LA4** | 147 | **C703_112.4 P100 BE100LA4** | 148 |
| **13.1** | 1497 | 2.7 | 109.5 | 35000 | **C803_109.5 S3 ME3LA4** | 150 | **C803_109.5 P100 BE100LA4** | 151 |
| **13.8** | 1419 | 1.6 | 103.8 | 25000 | **C703_103.8 S3 ME3LA4** | 147 | **C703_103.8 P100 BE100LA4** | 148 |
| **13.8** | 1371 | 1.2 | 103.6 | 16000 | **C613_103.6 S3 ME3LA4** | 143 | **C613_103.6 P100 BE100LA4** | 144 |
| **14.7** | 1331 | 3.0 | 97.4 | 35000 | **C803_97.4 S3 ME3LA4** | 150 | **C803_97.4 P100 BE100LA4** | 151 |
| **15.7** | 1204 | 1.3 | 91.0 | 16000 | **C613_91.0 S3 ME3LA4** | 143 | **C613_91.0 P100 BE100LA4** | 144 |
| **16.0** | 1220 | 3.3 | 89.3 | 35000 | **C803_89.3 S3 ME3LA4** | 150 | **C803_89.3 P100 BE100LA4** | 151 |
| **16.2** | 1206 | 1.9 | 88.2 | 25000 | **C703_88.2 S3 ME3LA4** | 147 | **C703_88.2 P100 BE100LA4** | 148 |
| **17.2** | 1099 | 1.5 | 83.0 | 16000 | **C613_83.0 S3 ME3LA4** | 143 | **C613_83.0 P100 BE100LA4** | 144 |
| **17.6** | 1113 | 2.1 | 81.4 | 25000 | **C703_81.4 S3 ME3LA4** | 147 | **C703_81.4 P100 BE100LA4** | 148 |
| **17.9** | 1092 | 0.9 | 79.9 | 10000 | **C513_79.9 S3 ME3LA4** | 139 | **C513_79.9 P100 BE100LA4** | 140 |
| **19.3** | 982 | 1.6 | 74.2 | 16000 | **C613_74.2 S3 ME3LA4** | 143 | **C613_74.2 P100 BE100LA4** | 144 |
| **19.6** | 997 | 1.0 | 72.9 | 10000 | **C513_72.9 S3 ME3LA4** | 139 | **C513_72.9 P100 BE100LA4** | 140 |
| **20.0** | 975 | 2.4 | 71.3 | 25000 | **C703_71.3 S3 ME3LA4** | 147 | **C703_71.3 P100 BE100LA4** | 148 |
| **21.1** | 896 | 1.8 | 67.7 | 16000 | **C613_67.7 S3 ME3LA4** | 143 | **C613_67.7 P100 BE100LA4** | 144 |
| **21.7** | 900 | 2.6 | 65.9 | 25000 | **C703_65.9 S3 ME3LA4** | 147 | **C703_65.9 P100 BE100LA4** | 148 |
| **22.1** | 883 | 1.1 | 64.6 | 10000 | **C513_64.6 S3 ME3LA4** | 139 | **C513_64.6 P100 BE100LA4** | 140 |
| **24.2** | 806 | 1.2 | 59.0 | 10000 | **C513_59.0 S3 ME3LA4** | 139 | **C513_59.0 P100 BE100LA4** | 140 |
| **24.4** | 775 | 2.1 | 58.6 | 16000 | **C613_58.6 S3 ME3LA4** | 143 | **C613_58.6 P100 BE100LA4** | 144 |
| **25.1** | 796 | 1.0 | 57.0 | 10000 | **C512_57.0 S3 ME3LA4** | 139 | **C512_57.0 P100 BE100LA4** | 140 |
| **25.3** | 773 | 3.0 | 56.5 | 25000 | **C703_56.5 S3 ME3LA4** | 147 | **C703_56.5 P100 BE100LA4** | 148 |
| **26.7** | 707 | 2.3 | 53.5 | 16000 | **C613_53.5 S3 ME3LA4** | 143 | **C613_53.5 P100 BE100LA4** | 144 |
| **27.8** | 718 | 1.0 | 51.4 | 10000 | **C512_51.4 S3 ME3LA4** | 139 | **C512_51.4 P100 BE100LA4** | 140 |
| **27.9** | 700 | 1.4 | 51.2 | 10000 | **C513_51.2 S3 ME3LA4** | 139 | **C513_51.2 P100 BE100LA4** | 140 |
| **29.9** | 668 | 1.2 | 47.8 | 10000 | **C512_47.8 S3 ME3LA4** | 139 | **C512_47.8 P100 BE100LA4** | 140 |
| **30** | 630 | 2.5 | 47.6 | 16000 | **C613_47.6 S3 ME3LA4** | 143 | **C613_47.6 P100 BE100LA4** | 144 |
| **30** | 642 | 0.9 | 47.0 | 6440 | **C413_47.0 S3 ME3LA4** | 135 | **C413_47.0 P100 BE100LA4** | 136 |
| **31** | 639 | 1.6 | 46.7 | 10000 | **C513_46.7 S3 ME3LA4** | 139 | **C513_46.7 P100 BE100LA4** | 140 |
| **33** | 575 | 2.8 | 43.4 | 16000 | **C613_43.4 S3 ME3LA4** | 143 | **C613_43.4 P100 BE100LA4** | 144 |
| **33** | 602 | 1.3 | 43.1 | 10000 | **C512_43.1 S3 ME3LA4** | 139 | **C512_43.1 P100 BE100LA4** | 140 |
| **35** | 553 | 1.8 | 40.5 | 10000 | **C513_40.5 S3 ME3LA4** | 139 | **C513_40.5 P100 BE100LA4** | 140 |
| **35** | 564 | 1.4 | 40.4 | 10000 | **C512_40.4 S3 ME3LA4** | 139 | **C512_40.4 P100 BE100LA4** | 140 |
| **35** | 551 | 1.1 | 40.3 | 6460 | **C413_40.3 S3 ME3LA4** | 135 | **C413_40.3 P100 BE100LA4** | 136 |
| **38** | 531 | 2.5 | 38.0 | 16000 | **C612_38.0 S3 ME3LA4** | 143 | **C612_38.0 P100 BE100LA4** | 144 |
| **39** | 518 | 1.0 | 37.1 | 6370 | **C412_37.1 S3 ME3LA4** | 135 | **C412_37.1 P100 BE100LA4** | 136 |
| **39** | 505 | 2.0 | 37.0 | 10000 | **C513_37.0 S3 ME3LA4** | 139 | **C513_37.0 P100 BE100LA4** | 140 |
| **39** | 503 | 1.2 | 36.8 | 6390 | **C413_36.8 S3 ME3LA4** | 135 | **C413_36.8 P100 BE100LA4** | 136 |
| **39** | 508 | 1.6 | 36.4 | 10000 | **C512_36.4 S3 ME3LA4** | 139 | **C512_36.4 P100 BE100LA4** | 140 |
| **41** | 473 | 1.0 | 34.6 | 5350 | **C363_34.6 S3 ME3LA4** | 131 | **C363_34.6 P100 BE100LA4** | 132 |
| **42** | 478 | 2.6 | 34.2 | 16000 | **C612_34.2 S3 ME3LA4** | 143 | **C612_34.2 P100 BE100LA4** | 144 |
| **43** | 466 | 1.1 | 33.4 | 6290 | **C412_33.4 S3 ME3LA4** | 135 | **C412_33.4 P100 BE100LA4** | 136 |
| **43** | 461 | 1.7 | 33.0 | 10000 | **C512_33.0 S3 ME3LA4** | 139 | **C512_33.0 P100 BE100LA4** | 140 |
| **45** | 439 | 1.1 | 31.4 | 6290 | **C412_31.4 S3 ME3LA4** | 135 | **C412_31.4 P100 BE100LA4** | 136 |
| **47** | 425 | 3.2 | 30.4 | 16000 | **C612_30.4 S3 ME3LA4** | 143 | **C612_30.4 P100 BE100LA4** | 144 |
| **48** | 411 | 2.4 | 30.1 | 10000 | **C513_30.1 S3 ME3LA4** | 139 | **C513_30.1 P100 BE100LA4** | 140 |
| **48** | 416 | 1.9 | 29.8 | 10000 | **C512_29.8 S3 ME3LA4** | 139 | **C512_29.8 P100 BE100LA4** | 140 |
| **50** | 393 | 1.1 | 28.7 | 5220 | **C363_28.7 S3 ME3LA4** | 131 | **C363_28.7 P100 BE100LA4** | 132 |
| **51** | 395 | 1.3 | 28.3 | 6190 | **C412_28.3 S3 ME3LA4** | 135 | **C412_28.3 P100 BE100LA4** | 136 |
| **52** | 375 | 2.6 | 27.4 | 10000 | **C513_27.4 S3 ME3LA4** | 139 | **C513_27.4 P100 BE100LA4** | 140 |
| **52** | 383 | 3.5 | 27.4 | 15900 | **C612_27.4 S3 ME3LA4** | 143 | **C612_27.4 P100 BE100LA4** | 144 |
| **55** | 358 | 1.2 | 26.2 | 5140 | **C363_26.2 S3 ME3LA4** | 131 | **C363_26.2 P100 BE100LA4** | 132 |
| **55** | 362 | 2.2 | 25.9 | 10000 | **C512_25.9 S3 ME3LA4** | 139 | **C512_25.9 P100 BE100LA4** | 140 |
| **57** | 351 | 0.9 | 25.1 | 4270 | **C322_25.1 S3 ME3LA4** | 127 | **C322_25.1 P100 BE100LA4** | 128 |
| **57** | 350 | 1.4 | 25.0 | 6120 | **C412_25.0 S3 ME3LA4** | 135 | **C412_25.0 P100 BE100LA4** | 136 |
| **61** | 326 | 2.5 | 23.4 | 10000 | **C512_23.4 S3 ME3LA4** | 139 | **C512_23.4 P100 BE100LA4** | 140 |
| **62** | 320 | 0.9 | 22.9 | 4240 | **C322_22.9 S3 ME3LA4** | 127 | **C322_22.9 P100 BE100LA4** | 128 |
| **63** | 315 | 1.6 | 22.6 | 6000 | **C412_22.6 S3 ME3LA4** | 135 | **C412_22.6 P100 BE100LA4** | 136 |

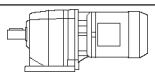


# 2.2 kW

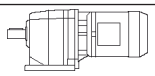
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **65** | 303 | 1.4 | 22.1 | 5060 | **C363_22.1 S3 ME3LA4** | 131 | **C363_22.1 P100 BE100LA4** | 132 |
| **68** | 293 | 2.7 | 21.0 | 10000 | **C512_21.0 S3 ME3LA4** | 139 | **C512_21.0 P100 BE100LA4** | 140 |
| **71** | 280 | 1.1 | 20.1 | 4200 | **C322_20.1 S3 ME3LA4** | 127 | **C322_20.1 P100 BE100LA4** | 128 |
| **72** | 276 | 1.8 | 19.8 | 5890 | **C412_19.8 S3 ME3LA4** | 135 | **C412_19.8 P100 BE100LA4** | 136 |
| **75** | 265 | 1.4 | 19.0 | 4920 | **C362_19.0 S3 ME3LA4** | 131 | **C362_19.0 P100 BE100LA4** | 132 |
| **76** | 264 | 3.0 | 18.9 | 10000 | **C512_18.9 S3 ME3LA4** | 139 | **C512_18.9 P100 BE100LA4** | 140 |
| **77** | 258 | 1.0 | 12.3 | 4100 | **C322_12.3 S4 ME4SA6** | 127 | **C322_12.3 P112 BE112M6** | 128 |
| **79** | 254 | 1.1 | 18.2 | 4120 | **C322_18.2 S3 ME3LA4** | 127 | **C322_18.2 P100 BE100LA4** | 128 |
| **80** | 248 | 1.9 | 17.8 | 5760 | **C412_17.8 S3 ME3LA4** | 135 | **C412_17.8 P100 BE100LA4** | 136 |
| **83** | 240 | 1.6 | 17.2 | 4800 | **C362_17.2 S3 ME3LA4** | 131 | **C362_17.2 P100 BE100LA4** | 132 |
| **85** | 234 | 1.0 | 11.2 | 4060 | **C322_11.2 S4 ME4SA6** | 127 | **C322_11.2 P112 BE112M6** | 128 |
| **90** | 221 | 2.0 | 15.8 | 5650 | **C412_15.8 S3 ME3LA4** | 135 | **C412_15.8 P100 BE100LA4** | 136 |
| **92** | 218 | 1.2 | 15.6 | 4060 | **C322_15.6 S3 ME3LA4** | 127 | **C322_15.6 P100 BE100LA4** | 128 |
| **97** | 206 | 1.8 | 14.8 | 4710 | **C362_14.8 S3 ME3LA4** | 131 | **C362_14.8 P100 BE100LA4** | 132 |
| **100** | 199 | 2.2 | 14.2 | 5510 | **C412_14.2 S3 ME3LA4** | 135 | **C412_14.2 P100 BE100LA4** | 136 |
| **102** | 197 | 1.3 | 14.1 | 3980 | **C322_14.1 S3 ME3LA4** | 127 | **C322_14.1 P100 BE100LA4** | 128 |
| **103** | 194 | 1.1 | 9.3 | 3960 | **C322_9.3 S4 ME4SA6** | 127 | **C322_9.3 P112 BE112M6** | 128 |
| **107** | 186 | 2.0 | 13.3 | 4590 | **C362_13.3 S3 ME3LA4** | 131 | **C362_13.3 P100 BE100LA4** | 132 |
| **113** | 177 | 1.2 | 8.5 | 3890 | **C322_8.5 S4 ME4SA6** | 127 | **C322_8.5 P112 BE112M6** | 128 |
| **115** | 173 | 0.9 | 12.4 | 2270 | **C222_12.4 S3 ME3LA4** | 123 | **C222_12.4 P100 BE100LA4** | 124 |
| **115** | 173 | 2.5 | 12.4 | 5360 | **C412_12.4 S3 ME3LA4** | 135 | **C412_12.4 P100 BE100LA4** | 136 |
| **116** | 172 | 1.4 | 12.3 | 3900 | **C322_12.3 S3 ME3LA4** | 127 | **C322_12.3 P100 BE100LA4** | 128 |
| **123** | 163 | 2.3 | 11.7 | 4490 | **C362_11.7 S3 ME3LA4** | 131 | **C362_11.7 P100 BE100LA4** | 132 |
| **128** | 156 | 1.5 | 11.2 | 3800 | **C322_11.2 S3 ME3LA4** | 127 | **C322_11.2 P100 BE100LA4** | 128 |
| **128** | 156 | 2.7 | 11.2 | 5220 | **C412_11.2 S3 ME3LA4** | 135 | **C412_11.2 P100 BE100LA4** | 136 |
| **129** | 155 | 1.0 | 11.1 | 2250 | **C222_11.1 S3 ME3LA4** | 123 | **C222_11.1 P100 BE100LA4** | 124 |
| **133** | 150 | 1.3 | 7.2 | 3810 | **C322_7.2 S4 ME4SA6** | 127 | **C322_7.2 P112 BE112M6** | 128 |
| **135** | 148 | 2.6 | 10.6 | 4320 | **C362_10.6 S3 ME3LA4** | 131 | **C362_10.6 P100 BE100LA4** | 132 |
| **148** | 135 | 1.1 | 9.6 | 2250 | **C222_9.6 S3 ME3LA4** | 123 | **C222_9.6 P100 BE100LA4** | 124 |
| **149** | 134 | 2.9 | 9.6 | 5050 | **C412_9.6 S3 ME3LA4** | 135 | **C412_9.6 P100 BE100LA4** | 136 |
| **152** | 131 | 1.2 | 6.3 | 3510 | **C322_6.3 S4 ME4SA6** | 127 | **C322_6.3 P112 BE112M6** | 128 |
| **154** | 130 | 1.7 | 9.3 | 3690 | **C322_9.3 S3 ME3LA4** | 127 | **C322_9.3 P100 BE100LA4** | 128 |
| **163** | 123 | 3.1 | 8.8 | 4210 | **C362_8.8 S3 ME3LA4** | 131 | **C362_8.8 P100 BE100LA4** | 132 |
| **165** | 121 | 1.1 | 8.7 | 2220 | **C222_8.7 S3 ME3LA4** | 123 | **C222_8.7 P100 BE100LA4** | 124 |
| **165** | 121 | 3.2 | 8.6 | 4850 | **C412_8.6 S3 ME3LA4** | 135 | **C412_8.6 P100 BE100LA4** | 136 |
| **169** | 118 | 1.8 | 8.5 | 3600 | **C322_8.5 S3 ME3LA4** | 127 | **C322_8.5 P100 BE100LA4** | 128 |
| **169** | 118 | 1.3 | 5.7 | 3450 | **C322_5.7 S4 ME4SA6** | 127 | **C322_5.7 P112 BE112M6** | 128 |
| **193** | 103 | 1.5 | 5.0 | 3410 | **C322_5.0 S4 ME4SA6** | 127 | **C322_5.0 P112 BE112M6** | 128 |
| **200** | 100 | 2.0 | 7.2 | 3480 | **C322_7.2 S3 ME3LA4** | 127 | **C322_7.2 P100 BE100LA4** | 128 |
| **202** | 99 | 1.3 | 7.1 | 2180 | **C222_7.1 S3 ME3LA4** | 123 | **C222_7.1 P100 BE100LA4** | 124 |
| **228** | 87 | 1.8 | 6.3 | 3250 | **C322_6.3 S3 ME3LA4** | 127 | **C322_6.3 P100 BE100LA4** | 128 |
| **235** | 85 | 1.2 | 6.1 | 2040 | **C222_6.1 S3 ME3LA4** | 123 | **C222_6.1 P100 BE100LA4** | 124 |
| **245** | 82 | 2.4 | 5.8 | 3710 | **C362_5.8 S3 ME3LA4** | 131 | **C362_5.8 P100 BE100LA4** | 132 |
| **253** | 79 | 2.0 | 5.7 | 3180 | **C322_5.7 S3 ME3LA4** | 127 | **C322_5.7 P100 BE100LA4** | 128 |
| **256** | 78 | 1.3 | 5.6 | 2050 | **C222_5.6 S3 ME3LA4** | 123 | **C222_5.6 P100 BE100LA4** | 124 |
| **271** | 74 | 2.7 | 5.3 | 3550 | **C362_5.3 S3 ME3LA4** | 131 | **C362_5.3 P100 BE100LA4** | 132 |
| **289** | 69 | 2.2 | 5.0 | 3100 | **C322_5.0 S3 ME3LA4** | 127 | **C322_5.0 P100 BE100LA4** | 128 |
| **300** | 67 | 1.5 | 4.8 | 1970 | **C222_4.8 S3 ME3LA4** | 123 | **C222_4.8 P100 BE100LA4** | 124 |
| **309** | 65 | 3.4 | 9.3 | 3130 | **C322_9.3 S3 ME3LA2** | 127 | **C322_9.3 P90 BE90L2** | 128 |
| **309** | 65 | 3.1 | 4.6 | 3490 | **C362_4.6 S3 ME3LA4** | 131 | **C362_4.6 P100 BE100LA4** | 132 |
| **318** | 63 | 2.4 | 4.5 | 3000 | **C322_4.5 S3 ME3LA4** | 127 | **C322_4.5 P100 BE100LA4** | 128 |
| **332** | 60 | 2.3 | 8.7 | 2000 | **C222_8.7 S3 ME3LA2** | 123 | **C222_8.7 P90 BE90L2** | 124 |
| **336** | 59 | 1.6 | 4.3 | 1970 | **C222_4.3 S3 ME3LA4** | 123 | **C222_4.3 P100 BE100LA4** | 124 |
| **355** | 56 | 3.6 | 2.7 | 3380 | **C362_2.7 S4 ME4SA6** | 131 | **C362_2.7 P112 BE112M6** | 132 |
| **377** | 53 | 1.1 | 7.6 | 930 | **C122_7.6 S3 ME3LA2** | 119 | **C122_7.6 P90 BE90L2** | 120 |
| **383** | 52 | 2.9 | 3.7 | 2890 | **C322_3.7 S3 ME3LA4** | 127 | **C322_3.7 P100 BE100LA4** | 128 |
| **386** | 52 | 1.7 | 3.7 | 1890 | **C222_3.7 S3 ME3LA4** | 123 | **C222_3.7 P100 BE100LA4** | 124 |

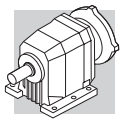


## 2.2 kW

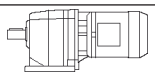
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **401** | 50 | 4.0 | 7.2 | 2920 | **C322_7.2 S3 ME3LA2** | 127 | **C322_7.2 P90 BE90L2** | 128 |
| **405** | 49 | 2.6 | 7.1 | 1920 | **C222_7.1 S3 ME3LA2** | 123 | **C222_7.1 P90 BE90L2** | 124 |
| **419** | 48 | 2.9 | 3.4 | 2800 | **C322_3.4 S3 ME3LA4** | 127 | **C322_3.4 P100 BE100LA4** | 128 |
| **430** | 46 | 1.8 | 3.3 | 1890 | **C222_3.3 S3 ME3LA4** | 123 | **C222_3.3 P100 BE100LA4** | 124 |
| **446** | 45 | 0.9 | 3.2 | 580 | **C122_3.2 S3 ME3LA4** | 119 | **C122_3.2 P100 BE100LA4** | 120 |
| **458** | 44 | 3.6 | 6.3 | 2760 | **C322_6.3 S3 ME3LA2** | 127 | **C322_6.3 P90 BE90L2** | 128 |
| **472** | 42 | 2.5 | 6.1 | 1820 | **C222_6.1 S3 ME3LA2** | 123 | **C222_6.1 P90 BE90L2** | 124 |
| **497** | 40 | 3.2 | 2.9 | 2700 | **C322_2.9 S3 ME3LA4** | 127 | **C322_2.9 P100 BE100LA4** | 128 |
| **513** | 39 | 2.6 | 5.6 | 1770 | **C222_5.6 S3 ME3LA2** | 123 | **C222_5.6 P90 BE90L2** | 124 |
| **517** | 39 | 1.0 | 2.8 | 690 | **C122_2.8 S3 ME3LA4** | 119 | **C122_2.8 P100 BE100LA4** | 120 |
| **525** | 38 | 2.1 | 2.7 | 1770 | **C222_2.7 S3 ME3LA4** | 123 | **C222_2.7 P100 BE100LA4** | 124 |
| **602** | 33 | 3.0 | 4.8 | 1720 | **C222_4.8 S3 ME3LA2** | 123 | **C222_4.8 P90 BE90L2** | 124 |
| **674** | 30 | 3.2 | 4.3 | 1670 | **C222_4.3 S3 ME3LA2** | 123 | **C222_4.3 P90 BE90L2** | 124 |
| **774** | 26 | 3.5 | 3.7 | 1620 | **C222_3.7 S3 ME3LA2** | 123 | **C222_3.7 P90 BE90L2** | 124 |
| **786** | 25 | 1.7 | 3.7 | 970 | **C122_3.7 S3 ME3LA2** | 119 | **C122_3.7 P90 BE90L2** | 120 |
| **863** | 23 | 3.7 | 3.3 | 1550 | **C222_3.3 S3 ME3LA2** | 123 | **C222_3.3 P90 BE90L2** | 124 |
| **895** | 22 | 1.8 | 3.2 | 940 | **C122_3.2 S3 ME3LA2** | 119 | **C122_3.2 P90 BE90L2** | 120 |
| **1037** | 19 | 1.9 | 2.8 | 920 | **C122_2.8 S3 ME3LA2** | 119 | **C122_2.8 P90 BE90L2** | 120 |
| **1054** | 19 | 4.2 | 2.7 | 1490 | **C222_2.7 S3 ME3LA2** | 123 | **C222_2.7 P90 BE90L2** | 124 |

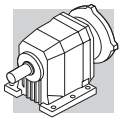
## 3 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **2.0** | 12965 | 0.9 | 720.3 | 85000 | **C1004_720.3 S3 ME3LB4** | 156 | **C1004_720.3 P100 BE100LB4** | 157 |
| **2.3** | 11293 | 1.1 | 627.4 | 85000 | **C1004_627.4 S3 ME3LB4** | 156 | **C1004_627.4 P100 BE100LB4** | 157 |
| **2.5** | 10487 | 1.1 | 582.6 | 85000 | **C1004_582.6 S3 ME3LB4** | 156 | **C1004_582.6 P100 BE100LB4** | 157 |
| **2.9** | 9047 | 1.3 | 502.6 | 85000 | **C1004_502.6 S3 ME3LB4** | 156 | **C1004_502.6 P100 BE100LB4** | 157 |
| **3.1** | 8401 | 1.4 | 466.7 | 85000 | **C1004_466.7 S3 ME3LB4** | 156 | **C1004_466.7 P100 BE100LB4** | 157 |
| **3.4** | 7543 | 1.0 | 419.0 | 60000 | **C904_419.0 S3 ME3LB4** | 153 | **C904_419.0 P100 BE100LB4** | 154 |
| **3.5** | 7376 | 1.6 | 409.8 | 85000 | **C1004_409.8 S3 ME3LB4** | 156 | **C1004_409.8 P100 BE100LB4** | 157 |
| **3.8** | 6849 | 1.8 | 380.5 | 85000 | **C1004_380.5 S3 ME3LB4** | 156 | **C1004_380.5 P100 BE100LB4** | 157 |
| **3.9** | 6656 | 1.1 | 369.8 | 60000 | **C904_369.8 S3 ME3LB4** | 153 | **C904_369.8 P100 BE100LB4** | 154 |
| **4.2** | 6101 | 1.2 | 339.0 | 60000 | **C904_339.0 S3 ME3LB4** | 153 | **C904_339.0 P100 BE100LB4** | 154 |
| **4.4** | 5825 | 2.1 | 323.6 | 85000 | **C1004_323.6 S3 ME3LB4** | 156 | **C1004_323.6 P100 BE100LB4** | 157 |
| **4.8** | 5409 | 2.2 | 300.5 | 85000 | **C1004_300.5 S3 ME3LB4** | 156 | **C1004_300.5 P100 BE100LB4** | 157 |
| **4.9** | 5272 | 1.4 | 292.9 | 60000 | **C904_292.9 S3 ME3LB4** | 153 | **C904_292.9 P100 BE100LB4** | 154 |
| **5.4** | 4833 | 1.5 | 268.5 | 60000 | **C904_268.5 S3 ME3LB4** | 153 | **C904_268.5 P100 BE100LB4** | 154 |
| **5.5** | 4734 | 2.5 | 263.0 | 85000 | **C1004_263.0 S3 ME3LB4** | 156 | **C1004_263.0 P100 BE100LB4** | 157 |
| **5.9** | 4396 | 2.7 | 244.2 | 85000 | **C1004_244.2 S3 ME3LB4** | 156 | **C1004_244.2 P100 BE100LB4** | 157 |
| **6.2** | 4170 | 1.7 | 231.7 | 60000 | **C904_231.7 S3 ME3LB4** | 153 | **C904_231.7 P100 BE100LB4** | 154 |
| **6.7** | 4015 | 1.0 | 215.8 | 35000 | **C803_215.8 S3 ME3LB4** | 150 | **C803_215.8 P100 BE100LB4** | 151 |
| **6.8** | 3823 | 1.9 | 212.4 | 60000 | **C904_212.4 S3 ME3LB4** | 153 | **C904_212.4 P100 BE100LB4** | 154 |
| **7.3** | 3680 | 1.0 | 197.9 | 35000 | **C803_197.9 S3 ME3LB4** | 150 | **C803_197.9 P100 BE100LB4** | 151 |
| **7.8** | 3429 | 1.2 | 184.4 | 35000 | **C803_184.4 S3 ME3LB4** | 150 | **C803_184.4 P100 BE100LB4** | 151 |
| **8.4** | 3201 | 2.2 | 172.1 | 60000 | **C903_172.1 S3 ME3LB4** | 153 | **C903_172.1 P100 BE100LB4** | 154 |
| **8.5** | 3143 | 1.3 | 169.0 | 35000 | **C803_169.0 S3 ME3LB4** | 150 | **C803_169.0 P100 BE100LB4** | 151 |
| **9.1** | 2934 | 2.4 | 157.8 | 60000 | **C903_157.8 S3 ME3LB4** | 153 | **C903_157.8 P100 BE100LB4** | 154 |
| **9.7** | 2773 | 1.4 | 149.1 | 35000 | **C803_149.1 S3 ME3LB4** | 150 | **C803_149.1 P100 BE100LB4** | 151 |
| **9.8** | 2722 | 2.6 | 146.3 | 60000 | **C903_146.3 S3 ME3LB4** | 153 | **C903_146.3 P100 BE100LB4** | 154 |
| **10.5** | 2542 | 1.6 | 136.7 | 35000 | **C803_136.7 S3 ME3LB4** | 150 | **C803_136.7 P100 BE100LB4** | 151 |
| **10.7** | 2495 | 2.8 | 134.1 | 60000 | **C903_134.1 S3 ME3LB4** | 153 | **C903_134.1 P100 BE100LB4** | 154 |
| **11.4** | 2359 | 1.0 | 126.8 | 25000 | **C703_126.8 S3 ME3LB4** | 147 | **C703_126.8 P100 BE100LB4** | 148 |
| **12.1** | 2222 | 1.8 | 119.5 | 35000 | **C803_119.5 S3 ME3LB4** | 150 | **C803_119.5 P100 BE100LB4** | 151 |

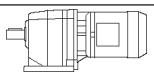


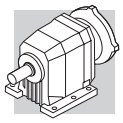
# 3 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **12.3** | 2171 | 3.3 | 116.7 | 60000 | **C903_116.7 S3 ME3LB4** | 153 | **C903_116.7 P100 BE100LB4** | 154 |
| **12.8** | 2091 | 1.1 | 112.4 | 25000 | **C703_112.4 S3 ME3LB4** | 147 | **C703_112.4 P100 BE100LB4** | 148 |
| **13.2** | 2037 | 2.0 | 109.5 | 35000 | **C803_109.5 S3 ME3LB4** | 150 | **C803_109.5 P100 BE100LB4** | 151 |
| **13.9** | 1931 | 1.2 | 103.8 | 25000 | **C703_103.8 S3 ME3LB4** | 147 | **C703_103.8 P100 BE100LB4** | 148 |
| **14.8** | 1811 | 2.2 | 97.4 | 35000 | **C803_97.4 S3 ME3LB4** | 150 | **C803_97.4 P100 BE100LB4** | 151 |
| **15.8** | 1638 | 1.0 | 91.0 | 16000 | **C613_91.0 S3 ME3LB4** | 143 | **C613_91.0 P100 BE100LB4** | 144 |
| **16.1** | 1660 | 2.4 | 89.3 | 35000 | **C803_89.3 S3 ME3LB4** | 150 | **C803_89.3 P100 BE100LB4** | 151 |
| **16.3** | 1640 | 1.4 | 88.2 | 25000 | **C703_88.2 S3 ME3LB4** | 147 | **C703_88.2 P100 BE100LB4** | 148 |
| **17.3** | 1495 | 1.1 | 83.0 | 16000 | **C613_83.0 S3 ME3LB4** | 143 | **C613_83.0 P100 BE100LB4** | 144 |
| **17.7** | 1514 | 1.5 | 81.4 | 25000 | **C703_81.4 S3 ME3LB4** | 147 | **C703_81.4 P100 BE100LB4** | 148 |
| **18.7** | 1431 | 2.8 | 76.9 | 35000 | **C803_76.9 S3 ME3LB4** | 150 | **C803_76.9 P100 BE100LB4** | 151 |
| **19.4** | 1336 | 1.2 | 74.2 | 16000 | **C613_74.2 S3 ME3LB4** | 143 | **C613_74.2 P100 BE100LB4** | 144 |
| **20.2** | 1327 | 1.7 | 71.3 | 25000 | **C703_71.3 S3 ME3LB4** | 147 | **C703_71.3 P100 BE100LB4** | 148 |
| **20.4** | 1311 | 3.1 | 70.5 | 35000 | **C803_70.5 S3 ME3LB4** | 150 | **C803_70.5 P100 BE100LB4** | 151 |
| **21.3** | 1218 | 1.3 | 67.7 | 16000 | **C613_67.7 S3 ME3LB4** | 143 | **C613_67.7 P100 BE100LB4** | 144 |
| **21.9** | 1225 | 1.9 | 65.9 | 25000 | **C703_65.9 S3 ME3LB4** | 147 | **C703_65.9 P100 BE100LB4** | 148 |
| **24.4** | 1097 | 0.9 | 59.0 | 10000 | **C513_59.0 S3 ME3LB4** | 139 | **C513_59.0 P100 BE100LB4** | 140 |
| **24.6** | 1055 | 1.5 | 58.6 | 16000 | **C613_58.6 S3 ME3LB4** | 143 | **C613_58.6 P100 BE100LB4** | 144 |
| **25.5** | 1051 | 2.2 | 56.5 | 25000 | **C703_56.5 S3 ME3LB4** | 147 | **C703_56.5 P100 BE100LB4** | 148 |
| **26.9** | 962 | 1.7 | 53.5 | 16000 | **C613_53.5 S3 ME3LB4** | 143 | **C613_53.5 P100 BE100LB4** | 144 |
| **27.6** | 970 | 2.4 | 52.2 | 25000 | **C703_52.2 S3 ME3LB4** | 147 | **C703_52.2 P100 BE100LB4** | 148 |
| **28.1** | 952 | 1.1 | 51.2 | 10000 | **C513_51.2 S3 ME3LB4** | 139 | **C513_51.2 P100 BE100LB4** | 140 |
| **30** | 857 | 1.9 | 47.6 | 16000 | **C613_47.6 S3 ME3LB4** | 143 | **C613_47.6 P100 BE100LB4** | 144 |
| **31** | 869 | 1.2 | 46.7 | 10000 | **C513_46.7 S3 ME3LB4** | 139 | **C513_46.7 P100 BE100LB4** | 140 |
| **32** | 831 | 2.8 | 44.7 | 25000 | **C703_44.7 S3 ME3LB4** | 147 | **C703_44.7 P100 BE100LB4** | 148 |
| **33** | 782 | 2.0 | 43.4 | 16000 | **C613_43.4 S3 ME3LB4** | 143 | **C613_43.4 P100 BE100LB4** | 144 |
| **33** | 819 | 0.9 | 43.1 | 10000 | **C512_43.1 S3 ME3LB4** | 139 | **C512_43.1 P100 BE100LB4** | 140 |
| **35** | 767 | 3.0 | 41.3 | 25000 | **C703_41.3 S3 ME3LB4** | 147 | **C703_41.3 P100 BE100LB4** | 148 |
| **36** | 753 | 1.3 | 40.5 | 10000 | **C513_40.5 S3 ME3LB4** | 139 | **C513_40.5 P100 BE100LB4** | 140 |
| **36** | 767 | 1.0 | 40.4 | 10000 | **C512_40.4 S3 ME3LB4** | 139 | **C512_40.4 P100 BE100LB4** | 140 |
| **38** | 722 | 1.9 | 38.0 | 16000 | **C612_38.0 S3 ME3LB4** | 143 | **C612_38.0 P100 BE100LB4** | 144 |
| **39** | 687 | 1.5 | 37.0 | 10000 | **C513_37.0 S3 ME3LB4** | 139 | **C513_37.0 P100 BE100LB4** | 140 |
| **40** | 691 | 1.1 | 36.4 | 10000 | **C512_36.4 S3 ME3LB4** | 139 | **C512_36.4 P100 BE100LB4** | 140 |
| **40** | 651 | 2.4 | 36.1 | 16000 | **C613_36.1 S3 ME3LB4** | 143 | **C613_36.1 P100 BE100LB4** | 144 |
| **42** | 650 | 1.9 | 34.2 | 16000 | **C612_34.2 S3 ME3LB4** | 143 | **C612_34.2 P100 BE100LB4** | 144 |
| **44** | 628 | 1.3 | 33.0 | 10000 | **C512_33.0 S3 ME3LB4** | 139 | **C512_33.0 P100 BE100LB4** | 140 |
| **44** | 594 | 2.6 | 33.0 | 16000 | **C613_33.0 S3 ME3LB4** | 143 | **C613_33.0 P100 BE100LB4** | 144 |
| **46** | 581 | 1.0 | 31.2 | 5550 | **C413_31.2 S3 ME3LB4** | 135 | **C413_31.2 P100 BE100LB4** | 136 |
| **47** | 578 | 2.3 | 30.4 | 15900 | **C612_30.4 S3 ME3LB4** | 143 | **C612_30.4 P100 BE100LB4** | 144 |
| **48** | 559 | 1.8 | 30.1 | 10000 | **C513_30.1 S3 ME3LB4** | 139 | **C513_30.1 P100 BE100LB4** | 140 |
| **48** | 566 | 1.4 | 29.8 | 10000 | **C512_29.8 S3 ME3LB4** | 139 | **C512_29.8 P100 BE100LB4** | 140 |
| **51** | 538 | 0.9 | 28.3 | 5460 | **C412_28.3 S3 ME3LB4** | 135 | **C412_28.3 P100 BE100LB4** | 136 |
| **52** | 511 | 1.9 | 27.4 | 10000 | **C513_27.4 S3 ME3LB4** | 139 | **C513_27.4 P100 BE100LB4** | 140 |
| **53** | 521 | 2.6 | 27.4 | 15400 | **C612_27.4 S3 ME3LB4** | 143 | **C612_27.4 P100 BE100LB4** | 144 |
| **55** | 487 | 0.9 | 26.2 | 4500 | **C363_26.2 S3 ME3LB4** | 131 | **C363_26.2 P100 BE100LB4** | 132 |
| **56** | 492 | 1.6 | 25.9 | 10000 | **C512_25.9 S3 ME3LB4** | 139 | **C512_25.9 P100 BE100LB4** | 140 |
| **57** | 476 | 1.1 | 25.0 | 5480 | **C412_25.0 S3 ME3LB4** | 135 | **C412_25.0 P100 BE100LB4** | 136 |
| **58** | 472 | 2.9 | 24.8 | 15100 | **C612_24.8 S3 ME3LB4** | 143 | **C612_24.8 P100 BE100LB4** | 144 |
| **62** | 444 | 1.8 | 23.4 | 10000 | **C512_23.4 S3 ME3LB4** | 139 | **C512_23.4 P100 BE100LB4** | 140 |
| **64** | 429 | 1.2 | 22.6 | 5420 | **C412_22.6 S3 ME3LB4** | 135 | **C412_22.6 P100 BE100LB4** | 136 |
| **64** | 425 | 3.2 | 22.4 | 14600 | **C612_22.4 S3 ME3LB4** | 143 | **C612_22.4 P100 BE100LB4** | 144 |
| **65** | 412 | 1.0 | 22.1 | 4530 | **C363_22.1 S3 ME3LB4** | 131 | **C363_22.1 P100 BE100LB4** | 132 |
| **69** | 398 | 2.0 | 21.0 | 10000 | **C512_21.0 S3 ME3LB4** | 139 | **C512_21.0 P100 BE100LB4** | 140 |
| **73** | 375 | 1.3 | 19.8 | 5390 | **C412_19.8 S3 ME3LB4** | 135 | **C412_19.8 P100 BE100LB4** | 136 |
| **76** | 361 | 1.1 | 19.0 | 4450 | **C362_19.0 S3 ME3LB4** | 131 | **C362_19.0 P100 BE100LB4** | 132 |
| **76** | 359 | 2.2 | 18.9 | 10000 | **C512_18.9 S3 ME3LB4** | 139 | **C512_18.9 P100 BE100LB4** | 140 |
| **81** | 338 | 1.4 | 17.8 | 5300 | **C412_17.8 S3 ME3LB4** | 135 | **C412_17.8 P100 BE100LB4** | 136 |

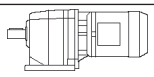


# 3 kW

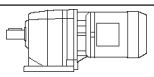
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **84** | 327 | 1.2 | 17.2 | 4400 | **C362_17.2 S3 ME3LB4** | 131 | **C362_17.2 P100 BE100LB4** | 132 |
| **87** | 315 | 2.5 | 16.6 | 9790 | **C512_16.6 S3 ME3LB4** | 139 | **C512_16.6 P100 BE100LB4** | 140 |
| **91** | 301 | 1.5 | 15.8 | 5240 | **C412_15.8 S3 ME3LB4** | 135 | **C412_15.8 P100 BE100LB4** | 136 |
| **92** | 296 | 0.9 | 15.6 | 3680 | **C322_15.6 S3 ME3LB4** | 127 | **C322_15.6 P100 BE100LB4** | 128 |
| **96** | 284 | 2.8 | 15.0 | 9540 | **C512_15.0 S3 ME3LB4** | 139 | **C512_15.0 P100 BE100LB4** | 140 |
| **98** | 280 | 1.4 | 14.8 | 4340 | **C362_14.8 S3 ME3LB4** | 131 | **C362_14.8 P100 BE100LB4** | 132 |
| **101** | 271 | 1.6 | 14.2 | 5140 | **C412_14.2 S3 ME3LB4** | 135 | **C412_14.2 P100 BE100LB4** | 136 |
| **102** | 267 | 0.9 | 14.1 | 3650 | **C322_14.1 S3 ME3LB4** | 127 | **C322_14.1 P100 BE100LB4** | 128 |
| **108** | 253 | 1.5 | 13.3 | 4260 | **C362_13.3 S3 ME3LB4** | 131 | **C362_13.3 P100 BE100LB4** | 132 |
| **110** | 249 | 3.0 | 13.1 | 9200 | **C512_13.1 S3 ME3LB4** | 139 | **C512_13.1 P100 BE100LB4** | 140 |
| **116** | 235 | 1.8 | 12.4 | 5040 | **C412_12.4 S3 ME3LB4** | 135 | **C412_12.4 P100 BE100LB4** | 136 |
| **117** | 234 | 1.0 | 12.3 | 3580 | **C322_12.3 S3 ME3LB4** | 127 | **C322_12.3 P100 BE100LB4** | 128 |
| **123** | 222 | 1.7 | 11.7 | 4200 | **C362_11.7 S3 ME3LB4** | 131 | **C362_11.7 P100 BE100LB4** | 132 |
| **129** | 213 | 1.1 | 11.2 | 3520 | **C322_11.2 S3 ME3LB4** | 127 | **C322_11.2 P100 BE100LB4** | 128 |
| **129** | 212 | 2.0 | 11.2 | 4930 | **C412_11.2 S3 ME3LB4** | 135 | **C412_11.2 P100 BE100LB4** | 136 |
| **136** | 201 | 1.9 | 10.6 | 4100 | **C362_10.6 S3 ME3LB4** | 131 | **C362_10.6 P100 BE100LB4** | 132 |
| **143** | 190 | 1.6 | 20.1 | 3480 | **C322_20.1 S3 ME3LB2** | 127 | **C322_20.1 P100 BE100L2** | 128 |
| **150** | 182 | 2.1 | 9.6 | 4800 | **C412_9.6 S3 ME3LB4** | 135 | **C412_9.6 P100 BE100LB4** | 136 |
| **155** | 177 | 1.2 | 9.3 | 3450 | **C322_9.3 S3 ME3LB4** | 127 | **C322_9.3 P100 BE100LB4** | 128 |
| **158** | 172 | 1.6 | 18.2 | 3410 | **C322_18.2 S3 ME3LB2** | 127 | **C322_18.2 P100 BE100L2** | 128 |
| **164** | 167 | 2.3 | 8.8 | 3990 | **C362_8.8 S3 ME3LB4** | 131 | **C362_8.8 P100 BE100LB4** | 132 |
| **167** | 164 | 2.3 | 8.6 | 4600 | **C412_8.6 S3 ME3LB4** | 135 | **C412_8.6 P100 BE100LB4** | 136 |
| **170** | 161 | 1.3 | 8.5 | 3400 | **C322_8.5 S3 ME3LB4** | 127 | **C322_8.5 P100 BE100LB4** | 128 |
| **179** | 153 | 2.4 | 8.0 | 3840 | **C362_8.0 S3 ME3LB4** | 131 | **C362_8.0 P100 BE100LB4** | 132 |
| **182** | 150 | 1.2 | 15.8 | 1940 | **C222_15.8 S3 ME3LB2** | 123 | **C222_15.8 P100 BE100L2** | 124 |
| **185** | 147 | 1.8 | 15.6 | 3340 | **C322_15.6 S3 ME3LB2** | 127 | **C322_15.6 P100 BE100L2** | 128 |
| **201** | 136 | 1.5 | 7.2 | 3300 | **C322_7.2 S3 ME3LB4** | 127 | **C322_7.2 P100 BE100LB4** | 128 |
| **203** | 135 | 1.0 | 7.1 | 1940 | **C222_7.1 S3 ME3LB4** | 123 | **C222_7.1 P100 BE100LB4** | 124 |
| **204** | 134 | 2.6 | 7.1 | 4490 | **C412_7.1 S3 ME3LB4** | 135 | **C412_7.1 P100 BE100LB4** | 136 |
| **205** | 133 | 1.9 | 14.1 | 3250 | **C322_14.1 S3 ME3LB2** | 127 | **C322_14.1 P100 BE100L2** | 128 |
| **212** | 129 | 2.8 | 6.8 | 3780 | **C362_6.8 S3 ME3LB4** | 131 | **C362_6.8 P100 BE100LB4** | 132 |
| **226** | 121 | 2.9 | 6.4 | 4370 | **C412_6.4 S3 ME3LB4** | 135 | **C412_6.4 P100 BE100LB4** | 136 |
| **230** | 119 | 1.3 | 6.3 | 3100 | **C322_6.3 S3 ME3LB4** | 127 | **C322_6.3 P100 BE100LB4** | 128 |
| **234** | 116 | 2.1 | 12.3 | 3190 | **C322_12.3 S3 ME3LB2** | 127 | **C322_12.3 P100 BE100L2** | 128 |
| **237** | 116 | 0.9 | 6.1 | 1600 | **C222_6.1 S3 ME3LB4** | 123 | **C222_6.1 P100 BE100LB4** | 124 |
| **242** | 113 | 2.3 | 6.0 | 4090 | **C412_6.0 S3 ME3LB4** | 135 | **C412_6.0 P100 BE100LB4** | 136 |
| **246** | 111 | 1.8 | 5.8 | 3530 | **C362_5.8 S3 ME3LB4** | 131 | **C362_5.8 P100 BE100LB4** | 132 |
| **255** | 107 | 1.4 | 5.7 | 3040 | **C322_5.7 S3 ME3LB4** | 127 | **C322_5.7 P100 BE100LB4** | 128 |
| **257** | 106 | 2.2 | 11.2 | 3090 | **C322_11.2 S3 ME3LB2** | 127 | **C322_11.2 P100 BE100L2** | 128 |
| **258** | 106 | 1.0 | 5.6 | 1750 | **C222_5.6 S3 ME3LB4** | 123 | **C222_5.6 P100 BE100LB4** | 124 |
| **260** | 105 | 1.5 | 11.1 | 1850 | **C222_11.1 S3 ME3LB2** | 123 | **C222_11.1 P100 BE100L2** | 124 |
| **273** | 100 | 2.0 | 5.3 | 3380 | **C362_5.3 S3 ME3LB4** | 131 | **C362_5.3 P100 BE100LB4** | 132 |
| **291** | 94 | 1.6 | 5.0 | 2950 | **C322_5.0 S3 ME3LB4** | 127 | **C322_5.0 P100 BE100LB4** | 128 |
| **299** | 91 | 1.6 | 9.6 | 1880 | **C222_9.6 S3 ME3LB2** | 123 | **C222_9.6 P100 BE100L2** | 124 |
| **302** | 91 | 1.1 | 4.8 | 1780 | **C222_4.8 S3 ME3LB4** | 123 | **C222_4.8 P100 BE100LB4** | 124 |
| **309** | 89 | 2.9 | 4.7 | 3880 | **C412_4.7 S3 ME3LB4** | 135 | **C412_4.7 P100 BE100LB4** | 136 |
| **310** | 88 | 2.5 | 9.3 | 2990 | **C322_9.3 S3 ME3LB2** | 127 | **C322_9.3 P100 BE100L2** | 128 |
| **312** | 88 | 2.3 | 4.6 | 3270 | **C362_4.6 S3 ME3LB4** | 131 | **C362_4.6 P100 BE100LB4** | 132 |
| **320** | 85 | 1.8 | 4.5 | 2880 | **C322_4.5 S3 ME3LB4** | 127 | **C322_4.5 P100 BE100LB4** | 128 |
| **333** | 82 | 1.7 | 8.7 | 1840 | **C222_8.7 S3 ME3LB2** | 123 | **C222_8.7 P100 BE100L2** | 124 |
| **338** | 81 | 1.2 | 4.3 | 1800 | **C222_4.3 S3 ME3LB4** | 123 | **C222_4.3 P100 BE100LB4** | 124 |
| **339** | 80 | 2.6 | 8.5 | 2900 | **C322_8.5 S3 ME3LB2** | 127 | **C322_8.5 P100 BE100L2** | 128 |
| **343** | 80 | 2.5 | 4.2 | 3190 | **C362_4.2 S3 ME3LB4** | 131 | **C362_4.2 P100 BE100LB4** | 132 |
| **386** | 71 | 2.1 | 3.7 | 2780 | **C322_3.7 S3 ME3LB4** | 127 | **C322_3.7 P100 BE100LB4** | 128 |
| **388** | 70 | 1.3 | 3.7 | 1740 | **C222_3.7 S3 ME3LB4** | 123 | **C222_3.7 P100 BE100LB4** | 124 |
| **402** | 68 | 3.0 | 7.2 | 2810 | **C322_7.2 S3 ME3LB2** | 127 | **C322_7.2 P100 BE100L2** | 128 |
| **407** | 67 | 1.9 | 7.1 | 1800 | **C222_7.1 S3 ME3LB2** | 123 | **C222_7.1 P100 BE100L2** | 124 |

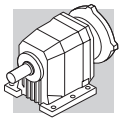


## 3 kW

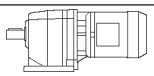
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **413** | 66 | 3.0 | 3.5 | 3130 | **C362_3.5 S3 ME3LB4** | 131 | **C362_3.5 P100 BE100LB4** | 132 |
| **422** | 65 | 2.1 | 3.4 | 2690 | **C322_3.4 S3 ME3LB4** | 127 | **C322_3.4 P100 BE100LB4** | 128 |
| **433** | 63 | 1.3 | 3.3 | 1740 | **C222_3.3 S3 ME3LB4** | 123 | **C222_3.3 P100 BE100LB4** | 124 |
| **460** | 59 | 2.6 | 6.3 | 2650 | **C322_6.3 S3 ME3LB2** | 127 | **C322_6.3 P100 BE100L2** | 128 |
| **473** | 58 | 1.8 | 6.1 | 1690 | **C222_6.1 S3 ME3LB2** | 123 | **C222_6.1 P100 BE100L2** | 124 |
| **500** | 55 | 2.4 | 2.9 | 2610 | **C322_2.9 S3 ME3LB4** | 127 | **C322_2.9 P100 BE100LB4** | 128 |
| **509** | 53 | 2.9 | 5.7 | 2570 | **C322_5.7 S3 ME3LB2** | 127 | **C322_5.7 P100 BE100L2** | 128 |
| **515** | 53 | 1.9 | 5.6 | 1650 | **C222_5.6 S3 ME3LB2** | 123 | **C222_5.6 P100 BE100L2** | 124 |
| **529** | 52 | 1.5 | 2.7 | 1660 | **C222_2.7 S3 ME3LB4** | 123 | **C222_2.7 P100 BE100LB4** | 124 |
| **582** | 47 | 3.3 | 5.0 | 2500 | **C322_5.0 S3 ME3LB2** | 127 | **C322_5.0 P100 BE100L2** | 128 |
| **604** | 45 | 2.2 | 4.8 | 1620 | **C222_4.8 S3 ME3LB2** | 123 | **C222_4.8 P100 BE100L2** | 124 |
| **640** | 43 | 3.6 | 4.5 | 2400 | **C322_4.5 S3 ME3LB2** | 127 | **C322_4.5 P100 BE100L2** | 128 |
| **676** | 40 | 2.3 | 4.3 | 1580 | **C222_4.3 S3 ME3LB2** | 123 | **C222_4.3 P100 BE100L2** | 124 |
| **771** | 35 | 4.2 | 3.7 | 2320 | **C322_3.7 S3 ME3LB2** | 127 | **C322_3.7 P100 BE100L2** | 128 |
| **777** | 35 | 2.6 | 3.7 | 1540 | **C222_3.7 S3 ME3LB2** | 123 | **C222_3.7 P100 BE100L2** | 124 |
| **789** | 35 | 1.2 | 3.7 | 560 | **C122_3.7 S3 ME3LB2** | 119 | **C122_3.7 P100 BE100L2** | 120 |
| **866** | 31 | 2.7 | 3.3 | 1480 | **C222_3.3 S3 ME3LB2** | 123 | **C222_3.3 P100 BE100L2** | 124 |
| **898** | 30 | 1.3 | 3.2 | 630 | **C122_3.2 S3 ME3LB2** | 119 | **C122_3.2 P100 BE100L2** | 120 |
| **1041** | 26 | 1.4 | 2.8 | 750 | **C122_2.8 S3 ME3LB2** | 119 | **C122_2.8 P100 BE100L2** | 120 |
| **1058** | 26 | 3.1 | 2.7 | 1430 | **C222_2.7 S3 ME3LB2** | 123 | **C222_2.7 P100 BE100L2** | 124 |

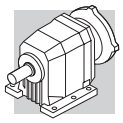
## 4 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **2.9** | 12214 | 1.0 | 502.6 | 85000 | **C1004_502.6 S4 ME4SA4** | 156 | **C1004_502.6 P112 BE112M4** | 157 |
| **3.1** | 11342 | 1.1 | 466.7 | 85000 | **C1004_466.7 S4 ME4SA4** | 156 | **C1004_466.7 P112 BE112M4** | 157 |
| **3.5** | 9957 | 1.2 | 409.8 | 85000 | **C1004_409.8 S4 ME4SA4** | 156 | **C1004_409.8 P112 BE112M4** | 157 |
| **3.8** | 9246 | 1.3 | 380.5 | 85000 | **C1004_380.5 S4 ME4SA4** | 156 | **C1004_380.5 P112 BE112M4** | 157 |
| **4.4** | 7864 | 1.5 | 323.6 | 85000 | **C1004_323.6 S4 ME4SA4** | 156 | **C1004_323.6 P112 BE112M4** | 157 |
| **4.8** | 7302 | 1.6 | 300.5 | 85000 | **C1004_300.5 S4 ME4SA4** | 156 | **C1004_300.5 P112 BE112M4** | 157 |
| **4.9** | 7118 | 1.0 | 292.9 | 60000 | **C904_292.9 S4 ME4SA4** | 153 | **C904_292.9 P112 BE112M4** | 154 |
| **5.4** | 6524 | 1.1 | 268.5 | 60000 | **C904_268.5 S4 ME4SA4** | 153 | **C904_268.5 P112 BE112M4** | 154 |
| **5.5** | 6391 | 1.9 | 263.0 | 85000 | **C1004_263.0 S4 ME4SA4** | 156 | **C1004_263.0 P112 BE112M4** | 157 |
| **5.9** | 5934 | 2.0 | 244.2 | 85000 | **C1004_244.2 S4 ME4SA4** | 156 | **C1004_244.2 P112 BE112M4** | 157 |
| **6.2** | 5630 | 1.3 | 231.7 | 60000 | **C904_231.7 S4 ME4SA4** | 153 | **C904_231.7 P112 BE112M4** | 154 |
| **6.8** | 5161 | 1.4 | 212.4 | 60000 | **C904_212.4 S4 ME4SA4** | 153 | **C904_212.4 P112 BE112M4** | 154 |
| **7.2** | 4851 | 2.5 | 199.6 | 85000 | **C1004_199.6 S4 ME4SA4** | 156 | **C1004_199.6 P112 BE112M4** | 157 |
| **7.8** | 4504 | 2.7 | 185.4 | 85000 | **C1004_185.4 S4 ME4SA4** | 156 | **C1004_185.4 P112 BE112M4** | 157 |
| **8.4** | 4322 | 1.7 | 172.1 | 60000 | **C903_172.1 S4 ME4SA4** | 153 | **C903_172.1 P112 BE112M4** | 154 |
| **8.5** | 4243 | 0.9 | 169.0 | 35000 | **C803_169.0 S4 ME4SA4** | 150 | **C803_169.0 P112 BE112M4** | 151 |
| **9.1** | 3961 | 1.8 | 157.8 | 60000 | **C903_157.8 S4 ME4SA4** | 153 | **C903_157.8 P112 BE112M4** | 154 |
| **9.7** | 3744 | 1.1 | 149.1 | 35000 | **C803_149.1 S4 ME4SA4** | 150 | **C803_149.1 P112 BE112M4** | 151 |
| **9.8** | 3674 | 2.0 | 146.3 | 60000 | **C903_146.3 S4 ME4SA4** | 153 | **C903_146.3 P112 BE112M4** | 154 |
| **10.5** | 3432 | 1.2 | 136.7 | 35000 | **C803_136.7 S4 ME4SA4** | 150 | **C803_136.7 P112 BE112M4** | 151 |
| **10.7** | 3368 | 2.1 | 134.1 | 60000 | **C903_134.1 S4 ME4SA4** | 153 | **C903_134.1 P112 BE112M4** | 154 |
| **12.1** | 3000 | 1.3 | 119.5 | 35000 | **C803_119.5 S4 ME4SA4** | 150 | **C803_119.5 P112 BE112M4** | 151 |
| **12.3** | 2931 | 2.5 | 116.7 | 60000 | **C903_116.7 S4 ME4SA4** | 153 | **C903_116.7 P112 BE112M4** | 154 |
| **13.2** | 2750 | 1.5 | 109.5 | 35000 | **C803_109.5 S4 ME4SA4** | 150 | **C803_109.5 P112 BE112M4** | 151 |
| **13.5** | 2687 | 2.6 | 107.0 | 60000 | **C903_107.0 S4 ME4SA4** | 153 | **C903_107.0 P112 BE112M4** | 154 |
| **14.8** | 2445 | 1.6 | 97.4 | 35000 | **C803_97.4 S4 ME4SA4** | 150 | **C803_97.4 P112 BE112M4** | 151 |
| **15.0** | 2417 | 3.0 | 96.2 | 60000 | **C903_96.2 S4 ME4SA4** | 153 | **C903_96.2 P112 BE112M4** | 154 |
| **16.1** | 2242 | 1.8 | 89.3 | 35000 | **C803_89.3 S4 ME4SA4** | 150 | **C803_89.3 P112 BE112M4** | 151 |
| **16.3** | 2215 | 1.0 | 88.2 | 25000 | **C703_88.2 S4 ME4SA4** | 147 | **C703_88.2 P112 BE112M4** | 148 |



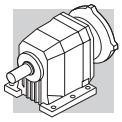
# 4 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  | IEC  |  |
|---|---|---|---|---|---|---|---|---|
| **17.7** | 2044 | 1.1 | 81.4 | 25000 | **C703_81.4 S4 ME4SA4** | 147 | **C703_81.4 P112 BE112M4** | 148 |
| **18.7** | 1931 | 2.1 | 76.9 | 35000 | **C803_76.9 S4 ME4SA4** | 150 | **C803_76.9 P112 BE112M4** | 151 |
| **20.2** | 1791 | 1.3 | 71.3 | 25000 | **C703_71.3 S4 ME4SA4** | 147 | **C703_71.3 P112 BE112M4** | 148 |
| **20.4** | 1770 | 2.3 | 70.5 | 35000 | **C803_70.5 S4 ME4SA4** | 150 | **C803_70.5 P112 BE112M4** | 151 |
| **21.3** | 1645 | 1.0 | 67.7 | 16000 | **C613_67.7 S4 ME4SA4** | 143 | **C613_67.7 P112 BE112M4** | 144 |
| **21.9** | 1654 | 1.4 | 65.9 | 25000 | **C703_65.9 S4 ME4SA4** | 147 | **C703_65.9 P112 BE112M4** | 148 |
| **23.0** | 1570 | 2.5 | 62.5 | 35000 | **C803_62.5 S4 ME4SA4** | 150 | **C803_62.5 P112 BE112M4** | 151 |
| **24.6** | 1424 | 1.1 | 58.6 | 16000 | **C613_58.6 S4 ME4SA4** | 143 | **C613_58.6 P112 BE112M4** | 144 |
| **25.1** | 1439 | 2.8 | 57.3 | 35000 | **C803_57.3 S4 ME4SA4** | 150 | **C803_57.3 P112 BE112M4** | 151 |
| **25.5** | 1419 | 1.6 | 56.5 | 25000 | **C703_56.5 S4 ME4SA4** | 147 | **C703_56.5 P112 BE112M4** | 148 |
| **26.9** | 1299 | 1.2 | 53.5 | 16000 | **C613_53.5 S4 ME4SA4** | 143 | **C613_53.5 P112 BE112M4** | 144 |
| **27.6** | 1310 | 1.8 | 52.2 | 25000 | **C703_52.2 S4 ME4SA4** | 147 | **C703_52.2 P112 BE112M4** | 148 |
| **30** | 1157 | 1.4 | 47.6 | 16000 | **C613_47.6 S4 ME4SA4** | 143 | **C613_47.6 P112 BE112M4** | 144 |
| **30** | 1191 | 3.2 | 47.4 | 35000 | **C803_47.4 S4 ME4SA4** | 150 | **C803_47.4 P112 BE112M4** | 151 |
| **32** | 1122 | 2.0 | 44.7 | 25000 | **C703_44.7 S4 ME4SA4** | 147 | **C703_44.7 P112 BE112M4** | 148 |
| **33** | 1092 | 3.5 | 43.5 | 35000 | **C803_43.5 S4 ME4SA4** | 150 | **C803_43.5 P112 BE112M4** | 151 |
| **33** | 1056 | 1.5 | 43.4 | 16000 | **C613_43.4 S4 ME4SA4** | 143 | **C613_43.4 P112 BE112M4** | 144 |
| **35** | 1036 | 2.2 | 41.3 | 25000 | **C703_41.3 S4 ME4SA4** | 147 | **C703_41.3 P112 BE112M4** | 148 |
| **36** | 1016 | 1.0 | 40.5 | 10000 | **C513_40.5 S4 ME4SA4** | 139 | **C513_40.5 P112 BE112M4** | 140 |
| **38** | 975 | 1.4 | 38.0 | 16000 | **C612_38.0 S4 ME4SA4** | 143 | **C612_38.0 P112 BE112M4** | 144 |
| **39** | 928 | 1.1 | 37.0 | 10000 | **C513_37.0 S4 ME4SA4** | 139 | **C513_37.0 P112 BE112M4** | 140 |
| **40** | 878 | 1.8 | 36.1 | 15700 | **C613_36.1 S4 ME4SA4** | 143 | **C613_36.1 P112 BE112M4** | 144 |
| **41** | 891 | 2.4 | 34.7 | 23400 | **C702_34.7 S4 ME4SA4** | 147 | **C702_34.7 P112 BE112M4** | 148 |
| **42** | 878 | 1.4 | 34.2 | 15700 | **C612_34.2 S4 ME4SA4** | 143 | **C612_34.2 P112 BE112M4** | 144 |
| **44** | 847 | 0.9 | 33.0 | 10000 | **C512_33.0 S4 ME4SA4** | 139 | **C512_33.0 P112 BE112M4** | 140 |
| **44** | 801 | 1.9 | 33.0 | 15500 | **C613_33.0 S4 ME4SA4** | 143 | **C613_33.0 P112 BE112M4** | 144 |
| **47** | 781 | 1.7 | 30.4 | 15300 | **C612_30.4 S4 ME4SA4** | 143 | **C612_30.4 P112 BE112M4** | 144 |
| **48** | 755 | 1.3 | 30.1 | 9880 | **C513_30.1 S4 ME4SA4** | 139 | **C513_30.1 P112 BE112M4** | 140 |
| **48** | 764 | 1.0 | 29.8 | 10000 | **C512_29.8 S4 ME4SA4** | 139 | **C512_29.8 P112 BE112M4** | 140 |
| **52** | 711 | 3.0 | 27.7 | 22300 | **C702_27.7 S4 ME4SA4** | 147 | **C702_27.7 P112 BE112M4** | 148 |
| **52** | 689 | 1.4 | 27.4 | 9550 | **C513_27.4 S4 ME4SA4** | 139 | **C513_27.4 P112 BE112M4** | 140 |
| **53** | 703 | 1.9 | 27.4 | 14900 | **C612_27.4 S4 ME4SA4** | 143 | **C612_27.4 P112 BE112M4** | 144 |
| **54** | 651 | 2.2 | 26.8 | 14700 | **C613_26.8 S4 ME4SA4** | 143 | **C613_26.8 P112 BE112M4** | 144 |
| **56** | 665 | 1.2 | 25.9 | 10000 | **C512_25.9 S4 ME4SA4** | 139 | **C512_25.9 P112 BE112M4** | 140 |
| **58** | 637 | 2.1 | 24.8 | 14600 | **C612_24.8 S4 ME4SA4** | 143 | **C612_24.8 P112 BE112M4** | 144 |
| **60** | 600 | 1.5 | 23.9 | 9250 | **C513_23.9 S4 ME4SA4** | 139 | **C513_23.9 P112 BE112M4** | 140 |
| **62** | 599 | 1.3 | 23.4 | 10000 | **C512_23.4 S4 ME4SA4** | 139 | **C512_23.4 P112 BE112M4** | 140 |
| **64** | 573 | 2.4 | 22.4 | 14200 | **C612_22.4 S4 ME4SA4** | 143 | **C612_22.4 P112 BE112M4** | 144 |
| **69** | 538 | 1.5 | 21.0 | 9920 | **C512_21.0 S4 ME4SA4** | 139 | **C512_21.0 P112 BE112M4** | 140 |
| **73** | 507 | 1.0 | 19.8 | 4760 | **C412_19.8 S4 ME4SA4** | 135 | **C412_19.8 P112 BE112M4** | 136 |
| **73** | 503 | 2.7 | 19.6 | 13800 | **C612_19.6 S4 ME4SA4** | 143 | **C612_19.6 P112 BE112M4** | 144 |
| **76** | 485 | 1.7 | 18.9 | 9730 | **C512_18.9 S4 ME4SA4** | 139 | **C512_18.9 P112 BE112M4** | 140 |
| **81** | 456 | 1.1 | 17.8 | 4720 | **C412_17.8 S4 ME4SA4** | 135 | **C412_17.8 P112 BE112M4** | 136 |
| **82** | 453 | 3.0 | 17.7 | 13400 | **C612_17.7 S4 ME4SA4** | 143 | **C612_17.7 P112 BE112M4** | 144 |
| **87** | 426 | 1.9 | 16.6 | 9440 | **C512_16.6 S4 ME4SA4** | 139 | **C512_16.6 P112 BE112M4** | 140 |
| **90** | 409 | 3.3 | 15.9 | 13100 | **C612_15.9 S4 ME4SA4** | 143 | **C612_15.9 P112 BE112M4** | 144 |
| **91** | 406 | 1.1 | 15.8 | 4740 | **C412_15.8 S4 ME4SA4** | 135 | **C412_15.8 P112 BE112M4** | 136 |
| **96** | 384 | 2.1 | 15.0 | 9230 | **C512_15.0 S4 ME4SA4** | 139 | **C512_15.0 P112 BE112M4** | 140 |
| **98** | 378 | 1.0 | 14.8 | 3880 | **C362_14.8 S4 ME4SA4** | 131 | **C362_14.8 P112 BE112M4** | 132 |
| **101** | 365 | 1.2 | 14.2 | 4690 | **C412_14.2 S4 ME4SA4** | 135 | **C412_14.2 P112 BE112M4** | 136 |
| **108** | 342 | 1.1 | 13.3 | 3840 | **C362_13.3 S4 ME4SA4** | 131 | **C362_13.3 P112 BE112M4** | 132 |
| **110** | 337 | 2.2 | 13.1 | 8930 | **C512_13.1 S4 ME4SA4** | 139 | **C512_13.1 P112 BE112M4** | 140 |
| **116** | 318 | 1.3 | 12.4 | 4660 | **C412_12.4 S4 ME4SA4** | 135 | **C412_12.4 P112 BE112M4** | 136 |
| **122** | 304 | 2.5 | 11.8 | 8720 | **C512_11.8 S4 ME4SA4** | 139 | **C512_11.8 P112 BE112M4** | 140 |
| **123** | 299 | 1.3 | 11.7 | 3840 | **C362_11.7 S4 ME4SA4** | 131 | **C362_11.7 P112 BE112M4** | 132 |
| **129** | 286 | 1.5 | 11.2 | 4580 | **C412_11.2 S4 ME4SA4** | 135 | **C412_11.2 P112 BE112M4** | 136 |
| **136** | 272 | 1.4 | 10.6 | 3780 | **C362_10.6 S4 ME4SA4** | 131 | **C362_10.6 P112 BE112M4** | 132 |

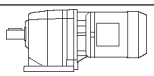


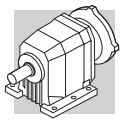
# 4 kW

| $n_2$ min-1 | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **148** | 250 | 2.7 | 9.8 | 8290 | **C512_9.8 S4 ME4SA4** | 139 | **C512_9.8 P112 BE112M4** | 140 |
| **150** | 246 | 1.6 | 9.6 | 4510 | **C412_9.6 S4 ME4SA4** | 135 | **C412_9.6 P112 BE112M4** | 136 |
| **155** | 238 | 0.9 | 9.3 | 3150 | **C322_9.3 S4 ME4SA4** | 127 | **C322_9.3 P112 BE112M4** | 128 |
| **164** | 226 | 1.7 | 8.8 | 3720 | **C362_8.8 S4 ME4SA4** | 131 | **C362_8.8 P112 BE112M4** | 132 |
| **164** | 225 | 3.0 | 8.8 | 8070 | **C512_8.8 S4 ME4SA4** | 139 | **C512_8.8 P112 BE112M4** | 140 |
| **167** | 222 | 1.7 | 8.6 | 4420 | **C412_8.6 S4 ME4SA4** | 135 | **C412_8.6 P112 BE112M4** | 136 |
| **170** | 218 | 1.0 | 8.5 | 3110 | **C322_8.5 S4 ME4SA4** | 127 | **C322_8.5 P112 BE112M4** | 128 |
| **179** | 206 | 1.8 | 8.0 | 3650 | **C362_8.0 S4 ME4SA4** | 131 | **C362_8.0 P112 BE112M4** | 132 |
| **186** | 199 | 3.2 | 7.8 | 7800 | **C512_7.8 S4 ME4SA4** | 139 | **C512_7.8 P112 BE112M4** | 140 |
| **186** | 195 | 1.4 | 15.6 | 3090 | **C322_15.6 S4 ME4SA2** | 127 | **C322_15.6 P112 BE112M2** | 128 |
| **201** | 184 | 1.1 | 7.2 | 3070 | **C322_7.2 S4 ME4SA4** | 127 | **C322_7.2 P112 BE112M4** | 128 |
| **204** | 181 | 2.0 | 7.1 | 4280 | **C412_7.1 S4 ME4SA4** | 135 | **C412_7.1 P112 BE112M4** | 136 |
| **206** | 176 | 1.4 | 14.1 | 3040 | **C322_14.1 S4 ME4SA2** | 127 | **C322_14.1 P112 BE112M2** | 128 |
| **206** | 179 | 3.5 | 7.0 | 7580 | **C512_7.0 S4 ME4SA4** | 139 | **C512_7.0 P112 BE112M4** | 140 |
| **212** | 174 | 2.0 | 6.8 | 3580 | **C362_6.8 S4 ME4SA4** | 131 | **C362_6.8 P112 BE112M4** | 132 |
| **226** | 163 | 2.1 | 6.4 | 4180 | **C412_6.4 S4 ME4SA4** | 135 | **C412_6.4 P112 BE112M4** | 136 |
| **230** | 161 | 1.0 | 6.3 | 2840 | **C322_6.3 S4 ME4SA4** | 127 | **C322_6.3 P112 BE112M4** | 128 |
| **235** | 154 | 1.6 | 12.3 | 2990 | **C322_12.3 S4 ME4SA2** | 127 | **C322_12.3 P112 BE112M2** | 128 |
| **242** | 153 | 1.7 | 6.0 | 3840 | **C412_6.0 S4 ME4SA4** | 135 | **C412_6.0 P112 BE112M4** | 136 |
| **246** | 150 | 1.3 | 5.8 | 3310 | **C362_5.8 S4 ME4SA4** | 131 | **C362_5.8 P112 BE112M4** | 132 |
| **255** | 145 | 1.1 | 5.7 | 2780 | **C322_5.7 S4 ME4SA4** | 127 | **C322_5.7 P112 BE112M4** | 128 |
| **259** | 140 | 1.6 | 11.2 | 2900 | **C322_11.2 S4 ME4SA2** | 127 | **C322_11.2 P112 BE112M2** | 128 |
| **273** | 135 | 1.5 | 5.3 | 3200 | **C362_5.3 S4 ME4SA4** | 131 | **C362_5.3 P112 BE112M4** | 132 |
| **291** | 127 | 1.2 | 5.0 | 2760 | **C322_5.0 S4 ME4SA4** | 127 | **C322_5.0 P112 BE112M4** | 128 |
| **301** | 121 | 1.2 | 9.6 | 1680 | | | **C222_9.6 P112 BE112M2** | 124 |
| **309** | 120 | 2.2 | 4.7 | 3500 | **C412_4.7 S4 ME4SA4** | 135 | **C412_4.7 P112 BE112M4** | 136 |
| **312** | 119 | 1.7 | 4.6 | 3180 | **C362_4.6 S4 ME4SA4** | 131 | **C362_4.6 P112 BE112M4** | 132 |
| **312** | 116 | 1.9 | 9.3 | 2840 | **C322_9.3 S4 ME4SA2** | 127 | **C322_9.3 P112 BE112M2** | 128 |
| **320** | 115 | 1.3 | 4.5 | 2690 | **C322_4.5 S4 ME4SA4** | 127 | **C322_4.5 P112 BE112M4** | 128 |
| **335** | 108 | 1.3 | 8.7 | 1660 | | | **C222_8.7 P112 BE112M2** | 124 |
| **338** | 109 | 0.9 | 4.3 | 1300 | | | **C222_4.3 P112 BE112M4** | 124 |
| **342** | 106 | 2.0 | 8.5 | 2750 | **C322_8.5 S4 ME4SA2** | 127 | **C322_8.5 P112 BE112M2** | 128 |
| **343** | 108 | 1.9 | 4.2 | 3060 | **C362_4.2 S4 ME4SA4** | 131 | **C362_4.2 P112 BE112M4** | 132 |
| **386** | 96 | 1.6 | 3.7 | 2640 | **C322_3.7 S4 ME4SA4** | 127 | **C322_3.7 P112 BE112M4** | 128 |
| **388** | 95 | 0.9 | 3.7 | 1560 | | | **C222_3.7 P112 BE112M4** | 124 |
| **399** | 93 | 2.8 | 3.6 | 3180 | **C412_3.6 S4 ME4SA4** | 135 | **C412_3.6 P112 BE112M4** | 136 |
| **405** | 90 | 2.2 | 7.2 | 2690 | **C322_7.2 S4 ME4SA2** | 127 | **C322_7.2 P112 BE112M2** | 128 |
| **409** | 89 | 1.5 | 7.1 | 1650 | | | **C222_7.1 P112 BE112M2** | 124 |
| **413** | 89 | 2.2 | 3.5 | 3010 | **C362_3.5 S4 ME4SA4** | 131 | **C362_3.5 P112 BE112M4** | 132 |
| **422** | 87 | 1.6 | 3.4 | 2580 | **C322_3.4 S4 ME4SA4** | 127 | **C322_3.4 P112 BE112M4** | 128 |
| **433** | 85 | 1.0 | 3.3 | 1540 | | | **C222_3.3 P112 BE112M4** | 124 |
| **453** | 82 | 2.5 | 3.2 | 2890 | **C362_3.2 S4 ME4SA4** | 131 | **C362_3.2 P112 BE112M4** | 132 |
| **463** | 78 | 2.0 | 6.3 | 2530 | **C322_6.3 S4 ME4SA2** | 127 | **C322_6.3 P112 BE112M2** | 128 |
| **476** | 76 | 1.4 | 6.1 | 1540 | | | **C222_6.1 P112 BE112M2** | 124 |
| **500** | 74 | 1.8 | 2.9 | 2500 | **C322_2.9 S4 ME4SA4** | 127 | **C322_2.9 P112 BE112M4** | 128 |
| **519** | 70 | 1.5 | 5.6 | 1520 | | | **C222_5.6 P112 BE112M2** | 124 |
| **529** | 70 | 1.1 | 2.7 | 1530 | | | **C222_2.7 P112 BE112M4** | 124 |
| **536** | 69 | 2.9 | 2.7 | 2840 | **C362_2.7 S4 ME4SA4** | 131 | **C362_2.7 P112 BE112M4** | 132 |
| **586** | 62 | 2.4 | 5.0 | 2410 | **C322_5.0 S4 ME4SA2** | 127 | **C322_5.0 P112 BE112M2** | 128 |
| **608** | 60 | 1.7 | 4.8 | 1500 | | | **C222_4.8 P112 BE112M2** | 124 |
| **644** | 56 | 2.7 | 4.5 | 2330 | **C322_4.5 S4 ME4SA2** | 127 | **C322_4.5 P112 BE112M2** | 128 |
| **681** | 53 | 1.8 | 4.3 | 1470 | | | **C222_4.3 P112 BE112M2** | 124 |
| **776** | 47 | 3.2 | 3.7 | 2250 | **C322_3.7 S4 ME4SA2** | 127 | **C322_3.7 P112 BE112M2** | 128 |
| **782** | 46 | 1.9 | 3.7 | 1450 | | | **C222_3.7 P112 BE112M2** | 124 |
| **851** | 43 | 3.2 | 3.4 | 2170 | **C322_3.4 S4 ME4SA2** | 127 | **C322_3.4 P112 BE112M2** | 128 |
| **872** | 42 | 2.0 | 3.3 | 1410 | | | **C222_3.3 P112 BE112M2** | 124 |
| **1007** | 36 | 3.6 | 2.9 | 2100 | **C322_2.9 S4 ME4SA2** | 127 | **C322_2.9 P112 BE112M2** | 128 |
| **1065** | 34 | 2.3 | 2.7 | 1370 | | | **C222_2.7 P112 BE112M2** | 124 |

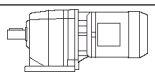


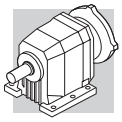
# 5.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **3.6** | 13276 | 0.9 | 409.8 | 85000 | **C1004_409.8 S4 ME4SB4** | 156 | **C1004_409.8 P132 BE132S4** | 157 |
| **3.8** | 12328 | 1.0 | 380.5 | 85000 | **C1004_380.5 S4 ME4SB4** | 156 | **C1004_380.5 P132 BE132S4** | 157 |
| **4.5** | 10485 | 1.1 | 323.6 | 85000 | **C1004_323.6 S4 ME4SB4** | 156 | **C1004_323.6 P132 BE132S4** | 157 |
| **4.9** | 9736 | 1.2 | 300.5 | 85000 | **C1004_300.5 S4 ME4SB4** | 156 | **C1004_300.5 P132 BE132S4** | 157 |
| **5.6** | 8521 | 1.4 | 263.0 | 85000 | **C1004_263.0 S4 ME4SB4** | 156 | **C1004_263.0 P132 BE132S4** | 157 |
| **6.0** | 7913 | 1.5 | 244.2 | 85000 | **C1004_244.2 S4 ME4SB4** | 156 | **C1004_244.2 P132 BE132S4** | 157 |
| **6.3** | 7507 | 1.0 | 231.7 | 60000 | **C904_231.7 S4 ME4SB4** | 153 | **C904_231.7 P132 BE132S4** | 154 |
| **6.9** | 6881 | 1.0 | 212.4 | 60000 | **C904_212.4 S4 ME4SB4** | 153 | **C904_212.4 P132 BE132S4** | 154 |
| **7.3** | 6468 | 1.9 | 199.6 | 85000 | **C1004_199.6 S4 ME4SB4** | 156 | **C1004_199.6 P132 BE132S4** | 157 |
| **7.9** | 6006 | 2.0 | 185.4 | 85000 | **C1004_185.4 S4 ME4SB4** | 156 | **C1004_185.4 P132 BE132S4** | 157 |
| **8.5** | 5762 | 1.2 | 172.1 | 60000 | **C903_172.1 S4 ME4SB4** | 153 | **C903_172.1 P132 BE132S4** | 154 |
| **9.0** | 5252 | 2.3 | 162.1 | 85000 | **C1004_162.1 S4 ME4SB4** | 156 | **C1004_162.1 P132 BE132S4** | 157 |
| **9.3** | 5282 | 1.3 | 157.8 | 60000 | **C903_157.8 S4 ME4SB4** | 153 | **C903_157.8 P132 BE132S4** | 154 |
| **9.7** | 5036 | 2.4 | 150.4 | 85000 | **C1003_150.4 S4 ME4SB4** | 156 | **C1003_150.4 P132 BE132S4** | 157 |
| **10.0** | 4899 | 1.5 | 146.3 | 60000 | **C903_146.3 S4 ME4SB4** | 153 | **C903_146.3 P132 BE132S4** | 154 |
| **10.5** | 4677 | 2.4 | 139.7 | 85000 | **C1003_139.7 S4 ME4SB4** | 156 | **C1003_139.7 P132 BE132S4** | 157 |
| **10.9** | 4491 | 1.6 | 134.1 | 60000 | **C903_134.1 S4 ME4SB4** | 153 | **C903_134.1 P132 BE132S4** | 154 |
| **12.1** | 4035 | 3.0 | 120.5 | 85000 | **C1003_120.5 S4 ME4SB4** | 156 | **C1003_120.5 P132 BE132S4** | 157 |
| **12.2** | 3999 | 1.0 | 119.5 | 35000 | **C803_119.5 S4 ME4SB4** | 150 | **C803_119.5 P132 BE132S4** | 151 |
| **12.5** | 3908 | 1.8 | 116.7 | 60000 | **C903_116.7 S4 ME4SB4** | 153 | **C903_116.7 P132 BE132S4** | 154 |
| **13.3** | 3666 | 1.1 | 109.5 | 35000 | **C803_109.5 S4 ME4SB4** | 150 | **C803_109.5 P132 BE132S4** | 151 |
| **13.6** | 3582 | 2.0 | 107.0 | 60000 | **C903_107.0 S4 ME4SB4** | 153 | **C903_107.0 P132 BE132S4** | 154 |
| **15.0** | 3260 | 1.2 | 97.4 | 35000 | **C803_97.4 S4 ME4SB4** | 150 | **C803_97.4 P132 BE132S4** | 151 |
| **15.2** | 3222 | 2.2 | 96.2 | 60000 | **C903_96.2 S4 ME4SB4** | 153 | **C903_96.2 P132 BE132S4** | 154 |
| **16.4** | 2989 | 1.3 | 89.3 | 35000 | **C803_89.3 S4 ME4SB4** | 150 | **C803_89.3 P132 BE132S4** | 151 |
| **16.5** | 2954 | 2.4 | 88.2 | 60000 | **C903_88.2 S4 ME4SB4** | 153 | **C903_88.2 P132 BE132S4** | 154 |
| **18.0** | 2719 | 2.6 | 81.2 | 59100 | **C903_81.2 S4 ME4SB4** | 153 | **C903_81.2 P132 BE132S4** | 154 |
| **19.0** | 2575 | 1.6 | 76.9 | 35000 | **C803_76.9 S4 ME4SB4** | 150 | **C803_76.9 P132 BE132S4** | 151 |
| **19.6** | 2492 | 2.8 | 74.4 | 58200 | **C903_74.4 S4 ME4SB4** | 153 | **C903_74.4 P132 BE132S4** | 154 |
| **20.5** | 2388 | 1.0 | 71.3 | 25000 | **C703_71.3 S4 ME4SB4** | 147 | **C703_71.3 P132 BE132S4** | 148 |
| **20.7** | 2360 | 1.7 | 70.5 | 35000 | **C803_70.5 S4 ME4SB4** | 150 | **C803_70.5 P132 BE132S4** | 151 |
| **22.2** | 2205 | 1.0 | 65.9 | 25000 | **C703_65.9 S4 ME4SB4** | 147 | **C703_65.9 P132 BE132S4** | 148 |
| **23.4** | 2093 | 1.9 | 62.5 | 35000 | **C803_62.5 S4 ME4SB4** | 150 | **C803_62.5 P132 BE132S4** | 151 |
| **25.5** | 1918 | 2.1 | 57.3 | 35000 | **C803_57.3 S4 ME4SB4** | 150 | **C803_57.3 P132 BE132S4** | 151 |
| **25.8** | 1892 | 1.2 | 56.5 | 25000 | **C703_56.5 S4 ME4SB4** | 147 | **C703_56.5 P132 BE132S4** | 148 |
| **27.3** | 1732 | 0.9 | 53.5 | 15000 | **C613_53.5 S4 ME4SB4** | 143 | **C613_53.5 P132 BE132S4** | 144 |
| **28.0** | 1746 | 1.3 | 52.2 | 24700 | **C703_52.2 S4 ME4SB4** | 147 | **C703_52.2 P132 BE132S4** | 148 |
| **31** | 1543 | 1.0 | 47.6 | 15300 | **C613_47.6 S4 ME4SB4** | 143 | **C613_47.6 P132 BE132S4** | 144 |
| **31** | 1588 | 2.4 | 47.4 | 35000 | **C803_47.4 S4 ME4SB4** | 150 | **C803_47.4 P132 BE132S4** | 151 |
| **33** | 1497 | 1.5 | 44.7 | 24100 | **C703_44.7 S4 ME4SB4** | 147 | **C703_44.7 P132 BE132S4** | 148 |
| **34** | 1456 | 2.6 | 43.5 | 35000 | **C803_43.5 S4 ME4SB4** | 150 | **C803_43.5 P132 BE132S4** | 151 |
| **34** | 1408 | 1.1 | 43.4 | 15000 | **C613_43.4 S4 ME4SB4** | 143 | **C613_43.4 P132 BE132S4** | 144 |
| **35** | 1381 | 1.7 | 41.3 | 23800 | **C703_41.3 S4 ME4SB4** | 147 | **C703_41.3 P132 BE132S4** | 148 |
| **37** | 1338 | 2.4 | 39.1 | 35000 | **C802_39.1 S4 ME4SB4** | 150 | **C802_39.1 P132 BE132S4** | 151 |
| **38** | 1300 | 1.0 | 38.0 | 14800 | **C612_38.0 S4 ME4SB4** | 143 | **C612_38.0 P132 BE132S4** | 144 |
| **40** | 1171 | 1.3 | 36.1 | 14800 | **C613_36.1 S4 ME4SB4** | 143 | **C613_36.1 P132 BE132S4** | 144 |
| **42** | 1188 | 1.8 | 34.7 | 22100 | **C702_34.7 S4 ME4SB4** | 147 | **C702_34.7 P132 BE132S4** | 148 |
| **43** | 1170 | 1.0 | 34.2 | 14500 | **C612_34.2 S4 ME4SB4** | 143 | **C612_34.2 P132 BE132S4** | 144 |
| **44** | 1068 | 1.4 | 33.0 | 14500 | **C613_33.0 S4 ME4SB4** | 143 | **C613_33.0 P132 BE132S4** | 144 |
| **47** | 1072 | 3.5 | 31.3 | 33400 | **C802_31.3 S4 ME4SB4** | 150 | **C802_31.3 P132 BE132S4** | 151 |
| **48** | 1041 | 1.3 | 30.4 | 14300 | **C612_30.4 S4 ME4SB4** | 143 | **C612_30.4 P132 BE132S4** | 144 |
| **49** | 1006 | 1.0 | 30.1 | 9610 | **C513_30.1 S4 ME4SB4** | 139 | **C513_30.1 P132 BE132S4** | 140 |
| **53** | 948 | 2.2 | 27.7 | 21200 | **C702_27.7 S4 ME4SB4** | 147 | **C702_27.7 P132 BE132S4** | 148 |
| **53** | 919 | 1.1 | 27.4 | 9490 | **C513_27.4 S4 ME4SB4** | 139 | **C513_27.4 P132 BE132S4** | 140 |
| **53** | 938 | 1.4 | 27.4 | 13900 | **C612_27.4 S4 ME4SB4** | 143 | **C612_27.4 P132 BE132S4** | 144 |
| **56** | 886 | 0.9 | 25.9 | 9350 | **C512_25.9 S4 ME4SB4** | 139 | **C512_25.9 P132 BE132S4** | 140 |
| **59** | 849 | 1.6 | 24.8 | 13700 | **C612_24.8 S4 ME4SB4** | 143 | **C612_24.8 P132 BE132S4** | 144 |

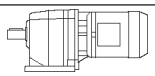


# 5.5 kW

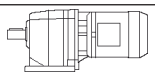
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **61** | 800 | 1.2 | 23.9 | 9540 | **C513_23.9 S4 ME4SB4** | 139 | **C513_23.9 P132 BE132S4** | 140 |
| **63** | 799 | 1.0 | 23.4 | 9310 | **C512_23.4 S4 ME4SB4** | 139 | **C512_23.4 P132 BE132S4** | 140 |
| **64** | 782 | 2.7 | 22.9 | 20400 | **C702_22.9 S4 ME4SB4** | 147 | **C702_22.9 P132 BE132S4** | 148 |
| **65** | 764 | 1.8 | 22.4 | 13400 | **C612_22.4 S4 ME4SB4** | 143 | **C612_22.4 P132 BE132S4** | 144 |
| **70** | 717 | 1.1 | 21.0 | 9150 | **C512_21.0 S4 ME4SB4** | 139 | **C512_21.0 P132 BE132S4** | 140 |
| **74** | 670 | 2.0 | 19.6 | 13100 | **C612_19.6 S4 ME4SB4** | 143 | **C612_19.6 P132 BE132S4** | 144 |
| **76** | 660 | 3.2 | 19.3 | 19700 | **C702_19.3 S4 ME4SB4** | 147 | **C702_19.3 P132 BE132S4** | 148 |
| **77** | 646 | 1.2 | 18.9 | 9030 | **C512_18.9 S4 ME4SB4** | 139 | **C512_18.9 P132 BE132S4** | 140 |
| **83** | 604 | 2.2 | 17.7 | 12700 | **C612_17.7 S4 ME4SB4** | 143 | **C612_17.7 P132 BE132S4** | 144 |
| **88** | 568 | 1.4 | 16.6 | 8810 | **C512_16.6 S4 ME4SB4** | 139 | **C512_16.6 P132 BE132S4** | 140 |
| **92** | 545 | 2.5 | 15.9 | 12500 | **C612_15.9 S4 ME4SB4** | 143 | **C612_15.9 P132 BE132S4** | 144 |
| **98** | 512 | 1.6 | 15.0 | 8660 | **C512_15.0 S4 ME4SB4** | 139 | **C512_15.0 P132 BE132S4** | 140 |
| **102** | 491 | 2.8 | 14.3 | 12100 | **C612_14.3 S4 ME4SB4** | 143 | **C612_14.3 P132 BE132S4** | 144 |
| **102** | 487 | 0.9 | 14.2 | 4000 | **C412_14.2 S4 ME4SB4** | 135 | **C412_14.2 P132 BE132S4** | 136 |
| **111** | 449 | 1.7 | 13.1 | 8420 | **C512_13.1 S4 ME4SB4** | 139 | **C512_13.1 P132 BE132S4** | 140 |
| **118** | 424 | 1.0 | 12.4 | 4060 | **C412_12.4 S4 ME4SB4** | 135 | **C412_12.4 P132 BE132S4** | 136 |
| **121** | 414 | 3.3 | 12.1 | 11600 | **C612_12.1 S4 ME4SB4** | 143 | **C612_12.1 P132 BE132S4** | 144 |
| **123** | 405 | 1.9 | 11.8 | 8250 | **C512_11.8 S4 ME4SB4** | 139 | **C512_11.8 P132 BE132S4** | 140 |
| **125** | 399 | 1.0 | 11.7 | 3380 | **C362_11.7 S4 ME4SB4** | 131 | **C362_11.7 P132 BE132S4** | 132 |
| **131** | 382 | 1.1 | 11.2 | 4030 | **C412_11.2 S4 ME4SB4** | 135 | **C412_11.2 P132 BE132S4** | 136 |
| **138** | 363 | 1.0 | 10.6 | 3350 | **C362_10.6 S4 ME4SB4** | 131 | **C362_10.6 P132 BE132S4** | 132 |
| **150** | 334 | 2.1 | 9.8 | 7890 | **C512_9.8 S4 ME4SB4** | 139 | **C512_9.8 P132 BE132S4** | 140 |
| **152** | 328 | 1.2 | 9.6 | 4030 | **C412_9.6 S4 ME4SB4** | 135 | **C412_9.6 P132 BE132S4** | 136 |
| **166** | 301 | 1.3 | 8.8 | 3350 | **C362_8.8 S4 ME4SB4** | 131 | **C362_8.8 P132 BE132S4** | 132 |
| **166** | 301 | 2.3 | 8.8 | 7700 | **C512_8.8 S4 ME4SB4** | 139 | **C512_8.8 P132 BE132S4** | 140 |
| **182** | 275 | 1.3 | 8.0 | 3330 | **C362_8.0 S4 ME4SB4** | 131 | **C362_8.0 P132 BE132S4** | 132 |
| **188** | 265 | 2.4 | 7.8 | 7460 | **C512_7.8 S4 ME4SB4** | 139 | **C512_7.8 P132 BE132S4** | 140 |
| **207** | 242 | 1.5 | 7.1 | 3920 | **C412_7.1 S4 ME4SB4** | 135 | **C412_7.1 P132 BE132S4** | 136 |
| **209** | 239 | 2.6 | 7.0 | 7280 | **C512_7.0 S4 ME4SB4** | 139 | **C512_7.0 P132 BE132S4** | 140 |
| **215** | 232 | 1.5 | 6.8 | 3280 | **C362_6.8 S4 ME4SB4** | 131 | **C362_6.8 P132 BE132S4** | 132 |
| **229** | 218 | 1.6 | 6.4 | 3840 | **C412_6.4 S4 ME4SB4** | 135 | **C412_6.4 P132 BE132S4** | 136 |
| **243** | 205 | 3.2 | 6.0 | 9480 | **C612_6.0 S4 ME4SB4** | 143 | **C612_6.0 P132 BE132S4** | 144 |
| **245** | 204 | 1.3 | 6.0 | 3430 | **C412_6.0 S4 ME4SB4** | 135 | **C412_6.0 P132 BE132S4** | 136 |
| **250** | 200 | 1.0 | 5.8 | 3020 | **C362_5.8 S4 ME4SB4** | 131 | **C362_5.8 P132 BE132S4** | 132 |
| **259** | 193 | 2.3 | 5.6 | 6720 | **C512_5.6 S4 ME4SB4** | 139 | **C512_5.6 P132 BE132S4** | 140 |
| **262** | 190 | 2.2 | 11.2 | 3770 | **C412_11.2 S4 ME4SB2** | 135 | **C412_11.2 P132 BE132SA2** | 136 |
| **277** | 181 | 1.1 | 5.3 | 2930 | **C362_5.3 S4 ME4SB4** | 131 | **C362_5.3 P132 BE132S4** | 132 |
| **292** | 171 | 2.5 | 3.3 | 6530 | **C512_3.3 S5 ME5SA6** | 139 | **C512_3.3 P160 BE160MA6** | 140 |
| **295** | 169 | 0.9 | 5.0 | 2480 | **C322_5.0 S4 ME4SB4** | 127 | **C322_5.0 P132 BE132S4** | 128 |
| **305** | 164 | 2.4 | 9.6 | 3680 | **C412_9.6 S4 ME4SB2** | 135 | **C412_9.6 P132 BE132SA2** | 136 |
| **313** | 159 | 1.6 | 4.7 | 3360 | **C412_4.7 S4 ME4SB4** | 135 | **C412_4.7 P132 BE132S4** | 136 |
| **316** | 158 | 1.3 | 4.6 | 2860 | **C362_4.6 S4 ME4SB4** | 131 | **C362_4.6 P132 BE132S4** | 132 |
| **324** | 154 | 1.0 | 4.5 | 2500 | **C322_4.5 S4 ME4SB4** | 127 | **C322_4.5 P132 BE132S4** | 128 |
| **328** | 152 | 2.9 | 4.5 | 6330 | **C512_4.5 S4 ME4SB4** | 139 | **C512_4.5 P132 BE132S4** | 140 |
| **338** | 147 | 2.6 | 8.6 | 3600 | **C412_8.6 S4 ME4SB2** | 135 | **C412_8.6 P132 BE132SA2** | 136 |
| **348** | 144 | 1.4 | 4.2 | 2830 | **C362_4.2 S4 ME4SB4** | 131 | **C362_4.2 P132 BE132S4** | 132 |
| **364** | 137 | 2.7 | 8.0 | 2850 | **C362_8.0 S4 ME4SB2** | 131 | **C362_8.0 P132 BE132SA2** | 132 |
| **367** | 136 | 2.9 | 2.6 | 6150 | **C512_2.6 S5 ME5SA6** | 139 | **C512_2.6 P160 BE160MA6** | 140 |
| **391** | 128 | 1.2 | 3.7 | 2410 | **C322_3.7 S4 ME4SB4** | 127 | **C322_3.7 P132 BE132S4** | 128 |
| **404** | 123 | 2.1 | 3.6 | 3240 | **C412_3.6 S4 ME4SB4** | 135 | **C412_3.6 P132 BE132S4** | 136 |
| **414** | 121 | 2.9 | 7.1 | 3460 | **C412_7.1 S4 ME4SB2** | 135 | **C412_7.1 P132 BE132SA2** | 136 |
| **419** | 119 | 1.7 | 3.5 | 2750 | **C362_3.5 S4 ME4SB4** | 131 | **C362_3.5 P132 BE132S4** | 132 |
| **428** | 117 | 1.2 | 3.4 | 2370 | **C322_3.4 S4 ME4SB4** | 127 | **C322_3.4 P132 BE132S4** | 128 |
| **431** | 116 | 3.1 | 6.8 | 2750 | **C362_6.8 S4 ME4SB2** | 131 | **C362_6.8 P132 BE132SA2** | 132 |
| **459** | 109 | 1.8 | 3.2 | 2700 | **C362_3.2 S4 ME4SB4** | 131 | **C362_3.2 P132 BE132S4** | 132 |
| **460** | 109 | 3.2 | 6.4 | 3370 | **C412_6.4 S4 ME4SB2** | 135 | **C412_6.4 P132 BE132SA2** | 136 |
| **491** | 102 | 2.6 | 6.0 | 3140 | **C412_6.0 S4 ME4SB2** | 135 | **C412_6.0 P132 BE132SA2** | 136 |



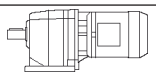
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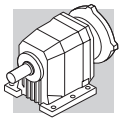
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **500** | 100 | 2.0 | 5.8 | 2620 | **C362_5.8 S4 ME4SB2** | 131 | **C362_5.8 P132 BE132SA2** | 132 |
| **507** | 98 | 1.3 | 2.9 | 2310 | **C322_2.9 S4 ME4SB4** | 127 | **C322_2.9 P132 BE132S4** | 128 |
| **543** | 92 | 2.2 | 2.7 | 2620 | **C362_2.7 S4 ME4SB4** | 131 | **C362_2.7 P132 BE132S4** | 132 |
| **549** | 91 | 2.7 | 2.7 | 3070 | **C412_2.7 S4 ME4SB4** | 135 | **C412_2.7 P132 BE132S4** | 136 |
| **554** | 90 | 2.2 | 5.3 | 2550 | **C362_5.3 S4 ME4SB2** | 131 | **C362_5.3 P132 BE132SA2** | 132 |
| **591** | 84 | 1.8 | 5.0 | 2230 | **C322_5.0 S4 ME4SB2** | 127 | **C322_5.0 P132 BE132SA2** | 128 |
| **627** | 80 | 3.3 | 4.7 | 2990 | **C412_4.7 S4 ME4SB2** | 135 | **C412_4.7 P132 BE132SA2** | 136 |
| **650** | 77 | 2.0 | 4.5 | 2190 | **C322_4.5 S4 ME4SB2** | 127 | **C322_4.5 P132 BE132SA2** | 128 |
| **783** | 64 | 2.4 | 3.7 | 2120 | **C322_3.7 S4 ME4SB2** | 127 | **C322_3.7 P132 BE132SA2** | 128 |
| **858** | 58 | 2.4 | 3.4 | 2080 | **C322_3.4 S4 ME4SB2** | 127 | **C322_3.4 P132 BE132SA2** | 128 |
| **1016** | 49 | 2.6 | 2.9 | 2000 | **C322_2.9 S4 ME4SB2** | 127 | **C322_2.9 P132 BE132SA2** | 128 |

## 7.5 kW

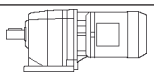
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **4.8** | 13252 | 0.9 | 300.5 | 85000 | **C1004_300.5 S4 ME4LA4** | 156 | **C1004_300.5 P132 BE132MA4** | 157 |
| **5.5** | 11598 | 1.0 | 263.0 | 85000 | **C1004_263.0 S4 ME4LA4** | 156 | **C1004_263.0 P132 BE132MA4** | 157 |
| **6.0** | 10770 | 1.1 | 244.2 | 85000 | **C1004_244.2 S4 ME4LA4** | 156 | **C1004_244.2 P132 BE132MA4** | 157 |
| **7.3** | 8804 | 1.4 | 199.6 | 85000 | **C1004_199.6 S4 ME4LA4** | 156 | **C1004_199.6 P132 BE132MA4** | 157 |
| **7.8** | 8175 | 1.5 | 185.4 | 85000 | **C1004_185.4 S4 ME4LA4** | 156 | **C1004_185.4 P132 BE132MA4** | 157 |
| **8.5** | 7843 | 0.9 | 172.1 | 60000 | **C903_172.1 S4 ME4LA4** | 153 | **C903_172.1 P132 BE132MA4** | 154 |
| **9.0** | 7149 | 1.7 | 162.1 | 85000 | **C1004_162.1 S4 ME4LA4** | 156 | **C1004_162.1 P132 BE132MA4** | 157 |
| **9.2** | 7189 | 1.0 | 157.8 | 60000 | **C903_157.8 S4 ME4LA4** | 153 | **C903_157.8 P132 BE132MA4** | 154 |
| **9.7** | 6855 | 1.8 | 150.4 | 85000 | **C1003_150.4 S4 ME4LA4** | 156 | **C1003_150.4 P132 BE132MA4** | 157 |
| **9.9** | 6668 | 1.1 | 146.3 | 59600 | **C903_146.3 S4 ME4LA4** | 153 | **C903_146.3 P132 BE132MA4** | 154 |
| **10.4** | 6365 | 1.7 | 139.7 | 85000 | **C1003_139.7 S4 ME4LA4** | 156 | **C1003_139.7 P132 BE132MA4** | 157 |
| **10.8** | 6113 | 1.2 | 134.1 | 59400 | **C903_134.1 S4 ME4LA4** | 153 | **C903_134.1 P132 BE132MA4** | 154 |
| **12.1** | 5492 | 2.2 | 120.5 | 85000 | **C1003_120.5 S4 ME4LA4** | 156 | **C1003_120.5 P132 BE132MA4** | 157 |
| **12.5** | 5319 | 1.4 | 116.7 | 58600 | **C903_116.7 S4 ME4LA4** | 153 | **C903_116.7 P132 BE132MA4** | 154 |
| **13.0** | 5100 | 2.4 | 111.9 | 85000 | **C1003_111.9 S4 ME4LA4** | 156 | **C1003_111.9 P132 BE132MA4** | 157 |
| **13.6** | 4876 | 1.5 | 107.0 | 58200 | **C903_107.0 S4 ME4LA4** | 153 | **C903_107.0 P132 BE132MA4** | 154 |
| **14.6** | 4548 | 2.6 | 99.8 | 85000 | **C1003_99.8 S4 ME4LA4** | 156 | **C1003_99.8 P132 BE132MA4** | 157 |
| **14.9** | 4438 | 0.9 | 97.4 | 34500 | **C803_97.4 S4 ME4LA4** | 150 | **C803_97.4 P132 BE132MA4** | 151 |
| **15.1** | 4386 | 1.6 | 96.2 | 57500 | **C903_96.2 S4 ME4LA4** | 153 | **C903_96.2 P132 BE132MA4** | 154 |
| **15.7** | 4223 | 2.8 | 92.7 | 85000 | **C1003_92.7 S4 ME4LA4** | 156 | **C1003_92.7 P132 BE132MA4** | 157 |
| **16.3** | 4068 | 1.0 | 89.3 | 35000 | **C803_89.3 S4 ME4LA4** | 150 | **C803_89.3 P132 BE132MA4** | 151 |
| **16.5** | 4020 | 1.8 | 88.2 | 56600 | **C903_88.2 S4 ME4LA4** | 153 | **C903_88.2 P132 BE132MA4** | 154 |
| **17.0** | 3899 | 3.1 | 85.6 | 85000 | **C1003_85.6 S4 ME4LA4** | 156 | **C1003_85.6 P132 BE132MA4** | 157 |
| **17.9** | 3701 | 1.9 | 81.2 | 56100 | **C903_81.2 S4 ME4LA4** | 153 | **C903_81.2 P132 BE132MA4** | 154 |
| **18.9** | 3505 | 1.1 | 76.9 | 35000 | **C803_76.9 S4 ME4LA4** | 150 | **C803_76.9 P132 BE132MA4** | 151 |
| **19.5** | 3392 | 2.1 | 74.4 | 55200 | **C903_74.4 S4 ME4LA4** | 153 | **C903_74.4 P132 BE132MA4** | 154 |
| **20.6** | 3213 | 1.2 | 70.5 | 35000 | **C803_70.5 S4 ME4LA4** | 150 | **C803_70.5 P132 BE132MA4** | 151 |
| **22.5** | 2943 | 2.4 | 64.6 | 54000 | **C903_64.6 S4 ME4LA4** | 153 | **C903_64.6 P132 BE132MA4** | 154 |
| **23.3** | 2848 | 1.4 | 62.5 | 35000 | **C803_62.5 S4 ME4LA4** | 150 | **C803_62.5 P132 BE132MA4** | 151 |
| **24.6** | 2698 | 2.6 | 59.2 | 53000 | **C903_59.2 S4 ME4LA4** | 153 | **C903_59.2 P132 BE132MA4** | 154 |
| **25.4** | 2611 | 1.5 | 57.3 | 35000 | **C803_57.3 S4 ME4LA4** | 150 | **C803_57.3 P132 BE132MA4** | 151 |
| **26.5** | 2501 | 2.9 | 54.9 | 52400 | **C903_54.9 S4 ME4LA4** | 153 | **C903_54.9 P132 BE132MA4** | 154 |
| **27.9** | 2377 | 1.0 | 52.2 | 22900 | **C703_52.2 S4 ME4LA4** | 147 | **C703_52.2 P132 BE132MA4** | 148 |
| **31** | 2162 | 1.8 | 47.4 | 35000 | **C803_47.4 S4 ME4LA4** | 150 | **C803_47.4 P132 BE132MA4** | 151 |
| **33** | 2037 | 1.1 | 44.7 | 22500 | **C703_44.7 S4 ME4LA4** | 147 | **C703_44.7 P132 BE132MA4** | 148 |
| **33** | 1982 | 1.9 | 43.5 | 35000 | **C803_43.5 S4 ME4LA4** | 150 | **C803_43.5 P132 BE132MA4** | 151 |
| **35** | 1880 | 1.2 | 41.3 | 22300 | **C703_41.3 S4 ME4LA4** | 147 | **C703_41.3 P132 BE132MA4** | 148 |
| **37** | 1821 | 1.8 | 39.1 | 33600 | **C802_39.1 S4 ME4LA4** | 150 | **C802_39.1 P132 BE132MA4** | 151 |

# 7.5 kW

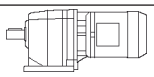
| $n_2$ min-1 | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **40** | 1594 | 1.0 | 36.1 | 13300 | **C613_36.1 S4 ME4LA4** | 143 | **C613_36.1 P132 BE132MA4** | 144 |
| **41** | 1634 | 3.3 | 35.1 | 47300 | **C902_35.1 S4 ME4LA4** | 153 | **C902_35.1 P132 BE132MA4** | 154 |
| **42** | 1617 | 1.3 | 34.7 | 20500 | **C702_34.7 S4 ME4LA4** | 147 | **C702_34.7 P132 BE132MA4** | 148 |
| **44** | 1454 | 1.0 | 33.0 | 13100 | **C613_33.0 S4 ME4LA4** | 143 | **C613_33.0 P132 BE132MA4** | 144 |
| **46** | 1459 | 2.5 | 31.3 | 32200 | **C802_31.3 S4 ME4LA4** | 150 | **C802_31.3 P132 BE132MA4** | 151 |
| **48** | 1417 | 1.0 | 30.4 | 13000 | **C612_30.4 S4 ME4LA4** | 143 | **C612_30.4 P132 BE132MA4** | 144 |
| **50** | 1295 | 1.1 | 29.4 | 13100 | **C613_29.4 S4 ME4LA4** | 143 | **C613_29.4 P132 BE132MA4** | 144 |
| **52** | 1290 | 1.6 | 27.7 | 20000 | **C702_27.7 S4 ME4LA4** | 147 | **C702_27.7 P132 BE132MA4** | 148 |
| **53** | 1276 | 1.1 | 27.4 | 12800 | **C612_27.4 S4 ME4LA4** | 143 | **C612_27.4 P132 BE132MA4** | 144 |
| **56** | 1208 | 3.1 | 25.9 | 31000 | **C802_25.9 S4 ME4LA4** | 150 | **C802_25.9 P132 BE132MA4** | 151 |
| **59** | 1155 | 1.2 | 24.8 | 12700 | **C612_24.8 S4 ME4LA4** | 143 | **C612_24.8 P132 BE132MA4** | 144 |
| **61** | 1115 | 3.2 | 24.0 | 30500 | **C802_24.0 S4 ME4LA4** | 150 | **C802_24.0 P132 BE132MA4** | 151 |
| **64** | 1064 | 2.0 | 22.9 | 19400 | **C702_22.9 S4 ME4LA4** | 147 | **C702_22.9 P132 BE132MA4** | 148 |
| **65** | 1040 | 1.3 | 22.4 | 12500 | **C612_22.4 S4 ME4LA4** | 143 | **C612_22.4 P132 BE132MA4** | 144 |
| **65** | 1035 | 3.6 | 22.2 | 30000 | **C802_22.2 S4 ME4LA4** | 150 | **C802_22.2 P132 BE132MA4** | 151 |
| **67** | 994 | 0.9 | 21.8 | 7200 | **C513_21.8 S4 ME4LA4** | 139 | **C513_21.8 P132 BE132MA4** | 140 |
| **74** | 912 | 1.5 | 19.6 | 12300 | **C612_19.6 S4 ME4LA4** | 143 | **C612_19.6 P132 BE132MA4** | 144 |
| **75** | 898 | 2.3 | 19.3 | 18900 | **C702_19.3 S4 ME4LA4** | 147 | **C702_19.3 P132 BE132MA4** | 148 |
| **77** | 879 | 0.9 | 18.9 | 7100 | **C512_18.9 S4 ME4LA4** | 139 | **C512_18.9 P132 BE132MA4** | 140 |
| **82** | 822 | 1.6 | 17.7 | 12000 | **C612_17.7 S4 ME4LA4** | 143 | **C612_17.7 P132 BE132MA4** | 144 |
| **87** | 778 | 2.6 | 16.7 | 18200 | **C702_16.7 S4 ME4LA4** | 147 | **C702_16.7 P132 BE132MA4** | 148 |
| **88** | 773 | 1.0 | 16.6 | 8070 | **C512_16.6 S4 ME4LA4** | 139 | **C512_16.6 P132 BE132MA4** | 140 |
| **91** | 742 | 1.8 | 15.9 | 11800 | **C612_15.9 S4 ME4LA4** | 143 | **C612_15.9 P132 BE132MA4** | 144 |
| **95** | 714 | 2.9 | 15.3 | 18000 | **C702_15.3 S4 ME4LA4** | 147 | **C702_15.3 P132 BE132MA4** | 148 |
| **97** | 697 | 1.1 | 15.0 | 8000 | **C512_15.0 S4 ME4LA4** | 139 | **C512_15.0 P132 BE132MA4** | 140 |
| **101** | 668 | 2.0 | 14.3 | 11500 | **C612_14.3 S4 ME4LA4** | 143 | **C612_14.3 P132 BE132MA4** | 144 |
| **111** | 611 | 1.2 | 13.1 | 7840 | **C512_13.1 S4 ME4LA4** | 139 | **C512_13.1 P132 BE132MA4** | 140 |
| **120** | 563 | 2.4 | 12.1 | 11100 | **C612_12.1 S4 ME4LA4** | 143 | **C612_12.1 P132 BE132MA4** | 144 |
| **123** | 551 | 1.4 | 11.8 | 7730 | **C512_11.8 S4 ME4LA4** | 139 | **C512_11.8 P132 BE132MA4** | 140 |
| **134** | 507 | 2.7 | 10.9 | 10900 | **C612_10.9 S4 ME4LA4** | 143 | **C612_10.9 P132 BE132MA4** | 144 |
| **148** | 457 | 3.0 | 9.8 | 10600 | **C612_9.8 S4 ME4LA4** | 143 | **C612_9.8 P132 BE132MA4** | 144 |
| **149** | 454 | 1.5 | 9.8 | 7450 | **C512_9.8 S4 ME4LA4** | 139 | **C512_9.8 P132 BE132MA4** | 140 |
| **152** | 447 | 0.9 | 9.6 | 3300 | **C412_9.6 S4 ME4LA4** | 135 | **C412_9.6 P132 BE132MA4** | 136 |
| **165** | 412 | 3.3 | 8.8 | 10300 | **C612_8.8 S4 ME4LA4** | 143 | **C612_8.8 P132 BE132MA4** | 144 |
| **165** | 410 | 0.9 | 8.8 | 2880 | **C362_8.8 S4 ME4LA4** | 131 | **C362_8.8 P132 BE132MA4** | 132 |
| **166** | 409 | 1.7 | 8.8 | 7320 | **C512_8.8 S4 ME4LA4** | 139 | **C512_8.8 P132 BE132MA4** | 140 |
| **168** | 402 | 1.0 | 8.6 | 3430 | **C412_8.6 S4 ME4LA4** | 135 | **C412_8.6 P132 BE132MA4** | 136 |
| **181** | 374 | 1.0 | 8.0 | 2900 | **C362_8.0 S4 ME4LA4** | 131 | **C362_8.0 P132 BE132MA4** | 132 |
| **188** | 361 | 1.8 | 7.8 | 7120 | **C512_7.8 S4 ME4LA4** | 139 | **C512_7.8 P132 BE132MA4** | 140 |
| **206** | 329 | 1.1 | 7.1 | 3470 | **C412_7.1 S4 ME4LA4** | 135 | **C412_7.1 P132 BE132MA4** | 136 |
| **208** | 325 | 1.9 | 7.0 | 6970 | **C512_7.0 S4 ME4LA4** | 139 | **C512_7.0 P132 BE132MA4** | 140 |
| **215** | 316 | 1.1 | 6.8 | 2900 | **C362_6.8 S4 ME4LA4** | 131 | **C362_6.8 P132 BE132MA4** | 132 |
| **229** | 296 | 1.2 | 6.4 | 3440 | **C412_6.4 S4 ME4LA4** | 135 | **C412_6.4 P132 BE132MA4** | 136 |
| **242** | 279 | 2.4 | 6.0 | 9180 | **C612_6.0 S4 ME4LA4** | 143 | **C612_6.0 P132 BE132MA4** | 144 |
| **244** | 277 | 0.9 | 6.0 | 2920 | **C412_6.0 S4 ME4LA4** | 135 | **C412_6.0 P132 BE132MA4** | 136 |
| **258** | 262 | 1.7 | 5.6 | 6410 | **C512_5.6 S4 ME4LA4** | 139 | **C512_5.6 P132 BE132MA4** | 140 |
| **312** | 217 | 1.2 | 4.7 | 2960 | **C412_4.7 S4 ME4LA4** | 135 | **C412_4.7 P132 BE132MA4** | 136 |
| **315** | 215 | 0.9 | 4.6 | 2600 | **C362_4.6 S4 ME4LA4** | 131 | **C362_4.6 P132 BE132MA4** | 132 |
| **319** | 212 | 3.1 | 4.6 | 8550 | **C612_4.6 S4 ME4LA4** | 143 | **C612_4.6 P132 BE132MA4** | 144 |
| **327** | 207 | 2.1 | 4.5 | 6090 | **C512_4.5 S4 ME4LA4** | 139 | **C512_4.5 P132 BE132MA4** | 140 |
| **342** | 199 | 3.3 | 2.8 | 8390 | **C612_2.8 S5 ME5SB6** | 143 | **C612_2.8 P160 BE160MB6** | 144 |
| **346** | 196 | 1.0 | 4.2 | 2550 | **C362_4.2 S4 ME4LA4** | 131 | **C362_4.2 P132 BE132MA4** | 132 |
| **367** | 185 | 2.2 | 2.6 | 5920 | **C512_2.6 S5 ME5SB6** | 139 | **C512_2.6 P160 BE160MB6** | 140 |
| **403** | 168 | 1.5 | 3.6 | 2930 | **C412_3.6 S4 ME4LA4** | 135 | **C412_3.6 P132 BE132MA4** | 136 |
| **414** | 164 | 2.2 | 7.1 | 3240 | **C412_7.1 S4 ME4LA2** | 135 | **C412_7.1 P132 BE132SB2** | 136 |
| **417** | 162 | 1.2 | 3.5 | 2500 | **C362_3.5 S4 ME4LA4** | 131 | **C362_3.5 P132 BE132MA4** | 132 |
| **440** | 154 | 2.7 | 3.3 | 5660 | **C512_3.3 S4 ME4LA4** | 139 | **C512_3.3 P132 BE132MA4** | 140 |

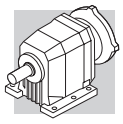


## 7.5 kW

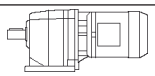
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **457** | 148 | 1.4 | 3.2 | 2500 | **C362_3.2 S4 ME4LA4** | 131 | **C362_3.2 P132 BE132MA4** | 132 |
| **460** | 148 | 2.3 | 6.4 | 3170 | **C412_6.4 S4 ME4LA2** | 135 | **C412_6.4 P132 BE132SB2** | 136 |
| **491** | 138 | 1.9 | 6.0 | 2880 | **C412_6.0 S4 ME4LA2** | 135 | **C412_6.0 P132 BE132SB2** | 136 |
| **505** | 134 | 1.0 | 2.9 | 2100 | **C322_2.9 S4 ME4LA4** | 127 | **C322_2.9 P132 BN132MA4** | 128 |
| **519** | 131 | 3.3 | 5.6 | 5420 | **C512_5.6 S4 ME4LA2** | 139 | **C512_5.6 P132 BE132SB2** | 140 |
| **542** | 125 | 1.6 | 2.7 | 2440 | **C362_2.7 S4 ME4LA4** | 131 | **C362_2.7 P132 BE132MA4** | 132 |
| **547** | 124 | 2.0 | 2.7 | 2840 | **C412_2.7 S4 ME4LA4** | 135 | **C412_2.7 P132 BE132MA4** | 136 |
| **553** | 122 | 3.3 | 2.6 | 5330 | **C512_2.6 S4 ME4LA4** | 139 | **C512_2.6 P132 BE132MA4** | 140 |
| **554** | 123 | 1.6 | 5.3 | 2370 | **C362_5.3 S4 ME4LA2** | 131 | **C362_5.3 P132 BE132SB2** | 132 |
| **627** | 108 | 2.4 | 4.7 | 2790 | **C412_4.7 S4 ME4LA2** | 135 | **C412_4.7 P132 BE132SB2** | 136 |
| **633** | 108 | 1.9 | 4.6 | 2330 | **C362_4.6 S4 ME4LA2** | 131 | **C362_4.6 P132 BE132SB2** | 132 |
| **696** | 98 | 2.0 | 4.2 | 2290 | **C362_4.2 S4 ME4LA2** | 131 | **C362_4.2 P132 BE132SB2** | 132 |
| **810** | 84 | 3.0 | 3.6 | 2670 | **C412_3.6 S4 ME4LA2** | 135 | **C412_3.6 P132 BE132SB2** | 136 |
| **839** | 81 | 2.5 | 3.5 | 2210 | **C362_3.5 S4 ME4LA2** | 131 | **C362_3.5 P132 BE132SB2** | 132 |
| **919** | 74 | 2.7 | 3.2 | 2170 | **C362_3.2 S4 ME4LA2** | 131 | **C362_3.2 P132 BE132SB2** | 132 |
| **1089** | 62 | 3.2 | 2.7 | 2100 | **C362_2.7 S4 ME4LA2** | 131 | **C362_2.7 P132 BE132SB2** | 132 |

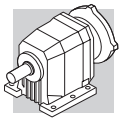
## 9.2 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **5.9** | 13408 | 0.9 | 244.2 | 85000 | **C1004_244.2 S4 ME4LB4** | 156 | **C1004_244.2 P132 BE132MB4** | 157 |
| **7.3** | 10960 | 1.1 | 199.6 | 85000 | **C1004_199.6 S4 ME4LB4** | 156 | **C1004_199.6 P132 BE132MB4** | 157 |
| **7.8** | 10177 | 1.2 | 185.4 | 85000 | **C1004_185.4 S4 ME4LB4** | 156 | **C1004_185.4 P132 BE132MB4** | 157 |
| **8.9** | 8900 | 1.3 | 162.1 | 85000 | **C1004_162.1 S4 ME4LB4** | 156 | **C1004_162.1 P132 BE132MB4** | 157 |
| **9.6** | 8534 | 1.4 | 150.4 | 85000 | **C1003_150.4 S4 ME4LB4** | 156 | **C1003_150.4 P132 BE132MB4** | 157 |
| **10.4** | 7924 | 1.4 | 139.7 | 85000 | **C1003_139.7 S4 ME4LB4** | 156 | **C1003_139.7 P132 BE132MB4** | 157 |
| **10.8** | 7610 | 0.9 | 134.1 | 54900 | **C903_134.1 S4 ME4LB4** | 153 | **C903_134.1 P132 BE132MB4** | 154 |
| **12.0** | 6837 | 1.8 | 120.5 | 85000 | **C1003_120.5 S4 ME4LB4** | 156 | **C1003_120.5 P132 BE132MB4** | 157 |
| **12.4** | 6622 | 1.1 | 116.7 | 54800 | **C903_116.7 S4 ME4LB4** | 153 | **C903_116.7 P132 BE132MB4** | 154 |
| **13.0** | 6348 | 1.9 | 111.9 | 85000 | **C1003_111.9 S4 ME4LB4** | 156 | **C1003_111.9 P132 BE132MB4** | 157 |
| **13.6** | 6070 | 1.2 | 107.0 | 54600 | **C903_107.0 S4 ME4LB4** | 153 | **C903_107.0 P132 BE132MB4** | 154 |
| **14.5** | 5662 | 2.1 | 99.8 | 85000 | **C1003_99.8 S4 ME4LB4** | 156 | **C1003_99.8 P132 BE132MB4** | 157 |
| **15.1** | 5460 | 1.3 | 96.2 | 54200 | **C903_96.2 S4 ME4LB4** | 153 | **C903_96.2 P132 BE132MB4** | 154 |
| **15.6** | 5257 | 2.3 | 92.7 | 85000 | **C1003_92.7 S4 ME4LB4** | 156 | **C1003_92.7 P132 BE132MB4** | 157 |
| **16.4** | 5005 | 1.4 | 88.2 | 53700 | **C903_88.2 S4 ME4LB4** | 153 | **C903_88.2 P132 BE132MB4** | 154 |
| **16.9** | 4854 | 2.5 | 85.6 | 85000 | **C1003_85.6 S4 ME4LB4** | 156 | **C1003_85.6 P132 BE132MB4** | 157 |
| **17.9** | 4607 | 1.6 | 81.2 | 53300 | **C903_81.2 S4 ME4LB4** | 153 | **C903_81.2 P132 BE132MB4** | 154 |
| **18.3** | 4507 | 2.7 | 79.4 | 85000 | **C1003_79.4 S4 ME4LB4** | 156 | **C1003_79.4 P132 BE132MB4** | 157 |
| **18.9** | 4363 | 0.9 | 76.9 | 33700 | **C803_76.9 S4 ME4LB4** | 150 | **C803_76.9 P132 BE132MB4** | 151 |
| **19.5** | 4223 | 1.7 | 74.4 | 52700 | **C903_74.4 S4 ME4LB4** | 153 | **C903_74.4 P132 BE132MB4** | 154 |
| **20.6** | 4000 | 1.0 | 70.5 | 35000 | **C803_70.5 S4 ME4LB4** | 150 | **C803_70.5 P132 BE132MB4** | 151 |
| **22.5** | 3664 | 2.0 | 64.6 | 51800 | **C903_64.6 S4 ME4LB4** | 153 | **C903_64.6 P132 BE132MB4** | 154 |
| **23.2** | 3546 | 1.1 | 62.5 | 35000 | **C803_62.5 S4 ME4LB4** | 150 | **C803_62.5 P132 BE132MB4** | 151 |
| **24.5** | 3358 | 2.1 | 59.2 | 51100 | **C903_59.2 S4 ME4LB4** | 153 | **C903_59.2 P132 BE132MB4** | 154 |
| **25.3** | 3250 | 1.2 | 57.3 | 35000 | **C803_57.3 S4 ME4LB4** | 150 | **C803_57.3 P132 BE132MB4** | 151 |
| **26.4** | 3113 | 2.3 | 54.9 | 50500 | **C903_54.9 S4 ME4LB4** | 153 | **C903_54.9 P132 BE132MB4** | 154 |
| **28.8** | 2854 | 2.5 | 50.3 | 49700 | **C903_50.3 S4 ME4LB4** | 153 | **C903_50.3 P132 BE132MB4** | 154 |
| **31** | 2692 | 1.4 | 47.4 | 34900 | **C803_47.4 S4 ME4LB4** | 150 | **C803_47.4 P132 BE132MB4** | 151 |
| **32** | 2536 | 0.9 | 44.7 | 21100 | **C703_44.7 S4 ME4LB4** | 147 | **C703_44.7 P132 BE132MB4** | 148 |
| **33** | 2467 | 1.5 | 43.5 | 34400 | **C803_43.5 S4 ME4LB4** | 150 | **C803_43.5 P132 BE132MB4** | 151 |
| **34** | 2439 | 3.0 | 43.0 | 48300 | **C903_43.0 S4 ME4LB4** | 153 | **C903_43.0 P132 BE132MB4** | 154 |
| **35** | 2341 | 1.0 | 41.3 | 21000 | **C703_41.3 S4 ME4LB4** | 147 | **C703_41.3 P132 BE132MB4** | 148 |
| **37** | 2266 | 1.4 | 39.1 | 32300 | **C802_39.1 S4 ME4LB4** | 150 | **C802_39.1 P132 BE132MB4** | 151 |



# 9.2 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **41** | 2034 | 2.7 | 35.1 | 46200 | **C902_35.1 S4 ME4LB4** | 153 | **C902_35.1 P132 BE132MB4** | 154 |
| **42** | 2014 | 1.0 | 34.7 | 19200 | **C702_34.7 S4 ME4LB4** | 147 | **C702_34.7 P132 BE132MB4** | 148 |
| **46** | 1816 | 2.0 | 31.3 | 31100 | **C802_31.3 S4 ME4LB4** | 150 | **C802_31.3 P132 BE132MB4** | 151 |
| **49** | 1706 | 3.5 | 29.4 | 44600 | **C902_29.4 S4 ME4LB4** | 153 | **C902_29.4 P132 BE132MB4** | 154 |
| **49** | 1612 | 0.9 | 29.4 | 10500 | **C613_29.4 S4 ME4LB4** | 143 | **C613_29.4 P132 BE132MB4** | 144 |
| **52** | 1606 | 1.3 | 27.7 | 18900 | **C702_27.7 S4 ME4LB4** | 147 | **C702_27.7 P132 BE132MB4** | 148 |
| **54** | 1470 | 1.0 | 26.8 | 11400 | **C613_26.8 S4 ME4LB4** | 143 | **C613_26.8 P132 BE132MB4** | 144 |
| **56** | 1504 | 2.5 | 25.9 | 30300 | **C802_25.9 S4 ME4LB4** | 150 | **C802_25.9 P132 BE132MB4** | 151 |
| **58** | 1438 | 0.9 | 24.8 | 11800 | **C612_24.8 S4 ME4LB4** | 143 | **C612_24.8 P132 BE132MB4** | 144 |
| **61** | 1388 | 2.6 | 24.0 | 30000 | **C802_24.0 S4 ME4LB4** | 150 | **C802_24.0 P132 BE132MB4** | 151 |
| **63** | 1324 | 1.6 | 22.9 | 18500 | **C702_22.9 S4 ME4LB4** | 147 | **C702_22.9 P132 BE132MB4** | 148 |
| **65** | 1295 | 1.0 | 22.4 | 11700 | **C612_22.4 S4 ME4LB4** | 143 | **C612_22.4 P132 BE132MB4** | 144 |
| **65** | 1289 | 2.9 | 22.2 | 29200 | **C802_22.2 S4 ME4LB4** | 150 | **C802_22.2 P132 BE132MB4** | 151 |
| **71** | 1190 | 3.0 | 20.5 | 28900 | **C802_20.5 S4 ME4LB4** | 150 | **C802_20.5 P132 BE132MB4** | 151 |
| **74** | 1136 | 1.2 | 19.6 | 11600 | **C612_19.6 S4 ME4LB4** | 143 | **C612_19.6 P132 BE132MB4** | 144 |
| **75** | 1118 | 1.9 | 19.3 | 18100 | **C702_19.3 S4 ME4LB4** | 147 | **C702_19.3 P132 BE132MB4** | 148 |
| **82** | 1023 | 1.3 | 17.7 | 11400 | **C612_17.7 S4 ME4LB4** | 143 | **C612_17.7 P132 BE132MB4** | 144 |
| **87** | 968 | 2.1 | 16.7 | 17500 | **C702_16.7 S4 ME4LB4** | 147 | **C702_16.7 P132 BE132MB4** | 148 |
| **91** | 923 | 1.5 | 15.9 | 11200 | **C612_15.9 S4 ME4LB4** | 143 | **C612_15.9 P132 BE132MB4** | 144 |
| **95** | 889 | 2.4 | 15.3 | 17500 | **C702_15.3 S4 ME4LB4** | 147 | **C702_15.3 P132 BE132MB4** | 148 |
| **97** | 867 | 0.9 | 15.0 | 7430 | **C512_15.0 S4 ME4LB4** | 139 | **C512_15.0 P132 BE132MB4** | 140 |
| **101** | 831 | 1.6 | 14.3 | 11000 | **C612_14.3 S4 ME4LB4** | 143 | **C612_14.3 P132 BE132MB4** | 144 |
| **103** | 817 | 2.6 | 14.1 | 17000 | **C702_14.1 S4 ME4LB4** | 147 | **C702_14.1 P132 BE132MB4** | 148 |
| **110** | 761 | 1.0 | 13.1 | 7340 | **C512_13.1 S4 ME4LB4** | 139 | **C512_13.1 P132 BE132MB4** | 140 |
| **111** | 755 | 2.8 | 13.0 | 17000 | **C702_13.0 S4 ME4LB4** | 147 | **C702_13.0 P132 BE132MB4** | 148 |
| **120** | 701 | 1.9 | 12.1 | 10700 | **C612_12.1 S4 ME4LB4** | 143 | **C612_12.1 P132 BE132MB4** | 144 |
| **123** | 686 | 1.1 | 11.8 | 7280 | **C512_11.8 S4 ME4LB4** | 139 | **C512_11.8 P132 BE132MB4** | 140 |
| **128** | 653 | 3.2 | 22.9 | 16500 | **C702_22.9 S4 ME4LB2** | 147 | **C702_22.9 P132 BE132MB2** | 148 |
| **133** | 631 | 2.1 | 10.9 | 10500 | **C612_10.9 S4 ME4LB4** | 143 | **C612_10.9 P132 BE132MB4** | 144 |
| **148** | 569 | 2.4 | 9.8 | 10300 | **C612_9.8 S4 ME4LB4** | 143 | **C612_9.8 P132 BE132MB4** | 144 |
| **149** | 565 | 1.2 | 9.8 | 7080 | **C512_9.8 S4 ME4LB4** | 139 | **C512_9.8 P132 BE132MB4** | 140 |
| **164** | 512 | 2.6 | 8.8 | 10000 | **C612_8.8 S4 ME4LB4** | 143 | **C612_8.8 P132 BE132MB4** | 144 |
| **165** | 509 | 1.3 | 8.8 | 6990 | **C512_8.8 S4 ME4LB4** | 139 | **C512_8.8 P132 BE132MB4** | 140 |
| **187** | 449 | 1.4 | 7.8 | 6820 | **C512_7.8 S4 ME4LB4** | 139 | **C512_7.8 P132 BE132MB4** | 140 |
| **194** | 434 | 3.1 | 7.5 | 9670 | **C612_7.5 S4 ME4LB4** | 143 | **C612_7.5 P132 BE132MB4** | 144 |
| **208** | 405 | 1.6 | 7.0 | 6710 | **C512_7.0 S4 ME4LB4** | 139 | **C512_7.0 P132 BE132MB4** | 140 |
| **215** | 391 | 3.5 | 6.7 | 9410 | **C612_6.7 S4 ME4LB4** | 143 | **C612_6.7 P132 BE132MB4** | 144 |
| **228** | 369 | 0.9 | 6.4 | 3100 | **C412_6.4 S4 ME4LB4** | 135 | **C412_6.4 P132 BE132MB4** | 136 |
| **242** | 348 | 1.9 | 6.0 | 8930 | **C612_6.0 S4 ME4LB4** | 143 | **C612_6.0 P132 BE132MB4** | 144 |
| **258** | 326 | 1.3 | 5.6 | 6150 | **C512_5.6 S4 ME4LB4** | 139 | **C512_5.6 P132 BE132MB4** | 140 |
| **262** | 319 | 1.3 | 11.2 | 3110 | **C412_11.2 S4 ME4LB2** | 135 | **C412_11.2 P132 BE132MB2** | 136 |
| **311** | 270 | 1.0 | 4.7 | 2620 | **C412_4.7 S4 ME4LB4** | 135 | **C412_4.7 P132 BE132MB4** | 136 |
| **318** | 264 | 2.5 | 4.6 | 8360 | **C612_4.6 S4 ME4LB4** | 143 | **C612_4.6 P132 BE132MB4** | 144 |
| **326** | 258 | 1.7 | 4.5 | 5880 | **C512_4.5 S4 ME4LB4** | 139 | **C512_4.5 P132 BE132MB4** | 140 |
| **338** | 247 | 1.6 | 8.6 | 3090 | **C412_8.6 S4 ME4LB2** | 135 | **C412_8.6 P132 BE132MB2** | 136 |
| **377** | 222 | 2.9 | 7.8 | 5870 | **C512_7.8 S4 ME4LB2** | 139 | **C512_7.8 P132 BE132MB2** | 140 |
| **402** | 209 | 1.2 | 3.6 | 2670 | **C412_3.6 S4 ME4LB4** | 135 | **C412_3.6 P132 BE132MB4** | 136 |
| **413** | 202 | 1.8 | 7.1 | 3050 | **C412_7.1 S4 ME4LB2** | 135 | **C412_7.1 P132 BE132MB2** | 136 |
| **416** | 202 | 1.0 | 3.5 | 2300 | **C362_3.5 S4 ME4LB4** | 131 | **C362_3.5 P132 BE132MB4** | 132 |
| **418** | 200 | 3.2 | 7.0 | 5730 | **C512_7.0 S4 ME4LB2** | 139 | **C512_7.0 P132 BE132MB2** | 140 |
| **438** | 192 | 2.2 | 3.3 | 5510 | **C512_3.3 S4 ME4LB4** | 139 | **C512_3.3 P132 BE132MB4** | 140 |
| **456** | 184 | 1.1 | 3.2 | 2300 | **C362_3.2 S4 ME4LB4** | 131 | **C362_3.2 P132 BE132MB4** | 132 |
| **459** | 182 | 1.9 | 6.4 | 3000 | **C412_6.4 S4 ME4LB2** | 135 | **C412_6.4 P132 BE132MB2** | 136 |
| **491** | 170 | 1.5 | 6.0 | 2660 | **C412_6.0 S4 ME4LB2** | 135 | **C412_6.0 P132 BE132MB2** | 136 |
| **519** | 161 | 2.7 | 5.6 | 5290 | **C512_5.6 S4 ME4LB2** | 139 | **C512_5.6 P132 BE132MB2** | 140 |
| **540** | 156 | 1.3 | 2.7 | 2280 | **C362_2.7 S4 ME4LB4** | 131 | **C362_2.7 P132 BE132MB4** | 132 |
| **545** | 154 | 1.6 | 2.7 | 2650 | **C412_2.7 S4 ME4LB4** | 135 | **C412_2.7 P132 BE132MB4** | 136 |

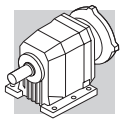


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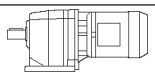
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **552** | 152 | 2.6 | 2.6 | 5210 | **C512_2.6 S4 ME4LB4** | 139 | **C512_2.6 P132 BE132MB4** | 140 |
| **626** | 133 | 2.0 | 4.7 | 2620 | **C412_4.7 S4 ME4LB2** | 135 | **C412_4.7 P132 BE132MB2** | 136 |
| **656** | 127 | 3.4 | 4.5 | 4980 | **C512_4.5 S4 ME4LB2** | 139 | **C512_4.5 P132 BE132MB2** | 140 |
| **695** | 120 | 1.7 | 4.2 | 2180 | **C362_4.2 S4 ME4LB2** | 131 | **C362_4.2 P132 BE132MB2** | 132 |
| **809** | 103 | 2.5 | 3.6 | 2540 | **C412_3.6 S4 ME4LB2** | 135 | **C412_3.6 P132 BE132MB2** | 136 |
| **838** | 100 | 2.0 | 3.5 | 2120 | **C362_3.5 S4 ME4LB2** | 131 | **C362_3.5 P132 BE132MB2** | 132 |
| **918** | 91 | 2.2 | 3.2 | 2090 | **C362_3.2 S4 ME4LB2** | 131 | **C362_3.2 P132 BE132MB2** | 132 |
| **1087** | 77 | 2.6 | 2.7 | 2020 | **C362_2.7 S4 ME4LB2** | 131 | **C362_2.7 P132 BE132MB2** | 132 |
| **1098** | 76 | 3.2 | 2.7 | 2410 | **C412_2.7 S4 ME4LB2** | 135 | **C412_2.7 P132 BE132MB2** | 136 |

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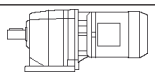
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **7.4** | 12936 | 0.9 | 199.6 | 85000 | **C1004_199.6 S5 ME5SA4** | 156 | **C1004_199.6 P160 BE160M4** | 157 |
| **7.9** | 12012 | 1.0 | 185.4 | 85000 | **C1004_185.4 S5 ME5SA4** | 156 | **C1004_185.4 P160 BE160M4** | 157 |
| **9.1** | 10504 | 1.1 | 162.1 | 85000 | **C1004_162.1 S5 ME5SA4** | 156 | **C1004_162.1 P160 BE160M4** | 157 |
| **9.8** | 10073 | 1.2 | 150.4 | 85000 | **C1003_150.4 S5 ME5SA4** | 156 | **C1003_150.4 P160 BE160M4** | 157 |
| **10.5** | 9353 | 1.2 | 139.7 | 85000 | **C1003_139.7 S5 ME5SA4** | 156 | **C1003_139.7 P160 BE160M4** | 157 |
| **12.2** | 8070 | 1.5 | 120.5 | 85000 | **C1003_120.5 S5 ME5SA4** | 156 | **C1003_120.5 P160 BE160M4** | 157 |
| **12.6** | 7816 | 0.9 | 116.7 | 50800 | **C903_116.7 S5 ME5SA4** | 153 | **C903_116.7 P160 BE160M4** | 154 |
| **13.1** | 7493 | 1.6 | 111.9 | 85000 | **C1003_111.9 S5 ME5SA4** | 156 | **C1003_111.9 P160 BE160M4** | 157 |
| **13.7** | 7165 | 1.0 | 107.0 | 51000 | **C903_107.0 S5 ME5SA4** | 153 | **C903_107.0 P160 BE160M4** | 154 |
| **14.7** | 6683 | 1.8 | 99.8 | 85000 | **C1003_99.8 S5 ME5SA4** | 156 | **C1003_99.8 P160 BE160M4** | 157 |
| **15.3** | 6444 | 1.1 | 96.2 | 50800 | **C903_96.2 S5 ME5SA4** | 153 | **C903_96.2 P160 BE160M4** | 154 |
| **15.9** | 6205 | 1.9 | 92.7 | 85000 | **C1003_92.7 S5 ME5SA4** | 156 | **C1003_92.7 P160 BE160M4** | 157 |
| **16.7** | 5907 | 1.2 | 88.2 | 50700 | **C903_88.2 S5 ME5SA4** | 153 | **C903_88.2 P160 BE160M4** | 154 |
| **17.2** | 5729 | 2.1 | 85.6 | 85000 | **C1003_85.6 S5 ME5SA4** | 156 | **C1003_85.6 P160 BE160M4** | 157 |
| **18.1** | 5438 | 1.3 | 81.2 | 50700 | **C903_81.2 S5 ME5SA4** | 153 | **C903_81.2 P160 BE160M4** | 154 |
| **18.5** | 5320 | 2.3 | 79.4 | 85000 | **C1003_79.4 S5 ME5SA4** | 156 | **C1003_79.4 P160 BE160M4** | 157 |
| **19.7** | 4985 | 1.4 | 74.4 | 50200 | **C903_74.4 S5 ME5SA4** | 153 | **C903_74.4 P160 BE160M4** | 154 |
| **21.2** | 4649 | 2.6 | 69.4 | 84800 | **C1003_69.4 S5 ME5SA4** | 156 | **C1003_69.4 P160 BE160M4** | 157 |
| **22.8** | 4324 | 1.7 | 64.6 | 50000 | **C903_64.6 S5 ME5SA4** | 153 | **C903_64.6 P160 BE160M4** | 154 |
| **22.8** | 4317 | 2.8 | 64.5 | 83100 | **C1003_64.5 S5 ME5SA4** | 156 | **C1003_64.5 P160 BE160M4** | 157 |
| **23.5** | 4185 | 1.0 | 62.5 | 33000 | **C803_62.5 S5 ME5SA4** | 150 | **C803_62.5 P160 BE160M4** | 151 |
| **24.8** | 3964 | 1.8 | 59.2 | 49000 | **C903_59.2 S5 ME5SA4** | 153 | **C903_59.2 P160 BE160M4** | 154 |
| **25.7** | 3837 | 1.0 | 57.3 | 34200 | **C803_57.3 S5 ME5SA4** | 150 | **C803_57.3 P160 BE160M4** | 151 |
| **26.8** | 3674 | 2.0 | 54.9 | 48800 | **C903_54.9 S5 ME5SA4** | 153 | **C903_54.9 P160 BE160M4** | 154 |
| **29.2** | 3368 | 2.1 | 50.3 | 48000 | **C903_50.3 S5 ME5SA4** | 153 | **C903_50.3 P160 BE160M4** | 154 |
| **31** | 3177 | 1.2 | 47.4 | 33500 | **C803_47.4 S5 ME5SA4** | 150 | **C803_47.4 P160 BE160M4** | 151 |
| **34** | 2912 | 1.3 | 43.5 | 33100 | **C803_43.5 S5 ME5SA4** | 150 | **C803_43.5 P160 BE160M4** | 151 |
| **34** | 2878 | 2.5 | 43.0 | 47000 | **C903_43.0 S5 ME5SA4** | 153 | **C903_43.0 P160 BE160M4** | 154 |
| **37** | 2638 | 2.7 | 39.4 | 46100 | **C903_39.4 S5 ME5SA4** | 153 | **C903_39.4 P160 BE160M4** | 154 |
| **38** | 2675 | 1.2 | 39.1 | 30900 | **C802_39.1 S5 ME5SA4** | 150 | **C802_39.1 P160 BE160M4** | 151 |
| **42** | 2401 | 2.2 | 35.1 | 45000 | **C902_35.1 S5 ME5SA4** | 153 | **C902_35.1 P160 BE160M4** | 154 |
| **47** | 2143 | 1.7 | 31.3 | 30000 | **C802_31.3 S5 ME5SA4** | 150 | **C802_31.3 P160 BE160M4** | 151 |
| **50** | 2013 | 2.9 | 29.4 | 43400 | **C902_29.4 S5 ME5SA4** | 153 | **C902_29.4 P160 BE160M4** | 154 |
| **53** | 1896 | 1.1 | 27.7 | 17800 | **C702_27.7 S5 ME5SA4** | 147 | **C702_27.7 P160 BE160M4** | 148 |
| **54** | 1859 | 3.0 | 27.2 | 42700 | **C902_27.2 S5 ME5SA4** | 153 | **C902_27.2 P160 BE160M4** | 154 |
| **57** | 1775 | 2.1 | 25.9 | 29200 | **C802_25.9 S5 ME5SA4** | 150 | **C802_25.9 P160 BE160M4** | 151 |
| **61** | 1638 | 2.2 | 24.0 | 28700 | **C802_24.0 S5 ME5SA4** | 150 | **C802_24.0 P160 BE160M4** | 151 |
| **64** | 1563 | 1.3 | 22.9 | 17600 | **C702_22.9 S5 ME5SA4** | 147 | **C702_22.9 P160 BE160M4** | 148 |
| **66** | 1522 | 2.4 | 22.2 | 28400 | **C802_22.2 S5 ME5SA4** | 150 | **C802_22.2 P160 BE160M4** | 151 |
| **72** | 1404 | 2.5 | 20.5 | 28000 | **C802_20.5 S5 ME5SA4** | 150 | **C802_20.5 P160 BE160M4** | 151 |

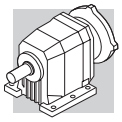


# 11 kW

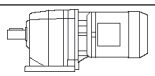
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **75** | 1341 | 1.0 | 19.6 | 10800 | **C612_19.6 S5 ME5SA4** | 143 | **C612_19.6 P160 BE160M4** | 144 |
| **76** | 1319 | 1.6 | 19.3 | 17300 | **C702_19.3 S5 ME5SA4** | 147 | **C702_19.3 P160 BE160M4** | 148 |
| **81** | 1235 | 3.0 | 18.1 | 27300 | **C802_18.1 S5 ME5SA4** | 150 | **C802_18.1 P160 BE160M4** | 151 |
| **83** | 1207 | 1.1 | 17.7 | 10700 | **C612_17.7 S5 ME5SA4** | 143 | **C612_17.7 P160 BE160M4** | 144 |
| **88** | 1143 | 1.8 | 16.7 | 16800 | **C702_16.7 S5 ME5SA4** | 147 | **C702_16.7 P160 BE160M4** | 148 |
| **88** | 1140 | 3.1 | 16.7 | 26900 | **C802_16.7 S5 ME5SA4** | 150 | **C802_16.7 P160 BE160M4** | 151 |
| **92** | 1090 | 1.2 | 15.9 | 10700 | **C612_15.9 S5 ME5SA4** | 143 | **C612_15.9 P160 BE160M4** | 144 |
| **96** | 1049 | 2.0 | 15.3 | 16800 | **C702_15.3 S5 ME5SA4** | 147 | **C702_15.3 P160 BE160M4** | 148 |
| **102** | 981 | 1.4 | 14.3 | 10500 | **C612_14.3 S5 ME5SA4** | 143 | **C612_14.3 P160 BE160M4** | 144 |
| **104** | 964 | 2.2 | 14.1 | 16400 | **C702_14.1 S5 ME5SA4** | 147 | **C702_14.1 P160 BE160M4** | 148 |
| **113** | 891 | 2.4 | 13.0 | 16400 | **C702_13.0 S5 ME5SA4** | 147 | **C702_13.0 P160 BE160M4** | 148 |
| **122** | 827 | 1.6 | 12.1 | 10300 | **C612_12.1 S5 ME5SA4** | 143 | **C612_12.1 P160 BE160M4** | 144 |
| **124** | 810 | 1.0 | 11.8 | 6810 | **C512_11.8 S5 ME5SA4** | 139 | **C512_11.8 P160 BE160M4** | 140 |
| **131** | 767 | 2.8 | 11.2 | 15800 | **C702_11.2 S5 ME5SA4** | 147 | **C702_11.2 P160 BE160M4** | 148 |
| **135** | 745 | 1.8 | 10.9 | 10100 | **C612_10.9 S5 ME5SA4** | 143 | **C612_10.9 P160 BE160M4** | 144 |
| **144** | 698 | 3.0 | 10.2 | 15700 | **C702_10.2 S5 ME5SA4** | 147 | **C702_10.2 P160 BE160M4** | 148 |
| **150** | 672 | 2.0 | 9.8 | 9910 | **C612_9.8 S5 ME5SA4** | 143 | **C612_9.8 P160 BE160M4** | 144 |
| **151** | 667 | 1.0 | 9.8 | 6690 | **C512_9.8 S5 ME5SA4** | 139 | **C512_9.8 P160 BE160M4** | 140 |
| **154** | 651 | 3.3 | 9.5 | 15400 | **C702_9.5 S5 ME5SA4** | 147 | **C702_9.5 P160 BE160M4** | 148 |
| **166** | 605 | 2.2 | 8.8 | 9690 | **C612_8.8 S5 ME5SA4** | 143 | **C612_8.8 P160 BE160M4** | 144 |
| **167** | 601 | 1.1 | 8.8 | 6640 | **C512_8.8 S5 ME5SA4** | 139 | **C512_8.8 P160 BE160M4** | 140 |
| **190** | 530 | 1.2 | 7.8 | 6510 | **C512_7.8 S5 ME5SA4** | 139 | **C512_7.8 P160 BE160M4** | 140 |
| **196** | 512 | 2.6 | 7.5 | 9390 | **C612_7.5 S5 ME5SA4** | 143 | **C612_7.5 P160 BE160M4** | 144 |
| **210** | 478 | 1.3 | 7.0 | 6430 | **C512_7.0 S5 ME5SA4** | 139 | **C512_7.0 P160 BE160M4** | 140 |
| **218** | 461 | 2.9 | 6.7 | 9150 | **C612_6.7 S5 ME5SA4** | 143 | **C612_6.7 P160 BE160M4** | 144 |
| **245** | 411 | 1.6 | 6.0 | 8670 | **C612_6.0 S5 ME5SA4** | 143 | **C612_6.0 P160 BE160M4** | 144 |
| **261** | 385 | 1.1 | 5.6 | 5880 | **C512_5.6 S5 ME5SA4** | 139 | **C512_5.6 P160 BE160M4** | 140 |
| **323** | 312 | 2.1 | 4.6 | 8160 | **C612_4.6 S5 ME5SA4** | 143 | **C612_4.6 P160 BE160M4** | 144 |
| **330** | 305 | 1.4 | 4.5 | 5660 | **C512_4.5 S5 ME5SA4** | 139 | **C512_4.5 P160 BE160M4** | 140 |
| **397** | 253 | 2.6 | 3.7 | 7760 | **C612_3.7 S5 ME5SA4** | 143 | **C612_3.7 P160 BE160M4** | 144 |
| **444** | 226 | 1.9 | 3.3 | 5340 | **C512_3.3 S5 ME5SA4** | 139 | **C512_3.3 P160 BE160M4** | 140 |
| **521** | 193 | 3.4 | 2.8 | 7240 | **C612_2.8 S5 ME5SA4** | 143 | **C612_2.8 P160 BE160M4** | 144 |
| **522** | 191 | 2.3 | 5.6 | 5140 | **C512_5.6 S5 ME5SA2** | 139 | **C512_5.6 P160 BE160MA2** | 140 |
| **559** | 180 | 2.2 | 2.6 | 5080 | **C512_2.6 S5 ME5SA4** | 139 | **C512_2.6 P160 BE160M4** | 140 |
| **660** | 151 | 2.9 | 4.5 | 4870 | **C512_4.5 S5 ME5SA2** | 139 | **C512_4.5 P160 BE160MA2** | 140 |

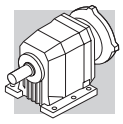
# 15 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **12.2** | 10984 | 1.1 | 120.5 | 83800 | **C1003_120.5 S5 ME5LA4** | 156 | **C1003_120.5 P160 BE160L4** | 157 |
| **13.1** | 10199 | 1.2 | 111.9 | 83300 | **C1003_111.9 S5 ME5LA4** | 156 | **C1003_111.9 P160 BE160L4** | 157 |
| **14.7** | 9096 | 1.3 | 99.8 | 82700 | **C1003_99.8 S5 ME5LA4** | 156 | **C1003_99.8 P160 BE160L4** | 157 |
| **15.9** | 8446 | 1.4 | 92.7 | 82400 | **C1003_92.7 S5 ME5LA4** | 156 | **C1003_92.7 P160 BE160L4** | 157 |
| **17.2** | 7798 | 1.5 | 85.6 | 81500 | **C1003_85.6 S5 ME5LA4** | 156 | **C1003_85.6 P160 BE160L4** | 157 |
| **18.1** | 7402 | 1.0 | 81.2 | 44300 | **C903_81.2 S5 ME5LA4** | 153 | **C903_81.2 P160 BE160L4** | 154 |
| **18.5** | 7241 | 1.7 | 79.4 | 81000 | **C1003_79.4 S5 ME5LA4** | 156 | **C1003_79.4 P160 BE160L4** | 157 |
| **19.7** | 6785 | 1.0 | 74.4 | 44800 | **C903_74.4 S5 ME5LA4** | 153 | **C903_74.4 P160 BE160L4** | 154 |
| **21.2** | 6328 | 1.9 | 69.4 | 79500 | **C1003_69.4 S5 ME5LA4** | 156 | **C1003_69.4 P160 BE160L4** | 157 |
| **22.8** | 5886 | 1.2 | 64.6 | 44500 | **C903_64.6 S5 ME5LA4** | 153 | **C903_64.6 P160 BE160L4** | 154 |
| **22.8** | 5876 | 2.0 | 64.5 | 78600 | **C1003_64.5 S5 ME5LA4** | 156 | **C1003_64.5 P160 BE160L4** | 157 |
| **24.8** | 5396 | 1.3 | 59.2 | 44400 | **C903_59.2 S5 ME5LA4** | 153 | **C903_59.2 P160 BE160L4** | 154 |
| **25.6** | 5227 | 2.3 | 57.4 | 77400 | **C1003_57.4 S5 ME5LA4** | 156 | **C1003_57.4 P160 BE160L4** | 157 |
| **26.8** | 5001 | 1.4 | 54.9 | 44300 | **C903_54.9 S5 ME5LA4** | 153 | **C903_54.9 P160 BE160L4** | 154 |

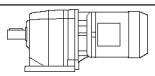


# 15 kW

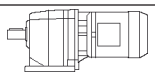
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **27.6** | 4854 | 2.5 | 53.3 | 76200 | **C1003_53.3 S5 ME5LA4** | 156 | **C1003_53.3 P160 BE160L4** | 157 |
| **29.2** | 4584 | 1.5 | 50.3 | 44100 | **C903_50.3 S5 ME5LA4** | 153 | **C903_50.3 P160 BE160L4** | 154 |
| **32** | 4213 | 2.8 | 46.2 | 74500 | **C1003_46.2 S5 ME5LA4** | 156 | **C1003_46.2 P160 BE160L4** | 157 |
| **34** | 3964 | 1.0 | 43.5 | 30300 | **C803_43.5 S5 ME5LA4** | 150 | **C803_43.5 P160 BE160L4** | 151 |
| **34** | 3918 | 1.8 | 43.0 | 44100 | **C903_43.0 S5 ME5LA4** | 153 | **C903_43.0 P160 BE160L4** | 154 |
| **37** | 3591 | 2.0 | 39.4 | 43000 | **C903_39.4 S5 ME5LA4** | 153 | **C903_39.4 P160 BE160L4** | 154 |
| **38** | 3641 | 0.9 | 39.1 | 27300 | **C802_39.1 S5 ME5LA4** | 150 | **C802_39.1 P160 BE160L4** | 151 |
| **42** | 3268 | 1.7 | 35.1 | 42200 | **C902_35.1 S5 ME5LA4** | 153 | **C902_35.1 P160 BE160L4** | 154 |
| **47** | 2917 | 1.3 | 31.3 | 27500 | **C802_31.3 S5 ME5LA4** | 150 | **C802_31.3 P160 BE160L4** | 151 |
| **50** | 2740 | 2.2 | 29.4 | 41100 | **C902_29.4 S5 ME5LA4** | 153 | **C902_29.4 P160 BE160L4** | 154 |
| **54** | 2530 | 2.2 | 27.2 | 40700 | **C902_27.2 S5 ME5LA4** | 153 | **C902_27.2 P160 BE160L4** | 154 |
| **57** | 2416 | 1.5 | 25.9 | 27100 | **C802_25.9 S5 ME5LA4** | 150 | **C802_25.9 P160 BE160L4** | 151 |
| **59** | 2311 | 2.9 | 24.8 | 40000 | **C902_24.8 S5 ME5LA4** | 153 | **C902_24.8 P160 BE160L4** | 154 |
| **61** | 2230 | 1.6 | 24.0 | 26900 | **C802_24.0 S5 ME5LA4** | 150 | **C802_24.0 P160 BE160L4** | 151 |
| **64** | 2134 | 2.9 | 22.9 | 39500 | **C902_22.9 S5 ME5LA4** | 153 | **C902_22.9 P160 BE160L4** | 154 |
| **64** | 2128 | 1.0 | 22.9 | 15400 | **C702_22.9 S5 ME5LA4** | 147 | **C702_22.9 P160 BE160L4** | 148 |
| **66** | 2071 | 1.8 | 22.2 | 26600 | **C802_22.2 S5 ME5LA4** | 150 | **C802_22.2 P160 BE160L4** | 151 |
| **72** | 1912 | 1.9 | 20.5 | 26200 | **C802_20.5 S5 ME5LA4** | 150 | **C802_20.5 P160 BE160L4** | 151 |
| **73** | 1884 | 3.5 | 20.2 | 38500 | **C902_20.2 S5 ME5LA4** | 153 | **C902_20.2 P160 BE160L4** | 154 |
| **76** | 1795 | 1.2 | 19.3 | 15600 | **C702_19.3 S5 ME5LA4** | 147 | **C702_19.3 P160 BE160L4** | 148 |
| **81** | 1681 | 2.2 | 18.1 | 25800 | **C802_18.1 S5 ME5LA4** | 150 | **C802_18.1 P160 BE160L4** | 151 |
| **88** | 1555 | 1.3 | 16.7 | 15400 | **C702_16.7 S5 ME5LA4** | 147 | **C702_16.7 P160 BE160L4** | 148 |
| **88** | 1551 | 2.3 | 16.7 | 25500 | **C802_16.7 S5 ME5LA4** | 150 | **C802_16.7 P160 BE160L4** | 151 |
| **92** | 1483 | 0.9 | 15.9 | 9350 | **C612_15.9 S5 ME5LA4** | 143 | **C612_15.9 P160 BE160L4** | 144 |
| **96** | 1428 | 1.5 | 15.3 | 15400 | **C702_15.3 S5 ME5LA4** | 147 | **C702_15.3 P160 BE160L4** | 148 |
| **99** | 1388 | 2.7 | 14.9 | 25000 | **C802_14.9 S5 ME5LA4** | 150 | **C802_14.9 P160 BE160L4** | 151 |
| **102** | 1336 | 1.0 | 14.3 | 9280 | **C612_14.3 S5 ME5LA4** | 143 | **C612_14.3 P160 BE160L4** | 144 |
| **104** | 1312 | 1.6 | 14.1 | 15300 | **C702_14.1 S5 ME5LA4** | 147 | **C702_14.1 P160 BE160L4** | 148 |
| **107** | 1281 | 2.7 | 13.8 | 25000 | **C802_13.8 S5 ME5LA4** | 150 | **C802_13.8 P160 BE160L4** | 151 |
| **113** | 1213 | 1.7 | 13.0 | 15200 | **C702_13.0 S5 ME5LA4** | 147 | **C702_13.0 P160 BE160L4** | 148 |
| **122** | 1126 | 1.2 | 12.1 | 9270 | **C612_12.1 S5 ME5LA4** | 143 | **C612_12.1 P160 BE160L4** | 144 |
| **131** | 1044 | 2.1 | 11.2 | 14700 | **C702_11.2 S5 ME5LA4** | 147 | **C702_11.2 P160 BE160L4** | 148 |
| **135** | 1014 | 1.3 | 10.9 | 9140 | **C612_10.9 S5 ME5LA4** | 143 | **C612_10.9 P160 BE160L4** | 144 |
| **144** | 950 | 2.2 | 10.2 | 14600 | **C702_10.2 S5 ME5LA4** | 147 | **C702_10.2 P160 BE160L4** | 148 |
| **150** | 914 | 1.5 | 9.8 | 9090 | **C612_9.8 S5 ME5LA4** | 143 | **C612_9.8 P160 BE160L4** | 144 |
| **154** | 887 | 2.4 | 9.5 | 14400 | **C702_9.5 S5 ME5LA4** | 147 | **C702_9.5 P160 BE160L4** | 148 |
| **166** | 823 | 1.6 | 8.8 | 8930 | **C612_8.8 S5 ME5LA4** | 143 | **C612_8.8 P160 BE160L4** | 144 |
| **184** | 745 | 2.8 | 8.0 | 14200 | | | **C702_8.0 P160 BE160L4** | 148 |
| **196** | 697 | 1.9 | 7.5 | 8760 | **C612_7.5 S5 ME5LA4** | 143 | **C612_7.5 P160 BE160L4** | 144 |
| **197** | 695 | 3.0 | 7.5 | 14000 | **C702_7.5 S5 ME5LA4** | 147 | **C702_7.5 P160 BE160L4** | 148 |
| **210** | 650 | 1.0 | 7.0 | 5800 | **C512_7.0 S5 ME5LA4** | 139 | **C512_7.0 P160 BE160L4** | 140 |
| **218** | 628 | 2.2 | 6.7 | 8570 | **C612_6.7 S5 ME5LA4** | 143 | **C612_6.7 P160 BE160L4** | 144 |
| **224** | 608 | 1.2 | 13.1 | 5760 | **C512_13.1 S5 ME5SB2** | 139 | **C512_13.1 P160 BE160MB2** | 140 |
| **243** | 560 | 2.4 | 12.1 | 8430 | **C612_12.1 S5 ME5SB2** | 143 | **C612_12.1 P160 BE160MB2** | 144 |
| **245** | 559 | 1.2 | 6.0 | 8130 | **C612_6.0 S5 ME5LA4** | 143 | **C612_6.0 P160 BE160L4** | 144 |
| **248** | 548 | 1.4 | 11.8 | 5720 | **C512_11.8 S5 ME5SB2** | 139 | **C512_11.8 P160 BE160MB2** | 140 |
| **270** | 504 | 2.7 | 10.9 | 8230 | **C612_10.9 S5 ME5SB2** | 143 | **C612_10.9 P160 BE160MB2** | 144 |
| **299** | 454 | 3.0 | 9.8 | 8090 | **C612_9.8 S5 ME5SB2** | 143 | **C612_9.8 P160 BE160MB2** | 144 |
| **301** | 451 | 1.5 | 9.8 | 5570 | **C512_9.8 S5 ME5SB2** | 139 | **C512_9.8 P160 BE160MB2** | 140 |
| **323** | 424 | 1.6 | 4.6 | 7690 | **C612_4.6 S5 ME5LA4** | 143 | **C612_4.6 P160 BE160L4** | 144 |
| **330** | 415 | 1.0 | 4.5 | 5250 | **C512_4.5 S5 ME5LA4** | 139 | **C512_4.5 P160 BE160L4** | 140 |
| **333** | 409 | 3.3 | 8.8 | 7880 | **C612_8.8 S5 ME5SB2** | 143 | **C612_8.8 P160 BE160MB2** | 144 |
| **334** | 407 | 1.7 | 8.8 | 5490 | **C512_8.8 S5 ME5SB2** | 139 | **C512_8.8 P160 BE160MB2** | 140 |
| **379** | 359 | 1.8 | 7.8 | 5370 | **C512_7.8 S5 ME5SB2** | 139 | **C512_7.8 P160 BE160MB2** | 140 |
| **397** | 344 | 1.9 | 3.7 | 7370 | **C612_3.7 S5 ME5LA4** | 143 | **C612_3.7 P160 BE160L4** | 144 |
| **421** | 323 | 1.9 | 7.0 | 5280 | **C512_7.0 S5 ME5SB2** | 139 | **C512_7.0 P160 BE160MB2** | 140 |
| **444** | 308 | 1.4 | 3.3 | 5080 | **C512_3.3 S5 ME5LA4** | 139 | **C512_3.3 P160 BE160L4** | 140 |

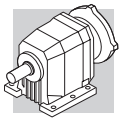


## 15 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **490** | 278 | 2.4 | 6.0 | 7030 | **C612_6.0 S5 ME5SB2** | 143 | **C612_6.0 P160 BE160MB2** | 144 |
| **521** | 263 | 2.5 | 2.8 | 6940 | **C612_2.8 S5 ME5LA4** | 143 | **C612_2.8 P160 BE160L4** | 144 |
| **522** | 261 | 1.7 | 5.6 | 4840 | **C512_5.6 S5 ME5SB2** | 139 | **C512_5.6 P160 BE160MB2** | 140 |
| **559** | 245 | 1.6 | 2.6 | 4940 | **C512_2.6 S5 ME5LA4** | 139 | **C512_2.6 P160 BE160L4** | 140 |
| **645** | 211 | 3.2 | 4.6 | 6580 | **C612_4.6 S5 ME5SB2** | 143 | **C612_4.6 P160 BE160MB2** | 144 |
| **660** | 206 | 2.1 | 4.5 | 4630 | **C512_4.5 S5 ME5SB2** | 139 | **C512_4.5 P160 BE160MB2** | 140 |
| **889** | 153 | 2.7 | 3.3 | 4330 | **C512_3.3 S5 ME5SB2** | 139 | **C512_3.3 P160 BE160MB2** | 140 |
| **1118** | 122 | 3.3 | 2.6 | 4100 | **C512_2.6 S5 ME5SB2** | 139 | **C512_2.6 P160 BE160MB2** | 140 |

## 18.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **13.1** | 12489 | 1.0 | 111.9 | 76600 | | | **C1003_111.9 P180 BE180M4** | 157 |
| **14.7** | 11138 | 1.1 | 99.8 | 76700 | | | **C1003_99.8 P180 BE180M4** | 157 |
| **15.9** | 10342 | 1.2 | 92.7 | 76700 | | | **C1003_92.7 P180 BE180M4** | 157 |
| **17.2** | 9548 | 1.3 | 85.6 | 76400 | | | **C1003_85.6 P180 BE180M4** | 157 |
| **18.5** | 8866 | 1.4 | 79.4 | 76100 | | | **C1003_79.4 P180 BE180M4** | 157 |
| **21.2** | 7748 | 1.5 | 69.4 | 75400 | | | **C1003_69.4 P180 BE180M4** | 157 |
| **22.8** | 7207 | 1.0 | 64.6 | 40300 | | | **C903_64.6 P180 BE180M4** | 154 |
| **22.8** | 7195 | 1.7 | 64.5 | 74800 | | | **C1003_64.5 P180 BE180M4** | 157 |
| **24.8** | 6607 | 1.1 | 59.2 | 40500 | | | **C903_59.2 P180 BE180M4** | 154 |
| **25.6** | 6400 | 1.9 | 57.4 | 73700 | | | **C1003_57.4 P180 BE180M4** | 157 |
| **26.8** | 6124 | 1.2 | 54.9 | 40700 | | | **C903_54.9 P180 BE180M4** | 154 |
| **27.6** | 5943 | 2.0 | 53.3 | 73100 | | | **C1003_53.3 P180 BE180M4** | 157 |
| **29.2** | 5614 | 1.3 | 50.3 | 40700 | | | **C903_50.3 P180 BE180M4** | 154 |
| **32** | 5159 | 2.3 | 46.2 | 71600 | | | **C1003_46.2 P180 BE180M4** | 157 |
| **34** | 4797 | 1.5 | 43.0 | 40600 | | | **C903_43.0 P180 BE180M4** | 154 |
| **34** | 4790 | 2.5 | 42.9 | 70800 | | | **C1003_42.9 P180 BE180M4** | 157 |
| **37** | 4397 | 1.6 | 39.4 | 40500 | | | **C903_39.4 P180 BE180M4** | 154 |
| **40** | 4122 | 2.9 | 36.9 | 69000 | | | **C1003_36.9 P180 BE180M4** | 157 |
| **42** | 4001 | 1.3 | 35.1 | 39800 | | | **C902_35.1 P180 BE180M4** | 154 |
| **43** | 3828 | 3.1 | 34.3 | 68100 | | | **C1003_34.3 P180 BE180M4** | 157 |
| **47** | 3572 | 1.0 | 31.3 | 25000 | | | **C802_31.3 P180 BE180M4** | 151 |
| **50** | 3298 | 2.8 | 29.6 | 65800 | | | **C1002_29.6 P180 BE180M4** | 157 |
| **50** | 3356 | 1.8 | 29.4 | 39100 | | | **C902_29.4 P180 BE180M4** | 154 |
| **54** | 3098 | 1.8 | 27.2 | 38800 | | | **C902_27.2 P180 BE180M4** | 154 |
| **57** | 2958 | 1.3 | 25.9 | 25300 | | | **C802_25.9 P180 BE180M4** | 151 |
| **59** | 2830 | 2.3 | 24.8 | 38400 | | | **C902_24.8 P180 BE180M4** | 154 |
| **61** | 2731 | 1.3 | 24.0 | 25000 | | | **C802_24.0 P180 BE180M4** | 151 |
| **64** | 2613 | 2.4 | 22.9 | 37900 | | | **C902_22.9 P180 BE180M4** | 154 |
| **66** | 2536 | 1.5 | 22.2 | 25100 | | | **C802_22.2 P180 BE180M4** | 151 |
| **72** | 2341 | 1.5 | 20.5 | 24900 | | | **C802_20.5 P180 BE180M4** | 151 |
| **73** | 2307 | 2.9 | 20.2 | 37200 | | | **C902_20.2 P180 BE180M4** | 154 |
| **76** | 2198 | 1.0 | 19.3 | 14100 | | | **C702_19.3 P180 BE180M4** | 148 |
| **79** | 2130 | 2.9 | 18.7 | 36700 | | | **C902_18.7 P180 BE180M4** | 154 |
| **81** | 2058 | 1.8 | 18.1 | 24700 | | | **C802_18.1 P180 BE180M4** | 151 |
| **85** | 1973 | 3.3 | 17.3 | 36200 | | | **C902_17.3 P180 BE180M4** | 154 |
| **88** | 1904 | 1.1 | 16.7 | 13800 | | | **C702_16.7 P180 BE180M4** | 148 |
| **88** | 1900 | 1.8 | 16.7 | 24400 | | | **C802_16.7 P180 BE180M4** | 151 |
| **96** | 1748 | 1.2 | 15.3 | 13800 | | | **C702_15.3 P180 BE180M4** | 148 |
| **99** | 1700 | 2.2 | 14.9 | 24000 | | | **C802_14.9 P180 BE180M4** | 151 |
| **104** | 1607 | 1.3 | 14.1 | 13900 | | | **C702_14.1 P180 BE180M4** | 148 |
| **107** | 1569 | 2.2 | 13.8 | 23700 | | | **C802_13.8 P180 BE180M4** | 151 |

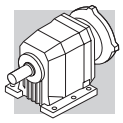


## 18.5 kW

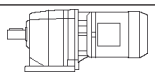
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **113** | 1485 | 1.4 | 13.0 | 13800 | | | **C702_13.0 P180 BE180M4** | 148 |
| **122** | 1378 | 1.0 | 12.1 | 8420 | | | **C612_12.1 P180 BE180M4** | 144 |
| **122** | 1370 | 2.7 | 12.0 | 23500 | | | **C802_12.0 P180 BE180M4** | 151 |
| **131** | 1278 | 1.7 | 11.2 | 13800 | | | **C702_11.2 P180 BE180M4** | 148 |
| **133** | 1265 | 2.8 | 11.1 | 22900 | | | **C802_11.1 P180 BE180M4** | 151 |
| **135** | 1241 | 1.1 | 10.9 | 8360 | | | **C612_10.9 P180 BE180M4** | 144 |
| **144** | 1164 | 1.8 | 10.2 | 13700 | | | **C702_10.2 P180 BE180M4** | 148 |
| **150** | 1119 | 1.2 | 9.8 | 8400 | | | **C612_9.8 P180 BE180M4** | 144 |
| **154** | 1086 | 2.0 | 9.5 | 13600 | | | **C702_9.5 P180 BE180M4** | 148 |
| **166** | 1008 | 1.3 | 8.8 | 8300 | | | **C612_8.8 P180 BE180M4** | 144 |
| **184** | 912 | 2.3 | 8.0 | 13500 | | | **C702_8.0 P180 BE180M4** | 148 |
| **196** | 853 | 1.6 | 7.5 | 8230 | | | **C612_7.5 P180 BE180M4** | 144 |
| **197** | 850 | 2.4 | 7.5 | 13400 | | | **C702_7.5 P180 BE180M4** | 148 |
| **218** | 768 | 1.8 | 6.7 | 8090 | | | **C612_6.7 P180 BE180M4** | 144 |
| **235** | 713 | 2.7 | 6.3 | 13300 | | | **C702_6.3 P180 BE180M4** | 148 |
| **245** | 684 | 1.0 | 6.0 | 7550 | | | **C612_6.0 P180 BE180M4** | 144 |
| **251** | 667 | 2.8 | 5.9 | 13200 | | | **C702_5.9 P180 BE180M4** | 148 |
| **270** | 621 | 2.2 | 10.9 | 7840 | **C612_10.9 S5 ME5LA2** | 143 | **C612_10.9 P160 BE160L2** | 144 |
| **300** | 560 | 2.4 | 9.8 | 7740 | **C612_9.8 S5 ME5LA2** | 143 | **C612_9.8 P160 BE160L2** | 144 |
| **302** | 556 | 1.2 | 9.8 | 5190 | **C512_9.8 S5 ME5LA2** | 139 | **C512_9.8 P160 BE160L2** | 140 |
| **322** | 521 | 3.3 | 4.6 | 13000 | | | **C702_4.6 P180 BE180M4** | 148 |
| **323** | 519 | 1.3 | 4.6 | 7300 | | | **C612_4.6 P180 BE180M4** | 144 |
| **333** | 504 | 2.7 | 8.8 | 7570 | **C612_8.8 S5 ME5LA2** | 143 | **C612_8.8 P160 BE160L2** | 144 |
| **335** | 501 | 1.4 | 8.8 | 5160 | **C512_8.8 S5 ME5LA2** | 139 | **C512_8.8 P160 BE160L2** | 140 |
| **380** | 442 | 1.4 | 7.8 | 5070 | **C512_7.8 S5 ME5LA2** | 139 | **C512_7.8 P160 BE160L2** | 140 |
| **393** | 427 | 3.2 | 7.5 | 7350 | **C612_7.5 S5 ME5LA2** | 143 | **C612_7.5 P160 BE160L2** | 144 |
| **397** | 422 | 1.6 | 3.7 | 7060 | | | **C612_3.7 P180 BE180M4** | 144 |
| **422** | 398 | 1.6 | 7.0 | 5010 | **C512_7.0 S5 ME5LA2** | 139 | **C512_7.0 P160 BE160L2** | 140 |
| **437** | 384 | 3.5 | 6.7 | 7170 | **C612_6.7 S5 ME5LA2** | 143 | **C612_6.7 P160 BE160L2** | 144 |
| **444** | 377 | 1.1 | 3.3 | 4750 | | | **C512_3.3 P180 BE180M4** | 140 |
| **491** | 342 | 1.9 | 6.0 | 6780 | **C612_6 S5 ME5LA2** | 143 | **C612_6.0 P160 BE160L2** | 144 |
| **521** | 321 | 2.1 | 2.8 | 6700 | | | **C612_2.8 P180 BE180M4** | 144 |
| **523** | 321 | 1.4 | 5.6 | 4580 | **C512_5.6 S5 ME5LA2** | 139 | **C512_5.6 P160 BE160L2** | 140 |
| **559** | 300 | 1.3 | 2.6 | 4600 | | | **C512_2.6 P180 BE180M4** | 140 |
| **646** | 260 | 2.6 | 4.6 | 6390 | **C612_4.6 S5 ME5LA2** | 143 | **C612_4.6 P160 BE160L2** | 144 |
| **661** | 254 | 1.7 | 4.5 | 4420 | **C512_4.5 S5 ME5LA2** | 139 | **C512_4.5 P160 BE160L2** | 140 |
| **796** | 211 | 3.2 | 3.7 | 6080 | **C612_3.7 S5 ME5LA2** | 143 | **C612_3.7 P160 BE160L2** | 144 |
| **890** | 188 | 2.2 | 3.3 | 4180 | **C512_3.3 S5 ME5LA2** | 139 | **C512_3.3 P160 BE160L2** | 140 |
| **1120** | 150 | 2.7 | 2.6 | 3980 | **C512_2.6 S5 ME5LA2** | 139 | **C512_2.6 P160 BE160L2** | 140 |

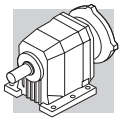
## 22 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **14.7** | 13273 | 0.9 | 99.8 | 70600 | | | **C1003_99.8 P180 BE180L4** | 157 |
| **15.9** | 12325 | 1.0 | 92.7 | 70900 | | | **C1003_92.7 P180 BE180L4** | 157 |
| **17.2** | 11378 | 1.1 | 85.6 | 71100 | | | **C1003_85.6 P180 BE180L4** | 157 |
| **18.5** | 10565 | 1.1 | 79.4 | 71200 | | | **C1003_79.4 P180 BE180L4** | 157 |
| **21.2** | 9233 | 1.3 | 69.4 | 71000 | | | **C1003_69.4 P180 BE180L4** | 157 |
| **22.8** | 8574 | 1.4 | 64.5 | 70800 | | | **C1003_64.5 P180 BE180L4** | 157 |
| **24.8** | 7873 | 0.9 | 59.2 | 36700 | | | **C903_59.2 P180 BE180L4** | 154 |
| **25.6** | 7627 | 1.6 | 57.4 | 70300 | | | **C1003_57.4 P180 BE180L4** | 157 |
| **26.8** | 7298 | 1.0 | 54.9 | 36000 | | | **C903_54.9 P180 BE180L4** | 154 |
| **27.6** | 7082 | 1.7 | 53.3 | 69800 | | | **C1003_53.3 P180 BE180L4** | 157 |



# 22 kW

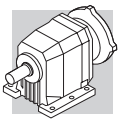
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **29.2** | 6690 | 1.1 | 50.3 | 37400 | | | **C903_50.3 P180 BE180L4** | 154 |
| **32** | 6147 | 2.0 | 46.2 | 68800 | | | **C1003_46.2 P180 BE180L4** | 157 |
| **34** | 5716 | 1.3 | 43.0 | 37500 | | | **C903_43.0 P180 BE180L4** | 154 |
| **34** | 5708 | 2.1 | 42.9 | 68100 | | | **C1003_42.9 P180 BE180L4** | 157 |
| **37** | 5240 | 1.4 | 39.4 | 37500 | | | **C903_39.4 P180 BE180L4** | 154 |
| **40** | 4912 | 2.4 | 36.9 | 66700 | | | **C1003_36.9 P180 BE180L4** | 157 |
| **42** | 4768 | 1.1 | 35.1 | 37400 | | | **C902_35.1 P180 BE180L4** | 154 |
| **43** | 4561 | 2.6 | 34.3 | 65900 | | | **C1003_34.3 P180 BE180L4** | 157 |
| **50** | 3931 | 2.3 | 29.6 | 64100 | | | **C1002_29.6 P180 BE180L4** | 157 |
| **50** | 3999 | 1.5 | 29.4 | 37100 | | | **C902_29.4 P180 BE180L4** | 154 |
| **54** | 3691 | 1.5 | 27.2 | 36900 | | | **C902_27.2 P180 BE180L4** | 154 |
| **57** | 3525 | 1.0 | 25.9 | 23000 | | | **C802_25.9 P180 BE180L4** | 151 |
| **59** | 3373 | 2.0 | 24.8 | 36600 | | | **C902_24.8 P180 BE180L4** | 154 |
| **61** | 3254 | 1.1 | 24.0 | 23700 | | | **C802_24.0 P180 BE180L4** | 151 |
| **64** | 3113 | 2.0 | 22.9 | 36400 | | | **C902_22.9 P180 BE180L4** | 154 |
| **66** | 3022 | 1.2 | 22.2 | 23500 | | | **C802_22.2 P180 BE180L4** | 151 |
| **72** | 2789 | 1.3 | 20.5 | 23400 | | | **C802_20.5 P180 BE180L4** | 151 |
| **73** | 2749 | 2.4 | 20.2 | 35800 | | | **C902_20.2 P180 BE180L4** | 154 |
| **79** | 2538 | 2.4 | 18.7 | 35400 | | | **C902_18.7 P180 BE180L4** | 154 |
| **81** | 2452 | 1.5 | 18.1 | 23300 | | | **C802_18.1 P180 BE180L4** | 151 |
| **85** | 2352 | 2.8 | 17.3 | 34900 | | | **C902_17.3 P180 BE180L4** | 154 |
| **88** | 2269 | 0.9 | 16.7 | 12400 | | | **C702_16.7 P180 BE180L4** | 148 |
| **88** | 2264 | 1.5 | 16.7 | 23100 | | | **C802_16.7 P180 BE180L4** | 151 |
| **92** | 2171 | 2.9 | 16.0 | 34600 | | | **C902_16.0 P180 BE180L4** | 154 |
| **96** | 2083 | 1.0 | 15.3 | 12400 | | | **C702_15.3 P180 BE180L4** | 148 |
| **99** | 2026 | 1.8 | 14.9 | 22900 | | | **C802_14.9 P180 BE180L4** | 151 |
| **104** | 1915 | 1.1 | 14.1 | 12700 | | | **C702_14.1 P180 BE180L4** | 148 |
| **106** | 1882 | 3.2 | 13.9 | 33700 | | | **C902_13.9 P180 BE180L4** | 154 |
| **107** | 1870 | 1.9 | 13.8 | 22700 | | | **C802_13.8 P180 BE180L4** | 151 |
| **113** | 1770 | 1.2 | 13.0 | 12700 | | | **C702_13.0 P180 BE180L4** | 148 |
| **122** | 1633 | 2.3 | 12.0 | 22500 | | | **C802_12.0 P180 BE180L4** | 151 |
| **131** | 1523 | 1.4 | 11.2 | 12900 | | | **C702_11.2 P180 BE180L4** | 148 |
| **133** | 1507 | 2.3 | 11.1 | 22100 | | | **C802_11.1 P180 BE180L4** | 151 |
| **135** | 1479 | 0.9 | 10.9 | 7580 | | | **C612_10.9 P180 BE180L4** | 144 |
| **144** | 1387 | 1.5 | 10.2 | 12800 | | | **C702_10.2 P180 BE180L4** | 148 |
| **150** | 1334 | 1.0 | 9.8 | 7710 | | | **C612_9.8 P180 BE180L4** | 144 |
| **153** | 1305 | 2.8 | 9.6 | 21900 | | | **C802_9.6 P180 BE180L4** | 151 |
| **154** | 1294 | 1.7 | 9.5 | 12800 | | | **C702_9.5 P180 BE180L4** | 148 |
| **166** | 1204 | 2.9 | 8.9 | 21300 | | | **C802_8.9 P180 BE180L4** | 151 |
| **166** | 1201 | 1.1 | 8.8 | 7660 | | | **C612_8.8 P180 BE180L4** | 144 |
| **184** | 1087 | 1.9 | 8.0 | 12700 | | | **C702_8.0 P180 BE180L4** | 148 |
| **196** | 1017 | 1.3 | 7.5 | 7690 | | | **C612_7.5 P180 BE180L4** | 144 |
| **197** | 1013 | 2.0 | 7.5 | 12700 | | | **C702_7.5 P180 BE180L4** | 148 |
| **218** | 916 | 1.5 | 6.7 | 7600 | | | **C612_6.7 P180 BE180L4** | 144 |
| **235** | 850 | 2.3 | 6.3 | 12500 | | | **C702_6.3 P180 BE180L4** | 148 |
| **251** | 795 | 2.4 | 5.9 | 12300 | | | **C702_5.9 P180 BE180L4** | 148 |
| **322** | 621 | 2.7 | 4.6 | 11900 | | | **C702_4.6 P180 BE180L4** | 148 |
| **323** | 619 | 1.1 | 4.6 | 6910 | | | **C612_4.6 P180 BE180L4** | 144 |
| **397** | 503 | 1.3 | 3.7 | 6740 | | | **C612_3.7 P180 BE180L4** | 144 |
| **444** | 449 | 0.9 | 3.3 | 4350 | | | **C512_3.3 P180 BE180L4** | 140 |
| **521** | 383 | 1.7 | 2.8 | 6450 | | | **C612_2.8 P180 BE180L4** | 144 |
| **559** | 357 | 1.1 | 2.6 | 4290 | | | **C512_2.6 P180 BE180L4** | 140 |



## 26 DATOS TÉCNICOS REDUCTORES

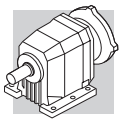
# C 12 — 100 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 12 2_2.8** | 2.8 | 1012 | 30 | 3.3 | 750 | 600 | 506 | 37 | 2.1 | 990 | 790 | |
| **C 12 2_3.2** | 3.2 | 873 | 32 | 3.1 | 730 | 600 | 436 | 40 | 1.9 | 960 | 790 | |
| **C 12 2_3.7** | 3.7 | 767 | 34 | 2.9 | 720 | 610 | 383 | 42 | 1.8 | 960 | 800 | |
| **C 12 2_4.3** | 4.3 | 649 | 36 | 2.6 | 710 | 630 | 325 | 45 | 1.6 | 890 | 800 | |
| **C 12 2_4.9** | 4.9 | 575 | 38 | 2.4 | 710 | 640 | 288 | 48 | 1.5 | 880 | 800 | |
| **C 12 2_5.6** | 5.6 | 500 | 40 | 2.2 | 680 | 650 | 250 | 51 | 1.4 | 840 | 810 | |
| **C 12 2_6.2** | 6.2 | 449 | 42 | 2.1 | 650 | 660 | 225 | 53 | 1.3 | 810 | 830 | |
| **C 12 2_7.6** | 7.6 | 367 | 45 | 1.8 | 1140 | 1220 | 184 | 56 | 1.1 | 1300 | 1540 | |
| **C 12 2_8.8** | 8.8 | 317 | 47 | 1.6 | 1140 | 1280 | 158 | 59 | 1.0 | 1300 | 1620 | |
| **C 12 2_10.1** | 10.1 | 278 | 49 | 1.5 | 1150 | 1340 | 139 | 63 | 0.97 | 1300 | 1680 | |
| **C 12 2_11.9** | 11.9 | 236 | 53 | 1.4 | 1140 | 1390 | 118 | 67 | 0.87 | 1300 | 1760 | |
| **C 12 2_13.4** | 13.4 | 209 | 55 | 1.3 | 1140 | 1460 | 104 | 70 | 0.81 | 1300 | 1840 | |
| **C 12 2_15.4** | 15.4 | 182 | 58 | 1.2 | 1130 | 1500 | 91 | 73 | 0.73 | 1300 | 1930 | 122 |
| **C 12 2_17.2** | 17.2 | 163 | 60 | 1.1 | 1130 | 1590 | 82 | 76 | 0.68 | 1300 | 2000 | |
| **C 12 2_18.4** | 18.4 | 152 | 62 | 1.0 | 1120 | 1620 | 76 | 78 | 0.65 | 1300 | 2000 | |
| **C 12 2_20.6** | 20.6 | 136 | 65 | 1.0 | 1110 | 1670 | 68 | 82 | 0.61 | 1300 | 2000 | |
| **C 12 2_23.2** | 23.2 | 120 | 67 | 0.89 | 1110 | 1720 | 60 | 85 | 0.56 | 1300 | 2000 | |
| **C 12 2_25.4** | 25.4 | 110 | 69 | 0.84 | 1110 | 1800 | 55 | 88 | 0.54 | 1300 | 2000 | |
| **C 12 2_29.5** | 29.5 | 95 | 74 | 0.77 | 1100 | 1880 | 47 | 93 | 0.49 | 1300 | 2000 | |
| **C 12 2_32.8** | 32.8 | 85 | 75 | 0.71 | 1090 | 1970 | 43 | 90 | 0.42 | 1300 | 2000 | |
| **C 12 2_37.0** | 37.0 | 76 | 79 | 0.66 | 1070 | 2000 | 38 | 90 | 0.38 | 1300 | 2000 | |
| **C 12 2_42.3** | 42.3 | 66 | 84 | 0.61 | 1060 | 2000 | 33 | 100 | 0.36 | 1300 | 2000 | |
| **C 12 2_47.6** | 47.6 | 59 | 85 | 0.55 | 1050 | 2000 | 29.4 | 90 | 0.29 | 1300 | 2000 | |
| **C 12 2_55.2** | 55.2 | 51 | 89 | 0.50 | 1030 | 2000 | 25.4 | 90 | 0.25 | 1300 | 2000 | |
| **C 12 2_66.2** | 66.2 | 42 | 86 | 0.40 | 1060 | 2000 | 21.2 | 90 | 0.21 | 1300 | 2000 | |



# C 12 — 100 Nm

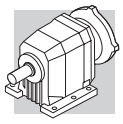
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 12 2_2.8** | 2.8 | 325 | 43 | 1.5 | 1140 | 910 | 181 | 53 | 1.1 | 1300 | 1080 | |
| **C 12 2_3.2** | 3.2 | 281 | 46 | 1.4 | 1100 | 910 | 156 | 57 | 1.0 | 1300 | 1080 | |
| **C 12 2_3.7** | 3.7 | 246 | 49 | 1.3 | 1090 | 920 | 137 | 60 | 0.91 | 1300 | 1100 | |
| **C 12 2_4.3** | 4.3 | 209 | 52 | 1.2 | 1050 | 920 | 116 | 64 | 0.82 | 1280 | 1100 | |
| **C 12 2_4.9** | 4.9 | 185 | 55 | 1.1 | 1050 | 960 | 103 | 67 | 0.76 | 1280 | 1160 | |
| **C 12 2_5.6** | 5.6 | 161 | 58 | 1.0 | 1000 | 980 | 89 | 69 | 0.68 | 1300 | 1280 | |
| **C 12 2_6.2** | 6.2 | 144 | 61 | 1.0 | 960 | 980 | 80 | 70 | 0.62 | 1300 | 1390 | |
| **C 12 2_7.6** | 7.6 | 118 | 65 | 0.85 | 1300 | 1780 | 66 | 79 | 0.57 | 1300 | 2000 | |
| **C 12 2_8.8** | 8.8 | 102 | 69 | 0.77 | 1300 | 1830 | 57 | 84 | 0.52 | 1300 | 2000 | |
| **C 12 2_10.1** | 10.1 | 89 | 72 | 0.71 | 1300 | 1950 | 50 | 88 | 0.48 | 1300 | 2000 | |
| **C 12 2_11.9** | 11.9 | 76 | 77 | 0.64 | 1300 | 2000 | 42 | 89 | 0.41 | 1300 | 2000 | |
| **C 12 2_13.4** | 13.4 | 67 | 81 | 0.60 | 1300 | 2000 | 37 | 90 | 0.37 | 1300 | 2000 | |
| **C 12 2_15.4** | 15.4 | 58 | 85 | 0.55 | 1300 | 2000 | 32 | 89 | 0.32 | 1300 | 2000 | 122 |
| **C 12 2_17.2** | 17.2 | 52 | 88 | 0.51 | 1300 | 2000 | 29.1 | 90 | 0.29 | 1300 | 2000 | |
| **C 12 2_18.4** | 18.4 | 49 | 88 | 0.47 | 1300 | 2000 | 27.2 | 89 | 0.27 | 1300 | 2000 | |
| **C 12 2_20.6** | 20.6 | 44 | 89 | 0.43 | 1300 | 2000 | 24.2 | 89 | 0.24 | 1300 | 2000 | |
| **C 12 2_23.2** | 23.2 | 39 | 89 | 0.38 | 1300 | 2000 | 21.5 | 89 | 0.21 | 1300 | 2000 | |
| **C 12 2_25.4** | 25.4 | 35 | 89 | 0.35 | 1300 | 2000 | 19.7 | 89 | 0.19 | 1300 | 2000 | |
| **C 12 2_29.5** | 29.5 | 31 | 100 | 0.34 | 1300 | 2000 | 16.9 | 100 | 0.19 | 1300 | 2000 | |
| **C 12 2_32.8** | 32.8 | 27.5 | 90 | 0.27 | 1300 | 2000 | 15.3 | 90 | 0.15 | 1300 | 2000 | |
| **C 12 2_37.0** | 37.0 | 24.3 | 90 | 0.24 | 1300 | 2000 | 13.5 | 90 | 0.13 | 1300 | 2000 | |
| **C 12 2_42.3** | 42.3 | 21.3 | 100 | 0.23 | 1300 | 2000 | 11.8 | 100 | 0.13 | 1300 | 2000 | |
| **C 12 2_47.6** | 47.6 | 18.9 | 90 | 0.19 | 1300 | 2000 | 10.5 | 90 | 0.10 | 1300 | 2000 | |
| **C 12 2_55.2** | 55.2 | 16.3 | 90 | 0.16 | 1300 | 2000 | 9.1 | 90 | 0.09 | 1300 | 2000 | |
| **C 12 2_66.2** | 66.2 | 13.6 | 90 | 0.13 | 1300 | 2000 | 7.6 | 90 | 0.07 | 1300 | 2000 | |



# C 22 — 200 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 22 2_2.7** | 2.7 | 1029 | 65 | 7.4 | — | 1150 | 514 | 80 | 4.5 | — | 1460 | |
| **C 22 2_3.3** | 3.3 | 842 | 68 | 6.3 | — | 1230 | 421 | 85 | 3.9 | — | 1560 | |
| **C 22 2_3.7** | 3.7 | 755 | 70 | 5.8 | — | 1290 | 378 | 90 | 3.7 | — | 1610 | |
| **C 22 2_4.3** | 4.3 | 658 | 75 | 5.4 | — | 1320 | 329 | 94 | 3.4 | — | 1650 | |
| **C 22 2_4.8** | 4.8 | 587 | 80 | 5.2 | — | 1370 | 294 | 100 | 3.2 | — | 1730 | |
| **C 22 2_5.6** | 5.6 | 501 | 82 | 4.5 | — | 1410 | 250 | 102 | 2.8 | — | 1790 | |
| **C 22 2_6.1** | 6.1 | 460 | 85 | 4.3 | — | 1500 | 230 | 105 | 2.7 | — | 1900 | |
| **C 22 2_7.1** | 7.1 | 395 | 105 | 4.6 | 1090 | 1570 | 198 | 130 | 2.8 | 1420 | 1990 | |
| **C 22 2_8.7** | 8.7 | 324 | 110 | 3.9 | 1130 | 1680 | 162 | 138 | 2.5 | 1430 | 2090 | |
| **C 22 2_9.6** | 9.6 | 290 | 115 | 3.7 | 1160 | 1750 | 145 | 145 | 2.3 | 1460 | 2200 | |
| **C 22 2_11.1** | 11.1 | 253 | 120 | 3.3 | 1130 | 1820 | 126 | 153 | 2.1 | 1390 | 2270 | |
| **C 22 2_12.4** | 12.4 | 226 | 125 | 3.1 | 1160 | 1900 | 113 | 160 | 2.0 | 1420 | 2380 | |
| **C 22 2_14.5** | 14.5 | 193 | 133 | 2.8 | 1090 | 1980 | 96 | 168 | 1.8 | 1360 | 2450 | |
| **C 22 2_15.8** | 15.8 | 177 | 140 | 2.7 | 1030 | 2030 | 88 | 175 | 1.7 | 1320 | 2570 | |
| **C 22 2_18.1** | 18.1 | 154 | 145 | 2.5 | 1000 | 2140 | 77 | 183 | 1.6 | 1250 | 2650 | |
| **C 22 2_20.0** | 20.0 | 140 | 150 | 2.3 | 1000 | 2210 | 70 | 190 | 1.5 | 1250 | 2770 | |
| **C 22 2_21.5** | 21.5 | 131 | 153 | 2.2 | 970 | 2250 | 65 | 194 | 1.4 | 1190 | 2820 | |
| **C 22 2_24.3** | 24.3 | 115 | 160 | 2.0 | 980 | 2350 | 58 | 200 | 1.3 | 1250 | 2970 | |
| **C 22 2_27.2** | 27.2 | 103 | 166 | 1.9 | 960 | 2420 | 52 | 200 | 1.1 | 1340 | 3110 | |
| **C 22 2_29.6** | 29.6 | 95 | 175 | 1.8 | 850 | 2490 | 47 | 200 | 1.0 | 1350 | 3270 | |
| **C 22 2_33.1** | 33.1 | 85 | 178 | 1.7 | 840 | 2590 | 42 | 200 | 0.93 | 1390 | 3400 | 126 |
| **C 22 2_36.8** | 36.8 | 76 | 185 | 1.6 | 750 | 2690 | 38 | 200 | 0.84 | 1400 | 3610 | |
| **C 22 2_43.3** | 43.3 | 65 | 185 | 1.3 | 830 | 2910 | 32 | 190 | 0.68 | 1610 | 3950 | |
| **C 22 2_48.6** | 48.6 | 58 | 150 | 0.95 | 1300 | 3300 | 28.8 | 155 | 0.49 | 1740 | 4400 | |
| **C 22 2_54.7** | 54.7 | 51 | 150 | 0.85 | 1320 | 3470 | 25.6 | 155 | 0.44 | 1770 | 4600 | |
| **C 22 2_63.3** | 63.3 | 44 | 125 | 0.61 | 1400 | 3860 | 22.1 | 130 | 0.32 | 1820 | 5000 | |
| **C 22 3_60.0** | 60.0 | 47 | 180 | 0.93 | 840 | 3400 | 23.3 | 190 | 0.49 | 1230 | 4500 | |
| **C 22 3_65.3** | 65.3 | 43 | 200 | 0.94 | 880 | 3440 | 21.4 | 200 | 0.47 | 1270 | 4670 | |
| **C 22 3_74.8** | 74.8 | 37 | 200 | 0.83 | 940 | 3600 | 18.7 | 200 | 0.41 | 1270 | 4800 | |
| **C 22 3_82.6** | 82.6 | 34 | 200 | 0.75 | 1010 | 3820 | 16.9 | 200 | 0.37 | 1300 | 5000 | |
| **C 22 3_88.5** | 88.5 | 32 | 200 | 0.70 | 1040 | 3900 | 15.8 | 200 | 0.35 | 1300 | 5000 | |
| **C 22 3_100.2** | 100.2 | 28.0 | 200 | 0.62 | 1090 | 4160 | 14.0 | 200 | 0.31 | 1300 | 5000 | |
| **C 22 3_112.0** | 112.0 | 25.0 | 200 | 0.55 | 1130 | 4300 | 12.5 | 200 | 0.28 | 1300 | 5000 | |
| **C 22 3_122.2** | 122.2 | 22.9 | 200 | 0.51 | 1160 | 4540 | 11.5 | 200 | 0.25 | 1300 | 5000 | |
| **C 22 3_136.5** | 136.5 | 20.5 | 200 | 0.45 | 1180 | 4700 | 10.3 | 200 | 0.23 | 1300 | 5000 | |
| **C 22 3_151.7** | 151.7 | 18.5 | 200 | 0.41 | 1220 | 4980 | 9.2 | 200 | 0.20 | 1300 | 5000 | |
| **C 22 3_178.5** | 178.5 | 15.7 | 200 | 0.35 | 1260 | 5000 | 7.8 | 200 | 0.17 | 1300 | 5000 | |
| **C 22 3_200.7** | 200.7 | 14.0 | 190 | 0.29 | 1280 | 5000 | 7.0 | 190 | 0.15 | 1300 | 5000 | |
| **C 22 3_225.8** | 225.8 | 12.4 | 180 | 0.25 | 1300 | 5000 | 6.2 | 185 | 0.13 | 1300 | 5000 | |
| **C 22 3_261.0** | 261.0 | 10.7 | 145 | 0.17 | 1300 | 5000 | 5.4 | 155 | 0.09 | 1300 | 5000 | |

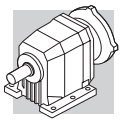
(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



# C 22 — 200 Nm

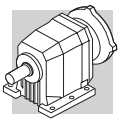
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 22 2_2.7** | 2.7 | 331 | 95 | 3.5 | — | 1670 | 184 | 100 | 2.0 | 400 | 2150 | |
| **C 22 2_3.3** | 3.3 | 271 | 100 | 3.0 | — | 1760 | 150 | 103 | 1.7 | 570 | 2300 | |
| **C 22 2_3.7** | 3.7 | 243 | 105 | 2.8 | — | 1850 | 135 | 105 | 1.6 | 800 | 2430 | |
| **C 22 2_4.3** | 4.3 | 211 | 105 | 2.4 | — | 1980 | 117 | 105 | 1.4 | 940 | 2550 | |
| **C 22 2_4.8** | 4.8 | 189 | 105 | 2.2 | 170 | 2090 | 105 | 105 | 1.2 | 1200 | 2710 | |
| **C 22 2_5.6** | 5.6 | 161 | 105 | 1.9 | 200 | 2250 | 89 | 112 | 1.1 | 1020 | 2850 | |
| **C 22 2_6.1** | 6.1 | 148 | 110 | 1.8 | 200 | 2290 | 82 | 116 | 1.1 | 980 | 2930 | |
| **C 22 2_7.1** | 7.1 | 127 | 150 | 2.1 | 1650 | 2310 | 71 | 180 | 1.4 | 2060 | 2820 | |
| **C 22 2_8.7** | 8.7 | 104 | 160 | 1.8 | 1650 | 2440 | 58 | 190 | 1.2 | 2100 | 3000 | |
| **C 22 2_9.6** | 9.6 | 93 | 170 | 1.7 | 1650 | 2530 | 52 | 200 | 1.1 | 2130 | 3130 | |
| **C 22 2_11.1** | 11.1 | 81 | 176 | 1.6 | 1640 | 2650 | 45 | 200 | 0.99 | 2170 | 3270 | |
| **C 22 2_12.4** | 12.4 | 73 | 185 | 1.5 | 1650 | 2760 | 40 | 200 | 0.89 | 2200 | 3520 | |
| **C 22 2_14.5** | 14.5 | 62 | 193 | 1.3 | 1610 | 2850 | 34 | 200 | 0.76 | 2200 | 3670 | |
| **C 22 2_15.8** | 15.8 | 57 | 200 | 1.3 | 1580 | 2990 | 32 | 200 | 0.70 | 2200 | 3920 | |
| **C 22 2_18.1** | 18.1 | 50 | 200 | 1.1 | 1650 | 3150 | 27.6 | 200 | 0.61 | 2200 | 4200 | |
| **C 22 2_20.0** | 20.0 | 45 | 200 | 0.99 | 1750 | 3340 | 25.0 | 200 | 0.55 | 2200 | 4350 | |
| **C 22 2_21.5** | 21.5 | 42 | 200 | 0.92 | 1760 | 3450 | 23.3 | 200 | 0.51 | 2200 | 4550 | |
| **C 22 2_24.3** | 24.3 | 37 | 200 | 0.82 | 1900 | 3650 | 20.6 | 200 | 0.45 | 2200 | 4720 | |
| **C 22 2_27.2** | 27.2 | 33 | 200 | 0.73 | 1950 | 3820 | 18.4 | 200 | 0.41 | 2200 | 5000 | |
| **C 22 2_29.6** | 29.6 | 30 | 200 | 0.67 | 1980 | 3990 | 16.9 | 200 | 0.37 | 2200 | 5000 | |
| **C 22 2_33.1** | 33.1 | 27.2 | 200 | 0.60 | 1970 | 4200 | 15.1 | 200 | 0.33 | 2200 | 5000 | 126 |
| **C 22 2_36.8** | 36.8 | 24.5 | 200 | 0.54 | 1990 | 4390 | 13.6 | 200 | 0.30 | 2200 | 5000 | |
| **C 22 2_43.3** | 43.3 | 20.8 | 190 | 0.44 | 2020 | 4770 | 11.6 | 190 | 0.24 | 2200 | 5000 | |
| **C 22 2_48.6** | 48.6 | 18.5 | 160 | 0.33 | 2050 | 5000 | 10.3 | 170 | 0.19 | 2200 | 5000 | |
| **C 22 2_54.7** | 54.7 | 16.4 | 160 | 0.29 | 2090 | 5000 | 9.1 | 170 | 0.17 | 2200 | 5000 | |
| **C 22 2_63.3** | 63.3 | 14.2 | 135 | 0.21 | 2140 | 5000 | 7.9 | 140 | 0.12 | 2200 | 5000 | |
| **C 22 3_60.0** | 60.0 | 15.0 | 190 | 0.31 | 1300 | 5000 | 8.3 | 200 | 0.18 | 1300 | 5000 | |
| **C 22 3_65.3** | 65.3 | 13.8 | 200 | 0.31 | 1300 | 5000 | 7.7 | 200 | 0.17 | 1300 | 5000 | |
| **C 22 3_74.8** | 74.8 | 12.0 | 200 | 0.27 | 1300 | 5000 | 6.7 | 200 | 0.15 | 1300 | 5000 | |
| **C 22 3_82.6** | 82.6 | 10.9 | 200 | 0.25 | 1300 | 5000 | 6.1 | 200 | 0.14 | 1300 | 5000 | |
| **C 22 3_88.5** | 88.5 | 10.2 | 200 | 0.22 | 1300 | 5000 | 5.6 | 200 | 0.12 | 1300 | 5000 | |
| **C 22 3_100.2** | 100.2 | 9.0 | 200 | 0.20 | 1300 | 5000 | 5.0 | 200 | 0.11 | 1300 | 5000 | |
| **C 22 3_112.0** | 112.0 | 8.0 | 200 | 0.18 | 1300 | 5000 | 4.5 | 200 | 0.10 | 1300 | 5000 | |
| **C 22 3_122.2** | 122.2 | 7.4 | 200 | 0.17 | 1300 | 5000 | 4.1 | 200 | 0.09 | 1300 | 5000 | |
| **C 22 3_136.5** | 136.5 | 6.6 | 200 | 0.15 | 1300 | 5000 | 3.7 | 200 | 0.08 | 1300 | 5000 | |
| **C 22 3_151.7** | 151.7 | 5.9 | 200 | 0.13 | 1300 | 5000 | 3.3 | 200 | 0.07 | 1300 | 5000 | |
| **C 22 3_178.5** | 178.5 | 5.0 | 200 | 0.11 | 1300 | 5000 | 2.8 | 200 | 0.06 | 1300 | 5000 | |
| **C 22 3_200.7** | 200.7 | 4.5 | 195 | 0.10 | 1300 | 5000 | 2.5 | 200 | 0.05 | 1300 | 5000 | |
| **C 22 3_225.8** | 225.8 | 4.0 | 195 | 0.09 | 1300 | 5000 | 2.2 | 200 | 0.05 | 1300 | 5000 | |
| **C 22 3_261.0** | 261.0 | 3.4 | 160 | 0.06 | 1300 | 5000 | 1.9 | 165 | 0.04 | 1300 | 5000 | |

(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



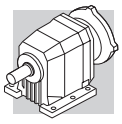
# C 32 — 300 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 32 2_2.9** | 2.9 | 973 | 105 | 11.3 | 670 | 1710 | 486 | 130 | 7.0 | 940 | 2170 | |
| **C 32 2_3.4** | 3.4 | 821 | 116 | 10.5 | 480 | 1770 | 411 | 138 | 6.2 | 900 | 2280 | |
| **C 32 2_3.7** | 3.7 | 750 | 120 | 9.9 | 560 | 1830 | 375 | 150 | 6.2 | 750 | 2310 | |
| **C 32 2_4.5** | 4.5 | 622 | 129 | 8.8 | 450 | 1930 | 311 | 152 | 5.2 | 970 | 2500 | |
| **C 32 2_5.0** | 5.0 | 565 | 135 | 8.4 | 470 | 1990 | 283 | 155 | 4.8 | 1100 | 2600 | |
| **C 32 2_5.7** | 5.7 | 495 | 141 | 7.7 | 380 | 2080 | 248 | 155 | 4.2 | 1250 | 2760 | |
| **C 32 2_6.3** | 6.3 | 447 | 150 | 7.4 | 300 | 2130 | 223 | 155 | 3.8 | 1450 | 2890 | |
| **C 32 2_7.2** | 7.2 | 391 | 160 | 6.9 | 1890 | 2370 | 195 | 200 | 4.3 | 2200 | 2990 | |
| **C 32 2_8.5** | 8.5 | 330 | 168 | 6.1 | 1900 | 2510 | 165 | 209 | 3.8 | 2200 | 3180 | |
| **C 32 2_9.3** | 9.3 | 301 | 175 | 5.8 | 1910 | 2580 | 151 | 220 | 3.7 | 2200 | 3260 | |
| **C 32 2_11.2** | 11.2 | 250 | 187 | 5.2 | 1910 | 2740 | 125 | 231 | 3.2 | 2200 | 3480 | |
| **C 32 2_12.3** | 12.3 | 227 | 195 | 4.9 | 1910 | 2820 | 114 | 245 | 3.1 | 2200 | 3560 | |
| **C 32 2_14.1** | 14.1 | 199 | 205 | 4.5 | 1900 | 2940 | 99 | 251 | 2.8 | 2200 | 3750 | |
| **C 32 2_15.6** | 15.6 | 180 | 215 | 4.3 | 1900 | 3030 | 90 | 270 | 2.7 | 2200 | 3820 | |
| **C 32 2_18.2** | 18.2 | 154 | 223 | 3.8 | 1900 | 3210 | 77 | 275 | 2.3 | 2200 | 4070 | |
| **C 32 2_20.1** | 20.1 | 139 | 235 | 3.6 | 1900 | 3290 | 70 | 295 | 2.3 | 2200 | 4160 | |
| **C 32 2_22.9** | 22.9 | 122 | 240 | 3.2 | 1880 | 3470 | 61 | 295 | 2.0 | 2200 | 4400 | |
| **C 32 2_25.1** | 25.1 | 111 | 250 | 3.1 | 1890 | 3560 | 56 | 300 | 1.8 | 2200 | 4570 | |
| **C 32 2_26.9** | 26.9 | 104 | 255 | 2.9 | 1880 | 3650 | 52 | 300 | 1.7 | 2200 | 4700 | |
| **C 32 2_29.8** | 29.8 | 94 | 265 | 2.7 | 1880 | 3770 | 47 | 300 | 1.6 | 2200 | 4920 | |
| **C 32 2_33.1** | 33.1 | 85 | 270 | 2.5 | 1880 | 3920 | 42 | 300 | 1.4 | 2200 | 5150 | 130 |
| **C 32 2_36.1** | 36.1 | 78 | 280 | 2.4 | 1870 | 4030 | 39 | 300 | 1.3 | 2200 | 5350 | |
| **C 32 2_40.7** | 40.7 | 69 | 290 | 2.2 | 1860 | 4200 | 34 | 300 | 1.1 | 2200 | 5500 | |
| **C 32 2_45.3** | 45.3 | 62 | 300 | 2.0 | 1860 | 4360 | 31 | 300 | 1.0 | 2200 | 5500 | |
| **C 32 2_52.4** | 52.4 | 53 | 300 | 1.8 | 1860 | 4650 | 26.7 | 300 | 0.88 | 2200 | 5500 | |
| **C 32 2_59.4** | 59.4 | 47 | 205 | 1.1 | 2020 | 5000 | 23.6 | 215 | 0.56 | 2200 | 5500 | |
| **C 32 2_66.8** | 66.8 | 42 | 205 | 0.95 | 2020 | 5500 | 21.0 | 215 | 0.50 | 2200 | 5500 | |
| | | | | | | | | | | | | |
| **C 32 3_74.7** | 74.7 | 37 | 280 | 1.2 | 750 | 5500 | 18.7 | 290 | 0.60 | 1170 | 5500 | |
| **C 32 3_82.6** | 82.6 | 34 | 300 | 1.1 | 820 | 5500 | 17.0 | 300 | 0.56 | 1240 | 5500 | |
| **C 32 3_94.2** | 94.2 | 29.7 | 300 | 0.98 | 900 | 5500 | 14.9 | 300 | 0.49 | 1270 | 5500 | |
| **C 32 3_103.3** | 103.3 | 27.1 | 300 | 0.90 | 980 | 5500 | 13.6 | 300 | 0.45 | 1300 | 5500 | |
| **C 32 3_110.6** | 110.6 | 25.3 | 300 | 0.84 | 1000 | 5500 | 12.7 | 300 | 0.42 | 1300 | 5500 | |
| **C 32 3_122.4** | 122.4 | 22.9 | 300 | 0.76 | 1060 | 5500 | 11.4 | 300 | 0.38 | 1300 | 5500 | |
| **C 32 3_136.0** | 136.0 | 20.6 | 300 | 0.68 | 1110 | 5500 | 10.3 | 300 | 0.34 | 1300 | 5500 | |
| **C 32 3_148.4** | 148.4 | 18.9 | 300 | 0.62 | 1130 | 5500 | 9.4 | 300 | 0.31 | 1300 | 5500 | |
| **C 32 3_167.4** | 167.4 | 16.7 | 300 | 0.55 | 1180 | 5500 | 8.4 | 300 | 0.28 | 1300 | 5500 | |
| **C 32 3_186.0** | 186.0 | 15.1 | 300 | 0.50 | 1200 | 5500 | 7.5 | 300 | 0.25 | 1300 | 5500 | |
| **C 32 3_215.6** | 215.6 | 13.0 | 300 | 0.43 | 1240 | 5500 | 6.5 | 300 | 0.21 | 1300 | 5500 | |
| **C 32 3_244.2** | 244.2 | 11.5 | 240 | 0.30 | 1280 | 5500 | 5.7 | 255 | 0.16 | 1300 | 5500 | |
| **C 32 3_274.7** | 274.7 | 10.2 | 240 | 0.27 | 1300 | 5500 | 5.1 | 255 | 0.14 | 1300 | 5500 | |



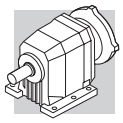
# C 32 — 300 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 32 2_2.9** | 2.9 | 313 | 150 | 5.2 | 1120 | 2510 | 174 | 155 | 3.0 | 2200 | 3220 | |
| **C 32 2_3.4** | 3.4 | 264 | 152 | 4.4 | 1390 | 2690 | 147 | 167 | 2.7 | 2200 | 3390 | |
| **C 32 2_3.7** | 3.7 | 241 | 155 | 4.1 | 1570 | 2790 | 134 | 175 | 2.6 | 2200 | 3480 | |
| **C 32 2_4.5** | 4.5 | 200 | 158 | 3.5 | 1750 | 3010 | 111 | 188 | 2.3 | 2200 | 3690 | |
| **C 32 2_5.0** | 5.0 | 182 | 162 | 3.2 | 1870 | 3120 | 101 | 198 | 2.2 | 2200 | 3790 | |
| **C 32 2_5.7** | 5.7 | 159 | 171 | 3.0 | 1730 | 3250 | 88 | 198 | 1.9 | 2200 | 4010 | |
| **C 32 2_6.3** | 6.3 | 144 | 178 | 2.8 | 1730 | 3350 | 80 | 200 | 1.8 | 2200 | 4180 | |
| **C 32 2_7.2** | 7.2 | 126 | 235 | 3.3 | 2200 | 3450 | 70 | 285 | 2.2 | 2200 | 4200 | |
| **C 32 2_8.5** | 8.5 | 106 | 246 | 2.9 | 2200 | 3660 | 59 | 288 | 1.9 | 2200 | 4520 | |
| **C 32 2_9.3** | 9.3 | 97 | 260 | 2.8 | 2200 | 3750 | 54 | 300 | 1.8 | 2200 | 4640 | |
| **C 32 2_11.2** | 11.2 | 80 | 272 | 2.4 | 2200 | 4010 | 45 | 300 | 1.5 | 2200 | 5030 | |
| **C 32 2_12.3** | 12.3 | 73 | 285 | 2.3 | 2200 | 4120 | 41 | 300 | 1.3 | 2200 | 5250 | |
| **C 32 2_14.1** | 14.1 | 64 | 290 | 2.0 | 2200 | 4340 | 36 | 300 | 1.2 | 2200 | 5500 | |
| **C 32 2_15.6** | 15.6 | 58 | 300 | 1.9 | 2200 | 4500 | 32 | 300 | 1.1 | 2200 | 5500 | |
| **C 32 2_18.2** | 18.2 | 50 | 300 | 1.6 | 2200 | 4810 | 27.5 | 300 | 0.91 | 2200 | 5500 | |
| **C 32 2_20.1** | 20.1 | 45 | 300 | 1.5 | 2200 | 5030 | 24.9 | 300 | 0.82 | 2200 | 5500 | |
| **C 32 2_22.9** | 22.9 | 39 | 300 | 1.3 | 2200 | 5300 | 21.8 | 300 | 0.72 | 2200 | 5500 | |
| **C 32 2_25.1** | 25.1 | 36 | 300 | 1.2 | 2200 | 5500 | 19.9 | 300 | 0.66 | 2200 | 5500 | |
| **C 32 2_26.9** | 26.9 | 33 | 300 | 1.1 | 2200 | 5500 | 18.6 | 300 | 0.61 | 2200 | 5500 | |
| **C 32 2_29.8** | 29.8 | 30 | 300 | 1.0 | 2200 | 5500 | 16.8 | 300 | 0.56 | 2200 | 5500 | |
| **C 32 2_33.1** | 33.1 | 27.2 | 300 | 0.90 | 2200 | 5500 | 15.1 | 300 | 0.50 | 2200 | 5500 | 130 |
| **C 32 2_36.1** | 36.1 | 24.9 | 300 | 0.82 | 2200 | 5500 | 13.9 | 300 | 0.46 | 2200 | 5500 | |
| **C 32 2_40.7** | 40.7 | 22.1 | 300 | 0.73 | 2200 | 5500 | 12.3 | 300 | 0.41 | 2200 | 5500 | |
| **C 32 2_45.3** | 45.3 | 19.9 | 300 | 0.66 | 2200 | 5500 | 11.0 | 300 | 0.37 | 2200 | 5500 | |
| **C 32 2_52.4** | 52.4 | 17.2 | 300 | 0.57 | 2200 | 5500 | 9.5 | 300 | 0.32 | 2200 | 5500 | |
| **C 32 2_59.4** | 59.4 | 15.2 | 220 | 0.37 | 2200 | 5500 | 8.4 | 230 | 0.21 | 2200 | 5500 | |
| **C 32 2_66.8** | 66.8 | 13.5 | 220 | 0.33 | 2200 | 5500 | 7.5 | 230 | 0.19 | 2200 | 5500 | |
| | | | | | | | | | | | | |
| **C 32 3_74.7** | 74.7 | 12.0 | 290 | 0.38 | 1300 | 5500 | 6.7 | 300 | 0.22 | 1300 | 5500 | |
| **C 32 3_82.6** | 82.6 | 10.9 | 300 | 0.36 | 1300 | 5500 | 6.1 | 300 | 0.20 | 1300 | 5500 | |
| **C 32 3_94.2** | 94.2 | 9.6 | 300 | 0.32 | 1300 | 5500 | 5.3 | 300 | 0.18 | 1300 | 5500 | |
| **C 32 3_103.3** | 103.3 | 8.7 | 300 | 0.29 | 1300 | 5500 | 4.8 | 300 | 0.16 | 1300 | 5500 | |
| **C 32 3_110.6** | 110.6 | 8.1 | 300 | 0.27 | 1300 | 5500 | 4.5 | 300 | 0.15 | 1300 | 5500 | |
| **C 32 3_122.4** | 122.4 | 7.4 | 300 | 0.24 | 1300 | 5500 | 4.1 | 300 | 0.14 | 1300 | 5500 | |
| **C 32 3_136.0** | 136.0 | 6.6 | 300 | 0.22 | 1300 | 5500 | 3.7 | 300 | 0.12 | 1300 | 5500 | |
| **C 32 3_148.4** | 148.4 | 6.1 | 300 | 0.20 | 1300 | 5500 | 3.4 | 300 | 0.11 | 1300 | 5500 | |
| **C 32 3_167.4** | 167.4 | 5.4 | 300 | 0.18 | 1300 | 5500 | 3.0 | 300 | 0.10 | 1300 | 5500 | |
| **C 32 3_186.0** | 186.0 | 4.8 | 300 | 0.16 | 1300 | 5500 | 2.7 | 300 | 0.09 | 1300 | 5500 | |
| **C 32 3_215.6** | 215.6 | 4.2 | 300 | 0.14 | 1300 | 5500 | 2.3 | 300 | 0.08 | 1300 | 5500 | |
| **C 32 3_244.2** | 244.2 | 3.7 | 260 | 0.11 | 1300 | 5500 | 2.0 | 275 | 0.06 | 1300 | 5500 | |
| **C 32 3_274.7** | 274.7 | 3.3 | 260 | 0.09 | 1300 | 5500 | 1.8 | 275 | 0.06 | 1300 | 5500 | |



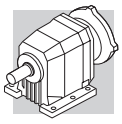
# C 36 — 450 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 36 2_2.7** | 2.7 | 1042 | 140 | 16.1 | 670 | 1750 | 521 | 170 | 9.8 | 1150 | 2240 | |
| **C 36 2_3.2** | 3.2 | 880 | 145 | 14.1 | 790 | 1870 | 440 | 177 | 8.6 | 1240 | 2380 | |
| **C 36 2_3.5** | 3.5 | 803 | 150 | 13.3 | 910 | 1920 | 402 | 185 | 8.2 | 1320 | 2440 | |
| **C 36 2_4.2** | 4.2 | 667 | 157 | 11.5 | 920 | 2050 | 333 | 192 | 7.1 | 1410 | 2620 | |
| **C 36 2_4.6** | 4.6 | 606 | 165 | 11.0 | 920 | 2110 | 303 | 200 | 6.7 | 1470 | 2700 | |
| **C 36 2_5.3** | 5.3 | 530 | 167 | 9.8 | 990 | 2230 | 265 | 200 | 5.8 | 1650 | 2870 | |
| **C 36 2_5.8** | 5.8 | 479 | 170 | 9.0 | 1160 | 2330 | 239 | 200 | 5.3 | 1990 | 3020 | |
| **C 36 2_6.8** | 6.8 | 413 | 285 | 13.0 | 1750 | 2130 | 206 | 355 | 8.1 | 2220 | 2710 | |
| **C 36 2_8.0** | 8.0 | 349 | 297 | 11.4 | 1770 | 2270 | 174 | 365 | 7.0 | 2250 | 2910 | |
| **C 36 2_8.8** | 8.8 | 318 | 310 | 10.9 | 1780 | 2330 | 159 | 380 | 6.7 | 2270 | 3000 | |
| **C 36 2_10.6** | 10.6 | 264 | 325 | 9.5 | 1790 | 2500 | 132 | 380 | 5.5 | 2320 | 3290 | |
| **C 36 2_11.7** | 11.7 | 240 | 340 | 9.0 | 1790 | 2560 | 120 | 380 | 5.0 | 2370 | 3460 | |
| **C 36 2_13.3** | 13.3 | 210 | 350 | 8.1 | 1800 | 2700 | 105 | 380 | 4.4 | 2400 | 3670 | |
| **C 36 2_14.8** | 14.8 | 190 | 360 | 7.5 | 1800 | 2810 | 95 | 380 | 4.0 | 2440 | 3890 | |
| **C 36 2_17.2** | 17.2 | 163 | 370 | 6.6 | 1810 | 3000 | 81 | 380 | 3.4 | 2460 | 4200 | |
| **C 36 2_19.0** | 19.0 | 147 | 380 | 6.2 | 1820 | 3110 | 74 | 380 | 3.1 | 2500 | 4400 | |
| **C 36 3_22.1** | 22.1 | 127 | 340 | 4.7 | 2300 | 3570 | 63 | 430 | 3.0 | 2900 | 4490 | |
| **C 36 3_26.2** | 26.2 | 107 | 355 | 4.2 | 2300 | 3790 | 53 | 440 | 2.6 | 2910 | 4810 | |
| **C 36 3_28.7** | 28.7 | 98 | 385 | 4.1 | 2300 | 3820 | 49 | 450 | 2.4 | 2930 | 4980 | |
| **C 36 3_34.6** | 34.6 | 81 | 400 | 3.6 | 2300 | 4100 | 40 | 450 | 2.0 | 2950 | 5420 | |
| **C 36 3_38.1** | 38.1 | 74 | 435 | 3.5 | 2300 | 4140 | 37 | 450 | 1.8 | 2970 | 5690 | |
| **C 36 3_43.5** | 43.5 | 64 | 440 | 3.1 | 2300 | 4450 | 32 | 450 | 1.6 | 2980 | 6050 | |
| **C 36 3_48.2** | 48.2 | 58 | 450 | 2.9 | 2310 | 4580 | 29.1 | 450 | 1.4 | 2990 | 6330 | |
| **C 36 3_56.2** | 56.2 | 50 | 450 | 2.5 | 2320 | 4970 | 24.9 | 450 | 1.2 | 2990 | 6500 | |
| **C 36 3_62.0** | 62.0 | 45 | 450 | 2.2 | 2330 | 5170 | 22.6 | 450 | 1.1 | 3000 | 6500 | 134 |
| **C 36 3_70.8** | 70.8 | 40 | 450 | 2.0 | 2340 | 5520 | 19.8 | 450 | 0.98 | 3000 | 6500 | |
| **C 36 3_77.6** | 77.6 | 36 | 450 | 1.8 | 2350 | 5740 | 18.0 | 450 | 0.90 | 3000 | 6500 | |
| **C 36 3_83.1** | 83.1 | 34 | 450 | 1.7 | 2350 | 5930 | 16.8 | 450 | 0.84 | 3000 | 6500 | |
| **C 36 3_91.9** | 91.9 | 30 | 450 | 1.5 | 2360 | 6200 | 15.2 | 450 | 0.76 | 3000 | 6500 | |
| **C 36 3_102.2** | 102.2 | 27.4 | 450 | 1.4 | 2360 | 6400 | 13.7 | 450 | 0.68 | 3000 | 6500 | |
| **C 36 3_111.5** | 111.5 | 25.1 | 450 | 1.2 | 2360 | 6500 | 12.6 | 450 | 0.62 | 3000 | 6500 | |
| **C 36 3_125.8** | 125.8 | 22.3 | 450 | 1.1 | 2370 | 6500 | 11.1 | 450 | 0.55 | 3000 | 6500 | |
| **C 36 3_139.8** | 139.8 | 20.0 | 450 | 0.99 | 2370 | 6500 | 10.0 | 450 | 0.50 | 3000 | 6500 | |
| **C 36 3_162.0** | 162.0 | 17.3 | 450 | 0.86 | 2380 | 6500 | 8.6 | 450 | 0.43 | 3000 | 6500 | |
| **C 36 3_183.5** | 183.5 | 15.3 | 450 | 0.76 | 2380 | 6500 | 7.6 | 450 | 0.38 | 3000 | 6500 | |
| **C 36 3_206.4** | 206.4 | 13.6 | 450 | 0.67 | 2380 | 6500 | 6.8 | 450 | 0.34 | 3000 | 6500 | |
| **C 36 4_230.9** | 230.9 | 12.1 | 450 | 0.60 | 1150 | 6500 | 6.1 | 450 | 0.30 | 1300 | 6500 | |
| **C 36 4_255.0** | 255.0 | 11.0 | 450 | 0.54 | 1190 | 6500 | 5.5 | 450 | 0.27 | 1300 | 6500 | |
| **C 36 4_290.9** | 290.9 | 9.6 | 450 | 0.48 | 1210 | 6500 | 4.8 | 450 | 0.24 | 1300 | 6500 | |
| **C 36 4_318.9** | 318.9 | 8.8 | 450 | 0.44 | 1230 | 6500 | 4.4 | 450 | 0.22 | 1300 | 6500 | |
| **C 36 4_341.7** | 341.7 | 8.2 | 450 | 0.41 | 1240 | 6500 | 4.1 | 450 | 0.20 | 1300 | 6500 | |
| **C 36 4_377.9** | 377.9 | 7.4 | 450 | 0.37 | 1260 | 6500 | 3.7 | 450 | 0.18 | 1300 | 6500 | |
| **C 36 4_420.2** | 420.2 | 6.7 | 450 | 0.33 | 1270 | 6500 | 3.3 | 450 | 0.17 | 1300 | 6500 | |
| **C 36 4_458.4** | 458.4 | 6.1 | 450 | 0.30 | 1280 | 6500 | 3.1 | 450 | 0.15 | 1300 | 6500 | |
| **C 36 4_517.2** | 517.2 | 5.4 | 450 | 0.27 | 1300 | 6500 | 2.7 | 450 | 0.13 | 1300 | 6500 | |
| **C 36 4_574.7** | 574.7 | 4.9 | 450 | 0.24 | 1300 | 6500 | 2.4 | 450 | 0.12 | 1300 | 6500 | |
| **C 36 4_665.9** | 665.9 | 4.2 | 450 | 0.21 | 1300 | 6500 | 2.1 | 450 | 0.10 | 1300 | 6500 | |
| **C 36 4_754.2** | 754.2 | 3.7 | 450 | 0.18 | 1300 | 6500 | 1.9 | 450 | 0.09 | 1300 | 6500 | |
| **C 36 4_848.5** | 848.5 | 3.3 | 450 | 0.16 | 1300 | 6500 | 1.6 | 450 | 0.08 | 1300 | 6500 | |



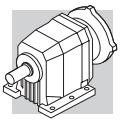
# C 36 — 450 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 36 2_2.7** | 2.7 | 335 | 190 | 7.0 | 1670 | 2640 | 186 | 200 | 4.1 | 3000 | 3390 | |
| **C 36 2_3.2** | 3.2 | 283 | 190 | 5.9 | 2080 | 2790 | 157 | 200 | 3.5 | 3000 | 3650 | |
| **C 36 2_3.5** | 3.5 | 258 | 200 | 5.7 | 2160 | 2920 | 143 | 200 | 3.2 | 3000 | 3810 | |
| **C 36 2_4.2** | 4.2 | 214 | 200 | 4.7 | 2410 | 3170 | 119 | 200 | 2.6 | 3000 | 4100 | |
| **C 36 2_4.6** | 4.6 | 195 | 200 | 4.3 | 2590 | 3320 | 108 | 200 | 2.4 | 3000 | 4300 | |
| **C 36 2_5.3** | 5.3 | 171 | 200 | 3.8 | 2630 | 3500 | 95 | 200 | 2.1 | 3000 | 4520 | |
| **C 36 2_5.8** | 5.8 | 154 | 200 | 3.4 | 2680 | 3690 | 86 | 200 | 1.9 | 3000 | 4740 | |
| **C 36 2_6.8** | 6.8 | 133 | 380 | 5.6 | 2660 | 3290 | 74 | 380 | 3.1 | 3000 | 4400 | |
| **C 36 2_8.0** | 8.0 | 112 | 380 | 4.7 | 2720 | 3580 | 62 | 380 | 2.6 | 3000 | 4750 | |
| **C 36 2_8.8** | 8.8 | 102 | 380 | 4.3 | 2790 | 3750 | 57 | 380 | 2.4 | 3000 | 4960 | |
| **C 36 2_10.6** | 10.6 | 85 | 380 | 3.6 | 2850 | 4110 | 47 | 380 | 2.0 | 3000 | 5360 | |
| **C 36 2_11.7** | 11.7 | 77 | 380 | 3.2 | 2900 | 4300 | 43 | 380 | 1.8 | 3000 | 5630 | |
| **C 36 2_13.3** | 13.3 | 68 | 380 | 2.8 | 2930 | 4590 | 38 | 380 | 1.6 | 3000 | 5930 | |
| **C 36 2_14.8** | 14.8 | 61 | 380 | 2.6 | 2970 | 4800 | 34 | 380 | 1.4 | 3000 | 6240 | |
| **C 36 2_17.2** | 17.2 | 52 | 380 | 2.2 | 2980 | 5100 | 29.1 | 380 | 1.2 | 3000 | 6330 | |
| **C 36 2_19.0** | 19.0 | 47 | 380 | 2.0 | 3000 | 5390 | 26.3 | 380 | 1.1 | 3000 | 6500 | |
| **C 36 3_22.1** | 22.1 | 41 | 450 | 2.0 | 3000 | 5430 | 22.6 | 450 | 1.1 | 3000 | 6500 | |
| **C 36 3_26.2** | 26.2 | 34 | 450 | 1.7 | 3000 | 5850 | 19.1 | 450 | 0.95 | 3000 | 6500 | |
| **C 36 3_28.7** | 28.7 | 31 | 450 | 1.6 | 3000 | 6120 | 17.4 | 450 | 0.86 | 3000 | 6500 | |
| **C 36 3_34.6** | 34.6 | 26.0 | 450 | 1.3 | 3000 | 6500 | 14.5 | 450 | 0.72 | 3000 | 6500 | |
| **C 36 3_38.1** | 38.1 | 23.6 | 450 | 1.2 | 3000 | 6500 | 13.1 | 450 | 0.65 | 3000 | 6500 | |
| **C 36 3_43.5** | 43.5 | 20.7 | 450 | 1.0 | 3000 | 6500 | 11.5 | 450 | 0.57 | 3000 | 6500 | |
| **C 36 3_48.2** | 48.2 | 18.7 | 450 | 0.93 | 3000 | 6500 | 10.4 | 450 | 0.52 | 3000 | 6500 | |
| **C 36 3_56.2** | 56.2 | 16.0 | 450 | 0.79 | 3000 | 6500 | 8.9 | 450 | 0.44 | 3000 | 6500 | |
| **C 36 3_62.0** | 62.0 | 14.5 | 450 | 0.72 | 3000 | 6500 | 8.1 | 450 | 0.40 | 3000 | 6500 | 134 |
| **C 36 3_70.8** | 70.8 | 12.7 | 450 | 0.63 | 3000 | 6500 | 7.1 | 450 | 0.35 | 3000 | 6500 | |
| **C 36 3_77.6** | 77.6 | 11.6 | 450 | 0.58 | 3000 | 6500 | 6.4 | 450 | 0.32 | 3000 | 6500 | |
| **C 36 3_83.1** | 83.1 | 10.8 | 450 | 0.54 | 3000 | 6500 | 6.0 | 450 | 0.30 | 3000 | 6500 | |
| **C 36 3_91.9** | 91.9 | 9.8 | 450 | 0.49 | 3000 | 6500 | 5.4 | 450 | 0.27 | 3000 | 6500 | |
| **C 36 3_102.2** | 102.2 | 8.8 | 450 | 0.44 | 3000 | 6500 | 4.9 | 450 | 0.24 | 3000 | 6500 | |
| **C 36 3_111.5** | 111.5 | 8.1 | 450 | 0.40 | 3000 | 6500 | 4.5 | 450 | 0.22 | 3000 | 6500 | |
| **C 36 3_125.8** | 125.8 | 7.2 | 450 | 0.35 | 3000 | 6500 | 4.0 | 450 | 0.20 | 3000 | 6500 | |
| **C 36 3_139.8** | 139.8 | 6.4 | 450 | 0.32 | 3000 | 6500 | 3.6 | 450 | 0.18 | 3000 | 6500 | |
| **C 36 3_162.0** | 162.0 | 5.6 | 450 | 0.28 | 3000 | 6500 | 3.1 | 450 | 0.15 | 3000 | 6500 | |
| **C 36 3_183.5** | 183.5 | 4.9 | 450 | 0.24 | 3000 | 6500 | 2.7 | 450 | 0.14 | 3000 | 6500 | |
| **C 36 3_206.4** | 206.4 | 4.4 | 450 | 0.22 | 3000 | 6500 | 2.4 | 450 | 0.12 | 3000 | 6500 | |
| **C 36 4_230.9** | 230.9 | 3.9 | 450 | 0.19 | 1300 | 6500 | 2.2 | 450 | 0.11 | 1300 | 6500 | |
| **C 36 4_255.0** | 255.0 | 3.5 | 450 | 0.18 | 1300 | 6500 | 2.0 | 450 | 0.10 | 1300 | 6500 | |
| **C 36 4_290.9** | 290.9 | 3.1 | 450 | 0.15 | 1300 | 6500 | 1.7 | 450 | 0.09 | 1300 | 6500 | |
| **C 36 4_318.9** | 318.9 | 2.8 | 450 | 0.14 | 1300 | 6500 | 1.6 | 450 | 0.08 | 1300 | 6500 | |
| **C 36 4_341.7** | 341.7 | 2.6 | 450 | 0.13 | 1300 | 6500 | 1.5 | 450 | 0.07 | 1300 | 6500 | |
| **C 36 4_377.9** | 377.9 | 2.4 | 450 | 0.12 | 1300 | 6500 | 1.3 | 450 | 0.07 | 1300 | 6500 | |
| **C 36 4_420.2** | 420.2 | 2.1 | 450 | 0.11 | 1300 | 6500 | 1.2 | 450 | 0.06 | 1300 | 6500 | |
| **C 36 4_458.4** | 458.4 | 2.0 | 450 | 0.10 | 1300 | 6500 | 1.1 | 450 | 0.05 | 1300 | 6500 | |
| **C 36 4_517.2** | 517.2 | 1.7 | 450 | 0.09 | 1300 | 6500 | 1.0 | 450 | 0.05 | 1300 | 6500 | |
| **C 36 4_574.7** | 574.7 | 1.6 | 450 | 0.08 | 1300 | 6500 | 0.9 | 450 | 0.04 | 1300 | 6500 | |
| **C 36 4_665.9** | 665.9 | 1.4 | 450 | 0.07 | 1300 | 6500 | 0.8 | 450 | 0.04 | 1300 | 6500 | |
| **C 36 4_754.2** | 754.2 | 1.2 | 450 | 0.06 | 1300 | 6500 | 0.7 | 450 | 0.03 | 1300 | 6500 | |
| **C 36 4_848.5** | 848.5 | 1.1 | 450 | 0.05 | 1300 | 6500 | 0.6 | 450 | 0.03 | 1300 | 6500 | |



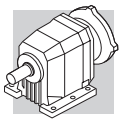
# C 41 — 600 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 41 2_2.7** | 2.7 | 1037 | 245 | 28 | 980 | 1290 | 519 | 245 | 14.0 | 1390 | 2060 | |
| **C 41 2_3.6** | 3.6 | 778 | 255 | 22 | 1070 | 1540 | 389 | 255 | 10.9 | 1650 | 2390 | |
| **C 41 2_4.7** | 4.7 | 596 | 260 | 17.1 | 1170 | 1800 | 298 | 260 | 8.5 | 2010 | 2730 | |
| **C 41 2_6.0** | 6.0 | 467 | 260 | 13.4 | 1290 | 2100 | 233 | 260 | 6.7 | 2400 | 3110 | |
| **C 41 2_6.4** | 6.4 | 438 | 275 | 13.3 | 2270 | 2590 | 219 | 345 | 8.3 | 2860 | 3260 | |
| **C 41 2_7.1** | 7.1 | 394 | 285 | 12.4 | 2360 | 2700 | 197 | 355 | 7.7 | 2980 | 3420 | |
| **C 41 2_8.6** | 8.6 | 326 | 305 | 10.9 | 2300 | 2860 | 163 | 385 | 6.9 | 2900 | 3600 | |
| **C 41 2_9.6** | 9.6 | 292 | 310 | 10.0 | 2410 | 3010 | 146 | 390 | 6.3 | 3030 | 3800 | |
| **C 41 2_11.2** | 11.2 | 250 | 335 | 9.2 | 2310 | 3100 | 125 | 420 | 5.8 | 2910 | 3920 | |
| **C 41 2_12.4** | 12.4 | 226 | 340 | 8.5 | 2440 | 3270 | 113 | 425 | 5.3 | 3070 | 4140 | |
| **C 41 2_14.2** | 14.2 | 197 | 355 | 7.7 | 2330 | 3410 | 99 | 445 | 4.8 | 2980 | 4300 | |
| **C 41 2_15.8** | 15.8 | 177 | 360 | 7.0 | 2460 | 3590 | 89 | 450 | 4.4 | 3120 | 4540 | |
| **C 41 2_17.8** | 17.8 | 157 | 380 | 6.6 | 2330 | 3680 | 79 | 480 | 4.2 | 3050 | 4630 | |
| **C 41 2_19.8** | 19.8 | 141 | 385 | 6.0 | 2460 | 3880 | 71 | 485 | 3.8 | 3180 | 4890 | |
| **C 41 2_22.6** | 22.6 | 124 | 410 | 5.6 | 2320 | 3990 | 62 | 500 | 3.4 | 3110 | 5110 | |
| **C 41 2_25.0** | 25.0 | 112 | 415 | 5.1 | 2460 | 4210 | 56 | 500 | 3.1 | 3230 | 5420 | |
| **C 41 2_28.3** | 28.3 | 99 | 445 | 4.9 | 2310 | 4290 | 49 | 500 | 2.7 | 3180 | 5710 | |
| **C 41 2_31.4** | 31.4 | 89 | 445 | 4.4 | 2440 | 4550 | 45 | 500 | 2.5 | 3300 | 6040 | |
| **C 41 2_33.4** | 33.4 | 84 | 465 | 4.3 | 2390 | 4560 | 42 | 500 | 2.3 | 3220 | 6170 | |
| **C 41 2_37.1** | 37.1 | 75 | 470 | 3.9 | 2440 | 4810 | 38 | 500 | 2.1 | 3320 | 6520 | |
| **C 41 2_44.8** | 44.8 | 63 | 500 | 3.4 | 2660 | 5130 | 31 | 500 | 1.7 | 3500 | 7000 | |
| | | | | | | | | | | | | |
| **C 41 3_28.5** | 28.5 | 98 | 445 | 4.9 | 3060 | 4300 | 49 | 560 | 3.1 | 3500 | 5420 | |
| **C 41 3_31.2** | 31.2 | 90 | 450 | 4.5 | 3090 | 4510 | 45 | 570 | 2.9 | 3500 | 5670 | |
| **C 41 3_36.8** | 36.8 | 76 | 480 | 4.1 | 3070 | 4710 | 38 | 600 | 2.6 | 3500 | 5960 | |
| **C 41 3_40.3** | 40.3 | 69 | 485 | 3.8 | 3100 | 4940 | 35 | 600 | 2.3 | 3500 | 6280 | |
| **C 41 3_47.0** | 47.0 | 60 | 515 | 3.5 | 3070 | 5140 | 29.8 | 600 | 2.0 | 3500 | 6720 | |
| **C 41 3_51.5** | 51.5 | 54 | 525 | 3.2 | 3090 | 5360 | 27.2 | 600 | 1.8 | 3500 | 7000 | |
| **C 41 3_58.7** | 58.7 | 48 | 550 | 3.0 | 3070 | 5550 | 23.9 | 600 | 1.6 | 3500 | 7000 | 138 |
| **C 41 3_64.3** | 64.3 | 44 | 560 | 2.7 | 3090 | 5800 | 21.8 | 600 | 1.5 | 3500 | 7000 | |
| **C 41 3_74.4** | 74.4 | 38 | 590 | 2.5 | 3060 | 6040 | 18.8 | 600 | 1.3 | 3500 | 7000 | |
| **C 41 3_81.5** | 81.5 | 34 | 600 | 2.3 | 3090 | 6310 | 17.2 | 600 | 1.2 | 3500 | 7000 | |
| **C 41 3_93.3** | 93.3 | 30 | 600 | 2.0 | 3080 | 6700 | 15.0 | 600 | 1.0 | 3500 | 7000 | |
| **C 41 3_102.3** | 102.3 | 27.4 | 600 | 1.8 | 3110 | 7000 | 13.7 | 600 | 0.92 | 3500 | 7000 | |
| **C 41 3_110.1** | 110.1 | 25.4 | 600 | 1.7 | 3090 | 7000 | 12.7 | 600 | 0.86 | 3500 | 7000 | |
| **C 41 3_120.6** | 120.6 | 23.2 | 600 | 1.6 | 3110 | 7000 | 11.6 | 600 | 0.78 | 3500 | 7000 | |
| **C 41 3_132.9** | 132.9 | 21.1 | 600 | 1.4 | 3090 | 7000 | 10.5 | 600 | 0.71 | 3500 | 7000 | |
| **C 41 3_145.6** | 145.6 | 19.2 | 600 | 1.3 | 3120 | 7000 | 9.6 | 600 | 0.65 | 3500 | 7000 | |
| **C 41 3_164.1** | 164.1 | 17.1 | 600 | 1.2 | 3100 | 7000 | 8.5 | 600 | 0.58 | 3500 | 7000 | |
| **C 41 3_179.9** | 179.9 | 15.6 | 600 | 1.1 | 3120 | 7000 | 7.8 | 600 | 0.53 | 3500 | 7000 | |
| **C 41 3_190.8** | 190.8 | 14.7 | 600 | 0.99 | 3110 | 7000 | 7.3 | 600 | 0.50 | 3500 | 7000 | |
| **C 41 3_209.1** | 209.1 | 13.4 | 600 | 0.90 | 3130 | 7000 | 6.7 | 600 | 0.45 | 3500 | 7000 | |
| | | | | | | | | | | | | |
| **C 41 4_239.9** | 239.9 | 11.7 | 600 | 0.81 | 1480 | 7000 | 5.8 | 600 | 0.40 | 1910 | 7000 | |
| **C 41 4_263.0** | 263.0 | 10.6 | 600 | 0.74 | 1500 | 7000 | 5.3 | 600 | 0.37 | 1920 | 7000 | |
| **C 41 4_304.2** | 304.2 | 9.2 | 600 | 0.64 | 1520 | 7000 | 4.6 | 600 | 0.32 | 1950 | 7000 | |
| **C 41 4_333.4** | 333.4 | 8.4 | 600 | 0.58 | 1530 | 7000 | 4.2 | 600 | 0.29 | 1960 | 7000 | |
| **C 41 4_381.8** | 381.8 | 7.3 | 600 | 0.51 | 1540 | 7000 | 3.7 | 600 | 0.25 | 1970 | 7000 | |
| **C 41 4_418.5** | 418.5 | 6.7 | 600 | 0.46 | 1550 | 7000 | 3.3 | 600 | 0.23 | 1980 | 7000 | |
| **C 41 4_450.2** | 450.2 | 6.2 | 600 | 0.43 | 1560 | 7000 | 3.1 | 600 | 0.21 | 1990 | 7000 | |
| **C 41 4_493.5** | 493.5 | 5.7 | 600 | 0.39 | 1570 | 7000 | 2.8 | 600 | 0.20 | 2000 | 7000 | |
| **C 41 4_543.5** | 543.5 | 5.2 | 600 | 0.36 | 1570 | 7000 | 2.6 | 600 | 0.18 | 2000 | 7000 | |
| **C 41 4_595.8** | 595.8 | 4.7 | 600 | 0.32 | 1580 | 7000 | 2.3 | 600 | 0.16 | 2010 | 7000 | |
| **C 41 4_671.3** | 671.3 | 4.2 | 600 | 0.29 | 1590 | 7000 | 2.1 | 600 | 0.14 | 2020 | 7000 | |
| **C 41 4_735.9** | 735.9 | 3.8 | 600 | 0.26 | 1590 | 7000 | 1.9 | 600 | 0.13 | 2020 | 7000 | |
| **C 41 4_780.4** | 780.4 | 3.6 | 600 | 0.25 | 1600 | 7000 | 1.8 | 600 | 0.12 | 2030 | 7000 | |
| **C 41 4_855.5** | 855.5 | 3.3 | 600 | 0.23 | 1600 | 7000 | 1.6 | 600 | 0.11 | 2030 | 7000 | |



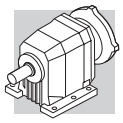
# C 41 — 600 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 41 2_2.7** | 2.7 | 333 | 245 | 9.0 | 2560 | 2650 | 185 | 245 | 5.0 | 3500 | 3590 | |
| **C 41 2_3.6** | 3.6 | 250 | 255 | 7.0 | 2710 | 3050 | 139 | 255 | 3.9 | 3500 | 4090 | |
| **C 41 2_4.7** | 4.7 | 191 | 260 | 5.5 | 2900 | 3440 | 106 | 260 | 3.0 | 3500 | 4570 | |
| **C 41 2_6.0** | 6.0 | 150 | 260 | 4.3 | 3080 | 3890 | 83 | 260 | 2.4 | 3500 | 5110 | |
| **C 41 2_6.4** | 6.4 | 141 | 400 | 6.2 | 3310 | 3780 | 78 | 490 | 4.2 | 3500 | 4580 | |
| **C 41 2_7.1** | 7.1 | 127 | 415 | 5.8 | 3460 | 3940 | 70 | 500 | 3.9 | 3500 | 4820 | |
| **C 41 2_8.6** | 8.6 | 105 | 445 | 5.1 | 3360 | 4180 | 58 | 500 | 3.2 | 3500 | 5290 | |
| **C 41 2_9.6** | 9.6 | 94 | 450 | 4.7 | 3500 | 4410 | 52 | 500 | 2.9 | 3500 | 5600 | |
| **C 41 2_11.2** | 11.2 | 80 | 490 | 4.3 | 3500 | 4520 | 45 | 500 | 2.5 | 3500 | 5980 | |
| **C 41 2_12.4** | 12.4 | 73 | 495 | 4.0 | 3500 | 4780 | 40 | 500 | 2.2 | 3500 | 6320 | |
| **C 41 2_14.2** | 14.2 | 63 | 500 | 3.5 | 3500 | 5060 | 35 | 500 | 1.9 | 3500 | 6700 | |
| **C 41 2_15.8** | 15.8 | 57 | 500 | 3.1 | 3500 | 5370 | 32 | 500 | 1.7 | 3500 | 7000 | |
| **C 41 2_17.8** | 17.8 | 51 | 500 | 2.8 | 3500 | 5650 | 28.1 | 500 | 1.5 | 3500 | 7000 | |
| **C 41 2_19.8** | 19.8 | 45 | 500 | 2.5 | 3500 | 5970 | 25.3 | 500 | 1.4 | 3500 | 7000 | |
| **C 41 2_22.6** | 22.6 | 40 | 500 | 2.2 | 3500 | 6320 | 22.1 | 500 | 1.2 | 3500 | 7000 | |
| **C 41 2_25.0** | 25.0 | 36 | 500 | 2.0 | 3500 | 6670 | 20.0 | 500 | 1.1 | 3500 | 7000 | |
| **C 41 2_28.3** | 28.3 | 32 | 500 | 1.8 | 3500 | 7000 | 17.7 | 500 | 0.97 | 3500 | 7000 | |
| **C 41 2_31.4** | 31.4 | 28.7 | 500 | 1.6 | 3500 | 7000 | 15.9 | 500 | 0.88 | 3500 | 7000 | |
| **C 41 2_33.4** | 33.4 | 26.9 | 500 | 1.5 | 3500 | 7000 | 15.0 | 500 | 0.83 | 3500 | 7000 | |
| **C 41 2_37.1** | 37.1 | 24.3 | 500 | 1.3 | 3500 | 7000 | 13.5 | 500 | 0.74 | 3500 | 7000 | |
| **C 41 2_44.8** | 44.8 | 20.1 | 500 | 1.1 | 3500 | 7000 | 11.2 | 500 | 0.62 | 3500 | 7000 | |
| | | | | | | | | | | | | |
| **C 41 3_28.5** | 28.5 | 32 | 600 | 2.1 | 3500 | 6530 | 17.5 | 600 | 1.2 | 3500 | 7000 | |
| **C 41 3_31.2** | 31.2 | 28.8 | 600 | 1.9 | 3500 | 6870 | 16.0 | 600 | 1.1 | 3500 | 7000 | |
| **C 41 3_36.8** | 36.8 | 24.5 | 600 | 1.7 | 3500 | 7000 | 13.6 | 600 | 0.92 | 3500 | 7000 | |
| **C 41 3_40.3** | 40.3 | 22.3 | 600 | 1.5 | 3500 | 7000 | 12.4 | 600 | 0.84 | 3500 | 7000 | |
| **C 41 3_47.0** | 47.0 | 19.1 | 600 | 1.3 | 3500 | 7000 | 10.6 | 600 | 0.72 | 3500 | 7000 | |
| **C 41 3_51.5** | 51.5 | 17.5 | 600 | 1.2 | 3500 | 7000 | 9.7 | 600 | 0.66 | 3500 | 7000 | |
| **C 41 3_58.7** | 58.7 | 15.3 | 600 | 1.0 | 3500 | 7000 | 8.5 | 600 | 0.58 | 3500 | 7000 | 138 |
| **C 41 3_64.3** | 64.3 | 14.0 | 600 | 0.95 | 3500 | 7000 | 7.8 | 600 | 0.53 | 3500 | 7000 | |
| **C 41 3_74.4** | 74.4 | 12.1 | 600 | 0.82 | 3500 | 7000 | 6.7 | 600 | 0.45 | 3500 | 7000 | |
| **C 41 3_81.5** | 81.5 | 11.0 | 600 | 0.75 | 3500 | 7000 | 6.1 | 600 | 0.41 | 3500 | 7000 | |
| **C 41 3_93.3** | 93.3 | 9.6 | 600 | 0.65 | 3500 | 7000 | 5.4 | 600 | 0.36 | 3500 | 7000 | |
| **C 41 3_102.3** | 102.3 | 8.8 | 600 | 0.59 | 3500 | 7000 | 4.9 | 600 | 0.33 | 3500 | 7000 | |
| **C 41 3_110.1** | 110.1 | 8.2 | 600 | 0.55 | 3500 | 7000 | 4.5 | 600 | 0.31 | 3500 | 7000 | |
| **C 41 3_120.6** | 120.6 | 7.5 | 600 | 0.50 | 3500 | 7000 | 4.1 | 600 | 0.28 | 3500 | 7000 | |
| **C 41 3_132.9** | 132.9 | 6.8 | 600 | 0.46 | 3500 | 7000 | 3.8 | 600 | 0.25 | 3500 | 7000 | |
| **C 41 3_145.6** | 145.6 | 6.2 | 600 | 0.42 | 3500 | 7000 | 3.4 | 600 | 0.23 | 3500 | 7000 | |
| **C 41 3_164.1** | 164.1 | 5.5 | 600 | 0.37 | 3500 | 7000 | 3.0 | 600 | 0.21 | 3500 | 7000 | |
| **C 41 3_179.9** | 179.9 | 5.0 | 600 | 0.34 | 3500 | 7000 | 2.8 | 600 | 0.19 | 3500 | 7000 | |
| **C 41 3_190.8** | 190.8 | 4.7 | 600 | 0.32 | 3500 | 7000 | 2.6 | 600 | 0.18 | 3500 | 7000 | |
| **C 41 3_209.1** | 209.1 | 4.3 | 600 | 0.29 | 3500 | 7000 | 2.4 | 600 | 0.16 | 3500 | 7000 | |
| | | | | | | | | | | | | |
| **C 41 4_239.9** | 239.9 | 3.8 | 600 | 0.26 | 2200 | 7000 | 2.1 | 600 | 0.14 | 2200 | 7000 | |
| **C 41 4_263.0** | 263.0 | 3.4 | 600 | 0.24 | 2200 | 7000 | 1.9 | 600 | 0.13 | 2200 | 7000 | |
| **C 41 4_304.2** | 304.2 | 3.0 | 600 | 0.20 | 2200 | 7000 | 1.6 | 600 | 0.11 | 2200 | 7000 | |
| **C 41 4_333.4** | 333.4 | 2.7 | 600 | 0.19 | 2200 | 7000 | 1.5 | 600 | 0.10 | 2200 | 7000 | |
| **C 41 4_381.8** | 381.8 | 2.4 | 600 | 0.16 | 2200 | 7000 | 1.3 | 600 | 0.09 | 2200 | 7000 | |
| **C 41 4_418.5** | 418.5 | 2.2 | 600 | 0.15 | 2200 | 7000 | 1.2 | 600 | 0.08 | 2200 | 7000 | |
| **C 41 4_450.2** | 450.2 | 2.0 | 600 | 0.14 | 2200 | 7000 | 1.1 | 600 | 0.08 | 2200 | 7000 | |
| **C 41 4_493.5** | 493.5 | 1.8 | 600 | 0.13 | 2200 | 7000 | 1.0 | 600 | 0.07 | 2200 | 7000 | |
| **C 41 4_543.5** | 543.5 | 1.7 | 600 | 0.11 | 2200 | 7000 | 0.92 | 600 | 0.06 | 2200 | 7000 | |
| **C 41 4_595.8** | 595.8 | 1.5 | 600 | 0.10 | 2200 | 7000 | 0.84 | 600 | 0.06 | 2200 | 7000 | |
| **C 41 4_671.3** | 671.3 | 1.3 | 600 | 0.09 | 2200 | 7000 | 0.74 | 600 | 0.05 | 2200 | 7000 | |
| **C 41 4_735.9** | 735.9 | 1.2 | 600 | 0.08 | 2200 | 7000 | 0.68 | 600 | 0.05 | 2200 | 7000 | |
| **C 41 4_780.4** | 780.4 | 1.2 | 600 | 0.08 | 2200 | 7000 | 0.64 | 600 | 0.04 | 2200 | 7000 | |
| **C 41 4_855.5** | 855.5 | 1.1 | 600 | 0.07 | 2200 | 7000 | 0.58 | 600 | 0.04 | 2200 | 7000 | |



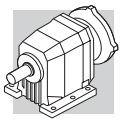
# C 51 — 1000 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 51 2_2.6** | 2.6 | 1077 | 315 | 37 | 980 | 3340 | 538 | 400 | 24 | 1390 | 4200 | |
| **C 51 2_3.3** | 3.3 | 848 | 340 | 32 | 1070 | 3610 | 424 | 420 | 19.6 | 1650 | 4580 | |
| **C 51 2_4.5** | 4.5 | 622 | 370 | 25 | 1170 | 4010 | 311 | 435 | 14.9 | 2010 | 5180 | |
| **C 51 2_5.6** | 5.6 | 500 | 390 | 21 | 1290 | 4380 | 250 | 435 | 12.0 | 2400 | 5760 | |
| **C 51 2_7.0** | 7.0 | 400 | 500 | 22 | 2270 | 4760 | 200 | 630 | 13.9 | 2860 | 6000 | |
| **C 51 2_7.8** | 7.8 | 359 | 510 | 20 | 2360 | 4940 | 179 | 640 | 12.7 | 2980 | 6230 | |
| **C 51 2_8.8** | 8.8 | 318 | 545 | 19.1 | 2300 | 5120 | 159 | 685 | 12.0 | 2900 | 6450 | |
| **C 51 2_9.8** | 9.8 | 286 | 545 | 17.2 | 2410 | 5350 | 143 | 685 | 10.8 | 3030 | 6750 | |
| **C 51 2_11.8** | 11.8 | 237 | 610 | 16.0 | 2310 | 5620 | 119 | 770 | 10.1 | 2910 | 7080 | |
| **C 51 2_13.1** | 13.1 | 214 | 595 | 14.0 | 2440 | 5930 | 107 | 750 | 8.8 | 3070 | 7470 | |
| **C 51 2_15.0** | 15.0 | 187 | 660 | 13.6 | 2330 | 6080 | 93 | 800 | 8.2 | 2980 | 7770 | |
| **C 51 2_16.6** | 16.6 | 169 | 640 | 11.9 | 2460 | 6420 | 84 | 795 | 7.4 | 3120 | 8130 | |
| **C 51 2_18.9** | 18.9 | 148 | 695 | 11.3 | 2330 | 6630 | 74 | 800 | 6.5 | 3050 | 8620 | |
| **C 51 2_21.0** | 21.0 | 133 | 675 | 9.9 | 2460 | 7000 | 67 | 795 | 5.8 | 3180 | 9020 | |
| **C 51 2_23.4** | 23.4 | 120 | 735 | 9.7 | 2320 | 7160 | 60 | 800 | 5.3 | 3110 | 9460 | |
| **C 51 2_25.9** | 25.9 | 108 | 715 | 8.5 | 2460 | 7550 | 54 | 795 | 4.7 | 3230 | 9890 | |
| **C 51 2_29.8** | 29.8 | 94 | 795 | 8.2 | 2310 | 7770 | 47 | 800 | 4.1 | 3180 | 10000 | |
| **C 51 2_33.0** | 33.0 | 85 | 775 | 7.2 | 2440 | 8190 | 42 | 795 | 3.7 | 3300 | 10000 | |
| **C 51 2_36.4** | 36.4 | 77 | 750 | 6.4 | 2390 | 8660 | 38 | 790 | 3.3 | 3220 | 10000 | |
| **C 51 2_40.4** | 40.4 | 69 | 795 | 6.1 | 2440 | 8870 | 35 | 795 | 3.0 | 3320 | 10000 | |
| **C 51 2_43.1** | 43.1 | 65 | 730 | 5.2 | 2450 | 9380 | 32 | 770 | 2.8 | 3280 | 10000 | |
| **C 51 2_47.8** | 47.8 | 59 | 800 | 5.2 | 2460 | 9530 | 29.3 | 800 | 2.6 | 3350 | 10000 | |
| **C 51 2_51.4** | 51.4 | 54 | 665 | 4.0 | 2550 | 10000 | 27.2 | 700 | 2.1 | 3390 | 10000 | |
| **C 51 2_57.0** | 57.0 | 49 | 745 | 4.0 | 2540 | 10000 | 24.6 | 785 | 2.1 | 3380 | 10000 | |
| **C 51 3_21.8** | 21.8 | 128 | 720 | 10.4 | 2870 | 6940 | 64 | 905 | 6.5 | 3500 | 8750 | |
| **C 51 3_23.9** | 23.9 | 117 | 730 | 9.6 | 2910 | 7230 | 59 | 920 | 6.1 | 3500 | 9110 | |
| **C 51 3_27.4** | 27.4 | 102 | 770 | 8.9 | 2890 | 7510 | 51 | 970 | 5.6 | 3500 | 9470 | |
| **C 51 3_30.1** | 30.1 | 93 | 780 | 8.2 | 2930 | 7830 | 47 | 1000 | 5.2 | 3500 | 9810 | |
| **C 51 3_37.0** | 37.0 | 76 | 840 | 7.2 | 2910 | 8330 | 38 | 1000 | 4.3 | 3500 | 10000 | |
| **C 51 3_40.5** | 40.5 | 69 | 855 | 6.7 | 2940 | 8670 | 35 | 1000 | 3.9 | 3500 | 10000 | 142 |
| **C 51 3_46.7** | 46.7 | 60 | 905 | 6.1 | 2920 | 9020 | 30 | 1000 | 3.4 | 3500 | 10000 | |
| **C 51 3_51.2** | 51.2 | 55 | 920 | 5.7 | 2950 | 9390 | 27.3 | 1000 | 3.1 | 3500 | 10000 | |
| **C 51 3_59.0** | 59.0 | 47 | 970 | 5.2 | 2910 | 9780 | 23.7 | 1000 | 2.7 | 3500 | 10000 | |
| **C 51 3_64.6** | 64.6 | 43 | 1000 | 4.9 | 2940 | 10000 | 21.7 | 1000 | 2.4 | 3500 | 10000 | |
| **C 51 3_72.9** | 72.9 | 38 | 1000 | 4.3 | 2920 | 10000 | 19.2 | 1000 | 2.2 | 3500 | 10000 | |
| **C 51 3_79.9** | 79.9 | 35 | 1000 | 3.9 | 2960 | 10000 | 17.5 | 1000 | 2.0 | 3500 | 10000 | |
| **C 51 3_93.0** | 93.0 | 30 | 1000 | 3.4 | 2950 | 10000 | 15.1 | 1000 | 1.7 | 3500 | 10000 | |
| **C 51 3_101.8** | 101.8 | 27.5 | 1000 | 3.1 | 2990 | 10000 | 13.8 | 1000 | 1.5 | 3500 | 10000 | |
| **C 51 3_113.6** | 113.6 | 24.6 | 1000 | 2.8 | 2960 | 10000 | 12.3 | 1000 | 1.4 | 3500 | 10000 | |
| **C 51 3_124.4** | 124.4 | 22.5 | 1000 | 2.5 | 3000 | 10000 | 11.3 | 1000 | 1.3 | 3500 | 10000 | |
| **C 51 3_134.6** | 134.6 | 20.8 | 1000 | 2.3 | 2970 | 10000 | 10.4 | 1000 | 1.2 | 3500 | 10000 | |
| **C 51 3_147.4** | 147.4 | 19.0 | 1000 | 2.1 | 3010 | 10000 | 9.5 | 1000 | 1.1 | 3500 | 10000 | |
| **C 51 3_160.5** | 160.5 | 17.4 | 1000 | 2.0 | 2980 | 10000 | 8.7 | 1000 | 0.98 | 3500 | 10000 | |
| **C 51 3_175.8** | 175.8 | 15.9 | 1000 | 1.8 | 3020 | 10000 | 8.0 | 1000 | 0.90 | 3500 | 10000 | |
| **C 51 3_197.9** | 197.9 | 14.1 | 1000 | 1.6 | 2980 | 10000 | 7.1 | 1000 | 0.80 | 3500 | 10000 | |
| **C 51 3_216.7** | 216.7 | 12.9 | 1000 | 1.5 | 3020 | 10000 | 6.5 | 1000 | 0.73 | 3500 | 10000 | |
| **C 51 4_240.9** | 240.9 | 11.6 | 1000 | 1.3 | 2100 | 10000 | 5.8 | 1000 | 0.67 | 2200 | 10000 | |
| **C 51 4_263.8** | 263.8 | 10.6 | 1000 | 1.2 | 2120 | 10000 | 5.3 | 1000 | 0.61 | 2200 | 10000 | |
| **C 51 4_297.8** | 297.8 | 9.4 | 1000 | 1.1 | 2140 | 10000 | 4.7 | 1000 | 0.54 | 2200 | 10000 | |
| **C 51 4_326.1** | 326.1 | 8.6 | 1000 | 0.99 | 2160 | 10000 | 4.3 | 1000 | 0.49 | 2200 | 10000 | |
| **C 51 4_379.6** | 379.6 | 7.4 | 1000 | 0.85 | 2190 | 10000 | 3.7 | 1000 | 0.42 | 2200 | 10000 | |
| **C 51 4_415.7** | 415.7 | 6.7 | 1000 | 0.78 | 2200 | 10000 | 3.4 | 1000 | 0.39 | 2200 | 10000 | |
| **C 51 4_463.9** | 463.9 | 6.0 | 1000 | 0.69 | 2200 | 10000 | 3.0 | 1000 | 0.35 | 2200 | 10000 | |
| **C 51 4_508.0** | 508.0 | 5.5 | 1000 | 0.63 | 2200 | 10000 | 2.8 | 1000 | 0.32 | 2200 | 10000 | |
| **C 51 4_549.7** | 549.7 | 5.1 | 1000 | 0.59 | 2200 | 10000 | 2.5 | 1000 | 0.29 | 2200 | 10000 | |
| **C 51 4_602.0** | 602.0 | 4.7 | 1000 | 0.54 | 2200 | 10000 | 2.3 | 1000 | 0.27 | 2200 | 10000 | |
| **C 51 4_655.4** | 655.4 | 4.3 | 1000 | 0.49 | 2200 | 10000 | 2.1 | 1000 | 0.25 | 2200 | 10000 | |
| **C 51 4_717.7** | 717.7 | 3.9 | 1000 | 0.45 | 2200 | 10000 | 2.0 | 1000 | 0.22 | 2200 | 10000 | |
| **C 51 4_808.0** | 808.0 | 3.5 | 1000 | 0.40 | 2200 | 10000 | 1.7 | 1000 | 0.20 | 2200 | 10000 | |
| **C 51 4_884.9** | 884.9 | 3.2 | 1000 | 0.36 | 2200 | 10000 | 1.6 | 1000 | 0.18 | 2200 | 10000 | |



# C 51 — 1000 Nm

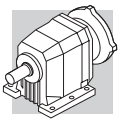
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ | $M_{n2}$ | $P_{n1}$ | $R_{n1}$ | $R_{n2}$ | $n_2$ | $M_{n2}$ | $P_{n1}$ | $R_{n1}$ | $R_{n2}$ | |
| | | min$^{-1}$ | Nm | kW | N | N | min$^{-1}$ | Nm | kW | N | N | |
| **C 51 2_2.6** | 2.6 | 346 | 400 | 15.3 | 2560 | 5130 | 192 | 400 | 8.5 | 3500 | 6620 | |
| **C 51 2_3.3** | 3.3 | 273 | 420 | 12.6 | 2710 | 5590 | 152 | 420 | 7.0 | 3500 | 7200 | |
| **C 51 2_4.5** | 4.5 | 200 | 435 | 9.6 | 2900 | 6300 | 111 | 435 | 5.3 | 3500 | 8070 | |
| **C 51 2_5.6** | 5.6 | 161 | 435 | 7.7 | 3080 | 6970 | 89 | 435 | 4.3 | 3500 | 8880 | |
| **C 51 2_7.0** | 7.0 | 129 | 730 | 10.3 | 3310 | 6950 | 71 | 800 | 6.3 | 3500 | 8760 | |
| **C 51 2_7.8** | 7.8 | 115 | 740 | 9.4 | 3460 | 7220 | 64 | 800 | 5.7 | 3500 | 9140 | |
| **C 51 2_8.8** | 8.8 | 102 | 795 | 9.0 | 3360 | 7470 | 57 | 800 | 5.0 | 3500 | 9680 | |
| **C 51 2_9.8** | 9.8 | 92 | 800 | 8.1 | 3500 | 7790 | 51 | 800 | 4.5 | 3500 | 10000 | |
| **C 51 2_11.8** | 11.8 | 76 | 800 | 6.7 | 3500 | 8530 | 42 | 800 | 3.7 | 3500 | 10000 | |
| **C 51 2_13.1** | 13.1 | 69 | 800 | 6.1 | 3500 | 8900 | 38 | 800 | 3.4 | 3500 | 10000 | |
| **C 51 2_15.0** | 15.0 | 60 | 800 | 5.3 | 3500 | 9450 | 33 | 800 | 2.9 | 3500 | 10000 | |
| **C 51 2_16.6** | 16.6 | 54 | 800 | 4.8 | 3500 | 9850 | 30 | 800 | 2.7 | 3500 | 10000 | |
| **C 51 2_18.9** | 18.9 | 48 | 800 | 4.2 | 3500 | 10000 | 26.5 | 800 | 2.3 | 3500 | 10000 | |
| **C 51 2_21.0** | 21.0 | 43 | 800 | 3.8 | 3500 | 10000 | 23.8 | 800 | 2.1 | 3500 | 10000 | |
| **C 51 2_23.4** | 23.4 | 38 | 800 | 3.4 | 3500 | 10000 | 21.4 | 800 | 1.9 | 3500 | 10000 | |
| **C 51 2_25.9** | 25.9 | 35 | 800 | 3.1 | 3500 | 10000 | 19.3 | 800 | 1.7 | 3500 | 10000 | |
| **C 51 2_29.8** | 29.8 | 30 | 800 | 2.7 | 3500 | 10000 | 16.8 | 800 | 1.5 | 3500 | 10000 | |
| **C 51 2_33.0** | 33.0 | 27.3 | 800 | 2.4 | 3500 | 10000 | 15.2 | 800 | 1.3 | 3500 | 10000 | |
| **C 51 2_36.4** | 36.4 | 24.7 | 800 | 2.2 | 3500 | 10000 | 13.7 | 800 | 1.2 | 3500 | 10000 | |
| **C 51 2_40.4** | 40.4 | 22.3 | 800 | 2.0 | 3500 | 10000 | 12.4 | 800 | 1.1 | 3500 | 10000 | |
| **C 51 2_43.1** | 43.1 | 20.9 | 800 | 1.8 | 3500 | 10000 | 11.6 | 800 | 1.0 | 3500 | 10000 | |
| **C 51 2_47.8** | 47.8 | 18.8 | 800 | 1.7 | 3500 | 10000 | 10.5 | 800 | 0.92 | 3500 | 10000 | |
| **C 51 2_51.4** | 51.4 | 17.5 | 725 | 1.4 | 3500 | 10000 | 9.7 | 755 | 0.81 | 3500 | 10000 | |
| **C 51 2_57.0** | 57.0 | 15.8 | 795 | 1.4 | 3500 | 10000 | 8.8 | 795 | 0.77 | 3500 | 10000 | |
| **C 51 3_21.8** | 21.8 | 41 | 1000 | 4.6 | 3500 | 10000 | 22.9 | 1000 | 2.6 | 3500 | 10000 | |
| **C 51 3_23.9** | 23.9 | 38 | 1000 | 4.2 | 3500 | 10000 | 20.9 | 1000 | 2.4 | 3500 | 10000 | |
| **C 51 3_27.4** | 27.4 | 33 | 1000 | 3.7 | 3500 | 10000 | 18.2 | 1000 | 2.1 | 3500 | 10000 | |
| **C 51 3_30.1** | 30.1 | 29.9 | 1000 | 3.4 | 3500 | 10000 | 16.6 | 1000 | 1.9 | 3500 | 10000 | |
| **C 51 3_37.0** | 37.0 | 24.3 | 1000 | 2.7 | 3500 | 10000 | 13.5 | 1000 | 1.5 | 3500 | 10000 | |
| **C 51 3_40.5** | 40.5 | 22.2 | 1000 | 2.5 | 3500 | 10000 | 12.3 | 1000 | 1.4 | 3500 | 10000 | 142 |
| **C 51 3_46.7** | 46.7 | 19.3 | 1000 | 2.2 | 3500 | 10000 | 10.7 | 1000 | 1.2 | 3500 | 10000 | |
| **C 51 3_51.2** | 51.2 | 17.6 | 1000 | 2.0 | 3500 | 10000 | 9.8 | 1000 | 1.1 | 3500 | 10000 | |
| **C 51 3_59.0** | 59.0 | 15.3 | 1000 | 1.7 | 3500 | 10000 | 8.5 | 1000 | 0.95 | 3500 | 10000 | |
| **C 51 3_64.6** | 64.6 | 13.9 | 1000 | 1.6 | 3500 | 10000 | 7.7 | 1000 | 0.87 | 3500 | 10000 | |
| **C 51 3_72.9** | 72.9 | 12.3 | 1000 | 1.4 | 3500 | 10000 | 6.9 | 1000 | 0.77 | 3500 | 10000 | |
| **C 51 3_79.9** | 79.9 | 11.3 | 1000 | 1.3 | 3500 | 10000 | 6.3 | 1000 | 0.70 | 3500 | 10000 | |
| **C 51 3_93.0** | 93.0 | 9.7 | 1000 | 1.1 | 3500 | 10000 | 5.4 | 1000 | 0.61 | 3500 | 10000 | |
| **C 51 3_101.8** | 101.8 | 8.8 | 1000 | 1.0 | 3500 | 10000 | 4.9 | 1000 | 0.55 | 3500 | 10000 | |
| **C 51 3_113.6** | 113.6 | 7.9 | 1000 | 0.89 | 3500 | 10000 | 4.4 | 1000 | 0.50 | 3500 | 10000 | |
| **C 51 3_124.4** | 124.4 | 7.2 | 1000 | 0.81 | 3500 | 10000 | 4.0 | 1000 | 0.45 | 3500 | 10000 | |
| **C 51 3_134.6** | 134.6 | 6.7 | 1000 | 0.75 | 3500 | 10000 | 3.7 | 1000 | 0.42 | 3500 | 10000 | |
| **C 51 3_147.4** | 147.4 | 6.1 | 1000 | 0.69 | 3500 | 10000 | 3.4 | 1000 | 0.38 | 3500 | 10000 | |
| **C 51 3_160.5** | 160.5 | 5.6 | 1000 | 0.63 | 3500 | 10000 | 3.1 | 1000 | 0.35 | 3500 | 10000 | |
| **C 51 3_175.8** | 175.8 | 5.1 | 1000 | 0.58 | 3500 | 10000 | 2.8 | 1000 | 0.32 | 3500 | 10000 | |
| **C 51 3_197.9** | 197.9 | 4.5 | 1000 | 0.51 | 3500 | 10000 | 2.5 | 1000 | 0.28 | 3500 | 10000 | |
| **C 51 3_216.7** | 216.7 | 4.2 | 1000 | 0.47 | 3500 | 10000 | 2.3 | 1000 | 0.26 | 3500 | 10000 | |
| **C 51 4_240.9** | 240.9 | 3.7 | 1000 | 0.43 | 2200 | 10000 | 2.1 | 1000 | 0.24 | 2200 | 10000 | |
| **C 51 4_263.8** | 263.8 | 3.4 | 1000 | 0.39 | 2200 | 10000 | 1.9 | 1000 | 0.22 | 2200 | 10000 | |
| **C 51 4_297.8** | 297.8 | 3.0 | 1000 | 0.35 | 2200 | 10000 | 1.7 | 1000 | 0.19 | 2200 | 10000 | |
| **C 51 4_326.1** | 326.1 | 2.8 | 1000 | 0.32 | 2200 | 10000 | 1.5 | 1000 | 0.18 | 2200 | 10000 | |
| **C 51 4_379.6** | 379.6 | 2.4 | 1000 | 0.27 | 2200 | 10000 | 1.3 | 1000 | 0.15 | 2200 | 10000 | |
| **C 51 4_415.7** | 415.7 | 2.2 | 1000 | 0.25 | 2200 | 10000 | 1.2 | 1000 | 0.14 | 2200 | 10000 | |
| **C 51 4_463.9** | 463.9 | 1.9 | 1000 | 0.22 | 2200 | 10000 | 1.1 | 1000 | 0.12 | 2200 | 10000 | |
| **C 51 4_508.0** | 508.0 | 1.8 | 1000 | 0.20 | 2200 | 10000 | 1.0 | 1000 | 0.11 | 2200 | 10000 | |
| **C 51 4_549.7** | 549.7 | 1.6 | 1000 | 0.19 | 2200 | 10000 | 0.91 | 1000 | 0.10 | 2200 | 10000 | |
| **C 51 4_602.0** | 602.0 | 1.5 | 1000 | 0.17 | 2200 | 10000 | 0.83 | 1000 | 0.10 | 2200 | 10000 | |
| **C 51 4_655.4** | 655.4 | 1.4 | 1000 | 0.16 | 2200 | 10000 | 0.76 | 1000 | 0.09 | 2200 | 10000 | |
| **C 51 4_717.7** | 717.7 | 1.3 | 1000 | 0.14 | 2200 | 10000 | 0.70 | 1000 | 0.08 | 2200 | 10000 | |
| **C 51 4_808.0** | 808.0 | 1.1 | 1000 | 0.13 | 2200 | 10000 | 0.62 | 1000 | 0.07 | 2200 | 10000 | |
| **C 51 4_884.9** | 884.9 | 1.0 | 1000 | 0.12 | 2200 | 10000 | 0.57 | 1000 | 0.07 | 2200 | 10000 | |



# C 61 — 1600 Nm

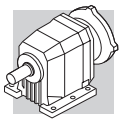
| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 61 2_2.8** | 2.8 | 1000 | 445 | 49 | — | 4670 | 500 | 550 | 30 | 770 | 5930 | 146 |
| **C 61 2_3.7** | 3.7 | 757 | 530 | 44 | — | 4950 | 378 | 575 | 24 | 1730 | 6600 | |
| **C 61 2_4.6** | 4.6 | 609 | 575 | 39 | — | 5280 | 304 | 600 | 20 | 2150 | 7130 | |
| **C 61 2_6.0** | 6.0 | 467 | 575 | 30 | — | 6000 | 233 | 625 | 16.1 | 2700 | 7950 | |
| **C 61 2_6.7** | 6.7 | 418 | 900 | 41 | 2230 | 5600 | 209 | 1130 | 26 | 2850 | 7060 | |
| **C 61 2_7.5** | 7.5 | 373 | 1000 | 41 | 2220 | 5620 | 187 | 1250 | 26 | 2900 | 7110 | |
| **C 61 2_8.8** | 8.8 | 318 | 1000 | 35 | 2290 | 6080 | 159 | 1250 | 22 | 2980 | 7690 | |
| **C 61 2_9.8** | 9.8 | 286 | 1100 | 35 | 2380 | 6140 | 143 | 1350 | 21 | 3330 | 7850 | |
| **C 61 2_10.9** | 10.9 | 257 | 1050 | 30 | 2530 | 6590 | 128 | 1350 | 19.1 | 2940 | 8210 | |
| **C 61 2_12.1** | 12.1 | 231 | 1150 | 29 | 2670 | 6670 | 116 | 1350 | 17.2 | 3600 | 8730 | |
| **C 61 2_14.3** | 14.3 | 196 | 1150 | 25 | 2450 | 7220 | 98 | 1350 | 14.6 | 3590 | 9430 | |
| **C 61 2_15.9** | 15.9 | 176 | 1250 | 24 | 2660 | 7350 | 88 | 1350 | 13.1 | 3780 | 9990 | |
| **C 61 2_17.7** | 17.7 | 158 | 1200 | 21 | 2540 | 7850 | 79 | 1350 | 11.8 | 3700 | 10400 | |
| **C 61 2_19.6** | 19.6 | 143 | 1300 | 20 | 2780 | 8000 | 71 | 1350 | 10.6 | 3890 | 11000 | |
| **C 61 2_22.4** | 22.4 | 125 | 1250 | 17.2 | 2630 | 8650 | 63 | 1350 | 9.3 | 3810 | 11600 | |
| **C 61 2_24.8** | 24.8 | 113 | 1350 | 16.8 | 2840 | 8840 | 56 | 1350 | 8.4 | 3980 | 12300 | |
| **C 61 2_27.4** | 27.4 | 102 | 1300 | 14.6 | 2600 | 9390 | 51 | 1350 | 7.6 | 3880 | 12800 | |
| **C 61 2_30.4** | 30.4 | 92 | 1350 | 13.7 | 2900 | 9770 | 46 | 1350 | 6.9 | 4050 | 13500 | |
| **C 61 2_34.2** | 34.2 | 82 | 1165 | 10.5 | 3020 | 10900 | 41 | 1225 | 5.5 | 4090 | 14500 | |
| **C 61 2_38.0** | 38.0 | 74 | 1280 | 10.4 | 3030 | 11100 | 37 | 1350 | 5.5 | 4100 | 14800 | |
| **C 61 3_26.8** | 26.8 | 104 | 1140 | 13.4 | 3740 | 9810 | 52 | 1435 | 8.4 | 4700 | 12400 | |
| **C 61 3_29.4** | 29.4 | 95 | 1160 | 12.4 | 3780 | 10200 | 48 | 1465 | 7.9 | 4700 | 12900 | |
| **C 61 3_33.0** | 33.0 | 85 | 1210 | 11.6 | 3750 | 10600 | 42 | 1525 | 7.3 | 4700 | 13300 | |
| **C 61 3_36.1** | 36.1 | 78 | 1235 | 10.8 | 3800 | 11000 | 39 | 1555 | 6.8 | 4700 | 13800 | |
| **C 61 3_43.4** | 43.4 | 65 | 1315 | 9.6 | 3760 | 11600 | 32 | 1600 | 5.8 | 4700 | 14800 | |
| **C 61 3_47.6** | 47.6 | 59 | 1340 | 8.9 | 3810 | 12100 | 29.4 | 1600 | 5.3 | 4700 | 15500 | |
| **C 61 3_53.5** | 53.5 | 52 | 1400 | 8.2 | 3760 | 12500 | 26.2 | 1600 | 4.7 | 4700 | 16000 | |
| **C 61 3_58.6** | 58.6 | 48 | 1430 | 7.7 | 3810 | 13000 | 23.9 | 1600 | 4.3 | 4700 | 16000 | |
| **C 61 3_67.7** | 67.7 | 41 | 1505 | 7.0 | 3750 | 13500 | 20.7 | 1600 | 3.7 | 4700 | 16000 | |
| **C 61 3_74.2** | 74.2 | 38 | 1535 | 6.5 | 3800 | 14100 | 18.9 | 1600 | 3.4 | 4700 | 16000 | |
| **C 61 3_83.0** | 83.0 | 34 | 1600 | 6.1 | 3740 | 14500 | 16.9 | 1600 | 3.0 | 4700 | 16000 | |
| **C 61 3_91.0** | 91.0 | 31 | 1600 | 5.5 | 3800 | 15200 | 15.4 | 1600 | 2.8 | 4700 | 16000 | |
| **C 61 3_103.6** | 103.6 | 27.0 | 1600 | 4.9 | 3760 | 16000 | 13.5 | 1600 | 2.4 | 4700 | 16000 | |
| **C 61 3_113.6** | 113.6 | 24.6 | 1600 | 4.4 | 3820 | 16000 | 12.3 | 1600 | 2.2 | 4700 | 16000 | |
| **C 61 3_128.1** | 128.1 | 21.9 | 1600 | 3.9 | 3790 | 16000 | 10.9 | 1600 | 2.0 | 4700 | 16000 | |
| **C 61 3_140.5** | 140.5 | 19.9 | 1600 | 3.6 | 3840 | 16000 | 10.0 | 1600 | 1.8 | 4700 | 16000 | |
| **C 61 3_150.0** | 150.0 | 18.7 | 1600 | 3.4 | 3800 | 16000 | 9.3 | 1600 | 1.7 | 4700 | 16000 | |
| **C 61 3_164.5** | 164.5 | 17.0 | 1600 | 3.1 | 3850 | 16000 | 8.5 | 1600 | 1.5 | 4700 | 16000 | |
| **C 61 3_178.6** | 178.6 | 15.7 | 1600 | 2.8 | 3800 | 16000 | 7.8 | 1600 | 1.4 | 4700 | 16000 | |
| **C 61 3_195.8** | 195.8 | 14.3 | 1600 | 2.6 | 3860 | 16000 | 7.2 | 1600 | 1.3 | 4700 | 16000 | |
| **C 61 4_217.4** | 217.4 | 12.9 | 1600 | 2.4 | 3020 | 16000 | 6.4 | 1600 | 1.2 | 3500 | 16000 | |
| **C 61 4_238.3** | 238.3 | 11.7 | 1600 | 2.2 | 3060 | 16000 | 5.9 | 1600 | 1.1 | 3500 | 16000 | |
| **C 61 4_275.3** | 275.3 | 10.2 | 1600 | 1.9 | 3100 | 16000 | 5.1 | 1600 | 0.94 | 3500 | 16000 | |
| **C 61 4_301.7** | 301.7 | 9.3 | 1600 | 1.7 | 3130 | 16000 | 4.6 | 1600 | 0.85 | 3500 | 16000 | |
| **C 61 4_337.7** | 337.7 | 8.3 | 1600 | 1.5 | 3160 | 16000 | 4.1 | 1600 | 0.76 | 3500 | 16000 | |
| **C 61 4_370.1** | 370.1 | 7.6 | 1600 | 1.4 | 3180 | 16000 | 3.8 | 1600 | 0.70 | 3500 | 16000 | |
| **C 61 4_421.5** | 421.5 | 6.6 | 1600 | 1.2 | 3200 | 16000 | 3.3 | 1600 | 0.61 | 3500 | 16000 | |
| **C 61 4_462.0** | 462.0 | 6.1 | 1600 | 1.1 | 3220 | 16000 | 3.0 | 1600 | 0.56 | 3500 | 16000 | |
| **C 61 4_521.1** | 521.1 | 5.4 | 1600 | 0.99 | 3240 | 16000 | 2.7 | 1600 | 0.49 | 3500 | 16000 | |
| **C 61 4_571.2** | 571.2 | 4.9 | 1600 | 0.90 | 3250 | 16000 | 2.5 | 1600 | 0.45 | 3500 | 16000 | |
| **C 61 4_610.1** | 610.1 | 4.6 | 1600 | 0.84 | 3260 | 16000 | 2.3 | 1600 | 0.42 | 3500 | 16000 | |
| **C 61 4_668.8** | 668.8 | 4.2 | 1600 | 0.77 | 3280 | 16000 | 2.1 | 1600 | 0.39 | 3500 | 16000 | |
| **C 61 4_726.3** | 726.3 | 3.9 | 1600 | 0.71 | 3290 | 16000 | 1.9 | 1600 | 0.35 | 3500 | 16000 | |
| **C 61 4_796.1** | 796.1 | 3.5 | 1600 | 0.65 | 3300 | 16000 | 1.8 | 1600 | 0.32 | 3500 | 16000 | |

(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



# C 61 — 1600 Nm

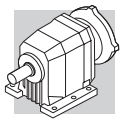
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 61 2_2.8** | 2.8 | 321 | 565 | 20 | 2840 | 7150 | 179 | 665 | 13.1 | 4050 | 8790 | |
| **C 61 2_3.7** | 3.7 | 243 | 625 | 16.8 | 3000 | 7800 | 135 | 665 | 9.9 | 4700 | 9860 | |
| **C 61 2_4.6** | 4.6 | 196 | 665 | 14.3 | 3170 | 8380 | 109 | 665 | 8.0 | 4700 | 10760 | |
| **C 61 2_6.0** | 6.0 | 150 | 665 | 11.0 | 4120 | 9440 | 83 | 665 | 6.1 | 4700 | 12000 | |
| **C 61 2_6.7** | 6.7 | 134 | 1350 | 20 | 2850 | 8050 | 75 | 1350 | 11.1 | 4700 | 10800 | |
| **C 61 2_7.5** | 7.5 | 120 | 1350 | 17.9 | 4010 | 8560 | 67 | 1350 | 9.9 | 4700 | 11400 | |
| **C 61 2_8.8** | 8.8 | 102 | 1350 | 15.2 | 4070 | 9240 | 57 | 1350 | 8.5 | 4700 | 12200 | |
| **C 61 2_9.8** | 9.8 | 92 | 1350 | 13.7 | 4310 | 9790 | 51 | 1350 | 7.6 | 4700 | 12900 | |
| **C 61 2_10.9** | 10.9 | 83 | 1350 | 12.3 | 4270 | 10200 | 46 | 1350 | 6.8 | 4700 | 13400 | |
| **C 61 2_12.1** | 12.1 | 74 | 1350 | 11.1 | 4480 | 10800 | 41 | 1350 | 6.1 | 4700 | 14100 | |
| **C 61 2_14.3** | 14.3 | 63 | 1350 | 9.4 | 4470 | 11600 | 35 | 1350 | 5.2 | 4700 | 15100 | |
| **C 61 2_15.9** | 15.9 | 57 | 1350 | 8.4 | 4660 | 12300 | 31 | 1350 | 4.7 | 4700 | 15900 | |
| **C 61 2_17.7** | 17.7 | 51 | 1350 | 7.6 | 4580 | 12800 | 28.2 | 1350 | 4.2 | 4700 | 16000 | |
| **C 61 2_19.6** | 19.6 | 46 | 1350 | 6.8 | 4700 | 13500 | 25.5 | 1350 | 3.8 | 4700 | 16000 | |
| **C 61 2_22.4** | 22.4 | 40 | 1350 | 6.0 | 4690 | 14200 | 22.3 | 1350 | 3.3 | 4700 | 16000 | |
| **C 61 2_24.8** | 24.8 | 36 | 1350 | 5.4 | 4700 | 14900 | 20.2 | 1350 | 3.0 | 4700 | 16000 | |
| **C 61 2_27.4** | 27.4 | 33 | 1350 | 4.9 | 4700 | 15500 | 18.2 | 1350 | 2.7 | 4700 | 16000 | |
| **C 61 2_30.4** | 30.4 | 29.6 | 1350 | 4.4 | 4700 | 16000 | 16.4 | 1350 | 2.4 | 4700 | 16000 | |
| **C 61 2_34.2** | 34.2 | 26.3 | 1265 | 3.7 | 4700 | 16000 | 14.6 | 1325 | 2.1 | 4700 | 16000 | |
| **C 61 2_38.0** | 38.0 | 23.7 | 1350 | 3.5 | 4700 | 16000 | 13.2 | 1350 | 2.0 | 4700 | 16000 | |
| **C 61 3_26.8** | 26.8 | 34 | 1600 | 6.0 | 4700 | 14500 | 18.7 | 1600 | 3.4 | 4700 | 16000 | |
| **C 61 3_29.4** | 29.4 | 31 | 1600 | 5.5 | 4700 | 15200 | 17.0 | 1600 | 3.1 | 4700 | 16000 | |
| **C 61 3_33.0** | 33.0 | 27.3 | 1600 | 4.9 | 4700 | 15900 | 15.2 | 1600 | 2.7 | 4700 | 16000 | |
| **C 61 3_36.1** | 36.1 | 24.9 | 1600 | 4.5 | 4700 | 16000 | 13.9 | 1600 | 2.5 | 4700 | 16000 | |
| **C 61 3_43.4** | 43.4 | 20.7 | 1600 | 3.7 | 4700 | 16000 | 11.5 | 1600 | 2.1 | 4700 | 16000 | |
| **C 61 3_47.6** | 47.6 | 18.9 | 1600 | 3.4 | 4700 | 16000 | 10.5 | 1600 | 1.9 | 4700 | 16000 | |
| **C 61 3_53.5** | 53.5 | 16.8 | 1600 | 3.0 | 4700 | 16000 | 9.3 | 1600 | 1.7 | 4700 | 16000 | |
| **C 61 3_58.6** | 58.6 | 15.4 | 1600 | 2.8 | 4700 | 16000 | 8.5 | 1600 | 1.5 | 4700 | 16000 | 146 |
| **C 61 3_67.7** | 67.7 | 13.3 | 1600 | 2.4 | 4700 | 16000 | 7.4 | 1600 | 1.3 | 4700 | 16000 | |
| **C 61 3_74.2** | 74.2 | 12.1 | 1600 | 2.2 | 4700 | 16000 | 6.7 | 1600 | 1.2 | 4700 | 16000 | |
| **C 61 3_83.0** | 83.0 | 10.8 | 1600 | 2.0 | 4700 | 16000 | 6.0 | 1600 | 1.1 | 4700 | 16000 | |
| **C 61 3_91.0** | 91.0 | 9.9 | 1600 | 1.8 | 4700 | 16000 | 5.5 | 1600 | 0.99 | 4700 | 16000 | |
| **C 61 3_103.6** | 103.6 | 8.7 | 1600 | 1.6 | 4700 | 16000 | 4.8 | 1600 | 0.87 | 4700 | 16000 | |
| **C 61 3_113.6** | 113.6 | 7.9 | 1600 | 1.4 | 4700 | 16000 | 4.4 | 1600 | 0.79 | 4700 | 16000 | |
| **C 61 3_128.1** | 128.1 | 7.0 | 1600 | 1.3 | 4700 | 16000 | 3.9 | 1600 | 0.70 | 4700 | 16000 | |
| **C 61 3_140.5** | 140.5 | 6.4 | 1600 | 1.2 | 4700 | 16000 | 3.6 | 1600 | 0.64 | 4700 | 16000 | |
| **C 61 3_150.0** | 150.0 | 6.0 | 1600 | 1.1 | 4700 | 16000 | 3.3 | 1600 | 0.60 | 4700 | 16000 | |
| **C 61 3_164.5** | 164.5 | 5.5 | 1600 | 0.99 | 4700 | 16000 | 3.0 | 1600 | 0.55 | 4700 | 16000 | |
| **C 61 3_178.6** | 178.6 | 5.0 | 1600 | 0.91 | 4700 | 16000 | 2.8 | 1600 | 0.50 | 4700 | 16000 | |
| **C 61 3_195.8** | 195.8 | 4.6 | 1600 | 0.83 | 4700 | 16000 | 2.6 | 1600 | 0.46 | 4700 | 16000 | |
| **C 61 4_217.4** | 217.4 | 4.1 | 1600 | 0.76 | 3500 | 16000 | 2.3 | 1600 | 0.42 | 3500 | 16000 | |
| **C 61 4_238.3** | 238.3 | 3.8 | 1600 | 0.70 | 3500 | 16000 | 2.1 | 1600 | 0.39 | 3500 | 16000 | |
| **C 61 4_275.3** | 275.3 | 3.3 | 1600 | 0.60 | 3500 | 16000 | 1.8 | 1600 | 0.33 | 3500 | 16000 | |
| **C 61 4_301.7** | 301.7 | 3.0 | 1600 | 0.55 | 3500 | 16000 | 1.7 | 1600 | 0.31 | 3500 | 16000 | |
| **C 61 4_337.7** | 337.7 | 2.7 | 1600 | 0.49 | 3500 | 16000 | 1.5 | 1600 | 0.27 | 3500 | 16000 | |
| **C 61 4_370.1** | 370.1 | 2.4 | 1600 | 0.45 | 3500 | 16000 | 1.4 | 1600 | 0.25 | 3500 | 16000 | |
| **C 61 4_421.5** | 421.5 | 2.1 | 1600 | 0.39 | 3500 | 16000 | 1.2 | 1600 | 0.22 | 3500 | 16000 | |
| **C 61 4_462.0** | 462.0 | 1.9 | 1600 | 0.36 | 3500 | 16000 | 1.1 | 1600 | 0.20 | 3500 | 16000 | |
| **C 61 4_521.1** | 521.1 | 1.7 | 1600 | 0.32 | 3500 | 16000 | 1.0 | 1600 | 0.18 | 3500 | 16000 | |
| **C 61 4_571.2** | 571.2 | 1.6 | 1600 | 0.29 | 3500 | 16000 | 0.88 | 1600 | 0.16 | 3500 | 16000 | |
| **C 61 4_610.1** | 610.1 | 1.5 | 1600 | 0.27 | 3500 | 16000 | 0.82 | 1600 | 0.15 | 3500 | 16000 | |
| **C 61 4_668.8** | 668.8 | 1.3 | 1600 | 0.25 | 3500 | 16000 | 0.75 | 1600 | 0.14 | 3500 | 16000 | |
| **C 61 4_726.3** | 726.3 | 1.2 | 1600 | 0.23 | 3500 | 16000 | 0.69 | 1600 | 0.13 | 3500 | 16000 | |
| **C 61 4_796.1** | 796.1 | 1.1 | 1600 | 0.21 | 3500 | 16000 | 0.63 | 1600 | 0.12 | 3500 | 16000 | |



# C 70 — 2300 Nm

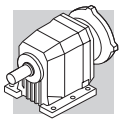
| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 70 2_4.6** | 4.6 | 613 | 1400 | 95 | — | 5590 | 306 | 1700 | 57 | — | 7100 | |
| **C 70 2_5.9** | 5.9 | 479 | 1550 | 82 | — | 5610 | 239 | 1900 | 50 | — | 6990 | |
| **C 70 2_6.3** | 6.3 | 448 | 1600 | 79 | 1980 | 6570 | 224 | 1950 | 48 | 2630 | 8250 | |
| **C 70 2_7.5** | 7.5 | 375 | 1550 | 64 | — | 7130 | 188 | 1950 | 40 | — | 8400 | |
| **C 70 2_8.0** | 8.0 | 350 | 1750 | 68 | 1760 | 6840 | 175 | 2100 | 41 | 2670 | 8880 | |
| **C 70 2_9.5** | 9.5 | 294 | 1600 | 52 | 770 | 8260 | 147 | 2000 | 32 | 620 | 9910 | |
| **C 70 2_10.2** | 10.2 | 274 | 1900 | 57 | 2000 | 7200 | 137 | 2100 | 32 | 4470 | 10800 | |
| **C 70 2_11.2** | 11.2 | 250 | 1600 | 44 | 1130 | 9350 | 125 | 2000 | 28 | 1070 | 11300 | |
| **C 70 2_13.0** | 13.0 | 215 | 2050 | 49 | 1860 | 7700 | 107 | 2100 | 25 | 5600 | 12900 | |
| **C 70 2_14.1** | 14.1 | 199 | 1700 | 37 | 1100 | 10100 | 99 | 2100 | 23 | 1280 | 12400 | |
| **C 70 2_15.3** | 15.3 | 183 | 2100 | 42 | 1810 | 8540 | 91 | 2100 | 21 | 5860 | 14300 | |
| **C 70 2_16.7** | 16.7 | 168 | 1700 | 31 | 1570 | 11400 | 84 | 2050 | 18.9 | 2350 | 14300 | |
| **C 70 2_19.3** | 19.3 | 145 | 2100 | 34 | 2730 | 10400 | 73 | 2100 | 16.8 | 6000 | 16300 | |
| **C 70 2_22.9** | 22.9 | 123 | 2100 | 28 | 3160 | 11800 | 61 | 2100 | 14.2 | 6060 | 18000 | |
| **C 70 2_27.7** | 27.7 | 101 | 2100 | 23 | 3570 | 13400 | 51 | 2100 | 11.7 | 6120 | 19900 | |
| **C 70 2_34.7** | 34.7 | 81 | 2100 | 18.7 | 3960 | 15400 | 40 | 2100 | 9.3 | 6180 | 22200 | |
| **C 70 3_41.3** | 41.3 | 68 | 1900 | 14.5 | 5670 | 18400 | 34 | 2300 | 8.8 | 7000 | 22800 | |
| **C 70 3_44.7** | 44.7 | 63 | 1900 | 13.4 | 5700 | 19100 | 31 | 2300 | 8.1 | 7000 | 23800 | |
| **C 70 3_52.2** | 52.2 | 54 | 2050 | 12.4 | 5680 | 19600 | 26.8 | 2300 | 7.0 | 7000 | 25000 | |
| **C 70 3_56.5** | 56.5 | 50 | 2050 | 11.4 | 5710 | 20400 | 24.8 | 2300 | 6.4 | 7000 | 25000 | |
| **C 70 3_65.9** | 65.9 | 43 | 2200 | 10.5 | 5670 | 21000 | 21.3 | 2300 | 5.5 | 7000 | 25000 | |
| **C 70 3_71.3** | 71.3 | 39 | 2200 | 9.7 | 5710 | 21900 | 19.6 | 2300 | 5.1 | 7000 | 25000 | |
| **C 70 3_81.4** | 81.4 | 34 | 2300 | 8.9 | 5680 | 22700 | 17.2 | 2300 | 4.5 | 7000 | 25000 | |
| **C 70 3_88.2** | 88.2 | 32 | 2300 | 8.2 | 5710 | 23600 | 15.9 | 2300 | 4.1 | 7000 | 25000 | |
| **C 70 3_103.8** | 103.8 | 27.0 | 2300 | 7.0 | 5700 | 25000 | 13.5 | 2300 | 3.5 | 7000 | 25000 | |
| **C 70 3_112.4** | 112.4 | 24.9 | 2300 | 6.4 | 5740 | 25000 | 12.5 | 2300 | 3.2 | 7000 | 25000 | 149 |
| **C 70 3_126.8** | 126.8 | 22.1 | 2300 | 5.7 | 5720 | 25000 | 11.0 | 2300 | 2.9 | 7000 | 25000 | |
| **C 70 3_137.4** | 137.4 | 20.4 | 2300 | 5.3 | 5750 | 25000 | 10.2 | 2300 | 2.6 | 7000 | 25000 | |
| **C 70 3_150.3** | 150.3 | 18.6 | 2300 | 4.8 | 5730 | 25000 | 9.3 | 2300 | 2.4 | 7000 | 25000 | |
| **C 70 3_162.8** | 162.8 | 17.2 | 2300 | 4.5 | 5760 | 25000 | 8.6 | 2300 | 2.2 | 7000 | 25000 | |
| **C 70 3_179.2** | 179.2 | 15.6 | 2300 | 4.0 | 5740 | 25000 | 7.8 | 2300 | 2.0 | 7000 | 25000 | |
| **C 70 3_194.1** | 194.1 | 14.4 | 2300 | 3.7 | 5770 | 25000 | 7.2 | 2300 | 1.9 | 7000 | 25000 | |
| **C 70 3_220.9** | 220.9 | 12.7 | 2250 | 3.2 | 5750 | 25000 | 6.3 | 2250 | 1.6 | 7000 | 25000 | |
| **C 70 3_239.3** | 239.3 | 11.7 | 2300 | 3.0 | 5770 | 25000 | 5.8 | 2300 | 1.5 | 7000 | 25000 | |
| **C 70 4_251.3** | 251.3 | 11.1 | 2300 | 2.9 | 2000 | 25000 | 5.6 | 2300 | 1.5 | 2620 | 25000 | |
| **C 70 4_272.2** | 272.2 | 10.3 | 2300 | 2.7 | 2030 | 25000 | 5.1 | 2300 | 1.4 | 2650 | 25000 | |
| **C 70 4_317.9** | 317.9 | 8.8 | 2300 | 2.3 | 2030 | 25000 | 4.4 | 2300 | 1.2 | 2650 | 25000 | |
| **C 70 4_344.3** | 344.3 | 8.1 | 2300 | 2.2 | 2050 | 25000 | 4.1 | 2300 | 1.1 | 2670 | 25000 | |
| **C 70 4_409.4** | 409.4 | 6.8 | 2300 | 1.8 | 2050 | 25000 | 3.4 | 2300 | 0.90 | 2670 | 25000 | |
| **C 70 4_443.5** | 443.5 | 6.3 | 2300 | 1.7 | 2070 | 25000 | 3.2 | 2300 | 0.80 | 2700 | 25000 | |
| **C 70 4_512.0** | 512.0 | 5.5 | 2300 | 1.4 | 2070 | 25000 | 2.7 | 2300 | 0.70 | 2680 | 25000 | |
| **C 70 4_554.7** | 554.7 | 5.0 | 2300 | 1.3 | 2090 | 25000 | 2.5 | 2300 | 0.70 | 2710 | 25000 | |
| **C 70 4_606.8** | 606.8 | 4.6 | 2300 | 1.2 | 2080 | 25000 | 2.3 | 2300 | 0.60 | 2700 | 25000 | |
| **C 70 4_657.3** | 657.3 | 4.3 | 2300 | 1.1 | 2100 | 25000 | 2.1 | 2300 | 0.60 | 2720 | 25000 | |
| **C 70 4_736.0** | 736.0 | 3.8 | 2300 | 1.0 | 2090 | 25000 | 1.9 | 2300 | 0.50 | 2700 | 25000 | |
| **C 70 4_797.3** | 797.3 | 3.5 | 2300 | 0.90 | 2110 | 25000 | 1.8 | 2300 | 0.50 | 2720 | 25000 | |
| **C 70 4_922.6** | 922.6 | 3.0 | 2300 | 0.80 | 2100 | 25000 | 1.5 | 2300 | 0.40 | 2710 | 25000 | |
| **C 70 4_999.5** | 999.5 | 2.8 | 2300 | 0.70 | 2110 | 25000 | 1.4 | 2300 | 0.40 | 2730 | 25000 | |
| **C 70 4_1069** | 1069 | 2.6 | 2300 | 0.70 | 2100 | 25000 | 1.3 | 2300 | 0.30 | 2720 | 25000 | |
| **C 70 4_1158** | 1158 | 2.4 | 2300 | 0.60 | 2100 | 25000 | 1.2 | 2300 | 0.30 | 2800 | 25000 | |
| **C 70 4_1362** | 1362 | 2.1 | 2300 | 0.50 | 2100 | 25000 | 1.0 | 2300 | 0.30 | 2800 | 25000 | |
| **C 70 4_1476** | 1476 | 1.9 | 2300 | 0.50 | 2100 | 25000 | 0.90 | 2300 | 0.30 | 2800 | 25000 | |

(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



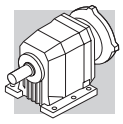
# C 70 — 2300 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 70 2_4.6** | 4.6 | 197 | 1800 | 39 | 650 | 9360 | 109 | 1800 | 22 | 5500 | 13900 | |
| **C 70 2_5.9** | 5.9 | 154 | 1950 | 33 | 560 | 9980 | 85 | 2150 | 20 | 2890 | 13400 | |
| **C 70 2_6.3** | 6.3 | 144 | 2100 | 33 | 4260 | 10400 | 80 | 2100 | 18.5 | 7000 | 15500 | |
| **C 70 2_7.5** | 7.5 | 121 | 2100 | 28 | 1120 | 10800 | 67 | 2150 | 15.9 | 5400 | 15600 | |
| **C 70 2_8.0** | 8.0 | 113 | 2100 | 26 | 5800 | 12500 | 63 | 2100 | 14.5 | 7000 | 17800 | |
| **C 70 2_9.5** | 9.5 | 95 | 2150 | 22 | 2140 | 12400 | 53 | 2150 | 12.4 | 6990 | 18100 | |
| **C 70 2_10.2** | 10.2 | 88 | 2100 | 20 | 6870 | 14600 | 49 | 2100 | 11.3 | 7000 | 20200 | |
| **C 70 2_11.2** | 11.2 | 80 | 2150 | 19.0 | 2620 | 14000 | 45 | 2150 | 10.6 | 7000 | 19800 | |
| **C 70 2_13.0** | 13.0 | 69 | 2100 | 16.0 | 7000 | 16900 | 38 | 2100 | 8.9 | 7000 | 22800 | |
| **C 70 2_14.1** | 14.1 | 64 | 2150 | 15.1 | 3900 | 16000 | 35 | 2150 | 8.4 | 7000 | 22300 | |
| **C 70 2_15.3** | 15.3 | 59 | 2100 | 13.6 | 7000 | 18400 | 33 | 2100 | 7.5 | 7000 | 24600 | |
| **C 70 2_16.7** | 16.7 | 54 | 2050 | 12.2 | 5470 | 18500 | 29.9 | 2050 | 6.8 | 7000 | 25000 | |
| **C 70 2_19.3** | 19.3 | 47 | 2100 | 10.8 | 7000 | 20700 | 25.9 | 2100 | 6.0 | 7000 | 25000 | |
| **C 70 2_22.9** | 22.9 | 39 | 2100 | 9.1 | 7000 | 22500 | 21.9 | 2100 | 5.1 | 7000 | 25000 | |
| **C 70 2_27.7** | 27.7 | 32 | 2100 | 7.5 | 7000 | 24600 | 18.0 | 2100 | 4.2 | 7000 | 25000 | |
| **C 70 2_34.7** | 34.7 | 25.9 | 2100 | 6.0 | 7000 | 25000 | 14.4 | 2100 | 3.3 | 7000 | 25000 | |
| **C 70 3_41.3** | 41.3 | 21.8 | 2300 | 5.6 | 7000 | 25000 | 12.1 | 2300 | 3.1 | 7000 | 25000 | |
| **C 70 3_44.7** | 44.7 | 20.1 | 2300 | 5.2 | 7000 | 25000 | 11.2 | 2300 | 2.9 | 7000 | 25000 | |
| **C 70 3_52.2** | 52.2 | 17.3 | 2300 | 4.5 | 7000 | 25000 | 9.6 | 2300 | 2.5 | 7000 | 25000 | |
| **C 70 3_56.5** | 56.5 | 15.9 | 2300 | 4.1 | 7000 | 25000 | 8.8 | 2300 | 2.3 | 7000 | 25000 | |
| **C 70 3_65.9** | 65.9 | 13.7 | 2300 | 3.5 | 7000 | 25000 | 7.6 | 2300 | 2.0 | 7000 | 25000 | |
| **C 70 3_71.3** | 71.3 | 12.6 | 2300 | 3.3 | 7000 | 25000 | 7.0 | 2300 | 1.8 | 7000 | 25000 | |
| **C 70 3_81.4** | 81.4 | 11.1 | 2300 | 2.9 | 7000 | 25000 | 6.1 | 2300 | 1.6 | 7000 | 25000 | |
| **C 70 3_88.2** | 88.2 | 10.2 | 2300 | 2.6 | 7000 | 25000 | 5.7 | 2300 | 1.5 | 7000 | 25000 | |
| **C 70 3_103.8** | 103.8 | 8.7 | 2300 | 2.2 | 7000 | 25000 | 4.8 | 2300 | 1.2 | 7000 | 25000 | |
| **C 70 3_112.4** | 112.4 | 8.0 | 2300 | 2.1 | 7000 | 25000 | 4.4 | 2300 | 1.2 | 7000 | 25000 | 149 |
| **C 70 3_126.8** | 126.8 | 7.1 | 2300 | 1.8 | 7000 | 25000 | 3.9 | 2300 | 1.0 | 7000 | 25000 | |
| **C 70 3_137.4** | 137.4 | 6.6 | 2300 | 1.7 | 7000 | 25000 | 3.6 | 2300 | 0.90 | 7000 | 25000 | |
| **C 70 3_150.3** | 150.3 | 6.0 | 2300 | 1.6 | 7000 | 25000 | 3.3 | 2300 | 0.90 | 7000 | 25000 | |
| **C 70 3_162.8** | 162.8 | 5.5 | 2300 | 1.4 | 7000 | 25000 | 3.1 | 2300 | 0.80 | 7000 | 25000 | |
| **C 70 3_179.2** | 179.2 | 5.0 | 2300 | 1.3 | 7000 | 25000 | 2.8 | 2300 | 0.70 | 7000 | 25000 | |
| **C 70 3_194.1** | 194.1 | 4.6 | 2300 | 1.2 | 7000 | 25000 | 2.6 | 2300 | 0.70 | 7000 | 25000 | |
| **C 70 3_220.9** | 220.9 | 4.1 | 2250 | 1.0 | 7000 | 25000 | 2.3 | 2250 | 0.60 | 7000 | 25000 | |
| **C 70 3_239.3** | 239.3 | 3.8 | 2300 | 1.0 | 7000 | 25000 | 2.1 | 2300 | 0.50 | 7000 | 25000 | |
| **C 70 4_251.3** | 251.3 | 3.6 | 2300 | 0.90 | 2000 | 25000 | 2.0 | 2300 | 0.50 | 2620 | 25000 | |
| **C 70 4_272.2** | 272.2 | 3.3 | 2300 | 0.90 | 2030 | 25000 | 1.8 | 2300 | 0.50 | 2650 | 25000 | |
| **C 70 4_317.9** | 317.9 | 2.8 | 2300 | 0.70 | 2030 | 25000 | 1.6 | 2300 | 0.40 | 2650 | 25000 | |
| **C 70 4_344.3** | 344.3 | 2.6 | 2300 | 0.70 | 2050 | 25000 | 1.5 | 2300 | 0.40 | 2670 | 25000 | |
| **C 70 4_409.4** | 409.4 | 2.2 | 2300 | 0.60 | 2050 | 25000 | 1.2 | 2300 | 0.30 | 2670 | 25000 | |
| **C 70 4_443.5** | 443.5 | 2.0 | 2300 | 0.50 | 2070 | 25000 | 1.1 | 2300 | 0.30 | 2700 | 25000 | |
| **C 70 4_512.0** | 512.0 | 1.8 | 2300 | 0.50 | 2070 | 25000 | 1.0 | 2300 | 0.30 | 2680 | 25000 | |
| **C 70 4_554.7** | 554.7 | 1.6 | 2300 | 0.40 | 2090 | 25000 | 0.90 | 2300 | 0.20 | 2710 | 25000 | |
| **C 70 4_606.8** | 606.8 | 1.5 | 2300 | 0.40 | 2080 | 25000 | 0.80 | 2300 | 0.20 | 2700 | 25000 | |
| **C 70 4_657.3** | 657.3 | 1.4 | 2300 | 0.40 | 2100 | 25000 | 0.80 | 2300 | 0.20 | 2720 | 25000 | |
| **C 70 4_736.0** | 736.0 | 1.2 | 2300 | 0.30 | 2090 | 25000 | 0.70 | 2300 | 0.20 | 2700 | 25000 | |
| **C 70 4_797.3** | 797.3 | 1.1 | 2300 | 0.30 | 2110 | 25000 | 0.60 | 2300 | 0.20 | 2720 | 25000 | |
| **C 70 4_922.6** | 922.6 | 1.0 | 2300 | 0.30 | 2100 | 25000 | 0.50 | 2300 | 0.10 | 2710 | 25000 | |
| **C 70 4_999.5** | 999.5 | 0.90 | 2300 | 0.20 | 2110 | 25000 | 0.50 | 2300 | 0.10 | 2730 | 25000 | |
| **C 70 4_1069** | 1069 | 0.80 | 2300 | 0.20 | 2100 | 25000 | 0.50 | 2300 | 0.10 | 2720 | 25000 | |
| **C 70 4_1158** | 1158 | 0.80 | 2300 | 0.20 | 2100 | 25000 | 0.40 | 2300 | 0.10 | 2800 | 25000 | |
| **C 70 4_1362** | 1362 | 0.70 | 2300 | 0.20 | 2100 | 25000 | 0.40 | 2300 | 0.10 | 2800 | 25000 | |
| **C 70 4_1476** | 1476 | 0.60 | 2300 | 0.20 | 2100 | 25000 | 0.30 | 2300 | 0.10 | 2800 | 25000 | |



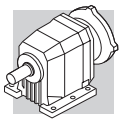
# C 80 — 4000 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 80 2_5.6** | 5.6 | 496 | 2400 | 131 | 370 | 10900 | 248 | 3100 | 85 | 690 | 12300 | |
| **C 80 2_6.1** | 6.1 | 458 | 2450 | 124 | 890 | 11000 | 229 | 3150 | 80 | 1380 | 12700 | |
| **C 80 2_7.0** | 7.0 | 398 | 2650 | 116 | 350 | 11000 | 199 | 3350 | 73 | 910 | 12900 | |
| **C 80 2_7.6** | 7.6 | 367 | 2700 | 109 | 890 | 11300 | 183 | 3400 | 69 | 1600 | 13300 | |
| **C 80 2_8.9** | 8.9 | 316 | 2800 | 98 | 420 | 12100 | 158 | 3500 | 61 | 1120 | 14500 | |
| **C 80 2_9.6** | 9.6 | 292 | 3000 | 96 | 520 | 11300 | 146 | 3700 | 59 | 1380 | 13900 | |
| **C 80 2_11.1** | 11.1 | 252 | 2800 | 78 | 1110 | 14200 | 126 | 3500 | 49 | 1950 | 17100 | |
| **C 80 2_12.0** | 12.0 | 233 | 3000 | 77 | 1200 | 13500 | 116 | 3700 | 48 | 2190 | 16600 | |
| **C 80 2_13.8** | 13.8 | 203 | 2800 | 63 | 1420 | 16400 | 102 | 3500 | 39 | 2330 | 19800 | |
| **C 80 2_14.9** | 14.9 | 188 | 3000 | 62 | 1510 | 15800 | 94 | 3700 | 38 | 2560 | 19300 | |
| **C 80 2_16.7** | 16.7 | 168 | 2800 | 52 | 1840 | 18500 | 84 | 3500 | 32 | 2840 | 22300 | |
| **C 80 2_18.1** | 18.1 | 155 | 3000 | 50 | 1930 | 17900 | 78 | 3700 | 32 | 3060 | 22000 | |
| **C 80 2_20.5** | 20.5 | 136 | 2850 | 43 | 2000 | 20500 | 68 | 3550 | 27 | 3060 | 24800 | |
| **C 80 2_22.2** | 22.2 | 126 | 3000 | 42 | 2210 | 20300 | 63 | 3700 | 26 | 3400 | 24900 | |
| **C 80 2_24.0** | 24.0 | 117 | 2850 | 37 | 2090 | 22400 | 58 | 3550 | 23 | 3180 | 27000 | |
| **C 80 2_25.9** | 25.9 | 108 | 3000 | 36 | 2300 | 22300 | 54 | 3700 | 22 | 3510 | 27200 | |
| **C 80 2_31.3** | 31.3 | 89 | 3000 | 30 | 2480 | 24700 | 45 | 3700 | 18.2 | 3730 | 30000 | |
| **C 80 2_39.1** | 39.1 | 72 | 2500 | 19.7 | 3820 | 31000 | 36 | 3200 | 12.6 | 5060 | 35000 | |
| **C 80 3_43.5** | 43.5 | 64 | 3100 | 23 | 5610 | 28700 | 32 | 3800 | 13.8 | 7000 | 34800 | |
| **C 80 3_47.4** | 47.4 | 59 | 3100 | 21 | 5660 | 30000 | 29.5 | 3800 | 12.6 | 7000 | 35000 | |
| **C 80 3_57.3** | 57.3 | 49 | 3400 | 18.7 | 5620 | 30500 | 24.4 | 4000 | 11.0 | 7000 | 35000 | |
| **C 80 3_62.5** | 62.5 | 45 | 3400 | 17.1 | 5670 | 31800 | 22.4 | 4000 | 10.1 | 7000 | 35000 | |
| **C 80 3_70.5** | 70.5 | 40 | 3650 | 16.3 | 5620 | 32200 | 19.9 | 4000 | 8.9 | 7000 | 35000 | |
| **C 80 3_76.9** | 76.9 | 36 | 3600 | 14.8 | 5670 | 33900 | 18.2 | 4000 | 8.2 | 7000 | 35000 | |
| **C 80 3_89.3** | 89.3 | 31 | 3900 | 13.8 | 5620 | 34700 | 15.7 | 4000 | 7.1 | 7000 | 35000 | |
| **C 80 3_97.4** | 97.4 | 28.7 | 3900 | 12.6 | 5670 | 35000 | 14.4 | 4000 | 6.5 | 7000 | 35000 | |
| **C 80 3_109.5** | 109.5 | 25.5 | 4000 | 11.5 | 5630 | 35000 | 12.8 | 4000 | 5.8 | 7000 | 35000 | 152 |
| **C 80 3_119.5** | 119.5 | 23.4 | 4000 | 10.6 | 5680 | 35000 | 11.7 | 4000 | 5.3 | 7000 | 35000 | |
| **C 80 3_136.7** | 136.7 | 20.5 | 4000 | 9.2 | 5660 | 35000 | 10.2 | 4000 | 4.6 | 7000 | 35000 | |
| **C 80 3_149.1** | 149.1 | 18.8 | 4000 | 8.5 | 5700 | 35000 | 9.4 | 4000 | 4.2 | 7000 | 35000 | |
| **C 80 3_169.0** | 169.0 | 16.6 | 4000 | 7.5 | 5680 | 35000 | 8.3 | 4000 | 3.7 | 7000 | 35000 | |
| **C 80 3_184.4** | 184.4 | 15.2 | 4000 | 6.8 | 5720 | 35000 | 7.6 | 4000 | 3.4 | 7000 | 35000 | |
| **C 80 3_197.9** | 197.9 | 14.2 | 3800 | 6.1 | 5710 | 35000 | 7.1 | 3800 | 3.0 | 7000 | 35000 | |
| **C 80 3_215.9** | 215.9 | 13.0 | 4000 | 5.8 | 5730 | 35000 | 6.5 | 4000 | 2.9 | 7000 | 35000 | |
| **C 80 4_261.9** | 261.9 | 10.7 | 4000 | 4.9 | 1850 | 35000 | 5.3 | 4000 | 2.5 | 2470 | 35000 | |
| **C 80 4_285.7** | 285.7 | 9.8 | 4000 | 4.5 | 1890 | 35000 | 4.9 | 4000 | 2.3 | 2510 | 35000 | |
| **C 80 4_334.3** | 334.3 | 8.4 | 4000 | 3.9 | 1880 | 35000 | 4.2 | 4000 | 1.9 | 2500 | 35000 | |
| **C 80 4_364.7** | 364.7 | 7.7 | 4000 | 3.5 | 1920 | 35000 | 3.8 | 4000 | 1.8 | 2540 | 35000 | |
| **C 80 4_417.5** | 417.5 | 6.7 | 4000 | 3.1 | 1910 | 35000 | 3.4 | 4000 | 1.5 | 2530 | 35000 | |
| **C 80 4_455.4** | 455.4 | 6.1 | 4000 | 2.8 | 1950 | 35000 | 3.1 | 4000 | 1.4 | 2570 | 35000 | |
| **C 80 4_529.3** | 529.3 | 5.3 | 4000 | 2.4 | 1940 | 35000 | 2.6 | 4000 | 1.2 | 2550 | 35000 | |
| **C 80 4_577.4** | 577.4 | 4.8 | 4000 | 2.2 | 1970 | 35000 | 2.4 | 4000 | 1.1 | 2590 | 35000 | |
| **C 80 4_664.3** | 664.3 | 4.2 | 4000 | 1.9 | 1960 | 35000 | 2.1 | 4000 | 1.0 | 2570 | 35000 | |
| **C 80 4_724.7** | 724.7 | 3.9 | 4000 | 1.8 | 1990 | 35000 | 1.9 | 4000 | 0.90 | 2610 | 35000 | |
| **C 80 4_783.4** | 783.4 | 3.6 | 4000 | 1.6 | 1970 | 35000 | 1.8 | 4000 | 0.80 | 2590 | 35000 | |
| **C 80 4_854.6** | 854.6 | 3.3 | 4000 | 1.5 | 2000 | 35000 | 1.6 | 4000 | 0.80 | 2620 | 35000 | |
| **C 80 4_945.7** | 945.7 | 3.0 | 4000 | 1.4 | 1980 | 35000 | 1.5 | 4000 | 0.70 | 2600 | 35000 | |
| **C 80 4_1032** | 1032 | 2.7 | 4000 | 1.2 | 2010 | 35000 | 1.4 | 4000 | 0.60 | 2630 | 35000 | |
| **C 80 4_1168** | 1168 | 2.4 | 4000 | 1.1 | 1980 | 35000 | 1.2 | 4000 | 0.60 | 2600 | 35000 | |
| **C 80 4_1274** | 1274 | 2.2 | 4000 | 1.0 | 2020 | 35000 | 1.1 | 4000 | 0.50 | 2640 | 35000 | |
| **C 80 4_1358** | 1358 | 2.1 | 4000 | 0.90 | 1990 | 35000 | 1.0 | 4000 | 0.50 | 2610 | 35000 | |
| **C 80 4_1481** | 1481 | 1.9 | 4000 | 0.90 | 2030 | 35000 | 0.90 | 4000 | 0.40 | 2640 | 35000 | |



# C 80 — 4000 Nm

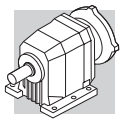
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 80 2_5.6** | 5.6 | 160 | 3500 | 62 | 1480 | 14400 | 89 | 3500 | 34 | 4970 | 21600 | |
| **C 80 2_6.1** | 6.1 | 147 | 3600 | 58 | 2100 | 14400 | 82 | 3700 | 33 | 5270 | 21200 | |
| **C 80 2_7.0** | 7.0 | 128 | 3500 | 49 | 2630 | 17000 | 71 | 3500 | 27 | 6130 | 24600 | |
| **C 80 2_7.6** | 7.6 | 118 | 3650 | 47 | 3060 | 16800 | 66 | 3650 | 26 | 6550 | 24600 | |
| **C 80 2_8.9** | 8.9 | 102 | 3500 | 39 | 3330 | 19900 | 56 | 3500 | 22 | 6800 | 27800 | |
| **C 80 2_9.6** | 9.6 | 94 | 3700 | 38 | 3590 | 19400 | 52 | 3700 | 21 | 7000 | 27700 | |
| **C 80 2_11.1** | 11.1 | 81 | 3500 | 31 | 4160 | 22800 | 45 | 3500 | 17.4 | 7000 | 31200 | |
| **C 80 2_12.0** | 12.0 | 75 | 3700 | 31 | 4400 | 22500 | 42 | 3700 | 17.0 | 7000 | 31200 | |
| **C 80 2_13.8** | 13.8 | 65 | 3500 | 25 | 4540 | 25700 | 36 | 3500 | 14.0 | 7000 | 34700 | |
| **C 80 2_14.9** | 14.9 | 60 | 3700 | 25 | 4770 | 25500 | 34 | 3700 | 13.7 | 7000 | 34700 | |
| **C 80 2_16.7** | 16.7 | 54 | 3500 | 21 | 5050 | 28500 | 30 | 3500 | 11.6 | 7000 | 35000 | |
| **C 80 2_18.1** | 18.1 | 50 | 3700 | 20 | 5280 | 28400 | 27.7 | 3700 | 11.3 | 7000 | 35000 | |
| **C 80 2_20.5** | 20.5 | 44 | 3550 | 17.2 | 5270 | 31400 | 24.4 | 3550 | 9.5 | 7000 | 35000 | |
| **C 80 2_22.2** | 22.2 | 40 | 3700 | 16.5 | 5610 | 31600 | 22.5 | 3700 | 9.2 | 7000 | 35000 | |
| **C 80 2_24.0** | 24.0 | 38 | 3550 | 14.7 | 5390 | 33800 | 20.9 | 3550 | 8.2 | 7000 | 35000 | |
| **C 80 2_25.9** | 25.9 | 35 | 3700 | 14.1 | 5730 | 34200 | 19.3 | 3700 | 7.9 | 7000 | 35000 | |
| **C 80 2_31.3** | 31.3 | 28.7 | 3700 | 11.7 | 5940 | 35000 | 16.0 | 3700 | 6.5 | 7000 | 35000 | |
| **C 80 2_39.1** | 39.1 | 23.0 | 3200 | 8.1 | 7000 | 35000 | 12.8 | 3200 | 4.5 | 7000 | 35000 | |
| **C 80 3_43.5** | 43.5 | 20.7 | 4000 | 9.3 | 7000 | 35000 | 11.5 | 4000 | 5.2 | 7000 | 35000 | |
| **C 80 3_47.4** | 47.4 | 19.0 | 4000 | 8.5 | 7000 | 35000 | 10.5 | 4000 | 4.7 | 7000 | 35000 | |
| **C 80 3_57.3** | 57.3 | 15.7 | 4000 | 7.1 | 7000 | 35000 | 8.7 | 4000 | 3.9 | 7000 | 35000 | |
| **C 80 3_62.5** | 62.5 | 14.4 | 4000 | 6.5 | 7000 | 35000 | 8.0 | 4000 | 3.6 | 7000 | 35000 | |
| **C 80 3_70.5** | 70.5 | 12.8 | 4000 | 5.7 | 7000 | 35000 | 7.1 | 4000 | 3.2 | 7000 | 35000 | |
| **C 80 3_76.9** | 76.9 | 11.7 | 4000 | 5.3 | 7000 | 35000 | 6.5 | 4000 | 2.9 | 7000 | 35000 | |
| **C 80 3_89.3** | 89.3 | 10.1 | 4000 | 4.5 | 7000 | 35000 | 5.6 | 4000 | 2.5 | 7000 | 35000 | |
| **C 80 3_97.4** | 97.4 | 9.2 | 4000 | 4.2 | 7000 | 35000 | 5.1 | 4000 | 2.3 | 7000 | 35000 | 152 |
| **C 80 3_109.5** | 109.5 | 8.2 | 4000 | 3.7 | 7000 | 35000 | 4.6 | 4000 | 2.1 | 7000 | 35000 | |
| **C 80 3_119.5** | 119.5 | 7.5 | 4000 | 3.4 | 7000 | 35000 | 4.2 | 4000 | 1.9 | 7000 | 35000 | |
| **C 80 3_136.7** | 136.7 | 6.6 | 4000 | 3.0 | 7000 | 35000 | 3.7 | 4000 | 1.6 | 7000 | 35000 | |
| **C 80 3_149.1** | 149.1 | 6.0 | 4000 | 2.7 | 7000 | 35000 | 3.4 | 4000 | 1.5 | 7000 | 35000 | |
| **C 80 3_169.0** | 169.0 | 5.3 | 4000 | 2.4 | 7000 | 35000 | 3.0 | 4000 | 1.3 | 7000 | 35000 | |
| **C 80 3_184.4** | 184.4 | 4.9 | 4000 | 2.2 | 7000 | 35000 | 2.7 | 4000 | 1.2 | 7000 | 35000 | |
| **C 80 3_197.9** | 197.9 | 4.5 | 3800 | 1.9 | 7000 | 35000 | 2.5 | 3800 | 1.1 | 7000 | 35000 | |
| **C 80 3_215.9** | 215.9 | 4.2 | 4000 | 1.9 | 7000 | 35000 | 2.3 | 4000 | 1.0 | 7000 | 35000 | |
| **C 80 4_261.9** | 261.9 | 3.4 | 4000 | 1.6 | 2950 | 35000 | 1.9 | 4000 | 0.90 | 3500 | 35000 | |
| **C 80 4_285.7** | 285.7 | 3.2 | 4000 | 1.4 | 2990 | 35000 | 1.8 | 4000 | 0.80 | 3500 | 35000 | |
| **C 80 4_334.3** | 334.3 | 2.7 | 4000 | 1.2 | 2980 | 35000 | 1.5 | 4000 | 0.70 | 3500 | 35000 | |
| **C 80 4_364.7** | 364.7 | 2.5 | 4000 | 1.1 | 3020 | 35000 | 1.4 | 4000 | 0.60 | 3500 | 35000 | |
| **C 80 4_417.5** | 417.5 | 2.2 | 4000 | 1.0 | 3000 | 35000 | 1.2 | 4000 | 0.60 | 3500 | 35000 | |
| **C 80 4_455.4** | 455.4 | 2.0 | 4000 | 0.90 | 3050 | 35000 | 1.1 | 4000 | 0.50 | 3500 | 35000 | |
| **C 80 4_529.3** | 529.3 | 1.7 | 4000 | 0.80 | 3030 | 35000 | 0.90 | 4000 | 0.40 | 3500 | 35000 | |
| **C 80 4_577.4** | 577.4 | 1.6 | 4000 | 0.70 | 3070 | 35000 | 0.90 | 4000 | 0.40 | 3500 | 35000 | |
| **C 80 4_664.3** | 664.3 | 1.4 | 4000 | 0.60 | 3050 | 35000 | 0.80 | 4000 | 0.30 | 3500 | 35000 | |
| **C 80 4_724.7** | 724.7 | 1.2 | 4000 | 0.60 | 3090 | 35000 | 0.70 | 4000 | 0.30 | 3500 | 35000 | |
| **C 80 4_783.4** | 783.4 | 1.1 | 4000 | 0.50 | 3060 | 35000 | 0.60 | 4000 | 0.30 | 3500 | 35000 | |
| **C 80 4_854.6** | 854.6 | 1.1 | 4000 | 0.50 | 3100 | 35000 | 0.60 | 4000 | 0.30 | 3500 | 35000 | |
| **C 80 4_945.7** | 945.7 | 1.0 | 4000 | 0.40 | 3070 | 35000 | 0.50 | 4000 | 0.20 | 3500 | 35000 | |
| **C 80 4_1032** | 1032 | 0.90 | 4000 | 0.40 | 3110 | 35000 | 0.50 | 4000 | 0.20 | 3500 | 35000 | |
| **C 80 4_1168** | 1168 | 0.80 | 4000 | 0.40 | 3080 | 35000 | 0.40 | 4000 | 0.20 | 3500 | 35000 | |
| **C 80 4_1274** | 1274 | 0.70 | 4000 | 0.30 | 3110 | 35000 | 0.40 | 4000 | 0.20 | 3500 | 35000 | |
| **C 80 4_1358** | 1358 | 0.70 | 4000 | 0.30 | 3090 | 35000 | 0.40 | 4000 | 0.20 | 3500 | 35000 | |
| **C 80 4_1481** | 1481 | 0.60 | 4000 | 0.30 | 3120 | 35000 | 0.30 | 4000 | 0.20 | 3500 | 35000 | |



# C 90 — 7200 Nm

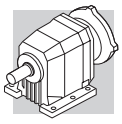
| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 90 2_5.2** | 5.2 | 542 | 3500 | 209 | 1700 | 12800 | 271 | 4300 | 128 | 2170 | 15800 | |
| **C 90 2_5.6** | 5.6 | 500 | 3600 | 198 | 3240 | 12800 | 250 | 4400 | 121 | 4250 | 16000 | |
| **C 90 2_6.8** | 6.8 | 414 | 3850 | 176 | 1860 | 13400 | 207 | 4750 | 108 | 2210 | 16400 | |
| **C 90 2_7.3** | 7.3 | 383 | 3950 | 167 | 3470 | 13500 | 191 | 4850 | 102 | 4360 | 16700 | |
| **C 90 2_8.3** | 8.3 | 336 | 4150 | 154 | 2010 | 13800 | 168 | 5100 | 94 | 2540 | 17100 | |
| **C 90 2_9.0** | 9.0 | 310 | 4250 | 145 | 3660 | 14000 | 155 | 5200 | 89 | 4720 | 17500 | |
| **C 90 2_10.4** | 10.4 | 270 | 4500 | 134 | 990 | 14200 | 135 | 5550 | 83 | 1150 | 17400 | |
| **C 90 2_11.2** | 11.2 | 249 | 4600 | 126 | 2750 | 14400 | 125 | 5650 | 78 | 3460 | 17800 | |
| **C 90 2_12.8** | 12.8 | 219 | 4850 | 117 | 580 | 14700 | 109 | 5950 | 72 | 840 | 18200 | |
| **C 90 2_13.9** | 13.9 | 202 | 4900 | 109 | 2700 | 15300 | 101 | 6050 | 67 | 3220 | 18700 | |
| **C 90 2_16.0** | 16.0 | 175 | 5050 | 98 | 690 | 16800 | 88 | 6200 | 60 | 950 | 20800 | |
| **C 90 2_17.3** | 17.3 | 162 | 5300 | 94 | 1670 | 15900 | 81 | 6500 | 58 | 2200 | 19800 | |
| **C 90 2_18.7** | 18.7 | 150 | 5050 | 83 | 1140 | 19600 | 75 | 6200 | 51 | 1500 | 24300 | |
| **C 90 2_20.2** | 20.2 | 138 | 5400 | 82 | 1540 | 17900 | 69 | 6600 | 50 | 2160 | 22500 | |
| **C 90 2_22.9** | 22.9 | 122 | 5050 | 68 | 2110 | 22400 | 61 | 6200 | 42 | 2700 | 27600 | |
| **C 90 2_24.8** | 24.8 | 113 | 5400 | 67 | 2500 | 21900 | 56 | 6600 | 41 | 3340 | 27300 | |
| **C 90 2_27.2** | 27.2 | 103 | 4500 | 51 | 6160 | 26000 | 52 | 5500 | 31 | 7820 | 32200 | |
| **C 90 2_29.4** | 29.4 | 95 | 4800 | 50 | 6560 | 26000 | 48 | 5900 | 31 | 8130 | 32000 | |
| **C 90 2_35.1** | 35.1 | 80 | 4400 | 39 | 8090 | 29400 | 40 | 5400 | 24 | 11100 | 36300 | |
| | | | | | | | | | | | | |
| **C 90 3_39.4** | 39.4 | 71 | 6350 | 51 | 10800 | 23900 | 36 | 7100 | 28 | 13700 | 32900 | |
| **C 90 3_43.0** | 43.0 | 65 | 6500 | 48 | 10800 | 24700 | 33 | 7200 | 26 | 13800 | 34000 | |
| **C 90 3_50.3** | 50.3 | 56 | 6800 | 43 | 10800 | 26000 | 27.8 | 7100 | 22 | 13800 | 37000 | |
| **C 90 3_54.9** | 54.9 | 51 | 7000 | 40 | 10900 | 26500 | 25.5 | 7200 | 21 | 13900 | 38300 | |
| **C 90 3_59.2** | 59.2 | 47 | 7100 | 38 | 10800 | 27700 | 23.6 | 7100 | 18.9 | 13900 | 40000 | |
| **C 90 3_64.6** | 64.6 | 43 | 7200 | 35 | 10900 | 29100 | 21.7 | 7200 | 17.6 | 14000 | 41300 | |
| **C 90 3_74.4** | 74.4 | 38 | 7100 | 30 | 10900 | 31900 | 18.8 | 7100 | 15.0 | 14000 | 44400 | |
| **C 90 3_81.2** | 81.2 | 34 | 7200 | 28 | 10900 | 33000 | 17.2 | 7200 | 14.0 | 14100 | 45900 | 155 |
| **C 90 3_88.2** | 88.2 | 32 | 7100 | 25 | 11000 | 34800 | 15.9 | 7100 | 12.7 | 14000 | 47900 | |
| **C 90 3_96.2** | 96.2 | 29.1 | 7200 | 24 | 11000 | 35900 | 14.5 | 7200 | 11.8 | 14100 | 49400 | |
| **C 90 3_107.0** | 107.0 | 26.2 | 7100 | 21 | 11000 | 38100 | 13.1 | 7100 | 10.5 | 14100 | 52100 | |
| **C 90 3_116.7** | 116.7 | 24.0 | 7200 | 19.4 | 11000 | 39400 | 12.0 | 7200 | 9.7 | 14100 | 53700 | |
| **C 90 3_134.1** | 134.1 | 20.9 | 7100 | 16.7 | 11000 | 42400 | 10.4 | 7100 | 8.3 | 14100 | 57300 | |
| **C 90 3_146.3** | 146.3 | 19.1 | 7200 | 15.5 | 11000 | 43800 | 9.6 | 7200 | 7.8 | 14200 | 59000 | |
| **C 90 3_157.8** | 157.8 | 17.7 | 7100 | 14.2 | 11000 | 45600 | 8.9 | 7100 | 7.1 | 14100 | 60000 | |
| **C 90 3_172.1** | 172.1 | 16.3 | 7200 | 13.2 | 11000 | 47100 | 8.1 | 7200 | 6.6 | 14200 | 60000 | |
| | | | | | | | | | | | | |
| **C 90 4_212.4** | 212.4 | 13.2 | 7200 | 10.9 | — | 60000 | 6.6 | 7200 | 5.5 | 1180 | 60000 | |
| **C 90 4_231.7** | 231.7 | 12.1 | 7200 | 10.0 | — | 60000 | 6.0 | 7200 | 5.0 | 1560 | 60000 | |
| **C 90 4_268.5** | 268.5 | 10.4 | 7200 | 8.6 | — | 60000 | 5.2 | 7200 | 4.3 | 1540 | 60000 | |
| **C 90 4_292.9** | 292.9 | 9.6 | 7200 | 7.9 | — | 60000 | 4.8 | 7200 | 4.0 | 1880 | 60000 | |
| **C 90 4_339.0** | 339.0 | 8.3 | 7200 | 6.8 | — | 60000 | 4.1 | 7200 | 3.4 | 1720 | 60000 | |
| **C 90 4_369.8** | 369.8 | 7.6 | 7200 | 6.3 | — | 60000 | 3.8 | 7200 | 3.1 | 2050 | 60000 | |
| **C 90 4_419.0** | 419.0 | 6.7 | 7200 | 5.5 | — | 60000 | 3.3 | 7200 | 2.8 | 1890 | 60000 | |
| **C 90 4_457.1** | 457.1 | 6.1 | 7200 | 5.1 | — | 60000 | 3.1 | 7200 | 2.5 | 2210 | 60000 | |
| **C 90 4_534.2** | 534.2 | 5.2 | 7200 | 4.3 | — | 60000 | 2.6 | 7200 | 2.2 | 2090 | 60000 | |
| **C 90 4_582.8** | 582.8 | 4.8 | 7200 | 4.0 | — | 60000 | 2.4 | 7200 | 2.0 | 2270 | 60000 | |
| **C 90 4_652.8** | 652.8 | 4.3 | 7200 | 3.6 | — | 60000 | 2.1 | 7200 | 1.8 | 2160 | 60000 | |
| **C 90 4_712.2** | 712.2 | 3.9 | 7200 | 3.3 | — | 60000 | 2.0 | 7200 | 1.6 | 2290 | 60000 | |
| **C 90 4_773.6** | 773.6 | 3.3 | 7200 | 3.0 | — | 60000 | 1.8 | 7200 | 1.5 | 2250 | 60000 | |
| **C 90 4_844.0** | 844.0 | 3.0 | 7200 | 2.7 | — | 60000 | 1.7 | 7200 | 1.4 | 2310 | 60000 | |
| **C 90 4_922.3** | 922.3 | 2.8 | 7200 | 2.5 | — | 60000 | 1.5 | 7200 | 1.3 | 2260 | 60000 | |
| **C 90 4_1006** | 1006 | 2.5 | 7200 | 2.3 | — | 60000 | 1.4 | 7200 | 1.2 | 2320 | 60000 | |
| **C 90 4_1137** | 1137 | 2.3 | 7200 | 2.0 | — | 60000 | 1.2 | 7200 | 1.0 | 2270 | 60000 | |
| **C 90 4_1240** | 1240 | 2.2 | 7200 | 1.9 | — | 60000 | 1.1 | 7200 | 0.90 | 2230 | 60000 | |

(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



# C 90 — 7200 Nm

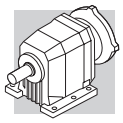
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 90 2_5.2** | 5.2 | 174 | 4900 | 94 | 2560 | 18200 | 97 | 5850 | 62 | 3010 | 21600 | |
| **C 90 2_5.6** | 5.6 | 161 | 5050 | 89 | 4640 | 18100 | 89 | 6000 | 59 | 5720 | 21800 | |
| **C 90 2_6.8** | 6.8 | 133 | 5450 | 80 | 2310 | 18500 | 74 | 6200 | 51 | 5130 | 24600 | |
| **C 90 2_7.3** | 7.3 | 123 | 5550 | 75 | 4890 | 18900 | 68 | 6550 | 49 | 6340 | 23200 | |
| **C 90 2_8.3** | 8.3 | 108 | 5850 | 70 | 2700 | 19300 | 60 | 6200 | 41 | 8870 | 27800 | |
| **C 90 2_9.0** | 9.0 | 100 | 5950 | 65 | 5300 | 19800 | 55 | 6600 | 40 | 9660 | 27600 | |
| **C 90 2_10.4** | 10.4 | 87 | 6200 | 59 | 2250 | 21000 | 48 | 6200 | 33 | 11000 | 31000 | |
| **C 90 2_11.2** | 11.2 | 80 | 6450 | 57 | 3960 | 20400 | 45 | 6600 | 32 | 11700 | 30800 | |
| **C 90 2_12.8** | 12.8 | 70 | 6250 | 48 | 4500 | 25300 | 39 | 6250 | 27 | 13200 | 34100 | |
| **C 90 2_13.9** | 13.9 | 65 | 6550 | 47 | 5830 | 24400 | 36 | 6550 | 26 | 14600 | 34300 | |
| **C 90 2_16.0** | 16.0 | 56 | 6200 | 38 | 6570 | 28700 | 31 | 6200 | 21 | 15000 | 38000 | |
| **C 90 2_17.3** | 17.3 | 52 | 6550 | 38 | 7530 | 28600 | 28.9 | 6550 | 21 | 15000 | 38100 | |
| **C 90 2_18.7** | 18.7 | 48 | 6200 | 33 | 7120 | 31000 | 26.7 | 6200 | 18.3 | 15000 | 40700 | |
| **C 90 2_20.2** | 20.2 | 44 | 6600 | 32 | 7780 | 30800 | 24.8 | 6600 | 18.0 | 15000 | 40700 | |
| **C 90 2_22.9** | 22.9 | 39 | 6200 | 27 | 8310 | 34200 | 21.8 | 6200 | 14.9 | 15000 | 44500 | |
| **C 90 2_24.8** | 24.8 | 36 | 6600 | 26 | 8950 | 34100 | 20.2 | 6600 | 14.6 | 15000 | 44600 | |
| **C 90 2_27.2** | 27.2 | 33 | 5500 | 20 | 13400 | 39200 | 18.4 | 5500 | 11.2 | 15000 | 50000 | |
| **C 90 2_29.4** | 29.4 | 31 | 5900 | 19.9 | 13700 | 39100 | 17.0 | 5900 | 11.0 | 15000 | 50200 | |
| **C 90 2_35.1** | 35.1 | 25.6 | 5400 | 15.3 | 14100 | 43800 | 14.2 | 5400 | 8.5 | 15000 | 55500 | |
| | | | | | | | | | | | | |
| **C 90 3_39.4** | 39.4 | 22.8 | 7100 | 18.3 | 15000 | 40600 | 12.7 | 7100 | 10.1 | 15000 | 40600 | |
| **C 90 3_43.0** | 43.0 | 20.9 | 7200 | 17.0 | 15000 | 42000 | 11.6 | 7200 | 9.4 | 15000 | 42000 | |
| **C 90 3_50.3** | 50.3 | 17.9 | 7100 | 14.3 | 15000 | 45400 | 9.9 | 7100 | 7.9 | 15000 | 45400 | |
| **C 90 3_54.9** | 54.9 | 16.4 | 7200 | 13.3 | 15000 | 46900 | 9.1 | 7200 | 7.4 | 15000 | 46900 | |
| **C 90 3_59.2** | 59.2 | 15.2 | 7100 | 12.2 | 15000 | 48800 | 8.4 | 7100 | 6.8 | 15000 | 48800 | |
| **C 90 3_64.6** | 64.6 | 13.9 | 7200 | 11.3 | 15000 | 50400 | 7.7 | 7200 | 6.3 | 15000 | 50400 | |
| **C 90 3_74.4** | 74.4 | 12.1 | 7100 | 9.7 | 15000 | 53800 | 6.7 | 7100 | 5.4 | 15000 | 53800 | |
| **C 90 3_81.2** | 81.2 | 11.1 | 7200 | 9.0 | 15000 | 55500 | 6.2 | 7200 | 5.0 | 15000 | 55500 | 155 |
| **C 90 3_88.2** | 88.2 | 10.2 | 7100 | 8.2 | 15000 | 57800 | 5.7 | 7100 | 4.5 | 15000 | 57800 | |
| **C 90 3_96.2** | 96.2 | 9.4 | 7200 | 7.6 | 15000 | 59600 | 5.2 | 7200 | 4.2 | 15000 | 59600 | |
| **C 90 3_107.0** | 107.0 | 8.4 | 7100 | 6.7 | 15000 | 60000 | 4.7 | 7100 | 3.7 | 15000 | 60000 | |
| **C 90 3_116.7** | 116.7 | 7.7 | 7200 | 6.3 | 15000 | 60000 | 4.3 | 7200 | 3.5 | 15000 | 60000 | |
| **C 90 3_134.1** | 134.1 | 6.7 | 7100 | 5.4 | 15000 | 60000 | 3.7 | 7100 | 3.0 | 15000 | 60000 | |
| **C 90 3_146.3** | 146.3 | 6.2 | 7200 | 5.0 | 15000 | 60000 | 3.4 | 7200 | 2.8 | 15000 | 60000 | |
| **C 90 3_157.8** | 157.8 | 5.7 | 7100 | 4.6 | 15000 | 60000 | 3.2 | 7100 | 2.5 | 15000 | 60000 | |
| **C 90 3_172.1** | 172.1 | 5.2 | 7200 | 4.2 | 15000 | 60000 | 2.9 | 7200 | 2.4 | 15000 | 60000 | |
| | | | | | | | | | | | | |
| **C 90 4_212.4** | 212.4 | 4.2 | 7200 | 3.5 | 2090 | 60000 | 2.4 | 7200 | 2.0 | 3210 | 60000 | |
| **C 90 4_231.7** | 231.7 | 3.9 | 7200 | 3.2 | 2460 | 60000 | 2.2 | 7200 | 1.8 | 3290 | 60000 | |
| **C 90 4_268.5** | 268.5 | 3.4 | 7200 | 2.8 | 2440 | 60000 | 1.9 | 7200 | 1.5 | 3300 | 60000 | |
| **C 90 4_292.9** | 292.9 | 3.1 | 7200 | 2.5 | 2620 | 60000 | 1.7 | 7200 | 1.4 | 3370 | 60000 | |
| **C 90 4_339.0** | 339.0 | 2.7 | 7200 | 2.2 | 2590 | 60000 | 1.5 | 7200 | 1.2 | 3340 | 60000 | |
| **C 90 4_369.8** | 369.8 | 2.4 | 7200 | 2.0 | 2660 | 60000 | 1.4 | 7200 | 1.1 | 3420 | 60000 | |
| **C 90 4_419.0** | 419.0 | 2.1 | 7200 | 1.8 | 2630 | 60000 | 1.2 | 7200 | 1.0 | 3390 | 60000 | |
| **C 90 4_457.1** | 457.1 | 2.0 | 7200 | 1.6 | 2700 | 60000 | 1.1 | 7200 | 0.90 | 3460 | 60000 | |
| **C 90 4_534.2** | 534.2 | 1.7 | 7200 | 1.4 | 2680 | 60000 | 0.90 | 7200 | 0.80 | 3380 | 60000 | |
| **C 90 4_582.8** | 582.8 | 1.5 | 7200 | 1.3 | 2750 | 60000 | 0.90 | 7200 | 0.70 | 3500 | 60000 | |
| **C 90 4_652.8** | 652.8 | 1.4 | 7200 | 1.1 | 2700 | 60000 | 0.80 | 7200 | 0.60 | 3450 | 60000 | |
| **C 90 4_712.2** | 712.2 | 1.3 | 7200 | 1.0 | 2760 | 60000 | 0.70 | 7200 | 0.60 | 3500 | 60000 | |
| **C 90 4_773.6** | 773.6 | 1.2 | 7200 | 1.0 | 2720 | 60000 | 0.60 | 7200 | 0.50 | 3480 | 60000 | |
| **C 90 4_844.0** | 844.0 | 1.1 | 7200 | 0.90 | 2790 | 60000 | 0.60 | 7200 | 0.50 | 3500 | 60000 | |
| **C 90 4_922.3** | 922.3 | 1.0 | 7200 | 0.80 | 2730 | 60000 | 0.50 | 7200 | 0.40 | 3490 | 60000 | |
| **C 90 4_1006** | 1006 | 0.90 | 7200 | 0.70 | 2800 | 60000 | 0.50 | 7200 | 0.40 | 3500 | 60000 | |
| **C 90 4_1137** | 1137 | 0.80 | 7200 | 0.70 | 2740 | 60000 | 0.40 | 7200 | 0.40 | 3500 | 60000 | |
| **C 90 4_1240** | 1240 | 0.70 | 7200 | 0.60 | 2800 | 60000 | 0.40 | 7200 | 0.30 | 3500 | 60000 | |



# C 100 — 12000 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 100 2_4.9** | 4.9 | 569 | 5500 | 345 | 1900 | 20600 | 285 | 6800 | 213 | 3790 | 25300 | |
| **C 100 2_5.3** | 5.3 | 525 | 5650 | 327 | 2790 | 21000 | 263 | 6950 | 201 | 4940 | 25800 | |
| **C 100 2_6.5** | 6.5 | 429 | 6150 | 291 | 1920 | 21800 | 215 | 7550 | 179 | 3950 | 27000 | |
| **C 100 2_7.1** | 7.1 | 396 | 6200 | 271 | 3100 | 22700 | 198 | 7650 | 167 | 5270 | 27900 | |
| **C 100 2_8.4** | 8.4 | 335 | 6700 | 248 | 1870 | 22800 | 168 | 8200 | 152 | 3970 | 28500 | |
| **C 100 2_9.0** | 9.0 | 309 | 6800 | 232 | 2950 | 23500 | 155 | 8350 | 142 | 5190 | 29200 | |
| **C 100 2_10.1** | 10.1 | 278 | 7100 | 217 | 1930 | 24100 | 139 | 8750 | 134 | 3900 | 29500 | |
| **C 100 2_10.9** | 10.9 | 256 | 7100 | 200 | 3240 | 25700 | 128 | 8750 | 124 | 5460 | 31600 | |
| **C 100 2_12.5** | 12.5 | 225 | 7650 | 190 | 1360 | 24900 | 112 | 9400 | 117 | 3260 | 30800 | |
| **C 100 2_13.5** | 13.5 | 208 | 7700 | 176 | 2600 | 26300 | 104 | 9500 | 109 | 4680 | 32100 | |
| **C 100 2_15.2** | 15.2 | 184 | 8100 | 164 | 1270 | 26600 | 92 | 10000 | 101 | 2680 | 32500 | |
| **C 100 2_16.5** | 16.5 | 170 | 8250 | 154 | 2320 | 27200 | 85 | 10150 | 95 | 4420 | 33600 | |
| **C 100 2_18.7** | 18.7 | 150 | 8200 | 136 | 1500 | 30800 | 75 | 10000 | 83 | 3600 | 38000 | |
| **C 100 2_20.2** | 20.2 | 138 | 8100 | 124 | 3047 | 32200 | 69 | 10000 | 76 | 5210 | 39600 | |
| **C 100 2_22.2** | 22.2 | 126 | 7500 | 104 | 3570 | 35800 | 63 | 9200 | 64 | 5960 | 44100 | |
| **C 100 2_24.1** | 24.1 | 116 | 8100 | 104 | 3620 | 35200 | 58 | 10000 | 64 | 5900 | 43300 | |
| **C 100 2_29.6** | 29.6 | 95 | 6900 | 72 | 6380 | 42400 | 47 | 8500 | 44 | 9220 | 52200 | |
| | | | | | | | | | | | | |
| **C 100 3_34.3** | 34.3 | 82 | 10350 | 95 | 9790 | 33300 | 41 | 11700 | 54 | 13000 | 46400 | |
| **C 100 3_36.9** | 36.9 | 76 | 10650 | 91 | 10200 | 34500 | 38 | 11800 | 50 | 13100 | 48000 | |
| **C 100 3_42.9** | 42.9 | 65 | 11350 | 83 | 9640 | 33200 | 33 | 12000 | 44 | 13100 | 51200 | |
| **C 100 3_46.2** | 46.2 | 61 | 11700 | 80 | 10100 | 33100 | 30 | 12000 | 41 | 13300 | 53100 | |
| **C 100 3_53.3** | 53.3 | 53 | 12000 | 71 | 9450 | 36400 | 26.3 | 12000 | 36 | 13200 | 56900 | |
| **C 100 3_57.4** | 57.4 | 49 | 12000 | 66 | 10200 | 39500 | 24.4 | 12000 | 33 | 13400 | 59000 | |
| **C 100 3_64.5** | 64.5 | 43 | 12000 | 59 | 9950 | 44100 | 21.7 | 12000 | 29 | 13400 | 62300 | |
| **C 100 3_69.4** | 69.4 | 40 | 12000 | 54 | 10400 | 45900 | 20.2 | 12000 | 27 | 13500 | 64500 | |
| **C 100 3_79.4** | 79.4 | 35 | 12000 | 48 | 10300 | 49200 | 17.6 | 12000 | 24 | 13500 | 68600 | 158 |
| **C 100 3_85.6** | 85.6 | 33 | 12000 | 44 | 10400 | 51100 | 16.4 | 12000 | 22 | 13600 | 70900 | |
| **C 100 3_92.7** | 92.7 | 30 | 12000 | 41 | 10400 | 53200 | 15.1 | 12000 | 20 | 13500 | 73500 | |
| **C 100 3_99.8** | 99.8 | 28.1 | 12000 | 38 | 10500 | 55200 | 14.0 | 12000 | 19.0 | 13600 | 75900 | |
| **C 100 3_111.9** | 111.9 | 25.0 | 12000 | 34 | 10400 | 58300 | 12.5 | 12000 | 16.9 | 13500 | 79800 | |
| **C 100 3_120.5** | 120.5 | 23.2 | 12000 | 31 | 10500 | 60400 | 11.6 | 12000 | 15.7 | 13700 | 82400 | |
| **C 100 3_139.7** | 139.7 | 20.0 | 11050 | 25 | 10600 | 67400 | 10.0 | 11050 | 12.5 | 13700 | 85000 | |
| **C 100 3_150.4** | 150.4 | 18.6 | 12000 | 25 | 10600 | 66900 | 9.3 | 12000 | 12.6 | 13700 | 85000 | |
| | | | | | | | | | | | | |
| **C 100 4_162.1** | 162.1 | 17.3 | 12000 | 24 | — | 85000 | 8.6 | 12000 | 11.9 | — | 85000 | |
| **C 100 4_185.4** | 185.4 | 15.1 | 12000 | 21 | — | 85000 | 7.6 | 12000 | 10.4 | — | 85000 | |
| **C 100 4_199.6** | 199.6 | 14.0 | 12000 | 19.4 | — | 85000 | 7.0 | 12000 | 9.7 | — | 85000 | |
| **C 100 4_244.2** | 244.2 | 11.5 | 12000 | 15.8 | — | 85000 | 5.7 | 12000 | 7.9 | — | 85000 | |
| **C 100 4_263.0** | 263.0 | 10.6 | 12000 | 14.7 | — | 85000 | 5.3 | 12000 | 7.4 | — | 85000 | |
| **C 100 4_300.5** | 300.5 | 9.3 | 12000 | 12.9 | — | 85000 | 4.7 | 12000 | 6.4 | — | 85000 | |
| **C 100 4_323.6** | 323.6 | 8.7 | 12000 | 11.9 | — | 85000 | 4.3 | 12000 | 6.0 | — | 85000 | |
| **C 100 4_380.5** | 380.5 | 7.4 | 12000 | 10.2 | — | 85000 | 3.7 | 12000 | 5.1 | — | 85000 | |
| **C 100 4_409.8** | 409.8 | 6.8 | 12000 | 9.4 | — | 85000 | 3.4 | 12000 | 4.7 | — | 85000 | |
| **C 100 4_466.7** | 466.7 | 6.0 | 12000 | 8.3 | — | 85000 | 3.0 | 12000 | 4.1 | — | 85000 | |
| **C 100 4_502.6** | 502.6 | 5.6 | 12000 | 7.7 | — | 85000 | 2.8 | 12000 | 3.8 | — | 85000 | |
| **C 100 4_582.6** | 582.6 | 4.8 | 12000 | 6.6 | — | 85000 | 2.4 | 12000 | 3.3 | — | 85000 | |
| **C 100 4_627.4** | 627.4 | 4.5 | 12000 | 6.2 | — | 85000 | 2.2 | 12000 | 3.1 | — | 85000 | |
| **C 100 4_720.3** | 720.3 | 3.9 | 12000 | 5.4 | — | 85000 | 1.9 | 12000 | 2.7 | — | 85000 | |
| **C 100 4_775.7** | 775.7 | 3.6 | 12000 | 5.0 | — | 85000 | 1.8 | 12000 | 2.5 | — | 85000 | |
| **C 100 4_843.3** | 843.3 | 3.3 | 12000 | 4.6 | — | 85000 | 1.7 | 12000 | 2.3 | — | 85000 | |
| **C 100 4_908.2** | 908.2 | 3.1 | 12000 | 4.3 | — | 85000 | 1.5 | 12000 | 2.1 | 830 | 85000 | |
| **C 100 4_1004** | 1004 | 2.8 | 12000 | 3.9 | — | 85000 | 1.4 | 12000 | 1.9 | — | 85000 | |
| **C 100 4_1081** | 1081 | 2.6 | 12000 | 3.6 | — | 85000 | 1.3 | 12000 | 1.8 | 870 | 85000 | |

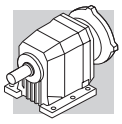
(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



# C 100 — 12000 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **C 100 2_4.9** | 4.9 | 183 | 7800 | 157 | 5310 | 28800 | 102 | 9300 | 104 | 6720 | 34400 | |
| **C 100 2_5.3** | 5.3 | 169 | 7950 | 148 | 6680 | 29500 | 94 | 9450 | 98 | 9740 | 35200 | |
| **C 100 2_6.5** | 6.5 | 138 | 8600 | 131 | 5670 | 31000 | 77 | 10250 | 87 | 7540 | 37000 | |
| **C 100 2_7.1** | 7.1 | 127 | 8750 | 123 | 7050 | 31800 | 71 | 10450 | 81 | 10100 | 37800 | |
| **C 100 2_8.4** | 8.4 | 108 | 9350 | 111 | 5670 | 32600 | 60 | 10950 | 72 | 8530 | 40100 | |
| **C 100 2_9.0** | 9.0 | 99 | 9500 | 104 | 7080 | 33600 | 55 | 11350 | 69 | 10100 | 39900 | |
| **C 100 2_10.1** | 10.1 | 89 | 10000 | 98 | 5540 | 33600 | 50 | 10900 | 60 | 10600 | 44500 | |
| **C 100 2_10.9** | 10.9 | 82 | 10150 | 92 | 6980 | 34700 | 46 | 11500 | 58 | 11300 | 44300 | |
| **C 100 2_12.5** | 12.5 | 72 | 10700 | 85 | 3910 | 35400 | 40 | 10850 | 48 | 11700 | 49600 | |
| **C 100 2_13.5** | 13.5 | 67 | 10850 | 80 | 6440 | 36700 | 37 | 11450 | 47 | 12300 | 49500 | |
| **C 100 2_15.2** | 15.2 | 59 | 10800 | 70 | 5940 | 40800 | 33 | 10800 | 39 | 13000 | 54700 | |
| **C 100 2_16.5** | 16.5 | 55 | 11500 | 69 | 6320 | 39100 | 30 | 11500 | 38 | 13400 | 54500 | |
| **C 100 2_18.7** | 18.7 | 48 | 10900 | 58 | 6310 | 45100 | 26.8 | 10900 | 32 | 13400 | 59800 | |
| **C 100 2_20.2** | 20.2 | 45 | 11500 | 56 | 6890 | 45000 | 24.7 | 11500 | 31 | 14000 | 60100 | |
| **C 100 2_22.2** | 22.2 | 40 | 9850 | 44 | 9170 | 52200 | 22.5 | 9850 | 24 | 15000 | 67800 | |
| **C 100 2_24.1** | 24.1 | 37 | 10800 | 44 | 8930 | 51200 | 20.7 | 10800 | 25 | 15000 | 67200 | |
| **C 100 2_29.6** | 29.6 | 30 | 9100 | 31 | 12600 | 61400 | 16.9 | 9100 | 17.0 | 15000 | 78300 | |
| | | | | | | | | | | | | |
| **C 100 3_34.3** | 34.3 | 26.2 | 11700 | 35 | 15000 | 57800 | 14.6 | 11700 | 19.2 | 15000 | 75500 | |
| **C 100 3_36.9** | 36.9 | 24.4 | 11800 | 32 | 15000 | 59600 | 13.5 | 11800 | 18.0 | 15000 | 77700 | |
| **C 100 3_42.9** | 42.9 | 21.0 | 12000 | 28 | 15000 | 63400 | 11.6 | 12000 | 15.7 | 15000 | 82300 | |
| **C 100 3_46.2** | 46.2 | 19.5 | 12000 | 26 | 15000 | 65600 | 10.8 | 12000 | 14.6 | 15000 | 84900 | |
| **C 100 3_53.3** | 53.3 | 16.9 | 12000 | 23 | 15000 | 69900 | 9.4 | 12000 | 12.7 | 15000 | 85000 | |
| **C 100 3_57.4** | 57.4 | 15.7 | 12000 | 21 | 15000 | 72300 | 8.7 | 12000 | 11.8 | 15000 | 85000 | |
| **C 100 3_64.5** | 64.5 | 14.0 | 12000 | 18.6 | 15000 | 76100 | 7.8 | 12000 | 10.5 | 15000 | 85000 | |
| **C 100 3_69.4** | 69.4 | 13.0 | 12000 | 17.5 | 15000 | 78600 | 7.2 | 12000 | 9.7 | 15000 | 85000 | |
| **C 100 3_79.4** | 79.4 | 11.3 | 12000 | 15.3 | 15000 | 83300 | 6.3 | 12000 | 8.5 | 15000 | 85000 | 158 |
| **C 100 3_85.6** | 85.6 | 10.5 | 12000 | 14.2 | 15000 | 85000 | 5.8 | 12000 | 7.9 | 15000 | 85000 | |
| **C 100 3_92.7** | 92.7 | 9.7 | 12000 | 13.1 | 15000 | 85000 | 5.4 | 12000 | 7.3 | 15000 | 85000 | |
| **C 100 3_99.8** | 99.8 | 9.0 | 12000 | 12.2 | 15000 | 85000 | 5.0 | 12000 | 6.8 | 15000 | 85000 | |
| **C 100 3_111.9** | 111.9 | 8.0 | 12000 | 10.9 | 15000 | 85000 | 4.5 | 12000 | 6.0 | 15000 | 85000 | |
| **C 100 3_120.5** | 120.5 | 7.5 | 12000 | 10.1 | 15000 | 85000 | 4.1 | 12000 | 5.6 | 15000 | 85000 | |
| **C 100 3_139.7** | 139.7 | 6.4 | 11500 | 8.0 | 15000 | 85000 | 3.6 | 11050 | 4.5 | 15000 | 85000 | |
| **C 100 3_150.4** | 150.4 | 6.0 | 12000 | 8.1 | 15000 | 85000 | 3.3 | 12000 | 4.5 | 15000 | 85000 | |
| | | | | | | | | | | | | |
| **C 100 4_162.1** | 162.1 | 5.6 | 12000 | 7.7 | — | 85000 | 3.1 | 12000 | 4.3 | — | 85000 | |
| **C 100 4_185.4** | 185.4 | 4.9 | 12000 | 6.7 | — | 85000 | 2.7 | 12000 | 3.7 | 920 | 85000 | |
| **C 100 4_199.6** | 199.6 | 4.5 | 12000 | 6.2 | — | 85000 | 2.5 | 12000 | 3.5 | 1430 | 85000 | |
| **C 100 4_244.2** | 244.2 | 3.7 | 12000 | 5.1 | — | 85000 | 2.0 | 12000 | 2.8 | 1490 | 85000 | |
| **C 100 4_263.0** | 263.0 | 3.4 | 12000 | 4.7 | — | 85000 | 1.9 | 12000 | 2.6 | 1950 | 85000 | |
| **C 100 4_300.5** | 300.5 | 3.0 | 12000 | 4.1 | — | 85000 | 1.7 | 12000 | 2.3 | 1840 | 85000 | |
| **C 100 4_323.6** | 323.6 | 2.8 | 12000 | 3.8 | 850 | 85000 | 1.5 | 12000 | 2.1 | 2280 | 85000 | |
| **C 100 4_380.5** | 380.5 | 2.4 | 12000 | 3.3 | 700 | 85000 | 1.3 | 12000 | 1.8 | 2130 | 85000 | |
| **C 100 4_409.8** | 409.8 | 2.2 | 12000 | 3.0 | 1120 | 85000 | 1.2 | 12000 | 1.7 | 2550 | 85000 | |
| **C 100 4_466.7** | 466.7 | 1.9 | 12000 | 2.7 | 910 | 85000 | 1.1 | 12000 | 1.5 | 2340 | 85000 | |
| **C 100 4_502.6** | 502.6 | 1.8 | 12000 | 2.5 | 1320 | 85000 | 1.0 | 12000 | 1.4 | 2740 | 85000 | |
| **C 100 4_582.6** | 582.6 | 1.5 | 12000 | 2.1 | 1100 | 85000 | 0.90 | 12000 | 1.2 | 2520 | 85000 | |
| **C 100 4_627.4** | 627.4 | 1.4 | 12000 | 2.0 | 1490 | 85000 | 0.80 | 12000 | 1.1 | 2910 | 85000 | |
| **C 100 4_720.3** | 720.3 | 1.2 | 12000 | 1.7 | 1270 | 85000 | 0.70 | 12000 | 1.0 | 2700 | 85000 | |
| **C 100 4_775.7** | 775.7 | 1.2 | 12000 | 1.6 | 1650 | 85000 | 0.60 | 12000 | 0.90 | 3070 | 85000 | |
| **C 100 4_843.3** | 843.3 | 1.1 | 12000 | 1.5 | 1360 | 85000 | 0.60 | 12000 | 0.80 | 2790 | 85000 | |
| **C 100 4_908.2** | 908.2 | 1.0 | 12000 | 1.4 | 1730 | 85000 | 0.60 | 12000 | 0.80 | 3160 | 85000 | |
| **C 100 4_1004** | 1004 | 0.90 | 12000 | 1.2 | 1400 | 85000 | 0.50 | 12000 | 0.70 | 2830 | 85000 | |
| **C 100 4_1081** | 1081 | 0.90 | 12000 | 1.1 | 1770 | 85000 | 0.50 | 12000 | 0.60 | 3170 | 85000 | |

(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



## 27 PREDISPOSICIONES MOTOR

En las tablas (B18) y (B19) se especifican los montajes posibles de motores en términos puramente geométricos.

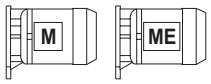
**La selección del motorreductor debe efectuarse siguiendo las instrucciones especificadas en el pàrrafo 11, respetando particularmente la condición $S \geq f_s$.**

(B 18)

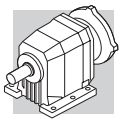
| | | IEC_ BN BE (IM B5) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | P63 P71 | P80 P90 | P100 P112 | P132 | P160 | P180 | P200 | P225 | P250 | P280 |
| C 12 2 | | 2.8_66.2 | 2.8_47.6 | 2.8_47.6 | | | | | | | |
| C 22 2 | | 3.7_63.3 ⛀ (7.1_8.7) | 2.7_54.7 | 2.7_54.7 | | | | | | | |
| C 22 3 | | 60.0_261.0 | 60.0_261.0 | 60.0_261.0 | | | | | | | |
| C 32 2 | | 5.0_66.8 ⛀ (7.2_11.2) | 2.9_66.8 | 2.9_66.8 | 2.9_25.1 | | | | | | |
| C 32 3 | | 74.7_274.7 | 74.7_274.7 | 74.7_274.7 | | | | | | | |
| C 36 2 | | 4.6_19.0 ⛀ (6.8_10.6) | 2.7_19.0 | 2.7_19.0 | 2.9_19.0 | | | | | | |
| C 36 3 | | 38.1_206.4 | 22.1_206.4 | 22.1_206.4 | 22.1_77.6 | | | | | | |
| C 36 4 | | 230.9_848.5 | 230.9_848.5 | 230.9_848.5 | | | | | | | |
| C 41 2 | | 14.2_44.8 | 2.7_44.8 | 2.7_44.8 | 2.7_31.4 | | | | | | |
| C 41 3 | | 47.0_209.1 | 28.5_209.1 | 28.5_209.1 | 28.5_102.3 | | | | | | |
| C 41 4 | | 239.9_855.5 | 239.9_855.5 | 239.9_855.5 | | | | | | | |
| C 51 2 | | 18.9_57.0 | 2.6_57.0 | 2.6_57.0 | 2.6_40.4 | 2.6_40.4 | 2.6_40.4 | | | | |
| C 51 3 | | 59.0_216.7 | 21.8_216.7 | 21.8_216.7 | 21.8_124.4 | 21.8_124.4 | 21.8_124.4 | | | | |
| C 51 4 | | 240.9_884.9 | 240.9_884.9 | 240.9_884.9 | 240.9_508.0 | | | | | | |
| C 61 2 | i = | 22.4_38.0 | 3.7_38.0 ⛀ (6.7_7.5) | 3.7_38.0 ⛀ (6.7_7.5) | 2.8_38.0 | 2.8_38.0 | 2.8_38.0 | | | | |
| C 61 3 | | 67.7_195.8 | 26.8_195.8 | 26.8_195.8 | 26.8_140.5 | 26.8_140.5 | 26.8_140.5 | | | | |
| C 61 4 | | 217.4_796.1 | 217.4_796.1 | 217.4_796.1 | | | | | | | |
| C 70 2 | | | 14.1_34.7 ⛀ (15.3) | 14.1_34.7 ⛀ (15.3) | 7.5_34.7 ⛀ (8.0) | 4.6_34.7 | 4.6_34.7* | 4.6_10.2* ⛀ (9.5) | | | |
| C 70 3 | | | 41.3_239.3 | 41.3_239.3 | 41.3_137.4 | 41.3_137.4 | 41.3_137.4* | | | | |
| C 70 4 | | 251.3_1476 | 251.3_1476 | 251.3_1476 | 251.3_554.7 | | | | | | |
| C 80 2 | | | 20.5_39.1 | 20.5_39.1 | 11.1_39.1 | 7.0_39.1 | 5.6_39.1 | 5.6_25.9* | 5.6_25.9* | | |
| C 80 3 | | | 43.5_215.9 | 43.5_215.9 | 43.5_184.4 | 43.5_184.4 | 43.5_184.4 | | | | |
| C 80 4 | | 334.3_1481 | 261.9_1481 | 261.9_1481 | 261.9_724.7 | | | | | | |
| C 90 2 | | | 22.9_35.1 | 22.9_35.1 | 12.8_35.1 | 10.4_35.1 | 10.4_35.1 | 5.2_29.4 | 5.2_29.4* | 5.2_29.4* | |
| C 90 3 | | | 74.4_172.1 | 74.4_172.1 | 39.4_172.1 | 39.4_172.1 | 39.4_172.1 | 39.4_96.2 | 39.4_96.2* | 39.4_96.2* | |
| C 90 4 | | 339.0_1240 | 212.4_1240 | 212.4_1240 | 212.4_712.2 | 212.4_712.2 | 212.4_712.2 | | | | |
| C 100 2 | | | | 29.6 | 15.2_29.6 | 12.5_29.6 | 12.5_29.6 | 4.9_29.6 | 4.9_29.6 | 4.9_29.6* | 4.9_29.6* |
| C 100 3 | | | | 79.4_150.4 | 42.9_150.4 | 34.3_150.4 | 34.3_150.4 | 34.3_99.8 | 34.3_99.8* | 34.3_99.8 | 34.3_99.8* |
| C 100 4 | | 380.5_1081 | 162.1_1081 | 162.1_1081 | 162.1_775.7 | 162.1_775.7 | 162.1_775.7 | | | | |

Los motores de los tamaños marcados con * están previstos en la forma constructiva B3/B5 en las posiciones de montaje B3-B5-B6-B7 y B8.

(B 19)




| | | M0 | M05 | M1 | ME2 | ME3 | ME4 | ME5 |
|---|---|---|---|---|---|---|---|---|
| **C 05 2** | | 27.1_44.7 | 5.5_44.7 | 5.5_44.7 | | | | |
| **C 12 2** | | | 2.8_66.2 | 2.8_37.0 | 2.8_47.7 | 2.8_47.7 | | |
| **C 22 2** | | | 3.7_63.3<br>⛀ (7.1_8.7) | 3.7_43.3<br>⛀ (7.1_8.7) | 2.7_54.7 | 2.7_54.7 | | |
| **C 22 3** | | | 60.0_261.0 | 60.0_178.5 | 60.0_261.0 | 60.0_261.0 | | |
| **C 32 2** | | | | 5.0_52.4<br>⛀ (7.2_11.2) | 2.9_66.8 | 2.9_66.8 | 2.9_25.1 | |
| **C 32 3** | | | 74.7_274.7 | 74.7_215.6 | 74.7_274.7 | 74.7_274.7 | | |
| **C 36 2** | | | | 4.6_19.0<br>⛀ (6.8_10.6) | 2.7_19.0 | 2.7_19.0 | 2.7_19.0 | |
| **C 36 3** | | | | 38.1_162.0 | 22.1_206.4 | 22.1_206.4 | 22.1_77.6 | |
| **C 36 4** | | | 230.9_848.5 | 230.9_665.9 | 230.9_848.5 | 230.9_848.5 | | |
| **C 41 2** | | | | 14.2_44.8 | 2.7_44.8 | 2.7_44.8 | 2.7_31.4 | |
| **C 41 3** | | | | 47.0_209.1 | 28.5_209.1 | 28.5_209.1 | 28.5_102.3 | |
| **C 41 4** | | | 239.9_855.5 | 239.9_855.5 | 239.9_855.5 | 239.9_855.5 | | |
| **C 51 2** | | | | 18.9_57.0 | 2.6_57.0 | 2.6_57.0 | 2.6_40.4 | 2.6_40.4 |
| **C 51 3** | | | | 59.0_216.7 | 21.8_216.7 | 21.8_216.7 | 21.8_124.4 | 21.8_124.4 |
| **C 51 4** | **i =** | | | 240.9_884.9 | 240.9_884.9 | 240.9_884.9 | 240.9_508.0 | |
| **C 61 2** | | | | | 3.7_38.0<br>⛀ (6.7_7.5) | 3.7_38.0<br>⛀ (6.7_7.5) | 2.8_38.0 | 2.8_38.0 |
| **C 61 3** | | | | | 26.8_195.8 | 26.8_195.8 | 26.8_140.5 | 26.8_140.5 |
| **C 61 4** | | | | 217.4_796.1 | 217.4_796.1 | 217.4_796.1 | | |
| **C 70 2** | | | | | 14.1_34.7<br>⛀ (15.3) | 14.1_34.7<br>⛀ (15.3) | 7.5_34.7<br>⛀ (8.0) | 7.5_34.7<br>⛀ (8.0) |
| **C 70 3** | | | | | 41.3_239.3 | 41.3_239.3 | 41.3_137.4 | 41.3_137.4 |
| **C 70 4** | | | | 251.3_1476 | 251.3_1476 | 251.3_1476 | 251.3_554.7 | |
| **C 80 2** | | | | | | 20.5_39.1 | 11.1_39.1 | 11.1_39.1 |
| **C 80 3** | | | | | | 43.5_215.8 | 43.5_184.4 | 43.5_184.4 |
| **C 80 4** | | | | 334.3_1481 | 261.9_1481 | 261.9_1481 | 261.9_724.7 | |
| **C 90 2** | | | | | | 22.9_35.1 | 12.8_35.1 | 12.8_35.1 |
| **C 90 3** | | | | | | 74.4_172.1 | 39.4_172.1 | 39.4_172.1 |
| **C 90 4** | | | | 339.0_1240 | 212.4_1240 | 212.4_1240 | 212.4_712.2 | |
| **C 100 2** | | | | | | | 15.2_29.6 | 15.2_29.6 |
| **C 100 3** | | | | | | | 42.9_150.4 | 42.9_150.4 |
| **C 100 4** | | | | 380.5_1081 | 162.1_1081 | 162.1_1081 | 162.1_775.7 | |



Predisposiciones motor que están disponibles para ser acoplados a reductores C12…C61 con servomotores de los tipos mas comunes. Las dimensiones de las bridas están indicadas en la sección de dimensiones de cada reductor. La sigla **SK** identifica la fijación con el eje del motor provisto de chavetero, mientras la sigla **SC** corresponde a la fijación mediante Aro de apriete (suministrado).

(B 20)

| | | SERVO INPUT | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | SK60A | SK60B | SK80A | SK80B | SK80C | SK95A | SK95B | SK95C |
| | | SC60A | SC60B | SC80A | SC80B | SC80C | SC95A | SC95B | SC95C |
| C 12 2 | i = | 2.8_66.2 | 2.8_66.2 | 2.8_66.2 | | 2.8_47.6 | 2.8_66.2 | 2.8_47.6 | 2.8_47.6 |
| C 22 2 | | 3.7_63.3 ⛀ (7.1_8.7) | 3.7_63.3 ⛀ (7.1_8.7) | 3.7_63.3 ⛀ (7.1_8.7) | | 2.7_54.7 | 3.7_63.3 ⛀ (7.1_8.7) | 2.7_54.7 | 2.7_54.7 |
| C 22 3 | | 60.0_261.0 | 60.0_261.0 | 60.0_261.0 | | 60.0_261.0 | 60.0_261.0 | 60.0_261.0 | 60.0_261.0 |
| C 32 2 | | 5.0_66.8 ⛀ (7.2_11.2) | 5.0_66.8 ⛀ (7.2_11.2) | 5.0_66.8 ⛀ (7.2_11.2) | | 2.9_66.8 | 5.0_66.8 ⛀ (7.2_11.2) | 2.9_66.8 | 2.9_66.8 |
| C 32 3 | | 74.7_274.7 | 74.7_274.7 | 74.7_274.7 | | 74.7_274.7 | 74.7_274.7 | 74.7_274.7 | 74.7_274.7 |
| C 36 2 | | 4.6_19.0 ⛀ (6.8_10.6) | 4.6_19.0 ⛀ (6.8_10.6) | 4.6_19.0 ⛀ (6.8_10.6) | | 2.7_19.0 | 4.6_19.0 ⛀ (6.8_10.6) | 2.7_19.0 | 2.7_19.0 |
| C 36 3 | | 38.1_206.4 | 38.1_206.4 | 38.1_206.4 | | 22.1_206.4 | 38.1_206.4 | 22.1_206.4 | 22.1_206.4 |
| C 36 4 | | 230.9_848.5 | 230.9_848.5 | 230.9_848.5 | | 230.9_848.5 | 230.9_848.5 | 230.9_848.5 | 230.9_848.5 |
| C 41 2 | | | | | 6.0_44.8 ⛀ (6.4_12.4) | 2.7_44.8 | 6.0_44.8 ⛀ (6.4_12.4) | 2.7_44.8 | 2.7_44.8 |
| C 41 3 | | | | | 47.0_209.1 | 28.5_209.1 | 47.0_209.1 | 28.5_209.1 | 28.5_209.1 |
| C 41 4 | | 239.9_855.5 | 239.9_855.5 | 239.9_855.5 | | 239.9_855.5 | 239.9_855.5 | 239.9_855.5 | 239.9_855.5 |
| C 51 2 | | | | | 18.9_57.0 | 2.6_57.0 | 18.9_57.0 | 2.6_57.0 | 2.6_57.0 |
| C 51 3 | | | | | 59.0_216.7 | 21.8_216.7 | 59.0_216.7 | 21.8_216.7 | 21.8_216.7 |
| C 51 4 | | | | | | 240.9_884.9 | 240.9_884.9 | 240.9_884.9 | 240.9_884.9 |
| C 61 2 | | | | | | 3.7_38.0 ⛀ (6.7_7.5) | 22.4_38.0 | 3.7_38.0 ⛀ (6.7_7.5) | 3.7_38.0 ⛀ (6.7_7.5) |
| C 61 3 | | | | | | 26.8_195.8 | 67.7_195.8 | 26.8_195.8 | 26.8_195.8 |
| C 61 4 | | | | | 217.4_796.1 | 217.4_796.1 | 217.4_796.1 | 217.4_796.1 | 217.4_796.1 |

(B 21)

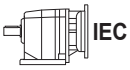
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | SK110A | SK110B | SK130A | SK130B | SK180A | SK180B |
| | | SC110A | SC110B | SC130A | SC130B | SC180A | SC180B |
| C 12 2 | i = | 2.8_47.6 | 2.8_47.6 | | | | |
| C 22 2 | | 2.7_54.7 | 2.7_54.7 | | | | |
| C 22 3 | | 60.0_261.0 | 60.0_261.0 | | | | |
| C 32 2 | | 2.9_66.8 | 2.9_66.8 | 2.9_66.8 | | | |
| C 32 3 | | 74.7_274.7 | 74.7_274.7 | | | | |
| C 36 2 | | 2.7_19.0 | 2.7_19.0 | 2.7_19.0 | | | |
| C 36 3 | | 22.1_206.4 | 22.1_206.4 | 22.1_206.4 | | | |
| C 36 4 | | 230.9_848.5 | 230.9_848.5 | | | | |
| C 41 2 | | 2.7_44.8 | 2.7_44.8 | 2.7_44.8 | 2.7_31.4 | 2.7_31.4 | 2.7_31.4 |
| C 41 3 | | 28.5_209.1 | 28.5_209.1 | 28.5_209.1 | 28.5_102.3 | 28.5_102.3 | 28.5_102.3 |
| C 41 4 | | 239.9_855.5 | 239.9_855.5 | | | | |
| C 51 2 | | 2.6_57.0 | 2.6_57.0 | 2.6_57.0 | 2.6_40.4 | 2.6_40.4 | 2.6_40.4 |
| C 51 3 | | 21.8_216.7 | 21.8_216.7 | 21.8_216.7 | 21.8_124.4 | 21.8_124.4 | 21.8_124.4 |
| C 51 4 | | 240.9_884.9 | 240.9_884.9 | 240.9_884.9 | | | |
| C 61 2 | | 3.7_38.0 ⛀ (6.7_7.5) | 3.7_38.0 ⛀ (6.7_7.5) | 3.7_38.0 ⛀ (6.7_7.5) | 2.8_38.0 | 2.8_38.0 | 2.8_38.0 |
| C 61 3 | | 26.8_195.8 | 26.8_195.8 | 26.8_195.8 | 26.8_140.5 | 26.8_140.5 | 26.8_140.5 |
| C 61 4 | | 217.4_796.1 | 217.4_796.1 | 217.4_796.1 | | | |

## 28 MOMENTO DE INERCIA

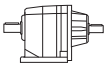
Las tablas siguientes indican los valores del momento de inercia $J_r$ [kgm$^2$] referidos al eje de entrada del reductor; para una mayor facilidad de lectura, a continuación se reproducen los significados de los sÌmbolos utilizados.



Los valores referidos a este símbolo corresponden al reductor compacto sin motor. En este caso para obtener el momento de inercia del motorreductor, se deberá sumar al valor correspondiente al reductor compacto, el del motor que se aplique (dato que se encuentra en las tablas de características técnicas de los motores eléctricos).




Los valores relativos a este símbolo corresponden al reductor aislado, configurado para conexión de motor (medida IEC ...).

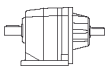


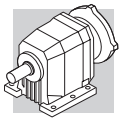
Los valores correspondientes al reductor están asociados a este símbolo.



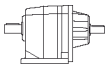

Los valores relativos a estos simbolos se deben atribuir al reductor predispuesto para acoplarse a servomotores

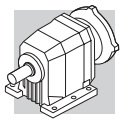
# C 05

| | i | **J** (•10$^{-4}$) [kgm$^2$] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC | | | | | |  |
| | | | **63** | **71** | **80** | **90** | **100** | **112** | |
| **C 05_5.5** | 5.5 | 0.29 | — | — | — | — | — | — | — |
| **C 05_6.7** | 6.7 | 0.29 | — | — | — | — | — | — | — |
| **C 05_7.4** | 7.4 | 0.28 | — | — | — | — | — | — | — |
| **C 05_9.3** | 9.3 | 0.17 | — | — | — | — | — | — | — |
| **C 05_11.2** | 11.2 | 0.16 | — | — | — | — | — | — | — |
| **C 05_12.5** | 12.5 | 0.16 | — | — | — | — | — | — | — |
| **C 05_15.6** | 15.6 | 0.09 | — | — | — | — | — | — | — |
| **C 05_18.9** | 18.9 | 0.09 | — | — | — | — | — | — | — |
| **C 05_21.0** | 21.0 | 0.08 | — | — | — | — | — | — | — |
| **C 05_27.1** | 27.1 | 0.04 | — | — | — | — | — | — | — |
| **C 05_32.8** | 32.8 | 0.04 | — | — | — | — | — | — | — |
| **C 05_36.4** | 36.4 | 0.04 | — | — | — | — | — | — | — |
| **C 05_40.3** | 40.3 | 0.03 | — | — | — | — | — | — | — |
| **C 05_44.7** | 44.7 | 0.03 | — | — | — | — | — | — | — |



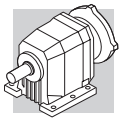
# C 12

| | i | J (•10-4) [kgm2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC | | | | | |  |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | |
| **C 12 2_2.8** | 2.8 | 0.44 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | 1.3 |
| **C 12 2_3.2** | 3.2 | 0.34 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 1.2 |
| **C 12 2_3.7** | 3.7 | 0.29 | 1.8 | 1.7 | 3.1 | 3.1 | 4.4 | 4.4 | 1.2 |
| **C 12 2_4.3** | 4.3 | 0.21 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 1.1 |
| **C 12 2_4.9** | 4.9 | 0.19 | 1.7 | 1.7 | 3.0 | 3.0 | 4.3 | 4.3 | 1.1 |
| **C 12 2_5.6** | 5.6 | 0.15 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 1.0 |
| **C 12 2_6.2** | 6.2 | 0.12 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 1.0 |
| **C 12 2_7.6** | 7.6 | 0.33 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 1.2 |
| **C 12 2_8.8** | 8.8 | 0.32 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 1.2 |
| **C 12 2_10.1** | 10.1 | 0.23 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 1.1 |
| **C 12 2_11.9** | 11.9 | 0.17 | 1.6 | 1.6 | 3.0 | 3.0 | 4.2 | 4.2 | 1.1 |
| **C 12 2_13.4** | 13.4 | 0.16 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 1.1 |
| **C 12 2_15.4** | 15.4 | 0.12 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 1.0 |
| **C 12 2_17.2** | 17.2 | 0.10 | 1.6 | 1.6 | 2.9 | 2.9 | 4.2 | 4.2 | 1.0 |
| **C 12 2_18.4** | 18.4 | 0.08 | 1.6 | 1.5 | 2.9 | 2.9 | 4.2 | 4.2 | 0.98 |
| **C 12 2_20.6** | 20.6 | 0.08 | 1.5 | 1.5 | 2.9 | 2.9 | 4.2 | 4.2 | 0.98 |
| **C 12 2_23.2** | 23.2 | 0.07 | 1.5 | 1.5 | 2.9 | 2.9 | 4.1 | 4.1 | 0.97 |
| **C 12 2_25.4** | 25.4 | 0.06 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.96 |
| **C 12 2_29.5** | 29.5 | 0.05 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.95 |
| **C 12 2_32.8** | 32.8 | 0.04 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.94 |
| **C 12 2_37.0** | 37.0 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.93 |
| **C 12 2_42.3** | 42.3 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.93 |
| **C 12 2_47.6** | 47.6 | 0.02 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.92 |
| **C 12 2_55.2** | 55.2 | 0.02 | 1.5 | 1.5 | — | — | — | — | 0.92 |
| **C 12 2_66.2** | 66.2 | 0.01 | 1.5 | 1.5 | — | — | — | — | 0.91 |



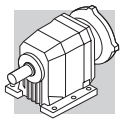
# C 12

| | i | J (•10-4) [kgm2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | |
| | | 60A | | 60B 80A | | 95A | | 80C 95B 110A | | 95C 110B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **C 12 2_2.8** | 2.8 | 0.71 | 0.97 | 0.73 | 1.2 | 3.3 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 |
| **C 12 2_3.2** | 3.2 | 0.61 | 0.87 | 0.63 | 1.1 | 3.2 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 |
| **C 12 2_3.7** | 3.7 | 0.56 | 0.82 | 0.58 | 1.0 | 3.1 | 3.5 | 3.1 | 3.6 | 3.1 | 4.1 |
| **C 12 2_4.3** | 4.3 | 0.48 | 0.74 | 0.50 | 0.94 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 |
| **C 12 2_4.9** | 4.9 | 0.46 | 0.72 | 0.48 | 0.92 | 3.0 | 3.4 | 3.0 | 3.5 | 3.0 | 4.0 |
| **C 12 2_5.6** | 5.6 | 0.42 | 0.68 | 0.44 | 0.88 | 3.0 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **C 12 2_6.2** | 6.2 | 0.39 | 0.65 | 0.41 | 0.85 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **C 12 2_7.6** | 7.6 | 0.60 | 0.86 | 0.62 | 1.1 | 3.2 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 |
| **C 12 2_8.8** | 8.8 | 0.59 | 0.85 | 0.61 | 1.0 | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 |
| **C 12 2_10.1** | 10.1 | 0.50 | 0.76 | 0.52 | 0.96 | 3.1 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 |
| **C 12 2_11.9** | 11.9 | 0.44 | 0.70 | 0.46 | 0.90 | 3.0 | 3.4 | 3.0 | 3.5 | 3.0 | 4.0 |
| **C 12 2_13.4** | 13.4 | 0.43 | 0.69 | 0.45 | 0.83 | 3.0 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **C 12 2_15.4** | 15.4 | 0.39 | 0.65 | 0.41 | 0.85 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **C 12 2_17.2** | 17.2 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 2.9 | 3.4 | 2.9 | 3.9 |
| **C 12 2_18.4** | 18.4 | 0.35 | 0.61 | 0.37 | 0.81 | 2.9 | 3.3 | 2.9 | 3.4 | 2.9 | 3.9 |
| **C 12 2_20.6** | 20.6 | 0.35 | 0.61 | 0.37 | 0.81 | 2.9 | 3.3 | 2.9 | 3.4 | 2.9 | 3.9 |
| **C 12 2_23.2** | 23.2 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.9 | 3.9 |
| **C 12 2_25.4** | 25.4 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 12 2_29.5** | 29.5 | 0.32 | 0.58 | 0.34 | 0.78 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 12 2_32.8** | 32.8 | 0.34 | 0.60 | 0.33 | 0.77 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 12 2_37.0** | 37.0 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 12 2_42.3** | 42.3 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 12 2_47.6** | 47.6 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 12 2_55.2** | 55.2 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | — | — | — | — |
| **C 12 2_66.2** | 66.2 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | — | — | — | — |



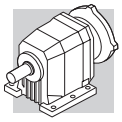
# C 22

| | i | J (•10-4) [kgm2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | |
| **C 22 2_2.7** | 2.7 | 1.2 | — | — | 4.0 | 4.0 | 5.3 | 5.3 | 3.1 |
| **C 22 2_3.3** | 3.3 | 0.83 | — | — | 3.7 | 3.6 | 4.9 | 4.9 | 2.7 |
| **C 22 2_3.7** | 3.7 | 0.72 | 2.2 | 2.2 | 3.6 | 3.5 | 4.8 | 4.8 | 2.6 |
| **C 22 2_4.3** | 4.3 | 0.56 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | 2.4 |
| **C 22 2_4.8** | 4.8 | 0.48 | 2.0 | 1.9 | 3.3 | 3.3 | 4.6 | 4.6 | 2.4 |
| **C 22 2_5.6** | 5.6 | 0.36 | 1.8 | 1.8 | 3.2 | 3.2 | 4.4 | 4.4 | 2.2 |
| **C 22 2_6.1** | 6.1 | 0.29 | 1.8 | 1.7 | 3.1 | 3.1 | 4.4 | 4.4 | 2.2 |
| **C 22 2_7.1** | 7.1 | 0.77 | — | — | 3.6 | 3.6 | 4.8 | 4.8 | 2.6 |
| **C 22 2_8.7** | 8.7 | 0.55 | — | — | 3.4 | 3.3 | 4.6 | 4.6 | 2.4 |
| **C 22 2_9.6** | 9.6 | 0.50 | 2.0 | 2.0 | 3.3 | 3.3 | 4.6 | 4.6 | 2.4 |
| **C 22 2_11.1** | 11.1 | 0.39 | 1.9 | 1.8 | 3.2 | 3.2 | 4.5 | 4.5 | 2.3 |
| **C 22 2_12.4** | 12.4 | 0.35 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 2.2 |
| **C 22 2_14.5** | 14.5 | 0.36 | 1.7 | 1.7 | 3.1 | 3.1 | 4.3 | 4.3 | 2.1 |
| **C 22 2_15.8** | 15.8 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 2.1 |
| **C 22 2_18.1** | 18.1 | 0.18 | 1.6 | 1.6 | 3.0 | 3.0 | 4.3 | 4.3 | 2.0 |
| **C 22 2_20.0** | 20.0 | 0.15 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.0 |
| **C 22 2_21.5** | 21.5 | 0.13 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.0 |
| **C 22 2_24.3** | 24.3 | 0.12 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.0 |
| **C 22 2_27.2** | 27.2 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.0 |
| **C 22 2_29.6** | 29.6 | 0.09 | 1.6 | 1.5 | 2.9 | 2.9 | 4.2 | 4.2 | 2.0 |
| **C 22 2_33.1** | 33.1 | 0.07 | 1.5 | 1.5 | 2.9 | 2.9 | 4.2 | 4.2 | 1.9 |
| **C 22 2_36.8** | 36.8 | 0.06 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 1.9 |
| **C 22 2_43.3** | 43.3 | 0.05 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 1.9 |
| **C 22 2_48.6** | 48.6 | 0.04 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 1.9 |
| **C 22 2_54.7** | 54.7 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 1.9 |
| **C 22 2_63.3** | 63.3 | 0.02 | 1.5 | 1.5 | — | — | — | — | 1.9 |
| **C 22 3_60.0** | 60.0 | 0.04 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.94 |
| **C 22 3_65.3** | 65.3 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.93 |
| **C 22 3_74.8** | 74.8 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.93 |
| **C 22 3_82.6** | 82.6 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.93 |
| **C 22 3_88.5** | 88.5 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.93 |
| **C 22 3_100.2** | 100.2 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.93 |
| **C 22 3_112.0** | 112.0 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.93 |
| **C 22 3_122.2** | 122.2 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.93 |
| **C 22 3_136.5** | 136.5 | 0.02 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.92 |
| **C 22 3_151.7** | 151.7 | 0.02 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.92 |
| **C 22 3_178.5** | 178.5 | 0.02 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.92 |
| **C 22 3_200.7** | 200.7 | 0.02 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.92 |
| **C 22 3_225.8** | 225.8 | 0.02 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.92 |
| **C 22 3_261.0** | 261.0 | 0.02 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.92 |

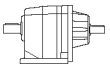


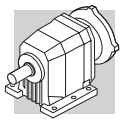
# C 22

| | i | J (•10-4) [kgm2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | |
| | | 60A | | 60B 80A | | 95A | | 80C 95B 110A | | 95C 110B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **C 22 2_2.7** | 2.7 | — | — | — | — | — | — | 4.0 | 4.5 | 4.0 | 5.0 |
| **C 22 2_3.3** | 3.3 | — | — | — | — | — | — | 3.7 | 4.2 | 3.6 | 4.6 |
| **C 22 2_3.7** | 3.7 | 0.99 | 1.3 | 1.0 | 1.4 | 3.5 | 4.0 | 3.6 | 4.1 | 3.5 | 4.5 |
| **C 22 2_4.3** | 4.3 | 0.83 | 1.1 | 0.85 | 1.3 | 3.4 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 |
| **C 22 2_4.8** | 4.8 | 0.75 | 1.0 | 0.77 | 1.2 | 3.3 | 3.7 | 3.3 | 3.8 | 3.3 | 4.3 |
| **C 22 2_5.6** | 5.6 | 0.63 | 0.89 | 0.65 | 1.1 | 3.2 | 3.6 | 3.2 | 3.7 | 3.2 | 4.2 |
| **C 22 2_6.1** | 6.1 | 0.56 | 0.82 | 0.58 | 1.0 | 3.1 | 3.5 | 3.1 | 3.6 | 3.1 | 4.1 |
| **C 22 2_7.1** | 7.1 | — | — | — | — | — | — | 3.6 | 4.1 | 3.6 | 4.6 |
| **C 22 2_8.7** | 8.7 | — | — | — | — | — | — | 3.4 | 3.9 | 3.3 | 4.3 |
| **C 22 2_9.6** | 9.6 | 0.77 | 1.0 | 0.79 | 1.2 | 3.3 | 3.8 | 3.3 | 3.8 | 3.3 | 4.3 |
| **C 22 2_11.1** | 11.1 | 0.66 | 0.92 | 0.68 | 1.1 | 3.2 | 3.6 | 3.2 | 3.7 | 3.2 | 4.2 |
| **C 22 2_12.4** | 12.4 | 0.62 | 0.88 | 0.64 | 1.1 | 3.2 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 |
| **C 22 2_14.5** | 14.5 | 0.63 | 0.89 | 0.65 | 1.1 | 3.2 | 3.6 | 3.1 | 3.6 | 3.1 | 4.1 |
| **C 22 2_15.8** | 15.8 | 0.47 | 0.73 | 0.49 | 0.93 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 |
| **C 22 2_18.1** | 18.1 | 0.45 | 0.71 | 0.47 | 0.91 | 3.0 | 3.4 | 3.0 | 3.5 | 3.0 | 4.0 |
| **C 22 2_20.0** | 20.0 | 0.42 | 0.68 | 0.44 | 0.88 | 3.0 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **C 22 2_21.5** | 21.5 | 0.40 | 0.66 | 0.42 | 0.86 | 3.0 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **C 22 2_24.3** | 24.3 | 0.39 | 0.65 | 0.41 | 0.85 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **C 22 2_27.2** | 27.2 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **C 22 2_29.6** | 29.6 | 0.36 | 0.62 | 0.38 | 0.82 | 2.9 | 3.3 | 2.9 | 3.4 | 2.9 | 3.9 |
| **C 22 2_33.1** | 33.1 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.9 | 3.9 |
| **C 22 2_36.8** | 36.8 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 2_43.3** | 43.3 | 0.32 | 0.58 | 0.34 | 0.78 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 2_48.6** | 48.6 | 0.31 | 0.57 | 0.33 | 0.77 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 2_54.7** | 54.7 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 2_63.3** | 63.3 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | — | — | — | — |
| **C 22 3_60.0** | 60.0 | 0.31 | 0.57 | 0.33 | 0.77 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 3_65.3** | 65.3 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 3_74.8** | 74.8 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 3_82.6** | 82.6 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 3_88.5** | 88.5 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 3_100.2** | 100.2 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 3_112.0** | 112.0 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 3_122.2** | 122.2 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 3_136.5** | 136.5 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 3_151.7** | 151.7 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 3_178.5** | 178.5 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 3_200.7** | 200.7 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 3_225.8** | 225.8 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **C 22 3_261.0** | 261.0 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |



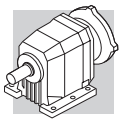
# C 32

| | i | J (•10-4) [kgm2] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC | | | | | | |  |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | |
| **C 32 2_2.9** | 2.9 | 2.3 | — | — | 5.2 | 5.1 | 6.4 | 6.4 | 20 | 4.6 |
| **C 32 2_3.4** | 3.4 | 1.8 | — | — | 4.6 | 4.6 | 5.9 | 5.9 | 20 | 4.0 |
| **C 32 2_3.7** | 3.7 | 1.6 | — | — | 4.4 | 4.3 | 5.6 | 5.6 | 20 | 3.8 |
| **C 32 2_4.5** | 4.5 | 1.2 | — | — | 4.0 | 4.0 | 5.2 | 5.2 | 19 | 3.4 |
| **C 32 2_5.0** | 5.0 | 0.87 | 2.3 | 2.3 | 3.7 | 3.7 | 5.0 | 5.0 | 19 | 3.1 |
| **C 32 2_5.7** | 5.7 | 0.82 | 2.3 | 2.3 | 3.7 | 3.6 | 4.9 | 4.9 | 19 | 3.0 |
| **C 32 2_6.3** | 6.3 | 0.63 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 18 | 2.8 |
| **C 32 2_7.2** | 7.2 | 1.5 | — | — | 4.4 | 4.3 | 5.6 | 5.6 | 19 | 3.7 |
| **C 32 2_8.5** | 8.5 | 1.2 | — | — | 4.1 | 4.0 | 5.3 | 5.3 | 19 | 3.4 |
| **C 32 2_9.3** | 9.3 | 1.1 | — | — | 3.9 | 3.9 | 5.1 | 5.1 | 19 | 3.3 |
| **C 32 2_11.2** | 11.2 | 0.83 | — | — | 3.7 | 3.6 | 4.9 | 4.9 | 19 | 3.0 |
| **C 32 2_12.3** | 12.3 | 0.60 | 2.1 | 2.1 | 3.4 | 3.4 | 4.7 | 4.7 | 18 | 2.8 |
| **C 32 2_14.1** | 14.1 | 0.61 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 18 | 2.8 |
| **C 32 2_15.6** | 15.6 | 0.46 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | 18 | 2.7 |
| **C 32 2_18.2** | 18.2 | 0.42 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | 18 | 2.6 |
| **C 32 2_20.1** | 20.1 | 0.34 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 18 | 2.6 |
| **C 32 2_22.9** | 22.9 | 0.31 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 17 | 2.5 |
| **C 32 2_25.1** | 25.1 | 0.25 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 17 | 2.5 |
| **C 32 2_26.9** | 26.9 | 0.24 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | 2.5 |
| **C 32 2_29.8** | 29.8 | 0.19 | 1.7 | 1.7 | 3.0 | 3.0 | 4.3 | 4.3 | — | 2.4 |
| **C 32 2_33.1** | 33.1 | 0.19 | 1.7 | 1.7 | 3.0 | 3.0 | 4.3 | 4.3 | — | 2.4 |
| **C 32 2_36.1** | 36.1 | 0.14 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.4 |
| **C 32 2_40.7** | 40.7 | 0.14 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.4 |
| **C 32 2_45.3** | 45.3 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.3 |
| **C 32 2_52.4** | 52.4 | 0.08 | 1.6 | 1.6 | 2.9 | 2.9 | 4.2 | 4.2 | — | 2.3 |
| **C 32 2_59.4** | 59.4 | 0.07 | 1.5 | 1.5 | 2.9 | 2.9 | 4.2 | 4.2 | — | 2.3 |
| **C 32 2_66.8** | 66.8 | 0.05 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 2.3 |
| | | | | | | | | | | |
| **C 32 3_74.7** | 74.7 | 0.06 | 1.5 | 1.5 | 2.9 | 2.9 | 4.1 | 4.1 | — | 0.96 |
| **C 32 3_82.6** | 82.6 | 0.06 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 0.96 |
| **C 32 3_94.2** | 94.2 | 0.06 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 0.96 |
| **C 32 3_103.3** | 103.3 | 0.05 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 0.95 |
| **C 32 3_110.6** | 110.6 | 0.05 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 0.95 |
| **C 32 3_122.4** | 122.4 | 0.05 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 0.95 |
| **C 32 3_136.0** | 136.0 | 0.05 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 0.95 |
| **C 32 3_148.4** | 148.4 | 0.05 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 0.95 |
| **C 32 3_167.4** | 167.4 | 0.05 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 0.95 |
| **C 32 3_186.0** | 186.0 | 0.04 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 0.94 |
| **C 32 3_215.6** | 215.6 | 0.04 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 0.94 |
| **C 32 3_244.2** | 244.2 | 0.04 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 0.94 |
| **C 32 3_274.7** | 274.7 | 0.04 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 0.94 |

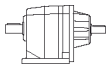


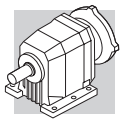
# C 32

| | i | J (•10-4) [kgm2] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | | | |
| | | 60A | | 60B 80A | | 95A | | 80C 95B 110A | | 95C 110B | | 130A | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **C 32 2_2.9** | 2.9 | — | — | — | — | — | — | 5.2 | 5.7 | 5.1 | 6.1 | 5.1 | 6.1 |
| **C 32 2_3.4** | 3.4 | — | — | — | — | — | — | 4.6 | 5.1 | 4.6 | 5.6 | 4.6 | 5.6 |
| **C 32 2_3.7** | 3.7 | — | — | — | — | — | — | 4.4 | 4.9 | 4.3 | 5.3 | 4.3 | 5.3 |
| **C 32 2_4.5** | 4.5 | — | — | — | — | — | — | 4.0 | 4.5 | 4.0 | 5.0 | 4.0 | 5.0 |
| **C 32 2_5.0** | 5.0 | 1.1 | 1.4 | 1.2 | 1.6 | 3.7 | 4.1 | 3.7 | 4.2 | 3.7 | 4.7 | 3.7 | 4.7 |
| **C 32 2_5.7** | 5.7 | 1.1 | 1.4 | 1.1 | 1.5 | 3.6 | 4.1 | 3.7 | 4.2 | 3.6 | 4.6 | 3.6 | 4.6 |
| **C 32 2_6.3** | 6.3 | 0.90 | 1.2 | 0.92 | 1.4 | 3.5 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | 3.4 | 4.4 |
| **C 32 2_7.2** | 7.2 | — | — | — | — | — | — | 4.4 | 4.9 | 4.3 | 5.3 | 4.3 | 5.3 |
| **C 32 2_8.5** | 8.5 | — | — | — | — | — | — | 4.1 | 4.6 | 4.0 | 5.0 | 4.0 | 5.0 |
| **C 32 2_9.3** | 9.3 | — | — | — | — | — | — | 3.9 | 4.4 | 3.9 | 4.9 | 3.9 | 4.9 |
| **C 32 2_11.2** | 11.2 | — | — | — | — | — | — | 3.7 | 4.2 | 3.6 | 4.6 | 3.6 | 4.6 |
| **C 32 2_12.3** | 12.3 | 0.87 | 1.1 | 0.89 | 1.3 | 3.4 | 3.9 | 3.4 | 3.9 | 3.4 | 4.4 | 3.4 | 4.4 |
| **C 32 2_14.1** | 14.1 | 0.88 | 1.1 | 0.90 | 1.3 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | 3.4 | 4.4 |
| **C 32 2_15.6** | 15.6 | 0.73 | 0.99 | 0.75 | 1.2 | 3.3 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 | 3.2 | 4.2 |
| **C 32 2_18.2** | 18.2 | 0.69 | 0.95 | 0.71 | 1.1 | 3.2 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 | 3.2 | 4.2 |
| **C 32 2_20.1** | 20.1 | 0.61 | 0.87 | 0.63 | 1.1 | 3.2 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 |
| **C 32 2_22.9** | 22.9 | 0.58 | 0.84 | 0.60 | 1.0 | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 |
| **C 32 2_25.1** | 25.1 | 0.52 | 0.78 | 0.54 | 0.98 | 3.1 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **C 32 2_26.9** | 26.9 | 0.51 | 0.77 | 0.53 | 0.97 | 3.1 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **C 32 2_29.8** | 29.8 | 0.46 | 0.72 | 0.48 | 0.92 | 3.0 | 3.4 | 3.0 | 3.5 | 3.0 | 4.0 | 3.0 | 4.0 |
| **C 32 2_33.1** | 33.1 | 0.46 | 0.72 | 0.48 | 0.92 | 3.0 | 3.4 | 3.0 | 3.5 | 3.0 | 4.0 | 3.0 | 4.0 |
| **C 32 2_36.1** | 36.1 | 0.41 | 0.67 | 0.43 | 0.87 | 3.0 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **C 32 2_40.7** | 40.7 | 0.41 | 0.67 | 0.43 | 0.87 | 3.0 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **C 32 2_45.3** | 45.3 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **C 32 2_52.4** | 52.4 | 0.35 | 0.61 | 0.37 | 0.81 | 2.9 | 3.3 | 2.9 | 3.4 | 2.9 | 3.9 | 2.9 | 3.9 |
| **C 32 2_59.4** | 59.4 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.9 | 3.9 | 2.9 | 3.9 |
| **C 32 2_66.8** | 66.8 | 0.32 | 0.58 | 0.34 | 0.78 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | 2.8 | 3.8 |
| | | | | | | | | | | | | | |
| **C 32 3_74.7** | 74.7 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 2.9 | 3.4 | 2.9 | 3.9 | — | — |
| **C 32 3_82.6** | 82.6 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **C 32 3_94.2** | 94.2 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **C 32 3_103.3** | 103.3 | 0.32 | 0.58 | 0.34 | 0.78 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **C 32 3_110.6** | 110.6 | 0.32 | 0.58 | 0.34 | 0.78 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **C 32 3_122.4** | 122.4 | 0.32 | 0.58 | 0.34 | 0.78 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **C 32 3_136.0** | 136.0 | 0.32 | 0.58 | 0.34 | 0.78 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **C 32 3_148.4** | 148.4 | 0.32 | 0.58 | 0.34 | 0.78 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **C 32 3_167.4** | 167.4 | 0.32 | 0.58 | 0.34 | 0.78 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **C 32 3_186.0** | 186.0 | 0.31 | 0.57 | 0.33 | 0.77 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **C 32 3_215.6** | 215.6 | 0.31 | 0.57 | 0.33 | 0.77 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **C 32 3_244.2** | 244.2 | 0.31 | 0.57 | 0.33 | 0.77 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **C 32 3_274.7** | 274.7 | 0.31 | 0.57 | 0.33 | 0.77 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |



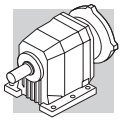
# C 36

| | i | J (•10-4) [kgm2] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC | | | | | | |  |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | |
| **C 36 2_2.7** | 2.7 | 3.6 | — | — | 6.5 | 6.4 | 7.7 | 7.7 | 22 | 14 |
| **C 36 2_3.2** | 3.2 | 2.5 | — | — | 5.4 | 5.3 | 6.6 | 6.6 | 21 | 13 |
| **C 36 2_3.5** | 3.5 | 2.4 | — | — | 5.3 | 5.2 | 6.5 | 6.5 | 20 | 13 |
| **C 36 2_4.2** | 4.2 | 1.6 | — | — | 4.5 | 4.4 | 5.7 | 5.7 | 20 | 12 |
| **C 36 2_4.6** | 4.6 | 1.5 | 3.0 | 3.0 | 4.4 | 4.3 | 5.6 | 5.6 | 19 | 12 |
| **C 36 2_5.3** | 5.3 | 1.1 | 2.6 | 2.6 | 4.0 | 3.9 | 5.2 | 5.2 | 19 | 12 |
| **C 36 2_5.8** | 5.8 | 0.98 | 2.5 | 2.5 | 3.9 | 3.8 | 5.1 | 5.1 | 19 | 12 |
| **C 36 2_6.8** | 6.8 | 2.2 | — | — | 5.1 | 5.0 | 6.3 | 6.3 | 20 | 13 |
| **C 36 2_8.0** | 8.0 | 1.6 | — | — | 4.4 | 4.3 | 5.6 | 5.6 | 20 | 12 |
| **C 36 2_8.8** | 8.8 | 1.5 | — | — | 4.4 | 4.3 | 5.6 | 5.6 | 19 | 12 |
| **C 36 2_10.6** | 10.6 | 1.1 | — | — | 3.9 | 3.8 | 5.1 | 5.1 | 19 | 12 |
| **C 36 2_11.7** | 11.7 | 1.0 | 2.5 | 2.5 | 3.9 | 3.8 | 5.1 | 5.1 | 19 | 12 |
| **C 36 2_13.3** | 13.3 | 0.69 | 2.2 | 2.2 | 3.6 | 3.5 | 4.8 | 4.8 | 19 | 11 |
| **C 36 2_14.8** | 14.8 | 0.68 | 2.2 | 2.2 | 3.6 | 3.5 | 4.8 | 4.8 | 19 | 11 |
| **C 36 2_17.2** | 17.2 | 0.47 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | 18 | 11 |
| **C 36 2_19.0** | 19.0 | 0.47 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | 18 | 11 |
| **C 36 3_22.1** | 22.1 | 1.8 | — | — | 4.7 | 4.6 | 5.9 | 5.9 | 19 | 12 |
| **C 36 3_26.2** | 26.2 | 1.3 | — | — | 4.2 | 4.1 | 5.4 | 5.4 | 19 | 12 |
| **C 36 3_28.7** | 28.7 | 1.3 | — | — | 4.2 | 4.1 | 5.4 | 5.4 | 19 | 12 |
| **C 36 3_34.6** | 34.6 | 0.88 | — | — | 3.8 | 3.7 | 5.0 | 5.0 | 19 | 11 |
| **C 36 3_38.1** | 38.1 | 0.90 | 2.4 | 2.4 | 3.8 | 3.7 | 5.0 | 5.0 | 19 | 11 |
| **C 36 3_43.5** | 43.5 | 0.59 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 19 | 11 |
| **C 36 3_48.2** | 48.2 | 0.60 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 19 | 11 |
| **C 36 3_56.2** | 56.2 | 0.41 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | 18 | 11 |
| **C 36 3_62.0** | 62.0 | 0.42 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | 18 | 11 |
| **C 36 3_70.8** | 70.8 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 18 | 11 |
| **C 36 3_77.6** | 77.6 | 0.28 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 17 | 11 |
| **C 36 3_83.1** | 83.1 | 0.24 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | 11 |
| **C 36 3_91.9** | 91.9 | 0.21 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | 11 |
| **C 36 3_102.2** | 102.2 | 0.19 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | 11 |
| **C 36 3_111.5** | 111.5 | 0.16 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | 11 |
| **C 36 3_125.8** | 125.8 | 0.14 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 11 |
| **C 36 3_139.8** | 139.8 | 0.11 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 11 |
| **C 36 3_162.0** | 162.0 | 0.09 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 11 |
| **C 36 3_183.5** | 183.5 | 0.07 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 11 |
| **C 36 3_206.4** | 206.4 | 0.06 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 11 |
| **C 36 4_230.9** | 230.9 | 0.08 | — | — | — | — | — | — | — | — |
| **C 36 4_255.0** | 255.0 | 0.08 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 0.90 |
| **C 36 4_290.9** | 290.9 | 0.07 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 0.89 |
| **C 36 4_318.9** | 318.9 | 0.07 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 0.89 |
| **C 36 4_341.7** | 341.7 | 0.07 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 0.89 |
| **C 36 4_377.9** | 377.9 | 0.07 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 0.89 |
| **C 36 4_420.2** | 420.2 | 0.06 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 0.88 |
| **C 36 4_458.4** | 458.4 | 0.06 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 0.88 |
| **C 36 4_517.2** | 517.2 | 0.06 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 0.88 |
| **C 36 4_574.7** | 574.7 | 0.06 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 0.88 |
| **C 36 4_665.9** | 665.9 | 0.06 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 0.88 |
| **C 36 4_754.2** | 754.2 | 0.06 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 0.88 |
| **C 36 4_848.5** | 848.5 | 0.06 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 0.88 |



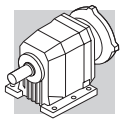
# C 36

| | i | J (•10-4) [kgm2] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | | | |
| | | 60A | | 60B 80A | | 95A | | 80C 95B 110A | | 95C 110B | | 130A | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **C 36 2_2.7** | 2.7 | — | — | — | — | — | — | 6.5 | 7.0 | 6.4 | 7.4 | 6.4 | 7.4 |
| **C 36 2_3.2** | 3.2 | — | — | — | — | — | — | 5.4 | 5.9 | 5.3 | 6.3 | 5.3 | 6.3 |
| **C 36 2_3.5** | 3.5 | — | — | — | — | — | — | 5.3 | 5.8 | 5.2 | 6.2 | 5.2 | 6.2 |
| **C 36 2_4.2** | 4.2 | — | — | — | — | — | — | 4.5 | 5.0 | 4.4 | 5.4 | 4.4 | 5.4 |
| **C 36 2_4.6** | 4.6 | 1.8 | 2.0 | 1.8 | 2.2 | 4.3 | 4.7 | 4.4 | 4.9 | 4.3 | 5.3 | 4.3 | 5.3 |
| **C 36 2_5.3** | 5.3 | 1.4 | 1.6 | 1.4 | 1.8 | 3.9 | 4.4 | 4.0 | 4.5 | 3.9 | 4.9 | 3.9 | 4.9 |
| **C 36 2_5.8** | 5.8 | 1.3 | 1.5 | 1.3 | 1.7 | 3.8 | 4.2 | 3.9 | 4.4 | 3.8 | 4.8 | 3.8 | 4.8 |
| **C 36 2_6.8** | 6.8 | — | — | — | — | — | — | 5.1 | 5.6 | 5.0 | 6.0 | 5.0 | 6.0 |
| **C 36 2_8.0** | 8.0 | — | — | — | — | — | — | 4.4 | 4.9 | 4.3 | 5.3 | 4.3 | 5.3 |
| **C 36 2_8.8** | 8.8 | — | — | — | — | — | — | 4.4 | 4.9 | 4.3 | 5.3 | 4.3 | 5.3 |
| **C 36 2_10.6** | 10.6 | — | — | — | — | — | — | 3.9 | 4.4 | 3.8 | 4.8 | 3.8 | 4.8 |
| **C 36 2_11.7** | 11.7 | 1.3 | 1.5 | 1.3 | 1.7 | 3.8 | 4.3 | 3.9 | 4.4 | 3.8 | 4.8 | 3.8 | 4.8 |
| **C 36 2_13.3** | 13.3 | 0.96 | 1.2 | 0.98 | 1.4 | 3.5 | 3.9 | 3.6 | 4.1 | 3.5 | 4.5 | 3.5 | 4.5 |
| **C 36 2_14.8** | 14.8 | 0.95 | 1.2 | 0.97 | 1.4 | 3.5 | 3.9 | 3.6 | 4.1 | 3.5 | 4.5 | 3.5 | 4.5 |
| **C 36 2_17.2** | 17.2 | 0.74 | 1.0 | 0.76 | 1.2 | 3.3 | 3.7 | 3.4 | 3.9 | 3.3 | 4.3 | 3.3 | 4.3 |
| **C 36 2_19.0** | 19.0 | 0.74 | 1.0 | 0.76 | 1.2 | 3.3 | 3.7 | 3.4 | 3.9 | 3.3 | 4.3 | 3.3 | 4.3 |
| **C 36 3_22.1** | 22.1 | — | — | — | — | — | — | 4.7 | 5.2 | 4.6 | 5.6 | 4.6 | 5.6 |
| **C 36 3_26.2** | 26.2 | — | — | — | — | — | — | 4.2 | 4.7 | 4.1 | 5.1 | 4.1 | 5.1 |
| **C 36 3_28.7** | 28.7 | — | — | — | — | — | — | 4.2 | 4.7 | 4.1 | 5.1 | 4.1 | 5.1 |
| **C 36 3_34.6** | 34.6 | — | — | — | — | — | — | 3.8 | 4.3 | 3.7 | 4.7 | 3.7 | 4.7 |
| **C 36 3_38.1** | 38.1 | 1.2 | 1.4 | 1.2 | 1.6 | 3.7 | 4.2 | 3.8 | 4.3 | 3.7 | 4.7 | 3.7 | 4.7 |
| **C 36 3_43.5** | 43.5 | 0.86 | 1.1 | 0.88 | 1.3 | 3.4 | 3.8 | 3.5 | 4.0 | 3.4 | 4.4 | 3.4 | 4.4 |
| **C 36 3_48.2** | 48.2 | 0.87 | 1.1 | 0.89 | 1.3 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | 3.4 | 4.4 |
| **C 36 3_56.2** | 56.2 | 0.68 | 0.94 | 0.70 | 1.1 | 3.2 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 | 3.2 | 4.2 |
| **C 36 3_62.0** | 62.0 | 0.69 | 0.95 | 0.71 | 1.1 | 3.2 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 | 3.2 | 4.2 |
| **C 36 3_70.8** | 70.8 | 0.57 | 0.83 | 0.59 | 1.0 | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 |
| **C 36 3_77.6** | 77.6 | 0.55 | 0.81 | 0.57 | 1.0 | 3.1 | 3.5 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 |
| **C 36 3_83.1** | 83.1 | 0.51 | 0.77 | 0.53 | 0.97 | 3.1 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **C 36 3_91.9** | 91.9 | 0.48 | 0.74 | 0.50 | 0.94 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **C 36 3_102.2** | 102.2 | 0.46 | 0.72 | 0.48 | 0.92 | 3.0 | 3.4 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **C 36 3_111.5** | 111.5 | 0.43 | 0.69 | 0.45 | 0.89 | 3.0 | 3.4 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **C 36 3_125.8** | 125.8 | 0.41 | 0.67 | 0.43 | 0.87 | 3.0 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **C 36 3_139.8** | 139.8 | 0.38 | 0.64 | 0.40 | 0.84 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **C 36 3_162.0** | 162.0 | 0.36 | 0.62 | 0.38 | 0.82 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **C 36 3_183.5** | 183.5 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **C 36 3_206.4** | 206.4 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **C 36 4_230.9** | 230.9 | 0.35 | 0.61 | 0.37 | 0.81 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **C 36 4_255.0** | 255.0 | 0.35 | 0.61 | 0.37 | 0.81 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **C 36 4_290.9** | 290.9 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **C 36 4_318.9** | 318.9 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **C 36 4_341.7** | 341.7 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **C 36 4_377.9** | 377.9 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **C 36 4_420.2** | 420.2 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **C 36 4_458.4** | 458.4 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **C 36 4_517.2** | 517.2 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **C 36 4_574.7** | 574.7 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **C 36 4_665.9** | 665.9 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **C 36 4_754.2** | 754.2 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **C 36 4_848.5** | 848.5 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |



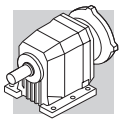
# C 41

| | i | J (•10-4) [kgm2] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | |
| **C 41 2_2.7** | 2.7 | 10 | — | — | 13 | 13 | 14 | 14 | 29 | 21 |
| **C 41 2_3.6** | 3.6 | 6.0 | — | — | 8.9 | 8.8 | 10 | 10 | 25 | 17 |
| **C 41 2_4.7** | 4.7 | 3.7 | — | — | 6.6 | 6.5 | 7.8 | 7.8 | 23 | 14 |
| **C 41 2_6.0** | 6.0 | 2.5 | — | — | 5.4 | 5.3 | 6.6 | 6.6 | 21 | 13 |
| **C 41 2_6.4** | 6.4 | 4.3 | — | — | 7.2 | 7.1 | 8.4 | 8.4 | 23 | 15 |
| **C 41 2_7.1** | 7.1 | 4.1 | — | — | 7.0 | 6.9 | 8.2 | 8.2 | 23 | 15 |
| **C 41 2_8.6** | 8.6 | 2.9 | — | — | 5.8 | 5.7 | 7.0 | 7.0 | 22 | 13 |
| **C 41 2_9.6** | 9.6 | 2.8 | — | — | 5.7 | 5.6 | 6.9 | 6.9 | 22 | 13 |
| **C 41 2_11.2** | 11.2 | 1.8 | — | — | 4.7 | 4.6 | 5.9 | 5.9 | 21 | 12 |
| **C 41 2_12.4** | 12.4 | 1.8 | — | — | 4.7 | 4.6 | 5.9 | 5.9 | 21 | 12 |
| **C 41 2_14.2** | 14.2 | 1.4 | 2.9 | 2.9 | 4.3 | 4.2 | 5.5 | 5.5 | 20 | 12 |
| **C 41 2_15.8** | 15.8 | 1.3 | 2.8 | 2.8 | 4.2 | 4.1 | 5.4 | 5.4 | 20 | 12 |
| **C 41 2_17.8** | 17.8 | 1.0 | 2.5 | 2.5 | 3.9 | 3.8 | 5.1 | 5.1 | 20 | 12 |
| **C 41 2_19.8** | 19.8 | 0.98 | 2.5 | 2.5 | 3.9 | 3.8 | 5.1 | 5.1 | 20 | 12 |
| **C 41 2_22.6** | 22.6 | 0.60 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 20 | 11 |
| **C 41 2_25.0** | 25.0 | 0.60 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 20 | 11 |
| **C 41 2_28.3** | 28.3 | 0.44 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | 19 | 11 |
| **C 41 2_31.4** | 31.4 | 0.43 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | 19 | 11 |
| **C 41 2_33.4** | 33.4 | 0.34 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | — | 11 |
| **C 41 2_37.1** | 37.1 | 0.33 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | — | 11 |
| **C 41 2_44.8** | 44.8 | 0.27 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | — | 11 |
| | | | | | | | | | | |
| **C 41 3_28.5** | 28.5 | 2.5 | — | — | 5.4 | 5.3 | 6.6 | 6.6 | 21 | 13 |
| **C 41 3_31.2** | 31.2 | 2.5 | — | — | 5.4 | 5.3 | 6.6 | 6.6 | 21 | 13 |
| **C 41 3_36.8** | 36.8 | 1.6 | — | — | 4.5 | 4.4 | 5.7 | 5.7 | 21 | 12 |
| **C 41 3_40.3** | 40.3 | 1.6 | — | — | 4.5 | 4.4 | 5.7 | 5.7 | 21 | 12 |
| **C 41 3_47.0** | 47.0 | 1.2 | 2.7 | 2.7 | 4.1 | 4.0 | 5.3 | 5.3 | 20 | 12 |
| **C 41 3_51.5** | 51.5 | 1.2 | 2.7 | 2.7 | 4.1 | 4.0 | 5.3 | 5.3 | 20 | 12 |
| **C 41 3_58.7** | 58.7 | 0.90 | 2.4 | 2.4 | 3.8 | 3.7 | 5.0 | 5.0 | 20 | 11 |
| **C 41 3_64.3** | 64.3 | 0.90 | 2.4 | 2.4 | 3.8 | 3.7 | 5.0 | 5.0 | 20 | 11 |
| **C 41 3_74.4** | 74.4 | 0.60 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 20 | 11 |
| **C 41 3_81.5** | 81.5 | 0.60 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 20 | 11 |
| **C 41 3_93.9** | 93.9 | 0.40 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | 19 | 11 |
| **C 41 3_102.3** | 102.3 | 0.40 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | 19 | 11 |
| **C 41 3_110.1** | 110.1 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | — | 11 |
| **C 41 3_120.6** | 120.6 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | — | 11 |
| **C 41 3_132.9** | 132.9 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | — | 11 |
| **C 41 3_145.6** | 145.6 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | — | 11 |
| **C 41 3_164.1** | 164.1 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | 11 |
| **C 41 3_179.9** | 179.9 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | 11 |
| **C 41 3_190.8** | 190.8 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 11 |
| **C 41 3_209.1** | 209.1 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 11 |
| | | | | | | | | | | |
| **C 41 4_239.9** | 239.9 | 0.15 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | 2.1 |
| **C 41 4_263.0** | 263.0 | 0.15 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | 2.1 |
| **C 41 4_304.2** | 304.2 | 0.13 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **C 41 4_333.4** | 333.4 | 0.13 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **C 41 4_382.0** | 382.0 | 0.12 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **C 41 4_419.0** | 419.0 | 0.12 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **C 41 4_450.2** | 450.2 | 0.12 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **C 41 4_493.5** | 493.5 | 0.12 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **C 41 4_543.5** | 543.5 | 0.12 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **C 41 4_595.8** | 595.8 | 0.12 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **C 41 4_671.3** | 671.3 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **C 41 4_735.9** | 735.9 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **C 41 4_780.4** | 780.4 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **C 41 4_855.5** | 855.5 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.0 |



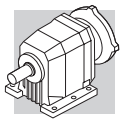
# C 41

| | i | J (•10-4) [kgm2] | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | | | | | | | | | |
| | | 60A | | 60B 80A | | 80B | | 95A | | 80C 95B 110A | | 95C 110B | | 130A | | 130B 180A | | 180B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **C 41 2_2.7** | 2.7 | — | — | — | — | — | — | — | — | 13 | 14 | 13 | 14 | 13 | 14 | 27 | 29 | 29 | 34 |
| **C 41 2_3.6** | 3.6 | — | — | — | — | — | — | — | — | 8.9 | 9.4 | 8.8 | 9.8 | 8.8 | 9.8 | 23 | 25 | 25 | 30 |
| **C 41 2_4.7** | 4.7 | — | — | — | — | — | — | — | — | 6.6 | 7.1 | 6.5 | 7.5 | 6.5 | 7.5 | 21 | 23 | 23 | 28 |
| **C 41 2_6.0** | 6.0 | — | — | — | — | 5.3 | 5.8 | 5.3 | 5.8 | 5.4 | 5.9 | 5.3 | 6.3 | 5.3 | 6.3 | 19 | 22 | 21 | 26 |
| **C 41 2_6.4** | 6.4 | — | — | — | — | — | — | — | — | 7.2 | 7.7 | 7.1 | 8.1 | 7.1 | 8.1 | 21 | 24 | 23 | 28 |
| **C 41 2_7.1** | 7.1 | — | — | — | — | — | — | — | — | 7.0 | 7.5 | 6.9 | 7.9 | 6.9 | 7.9 | 21 | 24 | 23 | 28 |
| **C 41 2_8.6** | 8.6 | — | — | — | — | — | — | — | — | 5.8 | 6.3 | 5.7 | 6.7 | 5.7 | 6.7 | 20 | 22 | 22 | 27 |
| **C 41 2_9.6** | 9.6 | — | — | — | — | — | — | — | — | 5.7 | 6.2 | 5.6 | 6.6 | 5.6 | 6.6 | 20 | 22 | 22 | 27 |
| **C 41 2_11.2** | 11.2 | — | — | — | — | — | — | — | — | 4.7 | 5.2 | 4.6 | 5.6 | 4.6 | 5.6 | 19 | 21 | 21 | 26 |
| **C 41 2_12.4** | 12.4 | — | — | — | — | — | — | — | — | 4.7 | 5.2 | 4.6 | 5.6 | 4.6 | 5.6 | 19 | 21 | 21 | 26 |
| **C 41 2_14.2** | 14.2 | — | — | — | — | 4.2 | 4.7 | 4.2 | 4.7 | 4.3 | 4.8 | 4.2 | 5.2 | 4.2 | 5.2 | 18 | 21 | 20 | 25 |
| **C 41 2_15.8** | 15.8 | — | — | — | — | 4.1 | 4.6 | 4.1 | 4.6 | 4.2 | 4.7 | 4.1 | 5.1 | 4.1 | 5.1 | 18 | 21 | 20 | 25 |
| **C 41 2_17.8** | 17.8 | — | — | — | — | 3.8 | 5.3 | 3.8 | 5.3 | 3.9 | 4.4 | 3.8 | 4.8 | 3.8 | 4.8 | 18 | 20 | 20 | 25 |
| **C 41 2_19.8** | 19.8 | — | — | — | — | 3.8 | 4.2 | 3.8 | 4.2 | 3.9 | 4.4 | 3.8 | 4.8 | 3.8 | 4.8 | 18 | 20 | 20 | 25 |
| **C 41 2_22.6** | 22.6 | — | — | — | — | 3.4 | 3.9 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | 3.4 | 4.4 | 18 | 20 | 20 | 25 |
| **C 41 2_25.0** | 25.0 | — | — | — | — | 3.4 | 3.9 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | 3.4 | 4.4 | 18 | 20 | 20 | 25 |
| **C 41 2_28.3** | 28.3 | — | — | — | — | 3.3 | 3.7 | 3.3 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 | 3.2 | 4.2 | 17 | 20 | 19 | 24 |
| **C 41 2_31.4** | 31.4 | — | — | — | — | 3.3 | 3.7 | 3.3 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 | 3.2 | 4.2 | 17 | 20 | 19 | 24 |
| **C 41 2_33.4** | 33.4 | — | — | — | — | 3.2 | 3.6 | 3.2 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 | — | — | — | — |
| **C 41 2_37.1** | 37.1 | — | — | — | — | 3.2 | 3.6 | 3.2 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 | — | — | — | — |
| **C 41 2_44.8** | 44.8 | — | — | — | — | 3.1 | 3.5 | 3.1 | 3.5 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 | — | — | — | — |
| | | | | | | | | | | | | | | | | | | | |
| **C 41 3_28.5** | 28.5 | — | — | — | — | — | — | — | — | 5.4 | 5.9 | 5.3 | 6.3 | 5.3 | 6.3 | 19 | 22 | 21 | 26 |
| **C 41 3_31.2** | 31.2 | — | — | — | — | — | — | — | — | 5.4 | 5.9 | 5.3 | 6.3 | 5.3 | 6.3 | 19 | 22 | 21 | 26 |
| **C 41 3_36.8** | 36.8 | — | — | — | — | — | — | — | — | 4.5 | 5.0 | 4.4 | 5.4 | 4.4 | 5.4 | 19 | 21 | 21 | 26 |
| **C 41 3_40.3** | 40.3 | — | — | — | — | — | — | — | — | 4.5 | 5.0 | 4.4 | 5.4 | 4.4 | 5.4 | 19 | 21 | 21 | 26 |
| **C 41 3_47.0** | 47.0 | — | — | — | — | 4.0 | 4.5 | 4.0 | 4.5 | 4.1 | 4.6 | 4.0 | 5.0 | 4.0 | 5.0 | 18 | 21 | 20 | 25 |
| **C 41 3_51.5** | 51.5 | — | — | — | — | 4.0 | 4.5 | 4.0 | 4.5 | 4.1 | 4.6 | 4.0 | 5.0 | 4.0 | 5.0 | 18 | 21 | 20 | 25 |
| **C 41 3_58.7** | 58.7 | — | — | — | — | 3.7 | 4.2 | 3.7 | 4.2 | 3.8 | 4.3 | 3.7 | 4.7 | 3.7 | 4.7 | 18 | 20 | 20 | 25 |
| **C 41 3_64.3** | 64.3 | — | — | — | — | 3.7 | 4.2 | 3.7 | 4.2 | 3.8 | 4.3 | 3.7 | 4.7 | 3.7 | 4.7 | 18 | 20 | 20 | 25 |
| **C 41 3_74.4** | 74.4 | — | — | — | — | 3.4 | 3.9 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | 3.4 | 4.4 | 18 | 20 | 20 | 25 |
| **C 41 3_81.5** | 81.5 | — | — | — | — | 3.4 | 3.9 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | 3.4 | 4.4 | 18 | 20 | 20 | 25 |
| **C 41 3_93.9** | 93.9 | — | — | — | — | 3.2 | 3.7 | 3.2 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 | 3.2 | 4.2 | 17 | 20 | 19 | 24 |
| **C 41 3_102.3** | 102.3 | — | — | — | — | 3.2 | 3.7 | 3.2 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 | 3.2 | 4.2 | 17 | 20 | 19 | 24 |
| **C 41 3_110.1** | 110.1 | — | — | — | — | 3.1 | 3.6 | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 | — | — | — | — |
| **C 41 3_120.6** | 120.6 | — | — | — | — | 3.1 | 3.6 | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 | — | — | — | — |
| **C 41 3_132.9** | 132.9 | — | — | — | — | 3.1 | 3.6 | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 | — | — | — | — |
| **C 41 3_145.6** | 145.6 | — | — | — | — | 3.1 | 3.6 | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 | — | — | — | — |
| **C 41 3_164.1** | 164.1 | — | — | — | — | 3.0 | 3.5 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 | — | — | — | — |
| **C 41 3_179.9** | 179.9 | — | — | — | — | 3.0 | 3.5 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 | — | — | — | — |
| **C 41 3_190.8** | 190.8 | — | — | — | — | 2.9 | 3.4 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 | — | — | — | — |
| **C 41 3_209.1** | 209.1 | — | — | — | — | 2.9 | 3.4 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 | — | — | — | — |
| | | | | | | | | | | | | | | | | | | | |
| **C 41 4_239.9** | 239.9 | 0.42 | 0.68 | 0.44 | 0.88 | — | — | 3.0 | 3.4 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — | — | — |
| **C 41 4_263.0** | 263.0 | 0.42 | 0.68 | 0.44 | 0.88 | — | — | 3.0 | 3.4 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — | — | — |
| **C 41 4_304.2** | 304.2 | 0.40 | 0.66 | 0.42 | 0.86 | — | — | 3.0 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — | — | — |
| **C 41 4_333.4** | 333.4 | 0.40 | 0.66 | 0.42 | 0.86 | — | — | 3.0 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — | — | — |
| **C 41 4_382.0** | 382.0 | 0.39 | 0.65 | 0.41 | 0.85 | — | — | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — | — | — |
| **C 41 4_419.0** | 419.0 | 0.39 | 0.65 | 0.41 | 0.85 | — | — | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — | — | — |
| **C 41 4_450.2** | 450.2 | 0.39 | 0.65 | 0.41 | 0.85 | — | — | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — | — | — |
| **C 41 4_493.5** | 493.5 | 0.39 | 0.65 | 0.41 | 0.85 | — | — | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — | — | — |
| **C 41 4_543.5** | 543.5 | 0.39 | 0.65 | 0.41 | 0.85 | — | — | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — | — | — |
| **C 41 4_595.8** | 595.8 | 0.39 | 0.65 | 0.41 | 0.85 | — | — | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — | — | — |
| **C 41 4_671.3** | 671.3 | 0.37 | 0.63 | 0.39 | 0.83 | — | — | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — | — | — |
| **C 41 4_735.9** | 735.9 | 0.37 | 0.63 | 0.39 | 0.83 | — | — | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — | — | — |
| **C 41 4_780.4** | 780.4 | 0.37 | 0.63 | 0.39 | 0.83 | — | — | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — | — | — |
| **C 41 4_855.5** | 855.5 | 0.37 | 0.63 | 0.39 | 0.83 | — | — | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — | — | — |



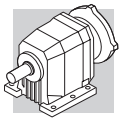
# C 51

| | i | J (•10-4) [kgm2] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | |
| **C 51 2_2.6** | 2.6 | 15 | — | — | 17 | 17 | 19 | 19 | 33 | 79 | 76 | 25 |
| **C 51 2_3.3** | 3.3 | 10 | — | — | 13 | 13 | 14 | 14 | 29 | 75 | 72 | 21 |
| **C 51 2_4.5** | 4.5 | 6.3 | — | — | 9.2 | 9.1 | 10 | 10 | 25 | 71 | 68 | 17 |
| **C 51 2_5.6** | 5.6 | 4.1 | — | — | 7.0 | 6.9 | 8.2 | 8.2 | 23 | 69 | 66 | 15 |
| **C 51 2_7.0** | 7.0 | 8.1 | — | — | 11 | 11 | 12 | 12 | 27 | 73 | 70 | 19 |
| **C 51 2_7.8** | 7.8 | 7.8 | — | — | 11 | 11 | 12 | 12 | 27 | 73 | 70 | 18 |
| **C 51 2_8.8** | 8.8 | 6.0 | — | — | 8.9 | 8.8 | 10 | 10 | 25 | 71 | 68 | 17 |
| **C 51 2_9.8** | 9.8 | 5.8 | — | — | 8.7 | 8.6 | 9.9 | 9.9 | 25 | 71 | 68 | 16 |
| **C 51 2_11.8** | 11.8 | 4.1 | — | — | 7.0 | 6.9 | 8.2 | 8.2 | 23 | 69 | 66 | 15 |
| **C 51 2_13.1** | 13.1 | 4.0 | — | — | 6.9 | 6.8 | 8.1 | 8.1 | 23 | 69 | 66 | 15 |
| **C 51 2_15.0** | 15.0 | 2.7 | — | — | 5.6 | 5.5 | 6.8 | 6.8 | 22 | 68 | 65 | 13 |
| **C 51 2_16.6** | 16.6 | 2.6 | — | — | 5.5 | 5.4 | 6.7 | 6.7 | 22 | 68 | 65 | 13 |
| **C 51 2_18.9** | 18.9 | 2.0 | 3.5 | 3.5 | 4.9 | 4.8 | 6.1 | 6.1 | 21 | 67 | 64 | 13 |
| **C 51 2_21.0** | 21.0 | 1.9 | 3.4 | 3.4 | 4.8 | 4.7 | 6.0 | 6.0 | 21 | 67 | 64 | 12 |
| **C 51 2_23.4** | 23.4 | 1.5 | 3.0 | 3.0 | 4.4 | 4.3 | 5.6 | 5.6 | 20 | 66 | 63 | 12 |
| **C 51 2_25.9** | 25.9 | 1.4 | 2.9 | 2.9 | 4.3 | 4.2 | 5.5 | 5.5 | 20 | 66 | 63 | 12 |
| **C 51 2_29.8** | 29.8 | 0.90 | 2.4 | 2.4 | 3.8 | 3.7 | 5.0 | 5.0 | 20 | 66 | 63 | 11 |
| **C 51 2_33.0** | 33.0 | 0.90 | 2.4 | 2.4 | 3.8 | 3.7 | 5.0 | 5.0 | 20 | 66 | 63 | 11 |
| **C 51 2_36.4** | 36.4 | 0.70 | 2.2 | 2.2 | 3.6 | 3.5 | 4.8 | 4.8 | 20 | 66 | 63 | 11 |
| **C 51 2_40.4** | 40.4 | 0.70 | 2.2 | 2.2 | 3.6 | 3.5 | 4.8 | 4.8 | 20 | 66 | 63 | 11 |
| **C 51 2_43.1** | 43.1 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 11 |
| **C 51 2_47.8** | 47.8 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 11 |
| **C 51 2_51.4** | 51.4 | 0.40 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | — | — | — | 11 |
| **C 51 2_57.0** | 57.0 | 0.40 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | — | — | — | 11 |
| **C 51 3_21.8** | 21.8 | 6.8 | — | — | 9.7 | 9.6 | 11 | 11 | 26 | 72 | 69 | 17 |
| **C 51 3_23.9** | 23.9 | 6.8 | — | — | 9.7 | 9.6 | 11 | 11 | 26 | 72 | 69 | 17 |
| **C 51 3_27.4** | 27.4 | 5.2 | — | — | 8.1 | 8.0 | 9.3 | 9.3 | 24 | 70 | 67 | 16 |
| **C 51 3_30.1** | 30.1 | 5.2 | — | — | 8.1 | 8.0 | 9.3 | 9.3 | 24 | 70 | 67 | 16 |
| **C 51 3_37.0** | 37.0 | 3.6 | — | — | 6.5 | 6.4 | 7.7 | 7.7 | 23 | 69 | 66 | 14 |
| **C 51 3_40.5** | 40.5 | 3.6 | — | — | 6.5 | 6.4 | 7.7 | 7.7 | 23 | 69 | 66 | 14 |
| **C 51 3_46.7** | 46.7 | 2.4 | — | — | 5.3 | 5.2 | 6.5 | 6.5 | 21 | 67 | 64 | 13 |
| **C 51 3_51.2** | 51.2 | 2.4 | — | — | 5.3 | 5.2 | 6.5 | 6.5 | 21 | 67 | 64 | 13 |
| **C 51 3_59.0** | 59.0 | 1.8 | 3.3 | 3.3 | 4.7 | 4.6 | 5.9 | 5.9 | 21 | 67 | 64 | 12 |
| **C 51 3_64.6** | 64.6 | 1.8 | 3.3 | 3.3 | 4.7 | 4.6 | 5.9 | 5.9 | 21 | 67 | 64 | 12 |
| **C 51 3_72.9** | 72.9 | 1.3 | 2.8 | 2.8 | 4.2 | 4.1 | 5.4 | 5.4 | 20 | 66 | 63 | 12 |
| **C 51 3_79.9** | 79.9 | 1.3 | 2.8 | 2.8 | 4.2 | 4.1 | 5.4 | 5.4 | 20 | 66 | 63 | 12 |
| **C 51 3_93.0** | 93.0 | 0.80 | 2.3 | 2.3 | 3.7 | 3.6 | 4.9 | 4.9 | 20 | 66 | 63 | 11 |
| **C 51 3_101.8** | 101.8 | 0.80 | 2.3 | 2.3 | 3.7 | 3.6 | 4.9 | 4.9 | 20 | 66 | 63 | 11 |
| **C 51 3_113.6** | 113.6 | 0.60 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 20 | 66 | 63 | 11 |
| **C 51 3_124.4** | 124.4 | 0.60 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 20 | 66 | 63 | 11 |
| **C 51 3_134.6** | 134.6 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 11 |
| **C 51 3_147.4** | 147.4 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 11 |
| **C 51 3_160.5** | 160.5 | 0.40 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | — | — | — | 11 |
| **C 51 3_175.8** | 175.8 | 0.40 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | — | — | — | 11 |
| **C 51 3_197.9** | 197.9 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | — | — | — | 11 |
| **C 51 3_216.7** | 216.7 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | — | — | — | 11 |
| **C 51 4_240.9** | 240.9 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 17 | — | — | 1.2 |
| **C 51 4_263.8** | 263.8 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 17 | — | — | 1.2 |
| **C 51 4_297.8** | 297.8 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 17 | — | — | 1.2 |
| **C 51 4_326.1** | 326.1 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 17 | — | — | 1.2 |
| **C 51 4_380.0** | 380.0 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 17 | — | — | 1.1 |
| **C 51 4_416.0** | 416.0 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 17 | — | — | 1.1 |
| **C 51 4_463.9** | 463.9 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 17 | — | — | 1.1 |
| **C 51 4_508.0** | 508.0 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 17 | — | — | 1.1 |
| **C 51 4_549.7** | 549.7 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | — | — | 1.1 |
| **C 51 4_602.0** | 602.0 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | — | — | 1.1 |
| **C 51 4_655.4** | 655.4 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | — | — | 1.1 |
| **C 51 4_717.7** | 717.7 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | — | — | 1.1 |
| **C 51 4_808.0** | 808.0 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | — | — | 1.1 |
| **C 51 4_884.9** | 884.9 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | — | — | 1.1 |



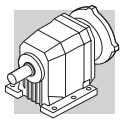
# C 51

| | i | J (•10-4) [kgm2] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | | | |
| | | 80B | | 95A | | 80C 95B 110A | | 95C 110B 130A | | 130B 180A | | 180B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **C 51 2_2.6** | 2.6 | — | — | — | — | 17 | 18 | 17 | 18 | 32 | 34 | 33 | 38 |
| **C 51 2_3.3** | 3.3 | — | — | — | — | 13 | 14 | 13 | 14 | 27 | 29 | 29 | 34 |
| **C 51 2_4.5** | 4.5 | — | — | — | — | 9.2 | 9.7 | 9.1 | 10 | 23 | 26 | 25 | 30 |
| **C 51 2_5.6** | 5.6 | — | — | — | — | 7.0 | 7.5 | 6.9 | 7.9 | 21 | 24 | 23 | 28 |
| **C 51 2_7.0** | 7.0 | — | — | — | — | 11 | 12 | 11 | 12 | 25 | 28 | 27 | 32 |
| **C 51 2_7.8** | 7.8 | — | — | — | — | 11 | 12 | 11 | 12 | 25 | 27 | 27 | 32 |
| **C 51 2_8.8** | 8.8 | — | — | — | — | 8.9 | 9.4 | 8.8 | 9.8 | 23 | 25 | 25 | 30 |
| **C 51 2_9.8** | 9.8 | — | — | — | — | 8.7 | 9.2 | 8.6 | 9.6 | 23 | 25 | 25 | 30 |
| **C 51 2_11.8** | 11.8 | — | — | — | — | 7.0 | 7.5 | 6.9 | 7.9 | 21 | 24 | 23 | 28 |
| **C 51 2_13.1** | 13.1 | — | — | — | — | 6.9 | 7.4 | 6.8 | 7.8 | 21 | 23 | 23 | 28 |
| **C 51 2_15.0** | 15.0 | — | — | — | — | 5.6 | 6.1 | 5.5 | 6.5 | 20 | 22 | 22 | 27 |
| **C 51 2_16.6** | 16.6 | — | — | — | — | 5.5 | 6.0 | 5.4 | 6.4 | 20 | 22 | 22 | 27 |
| **C 51 2_18.9** | 18.9 | 4.8 | 5.3 | 4.8 | 5.3 | 4.9 | 5.4 | 4.8 | 5.8 | 19 | 21 | 21 | 26 |
| **C 51 2_21.0** | 21.0 | 4.7 | 5.2 | 4.7 | 5.2 | 4.8 | 5.3 | 4.7 | 5.7 | 19 | 21 | 21 | 26 |
| **C 51 2_23.4** | 23.4 | 4.3 | 4.8 | 4.3 | 4.8 | 4.4 | 4.3 | 4.3 | 5.3 | 18 | 21 | 20 | 25 |
| **C 51 2_25.9** | 25.9 | 4.2 | 4.7 | 4.2 | 4.7 | 4.3 | 4.8 | 4.2 | 5.2 | 18 | 21 | 20 | 25 |
| **C 51 2_29.8** | 29.8 | 3.7 | 4.2 | 3.7 | 4.2 | 3.8 | 4.3 | 3.7 | 4.7 | 18 | 20 | 20 | 25 |
| **C 51 2_33.0** | 33.0 | 3.7 | 4.2 | 3.7 | 4.2 | 3.8 | 4.3 | 3.7 | 4.7 | 18 | 20 | 20 | 25 |
| **C 51 2_36.4** | 36.4 | 3.5 | 4.0 | 3.5 | 4.0 | 3.6 | 4.1 | 3.5 | 4.5 | 18 | 20 | 20 | 25 |
| **C 51 2_40.4** | 40.4 | 3.5 | 4.0 | 3.5 | 4.0 | 3.6 | 4.1 | 3.5 | 4.5 | 18 | 20 | 20 | 25 |
| **C 51 2_43.1** | 43.1 | 3.3 | 3.8 | 3.3 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **C 51 2_47.8** | 47.8 | 3.3 | 3.8 | 3.3 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **C 51 2_51.4** | 51.4 | 3.2 | 3.7 | 3.2 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 | — | — | — | — |
| **C 51 2_57.0** | 57.0 | 3.2 | 3.7 | 3.2 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 | — | — | — | — |
| **C 51 3_21.8** | 21.8 | — | — | — | — | 9.7 | 10 | 9.6 | 11 | 24 | 26 | 26 | 31 |
| **C 51 3_23.9** | 23.9 | — | — | — | — | 9.7 | 10 | 9.6 | 11 | 24 | 26 | 26 | 31 |
| **C 51 3_27.4** | 27.4 | — | — | — | — | 8.1 | 8.6 | 8.0 | 9.0 | 22 | 25 | 24 | 29 |
| **C 51 3_30.1** | 30.1 | — | — | — | — | 8.1 | 8.6 | 8.0 | 9.0 | 22 | 25 | 24 | 29 |
| **C 51 3_37.0** | 37.0 | — | — | — | — | 6.5 | 7.0 | 6.4 | 7.4 | 21 | 23 | 23 | 28 |
| **C 51 3_40.5** | 40.5 | — | — | — | — | 6.5 | 7.0 | 6.4 | 7.4 | 21 | 23 | 23 | 28 |
| **C 51 3_46.7** | 46.7 | — | — | — | — | 5.3 | 5.8 | 5.2 | 6.2 | 19 | 22 | 21 | 26 |
| **C 51 3_51.2** | 51.2 | — | — | — | — | 5.3 | 5.8 | 5.2 | 6.2 | 19 | 22 | 21 | 26 |
| **C 51 3_59.0** | 59.0 | 4.6 | 5.1 | 4.6 | 5.1 | 4.7 | 5.2 | 4.6 | 5.6 | 19 | 21 | 21 | 26 |
| **C 51 3_64.6** | 64.6 | 4.6 | 5.1 | 4.6 | 5.1 | 4.7 | 5.2 | 4.6 | 5.6 | 19 | 21 | 21 | 26 |
| **C 51 3_72.9** | 72.9 | 4.1 | 4.6 | 4.1 | 4.6 | 4.2 | 5.2 | 4.1 | 5.1 | 18 | 21 | 20 | 25 |
| **C 51 3_79.9** | 79.9 | 4.1 | 4.6 | 4.1 | 4.6 | 4.2 | 5.2 | 4.1 | 5.1 | 18 | 21 | 20 | 25 |
| **C 51 3_93.0** | 93.0 | 3.6 | 4.1 | 3.6 | 4.1 | 3.7 | 4.2 | 3.6 | 4.6 | 18 | 20 | 20 | 25 |
| **C 51 3_101.8** | 101.8 | 3.6 | 4.1 | 3.6 | 4.1 | 3.7 | 4.2 | 3.6 | 4.6 | 18 | 20 | 20 | 25 |
| **C 51 3_113.6** | 113.6 | 3.4 | 3.9 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | 18 | 20 | 20 | 25 |
| **C 51 3_124.4** | 124.4 | 3.4 | 3.9 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | 18 | 20 | 20 | 25 |
| **C 51 3_134.6** | 134.6 | 3.3 | 3.8 | 3.3 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **C 51 3_147.4** | 147.4 | 3.3 | 3.8 | 3.3 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **C 51 3_160.5** | 160.5 | 3.2 | 3.7 | 3.2 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 | — | — | — | — |
| **C 51 3_175.8** | 175.8 | 3.2 | 3.7 | 3.2 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 | — | — | — | — |
| **C 51 3_197.9** | 197.9 | 3.1 | 3.6 | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | — | — | — | — |
| **C 51 3_216.7** | 216.7 | 3.1 | 3.6 | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | — | — | — | — |
| **C 51 4_240.9** | 240.9 | — | — | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | — | — | — | — |
| **C 51 4_263.8** | 263.8 | — | — | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | — | — | — | — |
| **C 51 4_297.8** | 297.8 | — | — | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | — | — | — | — |
| **C 51 4_326.1** | 326.1 | — | — | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | — | — | — | — |
| **C 51 4_380.0** | 380.0 | — | — | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |
| **C 51 4_416.0** | 416.0 | — | — | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |
| **C 51 4_463.9** | 463.9 | — | — | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |
| **C 51 4_508.0** | 508.0 | — | — | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |
| **C 51 4_549.7** | 549.7 | — | — | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |
| **C 51 4_602.0** | 602.0 | — | — | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |
| **C 51 4_655.4** | 655.4 | — | — | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |
| **C 51 4_717.7** | 717.7 | — | — | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |
| **C 51 4_808.0** | 808.0 | — | — | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |
| **C 51 4_884.9** | 884.9 | — | — | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |



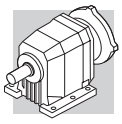
# C 61

| | i | J (•10-4) [kgm2] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | |
| **C 61 2_2.8** | 2.8 | 30 | — | — | — | — | — | — | 49 | 78 | 76 | 52 |
| **C 61 2_3.7** | 3.7 | 19 | — | — | 22 | 22 | 23 | 23 | 38 | 78 | 76 | 41 |
| **C 61 2_4.6** | 4.6 | 14 | — | — | 17 | 17 | 18 | 18 | 33 | 78 | 76 | 36 |
| **C 61 2_6.0** | 6.0 | 8.8 | — | — | 12 | 12 | 13 | 13 | 28 | 78 | 76 | 31 |
| **C 61 2_6.7** | 6.7 | 14 | — | — | — | — | — | — | 33 | 78 | 76 | 36 |
| **C 61 2_7.5** | 7.5 | 13 | — | — | — | — | — | — | 32 | 78 | 76 | 35 |
| **C 61 2_8.8** | 8.8 | 13 | — | — | 16 | 16 | 17 | 17 | 32 | 78 | 76 | 35 |
| **C 61 2_9.8** | 9.8 | 12 | — | — | 15 | 15 | 16 | 16 | 31 | 78 | 76 | 34 |
| **C 61 2_10.9** | 10.9 | 9.6 | — | — | 13 | 12 | 14 | 14 | 29 | 78 | 76 | 31 |
| **C 61 2_12.1** | 12.1 | 9.2 | — | — | 12 | 12 | 13 | 13 | 28 | 78 | 76 | 31 |
| **C 61 2_14.3** | 14.3 | 5.8 | — | — | 8.7 | 8.6 | 9.9 | 9.9 | 25 | 78 | 76 | 28 |
| **C 61 2_15.9** | 15.9 | 5.6 | — | — | 8.5 | 8.4 | 9.7 | 9.7 | 25 | 78 | 76 | 27 |
| **C 61 2_17.7** | 17.7 | 4.4 | — | — | 7.3 | 7.2 | 8.5 | 8.5 | 23 | 78 | 76 | 26 |
| **C 61 2_19.6** | 19.6 | 4.3 | — | — | 7.2 | 7.1 | 8.4 | 8.4 | 23 | 78 | 76 | 26 |
| **C 61 2_22.4** | 22.4 | 3.2 | 4.7 | 4.7 | 6.1 | 6.0 | 7.3 | 7.3 | 22 | 78 | 76 | 25 |
| **C 61 2_24.8** | 24.8 | 3.1 | 4.6 | 4.6 | 6.0 | 5.9 | 7.2 | 7.2 | 22 | 78 | 76 | 25 |
| **C 61 2_27.4** | 27.4 | 2.1 | 3.6 | 3.6 | 5.0 | 4.9 | 6.2 | 6.2 | 21 | 78 | 76 | 24 |
| **C 61 2_30.4** | 30.4 | 2.2 | 3.7 | 3.7 | 5.1 | 5.0 | 6.3 | 6.3 | 21 | 78 | 76 | 24 |
| **C 61 2_34.2** | 34.2 | 1.5 | 3.0 | 3.0 | 4.4 | 4.3 | 5.6 | 5.6 | 20 | 78 | 76 | 23 |
| **C 61 2_38.0** | 38.0 | 1.5 | 3.0 | 3.0 | 4.4 | 4.3 | 5.6 | 5.6 | 20 | 78 | 76 | 23 |
| **C 61 3_26.8** | 26.8 | 10 | — | — | 13 | 13 | 14 | 14 | 29 | 78 | 76 | 32 |
| **C 61 3_29.4** | 29.4 | 10 | — | — | 13 | 13 | 14 | 14 | 29 | 78 | 76 | 32 |
| **C 61 3_33.0** | 33.0 | 8.1 | — | — | 11 | 11 | 12 | 12 | 27 | 78 | 76 | 30 |
| **C 61 3_36.1** | 36.1 | 8.1 | — | — | 11 | 11 | 12 | 12 | 27 | 78 | 76 | 30 |
| **C 61 3_43.4** | 43.4 | 5.0 | — | — | 7.9 | 7.8 | 9.1 | 9.1 | 24 | 78 | 76 | 27 |
| **C 61 3_47.6** | 47.6 | 5.0 | — | — | 7.9 | 7.8 | 9.1 | 9.1 | 24 | 78 | 76 | 27 |
| **C 61 3_53.5** | 53.5 | 3.9 | — | — | 6.8 | 6.7 | 8.0 | 8.0 | 23 | 78 | 76 | 26 |
| **C 61 3_58.6** | 58.6 | 3.8 | — | — | 6.7 | 6.6 | 7.9 | 7.9 | 23 | 78 | 76 | 26 |
| **C 61 3_67.7** | 67.7 | 2.8 | 4.3 | 4.3 | 5.7 | 5.6 | 6.9 | 6.9 | 22 | 78 | 76 | 25 |
| **C 61 3_74.2** | 74.2 | 2.8 | 4.3 | 4.3 | 5.7 | 5.6 | 6.9 | 6.9 | 22 | 78 | 76 | 25 |
| **C 61 3_83.0** | 83.0 | 1.9 | 3.4 | 3.4 | 4.8 | 4.7 | 6.0 | 6.0 | 21 | 78 | 76 | 24 |
| **C 61 3_91.0** | 91.0 | 1.9 | 3.4 | 3.4 | 4.8 | 4.7 | 6.0 | 6.0 | 21 | 78 | 76 | 24 |
| **C 61 3_103.6** | 103.6 | 1.3 | 2.8 | 2.8 | 4.2 | 4.1 | 5.4 | 5.4 | 20 | 78 | 76 | 23 |
| **C 61 3_113.6** | 113.6 | 1.3 | 2.8 | 2.8 | 4.2 | 4.1 | 5.4 | 5.4 | 20 | 78 | 76 | 23 |
| **C 61 3_128.1** | 128.1 | 1.0 | 2.5 | 2.5 | 3.9 | 3.8 | 5.1 | 5.1 | 20 | 78 | 76 | 23 |
| **C 61 3_140.5** | 140.5 | 1.0 | 2.5 | 2.5 | 3.9 | 3.8 | 5.1 | 5.1 | 20 | 78 | 76 | 23 |
| **C 61 3_150.0** | 150.0 | 0.70 | 2.2 | 2.2 | 3.6 | 3.5 | 4.8 | 4.8 | — | — | — | 23 |
| **C 61 3_164.5** | 164.5 | 0.70 | 2.2 | 2.2 | 3.6 | 3.5 | 4.8 | 4.8 | — | — | — | 23 |
| **C 61 3_178.6** | 178.6 | 0.60 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | — | — | — | 22 |
| **C 61 3_195.8** | 195.8 | 0.60 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | — | — | — | 22 |
| **C 61 4_217.4** | 217.4 | 0.67 | 2.2 | 2.2 | 3.6 | 3.5 | 4.8 | 4.8 | — | — | — | 11 |
| **C 61 4_238.3** | 238.3 | 0.67 | 2.2 | 2.2 | 3.6 | 3.5 | 4.8 | 4.8 | — | — | — | 11 |
| **C 61 4_275.3** | 275.3 | 0.81 | 2.3 | 2.3 | 3.7 | 3.6 | 4.9 | 4.9 | — | — | — | 11 |
| **C 61 4_301.7** | 301.7 | 0.81 | 2.3 | 2.3 | 3.7 | 3.6 | 4.9 | 4.9 | — | — | — | 11 |
| **C 61 4_337.7** | 337.7 | 0.56 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | — | — | — | 11 |
| **C 61 4_370.1** | 370.1 | 0.56 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | — | — | — | 11 |
| **C 61 4_421.5** | 421.5 | 0.53 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 11 |
| **C 61 4_462.0** | 462.0 | 0.53 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 11 |
| **C 61 4_521.1** | 521.1 | 0.51 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 11 |
| **C 61 4_571.2** | 571.2 | 0.51 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 11 |
| **C 61 4_610.1** | 610.1 | 0.49 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 11 |
| **C 61 4_668.8** | 668.8 | 0.49 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 11 |
| **C 61 4_726.3** | 726.3 | 0.48 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 11 |
| **C 61 4_796.1** | 796.1 | 0.48 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 11 |



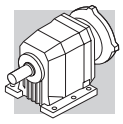
# C 61

| | i | J (•10-4) [kgm2] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | | | |
| | | 80B | | 95A | | 80C 95B 110A | | 95C 110B 130A | | 130B 180A | | 180B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **C 61 2_2.8** | 2.8 | — | — | — | — | — | — | — | — | 47 | 49 | 49 | 54 |
| **C 61 2_3.7** | 3.7 | — | — | — | — | 22 | 23 | 22 | 23 | 36 | 38 | 38 | 43 |
| **C 61 2_4.6** | 4.6 | — | — | — | — | 17 | 18 | 17 | 18 | 31 | 33 | 33 | 38 |
| **C 61 2_6.0** | 6.0 | — | — | — | — | 12 | 13 | 12 | 13 | 26 | 28 | 28 | 33 |
| **C 61 2_6.7** | 6.7 | — | — | — | — | — | — | — | — | 31 | 33 | 33 | 38 |
| **C 61 2_7.5** | 7.5 | — | — | — | — | — | — | — | — | 30 | 32 | 32 | 37 |
| **C 61 2_8.8** | 8.8 | — | — | — | — | 16 | 17 | 16 | 17 | 30 | 32 | 32 | 37 |
| **C 61 2_9.8** | 9.8 | — | — | — | — | 15 | 16 | 15 | 16 | 23 | 31 | 31 | 36 |
| **C 61 2_10.9** | 10.9 | — | — | — | — | 13 | 14 | 12 | 13 | 27 | 29 | 29 | 34 |
| **C 61 2_12.1** | 12.1 | — | — | — | — | 12 | 13 | 12 | 13 | 26 | 29 | 28 | 33 |
| **C 61 2_14.3** | 14.3 | — | — | — | — | 8.7 | 9.2 | 8.6 | 9.6 | 23 | 25 | 25 | 30 |
| **C 61 2_15.9** | 15.9 | — | — | — | — | 8.5 | 9.0 | 8.4 | 9.4 | 23 | 25 | 25 | 30 |
| **C 61 2_17.7** | 17.7 | — | — | — | — | 7.3 | 7.8 | 7.2 | 8.2 | 21 | 24 | 23 | 28 |
| **C 61 2_19.6** | 19.6 | — | — | — | — | 7.2 | 7.7 | 7.1 | 8.1 | 21 | 24 | 23 | 28 |
| **C 61 2_22.4** | 22.4 | — | — | 6.0 | 6.5 | 6.1 | 6.6 | 6.0 | 7.0 | 20 | 23 | 22 | 27 |
| **C 61 2_24.8** | 24.8 | — | — | 5.9 | 6.4 | 6.0 | 6.5 | 5.9 | 6.9 | 20 | 23 | 22 | 27 |
| **C 61 2_27.4** | 27.4 | — | — | 4.9 | 5.4 | 5.0 | 5.5 | 4.9 | 5.9 | 19 | 22 | 21 | 26 |
| **C 61 2_30.4** | 30.4 | — | — | 5.0 | 5.5 | 5.1 | 5.6 | 5.0 | 6.0 | 19 | 22 | 21 | 26 |
| **C 61 2_34.2** | 34.2 | — | — | 4.3 | 4.8 | 4.4 | 4.9 | 4.3 | 5.3 | 18 | 21 | 20 | 25 |
| **C 61 2_38.0** | 38.0 | — | — | 4.3 | 4.8 | 4.4 | 4.9 | 4.3 | 5.3 | 18 | 21 | 20 | 25 |
| **C 61 3_26.8** | 26.8 | — | — | — | — | 13 | 14 | 13 | 14 | 27 | 29 | 29 | 34 |
| **C 61 3_29.4** | 29.4 | — | — | — | — | 13 | 14 | 13 | 14 | 27 | 29 | 29 | 34 |
| **C 61 3_33.0** | 33.0 | — | — | — | — | 11 | 12 | 11 | 12 | 25 | 28 | 27 | 32 |
| **C 61 3_36.1** | 36.1 | — | — | — | — | 11 | 12 | 11 | 12 | 25 | 28 | 27 | 32 |
| **C 61 3_43.4** | 43.4 | — | — | — | — | 7.9 | 8.4 | 7.8 | 8.8 | 22 | 24 | 24 | 29 |
| **C 61 3_47.6** | 47.6 | — | — | — | — | 7.9 | 8.4 | 7.8 | 8.8 | 22 | 24 | 24 | 29 |
| **C 61 3_53.5** | 53.5 | — | — | — | — | 6.8 | 7.3 | 6.7 | 7.7 | 21 | 23 | 23 | 28 |
| **C 61 3_58.6** | 58.6 | — | — | — | — | 6.7 | 7.2 | 6.6 | 7.6 | 21 | 23 | 23 | 28 |
| **C 61 3_67.7** | 67.7 | — | — | 5.6 | 6.1 | 5.7 | 6.2 | 5.6 | 6.6 | 20 | 22 | 22 | 27 |
| **C 61 3_74.2** | 74.2 | — | — | 5.6 | 6.1 | 5.7 | 6.2 | 5.6 | 6.6 | 20 | 22 | 22 | 27 |
| **C 61 3_83.0** | 83.0 | — | — | 4.7 | 5.2 | 4.8 | 5.3 | 4.7 | 5.7 | 19 | 21 | 21 | 26 |
| **C 61 3_91.0** | 91.0 | — | — | 4.7 | 5.2 | 4.8 | 5.3 | 4.7 | 5.7 | 19 | 21 | 21 | 26 |
| **C 61 3_103.6** | 103.6 | — | — | 4.1 | 4.6 | 4.2 | 4.7 | 4.1 | 5.1 | 18 | 21 | 20 | 25 |
| **C 61 3_113.6** | 113.6 | — | — | 4.1 | 4.6 | 4.2 | 4.7 | 4.1 | 5.1 | 18 | 21 | 20 | 25 |
| **C 61 3_128.1** | 128.1 | — | — | 3.8 | 4.3 | 3.9 | 4.4 | 3.8 | 4.8 | 18 | 20 | 20 | 25 |
| **C 61 3_140.5** | 140.5 | — | — | 3.8 | 4.3 | 3.9 | 4.4 | 3.8 | 4.8 | 18 | 20 | 20 | 25 |
| **C 61 3_150.0** | 150.0 | — | — | 3.5 | 4.0 | 3.6 | 4.1 | 3.5 | 4.5 | — | — | — | — |
| **C 61 3_164.5** | 164.5 | — | — | 3.5 | 4.0 | 3.6 | 4.1 | 3.5 | 4.5 | — | — | — | — |
| **C 61 3_178.6** | 178.6 | — | — | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | — | — | — | — |
| **C 61 3_195.8** | 195.8 | — | — | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | — | — | — | — |
| **C 61 4_217.4** | 217.4 | 3.5 | 3.9 | 3.5 | 3.9 | 3.6 | 4.1 | 3.5 | 4.5 | — | — | — | — |
| **C 61 4_238.3** | 238.3 | 3.5 | 3.9 | 3.5 | 3.9 | 3.6 | 4.1 | 3.5 | 4.5 | — | — | — | — |
| **C 61 4_275.3** | 275.3 | 3.6 | 4.1 | 3.6 | 4.1 | 3.7 | 4.2 | 3.6 | 4.6 | — | — | — | — |
| **C 61 4_301.7** | 301.7 | 3.6 | 4.1 | 3.6 | 4.1 | 3.7 | 4.2 | 3.6 | 4.6 | — | — | — | — |
| **C 61 4_337.7** | 337.7 | 3.4 | 3.8 | 3.4 | 3.8 | 3.5 | 4.0 | 3.4 | 4.4 | — | — | — | — |
| **C 61 4_370.1** | 370.1 | 3.4 | 3.8 | 3.4 | 3.8 | 3.5 | 4.0 | 3.4 | 4.4 | — | — | — | — |
| **C 61 4_421.5** | 421.5 | 3.4 | 3.8 | 3.4 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **C 61 4_462.0** | 462.0 | 3.4 | 3.8 | 3.4 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **C 61 4_521.1** | 521.1 | 3.3 | 3.8 | 3.3 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **C 61 4_571.2** | 571.2 | 3.3 | 3.8 | 3.3 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **C 61 4_610.1** | 610.1 | 3.3 | 3.7 | 3.3 | 3.7 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **C 61 4_668.8** | 668.8 | 3.3 | 3.7 | 3.3 | 3.7 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **C 61 4_726.3** | 726.3 | 3.3 | 3.7 | 3.3 | 3.7 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **C 61 4_796.1** | 796.1 | 3.3 | 3.7 | 3.3 | 3.7 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |



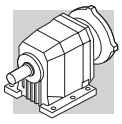
# C 70

| | i | J (•10-4) [kgm2] | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | |
| **C 70 2_4.6** | 4.6 | — | — | — | — | — | — | — | 136 | 133 | 143 | — | — | — | 99 |
| **C 70 2_5.9** | 5.9 | — | — | — | — | — | — | — | 119 | 117 | 126 | — | — | — | 32 |
| **C 70 2_6.3** | 6.3 | — | — | — | — | — | — | — | 129 | 127 | 136 | — | — | — | 93 |
| **C 70 2_7.5** | 7.5 | 26 | — | — | — | — | — | 45 | 105 | 102 | 112 | — | — | — | 68 |
| **C 70 2_8.0** | 8.0 | — | — | — | — | — | — | — | 115 | 113 | 122 | — | — | — | 78 |
| **C 70 2_9.5** | 9.5 | 19 | — | — | — | — | — | 38 | 97 | 95 | — | — | — | — | 60 |
| **C 70 2_10.2** | 10.2 | 24 | — | — | — | — | — | 43 | 102 | 100 | 109 | — | — | — | 65 |
| **C 70 2_11.2** | 11.2 | 15 | — | — | — | — | — | 34 | 94 | 91 | — | — | — | — | 56 |
| **C 70 2_13.0** | 13.0 | 17 | — | — | — | — | — | 36 | 95 | 93 | — | — | — | — | 58 |
| **C 70 2_14.1** | 14.1 | 9.9 | — | — | 12 | 12 | 14 | 29 | 88 | 86 | — | — | — | — | 51 |
| **C 70 2_15.3** | 15.3 | 14 | — | — | — | — | — | 33 | 93 | 90 | — | — | — | — | 55 |
| **C 70 2_16.7** | 16.7 | 6.9 | — | — | 9.5 | 9.4 | 11 | 26 | 85 | 83 | — | — | — | — | 48 |
| **C 70 2_19.3** | 19.3 | 9.1 | — | — | 12 | 12 | 13 | 28 | 87 | 85 | — | — | — | — | 50 |
| **C 70 2_22.9** | 22.9 | 6.4 | — | — | 9.0 | 8.9 | 10 | 25 | 85 | 83 | — | — | — | — | 48 |
| **C 70 2_27.7** | 27.7 | 5.2 | — | — | 8.0 | 7.9 | 9.2 | 24 | 84 | 81 | — | — | — | — | 46 |
| **C 70 2_34.7** | 34.7 | 3.2 | — | — | 6.1 | 6.0 | 7.3 | 22 | 82 | 79 | — | — | — | — | 44 |
| **C 70 3_41.3** | 41.3 | 4.4 | — | — | 7.2 | 7.2 | 8.5 | 23 | 83 | 80 | — | — | — | — | 46 |
| **C 70 3_44.7** | 44.7 | 4.2 | — | — | 7.0 | 7.0 | 8.2 | 23 | 83 | 80 | — | — | — | — | 45 |
| **C 70 3_52.2** | 52.2 | 3.0 | — | — | 5.8 | 5.8 | 7.0 | 22 | 81 | 79 | — | — | — | — | 44 |
| **C 70 3_56.5** | 56.5 | 2.8 | — | — | 5.7 | 5.6 | 6.9 | 22 | 81 | 79 | — | — | — | — | 44 |
| **C 70 3_65.9** | 65.9 | 2.0 | — | — | 4.9 | 4.8 | 6.1 | 21 | 80 | 78 | — | — | — | — | 43 |
| **C 70 3_71.3** | 71.3 | 2.0 | — | — | 4.8 | 4.8 | 6.0 | 21 | 80 | 78 | — | — | — | — | 43 |
| **C 70 3_81.4** | 81.4 | 1.5 | — | — | 4.3 | 4.3 | 5.6 | 20 | 80 | 78 | — | — | — | — | 43 |
| **C 70 3_88.2** | 88.2 | 1.4 | — | — | 4.3 | 4.2 | 5.5 | 20 | 80 | 76 | — | — | — | — | 43 |
| **C 70 3_103.8** | 103.8 | 1.0 | — | — | 3.8 | 3.8 | 5.1 | 20 | 79 | 77 | — | — | — | — | 42 |
| **C 70 3_112.4** | 112.4 | 0.90 | — | — | 3.8 | 3.7 | 5.0 | 20 | 79 | 77 | — | — | — | — | 42 |
| **C 70 3_126.8** | 126.8 | 0.70 | — | — | 3.5 | 3.5 | 4.8 | 20 | 79 | 77 | — | — | — | — | 42 |
| **C 70 3_137.4** | 137.4 | 0.70 | — | — | 3.5 | 3.5 | 4.7 | 20 | 79 | 77 | — | — | — | — | 42 |
| **C 70 3_150.3** | 150.3 | 0.50 | — | — | 3.4 | 3.4 | 9.6 | — | — | — | — | — | — | — | 42 |
| **C 70 3_162.8** | 162.8 | 0.50 | — | — | 3.4 | 3.4 | 4.6 | — | — | — | — | — | — | — | 42 |
| **C 70 3_179.2** | 179.2 | 0.40 | — | — | 3.2 | 3.3 | 4.5 | — | — | — | — | — | — | — | 42 |
| **C 70 3_194.1** | 194.1 | 0.40 | — | — | 3.2 | 3.2 | 4.5 | — | — | — | — | — | — | — | 42 |
| **C 70 3_220.9** | 220.9 | 0.30 | — | — | 3.1 | 3.1 | 4.3 | — | — | — | — | — | — | — | 41 |
| **C 70 3_239.3** | 239.3 | 0.30 | — | — | 3.1 | 3.1 | 4.3 | — | — | — | — | — | — | — | 41 |
| **C 70 4_251.3** | 251.3 | 0.70 | 2.2 | 2.2 | 3.5 | 3.5 | 4.8 | 20 | — | — | — | — | — | — | 11 |
| **C 70 4_272.2** | 272.2 | 0.70 | 2.2 | 2.1 | 3.5 | 3.5 | 4.8 | 20 | — | — | — | — | — | — | 11 |
| **C 70 4_317.9** | 317.9 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 19 | — | — | — | — | — | — | 11 |
| **C 70 4_344.3** | 344.3 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 19 | — | — | — | — | — | — | 11 |
| **C 70 4_409.4** | 409.4 | 0.40 | 1.8 | 1.8 | 3.2 | 3.2 | 4.5 | 19 | — | — | — | — | — | — | 7.9 |
| **C 70 4_443.5** | 443.5 | 0.40 | 1.8 | 1.8 | 3.2 | 3.2 | 4.5 | 19 | — | — | — | — | — | — | 7.9 |
| **C 70 4_512.0** | 512.0 | 0.30 | 1.7 | 1.7 | 3.1 | 3.1 | 4.4 | 19 | — | — | — | — | — | — | 7.8 |
| **C 70 4_554.7** | 554.7 | 0.30 | 1.7 | 1.7 | 3.1 | 3.1 | 4.4 | 19 | — | — | — | — | — | — | 7.8 |
| **C 70 4_606.8** | 606.8 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | — | — | — | — | — | — | — | 7.8 |
| **C 70 4_657.3** | 657.3 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | — | — | — | — | — | — | — | 7.7 |
| **C 70 4_736.0** | 736.0 | 0.20 | 1.6 | 1.6 | 3.0 | 2.9 | 4.3 | — | — | — | — | — | — | — | 7.7 |
| **C 70 4_797.3** | 797.3 | 0.20 | 1.6 | 1.6 | 3.0 | 2.9 | 4.3 | — | — | — | — | — | — | — | 7.7 |
| **C 70 4_922.6** | 922.6 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | — | — | — | — | — | — | — | 7.7 |
| **C 70 4_999.5** | 999.5 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | — | — | — | — | — | — | — | 7.6 |
| **C 70 4_1069** | 1069 | 0.80 | 1.6 | 1.5 | 2.9 | 2.9 | 4.2 | — | — | — | — | — | — | — | 7.6 |
| **C 70 4_1158** | 1158 | 0.80 | 1.6 | 1.5 | 2.9 | 2.9 | 4.2 | — | — | — | — | — | — | — | 7.6 |
| **C 70 4_1362** | 1362 | 0.60 | 1.5 | 1.5 | 2.9 | 2.9 | 4.1 | — | — | — | — | — | — | — | 7.6 |
| **C 70 4_1476** | 1476 | 0.60 | 1.5 | 1.5 | 2.9 | 2.9 | 4.1 | — | — | — | — | — | — | — | 7.6 |



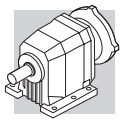
# C 80

| | i | J (•10-4) [kgm2] | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | |
| **C 80 2_5.6** | 5.6 | — | — | — | — | — | — | — | — | 197 | 211 | 489 | — | — | 164 |
| **C 80 2_6.1** | 6.1 | — | — | — | — | — | — | — | — | 193 | 210 | 485 | — | — | 159 |
| **C 80 2_7.0** | 7.0 | — | — | — | — | — | — | — | 160 | 161 | 174 | 452 | — | — | 127 |
| **C 80 2_7.6** | 7.6 | — | — | — | — | — | — | — | 158 | 158 | 172 | 449 | — | — | 124 |
| **C 80 2_8.9** | 8.9 | — | — | — | — | — | — | — | 137 | 135 | 146 | 429 | — | — | 101 |
| **C 80 2_9.6** | 9.6 | — | — | — | — | — | — | — | 136 | 133 | 144 | 427 | — | — | 99 |
| **C 80 2_11.1** | 11.1 | 38 | — | — | — | — | — | 56 | 116 | 113 | 124 | 408 | — | — | 79 |
| **C 80 2_12.0** | 12.0 | 36 | — | — | — | — | — | 55 | 115 | 112 | 123 | 407 | — | — | 78 |
| **C 80 2_13.8** | 13.8 | 28 | — | — | — | — | — | 47 | 106 | 104 | 135 | 398 | — | — | 69 |
| **C 80 2_14.9** | 14.9 | 27 | — | — | — | — | — | 46 | 106 | 103 | 134 | 397 | — | — | 69 |
| **C 80 2_16.7** | 16.7 | 21 | — | — | — | — | — | 40 | 100 | 97 | 127 | 391 | — | — | 63 |
| **C 80 2_18.1** | 18.1 | 21 | — | — | — | — | — | 40 | 99 | 97 | 127 | 390 | — | — | 62 |
| **C 80 2_20.5** | 20.5 | 14 | — | — | 17 | 17 | 18 | 33 | 93 | 90 | 120 | 383 | — | — | 55 |
| **C 80 2_22.2** | 22.2 | 14 | — | — | 16 | 16 | 18 | 33 | 92 | 90 | 120 | 383 | — | — | 55 |
| **C 80 2_24.0** | 24.0 | 13 | — | — | 16 | 16 | 17 | 32 | 91 | 89 | 119 | 382 | — | — | 54 |
| **C 80 2_25.9** | 25.9 | 13 | — | — | 16 | 15 | 17 | 32 | 91 | 89 | 118 | 382 | — | — | 54 |
| **C 80 2_31.3** | 31.3 | 8.7 | — | — | 12 | 11 | 13 | 28 | 87 | 85 | — | — | — | — | 50 |
| **C 80 2_39.1** | 39.1 | 5.2 | — | — | 8.0 | 8.0 | 9.2 | 24 | 84 | 81 | — | — | — | — | 46 |
| **C 80 3_43.5** | 43.5 | 9.6 | — | — | 12 | 12 | 14 | 29 | 88 | 86 | — | — | — | — | 51 |
| **C 80 3_47.4** | 47.4 | 9.1 | — | — | 12 | 12 | 13 | 28 | 87 | 85 | — | — | — | — | 50 |
| **C 80 3_57.3** | 57.3 | 5.7 | — | — | 8.5 | 8.5 | 9.7 | 25 | 84 | 82 | — | — | — | — | 47 |
| **C 80 3_62.5** | 62.5 | 5.4 | — | — | 8.2 | 8.2 | 9.5 | 24 | 84 | 82 | — | — | — | — | 47 |
| **C 80 3_70.5** | 70.5 | 4.3 | — | — | 7.1 | 7.0 | 8.3 | 23 | 83 | 80 | — | — | — | — | 45 |
| **C 80 3_76.9** | 76.9 | 4.1 | — | — | 7.0 | 6.9 | 8.2 | 23 | 82 | 80 | — | — | — | — | 45 |
| **C 80 3_89.3** | 89.3 | 3.0 | — | — | 5.9 | 5.8 | 7.1 | 22 | 81 | 79 | — | — | — | — | 44 |
| **C 80 3_97.4** | 97.4 | 2.9 | — | — | 5.8 | 5.7 | 7.0 | 22 | 81 | 79 | — | — | — | — | 44 |
| **C 80 3_109.5** | 109.5 | 2.0 | — | — | 4.8 | 4.8 | 6.1 | 21 | 80 | 78 | — | — | — | — | 43 |
| **C 80 3_119.5** | 119.5 | 1.9 | — | — | 4.8 | 4.7 | 6.0 | 21 | 80 | 79 | — | — | — | — | 43 |
| **C 80 3_136.7** | 136.7 | 1.4 | — | — | 4.3 | 4.2 | 5.5 | 20 | 80 | 78 | — | — | — | — | 43 |
| **C 80 3_149.1** | 149.1 | 1.4 | — | — | 4.2 | 4.2 | 5.5 | 20 | 80 | 77 | — | — | — | — | 43 |
| **C 80 3_169.0** | 169.0 | 1.0 | — | — | 3.9 | 3.8 | 5.1 | 20 | 80 | 77 | — | — | — | — | 42 |
| **C 80 3_184.4** | 184.4 | 1.0 | — | — | 3.9 | 3.8 | 5.1 | 20 | 80 | 77 | — | — | — | — | 42 |
| **C 80 3_197.9** | 197.9 | 0.80 | — | — | 3.7 | 3.6 | 4.9 | — | — | — | — | — | — | — | 42 |
| **C 80 3_215.8** | 215.8 | 0.80 | — | — | 3.6 | 3.6 | 4.9 | — | — | — | — | — | — | — | 42 |
| **C 80 4_261.9** | 261.9 | 1.7 | — | — | 4.6 | 4.5 | 5.8 | 21 | — | — | — | — | — | — | 12 |
| **C 80 4_285.7** | 285.7 | 1.7 | — | — | 4.6 | 4.5 | 5.8 | 21 | — | — | — | — | — | — | 12 |
| **C 80 4_334.3** | 334.3 | 1.2 | 2.7 | 2.7 | 4.0 | 4.0 | 5.3 | 20 | — | — | — | — | — | — | 11 |
| **C 80 4_364.7** | 364.7 | 1.2 | 2.7 | 2.6 | 4.0 | 4.0 | 5.3 | 20 | — | — | — | — | — | — | 11 |
| **C 80 4_417.5** | 417.5 | 0.90 | 2.4 | 2.3 | 3.7 | 3.7 | 5.0 | 20 | — | — | — | — | — | — | 11 |
| **C 80 4_455.4** | 455.4 | 0.90 | 2.3 | 2.3 | 3.7 | 3.7 | 5.5 | 20 | — | — | — | — | — | — | 11 |
| **C 80 4_529.3** | 529.3 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 19 | — | — | — | — | — | — | 11 |
| **C 80 4_577.4** | 577.4 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 19 | — | — | — | — | — | — | 11 |
| **C 80 4_664.3** | 664.3 | 0.40 | 2.0 | 1.9 | 3.3 | 3.2 | 4.5 | 19 | — | — | — | — | — | — | 11 |
| **C 80 4_724.7** | 724.7 | 0.40 | 2.0 | 1.9 | 3.3 | 3.2 | 4.5 | 19 | — | — | — | — | — | — | 11 |
| **C 80 4_783.4** | 783.4 | 0.30 | 2.0 | 1.8 | 3.2 | 3.1 | 4.4 | — | — | — | — | — | — | — | 9.4 |
| **C 80 4_854.6** | 854.6 | 0.30 | 2.0 | 1.8 | 3.2 | 3.1 | 4.4 | — | — | — | — | — | — | — | 9.4 |
| **C 80 4_945.7** | 945.7 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | — | — | — | — | — | — | — | 9.3 |
| **C 80 4_1032** | 1032 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | — | — | — | — | — | — | — | 9.3 |
| **C 80 4_1168** | 1168 | 0.20 | 1.6 | 1.6 | 3.0 | 3.0 | 4.2 | — | — | — | — | — | — | — | 9.2 |
| **C 80 4_1274** | 1274 | 0.20 | 1.6 | 1.6 | 3.0 | 3.0 | 4.2 | — | — | — | — | — | — | — | 9.2 |
| **C 80 4_1358** | 1358 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | — | — | — | — | — | — | — | 9.2 |
| **C 80 4_1481** | 1481 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | — | — | — | — | — | — | — | 9.2 |



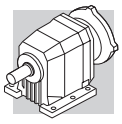
# C 90

| | i | J (•10-4) [kgm2] | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | |
| **C 90 2_5.2** | 5.2 | — | — | — | — | — | — | — | — | — | 332 | 610 | 637 | — | 619 |
| **C 90 2_5.6** | 5.6 | — | — | — | — | — | — | — | — | — | 321 | 599 | 626 | — | 609 |
| **C 90 2_6.8** | 6.8 | — | — | — | — | — | — | — | — | — | 252 | 530 | 557 | — | 540 |
| **C 90 2_7.3** | 7.3 | — | — | — | — | — | — | — | — | — | 246 | 524 | 551 | — | 533 |
| **C 90 2_8.3** | 8.3 | — | — | — | — | — | — | — | — | — | 212 | 490 | 517 | — | 499 |
| **C 90 2_9.0** | 9.0 | — | — | — | — | — | — | — | — | — | 208 | 485 | 513 | — | 495 |
| **C 90 2_10.4** | 10.4 | — | — | — | — | — | — | — | 167 | 164 | 175 | 458 | 484 | — | 461 |
| **C 90 2_11.2** | 11.2 | — | — | — | — | — | — | — | 164 | 162 | 173 | 455 | 482 | — | 458 |
| **C 90 2_12.8** | 12.8 | 65 | — | — | — | — | — | 84 | 143 | 141 | 152 | 436 | 462 | — | 439 |
| **C 90 2_13.9** | 13.9 | 63 | — | — | — | — | — | 82 | 141 | 139 | 200 | 434 | 460 | — | 437 |
| **C 90 2_16.0** | 16.0 | 47 | — | — | — | — | — | 66 | 125 | 123 | 154 | 417 | 443 | — | 420 |
| **C 90 2_17.3** | 17.3 | 46 | — | — | — | — | — | 65 | 124 | 122 | 153 | 416 | 442 | — | 419 |
| **C 90 2_18.7** | 18.7 | 42 | — | — | — | — | — | 61 | 121 | 119 | 148 | 412 | 433 | — | 415 |
| **C 90 2_20.2** | 20.2 | 41 | — | — | — | — | — | 61 | 199 | 118 | 147 | 411 | 438 | — | 414 |
| **C 90 2_22.9** | 22.9 | 28 | — | — | 30 | 30 | 31 | 47 | 106 | 104 | 133 | 397 | 423 | — | 400 |
| **C 90 2_24.8** | 24.8 | 27 | — | — | 29 | 29 | 31 | 46 | 105 | 103 | 133 | 396 | 422 | — | 399 |
| **C 90 2_27.2** | 27.2 | 22 | — | — | 25 | 25 | 26 | 41 | 101 | 99 | 128 | 391 | 418 | — | 394 |
| **C 90 2_29.4** | 29.4 | 22 | — | — | 25 | 24 | 26 | 41 | 100 | 98 | 127 | 391 | 417 | — | 394 |
| **C 90 2_35.1** | 35.1 | 14 | — | — | 17 | 17 | 18 | 33 | 93 | 90 | — | — | — | — | 386 |
| | | | | | | | | | | | | | | | |
| **C 90 3_39.4** | 39.4 | 27 | — | — | — | — | — | 46 | 105 | 103 | 112 | 398 | 424 | — | 412 |
| **C 90 3_43.0** | 43.0 | 26 | — | — | — | — | — | 45 | 104 | 102 | 111 | 396 | 422 | — | 410 |
| **C 90 3_50.3** | 50.3 | 19 | — | — | — | — | — | 38 | 98 | 95 | 126 | 389 | 415 | — | 403 |
| **C 90 3_54.9** | 54.9 | 19 | — | — | — | — | — | 37 | 97 | 95 | 125 | 389 | 415 | — | 401 |
| **C 90 3_59.2** | 59.2 | 16 | — | — | — | — | — | 35 | 94 | 92 | 122 | 385 | 411 | — | 398 |
| **C 90 3_64.6** | 64.6 | 15 | — | — | — | — | — | 34 | 94 | 91 | 121 | 384 | 410 | — | 398 |
| **C 90 3_74.4** | 74.4 | 10 | — | — | 13 | 13 | 14 | 29 | 88 | 86 | 116 | 379 | 405 | — | 393 |
| **C 90 3_81.2** | 81.2 | 9.8 | — | — | 12 | 12 | 13 | 29 | 88 | 86 | 115 | 379 | 405 | — | 392 |
| **C 90 3_88.2** | 88.2 | 7.1 | — | — | 9.7 | 9.6 | 11 | 26 | 85 | 83 | 113 | 376 | 402 | — | 389 |
| **C 90 3_96.2** | 96.2 | 6.9 | — | — | 9.4 | 9.4 | 11 | 26 | 85 | 83 | 112 | 376 | 402 | — | 389 |
| **C 90 3_107.0** | 107.0 | 5.7 | — | — | 8.4 | 8.4 | 9.6 | 25 | 84 | 82 | — | — | — | — | 388 |
| **C 90 3_116.7** | 116.7 | 5.5 | — | — | 8.3 | 8.2 | 9.5 | 24 | 84 | 82 | — | — | — | — | 388 |
| **C 90 3_134.1** | 134.1 | 3.5 | — | — | 6.4 | 6.3 | 7.6 | 22 | 82 | 80 | — | — | — | — | 386 |
| **C 90 3_146.3** | 146.3 | 3.4 | — | — | 6.3 | 6.2 | 7.5 | 22 | 82 | 80 | — | — | — | — | 386 |
| **C 90 3_157.8** | 157.8 | 2.5 | — | — | 5.4 | 5.3 | 6.6 | 21 | 81 | 79 | — | — | — | — | 385 |
| **C 90 3_172.1** | 172.1 | 2.4 | — | — | 5.3 | 5.2 | 6.5 | 21 | 81 | 79 | — | — | — | — | 385 |
| | | | | | | | | | | | | | | | |
| **C 90 4_212.4** | 212.4 | 4.2 | — | — | 7.0 | 7.0 | 8.3 | 23 | 83 | 80 | — | — | — | — | 14 |
| **C 90 4_231.7** | 231.7 | 4.1 | — | — | 7.0 | 6.9 | 8.2 | 23 | 82 | 80 | — | — | — | — | 14 |
| **C 90 4_268.5** | 268.5 | 2.8 | — | — | 5.7 | 5.6 | 6.9 | 22 | 81 | 79 | — | — | — | — | 13 |
| **C 90 4_292.9** | 292.9 | 2.8 | — | — | 5.7 | 2.6 | 6.9 | 22 | 81 | 79 | — | — | — | — | 13 |
| **C 90 4_339.0** | 339.0 | 2.0 | 3.4 | 3.4 | 4.8 | 4.8 | 6.0 | 21 | 80 | 78 | — | — | — | — | 12 |
| **C 90 4_369.8** | 369.8 | 2.0 | 3.4 | 3.4 | 4.8 | 4.8 | 6.0 | 21 | 80 | 78 | — | — | — | — | 12 |
| **C 90 4_419.0** | 419.0 | 1.4 | 2.9 | 2.9 | 4.3 | 4.2 | 5.5 | 20 | 80 | 78 | — | — | — | — | 12 |
| **C 90 4_457.1** | 457.1 | 1.4 | 2.9 | 2.9 | 4.3 | 4.2 | 5.5 | 20 | 80 | 78 | — | — | — | — | 12 |
| **C 90 4_534.2** | 534.2 | 0.90 | 2.4 | 2.4 | 3.8 | 3.7 | 5.0 | 20 | 79 | 77 | — | — | — | — | 11 |
| **C 90 4_582.8** | 582.8 | 0.90 | 2.4 | 2.4 | 3.8 | 3.7 | 5.0 | 20 | 79 | 77 | — | — | — | — | 11 |
| **C 90 4_652.8** | 652.8 | 0.70 | 2.1 | 2.1 | 3.5 | 3.5 | 4.7 | 20 | 79 | 77 | — | — | — | — | 11 |
| **C 90 4_712.2** | 712.2 | 0.70 | 2.1 | 2.1 | 3.5 | 3.5 | 4.7 | 20 | 79 | 77 | — | — | — | — | 11 |
| **C 90 4_773.6** | 773.6 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | — | — | — | — | — | — | — | 9.7 |
| **C 90 4_844.0** | 844.0 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | — | — | — | — | — | — | — | 9.6 |
| **C 90 4_922.3** | 922.3 | 0.40 | 1.8 | 1.8 | 3.2 | 3.2 | 4.5 | — | — | — | — | — | — | — | 9.5 |
| **C 90 4_1006** | 1006 | 0.40 | 1.8 | 1.8 | 3.2 | 3.2 | 4.5 | — | — | — | — | — | — | — | 9.4 |
| **C 90 4_1137** | 1137 | 0.30 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | — | — | — | — | — | — | — | 9.3 |
| **C 90 4_1240** | 1240 | 0.30 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | — | — | — | — | — | — | — | 9.3 |



# C 100

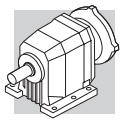
| | i | J (•10-4) [kgm2] | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | |
| **C 100 2_4.9** | 4.9 | — | — | — | — | — | — | — | — | — | 674 | 960 | 987 | 970 | 972 |
| **C 100 2_5.3** | 5.3 | — | — | — | — | — | — | — | — | — | 647 | 933 | 960 | 943 | 944 |
| **C 100 2_6.5** | 6.5 | — | — | — | — | — | — | — | — | — | 481 | 767 | 794 | 777 | 778 |
| **C 100 2_7.1** | 7.1 | — | — | — | — | — | — | — | — | — | 465 | 751 | 778 | 761 | 763 |
| **C 100 2_8.4** | 8.4 | — | — | — | — | — | — | — | — | — | 365 | 651 | 678 | 660 | 662 |
| **C 100 2_9.0** | 9.0 | — | — | — | — | — | — | — | — | — | 355 | 641 | 668 | 651 | 653 |
| **C 100 2_10.1** | 10.1 | — | — | — | — | — | — | — | — | — | 291 | 577 | 604 | 587 | 589 |
| **C 100 2_10.9** | 10.9 | — | — | — | — | — | — | — | — | — | 285 | 570 | 597 | 580 | 582 |
| **C 100 2_12.5** | 12.5 | — | — | — | — | — | — | — | 224 | 222 | 233 | 521 | 550 | 539 | 529 |
| **C 100 2_13.5** | 13.5 | — | — | — | — | — | — | — | 220 | 218 | 228 | 517 | 545 | 532 | 524 |
| **C 100 2_15.2** | 15.2 | 122 | — | — | — | — | — | 82 | 141 | 200 | 199 | 472 | 499 | 528 | 514 |
| **C 100 2_16.5** | 16.5 | 119 | — | — | — | — | — | 138 | 197 | 195 | 206 | 496 | 525 | 511 | 504 |
| **C 100 2_18.7** | 18.7 | 97 | — | — | — | — | — | 116 | 175 | 173 | 203 | 474 | 501 | 488 | 480 |
| **C 100 2_20.2** | 20.2 | 95 | — | — | — | — | — | 114 | 173 | 171 | 201 | 471 | 499 | 486 | 478 |
| **C 100 2_22.2** | 22.2 | 73 | — | — | — | — | — | 92 | 102 | 150 | 179 | 448 | 477 | 463 | 456 |
| **C 100 2_24.1** | 24.1 | 72 | — | — | — | — | — | 91 | 150 | 148 | 178 | 447 | 476 | 462 | 455 |
| **C 100 2_29.6** | 29.6 | 50 | — | — | — | — | 54 | 69 | 129 | 127 | 156 | 425 | 454 | 440 | 433 |
| | | | | | | | | | | | | | | | |
| **C 100 3_34.3** | 34.3 | — | — | — | — | — | — | — | 148 | 146 | 155 | 439 | 465 | 471 | 461 |
| **C 100 3_36.9** | 36.9 | — | — | — | — | — | — | — | 145 | 143 | 152 | 436 | 462 | 468 | 458 |
| **C 100 3_42.9** | 42.9 | 44 | — | — | — | — | — | 63 | 123 | 120 | 130 | 415 | 441 | 451 | 437 |
| **C 100 3_46.2** | 46.2 | 43 | — | — | — | — | — | 61 | 121 | 118 | 128 | 413 | 439 | 452 | 435 |
| **C 100 3_53.3** | 53.3 | 33 | — | — | — | — | — | 51 | 111 | 109 | 139 | 403 | 429 | 432 | 424 |
| **C 100 3_57.4** | 57.4 | 31 | — | — | — | — | — | 50 | 110 | 107 | 138 | 401 | 427 | 431 | 423 |
| **C 1003_64.5** | 64.5 | 24 | — | — | — | — | — | 43 | 103 | 101 | 130 | 394 | 420 | 422 | 415 |
| **C 100 3_69.4** | 69.4 | 24 | — | — | — | — | — | 43 | 102 | 100 | 129 | 393 | 419 | 421 | 414 |
| **C 100 3_79.4** | 79.4 | 16 | — | — | — | — | 20 | 35 | 95 | 92 | 122 | 385 | 411 | 413 | 407 |
| **C 100 3_85.6** | 85.6 | 16 | — | — | — | — | 19 | 35 | 94 | 92 | 121 | 385 | 411 | 413 | 406 |
| **C 100 3_92.7** | 92.7 | 15 | — | — | — | — | 18 | 34 | 93 | 91 | 120 | 384 | 410 | 412 | 405 |
| **C 100 3_99.8** | 99.8 | 14 | — | — | — | — | 18 | 33 | 93 | 90 | 119 | 383 | 409 | 411 | 404 |
| **C 100 3_111.9** | 111.9 | 9.9 | — | — | — | — | 14 | 29 | 88 | 86 | — | — | — | — | 392 |
| **C 100 3_120.5** | 120.5 | 9.6 | — | — | — | — | 14 | 29 | 88 | 86 | — | — | — | — | 392 |
| **C 100 3_139.7** | 139.7 | 6.0 | — | — | — | — | 10 | 25 | 84 | 82 | — | — | — | — | 388 |
| **C 100 3_150.4** | 150.4 | 5.8 | — | — | — | — | 9.8 | 25 | 84 | 82 | — | — | — | — | 388 |
| | | | | | | | | | | | | | | | |
| **C 100 4_162.1** | 162.1 | 13 | — | — | 16 | 16 | 17 | 32 | 100 | 89 | — | — | — | — | 23 |
| **C 100 4_185.4** | 185.4 | 9.6 | — | — | 13 | 12 | 14 | 29 | 88 | 86 | — | — | — | — | 20 |
| **C 100 4_199.6** | 199.6 | 8.5 | — | — | 12 | 12 | 14 | 28 | 88 | 86 | — | — | — | — | 20 |
| **C 100 4_244.2** | 244.2 | 5.7 | — | — | 8.5 | 8.5 | 9.8 | 25 | 84 | 82 | — | — | — | — | 16 |
| **C 100 4_263.0** | 263.0 | 5.6 | — | — | 8.5 | 8.4 | 9.7 | 25 | 84 | 82 | — | — | — | — | 16 |
| **C 100 4_300.5** | 300.5 | 4.2 | — | — | 7.1 | 7.1 | 8.4 | 23 | 83 | 80 | — | — | — | — | 15 |
| **C 100 4_323.6** | 323.6 | 4.2 | — | — | 7.1 | 7.0 | 8.3 | 23 | 83 | 80 | — | — | — | — | 14 |
| **C 100 4_380.5** | 380.5 | 3.1 | 4.5 | 4.5 | 5.9 | 5.5 | 7.1 | 22 | 81 | 79 | — | — | — | — | 13 |
| **C 100 4_409.8** | 409.8 | 3.0 | 4.5 | 4.5 | 5.9 | 5.5 | 7.1 | 22 | 81 | 79 | — | — | — | — | 13 |
| **C 100 4_466.7** | 466.7 | 2.0 | 3.5 | 3.5 | 4.9 | 4.8 | 6.1 | 20 | 80 | 78 | — | — | — | — | 12 |
| **C 100 4_502.6** | 502.6 | 2.0 | 3.5 | 3.4 | 4.8 | 4.8 | 6.1 | 20 | 80 | 78 | — | — | — | — | 12 |
| **C 100 4_582.6** | 582.6 | 1.4 | 2.9 | 2.9 | 4.3 | 4.2 | 5.5 | 20 | 80 | 77 | — | — | — | — | 12 |
| **C 100 4_627.4** | 627.4 | 1.4 | 2.9 | 2.9 | 4.3 | 4.2 | 5.5 | 20 | 80 | 77 | — | — | — | — | 12 |
| **C 100 4_720.3** | 720.3 | 1.0 | 2.5 | 2.5 | 3.9 | 3.4 | 5.1 | 20 | 79 | 77 | — | — | — | — | 11 |
| **C 100 4_775.7** | 775.7 | 1.0 | 2.5 | 2.5 | 3.9 | 3.4 | 5.1 | 20 | 79 | 77 | — | — | — | — | 11 |
| **C 100 4_843.3** | 843.3 | 0.80 | 2.3 | 2.3 | 3.7 | 3.6 | 4.9 | — | — | — | — | — | — | — | 9.9 |
| **C 100 4_908.2** | 908.2 | 0.80 | 2.3 | 2.3 | 3.7 | 3.6 | 4.9 | — | — | — | — | — | — | — | 9.9 |
| **C 100 4_1004** | 1004 | 0.60 | 2.1 | 2.0 | 3.4 | 3.4 | 4.7 | — | — | — | — | — | — | — | 9.7 |
| **C 100 4_1081** | 1081 | 0.60 | 2.1 | 2.0 | 3.4 | 3.4 | 4.7 | — | — | — | — | — | — | — | 9.7 |



## 29 RELACIONES EXACTAS

| $i_N$ | C12 | C22 | C32 | C36 | C41 | C51 | C61 | C70 | C80 | C90 | C100 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **2.5** | | | | | | 2.62895 | | | | | |
| **2.8** | 2.76731 | 2.72212 | 2.87879 | 2.68687 | 2.65909 | | 2.82011 | | | | |
| **3.2** | 3.20743 | 3.32609 | | 3.18182 | | 3.30758 | | | | | |
| **3.5** | 3.65132 | 3.70709 | 3.40909 | 3.48617 | 3.61111 | | 3.69925 | | | | |
| **4.0** | | | 3.73518 | 4.20000 | | | | | | | |
| **4.5** | 4.31203 | 4.25831 | 4.50000 | 4.62201 | 4.66304 | 4.45370 | 4.55556 | 4.57143 | | | |
| **5.0** | 4.86842 | 4.76902 | 4.95215 | 5.27807 | | | | | | 5.17231 | 4.92308 |
| **5.6** | 5.59868 | 5.59006 | 5.65508 | 5.84659 | 5.95263 | 5.63043 | | 5.85034 | 5.64103 | 5.60333 | 5.33333 |
| **6.3** | 6.23158 | 6.08696 | 6.26420 | | 6.36364 | | 6.00176<br>6.74074 | 6.25455 | 6.11111 | 6.75824 | 6.52308 |
| **7.1** | | 7.08300 | 7.16498 | 6.78114 | 7.06612 | 6.98684 | 7.48485 | 7.46032 | 7.04000 | 7.32143 | 7.06667 |
| **8.0** | 7.62201 | | 8.48485 | 8.03030 | | 7.75120 | | 8.00433 | 7.62667 | 8.32615 | 8.35165 |
| **9.0** | 8.83422 | 8.65455 | 9.29644 | 8.79842 | 8.64198 | 8.79040 | 8.84211 | 9.52381 | 8.86447 | 9.02000 | 9.04762 |
| **10.0** | 10.05682 | 9.64593 | | 10.60000 | 9.59596 | 9.75207 | 9.81818 | 10.20707 | 9.60317 | 10.36264 | 10.09231 |
| **11.2** | | 11.08021 | 11.20000 | 11.66507 | 11.15942 | 11.83642 | 10.88889 | 11.20879 | 11.09402 | 11.22619 | 10.93333 |
| **12.5** | 11.87662 | 12.40909 | 12.32536 | 13.32086 | 12.39130 | 13.13131 | 12.09091 | 13.03030 | 12.01852 | 12.79060 | 12.45421 |
| **14.0** | 13.40909 | 14.54545 | 14.07487 | 14.75568 | 14.24561 | 14.96377 | 14.34568 | 14.09524 | 13.76410<br>14.91111 | 13.85648 | 13.49206 |
| **16.0** | 15.42045 | 15.83838 | 15.59091 | | 15.81818 | 16.60079 | 15.92929 | 15.33566<br>16.70330 | 16.66272 | 15.97949 | 15.21368<br>16.48148 |
| **18.0** | 17.16364<br>18.38961 | 18.13636 | 18.18182 | 17.20779 | 17.79167 | 18.89035 | 17.65217 | | 18.05128 | 17.31111<br>18.68047 | 18.66667 |
| **20.0** | 20.62937 | 20.02424 | 20.08081 | 19.00505 | 19.75568 | 20.95694<br>21.81606 | 19.60079 | 19.28485 | 20.53333 | 20.23718 | 20.22222 |
| **22.4** | 23.24242 | 21.45455 | 22.90909 | 22.13187 | 22.55556 | 23.35417<br>23.89242 | 22.35088 | 22.85315 | 22.24444 | 22.91795 | 22.24852 |
| **25.0** | 25.35537 | 24.27972 | 25.11515 | 26.20879 | 25.04545 | 25.90909 | 24.81818<br>26.77895 | | 23.95266<br>25.94872 | 24.82778 | 24.10256 |
| **28.0** | 29.50000 | 27.15152<br>29.61983 | 26.90909 | 28.71572 | 28.31111<br>28.49003 | 27.44759<br>29.77315 | 27.41667<br>29.35385 | 27.71901 | | 27.17160<br>29.43590 | 29.55556 |
| **31.5** | 32.77778 | 33.09091 | 29.76224<br>33.09091 | | 31.22945<br>31.43636 | 30.05994<br>33.03030 | 30.44318<br>32.97778 | | 31.33333 | | |
| **35.5** | 37.00909 | 36.76768 | 36.09917 | 34.59560 | 33.38462<br>36.78930 | 36.38333<br>36.95862 | 34.22222<br>36.14872 | 34.74747 | | 35.09848 | 34.29705<br>36.93529 |
| **40.0** | 42.31313 | | 40.72727 | 38.07172 | 37.06993<br>40.32673 | 40.36364<br>40.47619 | 38.00000 | 41.26263 | 39.11111 | 39.40239 | 42.92328 |
| **45.0** | | 43.27273 | 45.25253 | 43.47576 | 44.75207<br>46.96356 | 43.11538<br>46.72360 | 43.44691 | 44.70118 | 43.49074 | 42.98443 | 46.22507 |
| **50.0** | 47.60227 | 48.64646 | 52.43636 | 48.15865 | 51.47929 | 47.83217<br>51.40152 | 47.62450 | 52.16479 | 47.44444 | 50.30093 | 53.25397 |
| **56.0** | 55.16883 | 54.72727 | 59.39394 | 56.16170 | 58.65385 | 57.02479<br>58.98416 | 53.46087<br>58.60134 | 56.51186 | 57.29733 | 54.87374<br>59.20032 | 57.35043 |
| **63.0** | 66.15152 | 60.00000<br>63.27273 | 66.81818 | 62.02747 | 64.29364 | 64.59803 | | 65.85315 | 62.50617 | 64.58217 | 64.46886 |
| **71.0** | | 65.33333<br>74.81250 | 74.74747 | 70.76374 | 74.35897 | 72.92219 | 67.69123<br>74.20000 | 71.34091 | 70.50362 | 74.44537 | 69.42801 |
| **80.0** | | 82.60000 | 82.55443 | 77.57802<br>83.11931 | 81.50888 | 79.86264 | 83.03333 | 81.41434 | 76.91304 | 81.21313 | 79.44444 |
| **90.0** | | 88.50000 | 94.18182 | 91.93238 | 93.33333 | 92.96514 | 91.01731 | 88.19886 | 89.27047 | 88.22009 | 85.55556<br>92.67399 |
| **100.0** | | 100.15385 | 103.25118 | 102.21429 | 102.30769 | 101.81319 | 103.64444 | 103.79138 | 97.38596 | 96.24009 | 99.80276 |

**2x** **3x**



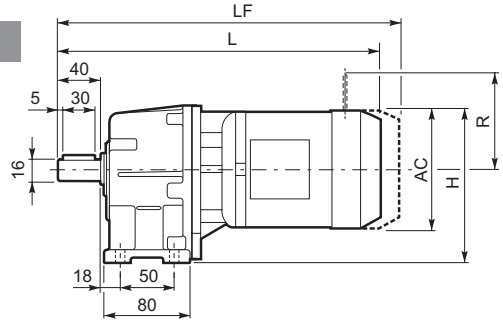
| $i_N$ | C12 | C22 | C32 | C36 | C41 | C51 | C61 | C70 | C80 | C90 | C100 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **112.2** | | 112.00000 | 110.62626 | 111.50649 | 110.05917 | 113.60510 | 113.61026 | 112.44066 | 109.50347 | 107.00379<br>116.73140 | 111.90476 |
| **125.5** | | 122.18182 | 122.35587 | 125.80220 | 120.64178 | 124.41758 | 128.14222 | 126.83497 | 119.45833 | | 120.51282 |
| **140.0** | | 136.50000 | 136.04040<br>148.40771 | 139.78022 | 132.86713<br>145.64282 | 134.62559<br>147.43872 | 140.46359 | 137.40455 | 136.68519<br>149.11111 | 134.13580<br>146.32997 | 139.68254 |
| **160.0** | | 151.66667 | 167.43434 | 161.97033 | 164.10256 | 160.49861 | 150.03077<br>164.45680 | 150.30339<br>162.82867 | 168.99259 | 157.76199 | 150.42735<br>162.10526 |
| **180.0** | | 178.50000 | 186.03816 | 183.46154 | 179.88166 | 175.77423 | 178.59394 | 179.18945 | 184.35556 | 172.10399 | 185.37037 |
| **200.0** | | 200.66667 | | 206.39423 | 190.76923<br>209.11243 | 197.87075 | 195.76643 | 194.12190 | 197.85897 | 212.38169 | 199.62963 |
| **225.0** | | 225.75000 | 215.57172 | 230.88697 | | 216.70330 | 217.40754 | 220.91375 | 215.84615 | 231.68911 | |
| **250.0** | | 261.00000 | 244.17508 | 255.00183 | 239.94755 | 240.85197<br>263.77530 | 238.31211 | 239.32323<br>251.28438 | 261.85613 | 268.49591 | 244.21811<br>263.00412 |
| **280.0** | | | 274.69697 | 290.91758 | 263.01943 | | 275.27766 | 272.22475 | 285.66123 | 292.90463 | 300.50725 |
| **315.0** | | | | 318.93187 | 304.19580<br>333.44540 | 297.76563<br>326.10577 | 301.74667 | 317.86109 | 334.27376 | 338.95085 | 323.62319 |
| **355.0** | | | | 341.71272 | | | 337.66889<br>370.13705 | 344.34951 | 364.66228 | 369.76457 | 380.49708 |
| **400.0** | | | | 377.94421<br>420.21429 | 381.81818<br>418.53147 | 379.60764<br>415.73718 | 421.48741 | 409.39931 | 417.48199 | 419.04541 | 409.76608 |
| **450.0** | | | | 458.41558 | 450.24207 | 463.88750 | 462.01504 | 443.51592 | 455.43490 | 457.14044 | 466.73611 |
| **500.0** | | | | 517.18681 | 493.53457 | 508.03846 | 521.11170 | 512.03745 | 529.26678 | | 502.63889 |
| **560.0** | | | | 574.65201 | 543.54736 | 549.72115 | 571.21860 | 554.70724 | 577.38194 | 534.22163<br>582.78723 | 582.59259 |
| **630.0** | | | | 665.87802 | 595.81153 | 602.04142<br>655.36932 | 610.12513<br>668.79101 | 606.78035<br>657.34538 | 664.32106 | 652.82863 | 627.40741 |
| **710.0** | | | | 754.23077 | 671.32867<br>735.87951 | 717.74476 | 726.28202 | 735.97521 | 724.71389 | 712.17669 | 720.29630 |
| **800.0** | | | | 848.50962 | 780.41958 | 807.97222 | 796.11683 | 797.30647 | 783.37099 | 773.62229<br>843.95159 | 775.70370<br>843.33333 |
| **900.0** | | | | | 855.45992 | 884.87179 | | 922.59000 | 854.58654<br>945.71181 | 922.30089 | 908.20513 |
| **1000.0** | | | | | | | | 999.47250<br>1069.05117 | 1031.68561 | 1006.14643 | 1003.88889 |
| **1125.0** | | | | | | | | 1158.13876 | 1168.03704 | 1137.05888 | 1081.11111 |
| **1250.0** | | | | | | | | | 1274.22222 | 1240.42787 | |
| **1400.0** | | | | | | | | 1362.26180<br>1475.78362 | 1357.84306<br>1481.28333 | | |

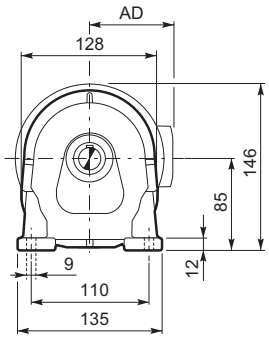
3x 4x

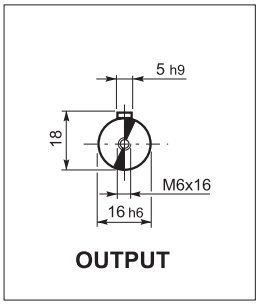
## 30 DIMENSIONES

# C 05...M

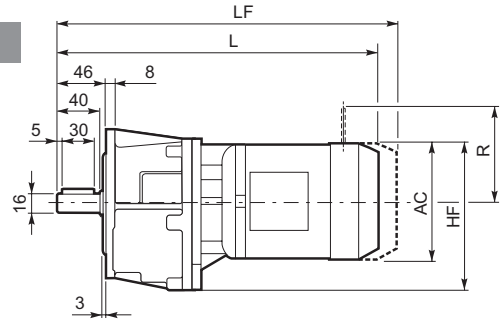
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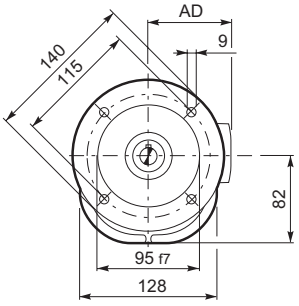


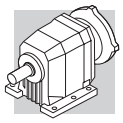




**F**



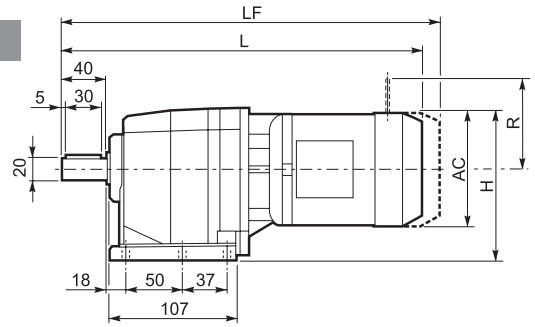



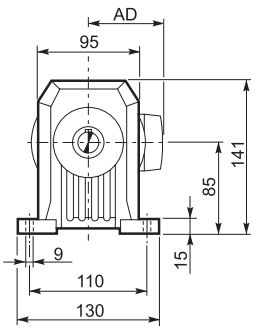

| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **C 05 2** | **S0** | **M0** | 110 | 140 | 137 | 287 | 91 | 7 | — | — | — | — | — | — |
| **C 05 2** | **S05** | **M05** | 121 | 145.5 | 142.5 | 332 | 95 | 8 | 398 | 10 | 96 | 122 | 116 | 95 |
| **C 05 2** | **S1** | **M1** | 138 | 154 | 151 | 360.5 | 108 | 11 | 423 | 13 | 103 | 135 | 124 | 108 |

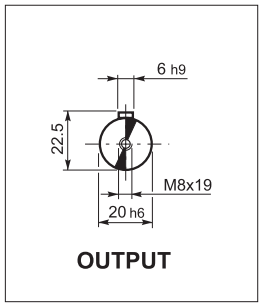


# C 12...M/ME

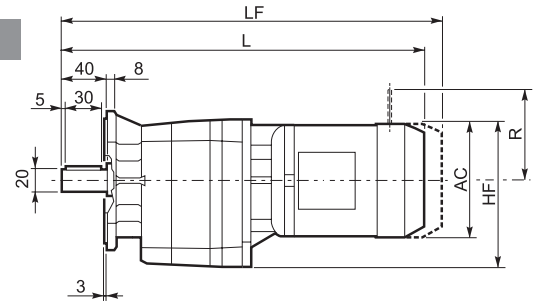
**P**

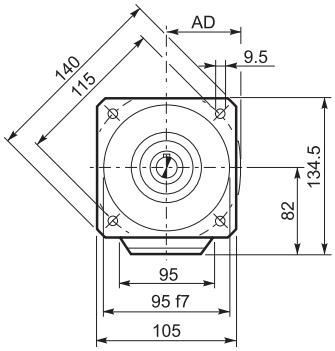


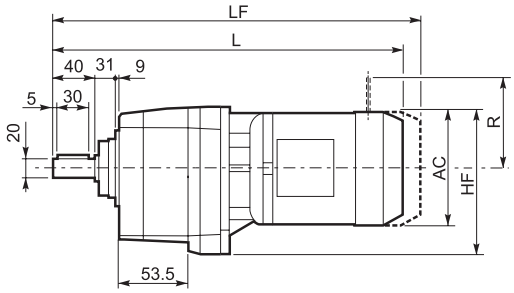



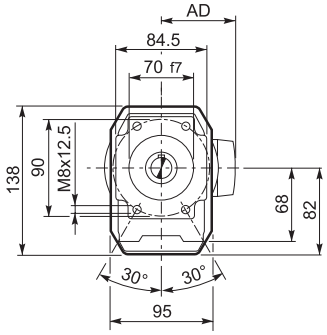

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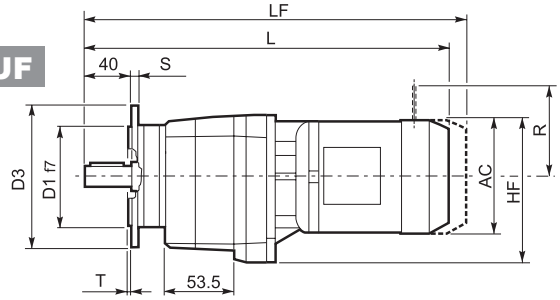



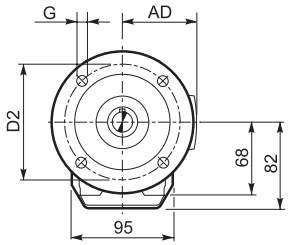

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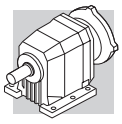

**UF**



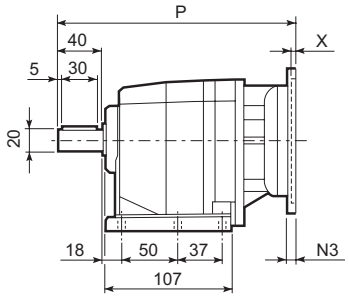

| C 12 2_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 80 | 100 | 120 | 7 | 3 | 8 |
| FB | 95 | 115 | 140 | 9 | 3 | 10 |
| FC | 110 | 130 | 160 | 9 | 3 | 10 |

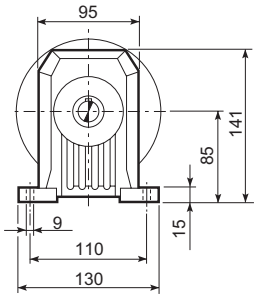
| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | AD | Kg | LF | Kg | R | AD | R | AD |
| C 12 2 | S05 | M05 | 121 | 145.5 | 142.5 | 370.5 | 95 | 9 | 436.5 | 10 | 96 | 122 | 116 | 95 |
| C 12 2 | S1 | M1 | 138 | 154 | 151 | 404.5 | 108 | 11 | 460.5 | 13 | 103 | 135 | 124 | 108 |
| C 12 2 | S2 | M2S | 156 | 163 | 160 | 428.5 | 119 | 15 | 498.5 | 18 | 129 | 146 | 134 | 119 |
| C 12 2 | S2 | ME2S | 156 | 163 | 160 | 428.5 | 119 | 15 | — | — | — | — | — | — |
| C 12 2 | S3 | ME3S | 195 | 182.5 | 179.5 | 471.5 | 142 | 21.5 | — | — | — | — | — | — |
| C 12 2 | S3 | ME3L | 195 | 182.5 | 179.5 | 503.5 | 142 | 22 | — | — | — | — | — | — |

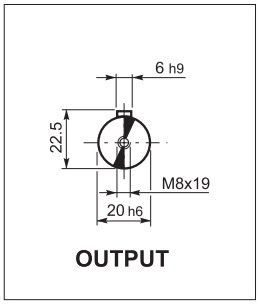


# C 12...P (IEC)

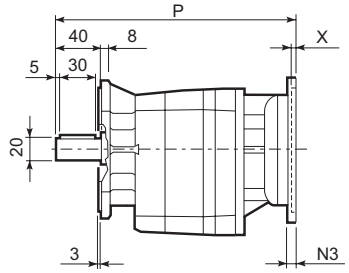
**P**

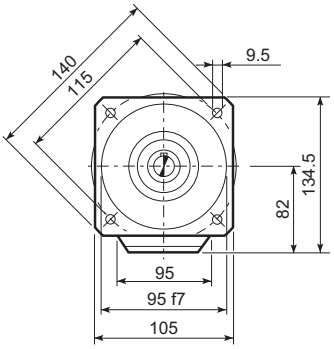


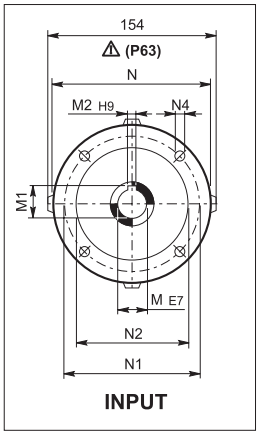



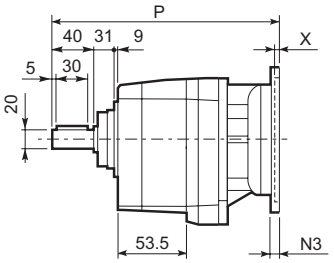

**F**

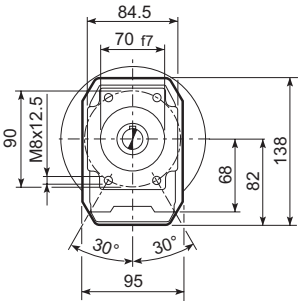


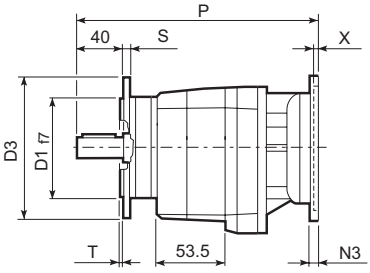



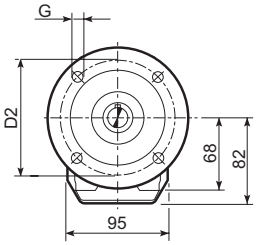

**U**



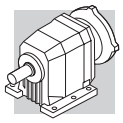

**UF**



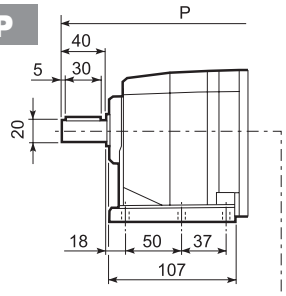

| C 12 2_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 80 | 100 | 120 | 7 | 3 | 8 |
| FB | 95 | 115 | 140 | 9 | 3 | 10 |
| FC | 110 | 130 | 160 | 9 | 3 | 10 |

| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 12 2** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 244.5 | 6 |
| **C 12 2** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 244.5 | 6 |
| **C 12 2** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 264 | 7 |
| **C 12 2** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 264 | 7 |
| **C 12 2** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 274 | 11 |
| **C 12 2** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 274 | 11 |

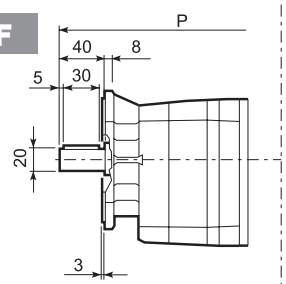


# C 12...SK / SC

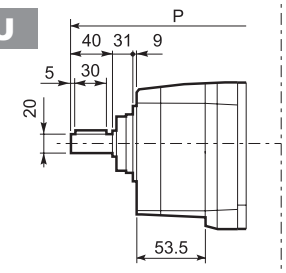
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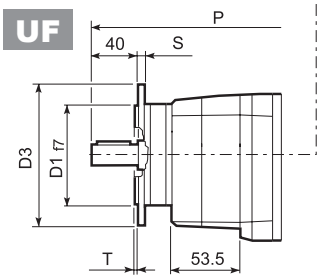

**F**

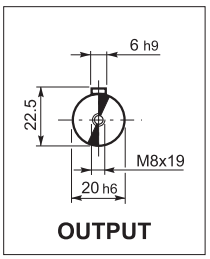


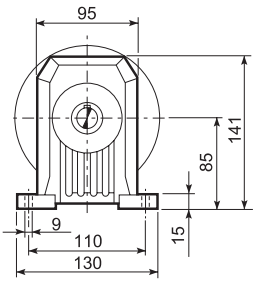

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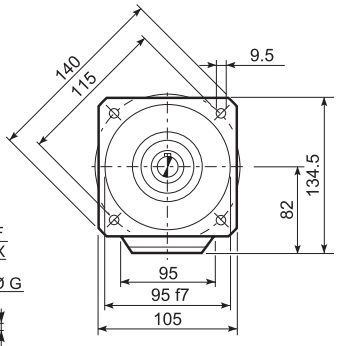


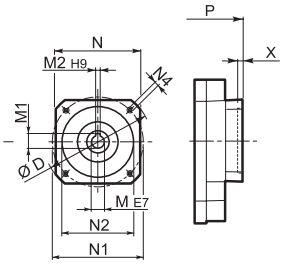

**UF**



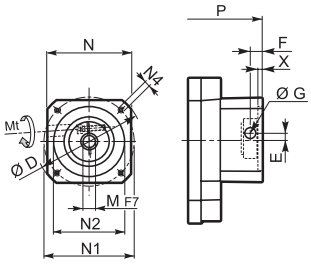



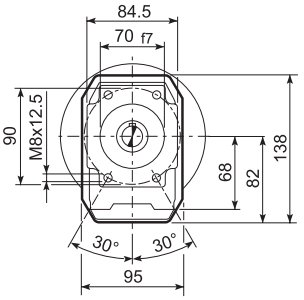



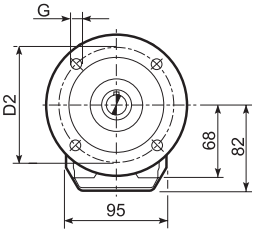




**SK...**




**SC...**



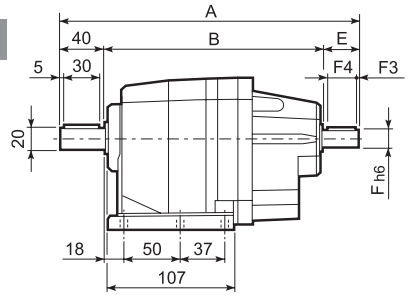

| C 12 2_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 80 | 100 | 120 | 7 | 3 | 8 |
| FB | 95 | 115 | 140 | 9 | 3 | 10 |
| FC | 110 | 130 | 160 | 9 | 3 | 10 |

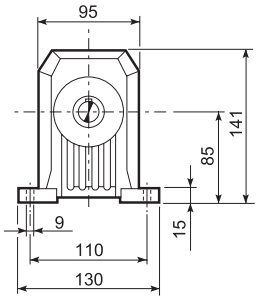
| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 12 2 | SK60A | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | 216 | 6 |
| C 12 2 | SK60B | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | 223 | 5 |
| C 12 2 | SK80A | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | 223 | 5 |
| C 12 2 | SK80C | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 264 | 7 |
| C 12 2 | SK95A | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 264 | 6 |
| C 12 2 | SK95B | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 264 | 7 |
| C 12 2 | SK95C | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 264 | 7 |
| C 12 2 | SK110A | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 264 | 7 |
| C 12 2 | SK110B | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 264 | 7 |

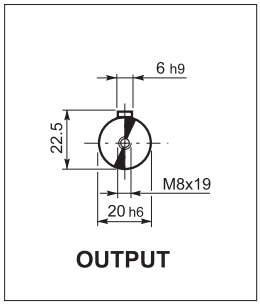
| | | | Mt | D | E | F | G | M | N | N1 | N2 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 12 2 | SC60A | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | 243 | 7 |
| C 12 2 | SC60B | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | 243 | 6 |
| C 12 2 | SC80A | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | 243 | 6 |
| C 12 2 | SC80C | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 287.5 | 8 |
| C 12 2 | SC95A | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 287.5 | 7 |
| C 12 2 | SC95B | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 287.5 | 8 |
| C 12 2 | SC95C | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 287.5 | 8 |
| C 12 2 | SC110A | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 287.5 | 10 |
| C 12 2 | SC110B | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 287.5 | 10 |

# C 12...HS

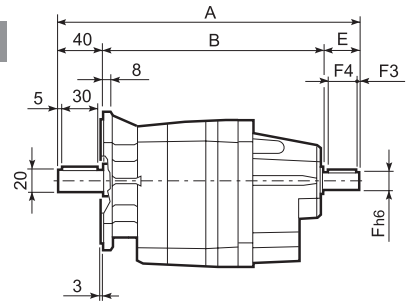
**P**

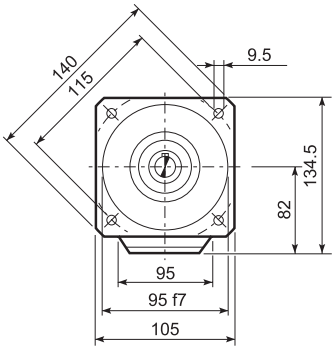


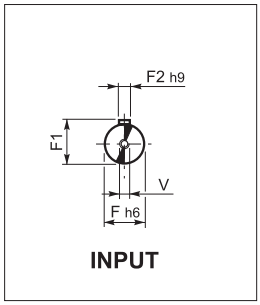



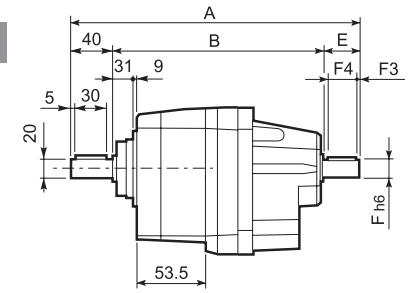

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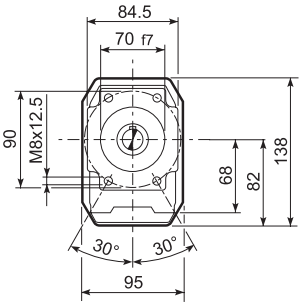


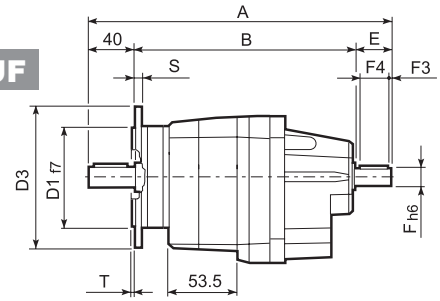



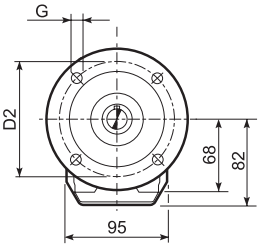

**U**




**UF**



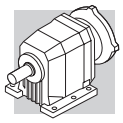




| C 12 2_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 80 | 100 | 120 | 7 | 3 | 8 |
| FB | 95 | 115 | 140 | 9 | 3 | 10 |
| FC | 110 | 130 | 160 | 9 | 3 | 10 |

| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C 12 2 | HS | 251.5 | 171.5 | 40 | 16 | 18 | 5 | 2.5 | 35 | M6x16 | 7.8 |

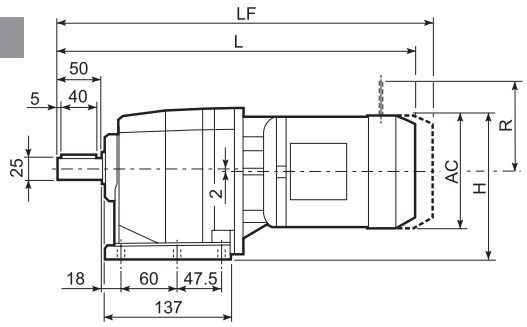


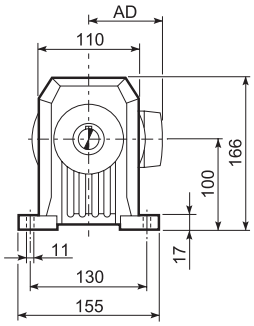
Bonfiglioli Riduttori

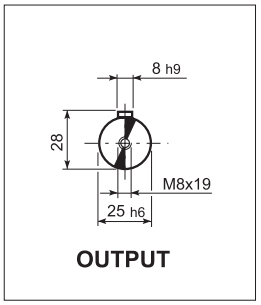


# C 22...M/ME

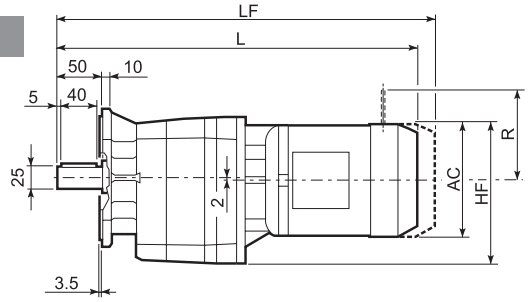
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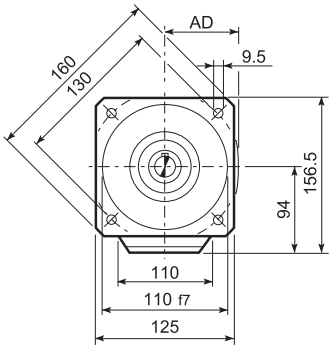


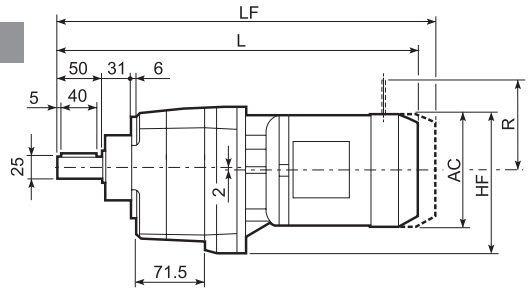



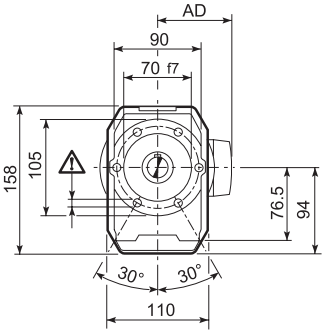

**F**

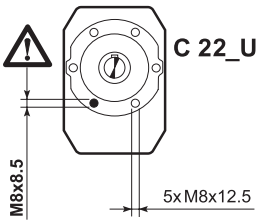


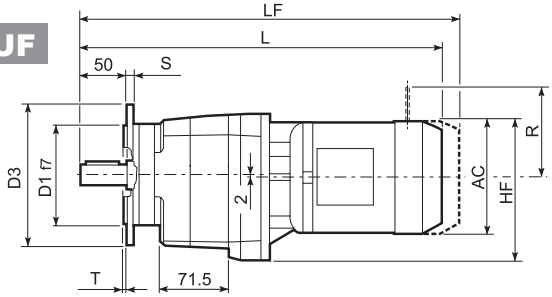

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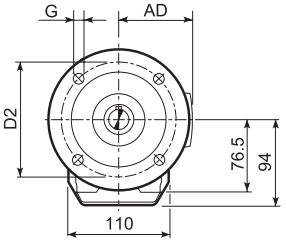


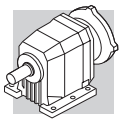

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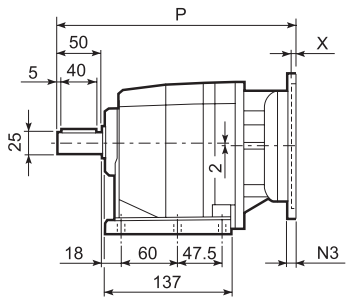

| C 22_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 95 | 115 | 140 | 9 | 3 | 10 |
| FB | 110 | 130 | 160 | 9 | 3 | 10 |
| FC | 130 | 165 | 200 | 11 | 3.5 | 11 |

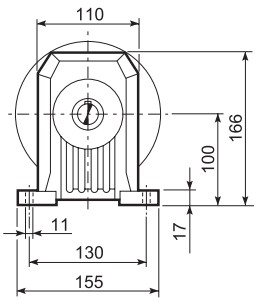
| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | AD | Kg | LF | Kg | R | AD | R | AD |
| C 22 2 | S05 | M05 | 121 | 160.5 | 154.5 | 399 | 95 | 8 | 465 | 10 | 96 | 119 | 116 | 95 |
| C 22 2 | S1 | M1 | 138 | 169 | 163 | 428 | 108 | 11 | 489 | 14 | 103 | 135 | 124 | 108 |
| C 22 2 | S2 | M2S | 156 | 178 | 170 | 456 | 119 | 16 | 527 | 19 | 129 | 146 | 134 | 119 |
| C 22 2 | S2 | ME2S | 156 | 178 | 170 | 456 | 119 | 16 | — | — | — | — | — | — |
| C 22 2 | S3 | ME3S | 195 | 197.5 | 191.5 | 500 | 142 | 22.5 | — | — | — | — | — | — |
| C 22 2 | S3 | ME3L | 195 | 197.5 | 191.5 | 532 | 142 | 27 | — | — | — | — | — | — |
| C 22 3 | S05 | M05 | 121 | 160.5 | 154.5 | 454.5 | 95 | 11 | 520.5 | 12 | 96 | 122 | 116 | 95 |
| C 22 3 | S1 | M1 | 138 | 169 | 163 | 483.5 | 108 | 13 | 544.5 | 15 | 103 | 135 | 124 | 108 |
| C 22 3 | S2 | ME2S | 156 | 178 | 170 | 511.5 | 119 | 18 | — | — | — | — | — | — |
| C 22 3 | S3 | ME3S | 195 | 197.5 | 191.5 | 555.5 | 142 | 24.5 | — | — | — | — | — | — |
| C 22 3 | S3 | ME3L | 195 | 197.5 | 191.5 | 587.5 | 142 | 29 | — | — | — | — | — | — |

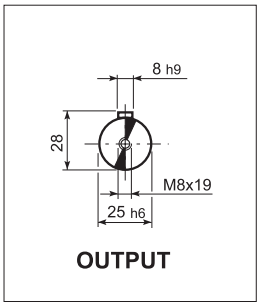


# C 22...P(IEC)

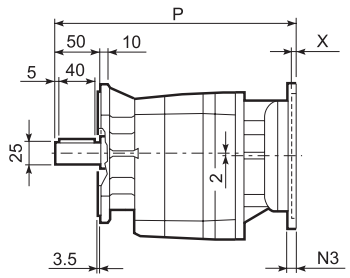
**P**

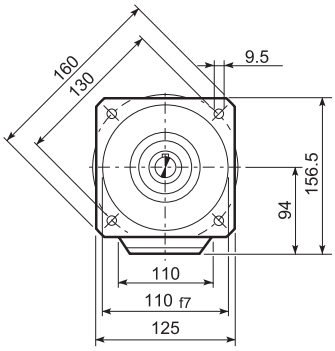


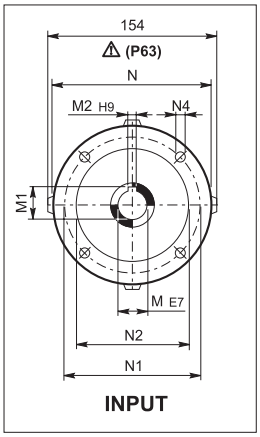



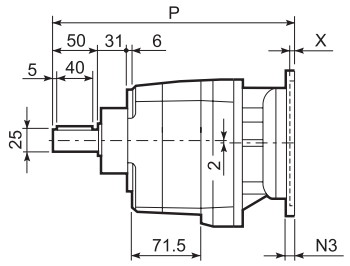

**F**

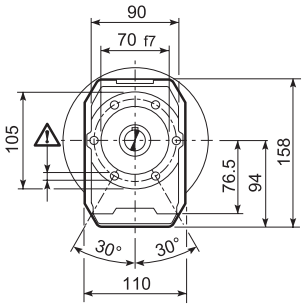


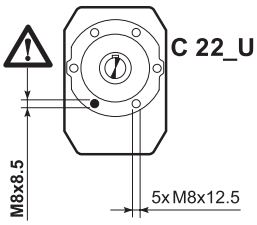



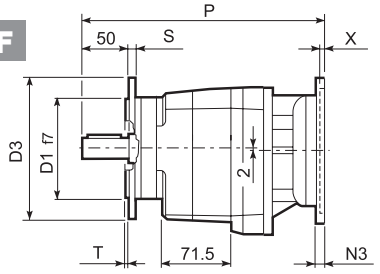

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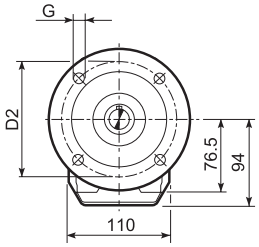


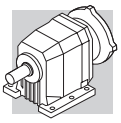

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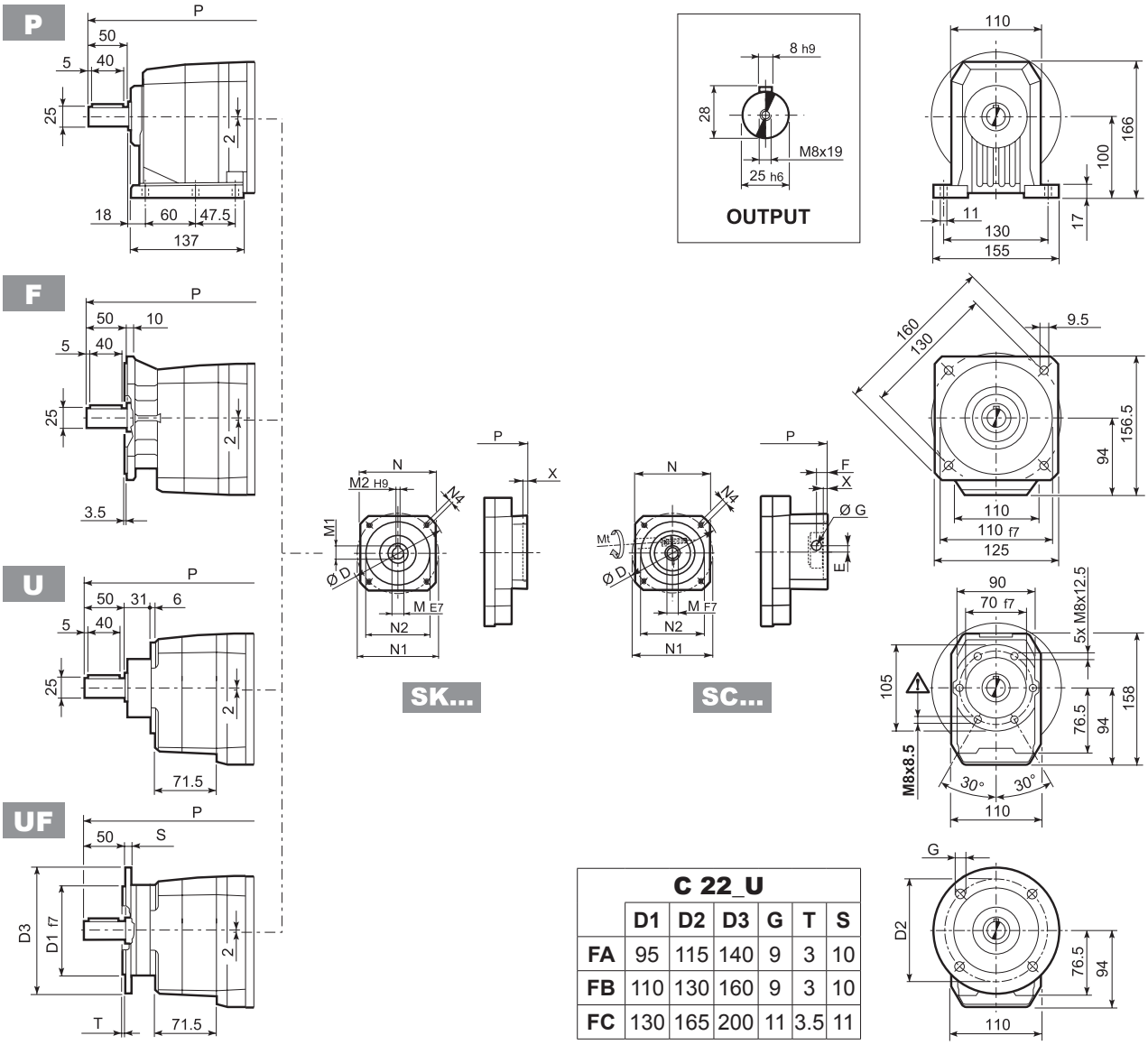




| C 22_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 95 | 115 | 140 | 9 | 3 | 10 |
| FB | 110 | 130 | 160 | 9 | 3 | 10 |
| FC | 130 | 165 | 200 | 11 | 3.5 | 11 |

| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 22 2** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 273 | 7 |
| **C 22 2** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 273 | 7 |
| **C 22 2** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 292.5 | 8 |
| **C 22 2** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 292.5 | 8 |
| **C 22 2** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12X16 | 4.5 | 302.5 | 12 |
| **C 22 2** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12X16 | 4.5 | 302.5 | 12 |
| **C 22 3** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 328.5 | 8 |
| **C 22 3** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 328.5 | 8 |
| **C 22 3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 348 | 9 |
| **C 22 3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 348 | 9 |
| **C 22 3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 358 | 13 |
| **C 22 3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 358 | 13 |



# C 22...SK / SC

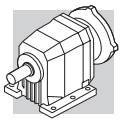



| C 22_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 95 | 115 | 140 | 9 | 3 | 10 |
| FB | 110 | 130 | 160 | 9 | 3 | 10 |
| FC | 130 | 165 | 200 | 11 | 3.5 | 11 |

| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P 2x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 22 2/3 | SK60A* | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | 224.5 | 300 | 6/9 |
| C 22 2/3 | SK60B* | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | 251.5 | 307 | 7/8 |
| C 22 2/3 | SK80A* | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | 251.5 | 307 | 7/8 |
| C 22 2/3 | SK80C | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 292.5 | 348 | 8/9 |
| C 22 2/3 | SK95A | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 292.5 | 348 | 8/9 |
| C 22 2/3 | SK95B | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 292.5 | 348 | 8/9 |
| C 22 2/3 | SK95C | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 292.5 | 348 | 8/9 |
| C 22 2/3 | SK110A | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 292.5 | 348 | 8/9 |
| C 22 2/3 | SK110B | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 292.5 | 348 | 8/9 |

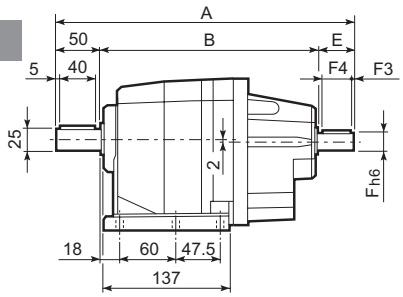
| | | Mt | | D | E | F | G | M | N | N1 | N2 | N4 | X | P 2x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 22 2/3 | SC60A* | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | 271.5 | 327 | 7/8 |
| C 22 2/3 | SC60B* | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | 271.5 | 327 | 8/9 |
| C 22 2/3 | SC80A* | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | 271.5 | 327 | 8/9 |
| C 22 2/3 | SC80C | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 316 | 371.5 | 9/10 |
| C 22 2/3 | SC95A | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 316 | 371.5 | 9/10 |
| C 22 2/3 | SC95B | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 316 | 371.5 | 9/10 |
| C 22 2/3 | SC95C | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 316 | 371.5 | 9/10 |
| C 22 2/3 | SC110A | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 316 | 371.5 | 10/11 |
| C 22 2/3 | SC110B | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 316 | 371.5 | 10/11 |

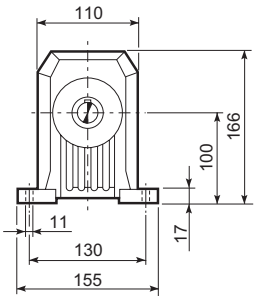
* Contactar nuestro Servicio Técnico comunicando los datos relativos a la aplicación

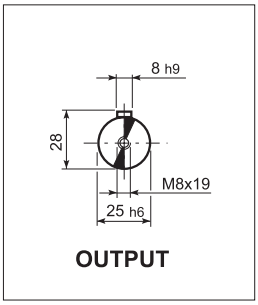


# C 22...HS

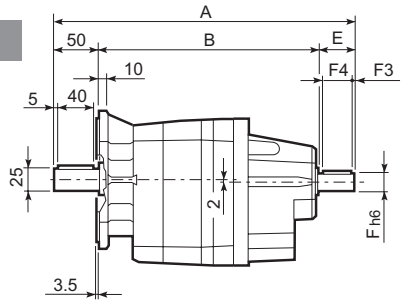
**P**

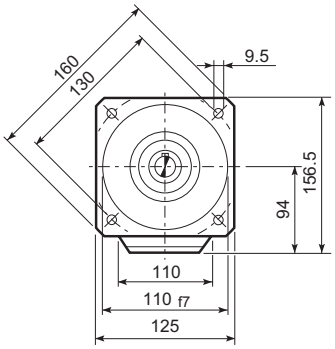


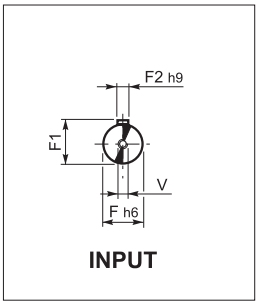



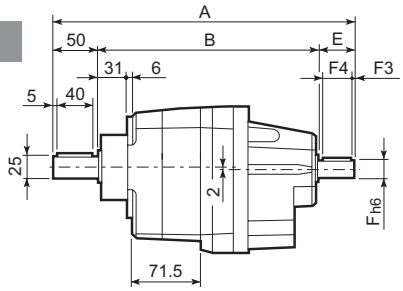

**F**

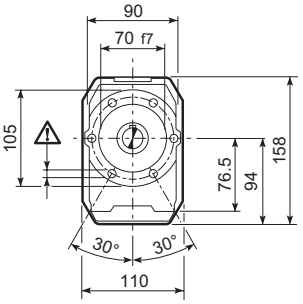


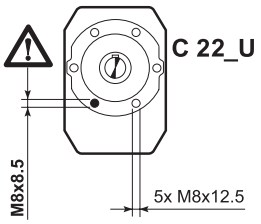



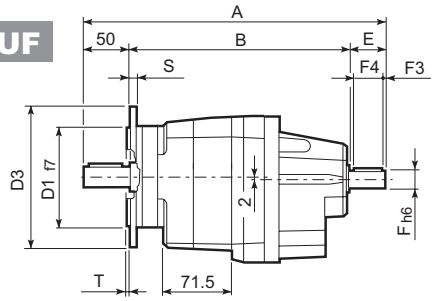

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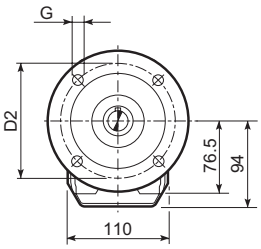


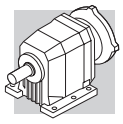

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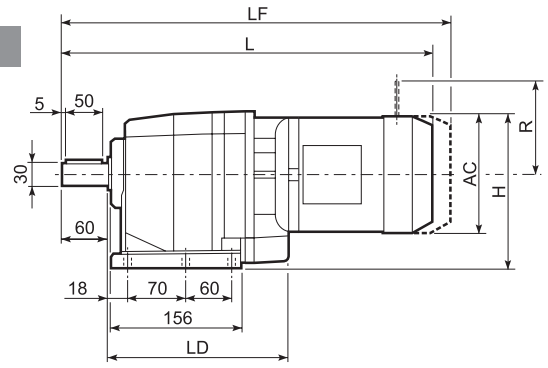

| C 22_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 95 | 115 | 140 | 9 | 3 | 10 |
| FB | 110 | 130 | 160 | 9 | 3 | 10 |
| FC | 130 | 165 | 200 | 11 | 3.5 | 11 |

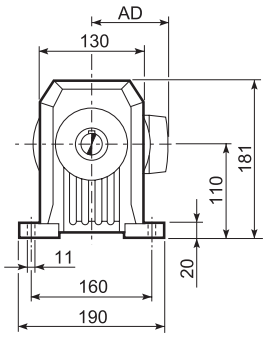
| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C 22 2 | HS | 323 | 233 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 7.2 |
| C 22 3 | | 335.5 | 245.5 | 40 | 16 | 18 | 6 | 2.5 | 36 | M6x16 | 7.5 |

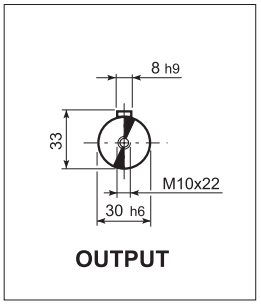


# C 32...M/ME

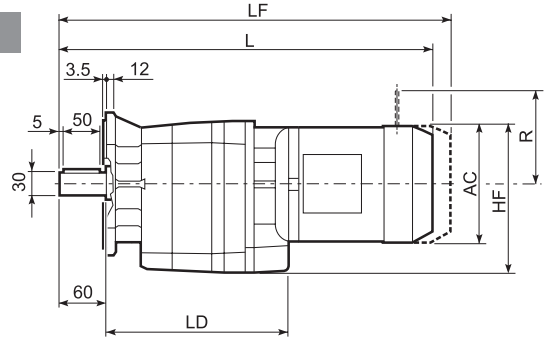
**P**

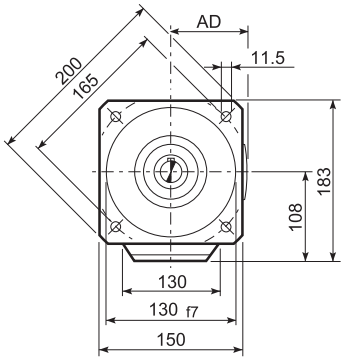


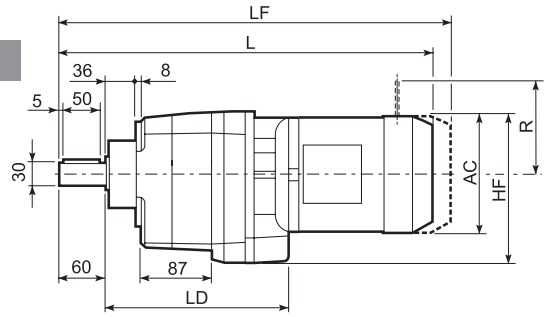



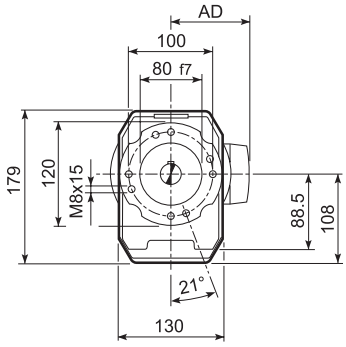

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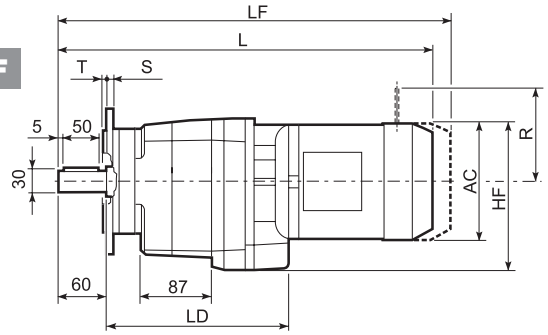



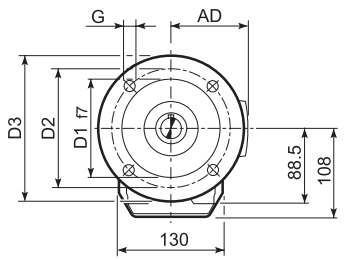

**U**




**UF**



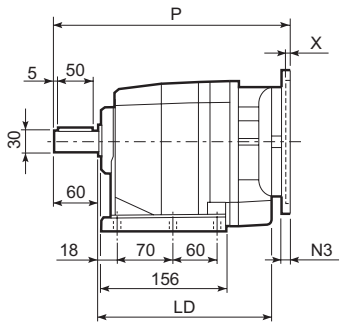



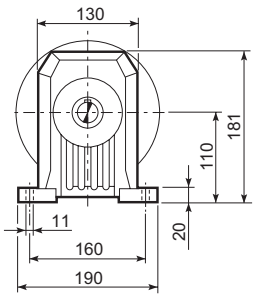

| C 32_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 110 | 130 | 160 | 9 | 3 | 10 |
| FB | 130 | 165 | 200 | 11 | 3.5 | 11 |
| FC | 180 | 215 | 250 | 14 | 4 | 13 |

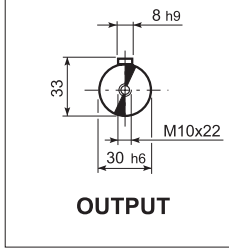
| | | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | LD | AD | kg | LF | kg | R | AD | R | AD |
| C 32 2 | S1 | M1 | 138 | 179 | 177 | 462.5 | 205.5 | 108 | 14 | 523.5 | 16 | 103 | 135 | 124 | 108 |
| C 32 2 | S2 | M2S | 156 | 188 | 186 | 490.5 | 217.5 | 119 | 18 | 561.5 | 21 | 129 | 146 | 134 | 119 |
| C 32 2 | S2 | ME2S | 156 | 188 | 186 | 490.5 | 217.5 | 119 | 18 | — | — | — | — | — | — |
| C 32 2 | S3 | ME3S | 195 | 207.5 | 205.5 | 534.5 | 227.5 | 142 | 24.5 | — | — | — | — | — | — |
| C 32 2 | S3 | ME3L | 195 | 207.5 | 205.5 | 566.5 | 227.5 | 142 | 32 | — | — | — | — | — | — |
| C 32 2 | S4 | ME4 | 258 | 239 | 237 | 674.5 | — | 193 | 66 | — | — | — | — | — | — |
| C 32 2 | S4 | ME4LB | 258 | 239 | 237 | 709.5 | — | 193 | 74 | — | — | — | — | — | — |
| C 32 3 | S05 | M05 | 121 | 170.5 | 168.5 | 491 | — | 95 | 13 | 557 | 15 | 96 | 122 | 116 | 95 |
| C 32 3 | S1 | M1 | 138 | 179 | 177 | 520 | — | 108 | 15 | 581 | 17 | 103 | 135 | 124 | 108 |
| C 32 3 | S2 | ME2S | 156 | 188 | 186 | 548 | — | 119 | 18 | — | — | — | — | — | — |
| C 32 3 | S3 | ME3S | 195 | 207.5 | 205.5 | 592 | — | 142 | 25.5 | — | — | — | — | — | — |
| C 32 3 | S3 | ME3L | 195 | 207.5 | 205.5 | 624 | — | 142 | 33 | — | — | — | — | — | — |

# C 32...P(IEC)

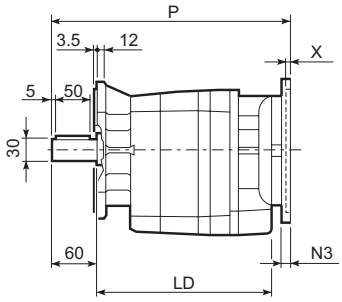
**P**

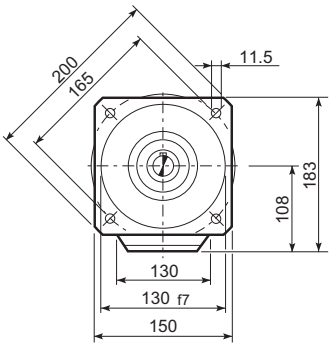


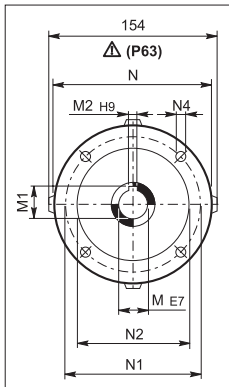



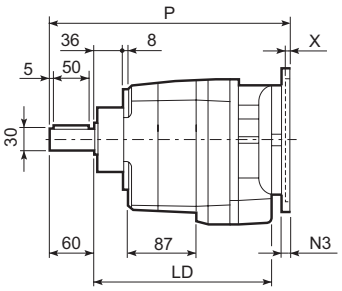

**F**

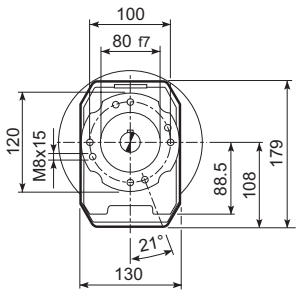


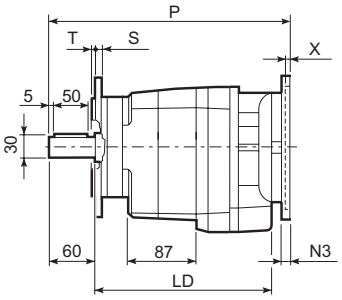



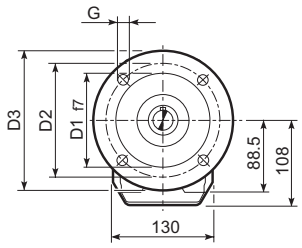

**U**



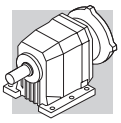

**UF**



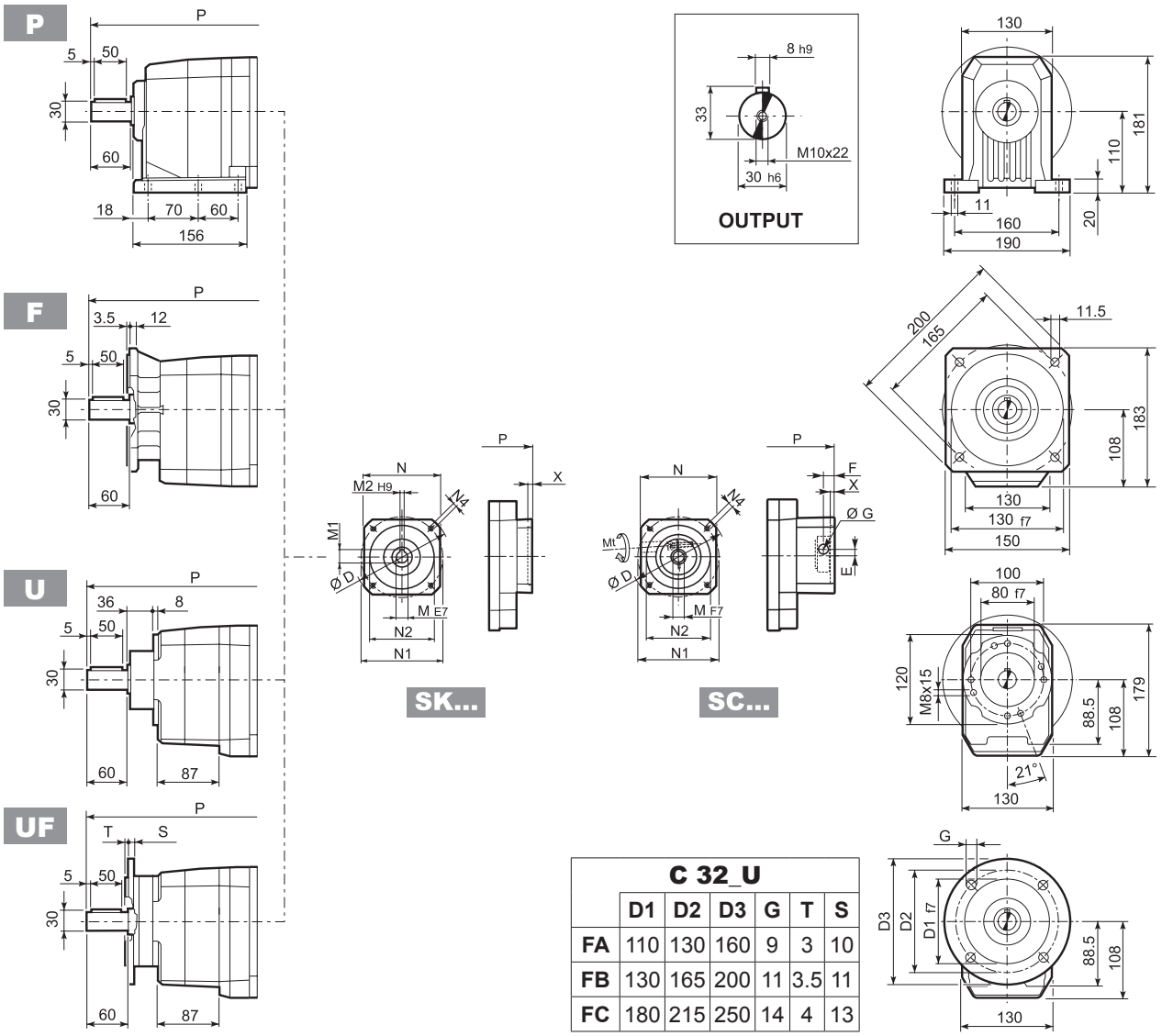




| C 32_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 110 | 130 | 160 | 9 | 3 | 10 |
| FB | 130 | 165 | 200 | 11 | 3.5 | 11 |
| FC | 180 | 215 | 250 | 14 | 4 | 13 |

| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 32 2** | **P63** | 217.5 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 307.5 | 9 |
| **C 32 2** | **P71** | 217.5 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 307.5 | 9 |
| **C 32 2** | **P80** | 227.5 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 327 | 10 |
| **C 32 2** | **P90** | 227.5 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 327 | 10 |
| **C 32 2** | **P100** | 227.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 337 | 14 |
| **C 32 2** | **P112** | 227.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 337 | 14 |
| **C 32 2** | **P132** | — | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 373 | 17 |
| **C 32 3** | **P63** | — | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 365 | 10 |
| **C 32 3** | **P71** | — | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 365 | 10 |
| **C 32 3** | **P80** | — | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 384.5 | 11 |
| **C 32 3** | **P90** | — | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 384.5 | 11 |
| **C 32 3** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 394.5 | 15 |
| **C 32 3** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 394.5 | 15 |



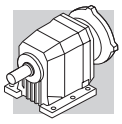
# C 32...SK / SC




| C 32_U | D1 | D2 | D3 | G | T | S |
|---|---|---|---|---|---|---|
| FA | 110 | 130 | 160 | 9 | 3 | 10 |
| FB | 130 | 165 | 200 | 11 | 3.5 | 11 |
| FC | 180 | 215 | 250 | 14 | 4 | 13 |

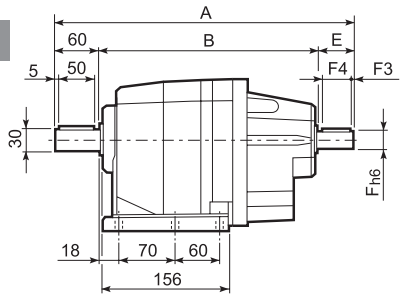
| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P 2x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 32 2/3 | SK60A | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | 279 | 336.5 | 8/9 |
| C 32 2/3 | SK60B | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | 286 | 343.5 | 9/10 |
| C 32 2/3 | SK80A | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | 286 | 343.5 | 9/10 |
| C 32 2/3 | SK80C | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 327 | 384.5 | 10/11 |
| C 32 2/3 | SK95A | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 327 | 384.5 | 10/11 |
| C 32 2/3 | SK95B | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 327 | 384.5 | 10/11 |
| C 32 2/3 | SK95C | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 327 | 384.5 | 10/11 |
| C 32 2/3 | SK110A | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 327 | 384.5 | 10/11 |
| C 32 2/3 | SK110B | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 327 | 384.5 | 10/11 |
| C 32 2 | SK130A | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 327 | — | 11 |

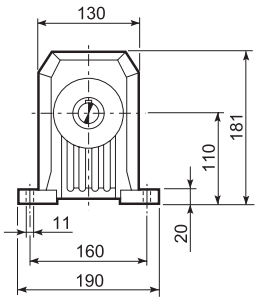
| | | Mt | | D | E | F | G | M | N | N1 | N2 | N4 | X | P 2x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 32 2/3 | SC60A | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | 306 | 363.5 | 9/10 |
| C 32 2/3 | SC60B | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | 306 | 363.5 | 10/11 |
| C 32 2/3 | SC80A | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | 306 | 363.5 | 10/11 |
| C 32 2/3 | SC80C | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 350.5 | 408 | 11/12 |
| C 32 2/3 | SC95A | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 350.5 | 408 | 11/12 |
| C 32 2/3 | SC95B | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 350.5 | 408 | 11/12 |
| C 32 2/3 | SC95C | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 350.5 | 408 | 11/12 |
| C 32 2/3 | SC 110A | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 350.5 | 408 | 12/13 |
| C 32 2/3 | SC 110B | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 350.5 | 408 | 12/13 |
| C 32 2 | SC 130A | M6 | 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 350.5 | — | 13 |

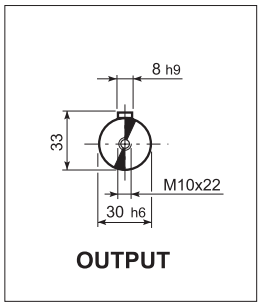


# C 32...HS

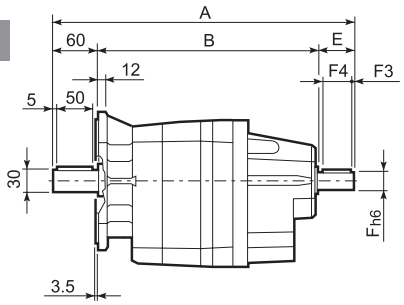
**P**

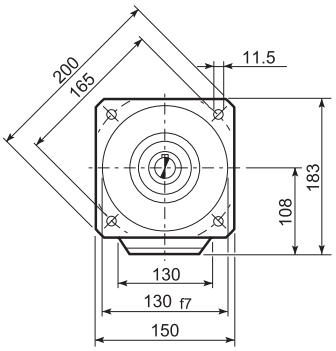


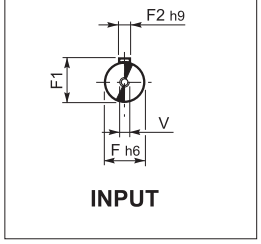



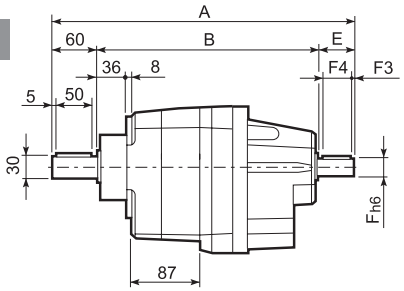

**F**

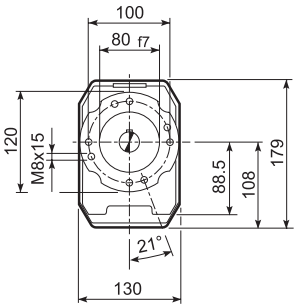


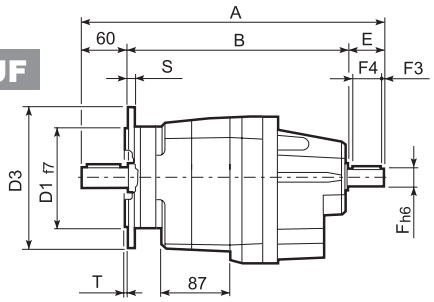



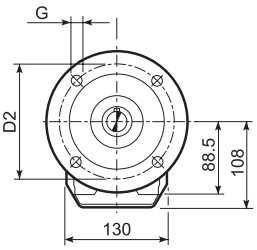

**U**



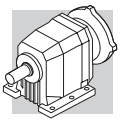

**UF**



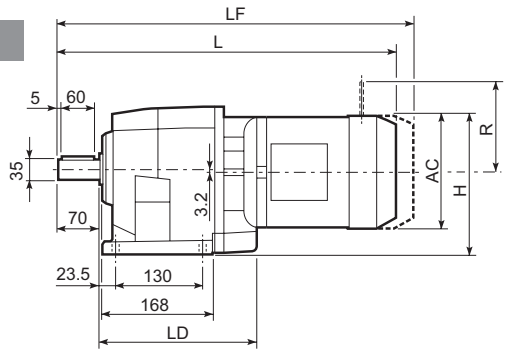

| C 32_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 110 | 130 | 160 | 9 | 3 | 10 |
| FB | 130 | 165 | 200 | 11 | 3.5 | 11 |
| FC | 180 | 215 | 250 | 14 | 4 | 13 |

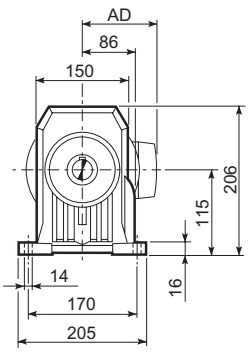
| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C 32 2 | HS | 357.5 | 257.5 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 11.1 |
| C 32 3 | | 372 | 272 | 40 | 16 | 18 | 5 | 2.5 | 36 | M6x16 | 10.6 |

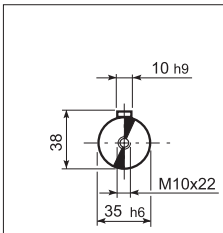


# C 36...M/ME

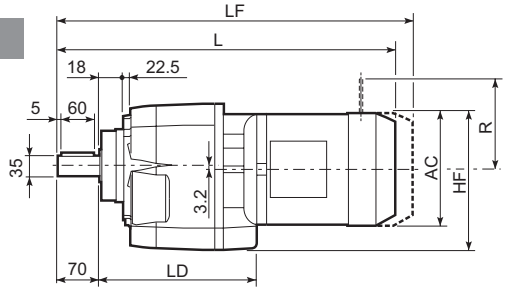
**P**

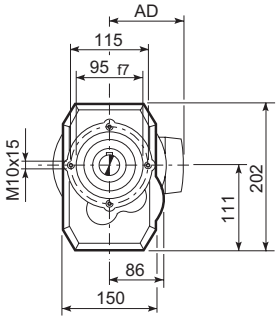


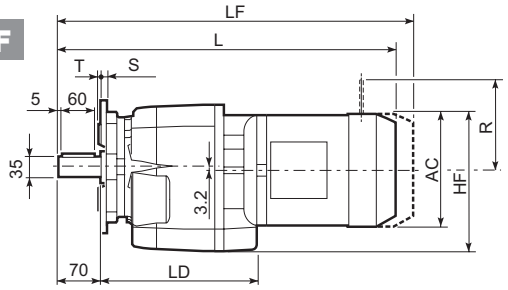



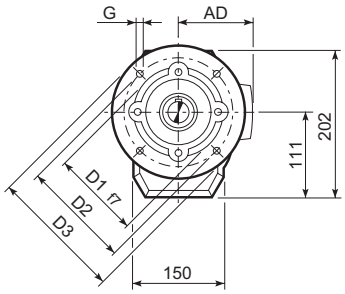

**U**



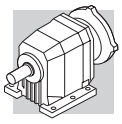

**UF**



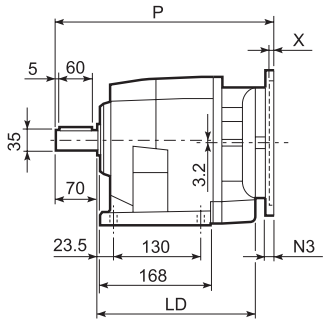

| C 36_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 130 | 165 | 200 | 11 | 3.5 | 11 |
| FB | 180 | 215 | 250 | 14 | 4 | 14 |

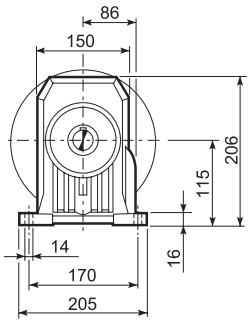
| | | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| C 36 2/3 | S1 | M1 | 138 | 184 | 177 | 481 | 214 | 108 | 20 | 542 | 21 | 103 | 135 | 124 | 108 |
| C 36 2/3 | S2 | ME2S | 156 | 193 | 186 | 509 | 226 | 119 | 23 | — | — | — | — | — | — |
| C 36 2/3 | S3 | ME3S | 195 | 212.5 | 205.5 | 553 | 236 | 142 | 29.5 | — | — | — | — | — | — |
| C 36 2/3 | S3 | ME3L | 195 | 212.5 | 205.5 | 585 | 236 | 142 | 37 | — | — | — | — | — | — |
| C 36 2/3 | S4 | ME4 | 258 | 244 | 240 | 693.5 | — | 193 | 71 | — | — | — | — | — | — |
| C 36 2/3 | S4 | ME4LB | 258 | 244 | 240 | 728.5 | — | 193 | 79 | — | — | — | — | — | — |
| C 36 4 | S05 | M05 | 121 | 175.5 | 168.5 | 509.5 | — | 95 | 19 | 575.5 | 20 | 96 | 122 | 116 | 95 |
| C 36 4 | S1 | M1 | 138 | 184 | 177 | 538.5 | — | 108 | 21 | 599.5 | 22 | 103 | 135 | 124 | 108 |
| C 36 4 | S2 | ME2S | 156 | 193 | 186 | 566.5 | — | 119 | 24 | — | — | — | — | — | — |
| C 36 4 | S3 | ME3S | 195 | 212.5 | 205.5 | 610.5 | — | 142 | 30.5 | — | — | — | — | — | — |
| C 36 4 | S3 | ME3L | 195 | 212.5 | 205.5 | 642.5 | — | 142 | 38 | — | — | — | — | — | — |

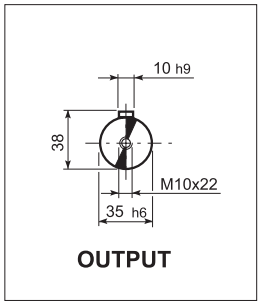


# C 36...P(IEC)

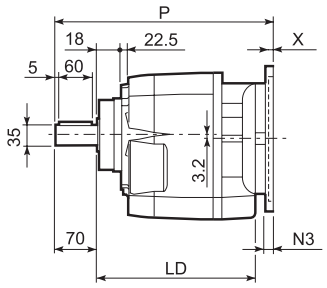
**P**

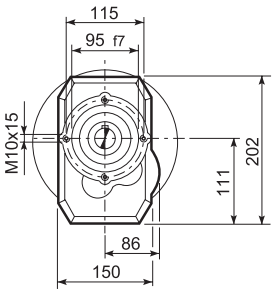


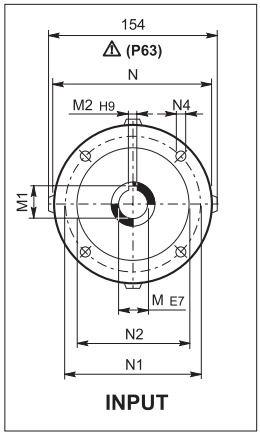



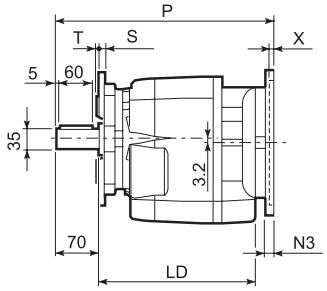

**U**

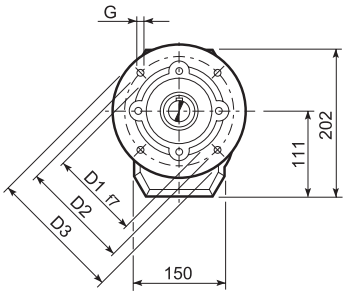


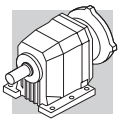

**UF**



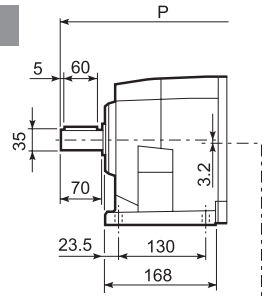

| C 36_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 130 | 165 | 200 | 11 | 3.5 | 11 |
| FB | 180 | 215 | 250 | 14 | 4 | 14 |

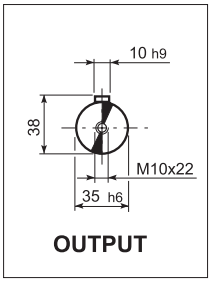
| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 36 2/3** | **P63** | 226 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 326 | 17 |
| **C 36 2/3** | **P71** | 226 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 326 | 17 |
| **C 36 2/3** | **P80** | 236 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 345.5 | 18 |
| **C 36 2/3** | **P90** | 236 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 345.5 | 18 |
| **C 36 2/3** | **P100** | 236 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 355.5 | 22 |
| **C 36 2/3** | **P112** | 236 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 355.5 | 22 |
| **C 36 2/3** | **P132** | — | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 392.5 | 25 |
| **C 36 4** | **P63** | — | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 383.5 | 20 |
| **C 36 4** | **P71** | — | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 383.5 | 20 |
| **C 36 4** | **P80** | — | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 403 | 21 |
| **C 36 4** | **P90** | — | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 403 | 21 |
| **C 36 4** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 413 | 25 |
| **C 36 4** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 413 | 25 |

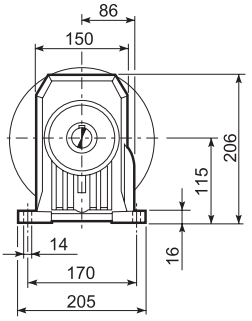


# C 36...SK / SC

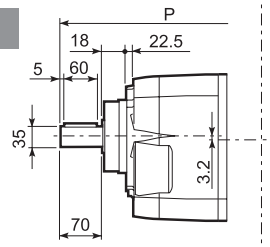
**P**

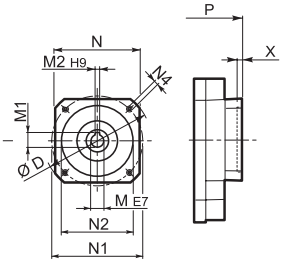


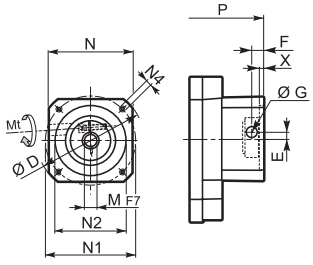




**U**

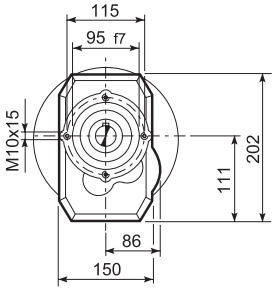


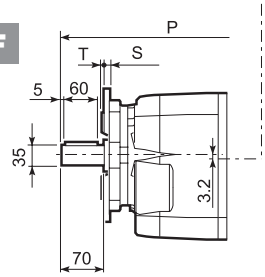

**SK...**



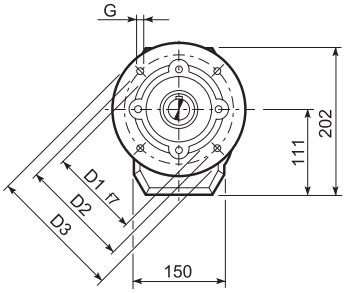

**SC...**




**UF**

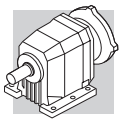



| C 36_U | | | | | | |
|---|---|---|---|---|---|---|
| | **D1** | **D2** | **D3** | **G** | **T** | **S** |
| **FA** | 130 | 165 | 200 | 11 | 3.5 | 11 |
| **FB** | 180 | 215 | 250 | 14 | 4 | 14 |



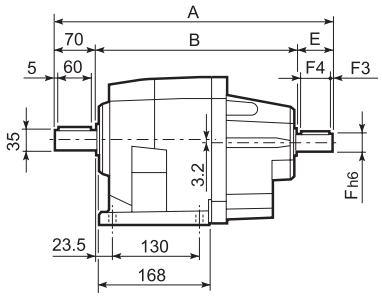

| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P 2/3x | P 4x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 36 2/3/4** | **SK60A** | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | 297.5 | 355 | 16/16/19 |
| **C 36 2/3/4** | **SK60B** | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | 304.5 | 362 | 17/17/20 |
| **C 36 2/3/4** | **SK80A** | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | 304.5 | 362 | 18/18/21 |
| **C 36 2/3/4** | **SK80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 304.5 | 403 | 18/18/21 |
| **C 36 2/3/4** | **SK95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 345.5 | 403 | 18/18/21 |
| **C 36 2/3/4** | **SK95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 345.5 | 403 | 18/18/21 |
| **C 36 2/3/4** | **SK95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 345.5 | 403 | 18/18/21 |
| **C 36 2/3/4** | **SK110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 345.5 | 403 | 18/18/21 |
| **C 36 2/3/4** | **SK110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 345.5 | 403 | 18/18/21 |
| **C 36 2/3** | **SK130A** | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 345.5 | — | 19/19 |

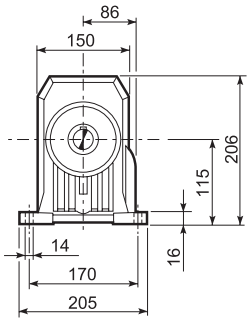
| | | | Mt | D | E | F | G | M | N | N1 | N2 | N4 | X | P 2/3x | P 4x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 36 2/3/4** | **SC60A** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | 324.5 | 382 | 17/17/20 |
| **C 36 2/3/4** | **SC60B** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | 324.5 | 382 | 18/18/21 |
| **C 36 2/3/4** | **SC80A** | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | 324.5 | 426.5 | 18/18/21 |
| **C 36 2/3/4** | **SC80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 369 | 426.5 | 19/19/22 |
| **C 36 2/3/4** | **SC95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 369 | 426.5 | 19/19/22 |
| **C 36 2/3/4** | **SC95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 369 | 426.5 | 19/19/22 |
| **C 36 2/3/4** | **SC95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 369 | 426.5 | 19/19/22 |
| **C 36 2/3/4** | **SC110A** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 369 | 426.5 | 21/21/24 |
| **C 36 2/3/4** | **SC110B** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 369 | 426.5 | 21/21/24 |
| **C 36 2/3** | **SC130A** | M6 | 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 369 | — | 22/22 |

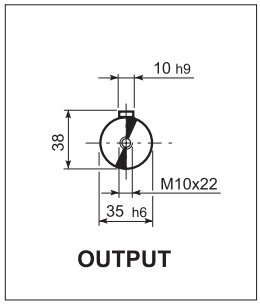


# C 36...HS

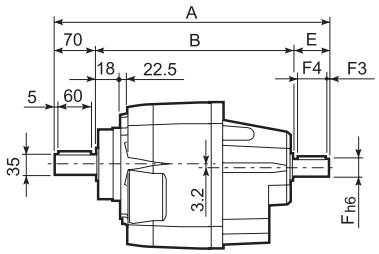
**P**

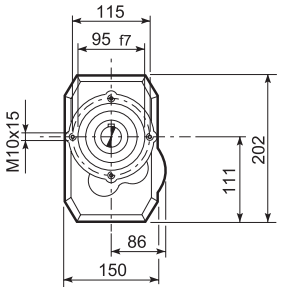


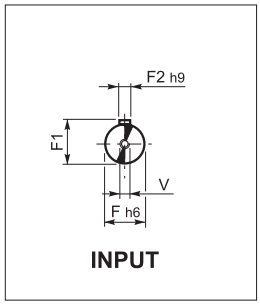



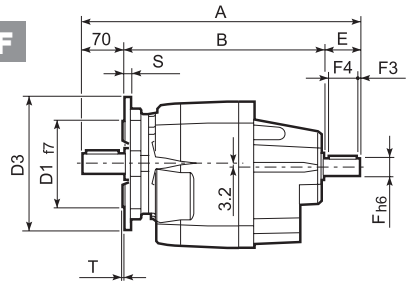

**U**

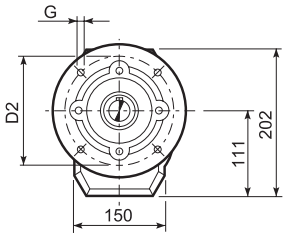


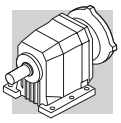

**UF**



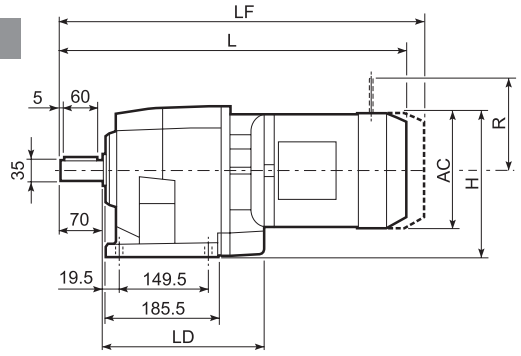

| C 36_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 130 | 165 | 200 | 11 | 3.5 | 11 |
| FB | 180 | 215 | 250 | 14 | 4 | 14 |

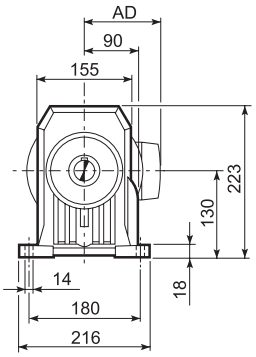
| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C 36 2 | HS | 415.5 | 295.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 25.5 |
| C 36 3 | | 415.5 | 295.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 25.5 |
| C 36 4 | | 390.5 | 280.5 | 40 | 16 | 18 | 5 | 2.5 | 36 | M6x16 | 26.5 |

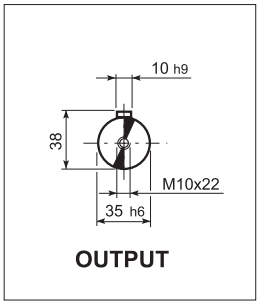


# C 41...M/ME

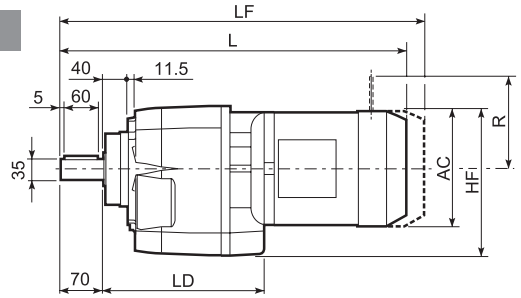
**P**

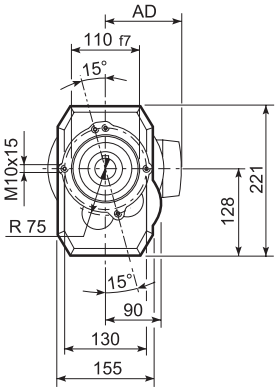


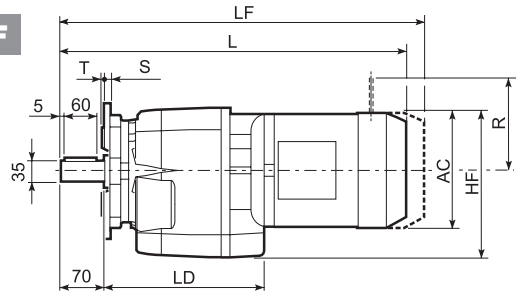



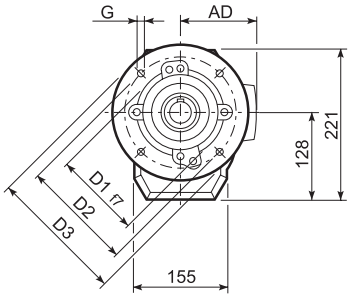

**U**




**UF**



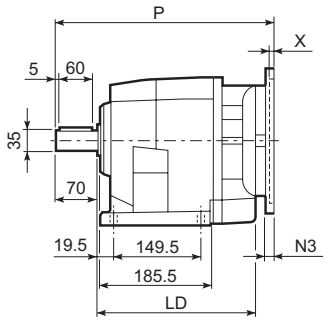



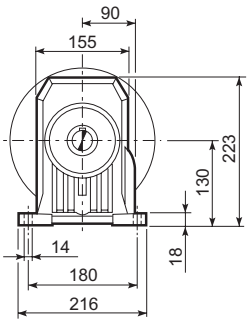

| C 41_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 130 | 165 | 200 | 11 | 3.5 | 11 |
| FB | 180 | 215 | 250 | 14 | 4 | 13 |

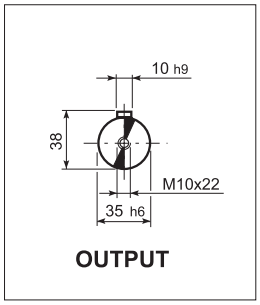
| | | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| C 41 2/3 | S1 | M1 | 138 | 199 | 197 | 491.5 | 220 | 108 | 25 | 552.5 | 28 | 103 | 135 | 124 | 108 |
| C 41 2/3 | S2 | ME2S | 156 | 208 | 206 | 519.5 | 235.5 | 119 | 31 | — | — | — | — | — | — |
| C 41 2/3 | S3 | ME3S | 195 | 227.5 | 225.5 | 563.5 | 251.5 | 142 | 37.5 | — | — | — | — | — | — |
| C 41 2/3 | S3 | ME3L | 195 | 227.5 | 225.5 | 595.5 | 251.5 | 142 | 45 | — | — | — | — | — | — |
| C 41 2/3 | S4 | ME4 | 258 | 259 | 257 | 703.5 | — | 193 | 71 | — | — | — | — | — | — |
| C 41 2/3 | S4 | ME4LB | 258 | 259 | 257 | 739 | — | 193 | 78 | — | — | — | — | — | — |
| C 41 4 | S05 | M05 | 231 | 245.5 | 243.5 | 524 | — | 95 | 27 | 590 | 28 | 96 | 122 | 116 | 95 |
| C 41 4 | S1 | M1 | 138 | 199 | 197 | 553 | — | 108 | 28 | 614 | 31 | 103 | 135 | 124 | 108 |
| C 41 4 | S2 | ME2S | 156 | 208 | 206 | 581 | — | 119 | 34 | — | — | — | — | — | — |
| C 41 4 | S3 | ME3S | 195 | 227.5 | 225.5 | 625 | — | 142 | 40.5 | — | — | — | — | — | — |
| C 41 4 | S3 | ME3L | 195 | 227.5 | 225.5 | 657 | — | 142 | 48 | — | — | — | — | — | — |

# C 41...P(IEC)

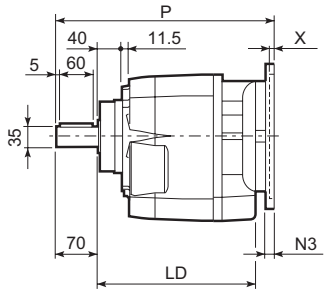
**P**

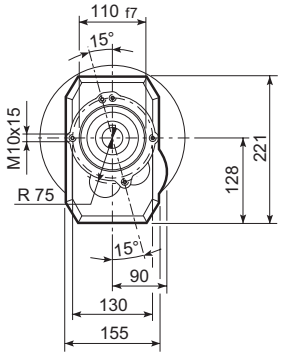


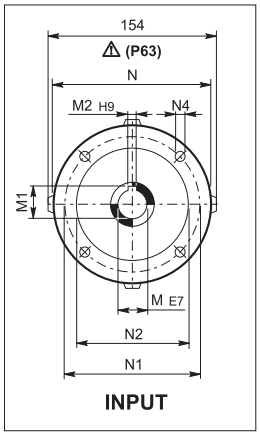



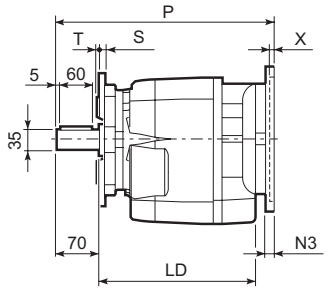

**U**

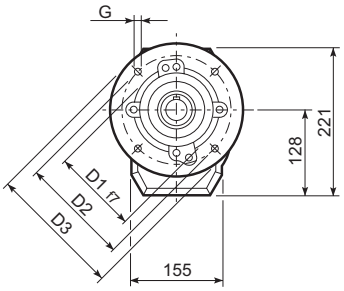



**UF**

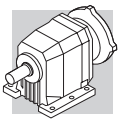



**C 41_U**

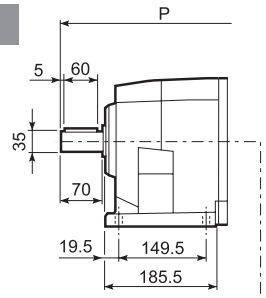
| | D1 | D2 | D3 | G | T | S |
|---|---|---|---|---|---|---|
| **FA** | 130 | 165 | 200 | 11 | 3.5 | 11 |
| **FB** | 180 | 215 | 250 | 14 | 4 | 13 |

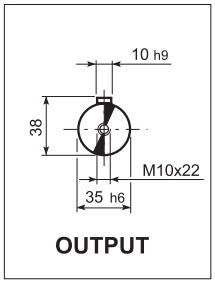
| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 41 2/3** | **P63** | 235.5 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 336.5 | 27 |
| **C 41 2/3** | **P71** | 235.5 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 336.5 | 28 |
| **C 41 2/3** | **P80** | 251.5 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 356 | 29 |
| **C 41 2/3** | **P90** | 251.5 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 356 | 29 |
| **C 41 2/3** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 366 | 33 |
| **C 41 2/3** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 366 | 33 |
| **C 41 2/3** | **P132** | — | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 402.5 | 35 |
| **C 41 4** | **P63** | — | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 395 | 30 |
| **C 41 4** | **P71** | — | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 395 | 31 |
| **C 41 4** | **P80** | — | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 414.5 | 32 |
| **C 41 4** | **P90** | — | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 414.5 | 32 |
| **C 41 4** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 424.5 | 36 |
| **C 41 4** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 424.5 | 36 |

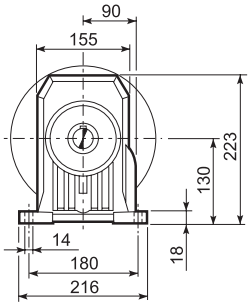


# C 41...SK / SC

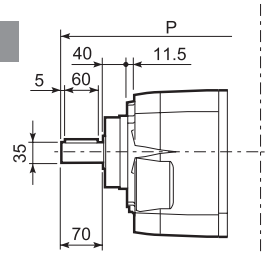
**P**

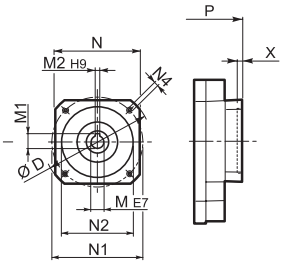


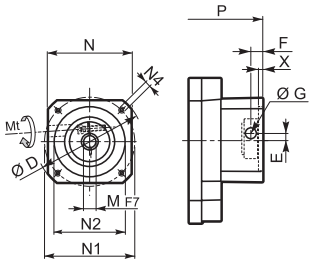



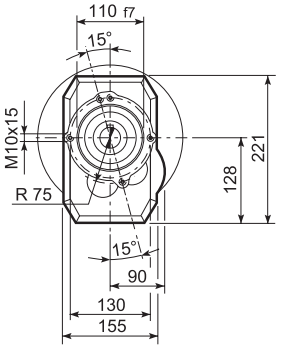




**U**



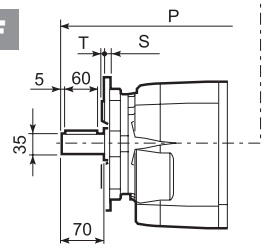



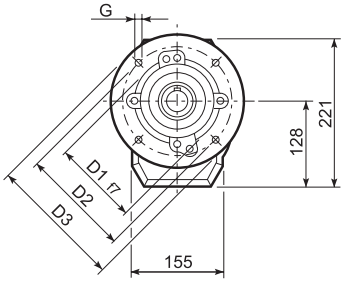




**SK...** **SC...**

**UF**



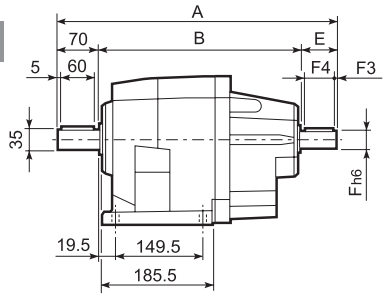

| C 41_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 130 | 165 | 200 | 11 | 3.5 | 11 |
| FB | 180 | 215 | 250 | 14 | 4 | 13 |

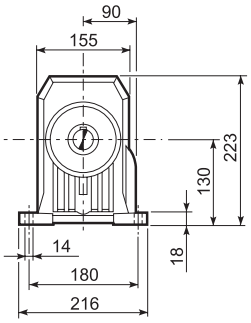
| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P 2/3x | P 4x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C41 4 | SK60A | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | — | 370 | 31 |
| C41 4 | SK60B | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | — | 377 | 32 |
| C41 4 | SK80A | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | — | 377 | 32 |
| C41 2/3 | SK80B | 120 | 14 | 16.3 | 5 | 96 | 100 | 80 | M6x12 | 4 | 356.5 | — | 29/29 |
| C41 2/3/4 | SK80C | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 356.5 | 418 | 29/29/32 |
| C41 2/3/4 | SK95A | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 356.5 | 418 | 29/29/32 |
| C41 2/3/4 | SK95B | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 356.5 | 418 | 29/29/33 |
| C41 2/3/4 | SK95C | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 356.5 | 418 | 29/29/36 |
| C41 2/3/4 | SK110A | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 356.5 | 418 | 29/29/36 |
| C41 2/3/4 | SK110B | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 356.5 | 418 | 29/29/36 |
| C41 2/3 | SK130A | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 356.5 | — | 31/31 |
| C41 2/3 | SK130B | 189 | 32 | 35.3 | 10 | 160 | 165 | 130 | M10x20 | 5 | 403 | — | 33/33 |
| C41 2/3 | SK180A | 240 | 32 | 35.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 403 | — | 33/33 |
| C41 2/3 | SK180B | 240 | 38 | 41.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 403 | — | 38/38 |

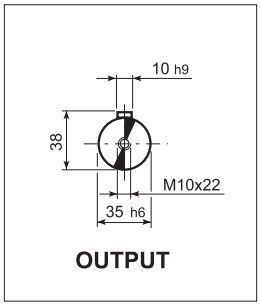
| | | | Mt | D | E | F | G | M | N | N1 | N2 | N4 | X | P 2/3x | P 4x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C41 4 | SC60A | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | — | 397 | 32 |
| C41 4 | SC60B | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | — | 397 | 33 |
| C41 4 | SC80A | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | — | 397 | 33 |
| C41 2/3 | SC80B | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 14 | 96 | 100 | 80 | M6x12 | 4 | 380 | — | 30/30 |
| C41 2/3/4 | SC80C | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 380 | 441.5 | 30/30/33 |
| C41 2/3/4 | SC95A | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 380 | 441.5 | 30/30/34 |
| C41 2/3/4 | SC95B | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 380 | 441.5 | 30/30/34 |
| C41 2/3/4 | SC95C | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 380 | 441.5 | 30/30/35 |
| C41 2/3/4 | SC110A | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 380 | 441.5 | 31/31/39 |
| C41 2/3/4 | SC110B | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 380 | 441.5 | 31/31/39 |
| C41 2/3 | SC130A | M6 | 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 380 | — | 32/32 |
| C41 2/3 | SC130B | M8 | 36 Nm | 189 | 20 | 17 | 17.75 | 32 | 160 | 165 | 130 | M10x20 | 5 | 426 | — | 36/36 |
| C41 2/3 | SC180A | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 32 | 192 | 215 | 180 | M12x24 | 5 | 430 | — | 36/36 |
| C41 2/3 | SC180B | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 38 | 192 | 215 | 180 | M12x24 | 5 | 430 | — | 35/35 |

# C 41...HS

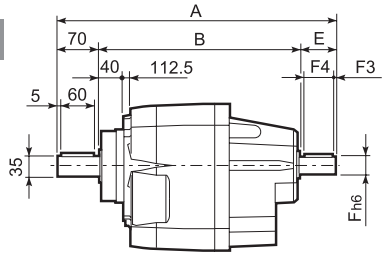
**P**

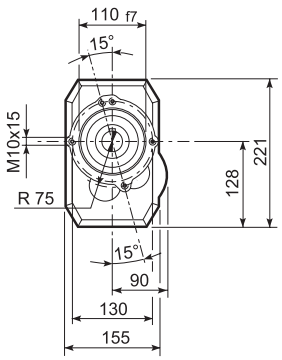


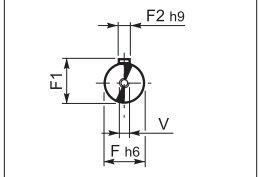



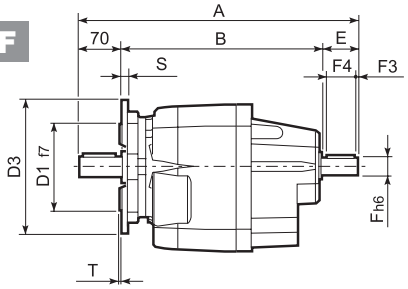

**U**

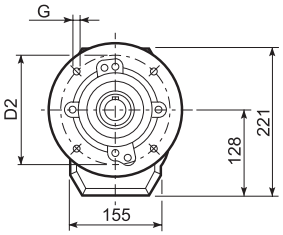


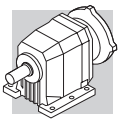

**UF**



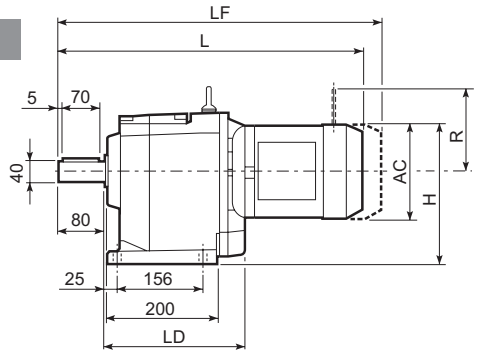

| C 41_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 130 | 165 | 200 | 11 | 3.5 | 11 |
| FB | 180 | 215 | 250 | 14 | 4 | 13 |

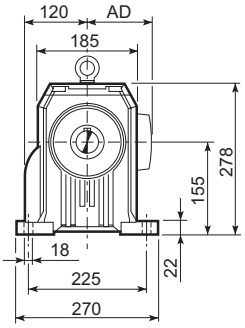
| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C 41 2 | HS | 425.5 | 305.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 30 |
| C 41 3 | | 425.5 | 305.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 30 |
| C 41 4 | | 448 | 338 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 33 |

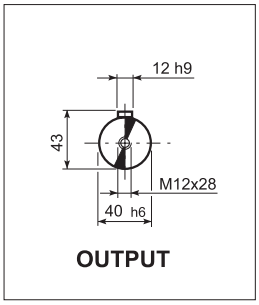


# C 51...M/ME

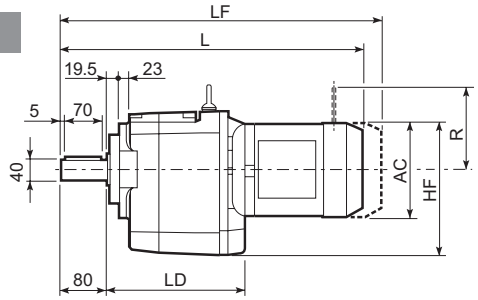
**P**

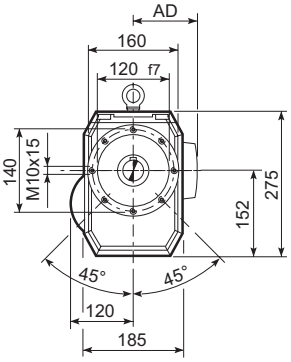


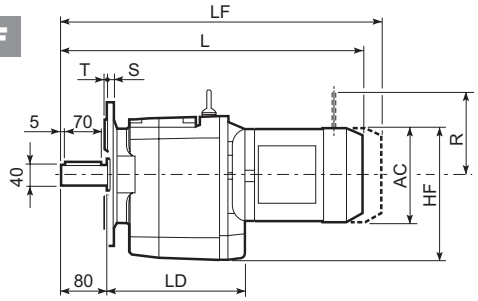



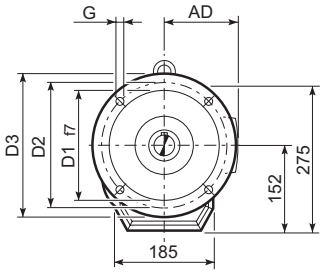

**U**




**UF**



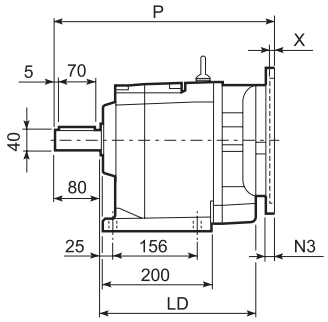



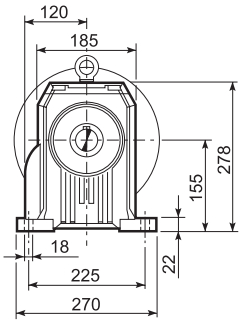

| C 51_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 180 | 215 | 250 | 14 | 4 | 13 |
| FB | 230 | 265 | 300 | 14 | 4 | 16 |

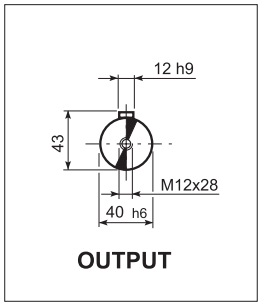
| | | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| C 51 2/3 | S1 | M1 | 138 | 224 | 221 | 517.5 | — | 108 | 49 | 578.5 | 52 | 103 | 135 | 124 | 108 |
| C 51 2/3 | S2 | ME2S | 156 | 233 | 230 | 545.5 | 252.5 | 119 | 53 | — | — | — | — | — | — |
| C 51 2/3 | S3 | ME3S | 195 | 252.5 | 249.5 | 589.5 | 267.5 | 142 | 59.5 | — | — | — | — | — | — |
| C 51 2/3 | S3 | ME3L | 195 | 252.5 | 249.5 | 621.5 | 267.5 | 142 | 65 | — | — | — | — | — | — |
| C 51 2/3 | S4 | ME4 | 258 | 284 | 281 | 729.5 | — | 193 | 99 | — | — | — | — | — | — |
| C 51 2/3 | S4 | ME4LB | 258 | 284 | 281 | 764.5 | — | 193 | 107 | — | — | — | — | — | — |
| C 51 2/3 | S5 | ME5S | 310 | 310 | 307 | 816 | — | 245 | 127 | — | — | — | — | — | — |
| C 51 2/3 | S5 | ME5L | 310 | 310 | 307 | 860 | — | 245 | 143 | — | — | — | — | — | — |
| C 51 4 | S1 | M1 | 138 | 224 | 221 | 589 | — | 108 | 52 | 650 | 55 | 103 | 135 | 124 | 108 |
| C 51 4 | S2 | ME2S | 156 | 233 | 230 | 617 | — | 119 | 56 | — | — | — | — | — | — |
| C 51 4 | S3 | ME3S | 195 | 252.5 | 249.5 | 661 | — | 142 | 62.5 | — | — | — | — | — | — |
| C 51 4 | S3 | ME3L | 195 | 252.5 | 249.5 | 693 | — | 142 | 68 | — | — | — | — | — | — |
| C 51 4 | S4 | ME4 | 258 | 284 | 281 | 801 | — | 193 | 98 | — | — | — | — | — | — |
| C 51 4 | S4 | ME4LB | 258 | 284 | 281 | 836 | — | 193 | 112 | — | — | — | — | — | — |

# C 51...P(IEC)

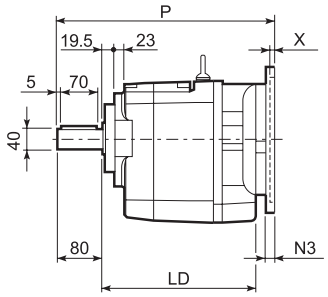
**P**

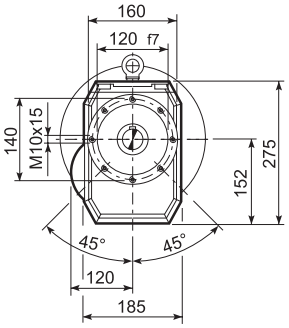


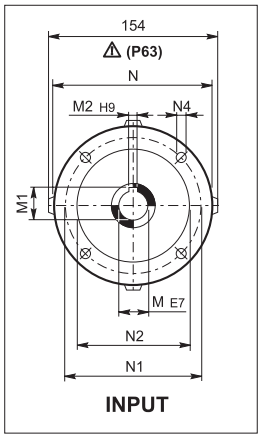



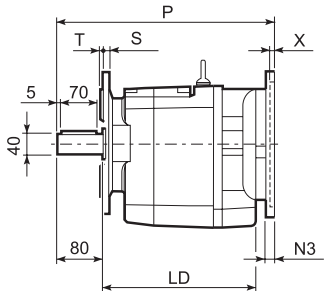

**U**

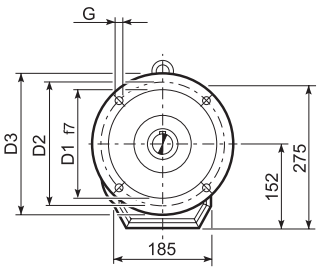


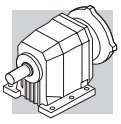

**UF**



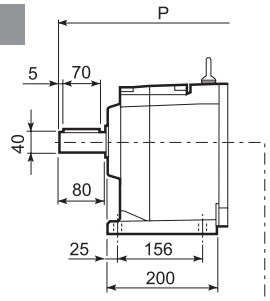

| C 51_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 180 | 215 | 250 | 14 | 4 | 13 |
| FB | 230 | 265 | 300 | 14 | 4 | 16 |

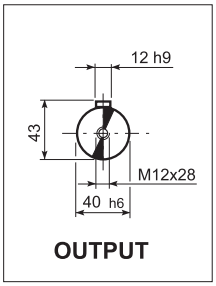
| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 51 2/3** | **P63** | 252.5 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 362.5 | 45 |
| **C 51 2/3** | **P71** | 252.5 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 362.5 | 45 |
| **C 51 2/3** | **P80** | 267.5 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 382 | 47 |
| **C 51 2/3** | **P90** | 267.5 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 382 | 47 |
| **C 51 2/3** | **P100** | 252.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 392 | 51 |
| **C 51 2/3** | **P112** | 252.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 392 | 51 |
| **C 51 2/3** | **P132** | 252.5 | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 428.5 | 54 |
| **C 51 2/3** | **P160** | — | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 5.5 | 479 | 58 |
| **C 51 2/3** | **P180** | — | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 5.5 | 479 | 58 |
| **C 51 4** | **P63** | — | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 434 | 47 |
| **C 51 4** | **P71** | — | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 434 | 47 |
| **C 51 4** | **P80** | — | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 453.5 | 49 |
| **C 51 4** | **P90** | — | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 463.5 | 49 |
| **C 51 4** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 463.5 | 53 |
| **C 51 4** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 463.5 | 53 |
| **C 51 4** | **P132** | — | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 500 | 62 |

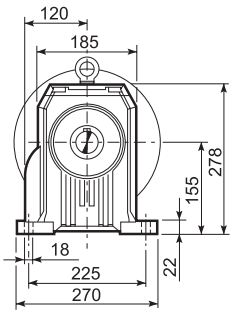


# C 51...SK / SC

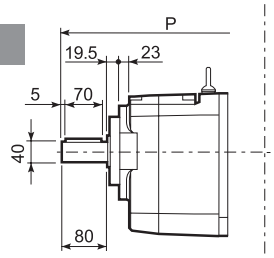
**P**

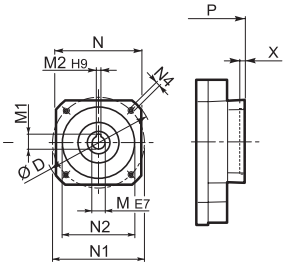


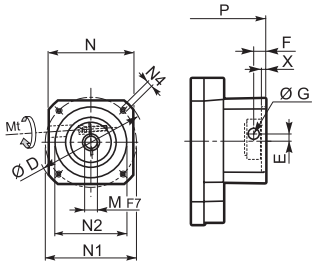




**U**

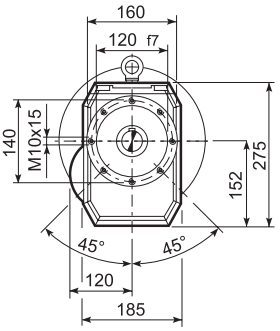


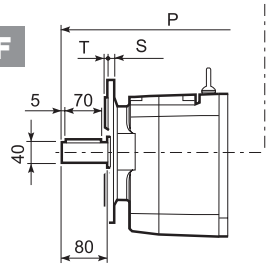

**SK...**



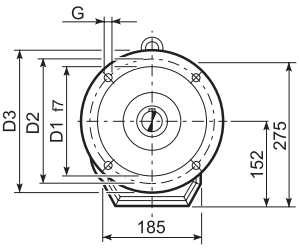

**SC...**




**UF**




| C 51_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 180 | 215 | 250 | 14 | 4 | 13 |
| FB | 230 | 265 | 300 | 14 | 4 | 16 |

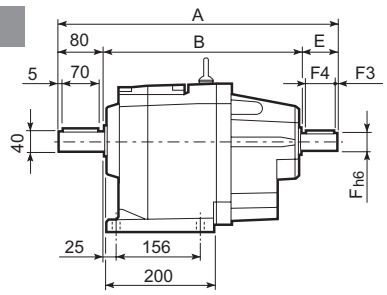


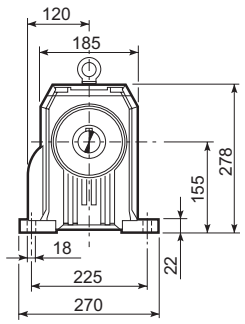

| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P 2/3x | P 4x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 51 2/3 | SK80B | 120 | 14 | 16.3 | 5 | 96 | 100 | 80 | M6x12 | 4 | 382 | — | 46/46 |
| C 51 2/3/4 | SK80C | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 382 | 453.5 | 47/47/49 |
| C 51 2/3/4 | SK95A | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 382 | 453.5 | 46/46/48 |
| C 51 2/3/4 | SK95B | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 382 | 453.5 | 47/47/49 |
| C 51 2/3/4 | SK95C | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 382 | 453.5 | 47/47/49 |
| C 51 2/3/4 | SK110A | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 382 | 453.5 | 47/47/51 |
| C 51 2/3/4 | SK110B | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 382 | 453.5 | 47/47/51 |
| C 51 2/3/4 | SK130A | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 382 | 453.5 | 49/49/52 |
| C 51 2/3 | SK130B | 189 | 32 | 35.3 | 10 | 160 | 165 | 130 | M10x20 | 5 | 428.5 | — | 55/55 |
| C 51 2/3 | SK180A | 240 | 32 | 35.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 428.5 | — | 55/55 |
| C 51 2/3 | SK180B | 240 | 38 | 41.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 428.5 | — | 55/55 |

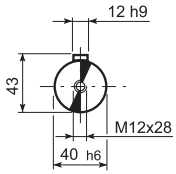
| | | Mt | | D | E | F | G | M | N | N1 | N2 | N4 | X | P 2/3x | P 4x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 51 2/3 | SC80B | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 14 | 96 | 100 | 80 | M6x12 | 4 | 405.5 | — | 47/47 |
| C 51 2/3/4 | SC80C | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 405.5 | 477 | 48/48/50 |
| C 51 2/3/4 | SC95A | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 405.5 | 477 | 47/47/49 |
| C 51 2/3/4 | SC95B | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 405.5 | 477 | 48/48/50 |
| C 51 2/3/4 | SC95C | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 405.5 | 477 | 48/48/50 |
| C 51 2/3/4 | SC110A | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 405.5 | 477 | 49/49/52 |
| C 51 2/3/4 | SC110B | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 405.5 | 477 | 49/49/52 |
| C 51 2/3/4 | SC130A | M6 | 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 405.5 | 477 | 50/50/53 |
| C 51 2/3 | SC130B | M8 | 36 Nm | 189 | 20 | 17 | 17.75 | 32 | 160 | 165 | 130 | M10x20 | 5 | 451.5 | — | 54/54 |
| C 51 2/3 | SC180A | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 32 | 192 | 215 | 180 | M12x24 | 5 | 455.5 | — | 54/54 |
| C 51 2/3 | SC180B | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 38 | 192 | 215 | 180 | M12x24 | 5 | 455.5 | — | 54/54 |

# C 51...HS

**P**

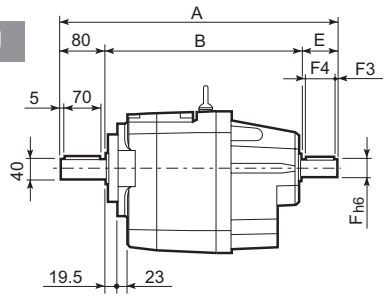


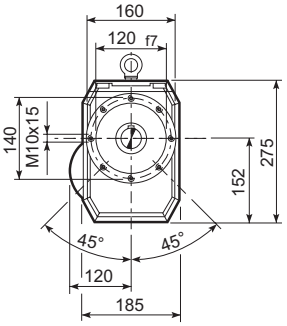



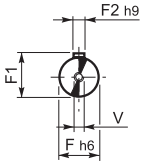




**OUTPUT**

**U**

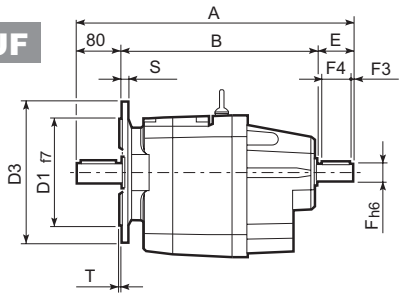


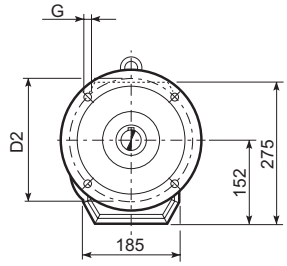




**INPUT**

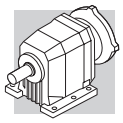
**UF**



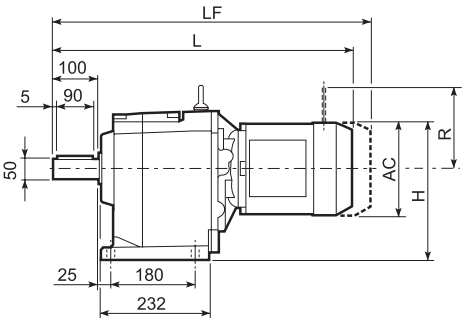

| C 51_U | | | | | | |
|---|---|---|---|---|---|---|
| | **D1** | **D2** | **D3** | **G** | **T** | **S** |
| **FA** | 180 | 215 | 250 | 14 | 4 | 13 |
| **FB** | 230 | 265 | 300 | 14 | 4 | 16 |

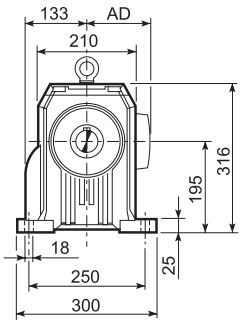
| | | **A** | **B** | **E** | **F** | **F1** | **F2** | **F3** | **F4** | **V** | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 51 2** | | 451.5 | 322 | 50 | 24 | 24 | 8 | 2.5 | 45 | M8x19 | 45 |
| **C 51 3** | **HS** | 451.5 | 322 | 50 | 24 | 24 | 8 | 2.5 | 45 | M8x19 | 45 |
| **C 51 4** | | 484 | 364 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 48 |

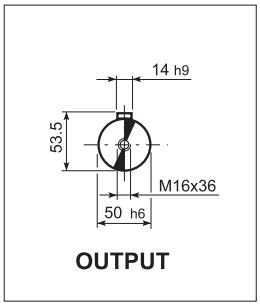


# C 61...M/ME

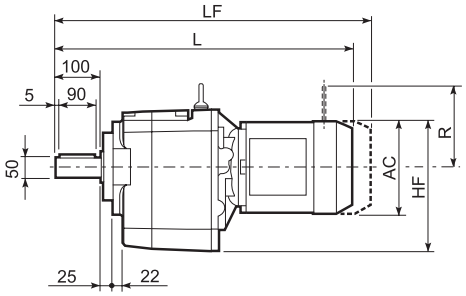
**P**

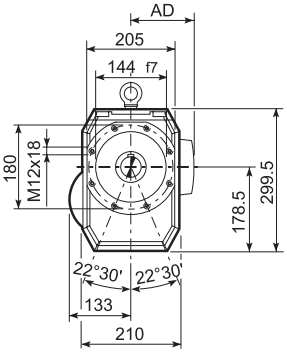


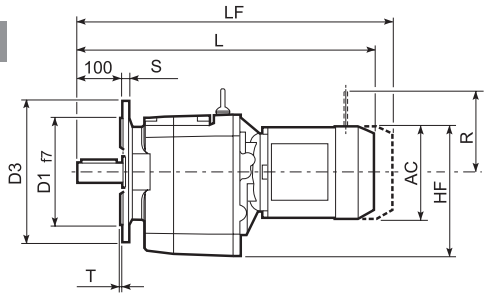



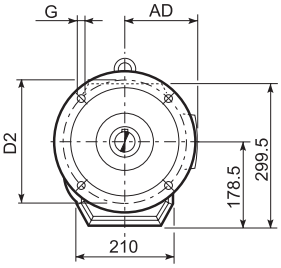

**U**




**UF**



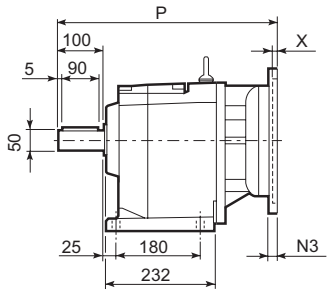



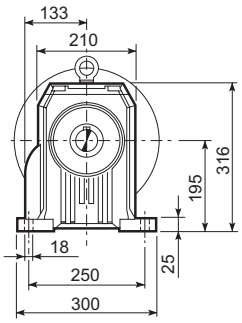

| C 61_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 230 | 265 | 300 | 14 | 4 | 16 |
| FB | 250 | 300 | 350 | 18 | 5 | 18 |

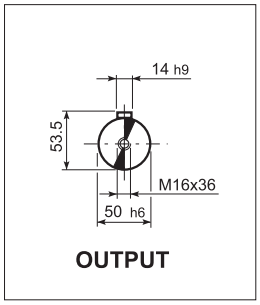
| | | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| C 61 2/3 | S2 | ME2S | 156 | 273 | 256.5 | 598.5 | 119 | 61 | — | — | — | — | — | — | 108 |
| C 61 2/3 | S3 | ME3S | 195 | 292.5 | 276 | 642.5 | 142 | 67.5 | — | — | — | — | — | — | 119 |
| C 61 2/3 | S3 | ME3L | 195 | 292.5 | 276 | 674.5 | 142 | 74 | — | — | — | — | — | — | 142 |
| C 61 2/3 | S4 | ME4 | 258 | 324 | 307.5 | 782.5 | 193 | 108 | — | — | — | — | — | — | 142 |
| C 61 2/3 | S4 | ME4LB | 258 | 324 | 307.5 | 817.5 | 193 | 116 | — | — | — | — | — | — | 193 |
| C 61 2/3 | S5 | ME5S | 310 | 350 | 333.5 | 869 | 245 | 136 | — | — | — | — | — | — | 193 |
| C 61 2/3 | S5 | ME5L | 310 | 350 | 333.5 | 913 | 245 | 152 | — | — | — | — | — | — | 245 |
| C 61 4 | S1 | M1 | 138 | 264 | 247.5 | 641 | 108 | 71 | 702 | 74 | 103 | 135 | 124 | 108 | 245 |
| C 61 4 | S2 | ME2S | 156 | 273 | 256.5 | 669 | 119 | 75 | — | — | — | — | — | — | 108 |
| C 61 4 | S3 | ME3S | 195 | 292.5 | 276 | 713 | 142 | 80.5 | — | — | — | — | — | — | 119 |
| C 61 4 | S3 | ME3L | 195 | 292.5 | 276 | 745 | 142 | 87 | — | — | — | — | — | — | 142 |

# C 61...P(IEC)

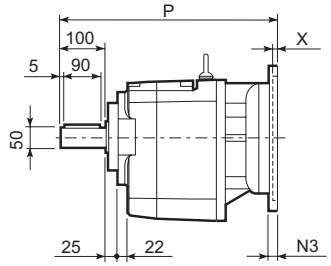
**P**

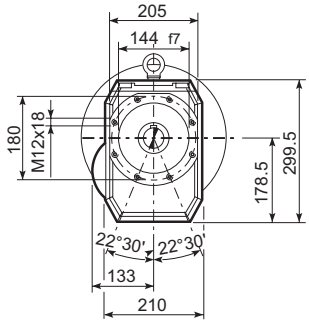


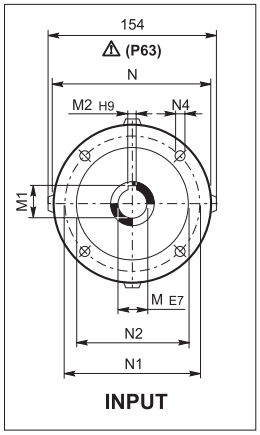



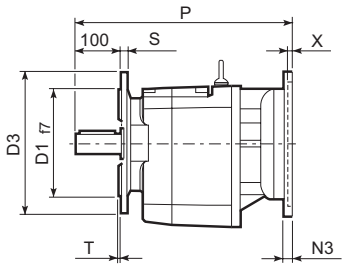

**U**

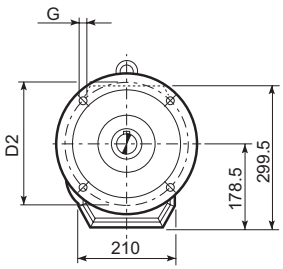


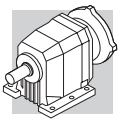

**UF**



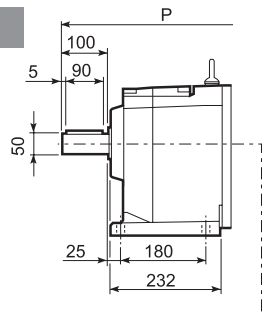

| C 61_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 230 | 265 | 300 | 14 | 4 | 16 |
| FB | 250 | 300 | 350 | 18 | 5 | 18 |

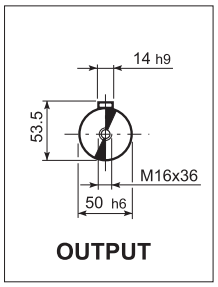
| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 61 2/3 | P63 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 415.5 | 55 |
| C 61 2/3 | P71 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 415.5 | 57 |
| C 61 2/3 | P80 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 435 | 61 |
| C 61 2/3 | P90 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 435 | 61 |
| C 61 2/3 | P100 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 444 | 65 |
| C 61 2/3 | P112 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 444 | 65 |
| C 61 2/3 | P132 | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 481.5 | 68 |
| C 61 2/3 | P160 | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 5.5 | 532 | 73 |
| C 61 2/3 | P180 | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 5.5 | 532 | 73 |
| C 61 4 | P63 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 486 | 61 |
| C 61 4 | P71 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 489 | 63 |
| C 61 4 | P80 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 505.5 | 67 |
| C 61 4 | P90 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 505.5 | 67 |
| C 61 4 | P100 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 515.5 | 71 |
| C 61 4 | P112 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 515.5 | 71 |

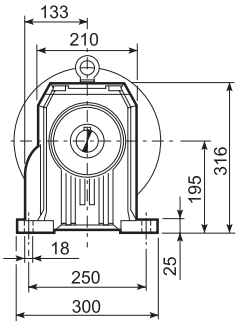


# C 61...SK / SC

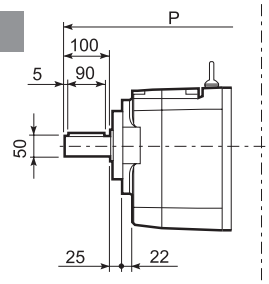
**P**

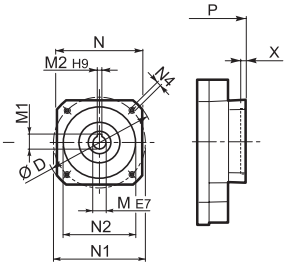


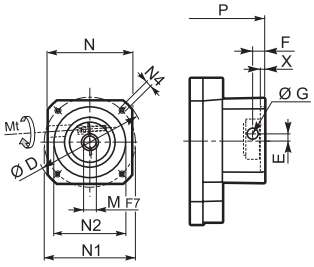




**U**

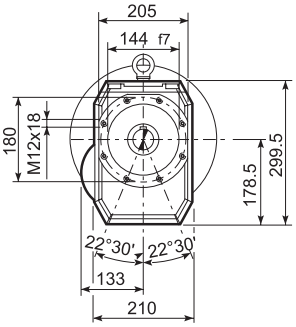


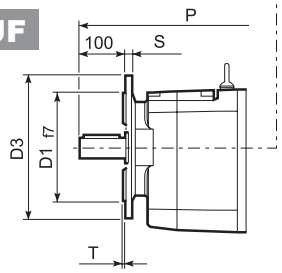

**SK...**

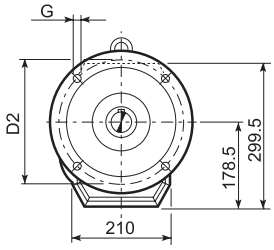



**SC...**




**UF**

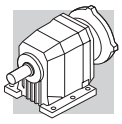



| C 61_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 230 | 265 | 300 | 14 | 4 | 16 |
| FB | 250 | 300 | 350 | 18 | 5 | 18 |

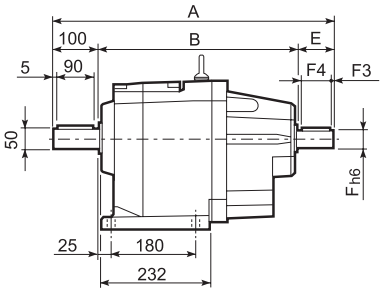
| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P 2/3x | P 4x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 61 4 | SK80B | 120 | 14 | 16.3 | 5 | 96 | 100 | 80 | M6x12 | 4 | — | 505.5 | 62 |
| C 61 2/3/4 | SK80C | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 435 | 505.5 | 63/63/69 |
| C 61 2/3/4 | SK95A | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 435 | 505.5 | 60/60/67 |
| C 61 2/3/4 | SK95B | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 435 | 505.5 | 63/63/69 |
| C 61 2/3/4 | SK95C | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 435 | 505.5 | 63/63/69 |
| C 61 2/3/4 | SK110A | 140 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 435 | 505.5 | 63/63/69 |
| C 61 2/3/4 | SK110B | 140 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 435 | 505.5 | 63/63/69 |
| C 61 2/3/4 | SK130A | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 435 | 505.5 | 67/67/80 |
| C 61 2/3 | SK130B | 189 | 32 | 35.3 | 10 | 160 | 165 | 130 | M10x20 | 5 | 481.5 | — | 72/72 |
| C 61 2/3 | SK180A | 240 | 32 | 35.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 481.5 | — | 72/72 |
| C 61 2/3 | SK180B | 240 | 38 | 41.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 481.5 | — | 66/66 |

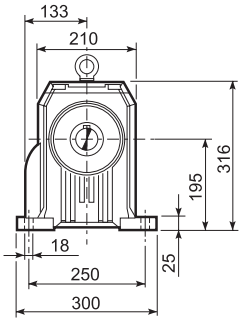
| | | Mt | | D | E | F | G | M | N | N1 | N2 | N4 | X | P 2/3x | P 4x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 61 4 | SC80B | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 14 | 96 | 100 | 80 | M6x12 | 4 | — | 529 | 63 |
| C 61 2/3/4 | SC80C | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 458.5 | 529 | 64/64/70 |
| C 61 2/3/4 | SC95A | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 458.5 | 529 | 61/61/68 |
| C 61 2/3/4 | SC95B | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 458.5 | 529 | 64/64/70 |
| C 61 2/3/4 | SC95C | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 458.5 | 529 | 64/64/70 |
| C 61 2/3/4 | SC110A | M6 | 15 Nm | 140 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 458.5 | 529 | 65/65/70 |
| C 61 2/3/4 | SC110B | M6 | 15 Nm | 140 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 458.5 | 529 | 65/65/70 |
| C 61 2/3/4 | SC130A | M6 | 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 458.5 | 529 | 66/66/81 |
| C 61 2/3 | SC130B | M8 | 36 Nm | 189 | 20 | 17 | 17.75 | 32 | 160 | 165 | 130 | M10x20 | 5 | 504.5 | — | 75/75 |
| C 61 2/3 | SC180A | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 32 | 192 | 215 | 180 | M12x24 | 5 | 508.5 | — | 75/75 |
| C 61 2/3 | SC180B | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 38 | 192 | 215 | 180 | M12x24 | 5 | 508.5 | — | 69/69 |

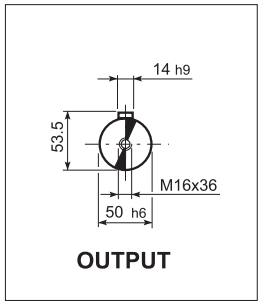


# C 61...HS

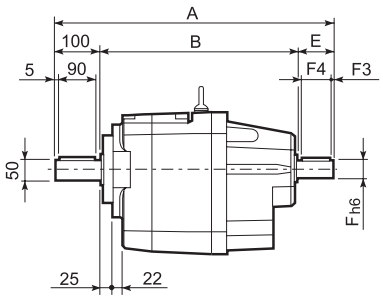
**P**

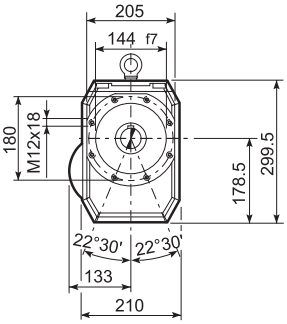


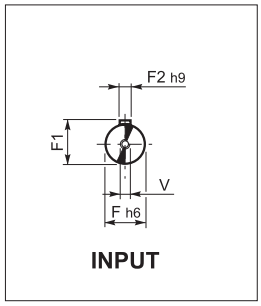



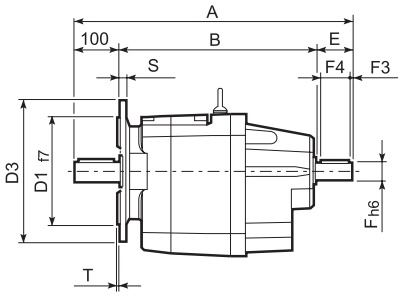

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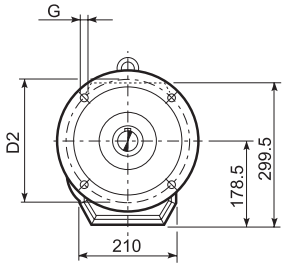


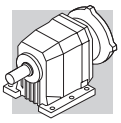

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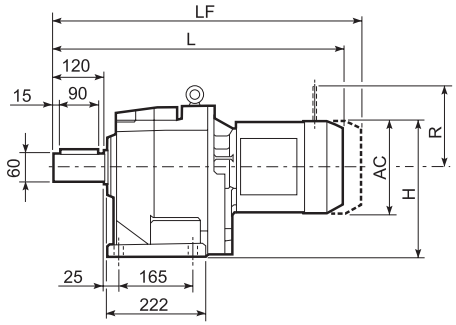

| C 61_U | | | | | | |
|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | G | T | S |
| FA | 230 | 265 | 300 | 14 | 4 | 16 |
| FB | 250 | 300 | 350 | 18 | 5 | 18 |

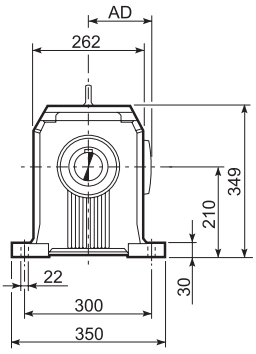
| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C 61 2 | HS | 532 | 372 | 60 | 28 | 31 | 8 | 5 | 50 | M10x22 | 66 |
| C 61 3 | | 532 | 372 | 60 | 28 | 31 | 8 | 5 | 50 | M10x22 | 66 |
| C 61 4 | | 575 | 425 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 72 |

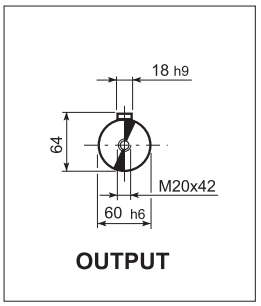


# C 70...M/ME

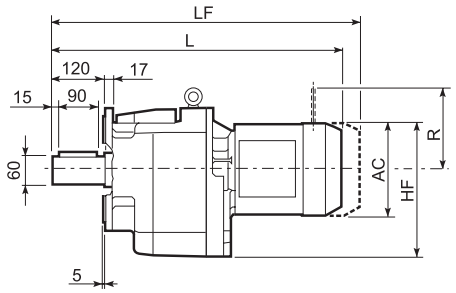
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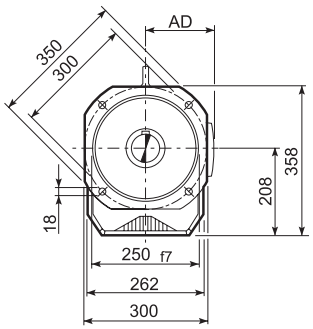



**F**

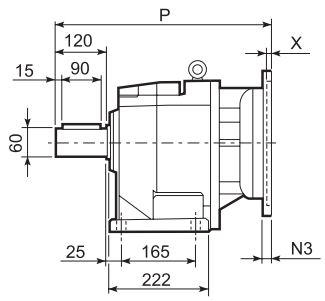


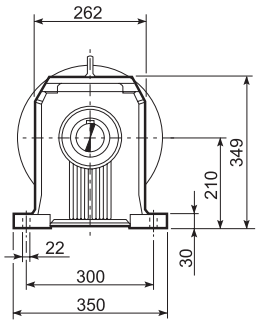



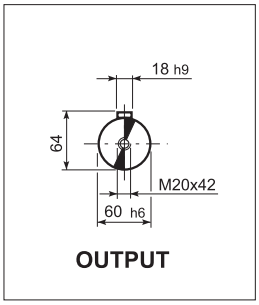

| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **C 70 2/3** | **S2** | **ME2S** | 156 | 288 | 286 | 636.5 | 119 | 88 | — | — | — | — | — | — |
| **C 70 2/3** | **S3** | **ME3S** | 195 | 307.5 | 305.5 | 680.5 | 142 | 94.5 | — | — | — | — | — | — |
| **C 70 2/3** | **S3** | **ME3L** | 195 | 307.5 | 305.5 | 712.5 | 142 | 101 | — | — | — | — | — | — |
| **C 70 2/3** | **S4** | **ME4** | 258 | 339 | 337 | 820.5 | 193 | 135 | — | — | — | — | — | — |
| **C 70 2/3** | **S4** | **ME4LB** | 258 | 339 | 337 | 855.5 | 193 | 143 | — | — | — | — | — | — |
| **C 70 2/3** | **S5** | **ME5S** | 310 | 365 | 363 | 907 | 245 | 163 | — | — | — | — | — | — |
| **C 70 2/3** | **S5** | **ME5L** | 310 | 365 | 363 | 951 | 245 | 179 | — | — | — | — | — | — |
| **C 70 4** | **S1** | **M1** | 138 | 279 | 277 | 659.5 | 108 | 88 | 720.5 | 91 | 103 | 135 | 124 | 108 |
| **C 70 4** | **S2** | **ME2S** | 156 | 288 | 286 | 687.5 | 119 | 92 | — | — | — | — | — | — |
| **C 70 4** | **S3** | **ME3S** | 195 | 307.5 | 305.5 | 731.5 | 142 | 98.5 | — | — | — | — | — | — |
| **C 70 4** | **S3** | **ME3L** | 195 | 307.5 | 305.5 | 763.5 | 142 | 104 | — | — | — | — | — | — |
| **C 70 4** | **S4** | **ME4** | 258 | 339 | 337 | 871.5 | 193 | 138 | — | — | — | — | — | — |
| **C 70 4** | **S4** | **ME4LB** | 258 | 339 | 337 | 906.5 | 193 | 146 | — | — | — | — | — | — |

# C 70...P(IEC)

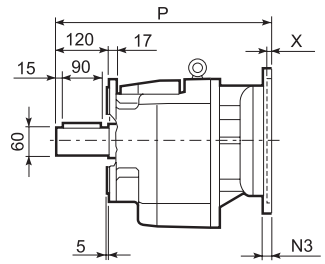
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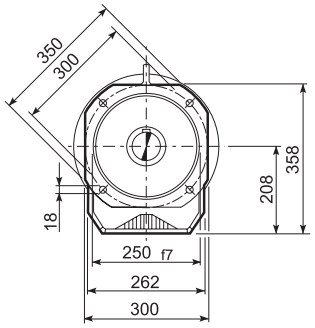


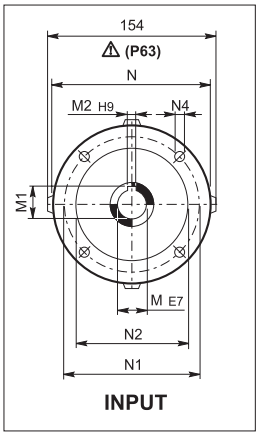




**F**



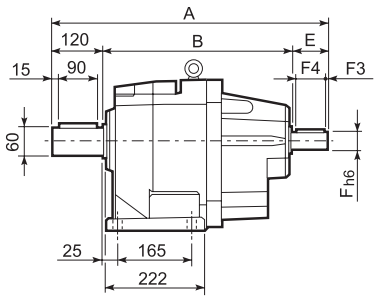



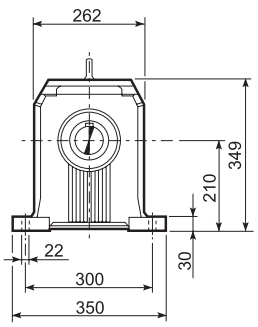



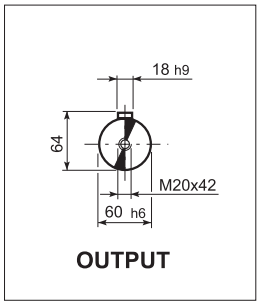

| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 70 2/3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 473 | 88 |
| **C 70 2/3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 473 | 88 |
| **C 70 2/3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 483 | 92 |
| **C 70 2/3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 483 | 92 |
| **C 70 2/3** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 519.5 | 95 |
| **C 70 2/3** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 6 | 575 | 107 |
| **C 70 2/3** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 6 | 575 | 107 |
| **C 70 2** | **P200** | 55 | 59.3 | 16 | 400 | 350 | 300 | — | M16x25 | 7 | 600 | 129 |
| **C 70 4** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 504.5 | 91 |
| **C 70 4** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 504.5 | 91 |
| **C 70 4** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 524 | 92 |
| **C 70 4** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 524 | 92 |
| **C 70 4** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 534 | 96 |
| **C 70 4** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 534 | 96 |
| **C 70 4** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 570.5 | 98 |

# C 70...HS

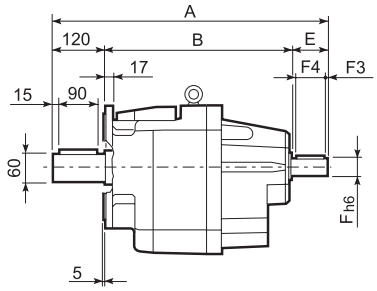
**P**

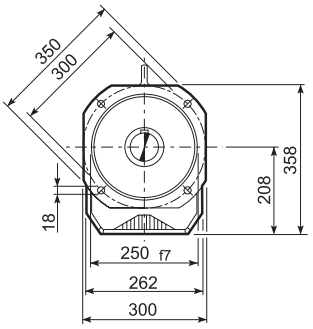


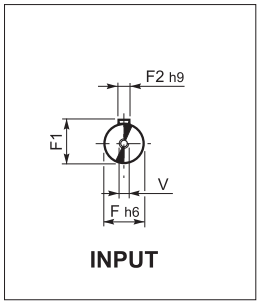



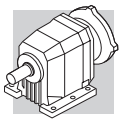

**F**



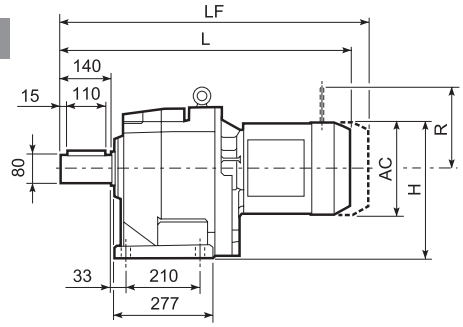



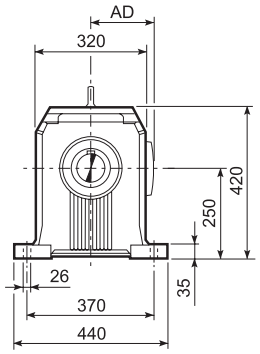

| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 70 2** | | 657.5 | 427.5 | 110 | 42 | 45 | 12 | 10 | 90 | M12x28 | 108 |
| **C 70 3** | **HS** | 657.5 | 427.5 | 110 | 42 | 45 | 12 | 10 | 90 | M12x28 | 108 |
| **C 70 4** | | 593.5 | 423.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 94 |

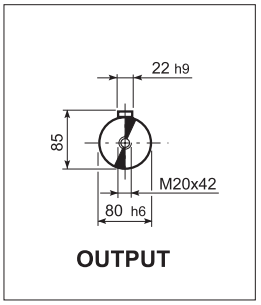


# C 80...M/ME

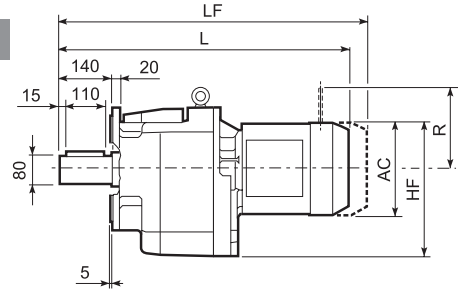
**P**

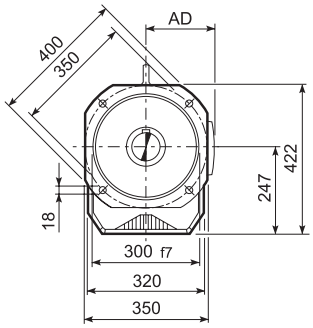



**F**

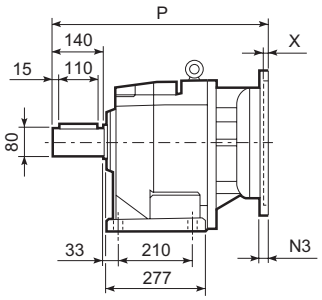


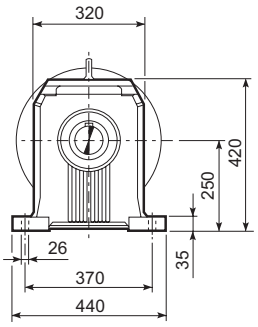




| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **C 80 2/3** | **S3** | **ME3S** | 195 | 347.5 | 344.5 | 742.5 | 142 | 140.5 | — | — | — | — | — | — |
| **C 80 2/3** | **S3** | **ME3L** | 195 | 347.5 | 344.5 | 774.5 | 142 | 146 | — | — | — | — | — | — |
| **C 80 2/3** | **S4** | **ME4** | 258 | 379 | 376 | 882.5 | 193 | 180 | — | — | — | — | — | — |
| **C 80 2/3** | **S4** | **ME4LB** | 258 | 379 | 376 | 917.5 | 193 | 188 | — | — | — | — | — | — |
| **C 80 2/3** | **S5** | **ME5S** | 310 | 405 | 402 | 969 | 245 | 208 | — | — | — | — | — | — |
| **C 80 2/3** | **S5** | **ME5L** | 310 | 405 | 402 | 1013 | 245 | 224 | — | — | — | — | — | — |
| **C 80 4** | **S1** | **M1** | 138 | 319 | 316 | 733.5 | 108 | 133 | 794.5 | 136 | 103 | 135 | 124 | 108 |
| **C 80 4** | **S2** | **ME2S** | 156 | 328 | 325 | 761.5 | 119 | 137 | — | — | — | — | — | — |
| **C 80 4** | **S3** | **ME3S** | 195 | 347.5 | 344.5 | 805.5 | 142 | 143.5 | — | — | — | — | — | — |
| **C 80 4** | **S3** | **ME3L** | 195 | 347.5 | 344.5 | 837.5 | 142 | 149 | — | — | — | — | — | — |
| **C 80 4** | **S4** | **ME4** | 258 | 379 | 376 | 945.5 | 193 | 183 | — | — | — | — | — | — |
| **C 80 4** | **S4** | **ME4LB** | 258 | 379 | 376 | 980.5 | 193 | 191 | — | — | — | — | — | — |

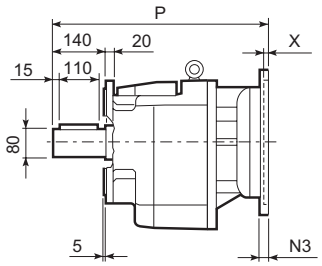
# C 80...P(IEC)

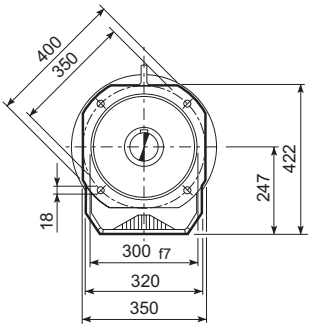
**P**

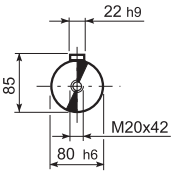


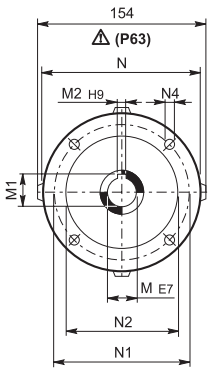

**F**



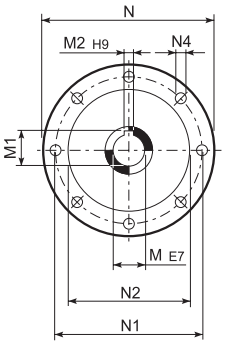




**OUTPUT**




**INPUT**
**P63...P200**

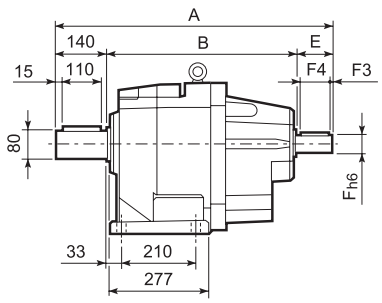


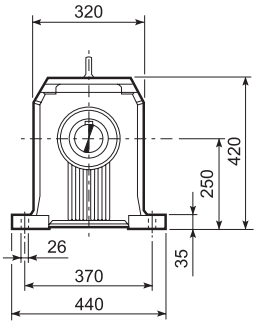

**INPUT**
**P225**

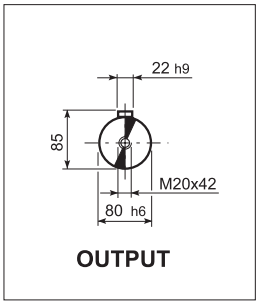
| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 80 2/3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 533 | 135 |
| **C 80 2/3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 533 | 135 |
| **C 80 2/3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 543 | 139 |
| **C 80 2/3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 543 | 139 |
| **C 80 2/3** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 579.5 | 141 |
| **C 80 2/3** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 6 | 635 | 154 |
| **C 80 2/3** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 6 | 635 | 154 |
| **C 80 2** | **P200** | 55 | 59.3 | 16 | 400 | 350 | 300 | — | M16x25 | 7 | 660 | 176 |
| **C 80 2** | **P225** | 60 | 64.4 | 18 | 450 | 400 | 350 | 25 | 18 | 6 | 705.5 | 178 |
| **C 80 4** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 576.5 | 138 |
| **C 80 4** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 576.5 | 138 |
| **C 80 4** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 596 | 140 |
| **C 80 4** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 596 | 140 |
| **C 80 4** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 606 | 144 |
| **C 80 4** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 606 | 144 |
| **C 80 4** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | M12x16 | 5 | 642.5 | 146 |

# C 80...HS

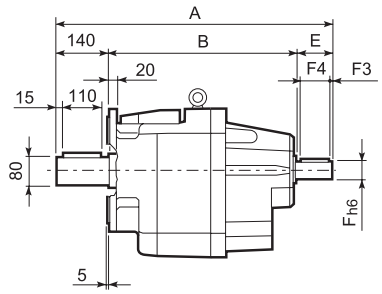
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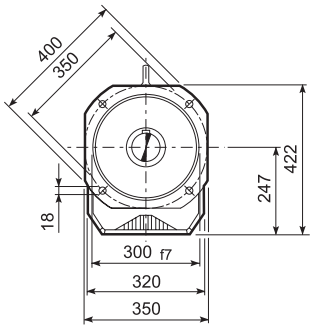


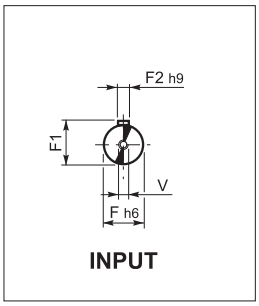




**F**



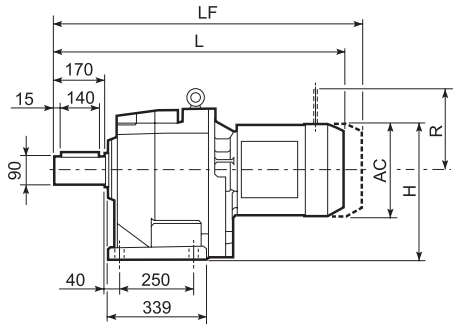



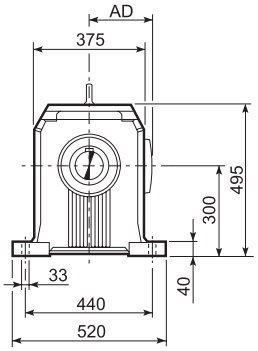



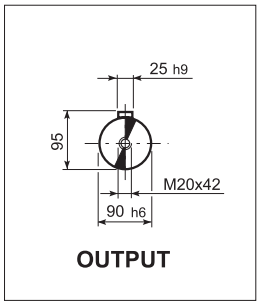

| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 80 2** | | 718.5 | 468.5 | 110 | 42 | 45 | 12 | 10 | 90 | M12x28 | 154 |
| **C 80 3** | **HS** | 718.5 | 468.5 | 110 | 42 | 45 | 12 | 10 | 90 | M12x28 | 154 |
| **C 80 4** | | 666.5 | 476.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 141 |

# C 90...M/ME

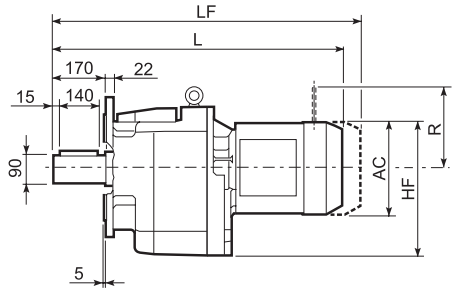
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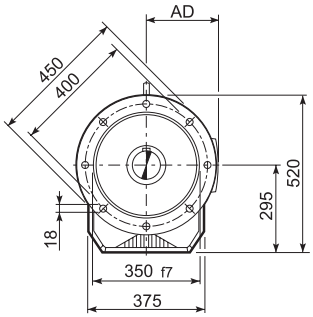



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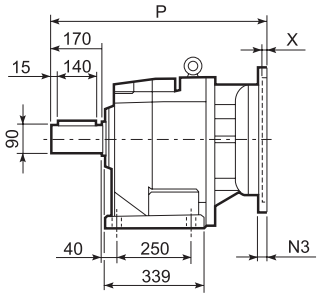


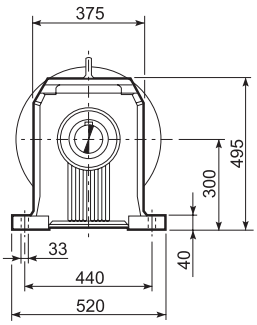




| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **C 90 2/3** | **S3** | **ME3S** | 195 | 397.5 | 392.5 | 852 | 142 | 229.5 | — | — | — | — | — | — |
| **C 90 2/3** | **S3** | **ME3L** | 195 | 397.5 | 392.5 | 884 | 142 | 236 | — | — | — | — | — | — |
| **C 90 2/3** | **S4** | **ME4** | 258 | 429 | 424 | 992 | 193 | 270 | — | — | — | — | — | — |
| **C 90 2/3** | **S4** | **ME4LB** | 258 | 429 | 424 | 1027 | 193 | 278 | — | — | — | — | — | — |
| **C 90 2/3** | **S5** | **ME5S** | 310 | 455 | 450 | 1078.5 | 245 | 298 | — | — | — | — | — | — |
| **C 90 2/3** | **S5** | **ME5L** | 310 | 455 | 450 | 1122.5 | 245 | 314 | — | — | — | — | — | — |
| **C 90 4** | **S1** | **M1** | 138 | 369 | 364 | 862 | 108 | 226 | 923 | 228 | 103 | 135 | 124 | 108 |
| **C 90 4** | **S2** | **M2S** | 156 | 378 | 373 | 891 | 119 | 234 | 962 | 238 | 129 | 146 | 134 | 119 |
| **C 90 4** | **S2** | **ME2S** | 156 | 378 | 373 | 891 | 119 | 234 | — | — | — | — | — | — |
| **C 90 4** | **S3** | **ME3S** | 195 | 397.5 | 392.5 | 935 | 142 | 240.5 | — | — | — | — | — | — |
| **C 90 4** | **S3** | **ME3L** | 195 | 397.5 | 392.5 | 967 | 142 | 246 | — | — | — | — | — | — |
| **C 90 4** | **S4** | **ME4** | 258 | 429 | 424 | 1075 | 193 | 280 | — | — | — | — | — | — |
| **C 90 4** | **S4** | **ME4LB** | 258 | 429 | 424 | 1126.5 | 193 | 288 | — | — | — | — | — | — |

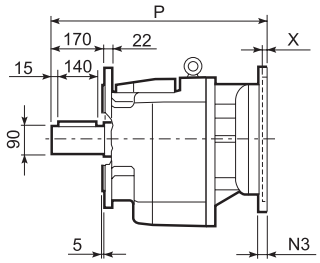
# C 90...P(IEC)

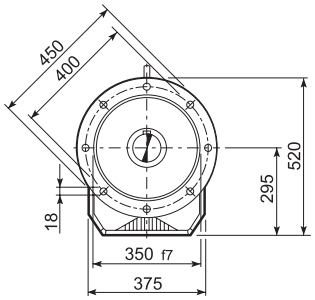
**P**

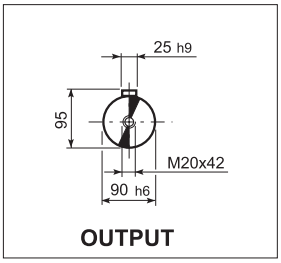


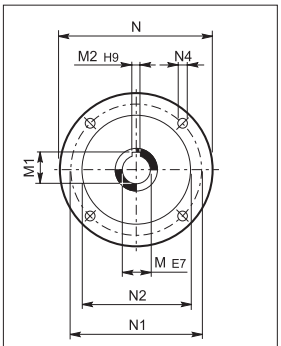

**F**



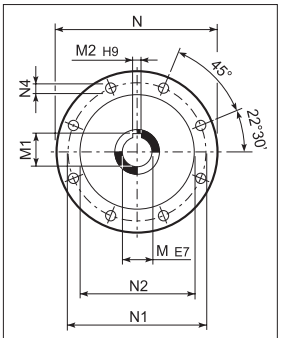




**OUTPUT**




**INPUT**
**P71...P200**

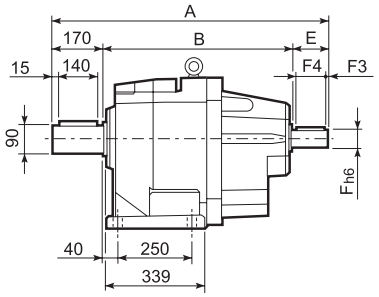


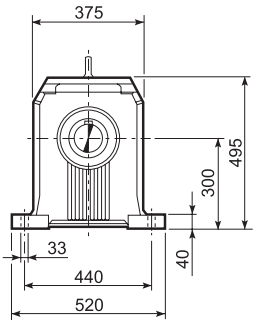

**INPUT**
**P225...P250**

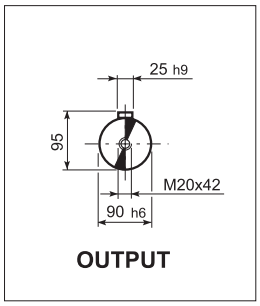
| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 90 2/3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 644.5 | 229 |
| **C 90 2/3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 644.5 | 229 |
| **C 90 2/3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 654.5 | 234 |
| **C 90 2/3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 654.5 | 234 |
| **C 90 2/3** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 691 | 236 |
| **C 90 2/3** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 6 | 746.5 | 251 |
| **C 90 2/3** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 6 | 746.5 | 251 |
| **C 90 2/3** | **P200** | 55 | 59.3 | 16 | 400 | 350 | 300 | — | M16x25 | 7 | 771.5 | 272 |
| **C 90 2/3** | **P225** | 60 | 64.4 | 18 | 450 | 400 | 350 | 30 | 18 | 6 | 817 | 273 |
| **C 90 2/3** | **P250** | 65 | 69.4 | 18 | 550 | 500 | 450 | 30 | 18 | 6 | 847 | 295 |
| **C 90 4** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 707.5 | 236 |
| **C 90 4** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 707.5 | 236 |
| **C 90 4** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 727 | 238 |
| **C 90 4** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 727 | 238 |
| **C 90 4** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 737 | 242 |
| **C 90 4** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 737 | 242 |
| **C 90 4** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 773.5 | 244 |
| **C 90 4** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 5.5 | 824 | 248 |
| **C 90 4** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 5.5 | 824 | 248 |

# C 90...HS

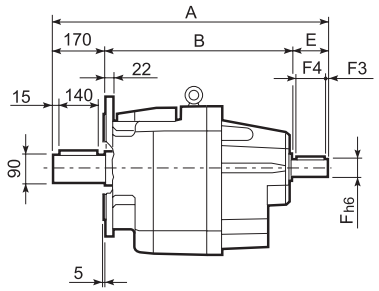
**P**

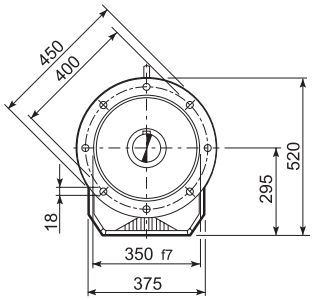


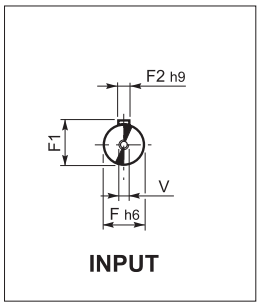



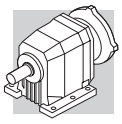

**F**



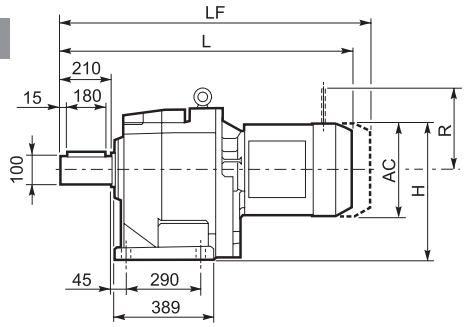



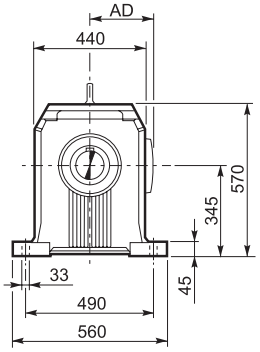

| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 90 2** | | 930.5 | 620.5 | 140 | 60 | 64 | 18 | 10 | 120 | M16x36 | 273 |
| **C 90 3** | **HS** | 930.5 | 620.5 | 140 | 60 | 64 | 18 | 10 | 120 | M16x36 | 273 |
| **C 90 4** | | 797 | 577 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 240 |

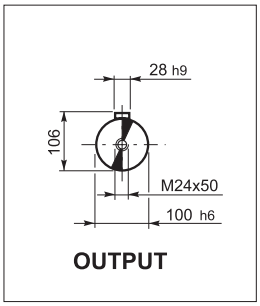


# C 100...M/ME

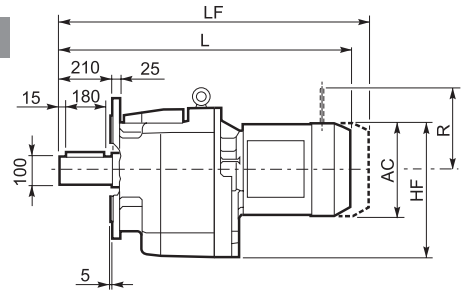
**P**

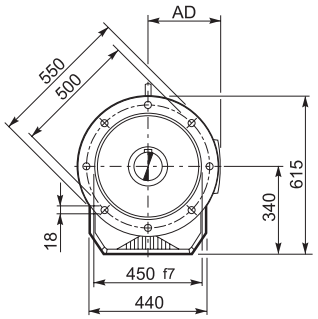



**F**

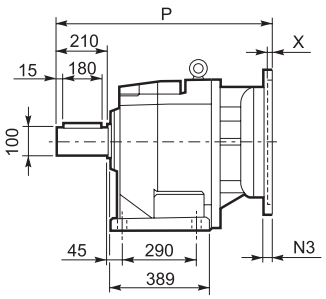


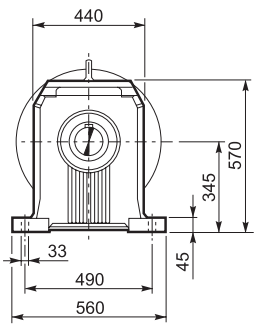



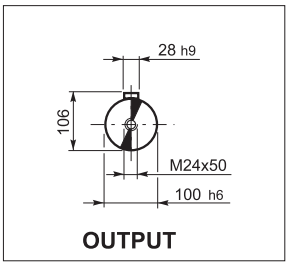

| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **C 100 2/3** | **S4** | **ME4** | 258 | 474 | 469 | 1087 | 193 | 392 | — | — | — | — | — | — |
| **C 100 2/3** | **S4** | **ME4LB** | 258 | 474 | 469 | 1122 | 193 | 400 | — | — | — | — | — | — |
| **C 100 2/3** | **S5** | **ME5S** | 310 | 500 | 495 | 1173.5 | 245 | 420 | — | — | — | — | — | — |
| **C 100 2/3** | **S5** | **ME5L** | 310 | 500 | 495 | 1217.5 | 245 | 436 | — | — | — | — | — | — |
| **C 100 4** | **S1** | **M1** | 138 | 414 | 409 | 956.5 | 108 | 346 | 1027.5 | 348 | 103 | 135 | 124 | 108 |
| **C 100 4** | **S2** | **M2S** | 156 | 423 | 418 | 985.5 | 119 | 354 | 1056.5 | 357 | 129 | 146 | 134 | 119 |
| **C 100 4** | **S2** | **ME2S** | 156 | 423 | 418 | 985.5 | 119 | 354 | — | — | — | — | — | — |
| **C 100 4** | **S3** | **ME3S** | 195 | 442.5 | 437.5 | 1029.5 | 142 | 359.5 | — | — | — | — | — | — |
| **C 100 4** | **S3** | **ME3L** | 195 | 442.5 | 437.5 | 1061.5 | 142 | 366 | — | — | — | — | — | — |
| **C 100 4** | **S4** | **ME4** | 258 | 474 | 469 | 1169.5 | 193 | 400 | — | — | — | — | — | — |
| **C 100 4** | **S4** | **ME4LB** | 258 | 474 | 469 | 1204.5 | 245 | 408 | — | — | — | — | — | — |

# C 100...P(IEC)

**P**

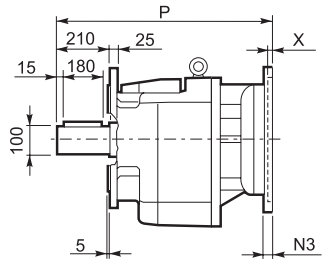


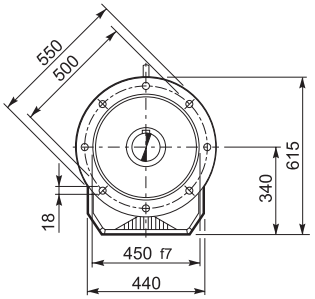



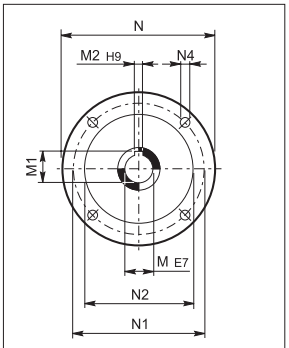




**OUTPUT**

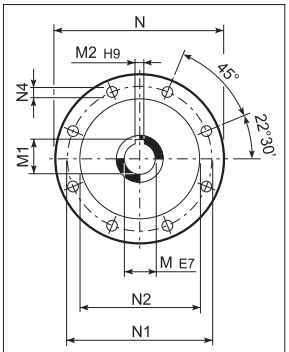
**F**




**INPUT**
**P80...P200**

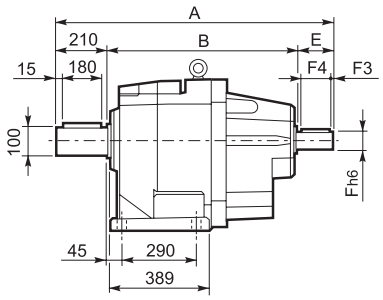


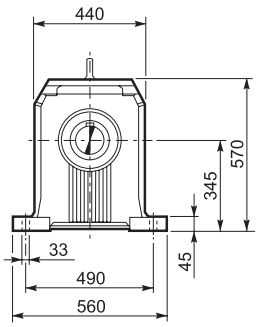

**INPUT**
**P225...P280**

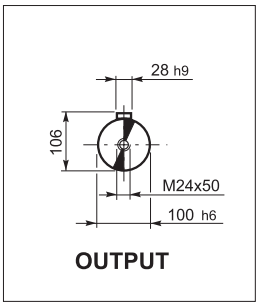
| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 100 2/3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 749.5 | 364 |
| **C 100 2/3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 749.5 | 364 |
| **C 100 2/3** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 786 | 367 |
| **C 100 2/3** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 6 | 841.5 | 382 |
| **C 100 2/3** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 6 | 841.5 | 382 |
| **C 100 2/3** | **P200** | 55 | 59.3 | 16 | 400 | 350 | 300 | — | M16x25 | 7 | 866.5 | 403 |
| **C 100 2/3** | **P225** | 60 | 64.4 | 18 | 450 | 400 | 350 | 30 | 18 | 7 | 912 | 403 |
| **C 100 2/3** | **P250** | 65 | 69.4 | 18 | 550 | 500 | 450 | 30 | 18 | 7 | 942 | 426 |
| **C 100 2/3** | **P280** | 75 | 79.9 | 20 | 550 | 500 | 450 | 30 | 18 | 6 | 942 | 426 |
| **C 100 4** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 803 | 369 |
| **C 100 4** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 803 | 369 |
| **C 100 4** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 822.5 | 371 |
| **C 100 4** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 822.5 | 371 |
| **C 100 4** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 832.5 | 375 |
| **C 100 4** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 832.5 | 375 |
| **C 100 4** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 869 | 377 |
| **C 100 4** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 5.5 | 919.5 | 381 |
| **C 100 4** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 5.5 | 919.5 | 381 |

# C 100...HS

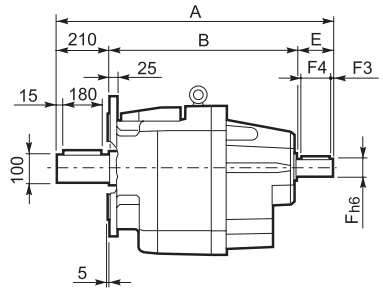
**P**

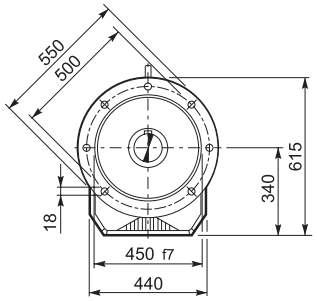


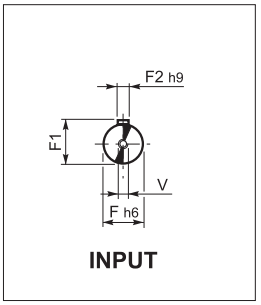



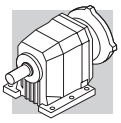

**F**



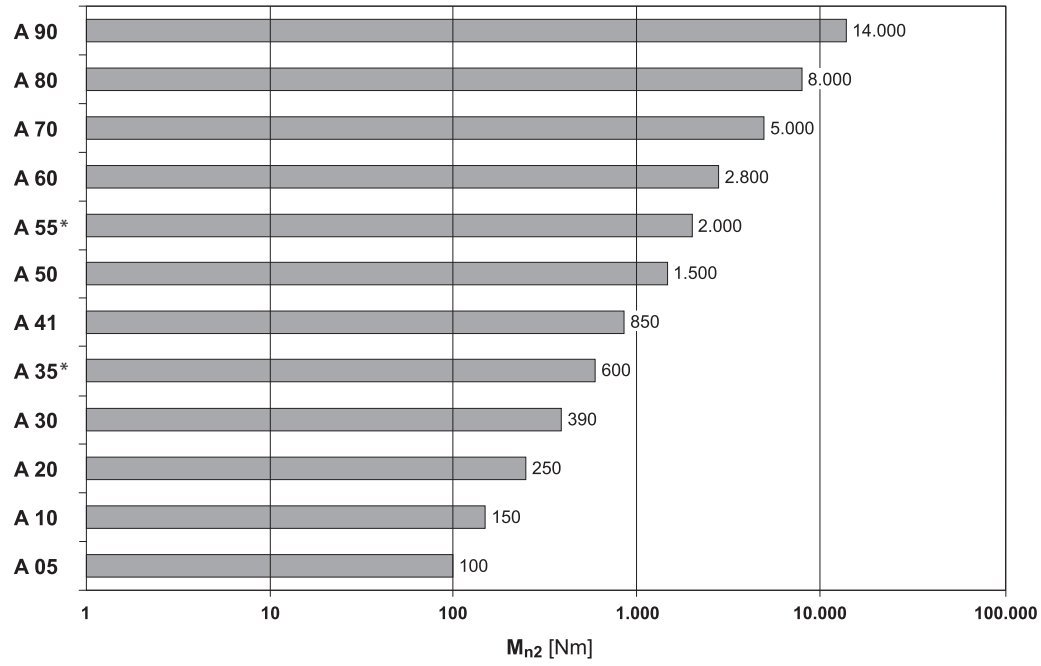

| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **C 100 2** | | 1025.5 | 676 | 140 | 60 | 64 | 18 | 10 | 120 | M16x36 | 409 |
| **C 100 3** | **HS** | 1025.5 | 676 | 140 | 60 | 64 | 18 | 10 | 120 | M16x36 | 409 |
| **C 100 4** | | 892 | 632 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 372 |



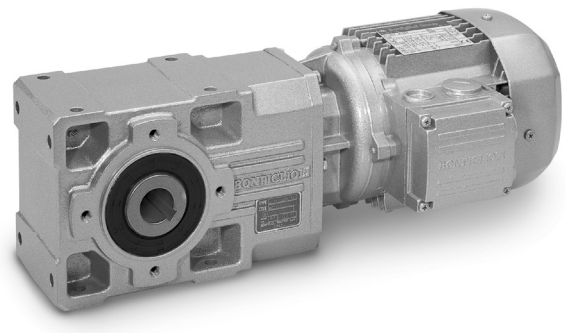
## 31 CARACTERISTICAS DE DISEÑO

Las principales características de diseño son:
- modularidad
- diseño compacto
- montajes universales
- rendimientos elevados
- bajo nivel de rumorosidad
- engranajes de acero aleado, cementados y templados
- cajas de aluminio sin pintar en los tamaños 05, 10, 20, 30 y de fundición de alta resistencia, pintadas, para los otros tamaños
- ejes de entrada y salida de acero de alta resistencia.

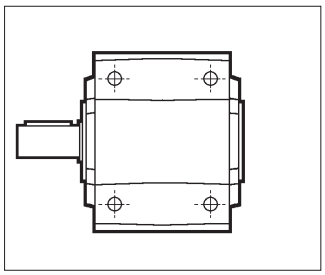
(C 22)




* Para las posible limitaciones relativas a la forma constructiva QF ver el capitulo “FORMAS CONSTRUTIVAS”.



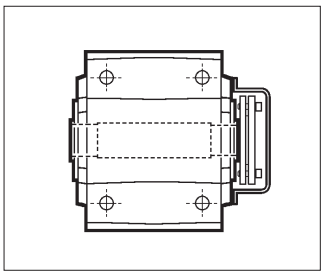
## 32 FORMAS CONSTRUCTIVAS



### UR

**Eje de salida simple**

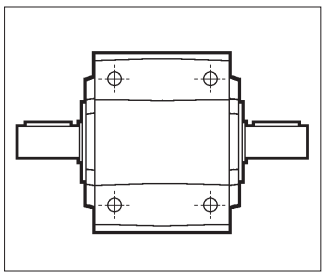
**A 10 ... A 90**



### US

**Eje de salida hueco con aro de apriete**

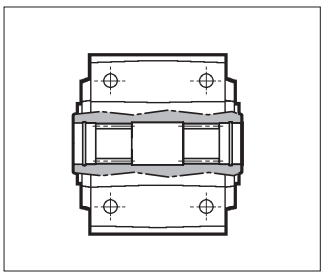
**A 05 ... A 90**



### UD

**Eje de salida doble**

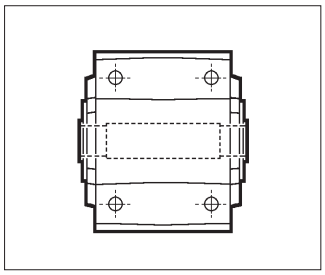
**A 10 ... A 90**



### UV

**Eje de salida estriado DIN 5480**

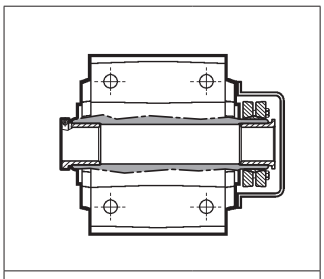
**A 20 ... A 60**



### UH

**Eje de salida hueco con chavetero**

**A 05 ... A 90**



### QF (Quick-fit)

**Eje hueco con casquillo de adaptación y aro de apriete**

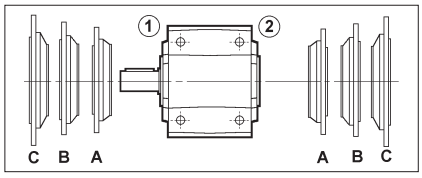
**A 10 ... A 60**

| $M_{n2\ max}$ [Nm] | |
|---|---|
| **A 35 QF35** | 550 |
| **A 55 QF55** | 1900 |

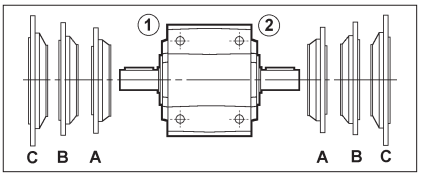
**Formas constructivas con brida postiza**

Los esquemas muestran las distintas bridas aplicables a la forma constructiva base, y su correspondiente posicionamiento (①,②).

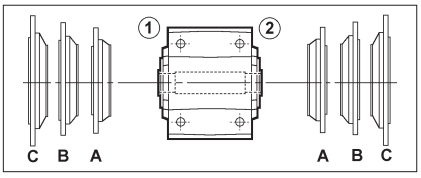
**UR F1...** **UR F2...**



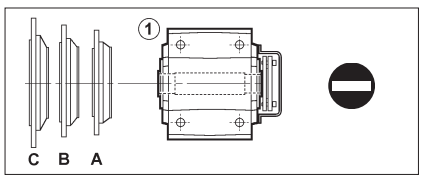

**UD F1...** **UD F2...**



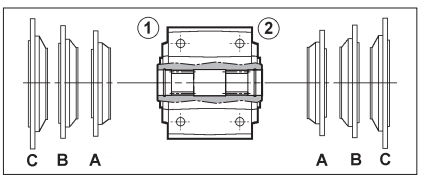

**UH... F1...** **UH... F2...**



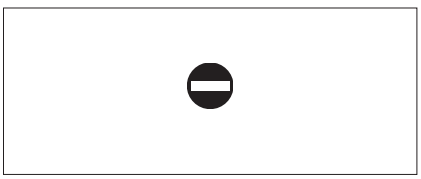

**US F1...** **US F2...**

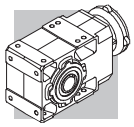



**UV F1...** **UV F2...**




**QF...**





## 33 DESIGNACIÓN

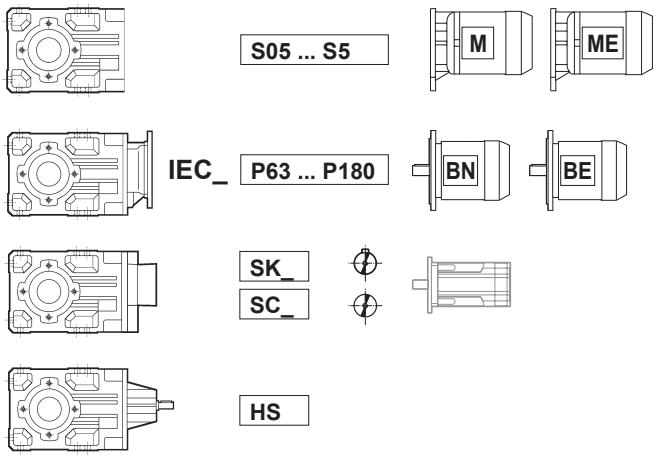
REDUCTOR

**A 35 2 UH40 F1A 49.1 S1 VA .....**

OPCIONES 164

POSICIÓN DE MONTAJE 168
**B3** (estandar), **B6**, **B7**, **B8**, **VA**, **VB**

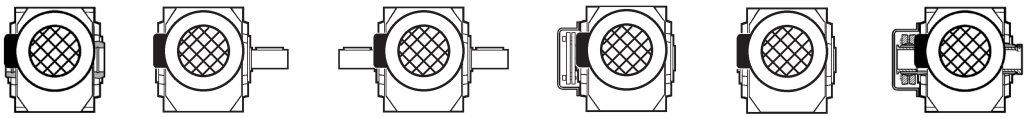
DESIGNACION DE LA ENTRADA




RELACIÓN DE REDUCCIÓN

TAMAÑO Y POSICION DE LA BRIDA DE SALIDA
(especificar solamente si se precisa)
**F** = Versión embridada
**1**, **2** = Posición de la brida
**A**, **B**, **C** = Tamaño de la brida

FORMA CONSTRUCTIVA



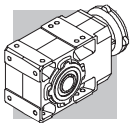
| UH_ | UR | UD | US | UV | QF |
|---|---|---|---|---|---|
| | (A 10...A 90) | (A 10...A 90) | (A 05...A 90) | (A 20...A 60) | (A 10...A 60) |

| A 05 | A 10 | A 20 | A 30 | A 35 | A 41 | A 50 | A 55 | A 60 | A 70 | A 80 | A 90 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **UH25** | **UH25** | **UH30** | **UH35** | **UH40** | **UH45** | **UH50** | **UH60** | **UH60** | **UH70** | **UH80** | **UH90** |
| — | UH30 | UH35 | UH40 | UH35 | UH40 | UH55 | UH50 | UH70 | UH80 | UH90 | UH100 |

Nº DE ETAPAS DE REDUCCIÓN
**2** (A 05...A 60), **3** (A 20...A 90), **4** (A 50...A 90)

TAMAÑO REDUCTOR
**05**, **10**, **20**, **30**, **35**, **41**, **50**, **55**, **60**, **70**, **80**, **90**

TIPO: **A** = Reductores ortogonales



MOTOR | FRENO

**M 1LA 4** 230/400-50 IP54 CLF ..... **W FD** 7.5 R SB 220 SA .....

OPCIONES 166

ALIMENTACIÓN FRENO 526 531 536 539

TIPO RECTIFICADOR AC/DC
**NB**, **SB**, **NBR**, **SBR** 527 532

PALANCA DESBLOQUEO FRENO
**R**, **RM** 541

PAR DE FRENADO 528 533 536 539

TIPO DE FRENO
**FD**, **AFD** (freno c.c.)
**FA**, **BA** (freno c.a.) 525 530 535 538

POSICIÓN CAJA DE BORNES
**W** (por defecto), **N**, **E**, **S** 168

FORMA CONSTRUCTIVA
— (motor integrado)
**B5** (motor IEC)

CLASE DE AISLAMIENTO
**CL F** estandar
**CL H** opción 492 519

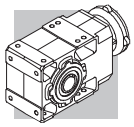
GRADO DE PROTECCIÓN
**IP55** estandard (IP54 - en motor con freno) 492 514

TENSIÓN - FRECUENCIA 488 517

NUMERO DE POLOS
**2**, **4**, **6**, **2/4**, **2/6**, **2/8**, **2/12**, **4/6**, **4/8**

TAMAÑO MOTOR
**0B ... 5LA** (motor integrado)
**63A ... 280M** (motor IEC)

TIPO MOTOR
**M** = trifásico integrado
**BN** = trifásico IEC
**ME** = trifásico integrado, clase IE2
**BE** = trifase IEC, classe IE2



## 33.1 Opciones reductor

**AL, AR**
Antirretorno. En el párrafo 39 están indicados los sentidos de giro a indicar y los tipos de reductor a los que puede aplicarse el dispositivo antirretorno.

**SO**
Los reductores A05, A10, A20, A30, A35 y A41 que normalmente son suministrados con lubricante por parte de BONFIGLIOLI RIDUTTORI, en este caso se suministran sin lubricante.

**LO**
Los reductores A 50, A 55, A 60, A 70, A 80 y A 90, que normalmente se suministran sin aceite lubricante, pueden solicitarse con aceite sintético del tipo utilizado normalmente por BONFIGLIOLI RIDUTTORI y llenados de acuerdo con la posición de montaje solicitada.

**DV**
Dos retenes en el eje rápido. (Disponible únicamente en los motorreductores compactos).

**VV**
Reten de fluoro-elastómero en el eje rápido.

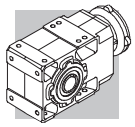
**PV**
Todos los retenes de fluoro-elastómero.

**TKL**
Para los reductores de tamaños A70 a A90 utilizados en ambientes polvorientos abrasivos, se dispone de retenes en el eje de salida de tipo Taconite constituidos por una combinación de reten de labio y de cámara de grasa. La presencia de la grasa deberá garantizarse mediante operaciones de mantenimiento periódico.
La opción prevé retenes de fluoro-elastómero en todos los ejes.
Para la posición de montaje B6 consultar con nuestro Servicio Técnico.

**HDB**
Para aplicaciones con cargas radiales especialmente altas, para las cuales la capacidad de carga radial en ejecución estándar no es suficiente, algunos reductores pueden ser solicitados con capacidad de carga radial más alta especificando en el pedido la opción HDB. Esta opción está disponible para reductores del tamaño A 10 al A 50, ya sea con eje de salida macho cilíndrico simple o doble.
La carga soportable de los grupos en ejecución reforzada se detallan en la siguiente tabla. Los valores se refieren a la aplicación de fuerza sobre la mitad del eje de salida.

(C 23)

| HDB | $R_{N2}$ | | | | | |
|---|---|---|---|---|---|---|
| | A 10 | A 20 | A 30 | A 35 | A 41 | A 50 |
| $n_1$ = 2800 | **5500 N** | **6200 N** | **9600 N** | **12000 N** | **15000 N** | **20000 N** |
| ⚠ | | | 8970 N @ i=5.4 | 10200 N @ i=5.4<br>10600 N @ i=6.4<br>11000 N @ i=7.0 | 11500 N @ i=5.2<br>12700 N @ i=7.1<br>13300 N @ i=8.3<br>13700 N @ i=9.2 | 19000 N @ i=7.7 |
| $n_1$ = 1400 | **5500 N** | **6200 N** | **9600 N** | **12000 N** | **15000 N** | **20000 N** |
| $n_1$ = 900 | **5500 N** | **6200 N** | **9600 N** | **12000 N** | **15000 N** | **20000 N** |
| $n_1$ = 500 | **5500 N** | **6200 N** | **9600 N** | **12000 N** | **15000 N** | **20000 N** |



Los rodamientos de tipo reforzado permiten también la aplicación de un porcentaje mayor de carga axial, en concreto:

$$A_{N2} = 0.35 \times R_{n2} \quad (24)$$

En ausencia de cargas radiales la carga axial aplicable es:

$$A_{N2} = 0.70 \times R_{n2} \quad (25)$$

En el caso de fuerzas aplicadas al mismo tiempo sobre el eje de salida se aconseja contactar con el servicio técnico de Bonfiglioli para verificar la aplicación.

**RB**

Los reductores tipo A10, A20, A30, A35, A41, A50, A55 y A60 que se suministran habitualmente con valores estándar de juego angular, en este caso se suministran con valores de juego angular reducido.

Los valores correspondientes de juego angular se detallan en la siguiente tabla:

(C 24)

| | | **standard** | | **RB** | |
|---|---|---|---|---|---|
| **A05** | i = | 5.5_12.3 - ⛀(10.6) | 10.6_91.6 - ⛀(12.3) | — | |
| | φ | **28** | **18** | | |
| **A10** | i = | 5.5_12.3 - ⛀(10.6) | 10.6_91.6 - ⛀(12.3) | 5.5_12.3 - ⛀(10.6) | 10.6_91.6 - ⛀(12.3) |
| | φ | **27** | **17** | **12** | **8** |
| **A20** | i = | 5.4_12 - ⛀(10.3) | 10.3_380.8 - ⛀(12) | 5.4_12 - ⛀(10.3) | 10.3_380.8 - ⛀(12) |
| | φ | **23** | **15** | **11** | **7** |
| **A30** | i = | 5.4_11.8 - ⛀(10.5) | 10.5_400.8 - ⛀(11.8) | 5.4_11.8 - ⛀(10.5) | 10.5_400.8 - ⛀(11.8) |
| | φ | **22** | **15** | **10** | **7** |
| **A35** | i = | 5.4_11.8 | 13.1_393.2 | 5.4_11.8 | 13.1_393.2 |
| | φ | **20** | **11** | **9** | **6** |
| **A41** | i = | 5.2_11.7 - ⛀(10.1) | 10.1_376.8 - ⛀(11.7) | 5.2-11.7 - ⛀(10.1) | 10.1_376.8 - ⛀(11.7) |
| | φ | **19** | **13** | **9** | **6** |
| **A50** | i = | 7.7_778.2 | | 7.7_778.2 | |
| | φ | **16** | | **7** | |
| **A55** | i = | 4.9_19.2 | 23.8_793 | 4.9_19.2 | 23.8_793 |
| | φ | **17** | **11** | **8** | **6** |
| **A60** | i = | 7.9_20.6 | 25.7_755.4 | 7.9_20.6 | 25.7_755.4 |
| | φ | **12** | **9** | **5** | **4** |
| **A70** | i = | 9.4_21.3 | 23.5_1715 | — | |
| | φ | **14** | **12** | | |
| **A80** | i = | 9.8_20.9 | 22.6_1558 | — | |
| | φ | **13** | **11** | | |
| **A90** | i = | 9.7_21 | 22.3_1632 | — | |
| | φ | **12** | **10** | | |

**Accesorios**

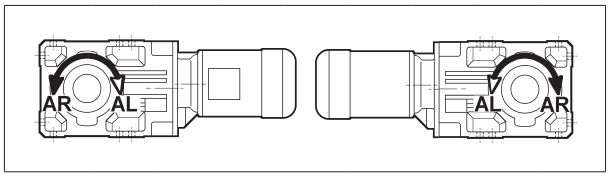
Ver el capítulo 46 de este catálogo.

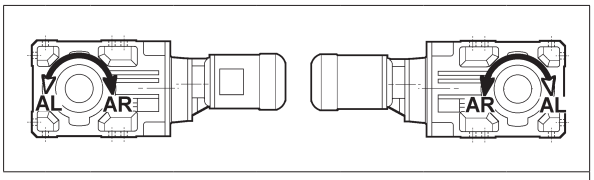
## 33.2 Opciones motores

**AA, AC, AD**
Posición angular de la palanca de desbloqueo del freno respecto a la caja de conexiones, visto desde el lado del ventilador.
Posición estándar = 90º en sentido horario. AA = 0º, AC = 180º, AD = 90º en sentido antihorario

**AL, AR**
Para los motorreductores equipados con motor compacto serie M ó ME, está disponible la opción antirretorno, colocado en el mismo motor como se indica en la sección de motores eléctricos de este catálogo. La tabla C25 muestra el sentido de rotación libre del reductor en base al cual se debe de hacer la selección de la opción.

(C 25)




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **2x** | A 05 | A 10 | A 20 | A 30 | A 35 | A 41 | A 50 | A 60 |
| **3x** | A 60 | A 70 | A 80 | A 90 | | | | |
| **4x** | A 50 | A 55 | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **2x** | A 55 | | | | | |
| **3x** | A 20 | A 30 | A 35 | A 41 | A 50 | A 55 |
| **4x** | A 60 | A 70 | A 80 | A 90 | | |

**CF**
Filtro capacitivo.

**D3**
n° 3 sonda bimetálica en los bobinados con temperatura a 150 ºC .

**E3**
nº 3 termistores en el bobinado, con temperatura 150 ºC.

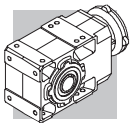
**F1**
Volante de inercia para arranque progresivo.

**H1**
Resistencias de caldeo. Alimentación normalizada 230 V ± 10 %.

**PN**
Potencia a 60 Hz. Correspondiente a la potencia normalizada a 50 Hz.

**PS**
Doble eje (excluye posiciones RC y U1).

**RC**
Sombrerete antilluvia (excluye opción PS).



**RV**
Equilibrado del rotor para grado de vibración B.

**TC**
La opción de sombrerete tipo TC, deberá ser especificada cuando el motor se instale en ambientes de la industria textil. Esta opción excluye las variantes EN_ y no es aplicable a motores con freno de tipo BA.

**TP**
Tropicalización.

**U1**
Ventilación independiente (excluye opción PS y CUS).

**U2**
Ventilador sin caja de conexiones, precableado interiormente. Excluye las opciones PS y CUS. Disponible para motores:
BN 71,
BE 80 ... BE 132,
M1,
ME2 ... ME4.

**Para mayor información sobre las opciones, consultar el correspondiente capitulo en la sección de motores eléctricos.**

## 34 LUBRICACIÓN

Los componentes internos de los reductores Bonfiglioli se lubrican mediante un sistema mixto de inmersión y barboteo del aceite. Los tamaños A05, A10, A20, A30, A35 y A41 se suministran normalmente desde fábrica con la carga de aceite.
Los grupos A50 y superiores se suministran sin aceite y es responsabilidad del usuario el llenado de aceite antes de la puesta en servicio. En ambos casos, según la versión, antes de la puesta en marcha será necesario substituir el tapón ciego usado en transporte por un tapón depresor que se suministran el reductor.
Para las tablas de situación de los tapones y de la cantidad de lubricante, consultar el Manual de uso y mantenimiento (disponible en www.bonfiglioli.com).
El lubricante ”long life” que se suministra de serie es de naturaleza sintética y a menos que sea contaminado por agentes externos, no requiere sustituirse periódicamente durante toda la vida del reductor. El funcionamiento del reductor está calculado para una temperatura ambiente de entre -20ºC y +40ºC. Para temperaturas ambiente comprendidas entre -20ºC y -10ºC , solo se debe poner en funcionamiento el reductor después de haber efectuado un calentamiento progresivo y homogéneo del grupo o, en todo caso, hacerlo funcionar sin carga. La carga podrá ser aplicada al eje del reductor cuando la temperatura del mismo alcance los -10ºC o más.

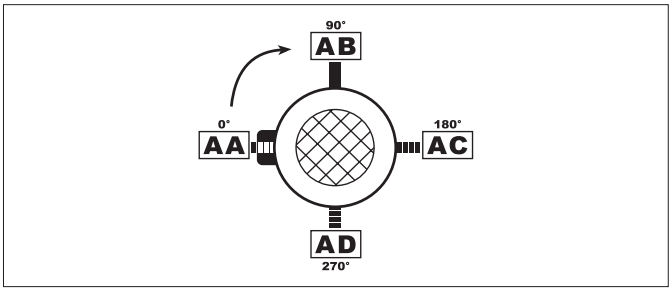
## 35 POSICION DE MONTAJE Y ORIENTACIÓN DE LA CAJA DE CONEXIONES

La orientación de la caja de conexiones del motor se identifica observando el motor por el lado del ventilador: la orientación estándar está resaltada en negrita (W).

**Posición angular de la palanca del desbloqueo del freno**

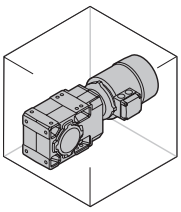
En los motores freno, la palanca de desbloqueo del freno (opcional) tiene la orientación estándar a 90º respecto a la caja de conexiones (posición AB); en caso de requerir una orientación distinta, especifíquese mediante los correspondientes códigos de opciones.

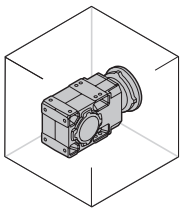
(C 26)

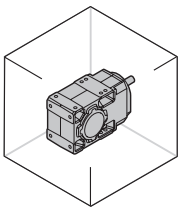


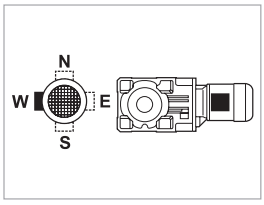
# A ...

## B3

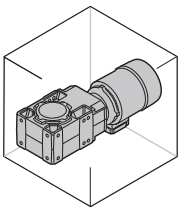

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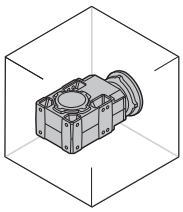

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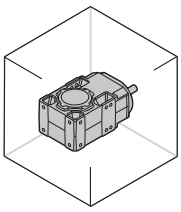

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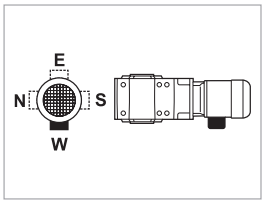



## B6

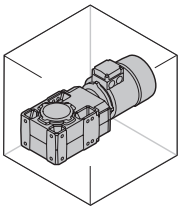

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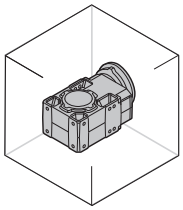

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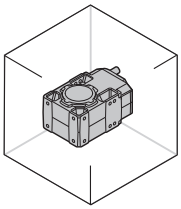

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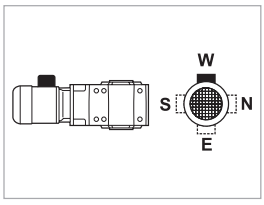



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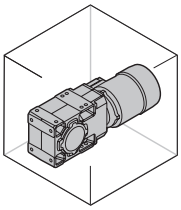

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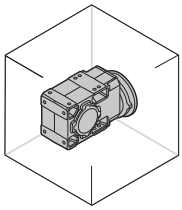

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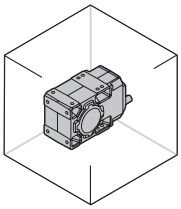

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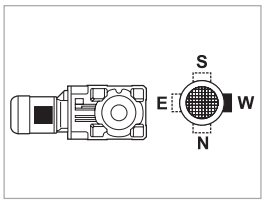



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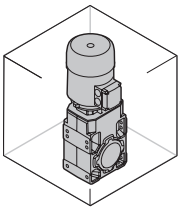

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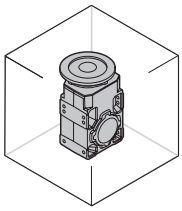

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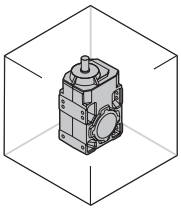

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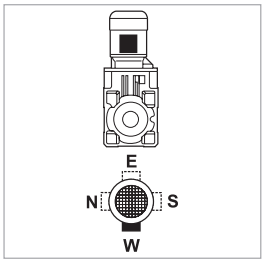



## VA

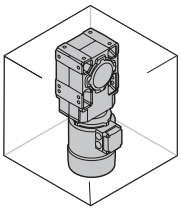

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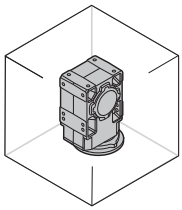

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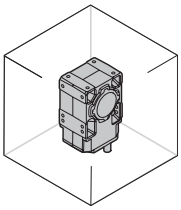

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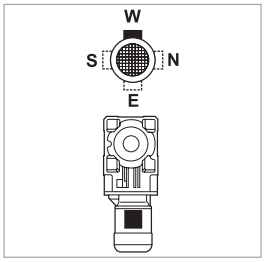



## VB


_S


_P(IEC) _SK / _SC


_HS




**W** = Default

## 36 CARGAS RADIALES

Los órganos de transmisión acoplados en los ejes de entrada y/o salida del reductor generan una fuerza resultante en sentido radial que actúa sobre el mismo eje.
El valor de dichas cargas deberá ser compatible con la capacidad del sistema eje – cojinetes del reductor para soportarlas, en particular el valor absoluto de la carga aplicada ($R_{c1}$ para el eje de entrada, $R_{c2}$ para el eje de salida) deberá ser inferior al valor nominal ($R_{n1}$ para el eje de entrada, y $R_{n2}$ para el de salida) contenido en las tablas de datos técnicos.
En las siguientes formulas, el subíndice (1) se refiere a los valores correspondientes al eje de entrada y el subíndice (2) a los valores correspondientes al eje de salida. La carga generada por un sistema de transmisión externo puede ser calculada, con una buena aproximación, mediante la siguiente Formula:

$$R_{c1}\,[N] = \frac{2000 \cdot M_1[Nm] \cdot K_r}{d\,[mm]} \quad ; \quad R_{c2}\,[N] = \frac{2000 \cdot M_2[Nm] \cdot K_r}{d\,[mm]} \qquad (26)$$

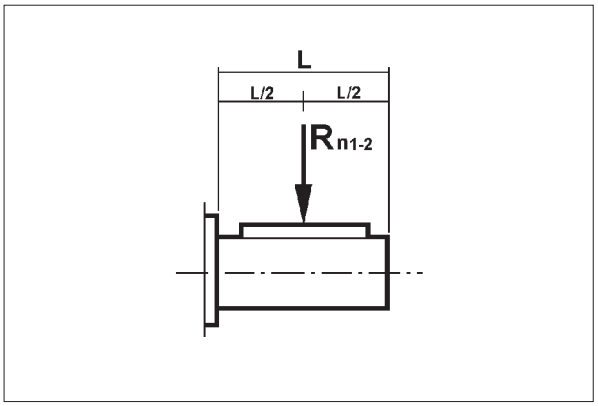
(C 27)

| | |
|---|---|
| **$M_1$** [Nm] | Par aplicado en el eje de entrada |
| **$M_2$** [Nm] | Par suministrado en el eje de Salida |
| **d** [mm] | Diámetro primitivo de la pieza montada sobre el eje |
| **$K_r$ = 1** | Transmisión por cadena |

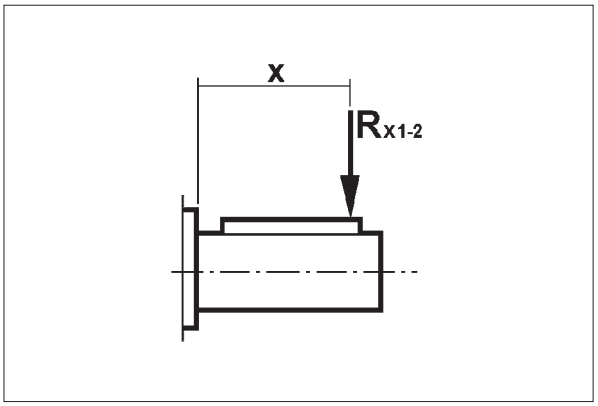
| | |
|---|---|
| **$K_r$ = 1,25** | Transmisión por engranaje |
| **$K_r$ = 1,5** | Transmisión por correa trapecial |
| **$K_r$ = 2,0** | Transmisión por correa plana |

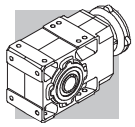
Dependiendo del punto de aplicación de la carga sobre el eje, la verificación de compatibilidad se procederá de modo diverso y en particular:

(C 28)




(C 29)





**a) Aplicación de la carga en el punto medio del eje, tabla (C28)**

La carga anteriormente calculada se deberá comparar con el correspondiente valor nominal de catalogo y deberá verificarse:

$R_{c1} \leq R_{n1}$ [eje de entrada]

o bien

$R_{c2} \leq R_{n2}$ [eje de salida]

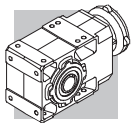
**b) Aplicación de la carga a una distancia x del apoyo del eje, tabla (C29)**

Cuando la carga se aplica a una distancia “x” del resalte del eje, se debe recalcular el valor admisible a dicha distancia. El nuevo valor se distingue con el símbolo $R_{x1}$ (eje rápido) y $R_{x2}$ (eje lento) y se obtiene a partir de los valores de catalogo $R_{n1}$ y $R_{n2}$ respectivamente a través del Factor.

$$\frac{a}{b+x} \qquad (27)$$

(C 30)

| | Constantes del reductor | | | | | |
|---|---|---|---|---|---|---|
| | Eje de salida | | | Eje de entrada | | |
| | **a** | **b** | **c** | **a** | **b** | **c** |
| **A 05 2** | 116 | 86 | 450 | — | — | — |
| **A 10 2** | 123 | 101 | 600 | 21 | 1 | 300 |
| **A 20 2** | 150 | 120 | 750 | 40 | 20 | 350 |
| **A 20 3** | 150 | 120 | 750 | 21 | 1 | 300 |
| **A 30 2** | 168 | 138 | 900 | 38.5 | 18.5 | 350 |
| **A 30 3** | 168 | 138 | 900 | 21 | 1 | 300 |
| **A 35 2** | 182.5 | 147.5 | 950 | 38.5 | 18.5 | 350 |
| **A 35 3** | 182.5 | 147.5 | 950 | 21 | 1 | 300 |
| **A 41 2** | 198 | 158 | 1050 | 49.5 | 24.5 | 450 |
| **A 41 3** | 198 | 158 | 1050 | 40 | 20 | 350 |
| **A 50 2 - A 50 3** | 242.5 | 201.5 | 1300 | 49.5 | 24.5 | 450 |
| **A 50 4** | 242.5 | 201.5 | 1300 | 38.5 | 18.5 | 350 |
| **A 55 2 - A 55 3** | 231.5 | 179 | 1300 | 49.5 | 24.5 | 450 |
| **A 55 4** | 231.5 | 179 | 1300 | 38.5 | 18.5 | 350 |
| **A 60 2 - A 60 3** | 242.5 | 190 | 1550 | 55.5 | 25.5 | 600 |
| **A 60 4** | 242.5 | 190 | 1550 | 49.5 | 24.5 | 450 |
| **A 70 3** | 295.5 | 230.5 | 1900 | 86 | 31 | 1000 |
| **A 70 4** | 295.5 | 230.5 | 1900 | 49.5 | 24.5 | 450 |
| **A 80 3** | 345 | 280 | 2400 | 86 | 31 | 1000 |
| **A 80 4** | 345 | 280 | 2400 | 49.5 | 24.5 | 450 |
| **A 90 3** | 432 | 327 | 3000 | 116 | 46 | 1400 |
| **A 90 4** | 432 | 327 | 3000 | 49.5 | 24.5 | 450 |



El procedimiento de verificación implica los siguientes pasos sucesivos.

**EJE DE ENTRADA**

1. Calculo de:

$$R_{x1} = R_{n1} \cdot \frac{a}{b + x} \quad (28)$$

Siempre que se cumpla:

$$\frac{L}{2} \leq x \leq c \quad (29)$$

Finalmente será necesario comprobar que:

$$R_{c1} \leq R_{x1} \quad (30)$$

**EJE DE SALIDA**

1. Calculo de:

$$R_{x2} = R_{n2} \cdot \frac{a}{b + x} \quad (31)$$

Siempre que se cumpla:

$$\frac{L}{2} \leq x \leq c \quad (32)$$

Finalmente será necesario comprobar que:

$$R_{c2} \leq R_{x2} \quad (33)$$

## 37 CARGAS AXIALES, $A_{n1}$, $A_{n2}$

Las cargas axiales máximas admisibles en el eje de entrada [$A_{n1}$] y en el de salida [$A_{n2}$], se pueden obtener a partir de los correspondientes valores de la carga radial [$R_{n1}$] y [$R_{n2}$] mediante las siguientes expresiones:

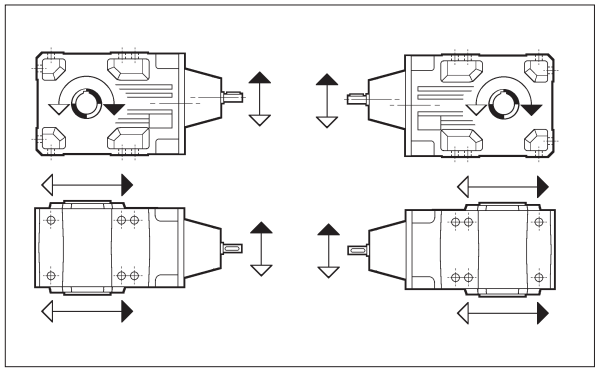
$$A_{n1} = R_{n1} \cdot 0{,}2$$
$$A_{n2} = R_{n2} \cdot 0{,}2 \qquad (34)$$

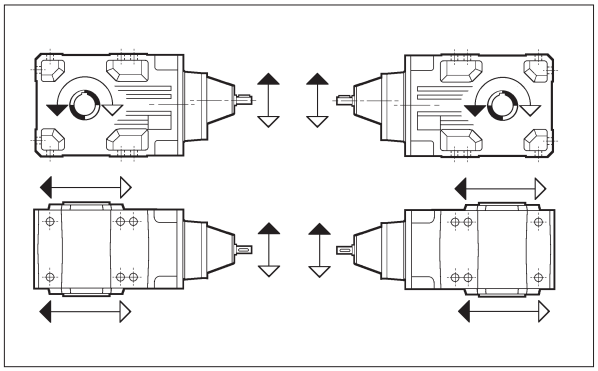
Los valores de las cargas axiales admisibles así calculados, están referidos a cargas axiales actuando contemporáneamente con las cargas radiales Nominales.
Únicamente en el caso en que la carga radial que actúe sobre el eje del reductor sea nula, se podrá considerar que la carga axial admisible [$A_n$] es el 50% del valor de la carga radial [$R_n$] admisible para el eje en cuestión.
Ante cargas axiales que superen los valores admisibles o de fuerzas axiales que resulten claramente dominantes sobre las cargas radiales, se recomienda contacten

## 38 SENTIDO DE GIRO DE LOS EJES

En los esquemas adjuntos en la tabla (C31) están indicados los sentidos de giro estándar de los reductores con ejes ortogonales con 2, 3 y 4 trenes de reducción.

(C 31)





| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **2x** | A 05 | A 10 | A 20 | A 30 | A 35 | A 41 | A 50 | A 60 |
| **3x** | A 60 | A 70 | A 80 | A 90 | | | | |
| **4x** | A 50 | A 55 | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **2x** | A 55 | | | | | |
| **3x** | A 20 | A 30 | A 35 | A 41 | A 50 | A 55 |
| **4x** | A 60 | A 70 | A 80 | A 90 | | |

## 39 DISPOSITIVO ANTIRRETORNO

Bajo pedido se puede suministrar el reductor/motorreductor provisto de un dispositivo antirretorno que permite el giro del eje de salida solamente en el sentido deseado (opciones AL – AR). La tabla (C32) indica los reductores a los que es posible aplicar el dispositivo Antirretorno.

(C 32)

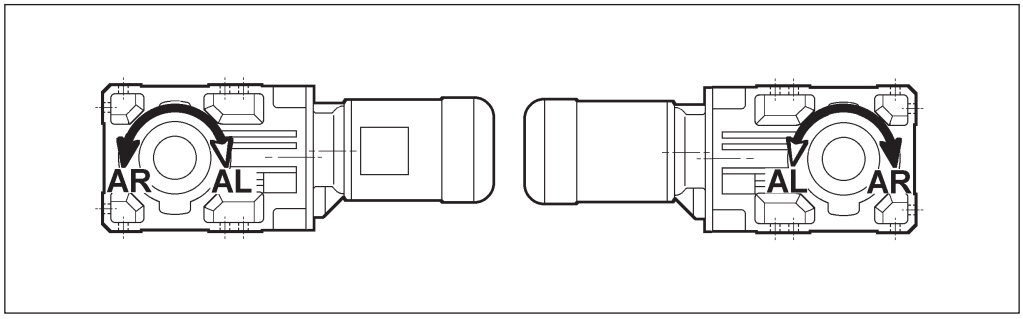
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **A 30 2*** | **A 35 2*** ⛔ (5.4_11.8) | **A 41 2** ⛔ (5.2; 10.1) | **A 50 3** | **A 55 3** | **A 60 3** | **A 70 3** | **A 80 3** | **A 90 3** |
| | | | **A 50 4** | **A 55 4** | **A 60 4** | **A 70 4** | **A 80 4** | **A 90 4** |

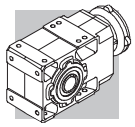
* El suministro del dispositivo antirretorno no incluye las bridas para servomotores del tipo S_60A, S_60B, S_80A.

Al efectuar el pedido deberá especificarse el sentido de rotación mediante la opción AL o AR (tabla C33) en la designación del reductor o en la del motor.

⚠ N.B.Cuando la intervención del dispositivo antirretorno sea solicitado de forma repetitiva, verificar que el par en el eje de salida resultante de la aplicación de la carga no supere el 70 % del par nominal $M_{n2}$ del reductor.

(C 33)



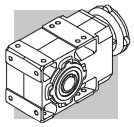


## 40 DATOS TECNICOS MOTORREDUCTORES

La selección de los motores sin freno cumplen las prescripciones del reglamiento CE 640/2009 (ver paragrafo **M1.1** de este catalogo): para potencias nominales iguales o superiores a 0.75kW,deve preverse motores BE/ME (se contempla en la sección **M1** de este catalogo). Para potencias nominales inferiores a 0.75kW,pueden preverse motores BN/M (ver sección **M2** de este catalogo).
La regulación CE 640/2009 no se aplica a los motores freno, por lo tanto la selección de los motores freno tiene cuenta de los motores BN/M, a prescindir delos valores de la potencia nominal. Los motores BE/ME freno están disponibles bajo demanda.

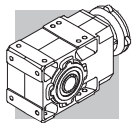
# 0.09 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.51** | 1492 | 3.4 | 1715 | 50000 | | | **A704_1715 P63 BN63A6** | 294 |
| **1.1** | 677 | 2.2 | 778.2 | 20000 | | | **A504_778.2 P63 BN63A6** | 282 |
| **1.2** | 616 | 2.4 | 707.9 | 20000 | | | **A504_707.9 P63 BN63A6** | 282 |
| **1.4** | 549 | 2.7 | 631.2 | 20000 | | | **A504_631.2 P63 BN63A6** | 282 |
| **1.5** | 499 | 3.0 | 574.2 | 20000 | | | **A504_574.2 P63 BN63A6** | 282 |
| **1.7** | 461 | 3.3 | 529.5 | 20000 | | | **A504_529.5 P63 BN63A6** | 282 |
| **2.2** | 356 | 1.0 | 400.8 | 9600 | **A303_400.8 S05 M05A6** | 269 | **A303_400.8 P63 BN63A6** | 270 |
| **2.6** | 302 | 1.7 | 339.3 | 12000 | **A353_339.3 S05 M05A6** | 273 | **A353_339.3 P63 BN63A6** | 274 |
| **3.0** | 259 | 3.3 | 291.7 | 15000 | **A413_291.7 S05 M05A6** | 277 | **A413_291.7 P63 BN63A6** | 278 |
| **3.5** | 221 | 2.7 | 248.1 | 12000 | **A353_248.1 S05 M05A6** | 273 | **A353_248.1 P63 BN63A6** | 274 |
| **4.1** | 193 | 2.1 | 216.6 | 9600 | **A303_216.6 S05 M05A6** | 269 | **A303_216.6 P63 BN63A6** | 270 |
| **4.9** | 159 | 1.6 | 178.3 | 6200 | **A203_178.3 S05 M05A6** | 265 | **A203_178.3 P63 BN63A6** | 266 |
| **5.8** | 134 | 2.8 | 150.7 | 9600 | **A303_150.7 S05 M05A6** | 269 | **A303_150.7 P63 BN63A6** | 270 |
| **6.8** | 115 | 2.2 | 129.1 | 6200 | **A203_129.1 S05 M05A6** | 265 | **A203_129.1 P63 BN63A6** | 266 |
| **8.1** | 97 | 2.5 | 109.2 | 6200 | **A203_109.2 S05 M05A6** | 265 | **A203_109.2 P63 BN63A6** | 266 |
| **9.6** | 84 | 1.5 | 91.6 | 5500 | **A102_91.6 S05 M05A6** | 261 | **A102_91.6 P63 BN63A6** | 262 |
| **11.5** | 70 | 2.1 | 76.4 | 5500 | **A102_76.4 S05 M05A6** | 261 | **A102_76.4 P63 BN63A6** | 262 |
| **13.3** | 61 | 2.5 | 65.9 | 5500 | **A102_65.9 S05 M05A6** | 261 | **A102_65.9 P63 BN63A6** | 262 |
| **15.0** | 54 | 2.8 | 58.6 | 5500 | **A102_58.6 S05 M05A6** | 261 | **A102_58.6 P63 BN63A6** | 262 |
| **17.2** | 47 | 3.2 | 51.3 | 5500 | **A102_51.3 S05 M05A6** | 261 | **A102_51.3 P63 BN63A6** | 262 |
| **19.4** | 42 | 2.4 | 45.4 | 4250 | **A052_45.4 S05 M05A6** | 258 | **A052_45.4 P63 BN63A6** | 258 |
| **21.5** | 38 | 2.7 | 40.9 | 4120 | **A052_40.9 S05 M05A6** | 258 | **A052_40.9 P63 BN63A6** | 258 |
| **25.1** | 32 | 3.1 | 35.1 | 3950 | **A052_35.1 S05 M05A6** | 258 | **A052_35.1 P63 BN63A6** | 258 |
| **27.3** | 30 | 3.4 | 32.2 | 3850 | **A052_32.2 S05 M05A6** | 258 | **A052_32.2 P63 BN63A6** | 258 |
| **31** | 26 | 3.8 | 28.6 | 3720 | **A052_28.6 S05 M05A6** | 258 | **A052_28.6 P63 BN63A6** | 258 |
| **35** | 23 | 4.4 | 25.5 | 3590 | **A052_25.5 S05 M05A6** | 258 | **A052_25.5 P63 BN63A6** | 258 |
| **37** | 22 | 4.6 | 23.8 | 3520 | **A052_23.8 S05 M05A6** | 258 | **A052_23.8 P63 BN63A6** | 258 |
| **41** | 19.6 | 5.3 | 21.4 | 3410 | **A052_21.4 S05 M05A6** | 258 | **A052_21.4 P63 BN63A6** | 258 |
| **47** | 17.1 | 5.9 | 18.6 | 3270 | **A052_18.6 S05 M05A6** | 258 | **A052_18.6 P63 BN63A6** | 258 |
| **53** | 15.1 | 6.8 | 16.4 | 3150 | **A052_16.4 S05 M05A6** | 258 | **A052_16.4 P63 BN63A6** | 258 |
| **63** | 12.8 | 7.8 | 13.9 | 2990 | **A052_13.9 S05 M05A6** | 258 | **A052_13.9 P63 BN63A6** | 258 |
| **72** | 11.3 | 8.8 | 12.3 | 2880 | **A052_12.3 S05 M05A6** | 258 | **A052_12.3 P63 BN63A6** | 258 |
| **83** | 9.7 | 10.3 | 10.6 | 2740 | **A052_10.6 S05 M05A6** | 258 | **A052_10.6 P63 BN63A6** | 258 |
| **92** | 8.8 | 11.3 | 9.6 | 2670 | **A052_9.6 S05 M05A6** | 258 | **A052_9.6 P63 BN63A6** | 258 |
| **103** | 7.8 | 13.2 | 8.5 | 2570 | **A052_8.5 S05 M05A6** | 258 | **A052_8.5 P63 BN63A6** | 258 |
| **122** | 6.6 | 15.1 | 7.2 | 2440 | **A052_7.2 S05 M05A6** | 258 | **A052_7.2 P63 BN63A6** | 258 |
| **139** | 5.8 | 17.8 | 6.3 | 2340 | **A052_6.3 S05 M05A6** | 258 | **A052_6.3 P63 BN63A6** | 258 |
| **161** | 5.0 | 19.9 | 5.5 | 2230 | **A052_5.5 S05 M05A6** | 258 | **A052_5.5 P63 BN63A6** | 258 |

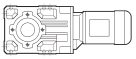


# 0.12 kW

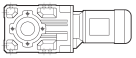
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.51** | 2012 | 2.5 | 1715 | 50000 | | | **A704_1715 P63 BN63B6** | 294 |
| **0.55** | 1857 | 2.7 | 1583 | 50000 | | | **A704_1583 P63 BN63B6** | 294 |
| **0.65** | 1579 | 3.2 | 1346 | 50000 | | | **A704_1346 P63 BN63B6** | 294 |
| **0.70** | 1457 | 3.4 | 1242 | 50000 | | | **A704_1242 P63 BN63B6** | 294 |
| **1.1** | 913 | 1.6 | 778.2 | 20000 | | | **A504_778.2 P63 BN63B6** | 282 |
| **1.2** | 818 | 3.4 | 697.3 | 30000 | | | **A604_697.3 P63 BN63B6** | 290 |
| **1.4** | 740 | 2.0 | 631.2 | 20000 | | | **A504_631.2 P63 BN63B6** | 282 |
| **1.6** | 621 | 2.4 | 529.5 | 20000 | | | **A504_529.5 P63 BN63B6** | 282 |
| **1.7** | 588 | 2.5 | 778.2 | 20000 | | | **A504_778.2 P63 BN63A4** | 282 |
| **1.9** | 535 | 2.8 | 707.9 | 20000 | | | **A504_707.9 P63 BN63A4** | 282 |
| **2.1** | 477 | 3.1 | 631.2 | 20000 | | | **A504_631.2 P63 BN63A4** | 282 |
| **2.4** | 434 | 3.5 | 574.2 | 20000 | | | **A504_574.2 P63 BN63A4** | 282 |
| **3.4** | 310 | 1.2 | 400.8 | 9600 | **A303_400.8 S05 M05A4** | 269 | **A303_400.8 P63 BN63A4** | 270 |
| **3.4** | 304 | 1.5 | 393.2 | 12000 | **A353_393.2 S05 M05A4** | 273 | **A353_393.2 P63 BN63A4** | 274 |
| **3.6** | 291 | 2.9 | 376.8 | 15000 | **A413_376.8 S05 M05A4** | 277 | **A413_376.8 P63 BN63A4** | 278 |
| **3.8** | 275 | 1.3 | 356.3 | 9600 | **A303_356.3 S05 M05A4** | 269 | **A303_356.3 P63 BN63A4** | 270 |
| **4.0** | 262 | 2.0 | 339.3 | 12000 | **A353_339.3 S05 M05A4** | 273 | **A353_339.3 P63 BN63A4** | 274 |
| **4.1** | 255 | 1.0 | 329.4 | 6200 | **A203_329.4 S05 M05A4** | 265 | **A203_329.4 P63 BN63A4** | 266 |
| **4.2** | 251 | 3.4 | 324.2 | 15000 | **A413_324.2 S05 M05A4** | 277 | **A413_324.2 P63 BN63A4** | 278 |
| **4.3** | 243 | 1.6 | 314.5 | 9600 | **A303_314.5 S05 M05A4** | 269 | **A303_314.5 P63 BN63A4** | 270 |
| **4.4** | 236 | 2.5 | 305.4 | 12000 | **A353_305.4 S05 M05A4** | 273 | **A353_305.4 P63 BN63A4** | 274 |
| **4.6** | 226 | 1.1 | 292.8 | 6200 | **A203_292.8 S05 M05A4** | 265 | **A203_292.8 P63 BN63A4** | 266 |
| **5.0** | 210 | 1.8 | 271.5 | 9600 | **A303_271.5 S05 M05A4** | 269 | **A303_271.5 P63 BN63A4** | 270 |
| **5.0** | 209 | 2.9 | 270.7 | 12000 | **A353_270.7 S05 M05A4** | 273 | **A353_270.7 P63 BN63A4** | 274 |
| **5.2** | 201 | 1.2 | 260.5 | 6200 | **A203_260.5 S05 M05A4** | 265 | **A203_260.5 P63 BN63A4** | 266 |
| **5.4** | 192 | 3.1 | 248.1 | 12000 | **A353_248.1 S05 M05A4** | 273 | **A353_248.1 P63 BN63A4** | 274 |
| **5.5** | 189 | 2.0 | 244.3 | 9600 | **A303_244.3 S05 M05A4** | 269 | **A303_244.3 P63 BN63A4** | 270 |
| **6.0** | 172 | 3.5 | 223.2 | 12000 | **A353_223.2 S05 M05A4** | 273 | **A353_223.2 P63 BN63A4** | 274 |
| **6.1** | 171 | 1.5 | 221.3 | 6200 | **A203_221.3 S05 M05A4** | 265 | **A203_221.3 P63 BN63A4** | 266 |
| **6.2** | 167 | 2.2 | 216.6 | 9600 | **A303_216.6 S05 M05A4** | 269 | **A303_216.6 P63 BN63A4** | 270 |
| **6.8** | 154 | 1.6 | 199.2 | 6200 | **A203_199.2 S05 M05A4** | 265 | **A203_199.2 P63 BN63A4** | 266 |
| **6.8** | 153 | 2.3 | 198.5 | 9600 | **A303_198.5 S05 M05A4** | 269 | **A303_198.5 P63 BN63A4** | 270 |
| **7.6** | 138 | 2.5 | 178.5 | 9600 | **A303_178.5 S05 M05A4** | 269 | **A303_178.5 P63 BN63A4** | 270 |
| **7.6** | 138 | 1.8 | 178.3 | 6200 | **A203_178.3 S05 M05A4** | 265 | **A203_178.3 P63 BN63A4** | 266 |
| **8.3** | 126 | 1.9 | 163.4 | 6200 | **A203_163.4 S05 M05A4** | 265 | **A203_163.4 P63 BN63A4** | 266 |
| **8.4** | 125 | 2.7 | 161.4 | 9600 | **A303_161.4 S05 M05A4** | 269 | **A303_161.4 P63 BN63A4** | 270 |
| **9.0** | 116 | 2.8 | 150.7 | 9600 | **A303_150.7 S05 M05A4** | 269 | **A303_150.7 P63 BN63A4** | 270 |
| **9.2** | 113 | 2.0 | 146.1 | 6200 | **A203_146.1 S05 M05A4** | 265 | **A203_146.1 P63 BN63A4** | 266 |
| **9.8** | 106 | 3.0 | 137.4 | 9600 | **A303_137.4 S05 M05A4** | 269 | **A303_137.4 P63 BN63A4** | 270 |
| **10.5** | 100 | 2.2 | 129.1 | 6200 | **A203_129.1 S05 M05A4** | 265 | **A203_129.1 P63 BN63A4** | 266 |
| **11.2** | 93 | 2.3 | 120.5 | 6200 | **A203_120.5 S05 M05A4** | 265 | **A203_120.5 P63 BN63A4** | 266 |
| **11.2** | 93 | 3.2 | 120.5 | 9600 | **A303_120.5 S05 M05A4** | 269 | **A303_120.5 P63 BN63A4** | 270 |
| **12.4** | 84 | 2.4 | 109.2 | 6200 | **A203_109.2 S05 M05A4** | 265 | **A203_109.2 P63 BN63A4** | 266 |
| **14.6** | 74 | 2.7 | 92.3 | 6200 | **A202_92.3 S05 M05A4** | 265 | **A202_92.3 P63 BN63A4** | 266 |
| **14.7** | 73 | 1.4 | 91.6 | 4420 | **A052_91.6 S05 M05A4** | 258 | **A052_91.6 P63 BN63A4** | 258 |
| **14.7** | 73 | 1.8 | 91.6 | 5500 | **A102_91.6 S05 M05A4** | 261 | **A102_91.6 P63 BN63A4** | 262 |
| **16.9** | 64 | 3.3 | 79.9 | 6200 | **A202_79.9 S05 M05A4** | 265 | **A202_79.9 P63 BN63A4** | 266 |
| **17.7** | 61 | 1.6 | 76.4 | 4230 | **A052_76.4 S05 M05A4** | 258 | **A052_76.4 P63 BN63A4** | 258 |
| **17.7** | 61 | 2.5 | 76.4 | 5500 | **A102_76.4 S05 M05A4** | 261 | **A102_76.4 P63 BN63A4** | 262 |
| **20.5** | 53 | 1.9 | 65.9 | 4070 | **A052_65.9 S05 M05A4** | 258 | **A052_65.9 P63 BN63A4** | 258 |
| **20.5** | 53 | 2.8 | 65.9 | 5500 | **A102_65.9 S05 M05A4** | 261 | **A102_65.9 P63 BN63A4** | 262 |
| **23.0** | 47 | 2.1 | 58.6 | 3950 | **A052_58.6 S05 M05A4** | 258 | **A052_58.6 P63 BN63A4** | 258 |
| **23.0** | 47 | 3.2 | 58.6 | 5500 | **A102_58.6 S05 M05A4** | 261 | **A102_58.6 P63 BN63A4** | 262 |
| **26.3** | 41 | 2.4 | 51.3 | 3810 | **A052_51.3 S05 M05A4** | 258 | **A052_51.3 P63 BN63A4** | 258 |
| **29.7** | 36 | 2.8 | 45.4 | 3680 | **A052_45.4 S05 M05A4** | 258 | **A052_45.4 P63 BN63A4** | 258 |
| **33** | 33 | 3.1 | 40.9 | 3570 | **A052_40.9 S05 M05A4** | 258 | **A052_40.9 P63 BN63A4** | 258 |
| **38** | 28 | 3.6 | 35.1 | 3420 | **A052_35.1 S05 M05A4** | 258 | **A052_35.1 P63 BN63A4** | 258 |

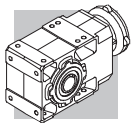


## 0.12 kW

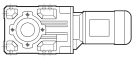
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **42** | 26 | 3.9 | 32.2 | 3340 | **A052_32.2 S05 M05A4** | 258 | **A052_32.2 P63 BN63A4** | 258 |
| **47** | 23 | 4.4 | 28.6 | 3220 | **A052_28.6 S05 M05A4** | 258 | **A052_28.6 P63 BN63A4** | 258 |
| **53** | 20 | 4.9 | 25.5 | 3110 | **A052_25.5 S05 M05A4** | 258 | **A052_25.5 P63 BN63A4** | 258 |
| **57** | 19 | 5.3 | 23.8 | 3050 | **A052_23.8 S05 M05A4** | 258 | **A052_23.8 P63 BN63A4** | 258 |
| **62** | 17.3 | 5.8 | 13.9 | 2960 | **A052_13.9 S05 M05B6** | 258 | **A052_13.9 P63 BN63B6** | 258 |
| **63** | 17.1 | 5.9 | 21.4 | 2950 | **A052_21.4 S05 M05A4** | 258 | **A052_21.4 P63 BN63A4** | 258 |
| **73** | 14.8 | 6.7 | 18.6 | 2830 | **A052_18.6 S05 M05A4** | 258 | **A052_18.6 P63 BN63A4** | 258 |
| **82** | 13.1 | 7.6 | 16.4 | 2730 | **A052_16.4 S05 M05A4** | 258 | **A052_16.4 P63 BN63A4** | 258 |
| **90** | 11.9 | 8.4 | 9.6 | 2640 | **A052_9.6 S05 M05B6** | 258 | **A052_9.6 P63 BN63B6** | 258 |
| **97** | 11.1 | 9.0 | 13.9 | 2590 | **A052_13.9 S05 M05A4** | 258 | **A052_13.9 P63 BN63A4** | 258 |
| **110** | 9.8 | 10.2 | 12.3 | 2500 | **A052_12.3 S05 M05A4** | 258 | **A052_12.3 P63 BN63A4** | 258 |
| **121** | 8.9 | 11.2 | 7.2 | 2420 | **A052_7.2 S05 M05B6** | 258 | **A052_7.2 P63 BN63B6** | 258 |
| **128** | 8.4 | 11.9 | 10.6 | 2380 | **A052_10.6 S05 M05A4** | 258 | **A052_10.6 P63 BN63A4** | 258 |
| **140** | 7.7 | 13.0 | 9.6 | 2310 | **A052_9.6 S05 M05A4** | 258 | **A052_9.6 P63 BN63A4** | 258 |
| **159** | 6.8 | 14.7 | 8.5 | 2220 | **A052_8.5 S05 M05A4** | 258 | **A052_8.5 P63 BN63A4** | 258 |
| **187** | 5.8 | 17.4 | 7.2 | 2110 | **A052_7.2 S05 M05A4** | 258 | **A052_7.2 P63 BN63A4** | 258 |
| **213** | 5.1 | 19.8 | 6.3 | 2020 | **A052_6.3 S05 M05A4** | 258 | **A052_6.3 P63 BN63A4** | 258 |
| **247** | 4.4 | 21.8 | 5.5 | 1930 | **A052_5.5 S05 M05A4** | 258 | **A052_5.5 P63 BN63A4** | 258 |

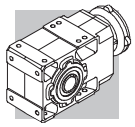
## 0.18 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.52** | 2917 | 1.7 | 1715 | 50000 | **A704_1715 S1 M1SC6** | 293 | **A704_1715 P71 BN71A6** | 294 |
| **0.58** | 2649 | 3.0 | 1558 | 65000 | **A804_1558 S1 M1SC6** | 296 | **A804_1558 P71 BN71A6** | 297 |
| **0.67** | 2279 | 3.5 | 1340 | 65000 | **A804_1340 S1 M1SC6** | 296 | **A804_1340 P71 BN71A6** | 297 |
| **0.77** | 1989 | 2.5 | 1715 | 50000 | | | **A704_1715 P63 BN63B4** | 294 |
| **0.83** | 1836 | 2.7 | 1583 | 50000 | | | **A704_1583 P63 BN63B4** | 294 |
| **0.98** | 1561 | 3.2 | 1346 | 50000 | | | **A704_1346 P63 BN63B4** | 294 |
| **1.1** | 1441 | 3.5 | 1242 | 50000 | | | **A704_1242 P63 BN63B4** | 294 |
| **1.3** | 1186 | 2.4 | 697.3 | 30000 | **A604_697.3 S1 M1SC6** | 289 | **A604_697.3 P71 BN71A6** | 290 |
| **1.5** | 996 | 2.8 | 585.8 | 30000 | **A604_585.8 S1 M1SC6** | 289 | **A604_585.8 P71 BN71A6** | 290 |
| **1.7** | 902 | 1.7 | 778.2 | 20000 | | | **A504_778.2 P63 BN63B4** | 282 |
| **1.7** | 876 | 3.2 | 755.4 | 30000 | | | **A604_755.4 P63 BN63B4** | 290 |
| **1.9** | 821 | 1.8 | 707.9 | 20000 | | | **A504_707.9 P63 BN63B4** | 282 |
| **1.9** | 809 | 3.5 | 697.3 | 30000 | | | **A604_697.3 P63 BN63B4** | 290 |
| **2.1** | 732 | 2.0 | 631.2 | 20000 | | | **A504_631.2 P63 BN63B4** | 282 |
| **2.3** | 666 | 2.3 | 574.2 | 20000 | | | **A504_574.2 P63 BN63B4** | 282 |
| **2.5** | 614 | 2.4 | 529.5 | 20000 | | | **A504_529.5 P63 BN63B4** | 282 |
| **2.7** | 559 | 2.7 | 481.6 | 20000 | | | **A504_481.6 P63 BN63B4** | 282 |
| **3.0** | 518 | 2.9 | 446.8 | 20000 | | | **A504_446.8 P63 BN63B4** | 282 |
| **3.2** | 471 | 3.2 | 406.4 | 20000 | | | **A504_406.4 P63 BN63B4** | 282 |
| **3.4** | 466 | 1.0 | 393.2 | 12000 | **A353_393.2 S05 M05B4** | 273 | **A353_393.2 P63 BN63B4** | 274 |
| **3.5** | 447 | 1.9 | 376.8 | 15000 | **A413_376.8 S05 M05B4** | 277 | **A413_376.8 P63 BN63B4** | 278 |
| **3.6** | 424 | 3.5 | 365.6 | 20000 | | | **A504_365.6 P63 BN63B4** | 282 |
| **3.7** | 422 | 0.9 | 356.3 | 9600 | **A303_356.3 S05 M05B4** | 269 | **A303_356.3 P63 BN63B4** | 270 |
| **3.9** | 402 | 1.3 | 339.3 | 12000 | **A353_339.3 S05 M05B4** | 273 | **A353_339.3 P63 BN63B4** | 274 |
| **4.1** | 384 | 2.2 | 324.2 | 15000 | **A413_324.2 S05 M05B4** | 277 | **A413_324.2 P63 BN63B4** | 278 |
| **4.2** | 373 | 1.0 | 314.5 | 9600 | **A303_314.5 S05 M05B4** | 269 | **A303_314.5 P63 BN63B4** | 270 |
| **4.3** | 362 | 1.7 | 305.4 | 12000 | **A353_305.4 S05 M05B4** | 273 | **A353_305.4 P63 BN63B4** | 274 |
| **4.5** | 346 | 2.5 | 291.7 | 15000 | **A413_291.7 S05 M05B4** | 277 | **A413_291.7 P63 BN63B4** | 278 |
| **4.9** | 322 | 1.2 | 271.5 | 9600 | **A303_271.5 S05 M05B4** | 269 | **A303_271.5 P63 BN63B4** | 270 |
| **4.9** | 321 | 1.9 | 270.7 | 12000 | **A353_270.7 S05 M05B4** | 273 | **A353_270.7 P63 BN63B4** | 274 |
| **5.0** | 311 | 2.7 | 262.5 | 15000 | **A413_262.5 S05 M05B4** | 277 | **A413_262.5 P63 BN63B4** | 278 |



# 0.18 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **5.3** | 294 | 2.0 | 248.1 | 12000 | **A353_248.1 S05 M05B4** | 273 | **A353_248.1 P63 BN63B4** | 274 |
| **5.4** | 290 | 1.3 | 244.3 | 9600 | **A303_244.3 S05 M05B4** | 269 | **A303_244.3 P63 BN63B4** | 270 |
| **5.5** | 285 | 3.0 | 240.6 | 15000 | **A413_240.6 S05 M05B4** | 277 | **A413_240.6 P63 BN63B4** | 278 |
| **5.9** | 265 | 2.3 | 223.2 | 12000 | **A353_223.2 S05 M05B4** | 273 | **A353_223.2 P63 BN63B4** | 274 |
| **6.0** | 262 | 1.0 | 221.3 | 6200 | **A203_221.3 S05 M05B4** | 265 | **A203_221.3 P63 BN63B4** | 266 |
| **6.1** | 258 | 3.3 | 217.4 | 15000 | **A413_217.4 S05 M05B4** | 277 | **A413_217.4 P63 BN63B4** | 278 |
| **6.1** | 257 | 1.4 | 216.6 | 9600 | **A303_216.6 S05 M05B4** | 269 | **A303_216.6 P63 BN63B4** | 270 |
| **6.5** | 239 | 2.5 | 201.8 | 12000 | **A353_201.8 S05 M05B4** | 273 | **A353_201.8 P63 BN63B4** | 274 |
| **6.6** | 236 | 1.1 | 199.2 | 6200 | **A203_199.2 S05 M05B4** | 265 | **A203_199.2 P63 BN63B4** | 266 |
| **6.6** | 235 | 1.5 | 198.5 | 9600 | **A303_198.5 S05 M05B4** | 269 | **A303_198.5 P63 BN63B4** | 270 |
| **7.0** | 223 | 2.7 | 188.3 | 12000 | **A353_188.3 S05 M05B4** | 273 | **A353_188.3 P63 BN63B4** | 274 |
| **7.4** | 212 | 1.6 | 178.5 | 9600 | **A303_178.5 S05 M05B4** | 269 | **A303_178.5 P63 BN63B4** | 270 |
| **7.4** | 211 | 1.2 | 178.3 | 6200 | **A203_178.3 S05 M05B4** | 265 | **A203_178.3 P63 BN63B4** | 266 |
| **7.7** | 204 | 2.9 | 171.8 | 12000 | **A353_171.8 S05 M05B4** | 273 | **A353_171.8 P63 BN63B4** | 274 |
| **8.1** | 194 | 1.2 | 163.4 | 6200 | **A203_163.4 S05 M05B4** | 265 | **A203_163.4 P63 BN63B4** | 266 |
| **8.2** | 191 | 1.8 | 161.4 | 9600 | **A303_161.4 S05 M05B4** | 269 | **A303_161.4 P63 BN63B4** | 270 |
| **8.8** | 179 | 1.8 | 150.7 | 9600 | **A303_150.7 S05 M05B4** | 269 | **A303_150.7 P63 BN63B4** | 270 |
| **8.8** | 179 | 3.4 | 150.6 | 12000 | **A353_150.6 S05 M05B4** | 273 | **A353_150.6 P63 BN63B4** | 274 |
| **9.0** | 173 | 1.3 | 146.1 | 6200 | **A203_146.1 S05 M05B4** | 265 | **A203_146.1 P63 BN63B4** | 266 |
| **9.6** | 163 | 1.9 | 137.4 | 9600 | **A303_137.4 S05 M05B4** | 269 | **A303_137.4 P63 BN63B4** | 270 |
| **10.2** | 153 | 1.4 | 129.1 | 6200 | **A203_129.1 S05 M05B4** | 265 | **A203_129.1 P63 BN63B4** | 266 |
| **11.0** | 143 | 1.5 | 120.5 | 6200 | **A203_120.5 S05 M05B4** | 265 | **A203_120.5 P63 BN63B4** | 266 |
| **11.0** | 143 | 2.1 | 120.5 | 9600 | **A303_120.5 S05 M05B4** | 269 | **A303_120.5 P63 BN63B4** | 270 |
| **12.1** | 129 | 1.6 | 109.2 | 6200 | **A203_109.2 S05 M05B4** | 265 | **A203_109.2 P63 BN63B4** | 266 |
| **12.1** | 129 | 2.3 | 109.1 | 9600 | **A303_109.1 S05 M05B4** | 269 | **A303_109.1 P63 BN63B4** | 270 |
| **13.5** | 119 | 2.5 | 97.5 | 9600 | | | **A302_97.5 P63 BN63B4** | 270 |
| **14.3** | 113 | 1.8 | 92.3 | 6200 | **A202_92.3 S05 M05B4** | 265 | **A202_92.3 P63 BN63B4** | 266 |
| **14.4** | 112 | 0.9 | 91.6 | 4120 | **A052_91.6 S05 M05B4** | 258 | **A052_91.6 P63 BN63B4** | 258 |
| **14.4** | 112 | 1.2 | 91.6 | 5500 | **A102_91.6 S05 M05B4** | 261 | **A102_91.6 P63 BN63B4** | 262 |
| **15.2** | 106 | 3.0 | 86.7 | 9600 | | | **A302_86.7 P63 BN63B4** | 270 |
| **16.5** | 98 | 2.1 | 79.9 | 6200 | **A202_79.9 S05 M05B4** | 265 | **A202_79.9 P63 BN63B4** | 266 |
| **17.3** | 94 | 1.1 | 76.4 | 3980 | **A052_76.4 S05 M05B4** | 258 | **A052_76.4 P63 BN63B4** | 258 |
| **17.3** | 94 | 1.6 | 76.4 | 5500 | **A102_76.4 S05 M05B4** | 261 | **A102_76.4 P63 BN63B4** | 262 |
| **18.6** | 87 | 2.4 | 71.0 | 6200 | **A202_71.0 S05 M05B4** | 265 | **A202_71.0 P63 BN63B4** | 266 |
| **20.0** | 81 | 1.2 | 65.9 | 3860 | **A052_65.9 S05 M05B4** | 258 | **A052_65.9 P63 BN63B4** | 258 |
| **20.0** | 81 | 1.9 | 65.9 | 5500 | **A102_65.9 S05 M05B4** | 261 | **A102_65.9 P63 BN63B4** | 262 |
| **20.9** | 77 | 3.2 | 63.1 | 6200 | **A202_63.1 S05 M05B4** | 265 | **A202_63.1 P63 BN63B4** | 266 |
| **22.5** | 72 | 1.4 | 58.6 | 3760 | **A052_58.6 S05 M05B4** | 258 | **A052_58.6 P63 BN63B4** | 258 |
| **22.5** | 72 | 2.1 | 58.6 | 5500 | **A102_58.6 S05 M05B4** | 261 | **A102_58.6 P63 BN63B4** | 262 |
| **25.8** | 63 | 1.6 | 51.3 | 3640 | **A052_51.3 S05 M05B4** | 258 | **A052_51.3 P63 BN63B4** | 258 |
| **25.8** | 63 | 2.4 | 51.3 | 5500 | **A102_51.3 S05 M05B4** | 261 | **A102_51.3 P63 BN63B4** | 262 |
| **29.1** | 56 | 1.8 | 45.4 | 3540 | **A052_45.4 S05 M05B4** | 258 | **A052_45.4 P63 BN63B4** | 258 |
| **29.1** | 56 | 2.7 | 45.4 | 5500 | **A102_45.4 S05 M05B4** | 261 | **A102_45.4 P63 BN63B4** | 262 |
| **32** | 50 | 2.0 | 40.9 | 3440 | **A052_40.9 S05 M05B4** | 258 | **A052_40.9 P63 BN63B4** | 258 |
| **32** | 50 | 3.0 | 40.9 | 5500 | **A102_40.9 S05 M05B4** | 261 | **A102_40.9 P63 BN63B4** | 262 |
| **38** | 43 | 2.3 | 35.1 | 3310 | **A052_35.1 S05 M05B4** | 258 | **A052_35.1 P63 BN63B4** | 258 |
| **38** | 43 | 3.5 | 35.1 | 5380 | **A102_35.1 S05 M05B4** | 261 | **A102_35.1 P63 BN63B4** | 262 |
| **41** | 39 | 2.5 | 32.2 | 3240 | **A052_32.2 S05 M05B4** | 258 | **A052_32.2 P63 BN63B4** | 258 |
| **46** | 35 | 2.9 | 28.6 | 3130 | **A052_28.6 S05 M05B4** | 258 | **A052_28.6 P63 BN63B4** | 258 |
| **52** | 31 | 3.2 | 25.5 | 3040 | **A052_25.5 S05 M05B4** | 258 | **A052_25.5 P63 BN63B4** | 258 |
| **56** | 29 | 3.4 | 23.8 | 2980 | **A052_23.8 S05 M05B4** | 258 | **A052_23.8 P63 BN63B4** | 258 |
| **62** | 26 | 3.8 | 21.4 | 2890 | **A052_21.4 S05 M05B4** | 258 | **A052_21.4 P63 BN63B4** | 258 |
| **71** | 23 | 4.4 | 18.6 | 2780 | **A052_18.6 S05 M05B4** | 258 | **A052_18.6 P63 BN63B4** | 258 |
| **80** | 20 | 5.0 | 16.4 | 2680 | **A052_16.4 S05 M05B4** | 258 | **A052_16.4 P63 BN63B4** | 258 |
| **95** | 17.1 | 5.9 | 13.9 | 2550 | **A052_13.9 S05 M05B4** | 258 | **A052_13.9 P63 BN63B4** | 258 |
| **107** | 15.1 | 6.6 | 12.3 | 2460 | **A052_12.3 S05 M05B4** | 258 | **A052_12.3 P63 BN63B4** | 258 |
| **125** | 12.9 | 7.7 | 10.6 | 2350 | **A052_10.6 S05 M05B4** | 258 | **A052_10.6 P63 BN63B4** | 258 |

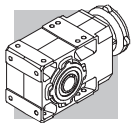


# 0.18 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **137** | 11.8 | 8.5 | 9.6 | 2280 | **A052_9.6 S05 M05B4** | 258 | **A052_9.6 P63 BN63B4** | 258 |
| **142** | 11.4 | 8.8 | 6.3 | 2300 | **A052_6.3 S1 M1SC6** | 258 | **A052_6.3 P71 BN71A6** | 258 |
| **155** | 10.4 | 9.6 | 8.5 | 2200 | **A052_8.5 S05 M05B4** | 258 | **A052_8.5 P63 BN63B4** | 258 |
| **183** | 8.8 | 11.3 | 7.2 | 2090 | **A052_7.2 S05 M05B4** | 258 | **A052_7.2 P63 BN63B4** | 258 |
| **208** | 7.8 | 12.9 | 6.3 | 2010 | **A052_6.3 S05 M05B4** | 258 | **A052_6.3 P63 BN63B4** | 258 |
| **242** | 6.7 | 14.2 | 5.5 | 1920 | **A052_5.5 S05 M05B4** | 258 | **A052_5.5 P63 BN63B4** | 258 |
| **284** | 5.7 | 16.7 | 9.6 | 1830 | **A052_9.6 S05 M05A2** | 258 | **A052_9.6 P63 BN63A2** | 258 |
| **321** | 5.0 | 17.8 | 8.5 | 1770 | **A052_8.5 S05 M05A2** | 258 | **A052_8.5 P63 BN63A2** | 258 |
| **379** | 4.3 | 19.9 | 7.2 | 1670 | **A052_7.2 S05 M05A2** | 258 | **A052_7.2 P63 BN63A2** | 258 |
| **431** | 3.8 | 21.3 | 6.3 | 1610 | **A052_6.3 S05 M05A2** | 258 | **A052_6.3 P63 BN63A2** | 258 |
| **499** | 3.2 | 23.2 | 5.5 | 1530 | **A052_5.5 S05 M05A2** | 258 | **A052_5.5 P63 BN63A2** | 258 |

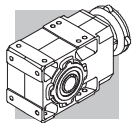
# 0.25 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.52** | 4051 | 1.2 | 1715 | 50000 | **A704_1715 S1 M1SD6** | 293 | **A704_1715 P71 BN71B6** | 294 |
| **0.58** | 3680 | 2.2 | 1558 | 65000 | **A804_1558 S1 M1SD6** | 296 | **A804_1558 P71 BN71B6** | 297 |
| **0.67** | 3165 | 2.5 | 1340 | 65000 | **A804_1340 S1 M1SD6** | 296 | **A804_1340 P71 BN71B6** | 297 |
| **0.80** | 2642 | 1.9 | 1715 | 50000 | | | **A704_1715 P71 BN71A4** | 294 |
| **0.87** | 2439 | 2.1 | 1583 | 50000 | | | **A704_1583 P71 BN71A4** | 294 |
| **0.89** | 2400 | 3.3 | 1558 | 65000 | | | **A804_1558 P71 BN71A4** | 297 |
| **1.0** | 2073 | 2.4 | 1346 | 50000 | | | **A704_1346 P71 BN71A4** | 294 |
| **1.1** | 1914 | 2.6 | 1242 | 50000 | | | **A704_1242 P71 BN71A4** | 294 |
| **1.2** | 1789 | 2.8 | 1161 | 50000 | | | **A704_1161 P71 BN71A4** | 294 |
| **1.3** | 1652 | 3.0 | 1072 | 50000 | | | **A704_1072 P71 BN71A4** | 294 |
| **1.5** | 1427 | 3.5 | 926.5 | 50000 | | | **A704_926.5 P71 BN71A4** | 294 |
| **1.8** | 1199 | 1.3 | 778.2 | 20000 | | | **A504_778.2 P71 BN71A4** | 282 |
| **1.8** | 1164 | 2.4 | 755.4 | 30000 | | | **A604_755.4 P71 BN71A4** | 290 |
| **1.9** | 1091 | 1.4 | 707.9 | 20000 | | | **A504_707.9 P71 BN71A4** | 282 |
| **2.0** | 1074 | 2.6 | 697.3 | 30000 | | | **A604_697.3 P71 BN71A4** | 290 |
| **2.2** | 978 | 2.9 | 634.6 | 30000 | | | **A604_634.6 P71 BN71A4** | 290 |
| **2.2** | 972 | 1.5 | 631.2 | 20000 | | | **A504_631.2 P71 BN71A4** | 282 |
| **2.4** | 902 | 3.1 | 585.8 | 30000 | | | **A604_585.8 P71 BN71A4** | 290 |
| **2.4** | 885 | 1.7 | 574.2 | 20000 | | | **A504_574.2 P71 BN71A4** | 282 |
| **2.5** | 835 | 3.4 | 542.0 | 30000 | | | **A604_542.0 P71 BN71A4** | 290 |
| **2.6** | 816 | 1.8 | 529.5 | 20000 | | | **A504_529.5 P71 BN71A4** | 282 |
| **2.9** | 742 | 2.0 | 481.6 | 20000 | | | **A504_481.6 P71 BN71A4** | 282 |
| **3.1** | 688 | 2.2 | 446.8 | 20000 | | | **A504_446.8 P71 BN71A4** | 282 |
| **3.4** | 626 | 2.4 | 406.4 | 20000 | | | **A504_406.4 P71 BN71A4** | 282 |
| **3.6** | 611 | 1.4 | 376.8 | 15000 | **A413_376.8 S05 M05C4** | 277 | **A413_376.8 P71 BN71A4** | 278 |
| **3.8** | 563 | 2.7 | 365.6 | 20000 | | | **A504_365.6 P71 BN71A4** | 282 |
| **3.9** | 550 | 0.9 | 339.3 | 12000 | **A353_339.3 S05 M05C4** | 273 | **A353_339.3 P71 BN71A4** | 274 |
| **4.1** | 526 | 1.6 | 324.2 | 15000 | **A413_324.2 S05 M05C4** | 277 | **A413_324.2 P71 BN71A4** | 278 |
| **4.1** | 512 | 2.9 | 332.6 | 20000 | | | **A504_332.6 P71 BN71A4** | 282 |
| **4.4** | 495 | 1.2 | 305.4 | 12000 | **A353_305.4 S05 M05C4** | 273 | **A353_305.4 P71 BN71A4** | 274 |
| **4.7** | 460 | 1.8 | 291.7 | 15000 | **A413_291.7 S05 M05C4** | 277 | **A413_291.7 P71 BN71A4** | 278 |
| **4.8** | 442 | 3.4 | 286.8 | 20000 | | | **A504_286.8 P71 BN71A4** | 282 |
| **4.9** | 440 | 0.9 | 271.5 | 9600 | **A303_271.5 S05 M05C4** | 269 | **A303_271.5 P71 BN71A4** | 270 |
| **5.0** | 439 | 1.4 | 270.7 | 12000 | **A353_270.7 S05 M05C4** | 273 | **A353_270.7 P71 BN71A4** | 274 |
| **5.1** | 426 | 2.0 | 262.5 | 15000 | **A413_262.5 S05 M05C4** | 277 | **A413_262.5 P71 BN71A4** | 278 |
| **5.4** | 403 | 1.5 | 248.1 | 12000 | **A353_248.1 S05 M05C4** | 273 | **A353_248.1 P71 BN71A4** | 274 |
| **5.6** | 385 | 1.0 | 244.3 | 9600 | **A303_244.3 S05 M05C4** | 269 | **A303_244.3 P71 BN71A4** | 270 |
| **5.7** | 379 | 2.2 | 240.6 | 15000 | **A413_240.6 S05 M05C4** | 277 | **A413_240.6 P71 BN71A4** | 278 |



# 0.25 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **6.0** | 362 | 1.7 | 223.2 | 12000 | **A353_223.2 S05 M05C4** | 273 | **A353_223.2 P71 BN71A4** | 274 |
| **6.2** | 353 | 2.4 | 217.4 | 15000 | **A413_217.4 S05 M05C4** | 277 | **A413_217.4 P71 BN71A4** | 278 |
| **6.2** | 351 | 1.0 | 216.6 | 9600 | **A303_216.6 S05 M05C4** | 269 | **A303_216.6 P71 BN71A4** | 270 |
| **6.6** | 327 | 1.8 | 201.8 | 12000 | **A353_201.8 S05 M05C4** | 273 | **A353_201.8 P71 BN71A4** | 274 |
| **7.0** | 313 | 1.1 | 198.5 | 9600 | **A303_198.5 S05 M05C4** | 269 | **A303_198.5 P71 BN71A4** | 270 |
| **7.0** | 311 | 2.7 | 197.5 | 15000 | **A413_197.5 S05 M05C4** | 277 | **A413_197.5 P71 BN71A4** | 278 |
| **7.1** | 306 | 2.0 | 188.3 | 12000 | **A353_188.3 S05 M05C4** | 273 | **A353_188.3 P71 BN71A4** | 274 |
| **7.3** | 299 | 2.8 | 184.4 | 15000 | **A413_184.4 S05 M05C4** | 277 | **A413_184.4 P71 BN71A4** | 278 |
| **7.5** | 290 | 1.2 | 178.5 | 9600 | **A303_178.5 S05 M05C4** | 269 | **A303_178.5 P71 BN71A4** | 270 |
| **7.8** | 279 | 2.2 | 171.8 | 12000 | **A353_171.8 S05 M05C4** | 273 | **A353_171.8 P71 BN71A4** | 274 |
| **8.4** | 257 | 0.9 | 163.4 | 6200 | **A203_163.4 S05 M05C4** | 265 | **A203_163.4 P71 BN71A4** | 266 |
| **8.5** | 254 | 1.3 | 161.4 | 9600 | **A303_161.4 S05 M05C4** | 269 | **A303_161.4 P71 BN71A4** | 270 |
| **8.9** | 244 | 1.4 | 150.7 | 9600 | **A303_150.7 S05 M05C4** | 269 | **A303_150.7 P71 BN71A4** | 270 |
| **8.9** | 244 | 2.5 | 150.6 | 12000 | **A353_150.6 S05 M05C4** | 273 | **A353_150.6 P71 BN71A4** | 274 |
| **9.2** | 237 | 1.0 | 146.1 | 6200 | **A203_146.1 S05 M05C4** | 265 | **A203_146.1 P71 BN71A4** | 266 |
| **9.8** | 221 | 2.6 | 136.3 | 12000 | **A353_136.3 S05 M05C4** | 273 | **A353_136.3 P71 BN71A4** | 274 |
| **10.0** | 216 | 1.5 | 137.4 | 9600 | **A303_137.4 S05 M05C4** | 269 | **A303_137.4 P71 BN71A4** | 270 |
| **10.7** | 203 | 1.1 | 129.1 | 6200 | **A203_129.1 S05 M05C4** | 265 | **A203_129.1 P71 BN71A4** | 266 |
| **11.1** | 196 | 1.1 | 120.5 | 6200 | **A203_120.5 S05 M05C4** | 265 | **A203_120.5 P71 BN71A4** | 266 |
| **11.1** | 195 | 1.5 | 120.5 | 9600 | **A303_120.5 S05 M05C4** | 269 | **A303_120.5 P71 BN71A4** | 270 |
| **11.5** | 190 | 3.0 | 116.9 | 12000 | **A353_116.9 S05 M05C4** | 273 | **A353_116.9 P71 BN71A4** | 274 |
| **12.6** | 172 | 1.2 | 109.2 | 6200 | **A203_109.2 S05 M05C4** | 265 | **A203_109.2 P71 BN71A4** | 266 |
| **12.7** | 172 | 1.7 | 109.1 | 9600 | **A303_109.1 S05 M05C4** | 269 | **A303_109.1 P71 BN71A4** | 270 |
| **12.7** | 171 | 3.1 | 105.5 | 12000 | **A353_105.5 S05 M05C4** | 273 | **A353_105.5 P71 BN71A4** | 274 |
| **14.2** | 159 | 1.9 | 97.5 | 9600 | | | **A302_97.5 P71 BN71A4** | 270 |
| **14.4** | 156 | 3.5 | 95.6 | 12000 | | | **A352_95.6 P71 BN71A4** | 274 |
| **14.5** | 155 | 1.3 | 92.3 | 6200 | **A202_92.3 S05 M05C4** | 265 | **A202_92.3 P71 BN71A4** | 266 |
| **15.9** | 141 | 2.3 | 86.7 | 9600 | | | **A302_86.7 P71 BN71A4** | 270 |
| **16.8** | 134 | 1.6 | 79.9 | 6200 | **A202_79.9 S05 M05C4** | 265 | **A202_79.9 P71 BN71A4** | 266 |
| **17.5** | 128 | 1.2 | 76.4 | 5500 | **A102_76.4 S05 M05C4** | 261 | **A102_76.4 P71 BN71A4** | 262 |
| **18.0** | 125 | 2.8 | 76.5 | 9600 | | | **A302_76.5 P71 BN71A4** | 270 |
| **19.4** | 116 | 1.8 | 71.0 | 6200 | **A202_71.0 S05 M05C4** | 265 | **A202_71.0 P71 BN71A4** | 266 |
| **20.3** | 110 | 0.9 | 65.9 | 3610 | **A052_65.9 S05 M05C4** | 258 | **A052_65.9 P71 BN71A4** | 258 |
| **20.3** | 110 | 1.4 | 65.9 | 5500 | **A102_65.9 S05 M05C4** | 261 | **A102_65.9 P71 BN71A4** | 262 |
| **21.2** | 106 | 2.3 | 63.1 | 6200 | **A202_63.1 S05 M05C4** | 265 | **A202_63.1 P71 BN71A4** | 266 |
| **22.9** | 98 | 1.0 | 58.6 | 3540 | **A052_58.6 S05 M05C4** | 258 | **A052_58.6 P71 BN71A4** | 258 |
| **23.5** | 95 | 1.6 | 58.6 | 5500 | **A102_58.6 S05 M05C4** | 261 | **A102_58.6 P71 BN71A4** | 262 |
| **25.0** | 90 | 2.8 | 53.7 | 6200 | **A202_53.7 S05 M05C4** | 265 | **A202_53.7 P71 BN71A4** | 266 |
| **26.1** | 86 | 1.2 | 51.3 | 3450 | **A052_51.3 S05 M05C4** | 258 | **A052_51.3 P71 BN71A4** | 258 |
| **26.1** | 86 | 1.7 | 51.3 | 5500 | **A102_51.3 S05 M05C4** | 261 | **A102_51.3 P71 BN71A4** | 262 |
| **28.6** | 79 | 3.2 | 48.3 | 6180 | **A202_48.3 S05 M05C4** | 265 | **A202_48.3 P71 BN71A4** | 266 |
| **29.5** | 76 | 1.3 | 45.4 | 3370 | **A052_45.4 S05 M05C4** | 258 | **A052_45.4 P71 BN71A4** | 258 |
| **29.5** | 76 | 2.0 | 45.4 | 5500 | **A102_45.4 S05 M05C4** | 261 | **A102_45.4 P71 BN71A4** | 262 |
| **33** | 68 | 1.5 | 40.9 | 3290 | **A052_40.9 S05 M05C4** | 258 | **A052_40.9 P71 BN71A4** | 258 |
| **34** | 66 | 2.3 | 40.9 | 5500 | **A102_40.9 S05 M05C4** | 261 | **A102_40.9 P71 BN71A4** | 262 |
| **38** | 59 | 1.7 | 35.1 | 3180 | **A052_35.1 S05 M05C4** | 258 | **A052_35.1 P71 BN71A4** | 258 |
| **38** | 59 | 2.5 | 35.1 | 5260 | **A102_35.1 S05 M05C4** | 261 | **A102_35.1 P71 BN71A4** | 262 |
| **42** | 54 | 1.9 | 32.2 | 3120 | **A052_32.2 S05 M05C4** | 258 | **A052_32.2 P71 BN71A4** | 258 |
| **43** | 52 | 2.9 | 32.2 | 5500 | **A102_32.2 S05 M05C4** | 261 | **A102_32.2 P71 BN71A4** | 262 |
| **47** | 48 | 2.1 | 28.6 | 3030 | **A052_28.6 S05 M05C4** | 258 | **A052_28.6 P71 BN71A4** | 258 |
| **47** | 48 | 3.1 | 28.6 | 4970 | **A102_28.6 S05 M05C4** | 261 | **A102_28.6 P71 BN71A4** | 262 |
| **53** | 43 | 2.3 | 25.5 | 2940 | **A052_25.5 S05 M05C4** | 258 | **A052_25.5 P71 BN71A4** | 258 |
| **56** | 40 | 2.5 | 23.8 | 2890 | **A052_23.8 S05 M05C4** | 258 | **A052_23.8 P71 BN71A4** | 258 |
| **63** | 36 | 2.8 | 21.4 | 2810 | **A052_21.4 S05 M05C4** | 258 | **A052_21.4 P71 BN71A4** | 258 |
| **72** | 31 | 3.2 | 18.6 | 2710 | **A052_18.6 S05 M05C4** | 258 | **A052_18.6 P71 BN71A4** | 258 |
| **84** | 27 | 3.7 | 16.4 | 2620 | **A052_16.4 S05 M05C4** | 258 | **A052_16.4 P71 BN71A4** | 258 |
| **99** | 23 | 4.4 | 13.9 | 2500 | **A052_13.9 S05 M05C4** | 258 | **A052_13.9 P71 BN71A4** | 258 |

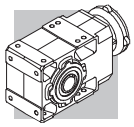


## 0.25 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **112** | 20 | 5.0 | 12.3 | 2420 | **A052_12.3 S05 M05C4** | 258 | **A052_12.3 P71 BN71A4** | 258 |
| **131** | 17.2 | 5.8 | 10.6 | 2310 | **A052_10.6 S05 M05C4** | 258 | **A052_10.6 P71 BN71A4** | 258 |
| **144** | 15.7 | 6.4 | 9.6 | 2260 | **A052_9.6 S05 M05C4** | 258 | **A052_9.6 P71 BN71A4** | 258 |
| **162** | 13.9 | 7.2 | 8.5 | 2180 | **A052_8.5 S05 M05C4** | 258 | **A052_8.5 P71 BN71A4** | 258 |
| **191** | 11.7 | 8.5 | 7.2 | 2070 | **A052_7.2 S05 M05C4** | 258 | **A052_7.2 P71 BN71A4** | 258 |
| **218** | 10.3 | 9.7 | 6.3 | 1990 | **A052_6.3 S05 M05C4** | 258 | **A052_6.3 P71 BN71A4** | 258 |
| **252** | 8.9 | 10.7 | 5.5 | 1900 | **A052_5.5 S05 M05C4** | 258 | **A052_5.5 P71 BN71A4** | 258 |
| **285** | 7.9 | 12.1 | 9.6 | 1820 | **A052_9.6 S05 M05B2** | 258 | **A052_9.6 P63 BN63B2** | 258 |
| **322** | 7.0 | 12.9 | 8.5 | 1750 | **A052_8.5 S05 M05B2** | 258 | **A052_8.5 P63 BN63B2** | 258 |
| **380** | 5.9 | 14.4 | 7.2 | 1660 | **A052_7.2 S05 M05B2** | 258 | **A052_7.2 P63 BN63B2** | 258 |
| **433** | 5.2 | 15.4 | 6.3 | 1590 | **A052_6.3 S05 M05B2** | 258 | **A052_6.3 P63 BN63B2** | 258 |
| **501** | 4.5 | 16.7 | 5.5 | 1520 | **A052_5.5 S05 M05B2** | 258 | **A052_5.5 P63 BN63B2** | 258 |

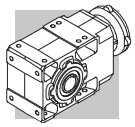
## 0.37 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.56** | 5644 | 2.5 | 1632 | 75000 | **A904_1632 S1 M1LA6** | 299 | **A904_1632 P80 BN80A6** | 300 |
| **0.63** | 4972 | 1.6 | 1438 | 65000 | **A804_1438 S1 M1LA6** | 296 | **A804_1438 P80 BN80A6** | 297 |
| **0.74** | 4226 | 3.3 | 1222 | 75000 | **A904_1222 S1 M1LA6** | 299 | **A904_1222 P80 BN80A6** | 300 |
| **0.80** | 3939 | 1.3 | 1715 | 50000 | **A704_1715 S1 M1SD4** | 293 | **A704_1715 P71 BN71B4** | 294 |
| **0.87** | 3636 | 1.4 | 1583 | 50000 | **A704_1583 S1 M1SD4** | 293 | **A704_1583 P71 BN71B4** | 294 |
| **0.88** | 3577 | 2.2 | 1558 | 65000 | **A804_1558 S1 M1SD4** | 296 | **A804_1558 P71 BN71B4** | 297 |
| **0.95** | 3302 | 2.4 | 1438 | 65000 | **A804_1438 S1 M1SD4** | 296 | **A804_1438 P71 BN71B4** | 297 |
| **1.0** | 3091 | 1.6 | 1346 | 50000 | **A704_1346 S1 M1SD4** | 293 | **A704_1346 P71 BN71B4** | 294 |
| **1.0** | 3077 | 2.6 | 1340 | 65000 | **A804_1340 S1 M1SD4** | 296 | **A804_1340 P71 BN71B4** | 297 |
| **1.1** | 2853 | 1.8 | 1242 | 50000 | **A704_1242 S1 M1SD4** | 293 | **A704_1242 P71 BN71B4** | 294 |
| **1.1** | 2841 | 2.8 | 1237 | 65000 | **A804_1237 S1 M1SD4** | 296 | **A804_1237 P71 BN71B4** | 297 |
| **1.2** | 2668 | 1.9 | 1161 | 50000 | **A704_1161 S1 M1SD4** | 293 | **A704_1161 P71 BN71B4** | 294 |
| **1.3** | 2492 | 3.2 | 1085 | 65000 | **A804_1085 S1 M1SD4** | 296 | **A804_1085 P71 BN71B4** | 297 |
| **1.3** | 2462 | 2.0 | 1072 | 50000 | **A704_1072 S1 M1SD4** | 293 | **A704_1072 P71 BN71B4** | 294 |
| **1.4** | 2300 | 3.5 | 1001 | 65000 | **A804_1001 S1 M1SD4** | 296 | **A804_1001 P71 BN71B4** | 297 |
| **1.5** | 2128 | 2.3 | 926.5 | 50000 | **A704_926.5 S1 M1SD4** | 293 | **A704_926.5 P71 BN71B4** | 294 |
| **1.6** | 1964 | 2.5 | 855.3 | 50000 | **A704_855.3 S1 M1SD4** | 293 | **A704_855.3 P71 BN71B4** | 294 |
| **1.8** | 1754 | 2.8 | 763.9 | 50000 | **A704_763.9 S1 M1SD4** | 293 | **A704_763.9 P71 BN71B4** | 294 |
| **1.8** | 1735 | 1.6 | 755.4 | 30000 | **A604_755.4 S1 M1SD4** | 289 | **A604_755.4 P71 BN71B4** | 290 |
| **1.9** | 1626 | 0.9 | 707.9 | 20000 | **A504_707.9 S1 M1SD4** | 281 | **A504_707.9 P71 BN71B4** | 282 |
| **1.9** | 1619 | 3.1 | 705.1 | 50000 | **A704_705.1 S1 M1SD4** | 293 | **A704_705.1 P71 BN71B4** | 294 |
| **2.0** | 1601 | 1.7 | 697.3 | 30000 | **A604_697.3 S1 M1SD4** | 289 | **A604_697.3 P71 BN71B4** | 290 |
| **2.1** | 1481 | 3.4 | 644.6 | 50000 | **A704_644.6 S1 M1SD4** | 293 | **A704_644.6 P71 BN71B4** | 294 |
| **2.2** | 1457 | 1.9 | 634.6 | 30000 | **A604_634.6 S1 M1SD4** | 289 | **A604_634.6 P71 BN71B4** | 290 |
| **2.2** | 1450 | 1.0 | 631.2 | 20000 | **A504_631.2 S1 M1SD4** | 281 | **A504_631.2 P71 BN71B4** | 282 |
| **2.3** | 1345 | 2.1 | 585.8 | 30000 | **A604_585.8 S1 M1SD4** | 289 | **A604_585.8 P71 BN71B4** | 290 |
| **2.4** | 1319 | 1.1 | 574.2 | 20000 | **A504_574.2 S1 M1SD4** | 281 | **A504_574.2 P71 BN71B4** | 282 |
| **2.5** | 1245 | 2.2 | 542.0 | 30000 | **A604_542.0 S1 M1SD4** | 289 | **A604_542.0 P71 BN71B4** | 290 |
| **2.6** | 1216 | 1.2 | 529.5 | 20000 | **A504_529.5 S1 M1SD4** | 281 | **A504_529.5 P71 BN71B4** | 282 |
| **2.7** | 1149 | 2.4 | 500.3 | 30000 | **A604_500.3 S1 M1SD4** | 289 | **A604_500.3 P71 BN71B4** | 290 |
| **2.8** | 1106 | 1.4 | 481.6 | 20000 | **A504_481.6 S1 M1SD4** | 281 | **A504_481.6 P71 BN71B4** | 282 |
| **3.1** | 1026 | 1.5 | 446.8 | 20000 | **A504_446.8 S1 M1SD4** | 281 | **A504_446.8 P71 BN71B4** | 282 |
| **3.1** | 1007 | 2.8 | 438.4 | 30000 | **A604_438.4 S1 M1SD4** | 289 | **A604_438.4 P71 BN71B4** | 290 |
| **3.4** | 933 | 1.6 | 406.4 | 20000 | **A504_406.4 S1 M1SD4** | 281 | **A504_406.4 P71 BN71B4** | 282 |
| **3.4** | 929 | 3.0 | 404.7 | 30000 | **A604_404.7 S1 M1SD4** | 289 | **A604_404.7 P71 BN71B4** | 290 |
| **3.6** | 885 | 1.0 | 376.8 | 15000 | **A413_376.8 S1 M1SD4** | 277 | **A413_376.8 P71 BN71B4** | 278 |
| **3.7** | 840 | 1.8 | 365.6 | 20000 | **A504_365.6 S1 M1SD4** | 281 | **A504_365.6 P71 BN71B4** | 282 |



# 0.37 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **3.9** | 807 | 3.5 | 351.2 | 30000 | **A604_351.2 S1 M1SD4** | 289 | **A604_351.2 P71 BN71B4** | 290 |
| **4.1** | 764 | 2.0 | 332.6 | 20000 | **A504_332.6 S1 M1SD4** | 281 | **A504_332.6 P71 BN71B4** | 282 |
| **4.2** | 761 | 1.1 | 324.2 | 15000 | **A413_324.2 S1 M1SD4** | 277 | **A413_324.2 P71 BN71B4** | 278 |
| **4.7** | 685 | 1.2 | 291.7 | 15000 | **A413_291.7 S1 M1SD4** | 277 | **A413_291.7 P71 BN71B4** | 278 |
| **4.8** | 659 | 2.3 | 286.8 | 20000 | **A504_286.8 S1 M1SD4** | 281 | **A504_286.8 P71 BN71B4** | 282 |
| **5.1** | 636 | 0.9 | 270.7 | 12000 | **A353_270.7 S1 M1SD4** | 273 | **A353_270.7 P71 BN71B4** | 274 |
| **5.2** | 616 | 1.4 | 262.5 | 15000 | **A413_262.5 S1 M1SD4** | 277 | **A413_262.5 P71 BN71B4** | 278 |
| **5.3** | 599 | 2.5 | 260.9 | 20000 | **A504_260.9 S1 M1SD4** | 281 | **A504_260.9 P71 BN71B4** | 282 |
| **5.5** | 583 | 1.0 | 248.1 | 12000 | **A353_248.1 S1 M1SD4** | 273 | **A353_248.1 P71 BN71B4** | 274 |
| **5.7** | 565 | 1.5 | 240.6 | 15000 | **A413_240.6 S1 M1SD4** | 277 | **A413_240.6 P71 BN71B4** | 278 |
| **5.9** | 533 | 2.8 | 232.0 | 20000 | **A504_232.0 S1 M1SD4** | 281 | **A504_232.0 P71 BN71B4** | 282 |
| **6.1** | 524 | 1.1 | 223.2 | 12000 | **A353_223.2 S1 M1SD4** | 273 | **A353_223.2 P71 BN71B4** | 274 |
| **6.3** | 511 | 1.7 | 217.4 | 15000 | **A413_217.4 S1 M1SD4** | 277 | **A413_217.4 P71 BN71B4** | 278 |
| **6.5** | 485 | 3.1 | 211.0 | 20000 | **A504_211.0 S1 M1SD4** | 281 | **A504_211.0 P71 BN71B4** | 282 |
| **6.8** | 474 | 1.3 | 201.8 | 12000 | **A353_201.8 S1 M1SD4** | 273 | **A353_201.8 P71 BN71B4** | 274 |
| **6.9** | 464 | 1.8 | 197.5 | 15000 | **A413_197.5 S1 M1SD4** | 277 | **A413_197.5 P71 BN71B4** | 278 |
| **7.2** | 448 | 3.4 | 190.6 | 20000 | **A503_190.6 S1 M1SD4** | 281 | **A503_190.6 P71 BN71B4** | 282 |
| **7.3** | 442 | 1.4 | 188.3 | 12000 | **A353_188.3 S1 M1SD4** | 273 | **A353_188.3 P71 BN71B4** | 274 |
| **7.4** | 433 | 2.0 | 184.4 | 15000 | **A413_184.4 S1 M1SD4** | 277 | **A413_184.4 P71 BN71B4** | 278 |
| **8.0** | 403 | 1.5 | 171.8 | 12000 | **A353_171.8 S1 M1SD4** | 273 | **A353_171.8 P71 BN71B4** | 274 |
| **9.1** | 354 | 0.9 | 150.7 | 9600 | **A303_150.7 S1 M1SD4** | 269 | **A303_150.7 P71 BN71B4** | 270 |
| **9.1** | 354 | 1.7 | 150.6 | 12000 | **A353_150.6 S1 M1SD4** | 273 | **A353_150.6 P71 BN71B4** | 274 |
| **9.3** | 345 | 2.5 | 146.9 | 15000 | **A413_146.9 S1 M1SD4** | 277 | **A413_146.9 P71 BN71B4** | 278 |
| **10.0** | 323 | 1.0 | 137.4 | 9600 | **A303_137.4 S1 M1SD4** | 269 | **A303_137.4 P71 BN71B4** | 270 |
| **10.0** | 320 | 1.8 | 136.3 | 12000 | **A353_136.3 S1 M1SD4** | 273 | **A353_136.3 P71 BN71B4** | 274 |
| **11.4** | 283 | 1.1 | 120.5 | 9600 | **A303_120.5 S1 M1SD4** | 269 | **A303_120.5 P71 BN71B4** | 270 |
| **11.7** | 275 | 2.0 | 116.9 | 12000 | **A353_116.9 S1 M1SD4** | 273 | **A353_116.9 P71 BN71B4** | 274 |
| **11.8** | 272 | 3.1 | 115.9 | 15000 | **A413_115.9 S1 M1SD4** | 277 | **A413_115.9 P71 BN71B4** | 278 |
| **12.6** | 256 | 1.2 | 109.1 | 9600 | **A303_109.1 S1 M1SD4** | 269 | **A303_109.1 P71 BN71B4** | 270 |
| **13.0** | 248 | 2.1 | 105.5 | 12000 | **A353_105.5 S1 M1SD4** | 273 | **A353_105.5 P71 BN71B4** | 274 |
| **14.1** | 237 | 1.3 | 97.5 | 9600 | | | **A302_97.5 P71 BN71B4** | 270 |
| **14.3** | 232 | 2.3 | 95.6 | 12000 | **A352_95.6 S1 M1SD4** | 273 | **A352_95.6 P71 BN71B4** | 274 |
| **15.8** | 210 | 1.5 | 86.7 | 9600 | | | **A302_86.7 P71 BN71B4** | 270 |
| **16.6** | 200 | 3.0 | 82.5 | 12000 | **A352_82.5 S1 M1SD4** | 273 | **A352_82.5 P71 BN71B4** | 274 |
| **17.2** | 194 | 1.1 | 79.9 | 6200 | | | **A202_79.9 P71 BN71B4** | 266 |
| **17.9** | 186 | 1.9 | 76.5 | 9600 | **A302_76.5 S1 M1SD4** | 269 | **A302_76.5 P71 BN71B4** | 270 |
| **18.4** | 180 | 3.3 | 74.3 | 12000 | **A352_74.3 S1 M1SD4** | 273 | **A352_74.3 P71 BN71B4** | 274 |
| **19.3** | 172 | 1.2 | 71.0 | 6200 | | | **A202_71.0 P71 BN71B4** | 266 |
| **20.7** | 160 | 2.4 | 66.0 | 9350 | **A302_66.0 S1 M1SD4** | 269 | **A302_66.0 P71 BN71B4** | 270 |
| **20.8** | 160 | 0.9 | 65.9 | 5500 | | | **A102_65.9 P71 BN71B4** | 262 |
| **21.7** | 153 | 1.6 | 63.1 | 6200 | **A202_63.1 S1 M1SD4** | 265 | **A202_63.1 P71 BN71B4** | 266 |
| **23.1** | 144 | 2.8 | 59.4 | 9080 | **A302_59.4 S1 M1SD4** | 269 | **A302_59.4 P71 BN71B4** | 270 |
| **23.4** | 142 | 1.1 | 58.6 | 5500 | | | **A102_58.6 P71 BN71B4** | 262 |
| **25.5** | 130 | 1.9 | 53.7 | 6090 | **A202_53.7 S1 M1SD4** | 265 | **A202_53.7 P71 BN71B4** | 266 |
| **26.0** | 128 | 3.2 | 52.7 | 8790 | **A302_52.7 S1 M1SD4** | 269 | **A302_52.7 P71 BN71B4** | 270 |
| **26.7** | 124 | 1.2 | 51.3 | 5490 | **A102_51.3 S1 M1SD4** | 261 | **A102_51.3 P71 BN71B4** | 262 |
| **28.4** | 117 | 2.1 | 48.3 | 5940 | **A202_48.3 S1 M1SD4** | 265 | **A202_48.3 P71 BN71B4** | 266 |
| **28.4** | 117 | 3.5 | 48.3 | 8580 | **A302_48.3 S1 M1SD4** | 269 | **A302_48.3 P71 BN71B4** | 270 |
| **30** | 110 | 0.9 | 45.4 | 3060 | **A052_45.4 S1 M1SD4** | 258 | **A052_45.4 P71 BN71B4** | 258 |
| **30** | 110 | 1.4 | 45.4 | 5350 | **A102_45.4 S1 M1SD4** | 261 | **A102_45.4 P71 BN71B4** | 262 |
| **32** | 105 | 2.4 | 43.2 | 5780 | **A202_43.2 S1 M1SD4** | 265 | **A202_43.2 P71 BN71B4** | 266 |
| **34** | 99 | 1.0 | 40.9 | 3020 | **A052_40.9 S1 M1SD4** | 258 | **A052_40.9 P71 BN71B4** | 258 |
| **34** | 99 | 1.5 | 40.9 | 5500 | **A102_40.9 S1 M1SD4** | 261 | **A102_40.9 P71 BN71B4** | 262 |
| **35** | 96 | 2.6 | 39.6 | 5650 | **A202_39.6 S1 M1SD4** | 265 | **A202_39.6 P71 BN71B4** | 266 |
| **39** | 86 | 2.9 | 35.4 | 5480 | **A202_35.4 S1 M1SD4** | 265 | **A202_35.4 P71 BN71B4** | 266 |
| **39** | 85 | 1.2 | 35.1 | 2950 | **A052_35.1 S1 M1SD4** | 258 | **A052_35.1 P71 BN71B4** | 258 |
| **39** | 85 | 1.8 | 35.1 | 5040 | **A102_35.1 S1 M1SD4** | 261 | **A102_35.1 P71 BN71B4** | 262 |

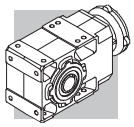


# 0.37 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **43** | 78 | 1.3 | 32.2 | 2900 | **A052_32.2 S1 M1SD4** | 258 | **A052_32.2 P71 BN71B4** | 258 |
| **43** | 78 | 1.9 | 32.2 | 5500 | **A102_32.2 S1 M1SD4** | 261 | **A102_32.2 P71 BN71B4** | 262 |
| **44** | 76 | 3.3 | 31.3 | 5310 | **A202_31.3 S1 M1SD4** | 265 | **A202_31.3 P71 BN71B4** | 266 |
| **47** | 71 | 3.5 | 29.2 | 5210 | **A202_29.2 S1 M1SD4** | 265 | **A202_29.2 P71 BN71B4** | 266 |
| **48** | 69 | 1.4 | 28.6 | 2840 | **A052_28.6 S1 M1SD4** | 258 | **A052_28.6 P71 BN71B4** | 258 |
| **48** | 69 | 2.2 | 28.6 | 4790 | **A102_28.6 S1 M1SD4** | 261 | **A102_28.6 P71 BN71B4** | 262 |
| **54** | 62 | 1.6 | 25.5 | 2770 | **A052_25.5 S1 M1SD4** | 258 | **A052_25.5 P71 BN71B4** | 258 |
| **54** | 62 | 2.4 | 25.5 | 5500 | **A102_25.5 S1 M1SD4** | 261 | **A102_25.5 P71 BN71B4** | 262 |
| **58** | 58 | 1.7 | 23.8 | 2730 | **A052_23.8 S1 M1SD4** | 258 | **A052_23.8 P71 BN71B4** | 258 |
| **58** | 58 | 2.6 | 23.8 | 4570 | **A102_23.8 S1 M1SD4** | 261 | **A102_23.8 P71 BN71B4** | 262 |
| **64** | 52 | 1.9 | 21.4 | 2670 | **A052_21.4 S1 M1SD4** | 258 | **A052_21.4 P71 BN71B4** | 258 |
| **64** | 52 | 2.9 | 21.4 | 5270 | **A102_21.4 S1 M1SD4** | 261 | **A102_21.4 P71 BN71B4** | 262 |
| **74** | 45 | 2.2 | 18.6 | 2590 | **A052_18.6 S1 M1SD4** | 258 | **A052_18.6 P71 BN71B4** | 258 |
| **74** | 45 | 3.3 | 18.6 | 4270 | **A102_18.6 S1 M1SD4** | 261 | **A102_18.6 P71 BN71B4** | 262 |
| **83** | 40 | 2.5 | 16.4 | 2510 | **A052_16.4 S1 M1SD4** | 258 | **A052_16.4 P71 BN71B4** | 258 |
| **98** | 34 | 3.0 | 13.9 | 2410 | **A052_13.9 S1 M1SD4** | 258 | **A052_13.9 P71 BN71B4** | 258 |
| **111** | 30 | 3.3 | 12.3 | 2350 | **A052_12.3 S1 M1SD4** | 258 | **A052_12.3 P71 BN71B4** | 258 |
| **130** | 26 | 3.9 | 10.6 | 2240 | **A052_10.6 S1 M1SD4** | 258 | **A052_10.6 P71 BN71B4** | 258 |
| **142** | 23 | 4.3 | 9.6 | 2190 | **A052_9.6 S1 M1SD4** | 258 | **A052_9.6 P71 BN71B4** | 258 |
| **161** | 21 | 4.8 | 8.5 | 2120 | **A052_8.5 S1 M1SD4** | 258 | **A052_8.5 P71 BN71B4** | 258 |
| **190** | 17.5 | 5.7 | 7.2 | 2030 | **A052_7.2 S1 M1SD4** | 258 | **A052_7.2 P71 BN71B4** | 258 |
| **216** | 15.4 | 6.5 | 6.3 | 1950 | **A052_6.3 S1 M1SD4** | 258 | **A052_6.3 P71 BN71B4** | 258 |
| **228** | 14.6 | 6.8 | 12.3 | 1920 | **A052_12.3 S05 M05C2** | 258 | **A052_12.3 P71 BN71A2** | 258 |
| **251** | 13.3 | 7.2 | 5.5 | 1870 | **A052_5.5 S1 M1SD4** | 258 | **A052_5.5 P71 BN71B4** | 258 |
| **265** | 12.5 | 6.4 | 10.6 | 1830 | **A052_10.6 S05 M05C2** | 258 | **A052_10.6 P71 BN71A2** | 258 |
| **291** | 11.4 | 8.3 | 9.6 | 1790 | **A052_9.6 S05 M05C2** | 258 | **A052_9.6 P71 BN71A2** | 258 |
| **331** | 10.0 | 9.0 | 8.5 | 1720 | **A052_8.5 S05 M05C2** | 258 | **A052_8.5 P71 BN71A2** | 258 |
| **388** | 8.6 | 9.9 | 7.2 | 1640 | **A052_7.2 S05 M05C2** | 258 | **A052_7.2 P71 BN71A2** | 258 |
| **445** | 7.5 | 10.7 | 6.3 | 1570 | **A052_6.3 S05 M05C2** | 258 | **A052_6.3 P71 BN71A2** | 258 |
| **512** | 6.5 | 11.6 | 5.5 | 1500 | **A052_5.5 S05 M05C2** | 258 | | |

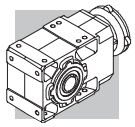
# 0.55 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.56** | 8299 | 1.7 | 1632 | 75000 | **A904_1632 S2 M2SA6** | 299 | **A904_1632 P80 BN80B6** | 300 |
| **0.64** | 7310 | 1.1 | 1438 | 65000 | **A804_1438 S2 M2SA6** | 296 | **A804_1438 P80 BN80B6** | 297 |
| **0.75** | 6213 | 2.3 | 1222 | 75000 | **A904_1222 S2 M2SA6** | 299 | **A904_1222 P80 BN80B6** | 300 |
| **0.80** | 5813 | 0.9 | 1715 | 50000 | **A704_1715 S1 M1LA4** | 293 | **A704_1715 P80 BN80A4** | 294 |
| **0.85** | 5532 | 2.5 | 1632 | 75000 | **A904_1632 S1 M1LA4** | 299 | **A904_1632 P80 BN80A4** | 300 |
| **0.87** | 5365 | 0.9 | 1583 | 50000 | **A704_1583 S1 M1LA4** | 293 | **A704_1583 P80 BN80A4** | 294 |
| **0.89** | 5279 | 1.5 | 1558 | 65000 | **A804_1558 S1 M1LA4** | 296 | **A804_1558 P80 BN80A4** | 297 |
| **0.92** | 5070 | 2.8 | 1507 | 75000 | **A904_1507 S1 M1LA4** | 299 | **A904_1507 P80 BN80A4** | 300 |
| **0.96** | 4873 | 1.6 | 1438 | 65000 | **A804_1438 S1 M1LA4** | 296 | **A804_1438 P80 BN80A4** | 297 |
| **1.0** | 4561 | 1.1 | 1346 | 50000 | **A704_1346 S1 M1LA4** | 293 | **A704_1346 P80 BN80A4** | 294 |
| **1.0** | 4541 | 1.8 | 1340 | 65000 | **A804_1340 S1 M1LA4** | 296 | **A804_1340 P80 BN80A4** | 297 |
| **1.0** | 4455 | 3.1 | 1324 | 75000 | **A904_1324 S1 M1LA4** | 299 | **A904_1324 P80 BN80A4** | 300 |
| **1.1** | 4211 | 1.2 | 1242 | 50000 | **A704_1242 S1 M1LA4** | 293 | **A704_1242 P80 BN80A4** | 294 |
| **1.1** | 4192 | 1.9 | 1237 | 65000 | **A804_1237 S1 M1LA4** | 296 | **A804_1237 P80 BN80A4** | 297 |
| **1.1** | 4112 | 3.4 | 1222 | 75000 | **A904_1222 S1 M1LA4** | 299 | **A904_1222 P80 BN80A4** | 300 |
| **1.2** | 3937 | 1.3 | 1161 | 50000 | **A704_1161 S1 M1LA4** | 293 | **A704_1161 P80 BN80A4** | 294 |
| **1.3** | 3677 | 2.2 | 1085 | 65000 | **A804_1085 S1 M1LA4** | 296 | **A804_1085 P80 BN80A4** | 297 |
| **1.3** | 3634 | 1.4 | 1072 | 50000 | **A704_1072 S1 M1LA4** | 293 | **A704_1072 P80 BN80A4** | 294 |
| **1.4** | 3394 | 2.4 | 1001 | 65000 | **A804_1001 S1 M1LA4** | 296 | **A804_1001 P80 BN80A4** | 297 |

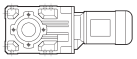


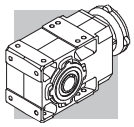
# 0.55 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **1.5** | 3140 | 1.6 | 926.5 | 50000 | **A704_926.5 S1 M1LA4** | 293 | **A704_926.5 P80 BN80A4** | 294 |
| **1.5** | 3046 | 2.6 | 898.7 | 65000 | **A804_898.7 S1 M1LA4** | 296 | **A804_898.7 P80 BN80A4** | 297 |
| **1.6** | 2899 | 1.7 | 855.3 | 50000 | **A704_855.3 S1 M1LA4** | 293 | **A704_855.3 P80 BN80A4** | 294 |
| **1.7** | 2811 | 2.8 | 829.5 | 65000 | **A804_829.5 S1 M1LA4** | 296 | **A804_829.5 P80 BN80A4** | 297 |
| **1.8** | 2589 | 1.9 | 763.9 | 50000 | **A704_763.9 S1 M1LA4** | 293 | **A704_763.9 P80 BN80A4** | 294 |
| **1.8** | 2583 | 3.1 | 762.1 | 65000 | **A804_762.1 S1 M1LA4** | 296 | **A804_762.1 P80 BN80A4** | 297 |
| **1.8** | 2560 | 1.1 | 755.4 | 30000 | **A604_755.4 S1 M1LA4** | 289 | **A604_755.4 P80 BN80A4** | 290 |
| **2.0** | 2390 | 2.1 | 705.1 | 50000 | **A704_705.1 S1 M1LA4** | 293 | **A704_705.1 P80 BN80A4** | 294 |
| **2.0** | 2384 | 3.4 | 703.5 | 65000 | **A804_703.5 S1 M1LA4** | 296 | **A804_703.5 P80 BN80A4** | 297 |
| **2.0** | 2363 | 1.2 | 697.3 | 30000 | **A604_697.3 S1 M1LA4** | 289 | **A604_697.3 P80 BN80A4** | 290 |
| **2.1** | 2185 | 2.3 | 644.6 | 50000 | **A704_644.6 S1 M1LA4** | 293 | **A704_644.6 P80 BN80A4** | 294 |
| **2.2** | 2151 | 1.3 | 634.6 | 30000 | **A604_634.6 S1 M1LA4** | 289 | **A604_634.6 P80 BN80A4** | 290 |
| **2.3** | 2017 | 2.5 | 595.0 | 50000 | **A704_595.0 S1 M1LA4** | 293 | **A704_595.0 P80 BN80A4** | 294 |
| **2.4** | 1985 | 1.4 | 585.8 | 30000 | **A604_585.8 S1 M1LA4** | 289 | **A604_585.8 P80 BN80A4** | 290 |
| **2.5** | 1837 | 1.5 | 542.0 | 30000 | **A604_542.0 S1 M1LA4** | 289 | **A604_542.0 P80 BN80A4** | 290 |
| **2.7** | 1747 | 2.9 | 515.4 | 50000 | **A704_515.4 S1 M1LA4** | 293 | **A704_515.4 P80 BN80A4** | 294 |
| **2.8** | 1696 | 1.7 | 500.3 | 30000 | **A604_500.3 S1 M1LA4** | 289 | **A604_500.3 P80 BN80A4** | 290 |
| **2.9** | 1632 | 0.9 | 481.6 | 20000 | **A504_481.6 S1 M1LA4** | 281 | **A504_481.6 P80 BN80A4** | 282 |
| **2.9** | 1612 | 3.1 | 475.8 | 50000 | **A704_475.8 S1 M1LA4** | 293 | **A704_475.8 P80 BN80A4** | 294 |
| **3.1** | 1514 | 1.0 | 446.8 | 20000 | **A504_446.8 S1 M1LA4** | 281 | **A504_446.8 P80 BN80A4** | 282 |
| **3.1** | 1486 | 1.9 | 438.4 | 30000 | **A604_438.4 S1 M1LA4** | 289 | **A604_438.4 P80 BN80A4** | 290 |
| **3.4** | 1378 | 1.1 | 406.4 | 20000 | **A504_406.4 S1 M1LA4** | 281 | **A504_406.4 P80 BN80A4** | 282 |
| **3.4** | 1372 | 2.0 | 404.7 | 30000 | **A604_404.7 S1 M1LA4** | 289 | **A604_404.7 P80 BN80A4** | 290 |
| **3.8** | 1239 | 1.2 | 365.6 | 20000 | **A504_365.6 S1 M1LA4** | 281 | **A504_365.6 P80 BN80A4** | 282 |
| **3.9** | 1190 | 2.4 | 351.2 | 30000 | **A604_351.2 S1 M1LA4** | 289 | **A604_351.2 P80 BN80A4** | 290 |
| **4.1** | 1127 | 1.3 | 332.6 | 20000 | **A504_332.6 S1 M1LA4** | 281 | **A504_332.6 P80 BN80A4** | 282 |
| **4.3** | 1099 | 2.5 | 324.2 | 30000 | **A604_324.2 S1 M1LA4** | 289 | **A604_324.2 P80 BN80A4** | 290 |
| **4.8** | 972 | 1.5 | 286.8 | 20000 | **A504_286.8 S1 M1LA4** | 281 | **A504_286.8 P80 BN80A4** | 282 |
| **4.8** | 970 | 2.9 | 286.3 | 30000 | **A604_286.3 S1 M1LA4** | 289 | **A604_286.3 P80 BN80A4** | 290 |
| **5.2** | 896 | 3.1 | 264.3 | 30000 | **A604_264.3 S1 M1LA4** | 289 | **A604_264.3 P80 BN80A4** | 290 |
| **5.3** | 910 | 0.9 | 262.5 | 15000 | **A413_262.5 S1 M1LA4** | 277 | **A413_262.5 P80 BN80A4** | 278 |
| **5.3** | 884 | 1.7 | 260.9 | 20000 | **A504_260.9 S1 M1LA4** | 281 | **A504_260.9 P80 BN80A4** | 282 |
| **5.7** | 834 | 1.0 | 240.6 | 15000 | **A413_240.6 S1 M1LA4** | 277 | **A413_240.6 P80 BN80A4** | 278 |
| **5.9** | 786 | 1.9 | 232.0 | 20000 | **A504_232.0 S1 M1LA4** | 281 | **A504_232.0 P80 BN80A4** | 282 |
| **6.3** | 753 | 1.1 | 217.4 | 15000 | **A413_217.4 S1 M1LA4** | 277 | **A413_217.4 P80 BN80A4** | 278 |
| **6.5** | 715 | 2.1 | 211.0 | 20000 | **A504_211.0 S1 M1LA4** | 281 | **A504_211.0 P80 BN80A4** | 282 |
| **7.0** | 685 | 1.2 | 197.5 | 15000 | **A413_197.5 S1 M1LA4** | 277 | **A413_197.5 P80 BN80A4** | 278 |
| **7.1** | 673 | 3.0 | 194.2 | 30000 | **A553_194.2 S1 M1LA4** | 285 | **A553_194.2 P80 BN80A4** | 286 |
| **7.2** | 660 | 2.3 | 190.6 | 20000 | **A503_190.6 S1 M1LA4** | 281 | **A503_190.6 P80 BN80A4** | 282 |
| **7.3** | 653 | 0.9 | 188.3 | 12000 | **A353_188.3 S1 M1LA4** | 273 | **A353_188.3 P80 BN80A4** | 274 |
| **7.5** | 639 | 1.3 | 184.4 | 15000 | **A413_184.4 S1 M1LA4** | 277 | **A413_184.4 P80 BN80A4** | 278 |
| **7.9** | 607 | 3.3 | 175.0 | 30000 | **A553_175.0 S1 M1LA4** | 285 | **A553_175.0 P80 BN80A4** | 286 |
| **8.0** | 601 | 2.5 | 173.4 | 20000 | **A503_173.4 S1 M1LA4** | 281 | **A503_173.4 P80 BN80A4** | 282 |
| **8.0** | 595 | 1.0 | 171.8 | 12000 | **A353_171.8 S1 M1LA4** | 273 | **A353_171.8 P80 BN80A4** | 274 |
| **9.0** | 532 | 2.8 | 154.6 | 20000 | **A503_154.6 S1 M1LA4** | 281 | **A503_154.6 P80 BN80A4** | 282 |
| **9.2** | 522 | 1.1 | 150.6 | 12000 | **A353_150.6 S1 M1LA4** | 273 | **A353_150.6 P80 BN80A4** | 274 |
| **9.4** | 509 | 1.7 | 146.9 | 15000 | **A413_146.9 S1 M1LA4** | 277 | **A413_146.9 P80 BN80A4** | 278 |
| **9.9** | 484 | 3.1 | 140.6 | 20000 | **A503_140.6 S1 M1LA4** | 281 | **A503_140.6 P80 BN80A4** | 282 |
| **10.1** | 472 | 1.2 | 136.3 | 12000 | **A353_136.3 S1 M1LA4** | 273 | **A353_136.3 P80 BN80A4** | 274 |
| **10.7** | 446 | 3.4 | 129.7 | 20000 | **A503_129.7 S1 M1LA4** | 281 | **A503_129.7 P80 BN80A4** | 282 |
| **11.8** | 405 | 1.4 | 116.9 | 12000 | **A353_116.9 S1 M1LA4** | 273 | **A353_116.9 P80 BN80A4** | 274 |
| **11.9** | 402 | 2.1 | 115.9 | 15000 | **A413_115.9 S1 M1LA4** | 277 | **A413_115.9 P80 BN80A4** | 278 |
| **13.1** | 366 | 1.4 | 105.5 | 12000 | **A353_105.5 S1 M1LA4** | 273 | **A353_105.5 P80 BN80A4** | 274 |
| **14.2** | 349 | 0.9 | 97.5 | 9600 | | | **A302_97.5 P80 BN80A4** | 270 |
| **14.4** | 342 | 1.6 | 95.6 | 12000 | **A352_95.6 S1 M1LA4** | 273 | **A352_95.6 P80 BN80A4** | 274 |
| **14.9** | 321 | 2.5 | 92.8 | 15000 | **A413_92.8 S1 M1LA4** | 277 | **A413_92.8 P80 BN80A4** | 278 |
| **15.9** | 310 | 1.0 | 86.7 | 9420 | | | **A302_86.7 P80 BN80A4** | 270 |

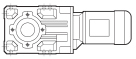


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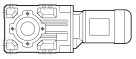
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **16.7** | 295 | 2.0 | 82.5 | 12000 | **A352_82.5 S1 M1LA4** | 273 | **A352_82.5 P80 BN80A4** | 274 |
| **17.4** | 284 | 3.0 | 79.2 | 15000 | **A412_79.2 S1 M1LA4** | 277 | **A412_79.2 P80 BN80A4** | 278 |
| **18.0** | 274 | 1.3 | 76.5 | 9180 | **A302_76.5 S1 M1LA4** | 269 | **A302_76.5 P80 BN80A4** | 270 |
| **18.6** | 266 | 2.3 | 74.3 | 12000 | **A352_74.3 S1 M1LA4** | 273 | **A352_74.3 P80 BN80A4** | 274 |
| **19.4** | 255 | 3.3 | 71.3 | 15000 | **A412_71.3 S1 M1LA4** | 277 | **A412_71.3 P80 BN80A4** | 278 |
| **20.9** | 236 | 1.6 | 66.0 | 8880 | **A302_66.0 S1 M1LA4** | 269 | **A302_66.0 P80 BN80A4** | 270 |
| **21.0** | 236 | 2.5 | 65.8 | 12000 | **A352_65.8 S1 M1LA4** | 273 | **A352_65.8 P80 BN80A4** | 274 |
| **21.9** | 226 | 1.1 | 63.1 | 5840 | **A202_63.1 S1 M1LA4** | 265 | **A202_63.1 P80 BN80A4** | 266 |
| **22.9** | 216 | 2.8 | 60.4 | 12000 | **A352_60.4 S1 M1LA4** | 273 | **A352_60.4 P80 BN80A4** | 274 |
| **23.2** | 213 | 1.9 | 59.4 | 8660 | **A302_59.4 S1 M1LA4** | 269 | **A302_59.4 P80 BN80A4** | 270 |
| **25.4** | 194 | 3.1 | 54.3 | 12000 | **A352_54.3 S1 M1LA4** | 273 | **A352_54.3 P80 BN80A4** | 274 |
| **25.7** | 192 | 1.3 | 53.7 | 5670 | **A202_53.7 S1 M1LA4** | 265 | **A202_53.7 P80 BN80A4** | 266 |
| **26.2** | 189 | 2.2 | 52.7 | 8410 | **A302_52.7 S1 M1LA4** | 269 | **A302_52.7 P80 BN80A4** | 270 |
| **28.1** | 176 | 3.4 | 49.1 | 12000 | **A352_49.1 S1 M1LA4** | 273 | **A352_49.1 P80 BN80A4** | 274 |
| **28.6** | 173 | 1.4 | 48.3 | 5560 | **A202_48.3 S1 M1LA4** | 265 | **A202_48.3 P80 BN80A4** | 266 |
| **28.6** | 173 | 2.4 | 48.3 | 8230 | **A302_48.3 S1 M1LA4** | 269 | **A302_48.3 P80 BN80A4** | 270 |
| **30** | 163 | 0.9 | 45.4 | 4910 | **A102_45.4 S1 M1LA4** | 261 | **A102_45.4 P80 BN80A4** | 262 |
| **32** | 155 | 2.6 | 43.4 | 8010 | **A302_43.4 S1 M1LA4** | 269 | **A302_43.4 P80 BN80A4** | 270 |
| **32** | 155 | 1.6 | 43.2 | 5440 | **A202_43.2 S1 M1LA4** | 265 | **A202_43.2 P80 BN80A4** | 266 |
| **34** | 146 | 1.0 | 40.9 | 5500 | **A102_40.9 S1 M1LA4** | 261 | **A102_40.9 P80 BN80A4** | 262 |
| **35** | 142 | 1.8 | 39.6 | 5340 | **A202_39.6 S1 M1LA4** | 265 | **A202_39.6 P80 BN80A4** | 266 |
| **35** | 141 | 2.9 | 39.3 | 7800 | **A302_39.3 S1 M1LA4** | 269 | **A302_39.3 P80 BN80A4** | 270 |
| **38** | 131 | 3.1 | 36.6 | 7660 | **A302_36.6 S1 M1LA4** | 269 | **A302_36.6 P80 BN80A4** | 270 |
| **39** | 127 | 2.0 | 35.4 | 5200 | **A202_35.4 S1 M1LA4** | 265 | **A202_35.4 P80 BN80A4** | 266 |
| **39** | 126 | 1.2 | 35.1 | 4700 | **A102_35.1 S1 M1LA4** | 261 | **A102_35.1 P80 BN80A4** | 262 |
| **41** | 120 | 3.4 | 33.4 | 7480 | **A302_33.4 S1 M1LA4** | 269 | **A302_33.4 P80 BN80A4** | 270 |
| **43** | 115 | 1.3 | 32.2 | 5490 | **A102_32.2 S1 M1LA4** | 261 | **A102_32.2 P80 BN80A4** | 262 |
| **44** | 112 | 2.2 | 31.3 | 5060 | **A202_31.3 S1 M1LA4** | 265 | **A202_31.3 P80 BN80A4** | 266 |
| **47** | 105 | 2.4 | 29.2 | 4970 | **A202_29.2 S1 M1LA4** | 265 | **A202_29.2 P80 BN80A4** | 266 |
| **48** | 102 | 1.0 | 28.6 | 2550 | **A052_28.6 S1 M1LA4** | 258 | **A052_28.6 P80 BN80A4** | 258 |
| **48** | 102 | 1.5 | 28.6 | 4510 | **A102_28.6 S1 M1LA4** | 261 | **A102_28.6 P80 BN80A4** | 262 |
| **52** | 95 | 2.6 | 26.5 | 4850 | **A202_26.5 S1 M1LA4** | 265 | **A202_26.5 P80 BN80A4** | 266 |
| **54** | 91 | 1.1 | 25.5 | 2510 | **A052_25.5 S1 M1LA4** | 258 | **A052_25.5 P80 BN80A4** | 258 |
| **54** | 91 | 1.6 | 25.5 | 5230 | **A102_25.5 S1 M1LA4** | 261 | **A102_25.5 P80 BN80A4** | 262 |
| **58** | 85 | 1.2 | 23.8 | 2490 | **A052_23.8 S1 M1LA4** | 258 | **A052_23.8 P80 BN80A4** | 258 |
| **58** | 85 | 1.8 | 23.8 | 4330 | **A102_23.8 S1 M1LA4** | 261 | **A102_23.8 P80 BN80A4** | 262 |
| **60** | 83 | 3.0 | 23.1 | 4690 | **A202_23.1 S1 M1LA4** | 265 | **A202_23.1 P80 BN80A4** | 266 |
| **65** | 76 | 1.3 | 21.4 | 2450 | **A052_21.4 S1 M1LA4** | 258 | **A052_21.4 P80 BN80A4** | 258 |
| **65** | 76 | 2.0 | 21.4 | 5020 | **A102_21.4 S1 M1LA4** | 261 | **A102_21.4 P80 BN80A4** | 262 |
| **65** | 76 | 3.3 | 21.2 | 4590 | **A202_21.2 S1 M1LA4** | 265 | **A202_21.2 P80 BN80A4** | 266 |
| **74** | 66 | 1.5 | 18.6 | 2400 | **A052_18.6 S1 M1LA4** | 258 | **A052_18.6 P80 BN80A4** | 258 |
| **74** | 66 | 2.3 | 18.6 | 4090 | **A102_18.6 S1 M1LA4** | 261 | **A102_18.6 P80 BN80A4** | 262 |
| **84** | 59 | 1.7 | 16.4 | 2340 | **A052_16.4 S1 M1LA4** | 258 | **A052_16.4 P80 BN80A4** | 258 |
| **84** | 59 | 2.5 | 16.4 | 4710 | **A102_16.4 S1 M1LA4** | 261 | **A102_16.4 P80 BN80A4** | 262 |
| **99** | 50 | 2.0 | 13.9 | 2270 | **A052_13.9 S1 M1LA4** | 258 | **A052_13.9 P80 BN80A4** | 258 |
| **99** | 50 | 3.0 | 13.9 | 3800 | **A102_13.9 S1 M1LA4** | 261 | **A102_13.9 P80 BN80A4** | 262 |
| **112** | 44 | 2.3 | 12.3 | 2220 | **A052_12.3 S1 M1LA4** | 258 | **A052_12.3 P80 BN80A4** | 258 |
| **112** | 44 | 3.2 | 12.3 | 3670 | **A102_12.3 S1 M1LA4** | 261 | **A102_12.3 P80 BN80A4** | 262 |
| **131** | 38 | 2.6 | 10.6 | 2130 | **A052_10.6 S1 M1LA4** | 258 | **A052_10.6 P80 BN80A4** | 258 |
| **144** | 34 | 2.9 | 9.6 | 2100 | **A052_9.6 S1 M1LA4** | 258 | **A052_9.6 P80 BN80A4** | 258 |
| **162** | 30 | 3.3 | 8.5 | 2030 | **A052_8.5 S1 M1LA4** | 258 | **A052_8.5 P80 BN80A4** | 258 |
| **171** | 29 | 3.1 | 16.4 | 2000 | **A052_16.4 S1 M1SD2** | 258 | **A052_16.4 P71 BN71B2** | 258 |
| **191** | 26 | 3.9 | 7.2 | 1950 | **A052_7.2 S1 M1LA4** | 258 | **A052_7.2 P80 BN80A4** | 258 |
| **218** | 23 | 4.4 | 6.3 | 1880 | **A052_6.3 S1 M1LA4** | 258 | **A052_6.3 P80 BN80A4** | 258 |
| **229** | 22 | 4.6 | 12.3 | 1860 | **A052_12.3 S1 M1SD2** | 258 | **A052_12.3 P71 BN71B2** | 258 |
| **252** | 19.6 | 4.9 | 5.5 | 1810 | **A052_5.5 S1 M1LA4** | 258 | **A052_5.5 P80 BN80A4** | 258 |
| **267** | 18.5 | 4.3 | 10.6 | 1780 | **A052_10.6 S1 M1SD2** | 258 | **A052_10.6 P71 BN71B2** | 258 |

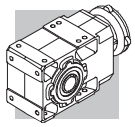


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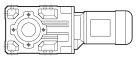
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **293** | 16.8 | 5.6 | 9.6 | 1740 | **A052_9.6 S1 M1SD2** | 258 | **A052_9.6 P71 BN71B2** | 258 |
| **331** | 14.9 | 6.0 | 8.5 | 1680 | **A052_8.5 S1 M1SD2** | 258 | **A052_8.5 P71 BN71B2** | 258 |
| **391** | 12.6 | 6.7 | 7.2 | 1600 | **A052_7.2 S1 M1SD2** | 258 | **A052_7.2 P71 BN71B2** | 258 |
| **445** | 11.1 | 7.2 | 6.3 | 1540 | **A052_6.3 S1 M1SD2** | 258 | **A052_6.3 P71 BN71B2** | 258 |
| **516** | 9.6 | 7.8 | 5.5 | 1480 | **A052_5.5 S1 M1SD2** | 258 | **A052_5.5 P71 BN71B2** | 258 |

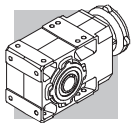
## 0.75 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.58** | 11068 | 1.3 | 1632 | 75000 | **A904_1632 S3 ME3SA6** | 299 | **A904_ 1632 P90 BE90S6** | 300 |
| **0.62** | 10220 | 1.4 | 1507 | 75000 | **A904_1507 S3 ME3SA6** | 299 | **A904_ 1507 P90 BE90S6** | 300 |
| **0.71** | 8979 | 1.6 | 1324 | 75000 | **A904_1324 S3 ME3SA6** | 299 | **A904_ 1324 P90 BE90S6** | 300 |
| **0.77** | 8287 | 1.7 | 1222 | 75000 | **A904_1222 S3 ME3SA6** | 299 | **A904_ 1222 P90 BE90S6** | 300 |
| **0.88** | 7264 | 1.9 | 1632 | 75000 | **A904_1632 S2 ME2SB4** | 299 | **A904_1632 P80 BE80B4** | 300 |
| **0.92** | 6932 | 1.2 | 1558 | 65000 | **A804_1558 S2 ME2SB4** | 296 | **A804_1558 P80 BE80B4** | 297 |
| **0.95** | 6705 | 2.1 | 1507 | 75000 | **A904_1507 S2 ME2SB4** | 299 | **A904_1507 P80 BE80B4** | 300 |
| **0.99** | 6398 | 1.3 | 1438 | 65000 | **A804_1438 S2 ME2SB4** | 296 | **A804_1438 P80 BE80B4** | 297 |
| **1.1** | 5963 | 1.3 | 1340 | 65000 | **A804_1340 S2 ME2SB4** | 296 | **A804_1340 P80 BE80B4** | 297 |
| **1.1** | 5892 | 2.4 | 1324 | 75000 | **A904_1324 S2 ME2SB4** | 299 | **A904_1324 P80 BE80B4** | 300 |
| **1.2** | 5528 | 0.9 | 1242 | 50000 | **A704_1242 S2 ME2SB4** | 293 | **A704_1242 P80 BE80B4** | 294 |
| **1.2** | 5504 | 1.5 | 1237 | 65000 | **A804_1237 S2 ME2SB4** | 296 | **A804_1237 P80 BE80B4** | 297 |
| **1.2** | 5439 | 2.6 | 1222 | 75000 | **A904_1222 S2 ME2SB4** | 299 | **A904_1222 P80 BE80B4** | 300 |
| **1.2** | 5169 | 1.0 | 1161 | 50000 | **A704_1161 S2 ME2SB4** | 293 | **A704_1161 P80 BE80B4** | 294 |
| **1.3** | 4942 | 2.8 | 1111 | 75000 | **A904_1111 S2 ME2SB4** | 299 | **A904_1111 P80 BE80B4** | 300 |
| **1.3** | 4828 | 1.7 | 1085 | 65000 | **A804_1085 S2 ME2SB4** | 296 | **A804_1085 P80 BE80B4** | 297 |
| **1.3** | 4771 | 1.0 | 1072 | 50000 | **A704_1072 S2 ME2SB4** | 293 | **A704_1072 P80 BE80B4** | 294 |
| **1.4** | 4562 | 3.1 | 1025 | 75000 | **A904_1025 S2 ME2SB4** | 299 | **A904_1025 P80 BE80B4** | 300 |
| **1.4** | 4456 | 1.8 | 1001 | 65000 | **A804_1001 S2 ME2SB4** | 296 | **A804_1001 P80 BE80B4** | 297 |
| **1.5** | 4170 | 3.4 | 937.2 | 75000 | **A904_937.2 S2 ME2SB4** | 299 | **A904_937.2 P80 BE80B4** | 300 |
| **1.5** | 4123 | 1.2 | 926.5 | 50000 | **A704_926.5 S2 ME2SB4** | 293 | **A704_926.5 P80 BE80B4** | 294 |
| **1.6** | 3999 | 2.0 | 898.7 | 65000 | **A804_898.7 S2 ME2SB4** | 296 | **A804_898.7 P80 BE80B4** | 297 |
| **1.7** | 3806 | 1.3 | 855.3 | 50000 | **A704_855.3 S2 ME2SB4** | 293 | **A704_855.3 P80 BE80B4** | 294 |
| **1.7** | 3691 | 2.2 | 829.5 | 65000 | **A804_829.5 S2 ME2SB4** | 296 | **A804_829.5 P80 BE80B4** | 297 |
| **1.9** | 3399 | 1.5 | 763.9 | 50000 | **A704_763.9 S2 ME2SB4** | 293 | **A704_763.9 P80 BE80B4** | 294 |
| **1.9** | 3391 | 2.4 | 762.1 | 65000 | **A804_762.1 S2 ME2SB4** | 296 | **A804_762.1 P80 BE80B4** | 297 |
| **2.0** | 3138 | 1.6 | 705.1 | 50000 | **A704_705.1 S2 ME2SB4** | 293 | **A704_705.1 P80 BE80B4** | 294 |
| **2.0** | 3130 | 2.6 | 703.5 | 65000 | **A804_703.5 S2 ME2SB4** | 296 | **A804_703.5 P80 BE80B4** | 297 |
| **2.1** | 3103 | 0.9 | 697.3 | 30000 | **A604_697.3 S2 ME2SB4** | 289 | **A604_697.3 P80 BE80B4** | 290 |
| **2.2** | 2869 | 1.7 | 644.6 | 50000 | **A704_644.6 S2 ME2SB4** | 293 | **A704_644.6 P80 BE80B4** | 294 |
| **2.3** | 2824 | 1.0 | 634.6 | 30000 | **A604_634.6 S2 ME2SB4** | 289 | **A604_634.6 P80 BE80B4** | 290 |
| **2.4** | 2702 | 3.0 | 607.2 | 65000 | **A804_607.2 S2 ME2SB4** | 296 | **A804_607.2 P80 BE80B4** | 297 |
| **2.4** | 2648 | 1.9 | 595.0 | 50000 | **A704_595.0 S2 ME2SB4** | 293 | **A704_595.0 P80 BE80B4** | 294 |
| **2.4** | 2607 | 1.1 | 585.8 | 30000 | **A604_585.8 S2 ME2SB4** | 289 | **A604_585.8 P80 BE80B4** | 290 |
| **2.6** | 2494 | 3.2 | 560.5 | 65000 | **A804_560.5 S2 ME2SB4** | 296 | **A804_560.5 P80 BE80B4** | 297 |
| **2.6** | 2412 | 1.2 | 542.0 | 30000 | **A604_542.0 S2 ME2SB4** | 289 | **A604_542.0 P80 BE80B4** | 290 |
| **2.8** | 2294 | 2.2 | 515.4 | 50000 | **A704_515.4 S2 ME2SB4** | 293 | **A704_515.4 P80 BE80B4** | 294 |
| **2.9** | 2226 | 1.3 | 500.3 | 30000 | **A604_500.3 S2 ME2SB4** | 289 | **A604_500.3 P80 BE80B4** | 290 |
| **3.0** | 2117 | 2.4 | 475.8 | 50000 | **A704_475.8 S2 ME2SB4** | 293 | **A704_475.8 P80 BE80B4** | 294 |
| **3.3** | 1951 | 1.4 | 438.4 | 30000 | **A604_438.4 S2 ME2SB4** | 289 | **A604_438.4 P80 BE80B4** | 290 |
| **3.5** | 1842 | 1.1 | 414.0 | 30000 | **A554_414.0 S2 ME2SB4** | 285 | **A554_414.0 P80 BE80B4** | 286 |
| **3.5** | 1801 | 1.6 | 404.7 | 30000 | **A604_404.7 S2 ME2SB4** | 289 | **A604_404.7 P80 BE80B4** | 290 |
| **3.6** | 1781 | 2.8 | 400.2 | 50000 | **A704_400.2 S2 ME2SB4** | 293 | **A704_400.2 P80 BE80B4** | 294 |
| **3.9** | 1644 | 3.0 | 369.4 | 50000 | **A704_369.4 S2 ME2SB4** | 293 | **A704_369.4 P80 BE80B4** | 294 |



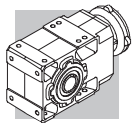
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| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **3.9** | 1627 | 0.9 | 365.6 | 20000 | **A504_365.6 S2 ME2SB4** | 281 | **A504_365.6 P80 BE80B4** | 282 |
| **4.1** | 1563 | 1.8 | 351.2 | 30000 | **A604_351.2 S2 ME2SB4** | 289 | **A604_351.2 P80 BE80B4** | 290 |
| **4.3** | 1480 | 1.0 | 332.6 | 20000 | **A504_332.6 S2 ME2SB4** | 281 | **A504_332.6 P80 BE80B4** | 282 |
| **4.4** | 1445 | 1.4 | 324.7 | 30000 | **A554_324.7 S2 ME2SB4** | 285 | **A554_324.7 P80 BE80B4** | 286 |
| **4.4** | 1443 | 1.9 | 324.2 | 30000 | **A604_324.2 S2 ME2SB4** | 289 | **A604_324.2 P80 BE80B4** | 290 |
| **4.5** | 1408 | 3.6 | 316.4 | 50000 | **A704_316.4 S2 ME2SB4** | 293 | **A704_316.4 P80 BE80B4** | 294 |
| **5.0** | 1276 | 1.2 | 286.8 | 20000 | **A504_286.8 S2 ME2SB4** | 281 | **A504_286.8 P80 BE80B4** | 282 |
| **5.0** | 1274 | 2.2 | 286.3 | 30000 | **A604_286.3 S2 ME2SB4** | 289 | **A604_286.3 P80 BE80B4** | 290 |
| **5.4** | 1176 | 2.4 | 264.3 | 30000 | **A604_264.3 S2 ME2SB4** | 289 | **A604_264.3 P80 BE80B4** | 290 |
| **5.4** | 1169 | 1.7 | 262.6 | 30000 | **A554_262.6 S2 ME2SB4** | 285 | **A554_262.6 P80 BE80B4** | 286 |
| **5.5** | 1161 | 1.3 | 260.9 | 20000 | **A504_260.9 S2 ME2SB4** | 281 | **A504_260.9 P80 BE80B4** | 282 |
| **6.2** | 1032 | 1.5 | 232.0 | 20000 | **A504_232.0 S2 ME2SB4** | 281 | **A504_232.0 P80 BE80B4** | 282 |
| **6.3** | 1006 | 2.8 | 226.1 | 30000 | **A604_226.1 S2 ME2SB4** | 289 | **A604_226.1 P80 BE80B4** | 290 |
| **6.8** | 939 | 1.6 | 211.0 | 20000 | **A504_211.0 S2 ME2SB4** | 281 | **A504_211.0 P80 BE80B4** | 282 |
| **6.9** | 929 | 3.0 | 208.7 | 30000 | **A604_208.7 S2 ME2SB4** | 289 | **A604_208.7 P80 BE80B4** | 290 |
| **6.9** | 926 | 2.1 | 208.1 | 30000 | **A554_208.1 S2 ME2SB4** | 285 | **A554_208.1 P80 BE80B4** | 286 |
| **7.2** | 899 | 0.9 | 197.5 | 15000 | **A413_197.5 S2 ME2SB4** | 277 | **A413_197.5 P80 BE80B4** | 278 |
| **7.4** | 884 | 2.3 | 194.2 | 30000 | **A553_194.2 S2 ME2SB4** | 285 | **A553_194.2 P80 BE80B4** | 286 |
| **7.5** | 867 | 1.7 | 190.6 | 20000 | **A503_190.6 S2 ME2SB4** | 281 | **A503_190.6 P80 BE80B4** | 282 |
| **7.7** | 845 | 3.3 | 185.8 | 30000 | **A603_185.8 S2 ME2SB4** | 289 | **A603_185.8 P80 BE80B4** | 290 |
| **7.8** | 839 | 1.0 | 184.4 | 15000 | **A413_184.4 S2 ME2SB4** | 277 | **A413_184.4 P80 BE80B4** | 278 |
| **8.2** | 796 | 2.5 | 175.0 | 30000 | **A553_175.0 S2 ME2SB4** | 285 | **A553_175.0 P80 BE80B4** | 286 |
| **8.2** | 789 | 1.9 | 173.4 | 20000 | **A503_173.4 S2 ME2SB4** | 281 | **A503_173.4 P80 BE80B4** | 282 |
| **8.3** | 780 | 3.6 | 171.5 | 30000 | **A603_171.5 S2 ME2SB4** | 289 | **A603_171.5 P80 BE80B4** | 290 |
| **8.9** | 730 | 2.7 | 160.4 | 30000 | **A553_160.4 S2 ME2SB4** | 285 | **A553_160.4 P80 BE80B4** | 286 |
| **9.3** | 703 | 2.1 | 154.6 | 20000 | **A503_154.6 S2 ME2SB4** | 281 | **A503_154.6 P80 BE80B4** | 282 |
| **9.7** | 668 | 1.3 | 146.9 | 15000 | **A413_146.9 S2 ME2SB4** | 277 | **A413_146.9 P80 BE80B4** | 278 |
| **9.7** | 668 | 3.0 | 146.8 | 30000 | **A553_146.8 S2 ME2SB4** | 285 | **A553_146.8 P80 BE80B4** | 286 |
| **10.2** | 640 | 2.3 | 140.6 | 20000 | **A503_140.6 S2 ME2SB4** | 281 | **A503_140.6 P80 BE80B4** | 282 |
| **10.5** | 620 | 0.9 | 136.3 | 12000 | **A353_136.3 S2 ME2SB4** | 273 | **A353_136.3 P80 BE80B4** | 274 |
| **10.8** | 604 | 3.3 | 132.7 | 30000 | **A553_132.7 S2 ME2SB4** | 285 | **A553_132.7 P80 BE80B4** | 286 |
| **11.0** | 590 | 2.5 | 129.7 | 20000 | **A503_129.7 S2 ME2SB4** | 281 | **A503_129.7 P80 BE80B4** | 282 |
| **11.5** | 564 | 3.5 | 123.9 | 30000 | **A553_123.9 S2 ME2SB4** | 285 | **A553_123.9 P80 BE80B4** | 286 |
| **12.1** | 537 | 2.8 | 118.0 | 20000 | **A503_118.0 S2 ME2SB4** | 281 | **A503_118.0 P80 BE80B4** | 282 |
| **12.2** | 532 | 1.1 | 116.9 | 12000 | **A353_116.9 S2 ME2SB4** | 273 | **A353_116.9 P80 BE80B4** | 274 |
| **12.3** | 527 | 1.6 | 115.9 | 15000 | **A413_115.9 S2 ME2SB4** | 277 | **A413_115.9 P80 BE80B4** | 278 |
| **13.1** | 498 | 3.0 | 109.4 | 20000 | **A503_109.4 S2 ME2SB4** | 281 | **A503_109.4 P80 BE80B4** | 282 |
| **13.5** | 480 | 1.1 | 105.5 | 12000 | **A353_105.5 S2 ME2SB4** | 273 | **A353_105.5 P80 BE80B4** | 274 |
| **14.4** | 453 | 3.3 | 99.5 | 20000 | **A503_99.5 S2 ME2SB4** | 281 | **A503_99.5 P80 BE80B4** | 282 |
| **15.0** | 450 | 1.2 | 95.6 | 12000 | **A352_95.6 S2 ME2SB4** | 273 | **A352_95.6 P80 BE80B4** | 274 |
| **15.4** | 422 | 1.9 | 92.8 | 15000 | **A413_92.8 S2 ME2SB4** | 277 | **A413_92.8 P80 BE80B4** | 278 |
| **17.3** | 388 | 1.5 | 82.5 | 12000 | **A352_82.5 S2 ME2SB4** | 273 | **A352_82.5 P80 BE80B4** | 274 |
| **18.0** | 372 | 2.3 | 79.2 | 15000 | **A412_79.2 S2 ME2SB4** | 277 | **A412_79.2 P80 BE80B4** | 278 |
| **18.7** | 360 | 1.0 | 76.5 | 8580 | **A302_76.5 S2 ME2SB4** | 269 | **A302_76.5 P80 BE80B4** | 270 |
| **19.3** | 349 | 1.7 | 74.3 | 12000 | **A352_74.3 S2 ME2SB4** | 273 | **A352_74.3 P80 BE80B4** | 274 |
| **20.1** | 335 | 2.5 | 71.3 | 15000 | **A412_71.3 S2 ME2SB4** | 277 | **A412_71.3 P80 BE80B4** | 278 |
| **21.7** | 310 | 1.3 | 66.0 | 8360 | **A302_66.0 S2 ME2SB4** | 269 | **A302_66.0 P80 BE80B4** | 270 |
| **21.7** | 309 | 1.9 | 65.8 | 12000 | **A352_65.8 S2 ME2SB4** | 273 | **A352_65.8 P80 BE80B4** | 274 |
| **22.3** | 302 | 2.8 | 64.2 | 15000 | **A412_64.2 S2 ME2SB4** | 277 | **A412_64.2 P80 BE80B4** | 278 |
| **23.7** | 284 | 2.1 | 60.4 | 12000 | **A352_60.4 S2 ME2SB4** | 273 | **A352_60.4 P80 BE80B4** | 274 |
| **24.1** | 279 | 1.4 | 59.4 | 8190 | **A302_59.4 S2 ME2SB4** | 269 | **A302_59.4 P80 BE80B4** | 270 |
| **24.3** | 276 | 3.1 | 58.8 | 15000 | **A412_58.8 S2 ME2SB4** | 277 | **A412_58.8 P80 BE80B4** | 278 |
| **26.3** | 255 | 2.4 | 54.3 | 12000 | **A352_54.3 S2 ME2SB4** | 273 | **A352_54.3 P80 BE80B4** | 274 |
| **26.7** | 252 | 1.0 | 53.7 | 5210 | **A202_53.7 S2 ME2SB4** | 265 | **A202_53.7 P80 BE80B4** | 266 |
| **26.9** | 250 | 3.4 | 53.1 | 15000 | **A412_53.1 S2 ME2SB4** | 277 | **A412_53.1 P80 BE80B4** | 278 |
| **27.1** | 248 | 1.7 | 52.7 | 7990 | **A302_52.7 S2 ME2SB4** | 269 | **A302_52.7 P80 BE80B4** | 270 |
| **29.1** | 231 | 2.6 | 49.1 | 12000 | **A352_49.1 S2 ME2SB4** | 273 | **A352_49.1 P80 BE80B4** | 274 |

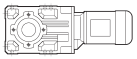


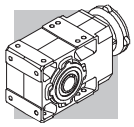
# 0.75 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **29.6** | 227 | 1.1 | 48.3 | 5140 | **A202_48.3 S2 ME2SB4** | 265 | **A202_48.3 P80 BE80B4** | 266 |
| **29.6** | 227 | 1.8 | 48.3 | 7840 | **A302_48.3 S2 ME2SB4** | 269 | **A302_48.3 P80 BE80B4** | 270 |
| **31** | 215 | 2.8 | 45.8 | 12000 | **A352_45.8 S2 ME2SB4** | 273 | **A352_45.8 P80 BE80B4** | 274 |
| **33** | 204 | 2.0 | 43.4 | 7660 | **A302_43.4 S2 ME2SB4** | 269 | **A302_43.4 P80 BE80B4** | 270 |
| **33** | 203 | 1.2 | 43.2 | 5060 | **A202_43.2 S2 ME2SB4** | 265 | **A202_43.2 P80 BE80B4** | 266 |
| **34** | 196 | 3.1 | 41.8 | 11900 | **A352_41.8 S2 ME2SB4** | 273 | **A352_41.8 P80 BE80B4** | 274 |
| **36** | 186 | 1.3 | 39.6 | 4990 | **A202_39.6 S2 ME2SB4** | 265 | **A202_39.6 P80 BE80B4** | 266 |
| **36** | 185 | 2.2 | 39.3 | 7480 | **A302_39.3 S2 ME2SB4** | 269 | **A302_39.3 P80 BE80B4** | 270 |
| **39** | 172 | 2.4 | 36.6 | 7360 | **A302_36.6 S2 ME2SB4** | 269 | **A302_36.6 P80 BE80B4** | 270 |
| **39** | 172 | 3.5 | 36.6 | 11500 | **A352_36.6 S2 ME2SB4** | 273 | **A352_36.6 P80 BE80B4** | 274 |
| **40** | 167 | 1.5 | 35.4 | 4890 | **A202_35.4 S2 ME2SB4** | 265 | **A202_35.4 P80 BE80B4** | 266 |
| **41** | 165 | 0.9 | 35.1 | 4320 | **A102_35.1 S2 ME2SB4** | 261 | **A102_35.1 P80 BE80B4** | 262 |
| **43** | 157 | 2.6 | 33.4 | 7200 | **A302_33.4 S2 ME2SB4** | 269 | **A302_33.4 P80 BE80B4** | 270 |
| **44** | 151 | 1.0 | 32.2 | 5080 | **A102_32.2 S2 ME2SB4** | 261 | **A102_32.2 P80 BE80B4** | 262 |
| **46** | 147 | 1.7 | 31.3 | 4780 | **A202_31.3 S2 ME2SB4** | 265 | **A202_31.3 P80 BE80B4** | 266 |
| **49** | 138 | 3.0 | 29.3 | 6960 | **A302_29.3 S2 ME2SB4** | 269 | **A302_29.3 P80 BE80B4** | 270 |
| **49** | 137 | 1.8 | 29.2 | 4710 | **A202_29.2 S2 ME2SB4** | 265 | **A202_29.2 P80 BE80B4** | 266 |
| **50** | 134 | 1.1 | 28.6 | 4200 | **A102_28.6 S2 ME2SB4** | 261 | **A102_28.6 P80 BE80B4** | 262 |
| **54** | 125 | 3.3 | 26.5 | 6790 | **A302_26.5 S2 ME2SB4** | 269 | **A302_26.5 P80 BE80B4** | 270 |
| **54** | 124 | 2.0 | 26.5 | 4620 | **A202_26.5 S2 ME2SB4** | 265 | **A202_26.5 P80 BE80B4** | 266 |
| **56** | 120 | 1.3 | 25.5 | 4900 | **A102_25.5 S2 ME2SB4** | 261 | **A102_25.5 P80 BE80B4** | 262 |
| **60** | 112 | 0.9 | 23.8 | 2200 | **A052_23.8 S2 ME2SB4** | 258 | **A052_23.8 P80 BE80B4** | 258 |
| **60** | 112 | 1.3 | 23.8 | 4070 | **A102_23.8 S2 ME2SB4** | 261 | **A102_23.8 P80 BE80B4** | 262 |
| **62** | 109 | 2.3 | 23.1 | 4480 | **A202_23.1 S2 ME2SB4** | 265 | **A202_23.1 P80 BE80B4** | 266 |
| **67** | 100 | 1.0 | 21.4 | 2210 | **A052_21.4 S2 ME2SB4** | 258 | **A052_21.4 P80 BE80B4** | 258 |
| **67** | 100 | 1.5 | 21.4 | 4740 | **A102_21.4 S2 ME2SB4** | 261 | **A102_21.4 P80 BE80B4** | 262 |
| **67** | 100 | 2.5 | 21.2 | 4390 | **A202_21.2 S2 ME2SB4** | 265 | **A202_21.2 P80 BE80B4** | 266 |
| **77** | 87 | 1.1 | 18.6 | 2190 | **A052_18.6 S2 ME2SB4** | 258 | **A052_18.6 P80 BE80B4** | 258 |
| **77** | 87 | 1.7 | 18.6 | 3880 | **A102_18.6 S2 ME2SB4** | 261 | **A102_18.6 P80 BE80B4** | 262 |
| **79** | 85 | 2.9 | 18.1 | 4230 | **A202_18.1 S2 ME2SB4** | 265 | **A202_18.1 P80 BE80B4** | 266 |
| **87** | 77 | 1.3 | 16.4 | 2160 | **A052_16.4 S2 ME2SB4** | 258 | **A052_16.4 P80 BE80B4** | 258 |
| **87** | 77 | 1.9 | 16.4 | 4490 | **A102_16.4 S2 ME2SB4** | 261 | **A102_16.4 P80 BE80B4** | 262 |
| **88** | 76 | 3.3 | 16.2 | 4110 | **A202_16.2 S2 ME2SB4** | 265 | **A202_16.2 P80 BE80B4** | 266 |
| **103** | 65 | 1.5 | 13.9 | 2110 | **A052_13.9 S2 ME2SB4** | 258 | **A052_13.9 P80 BE80B4** | 258 |
| **103** | 65 | 2.3 | 13.9 | 3640 | **A102_13.9 S2 ME2SB4** | 261 | **A102_13.9 P80 BE80B4** | 262 |
| **116** | 58 | 1.7 | 12.3 | 2080 | **A052_12.3 S2 ME2SB4** | 258 | **A052_12.3 P80 BE80B4** | 258 |
| **116** | 58 | 2.4 | 12.3 | 3530 | **A102_12.3 S2 ME2SB4** | 261 | **A102_12.3 P80 BE80B4** | 262 |
| **135** | 50 | 2.0 | 10.6 | 2010 | **A052_10.6 S2 ME2SB4** | 258 | **A052_10.6 P80 BE80B4** | 258 |
| **135** | 50 | 3.0 | 10.6 | 3400 | **A102_10.6 S2 ME2SB4** | 261 | **A102_10.6 P80 BE80B4** | 262 |
| **149** | 45 | 2.2 | 9.6 | 1990 | **A052_9.6 S2 ME2SB4** | 258 | **A052_9.6 P80 BE80B4** | 258 |
| **149** | 45 | 3.1 | 9.6 | 3320 | **A102_9.6 S2 ME2SB4** | 261 | **A102_9.6 P80 BE80B4** | 262 |
| **168** | 40 | 2.5 | 8.5 | 1940 | **A052_8.5 S2 ME2SB4** | 258 | **A052_8.5 P80 BE80B4** | 258 |
| **168** | 40 | 3.5 | 8.5 | 3820 | **A102_8.5 S2 ME2SB4** | 261 | **A102_8.5 P80 BE80B4** | 262 |
| **198** | 34 | 3.0 | 7.2 | 1870 | **A052_7.2 S2 ME2SB4** | 258 | **A052_7.2 P80 BE80B4** | 258 |
| **226** | 30 | 3.4 | 6.3 | 1810 | **A052_6.3 S2 ME2SB4** | 258 | **A052_6.3 P80 BE80B4** | 258 |
| **262** | 26 | 3.7 | 5.5 | 1750 | **A052_5.5 S2 ME2SB4** | 258 | **A052_5.5 P80 BE80B4** | 258 |
| **270** | 25 | 3.2 | 10.6 | 1720 | **A052_10.6 S2 ME2SA2** | 258 | **A052_10.6 P80 BE80A2** | 258 |
| **296** | 23 | 4.2 | 9.6 | 1690 | **A052_9.6 S2 ME2SA2** | 258 | **A052_9.6 P80 BE80A2** | 258 |
| **335** | 20 | 4.5 | 8.5 | 1640 | **A052_8.5 S2 ME2SA2** | 258 | **A052_8.5 P80 BE80A2** | 258 |
| **395** | 17.0 | 5.0 | 7.2 | 1570 | **A052_7.2 S2 ME2SA2** | 258 | **A052_7.2 P80 BE80A2** | 258 |
| **450** | 15.0 | 5.3 | 6.3 | 1510 | **A052_6.3 S2 ME2SA2** | 258 | **A052_6.3 P80 BE80A2** | 258 |
| **521** | 12.9 | 5.8 | 5.5 | 1450 | **A052_5.5 S2 ME2SA2** | 258 | **A052_5.5 P80 BE80A2** | 258 |



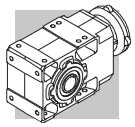
# 1.1 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.63** | 14914 | 0.9 | 1507 | 75000 | **A904_1507 S3 ME3LA6** | 299 | **A904_1507 P100 BE100M6** | 300 |
| **0.71** | 13103 | 1.1 | 1324 | 75000 | **A904_1324 S3 ME3LA6** | 299 | **A904_1324 P100 BE100M6** | 300 |
| **0.77** | 12094 | 1.2 | 1222 | 75000 | **A904_1222 S3 ME3LA6** | 299 | **A904_1222 P100 BE100M6** | 300 |
| **0.88** | 10751 | 1.3 | 1632 | 75000 | **A904_1632 S3 ME3SA4** | 299 | **A904_1632 P90 BE90S4** | 300 |
| **0.95** | 9924 | 1.4 | 1507 | 75000 | **A904_1507 S3 ME3SA4** | 299 | **A904_1507 P90 BE90S4** | 300 |
| **1.1** | 8825 | 0.9 | 1340 | 65000 | **A804_1340 S3 ME3SA4** | 296 | **A804_1340 P90 BE90S4** | 297 |
| **1.1** | 8720 | 1.6 | 1324 | 75000 | **A904_1324 S3 ME3SA4** | 299 | **A904_1324 P90 BE90S4** | 300 |
| **1.2** | 8146 | 1.0 | 1237 | 65000 | **A804_1237 S3 ME3SA4** | 296 | **A804_1237 P90 BE90S4** | 297 |
| **1.2** | 8049 | 1.7 | 1222 | 75000 | **A904_1222 S3 ME3SA4** | 299 | **A904_1222 P90 BE90S4** | 300 |
| **1.3** | 7314 | 1.9 | 1111 | 75000 | **A904_1111 S3 ME3SA4** | 299 | **A904_1111 P90 BE90S4** | 300 |
| **1.3** | 7145 | 1.1 | 1085 | 65000 | **A804_1085 S3 ME3SA4** | 296 | **A804_1085 P90 BE90S4** | 297 |
| **1.4** | 6752 | 2.1 | 1025 | 75000 | **A904_1025 S3 ME3SA4** | 299 | **A904_1025 P90 BE90S4** | 300 |
| **1.4** | 6595 | 1.2 | 1001 | 65000 | **A804_1001 S3 ME3SA4** | 296 | **A804_1001 P90 BE90S4** | 297 |
| **1.5** | 6172 | 2.3 | 937.2 | 75000 | **A904_937.2 S3 ME3SA4** | 299 | **A904_937.2 P90 BE90S4** | 300 |
| **1.6** | 5919 | 1.4 | 898.7 | 65000 | **A804_898.7 S3 ME3SA4** | 296 | **A804_898.7 P90 BE90S4** | 297 |
| **1.7** | 5697 | 2.5 | 865.1 | 75000 | **A904_865.1 S3 ME3SA4** | 299 | **A904_865.1 P90 BE90S4** | 300 |
| **1.7** | 5633 | 0.9 | 855.3 | 50000 | **A704_855.3 S3 ME3SA4** | 293 | **A704_855.3 P90 BE90S4** | 294 |
| **1.7** | 5463 | 1.5 | 829.5 | 65000 | **A804_829.5 S3 ME3SA4** | 296 | **A804_829.5 P90 BE90S4** | 297 |
| **1.9** | 5051 | 2.8 | 766.9 | 75000 | **A904_766.9 S3 ME3SA4** | 299 | **A904_766.9 P90 BE90S4** | 300 |
| **1.9** | 5031 | 1.0 | 763.9 | 50000 | **A704_763.9 S3 ME3SA4** | 293 | **A704_763.9 P90 BE90S4** | 294 |
| **1.9** | 5019 | 1.6 | 762.1 | 65000 | **A804_762.1 S3 ME3SA4** | 296 | **A804_762.1 P90 BE90S4** | 297 |
| **2.0** | 4662 | 3.0 | 707.9 | 75000 | **A904_707.9 S3 ME3SA4** | 299 | **A904_707.9 P90 BE90S4** | 300 |
| **2.0** | 4644 | 1.1 | 705.1 | 50000 | **A704_705.1 S3 ME3SA4** | 293 | **A704_705.1 P90 BE90S4** | 294 |
| **2.0** | 4633 | 1.7 | 703.5 | 65000 | **A804_703.5 S3 ME3SA4** | 296 | **A804_703.5 P90 BE90S4** | 297 |
| **2.2** | 4245 | 1.2 | 644.6 | 50000 | **A704_644.6 S3 ME3SA4** | 293 | **A704_644.6 P90 BE90S4** | 294 |
| **2.4** | 3999 | 2.0 | 607.2 | 65000 | **A804_607.2 S3 ME3SA4** | 296 | **A804_607.2 P90 BE90S4** | 297 |
| **2.4** | 3962 | 3.5 | 601.6 | 75000 | **A904_601.6 S3 ME3SA4** | 299 | **A904_601.6 P90 BE90S4** | 300 |
| **2.4** | 3919 | 1.3 | 595.0 | 50000 | **A704_595.0 S3 ME3SA4** | 293 | **A704_595.0 P90 BE90S4** | 294 |
| **2.6** | 3691 | 2.2 | 560.5 | 65000 | **A804_560.5 S3 ME3SA4** | 296 | **A804_560.5 P90 BE90S4** | 297 |
| **2.8** | 3394 | 1.5 | 515.4 | 50000 | **A704_515.4 S3 ME3SA4** | 293 | **A704_515.4 P90 BE90S4** | 294 |
| **3.0** | 3154 | 2.5 | 478.9 | 65000 | **A804_478.9 S3 ME3SA4** | 296 | **A804_478.9 P90 BE90S4** | 297 |
| **3.0** | 3133 | 1.6 | 475.8 | 50000 | **A704_475.8 S3 ME3SA4** | 293 | **A704_475.8 P90 BE90S4** | 294 |
| **3.2** | 2912 | 2.7 | 442.1 | 65000 | **A804_442.1 S3 ME3SA4** | 296 | **A804_442.1 P90 BE90S4** | 297 |
| **3.3** | 2887 | 1.0 | 438.4 | 30000 | **A604_438.4 S3 ME3SA4** | 289 | **A604_438.4 P90 BE90S4** | 290 |
| **3.5** | 2665 | 1.1 | 404.7 | 30000 | **A604_404.7 S3 ME3SA4** | 289 | **A604_404.7 P90 BE90S4** | 290 |
| **3.6** | 2635 | 1.9 | 400.2 | 50000 | **A704_400.2 S3 ME3SA4** | 293 | **A704_400.2 P90 BE90S4** | 294 |
| **3.7** | 2526 | 3.2 | 383.5 | 65000 | **A804_383.5 S3 ME3SA4** | 296 | **A804_383.5 P90 BE90S4** | 297 |
| **3.9** | 2433 | 2.1 | 369.4 | 50000 | **A704_369.4 S3 ME3SA4** | 293 | **A704_369.4 P90 BE90S4** | 294 |
| **4.0** | 2331 | 3.4 | 354.0 | 65000 | **A804_354.0 S3 ME3SA4** | 296 | **A804_354.0 P90 BE90S4** | 297 |
| **4.1** | 2313 | 1.2 | 351.2 | 30000 | **A604_351.2 S3 ME3SA4** | 289 | **A604_351.2 P90 BE90S4** | 290 |
| **4.4** | 2139 | 0.9 | 324.7 | 30000 | **A554_324.7 S3 ME3SA4** | 285 | **A554_324.7 P90 BE90S4** | 286 |
| **4.4** | 2135 | 1.3 | 324.2 | 30000 | **A604_324.2 S3 ME3SA4** | 289 | **A604_324.2 P90 BE90S4** | 290 |
| **4.5** | 2083 | 2.4 | 316.4 | 50000 | **A704_316.4 S3 ME3SA4** | 293 | **A704_316.4 P90 BE90S4** | 294 |
| **4.9** | 1923 | 2.6 | 292.0 | 50000 | **A704_292.0 S3 ME3SA4** | 293 | **A704_292.0 P90 BE90S4** | 294 |
| **5.0** | 1886 | 1.5 | 286.3 | 30000 | **A604_286.3 S3 ME3SA4** | 289 | **A604_286.3 P90 BE90S4** | 290 |
| **5.4** | 1741 | 1.6 | 264.3 | 30000 | **A604_264.3 S3 ME3SA4** | 289 | **A604_264.3 P90 BE90S4** | 290 |
| **5.4** | 1730 | 1.2 | 262.6 | 30000 | **A554_262.6 S3 ME3SA4** | 285 | **A554_262.6 P90 BE90S4** | 286 |
| **5.5** | 1718 | 0.9 | 260.9 | 20000 | **A504_260.9 S3 ME3SA4** | 281 | **A504_260.9 P90 BE90S4** | 282 |
| **6.0** | 1571 | 3.2 | 238.6 | 50000 | **A704_238.6 S3 ME3SA4** | 293 | **A704_238.6 P90 BE90S4** | 294 |
| **6.2** | 1528 | 1.0 | 232.0 | 20000 | **A504_232.0 S3 ME3SA4** | 281 | **A504_232.0 P90 BE90S4** | 282 |
| **6.3** | 1489 | 1.9 | 226.1 | 30000 | **A604_226.1 S3 ME3SA4** | 289 | **A604_226.1 P90 BE90S4** | 290 |
| **6.5** | 1451 | 3.4 | 220.3 | 50000 | **A704_220.3 S3 ME3SA4** | 293 | **A704_220.3 P90 BE90S4** | 294 |
| **6.8** | 1390 | 1.1 | 211.0 | 20000 | **A504_211.0 S3 ME3SA4** | 281 | **A504_211.0 P90 BE90S4** | 282 |
| **6.9** | 1375 | 2.0 | 208.7 | 30000 | **A604_208.7 S3 ME3SA4** | 289 | **A604_208.7 P90 BE90S4** | 290 |
| **6.9** | 1370 | 1.4 | 208.1 | 30000 | **A554_208.1 S3 ME3SA4** | 285 | **A554_208.1 P90 BE90S4** | 286 |
| **7.4** | 1308 | 1.5 | 194.2 | 30000 | **A553_194.2 S3 ME3SA4** | 285 | **A553_194.2 P90 BE90S4** | 286 |
| **7.5** | 1283 | 1.2 | 190.6 | 20000 | **A503_190.6 S3 ME3SA4** | 281 | **A503_190.6 P90 BE90S4** | 282 |

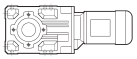


# 1.1 kW

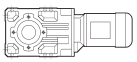
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **7.7** | 1251 | 2.2 | 185.8 | 30000 | **A603_185.8 S3 ME3SA4** | 289 | **A603_185.8 P90 BE90S4** | 290 |
| **8.2** | 1179 | 1.7 | 175.0 | 30000 | **A553_175.0 S3 ME3SA4** | 285 | **A553_175.0 P90 BE90S4** | 286 |
| **8.2** | 1167 | 1.3 | 173.4 | 20000 | **A503_173.4 S3 ME3SA4** | 281 | **A503_173.4 P90 BE90S4** | 282 |
| **8.3** | 1155 | 2.4 | 171.5 | 30000 | **A603_171.5 S3 ME3SA4** | 289 | **A603_171.5 P90 BE90S4** | 290 |
| **8.9** | 1080 | 1.9 | 160.4 | 30000 | **A553_160.4 S3 ME3SA4** | 285 | **A553_160.4 P90 BE90S4** | 286 |
| **9.2** | 1051 | 2.7 | 156.0 | 30000 | **A603_156.0 S3 ME3SA4** | 289 | **A603_156.0 P90 BE90S4** | 290 |
| **9.3** | 1041 | 1.4 | 154.6 | 20000 | **A503_154.6 S3 ME3SA4** | 281 | **A503_154.6 P90 BE90S4** | 282 |
| **9.7** | 989 | 2.0 | 146.8 | 30000 | **A553_146.8 S3 ME3SA4** | 285 | **A553_146.8 P90 BE90S4** | 286 |
| **9.9** | 970 | 2.9 | 144.0 | 30000 | **A603_144.0 S3 ME3SA4** | 289 | **A603_144.0 P90 BE90S4** | 290 |
| **10.2** | 947 | 1.6 | 140.6 | 20000 | **A503_140.6 S3 ME3SA4** | 281 | **A503_140.6 P90 BE90S4** | 282 |
| **10.7** | 898 | 3.1 | 133.3 | 30000 | **A603_133.3 S3 ME3SA4** | 289 | **A603_133.3 P90 BE90S4** | 290 |
| **10.8** | 894 | 2.2 | 132.7 | 30000 | **A553_132.7 S3 ME3SA4** | 285 | **A553_132.7 P90 BE90S4** | 286 |
| **11.0** | 873 | 1.7 | 129.7 | 20000 | **A503_129.7 S3 ME3SA4** | 281 | **A503_129.7 P90 BE90S4** | 282 |
| **11.5** | 834 | 2.4 | 123.9 | 30000 | **A553_123.9 S3 ME3SA4** | 285 | **A553_123.9 P90 BE90S4** | 286 |
| **11.6** | 828 | 3.4 | 123.0 | 30000 | **A603_123.0 S3 ME3SA4** | 289 | **A603_123.0 P90 BE90S4** | 290 |
| **12.1** | 794 | 1.9 | 118.0 | 20000 | **A503_118.0 S3 ME3SA4** | 281 | **A503_118.0 P90 BE90S4** | 282 |
| **12.3** | 780 | 1.1 | 115.9 | 15000 | **A413_115.9 S3 ME3SA4** | 277 | **A413_115.9 P90 BE90S4** | 278 |
| **13.1** | 737 | 2.0 | 109.4 | 20000 | **A503_109.4 S3 ME3SA4** | 281 | **A503_109.4 P90 BE90S4** | 282 |
| **14.1** | 683 | 2.9 | 101.4 | 30000 | **A553_101.4 S3 ME3SA4** | 285 | **A553_101.4 P90 BE90S4** | 286 |
| **14.4** | 670 | 2.2 | 99.5 | 20000 | **A503_99.5 S3 ME3SA4** | 281 | **A503_99.5 P90 BE90S4** | 282 |
| **15.4** | 625 | 1.3 | 92.8 | 15000 | **A413_92.8 S3 ME3SA4** | 277 | **A413_92.8 P90 BE90S4** | 278 |
| **16.0** | 603 | 2.5 | 89.5 | 20000 | **A503_89.5 S3 ME3SA4** | 281 | **A503_89.5 P90 BE90S4** | 282 |
| **17.3** | 574 | 1.0 | 82.5 | 12000 | **A352_82.5 S3 ME3SA4** | 273 | **A352_82.5 P90 BE90S4** | 274 |
| **17.6** | 548 | 2.7 | 81.5 | 20000 | **A503_81.5 S3 ME3SA4** | 281 | **A503_81.5 P90 BE90S4** | 282 |
| **18.0** | 551 | 1.5 | 79.2 | 15000 | **A412_79.2 S3 ME3SA4** | 277 | **A412_79.2 P90 BE90S4** | 278 |
| **19.3** | 517 | 1.2 | 74.3 | 12000 | **A352_74.3 S3 ME3SA4** | 273 | **A352_74.3 P90 BE90S4** | 274 |
| **20.1** | 496 | 1.7 | 71.3 | 15000 | **A412_71.3 S3 ME3SA4** | 277 | **A412_71.3 P90 BE90S4** | 278 |
| **20.4** | 473 | 3.2 | 70.2 | 20000 | **A503_70.2 S3 ME3SA4** | 281 | **A503_70.2 P90 BE90S4** | 282 |
| **21.7** | 458 | 1.3 | 65.8 | 12000 | **A352_65.8 S3 ME3SA4** | 273 | **A352_65.8 P90 BE90S4** | 274 |
| **22.3** | 446 | 1.9 | 64.2 | 15000 | **A412_64.2 S3 ME3SA4** | 277 | **A412_64.2 P90 BE90S4** | 278 |
| **22.4** | 430 | 3.5 | 63.9 | 20000 | **A503_63.9 S3 ME3SA4** | 281 | **A503_63.9 P90 BE90S4** | 282 |
| **23.7** | 420 | 1.4 | 60.4 | 12000 | **A352_60.4 S3 ME3SA4** | 273 | **A352_60.4 P90 BE90S4** | 274 |
| **24.1** | 413 | 1.0 | 59.4 | 7420 | **A302_59.4 S3 ME3SA4** | 269 | **A302_59.4 P90 BE90S4** | 270 |
| **24.3** | 409 | 2.1 | 58.8 | 15000 | **A412_58.8 S3 ME3SA4** | 277 | **A412_58.8 P90 BE90S4** | 278 |
| **26.3** | 378 | 1.6 | 54.3 | 12000 | **A352_54.3 S3 ME3SA4** | 273 | **A352_54.3 P90 BE90S4** | 274 |
| **26.9** | 370 | 2.3 | 53.1 | 15000 | **A412_53.1 S3 ME3SA4** | 277 | **A412_53.1 P90 BE90S4** | 278 |
| **27.1** | 366 | 1.1 | 52.7 | 7310 | **A302_52.7 S3 ME3SA4** | 269 | **A302_52.7 P90 BE90S4** | 270 |
| **29.1** | 341 | 1.8 | 49.1 | 11800 | **A352_49.1 S3 ME3SA4** | 273 | **A352_49.1 P90 BE90S4** | 274 |
| **29.6** | 336 | 1.2 | 48.3 | 7220 | **A302_48.3 S3 ME3SA4** | 269 | **A302_48.3 P90 BE90S4** | 270 |
| **29.6** | 336 | 2.5 | 48.3 | 15000 | **A412_48.3 S3 ME3SA4** | 277 | **A412_48.3 P90 BE90S4** | 278 |
| **31** | 319 | 1.9 | 45.8 | 11700 | **A352_45.8 S3 ME3SA4** | 273 | **A352_45.8 P90 BE90S4** | 274 |
| **32** | 313 | 2.6 | 45.1 | 15000 | **A412_45.1 S3 ME3SA4** | 277 | **A412_45.1 P90 BE90S4** | 278 |
| **33** | 302 | 1.4 | 43.4 | 7100 | **A302_43.4 S3 ME3SA4** | 269 | **A302_43.4 P90 BE90S4** | 270 |
| **34** | 291 | 2.1 | 41.8 | 11400 | **A352_41.8 S3 ME3SA4** | 273 | **A352_41.8 P90 BE90S4** | 274 |
| **36** | 276 | 0.9 | 39.6 | 4500 | **A202_39.6 S3 ME3SA4** | 265 | **A202_39.6 P90 BE90S4** | 266 |
| **36** | 273 | 1.5 | 39.3 | 6970 | **A302_39.3 S3 ME3SA4** | 269 | **A302_39.3 P90 BE90S4** | 270 |
| **39** | 255 | 1.6 | 36.6 | 6880 | **A302_36.6 S3 ME3SA4** | 269 | **A302_36.6 P90 BE90S4** | 270 |
| **39** | 255 | 2.4 | 36.6 | 11100 | **A352_36.6 S3 ME3SA4** | 273 | **A352_36.6 P90 BE90S4** | 274 |
| **40** | 250 | 3.1 | 35.9 | 14300 | **A412_35.9 S3 ME3SA4** | 277 | **A412_35.9 P90 BE90S4** | 278 |
| **40** | 246 | 1.0 | 35.4 | 4380 | **A202_35.4 S3 ME3SA4** | 265 | **A202_35.4 P90 BE90S4** | 266 |
| **43** | 233 | 1.8 | 33.4 | 6760 | **A302_33.4 S3 ME3SA4** | 269 | **A302_33.4 P90 BE90S4** | 270 |
| **43** | 231 | 2.6 | 33.2 | 10800 | **A352_33.2 S3 ME3SA4** | 273 | **A352_33.2 P90 BE90S4** | 274 |
| **46** | 218 | 1.1 | 31.3 | 4320 | **A202_31.3 S3 ME3SA4** | 265 | **A202_31.3 P90 BE90S4** | 266 |
| **49** | 204 | 2.0 | 29.3 | 6580 | **A302_29.3 S3 ME3SA4** | 269 | **A302_29.3 P90 BE90S4** | 270 |
| **49** | 203 | 1.2 | 29.2 | 4290 | **A202_29.2 S3 ME3SA4** | 265 | **A202_29.2 P90 BE90S4** | 266 |
| **50** | 198 | 3.0 | 28.4 | 10400 | **A352_28.4 S3 ME3SA4** | 273 | **A352_28.4 P90 BE90S4** | 274 |
| **54** | 185 | 2.2 | 26.5 | 6440 | **A302_26.5 S3 ME3SA4** | 269 | **A302_26.5 P90 BE90S4** | 270 |

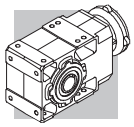


# 1.1 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  IEC |  |
|---|---|---|---|---|---|---|---|---|
| **54** | 184 | 1.4 | 26.5 | 4230 | **A202_26.5 S3 ME3SA4** | 265 | **A202_26.5 P90 BE90S4** | 266 |
| **56** | 179 | 3.4 | 25.7 | 10100 | **A352_25.7 S3 ME3SA4** | 273 | **A352_25.7 P90 BE90S4** | 274 |
| **60** | 165 | 0.9 | 23.8 | 3640 | **A102_23.8 S3 ME3SA4** | 261 | **A102_23.8 P90 BE90S4** | 262 |
| **62** | 161 | 1.6 | 23.1 | 4140 | **A202_23.1 S3 ME3SA4** | 265 | **A202_23.1 P90 BE90S4** | 266 |
| **63** | 158 | 2.6 | 22.8 | 6220 | **A302_22.8 S3 ME3SA4** | 269 | **A302_22.8 P90 BE90S4** | 270 |
| **67** | 149 | 1.0 | 21.4 | 4280 | **A102_21.4 S3 ME3SA4** | 261 | **A102_21.4 P90 BE90S4** | 262 |
| **67** | 148 | 1.7 | 21.2 | 4080 | **A202_21.2 S3 ME3SA4** | 265 | **A202_21.2 P90 BE90S4** | 266 |
| **70** | 143 | 2.9 | 20.5 | 6070 | **A302_20.5 S3 ME3SA4** | 269 | **A302_20.5 P90 BE90S4** | 270 |
| **77** | 129 | 1.2 | 18.6 | 3540 | **A102_18.6 S3 ME3SA4** | 261 | **A102_18.6 P90 BE90S4** | 262 |
| **79** | 126 | 2.0 | 18.1 | 3970 | **A202_18.1 S3 ME3SA4** | 265 | **A202_18.1 P90 BE90S4** | 266 |
| **80** | 125 | 3.2 | 18.0 | 5880 | **A302_18.0 S3 ME3SA4** | 269 | **A302_18.0 P90 BE90S4** | 270 |
| **87** | 114 | 1.3 | 16.4 | 4130 | **A102_16.4 S3 ME3SA4** | 261 | **A102_16.4 P90 BE90S4** | 262 |
| **88** | 114 | 3.4 | 16.3 | 5740 | **A302_16.3 S3 ME3SA4** | 269 | **A302_16.3 P90 BE90S4** | 270 |
| **88** | 112 | 2.2 | 16.2 | 3880 | **A202_16.2 S3 ME3SA4** | 265 | **A202_16.2 P90 BE90S4** | 266 |
| **102** | 98 | 2.5 | 14.1 | 3770 | **A202_14.1 S3 ME3SA4** | 265 | **A202_14.1 P90 BE90S4** | 266 |
| **103** | 97 | 1.5 | 13.9 | 3380 | **A102_13.9 S3 ME3SA4** | 261 | **A102_13.9 P90 BE90S4** | 262 |
| **116** | 86 | 1.6 | 12.3 | 3300 | **A102_12.3 S3 ME3SA4** | 261 | **A102_12.3 P90 BE90S4** | 262 |
| **120** | 83 | 2.5 | 12.0 | 3620 | **A202_12.0 S3 ME3SA4** | 265 | **A202_12.0 P90 BE90S4** | 266 |
| **135** | 73 | 2.0 | 10.6 | 3210 | **A102_10.6 S3 ME3SA4** | 261 | **A102_10.6 P90 BE90S4** | 262 |
| **138** | 72 | 3.1 | 10.3 | 3510 | **A202_10.3 S3 ME3SA4** | 265 | **A202_10.3 P90 BE90S4** | 266 |
| **149** | 67 | 2.1 | 9.6 | 3140 | **A102_9.6 S3 ME3SA4** | 261 | **A102_9.6 P90 BE90S4** | 262 |
| **153** | 65 | 3.2 | 9.4 | 3420 | **A202_9.4 S3 ME3SA4** | 265 | **A202_9.4 P90 BE90S4** | 266 |
| **168** | 59 | 2.4 | 8.5 | 3630 | **A102_8.5 S3 ME3SA4** | 261 | **A102_8.5 P90 BE90S4** | 262 |
| **198** | 50 | 2.8 | 7.2 | 2940 | **A102_7.2 S3 ME3SA4** | 261 | **A102_7.2 P90 BE90S4** | 262 |
| **226** | 44 | 3.2 | 6.3 | 3390 | **A102_6.3 S3 ME3SA4** | 261 | **A102_6.3 P90 BE90S4** | 262 |
| **230** | 43 | 3.3 | 12.3 | 2830 | **A102_12.3 S2 ME2SB2** | 261 | **A102_12.3 P90 BE90B2** | 262 |
| **294** | 34 | 2.8 | 9.6 | 1600 | **A052_9.6 S2 ME2SB2** | 258 | **A052_9.6 P90 BE90B2** | 258 |
| **332** | 30 | 3.0 | 8.5 | 1560 | **A052_8.5 S2 ME2SB2** | 258 | **A052_8.5 P90 BE90B2** | 258 |
| **392** | 25 | 3.4 | 7.2 | 1500 | **A052_7.2 S2 ME2SB2** | 258 | **A052_7.2 P90 BE90B2** | 258 |
| **447** | 22 | 3.6 | 6.3 | 1450 | **A052_6.3 S2 ME2SB2** | 258 | **A052_6.3 P90 BE90B2** | 258 |
| **518** | 19.1 | 3.9 | 5.5 | 1400 | **A052_5.5 S2 ME2SB2** | 258 | **A052_5.5 P90 BE90B2** | 258 |

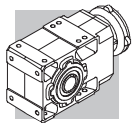
# 1.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  IEC |  |
|---|---|---|---|---|---|---|---|---|
| **0.88** | 14528 | 1.0 | 1632 | 75000 | **A904_1632 S3 ME3SB4** | 299 | **A904_1632 P90 BE90LA4** | 300 |
| **0.95** | 13410 | 1.0 | 1507 | 75000 | **A904_1507 S3 ME3SB4** | 299 | **A904_1507 P90 BE90LA4** | 300 |
| **1.1** | 11784 | 1.2 | 1324 | 75000 | **A904_1324 S3 ME3SB4** | 299 | **A904_1324 P90 BE90LA4** | 300 |
| **1.2** | 10877 | 1.3 | 1222 | 75000 | **A904_1222 S3 ME3SB4** | 299 | **A904_1222 P90 BE90LA4** | 300 |
| **1.3** | 9884 | 1.4 | 1111 | 75000 | **A904_1111 S3 ME3SB4** | 299 | **A904_1111 P90 BE90LA4** | 300 |
| **1.4** | 9124 | 1.5 | 1025 | 75000 | **A904_1025 S3 ME3SB4** | 299 | **A904_1025 P90 BE90LA4** | 300 |
| **1.4** | 8913 | 0.9 | 1001 | 65000 | **A804_1001 S3 ME3SB4** | 296 | **A804_1001 P90 BE90LA4** | 297 |
| **1.5** | 8341 | 1.7 | 937.2 | 75000 | **A904_937.2 S3 ME3SB4** | 299 | **A904_937.2 P90 BE90LA4** | 300 |
| **1.6** | 7998 | 1.0 | 898.7 | 65000 | **A804_898.7 S3 ME3SB4** | 296 | **A804_898.7 P90 BE90LA4** | 297 |
| **1.7** | 7699 | 1.8 | 865.1 | 75000 | **A904_865.1 S3 ME3SB4** | 299 | **A904_865.1 P90 BE90LA4** | 300 |
| **1.7** | 7383 | 1.1 | 829.5 | 65000 | **A804_829.5 S3 ME3SB4** | 296 | **A804_829.5 P90 BE90LA4** | 297 |
| **1.9** | 6826 | 2.1 | 766.9 | 75000 | **A904_766.9 S3 ME3SB4** | 299 | **A904_766.9 P90 BE90LA4** | 300 |
| **1.9** | 6783 | 1.2 | 762.1 | 65000 | **A804_762.1 S3 ME3SB4** | 296 | **A804_762.1 P90 BE90LA4** | 297 |
| **2.0** | 6300 | 2.2 | 707.9 | 75000 | **A904_707.9 S3 ME3SB4** | 299 | **A904_707.9 P90 BE90LA4** | 300 |
| **2.0** | 6261 | 1.3 | 703.5 | 65000 | **A804_703.5 S3 ME3SB4** | 296 | **A804_703.5 P90 BE90LA4** | 297 |
| **2.2** | 5737 | 0.9 | 644.6 | 50000 | **A704_644.6 S3 ME3SB4** | 293 | **A704_644.6 P90 BE90LA4** | 294 |
| **2.4** | 5404 | 1.5 | 607.2 | 65000 | **A804_607.2 S3 ME3SB4** | 296 | **A804_607.2 P90 BE90LA4** | 297 |
| **2.4** | 5354 | 2.6 | 601.6 | 75000 | **A904_601.6 S3 ME3SB4** | 299 | **A904_601.6 P90 BE90LA4** | 300 |

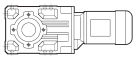


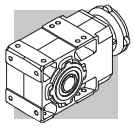
# 1.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **2.4** | 5296 | 0.9 | 595.0 | 50000 | **A704_595.0 S3 ME3SB4** | 293 | **A704_595.0 P90 BE90LA4** | 294 |
| **2.6** | 4988 | 1.6 | 560.5 | 65000 | **A804_560.5 S3 ME3SB4** | 296 | **A804_560.5 P90 BE90LA4** | 297 |
| **2.6** | 4942 | 2.8 | 555.3 | 75000 | **A904_555.3 S3 ME3SB4** | 299 | **A904_555.3 P90 BE90LA4** | 300 |
| **2.8** | 4587 | 1.1 | 515.4 | 50000 | **A704_515.4 S3 ME3SB4** | 293 | **A704_515.4 P90 BE90LA4** | 294 |
| **2.9** | 4331 | 3.2 | 486.6 | 75000 | **A904_486.6 S3 ME3SB4** | 299 | **A904_486.6 P90 BE90LA4** | 300 |
| **3.0** | 4262 | 1.9 | 478.9 | 65000 | **A804_478.9 S3 ME3SB4** | 296 | **A804_478.9 P90 BE90LA4** | 297 |
| **3.0** | 4234 | 1.2 | 475.8 | 50000 | **A704_475.8 S3 ME3SB4** | 293 | **A704_475.8 P90 BE90LA4** | 294 |
| **3.2** | 3998 | 3.5 | 449.2 | 75000 | **A904_449.2 S3 ME3SB4** | 299 | **A904_449.2 P90 BE90LA4** | 300 |
| **3.2** | 3935 | 2.0 | 442.1 | 65000 | **A804_442.1 S3 ME3SB4** | 296 | **A804_442.1 P90 BE90LA4** | 297 |
| **3.6** | 3561 | 1.4 | 400.2 | 50000 | **A704_400.2 S3 ME3SB4** | 293 | **A704_400.2 P90 BE90LA4** | 294 |
| **3.7** | 3413 | 2.3 | 383.5 | 65000 | **A804_383.5 S3 ME3SB4** | 296 | **A804_383.5 P90 BE90LA4** | 297 |
| **3.9** | 3288 | 1.5 | 369.4 | 50000 | **A704_369.4 S3 ME3SB4** | 293 | **A704_369.4 P90 BE90LA4** | 294 |
| **4.0** | 3150 | 2.5 | 354.0 | 65000 | **A804_354.0 S3 ME3SB4** | 296 | **A804_354.0 P90 BE90LA4** | 297 |
| **4.1** | 3126 | 0.9 | 351.2 | 30000 | **A604_351.2 S3 ME3SB4** | 289 | **A604_351.2 P90 BE90LA4** | 290 |
| **4.4** | 2885 | 1.0 | 324.2 | 30000 | **A604_324.2 S3 ME3SB4** | 289 | **A604_324.2 P90 BE90LA4** | 290 |
| **4.5** | 2816 | 1.8 | 316.4 | 50000 | **A704_316.4 S3 ME3SB4** | 293 | **A704_316.4 P90 BE90LA4** | 294 |
| **4.8** | 2673 | 3.0 | 300.4 | 65000 | **A804_300.4 S3 ME3SB4** | 296 | **A804_300.4 P90 BE90LA4** | 297 |
| **4.9** | 2599 | 1.9 | 292.0 | 50000 | **A704_292.0 S3 ME3SB4** | 293 | **A704_292.0 P90 BE90LA4** | 294 |
| **5.0** | 2548 | 1.1 | 286.3 | 30000 | **A604_286.3 S3 ME3SB4** | 289 | **A604_286.3 P90 BE90LA4** | 290 |
| **5.2** | 2468 | 3.2 | 277.3 | 65000 | **A804_277.3 S3 ME3SB4** | 296 | **A804_277.3 P90 BE90LA4** | 297 |
| **5.4** | 2352 | 1.2 | 264.3 | 30000 | **A604_264.3 S3 ME3SB4** | 289 | **A604_264.3 P90 BE90LA4** | 290 |
| **6.0** | 2124 | 2.4 | 238.6 | 50000 | **A704_238.6 S3 ME3SB4** | 293 | **A704_238.6 P90 BE90LA4** | 294 |
| **6.3** | 2013 | 1.4 | 226.1 | 30000 | **A604_226.1 S3 ME3SB4** | 289 | **A604_226.1 P90 BE90LA4** | 290 |
| **6.5** | 1960 | 2.6 | 220.3 | 50000 | **A704_220.3 S3 ME3SB4** | 293 | **A704_220.3 P90 BE90LA4** | 294 |
| **6.9** | 1858 | 1.5 | 208.7 | 30000 | **A604_208.7 S3 ME3SB4** | 289 | **A604_208.7 P90 BE90LA4** | 290 |
| **6.9** | 1852 | 1.1 | 208.1 | 30000 | **A554_208.1 S3 ME3SB4** | 285 | **A554_208.1 P90 BE90LA4** | 286 |
| **7.4** | 1767 | 1.1 | 194.2 | 30000 | **A553_194.2 S3 ME3SB4** | 285 | **A553_194.2 P90 BE90LA4** | 286 |
| **7.7** | 1690 | 1.7 | 185.8 | 30000 | **A603_185.8 S3 ME3SB4** | 289 | **A603_185.8 P90 BE90LA4** | 290 |
| **7.8** | 1637 | 3.1 | 183.9 | 50000 | **A704_183.9 S3 ME3SB4** | 293 | **A704_183.9 P90 BE90LA4** | 294 |
| **8.2** | 1593 | 1.3 | 175.0 | 30000 | **A553_175.0 S3 ME3SB4** | 285 | **A553_175.0 P90 BE90LA4** | 286 |
| **8.2** | 1578 | 1.0 | 173.4 | 20000 | **A503_173.4 S3 ME3SB4** | 281 | **A503_173.4 P90 BE90LA4** | 282 |
| **8.3** | 1560 | 1.8 | 171.5 | 30000 | **A603_171.5 S3 ME3SB4** | 289 | **A603_171.5 P90 BE90LA4** | 290 |
| **8.4** | 1511 | 3.3 | 169.8 | 50000 | **A704_169.8 S3 ME3SB4** | 293 | **A704_169.8 P90 BE90LA4** | 294 |
| **8.9** | 1460 | 1.4 | 160.4 | 30000 | **A553_160.4 S3 ME3SB4** | 285 | **A553_160.4 P90 BE90LA4** | 286 |
| **9.2** | 1420 | 2.0 | 156.0 | 30000 | **A603_156.0 S3 ME3SB4** | 289 | **A603_156.0 P90 BE90LA4** | 290 |
| **9.3** | 1407 | 1.1 | 154.6 | 20000 | **A503_154.6 S3 ME3SB4** | 281 | **A503_154.6 P90 BE90LA4** | 282 |
| **9.3** | 1399 | 2.9 | 153.7 | 50000 | **A703_153.7 S3 ME3SB4** | 293 | **A703_153.7 P90 BE90LA4** | 294 |
| **9.7** | 1336 | 1.5 | 146.8 | 30000 | **A553_146.8 S3 ME3SB4** | 285 | **A553_146.8 P90 BE90LA4** | 286 |
| **9.9** | 1311 | 2.1 | 144.0 | 30000 | **A603_144.0 S3 ME3SB4** | 289 | **A603_144.0 P90 BE90LA4** | 290 |
| **10.2** | 1280 | 1.2 | 140.6 | 20000 | **A503_140.6 S3 ME3SB4** | 281 | **A503_140.6 P90 BE90LA4** | 282 |
| **10.7** | 1213 | 2.3 | 133.3 | 30000 | **A603_133.3 S3 ME3SB4** | 289 | **A603_133.3 P90 BE90LA4** | 290 |
| **10.8** | 1208 | 1.7 | 132.7 | 30000 | **A553_132.7 S3 ME3SB4** | 285 | **A553_132.7 P90 BE90LA4** | 286 |
| **11.0** | 1180 | 1.3 | 129.7 | 20000 | **A503_129.7 S3 ME3SB4** | 281 | **A503_129.7 P90 BE90LA4** | 282 |
| **11.5** | 1127 | 1.8 | 123.9 | 30000 | **A553_123.9 S3 ME3SB4** | 285 | **A553_123.9 P90 BE90LA4** | 286 |
| **11.6** | 1120 | 2.5 | 123.0 | 30000 | **A603_123.0 S3 ME3SB4** | 289 | **A603_123.0 P90 BE90LA4** | 290 |
| **12.1** | 1073 | 1.4 | 118.0 | 20000 | **A503_118.0 S3 ME3SB4** | 281 | **A503_118.0 P90 BE90LA4** | 282 |
| **13.1** | 996 | 1.5 | 109.4 | 20000 | **A503_109.4 S3 ME3SB4** | 281 | **A503_109.4 P90 BE90LA4** | 282 |
| **13.3** | 981 | 2.9 | 107.8 | 30000 | **A603_107.8 S3 ME3SB4** | 289 | **A603_107.8 P90 BE90LA4** | 290 |
| **14.1** | 923 | 2.2 | 101.4 | 30000 | **A553_101.4 S3 ME3SB4** | 285 | **A553_101.4 P90 BE90LA4** | 286 |
| **14.4** | 906 | 1.7 | 99.5 | 20000 | **A503_99.5 S3 ME3SB4** | 281 | **A503_99.5 P90 BE90LA4** | 282 |
| **14.4** | 906 | 3.1 | 99.5 | 30000 | **A603_99.5 S3 ME3SB4** | 289 | **A603_99.5 P90 BE90LA4** | 290 |
| **15.4** | 844 | 0.9 | 92.8 | 15000 | **A413_92.8 S3 ME3SB4** | 277 | **A413_92.8 P90 BE90LA4** | 278 |
| **16.0** | 815 | 1.8 | 89.5 | 20000 | **A503_89.5 S3 ME3SB4** | 281 | **A503_89.5 P90 BE90LA4** | 282 |
| **16.6** | 786 | 3.6 | 86.4 | 30000 | **A603_86.4 S3 ME3SB4** | 289 | **A603_86.4 P90 BE90LA4** | 290 |
| **17.6** | 741 | 2.0 | 81.5 | 20000 | **A503_81.5 S3 ME3SB4** | 281 | **A503_81.5 P90 BE90LA4** | 282 |
| **18.0** | 724 | 2.8 | 79.5 | 30000 | **A553_79.5 S3 ME3SB4** | 285 | **A553_79.5 P90 BE90LA4** | 286 |
| **18.0** | 745 | 1.1 | 79.2 | 15000 | **A412_79.2 S3 ME3SB4** | 277 | **A412_79.2 P90 BE90LA4** | 278 |

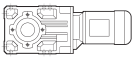


# 1.5 kW

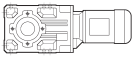
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **20.1** | 670 | 1.3 | 71.3 | 15000 | **A412_71.3 S3 ME3SB4** | 277 | **A412_71.3 P90 BE90LA4** | 278 |
| **20.4** | 639 | 2.3 | 70.2 | 20000 | **A503_70.2 S3 ME3SB4** | 281 | **A503_70.2 P90 BE90LA4** | 282 |
| **21.7** | 619 | 1.0 | 65.8 | 11600 | **A352_65.8 S3 ME3SB4** | 273 | **A352_65.8 P90 BE90LA4** | 274 |
| **22.2** | 585 | 3.4 | 64.3 | 30000 | **A553_64.3 S3 ME3SB4** | 285 | **A553_64.3 P90 BE90LA4** | 286 |
| **22.3** | 603 | 1.4 | 64.2 | 15000 | **A412_64.2 S3 ME3SB4** | 277 | **A412_64.2 P90 BE90LA4** | 278 |
| **22.4** | 581 | 2.6 | 63.9 | 20000 | **A503_63.9 S3 ME3SB4** | 281 | **A503_63.9 P90 BE90LA4** | 282 |
| **23.7** | 567 | 1.1 | 60.4 | 11500 | **A352_60.4 S3 ME3SB4** | 273 | **A352_60.4 P90 BE90LA4** | 274 |
| **24.3** | 553 | 1.5 | 58.8 | 15000 | **A412_58.8 S3 ME3SB4** | 277 | **A412_58.8 P90 BE90LA4** | 278 |
| **25.2** | 517 | 2.9 | 56.8 | 20000 | **A503_56.8 S3 ME3SB4** | 281 | **A503_56.8 P90 BE90LA4** | 282 |
| **26.3** | 510 | 1.2 | 54.3 | 11300 | **A352_54.3 S3 ME3SB4** | 273 | **A352_54.3 P90 BE90LA4** | 274 |
| **26.9** | 500 | 1.7 | 53.1 | 15000 | **A412_53.1 S3 ME3SB4** | 277 | **A412_53.1 P90 BE90LA4** | 278 |
| **27.7** | 470 | 3.2 | 51.7 | 19700 | **A503_51.7 S3 ME3SB4** | 281 | **A503_51.7 P90 BE90LA4** | 282 |
| **29.1** | 461 | 1.3 | 49.1 | 11100 | **A352_49.1 S3 ME3SB4** | 273 | **A352_49.1 P90 BE90LA4** | 274 |
| **29.6** | 454 | 0.9 | 48.3 | 6680 | **A302_48.3 S3 ME3SB4** | 269 | **A302_48.3 P90 BE90LA4** | 270 |
| **29.6** | 454 | 1.9 | 48.3 | 14900 | **A412_48.3 S3 ME3SB4** | 277 | **A412_48.3 P90 BE90LA4** | 278 |
| **31** | 431 | 1.4 | 45.8 | 11000 | **A352_45.8 S3 ME3SB4** | 273 | **A352_45.8 P90 BE90LA4** | 274 |
| **32** | 424 | 2.0 | 45.1 | 14600 | **A412_45.1 S3 ME3SB4** | 277 | **A412_45.1 P90 BE90LA4** | 278 |
| **33** | 408 | 1.0 | 43.4 | 6450 | **A302_43.4 S3 ME3SB4** | 269 | **A302_43.4 P90 BE90LA4** | 270 |
| **34** | 393 | 1.5 | 41.8 | 10800 | **A352_41.8 S3 ME3SB4** | 273 | **A352_41.8 P90 BE90LA4** | 274 |
| **36** | 369 | 1.1 | 39.3 | 6380 | **A302_39.3 S3 ME3SB4** | 269 | **A302_39.3 P90 BE90LA4** | 270 |
| **39** | 344 | 1.2 | 36.6 | 6330 | **A302_36.6 S3 ME3SB4** | 269 | **A302_36.6 P90 BE90LA4** | 270 |
| **39** | 344 | 1.7 | 36.6 | 10500 | **A352_36.6 S3 ME3SB4** | 273 | **A352_36.6 P90 BE90LA4** | 274 |
| **40** | 338 | 2.3 | 35.9 | 13800 | **A412_35.9 S3 ME3SB4** | 277 | **A412_35.9 P90 BE90LA4** | 278 |
| **43** | 314 | 1.3 | 33.4 | 6260 | **A302_33.4 S3 ME3SB4** | 269 | **A302_33.4 P90 BE90LA4** | 270 |
| **43** | 312 | 1.9 | 33.2 | 10300 | **A352_33.2 S3 ME3SB4** | 273 | **A352_33.2 P90 BE90LA4** | 274 |
| **49** | 275 | 1.5 | 29.3 | 6140 | **A302_29.3 S3 ME3SB4** | 269 | **A302_29.3 P90 BE90LA4** | 270 |
| **49** | 275 | 0.9 | 29.2 | 3820 | **A202_29.2 S3 ME3SB4** | 265 | **A202_29.2 P90 BE90LA4** | 266 |
| **50** | 267 | 2.2 | 28.4 | 9940 | **A352_28.4 S3 ME3SB4** | 273 | **A352_28.4 P90 BE90LA4** | 274 |
| **50** | 266 | 2.7 | 28.3 | 13000 | **A412_28.3 S3 ME3SB4** | 277 | **A412_28.3 P90 BE90LA4** | 278 |
| **54** | 249 | 1.6 | 26.5 | 6040 | **A302_26.5 S3 ME3SB4** | 269 | **A302_26.5 P90 BE90LA4** | 270 |
| **54** | 249 | 1.0 | 26.5 | 3790 | **A202_26.5 S3 ME3SB4** | 265 | **A202_26.5 P90 BE90LA4** | 266 |
| **56** | 241 | 2.5 | 25.7 | 9710 | **A352_25.7 S3 ME3SB4** | 273 | **A352_25.7 P90 BE90LA4** | 274 |
| **62** | 217 | 1.2 | 23.1 | 3760 | **A202_23.1 S3 ME3SB4** | 265 | **A202_23.1 P90 BE90LA4** | 266 |
| **63** | 214 | 1.9 | 22.8 | 5870 | **A302_22.8 S3 ME3SB4** | 269 | **A302_22.8 P90 BE90LA4** | 270 |
| **63** | 213 | 3.2 | 22.7 | 12200 | **A412_22.7 S3 ME3SB4** | 277 | **A412_22.7 P90 BE90LA4** | 278 |
| **64** | 211 | 2.8 | 22.5 | 9400 | **A352_22.5 S3 ME3SB4** | 273 | **A352_22.5 P90 BE90LA4** | 274 |
| **67** | 200 | 1.3 | 21.2 | 3730 | **A202_21.2 S3 ME3SB4** | 265 | **A202_21.2 P90 BE90LA4** | 266 |
| **70** | 193 | 2.1 | 20.5 | 5760 | **A302_20.5 S3 ME3SB4** | 269 | **A302_20.5 P90 BE90LA4** | 270 |
| **70** | 192 | 3.1 | 20.4 | 9170 | **A352_20.4 S3 ME3SB4** | 273 | **A352_20.4 P90 BE90LA4** | 274 |
| **79** | 170 | 1.5 | 18.1 | 3660 | **A202_18.1 S3 ME3SB4** | 265 | **A202_18.1 P90 BE90LA4** | 266 |
| **80** | 169 | 2.4 | 18.0 | 5600 | **A302_18.0 S3 ME3SB4** | 269 | **A302_18.0 P90 BE90LA4** | 270 |
| **87** | 155 | 1.0 | 16.4 | 3720 | **A102_16.4 S3 ME3SB4** | 261 | **A102_16.4 P90 BE90LA4** | 262 |
| **88** | 154 | 2.5 | 16.3 | 5480 | **A302_16.3 S3 ME3SB4** | 269 | **A302_16.3 P90 BE90LA4** | 270 |
| **88** | 152 | 1.6 | 16.2 | 3600 | **A202_16.2 S3 ME3SB4** | 265 | **A202_16.2 P90 BE90LA4** | 266 |
| **102** | 132 | 1.9 | 14.1 | 3530 | **A202_14.1 S3 ME3SB4** | 265 | **A202_14.1 P90 BE90LA4** | 266 |
| **103** | 131 | 1.1 | 13.9 | 3090 | **A102_13.9 S3 ME3SB4** | 261 | **A102_13.9 P90 BE90LA4** | 262 |
| **105** | 128 | 2.9 | 13.6 | 5250 | **A302_13.6 S3 ME3SB4** | 269 | **A302_13.6 P90 BE90LA4** | 270 |
| **116** | 116 | 1.2 | 12.3 | 3040 | **A102_12.3 S3 ME3SB4** | 261 | **A102_12.3 P90 BE90LA4** | 262 |
| **120** | 112 | 1.9 | 12.0 | 3420 | **A202_12.0 S3 ME3SB4** | 265 | **A202_12.0 P90 BE90LA4** | 266 |
| **121** | 111 | 2.7 | 11.8 | 5060 | **A302_11.8 S3 ME3SB4** | 269 | **A302_11.8 P90 BE90LA4** | 270 |
| **125** | 107 | 3.3 | 22.8 | 5040 | **A302_22.8 S3 ME3SA2** | 269 | **A302_22.8 P90 BE90SA2** | 270 |
| **135** | 99 | 1.5 | 10.6 | 2990 | **A102_10.6 S3 ME3SB4** | 261 | **A102_10.6 P90 BE90LA4** | 262 |
| **137** | 98 | 3.5 | 10.5 | 4930 | **A302_10.5 S3 ME3SB4** | 269 | **A302_10.5 P90 BE90LA4** | 270 |
| **138** | 97 | 2.3 | 10.3 | 3330 | **A202_10.3 S3 ME3SB4** | 265 | **A202_10.3 P90 BE90LA4** | 266 |
| **149** | 90 | 1.5 | 9.6 | 2940 | **A102_9.6 S3 ME3SB4** | 261 | **A102_9.6 P90 BE90LA4** | 262 |
| **153** | 88 | 2.4 | 9.4 | 3250 | **A202_9.4 S3 ME3SB4** | 265 | **A202_9.4 P90 BE90LA4** | 266 |
| **154** | 88 | 3.4 | 9.3 | 4770 | **A302_9.3 S3 ME3SB4** | 269 | **A302_9.3 P90 BE90LA4** | 270 |

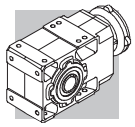


## 1.5 kW

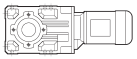
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **168** | 80 | 1.7 | 8.5 | 3420 | **A102_8.5 S3 ME3SB4** | 261 | **A102_8.5 P90 BE90LA4** | 262 |
| **171** | 79 | 2.7 | 8.4 | 3180 | **A202_8.4 S3 ME3SB4** | 265 | **A202_8.4 P90 BE90LA4** | 266 |
| **196** | 69 | 3.1 | 7.3 | 3080 | **A202_7.3 S3 ME3SB4** | 265 | **A202_7.3 P90 BE90LA4** | 266 |
| **198** | 68 | 2.1 | 7.2 | 2790 | **A102_7.2 S3 ME3SB4** | 261 | **A102_7.2 P90 BE90LA4** | 262 |
| **219** | 61 | 3.4 | 6.5 | 3000 | **A202_6.5 S3 ME3SB4** | 265 | **A202_6.5 P90 BE90LA4** | 266 |
| **226** | 60 | 2.4 | 6.3 | 3220 | **A102_6.3 S3 ME3SB4** | 261 | **A102_6.3 P90 BE90LA4** | 262 |
| **262** | 51 | 2.7 | 5.5 | 2630 | **A102_5.5 S3 ME3SB4** | 261 | **A102_5.5 P90 BE90LA4** | 262 |
| **297** | 45 | 3.1 | 9.6 | 2560 | **A102_9.6 S3 ME3SA2** | 261 | **A102_9.6 P90 BE90SA2** | 262 |
| **335** | 40 | 3.5 | 8.5 | 2950 | **A102_8.5 S3 ME3SA2** | 261 | **A102_8.5 P90 BE90SA2** | 262 |

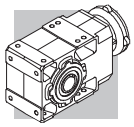
## 2.2 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **1.2** | 15990 | 0.9 | 1222 | 75000 | **A904_1222 S3 ME3LA4** | 299 | **A904_1222 P100 BE100LA4** | 300 |
| **1.3** | 14530 | 1.0 | 1111 | 75000 | **A904_1111 S3 ME3LA4** | 299 | **A904_1111 P100 BE100LA4** | 300 |
| **1.4** | 13412 | 1.0 | 1025 | 75000 | **A904_1025 S3 ME3LA4** | 299 | **A904_1025 P100 BE100LA4** | 300 |
| **1.5** | 12261 | 1.1 | 937.2 | 75000 | **A904_937.2 S3 ME3LA4** | 299 | **A904_937.2 P100 BE100LA4** | 300 |
| **1.7** | 11318 | 1.2 | 865.1 | 75000 | **A904_865.1 S3 ME3LA4** | 299 | **A904_865.1 P100 BE100LA4** | 300 |
| **1.9** | 10034 | 1.4 | 766.9 | 75000 | **A904_766.9 S3 ME3LA4** | 299 | **A904_766.9 P100 BE100LA4** | 300 |
| **2.0** | 9262 | 1.5 | 707.9 | 75000 | **A904_707.9 S3 ME3LA4** | 299 | **A904_707.9 P100 BE100LA4** | 300 |
| **2.0** | 9203 | 0.9 | 703.5 | 65000 | **A804_703.5 S3 ME3LA4** | 296 | **A804_703.5 P100 BE100LA4** | 297 |
| **2.4** | 7943 | 1.0 | 607.2 | 65000 | **A804_607.2 S3 ME3LA4** | 296 | **A804_607.2 P100 BE100LA4** | 297 |
| **2.4** | 7870 | 1.8 | 601.6 | 75000 | **A904_601.6 S3 ME3LA4** | 299 | **A904_601.6 P100 BE100LA4** | 300 |
| **2.6** | 7332 | 1.1 | 560.5 | 65000 | **A804_560.5 S3 ME3LA4** | 296 | **A804_560.5 P100 BE100LA4** | 297 |
| **2.6** | 7265 | 1.9 | 555.3 | 75000 | **A904_555.3 S3 ME3LA4** | 299 | **A904_555.3 P100 BE100LA4** | 300 |
| **2.9** | 6366 | 2.2 | 486.6 | 75000 | **A904_486.6 S3 ME3LA4** | 299 | **A904_486.6 P100 BE100LA4** | 300 |
| **3.0** | 6266 | 1.3 | 478.9 | 65000 | **A804_478.9 S3 ME3LA4** | 296 | **A804_478.9 P100 BE100LA4** | 297 |
| **3.2** | 5876 | 2.4 | 449.2 | 75000 | **A904_449.2 S3 ME3LA4** | 299 | **A904_449.2 P100 BE100LA4** | 300 |
| **3.2** | 5784 | 1.4 | 442.1 | 65000 | **A804_442.1 S3 ME3LA4** | 296 | **A804_442.1 P100 BE100LA4** | 297 |
| **3.6** | 5235 | 1.0 | 400.2 | 50000 | **A704_400.2 S3 ME3LA4** | 293 | **A704_400.2 P100 BE100LA4** | 294 |
| **3.7** | 5043 | 2.8 | 385.4 | 75000 | **A904_385.4 S3 ME3LA4** | 299 | **A904_385.4 P100 BE100LA4** | 300 |
| **3.7** | 5017 | 1.6 | 383.5 | 65000 | **A804_383.5 S3 ME3LA4** | 296 | **A804_383.5 P100 BE100LA4** | 297 |
| **3.9** | 4833 | 1.0 | 369.4 | 50000 | **A704_369.4 S3 ME3LA4** | 293 | **A704_369.4 P100 BE100LA4** | 294 |
| **4.0** | 4655 | 3.0 | 355.8 | 75000 | **A904_355.8 S3 ME3LA4** | 299 | **A904_355.8 P100 BE100LA4** | 300 |
| **4.0** | 4631 | 1.7 | 354.0 | 65000 | **A804_354.0 S3 ME3LA4** | 296 | **A804_354.0 P100 BE100LA4** | 297 |
| **4.5** | 4139 | 1.2 | 316.4 | 50000 | **A704_316.4 S3 ME3LA4** | 293 | **A704_316.4 P100 BE100LA4** | 294 |
| **4.7** | 3989 | 3.5 | 304.9 | 75000 | **A904_304.9 S3 ME3LA4** | 299 | **A904_304.9 P100 BE100LA4** | 300 |
| **4.8** | 3930 | 2.0 | 300.4 | 65000 | **A804_300.4 S3 ME3LA4** | 296 | **A804_300.4 P100 BE100LA4** | 297 |
| **4.9** | 3820 | 1.3 | 292.0 | 50000 | **A704_292.0 S3 ME3LA4** | 293 | **A704_292.0 P100 BE100LA4** | 294 |
| **5.2** | 3628 | 2.2 | 277.3 | 65000 | **A804_277.3 S3 ME3LA4** | 296 | **A804_277.3 P100 BE100LA4** | 297 |
| **6.0** | 3122 | 1.6 | 238.6 | 50000 | **A704_238.6 S3 ME3LA4** | 293 | **A704_238.6 P100 BE100LA4** | 294 |
| **6.1** | 3043 | 2.6 | 232.6 | 65000 | **A804_232.6 S3 ME3LA4** | 296 | **A804_232.6 P100 BE100LA4** | 297 |
| **6.3** | 2958 | 0.9 | 226.1 | 30000 | **A604_226.1 S3 ME3LA4** | 289 | **A604_226.1 P100 BE100LA4** | 290 |
| **6.5** | 2882 | 1.7 | 220.3 | 50000 | **A704_220.3 S3 ME3LA4** | 293 | **A704_220.3 P100 BE100LA4** | 294 |
| **6.7** | 2809 | 2.8 | 214.7 | 65000 | **A804_214.7 S3 ME3LA4** | 296 | **A804_214.7 P100 BE100LA4** | 297 |
| **6.9** | 2731 | 1.0 | 208.7 | 30000 | **A604_208.7 S3 ME3LA4** | 289 | **A604_208.7 P100 BE100LA4** | 290 |
| **7.7** | 2485 | 1.1 | 185.8 | 30000 | **A603_185.8 S3 ME3LA4** | 289 | **A603_185.8 P100 BE100LA4** | 290 |
| **7.8** | 2406 | 2.1 | 183.9 | 50000 | **A704_183.9 S3 ME3LA4** | 293 | **A704_183.9 P100 BE100LA4** | 294 |
| **8.3** | 2294 | 1.2 | 171.5 | 30000 | **A603_171.5 S3 ME3LA4** | 289 | **A603_171.5 P100 BE100LA4** | 290 |
| **8.3** | 2241 | 3.6 | 171.3 | 65000 | **A804_171.3 S3 ME3LA4** | 296 | **A804_171.3 P100 BE100LA4** | 297 |
| **8.4** | 2221 | 2.3 | 169.8 | 50000 | **A704_169.8 S3 ME3LA4** | 293 | **A704_169.8 P100 BE100LA4** | 294 |
| **8.9** | 2146 | 0.9 | 160.4 | 30000 | **A553_160.4 S3 ME3LA4** | 285 | **A553_160.4 P100 BE100LA4** | 286 |
| **9.2** | 2087 | 1.3 | 156.0 | 30000 | **A603_156.0 S3 ME3LA4** | 289 | **A603_156.0 P100 BE100LA4** | 290 |



# 2.2 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **9.3** | 2056 | 2.0 | 153.7 | 50000 | **A703_153.7 S3 ME3LA4** | 293 | **A703_153.7 P100 BE100LA4** | 294 |
| **9.7** | 1964 | 1.0 | 146.8 | 30000 | **A553_146.8 S3 ME3LA4** | 285 | **A553_146.8 P100 BE100LA4** | 286 |
| **9.9** | 1927 | 1.5 | 144.0 | 30000 | **A603_144.0 S3 ME3LA4** | 289 | **A603_144.0 P100 BE100LA4** | 290 |
| **10.1** | 1898 | 2.6 | 141.9 | 50000 | **A703_141.9 S3 ME3LA4** | 293 | **A703_141.9 P100 BE100LA4** | 294 |
| **10.7** | 1783 | 1.6 | 133.3 | 30000 | **A603_133.3 S3 ME3LA4** | 289 | **A603_133.3 P100 BE100LA4** | 290 |
| **10.8** | 1776 | 1.1 | 132.7 | 30000 | **A553_132.7 S3 ME3LA4** | 285 | **A553_132.7 P100 BE100LA4** | 286 |
| **10.9** | 1748 | 2.9 | 130.7 | 50000 | **A703_130.7 S3 ME3LA4** | 293 | **A703_130.7 P100 BE100LA4** | 294 |
| **11.5** | 1657 | 1.2 | 123.9 | 30000 | **A553_123.9 S3 ME3LA4** | 285 | **A553_123.9 P100 BE100LA4** | 286 |
| **11.6** | 1646 | 1.7 | 123.0 | 30000 | **A603_123.0 S3 ME3LA4** | 289 | **A603_123.0 P100 BE100LA4** | 290 |
| **11.9** | 1613 | 3.1 | 120.6 | 50000 | **A703_120.6 S3 ME3LA4** | 293 | **A703_120.6 P100 BE100LA4** | 294 |
| **12.1** | 1578 | 1.0 | 118.0 | 20000 | **A503_118.0 S3 ME3LA4** | 281 | **A503_118.0 P100 BE100LA4** | 282 |
| **13.1** | 1464 | 1.0 | 109.4 | 20000 | **A503_109.4 S3 ME3LA4** | 281 | **A503_109.4 P100 BE100LA4** | 282 |
| **13.3** | 1442 | 1.9 | 107.8 | 30000 | **A603_107.8 S3 ME3LA4** | 289 | **A603_107.8 P100 BE100LA4** | 290 |
| **13.7** | 1394 | 3.6 | 104.2 | 50000 | **A703_104.2 S3 ME3LA4** | 293 | **A703_104.2 P100 BE100LA4** | 294 |
| **14.1** | 1356 | 1.5 | 101.4 | 30000 | **A553_101.4 S3 ME3LA4** | 285 | **A553_101.4 P100 BE100LA4** | 286 |
| **14.4** | 1331 | 1.1 | 99.5 | 20000 | **A503_99.5 S3 ME3LA4** | 281 | **A503_99.5 P100 BE100LA4** | 282 |
| **14.4** | 1331 | 2.1 | 99.5 | 30000 | **A603_99.5 S3 ME3LA4** | 289 | **A603_99.5 P100 BE100LA4** | 290 |
| **16.0** | 1198 | 1.3 | 89.5 | 19800 | **A503_89.5 S3 ME3LA4** | 281 | **A503_89.5 P100 BE100LA4** | 282 |
| **16.6** | 1155 | 2.4 | 86.4 | 30000 | **A603_86.4 S3 ME3LA4** | 289 | **A603_86.4 P100 BE100LA4** | 290 |
| **17.6** | 1090 | 1.4 | 81.5 | 19600 | **A503_81.5 S3 ME3LA4** | 281 | **A503_81.5 P100 BE100LA4** | 282 |
| **17.9** | 1066 | 2.6 | 79.7 | 30000 | **A603_79.7 S3 ME3LA4** | 289 | **A603_79.7 P100 BE100LA4** | 290 |
| **18.0** | 1064 | 1.9 | 79.5 | 30000 | **A553_79.5 S3 ME3LA4** | 285 | **A553_79.5 P100 BE100LA4** | 286 |
| **20.3** | 942 | 3.0 | 70.4 | 30000 | **A603_70.4 S3 ME3LA4** | 289 | **A603_70.4 P100 BE100LA4** | 290 |
| **20.4** | 940 | 1.6 | 70.2 | 19300 | **A503_70.2 S3 ME3LA4** | 281 | **A503_70.2 P100 BE100LA4** | 282 |
| **22.0** | 869 | 3.2 | 65.0 | 30000 | **A603_65.0 S3 ME3LA4** | 289 | **A603_65.0 P100 BE100LA4** | 290 |
| **22.2** | 860 | 2.3 | 64.3 | 30000 | **A553_64.3 S3 ME3LA4** | 285 | **A553_64.3 P100 BE100LA4** | 286 |
| **22.3** | 887 | 1.0 | 64.2 | 14500 | **A412_64.2 S3 ME3LA4** | 277 | **A412_64.2 P100 BE100LA4** | 278 |
| **22.4** | 855 | 1.8 | 63.9 | 19000 | **A503_63.9 S3 ME3LA4** | 281 | **A503_63.9 P100 BE100LA4** | 282 |
| **24.3** | 813 | 1.0 | 58.8 | 14400 | **A412_58.8 S3 ME3LA4** | 277 | **A412_58.8 P100 BE100LA4** | 278 |
| **25.2** | 760 | 2.0 | 56.8 | 18600 | **A503_56.8 S3 ME3LA4** | 281 | **A503_56.8 P100 BE100LA4** | 282 |
| **26.9** | 734 | 1.2 | 53.1 | 14100 | **A412_53.1 S3 ME3LA4** | 277 | **A412_53.1 P100 BE100LA4** | 278 |
| **27.7** | 691 | 2.2 | 51.7 | 18300 | **A503_51.7 S3 ME3LA4** | 281 | **A503_51.7 P100 BE100LA4** | 282 |
| **28.1** | 682 | 2.9 | 51.0 | 30000 | **A553_51.0 S3 ME3LA4** | 285 | **A553_51.0 P100 BE100LA4** | 286 |
| **29.1** | 678 | 0.9 | 49.1 | 9900 | **A352_49.1 S3 ME3LA4** | 273 | **A352_49.1 P100 BE100LA4** | 274 |
| **29.6** | 667 | 1.3 | 48.3 | 13900 | **A412_48.3 S3 ME3LA4** | 277 | **A412_48.3 P100 BE100LA4** | 278 |
| **31** | 633 | 0.9 | 45.8 | 9840 | **A352_45.8 S3 ME3LA4** | 273 | **A352_45.8 P100 BE100LA4** | 274 |
| **32** | 623 | 1.3 | 45.1 | 13700 | **A412_45.1 S3 ME3LA4** | 277 | **A412_45.1 P100 BE100LA4** | 278 |
| **32** | 602 | 2.5 | 45.0 | 17900 | **A503_45.0 S3 ME3LA4** | 281 | **A503_45.0 P100 BE100LA4** | 282 |
| **34** | 577 | 1.0 | 41.8 | 9750 | **A352_41.8 S3 ME3LA4** | 273 | **A352_41.8 P100 BE100LA4** | 274 |
| **35** | 548 | 2.7 | 40.9 | 17500 | **A503_40.9 S3 ME3LA4** | 281 | **A503_40.9 P100 BE100LA4** | 282 |
| **39** | 506 | 1.2 | 36.6 | 9600 | **A352_36.6 S3 ME3LA4** | 273 | **A352_36.6 P100 BE100LA4** | 274 |
| **40** | 496 | 1.6 | 35.9 | 13100 | **A412_35.9 S3 ME3LA4** | 277 | **A412_35.9 P100 BE100LA4** | 278 |
| **40** | 476 | 3.1 | 35.6 | 17000 | **A503_35.6 S3 ME3LA4** | 281 | **A503_35.6 P100 BE100LA4** | 282 |
| **43** | 462 | 0.9 | 33.4 | 5050 | **A302_33.4 S3 ME3LA4** | 269 | **A302_33.4 P100 BE100LA4** | 270 |
| **43** | 458 | 1.3 | 33.2 | 9460 | **A352_33.2 S3 ME3LA4** | 273 | **A352_33.2 P100 BE100LA4** | 274 |
| **44** | 433 | 3.5 | 32.4 | 16600 | **A503_32.4 S3 ME3LA4** | 281 | **A503_32.4 P100 BE100LA4** | 282 |
| **49** | 405 | 1.0 | 29.3 | 5380 | **A302_29.3 S3 ME3LA4** | 269 | **A302_29.3 P100 BE100LA4** | 270 |
| **50** | 393 | 1.5 | 28.4 | 9230 | **A352_28.4 S3 ME3LA4** | 273 | **A352_28.4 P100 BE100LA4** | 274 |
| **50** | 391 | 1.9 | 28.3 | 12400 | **A412_28.3 S3 ME3LA4** | 277 | **A412_28.3 P100 BE100LA4** | 278 |
| **54** | 367 | 1.1 | 26.5 | 5350 | **A302_26.5 S3 ME3LA4** | 269 | **A302_26.5 P100 BE100LA4** | 270 |
| **56** | 355 | 1.7 | 25.7 | 9070 | **A352_25.7 S3 ME3LA4** | 273 | **A352_25.7 P100 BE100LA4** | 274 |
| **63** | 314 | 1.3 | 22.8 | 5290 | **A302_22.8 S3 ME3LA4** | 269 | **A302_22.8 P100 BE100LA4** | 270 |
| **63** | 313 | 2.2 | 22.7 | 11700 | **A412_22.7 S3 ME3LA4** | 277 | **A412_22.7 P100 BE100LA4** | 278 |
| **64** | 311 | 1.9 | 22.5 | 8840 | **A352_22.5 S3 ME3LA4** | 273 | **A352_22.5 P100 BE100LA4** | 274 |
| **70** | 284 | 1.4 | 20.5 | 5230 | **A302_20.5 S3 ME3LA4** | 269 | **A302_20.5 P100 BE100LA4** | 270 |
| **70** | 282 | 2.1 | 20.4 | 8660 | **A352_20.4 S3 ME3LA4** | 273 | **A352_20.4 P100 BE100LA4** | 274 |
| **79** | 250 | 1.0 | 18.1 | 3140 | **A202_18.1 S3 ME3LA4** | 265 | **A202_18.1 P100 BE100LA4** | 266 |

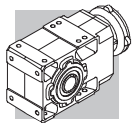


## 2.2 kW

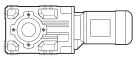
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **80** | 249 | 1.6 | 18.0 | 5140 | **A302_18.0 S3 ME3LA4** | 269 | **A302_18.0 P100 BE100LA4** | 270 |
| **81** | 245 | 2.6 | 17.8 | 11000 | **A412_17.8 S3 ME3LA4** | 277 | **A412_17.8 P100 BE100LA4** | 278 |
| **84** | 234 | 2.6 | 17.0 | 8320 | **A352_17.0 S3 ME3LA4** | 273 | **A352_17.0 P100 BE100LA4** | 274 |
| **88** | 226 | 1.7 | 16.3 | 5060 | **A302_16.3 S3 ME3LA4** | 269 | **A302_16.3 P100 BE100LA4** | 270 |
| **88** | 223 | 1.1 | 16.2 | 3140 | **A202_16.2 S3 ME3LA4** | 265 | **A202_16.2 P100 BE100LA4** | 266 |
| **89** | 222 | 2.7 | 16.1 | 10800 | **A412_16.1 S3 ME3LA4** | 277 | **A412_16.1 P100 BE100LA4** | 278 |
| **92** | 214 | 2.8 | 15.5 | 8150 | **A352_15.5 S3 ME3LA4** | 273 | **A352_15.5 P100 BE100LA4** | 274 |
| **102** | 194 | 1.3 | 14.1 | 3120 | **A202_14.1 S3 ME3LA4** | 265 | **A202_14.1 P100 BE100LA4** | 266 |
| **104** | 190 | 3.1 | 13.8 | 10300 | **A412_13.8 S3 ME3LA4** | 277 | **A412_13.8 P100 BE100LA4** | 278 |
| **105** | 187 | 2.0 | 13.6 | 4900 | **A302_13.6 S3 ME3LA4** | 269 | **A302_13.6 P100 BE100LA4** | 270 |
| **109** | 181 | 3.3 | 13.1 | 7820 | **A352_13.1 S3 ME3LA4** | 273 | **A352_13.1 P100 BE100LA4** | 274 |
| **120** | 165 | 1.3 | 12.0 | 3070 | **A202_12.0 S3 ME3LA4** | 265 | **A202_12.0 P100 BE100LA4** | 266 |
| **121** | 163 | 1.8 | 11.8 | 4750 | **A302_11.8 S3 ME3LA4** | 269 | **A302_11.8 P100 BE100LA4** | 270 |
| **121** | 163 | 2.5 | 11.8 | 7710 | **A352_11.8 S3 ME3LA4** | 273 | **A352_11.8 P100 BE100LA4** | 274 |
| **122** | 162 | 3.4 | 11.7 | 9870 | **A412_11.7 S3 ME3LA4** | 277 | **A412_11.7 P100 BE100LA4** | 278 |
| **124** | 159 | 2.0 | 23.1 | 3070 | **A202_23.1 S3 ME3LA2** | 265 | **A202_23.1 P90 BE90L2** | 266 |
| **134** | 147 | 2.7 | 10.6 | 7510 | **A352_10.6 S3 ME3LA4** | 273 | **A352_10.6 P100 BE100LA4** | 274 |
| **135** | 146 | 1.0 | 10.6 | 2600 | **A102_10.6 S3 ME3LA4** | 261 | **A102_10.6 P100 BE100LA4** | 262 |
| **137** | 144 | 2.4 | 10.5 | 4660 | **A302_10.5 S3 ME3LA4** | 269 | **A302_10.5 P100 BE100LA4** | 270 |
| **138** | 143 | 1.6 | 10.3 | 3030 | **A202_10.3 S3 ME3LA4** | 265 | **A202_10.3 P100 BE100LA4** | 266 |
| **149** | 133 | 1.1 | 9.6 | 2580 | **A102_9.6 S3 ME3LA4** | 261 | **A102_9.6 P100 BE100LA4** | 262 |
| **153** | 130 | 1.6 | 9.4 | 2980 | **A202_9.4 S3 ME3LA4** | 265 | **A202_9.4 P100 BE100LA4** | 266 |
| **154** | 129 | 2.3 | 9.3 | 4530 | **A302_9.3 S3 ME3LA4** | 269 | **A302_9.3 P100 BE100LA4** | 270 |
| **154** | 129 | 3.1 | 9.3 | 7240 | **A352_9.3 S3 ME3LA4** | 273 | **A352_9.3 P100 BE100LA4** | 274 |
| **168** | 118 | 1.2 | 8.5 | 3050 | **A102_8.5 S3 ME3LA4** | 261 | **A102_8.5 P100 BE100LA4** | 262 |
| **169** | 117 | 2.6 | 8.5 | 4430 | **A302_8.5 S3 ME3LA4** | 269 | **A302_8.5 P100 BE100LA4** | 270 |
| **169** | 117 | 3.3 | 8.5 | 7060 | **A352_8.5 S3 ME3LA4** | 273 | **A352_8.5 P100 BE100LA4** | 274 |
| **171** | 116 | 1.8 | 8.4 | 2930 | **A202_8.4 S3 ME3LA4** | 265 | **A202_8.4 P100 BE100LA4** | 266 |
| **196** | 101 | 2.1 | 7.3 | 2860 | **A202_7.3 S3 ME3LA4** | 265 | **A202_7.3 P100 BE100LA4** | 266 |
| **198** | 100 | 1.4 | 7.2 | 2520 | **A102_7.2 S3 ME3LA4** | 261 | **A102_7.2 P100 BE100LA4** | 262 |
| **204** | 97 | 3.1 | 7.0 | 4240 | **A302_7.0 S3 ME3LA4** | 269 | **A302_7.0 P100 BE100LA4** | 270 |
| **219** | 90 | 2.3 | 6.5 | 2810 | **A202_6.5 S3 ME3LA4** | 265 | **A202_6.5 P100 BE100LA4** | 266 |
| **223** | 89 | 3.4 | 6.4 | 4150 | **A302_6.4 S3 ME3LA4** | 269 | **A302_6.4 P100 BE100LA4** | 270 |
| **226** | 88 | 1.6 | 6.3 | 2950 | **A102_6.3 S3 ME3LA4** | 261 | **A102_6.3 P100 BE100LA4** | 262 |
| **262** | 76 | 1.9 | 5.5 | 2430 | **A102_5.5 S3 ME3LA4** | 261 | **A102_5.5 P100 BE100LA4** | 262 |
| **267** | 74 | 2.8 | 5.4 | 2700 | **A202_5.4 S3 ME3LA4** | 265 | **A202_5.4 P100 BE100LA4** | 266 |
| **306** | 65 | 3.2 | 9.4 | 2620 | **A202_9.4 S3 ME3LA2** | 265 | **A202_9.4 P90 BE90L2** | 266 |

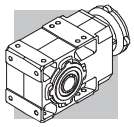
## 3 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **1.7** | 15399 | 0.9 | 865.1 | 75000 | **A904_865.1 S3 ME3LB4** | 299 | **A904_865.1 P100 BE100LB4** | 300 |
| **1.9** | 13651 | 1.0 | 766.9 | 75000 | **A904_766.9 S3 ME3LB4** | 299 | **A904_766.9 P100 BE100LB4** | 300 |
| **2.0** | 12601 | 1.1 | 707.9 | 75000 | **A904_707.9 S3 ME3LB4** | 299 | **A904_707.9 P100 BE100LB4** | 300 |
| **2.4** | 10708 | 1.3 | 601.6 | 75000 | **A904_601.6 S3 ME3LB4** | 299 | **A904_601.6 P100 BE100LB4** | 300 |
| **2.6** | 9884 | 1.4 | 555.3 | 75000 | **A904_555.3 S3 ME3LB4** | 299 | **A904_555.3 P100 BE100LB4** | 300 |
| **3.0** | 8661 | 1.6 | 486.6 | 75000 | **A904_486.6 S3 ME3LB4** | 299 | **A904_486.6 P100 BE100LB4** | 300 |
| **3.0** | 8525 | 0.9 | 478.9 | 65000 | **A804_478.9 S3 ME3LB4** | 296 | **A804_478.9 P100 BE100LB4** | 297 |
| **3.2** | 7995 | 1.8 | 449.2 | 75000 | **A904_449.2 S3 ME3LB4** | 299 | **A904_449.2 P100 BE100LB4** | 300 |
| **3.3** | 7869 | 1.0 | 442.1 | 65000 | **A804_442.1 S3 ME3LB4** | 296 | **A804_442.1 P100 BE100LB4** | 297 |
| **3.7** | 6861 | 2.0 | 385.4 | 75000 | **A904_385.4 S3 ME3LB4** | 299 | **A904_385.4 P100 BE100LB4** | 300 |
| **3.8** | 6826 | 1.2 | 383.5 | 65000 | **A804_383.5 S3 ME3LB4** | 296 | **A804_383.5 P100 BE100LB4** | 297 |
| **4.0** | 6333 | 2.2 | 355.8 | 75000 | **A904_355.8 S3 ME3LB4** | 299 | **A904_355.8 P100 BE100LB4** | 300 |



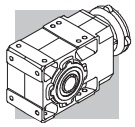
# 3 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **4.1** | 6301 | 1.3 | 354.0 | 65000 | **A804_354.0 S3 ME3LB4** | 296 | **A804_354.0 P100 BE100LB4** | 297 |
| **4.6** | 5631 | 0.9 | 316.4 | 50000 | **A704_316.4 S3 ME3LB4** | 293 | **A704_316.4 P100 BE100LB4** | 294 |
| **4.7** | 5427 | 2.6 | 304.9 | 75000 | **A904_304.9 S3 ME3LB4** | 299 | **A904_304.9 P100 BE100LB4** | 300 |
| **4.8** | 5347 | 1.5 | 300.4 | 65000 | **A804_300.4 S3 ME3LB4** | 296 | **A804_300.4 P100 BE100LB4** | 297 |
| **4.9** | 5198 | 1.0 | 292.0 | 50000 | **A704_292.0 S3 ME3LB4** | 293 | **A704_292.0 P100 BE100LB4** | 294 |
| **5.1** | 5010 | 2.8 | 281.4 | 75000 | **A904_281.4 S3 ME3LB4** | 299 | **A904_281.4 P100 BE100LB4** | 300 |
| **5.2** | 4936 | 1.6 | 277.3 | 65000 | **A804_277.3 S3 ME3LB4** | 296 | **A804_277.3 P100 BE100LB4** | 297 |
| **6.0** | 4247 | 1.2 | 238.6 | 50000 | **A704_238.6 S3 ME3LB4** | 293 | **A704_238.6 P100 BE100LB4** | 294 |
| **6.2** | 4141 | 1.9 | 232.6 | 65000 | **A804_232.6 S3 ME3LB4** | 296 | **A804_232.6 P100 BE100LB4** | 297 |
| **6.4** | 4030 | 3.5 | 226.4 | 75000 | **A904_226.4 S3 ME3LB4** | 299 | **A904_226.4 P100 BE100LB4** | 300 |
| **6.5** | 3921 | 1.3 | 220.3 | 50000 | **A704_220.3 S3 ME3LB4** | 293 | **A704_220.3 P100 BE100LB4** | 294 |
| **6.7** | 3822 | 2.1 | 214.7 | 65000 | **A804_214.7 S3 ME3LB4** | 296 | **A804_214.7 P100 BE100LB4** | 297 |
| **7.8** | 3273 | 1.5 | 183.9 | 50000 | **A704_183.9 S3 ME3LB4** | 293 | **A704_183.9 P100 BE100LB4** | 294 |
| **8.4** | 3121 | 0.9 | 171.5 | 30000 | **A603_171.5 S3 ME3LB4** | 289 | **A603_171.5 P100 BE100LB4** | 290 |
| **8.4** | 3049 | 2.6 | 171.3 | 65000 | **A804_171.3 S3 ME3LB4** | 296 | **A804_171.3 P100 BE100LB4** | 297 |
| **8.5** | 3022 | 1.7 | 169.8 | 50000 | **A704_169.8 S3 ME3LB4** | 293 | **A704_169.8 P100 BE100LB4** | 294 |
| **9.2** | 2854 | 2.8 | 156.8 | 65000 | **A803_156.8 S3 ME3LB4** | 296 | **A803_156.8 P100 BE100LB4** | 297 |
| **9.2** | 2840 | 1.0 | 156.0 | 30000 | **A603_156.0 S3 ME3LB4** | 289 | **A603_156.0 P100 BE100LB4** | 290 |
| **9.4** | 2797 | 1.4 | 153.7 | 50000 | **A703_153.7 S3 ME3LB4** | 293 | **A703_153.7 P100 BE100LB4** | 294 |
| **9.9** | 2634 | 3.0 | 144.7 | 65000 | **A803_144.7 S3 ME3LB4** | 296 | **A803_144.7 P100 BE100LB4** | 297 |
| **10.0** | 2622 | 1.1 | 144.0 | 30000 | **A603_144.0 S3 ME3LB4** | 289 | **A603_144.0 P100 BE100LB4** | 290 |
| **10.2** | 2582 | 1.9 | 141.9 | 50000 | **A703_141.9 S3 ME3LB4** | 293 | **A703_141.9 P100 BE100LB4** | 294 |
| **10.8** | 2426 | 1.2 | 133.3 | 30000 | **A603_133.3 S3 ME3LB4** | 289 | **A603_133.3 P100 BE100LB4** | 290 |
| **11.0** | 2378 | 2.1 | 130.7 | 50000 | **A703_130.7 S3 ME3LB4** | 293 | **A703_130.7 P100 BE100LB4** | 294 |
| **11.5** | 2286 | 3.5 | 125.6 | 65000 | **A803_125.6 S3 ME3LB4** | 296 | **A803_125.6 P100 BE100LB4** | 297 |
| **11.6** | 2255 | 0.9 | 123.9 | 30000 | **A553_123.9 S3 ME3LB4** | 285 | **A553_123.9 P100 BE100LB4** | 286 |
| **11.7** | 2239 | 1.3 | 123.0 | 30000 | **A603_123.0 S3 ME3LB4** | 289 | **A603_123.0 P100 BE100LB4** | 290 |
| **11.9** | 2195 | 2.3 | 120.6 | 50000 | **A703_120.6 S3 ME3LB4** | 293 | **A703_120.6 P100 BE100LB4** | 294 |
| **13.4** | 1962 | 1.4 | 107.8 | 30000 | **A603_107.8 S3 ME3LB4** | 289 | **A603_107.8 P100 BE100LB4** | 290 |
| **13.8** | 1897 | 2.6 | 104.2 | 50000 | **A703_104.2 S3 ME3LB4** | 293 | **A703_104.2 P100 BE100LB4** | 294 |
| **14.2** | 1845 | 1.1 | 101.4 | 30000 | **A553_101.4 S3 ME3LB4** | 285 | **A553_101.4 P100 BE100LB4** | 286 |
| **14.5** | 1811 | 1.5 | 99.5 | 30000 | **A603_99.5 S3 ME3LB4** | 289 | **A603_99.5 P100 BE100LB4** | 290 |
| **15.0** | 1751 | 2.9 | 96.2 | 50000 | **A703_96.2 S3 ME3LB4** | 293 | **A703_96.2 P100 BE100LB4** | 294 |
| **16.1** | 1630 | 0.9 | 89.5 | 17100 | **A503_89.5 S3 ME3LB4** | 281 | **A503_89.5 P100 BE100LB4** | 282 |
| **16.7** | 1572 | 1.8 | 86.4 | 30000 | **A603_86.4 S3 ME3LB4** | 289 | **A603_86.4 P100 BE100LB4** | 290 |
| **16.8** | 1564 | 3.2 | 85.9 | 50000 | **A703_85.9 S3 ME3LB4** | 293 | **A703_85.9 P100 BE100LB4** | 294 |
| **17.7** | 1482 | 1.0 | 81.5 | 17200 | **A503_81.5 S3 ME3LB4** | 281 | **A503_81.5 P100 BE100LB4** | 282 |
| **18.1** | 1451 | 1.9 | 79.7 | 30000 | **A603_79.7 S3 ME3LB4** | 289 | **A603_79.7 P100 BE100LB4** | 290 |
| **18.1** | 1447 | 1.4 | 79.5 | 30000 | **A553_79.5 S3 ME3LB4** | 285 | **A553_79.5 P100 BE100LB4** | 286 |
| **18.2** | 1444 | 3.5 | 79.3 | 50000 | **A703_79.3 S3 ME3LB4** | 293 | **A703_79.3 P100 BE100LB4** | 294 |
| **20.5** | 1281 | 2.2 | 70.4 | 30000 | **A603_70.4 S3 ME3LB4** | 289 | **A603_70.4 P100 BE100LB4** | 290 |
| **20.5** | 1278 | 1.2 | 70.2 | 17200 | **A503_70.2 S3 ME3LB4** | 281 | **A503_70.2 P100 BE100LB4** | 282 |
| **22.2** | 1183 | 2.4 | 65.0 | 30000 | **A603_65.0 S3 ME3LB4** | 289 | **A603_65.0 P100 BE100LB4** | 290 |
| **22.4** | 1171 | 1.7 | 64.3 | 30000 | **A553_64.3 S3 ME3LB4** | 285 | **A553_64.3 P100 BE100LB4** | 286 |
| **22.5** | 1163 | 1.3 | 63.9 | 17100 | **A503_63.9 S3 ME3LB4** | 281 | **A503_63.9 P100 BE100LB4** | 282 |
| **25.3** | 1034 | 1.5 | 56.8 | 17000 | **A503_56.8 S3 ME3LB4** | 281 | **A503_56.8 P100 BE100LB4** | 282 |
| **25.9** | 1012 | 2.8 | 55.6 | 30000 | **A603_55.6 S3 ME3LB4** | 289 | **A603_55.6 P100 BE100LB4** | 290 |
| **27.9** | 941 | 1.6 | 51.7 | 16800 | **A503_51.7 S3 ME3LB4** | 281 | **A503_51.7 P100 BE100LB4** | 282 |
| **28.1** | 934 | 3.0 | 51.3 | 30000 | **A603_51.3 S3 ME3LB4** | 289 | **A603_51.3 P100 BE100LB4** | 290 |
| **28.3** | 927 | 2.2 | 51.0 | 30000 | **A553_51.0 S3 ME3LB4** | 285 | **A553_51.0 P100 BE100LB4** | 286 |
| **29.8** | 908 | 0.9 | 48.3 | 12700 | **A412_48.3 S3 ME3LB4** | 277 | **A412_48.3 P100 BE100LB4** | 278 |
| **32** | 822 | 3.4 | 45.2 | 30000 | **A603_45.2 S3 ME3LB4** | 289 | **A603_45.2 P100 BE100LB4** | 290 |
| **32** | 847 | 1.0 | 45.1 | 12600 | **A412_45.1 S3 ME3LB4** | 277 | **A412_45.1 P100 BE100LB4** | 278 |
| **32** | 819 | 1.8 | 45.0 | 16500 | **A503_45.0 S3 ME3LB4** | 281 | **A503_45.0 P100 BE100LB4** | 282 |
| **35** | 745 | 2.0 | 40.9 | 16300 | **A503_40.9 S3 ME3LB4** | 281 | **A503_40.9 P100 BE100LB4** | 282 |
| **36** | 734 | 2.7 | 40.3 | 30000 | **A553_40.3 S3 ME3LB4** | 285 | **A553_40.3 P100 BE100LB4** | 286 |
| **39** | 689 | 0.9 | 36.6 | 8550 | **A352_36.6 S3 ME3LB4** | 273 | **A352_36.6 P100 BE100LB4** | 274 |

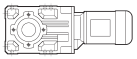


# 3 kW

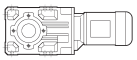
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **40** | 675 | 1.2 | 35.9 | 12200 | **A412_35.9 S3 ME3LB4** | 277 | **A412_35.9 P100 BE100LB4** | 278 |
| **40** | 648 | 2.3 | 35.6 | 16000 | **A503_35.6 S3 ME3LB4** | 281 | **A503_35.6 P100 BE100LB4** | 282 |
| **43** | 623 | 1.0 | 33.2 | 8520 | **A352_33.2 S3 ME3LB4** | 273 | **A352_33.2 P100 BE100LB4** | 274 |
| **44** | 589 | 2.5 | 32.4 | 15700 | **A503_32.4 S3 ME3LB4** | 281 | **A503_32.4 P100 BE100LB4** | 282 |
| **51** | 535 | 1.1 | 28.4 | 8420 | **A352_28.4 S3 ME3LB4** | 273 | **A352_28.4 P100 BE100LB4** | 274 |
| **51** | 532 | 1.4 | 28.3 | 11700 | **A412_28.3 S3 ME3LB4** | 277 | **A412_28.3 P100 BE100LB4** | 278 |
| **54** | 481 | 3.1 | 26.4 | 15100 | **A503_26.4 S3 ME3LB4** | 281 | **A503_26.4 P100 BE100LB4** | 282 |
| **56** | 483 | 1.2 | 25.7 | 8330 | **A352_25.7 S3 ME3LB4** | 273 | **A352_25.7 P100 BE100LB4** | 274 |
| **60** | 438 | 3.4 | 24.0 | 14800 | **A503_24.0 S3 ME3LB4** | 281 | **A503_24.0 P100 BE100LB4** | 282 |
| **63** | 428 | 1.0 | 22.8 | 4610 | **A302_22.8 S3 ME3LB4** | 269 | **A302_22.8 P100 BE100LB4** | 270 |
| **64** | 426 | 1.6 | 22.7 | 11200 | **A412_22.7 S3 ME3LB4** | 277 | **A412_22.7 P100 BE100LB4** | 278 |
| **64** | 423 | 1.4 | 22.5 | 8190 | **A352_22.5 S3 ME3LB4** | 273 | **A352_22.5 P100 BE100LB4** | 274 |
| **69** | 393 | 3.1 | 20.9 | 15500 | **A502_20.9 S3 ME3LB4** | 281 | **A502_20.9 P100 BE100LB4** | 282 |
| **70** | 386 | 1.1 | 20.5 | 4620 | **A302_20.5 S3 ME3LB4** | 269 | **A302_20.5 P100 BE100LB4** | 270 |
| **70** | 384 | 1.6 | 20.4 | 8080 | **A352_20.4 S3 ME3LB4** | 273 | **A352_20.4 P100 BE100LB4** | 274 |
| **80** | 338 | 1.2 | 18.0 | 4600 | **A302_18.0 S3 ME3LB4** | 269 | **A302_18.0 P100 BE100LB4** | 270 |
| **81** | 334 | 1.9 | 17.8 | 10600 | **A412_17.8 S3 ME3LB4** | 277 | **A412_17.8 P100 BE100LB4** | 278 |
| **85** | 319 | 1.9 | 17.0 | 7830 | **A352_17.0 S3 ME3LB4** | 273 | **A352_17.0 P100 BE100LB4** | 274 |
| **88** | 307 | 1.3 | 16.3 | 4580 | **A302_16.3 S3 ME3LB4** | 269 | **A302_16.3 P100 BE100LB4** | 270 |
| **89** | 303 | 2.0 | 16.1 | 10400 | **A412_16.1 S3 ME3LB4** | 277 | **A412_16.1 P100 BE100LB4** | 278 |
| **93** | 291 | 2.1 | 15.5 | 7700 | **A352_15.5 S3 ME3LB4** | 273 | **A352_15.5 P100 BE100LB4** | 274 |
| **102** | 265 | 0.9 | 14.1 | 2650 | **A202_14.1 S3 ME3LB4** | 265 | **A202_14.1 P100 BE100LB4** | 266 |
| **105** | 259 | 2.3 | 13.8 | 9990 | **A412_13.8 S3 ME3LB4** | 277 | **A412_13.8 P100 BE100LB4** | 278 |
| **106** | 255 | 1.5 | 13.6 | 4500 | **A302_13.6 S3 ME3LB4** | 269 | **A302_13.6 P100 BE100LB4** | 270 |
| **110** | 246 | 2.4 | 13.1 | 7450 | **A352_13.1 S3 ME3LB4** | 273 | **A352_13.1 P100 BE100LB4** | 274 |
| **120** | 225 | 0.9 | 12.0 | 2670 | **A202_12.0 S3 ME3LB4** | 265 | **A202_12.0 P100 BE100LB4** | 266 |
| **122** | 221 | 1.4 | 11.8 | 4400 | **A302_11.8 S3 ME3LB4** | 269 | **A302_11.8 P100 BE100LB4** | 270 |
| **122** | 221 | 1.8 | 11.8 | 7410 | **A352_11.8 S3 ME3LB4** | 273 | **A352_11.8 P100 BE100LB4** | 274 |
| **123** | 221 | 2.5 | 11.7 | 9580 | **A412_11.7 S3 ME3LB4** | 277 | **A412_11.7 P100 BE100LB4** | 278 |
| **125** | 216 | 1.5 | 23.1 | 2690 | **A202_23.1 S3 ME3LB2** | 265 | **A202_23.1 P100 BE100L2** | 266 |
| **135** | 200 | 2.0 | 10.6 | 7230 | **A352_10.6 S3 ME3LB4** | 273 | **A352_10.6 P100 BE100LB4** | 274 |
| **138** | 197 | 1.7 | 10.5 | 4350 | **A302_10.5 S3 ME3LB4** | 269 | **A302_10.5 P100 BE100LB4** | 270 |
| **139** | 194 | 1.2 | 10.3 | 2690 | **A202_10.3 S3 ME3LB4** | 265 | **A202_10.3 P100 BE100LB4** | 266 |
| **142** | 190 | 2.8 | 10.1 | 9230 | **A412_10.1 S3 ME3LB4** | 277 | **A412_10.1 P100 BE100LB4** | 278 |
| **154** | 176 | 1.2 | 9.4 | 2670 | **A202_9.4 S3 ME3LB4** | 265 | **A202_9.4 P100 BE100LB4** | 266 |
| **155** | 175 | 1.7 | 9.3 | 4240 | **A302_9.3 S3 ME3LB4** | 269 | **A302_9.3 P100 BE100LB4** | 270 |
| **155** | 175 | 2.3 | 9.3 | 7000 | **A352_9.3 S3 ME3LB4** | 273 | **A352_9.3 P100 BE100LB4** | 274 |
| **157** | 173 | 3.2 | 9.2 | 8980 | **A412_9.2 S3 ME3LB4** | 277 | **A412_9.2 P100 BE100LB4** | 278 |
| **170** | 159 | 1.9 | 8.5 | 4170 | **A302_8.5 S3 ME3LB4** | 269 | **A302_8.5 P100 BE100LB4** | 270 |
| **170** | 159 | 2.4 | 8.5 | 6840 | **A352_8.5 S3 ME3LB4** | 273 | **A352_8.5 P100 BE100LB4** | 274 |
| **172** | 157 | 1.3 | 8.4 | 2650 | **A202_8.4 S3 ME3LB4** | 265 | **A202_8.4 P100 BE100LB4** | 266 |
| **173** | 157 | 3.5 | 8.3 | 8740 | **A412_8.3 S3 ME3LB4** | 277 | **A412_8.3 P100 BE100LB4** | 278 |
| **198** | 137 | 1.5 | 7.3 | 2620 | **A202_7.3 S3 ME3LB4** | 265 | **A202_7.3 P100 BE100LB4** | 266 |
| **200** | 136 | 1.0 | 7.2 | 2220 | **A102_7.2 S3 ME3LB4** | 261 | **A102_7.2 P100 BE100LB4** | 262 |
| **205** | 132 | 2.3 | 7.0 | 4030 | **A302_7.0 S3 ME3LB4** | 269 | **A302_7.0 P100 BE100LB4** | 270 |
| **205** | 132 | 2.8 | 7.0 | 6520 | **A352_7.0 S3 ME3LB4** | 273 | **A352_7.0 P100 BE100LB4** | 274 |
| **220** | 123 | 1.7 | 6.5 | 2590 | **A202_6.5 S3 ME3LB4** | 265 | **A202_6.5 P100 BE100LB4** | 266 |
| **225** | 121 | 2.5 | 6.4 | 3950 | **A302_6.4 S3 ME3LB4** | 269 | **A302_6.4 P100 BE100LB4** | 270 |
| **225** | 121 | 2.9 | 6.4 | 6360 | **A352_6.4 S3 ME3LB4** | 273 | **A352_6.4 P100 BE100LB4** | 274 |
| **227** | 119 | 1.2 | 6.3 | 2640 | **A102_6.3 S3 ME3LB4** | 261 | **A102_6.3 P100 BE100LB4** | 262 |
| **245** | 110 | 2.7 | 11.8 | 3870 | **A302_11.8 S3 ME3LB2** | 269 | **A302_11.8 P100 BE100L2** | 270 |
| **263** | 103 | 1.4 | 5.5 | 2200 | **A102_5.5 S3 ME3LB4** | 261 | **A102_5.5 P100 BE100LB4** | 262 |
| **266** | 102 | 2.9 | 5.4 | 3810 | **A302_5.4 S3 ME3LB4** | 269 | **A302_5.4 P100 BE100LB4** | 270 |
| **266** | 102 | 3.3 | 5.4 | 6070 | **A352_5.4 S3 ME3LB4** | 273 | **A352_5.4 P100 BE100LB4** | 274 |
| **269** | 101 | 2.1 | 5.4 | 2520 | **A202_5.4 S3 ME3LB4** | 265 | **A202_5.4 P100 BE100LB4** | 266 |
| **279** | 97 | 1.9 | 10.3 | 2500 | **A202_10.3 S3 ME3LB2** | 265 | **A202_10.3 P100 BE100L2** | 266 |
| **309** | 87 | 3.4 | 9.3 | 3670 | **A302_9.3 S3 ME3LB2** | 269 | **A302_9.3 P100 BE100L2** | 270 |

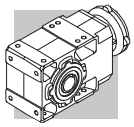


## 3 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **344** | 78 | 2.7 | 8.4 | 2410 | **A202_8.4 S3 ME3LB2** | 265 | **A202_8.4 P100 BE100L2** | 266 |
| **399** | 67 | 2.1 | 7.2 | 2090 | **A102_7.2 S3 ME3LB2** | 261 | **A102_7.2 P100 BE100L2** | 262 |
| **455** | 59 | 2.3 | 6.3 | 2430 | **A102_6.3 S3 ME3LB2** | 261 | **A102_6.3 P100 BE100L2** | 262 |
| **527** | 51 | 2.6 | 5.5 | 1990 | **A102_5.5 S3 ME3LB2** | 261 | **A102_5.5 P100 BE100L2** | 262 |

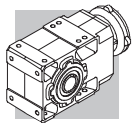
## 4 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **2.4** | 14456 | 1.0 | 601.6 | 75000 | **A904_601.6 S4 ME4SA4** | 299 | **A904_601.6 P112 BE112M4** | 300 |
| **2.6** | 13344 | 1.0 | 555.3 | 75000 | **A904_555.3 S4 ME4SA4** | 299 | **A904_555.3 P112 BE112M4** | 300 |
| **3.0** | 11693 | 1.2 | 486.6 | 75000 | **A904_486.6 S4 ME4SA4** | 299 | **A904_486.6 P112 BE112M4** | 300 |
| **3.2** | 10793 | 1.3 | 449.2 | 75000 | **A904_449.2 S4 ME4SA4** | 299 | **A904_449.2 P112 BE112M4** | 300 |
| **3.7** | 9262 | 1.5 | 385.4 | 75000 | **A904_385.4 S4 ME4SA4** | 299 | **A904_385.4 P112 BE112M4** | 300 |
| **3.8** | 9215 | 0.9 | 383.5 | 65000 | **A804_383.5 S4 ME4SA4** | 296 | **A804_383.5 P112 BE112M4** | 297 |
| **4.0** | 8550 | 1.6 | 355.8 | 75000 | **A904_355.8 S4 ME4SA4** | 299 | **A904_355.8 P112 BE112M4** | 300 |
| **4.1** | 8506 | 0.9 | 354.0 | 65000 | **A804_354.0 S4 ME4SA4** | 296 | **A804_354.0 P112 BE112M4** | 297 |
| **4.7** | 7326 | 1.9 | 304.9 | 75000 | **A904_304.9 S4 ME4SA4** | 299 | **A904_304.9 P112 BE112M4** | 300 |
| **4.8** | 7218 | 1.1 | 300.4 | 65000 | **A804_300.4 S4 ME4SA4** | 296 | **A804_300.4 P112 BE112M4** | 297 |
| **5.1** | 6763 | 2.1 | 281.4 | 75000 | **A904_281.4 S4 ME4SA4** | 299 | **A904_281.4 P112 BE112M4** | 300 |
| **5.2** | 6663 | 1.2 | 277.3 | 65000 | **A804_277.3 S4 ME4SA4** | 296 | **A804_277.3 P112 BE112M4** | 297 |
| **6.0** | 5734 | 0.9 | 238.6 | 50000 | **A704_238.6 S4 ME4SA4** | 293 | **A704_238.6 P112 BE112M4** | 294 |
| **6.2** | 5590 | 1.4 | 232.6 | 65000 | **A804_232.6 S4 ME4SA4** | 296 | **A804_232.6 P112 BE112M4** | 297 |
| **6.4** | 5441 | 2.6 | 226.4 | 75000 | **A904_226.4 S4 ME4SA4** | 299 | **A904_226.4 P112 BE112M4** | 300 |
| **6.5** | 5293 | 0.9 | 220.3 | 50000 | **A704_220.3 S4 ME4SA4** | 293 | **A704_220.3 P112 BE112M4** | 294 |
| **6.7** | 5160 | 1.6 | 214.7 | 65000 | **A804_214.7 S4 ME4SA4** | 296 | **A804_214.7 P112 BE112M4** | 297 |
| **6.9** | 5023 | 2.8 | 209.0 | 75000 | **A904_209.0 S4 ME4SA4** | 299 | **A904_209.0 P112 BE112M4** | 300 |
| **7.8** | 4419 | 1.1 | 183.9 | 50000 | **A704_183.9 S4 ME4SA4** | 293 | **A704_183.9 P112 BE112M4** | 294 |
| **8.0** | 4325 | 3.2 | 180.0 | 75000 | **A904_180.0 S4 ME4SA4** | 299 | **A904_180.0 P112 BE112M4** | 300 |
| **8.4** | 4116 | 1.9 | 171.3 | 65000 | **A804_171.3 S4 ME4SA4** | 296 | **A804_171.3 P112 BE112M4** | 297 |
| **8.5** | 4079 | 1.2 | 169.8 | 50000 | **A704_169.8 S4 ME4SA4** | 293 | **A704_169.8 P112 BE112M4** | 294 |
| **8.7** | 3992 | 3.5 | 166.1 | 75000 | **A904_166.1 S4 ME4SA4** | 299 | **A904_166.1 P112 BE112M4** | 300 |
| **9.2** | 3853 | 2.1 | 156.8 | 65000 | **A803_156.8 S4 ME4SA4** | 296 | **A803_156.8 P112 BE112M4** | 297 |
| **9.4** | 3776 | 1.1 | 153.7 | 50000 | **A703_153.7 S4 ME4SA4** | 293 | **A703_153.7 P112 BE112M4** | 294 |
| **9.9** | 3556 | 2.2 | 144.7 | 65000 | **A803_144.7 S4 ME4SA4** | 296 | **A803_144.7 P112 BE112M4** | 297 |
| **10.2** | 3486 | 1.4 | 141.9 | 50000 | **A703_141.9 S4 ME4SA4** | 293 | **A703_141.9 P112 BE112M4** | 294 |
| **11.0** | 3210 | 1.6 | 130.7 | 50000 | **A703_130.7 S4 ME4SA4** | 293 | **A703_130.7 P112 BE112M4** | 294 |
| **11.5** | 3086 | 2.6 | 125.6 | 65000 | **A803_125.6 S4 ME4SA4** | 296 | **A803_125.6 P112 BE112M4** | 297 |
| **11.7** | 3023 | 0.9 | 123.0 | 30000 | **A603_123.0 S4 ME4SA4** | 289 | **A603_123.0 P112 BE112M4** | 290 |
| **11.9** | 2964 | 1.7 | 120.6 | 50000 | **A703_120.6 S4 ME4SA4** | 293 | **A703_120.6 P112 BE112M4** | 294 |
| **12.4** | 2849 | 2.8 | 116.0 | 65000 | **A803_116.0 S4 ME4SA4** | 296 | **A803_116.0 P112 BE112M4** | 297 |
| **13.4** | 2649 | 1.1 | 107.8 | 30000 | **A603_107.8 S4 ME4SA4** | 289 | **A603_107.8 P112 BE112M4** | 290 |
| **13.8** | 2561 | 2.0 | 104.2 | 50000 | **A703_104.2 S4 ME4SA4** | 293 | **A703_104.2 P112 BE112M4** | 294 |
| **13.8** | 2556 | 3.1 | 104.0 | 65000 | **A803_104.0 S4 ME4SA4** | 296 | **A803_104.0 P112 BE112M4** | 297 |
| **14.5** | 2445 | 1.1 | 99.5 | 30000 | **A603_99.5 S4 ME4SA4** | 289 | **A603_99.5 P112 BE112M4** | 290 |
| **15.0** | 2364 | 2.1 | 96.2 | 50000 | **A703_96.2 S4 ME4SA4** | 293 | **A703_96.2 P112 BE112M4** | 294 |
| **15.0** | 2359 | 3.4 | 96.0 | 65000 | **A803_96.0 S4 ME4SA4** | 296 | **A803_96.0 P112 BE112M4** | 297 |
| **16.7** | 2122 | 1.3 | 86.4 | 30000 | **A603_86.4 S4 ME4SA4** | 289 | **A603_86.4 P112 BE112M4** | 290 |
| **16.8** | 2112 | 2.4 | 85.9 | 50000 | **A703_85.9 S4 ME4SA4** | 293 | **A703_85.9 P112 BE112M4** | 294 |
| **18.1** | 1959 | 1.4 | 79.7 | 30000 | **A603_79.7 S4 ME4SA4** | 289 | **A603_79.7 P112 BE112M4** | 290 |
| **18.1** | 1954 | 1.0 | 79.5 | 30000 | **A553_79.5 S4 ME4SA4** | 285 | **A553_79.5 P112 BE112M4** | 286 |
| **18.2** | 1949 | 2.6 | 79.3 | 50000 | **A703_79.3 S4 ME4SA4** | 293 | **A703_79.3 P112 BE112M4** | 294 |
| **19.9** | 1782 | 2.8 | 72.5 | 50000 | **A703_72.5 S4 ME4SA4** | 293 | **A703_72.5 P112 BE112M4** | 294 |
| **20.5** | 1730 | 1.6 | 70.4 | 30000 | **A603_70.4 S4 ME4SA4** | 289 | **A603_70.4 P112 BE112M4** | 290 |



# 4 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **21.5** | 1645 | 3.0 | 66.9 | 50000 | **A703_66.9 S4 ME4SA4** | 293 | **A703_66.9 P112 BE112M4** | 294 |
| **22.2** | 1597 | 1.8 | 65.0 | 30000 | **A603_65.0 S4 ME4SA4** | 289 | **A603_65.0 P112 BE112M4** | 290 |
| **22.4** | 1580 | 1.3 | 64.3 | 30000 | **A553_64.3 S4 ME4SA4** | 285 | **A553_64.3 P112 BE112M4** | 286 |
| **22.5** | 1570 | 1.0 | 63.9 | 14700 | **A503_63.9 S4 ME4SA4** | 281 | **A503_63.9 P112 BE112M4** | 282 |
| **25.3** | 1396 | 1.1 | 56.8 | 14800 | **A503_56.8 S4 ME4SA4** | 281 | **A503_56.8 P112 BE112M4** | 282 |
| **25.9** | 1366 | 2.0 | 55.6 | 30000 | **A603_55.6 S4 ME4SA4** | 289 | **A603_55.6 P112 BE112M4** | 290 |
| **27.9** | 1270 | 1.2 | 51.7 | 14900 | **A503_51.7 S4 ME4SA4** | 281 | **A503_51.7 P112 BE112M4** | 282 |
| **28.1** | 1261 | 2.2 | 51.3 | 30000 | **A603_51.3 S4 ME4SA4** | 289 | **A603_51.3 P112 BE112M4** | 290 |
| **28.3** | 1252 | 1.6 | 51.0 | 30000 | **A553_51.0 S4 ME4SA4** | 285 | **A553_51.0 P112 BE112M4** | 286 |
| **32** | 1110 | 2.5 | 45.2 | 30000 | **A603_45.2 S4 ME4SA4** | 289 | **A603_45.2 P112 BE112M4** | 290 |
| **32** | 1106 | 1.4 | 45.0 | 14900 | **A503_45.0 S4 ME4SA4** | 281 | **A503_45.0 P112 BE112M4** | 282 |
| **35** | 1025 | 2.7 | 41.7 | 30000 | **A603_41.7 S4 ME4SA4** | 289 | **A603_41.7 P112 BE112M4** | 290 |
| **35** | 1006 | 1.5 | 40.9 | 14800 | **A503_40.9 S4 ME4SA4** | 281 | **A503_40.9 P112 BE112M4** | 282 |
| **36** | 990 | 2.0 | 40.3 | 30000 | **A553_40.3 S4 ME4SA4** | 285 | **A553_40.3 P112 BE112M4** | 286 |
| **40** | 875 | 1.7 | 35.6 | 14700 | **A503_35.6 S4 ME4SA4** | 281 | **A503_35.6 P112 BE112M4** | 282 |
| **42** | 843 | 3.3 | 34.3 | 30000 | **A603_34.3 S4 ME4SA4** | 289 | **A603_34.3 P112 BE112M4** | 290 |
| **44** | 796 | 1.9 | 32.4 | 14500 | **A503_32.4 S4 ME4SA4** | 281 | **A503_32.4 P112 BE112M4** | 282 |
| **48** | 735 | 2.7 | 29.9 | 30000 | **A553_29.9 S4 ME4SA4** | 285 | **A553_29.9 P112 BE112M4** | 286 |
| **51** | 719 | 1.0 | 28.3 | 10900 | **A412_28.3 S4 ME4SA4** | 277 | **A412_28.3 P112 BE112M4** | 278 |
| **54** | 650 | 2.3 | 26.4 | 14100 | **A503_26.4 S4 ME4SA4** | 281 | **A503_26.4 P112 BE112M4** | 282 |
| **56** | 652 | 0.9 | 25.7 | 7420 | | | **A352_25.7 P112 BE112M4** | 274 |
| **60** | 591 | 2.5 | 24.0 | 13900 | **A503_24.0 S4 ME4SA4** | 281 | **A503_24.0 P112 BE112M4** | 282 |
| **61** | 585 | 3.3 | 23.8 | 30000 | **A553_23.8 S4 ME4SA4** | 285 | **A553_23.8 P112 BE112M4** | 286 |
| **64** | 576 | 1.2 | 22.7 | 10500 | **A412_22.7 S4 ME4SA4** | 277 | **A412_22.7 P112 BE112M4** | 278 |
| **64** | 571 | 1.1 | 22.5 | 7400 | | | **A352_22.5 P112 BE112M4** | 274 |
| **69** | 531 | 2.3 | 20.9 | 15100 | **A502_20.9 S4 ME4SA4** | 281 | **A502_20.9 P112 BE112M4** | 282 |
| **70** | 518 | 1.2 | 20.4 | 7360 | | | **A352_20.4 P112 BE112M4** | 274 |
| **80** | 456 | 0.9 | 18.0 | 3930 | | | **A302_18.0 P112 BE112M4** | 270 |
| **81** | 451 | 1.4 | 17.8 | 10100 | **A412_17.8 S4 ME4SA4** | 277 | **A412_17.8 P112 BE112M4** | 278 |
| **85** | 430 | 1.4 | 17.0 | 7240 | | | **A352_17.0 P112 BE112M4** | 274 |
| **87** | 421 | 2.9 | 16.6 | 14200 | **A502_16.6 S4 ME4SA4** | 281 | **A502_16.6 P112 BE112M4** | 282 |
| **88** | 415 | 0.9 | 16.3 | 3970 | | | **A302_16.3 P112 BE112M4** | 270 |
| **89** | 408 | 1.5 | 16.1 | 9940 | **A412_16.1 S4 ME4SA4** | 277 | **A412_16.1 P112 BE112M4** | 278 |
| **93** | 393 | 1.5 | 15.5 | 7160 | | | **A352_15.5 P112 BE112M4** | 274 |
| **105** | 349 | 1.7 | 13.8 | 9610 | **A412_13.8 S4 ME4SA4** | 277 | **A412_13.8 P112 BE112M4** | 278 |
| **106** | 344 | 1.1 | 13.6 | 4000 | | | **A302_13.6 P112 BE112M4** | 270 |
| **110** | 333 | 3.3 | 13.1 | 13300 | **A502_13.1 S4 ME4SA4** | 281 | **A502_13.1 P112 BE112M4** | 282 |
| **110** | 332 | 1.8 | 13.1 | 7000 | | | **A352_13.1 P112 BE112M4** | 274 |
| **122** | 299 | 1.0 | 11.8 | 3960 | | | **A302_11.8 P112 BE112M4** | 270 |
| **122** | 299 | 1.3 | 11.8 | 7050 | **A352_11.8 S4 ME4SA4** | 273 | **A352_11.8 P112 BE112M4** | 274 |
| **123** | 298 | 1.8 | 11.7 | 9260 | **A412_11.7 S4 ME4SA4** | 277 | **A412_11.7 P112 BE112M4** | 278 |
| **127** | 282 | 1.2 | 22.8 | 3980 | | | **A302_22.8 P112 BE112M2** | 270 |
| **135** | 270 | 1.5 | 10.6 | 6910 | **A352_10.6 S4 ME4SA4** | 273 | **A352_10.6 P112 BE112M4** | 274 |
| **138** | 265 | 1.3 | 10.5 | 3970 | | | **A302_10.5 P112 BE112M4** | 270 |
| **142** | 257 | 2.1 | 10.1 | 8960 | **A412_10.1 S4 ME4SA4** | 277 | **A412_10.1 P112 BE112M4** | 278 |
| **155** | 236 | 1.3 | 9.3 | 3900 | | | **A302_9.3 P112 BE112M4** | 270 |
| **155** | 236 | 1.7 | 9.3 | 6730 | **A352_9.3 S4 ME4SA4** | 273 | **A352_9.3 P112 BE112M4** | 274 |
| **157** | 233 | 2.4 | 9.2 | 8740 | **A412_9.2 S4 ME4SA4** | 277 | **A412_9.2 P112 BE112M4** | 278 |
| **170** | 215 | 1.4 | 8.5 | 3860 | | | **A302_8.5 P112 BE112M4** | 270 |
| **170** | 215 | 1.8 | 8.5 | 6590 | **A352_8.5 S4 ME4SA4** | 273 | **A352_8.5 P112 BE112M4** | 274 |
| **172** | 212 | 1.0 | 8.4 | 2300 | | | **A202_8.4 P112 BE112M4** | 266 |
| **173** | 211 | 2.6 | 8.3 | 8520 | **A412_8.3 S4 ME4SA4** | 277 | **A412_8.3 P112 BE112M4** | 278 |
| **198** | 185 | 1.1 | 7.3 | 2310 | | | **A202_7.3 P112 BE112M4** | 266 |
| **202** | 181 | 3.0 | 7.1 | 8180 | **A412_7.1 S4 ME4SA4** | 277 | **A412_7.1 P112 BE112M4** | 278 |
| **205** | 178 | 1.7 | 7.0 | 3770 | | | **A302_7.0 P112 BE112M4** | 270 |
| **205** | 178 | 2.1 | 7.0 | 6310 | **A352_7.0 S4 ME4SA4** | 273 | **A352_7.0 P112 BE112M4** | 274 |
| **220** | 166 | 1.3 | 6.5 | 2310 | | | **A202_6.5 P112 BE112M4** | 266 |

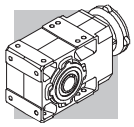


## 4 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **225** | 163 | 1.8 | 6.4 | 3720 | | | **A302_6.4 P112 BE112M4** | 270 |
| **225** | 163 | 2.2 | 6.4 | 6180 | **A352_6.4 S4 ME4SA4** | 273 | **A352_6.4 P112 BE112M4** | 274 |
| **263** | 139 | 1.0 | 5.5 | 1910 | **A102_5.5 S4 ME4SA4** | 261 | **A102_5.5 P112 BE112M4** | 262 |
| **266** | 137 | 2.2 | 5.4 | 3610 | | | **A302_5.4 P112 BE112M4** | 270 |
| **266** | 137 | 2.5 | 5.4 | 5920 | **A352_5.4 S4 ME4SA4** | 273 | **A352_5.4 P112 BE112M4** | 274 |
| **269** | 136 | 1.5 | 5.4 | 2300 | | | **A202_5.4 P112 BE112M4** | 266 |
| **273** | 132 | 3.0 | 10.6 | 5850 | **A352_10.6 S4 ME4SA2** | 273 | **A352_10.6 P112 BE112M2** | 274 |
| **311** | 115 | 3.5 | 9.3 | 5650 | **A352_9.3 S4 ME4SA2** | 273 | **A352_9.3 P112 BE112M2** | 274 |
| **346** | 104 | 2.1 | 8.4 | 2230 | | | **A202_8.4 P112 BE112M2** | 266 |
| **413** | 87 | 3.4 | 7.0 | 3280 | | | **A302_7.0 P112 BE112M2** | 270 |
| **458** | 78 | 1.8 | 6.3 | 2240 | | | **A102_6.3 P112 BE112M2** | 262 |
| **542** | 66 | 2.9 | 5.4 | 2080 | | | **A202_5.4 P112 BE112M2** | 266 |

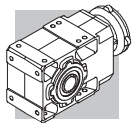
## 5.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **3.0** | 15590 | 0.9 | 486.6 | 75000 | **A904_486.6 S4 ME4SB4** | 299 | **A904_486.6 P132 BE132S4** | 300 |
| **3.3** | 14391 | 1.0 | 449.2 | 75000 | **A904_449.2 S4 ME4SB4** | 299 | **A904_449.2 P132 BE132S4** | 300 |
| **3.8** | 12350 | 1.1 | 385.4 | 75000 | **A904_385.4 S4 ME4SB4** | 299 | **A904_385.4 P132 BE132S4** | 300 |
| **4.1** | 11400 | 1.2 | 355.8 | 75000 | **A904_355.8 S4 ME4SB4** | 299 | **A904_355.8 P132 BE132S4** | 300 |
| **4.8** | 9769 | 1.4 | 304.9 | 75000 | **A904_304.9 S4 ME4SB4** | 299 | **A904_304.9 P132 BE132S4** | 300 |
| **5.2** | 9017 | 1.6 | 281.4 | 75000 | **A904_281.4 S4 ME4SB4** | 299 | **A904_281.4 P132 BE132S4** | 300 |
| **5.3** | 8884 | 0.9 | 277.3 | 65000 | **A804_277.3 S4 ME4SB4** | 296 | **A804_277.3 P132 BE132S4** | 297 |
| **6.3** | 7453 | 1.1 | 232.6 | 65000 | **A804_232.6 S4 ME4SB4** | 296 | **A804_232.6 P132 BE132S4** | 297 |
| **6.4** | 7255 | 1.9 | 226.4 | 75000 | **A904_226.4 S4 ME4SB4** | 299 | **A904_226.4 P132 BE132S4** | 300 |
| **6.8** | 6880 | 1.2 | 214.7 | 65000 | **A804_214.7 S4 ME4SB4** | 296 | **A804_214.7 P132 BE132S4** | 297 |
| **7.0** | 6697 | 2.1 | 209.0 | 75000 | **A904_209.0 S4 ME4SB4** | 299 | **A904_209.0 P132 BE132S4** | 300 |
| **8.1** | 5766 | 2.4 | 180.0 | 75000 | **A904_180.0 S4 ME4SB4** | 299 | **A904_180.0 P132 BE132S4** | 300 |
| **8.5** | 5488 | 1.5 | 171.3 | 65000 | **A804_171.3 S4 ME4SB4** | 296 | **A804_171.3 P132 BE132S4** | 297 |
| **8.6** | 5439 | 0.9 | 169.8 | 50000 | **A704_169.8 S4 ME4SB4** | 293 | **A704_169.8 P132 BE132S4** | 294 |
| **8.8** | 5323 | 2.6 | 166.1 | 75000 | **A904_166.1 S4 ME4SB4** | 299 | **A904_166.1 P132 BE132S4** | 300 |
| **9.3** | 5137 | 1.6 | 156.8 | 65000 | **A803_156.8 S4 ME4SB4** | 296 | **A803_156.8 P132 BE132S4** | 297 |
| **9.7** | 4947 | 2.8 | 151.0 | 75000 | **A903_151.0 S4 ME4SB4** | 299 | **A903_151.0 P132 BE132S4** | 300 |
| **10.1** | 4742 | 1.7 | 144.7 | 65000 | **A803_144.7 S4 ME4SB4** | 296 | **A803_144.7 P132 BE132S4** | 297 |
| **10.3** | 4647 | 1.1 | 141.9 | 50000 | **A703_141.9 S4 ME4SB4** | 293 | **A703_141.9 P132 BE132S4** | 294 |
| **10.5** | 4567 | 2.8 | 139.4 | 75000 | **A903_139.4 S4 ME4SB4** | 299 | **A903_139.4 P132 BE132S4** | 300 |
| **11.2** | 4281 | 1.2 | 130.7 | 50000 | **A703_130.7 S4 ME4SB4** | 293 | **A703_130.7 P132 BE132S4** | 294 |
| **11.5** | 4149 | 3.2 | 126.6 | 75000 | **A903_126.6 S4 ME4SB4** | 299 | **A903_126.6 P132 BE132S4** | 300 |
| **11.6** | 4115 | 1.9 | 125.6 | 65000 | **A803_125.6 S4 ME4SB4** | 296 | **A803_125.6 P132 BE132S4** | 297 |
| **12.1** | 3951 | 1.3 | 120.6 | 50000 | **A703_120.6 S4 ME4SB4** | 293 | **A703_120.6 P132 BE132S4** | 294 |
| **12.6** | 3799 | 2.1 | 116.0 | 65000 | **A803_116.0 S4 ME4SB4** | 296 | **A803_116.0 P132 BE132S4** | 297 |
| **14.0** | 3415 | 1.5 | 104.2 | 50000 | **A703_104.2 S4 ME4SB4** | 293 | **A703_104.2 P132 BE132S4** | 294 |
| **14.0** | 3408 | 2.3 | 104.0 | 65000 | **A803_104.0 S4 ME4SB4** | 296 | **A803_104.0 P132 BE132S4** | 297 |
| **15.2** | 3152 | 1.6 | 96.2 | 50000 | **A703_96.2 S4 ME4SB4** | 293 | **A703_96.2 P132 BE132S4** | 294 |
| **15.2** | 3146 | 2.5 | 96.0 | 65000 | **A803_96.0 S4 ME4SB4** | 296 | **A803_96.0 P132 BE132S4** | 297 |
| **16.4** | 2922 | 2.7 | 89.2 | 65000 | **A803_89.2 S4 ME4SB4** | 296 | **A803_89.2 P132 BE132S4** | 297 |
| **16.9** | 2829 | 1.0 | 86.4 | 30000 | **A603_86.4 S4 ME4SB4** | 289 | **A603_86.4 P132 BE132S4** | 290 |
| **17.0** | 2815 | 1.8 | 85.9 | 50000 | **A703_85.9 S4 ME4SB4** | 293 | **A703_85.9 P132 BE132S4** | 294 |
| **17.7** | 2697 | 3.0 | 82.3 | 65000 | **A803_82.3 S4 ME4SB4** | 296 | **A803_82.3 P132 BE132S4** | 297 |
| **18.3** | 2612 | 1.1 | 79.7 | 30000 | **A603_79.7 S4 ME4SB4** | 289 | **A603_79.7 P132 BE132S4** | 290 |
| **18.4** | 2599 | 1.9 | 79.3 | 50000 | **A703_79.3 S4 ME4SB4** | 293 | **A703_79.3 P132 BE132S4** | 294 |
| **20.1** | 2376 | 2.1 | 72.5 | 50000 | **A703_72.5 S4 ME4SB4** | 293 | **A703_72.5 P132 BE132S4** | 294 |
| **20.2** | 2371 | 3.4 | 72.4 | 65000 | **A803_72.4 S4 ME4SB4** | 296 | **A803_72.4 P132 BE132S4** | 297 |



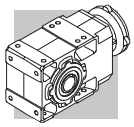
# 5.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **20.7** | 2306 | 1.2 | 70.4 | 30000 | **A603_70.4 S4 ME4SB4** | 289 | **A603_70.4 P132 BE132S4** | 290 |
| **21.8** | 2193 | 2.3 | 66.9 | 50000 | **A703_66.9 S4 ME4SB4** | 293 | **A703_66.9 P132 BE132S4** | 294 |
| **22.5** | 2129 | 1.3 | 65.0 | 30000 | **A603_65.0 S4 ME4SB4** | 289 | **A603_65.0 P132 BE132S4** | 290 |
| **22.7** | 2107 | 0.9 | 64.3 | 30000 | **A553_64.3 S4 ME4SB4** | 285 | **A553_64.3 P132 BE132S4** | 286 |
| **25.3** | 1889 | 2.6 | 57.7 | 50000 | **A703_57.7 S4 ME4SB4** | 293 | **A703_57.7 P132 BE132S4** | 294 |
| **26.3** | 1822 | 1.5 | 55.6 | 30000 | **A603_55.6 S4 ME4SB4** | 289 | **A603_55.6 P132 BE132S4** | 290 |
| **27.4** | 1744 | 2.9 | 53.2 | 50000 | **A703_53.2 S4 ME4SB4** | 293 | **A703_53.2 P132 BE132S4** | 294 |
| **28.4** | 1681 | 1.7 | 51.3 | 30000 | **A603_51.3 S4 ME4SB4** | 289 | **A603_51.3 P132 BE132S4** | 290 |
| **28.7** | 1669 | 1.2 | 51.0 | 30000 | **A553_51.0 S4 ME4SB4** | 285 | **A553_51.0 P132 BE132S4** | 286 |
| **29.8** | 1605 | 3.1 | 49.0 | 50000 | **A703_49.0 S4 ME4SB4** | 293 | **A703_49.0 P132 BE132S4** | 294 |
| **32** | 1482 | 3.2 | 45.2 | 50000 | **A703_45.2 S4 ME4SB4** | 293 | **A703_45.2 P132 BE132S4** | 294 |
| **32** | 1480 | 1.9 | 45.2 | 30000 | **A603_45.2 S4 ME4SB4** | 289 | **A603_45.2 P132 BE132S4** | 290 |
| **32** | 1474 | 1.0 | 45.0 | 12400 | **A503_45.0 S4 ME4SB4** | 281 | **A503_45.0 P132 BE132S4** | 282 |
| **35** | 1367 | 2.0 | 41.7 | 30000 | **A603_41.7 S4 ME4SB4** | 289 | **A603_41.7 P132 BE132S4** | 290 |
| **36** | 1341 | 1.1 | 40.9 | 12600 | **A503_40.9 S4 ME4SB4** | 281 | **A503_40.9 P132 BE132S4** | 282 |
| **36** | 1320 | 1.5 | 40.3 | 30000 | **A553_40.3 S4 ME4SB4** | 285 | **A553_40.3 P132 BE132S4** | 286 |
| **41** | 1166 | 1.3 | 35.6 | 12700 | **A503_35.6 S4 ME4SB4** | 281 | **A503_35.6 P132 BE132S4** | 282 |
| **43** | 1124 | 2.5 | 34.3 | 30000 | **A603_34.3 S4 ME4SB4** | 289 | **A603_34.3 P132 BE132S4** | 290 |
| **45** | 1061 | 1.4 | 32.4 | 12700 | **A503_32.4 S4 ME4SB4** | 281 | **A503_32.4 P132 BE132S4** | 282 |
| **46** | 1037 | 2.7 | 31.7 | 30000 | **A603_31.7 S4 ME4SB4** | 289 | **A603_31.7 P132 BE132S4** | 290 |
| **49** | 981 | 2.0 | 29.9 | 30000 | **A553_29.9 S4 ME4SB4** | 285 | **A553_29.9 P132 BE132S4** | 286 |
| **52** | 912 | 3.1 | 27.9 | 30000 | **A603_27.9 S4 ME4SB4** | 289 | **A603_27.9 P132 BE132S4** | 290 |
| **55** | 866 | 1.7 | 26.4 | 12600 | **A503_26.4 S4 ME4SB4** | 281 | **A503_26.4 P132 BE132S4** | 282 |
| **57** | 842 | 3.3 | 25.7 | 30000 | **A603_25.7 S4 ME4SB4** | 289 | **A603_25.7 P132 BE132S4** | 290 |
| **61** | 788 | 1.9 | 24.0 | 12500 | **A503_24.0 S4 ME4SB4** | 281 | **A503_24.0 P132 BE132S4** | 282 |
| **61** | 779 | 2.5 | 23.8 | 29800 | **A553_23.8 S4 ME4SB4** | 285 | **A553_23.8 P132 BE132S4** | 286 |
| **70** | 708 | 1.7 | 20.9 | 14400 | **A502_20.9 S4 ME4SB4** | 281 | **A502_20.9 P132 BE132S4** | 282 |
| **71** | 697 | 2.9 | 20.6 | 30000 | **A602_20.6 S4 ME4SB4** | 289 | **A602_20.6 P132 BE132S4** | 290 |
| **76** | 651 | 2.8 | 19.2 | 29300 | **A552_19.2 S4 ME4SB4** | 285 | **A552_19.2 P132 BE132S4** | 286 |
| **82** | 601 | 1.0 | 17.8 | 9280 | **A412_17.8 S4 ME4SB4** | 277 | **A412_17.8 P132 BE132S4** | 278 |
| **87** | 566 | 3.5 | 16.7 | 30000 | **A602_16.7 S4 ME4SB4** | 289 | **A602_16.7 P132 BE132S4** | 290 |
| **88** | 561 | 2.1 | 16.6 | 13600 | **A502_16.6 S4 ME4SB4** | 281 | **A502_16.6 P132 BE132S4** | 282 |
| **91** | 545 | 1.1 | 16.1 | 9160 | **A412_16.1 S4 ME4SB4** | 277 | **A412_16.1 P132 BE132S4** | 278 |
| **93** | 531 | 3.4 | 15.7 | 27700 | **A552_15.7 S4 ME4SB4** | 285 | **A552_15.7 P132 BE132S4** | 286 |
| **106** | 466 | 1.3 | 13.8 | 8940 | **A412_13.8 S4 ME4SB4** | 277 | **A412_13.8 P132 BE132S4** | 278 |
| **111** | 444 | 2.5 | 13.1 | 12800 | **A502_13.1 S4 ME4SB4** | 281 | **A502_13.1 P132 BE132S4** | 282 |
| **124** | 397 | 1.4 | 11.7 | 8670 | **A412_11.7 S4 ME4SB4** | 277 | **A412_11.7 P132 BE132S4** | 278 |
| **124** | 399 | 1.0 | 11.8 | 6450 | **A352_11.8 S4 ME4SB4** | 273 | **A352_11.8 P132 BE132S4** | 274 |
| **138** | 360 | 1.1 | 10.6 | 6360 | **A352_10.6 S4 ME4SB4** | 273 | **A352_10.6 P132 BE132S4** | 274 |
| **144** | 343 | 1.6 | 10.1 | 8440 | **A412_10.1 S4 ME4SB4** | 277 | **A412_10.1 P132 BE132S4** | 278 |
| **150** | 329 | 3.0 | 9.7 | 11800 | **A502_9.7 S4 ME4SB4** | 281 | **A502_9.7 P132 BE132S4** | 282 |
| **157** | 315 | 1.3 | 9.3 | 6240 | **A352_9.3 S4 ME4SB4** | 273 | **A352_9.3 P132 BE132S4** | 274 |
| **159** | 311 | 1.8 | 9.2 | 8250 | **A412_9.2 S4 ME4SB4** | 277 | **A412_9.2 P132 BE132S4** | 278 |
| **173** | 286 | 1.3 | 8.5 | 6140 | **A352_8.5 S4 ME4SB4** | 273 | **A352_8.5 P132 BE132S4** | 274 |
| **175** | 282 | 2.0 | 8.3 | 8080 | **A412_8.3 S4 ME4SB4** | 277 | **A412_8.3 P132 BE132S4** | 278 |
| **205** | 241 | 2.3 | 7.1 | 7790 | **A412_7.1 S4 ME4SB4** | 277 | **A412_7.1 P132 BE132S4** | 278 |
| **208** | 238 | 1.6 | 7.0 | 5930 | **A352_7.0 S4 ME4SB4** | 273 | **A352_7.0 P132 BE132S4** | 274 |
| **228** | 217 | 1.6 | 6.4 | 5820 | **A352_6.4 S4 ME4SB4** | 273 | **A352_6.4 P132 BE132S4** | 274 |
| **249** | 198 | 2.8 | 11.7 | 7430 | **A412_11.7 S4 ME4SB2** | 277 | **A412_11.7 P132 BE132SA2** | 278 |
| **270** | 183 | 1.9 | 5.4 | 5610 | **A352_5.4 S4 ME4SB4** | 273 | **A352_5.4 P132 BE132S4** | 274 |
| **289** | 171 | 2.5 | 10.1 | 7170 | **A412_10.1 S4 ME4SB2** | 277 | **A412_10.1 P132 BE132SA2** | 278 |
| **416** | 119 | 3.1 | 7.0 | 5060 | **A352_7.0 S4 ME4SB2** | 273 | **A352_7.0 P132 BE132SA2** | 274 |



# 7.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **4.1** | 15516 | 0.9 | 355.8 | 75000 | **A904_355.8 S4 ME4LA4** | 299 | **A904_355.8 P132 BE132MA4** | 300 |
| **4.8** | 13296 | 1.1 | 304.9 | 75000 | **A904_304.9 S4 ME4LA4** | 299 | **A904_304.9 P132 BE132MA4** | 300 |
| **5.2** | 12273 | 1.1 | 281.4 | 75000 | **A904_281.4 S4 ME4LA4** | 299 | **A904_281.4 P132 BE132MA4** | 300 |
| **6.4** | 9875 | 1.4 | 226.4 | 75000 | **A904_226.4 S4 ME4LA4** | 299 | **A904_226.4 P132 BE132MA4** | 300 |
| **7.0** | 9115 | 1.5 | 209.0 | 75000 | **A904_209.0 S4 ME4LA4** | 299 | **A904_209.0 P132 BE132MA4** | 300 |
| **8.1** | 7849 | 1.8 | 180.0 | 75000 | **A904_180.0 S4 ME4LA4** | 299 | **A904_180.0 P132 BE132MA4** | 300 |
| **8.5** | 7470 | 1.1 | 171.3 | 65000 | **A804_171.3 S4 ME4LA4** | 296 | **A804_171.3 P132 BE132MA4** | 297 |
| **8.8** | 7245 | 1.9 | 166.1 | 75000 | **A904_166.1 S4 ME4LA4** | 299 | **A904_166.1 P132 BE132MA4** | 300 |
| **9.3** | 6992 | 1.1 | 156.8 | 65000 | **A803_156.8 S4 ME4LA4** | 296 | **A803_156.8 P132 BE132MA4** | 297 |
| **9.6** | 6733 | 2.0 | 151.0 | 75000 | **A903_151.0 S4 ME4LA4** | 299 | **A903_151.0 P132 BE132MA4** | 300 |
| **10.1** | 6454 | 1.2 | 144.7 | 65000 | **A803_144.7 S4 ME4LA4** | 296 | **A803_144.7 P132 BE132MA4** | 297 |
| **10.4** | 6216 | 2.1 | 139.4 | 75000 | **A903_139.4 S4 ME4LA4** | 299 | **A903_139.4 P132 BE132MA4** | 300 |
| **11.5** | 5647 | 2.3 | 126.6 | 75000 | **A903_126.6 S4 ME4LA4** | 299 | **A903_126.6 P132 BE132MA4** | 300 |
| **11.6** | 5601 | 1.4 | 125.6 | 65000 | **A803_125.6 S4 ME4LA4** | 296 | **A803_125.6 P132 BE132MA4** | 297 |
| **12.1** | 5378 | 0.9 | 120.6 | 50000 | **A703_120.6 S4 ME4LA4** | 293 | **A703_120.6 P132 BE132MA4** | 294 |
| **12.4** | 5213 | 2.7 | 116.9 | 75000 | **A903_116.9 S4 ME4LA4** | 299 | **A903_116.9 P132 BE132MA4** | 300 |
| **12.5** | 5170 | 1.5 | 116.0 | 65000 | **A803_116.0 S4 ME4LA4** | 296 | **A803_116.0 P132 BE132MA4** | 297 |
| **13.6** | 4763 | 2.9 | 106.8 | 75000 | **A903_106.8 S4 ME4LA4** | 299 | **A903_106.8 P132 BE132MA4** | 300 |
| **14.0** | 4648 | 1.1 | 104.2 | 50000 | **A703_104.2 S4 ME4LA4** | 293 | **A703_104.2 P132 BE132MA4** | 294 |
| **14.0** | 4639 | 1.7 | 104.0 | 65000 | **A803_104.0 S4 ME4LA4** | 296 | **A803_104.0 P132 BE132MA4** | 297 |
| **14.8** | 4397 | 3.2 | 98.6 | 75000 | **A903_98.6 S4 ME4LA4** | 299 | **A903_98.6 P132 BE132MA4** | 300 |
| **15.1** | 4290 | 1.2 | 96.2 | 50000 | **A703_96.2 S4 ME4LA4** | 293 | **A703_96.2 P132 BE132MA4** | 294 |
| **15.2** | 4282 | 1.9 | 96.0 | 65000 | **A803_96.0 S4 ME4LA4** | 296 | **A803_96.0 P132 BE132MA4** | 297 |
| **16.3** | 3977 | 2.0 | 89.2 | 65000 | **A803_89.2 S4 ME4LA4** | 296 | **A803_89.2 P132 BE132MA4** | 297 |
| **16.9** | 3832 | 1.3 | 85.9 | 50000 | **A703_85.9 S4 ME4LA4** | 293 | **A703_85.9 P132 BE132MA4** | 294 |
| **17.7** | 3671 | 2.2 | 82.3 | 65000 | **A803_82.3 S4 ME4LA4** | 296 | **A803_82.3 P132 BE132MA4** | 297 |
| **18.3** | 3537 | 1.4 | 79.3 | 50000 | **A703_79.3 S4 ME4LA4** | 293 | **A703_79.3 P132 BE132MA4** | 294 |
| **20.1** | 3234 | 1.5 | 72.5 | 50000 | **A703_72.5 S4 ME4LA4** | 293 | **A703_72.5 P132 BE132MA4** | 294 |
| **20.1** | 3227 | 2.5 | 72.4 | 65000 | **A803_72.4 S4 ME4LA4** | 296 | **A803_72.4 P132 BE132MA4** | 297 |
| **20.7** | 3139 | 0.9 | 70.4 | 30000 | **A603_70.4 S4 ME4LA4** | 289 | **A603_70.4 P132 BE132MA4** | 290 |
| **21.7** | 2985 | 1.7 | 66.9 | 50000 | **A703_66.9 S4 ME4LA4** | 293 | **A703_66.9 P132 BE132MA4** | 294 |
| **21.8** | 2979 | 2.7 | 66.8 | 65000 | **A803_66.8 S4 ME4LA4** | 296 | **A803_66.8 P132 BE132MA4** | 297 |
| **22.4** | 2898 | 1.0 | 65.0 | 30000 | **A603_65.0 S4 ME4LA4** | 289 | **A603_65.0 P132 BE132MA4** | 290 |
| **24.3** | 2666 | 3.0 | 59.8 | 63800 | **A803_59.8 S4 ME4LA4** | 296 | **A803_59.8 P132 BE132MA4** | 297 |
| **25.2** | 2571 | 1.9 | 57.7 | 50000 | **A703_57.7 S4 ME4LA4** | 293 | **A703_57.7 P132 BE132MA4** | 294 |
| **26.2** | 2479 | 1.1 | 55.6 | 30000 | **A603_55.6 S4 ME4LA4** | 289 | **A603_55.6 P132 BE132MA4** | 290 |
| **26.4** | 2461 | 3.2 | 55.2 | 62600 | **A803_55.2 S4 ME4LA4** | 296 | **A803_55.2 P132 BE132MA4** | 297 |
| **27.3** | 2374 | 2.1 | 53.2 | 50000 | **A703_53.2 S4 ME4LA4** | 293 | **A703_53.2 P132 BE132MA4** | 294 |
| **28.3** | 2289 | 1.2 | 51.3 | 30000 | **A603_51.3 S4 ME4LA4** | 289 | **A603_51.3 P132 BE132MA4** | 290 |
| **29.7** | 2185 | 2.3 | 49.0 | 50000 | **A703_49.0 S4 ME4LA4** | 293 | **A703_49.0 P132 BE132MA4** | 294 |
| **32** | 2017 | 2.4 | 45.2 | 50000 | **A703_45.2 S4 ME4LA4** | 293 | **A703_45.2 P132 BE132MA4** | 294 |
| **32** | 2015 | 1.4 | 45.2 | 30000 | **A603_45.2 S4 ME4LA4** | 289 | **A603_45.2 P132 BE132MA4** | 290 |
| **35** | 1860 | 1.5 | 41.7 | 30000 | **A603_41.7 S4 ME4LA4** | 289 | **A603_41.7 P132 BE132MA4** | 290 |
| **36** | 1797 | 1.1 | 40.3 | 30000 | **A553_40.3 S4 ME4LA4** | 285 | **A553_40.3 P132 BE132MA4** | 286 |
| **38** | 1712 | 2.8 | 38.4 | 50000 | **A703_38.4 S4 ME4LA4** | 293 | **A703_38.4 P132 BE132MA4** | 294 |
| **41** | 1587 | 0.9 | 35.6 | 10100 | **A503_35.6 S4 ME4LA4** | 281 | **A503_35.6 P132 BE132MA4** | 282 |
| **41** | 1580 | 2.8 | 35.4 | 50000 | **A703_35.4 S4 ME4LA4** | 293 | **A703_35.4 P132 BE132MA4** | 294 |
| **42** | 1529 | 1.8 | 34.3 | 30000 | **A603_34.3 S4 ME4LA4** | 289 | **A603_34.3 P132 BE132MA4** | 290 |
| **45** | 1444 | 1.0 | 32.4 | 10300 | **A503_32.4 S4 ME4LA4** | 281 | **A503_32.4 P132 BE132MA4** | 282 |
| **46** | 1412 | 2.0 | 31.7 | 30000 | **A603_31.7 S4 ME4LA4** | 289 | **A603_31.7 P132 BE132MA4** | 290 |
| **49** | 1335 | 1.5 | 29.9 | 30000 | **A553_29.9 S4 ME4LA4** | 285 | **A553_29.9 P132 BE132MA4** | 286 |
| **52** | 1242 | 2.3 | 27.9 | 30000 | **A603_27.9 S4 ME4LA4** | 289 | **A603_27.9 P132 BE132MA4** | 290 |
| **55** | 1179 | 1.3 | 26.4 | 10700 | **A503_26.4 S4 ME4LA4** | 281 | **A503_26.4 P132 BE132MA4** | 282 |
| **57** | 1146 | 2.4 | 25.7 | 30000 | **A603_25.7 S4 ME4LA4** | 289 | **A603_25.7 P132 BE132MA4** | 290 |
| **61** | 1072 | 1.4 | 24.0 | 10800 | **A503_24.0 S4 ME4LA4** | 281 | **A503_24.0 P132 BE132MA4** | 282 |
| **61** | 1061 | 1.8 | 23.8 | 28800 | **A553_23.8 S4 ME4LA4** | 285 | **A553_23.8 P132 BE132MA4** | 286 |
| **70** | 963 | 1.2 | 20.9 | 13700 | **A502_20.9 S4 ME4LA4** | 281 | **A502_20.9 P132 BE132MA4** | 282 |

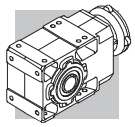


## 7.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **71** | 949 | 2.1 | 20.6 | 30000 | **A602_20.6 S4 ME4LA4** | 289 | **A602_20.6 P132 BE132MA4** | 290 |
| **76** | 886 | 2.0 | 19.2 | 28800 | **A552_19.2 S4 ME4LA4** | 285 | **A552_19.2 P132 BE132MA4** | 286 |
| **87** | 771 | 2.6 | 16.7 | 30000 | **A602_16.7 S4 ME4LA4** | 289 | **A602_16.7 P132 BE132MA4** | 290 |
| **88** | 763 | 1.6 | 16.6 | 13000 | **A502_16.6 S4 ME4LA4** | 281 | **A502_16.6 P132 BE132MA4** | 282 |
| **93** | 722 | 2.5 | 15.7 | 27300 | **A552_15.7 S4 ME4LA4** | 285 | **A552_15.7 P132 BE132MA4** | 286 |
| **106** | 634 | 0.9 | 13.8 | 8130 | **A412_13.8 S4 ME4LA4** | 277 | **A412_13.8 P132 BE132MA4** | 278 |
| **111** | 604 | 1.8 | 13.1 | 12300 | **A502_13.1 S4 ME4LA4** | 281 | **A502_13.1 P132 BE132MA4** | 282 |
| **111** | 602 | 3.0 | 13.1 | 26100 | **A552_13.1 S4 ME4LA4** | 285 | **A552_13.1 P132 BE132MA4** | 286 |
| **115** | 585 | 3.4 | 12.7 | 30000 | **A602_12.7 S4 ME4LA4** | 289 | **A602_12.7 P132 BE132MA4** | 290 |
| **124** | 541 | 1.0 | 11.7 | 7970 | **A412_11.7 S4 ME4LA4** | 277 | **A412_11.7 P132 BE132MA4** | 278 |
| **144** | 467 | 1.1 | 10.1 | 7850 | **A412_10.1 S4 ME4LA4** | 277 | **A412_10.1 P132 BE132MA4** | 278 |
| **149** | 448 | 2.2 | 9.7 | 11500 | **A502_9.7 S4 ME4LA4** | 281 | **A502_9.7 P132 BE132MA4** | 282 |
| **156** | 429 | 0.9 | 9.3 | 5650 | **A352_9.3 S4 ME4LA4** | 273 | **A352_9.3 P132 BE132MA4** | 274 |
| **158** | 424 | 1.3 | 9.2 | 7710 | **A412_9.2 S4 ME4LA4** | 277 | **A412_9.2 P132 BE132MA4** | 278 |
| **172** | 390 | 1.0 | 8.5 | 5600 | **A352_8.5 S4 ME4LA4** | 273 | **A352_8.5 P132 BE132MA4** | 274 |
| **175** | 384 | 1.4 | 8.3 | 7590 | **A412_8.3 S4 ME4LA4** | 277 | **A412_8.3 P132 BE132MA4** | 278 |
| **188** | 356 | 2.7 | 7.7 | 10800 | **A502_7.7 S4 ME4LA4** | 281 | **A502_7.7 P132 BE132MA4** | 282 |
| **204** | 328 | 1.7 | 7.1 | 7370 | **A412_7.1 S4 ME4LA4** | 277 | **A412_7.1 P132 BE132MA4** | 278 |
| **207** | 323 | 1.1 | 7.0 | 5490 | **A352_7.0 S4 ME4LA4** | 273 | **A352_7.0 P132 BE132MA4** | 274 |
| **227** | 295 | 1.2 | 6.4 | 5420 | **A352_6.4 S4 ME4LA4** | 273 | **A352_6.4 P132 BE132MA4** | 274 |
| **269** | 249 | 1.4 | 5.4 | 5270 | **A352_5.4 S4 ME4LA4** | 273 | **A352_5.4 P132 BE132MA4** | 274 |
| **277** | 242 | 2.3 | 5.2 | 6920 | **A412_5.2 S4 ME4LA4** | 277 | **A412_5.2 P132 BE132MA4** | 278 |
| **318** | 212 | 2.5 | 9.2 | 6710 | **A412_9.2 S4 ME4LA2** | 277 | **A412_9.2 P132 BE132SB2** | 278 |
| **351** | 192 | 2.7 | 8.3 | 6550 | **A412_8.3 S4 ME4LA2** | 277 | **A412_8.3 P132 BE132SB2** | 278 |
| **416** | 162 | 2.3 | 7.0 | 4830 | **A352_7.0 S4 ME4LA2** | 273 | **A352_7.0 P132 BE132SB2** | 274 |
| **540** | 125 | 2.7 | 5.4 | 4550 | **A352_5.4 S4 ME4LA2** | 273 | **A352_5.4 P132 BE132SB2** | 274 |

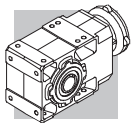
## 9.2 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **5.2** | 15279 | 0.9 | 281.4 | 75000 | **A904_281.4 S4 ME4LB4** | 299 | **A904_281.4 P132 BE132MB4** | 300 |
| **6.4** | 12293 | 1.1 | 226.4 | 75000 | **A904_226.4 S4 ME4LB4** | 299 | **A904_226.4 P132 BE132MB4** | 300 |
| **6.9** | 11347 | 1.2 | 209.0 | 75000 | **A904_209.0 S4 ME4LB4** | 299 | **A904_209.0 P132 BE132MB4** | 300 |
| **8.1** | 9771 | 1.4 | 180.0 | 75000 | **A904_180.0 S4 ME4LB4** | 299 | **A904_180.0 P132 BE132MB4** | 300 |
| **8.5** | 9300 | 0.9 | 171.3 | 65000 | **A804_171.3 S4 ME4LB4** | 296 | **A804_171.3 P132 BE132MB4** | 297 |
| **8.7** | 9019 | 1.6 | 166.1 | 75000 | **A904_166.1 S4 ME4LB4** | 299 | **A904_166.1 P132 BE132MB4** | 300 |
| **9.2** | 8704 | 0.9 | 156.8 | 65000 | **A803_156.8 S4 ME4LB4** | 296 | **A803_156.8 P132 BE132MB4** | 297 |
| **9.6** | 8383 | 1.6 | 151.0 | 75000 | **A903_151.0 S4 ME4LB4** | 299 | **A903_151.0 P132 BE132MB4** | 300 |
| **10.0** | 8034 | 1.0 | 144.7 | 65000 | **A803_144.7 S4 ME4LB4** | 296 | **A803_144.7 P132 BE132MB4** | 297 |
| **10.4** | 7738 | 1.6 | 139.4 | 75000 | **A903_139.4 S4 ME4LB4** | 299 | **A903_139.4 P132 BE132MB4** | 300 |
| **11.4** | 7030 | 1.9 | 126.6 | 75000 | **A903_126.6 S4 ME4LB4** | 299 | **A903_126.6 P132 BE132MB4** | 300 |
| **11.5** | 6973 | 1.1 | 125.6 | 65000 | **A803_125.6 S4 ME4LB4** | 296 | **A803_125.6 P132 BE132MB4** | 297 |
| **12.4** | 6489 | 2.2 | 116.9 | 75000 | **A903_116.9 S4 ME4LB4** | 299 | **A903_116.9 P132 BE132MB4** | 300 |
| **12.5** | 6437 | 1.2 | 116.0 | 65000 | **A803_116.0 S4 ME4LB4** | 296 | **A803_116.0 P132 BE132MB4** | 297 |
| **13.6** | 5930 | 2.4 | 106.8 | 75000 | **A903_106.8 S4 ME4LB4** | 299 | **A903_106.8 P132 BE132MB4** | 300 |
| **13.9** | 5775 | 1.4 | 104.0 | 65000 | **A803_104.0 S4 ME4LB4** | 296 | **A803_104.0 P132 BE132MB4** | 297 |
| **14.7** | 5473 | 2.6 | 98.6 | 75000 | **A903_98.6 S4 ME4LB4** | 299 | **A903_98.6 P132 BE132MB4** | 300 |
| **15.1** | 5341 | 0.9 | 96.2 | 50000 | **A703_96.2 S4 ME4LB4** | 293 | **A703_96.2 P132 BE132MB4** | 294 |
| **15.1** | 5331 | 1.5 | 96.0 | 65000 | **A803_96.0 S4 ME4LB4** | 296 | **A803_96.0 P132 BE132MB4** | 297 |
| **16.3** | 4950 | 1.6 | 89.2 | 65000 | **A803_89.2 S4 ME4LB4** | 296 | **A803_89.2 P132 BE132MB4** | 297 |
| **16.7** | 4833 | 2.9 | 87.1 | 75000 | **A903_87.1 S4 ME4LB4** | 299 | **A903_87.1 P132 BE132MB4** | 300 |
| **16.9** | 4770 | 1.0 | 85.9 | 50000 | **A703_85.9 S4 ME4LB4** | 293 | **A703_85.9 P132 BE132MB4** | 294 |
| **17.6** | 4570 | 1.8 | 82.3 | 65000 | **A803_82.3 S4 ME4LB4** | 296 | **A803_82.3 P132 BE132MB4** | 297 |



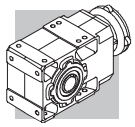
# 9.2 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **18.0** | 4461 | 3.1 | 80.4 | 75000 | **A903_80.4 S4 ME4LB4** | 299 | **A903_80.4 P132 BE132MB4** | 300 |
| **18.3** | 4403 | 1.1 | 79.3 | 50000 | **A703_79.3 S4 ME4LB4** | 293 | **A703_79.3 P132 BE132MB4** | 294 |
| **19.5** | 4134 | 3.4 | 74.5 | 75000 | **A903_74.5 S4 ME4LB4** | 299 | **A903_74.5 P132 BE132MB4** | 300 |
| **20.0** | 4026 | 1.2 | 72.5 | 50000 | **A703_72.5 S4 ME4LB4** | 293 | **A703_72.5 P132 BE132MB4** | 294 |
| **20.0** | 4017 | 2.0 | 72.4 | 65000 | **A803_72.4 S4 ME4LB4** | 296 | **A803_72.4 P132 BE132MB4** | 297 |
| **21.7** | 3716 | 1.3 | 66.9 | 50000 | **A703_66.9 S4 ME4LB4** | 293 | **A703_66.9 P132 BE132MB4** | 294 |
| **21.7** | 3708 | 2.2 | 66.8 | 63800 | **A803_66.8 S4 ME4LB4** | 296 | **A803_66.8 P132 BE132MB4** | 297 |
| **24.3** | 3318 | 2.4 | 59.8 | 62400 | **A803_59.8 S4 ME4LB4** | 296 | **A803_59.8 P132 BE132MB4** | 297 |
| **25.1** | 3201 | 1.6 | 57.7 | 50000 | **A703_57.7 S4 ME4LB4** | 293 | **A703_57.7 P132 BE132MB4** | 294 |
| **26.1** | 3087 | 0.9 | 55.6 | 30000 | **A603_55.6 S4 ME4LB4** | 289 | **A603_55.6 P132 BE132MB4** | 290 |
| **26.3** | 3063 | 2.6 | 55.2 | 61300 | **A803_55.2 S4 ME4LB4** | 296 | **A803_55.2 P132 BE132MB4** | 297 |
| **27.2** | 2955 | 1.7 | 53.2 | 50000 | **A703_53.2 S4 ME4LB4** | 293 | **A703_53.2 P132 BE132MB4** | 294 |
| **28.3** | 2849 | 1.0 | 51.3 | 30000 | **A603_51.3 S4 ME4LB4** | 289 | **A603_51.3 P132 BE132MB4** | 290 |
| **29.6** | 2720 | 1.8 | 49.0 | 50000 | **A703_49.0 S4 ME4LB4** | 293 | **A703_49.0 P132 BE132MB4** | 294 |
| **30** | 2675 | 3.0 | 48.2 | 59500 | **A803_48.2 S4 ME4LB4** | 296 | **A803_48.2 P132 BE132MB4** | 297 |
| **32** | 2511 | 1.9 | 45.2 | 50000 | **A703_45.2 S4 ME4LB4** | 293 | **A703_45.2 P132 BE132MB4** | 294 |
| **32** | 2508 | 1.1 | 45.2 | 30000 | **A603_45.2 S4 ME4LB4** | 289 | **A603_45.2 P132 BE132MB4** | 290 |
| **33** | 2469 | 3.0 | 44.5 | 58400 | **A803_44.5 S4 ME4LB4** | 296 | **A803_44.5 P132 BE132MB4** | 297 |
| **35** | 2315 | 1.2 | 41.7 | 30000 | **A603_41.7 S4 ME4LB4** | 289 | **A603_41.7 P132 BE132MB4** | 290 |
| **38** | 2131 | 2.3 | 38.4 | 50000 | **A703_38.4 S4 ME4LB4** | 293 | **A703_38.4 P132 BE132MB4** | 294 |
| **41** | 1967 | 2.3 | 35.4 | 50000 | **A703_35.4 S4 ME4LB4** | 293 | **A703_35.4 P132 BE132MB4** | 294 |
| **42** | 1904 | 1.5 | 34.3 | 30000 | **A603_34.3 S4 ME4LB4** | 289 | **A603_34.3 P132 BE132MB4** | 290 |
| **46** | 1758 | 1.6 | 31.7 | 30000 | **A603_31.7 S4 ME4LB4** | 289 | **A603_31.7 P132 BE132MB4** | 290 |
| **48** | 1661 | 1.2 | 29.9 | 29100 | **A553_29.9 S4 ME4LB4** | 285 | **A553_29.9 P132 BE132MB4** | 286 |
| **52** | 1546 | 1.8 | 27.9 | 30000 | **A603_27.9 S4 ME4LB4** | 289 | **A603_27.9 P132 BE132MB4** | 290 |
| **55** | 1468 | 1.0 | 26.4 | 9130 | **A503_26.4 S4 ME4LB4** | 281 | **A503_26.4 P132 BE132MB4** | 282 |
| **56** | 1427 | 2.0 | 25.7 | 30000 | **A603_25.7 S4 ME4LB4** | 289 | **A603_25.7 P132 BE132MB4** | 290 |
| **60** | 1335 | 1.1 | 24.0 | 9370 | **A503_24.0 S4 ME4LB4** | 281 | **A503_24.0 P132 BE132MB4** | 282 |
| **61** | 1321 | 1.5 | 23.8 | 27900 | **A553_23.8 S4 ME4LB4** | 285 | **A553_23.8 P132 BE132MB4** | 286 |
| **68** | 1183 | 3.4 | 21.3 | 46000 | **A703_21.3 S4 ME4LB4** | 293 | **A703_21.3 P132 BE132MB4** | 294 |
| **69** | 1199 | 1.0 | 20.9 | 13000 | **A502_20.9 S4 ME4LB4** | 281 | **A502_20.9 P132 BE132MB4** | 282 |
| **70** | 1181 | 1.7 | 20.6 | 30000 | **A602_20.6 S4 ME4LB4** | 289 | **A602_20.6 P132 BE132MB4** | 290 |
| **74** | 1092 | 3.4 | 19.7 | 45100 | **A703_19.7 S4 ME4LB4** | 293 | **A703_19.7 P132 BE132MB4** | 294 |
| **75** | 1103 | 1.6 | 19.2 | 28400 | **A552_19.2 S4 ME4LB4** | 285 | **A552_19.2 P132 BE132MB4** | 286 |
| **87** | 960 | 2.1 | 16.7 | 30000 | **A602_16.7 S4 ME4LB4** | 289 | **A602_16.7 P132 BE132MB4** | 290 |
| **88** | 950 | 1.3 | 16.6 | 12500 | **A502_16.6 S4 ME4LB4** | 281 | **A502_16.6 P132 BE132MB4** | 282 |
| **92** | 899 | 2.0 | 15.7 | 27000 | **A552_15.7 S4 ME4LB4** | 285 | **A552_15.7 P132 BE132MB4** | 286 |
| **111** | 752 | 1.5 | 13.1 | 11900 | **A502_13.1 S4 ME4LB4** | 281 | **A502_13.1 P132 BE132MB4** | 282 |
| **111** | 750 | 2.4 | 13.1 | 25800 | **A552_13.1 S4 ME4LB4** | 285 | **A552_13.1 P132 BE132MB4** | 286 |
| **114** | 728 | 2.7 | 12.7 | 30000 | **A602_12.7 S4 ME4LB4** | 289 | **A602_12.7 P132 BE132MB4** | 290 |
| **123** | 651 | 2.5 | 23.8 | 24100 | **A553_23.8 S4 ME4LB2** | 285 | **A553_23.8 P132 BE132MB2** | 286 |
| **140** | 594 | 3.0 | 10.4 | 24200 | **A552_10.4 S4 ME4LB4** | 285 | **A552_10.4 P132 BE132MB4** | 286 |
| **141** | 592 | 3.4 | 10.3 | 30000 | **A602_10.3 S4 ME4LB4** | 289 | **A602_10.3 P132 BE132MB4** | 290 |
| **143** | 581 | 0.9 | 10.1 | 7340 | **A412_10.1 S4 ME4LB4** | 277 | **A412_10.1 P132 BE132MB4** | 278 |
| **149** | 558 | 1.8 | 9.7 | 11200 | **A502_9.7 S4 ME4LB4** | 281 | **A502_9.7 P132 BE132MB4** | 282 |
| **158** | 527 | 1.0 | 9.2 | 7250 | **A412_9.2 S4 ME4LB4** | 277 | **A412_9.2 P132 BE132MB4** | 278 |
| **174** | 478 | 1.2 | 8.3 | 7170 | **A412_8.3 S4 ME4LB4** | 277 | **A412_8.3 P132 BE132MB4** | 278 |
| **187** | 444 | 2.1 | 7.7 | 10600 | **A502_7.7 S4 ME4LB4** | 281 | **A502_7.7 P132 BE132MB4** | 282 |
| **204** | 408 | 1.3 | 7.1 | 7020 | **A412_7.1 S4 ME4LB4** | 277 | **A412_7.1 P132 BE132MB4** | 278 |
| **206** | 403 | 0.9 | 7.0 | 5110 | **A352_7.0 S4 ME4LB4** | 273 | **A352_7.0 P132 BE132MB4** | 274 |
| **226** | 368 | 1.0 | 6.4 | 5070 | **A352_6.4 S4 ME4LB4** | 273 | **A352_6.4 P132 BE132MB4** | 274 |
| **268** | 310 | 1.1 | 5.4 | 4980 | **A352_5.4 S4 ME4LB4** | 273 | **A352_5.4 P132 BE132MB4** | 274 |
| **276** | 301 | 1.8 | 5.2 | 6660 | **A412_5.2 S4 ME4LB4** | 277 | **A412_5.2 P132 BE132MB4** | 278 |
| **317** | 260 | 2.0 | 9.2 | 6480 | **A412_9.2 S4 ME4LB2** | 277 | **A412_9.2 P132 BE132MB2** | 278 |
| **377** | 219 | 3.4 | 7.7 | 8780 | **A502_7.7 S4 ME4LB2** | 281 | **A502_7.7 P132 BE132MB2** | 282 |
| **539** | 153 | 2.2 | 5.4 | 4410 | **A352_5.4 S4 ME4LB2** | 273 | **A352_5.4 P132 BE132MB2** | 274 |
| **557** | 148 | 3.0 | 5.2 | 5690 | **A412_5.2 S4 ME4LB2** | 277 | **A412_5.2 P132 BE132MB2** | 278 |



# 11 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **6.5** | 14510 | 1.0 | 226.4 | 75000 | **A904_226.4 S5 ME5SA4** | 299 | **A904_226.4 P160 BE160M4** | 300 |
| **7.0** | 13393 | 1.0 | 209.0 | 75000 | **A904_209.0 S5 ME5SA4** | 299 | **A904_209.0 P160 BE160M4** | 300 |
| **8.2** | 11533 | 1.2 | 180.0 | 75000 | **A904_180.0 S5 ME5SA4** | 299 | **A904_180.0 P160 BE160M4** | 300 |
| **8.8** | 10645 | 1.3 | 166.1 | 75000 | **A904_166.1 S5 ME5SA4** | 299 | **A904_166.1 P160 BE160M4** | 300 |
| **9.7** | 9894 | 1.4 | 151.0 | 75000 | **A903_151.0 S5 ME5SA4** | 299 | **A903_151.0 P160 BE160M4** | 300 |
| **10.5** | 9133 | 1.4 | 139.4 | 75000 | **A903_139.4 S5 ME5SA4** | 299 | **A903_139.4 P160 BE160M4** | 300 |
| **11.6** | 8298 | 1.6 | 126.6 | 75000 | **A903_126.6 S5 ME5SA4** | 299 | **A903_126.6 P160 BE160M4** | 300 |
| **11.7** | 8231 | 1.0 | 125.6 | 65000 | **A803_125.6 S5 ME5SA4** | 296 | **A803_125.6 P160 BE160M4** | 297 |
| **12.6** | 7660 | 1.8 | 116.9 | 75000 | **A903_116.9 S5 ME5SA4** | 299 | **A903_116.9 P160 BE160M4** | 300 |
| **12.7** | 7597 | 1.1 | 116.0 | 65000 | **A803_116.0 S5 ME5SA4** | 296 | **A803_116.0 P160 BE160M4** | 297 |
| **13.8** | 6999 | 2.0 | 106.8 | 75000 | **A903_106.8 S5 ME5SA4** | 299 | **A903_106.8 P160 BE160M4** | 300 |
| **14.1** | 6816 | 1.2 | 104.0 | 65000 | **A803_104.0 S5 ME5SA4** | 296 | **A803_104.0 P160 BE160M4** | 297 |
| **14.9** | 6460 | 2.2 | 98.6 | 75000 | **A903_98.6 S5 ME5SA4** | 299 | **A903_98.6 P160 BE160M4** | 300 |
| **15.3** | 6292 | 1.3 | 96.0 | 65000 | **A803_96.0 S5 ME5SA4** | 296 | **A803_96.0 P160 BE160M4** | 297 |
| **16.5** | 5843 | 1.4 | 89.2 | 65000 | **A803_89.2 S5 ME5SA4** | 296 | **A803_89.2 P160 BE160M4** | 297 |
| **16.9** | 5705 | 2.5 | 87.1 | 75000 | **A903_87.1 S5 ME5SA4** | 299 | **A903_87.1 P160 BE160M4** | 300 |
| **17.9** | 5394 | 1.5 | 82.3 | 64500 | **A803_82.3 S5 ME5SA4** | 296 | **A803_82.3 P160 BE160M4** | 297 |
| **18.3** | 5266 | 2.7 | 80.4 | 75000 | **A903_80.4 S5 ME5SA4** | 299 | **A903_80.4 P160 BE160M4** | 300 |
| **18.5** | 5198 | 1.0 | 79.3 | 50000 | **A703_79.3 S5 ME5SA4** | 293 | **A703_79.3 P160 BE160M4** | 294 |
| **19.7** | 4880 | 2.9 | 74.5 | 75000 | **A903_74.5 S5 ME5SA4** | 299 | **A903_74.5 P160 BE160M4** | 300 |
| **20.3** | 4752 | 1.1 | 72.5 | 50000 | **A703_72.5 S5 ME5SA4** | 293 | **A703_72.5 P160 BE160M4** | 294 |
| **20.3** | 4742 | 1.7 | 72.4 | 63200 | **A803_72.4 S5 ME5SA4** | 296 | **A803_72.4 P160 BE160M4** | 297 |
| **21.4** | 4505 | 3.1 | 68.8 | 75000 | **A903_68.8 S5 ME5SA4** | 299 | **A903_68.8 P160 BE160M4** | 300 |
| **22.0** | 4386 | 1.1 | 66.9 | 50000 | **A703_66.9 S5 ME5SA4** | 293 | **A703_66.9 P160 BE160M4** | 294 |
| **22.0** | 4377 | 1.8 | 66.8 | 62200 | **A803_66.8 S5 ME5SA4** | 296 | **A803_66.8 P160 BE160M4** | 297 |
| **24.6** | 3917 | 2.0 | 59.8 | 60900 | **A803_59.8 S5 ME5SA4** | 296 | **A803_59.8 P160 BE160M4** | 297 |
| **24.7** | 3906 | 3.6 | 59.6 | 75000 | **A903_59.6 S5 ME5SA4** | 299 | **A903_59.6 P160 BE160M4** | 300 |
| **25.5** | 3778 | 1.3 | 57.7 | 50000 | **A703_57.7 S5 ME5SA4** | 293 | **A703_57.7 P160 BE160M4** | 294 |
| **26.6** | 3615 | 2.2 | 55.2 | 59900 | **A803_55.2 S5 ME5SA4** | 296 | **A803_55.2 P160 BE160M4** | 297 |
| **27.6** | 3488 | 1.4 | 53.2 | 50000 | **A703_53.2 S5 ME5SA4** | 293 | **A703_53.2 P160 BE160M4** | 294 |
| **30** | 3210 | 1.6 | 49.0 | 50000 | **A703_49.0 S5 ME5SA4** | 293 | **A703_49.0 P160 BE160M4** | 294 |
| **31** | 3157 | 2.5 | 48.2 | 58300 | **A803_48.2 S5 ME5SA4** | 296 | **A803_48.2 P160 BE160M4** | 297 |
| **33** | 2964 | 1.6 | 45.2 | 50000 | **A703_45.2 S5 ME5SA4** | 293 | **A703_45.2 P160 BE160M4** | 294 |
| **33** | 2961 | 0.9 | 45.2 | 30000 | **A603_45.2 S5 ME5SA4** | 289 | **A603_45.2 P160 BE160M4** | 290 |
| **33** | 2914 | 2.6 | 44.5 | 57300 | **A803_44.5 S5 ME5SA4** | 296 | **A803_44.5 P160 BE160M4** | 297 |
| **35** | 2733 | 1.0 | 41.7 | 30000 | **A603_41.7 S5 ME5SA4** | 289 | **A603_41.7 P160 BE160M4** | 290 |
| **38** | 2523 | 3.0 | 38.5 | 55500 | | | **A803_38.5 P160 BE160M4** | 297 |
| **38** | 2515 | 1.9 | 38.4 | 50000 | **A703_38.4 S5 ME5SA4** | 293 | **A703_38.4 P160 BE160M4** | 294 |
| **41** | 2328 | 3.0 | 35.5 | 54500 | | | **A803_35.5 P160 BE160M4** | 297 |
| **41** | 2321 | 1.9 | 35.4 | 50000 | **A703_35.4 S5 ME5SA4** | 293 | **A703_35.4 P160 BE160M4** | 294 |
| **43** | 2247 | 1.2 | 34.3 | 30000 | **A603_34.3 S5 ME5SA4** | 289 | **A603_34.3 P160 BE160M4** | 290 |
| **46** | 2074 | 1.3 | 31.7 | 30000 | **A603_31.7 S5 ME5SA4** | 289 | **A603_31.7 P160 BE160M4** | 290 |
| **48** | 2003 | 3.2 | 30.6 | 52600 | | | **A803_30.6 P160 BE160M4** | 297 |
| **49** | 1972 | 2.3 | 30.1 | 49400 | | | **A703_30.1 P160 BE160M4** | 294 |
| **49** | 1961 | 1.0 | 29.9 | 28200 | **A553_29.9 S5 ME5SA4** | 285 | **A553_29.9 P160 BE160M4** | 286 |
| **52** | 1849 | 3.6 | 28.2 | 51600 | | | **A803_28.2 P160 BE160M4** | 297 |
| **53** | 1825 | 1.5 | 27.9 | 30000 | **A603_27.9 S5 ME5SA4** | 289 | **A603_27.9 P160 BE160M4** | 290 |
| **53** | 1820 | 2.3 | 27.8 | 48500 | | | **A703_27.8 P160 BE160M4** | 294 |
| **57** | 1685 | 1.7 | 25.7 | 30000 | **A603_25.7 S5 ME5SA4** | 289 | **A603_25.7 P160 BE160M4** | 290 |
| **61** | 1576 | 1.0 | 24.0 | 7800 | **A503_24.0 S5 ME5SA4** | 281 | **A503_24.0 P160 BE160M4** | 282 |
| **62** | 1559 | 1.3 | 23.8 | 26000 | **A553_23.8 S5 ME5SA4** | 285 | **A553_23.8 P160 BE160M4** | 286 |
| **63** | 1541 | 2.8 | 23.5 | 46600 | | | **A703_23.5 P160 BE160M4** | 294 |
| **69** | 1396 | 2.9 | 21.3 | 45500 | **A703_21.3 S5 ME5SA4** | 293 | **A703_21.3 P160 BE160M4** | 294 |
| **70** | 1416 | 0.8 | 20.9 | | **A502_20.9 S5 ME5SA4** | 281 | **A502_20.9 P160 BE160M4** | 282 |
| **71** | 1394 | 1.4 | 20.6 | 30000 | **A602_20.6 S5 ME5SA4** | 289 | **A602_20.6 P160 BE160M4** | 290 |
| **75** | 1288 | 2.9 | 19.7 | 44500 | **A703_19.7 S5 ME5SA4** | 293 | **A703_19.7 P160 BE160M4** | 294 |
| **76** | 1302 | 1.4 | 19.2 | 27900 | **A552_19.2 S5 ME5SA4** | 285 | **A552_19.2 P160 BE160M4** | 286 |

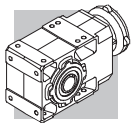


## 11 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **88** | 1133 | 1.8 | 16.7 | 30000 | **A602_16.7 S5 ME5SA4** | 289 | **A602_16.7 P160 BE160M4** | 290 |
| **89** | 1121 | 1.1 | 16.6 | 12000 | **A502_16.6 S5 ME5SA4** | 281 | **A502_16.6 P160 BE160M4** | 282 |
| **94** | 1061 | 1.7 | 15.7 | 26600 | **A552_15.7 S5 ME5SA4** | 285 | **A552_15.7 P160 BE160M4** | 286 |
| **112** | 887 | 1.2 | 13.1 | 11500 | **A502_13.1 S5 ME5SA4** | 281 | **A502_13.1 P160 BE160M4** | 282 |
| **112** | 885 | 2.0 | 13.1 | 25400 | **A552_13.1 S5 ME5SA4** | 285 | **A552_13.1 P160 BE160M4** | 286 |
| **116** | 860 | 2.3 | 12.7 | 30000 | **A602_12.7 S5 ME5SA4** | 289 | **A602_12.7 P160 BE160M4** | 290 |
| **124** | 773 | 2.1 | 23.8 | 23600 | **A553_23.8 S5 ME5SA2** | 285 | **A553_23.8 P160 BE160MA2** | 286 |
| **142** | 701 | 2.6 | 10.4 | 24000 | **A552_10.4 S5 ME5SA4** | 285 | **A552_10.4 P160 BE160M4** | 286 |
| **143** | 698 | 2.9 | 10.3 | 30000 | **A602_10.3 S5 ME5SA4** | 289 | **A602_10.3 P160 BE160M4** | 290 |
| **151** | 659 | 1.5 | 9.7 | 10800 | **A502_9.7 S5 ME5SA4** | 281 | **A502_9.7 P160 BE160M4** | 282 |
| **174** | 573 | 3.1 | 8.5 | 22800 | **A552_8.5 S5 ME5SA4** | 285 | **A552_8.5 P160 BE160M4** | 286 |
| **190** | 524 | 1.8 | 7.7 | 10300 | **A502_7.7 S5 ME5SA4** | 281 | **A502_7.7 P160 BE160M4** | 282 |
| **224** | 440 | 2.0 | 13.1 | 9920 | **A502_13.1 S5 ME5SA2** | 281 | **A502_13.1 P160 BE160MA2** | 282 |
| **380** | 260 | 2.8 | 7.7 | 8650 | **A502_7.7 S5 ME5SA2** | 281 | **A502_7.7 P160 BE160MA2** | 282 |

## 15 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **8.2** | 15697 | 0.9 | 180.0 | 75000 | **A904_180.0 S5 ME5LA4** | 299 | **A904_180.0 P160 BE160L4** | 300 |
| **8.8** | 14490 | 1.0 | 166.1 | 75000 | **A904_166.1 S5 ME5LA4** | 299 | **A904_166.1 P160 BE160L4** | 300 |
| **9.7** | 13467 | 1.0 | 151.0 | 75000 | **A903_151.0 S5 ME5LA4** | 299 | **A903_151.0 P160 BE160L4** | 300 |
| **10.5** | 12431 | 1.0 | 139.4 | 75000 | **A903_139.4 S5 ME5LA4** | 299 | **A903_139.4 P160 BE160L4** | 300 |
| **11.6** | 11294 | 1.2 | 126.6 | 75000 | **A903_126.6 S5 ME5LA4** | 299 | **A903_126.6 P160 BE160L4** | 300 |
| **12.6** | 10426 | 1.3 | 116.9 | 75000 | **A903_116.9 S5 ME5LA4** | 299 | **A903_116.9 P160 BE160L4** | 300 |
| **13.8** | 9526 | 1.5 | 106.8 | 75000 | **A903_106.8 S5 ME5LA4** | 299 | **A903_106.8 P160 BE160L4** | 300 |
| **14.9** | 8793 | 1.6 | 98.6 | 75000 | **A903_98.6 S5 ME5LA4** | 299 | **A903_98.6 P160 BE160L4** | 300 |
| **15.3** | 8564 | 0.9 | 96.0 | 60600 | **A803_96.0 S5 ME5LA4** | 296 | **A803_96.0 P160 BE160L4** | 297 |
| **16.5** | 7953 | 1.0 | 89.2 | 60400 | **A803_89.2 S5 ME5LA4** | 296 | **A803_89.2 P160 BE160L4** | 297 |
| **16.9** | 7765 | 1.8 | 87.1 | 75000 | **A903_87.1 S5 ME5LA4** | 299 | **A903_87.1 P160 BE160L4** | 300 |
| **17.9** | 7341 | 1.1 | 82.3 | 59800 | **A803_82.3 S5 ME5LA4** | 296 | **A803_82.3 P160 BE160L4** | 297 |
| **18.3** | 7168 | 2.0 | 80.4 | 75000 | **A903_80.4 S5 ME5LA4** | 299 | **A903_80.4 P160 BE160L4** | 300 |
| **19.7** | 6642 | 2.1 | 74.5 | 75000 | **A903_74.5 S5 ME5LA4** | 299 | **A903_74.5 P160 BE160L4** | 300 |
| **20.3** | 6454 | 1.2 | 72.4 | 59100 | **A803_72.4 S5 ME5LA4** | 296 | **A803_72.4 P160 BE160L4** | 297 |
| **21.4** | 6131 | 2.3 | 68.8 | 75000 | **A903_68.8 S5 ME5LA4** | 299 | **A903_68.8 P160 BE160L4** | 300 |
| **22.0** | 5957 | 1.3 | 66.8 | 58300 | **A803_66.8 S5 ME5LA4** | 296 | **A803_66.8 P160 BE160L4** | 297 |
| **24.6** | 5331 | 1.5 | 59.8 | 57500 | **A803_59.8 S5 ME5LA4** | 296 | **A803_59.8 P160 BE160L4** | 297 |
| **24.7** | 5317 | 2.6 | 59.6 | 75000 | **A903_59.6 S5 ME5LA4** | 299 | **A903_59.6 P160 BE160L4** | 300 |
| **25.5** | 5143 | 1.0 | 57.7 | 50000 | **A703_57.7 S5 ME5LA4** | 293 | **A703_57.7 P160 BE160L4** | 294 |
| **26.6** | 4921 | 1.6 | 55.2 | 56700 | **A803_55.2 S5 ME5LA4** | 296 | **A803_55.2 P160 BE160L4** | 297 |
| **26.7** | 4908 | 2.9 | 55.0 | 75000 | **A903_55.0 S5 ME5LA4** | 299 | **A903_55.0 P160 BE160L4** | 300 |
| **27.6** | 4747 | 1.1 | 53.2 | 50000 | **A703_53.2 S5 ME5LA4** | 293 | **A703_53.2 P160 BE160L4** | 294 |
| **30** | 4370 | 1.1 | 49.0 | 50000 | **A703_49.0 S5 ME5LA4** | 293 | **A703_49.0 P160 BE160L4** | 294 |
| **30** | 4307 | 3.3 | 48.3 | 74900 | | | **A903_48.3 P160 BE160L4** | 300 |
| **31** | 4297 | 1.9 | 48.2 | 55500 | **A803_48.2 S5 ME5LA4** | 296 | **A803_48.2 P160 BE160L4** | 297 |
| **33** | 4034 | 1.2 | 45.2 | 50000 | **A703_45.2 S5 ME5LA4** | 293 | **A703_45.2 P160 BE160L4** | 294 |
| **33** | 3976 | 3.5 | 44.6 | 73500 | | | **A903_44.6 P160 BE160L4** | 300 |
| **33** | 3966 | 1.9 | 44.5 | 54700 | **A803_44.5 S5 ME5LA4** | 296 | **A803_44.5 P160 BE160L4** | 297 |
| **38** | 3433 | 2.2 | 38.5 | 53200 | | | **A803_38.5 P160 BE160L4** | 297 |
| **38** | 3423 | 1.4 | 38.4 | 49900 | **A703_38.4 S5 ME5LA4** | 293 | **A703_38.4 P160 BE160L4** | 294 |
| **41** | 3169 | 2.2 | 35.5 | 52300 | | | **A803_35.5 P160 BE160L4** | 297 |
| **41** | 3160 | 1.4 | 35.4 | 49100 | **A703_35.4 S5 ME5LA4** | 293 | **A703_35.4 P160 BE160L4** | 294 |
| **43** | 3059 | 0.9 | 34.3 | 30000 | **A603_34.3 S5 ME5LA4** | 289 | **A603_34.3 P160 BE160L4** | 290 |
| **46** | 2824 | 1.0 | 31.7 | 30000 | **A603_31.7 S5 ME5LA4** | 289 | **A603_31.7 P160 BE160L4** | 290 |

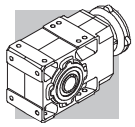


## 15 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **48** | 2727 | 2.4 | 30.6 | 50800 | | | **A803_30.6 P160 BE160L4** | 297 |
| **49** | 2684 | 1.7 | 30.1 | 47600 | | | **A703_30.1 P160 BE160L4** | 294 |
| **52** | 2517 | 2.6 | 28.2 | 49900 | | | **A803_28.2 P160 BE160L4** | 297 |
| **53** | 2484 | 1.1 | 27.9 | 30000 | **A603_27.9 S5 ME5LA4** | 289 | **A603_27.9 P160 BE160L4** | 290 |
| **53** | 2478 | 1.7 | 27.8 | 46700 | | | **A703_27.8 P160 BE160L4** | 294 |
| **57** | 2293 | 1.2 | 25.7 | 30000 | **A603_25.7 S5 ME5LA4** | 289 | **A603_25.7 P160 BE160L4** | 290 |
| **62** | 2122 | 0.9 | 23.8 | 22600 | **A553_23.8 S5 ME5LA4** | 285 | **A553_23.8 P160 BE160L4** | 286 |
| **63** | 2098 | 2.1 | 23.5 | 45100 | | | **A703_23.5 P160 BE160L4** | 294 |
| **69** | 1900 | 2.1 | 21.3 | 44100 | **A703_21.3 S5 ME5LA4** | 293 | **A703_21.3 P160 BE160L4** | 294 |
| **70** | 1868 | 3.5 | 20.9 | 46600 | **A803_20.9 S5 ME5LA4** | 296 | **A803_20.9 P160 BE160L4** | 297 |
| **71** | 1897 | 1.1 | 20.6 | 30000 | **A602_20.6 S5 ME5LA4** | 289 | **A602_20.6 P160 BE160L4** | 290 |
| **75** | 1754 | 2.1 | 19.7 | 43300 | **A703_19.7 S5 ME5LA4** | 293 | **A703_19.7 P160 BE160L4** | 294 |
| **76** | 1725 | 3.5 | 19.3 | 45700 | **A803_19.3 S5 ME5LA4** | 296 | **A803_19.3 P160 BE160L4** | 297 |
| **76** | 1772 | 1.0 | 19.2 | 26800 | **A552_19.2 S5 ME5LA4** | 285 | **A552_19.2 P160 BE160L4** | 286 |
| **88** | 1542 | 1.3 | 16.7 | 30000 | **A602_16.7 S5 ME5LA4** | 289 | **A602_16.7 P160 BE160L4** | 290 |
| **88** | 1488 | 2.7 | 16.7 | 41600 | **A703_16.7 S5 ME5LA4** | 293 | **A703_16.7 P160 BE160L4** | 294 |
| **94** | 1444 | 1.2 | 15.7 | 25700 | **A552_15.7 S5 ME5LA4** | 285 | **A552_15.7 P160 BE160L4** | 286 |
| **95** | 1374 | 2.7 | 15.4 | 40800 | **A703_15.4 S5 ME5LA4** | 293 | **A703_15.4 P160 BE160L4** | 294 |
| **112** | 1207 | 0.9 | 13.1 | 10500 | **A502_13.1 S5 ME5LA4** | 281 | **A502_13.1 P160 BE160L4** | 282 |
| **112** | 1167 | 3.3 | 13.1 | 39200 | | | **A703_13.1 P160 BE160L4** | 294 |
| **112** | 1205 | 1.5 | 13.1 | 24700 | **A552_13.1 S5 ME5LA4** | 285 | **A552_13.1 P160 BE160L4** | 286 |
| **116** | 1170 | 1.7 | 12.7 | 30000 | **A602_12.7 S5 ME5LA4** | 289 | **A602_12.7 P160 BE160L4** | 290 |
| **122** | 1077 | 3.3 | 12.1 | 38400 | | | **A703_12.1 P160 BE160L4** | 294 |
| **142** | 954 | 1.9 | 10.4 | 23400 | **A552_10.4 S5 ME5LA4** | 285 | **A552_10.4 P160 BE160L4** | 286 |
| **143** | 950 | 2.1 | 10.3 | 30000 | **A602_10.3 S5 ME5LA4** | 289 | **A602_10.3 P160 BE160L4** | 290 |
| **151** | 897 | 1.1 | 9.7 | 10100 | **A502_9.7 S5 ME5LA4** | 281 | **A502_9.7 P160 BE160L4** | 282 |
| **174** | 779 | 2.3 | 8.5 | 22200 | **A552_8.5 S5 ME5LA4** | 285 | **A552_8.5 P160 BE160L4** | 286 |
| **187** | 724 | 2.8 | 7.9 | 28300 | **A602_7.9 S5 ME5LA4** | 289 | **A602_7.9 P160 BE160L4** | 290 |
| **190** | 713 | 1.3 | 7.7 | 9750 | **A502_7.7 S5 ME5LA4** | 281 | **A502_7.7 P160 BE160L4** | 282 |
| **229** | 591 | 2.9 | 6.4 | 20700 | **A552_6.4 S5 ME5LA4** | 285 | **A552_6.4 P160 BE160L4** | 286 |
| **297** | 456 | 3.5 | 4.9 | 19400 | **A552_4.9 S5 ME5LA4** | 285 | **A552_4.9 P160 BE160L4** | 286 |
| **302** | 446 | 1.8 | 9.7 | 8830 | **A502_9.7 S5 ME5SB2** | 281 | **A502_9.7 P160 BE160MB2** | 282 |
| **380** | 354 | 2.1 | 7.7 | 8350 | **A502_7.7 S5 ME5SB2** | 281 | **A502_7.7 P160 BE160MB2** | 282 |

## 18.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **11.6** | 13830 | 1.0 | 126.6 | 75000 | | | **A903_126.6 P180 BE180M4** | 300 |
| **12.6** | 12766 | 1.1 | 116.9 | 75000 | | | **A903_116.9 P180 BE180M4** | 300 |
| **13.8** | 11665 | 1.2 | 106.8 | 75000 | | | **A903_106.8 P180 BE180M4** | 300 |
| **14.9** | 10767 | 1.3 | 98.6 | 75000 | | | **A903_98.6 P180 BE180M4** | 300 |
| **16.9** | 9508 | 1.5 | 87.1 | 75000 | | | **A903_87.1 P180 BE180M4** | 300 |
| **18.3** | 8777 | 1.6 | 80.4 | 75000 | | | **A903_80.4 P180 BE180M4** | 300 |
| **19.7** | 8133 | 1.7 | 74.5 | 75000 | | | **A903_74.5 P180 BE180M4** | 300 |
| **20.3** | 7903 | 1.0 | 72.4 | 55600 | | | **A803_72.4 P180 BE180M4** | 297 |
| **21.4** | 7508 | 1.9 | 68.8 | 75000 | | | **A903_68.8 P180 BE180M4** | 300 |
| **22.0** | 7295 | 1.1 | 66.8 | 55100 | | | **A803_66.8 P180 BE180M4** | 297 |
| **24.6** | 6528 | 1.2 | 59.8 | 54700 | | | **A803_59.8 P180 BE180M4** | 297 |
| **24.7** | 6510 | 2.2 | 59.6 | 75000 | | | **A903_59.6 P180 BE180M4** | 300 |
| **26.6** | 6026 | 1.3 | 55.2 | 54100 | | | **A803_55.2 P180 BE180M4** | 297 |
| **26.7** | 6009 | 2.3 | 55.0 | 74900 | | | **A903_55.0 P180 BE180M4** | 300 |
| **30** | 5351 | 0.9 | 49.0 | 49600 | | | **A703_49.0 P180 BE180M4** | 294 |
| **30** | 5274 | 2.7 | 48.3 | 73100 | | | **A903_48.3 P180 BE180M4** | 300 |

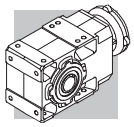


## 18.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **31** | 5262 | 1.5 | 48.2 | 53200 | | | **A803_48.2 P180 BE180M4** | 297 |
| **33** | 4939 | 1.0 | 45.2 | 49000 | | | **A703_45.2 P180 BE180M4** | 294 |
| **33** | 4869 | 2.9 | 44.6 | 71800 | | | **A903_44.6 P180 BE180M4** | 300 |
| **33** | 4857 | 1.5 | 44.5 | 52500 | | | **A803_44.5 P180 BE180M4** | 297 |
| **38** | 4238 | 3.3 | 38.8 | 69700 | | | **A903_38.8 P180 BE180M4** | 300 |
| **38** | 4204 | 1.8 | 38.5 | 51400 | | | **A803_38.5 P180 BE180M4** | 297 |
| **38** | 4191 | 1.2 | 38.4 | 48000 | | | **A703_38.4 P180 BE180M4** | 294 |
| **41** | 3912 | 3.5 | 35.8 | 68500 | | | **A903_35.8 P180 BE180M4** | 300 |
| **41** | 3881 | 1.8 | 35.5 | 50600 | | | **A803_35.5 P180 BE180M4** | 297 |
| **41** | 3869 | 1.2 | 35.4 | 47300 | | | **A703_35.4 P180 BE180M4** | 294 |
| **48** | 3339 | 1.9 | 30.6 | 49300 | | | **A803_30.6 P180 BE180M4** | 297 |
| **49** | 3287 | 1.4 | 30.1 | 46100 | | | **A703_30.1 P180 BE180M4** | 294 |
| **52** | 3082 | 2.1 | 28.2 | 48500 | | | **A803_28.2 P180 BE180M4** | 297 |
| **53** | 3042 | 0.9 | 27.9 | 30000 | | | **A603_27.9 P180 BE180M4** | 290 |
| **53** | 3034 | 1.4 | 27.8 | 45300 | | | **A703_27.8 P180 BE180M4** | 294 |
| **57** | 2808 | 1.0 | 25.7 | 30000 | | | **A603_25.7 P180 BE180M4** | 290 |
| **60** | 2675 | 2.5 | 24.5 | 47200 | | | **A803_24.5 P180 BE180M4** | 297 |
| **63** | 2568 | 1.7 | 23.5 | 43900 | | | **A703_23.5 P180 BE180M4** | 294 |
| **65** | 2470 | 2.5 | 22.6 | 46300 | | | **A803_22.6 P180 BE180M4** | 297 |
| **69** | 2326 | 1.7 | 21.3 | 43000 | | | **A703_21.3 P180 BE180M4** | 294 |
| **70** | 2288 | 2.9 | 20.9 | 45600 | | | **A803_20.9 P180 BE180M4** | 297 |
| **71** | 2323 | 0.9 | 20.6 | 30000 | | | **A602_20.6 P180 BE180M4** | 290 |
| **75** | 2147 | 1.7 | 19.7 | 42300 | | | **A703_19.7 P180 BE180M4** | 294 |
| **76** | 2112 | 2.9 | 19.3 | 44800 | | | **A803_19.3 P180 BE180M4** | 297 |
| **88** | 1888 | 1.1 | 16.7 | 30000 | | | **A602_16.7 P180 BE180M4** | 290 |
| **88** | 1822 | 2.2 | 16.7 | 40800 | | | **A703_16.7 P180 BE180M4** | 294 |
| **94** | 1769 | 1.0 | 15.7 | 25000 | | | **A552_15.7 P180 BE180M4** | 286 |
| **95** | 1682 | 2.2 | 15.4 | 40100 | | | **A703_15.4 P180 BE180M4** | 294 |
| **112** | 1429 | 2.7 | 13.1 | 38600 | | | **A703_13.1 P180 BE180M4** | 294 |
| **112** | 1475 | 1.2 | 13.1 | 24100 | | | **A552_13.1 P180 BE180M4** | 286 |
| **116** | 1433 | 1.4 | 12.7 | 30000 | | | **A602_12.7 P180 BE180M4** | 290 |
| **122** | 1319 | 2.7 | 12.1 | 37800 | | | **A703_12.1 P180 BE180M4** | 294 |
| **124** | 1299 | 1.2 | 23.8 | 21600 | **A553_23.8 S5 ME5LA2** | 285 | **A553_23.8 P160 BE160L2** | 286 |
| **142** | 1168 | 1.5 | 10.4 | 22900 | | | **A552_10.4 P180 BE180M4** | 286 |
| **143** | 1164 | 1.7 | 10.3 | 29900 | | | **A602_10.3 P180 BE180M4** | 290 |
| **144** | 1117 | 2.9 | 10.2 | 36300 | | | **A703_10.2 P180 BE180M4** | 294 |
| **151** | 1098 | 0.9 | 9.7 | 9530 | | | **A502_9.7 P180 BE180M4** | 282 |
| **156** | 1031 | 2.9 | 9.4 | 35600 | | | **A703_9.4 P180 BE180M4** | 294 |
| **174** | 954 | 1.9 | 8.5 | 21900 | | | **A552_8.5 P180 BE180M4** | 286 |
| **187** | 887 | 2.3 | 7.9 | 27900 | | | **A602_7.9 P180 BE180M4** | 290 |
| **190** | 873 | 1.1 | 7.7 | 9260 | | | **A502_7.7 P180 BE180M4** | 282 |
| **229** | 723 | 2.4 | 6.4 | 20400 | | | **A552_6.4 P180 BE180M4** | 286 |
| **297** | 558 | 2.9 | 4.9 | 19100 | | | **A552_4.9 P180 BE180M4** | 286 |
| **381** | 436 | 1.7 | 7.7 | 8100 | **A502_7.7 S5 ME5LA2** | 281 | **A502_7.7 P160 BE160L2** | 282 |

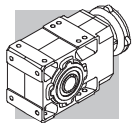
## 22 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **12.6** | 15213 | 0.9 | 116.9 | 75000 | | | **A903_116.9 P180 BE180L4** | 300 |
| **13.8** | 13900 | 1.0 | 106.8 | 75000 | | | **A903_106.8 P180 BE180L4** | 300 |
| **14.9** | 12831 | 1.1 | 98.6 | 75000 | | | **A903_98.6 P180 BE180L4** | 300 |
| **16.9** | 11330 | 1.2 | 87.1 | 75000 | | | **A903_87.1 P180 BE180L4** | 300 |
| **18.3** | 10459 | 1.3 | 80.4 | 75000 | | | **A903_80.4 P180 BE180L4** | 300 |



# 22 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **19.7** | 9692 | 1.4 | 74.5 | 75000 | | | **A903_74.5 P180 BE180L4** | 300 |
| **21.4** | 8947 | 1.6 | 68.8 | 75000 | | | **A903_68.8 P180 BE180L4** | 300 |
| **22.0** | 8693 | 0.9 | 66.8 | 51900 | | | **A803_66.8 P180 BE180L4** | 297 |
| **24.6** | 7779 | 1.0 | 59.8 | 51800 | | | **A803_59.8 P180 BE180L4** | 297 |
| **24.7** | 7758 | 1.8 | 59.6 | 73800 | | | **A903_59.6 P180 BE180L4** | 300 |
| **26.6** | 7181 | 1.1 | 55.2 | 51400 | | | **A803_55.2 P180 BE180L4** | 297 |
| **26.7** | 7161 | 2.0 | 55.0 | 72700 | | | **A903_55.0 P180 BE180L4** | 300 |
| **30** | 6285 | 2.2 | 48.3 | 71100 | | | **A903_48.3 P180 BE180L4** | 300 |
| **31** | 6270 | 1.3 | 48.2 | 50900 | | | **A803_48.2 P180 BE180L4** | 297 |
| **33** | 5802 | 2.4 | 44.6 | 70000 | | | **A903_44.6 P180 BE180L4** | 300 |
| **33** | 5788 | 1.3 | 44.5 | 50300 | | | **A803_44.5 P180 BE180L4** | 297 |
| **38** | 5050 | 2.8 | 38.8 | 68100 | | | **A903_38.8 P180 BE180L4** | 300 |
| **38** | 5010 | 1.5 | 38.5 | 49500 | | | **A803_38.5 P180 BE180L4** | 297 |
| **38** | 4995 | 1.0 | 38.4 | 46000 | | | **A703_38.4 P180 BE180L4** | 294 |
| **41** | 4662 | 2.9 | 35.8 | 67000 | | | **A903_35.8 P180 BE180L4** | 300 |
| **41** | 4625 | 1.5 | 35.5 | 48900 | | | **A803_35.5 P180 BE180L4** | 297 |
| **41** | 4611 | 1.0 | 35.4 | 45500 | | | **A703_35.4 P180 BE180L4** | 294 |
| **47** | 4099 | 3.4 | 31.5 | 65200 | | | **A903_31.5 P180 BE180L4** | 300 |
| **48** | 3979 | 1.6 | 30.6 | 47800 | | | **A803_30.6 P180 BE180L4** | 297 |
| **49** | 3917 | 1.2 | 30.1 | 44500 | | | **A703_30.1 P180 BE180L4** | 294 |
| **51** | 3784 | 3.4 | 29.1 | 64000 | | | **A903_29.1 P180 BE180L4** | 300 |
| **52** | 3673 | 1.8 | 28.2 | 47100 | | | **A803_28.2 P180 BE180L4** | 297 |
| **53** | 3616 | 1.2 | 27.8 | 43900 | | | **A703_27.8 P180 BE180L4** | 294 |
| **60** | 3188 | 2.1 | 24.5 | 45900 | | | **A803_24.5 P180 BE180L4** | 297 |
| **63** | 3061 | 1.4 | 23.5 | 42700 | | | **A703_23.5 P180 BE180L4** | 294 |
| **65** | 2943 | 2.1 | 22.6 | 45200 | | | **A803_22.6 P180 BE180L4** | 297 |
| **69** | 2772 | 1.4 | 21.3 | 41900 | | | **A703_21.3 P180 BE180L4** | 294 |
| **70** | 2726 | 2.4 | 20.9 | 44600 | | | **A803_20.9 P180 BE180L4** | 297 |
| **75** | 2559 | 1.4 | 19.7 | 41200 | | | **A703_19.7 P180 BE180L4** | 294 |
| **76** | 2516 | 2.4 | 19.3 | 43800 | | | **A803_19.3 P180 BE180L4** | 297 |
| **88** | 2178 | 3.0 | 16.7 | 42500 | | | **A803_16.7 P180 BE180L4** | 297 |
| **88** | 2250 | 0.9 | 16.7 | 30000 | | | **A602_16.7 P180 BE180L4** | 290 |
| **88** | 2172 | 1.8 | 16.7 | 39900 | | | **A703_16.7 P180 BE180L4** | 294 |
| **95** | 2011 | 3.0 | 15.5 | 41700 | | | **A803_15.5 P180 BE180L4** | 297 |
| **95** | 2005 | 1.8 | 15.4 | 39200 | | | **A703_15.4 P180 BE180L4** | 294 |
| **112** | 1703 | 2.3 | 13.1 | 37900 | | | **A703_13.1 P180 BE180L4** | 294 |
| **112** | 1758 | 1.0 | 13.1 | 23500 | | | **A552_13.1 P180 BE180L4** | 286 |
| **116** | 1708 | 1.2 | 12.7 | 30000 | | | **A602_12.7 P180 BE180L4** | 290 |
| **122** | 1572 | 2.3 | 12.1 | 37200 | | | **A703_12.1 P180 BE180L4** | 294 |
| **142** | 1392 | 1.3 | 10.4 | 22400 | | | **A552_10.4 P180 BE180L4** | 286 |
| **143** | 1387 | 1.4 | 10.3 | 29300 | | | **A602_10.3 P180 BE180L4** | 290 |
| **144** | 1331 | 2.4 | 10.2 | 35800 | | | **A703_10.2 P180 BE180L4** | 294 |
| **156** | 1228 | 2.4 | 9.4 | 35100 | | | **A703_9.4 P180 BE180L4** | 294 |
| **174** | 1137 | 1.6 | 8.5 | 21400 | | | **A552_8.5 P180 BE180L4** | 286 |
| **187** | 1057 | 1.9 | 7.9 | 27500 | | | **A602_7.9 P180 BE180L4** | 290 |
| **190** | 1040 | 0.9 | 7.7 | 8760 | | | **A502_7.7 P180 BE180L4** | 282 |
| **229** | 862 | 2.0 | 6.4 | 20100 | | | **A552_6.4 P180 BE180L4** | 286 |
| **297** | 665 | 2.4 | 4.9 | 18900 | | | **A552_4.9 P180 BE180L4** | 286 |

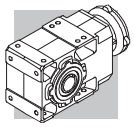


## 41 DATOS TECNICOS REDUCTORES

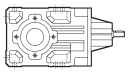
# A 10 — 150 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 10 2_5.5** | 5.5 | 512 | 73 | 4.2 | — | 1830 | 256 | 73 | 2.1 | 960 | 2460 | |
| **A 10 2_6.3** | 6.3 | 442 | 80 | 3.9 | — | 1900 | 221 | 80 | 2.0 | 830 | 2560 | |
| **A 10 2_7.2** | 7.2 | 388 | 92 | 4.0 | — | 1910 | 194 | 93 | 2.0 | 630 | 2600 | |
| **A 10 2_8.5** | 8.5 | 329 | 92 | 3.4 | — | 2060 | 164 | 93 | 1.7 | 720 | 2790 | |
| **A 10 2_9.6** | 9.6 | 291 | 102 | 3.3 | — | 2090 | 146 | 128 | 2.1 | — | 2650 | |
| **A 10 2_10.6** | 10.6 | 265 | 125 | 3.7 | 540 | 2010 | 133 | 150 | 2.2 | 810 | 2590 | |
| **A 10 2_12.3** | 12.3 | 228 | 110 | 2.8 | — | 2280 | 114 | 138 | 1.7 | — | 2880 | |
| **A 10 2_13.9** | 13.9 | 201 | 135 | 3.0 | 620 | 2220 | 101 | 150 | 1.7 | 1080 | 2960 | |
| **A 10 2_16.4** | 16.4 | 170 | 140 | 2.7 | 610 | 2370 | 85 | 150 | 1.4 | 1140 | 3200 | |
| **A 10 2_18.6** | 18.6 | 151 | 147 | 2.5 | 650 | 2460 | 75 | 150 | 1.3 | 1180 | 3380 | |
| **A 10 2_21.4** | 21.4 | 131 | 150 | 2.2 | 650 | 2610 | 66 | 150 | 1.1 | 1200 | 3600 | |
| **A 10 2_23.8** | 23.8 | 118 | 150 | 2.0 | 750 | 2750 | 59 | 150 | 0.98 | 1220 | 3780 | 262 |
| **A 10 2_25.5** | 25.5 | 110 | 150 | 1.8 | 750 | 2840 | 55 | 150 | 0.92 | 1220 | 3900 | |
| **A 10 2_28.6** | 28.6 | 98 | 150 | 1.6 | 830 | 3000 | 49 | 150 | 0.82 | 1250 | 4100 | |
| **A 10 2_32.2** | 32.2 | 87 | 150 | 1.5 | 880 | 3170 | 43 | 150 | 0.73 | 1270 | 4310 | |
| **A 10 2_35.1** | 35.1 | 80 | 150 | 1.3 | 880 | 3300 | 40 | 150 | 0.67 | 1270 | 4470 | |
| **A 10 2_40.9** | 40.9 | 69 | 150 | 1.1 | 910 | 3530 | 34 | 150 | 0.57 | 1300 | 4770 | |
| **A 10 2_45.4** | 45.4 | 62 | 150 | 1.0 | 910 | 3700 | 31 | 150 | 0.52 | 1300 | 4980 | |
| **A 10 2_51.3** | 51.3 | 55 | 150 | 0.91 | 910 | 3910 | 27.3 | 150 | 0.46 | 1290 | 5240 | |
| **A 10 2_58.6** | 58.6 | 48 | 150 | 0.80 | 920 | 4140 | 23.9 | 150 | 0.40 | 1300 | 5500 | |
| **A 10 2_65.9** | 65.9 | 42 | 150 | 0.71 | 920 | 4360 | 21.2 | 150 | 0.35 | 1300 | 5500 | |
| **A 10 2_76.4** | 76.4 | 37 | 150 | 0.61 | 930 | 4640 | 18.3 | 150 | 0.31 | 1300 | 5500 | |
| **A 10 2_91.6** | 91.6 | 31 | 130 | 0.44 | 1020 | 5160 | 15.3 | 130 | 0.22 | 1300 | 5500 | |

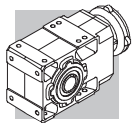
(—) Contactar con nuestro Servicio Técnico comunicando los datos relativos a la carga radial (sentido de giro, orientación, posición)



# A 10 — 150 Nm

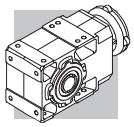


| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 10 2_5.5** | 5.5 | 165 | 73 | 1.3 | 1300 | 2950 | 91 | 73 | 0.74 | 1300 | 3720 | |
| **A 10 2_6.3** | 6.3 | 142 | 80 | 1.3 | 1300 | 3070 | 79 | 80 | 0.70 | 1300 | 4100 | |
| **A 10 2_7.2** | 7.2 | 125 | 93 | 1.3 | 1160 | 3130 | 69 | 93 | 0.72 | 1300 | 3970 | |
| **A 10 2_8.5** | 8.5 | 106 | 95 | 1.1 | 1200 | 3330 | 59 | 110 | 0.72 | 1300 | 4100 | |
| **A 10 2_9.6** | 9.6 | 94 | 128 | 1.3 | 500 | 3230 | 52 | 128 | 0.74 | 1300 | 4160 | |
| **A 10 2_10.6** | 10.6 | 85 | 150 | 1.4 | 1300 | 3200 | 47 | 150 | 0.79 | 1300 | 4160 | |
| **A 10 2_12.3** | 12.3 | 73 | 150 | 1.2 | 180 | 3420 | 41 | 150 | 0.68 | 1030 | 4430 | |
| **A 10 2_13.9** | 13.9 | 65 | 150 | 1.1 | 1300 | 3630 | 36 | 150 | 0.60 | 1300 | 4680 | |
| **A 10 2_16.4** | 16.4 | 55 | 150 | 0.91 | 1300 | 3900 | 30 | 150 | 0.51 | 1300 | 5010 | |
| **A 10 2_18.6** | 18.6 | 48 | 150 | 0.81 | 1300 | 4120 | 26.9 | 150 | 0.45 | 1300 | 5270 | |
| **A 10 2_21.4** | 21.4 | 42 | 150 | 0.70 | 1300 | 4370 | 23.4 | 150 | 0.39 | 1300 | 5500 | |
| **A 10 2_23.8** | 23.8 | 38 | 150 | 0.63 | 1300 | 4570 | 21.0 | 150 | 0.35 | 1300 | 5500 | 262 |
| **A 10 2_25.5** | 25.5 | 35 | 150 | 0.59 | 1300 | 4710 | 19.6 | 150 | 0.33 | 1300 | 5500 | |
| **A 10 2_28.6** | 28.6 | 31 | 150 | 0.53 | 1300 | 4940 | 17.5 | 150 | 0.29 | 1300 | 5500 | |
| **A 10 2_32.2** | 32.2 | 28.0 | 150 | 0.47 | 1300 | 5190 | 15.5 | 150 | 0.26 | 1300 | 5500 | |
| **A 10 2_35.1** | 35.1 | 25.6 | 150 | 0.43 | 1300 | 5380 | 14.2 | 150 | 0.24 | 1300 | 5500 | |
| **A 10 2_40.9** | 40.9 | 22.0 | 150 | 0.37 | 1300 | 5500 | 12.2 | 150 | 0.20 | 1300 | 5500 | |
| **A 10 2_45.4** | 45.4 | 19.8 | 150 | 0.33 | 1300 | 5500 | 11.0 | 150 | 0.18 | 1300 | 5500 | |
| **A 10 2_51.3** | 51.3 | 17.6 | 150 | 0.29 | 1300 | 5500 | 9.8 | 150 | 0.16 | 1300 | 5500 | |
| **A 10 2_58.6** | 58.6 | 15.4 | 150 | 0.26 | 1300 | 5500 | 8.5 | 150 | 0.14 | 1300 | 5500 | |
| **A 10 2_65.9** | 65.9 | 13.7 | 150 | 0.23 | 1300 | 5500 | 7.6 | 150 | 0.13 | 1300 | 5500 | |
| **A 10 2_76.4** | 76.4 | 11.8 | 150 | 0.20 | 1300 | 5500 | 6.5 | 150 | 0.11 | 1300 | 5500 | |
| **A 10 2_91.6** | 91.6 | 9.8 | 130 | 0.14 | 1300 | 5500 | 5.5 | 130 | 0.08 | 1300 | 5500 | |



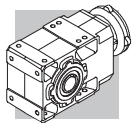
# A 20 — 250 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 20 2_5.4** | 5.4 | 523 | 96 | 5.6 | 610 | 1910 | 262 | 121 | 3.5 | 770 | 2400 | |
| **A 20 2_6.5** | 6.5 | 428 | 107 | 5.1 | 490 | 2010 | 214 | 135 | 3.2 | 610 | 2530 | |
| **A 20 2_7.3** | 7.3 | 384 | 113 | 4.8 | 510 | 2070 | 192 | 143 | 3.1 | 630 | 2600 | |
| **A 20 2_8.4** | 8.4 | 334 | 116 | 4.3 | 510 | 2180 | 167 | 146 | 2.7 | 650 | 2750 | |
| **A 20 2_9.4** | 9.4 | 299 | 122 | 4.1 | 530 | 2260 | 149 | 154 | 2.6 | 660 | 2840 | |
| **A 20 2_10.3** | 10.3 | 271 | 183 | 5.5 | 650 | 1970 | 135 | 225 | 3.4 | 890 | 2520 | |
| **A 20 2_12.0** | 12.0 | 234 | 128 | 3.3 | 550 | 2280 | 117 | 161 | 2.1 | 690 | 3120 | |
| **A 20 2_14.1** | 14.1 | 199 | 199 | 4.4 | 750 | 2210 | 99 | 245 | 2.7 | 960 | 2820 | |
| **A 20 2_16.2** | 16.2 | 173 | 209 | 4.0 | 700 | 2310 | 87 | 250 | 2.4 | 1040 | 2990 | |
| **A 20 2_18.1** | 18.1 | 155 | 216 | 3.7 | 760 | 2400 | 77 | 250 | 2.2 | 1210 | 3170 | |
| **A 20 2_21.2** | 21.2 | 132 | 226 | 3.3 | 710 | 2540 | 66 | 250 | 1.8 | 1290 | 3430 | |
| **A 20 2_23.1** | 23.1 | 121 | 232 | 3.1 | 710 | 2620 | 61 | 250 | 1.7 | 1360 | 3580 | |
| **A 20 2_26.5** | 26.5 | 106 | 241 | 2.8 | 660 | 2750 | 53 | 250 | 1.5 | 1410 | 3820 | |
| **A 20 2_29.2** | 29.2 | 96 | 249 | 2.7 | 670 | 2850 | 48 | 250 | 1.3 | 1510 | 4000 | |
| **A 20 2_31.3** | 31.3 | 89 | 250 | 2.5 | 660 | 2940 | 45 | 250 | 1.2 | 1510 | 4130 | |
| **A 20 2_35.4** | 35.4 | 79 | 250 | 2.2 | 800 | 3140 | 40 | 250 | 1.1 | 1650 | 4380 | |
| **A 20 2_39.6** | 39.6 | 71 | 250 | 2.0 | 880 | 3320 | 35 | 250 | 0.98 | 1710 | 4600 | |
| **A 20 2_43.2** | 43.2 | 65 | 250 | 1.8 | 880 | 3460 | 32 | 250 | 0.90 | 1710 | 4790 | |
| **A 20 2_48.3** | 48.3 | 58 | 250 | 1.6 | 920 | 3650 | 29.0 | 250 | 0.81 | 1720 | 5030 | 266 |
| **A 20 2_53.7** | 53.7 | 52 | 250 | 1.5 | 920 | 3840 | 26.1 | 250 | 0.73 | 1720 | 5270 | |
| **A 20 2_63.1** | 63.1 | 44 | 245 | 1.2 | 1040 | 4180 | 22.2 | 245 | 0.61 | 1740 | 5680 | |
| **A 20 2_71.0** | 71.0 | 39 | 210 | 0.92 | 1360 | 4640 | 19.7 | 210 | 0.46 | 1790 | 6200 | |
| **A 20 2_79.9** | 79.9 | 35 | 210 | 0.82 | 1360 | 4880 | 17.5 | 210 | 0.41 | 1790 | 6200 | |
| **A 20 2_92.3** | 92.3 | 30 | 200 | 0.68 | 1380 | 5250 | 15.2 | 200 | 0.34 | 1810 | 6200 | |
| **A 20 3_109.2** | 109.2 | 25.6 | 165 | 0.49 | 1180 | 5900 | 12.8 | 205 | 0.30 | 1300 | 6200 | |
| **A 20 3_120.5** | 120.5 | 23.2 | 168 | 0.45 | 1130 | 6110 | 11.6 | 210 | 0.28 | 1300 | 6200 | |
| **A 20 3_129.1** | 129.1 | 21.7 | 175 | 0.44 | 1210 | 6200 | 10.8 | 215 | 0.27 | 1300 | 6200 | |
| **A 20 3_146.1** | 146.1 | 19.2 | 183 | 0.40 | 1160 | 6200 | 9.6 | 230 | 0.25 | 1300 | 6200 | |
| **A 20 3_163.4** | 163.4 | 17.1 | 190 | 0.37 | 1240 | 6200 | 8.6 | 235 | 0.23 | 1300 | 6200 | |
| **A 20 3_178.3** | 178.3 | 15.7 | 195 | 0.35 | 1200 | 6200 | 7.9 | 245 | 0.22 | 1300 | 6200 | |
| **A 20 3_199.2** | 199.2 | 14.1 | 200 | 0.32 | 1270 | 6200 | 7.0 | 250 | 0.20 | 1300 | 6200 | |
| **A 20 3_221.3** | 221.3 | 12.7 | 203 | 0.30 | 1240 | 6200 | 6.3 | 250 | 0.18 | 1300 | 6200 | |
| **A 20 3_260.5** | 260.5 | 10.8 | 214 | 0.26 | 1270 | 6200 | 5.4 | 250 | 0.15 | 1300 | 6200 | |
| **A 20 3_292.8** | 292.8 | 9.6 | 218 | 0.24 | 1300 | 6200 | 4.8 | 250 | 0.14 | 1300 | 6200 | |
| **A 20 3_329.4** | 329.4 | 8.5 | 221 | 0.22 | 1300 | 6200 | 4.3 | 250 | 0.12 | 1300 | 6200 | |
| **A 20 3_380.8** | 380.8 | 7.4 | 226 | 0.19 | 1300 | 6200 | 3.7 | 250 | 0.11 | 1300 | 6200 | |



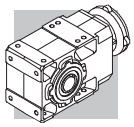
# A 20 — 250 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 20 2_5.4** | 5.4 | 168 | 140 | 2.6 | 900 | 2780 | 93 | 170 | 1.8 | 1100 | 3390 | |
| **A 20 2_6.5** | 6.5 | 138 | 156 | 2.4 | 720 | 2930 | 76 | 190 | 1.6 | 860 | 3570 | |
| **A 20 2_7.3** | 7.3 | 123 | 165 | 2.3 | 740 | 3020 | 69 | 201 | 1.5 | 890 | 3670 | |
| **A 20 2_8.4** | 8.4 | 108 | 170 | 2.0 | 730 | 3180 | 60 | 206 | 1.4 | 910 | 3870 | |
| **A 20 2_9.4** | 9.4 | 96 | 179 | 1.9 | 760 | 3290 | 53 | 210 | 1.2 | 1090 | 4050 | |
| **A 20 2_10.3** | 10.3 | 87 | 250 | 2.4 | 1190 | 2990 | 48 | 250 | 1.3 | 2200 | 3980 | |
| **A 20 2_12.0** | 12.0 | 75 | 187 | 1.6 | 790 | 2990 | 42 | 210 | 0.98 | 1336 | 4510 | |
| **A 20 2_14.1** | 14.1 | 64 | 250 | 1.8 | 1610 | 3490 | 36 | 250 | 0.99 | 2200 | 4590 | |
| **A 20 2_16.2** | 16.2 | 56 | 250 | 1.6 | 1690 | 3730 | 31 | 250 | 0.86 | 2200 | 4880 | |
| **A 20 2_18.1** | 18.1 | 50 | 250 | 1.4 | 1860 | 3930 | 27.6 | 250 | 0.77 | 2200 | 5140 | |
| **A 20 2_21.2** | 21.2 | 42 | 250 | 1.2 | 1940 | 4230 | 23.6 | 250 | 0.66 | 2200 | 5500 | |
| **A 20 2_23.1** | 23.1 | 39 | 250 | 1.1 | 1970 | 4400 | 21.6 | 250 | 0.60 | 2200 | 5710 | |
| **A 20 2_26.5** | 26.5 | 34 | 250 | 0.95 | 1980 | 4680 | 18.9 | 250 | 0.53 | 2200 | 6050 | |
| **A 20 2_29.2** | 29.2 | 31 | 250 | 0.86 | 2000 | 4890 | 17.1 | 250 | 0.48 | 2200 | 6200 | |
| **A 20 2_31.3** | 31.3 | 28.7 | 250 | 0.80 | 2000 | 5040 | 16.0 | 250 | 0.44 | 2200 | 6200 | |
| **A 20 2_35.4** | 35.4 | 25.4 | 250 | 0.71 | 2020 | 5330 | 14.1 | 250 | 0.39 | 2200 | 6200 | |
| **A 20 2_39.6** | 39.6 | 22.7 | 250 | 0.63 | 2040 | 5590 | 12.6 | 250 | 0.35 | 2200 | 6200 | |
| **A 20 2_43.2** | 43.2 | 20.8 | 250 | 0.58 | 2040 | 5800 | 11.6 | 250 | 0.32 | 2200 | 6200 | |
| **A 20 2_48.3** | 48.3 | 18.6 | 250 | 0.52 | 2040 | 6080 | 10.4 | 250 | 0.29 | 2200 | 6200 | 266 |
| **A 20 2_53.7** | 53.7 | 16.8 | 250 | 0.47 | 2050 | 6200 | 9.3 | 250 | 0.26 | 2200 | 6200 | |
| **A 20 2_63.1** | 63.1 | 14.3 | 245 | 0.39 | 2060 | 6200 | 7.9 | 245 | 0.22 | 2200 | 6200 | |
| **A 20 2_71.0** | 71.0 | 12.7 | 210 | 0.30 | 2120 | 6200 | 7.0 | 210 | 0.16 | 2200 | 6200 | |
| **A 20 2_79.9** | 79.9 | 11.3 | 210 | 0.26 | 2120 | 6200 | 6.3 | 210 | 0.15 | 2200 | 6200 | |
| **A 20 2_92.3** | 92.3 | 9.7 | 200 | 0.22 | 2140 | 6200 | 5.4 | 200 | 0.12 | 2200 | 6200 | |
| **A 20 3_109.2** | 109.2 | 8.2 | 240 | 0.23 | 1300 | 6200 | 4.6 | 250 | 0.13 | 1300 | 6200 | |
| **A 20 3_120.5** | 120.5 | 7.5 | 245 | 0.21 | 1300 | 6200 | 4.1 | 250 | 0.12 | 1300 | 6200 | |
| **A 20 3_129.1** | 129.1 | 7.0 | 250 | 0.20 | 1300 | 6200 | 3.9 | 250 | 0.11 | 1300 | 6200 | |
| **A 20 3_146.1** | 146.1 | 6.2 | 250 | 0.18 | 1300 | 6200 | 3.4 | 250 | 0.10 | 1300 | 6200 | |
| **A 20 3_163.4** | 163.4 | 5.5 | 250 | 0.16 | 1300 | 6200 | 3.1 | 250 | 0.09 | 1300 | 6200 | |
| **A 20 3_178.3** | 178.3 | 5.0 | 250 | 0.15 | 1300 | 6200 | 2.8 | 250 | 0.08 | 1300 | 6200 | |
| **A 20 3_199.2** | 199.2 | 4.5 | 250 | 0.13 | 1300 | 6200 | 2.5 | 250 | 0.07 | 1300 | 6200 | |
| **A 20 3_221.3** | 221.3 | 4.1 | 250 | 0.12 | 1300 | 6200 | 2.3 | 250 | 0.06 | 1300 | 6200 | |
| **A 20 3_260.5** | 260.5 | 3.5 | 250 | 0.10 | 1300 | 6200 | 1.9 | 250 | 0.06 | 1300 | 6200 | |
| **A 20 3_292.8** | 292.8 | 3.1 | 250 | 0.09 | 1300 | 6200 | 1.7 | 250 | 0.05 | 1300 | 6200 | |
| **A 20 3_329.4** | 329.4 | 2.7 | 250 | 0.08 | 1300 | 6200 | 1.5 | 250 | 0.04 | 1300 | 6200 | |
| **A 20 3_380.8** | 380.8 | 2.4 | 250 | 0.07 | 1300 | 6200 | 1.3 | 250 | 0.04 | 1300 | 6200 | |



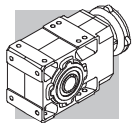
# A 30 — 410 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 30 2_5.4** | 5.4 | 517 | 175 | 10.1 | 1130 | 2480 | 259 | 220 | 6.3 | 1430 | 3130 | |
| **A 30 2_6.4** | 6.4 | 437 | 185 | 9.0 | 1120 | 2630 | 218 | 230 | 5.6 | 1470 | 3330 | |
| **A 30 2_7.0** | 7.0 | 399 | 194 | 8.6 | 1140 | 2690 | 199 | 245 | 5.4 | 1430 | 3380 | |
| **A 30 2_8.5** | 8.5 | 331 | 200 | 7.4 | 1220 | 2900 | 165 | 250 | 4.6 | 1570 | 3660 | |
| **A 30 2_9.3** | 9.3 | 301 | 214 | 7.2 | 1140 | 2950 | 150 | 270 | 4.5 | 1440 | 3710 | |
| **A 30 2_10.5** | 10.5 | 268 | 278 | 8.3 | 1800 | 2770 | 134 | 340 | 5.1 | 2200 | 3550 | |
| **A 30 2_11.8** | 11.8 | 238 | 230 | 6.1 | 1130 | 3200 | 119 | 290 | 3.8 | 1420 | 4030 | |
| **A 30 2_13.6** | 13.6 | 206 | 301 | 6.9 | 1830 | 3030 | 103 | 370 | 4.3 | 2200 | 3870 | |
| **A 30 2_16.3** | 16.3 | 171 | 318 | 6.1 | 1830 | 3240 | 86 | 385 | 3.7 | 2200 | 4170 | |
| **A 30 2_18.0** | 18.0 | 156 | 327 | 5.7 | 1840 | 3350 | 78 | 400 | 3.5 | 2200 | 4290 | |
| **A 30 2_20.5** | 20.5 | 136 | 340 | 5.2 | 1830 | 3510 | 68 | 410 | 3.1 | 2200 | 4530 | |
| **A 30 2_22.8** | 22.8 | 123 | 351 | 4.8 | 1850 | 3640 | 62 | 410 | 2.8 | 2200 | 4770 | |
| **A 30 2_26.5** | 26.5 | 106 | 367 | 4.3 | 1840 | 3850 | 53 | 410 | 2.4 | 2200 | 5150 | |
| **A 30 2_29.3** | 29.3 | 96 | 378 | 4.0 | 1847 | 3980 | 48 | 410 | 2.2 | 2200 | 5400 | |
| **A 30 2_33.4** | 33.4 | 84 | 393 | 3.7 | 1840 | 4170 | 42 | 410 | 1.9 | 2200 | 5750 | |
| **A 30 2_36.6** | 36.6 | 76 | 404 | 3.4 | 1840 | 4310 | 38 | 410 | 1.7 | 2200 | 6010 | |
| **A 30 2_39.3** | 39.3 | 71 | 410 | 3.3 | 1810 | 4430 | 36 | 410 | 1.6 | 2200 | 6200 | |
| **A 30 2_43.4** | 43.4 | 64 | 410 | 2.9 | 1850 | 4660 | 32 | 410 | 1.5 | 2200 | 6490 | |
| **A 30 2_48.3** | 48.3 | 58 | 410 | 2.6 | 1860 | 4920 | 29.0 | 410 | 1.3 | 2200 | 6810 | |
| **A 30 2_52.7** | 52.7 | 53 | 410 | 2.4 | 1860 | 5130 | 26.6 | 410 | 1.2 | 2200 | 7080 | 270 |
| **A 30 2_59.4** | 59.4 | 47 | 400 | 2.1 | 1890 | 5500 | 23.6 | 400 | 1.0 | 2200 | 7530 | |
| **A 30 2_66.0** | 66.0 | 42 | 390 | 1.8 | 1900 | 5840 | 21.2 | 390 | 0.92 | 2200 | 7940 | |
| **A 30 2_76.5** | 76.5 | 37 | 350 | 1.4 | 1950 | 6480 | 18.3 | 350 | 0.71 | 2200 | 8690 | |
| **A 30 2_86.7** | 86.7 | 32 | 320 | 1.2 | 2000 | 7010 | 16.2 | 320 | 0.58 | 2200 | 9310 | |
| **A 30 2_97.5** | 97.5 | 28.7 | 300 | 0.96 | 2020 | 7480 | 14.4 | 300 | 0.48 | 2200 | 9600 | |
| | | | | | | | | | | | | |
| **A 30 3_109.1** | 109.1 | 25.7 | 240 | 0.71 | 1300 | 8240 | 12.8 | 300 | 0.44 | 1300 | 9600 | |
| **A 30 3_120.5** | 120.5 | 23.2 | 243 | 0.65 | 1120 | 8540 | 11.6 | 300 | 0.40 | 1300 | 9600 | |
| **A 30 3_137.4** | 137.4 | 20.4 | 250 | 0.59 | 1300 | 8950 | 10.2 | 315 | 0.37 | 1300 | 9600 | |
| **A 30 3_150.7** | 150.7 | 18.6 | 261 | 0.56 | 1170 | 9210 | 9.3 | 330 | 0.35 | 1300 | 9600 | |
| **A 30 3_161.4** | 161.4 | 17.3 | 270 | 0.54 | 1300 | 9410 | 8.7 | 340 | 0.34 | 1300 | 9600 | |
| **A 30 3_178.6** | 178.5 | 15.7 | 274 | 0.49 | 1210 | 9600 | 7.8 | 345 | 0.31 | 1300 | 9600 | |
| **A 30 3_198.5** | 198.5 | 14.1 | 280 | 0.45 | 1300 | 9600 | 7.1 | 350 | 0.28 | 1300 | 9600 | |
| **A 30 3_216.6** | 216.6 | 12.9 | 287 | 0.43 | 1240 | 9600 | 6.5 | 360 | 0.27 | 1300 | 9600 | |
| **A 30 3_244.3** | 244.3 | 11.5 | 295 | 0.39 | 1300 | 9600 | 5.7 | 370 | 0.24 | 1300 | 9600 | |
| **A 30 3_271.5** | 271.5 | 10.3 | 301 | 0.36 | 1280 | 9600 | 5.2 | 380 | 0.23 | 1300 | 9600 | |
| **A 30 3_314.6** | 314.5 | 8.9 | 309 | 0.32 | 1300 | 9600 | 4.5 | 390 | 0.20 | 1300 | 9600 | |
| **A 30 3_356.3** | 356.3 | 7.9 | 320 | 0.29 | 1300 | 9600 | 3.9 | 370 | 0.17 | 1300 | 9600 | |
| **A 30 3_400.8** | 400.8 | 7.0 | 320 | 0.26 | 1300 | 9600 | 3.5 | 360 | 0.14 | 1300 | 9600 | |



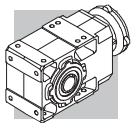
# A 30 — 410 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 30 2_5.4** | 5.4 | 166 | 255 | 4.7 | 1660 | 3630 | 92 | 300 | 3.1 | 2200 | 4470 | |
| **A 30 2_6.4** | 6.4 | 140 | 270 | 4.2 | 1630 | 3830 | 78 | 300 | 2.6 | 2200 | 4830 | |
| **A 30 2_7.0** | 7.0 | 128 | 284 | 4.1 | 1650 | 3920 | 71 | 300 | 2.4 | 2200 | 5040 | |
| **A 30 2_8.5** | 8.5 | 106 | 290 | 3.4 | 1810 | 4240 | 59 | 300 | 2.0 | 2200 | 5470 | |
| **A 30 2_9.3** | 9.3 | 97 | 300 | 3.2 | 1900 | 4380 | 54 | 300 | 1.8 | 2200 | 5710 | |
| **A 30 2_10.5** | 10.5 | 86 | 391 | 3.7 | 2200 | 4130 | 48 | 410 | 2.2 | 2200 | 5400 | |
| **A 30 2_11.8** | 11.8 | 76 | 300 | 2.6 | 2200 | 4880 | 42 | 300 | 1.4 | 2200 | 6320 | |
| **A 30 2_13.6** | 13.6 | 66 | 410 | 3.0 | 2200 | 4600 | 37 | 410 | 1.7 | 2200 | 6110 | |
| **A 30 2_16.3** | 16.3 | 55 | 410 | 2.5 | 2200 | 5044 | 31 | 410 | 1.4 | 2200 | 6650 | |
| **A 30 2_18.0** | 18.0 | 50 | 410 | 2.3 | 2200 | 5280 | 27.8 | 410 | 1.3 | 2200 | 6940 | |
| **A 30 2_20.5** | 20.5 | 44 | 410 | 2.0 | 2200 | 5630 | 24.3 | 410 | 1.1 | 2200 | 7360 | |
| **A 30 2_22.8** | 22.8 | 40 | 410 | 1.8 | 2200 | 5910 | 22.0 | 410 | 1.0 | 2200 | 7700 | |
| **A 30 2_26.5** | 26.5 | 34 | 410 | 1.5 | 2200 | 6340 | 18.8 | 410 | 0.86 | 2200 | 8230 | |
| **A 30 2_29.3** | 29.3 | 31 | 410 | 1.4 | 2200 | 6640 | 17.1 | 410 | 0.78 | 2200 | 8590 | |
| **A 30 2_33.4** | 33.4 | 26.9 | 410 | 1.2 | 2200 | 7040 | 15.0 | 410 | 0.68 | 2200 | 9080 | |
| **A 30 2_36.6** | 36.6 | 24.6 | 410 | 1.1 | 2200 | 7340 | 13.6 | 410 | 0.62 | 2200 | 9440 | |
| **A 30 2_39.3** | 39.3 | 22.9 | 410 | 1.0 | 2200 | 7560 | 12.7 | 410 | 0.58 | 2200 | 9600 | |
| **A 30 2_43.4** | 43.4 | 20.7 | 410 | 0.95 | 2200 | 7900 | 11.5 | 410 | 0.53 | 2200 | 9600 | |
| **A 30 2_48.3** | 48.3 | 18.6 | 410 | 0.85 | 2200 | 8270 | 10.4 | 410 | 0.47 | 2200 | 9600 | |
| **A 30 2_52.7** | 52.7 | 17.1 | 410 | 0.78 | 2200 | 8590 | 9.5 | 410 | 0.43 | 2200 | 9600 | 270 |
| **A 30 2_59.4** | 59.4 | 15.1 | 400 | 0.67 | 2200 | 9090 | 8.4 | 400 | 0.37 | 2200 | 9600 | |
| **A 30 2_66.0** | 66.0 | 13.6 | 390 | 0.59 | 2200 | 9560 | 7.6 | 390 | 0.33 | 2200 | 9600 | |
| **A 30 2_76.5** | 76.5 | 11.8 | 350 | 0.46 | 2200 | 9600 | 6.5 | 350 | 0.25 | 2200 | 9600 | |
| **A 30 2_86.7** | 86.7 | 10.4 | 320 | 0.37 | 2200 | 9600 | 5.8 | 320 | 0.21 | 2200 | 9600 | |
| **A 30 2_97.5** | 97.5 | 9.2 | 300 | 0.31 | 2200 | 9600 | 5.1 | 300 | 0.17 | 2200 | 9600 | |
| | | | | | | | | | | | | |
| **A 30 3_109.1** | 109.1 | 8.3 | 350 | 0.33 | 1300 | 9600 | 4.6 | 370 | 0.20 | 1300 | 9600 | |
| **A 30 3_120.5** | 120.5 | 7.5 | 354 | 0.30 | 1300 | 9600 | 4.2 | 410 | 0.20 | 1300 | 9600 | |
| **A 30 3_137.4** | 137.4 | 6.5 | 370 | 0.28 | 1300 | 9600 | 3.6 | 410 | 0.17 | 1300 | 9600 | |
| **A 30 3_150.7** | 150.7 | 6.0 | 381 | 0.26 | 1300 | 9600 | 3.3 | 410 | 0.16 | 1300 | 9600 | |
| **A 30 3_161.4** | 161.4 | 5.6 | 390 | 0.25 | 1300 | 9600 | 3.1 | 410 | 0.15 | 1300 | 9600 | |
| **A 30 3_178.6** | 178.5 | 5.0 | 400 | 0.23 | 1300 | 9600 | 2.8 | 410 | 0.13 | 1300 | 9600 | |
| **A 30 3_198.5** | 198.5 | 4.5 | 410 | 0.21 | 1300 | 9600 | 2.5 | 410 | 0.12 | 1300 | 9600 | |
| **A 30 3_216.6** | 216.6 | 4.2 | 410 | 0.20 | 1300 | 9600 | 2.3 | 410 | 0.11 | 1300 | 9600 | |
| **A 30 3_244.3** | 244.3 | 3.7 | 410 | 0.17 | 1300 | 9600 | 2.0 | 410 | 0.10 | 1300 | 9600 | |
| **A 30 3_271.5** | 271.5 | 3.3 | 410 | 0.16 | 1300 | 9600 | 1.8 | 410 | 0.09 | 1300 | 9600 | |
| **A 30 3_314.6** | 314.5 | 2.9 | 410 | 0.13 | 1300 | 9600 | 1.6 | 410 | 0.07 | 1300 | 9600 | |
| **A 30 3_356.3** | 356.3 | 2.5 | 380 | 0.11 | 1300 | 9600 | 1.4 | 380 | 0.06 | 1300 | 9600 | |
| **A 30 3_400.8** | 400.8 | 2.2 | 360 | 0.09 | 1300 | 9600 | 1.2 | 360 | 0.05 | 1300 | 9600 | |



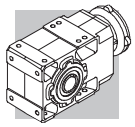
# A 35 — 600 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 35 2_5.4** | 5.4 | 517 | 246 | 14.2 | 1420 | 4000 | 259 | 310 | 8.9 | 1790 | 5050 | |
| **A 35 2_6.4** | 6.4 | 437 | 262 | 12.7 | 1420 | 4230 | 218 | 330 | 8.0 | 1790 | 5330 | |
| **A 35 2_7.0** | 7.0 | 399 | 278 | 12.3 | 1410 | 4320 | 199 | 350 | 7.8 | 1790 | 5440 | |
| **A 35 2_8.5** | 8.5 | 331 | 286 | 10.5 | 1450 | 4650 | 165 | 360 | 6.6 | 1830 | 5850 | |
| **A 35 2_9.3** | 9.3 | 301 | 302 | 10.1 | 1450 | 4760 | 150 | 380 | 6.4 | 1830 | 6000 | |
| **A 35 2_10.6** | 10.6 | 263 | 310 | 9.1 | 1440 | 5010 | 132 | 390 | 5.7 | 1830 | 6310 | |
| **A 35 2_11.8** | 11.8 | 238 | 317 | 8.4 | 1480 | 5200 | 119 | 400 | 5.3 | 1860 | 6550 | |
| **A 35 2_13.1** | 13.1 | 214 | 400 | 10.9 | 1630 | 4470 | 107 | 550 | 6.6 | 2100 | 5780 | |
| **A 35 2_15.5** | 15.5 | 181 | 430 | 10.0 | 1620 | 4670 | 90 | 570 | 5.7 | 2120 | 6190 | |
| **A 35 2_17.0** | 17.0 | 165 | 465 | 9.7 | 1620 | 4730 | 83 | 600 | 5.5 | 2130 | 6310 | |
| **A 35 2_20.4** | 20.4 | 137 | 500 | 8.4 | 1630 | 5080 | 69 | 600 | 4.6 | 2170 | 6930 | |
| **A 35 2_22.5** | 22.5 | 125 | 540 | 7.8 | 1660 | 5290 | 62 | 600 | 4.2 | 2200 | 7260 | |
| **A 35 2_25.7** | 25.7 | 109 | 585 | 7.1 | 1640 | 5540 | 55 | 600 | 3.6 | 2200 | 7740 | |
| **A 35 2_28.4** | 28.4 | 98 | 600 | 6.6 | 1660 | 5760 | 49 | 600 | 3.3 | 2200 | 8130 | |
| **A 35 2_33.2** | 33.2 | 84 | 600 | 5.6 | 910 | 6240 | 42 | 600 | 2.8 | 2200 | 8730 | |
| **A 35 2_36.6** | 36.6 | 76 | 600 | 5.1 | 1080 | 6560 | 38 | 600 | 2.6 | 2200 | 9140 | |
| **A 35 2_41.8** | 41.8 | 67 | 600 | 4.5 | 1140 | 7010 | 34 | 600 | 2.2 | 2200 | 9700 | |
| **A 35 2_45.8** | 45.8 | 61 | 600 | 4.1 | 1260 | 7330 | 31 | 600 | 2.0 | 2200 | 10100 | |
| **A 35 2_49.1** | 49.1 | 57 | 600 | 3.8 | 1260 | 7580 | 28.5 | 600 | 1.9 | 2200 | 10400 | |
| **A 35 2_54.3** | 54.3 | 52 | 600 | 3.4 | 1360 | 7950 | 25.8 | 600 | 1.7 | 2200 | 10900 | 274 |
| **A 35 2_60.4** | 60.4 | 46 | 600 | 3.1 | 1470 | 8360 | 23.2 | 600 | 1.6 | 2200 | 11400 | |
| **A 35 2_65.8** | 65.8 | 43 | 600 | 2.8 | 1470 | 8700 | 21.3 | 600 | 1.4 | 2200 | 11800 | |
| **A 35 2_74.3** | 74.3 | 38 | 600 | 2.5 | 1560 | 9200 | 18.8 | 600 | 1.3 | 2200 | 12000 | |
| **A 35 2_82.5** | 82.5 | 34 | 600 | 2.3 | 1560 | 9650 | 17.0 | 600 | 1.1 | 2200 | 12000 | |
| **A 35 2_95.6** | 95.6 | 29.3 | 540 | 1.8 | 1860 | 10600 | 14.6 | 540 | 0.88 | 2200 | 12000 | |
| | | | | | | | | | | | | |
| **A 35 3_105.5** | 105.5 | 26.5 | 430 | 1.3 | 550 | 12000 | 13.3 | 525 | 0.80 | 780 | 12000 | |
| **A 35 3_116.9** | 116.9 | 24.0 | 455 | 1.3 | 650 | 12000 | 12.0 | 560 | 0.77 | 870 | 12000 | |
| **A 35 3_136.3** | 136.3 | 20.5 | 470 | 1.1 | 870 | 12000 | 10.3 | 575 | 0.68 | 1110 | 12000 | |
| **A 35 3_150.6** | 150.6 | 18.6 | 495 | 1.1 | 900 | 12000 | 9.3 | 600 | 0.64 | 1160 | 12000 | |
| **A 35 3_171.8** | 171.8 | 16.3 | 505 | 0.95 | 960 | 12000 | 8.1 | 600 | 0.56 | 1250 | 12000 | |
| **A 35 3_188.3** | 188.3 | 14.9 | 525 | 0.90 | 990 | 12000 | 7.4 | 600 | 0.51 | 1300 | 12000 | |
| **A 35 3_201.8** | 201.8 | 13.9 | 525 | 0.84 | 1020 | 12000 | 6.9 | 600 | 0.48 | 1300 | 12000 | |
| **A 35 3_223.2** | 223.2 | 12.5 | 545 | 0.79 | 1050 | 12000 | 6.3 | 600 | 0.43 | 1300 | 12000 | |
| **A 35 3_248.1** | 248.1 | 11.3 | 565 | 0.73 | 1080 | 12000 | 5.6 | 600 | 0.39 | 1300 | 12000 | |
| **A 35 3_270.7** | 270.7 | 10.3 | 570 | 0.68 | 1110 | 12000 | 5.2 | 600 | 0.36 | 1300 | 12000 | |
| **A 35 3_305.4** | 305.4 | 9.2 | 585 | 0.62 | 1140 | 12000 | 4.6 | 600 | 0.32 | 1300 | 12000 | |
| **A 35 3_339.3** | 339.3 | 8.3 | 520 | 0.49 | 1210 | 12000 | 4.1 | 520 | 0.25 | 1300 | 12000 | |
| **A 35 3_393.2** | 393.2 | 7.1 | 465 | 0.38 | 1260 | 12000 | 3.6 | 465 | 0.19 | 1300 | 12000 | |



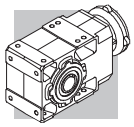
# A 35 — 600 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 35 2_5.4** | 5.4 | 166 | 340 | 6.3 | 2150 | 5940 | 92 | 340 | 3.5 | 2200 | 7600 | |
| **A 35 2_6.4** | 6.4 | 140 | 350 | 5.5 | 2190 | 6340 | 78 | 350 | 3.0 | 2200 | 8090 | |
| **A 35 2_7.0** | 7.0 | 128 | 370 | 5.3 | 2200 | 6490 | 71 | 370 | 2.9 | 2200 | 8290 | |
| **A 35 2_8.5** | 8.5 | 106 | 380 | 4.5 | 2200 | 6970 | 59 | 380 | 2.5 | 2200 | 8890 | |
| **A 35 2_9.3** | 9.3 | 97 | 400 | 4.3 | 2200 | 7160 | 54 | 400 | 2.4 | 2200 | 9140 | |
| **A 35 2_10.6** | 10.6 | 85 | 400 | 3.8 | 2200 | 7570 | 47 | 400 | 2.1 | 2200 | 9650 | |
| **A 35 2_11.8** | 11.8 | 76 | 400 | 3.4 | 2200 | 7910 | 42 | 400 | 1.9 | 2200 | 10100 | |
| **A 35 2_13.1** | 13.1 | 69 | 600 | 4.6 | 2200 | 6910 | 38 | 600 | 2.6 | 2200 | 9140 | |
| **A 35 2_15.5** | 15.5 | 58 | 600 | 3.9 | 2090 | 7510 | 32 | 600 | 2.2 | 2200 | 9860 | |
| **A 35 2_17.0** | 17.0 | 53 | 600 | 3.5 | 2200 | 7840 | 29.5 | 600 | 2.0 | 2200 | 10300 | |
| **A 35 2_20.4** | 20.4 | 44 | 600 | 2.9 | 2200 | 8560 | 24.5 | 600 | 1.6 | 2200 | 11100 | |
| **A 35 2_22.5** | 22.5 | 40 | 600 | 2.7 | 2200 | 8950 | 22.2 | 600 | 1.5 | 2200 | 11600 | |
| **A 35 2_25.7** | 25.7 | 35 | 600 | 2.3 | 2200 | 9500 | 19.5 | 600 | 1.3 | 2200 | 12000 | |
| **A 35 2_28.4** | 28.4 | 32 | 600 | 2.1 | 2200 | 9950 | 17.6 | 600 | 1.2 | 2200 | 12000 | |
| **A 35 2_33.2** | 33.2 | 27.1 | 600 | 1.8 | 2200 | 10700 | 15.1 | 600 | 1.0 | 2200 | 12000 | |
| **A 35 2_36.6** | 36.6 | 24.6 | 600 | 1.6 | 2200 | 11100 | 13.7 | 600 | 0.91 | 2200 | 12000 | |
| **A 35 2_41.8** | 41.8 | 21.5 | 600 | 1.4 | 2200 | 11800 | 12.0 | 600 | 0.80 | 2200 | 12000 | |
| **A 35 2_45.8** | 45.8 | 19.6 | 600 | 1.3 | 2200 | 12000 | 10.9 | 600 | 0.73 | 2200 | 12000 | |
| **A 35 2_49.1** | 49.1 | 18.3 | 600 | 1.2 | 2200 | 12000 | 10.2 | 600 | 0.68 | 2200 | 12000 | |
| **A 35 2_54.3** | 54.3 | 16.6 | 600 | 1.1 | 2200 | 12000 | 9.2 | 600 | 0.62 | 2200 | 12000 | 274 |
| **A 35 2_60.4** | 60.4 | 14.9 | 600 | 1.0 | 2200 | 12000 | 8.3 | 600 | 0.55 | 2200 | 12000 | |
| **A 35 2_65.8** | 65.8 | 13.7 | 600 | 0.91 | 2200 | 12000 | 7.6 | 600 | 0.51 | 2200 | 12000 | |
| **A 35 2_74.3** | 74.3 | 12.1 | 600 | 0.81 | 2200 | 12000 | 6.7 | 600 | 0.45 | 2200 | 12000 | |
| **A 35 2_82.5** | 82.5 | 10.9 | 600 | 0.73 | 2200 | 12000 | 6.1 | 600 | 0.40 | 2200 | 12000 | |
| **A 35 2_95.6** | 95.6 | 9.4 | 540 | 0.57 | 2200 | 12000 | 5.2 | 540 | 0.31 | 2200 | 12000 | |
| | | | | | | | | | | | | |
| **A 35 3_105.5** | 105.5 | 8.5 | 600 | 0.59 | 940 | 12000 | 4.7 | 600 | 0.33 | 1300 | 12000 | |
| **A 35 3_116.9** | 116.9 | 7.7 | 600 | 0.53 | 1230 | 12000 | 4.3 | 600 | 0.30 | 1300 | 12000 | |
| **A 35 3_136.3** | 136.3 | 6.6 | 600 | 0.46 | 1300 | 12000 | 3.7 | 600 | 0.25 | 1300 | 12000 | |
| **A 35 3_150.6** | 150.6 | 6.0 | 600 | 0.41 | 1300 | 12000 | 3.3 | 600 | 0.23 | 1300 | 12000 | |
| **A 35 3_171.8** | 171.8 | 5.2 | 600 | 0.36 | 1300 | 12000 | 2.9 | 600 | 0.20 | 1300 | 12000 | |
| **A 35 3_188.3** | 188.3 | 4.8 | 600 | 0.33 | 1300 | 12000 | 2.7 | 600 | 0.18 | 1300 | 12000 | |
| **A 35 3_201.8** | 201.8 | 4.5 | 600 | 0.31 | 1300 | 12000 | 2.5 | 600 | 0.17 | 1300 | 12000 | |
| **A 35 3_223.2** | 223.2 | 4.0 | 600 | 0.28 | 1300 | 12000 | 2.2 | 600 | 0.15 | 1300 | 12000 | |
| **A 35 3_248.1** | 248.1 | 3.6 | 600 | 0.25 | 1300 | 12000 | 2.0 | 600 | 0.14 | 1300 | 12000 | |
| **A 35 3_270.7** | 270.7 | 3.3 | 600 | 0.23 | 1300 | 12000 | 1.8 | 600 | 0.13 | 1300 | 12000 | |
| **A 35 3_305.4** | 305.4 | 2.9 | 600 | 0.20 | 1300 | 12000 | 1.6 | 600 | 0.11 | 1300 | 12000 | |
| **A 35 3_339.3** | 339.3 | 2.7 | 520 | 0.16 | 1300 | 12000 | 1.5 | 520 | 0.09 | 1300 | 12000 | |
| **A 35 3_393.2** | 393.2 | 2.3 | 465 | 0.12 | 1300 | 12000 | 1.3 | 465 | 0.07 | 1300 | 12000 | |



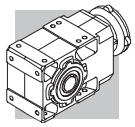
# A 41 — 850 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 41 2_5.2** | 5.2 | 534 | 450 | 27 | 1790 | 4350 | 267 | 550 | 16.4 | 2450 | 5560 | |
| **A 41 2_7.1** | 7.1 | 393 | 490 | 22 | 1890 | 4850 | 197 | 550 | 12.0 | 2670 | 6430 | |
| **A 41 2_8.3** | 8.3 | 336 | 510 | 19.1 | 1900 | 5140 | 168 | 550 | 10.3 | 2750 | 6920 | |
| **A 41 2_9.2** | 9.2 | 304 | 530 | 18.0 | 1980 | 5300 | 152 | 550 | 9.3 | 2860 | 7240 | |
| **A 41 2_10.1** | 10.1 | 276 | 435 | 13.4 | 2680 | 6030 | 138 | 535 | 8.2 | 3390 | 7650 | |
| **A 41 2_11.7** | 11.7 | 238 | 550 | 14.6 | 2050 | 5870 | 119 | 550 | 7.3 | 2950 | 8070 | |
| **A 41 2_13.8** | 13.8 | 204 | 480 | 10.9 | 2690 | 6680 | 102 | 585 | 6.6 | 3430 | 8510 | |
| **A 41 2_16.1** | 16.1 | 174 | 500 | 9.7 | 2700 | 7070 | 87 | 610 | 5.9 | 3430 | 9000 | |
| **A 41 2_17.8** | 17.8 | 158 | 515 | 9.0 | 2730 | 7310 | 79 | 630 | 5.5 | 3470 | 9300 | |
| **A 41 2_22.7** | 22.7 | 123 | 550 | 7.6 | 2730 | 7970 | 62 | 680 | 4.7 | 3460 | 10100 | |
| **A 41 2_28.3** | 28.3 | 99 | 595 | 6.6 | 2670 | 8570 | 49 | 730 | 4.0 | 3450 | 10900 | |
| **A 41 2_35.9** | 35.9 | 78 | 635 | 5.5 | 2590 | 9320 | 39 | 780 | 3.4 | 3410 | 11800 | |
| **A 41 2_45.1** | 45.1 | 62 | 680 | 4.7 | 2500 | 10100 | 31 | 830 | 2.9 | 3330 | 12800 | |
| **A 41 2_48.3** | 48.3 | 58 | 690 | 4.5 | 2430 | 10300 | 29.0 | 850 | 2.7 | 3200 | 13100 | |
| **A 41 2_53.1** | 53.1 | 53 | 700 | 4.1 | 2470 | 10700 | 26.3 | 850 | 2.5 | 3330 | 13700 | |
| **A 41 2_58.8** | 58.8 | 48 | 730 | 3.9 | 2390 | 11100 | 23.8 | 850 | 2.3 | 3460 | 14300 | 278 |
| **A 41 2_64.2** | 64.2 | 44 | 740 | 3.6 | 2320 | 11500 | 21.8 | 850 | 2.1 | 3460 | 14800 | |
| **A 41 2_71.3** | 71.3 | 39 | 780 | 3.4 | 2120 | 11800 | 19.6 | 850 | 1.9 | 3470 | 15000 | |
| **A 41 2_79.2** | 79.2 | 35 | 800 | 3.1 | 1990 | 12300 | 17.7 | 800 | 1.6 | 3500 | 15000 | |
| | | | | | | | | | | | | |
| **A 41 3_92.8** | 92.8 | 30 | 650 | 2.3 | 270 | 14000 | 15.1 | 800 | 1.4 | 430 | 15000 | |
| **A 41 3_115.9** | 115.9 | 24.2 | 800 | 2.2 | 310 | 14600 | 12.1 | 850 | 1.2 | 980 | 15000 | |
| **A 41 3_146.9** | 146.9 | 19.1 | 850 | 1.9 | 790 | 15000 | 9.5 | 850 | 0.93 | 1640 | 15000 | |
| **A 41 3_184.4** | 184.4 | 15.2 | 850 | 1.5 | 1290 | 15000 | 7.6 | 850 | 0.74 | 1770 | 15000 | |
| **A 41 3_197.5** | 197.5 | 14.2 | 850 | 1.4 | 1360 | 15000 | 7.1 | 850 | 0.69 | 1790 | 15000 | |
| **A 41 3_217.4** | 217.4 | 12.9 | 850 | 1.3 | 1390 | 15000 | 6.4 | 850 | 0.63 | 1820 | 15000 | |
| **A 41 3_240.6** | 240.6 | 11.6 | 850 | 1.1 | 1410 | 15000 | 5.8 | 850 | 0.57 | 1840 | 15000 | |
| **A 41 3_262.5** | 262.5 | 10.7 | 850 | 1.0 | 1430 | 15000 | 5.3 | 850 | 0.52 | 1860 | 15000 | |
| **A 41 3_291.7** | 291.7 | 9.6 | 850 | 0.94 | 1450 | 15000 | 4.8 | 850 | 0.47 | 1880 | 15000 | |
| **A 41 3_324.2** | 324.2 | 8.6 | 850 | 0.84 | 1470 | 15000 | 4.3 | 850 | 0.42 | 1900 | 15000 | |
| **A 41 3_376.8** | 376.8 | 7.4 | 850 | 0.73 | 1500 | 15000 | 3.7 | 850 | 0.36 | 1930 | 15000 | |



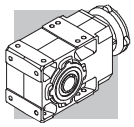
# A 41 — 850 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 41 2_5.2** | 5.2 | 172 | 550 | 10.5 | 3140 | 6850 | 95 | 550 | 5.8 | 3500 | 8900 | |
| **A 41 2_7.1** | 7.1 | 126 | 550 | 7.7 | 3360 | 7870 | 70 | 550 | 4.3 | 3500 | 10100 | |
| **A 41 2_8.3** | 8.3 | 108 | 550 | 6.6 | 3440 | 8430 | 60 | 550 | 3.7 | 3500 | 10800 | |
| **A 41 2_9.2** | 9.2 | 98 | 550 | 6.0 | 3500 | 8800 | 54 | 550 | 3.3 | 3500 | 11300 | |
| **A 41 2_10.1** | 10.1 | 89 | 610 | 6.0 | 3500 | 8920 | 49 | 730 | 4.0 | 3500 | 10900 | |
| **A 41 2_11.7** | 11.7 | 77 | 550 | 4.7 | 3500 | 9760 | 43 | 550 | 2.6 | 3500 | 12400 | |
| **A 41 2_13.8** | 13.8 | 65 | 670 | 4.9 | 3500 | 9900 | 36 | 800 | 3.2 | 3500 | 12100 | |
| **A 41 2_16.1** | 16.1 | 56 | 700 | 4.4 | 3500 | 10500 | 31 | 830 | 2.9 | 3500 | 12800 | |
| **A 41 2_17.8** | 17.8 | 51 | 720 | 4.1 | 3500 | 10800 | 28.1 | 850 | 2.7 | 3500 | 13300 | |
| **A 41 2_22.7** | 22.7 | 40 | 780 | 3.4 | 3500 | 11700 | 22.0 | 850 | 2.1 | 3500 | 14800 | |
| **A 41 2_28.3** | 28.3 | 32 | 830 | 2.9 | 3500 | 12700 | 17.7 | 850 | 1.7 | 3500 | 15000 | |
| **A 41 2_35.9** | 35.9 | 25.1 | 850 | 2.4 | 3500 | 14000 | 13.9 | 850 | 1.3 | 3500 | 15000 | |
| **A 41 2_45.1** | 45.1 | 20.0 | 850 | 1.9 | 3500 | 15000 | 11.1 | 850 | 1.1 | 3500 | 15000 | |
| **A 41 2_48.3** | 48.3 | 18.6 | 850 | 1.8 | 3500 | 15000 | 10.4 | 850 | 0.98 | 3500 | 15000 | |
| **A 41 2_53.1** | 53.1 | 16.9 | 850 | 1.6 | 3500 | 15000 | 9.4 | 850 | 0.89 | 3500 | 15000 | |
| **A 41 2_58.8** | 58.8 | 15.3 | 850 | 1.4 | 3500 | 15000 | 8.5 | 850 | 0.81 | 3500 | 15000 | 278 |
| **A 41 2_64.2** | 64.2 | 14.0 | 850 | 1.3 | 3300 | 15000 | 7.8 | 850 | 0.74 | 3500 | 15000 | |
| **A 41 2_71.3** | 71.3 | 12.6 | 850 | 1.2 | 3500 | 15000 | 7.0 | 850 | 0.66 | 3500 | 15000 | |
| **A 41 2_79.2** | 79.2 | 11.4 | 800 | 1.0 | 3500 | 15000 | 6.3 | 800 | 0.56 | 3500 | 15000 | |
| | | | | | | | | | | | | |
| **A 41 3_92.8** | 92.8 | 9.7 | 800 | 0.89 | 1080 | 15000 | 5.4 | 800 | 0.50 | 2110 | 15000 | |
| **A 41 3_115.9** | 115.9 | 7.8 | 850 | 0.76 | 1630 | 15000 | 4.3 | 850 | 0.42 | 2200 | 15000 | |
| **A 41 3_146.9** | 146.9 | 6.1 | 850 | 0.60 | 2020 | 15000 | 3.4 | 850 | 0.33 | 2200 | 15000 | |
| **A 41 3_184.4** | 184.4 | 4.9 | 850 | 0.48 | 2100 | 15000 | 2.7 | 850 | 0.27 | 2200 | 15000 | |
| **A 41 3_197.5** | 197.5 | 4.6 | 850 | 0.45 | 2120 | 15000 | 2.5 | 850 | 0.25 | 2200 | 15000 | |
| **A 41 3_217.4** | 217.4 | 4.1 | 850 | 0.40 | 2150 | 15000 | 2.3 | 850 | 0.22 | 2200 | 15000 | |
| **A 41 3_240.6** | 240.6 | 3.7 | 850 | 0.37 | 2170 | 15000 | 2.1 | 850 | 0.20 | 2200 | 15000 | |
| **A 41 3_262.5** | 262.5 | 3.4 | 850 | 0.34 | 2190 | 15000 | 1.9 | 850 | 0.19 | 2200 | 15000 | |
| **A 41 3_291.7** | 291.7 | 3.1 | 850 | 0.30 | 2200 | 15000 | 1.7 | 850 | 0.17 | 2200 | 15000 | |
| **A 41 3_324.2** | 324.2 | 2.8 | 850 | 0.27 | 2200 | 15000 | 1.5 | 850 | 0.15 | 2200 | 15000 | |
| **A 41 3_376.8** | 376.8 | 2.4 | 850 | 0.23 | 2200 | 15000 | 1.3 | 850 | 0.13 | 2200 | 15000 | |



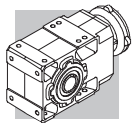
# A 50 — 1500 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 50 2_7.7** | 7.7 | 362 | 550 | 22 | 2300 | 7920 | 181 | 700 | 14.1 | 2890 | 9960 | |
| **A 50 2_9.7** | 9.7 | 288 | 600 | 19.2 | 2330 | 8530 | 144 | 750 | 12.0 | 2950 | 10800 | |
| **A 50 2_13.1** | 13.1 | 214 | 600 | 14.3 | 2460 | 9600 | 107 | 750 | 8.9 | 3110 | 12100 | |
| **A 50 2_16.6** | 16.6 | 169 | 640 | 12.0 | 2490 | 10400 | 84 | 800 | 7.5 | 3150 | 13100 | |
| **A 50 2_20.9** | 20.9 | 134 | 640 | 9.5 | 2540 | 11400 | 67 | 800 | 6.0 | 3210 | 14400 | |
| | | | | | | | | | | | | |
| **A 50 3_24.0** | 24.0 | 116 | 1150 | 15.4 | 1850 | 7020 | 58 | 1500 | 10.0 | 2100 | 8540 | |
| **A 50 3_26.4** | 26.4 | 106 | 1200 | 14.6 | 2100 | 7170 | 53 | 1500 | 9.1 | 2690 | 9100 | |
| **A 50 3_32.4** | 32.4 | 86 | 1290 | 12.8 | 1800 | 4630 | 43 | 1500 | 7.5 | 2760 | 10400 | |
| **A 50 3_35.6** | 35.6 | 79 | 1340 | 12.1 | 2080 | 7830 | 39 | 1500 | 6.8 | 3290 | 11000 | |
| **A 50 3_40.9** | 40.9 | 68 | 1415 | 11.1 | 1740 | 8130 | 34 | 1500 | 5.9 | 3220 | 11900 | |
| **A 50 3_45.0** | 45.0 | 62 | 1470 | 10.5 | 2030 | 8340 | 31 | 1500 | 5.4 | 3440 | 12600 | |
| **A 50 3_51.7** | 51.7 | 54 | 1500 | 9.4 | 1680 | 8970 | 27.1 | 1500 | 4.7 | 3400 | 13600 | |
| **A 50 3_56.8** | 56.8 | 49 | 1500 | 8.5 | 2150 | 9540 | 24.6 | 1500 | 4.3 | 3480 | 14400 | |
| **A 50 3_63.9** | 63.9 | 44 | 1500 | 7.6 | 1900 | 10300 | 21.9 | 1500 | 3.8 | 3450 | 15300 | |
| **A 50 3_70.2** | 70.2 | 40 | 1500 | 6.9 | 2350 | 10900 | 19.9 | 1500 | 3.4 | 3500 | 16100 | |
| **A 50 3_81.5** | 81.5 | 34 | 1500 | 5.9 | 2170 | 11900 | 17.2 | 1500 | 3.0 | 3500 | 17300 | |
| **A 50 3_89.5** | 89.5 | 31 | 1500 | 5.4 | 2590 | 12600 | 15.6 | 1500 | 2.7 | 3500 | 18200 | |
| **A 50 3_99.5** | 99.5 | 28.1 | 1500 | 4.9 | 2260 | 13400 | 14.1 | 1500 | 2.4 | 3500 | 19200 | |
| **A 50 3_109.4** | 109.4 | 25.6 | 1500 | 4.4 | 2680 | 14100 | 12.8 | 1500 | 2.2 | 3500 | 20000 | |
| **A 50 3_118.0** | 118.0 | 23.7 | 1500 | 4.1 | 2390 | 14700 | 11.9 | 1500 | 2.0 | 3500 | 20000 | 282 |
| **A 50 3_129.7** | 129.7 | 21.6 | 1500 | 3.7 | 2720 | 15400 | 10.8 | 1500 | 1.9 | 3500 | 20000 | |
| **A 50 3_140.6** | 140.6 | 19.9 | 1500 | 3.4 | 2440 | 16100 | 10.0 | 1500 | 1.7 | 3500 | 20000 | |
| **A 50 3_154.6** | 154.6 | 18.1 | 1500 | 3.1 | 2730 | 16900 | 9.1 | 1500 | 1.6 | 3500 | 20000 | |
| **A 50 3_173.4** | 173.4 | 16.2 | 1500 | 2.8 | 2480 | 17900 | 8.1 | 1500 | 1.4 | 3500 | 20000 | |
| **A 50 3_190.6** | 190.6 | 14.7 | 1500 | 2.5 | 2740 | 18800 | 7.3 | 1500 | 1.3 | 3500 | 20000 | |
| | | | | | | | | | | | | |
| **A 50 4_211.0** | 211.0 | 13.3 | 1500 | 2.3 | 1930 | 20000 | 6.6 | 1500 | 1.2 | 2200 | 20000 | |
| **A 50 4_232.0** | 232.0 | 12.1 | 1500 | 2.1 | 1970 | 20000 | 6.0 | 1500 | 1.1 | 2200 | 20000 | |
| **A 50 4_260.9** | 260.9 | 10.7 | 1500 | 1.9 | 2010 | 20000 | 5.4 | 1500 | 0.95 | 2200 | 20000 | |
| **A 50 4_286.8** | 286.8 | 9.8 | 1500 | 1.7 | 2040 | 20000 | 4.9 | 1500 | 0.86 | 2200 | 20000 | |
| **A 50 4_332.6** | 332.6 | 8.4 | 1500 | 1.5 | 2080 | 20000 | 4.2 | 1500 | 0.74 | 2200 | 20000 | |
| **A 50 4_365.6** | 365.6 | 7.7 | 1500 | 1.4 | 2100 | 20000 | 3.8 | 1500 | 0.68 | 2200 | 20000 | |
| **A 50 4_406.4** | 406.4 | 6.9 | 1500 | 1.2 | 2130 | 20000 | 3.4 | 1500 | 0.61 | 2200 | 20000 | |
| **A 50 4_446.8** | 446.8 | 6.3 | 1500 | 1.1 | 2140 | 20000 | 3.1 | 1500 | 0.55 | 2200 | 20000 | |
| **A 50 4_481.6** | 481.6 | 5.8 | 1500 | 1.0 | 2160 | 20000 | 2.9 | 1500 | 0.51 | 2200 | 20000 | |
| **A 50 4_529.5** | 529.5 | 5.3 | 1500 | 0.93 | 2170 | 20000 | 2.6 | 1500 | 0.47 | 2200 | 20000 | |
| **A 50 4_574.2** | 574.2 | 4.9 | 1500 | 0.86 | 2190 | 20000 | 2.4 | 1500 | 0.43 | 2200 | 20000 | |
| **A 50 4_631.2** | 631.2 | 4.4 | 1500 | 0.78 | 2200 | 20000 | 2.2 | 1500 | 0.39 | 2200 | 20000 | |
| **A 50 4_707.9** | 707.9 | 4.0 | 1500 | 0.70 | 2200 | 20000 | 2.0 | 1500 | 0.35 | 2200 | 20000 | |
| **A 50 4_778.2** | 778.2 | 3.6 | 1500 | 0.63 | 2200 | 20000 | 1.8 | 1500 | 0.32 | 2200 | 20000 | |



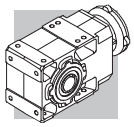
# A 50 — 1500 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 50 2_7.7** | 7.7 | 116 | 770 | 10.0 | 3430 | 11700 | 65 | 900 | 6.5 | 3500 | 14300 | |
| **A 50 2_9.7** | 9.7 | 92 | 830 | 8.5 | 3490 | 12600 | 51 | 1000 | 5.7 | 3500 | 15300 | |
| **A 50 2_13.1** | 13.1 | 69 | 830 | 6.3 | 3500 | 14200 | 38 | 1000 | 4.2 | 3500 | 17300 | |
| **A 50 2_16.6** | 16.6 | 54 | 880 | 5.3 | 3500 | 15400 | 30 | 1000 | 3.4 | 3500 | 18900 | |
| **A 50 2_20.9** | 20.9 | 43 | 880 | 4.2 | 3500 | 16800 | 23.9 | 1000 | 2.7 | 3500 | 20000 | |
| | | | | | | | | | | | | |
| **A 50 3_24.0** | 24.0 | 37 | 1500 | 6.5 | 3480 | 11300 | 20.8 | 1500 | 3.6 | 3500 | 15700 | |
| **A 50 3_26.4** | 26.4 | 34 | 1500 | 5.9 | 3500 | 12000 | 18.9 | 1500 | 3.3 | 3500 | 16500 | |
| **A 50 3_32.4** | 32.4 | 27.8 | 1500 | 4.8 | 3500 | 13400 | 15.4 | 1500 | 2.7 | 3500 | 18300 | |
| **A 50 3_35.6** | 35.6 | 25.3 | 1500 | 4.4 | 3500 | 14200 | 14.0 | 1500 | 2.4 | 3500 | 19200 | |
| **A 50 3_40.9** | 40.9 | 22.0 | 1500 | 3.8 | 3500 | 15300 | 12.2 | 1500 | 2.1 | 3500 | 20000 | |
| **A 50 3_45.0** | 45.0 | 20.0 | 1500 | 3.5 | 3500 | 16000 | 11.1 | 1500 | 1.9 | 3500 | 20000 | |
| **A 50 3_51.7** | 51.7 | 17.4 | 1500 | 3.0 | 3450 | 17200 | 9.7 | 1500 | 1.7 | 3500 | 20000 | |
| **A 50 3_56.8** | 56.8 | 15.8 | 1500 | 2.7 | 3500 | 18100 | 8.8 | 1500 | 1.5 | 3500 | 20000 | |
| **A 50 3_63.9** | 63.9 | 14.1 | 1500 | 2.4 | 3500 | 19200 | 7.8 | 1500 | 1.4 | 3500 | 20000 | |
| **A 50 3_70.2** | 70.2 | 12.8 | 1500 | 2.2 | 3500 | 20000 | 7.1 | 1500 | 1.2 | 3500 | 20000 | |
| **A 50 3_81.5** | 81.5 | 11.0 | 1500 | 1.9 | 3500 | 20000 | 6.1 | 1500 | 1.1 | 3500 | 20000 | |
| **A 50 3_89.5** | 89.5 | 10.1 | 1500 | 1.7 | 3500 | 20000 | 5.6 | 1500 | 0.96 | 3500 | 20000 | |
| **A 50 3_99.5** | 99.5 | 9.0 | 1500 | 1.6 | 3500 | 20000 | 5.0 | 1500 | 0.87 | 3500 | 20000 | |
| **A 50 3_109.4** | 109.4 | 8.2 | 1500 | 1.4 | 3500 | 20000 | 4.6 | 1500 | 0.79 | 3500 | 20000 | |
| **A 50 3_118.0** | 118.0 | 7.6 | 1500 | 1.3 | 3500 | 20000 | 4.2 | 1500 | 0.73 | 3500 | 20000 | 282 |
| **A 50 3_129.7** | 129.7 | 6.9 | 1500 | 1.2 | 3500 | 20000 | 3.9 | 1500 | 0.67 | 3500 | 20000 | |
| **A 50 3_140.6** | 140.6 | 6.4 | 1500 | 1.1 | 3500 | 20000 | 3.6 | 1500 | 0.61 | 3500 | 20000 | |
| **A 50 3_154.6** | 154.6 | 5.8 | 1500 | 1.0 | 3500 | 20000 | 3.2 | 1500 | 0.56 | 3500 | 20000 | |
| **A 50 3_173.4** | 173.4 | 5.2 | 1500 | 0.90 | 3500 | 20000 | 2.9 | 1500 | 0.50 | 3500 | 20000 | |
| **A 50 3_190.6** | 190.6 | 4.7 | 1500 | 0.82 | 3500 | 20000 | 2.6 | 1500 | 0.45 | 3500 | 20000 | |
| | | | | | | | | | | | | |
| **A 50 4_211.0** | 211.0 | 4.3 | 1500 | 0.75 | 2200 | 20000 | 2.4 | 1500 | 0.42 | 2200 | 20000 | |
| **A 50 4_232.0** | 232.0 | 3.9 | 1500 | 0.68 | 2200 | 20000 | 2.2 | 1500 | 0.38 | 2200 | 20000 | |
| **A 50 4_260.9** | 260.9 | 3.4 | 1500 | 0.61 | 2200 | 20000 | 1.9 | 1500 | 0.34 | 2200 | 20000 | |
| **A 50 4_286.8** | 286.8 | 3.1 | 1500 | 0.55 | 2200 | 20000 | 1.7 | 1500 | 0.31 | 2200 | 20000 | |
| **A 50 4_332.6** | 332.6 | 2.7 | 1500 | 0.48 | 2200 | 20000 | 1.5 | 1500 | 0.27 | 2200 | 20000 | |
| **A 50 4_365.6** | 365.6 | 2.5 | 1500 | 0.43 | 2200 | 20000 | 1.4 | 1500 | 0.24 | 2200 | 20000 | |
| **A 50 4_406.4** | 406.4 | 2.2 | 1500 | 0.39 | 2200 | 20000 | 1.2 | 1500 | 0.22 | 2200 | 20000 | |
| **A 50 4_446.8** | 446.8 | 2.0 | 1500 | 0.36 | 2200 | 20000 | 1.1 | 1500 | 0.20 | 2200 | 20000 | |
| **A 50 4_481.6** | 481.6 | 1.9 | 1500 | 0.33 | 2200 | 20000 | 1.0 | 1500 | 0.18 | 2200 | 20000 | |
| **A 50 4_529.5** | 529.5 | 1.7 | 1500 | 0.30 | 2200 | 20000 | 0.94 | 1500 | 0.17 | 2200 | 20000 | |
| **A 50 4_574.2** | 574.2 | 1.6 | 1500 | 0.28 | 2200 | 20000 | 0.87 | 1500 | 0.15 | 2200 | 20000 | |
| **A 50 4_631.2** | 631.2 | 1.4 | 1500 | 0.25 | 2200 | 20000 | 0.79 | 1500 | 0.14 | 2200 | 20000 | |
| **A 50 4_707.9** | 707.9 | 1.3 | 1500 | 0.22 | 2200 | 20000 | 0.71 | 1500 | 0.12 | 2200 | 20000 | |
| **A 50 4_778.2** | 778.2 | 1.2 | 1500 | 0.20 | 2200 | 20000 | 0.64 | 1500 | 0.11 | 2200 | 20000 | |



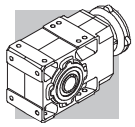
# A 55 — 2000 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 55 2_4.9** | 4.9 | 571 | 760 | 48 | 1320 | 15100 | 286 | 900 | 28 | 2150 | 18700 | |
| **A 55 2_6.4** | 6.4 | 438 | 800 | 39 | 1950 | 16400 | 219 | 950 | 23 | 2860 | 20300 | |
| **A 55 2_8.5** | 8.5 | 329 | 800 | 30 | 2810 | 18000 | 165 | 950 | 17.5 | 3500 | 22200 | |
| **A 55 2_10.4** | 10.4 | 269 | 840 | 25 | 2900 | 19100 | 135 | 1000 | 15.1 | 3500 | 23600 | |
| **A 55 2_13.1** | 13.1 | 214 | 840 | 20 | 3230 | 20600 | 107 | 1000 | 11.9 | 3500 | 25500 | |
| **A 55 2_15.7** | 15.7 | 178 | 840 | 16.7 | 3440 | 21900 | 89 | 1000 | 9.9 | 3500 | 27000 | |
| **A 55 2_19.2** | 19.2 | 146 | 925 | 15.0 | 3160 | 23200 | 73 | 1100 | 8.9 | 3500 | 28600 | |
| | | | | | | | | | | | | |
| **A 55 3_23.8** | 23.8 | 118 | 1600 | 22 | 2050 | 21000 | 59 | 1950 | 13.2 | 2640 | 26000 | |
| **A 55 3_29.9** | 29.9 | 94 | 1700 | 18.3 | 2110 | 22500 | 47 | 2000 | 10.8 | 2770 | 28200 | |
| **A 55 3_40.3** | 40.3 | 69 | 1850 | 14.8 | 2150 | 24800 | 35 | 2000 | 8.0 | 2930 | 30000 | |
| **A 55 3_51.0** | 51.0 | 55 | 2000 | 12.6 | 2170 | 26500 | 27.5 | 2000 | 6.3 | 3050 | 30000 | |
| **A 55 3_64.3** | 64.3 | 44 | 2000 | 10.0 | 2230 | 29000 | 21.8 | 2000 | 5.0 | 3110 | 30000 | |
| **A 55 3_79.5** | 79.5 | 35 | 2000 | 8.1 | 1040 | 30000 | 17.6 | 2000 | 4.1 | 2820 | 30000 | |
| **A 55 3_101.4** | 101.4 | 27.6 | 2000 | 6.4 | 1340 | 30000 | 13.8 | 2000 | 3.2 | 3130 | 30000 | |
| **A 55 3_123.9** | 123.9 | 22.6 | 2000 | 5.2 | 1450 | 30000 | 11.3 | 2000 | 2.6 | 3230 | 30000 | 286 |
| **A 55 3_132.7** | 132.7 | 21.1 | 2000 | 4.9 | 1450 | 30000 | 10.6 | 2000 | 2.4 | 3240 | 30000 | |
| **A 55 3_146.8** | 146.8 | 19.1 | 2000 | 4.4 | 1610 | 30000 | 9.5 | 2000 | 2.2 | 3290 | 30000 | |
| **A 55 3_160.4** | 160.4 | 17.5 | 2000 | 4.0 | 1660 | 30000 | 8.7 | 2000 | 2.0 | 3300 | 30000 | |
| **A 55 3_175.0** | 175.0 | 16.0 | 2000 | 3.7 | 1660 | 30000 | 8.0 | 2000 | 1.8 | 3300 | 30000 | |
| **A 55 3_194.2** | 194.2 | 14.4 | 2000 | 3.3 | 1710 | 30000 | 7.2 | 2000 | 1.7 | 3310 | 30000 | |
| | | | | | | | | | | | | |
| **A 55 4_208.1** | 208.1 | 13.5 | 1600 | 2.5 | 1890 | 30000 | 6.7 | 1950 | 1.5 | 2200 | 30000 | |
| **A 55 4_262.6** | 262.6 | 10.7 | 1650 | 2.1 | 1980 | 30000 | 5.3 | 2000 | 1.3 | 2200 | 30000 | |
| **A 55 4_324.7** | 324.7 | 8.6 | 1750 | 1.8 | 2030 | 30000 | 4.3 | 2000 | 1.0 | 2200 | 30000 | |
| **A 55 4_414.0** | 414.0 | 6.8 | 1850 | 1.5 | 2080 | 30000 | 3.4 | 2000 | 0.80 | 2200 | 30000 | |
| **A 55 4_505.9** | 505.9 | 5.5 | 1900 | 1.2 | 2120 | 30000 | 2.8 | 2000 | 0.65 | 2200 | 30000 | |
| **A 55 4_542.0** | 542.0 | 5.2 | 1900 | 1.2 | 2140 | 30000 | 2.6 | 2000 | 0.61 | 2200 | 30000 | |
| **A 55 4_599.5** | 599.5 | 4.7 | 1950 | 1.1 | 2150 | 30000 | 2.3 | 2000 | 0.55 | 2200 | 30000 | |
| **A 55 4_655.1** | 655.1 | 4.3 | 1950 | 1.0 | 2180 | 30000 | 2.1 | 2000 | 0.50 | 2200 | 30000 | |
| **A 55 4_714.7** | 714.7 | 3.9 | 1950 | 0.90 | 2200 | 30000 | 2.0 | 2000 | 0.46 | 2200 | 30000 | |
| **A 55 4_793.0** | 793.0 | 3.5 | 2000 | 0.83 | 2200 | 30000 | 1.8 | 2000 | 0.42 | 2200 | 30000 | |



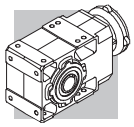
# A 55 — 2000 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 55 2_4.9** | 4.9 | 184 | 1000 | 20 | 2850 | 21400 | 102 | 1160 | 13.1 | 3500 | 25600 | |
| **A 55 2_6.4** | 6.4 | 141 | 1060 | 16.6 | 3500 | 23200 | 78 | 1230 | 10.7 | 3500 | 27700 | |
| **A 55 2_8.5** | 8.5 | 106 | 1060 | 12.6 | 3500 | 25400 | 59 | 1230 | 8.1 | 3500 | 30000 | |
| **A 55 2_10.4** | 10.4 | 87 | 1120 | 10.8 | 3500 | 27000 | 48 | 1290 | 6.9 | 3500 | 30000 | |
| **A 55 2_13.1** | 13.1 | 69 | 1120 | 8.6 | 3500 | 29100 | 38 | 1290 | 5.5 | 3500 | 30000 | |
| **A 55 2_15.7** | 15.7 | 57 | 1120 | 7.2 | 3500 | 30000 | 32 | 1290 | 4.6 | 3500 | 30000 | |
| **A 55 2_19.2** | 19.2 | 47 | 1230 | 6.4 | 3500 | 30000 | 26.0 | 1420 | 4.1 | 3500 | 30000 | |
| | | | | | | | | | | | | |
| **A 55 3_23.8** | 23.8 | 38 | 2000 | 8.7 | 3280 | 30000 | 21.0 | 2000 | 4.8 | 3500 | 30000 | |
| **A 55 3_29.9** | 29.9 | 30 | 2000 | 6.9 | 3450 | 30000 | 16.7 | 2000 | 3.8 | 3500 | 30000 | |
| **A 55 3_40.3** | 40.3 | 22.3 | 2000 | 5.1 | 3500 | 30000 | 12.4 | 2000 | 2.9 | 3500 | 30000 | |
| **A 55 3_51.0** | 51.0 | 17.6 | 2000 | 4.1 | 3500 | 30000 | 9.8 | 2000 | 2.3 | 3500 | 30000 | |
| **A 55 3_64.3** | 64.3 | 14.0 | 2000 | 3.2 | 3500 | 30000 | 7.8 | 2000 | 1.8 | 3500 | 30000 | |
| **A 55 3_79.5** | 79.5 | 11.3 | 2000 | 2.6 | 3500 | 30000 | 6.3 | 2000 | 1.4 | 3500 | 30000 | |
| **A 55 3_101.4** | 101.4 | 8.9 | 2000 | 2.0 | 3500 | 30000 | 4.9 | 2000 | 1.1 | 3500 | 30000 | |
| **A 55 3_123.9** | 123.9 | 7.3 | 2000 | 1.7 | 3500 | 30000 | 4.0 | 2000 | 0.93 | 3500 | 30000 | 286 |
| **A 55 3_132.7** | 132.7 | 6.8 | 2000 | 1.6 | 3500 | 30000 | 3.8 | 2000 | 0.87 | 3500 | 30000 | |
| **A 55 3_146.8** | 146.8 | 6.1 | 2000 | 1.4 | 3500 | 30000 | 3.4 | 2000 | 0.78 | 3500 | 30000 | |
| **A 55 3_160.4** | 160.4 | 5.6 | 2000 | 1.3 | 3500 | 30000 | 3.1 | 2000 | 0.72 | 3500 | 30000 | |
| **A 55 3_175.0** | 175.0 | 5.1 | 2000 | 1.2 | 3500 | 30000 | 2.9 | 2000 | 0.66 | 3500 | 30000 | |
| **A 55 3_194.2** | 194.2 | 4.6 | 2000 | 1.1 | 3500 | 30000 | 2.6 | 2000 | 0.59 | 3500 | 30000 | |
| | | | | | | | | | | | | |
| **A 55 4_208.1** | 208.1 | 4.3 | 2000 | 1.0 | 2200 | 30000 | 2.4 | 2000 | 0.57 | 2200 | 30000 | |
| **A 55 4_262.6** | 262.6 | 3.4 | 2000 | 0.81 | 2200 | 30000 | 1.9 | 2000 | 0.45 | 2200 | 30000 | |
| **A 55 4_324.7** | 324.7 | 2.8 | 2000 | 0.65 | 2200 | 30000 | 1.5 | 2000 | 0.36 | 2200 | 30000 | |
| **A 55 4_414.0** | 414.0 | 2.2 | 2000 | 0.51 | 2200 | 30000 | 1.2 | 2000 | 0.28 | 2200 | 30000 | |
| **A 55 4_505.9** | 505.9 | 1.8 | 2000 | 0.42 | 2200 | 30000 | 1.0 | 2000 | 0.23 | 2200 | 30000 | |
| **A 55 4_542.0** | 542.0 | 1.7 | 2000 | 0.39 | 2200 | 30000 | 0.92 | 2000 | 0.22 | 2200 | 30000 | |
| **A 55 4_599.5** | 599.5 | 1.5 | 2000 | 0.35 | 2200 | 30000 | 0.83 | 2000 | 0.20 | 2200 | 30000 | |
| **A 55 4_655.1** | 655.1 | 1.4 | 2000 | 0.32 | 2200 | 30000 | 0.76 | 2000 | 0.18 | 2200 | 30000 | |
| **A 55 4_714.7** | 714.7 | 1.3 | 2000 | 0.30 | 2200 | 30000 | 0.70 | 2000 | 0.16 | 2200 | 30000 | |
| **A 55 4_793.0** | 793.0 | 1.1 | 2000 | 0.27 | 2200 | 30000 | 0.63 | 2000 | 0.15 | 2200 | 30000 | |



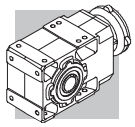
# A 60 — 2800 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 60 2_7.9** | 7.9 | 356 | 950 | 38 | 2770 | 22500 | 178 | 1200 | 24 | 3400 | 27700 | |
| **A 60 2_10.3** | 10.3 | 271 | 950 | 29 | 2970 | 24600 | 136 | 1200 | 18.1 | 3740 | 30000 | |
| **A 60 2_12.7** | 12.7 | 220 | 1000 | 25 | 3020 | 26200 | 110 | 1250 | 15.3 | 3810 | 30000 | |
| **A 60 2_16.7** | 16.7 | 167 | 1050 | 19.6 | 3080 | 28600 | 84 | 1300 | 12.1 | 3910 | 30000 | |
| **A 60 2_20.6** | 20.6 | 136 | 1100 | 16.7 | 3100 | 30000 | 68 | 1400 | 10.6 | 3890 | 30000 | |
| | | | | | | | | | | | | |
| **A 60 3_25.7** | 25.7 | 109 | 2760 | 35 | 2380 | 26900 | 54 | 2800 | 17.5 | 3800 | 30000 | |
| **A 60 3_27.9** | 27.9 | 101 | 2800 | 32 | 2780 | 27700 | 50 | 2800 | 16.2 | 3930 | 30000 | |
| **A 60 3_31.7** | 31.7 | 88 | 2800 | 29 | 2790 | 29000 | 44 | 2800 | 14.2 | 3940 | 30000 | |
| **A 60 3_34.3** | 34.3 | 82 | 2800 | 26 | 2920 | 30000 | 41 | 2800 | 13.2 | 4060 | 30000 | |
| **A 60 3_41.7** | 41.7 | 67 | 2800 | 22 | 2940 | 30000 | 34 | 2800 | 10.8 | 4090 | 30000 | |
| **A 60 3_45.2** | 45.2 | 62 | 2800 | 20 | 3060 | 30000 | 31 | 2800 | 10.0 | 4200 | 30000 | |
| **A 60 3_51.3** | 51.3 | 55 | 2800 | 17.6 | 3030 | 30000 | 27.3 | 2800 | 8.8 | 4180 | 30000 | |
| **A 60 3_55.6** | 55.6 | 50 | 2800 | 16.2 | 3140 | 30000 | 25.2 | 2800 | 8.1 | 4280 | 30000 | |
| **A 60 3_65.0** | 65.0 | 43 | 2800 | 13.9 | 3110 | 30000 | 21.5 | 2800 | 6.9 | 4260 | 30000 | |
| **A 60 3_70.4** | 70.4 | 40 | 2800 | 12.8 | 3210 | 30000 | 19.9 | 2800 | 6.4 | 4360 | 30000 | |
| **A 60 3_79.7** | 79.7 | 35 | 2800 | 11.3 | 3160 | 30000 | 17.6 | 2800 | 5.7 | 4310 | 30000 | |
| **A 60 3_86.4** | 86.4 | 32 | 2800 | 10.4 | 3260 | 30000 | 16.2 | 2800 | 5.2 | 4410 | 30000 | |
| **A 60 3_99.5** | 99.5 | 28.1 | 2800 | 9.1 | 3210 | 30000 | 14.1 | 2800 | 4.5 | 4360 | 30000 | |
| **A 60 3_107.8** | 107.8 | 26.0 | 2800 | 8.4 | 3300 | 30000 | 13.0 | 2800 | 4.2 | 4450 | 30000 | |
| **A 60 3_123.0** | 123.0 | 22.8 | 2800 | 7.3 | 3250 | 30000 | 11.4 | 2800 | 3.7 | 4400 | 30000 | 290 |
| **A 60 3_133.3** | 133.3 | 21.0 | 2800 | 6.8 | 3340 | 30000 | 10.5 | 2800 | 3.4 | 4490 | 30000 | |
| **A 60 3_144.0** | 144.0 | 19.4 | 2800 | 6.3 | 3280 | 30000 | 9.7 | 2800 | 3.1 | 4420 | 30000 | |
| **A 60 3_156.0** | 156.0 | 17.9 | 2800 | 5.8 | 3360 | 30000 | 9.0 | 2800 | 2.9 | 4510 | 30000 | |
| **A 60 3_171.5** | 171.5 | 16.3 | 2800 | 5.3 | 3290 | 30000 | 8.2 | 2800 | 2.6 | 4430 | 30000 | |
| **A 60 3_185.8** | 185.8 | 15.1 | 2800 | 4.9 | 3370 | 30000 | 7.5 | 2800 | 2.4 | 4520 | 30000 | |
| | | | | | | | | | | | | |
| **A 60 4_208.7** | 208.7 | 13.4 | 2800 | 4.4 | 2720 | 30000 | 6.7 | 2800 | 2.2 | 3500 | 30000 | |
| **A 60 4_226.1** | 226.1 | 12.4 | 2800 | 4.1 | 2770 | 30000 | 6.2 | 2800 | 2.0 | 3500 | 30000 | |
| **A 60 4_264.3** | 264.3 | 10.6 | 2800 | 3.5 | 2860 | 30000 | 5.3 | 2800 | 1.7 | 3500 | 30000 | |
| **A 60 4_286.3** | 286.3 | 9.8 | 2800 | 3.2 | 2900 | 30000 | 4.9 | 2800 | 1.6 | 3500 | 30000 | |
| **A 60 4_324.2** | 324.2 | 8.6 | 2800 | 2.8 | 2960 | 30000 | 4.3 | 2800 | 1.4 | 3500 | 30000 | |
| **A 60 4_351.2** | 351.2 | 8.0 | 2800 | 2.6 | 2990 | 30000 | 4.0 | 2800 | 1.3 | 3500 | 30000 | |
| **A 60 4_404.7** | 404.7 | 6.9 | 2800 | 2.3 | 3050 | 30000 | 3.5 | 2800 | 1.1 | 3500 | 30000 | |
| **A 60 4_438.4** | 438.4 | 6.4 | 2800 | 2.1 | 3070 | 30000 | 3.2 | 2800 | 1.1 | 3500 | 30000 | |
| **A 60 4_500.3** | 500.3 | 5.6 | 2800 | 1.8 | 3110 | 30000 | 2.8 | 2800 | 0.92 | 3500 | 30000 | |
| **A 60 4_542.0** | 542.0 | 5.2 | 2800 | 1.7 | 3140 | 30000 | 2.6 | 2800 | 0.85 | 3500 | 30000 | |
| **A 60 4_585.8** | 585.8 | 4.8 | 2800 | 1.6 | 3150 | 30000 | 2.4 | 2800 | 0.79 | 3500 | 30000 | |
| **A 60 4_634.6** | 634.6 | 4.4 | 2800 | 1.5 | 3170 | 30000 | 2.2 | 2800 | 0.73 | 3500 | 30000 | |
| **A 60 4_697.3** | 697.3 | 4.0 | 2800 | 1.3 | 3190 | 30000 | 2.0 | 2800 | 0.66 | 3500 | 30000 | |
| **A 60 4_755.4** | 755.4 | 3.7 | 2800 | 1.2 | 3210 | 30000 | 1.9 | 2800 | 0.61 | 3500 | 30000 | |



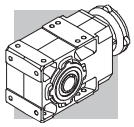
# A 60 — 2800 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 60 2_7.9** | 7.9 | 114 | 1300 | 16.6 | 4190 | 30000 | 64 | 1550 | 11.0 | 4700 | 30000 | |
| **A 60 2_10.3** | 10.3 | 87 | 1300 | 12.6 | 4470 | 30000 | 48 | 1550 | 8.4 | 4700 | 30000 | |
| **A 60 2_12.7** | 12.7 | 71 | 1400 | 11.0 | 4490 | 30000 | 39 | 1700 | 7.5 | 4700 | 30000 | |
| **A 60 2_16.7** | 16.7 | 54 | 1450 | 8.7 | 4610 | 30000 | 29.9 | 1700 | 5.7 | 4700 | 30000 | |
| **A 60 2_20.6** | 20.6 | 44 | 1550 | 7.5 | 4600 | 30000 | 24.3 | 1800 | 4.9 | 4700 | 30000 | |
| | | | | | | | | | | | | |
| **A 60 3_25.7** | 25.7 | 35 | 2800 | 11.3 | 4680 | 30000 | 19.4 | 2800 | 6.3 | 4700 | 30000 | |
| **A 60 3_27.9** | 27.9 | 32 | 2800 | 10.4 | 4700 | 30000 | 18.0 | 2800 | 5.8 | 4700 | 30000 | |
| **A 60 3_31.7** | 31.7 | 28.4 | 2800 | 9.2 | 4700 | 30000 | 15.8 | 2800 | 5.1 | 4700 | 30000 | |
| **A 60 3_34.3** | 34.3 | 26.2 | 2800 | 8.5 | 4700 | 30000 | 14.6 | 2800 | 4.7 | 4700 | 30000 | |
| **A 60 3_41.7** | 41.7 | 21.6 | 2800 | 7.0 | 4700 | 30000 | 12.0 | 2800 | 3.9 | 4700 | 30000 | |
| **A 60 3_45.2** | 45.2 | 19.9 | 2800 | 6.4 | 4700 | 30000 | 11.1 | 2800 | 3.6 | 4700 | 30000 | |
| **A 60 3_51.3** | 51.3 | 17.5 | 2800 | 5.6 | 4700 | 30000 | 9.7 | 2800 | 3.1 | 4700 | 30000 | |
| **A 60 3_55.6** | 55.6 | 16.2 | 2800 | 5.2 | 4700 | 30000 | 9.0 | 2800 | 2.9 | 4700 | 30000 | |
| **A 60 3_65.0** | 65.0 | 13.8 | 2800 | 4.5 | 4700 | 30000 | 7.7 | 2800 | 2.5 | 4700 | 30000 | |
| **A 60 3_70.4** | 70.4 | 12.8 | 2800 | 4.1 | 4700 | 30000 | 7.1 | 2800 | 2.3 | 4700 | 30000 | |
| **A 60 3_79.7** | 79.7 | 11.3 | 2800 | 3.6 | 4700 | 30000 | 6.3 | 2800 | 2.0 | 4700 | 30000 | |
| **A 60 3_86.4** | 86.4 | 10.4 | 2800 | 3.4 | 4700 | 30000 | 5.8 | 2800 | 1.9 | 4700 | 30000 | |
| **A 60 3_99.5** | 99.5 | 9.0 | 2800 | 2.9 | 4700 | 30000 | 5.0 | 2800 | 1.6 | 4700 | 30000 | |
| **A 60 3_107.8** | 107.8 | 8.3 | 2800 | 2.7 | 4700 | 30000 | 4.6 | 2800 | 1.5 | 4700 | 30000 | |
| **A 60 3_123.0** | 123.0 | 7.3 | 2800 | 2.4 | 4700 | 30000 | 4.1 | 2800 | 1.3 | 4700 | 30000 | 290 |
| **A 60 3_133.3** | 133.3 | 6.8 | 2800 | 2.2 | 4700 | 30000 | 3.8 | 2800 | 1.2 | 4700 | 30000 | |
| **A 60 3_144.0** | 144.0 | 6.2 | 2800 | 2.0 | 4700 | 30000 | 3.5 | 2800 | 1.1 | 4700 | 30000 | |
| **A 60 3_156.0** | 156.0 | 5.8 | 2800 | 1.9 | 4700 | 30000 | 3.2 | 2800 | 1.0 | 4700 | 30000 | |
| **A 60 3_171.5** | 171.5 | 5.2 | 2800 | 1.7 | 4700 | 30000 | 2.9 | 2800 | 0.94 | 4700 | 30000 | |
| **A 60 3_185.8** | 185.8 | 4.8 | 2800 | 1.6 | 4700 | 30000 | 2.7 | 2800 | 0.87 | 4700 | 30000 | |
| | | | | | | | | | | | | |
| **A 60 4_208.7** | 208.7 | 4.3 | 2800 | 1.4 | 3500 | 30000 | 2.4 | 2800 | 0.79 | 3500 | 30000 | |
| **A 60 4_226.1** | 226.1 | 4.0 | 2800 | 1.3 | 3500 | 30000 | 2.2 | 2800 | 0.73 | 3500 | 30000 | |
| **A 60 4_264.3** | 264.3 | 3.4 | 2800 | 1.1 | 3500 | 30000 | 1.9 | 2800 | 0.62 | 3500 | 30000 | |
| **A 60 4_286.3** | 286.3 | 3.1 | 2800 | 1.0 | 3500 | 30000 | 1.7 | 2800 | 0.58 | 3500 | 30000 | |
| **A 60 4_324.2** | 324.2 | 2.8 | 2800 | 0.91 | 3500 | 30000 | 1.5 | 2800 | 0.51 | 3500 | 30000 | |
| **A 60 4_351.2** | 351.2 | 2.6 | 2800 | 0.84 | 3500 | 30000 | 1.4 | 2800 | 0.47 | 3500 | 30000 | |
| **A 60 4_404.7** | 404.7 | 2.2 | 2800 | 0.73 | 3500 | 30000 | 1.2 | 2800 | 0.41 | 3500 | 30000 | |
| **A 60 4_438.4** | 438.4 | 2.1 | 2800 | 0.68 | 3500 | 30000 | 1.1 | 2800 | 0.38 | 3500 | 30000 | |
| **A 60 4_500.3** | 500.3 | 1.8 | 2800 | 0.59 | 3500 | 30000 | 1.0 | 2800 | 0.33 | 3500 | 30000 | |
| **A 60 4_542.0** | 542.0 | 1.7 | 2800 | 0.55 | 3500 | 30000 | 0.92 | 2800 | 0.30 | 3500 | 30000 | |
| **A 60 4_585.8** | 585.8 | 1.5 | 2800 | 0.51 | 3500 | 30000 | 0.85 | 2800 | 0.28 | 3500 | 30000 | |
| **A 60 4_634.6** | 634.6 | 1.4 | 2800 | 0.47 | 3500 | 30000 | 0.79 | 2800 | 0.26 | 3500 | 30000 | |
| **A 60 4_697.3** | 697.3 | 1.3 | 2800 | 0.43 | 3500 | 30000 | 0.72 | 2800 | 0.24 | 3500 | 30000 | |
| **A 60 4_755.4** | 755.4 | 1.2 | 2800 | 0.39 | 3500 | 30000 | 0.66 | 2800 | 0.22 | 3500 | 30000 | |



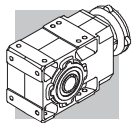
# A 70 — 5000 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 70 3_9.4** | 9.4 | 297 | 2300 | 79 | 1900 | 25900 | 148 | 2800 | 48 | 2550 | 31900 | |
| **A 70 3_10.2** | 10.2 | 274 | 2400 | 76 | 2480 | 26400 | 137 | 3200 | 50 | 1480 | 31900 | |
| **A 70 3_12.1** | 12.1 | 232 | 2400 | 64 | 2420 | 28000 | 116 | 3200 | 43 | 1400 | 33900 | |
| **A 70 3_13.1** | 13.1 | 214 | 2600 | 64 | 2420 | 28400 | 107 | 3350 | 41 | 2100 | 34600 | |
| **A 70 3_15.4** | 15.4 | 182 | 2700 | 56 | 2100 | 29900 | 91 | 3350 | 35 | 2430 | 36700 | |
| **A 70 3_16.7** | 16.7 | 168 | 2850 | 55 | 2500 | 30400 | 84 | 3600 | 35 | 2590 | 37200 | |
| **A 70 3_19.7** | 19.7 | 142 | 2900 | 48 | 2030 | 32100 | 71 | 3700 | 30 | 1790 | 39300 | |
| **A 70 3_21.3** | 21.3 | 131 | 3000 | 45 | 2750 | 32900 | 66 | 4000 | 30 | 1830 | 39800 | |
| **A 70 3_23.5** | 23.5 | 119 | 3500 | 48 | 4930 | 32900 | 60 | 4300 | 30 | 6250 | 40500 | |
| **A 70 3_27.8** | 27.8 | 101 | 3450 | 40 | 4960 | 35100 | 50 | 4200 | 24 | 6300 | 43300 | |
| **A 70 3_30.1** | 30.1 | 93 | 3700 | 40 | 4970 | 35600 | 47 | 4550 | 24 | 6300 | 43900 | |
| **A 70 3_35.4** | 35.4 | 79 | 3650 | 33 | 5040 | 37900 | 40 | 4500 | 21 | 6370 | 46600 | |
| **A 70 3_38.4** | 38.4 | 73 | 3950 | 33 | 5040 | 38400 | 36 | 4850 | 20 | 6380 | 47300 | |
| **A 70 3_45.2** | 45.2 | 62 | 3900 | 28 | 5050 | 40800 | 31 | 4800 | 17.1 | 6400 | 50000 | |
| **A 70 3_49.0** | 49.0 | 57 | 4250 | 28 | 5050 | 41300 | 28.6 | 5000 | 16.4 | 6450 | 50000 | |
| **A 70 3_53.2** | 53.2 | 53 | 4100 | 25 | 5030 | 42900 | 26.3 | 5000 | 15.1 | 6380 | 50000 | |
| **A 70 3_57.7** | 57.7 | 49 | 4450 | 25 | 5030 | 43400 | 24.3 | 5000 | 14.0 | 6490 | 50000 | |
| **A 70 3_66.9** | 66.9 | 42 | 4350 | 21 | 5050 | 46000 | 20.9 | 5000 | 12.0 | 6480 | 50000 | |
| **A 70 3_72.5** | 72.5 | 39 | 4750 | 21 | 5040 | 46500 | 19.3 | 5000 | 11.1 | 6580 | 50000 | |
| **A 70 3_79.3** | 79.3 | 35 | 4600 | 18.7 | 5020 | 48400 | 17.6 | 5000 | 10.2 | 6520 | 50000 | |
| **A 70 3_85.9** | 85.9 | 33 | 4950 | 18.6 | 5030 | 49100 | 16.3 | 5000 | 9.4 | 6620 | 50000 | |
| **A 70 3_96.2** | 96.2 | 29.1 | 4850 | 16.2 | 5000 | 50000 | 14.6 | 5000 | 8.4 | 6570 | 50000 | |
| **A 70 3_104.2** | 104.2 | 26.9 | 5000 | 15.5 | 5060 | 50000 | 13.4 | 5000 | 7.7 | 6660 | 50000 | |
| **A 70 3_120.6** | 120.6 | 23.2 | 5000 | 13.4 | 5010 | 50000 | 11.6 | 5000 | 6.7 | 6610 | 50000 | |
| **A 70 3_130.7** | 130.7 | 21.4 | 5000 | 12.3 | 5100 | 50000 | 10.7 | 5000 | 6.2 | 6690 | 50000 | 294 |
| **A 70 3_141.9** | 141.9 | 19.7 | 5000 | 11.4 | 5040 | 50000 | 9.9 | 5000 | 5.7 | 6640 | 50000 | |
| **A 70 3_153.7** | 153.7 | 18.2 | 3300 | 6.9 | 5410 | 50000 | 9.1 | 4050 | 4.2 | 6920 | 50000 | |
| | | | | | | | | | | | | |
| **A 70 4_169.8** | 169.8 | 16.5 | 5000 | 9.7 | 1130 | 50000 | 8.2 | 5000 | 4.9 | 2520 | 50000 | |
| **A 70 4_183.9** | 183.9 | 15.2 | 5000 | 9.0 | 1450 | 50000 | 7.6 | 5000 | 4.5 | 2670 | 50000 | |
| **A 70 4_220.3** | 220.3 | 12.7 | 5000 | 7.5 | 1560 | 50000 | 6.4 | 5000 | 3.7 | 2710 | 50000 | |
| **A 70 4_238.6** | 238.6 | 11.7 | 5000 | 6.9 | 1860 | 50000 | 5.9 | 5000 | 3.5 | 2770 | 50000 | |
| **A 70 4_292.0** | 292.0 | 9.6 | 5000 | 5.6 | 1900 | 50000 | 4.8 | 5000 | 2.8 | 2790 | 50000 | |
| **A 70 4_316.4** | 316.4 | 8.9 | 5000 | 5.2 | 2110 | 50000 | 4.4 | 5000 | 2.6 | 2850 | 50000 | |
| **A 70 4_369.4** | 369.4 | 7.6 | 5000 | 4.5 | 2110 | 50000 | 3.8 | 5000 | 2.2 | 2840 | 50000 | |
| **A 70 4_400.2** | 400.2 | 7.0 | 5000 | 4.1 | 2160 | 50000 | 3.5 | 5000 | 2.1 | 2900 | 50000 | |
| **A 70 4_475.8** | 475.8 | 5.9 | 5000 | 3.5 | 2150 | 50000 | 2.9 | 5000 | 1.7 | 2890 | 50000 | |
| **A 70 4_515.4** | 515.4 | 5.4 | 5000 | 3.2 | 2200 | 50000 | 2.7 | 5000 | 1.6 | 2940 | 50000 | |
| **A 70 4_595.0** | 595.0 | 4.7 | 5000 | 2.8 | 2190 | 50000 | 2.4 | 5000 | 1.4 | 2920 | 50000 | |
| **A 70 4_644.6** | 644.6 | 4.3 | 5000 | 2.6 | 2230 | 50000 | 2.2 | 5000 | 1.3 | 2970 | 50000 | |
| **A 70 4_705.1** | 705.1 | 4.0 | 5000 | 2.3 | 2200 | 50000 | 2.0 | 5000 | 1.2 | 2940 | 50000 | |
| **A 70 4_763.9** | 763.9 | 3.7 | 5000 | 2.2 | 2250 | 50000 | 1.8 | 5000 | 1.1 | 2990 | 50000 | |
| **A 70 4_855.3** | 855.3 | 3.3 | 5000 | 1.9 | 2220 | 50000 | 1.6 | 5000 | 0.96 | 2960 | 50000 | |
| **A 70 4_926.5** | 926.5 | 3.0 | 5000 | 1.8 | 2270 | 50000 | 1.5 | 5000 | 0.89 | 3000 | 50000 | |
| **A 70 4_1072** | 1072 | 2.6 | 5000 | 1.5 | 2240 | 50000 | 1.3 | 5000 | 0.77 | 2970 | 50000 | |
| **A 70 4_1161** | 1161 | 2.4 | 5000 | 1.4 | 2280 | 50000 | 1.2 | 5000 | 0.71 | 3020 | 50000 | |
| **A 70 4_1242** | 1242 | 2.3 | 5000 | 1.3 | 2250 | 50000 | 1.1 | 5000 | 0.66 | 2980 | 50000 | |
| **A 70 4_1346** | 1346 | 2.1 | 5000 | 1.2 | 2290 | 50000 | 1.0 | 5000 | 0.61 | 3030 | 50000 | |
| **A 70 4_1583** | 1583 | 1.8 | 5000 | 1.0 | 2260 | 50000 | 0.88 | 5000 | 0.52 | 2990 | 50000 | |
| **A 70 4_1715** | 1715 | 1.6 | 5000 | 0.96 | 2300 | 50000 | 0.82 | 5000 | 0.48 | 3040 | 50000 | |



# A 70 — 5000 Nm

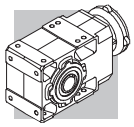
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ | $M_{n2}$ | $P_{n1}$ | $R_{n1}$ | $R_{n2}$ | $n_2$ | $M_{n2}$ | $P_{n1}$ | $R_{n1}$ | $R_{n2}$ | |
| | | min$^{-1}$ | Nm | kW | N | N | min$^{-1}$ | Nm | kW | N | N | |
| **A 70 3_9.4** | 9.4 | 95 | 3000 | 33 | 4290 | 36900 | 53 | 3000 | 18.3 | 7000 | 45400 | |
| **A 70 3_10.2** | 10.2 | 88 | 3250 | 33 | 4290 | 37400 | 49 | 3250 | 18.3 | 7000 | 46100 | |
| **A 70 3_12.1** | 12.1 | 75 | 3650 | 31 | 1620 | 38700 | 41 | 3650 | 17.4 | 6470 | 47900 | |
| **A 70 3_13.1** | 13.1 | 69 | 3950 | 31 | 1650 | 39200 | 38 | 3950 | 17.4 | 6500 | 48600 | |
| **A 70 3_15.4** | 15.4 | 58 | 3700 | 25 | 3510 | 42200 | 32 | 3700 | 13.8 | 7000 | 50000 | |
| **A 70 3_16.7** | 16.7 | 54 | 4000 | 25 | 3560 | 42800 | 30 | 4000 | 13.8 | 7000 | 50000 | |
| **A 70 3_19.7** | 19.7 | 46 | 3700 | 19.5 | 4910 | 46100 | 25.4 | 3700 | 10.8 | 7000 | 50000 | |
| **A 70 3_21.3** | 21.3 | 42 | 4000 | 19.4 | 4950 | 46800 | 23.5 | 4000 | 10.8 | 7000 | 50000 | |
| **A 70 3_23.5** | 23.5 | 38 | 4900 | 21.6 | 7000 | 46300 | 21.3 | 5000 | 12.2 | 7000 | 50000 | |
| **A 70 3_27.8** | 27.8 | 32 | 4800 | 17.9 | 7000 | 49400 | 18.0 | 5000 | 10.4 | 7000 | 50000 | |
| **A 70 3_30.1** | 30.1 | 29.9 | 5000 | 17.2 | 7000 | 50000 | 16.6 | 5000 | 9.6 | 7000 | 50000 | |
| **A 70 3_35.4** | 35.4 | 25.4 | 5000 | 14.6 | 7000 | 50000 | 14.1 | 5000 | 8.1 | 7000 | 50000 | |
| **A 70 3_38.4** | 38.4 | 23.4 | 5000 | 13.5 | 7000 | 50000 | 13.0 | 5000 | 7.5 | 7000 | 50000 | |
| **A 70 3_45.2** | 45.2 | 19.9 | 5000 | 11.4 | 7000 | 50000 | 11.1 | 5000 | 6.4 | 7000 | 50000 | |
| **A 70 3_49.0** | 49.0 | 18.4 | 5000 | 10.6 | 7000 | 50000 | 10.2 | 5000 | 5.9 | 7000 | 50000 | |
| **A 70 3_53.2** | 53.2 | 16.9 | 5000 | 9.7 | 7000 | 50000 | 9.4 | 5000 | 5.4 | 7000 | 50000 | |
| **A 70 3_57.7** | 57.7 | 15.6 | 5000 | 9.0 | 7000 | 50000 | 8.7 | 5000 | 5.0 | 7000 | 50000 | |
| **A 70 3_66.9** | 66.9 | 13.4 | 5000 | 7.7 | 7000 | 50000 | 7.5 | 5000 | 4.3 | 7000 | 50000 | |
| **A 70 3_72.5** | 72.5 | 12.4 | 5000 | 7.1 | 7000 | 50000 | 6.9 | 5000 | 4.0 | 7000 | 50000 | |
| **A 70 3_79.3** | 79.3 | 11.3 | 5000 | 6.5 | 7000 | 50000 | 6.3 | 5000 | 3.6 | 7000 | 50000 | |
| **A 70 3_85.9** | 85.9 | 10.5 | 5000 | 6.0 | 7000 | 50000 | 5.8 | 5000 | 3.3 | 7000 | 50000 | |
| **A 70 3_96.2** | 96.2 | 9.4 | 5000 | 5.4 | 7000 | 50000 | 5.2 | 5000 | 3.0 | 7000 | 50000 | |
| **A 70 3_104.2** | 104.2 | 8.6 | 5000 | 5.0 | 7000 | 50000 | 4.8 | 5000 | 2.8 | 7000 | 50000 | |
| **A 70 3_120.6** | 120.6 | 7.5 | 5000 | 4.3 | 7000 | 50000 | 4.1 | 5000 | 2.4 | 7000 | 50000 | |
| **A 70 3_130.7** | 130.7 | 6.9 | 5000 | 4.0 | 7000 | 50000 | 3.8 | 5000 | 2.2 | 7000 | 50000 | 294 |
| **A 70 3_141.9** | 141.9 | 6.3 | 5000 | 3.7 | 7000 | 50000 | 3.5 | 5000 | 2.0 | 7000 | 50000 | |
| **A 70 3_153.7** | 153.7 | 5.9 | 4600 | 3.1 | 7000 | 50000 | 3.3 | 5000 | 1.9 | 7000 | 50000 | |
| | | | | | | | | | | | | |
| **A 70 4_169.8** | 169.8 | 5.3 | 5000 | 3.1 | 3170 | 50000 | 2.9 | 5000 | 1.7 | 3500 | 50000 | |
| **A 70 4_183.9** | 183.9 | 4.9 | 5000 | 2.9 | 3240 | 50000 | 2.7 | 5000 | 1.6 | 3500 | 50000 | |
| **A 70 4_220.3** | 220.3 | 4.1 | 5000 | 2.4 | 3270 | 50000 | 2.3 | 5000 | 1.3 | 3500 | 50000 | |
| **A 70 4_238.6** | 238.6 | 3.8 | 5000 | 2.2 | 3340 | 50000 | 2.1 | 5000 | 1.2 | 3500 | 50000 | |
| **A 70 4_292.0** | 292.0 | 3.1 | 5000 | 1.8 | 3350 | 50000 | 1.7 | 5000 | 1.0 | 3500 | 50000 | |
| **A 70 4_316.4** | 316.4 | 2.8 | 5000 | 1.7 | 3410 | 50000 | 1.6 | 5000 | 0.93 | 3500 | 50000 | |
| **A 70 4_369.4** | 369.4 | 2.4 | 5000 | 1.4 | 3410 | 50000 | 1.4 | 5000 | 0.80 | 3500 | 50000 | |
| **A 70 4_400.2** | 400.2 | 2.2 | 5000 | 1.3 | 3460 | 50000 | 1.2 | 5000 | 0.74 | 3500 | 50000 | |
| **A 70 4_475.8** | 475.8 | 1.9 | 5000 | 1.1 | 3450 | 50000 | 1.1 | 5000 | 0.62 | 3500 | 50000 | |
| **A 70 4_515.4** | 515.4 | 1.7 | 5000 | 1.0 | 3500 | 50000 | 0.97 | 5000 | 0.57 | 3500 | 50000 | |
| **A 70 4_595.0** | 595.0 | 1.5 | 5000 | 0.89 | 3480 | 50000 | 0.84 | 5000 | 0.49 | 3500 | 50000 | |
| **A 70 4_644.6** | 644.6 | 1.4 | 5000 | 0.82 | 3500 | 50000 | 0.78 | 5000 | 0.46 | 3500 | 50000 | |
| **A 70 4_705.1** | 705.1 | 1.3 | 5000 | 0.75 | 3500 | 50000 | 0.71 | 5000 | 0.42 | 3500 | 50000 | |
| **A 70 4_763.9** | 763.9 | 1.2 | 5000 | 0.69 | 3500 | 50000 | 0.65 | 5000 | 0.39 | 3500 | 50000 | |
| **A 70 4_855.3** | 855.3 | 1.1 | 5000 | 0.62 | 3500 | 50000 | 0.58 | 5000 | 0.34 | 3500 | 50000 | |
| **A 70 4_926.5** | 926.5 | 0.97 | 5000 | 0.57 | 3500 | 50000 | 0.54 | 5000 | 0.32 | 3500 | 50000 | |
| **A 70 4_1072** | 1072 | 0.84 | 5000 | 0.49 | 3500 | 50000 | 0.47 | 5000 | 0.27 | 3500 | 50000 | |
| **A 70 4_1161** | 1161 | 0.77 | 5000 | 0.46 | 3500 | 50000 | 0.43 | 5000 | 0.25 | 3500 | 50000 | |
| **A 70 4_1242** | 1242 | 0.72 | 5000 | 0.43 | 3500 | 50000 | 0.40 | 5000 | 0.24 | 3500 | 50000 | |
| **A 70 4_1346** | 1346 | 0.67 | 5000 | 0.39 | 3500 | 50000 | 0.37 | 5000 | 0.22 | 3500 | 50000 | |
| **A 70 4_1583** | 1583 | 0.57 | 5000 | 0.33 | 3500 | 50000 | 0.32 | 5000 | 0.19 | 3500 | 50000 | |
| **A 70 4_1715** | 1715 | 0.52 | 5000 | 0.31 | 3500 | 50000 | 0.29 | 5000 | 0.17 | 3500 | 50000 | |



# A 80 — 8000 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 80 3_9.8** | 9.8 | 285 | 3100 | 102 | — | 26300 | 142 | 3900 | 64 | — | 32100 | 297 |
| **A 80 3_10.7** | 10.7 | 263 | 3450 | 104 | — | 26300 | 131 | 4300 | 65 | — | 32300 | |
| **A 80 3_12.3** | 12.3 | 228 | 3450 | 91 | — | 27700 | 114 | 4300 | 56 | — | 34000 | |
| **A 80 3_13.3** | 13.3 | 211 | 3450 | 84 | 1150 | 28700 | 105 | 4300 | 52 | 1150 | 35200 | |
| **A 80 3_15.5** | 15.5 | 181 | 3300 | 69 | 1560 | 30600 | 91 | 4100 | 43 | 1730 | 37600 | |
| **A 80 3_16.7** | 16.7 | 167 | 3600 | 69 | 1440 | 30900 | 84 | 4500 | 43 | 1460 | 37900 | |
| **A 80 3_19.3** | 19.3 | 145 | 3500 | 58 | 1870 | 32800 | 72 | 4400 | 37 | 1880 | 40200 | |
| **A 80 3_20.9** | 20.9 | 134 | 3840 | 59 | 1670 | 33100 | 67 | 4800 | 37 | 1740 | 40600 | |
| **A 80 3_22.6** | 22.6 | 124 | 5050 | 72 | 4500 | 31200 | 62 | 6250 | 45 | 5830 | 38400 | |
| **A 80 3_24.5** | 24.5 | 114 | 5500 | 72 | 4470 | 31300 | 57 | 6750 | 44 | 5840 | 38600 | |
| **A 80 3_28.2** | 28.2 | 99 | 5350 | 61 | 4700 | 33500 | 50 | 6600 | 38 | 5960 | 41200 | |
| **A 80 3_30.6** | 30.6 | 92 | 5250 | 55 | 4840 | 34900 | 46 | 6450 | 34 | 6140 | 43000 | |
| **A 80 3_35.5** | 35.5 | 79 | 5700 | 52 | 4700 | 36000 | 39 | 7000 | 32 | 6000 | 44300 | |
| **A 80 3_38.5** | 38.5 | 73 | 6150 | 51 | 4720 | 36200 | 36 | 7600 | 32 | 6000 | 44500 | |
| **A 80 3_44.5** | 44.5 | 63 | 6050 | 44 | 4790 | 38600 | 31 | 7450 | 27 | 6070 | 47500 | |
| **A 80 3_48.2** | 48.2 | 58 | 6550 | 44 | 4790 | 38800 | 29.1 | 8000 | 27 | 6090 | 47900 | |
| **A 80 3_55.2** | 55.2 | 51 | 6400 | 37 | 4710 | 41300 | 25.4 | 7900 | 23 | 6050 | 50800 | |
| **A 80 3_59.8** | 59.8 | 47 | 6950 | 37 | 4690 | 41500 | 23.4 | 8000 | 22 | 6170 | 52300 | |
| **A 80 3_66.8** | 66.8 | 42 | 6800 | 33 | 4670 | 43700 | 21.0 | 8000 | 19.3 | 6150 | 54600 | |
| **A 80 3_72.4** | 72.4 | 39 | 7350 | 33 | 4680 | 44000 | 19.3 | 8000 | 17.8 | 6280 | 56500 | |
| **A 80 3_82.3** | 82.3 | 34 | 7200 | 28 | 4570 | 46600 | 17.0 | 8000 | 15.7 | 6230 | 59300 | |
| **A 80 3_89.2** | 89.2 | 31 | 7800 | 28 | 4570 | 46900 | 15.7 | 8000 | 14.5 | 6350 | 61400 | |
| **A 80 3_96.0** | 96.0 | 29.2 | 7500 | 25 | 4410 | 48900 | 14.6 | 8000 | 13.4 | 6260 | 63000 | |
| **A 80 3_104.0** | 104.0 | 26.9 | 8000 | 25 | 4500 | 49500 | 13.5 | 8000 | 12.4 | 6380 | 65000 | |
| **A 80 3_116.0** | 116.0 | 24.1 | 7950 | 22 | 4230 | 51700 | 12.1 | 8000 | 11.1 | 6300 | 65000 | |
| **A 80 3_125.6** | 125.6 | 22.3 | 8000 | 21 | 4630 | 53400 | 11.1 | 8000 | 10.3 | 6420 | 65000 | |
| **A 80 3_144.7** | 144.7 | 19.3 | 8000 | 17.8 | 4320 | 56400 | 9.7 | 8000 | 8.9 | 6350 | 65000 | |
| **A 80 3_156.8** | 156.8 | 17.9 | 8000 | 16.4 | 4750 | 58300 | 8.9 | 8000 | 8.2 | 6460 | 65000 | |
| **A 80 4_171.3** | 171.3 | 16.3 | 8000 | 15.4 | — | 65000 | 8.2 | 8000 | 7.7 | 1230 | 65000 | |
| **A 80 4_214.7** | 214.7 | 13.0 | 8000 | 12.3 | — | 65000 | 6.5 | 8000 | 6.1 | 1400 | 65000 | |
| **A 80 4_232.6** | 232.6 | 12.0 | 8000 | 11.3 | — | 65000 | 6.0 | 8000 | 5.7 | 1810 | 65000 | |
| **A 80 4_277.3** | 277.3 | 10.1 | 8000 | 9.5 | 540 | 65000 | 5.0 | 8000 | 4.8 | 1930 | 65000 | |
| **A 80 4_300.4** | 300.4 | 9.3 | 8000 | 8.8 | 900 | 65000 | 4.7 | 8000 | 4.4 | 2290 | 65000 | |
| **A 80 4_354.0** | 354.0 | 7.9 | 8000 | 7.4 | 800 | 65000 | 4.0 | 8000 | 3.7 | 2190 | 65000 | |
| **A 80 4_383.5** | 383.5 | 7.3 | 8000 | 6.9 | 1140 | 65000 | 3.7 | 8000 | 3.4 | 2530 | 65000 | |
| **A 80 4_442.1** | 442.1 | 6.3 | 8000 | 6.0 | 1040 | 65000 | 3.2 | 8000 | 3.0 | 2430 | 65000 | |
| **A 80 4_478.9** | 478.9 | 5.8 | 8000 | 5.5 | 1370 | 65000 | 2.9 | 8000 | 2.8 | 2670 | 65000 | |
| **A 80 4_560.5** | 560.5 | 5.0 | 8000 | 4.7 | 1240 | 65000 | 2.5 | 8000 | 2.4 | 2630 | 65000 | |
| **A 80 4_607.2** | 607.2 | 4.6 | 8000 | 4.3 | 1550 | 65000 | 2.3 | 8000 | 2.2 | 2720 | 65000 | |
| **A 80 4_703.5** | 703.5 | 4.0 | 8000 | 3.7 | 1440 | 65000 | 2.0 | 8000 | 1.9 | 2690 | 65000 | |
| **A 80 4_762.1** | 762.1 | 3.7 | 8000 | 3.5 | 1730 | 65000 | 1.8 | 8000 | 1.7 | 2760 | 65000 | |
| **A 80 4_829.5** | 829.5 | 3.4 | 8000 | 3.2 | 1530 | 65000 | 1.7 | 8000 | 1.6 | 2720 | 65000 | |
| **A 80 4_898.7** | 898.7 | 3.1 | 8000 | 2.9 | 1820 | 65000 | 1.6 | 8000 | 1.5 | 2780 | 65000 | |
| **A 80 4_1001** | 1001 | 2.8 | 8000 | 2.6 | 1620 | 65000 | 1.4 | 8000 | 1.3 | 2740 | 65000 | |
| **A 80 4_1085** | 1085 | 2.6 | 8000 | 2.4 | 1900 | 65000 | 1.3 | 8000 | 1.2 | 2800 | 65000 | |
| **A 80 4_1237** | 1237 | 2.3 | 8000 | 2.1 | 1660 | 65000 | 1.1 | 8000 | 1.1 | 2750 | 65000 | |
| **A 80 4_1340** | 1340 | 2.1 | 8000 | 2.0 | 1940 | 65000 | 1.0 | 8000 | 0.98 | 2810 | 65000 | |
| **A 80 4_1438** | 1438 | 1.9 | 8000 | 1.8 | 1730 | 65000 | 0.97 | 8000 | 0.92 | 2770 | 65000 | |
| **A 80 4_1558** | 1558 | 1.8 | 8000 | 1.7 | 2000 | 65000 | 0.90 | 8000 | 0.85 | 2830 | 65000 | |

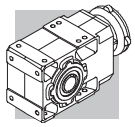
(—) Contactar con nuestro Servicio Técnico comunicando los datos relativos a la carga radial (sentido de giro, orientación, posición)



# A 80 — 8000 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 80 3_9.8** | 9.8 | 92 | 4450 | 47 | — | 36700 | 51 | 5300 | 31 | — | 43800 | |
| **A 80 3_10.7** | 10.7 | 84 | 4900 | 48 | — | 36900 | 47 | 5850 | 32 | — | 44000 | |
| **A 80 3_12.3** | 12.3 | 73 | 4900 | 41 | — | 38900 | 41 | 5850 | 27 | — | 46400 | |
| **A 80 3_13.3** | 13.3 | 68 | 4900 | 38 | 1360 | 40200 | 38 | 5850 | 25 | 1600 | 47900 | |
| **A 80 3_15.5** | 15.5 | 58 | 4650 | 31 | 2130 | 43000 | 32 | 5550 | 21 | 2530 | 51300 | |
| **A 80 3_16.7** | 16.7 | 54 | 5100 | 32 | 1840 | 43400 | 29.9 | 6100 | 21 | 2120 | 51700 | |
| **A 80 3_19.3** | 19.3 | 47 | 5000 | 27 | 2260 | 46000 | 25.9 | 6000 | 17.9 | 2530 | 54800 | |
| **A 80 3_20.9** | 20.9 | 43 | 5470 | 27 | 2030 | 46400 | 23.9 | 6500 | 17.9 | 2530 | 55400 | |
| **A 80 3_22.6** | 22.6 | 40 | 7100 | 33 | 6810 | 43900 | 22.1 | 8000 | 20.4 | 7000 | 53400 | |
| **A 80 3_24.5** | 24.5 | 37 | 7700 | 33 | 6800 | 44100 | 20.4 | 8000 | 18.8 | 7000 | 55300 | |
| **A 80 3_28.2** | 28.2 | 32 | 7550 | 28 | 6940 | 47000 | 17.7 | 8000 | 16.3 | 7000 | 58400 | |
| **A 80 3_30.6** | 30.6 | 29.4 | 7400 | 25 | 7000 | 49000 | 16.4 | 8000 | 15.1 | 7000 | 60400 | |
| **A 80 3_35.5** | 35.5 | 25.3 | 8000 | 23 | 6980 | 50600 | 14.1 | 8000 | 13.0 | 7000 | 63900 | |
| **A 80 3_38.5** | 38.5 | 23.4 | 8000 | 22 | 7000 | 52400 | 13.0 | 8000 | 12.0 | 7000 | 65000 | |
| **A 80 3_44.5** | 44.5 | 20.2 | 8000 | 18.6 | 7000 | 55400 | 11.2 | 8000 | 10.3 | 7000 | 65000 | |
| **A 80 3_48.2** | 48.2 | 18.7 | 8000 | 17.2 | 7000 | 57300 | 10.4 | 8000 | 9.6 | 7000 | 65000 | |
| **A 80 3_55.2** | 55.2 | 16.3 | 8000 | 15.0 | 7000 | 60300 | 9.1 | 8000 | 8.3 | 7000 | 65000 | |
| **A 80 3_59.8** | 59.8 | 15.1 | 8000 | 13.9 | 7000 | 62300 | 8.4 | 8000 | 7.7 | 7000 | 65000 | |
| **A 80 3_66.8** | 66.8 | 13.5 | 8000 | 12.4 | 7000 | 65000 | 7.5 | 8000 | 6.9 | 7000 | 65000 | |
| **A 80 3_72.4** | 72.4 | 12.4 | 8000 | 11.4 | 7000 | 65000 | 6.9 | 8000 | 6.4 | 7000 | 65000 | |
| **A 80 3_82.3** | 82.3 | 10.9 | 8000 | 10.1 | 7000 | 65000 | 6.1 | 8000 | 5.6 | 7000 | 65000 | |
| **A 80 3_89.2** | 89.2 | 10.1 | 8000 | 9.3 | 7000 | 65000 | 5.6 | 8000 | 5.2 | 7000 | 65000 | |
| **A 80 3_96.0** | 96.0 | 9.4 | 8000 | 8.6 | 7000 | 65000 | 5.2 | 8000 | 4.8 | 7000 | 65000 | |
| **A 80 3_104.0** | 104.0 | 8.7 | 8000 | 8.0 | 7000 | 65000 | 4.8 | 8000 | 4.4 | 7000 | 65000 | |
| **A 80 3_116.0** | 116.0 | 7.8 | 8000 | 7.1 | 7000 | 65000 | 4.3 | 8000 | 4.0 | 7000 | 65000 | 297 |
| **A 80 3_125.6** | 125.6 | 7.2 | 8000 | 6.6 | 7000 | 65000 | 4.0 | 8000 | 3.7 | 7000 | 65000 | |
| **A 80 3_144.7** | 144.7 | 6.2 | 8000 | 5.7 | 7000 | 65000 | 3.5 | 8000 | 3.2 | 7000 | 65000 | |
| **A 80 3_156.8** | 156.8 | 5.7 | 8000 | 5.3 | 7000 | 65000 | 3.2 | 8000 | 2.9 | 7000 | 65000 | |
| **A 80 4_171.3** | 171.3 | 5.3 | 8000 | 4.9 | 2300 | 65000 | 2.9 | 8000 | 2.7 | 3500 | 65000 | |
| **A 80 4_214.7** | 214.7 | 4.2 | 8000 | 3.9 | 2470 | 65000 | 2.3 | 8000 | 2.2 | 3500 | 65000 | |
| **A 80 4_232.6** | 232.6 | 3.9 | 8000 | 3.6 | 2870 | 65000 | 2.1 | 8000 | 2.0 | 3500 | 65000 | |
| **A 80 4_277.3** | 277.3 | 3.2 | 8000 | 3.1 | 3000 | 65000 | 1.8 | 8000 | 1.7 | 3500 | 65000 | |
| **A 80 4_300.4** | 300.4 | 3.0 | 8000 | 2.8 | 3120 | 65000 | 1.7 | 8000 | 1.6 | 3500 | 65000 | |
| **A 80 4_354.0** | 354.0 | 2.5 | 8000 | 2.4 | 3100 | 65000 | 1.4 | 8000 | 1.3 | 3500 | 65000 | |
| **A 80 4_383.5** | 383.5 | 2.3 | 8000 | 2.2 | 3180 | 65000 | 1.3 | 8000 | 1.2 | 3500 | 65000 | |
| **A 80 4_442.1** | 442.1 | 2.0 | 8000 | 1.9 | 3160 | 65000 | 1.1 | 8000 | 1.1 | 3500 | 65000 | |
| **A 80 4_478.9** | 478.9 | 1.9 | 8000 | 1.8 | 3230 | 65000 | 1.0 | 8000 | 0.98 | 3500 | 65000 | |
| **A 80 4_560.5** | 560.5 | 1.6 | 8000 | 1.5 | 3210 | 65000 | 0.89 | 8000 | 0.84 | 3500 | 65000 | |
| **A 80 4_607.2** | 607.2 | 1.5 | 8000 | 1.4 | 3280 | 65000 | 0.82 | 8000 | 0.78 | 3500 | 65000 | |
| **A 80 4_703.5** | 703.5 | 1.3 | 8000 | 1.2 | 3260 | 65000 | 0.71 | 8000 | 0.67 | 3500 | 65000 | |
| **A 80 4_762.1** | 762.1 | 1.2 | 8000 | 1.1 | 3320 | 65000 | 0.66 | 8000 | 0.62 | 3500 | 65000 | |
| **A 80 4_829.5** | 829.5 | 1.1 | 8000 | 1.0 | 3280 | 65000 | 0.60 | 8000 | 0.57 | 3500 | 65000 | |
| **A 80 4_898.7** | 898.7 | 1.0 | 8000 | 0.94 | 3340 | 65000 | 0.56 | 8000 | 0.52 | 3500 | 65000 | |
| **A 80 4_1001** | 1001 | 0.90 | 8000 | 0.85 | 3300 | 65000 | 0.50 | 8000 | 0.47 | 3500 | 65000 | |
| **A 80 4_1085** | 1085 | 0.83 | 8000 | 0.78 | 3360 | 65000 | 0.46 | 8000 | 0.43 | 3500 | 65000 | |
| **A 80 4_1237** | 1237 | 0.73 | 8000 | 0.68 | 3310 | 65000 | 0.40 | 8000 | 0.38 | 3500 | 65000 | |
| **A 80 4_1340** | 1340 | 0.67 | 8000 | 0.63 | 3370 | 65000 | 0.37 | 8000 | 0.35 | 3500 | 65000 | |
| **A 80 4_1438** | 1438 | 0.63 | 8000 | 0.59 | 3330 | 65000 | 0.35 | 8000 | 0.33 | 3500 | 65000 | |
| **A 80 4_1558** | 1558 | 0.58 | 8000 | 0.54 | 3390 | 65000 | 0.32 | 8000 | 0.30 | 3500 | 65000 | |

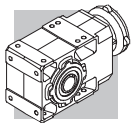
(—) Contactar con nuestro Servicio Técnico comunicando los datos relativos a la carga radial (sentido de giro, orientación, posición)



# A 90 — 14000 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 90 3_9.7** | 9.7 | 289 | 7800 | 260 | 2440 | 27600 | 145 | 9050 | 151 | 5520 | 35000 | |
| **A 90 3_10.5** | 10.5 | 267 | 8350 | 257 | 2620 | 27700 | 134 | 9800 | 151 | 5530 | 34900 | |
| **A 90 3_12.6** | 12.6 | 221 | 8500 | 217 | 2700 | 29800 | 111 | 10450 | 133 | 4790 | 36700 | |
| **A 90 3_13.7** | 13.7 | 204 | 8050 | 189 | 4670 | 31800 | 102 | 11150 | 131 | 5060 | 36900 | |
| **A 90 3_15.6** | 15.6 | 180 | 8900 | 184 | 3240 | 32000 | 90 | 10950 | 113 | 5410 | 39400 | |
| **A 90 3_16.9** | 16.9 | 166 | 9650 | 184 | 3230 | 31900 | 83 | 11850 | 113 | 5440 | 39300 | |
| **A 90 3_19.4** | 19.4 | 144 | 9400 | 156 | 3160 | 34300 | 72 | 11550 | 96 | 5350 | 42300 | |
| **A 90 3_21.0** | 21.0 | 133 | 10150 | 156 | 3210 | 34300 | 67 | 12400 | 95 | 5510 | 42400 | |
| **A 90 3_22.3** | 22.3 | 126 | 9850 | 143 | 9660 | 35700 | 63 | 12150 | 88 | 12200 | 43900 | |
| **A 90 3_24.1** | 24.1 | 116 | 10700 | 143 | 9660 | 35500 | 58 | 13150 | 88 | 12200 | 43800 | |
| **A 90 3_29.1** | 29.1 | 96 | 10550 | 117 | 9800 | 38900 | 48 | 13000 | 72 | 12400 | 47900 | |
| **A 90 3_31.5** | 31.5 | 89 | 11450 | 117 | 9800 | 38800 | 44 | 14000 | 72 | 12400 | 47900 | |
| **A 90 3_35.8** | 35.8 | 78 | 11150 | 100 | 9910 | 41600 | 39 | 13750 | 62 | 12500 | 51100 | |
| **A 90 3_38.8** | 38.8 | 72 | 12100 | 100 | 9900 | 41500 | 36 | 14000 | 58 | 12700 | 52700 | |
| **A 90 3_44.6** | 44.6 | 63 | 11800 | 85 | 9920 | 44600 | 31 | 14000 | 51 | 12700 | 56000 | |
| **A 90 3_48.3** | 48.3 | 58 | 12800 | 85 | 9920 | 44500 | 29.0 | 14000 | 47 | 12800 | 58000 | |
| **A 90 3_55.0** | 55.0 | 51 | 12550 | 73 | 9960 | 47500 | 25.4 | 14000 | 41 | 12800 | 61400 | |
| **A 90 3_59.6** | 59.6 | 47 | 13550 | 73 | 9970 | 47500 | 23.5 | 14000 | 38 | 13000 | 63500 | |
| **A 90 3_68.8** | 68.8 | 41 | 13350 | 63 | 9960 | 50900 | 20.4 | 14000 | 33 | 13000 | 67400 | |
| **A 90 3_74.5** | 74.5 | 38 | 14000 | 61 | 10000 | 51700 | 18.8 | 14000 | 30 | 13100 | 69700 | |
| **A 90 3_80.4** | 80.4 | 35 | 13900 | 56 | 9920 | 53500 | 17.4 | 14000 | 28 | 13000 | 71900 | |
| **A 90 3_87.1** | 87.1 | 32 | 14000 | 52 | 10100 | 55500 | 16.1 | 14000 | 26 | 13200 | 74300 | |
| **A 90 3_98.6** | 98.6 | 28.4 | 14000 | 46 | 9990 | 58500 | 14.2 | 14000 | 23 | 13100 | 75000 | |
| **A 90 3_106.8** | 106.8 | 26.2 | 14000 | 42 | 10100 | 60600 | 13.1 | 14000 | 21 | 13300 | 75000 | |
| **A 90 3_116.9** | 116.9 | 24.0 | 14000 | 39 | 10100 | 63000 | 12.0 | 14000 | 19.3 | 13200 | 75000 | |
| **A 90 3_126.6** | 126.6 | 22.1 | 10650 | 27 | 10600 | 71400 | 11.1 | 13150 | 16.7 | 13400 | 75000 | 300 |
| **A 90 3_139.4** | 139.4 | 20.1 | 10350 | 24 | 10600 | 74500 | 10.0 | 12750 | 14.7 | 13400 | 75000 | |
| **A 90 3_151.0** | 151.0 | 18.5 | 11200 | 24 | 10600 | 75000 | 9.3 | 13800 | 14.7 | 13400 | 75000 | |
| **A 90 4_166.1** | 166.1 | 16.9 | 14000 | 28 | — | 75000 | 8.4 | 14000 | 13.9 | — | 75000 | |
| **A 90 4_180.0** | 180.0 | 15.6 | 14000 | 26 | — | 75000 | 7.8 | 14000 | 12.8 | — | 75000 | |
| **A 90 4_209.0** | 209.0 | 13.4 | 14000 | 22 | — | 75000 | 6.7 | 14000 | 11.0 | — | 75000 | |
| **A 90 4_226.4** | 226.4 | 12.4 | 14000 | 20 | — | 75000 | 6.2 | 14000 | 10.2 | — | 75000 | |
| **A 90 4_281.4** | 281.4 | 9.9 | 14000 | 16.4 | — | 75000 | 5.0 | 14000 | 8.2 | — | 75000 | |
| **A 90 4_304.9** | 304.9 | 9.2 | 14000 | 15.1 | — | 75000 | 4.6 | 14000 | 7.6 | — | 75000 | |
| **A 90 4_355.8** | 355.8 | 7.9 | 14000 | 13.0 | — | 75000 | 3.9 | 14000 | 6.5 | — | 75000 | |
| **A 90 4_385.4** | 385.4 | 7.3 | 14000 | 12.0 | — | 75000 | 3.6 | 14000 | 6.0 | 680 | 75000 | |
| **A 90 4_449.2** | 449.2 | 6.2 | 14000 | 10.3 | — | 75000 | 3.1 | 14000 | 5.1 | — | 75000 | |
| **A 90 4_486.6** | 486.6 | 5.8 | 14000 | 9.5 | — | 75000 | 2.9 | 14000 | 4.7 | 950 | 75000 | |
| **A 90 4_555.3** | 555.3 | 5.0 | 14000 | 8.3 | — | 75000 | 2.5 | 14000 | 4.2 | 740 | 75000 | |
| **A 90 4_601.6** | 601.6 | 4.7 | 14000 | 7.7 | — | 75000 | 2.3 | 14000 | 3.8 | 1200 | 75000 | |
| **A 90 4_707.9** | 707.9 | 4.0 | 14000 | 6.5 | — | 75000 | 2.0 | 14000 | 3.3 | 1050 | 75000 | |
| **A 90 4_766.9** | 766.9 | 3.7 | 14000 | 6.0 | — | 75000 | 1.8 | 14000 | 3.0 | 1490 | 75000 | |
| **A 90 4_865.1** | 865.1 | 3.2 | 14000 | 5.3 | — | 75000 | 1.6 | 14000 | 2.7 | 1170 | 75000 | |
| **A 90 4_937.2** | 937.2 | 3.0 | 14000 | 4.9 | — | 75000 | 1.5 | 14000 | 2.5 | 1590 | 75000 | |
| **A 90 4_1025** | 1025 | 2.7 | 14000 | 4.5 | — | 75000 | 1.4 | 14000 | 2.2 | 1330 | 75000 | |
| **A 90 4_1111** | 1111 | 2.5 | 14000 | 4.2 | — | 75000 | 1.3 | 14000 | 2.1 | 1740 | 75000 | |
| **A 90 4_1222** | 1222 | 2.3 | 14000 | 3.8 | — | 75000 | 1.1 | 14000 | 1.9 | 1380 | 75000 | |
| **A 90 4_1324** | 1324 | 2.1 | 14000 | 3.5 | — | 75000 | 1.1 | 14000 | 1.7 | 1790 | 75000 | |
| **A 90 4_1507** | 1507 | 1.9 | 14000 | 3.1 | — | 75000 | 0.93 | 14000 | 1.5 | 1440 | 75000 | |
| **A 90 4_1632** | 1632 | 1.7 | 14000 | 2.8 | — | 75000 | 0.86 | 14000 | 1.4 | 1840 | 75000 | |

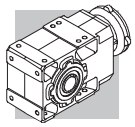
(—) Contactar con nuestro Servicio Técnico comunicando los datos relativos a la carga radial (sentido de giro, orientación, posición)



# A 90 — 14000 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **A 90 3_9.7** | 9.7 | 93 | 9050 | 97 | 9800 | 42300 | 52 | 9050 | 54 | 15000 | 53700 | |
| **A 90 3_10.5** | 10.5 | 86 | 9800 | 97 | 9810 | 42500 | 48 | 9800 | 54 | 15000 | 54200 | |
| **A 90 3_12.6** | 12.6 | 71 | 11800 | 97 | 6720 | 42100 | 40 | 11800 | 54 | 13500 | 54500 | |
| **A 90 3_13.7** | 13.7 | 66 | 12750 | 96 | 6770 | 42100 | 37 | 12800 | 54 | 13500 | 54600 | |
| **A 90 3_15.6** | 15.6 | 58 | 11550 | 77 | 8730 | 46700 | 32 | 11550 | 43 | 15000 | 59900 | |
| **A 90 3_16.9** | 16.9 | 53 | 12500 | 77 | 8750 | 46800 | 29.6 | 12500 | 43 | 15000 | 60300 | |
| **A 90 3_19.4** | 19.4 | 46 | 11550 | 62 | 9630 | 51400 | 25.8 | 11550 | 34 | 15000 | 65400 | |
| **A 90 3_21.0** | 21.0 | 43 | 12400 | 61 | 9790 | 51700 | 23.8 | 12400 | 34 | 15000 | 66100 | |
| **A 90 3_22.3** | 22.3 | 40 | 13850 | 64 | 14200 | 50200 | 22.5 | 14000 | 36 | 15000 | 64700 | |
| **A 90 3_24.1** | 24.1 | 37 | 14000 | 60 | 14400 | 51900 | 20.7 | 14000 | 33 | 15000 | 66900 | |
| **A 90 3_29.1** | 29.1 | 31 | 14000 | 50 | 14600 | 56200 | 17.2 | 14000 | 28 | 15000 | 72100 | |
| **A 90 3_31.5** | 31.5 | 28.6 | 14000 | 46 | 14800 | 58400 | 15.9 | 14000 | 26 | 15000 | 74700 | |
| **A 90 3_35.8** | 35.8 | 25.1 | 14000 | 40 | 14900 | 61700 | 14.0 | 14000 | 23 | 15000 | 75000 | |
| **A 90 3_38.8** | 38.8 | 23.2 | 14000 | 37 | 15000 | 63900 | 12.9 | 14000 | 21 | 15000 | 75000 | |
| **A 90 3_44.6** | 44.6 | 20.2 | 14000 | 33 | 15000 | 67700 | 11.2 | 14000 | 18.1 | 15000 | 75000 | |
| **A 90 3_48.3** | 48.3 | 18.6 | 14000 | 30 | 15000 | 70000 | 10.4 | 14000 | 16.7 | 15000 | 75000 | |
| **A 90 3_55.0** | 55.0 | 16.4 | 14000 | 26 | 15000 | 73800 | 9.1 | 14000 | 14.6 | 15000 | 75000 | |
| **A 90 3_59.6** | 59.6 | 15.1 | 14000 | 24 | 15000 | 75000 | 8.4 | 14000 | 13.5 | 15000 | 75000 | |
| **A 90 3_68.8** | 68.8 | 13.1 | 14000 | 21 | 15000 | 75000 | 7.3 | 14000 | 11.7 | 15000 | 75000 | |
| **A 90 3_74.5** | 74.5 | 12.1 | 14000 | 19.5 | 15000 | 75000 | 6.7 | 14000 | 10.8 | 15000 | 75000 | |
| **A 90 3_80.4** | 80.4 | 11.2 | 14000 | 18.0 | 15000 | 75000 | 6.2 | 14000 | 10.0 | 15000 | 75000 | |
| **A 90 3_87.1** | 87.1 | 10.3 | 14000 | 16.7 | 15000 | 75000 | 5.7 | 14000 | 9.3 | 15000 | 75000 | |
| **A 90 3_98.6** | 98.6 | 9.1 | 14000 | 14.7 | 15000 | 75000 | 5.1 | 14000 | 8.2 | 15000 | 75000 | |
| **A 90 3_106.8** | 106.8 | 8.4 | 14000 | 13.6 | 15000 | 75000 | 4.7 | 14000 | 7.5 | 15000 | 75000 | |
| **A 90 3_116.9** | 116.9 | 7.7 | 14000 | 12.4 | 15000 | 75000 | 4.3 | 14000 | 6.9 | 15000 | 75000 | |
| **A 90 3_126.6** | 126.6 | 7.1 | 14000 | 11.4 | 15000 | 75000 | 3.9 | 14000 | 6.4 | 15000 | 75000 | 300 |
| **A 90 3_139.4** | 139.4 | 6.5 | 14000 | 10.4 | 15000 | 75000 | 3.6 | 14000 | 5.8 | 15000 | 75000 | |
| **A 90 3_151.0** | 151.0 | 6.0 | 14000 | 9.6 | 15000 | 75000 | 3.3 | 14000 | 5.3 | 15000 | 75000 | |
| **A 90 4_166.1** | 166.1 | 5.4 | 14000 | 8.9 | — | 75000 | 3.0 | 14000 | 5.0 | 700 | 75000 | |
| **A 90 4_180.0** | 180.0 | 5.0 | 14000 | 8.2 | — | 75000 | 2.8 | 14000 | 4.6 | 1400 | 75000 | |
| **A 90 4_209.0** | 209.0 | 4.3 | 14000 | 7.1 | — | 75000 | 2.4 | 14000 | 3.9 | 1500 | 75000 | |
| **A 90 4_226.4** | 226.4 | 4.0 | 14000 | 6.5 | 500 | 75000 | 2.2 | 14000 | 3.6 | 2100 | 75000 | |
| **A 90 4_281.4** | 281.4 | 3.2 | 14000 | 5.3 | 690 | 75000 | 1.8 | 14000 | 2.9 | 2300 | 75000 | |
| **A 90 4_304.9** | 304.9 | 3.0 | 14000 | 4.9 | 1230 | 75000 | 1.6 | 14000 | 2.7 | 2900 | 75000 | |
| **A 90 4_355.8** | 355.8 | 2.5 | 14000 | 4.2 | 1240 | 75000 | 1.4 | 14000 | 2.3 | 2900 | 75000 | |
| **A 90 4_385.4** | 385.4 | 2.3 | 14000 | 3.8 | 1750 | 75000 | 1.3 | 14000 | 2.1 | 3400 | 75000 | |
| **A 90 4_449.2** | 449.2 | 2.0 | 14000 | 3.3 | 1540 | 75000 | 1.1 | 14000 | 1.8 | 3200 | 75000 | |
| **A 90 4_486.6** | 486.6 | 1.8 | 14000 | 3.0 | 2020 | 75000 | 1.0 | 14000 | 1.7 | 3500 | 75000 | |
| **A 90 4_555.3** | 555.3 | 1.6 | 14000 | 2.7 | 1810 | 75000 | 0.90 | 14000 | 1.5 | 3500 | 75000 | |
| **A 90 4_601.6** | 601.6 | 1.5 | 14000 | 2.5 | 2270 | 75000 | 0.83 | 14000 | 1.4 | 3500 | 75000 | |
| **A 90 4_707.9** | 707.9 | 1.3 | 14000 | 2.1 | 2120 | 75000 | 0.71 | 14000 | 1.2 | 3500 | 75000 | |
| **A 90 4_766.9** | 766.9 | 1.2 | 14000 | 1.9 | 2560 | 75000 | 0.65 | 14000 | 1.1 | 3500 | 75000 | |
| **A 90 4_865.1** | 865.1 | 1.0 | 14000 | 1.7 | 2240 | 75000 | 0.58 | 14000 | 0.95 | 3500 | 75000 | |
| **A 90 4_937.2** | 937.2 | 0.96 | 14000 | 1.6 | 2660 | 75000 | 0.53 | 14000 | 0.88 | 3500 | 75000 | |
| **A 90 4_1025** | 1025 | 0.88 | 14000 | 1.4 | 2400 | 75000 | 0.49 | 14000 | 0.80 | 3500 | 75000 | |
| **A 90 4_1111** | 1111 | 0.81 | 14000 | 1.3 | 2810 | 75000 | 0.45 | 14000 | 0.74 | 3500 | 75000 | |
| **A 90 4_1222** | 1222 | 0.74 | 14000 | 1.2 | 2450 | 75000 | 0.41 | 14000 | 0.67 | 3500 | 75000 | |
| **A 90 4_1324** | 1324 | 0.68 | 14000 | 1.1 | 2860 | 75000 | 0.38 | 14000 | 0.62 | 3500 | 75000 | |
| **A 90 4_1507** | 1507 | 0.60 | 14000 | 0.98 | 2410 | 75000 | 0.33 | 14000 | 0.55 | 3500 | 75000 | |
| **A 90 4_1632** | 1632 | 0.55 | 14000 | 0.91 | 2910 | 75000 | 0.31 | 14000 | 0.50 | 3500 | 75000 | |

(—) Contactar con nuestro Servicio Técnico comunicando los datos relativos a la carga radial (sentido de giro, orientación, posición)



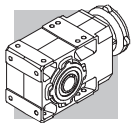
## 42 PREDISPOSICIONES POSIBLES

En las tablas (C34) y (C35) se especifican los montajes posibles de motores en términos puramente geométricos.

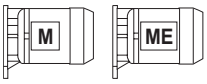
**La selección del motorreductor debe efectuarse siguiendo las instrucciones especificadas en el párrafo 11, respetando particularmente la condición $S \geq f_s$.**

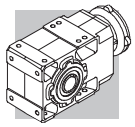
(C 34)

| | | IEC_ BN BE (IM B5) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | P63 | P71 | P80 | P90 | P100 | P112 | P132 | P160 | P180 | P200 | P225 | P250 |
| A 05 2 | | 5.5_91.6 | 5.5_51.3 | 5.5_51.3 | | | | | | | | | |
| A 10 2 | | 5.5_91.6 | 5.5_91.6 | 5.5_65.9 | 5.5_65.9 | 5.5_65.9 | 5.5_65.9 | | | | | | |
| A 20 2 | | 7.3_92.3 ⛀ (10.3) | 7.3_92.3 ⛀ (10.3) | 5.4_79.9 | 5.4_79.9 | 5.4_79.9 | 5.4_79.9 | | | | | | |
| A 20 3 | | 109.2_380.8 | 109.2_380.8 | 109.2_380.8 | 109.2_380.8 | 109.2_380.8 | 109.2_380.8 | | | | | | |
| A 30 2 | | 9.3_97.5 ⛀ (10.5 ; 13.6_16.3) | 9.3_97.5 ⛀ (10.5 ; 13.6_16.3) | 5.4_97.5 | 5.4_97.5 | 5.4_97.5 | 5.4_97.5 | | | | | | |
| A 30 3 | | 109.1_400.8 | 109.1_400.8 | 109.1_400.8 | 109.1_400.8 | 109.1_400.8 | 109.1_400.8 | | | | | | |
| A 35 2 | | 9.3_95.6 ⛀ (13.1_20.4) | 9.3_95.6 ⛀ (13.1_20.4) | 5.4_95.6 | 5.4_95.6 | 5.4_95.6 | 5.4_95.6 | 5.4_11.8 | | | | | |
| A 35 3 | | 105.5_393.2 | 105.5_393.2 | 105.5_393.2 | 105.5_393.2 | 105.5_393.2 | 105.5_393.2 | | | | | | |
| A 41 2 | | 11.7_79.2 ⛀ (13.8_17.8) | 11.7_79.2 ⛀ (13.8_17.8) | 5.2_79.2 | 5.2_79.2 | 5.2_79.2 | 5.2_79.2 | 5.2_45.1 | | | | | |
| A 41 3 | | 92.8_376.8 | 92.8_376.8 | 92.8_376.8 | 92.8_376.8 | 92.8_376.8 | 92.8_376.8 | | | | | | |
| A 50 2 | | 20.9 | 20.9 | 7.7_20.9 | 7.7_20.9 | 7.7_20.9 | 7.7_20.9 | 7.7_20.9 | 7.7_20.9 | 7.7_20.9 | | | |
| A 50 3 | | 51.7_190.6 | 51.7_190.6 | 24.0_190.6 | 24.0_190.6 | 24.0_190.6 | 24.0_190.6 | 24.0_109.4 | 24.0_109.4 | 24.0_109.4 | | | |
| A 50 4 | i = | 211.0_778.2 | 211.0_778.2 | 211.0_778.2 | 211.0_778.2 | 211.0_778.2 | 211.0_778.2 | | | | | | |
| A 55 2 | | | | 13.1_19.2 | 13.1_19.2 | 13.1_19.2 | 13.1_19.2 | 4.9_19.2 | 4.9_19.2 | 4.9_19.2 | | | |
| A 55 3 | | 64.3_194.2 | 64.3_194.2 | 23.8_194.2 | 23.8_194.2 | 23.8_194.2 | 23.8_194.2 | 23.8_123.9 | 23.8_123.9 | 23.8_123.9 | | | |
| A 55 4 | | 208.1_793.0 | 208.1_793.0 | 208.1_793.0 | 208.1_793.0 | 208.1_793.0 | 208.1_793.0 | | | | | | |
| A 60 2 | | | | 10.3_20.6 | 10.3_20.6 | 10.3_20.6 | 10.3_20.6 | 7.9_20.6 | 7.9_20.6 | 7.9_20.6 | | | |
| A 60 3 | | 65.0_185.8 | 65.0_185.8 | 25.7_185.8 | 25.7_185.8 | 25.7_185.8 | 25.7_185.8 | 25.7_133.3 | 25.7_133.3 | 25.7_133.3 | | | |
| A 60 4 | | 208.7_755.4 | 208.7_755.4 | 208.7_755.4 | 208.7_755.4 | 208.7_755.4 | 208.7_755.4 | | | | | | |
| A 70 3 | | | | 66.9_153.7 | 66.9_153.7 | 66.9_153.7 | 66.9_153.7 | 15.4_153.7 ⛀ (23.5_30.1) | 9.4_153.7 | 9.4_153.7 | 9.4_38.4 ⛀ (19.7_21.3) | | |
| A 70 4 | | 292.0_1715 | 292.0_1715 | 169.8_1715 | 169.8_1715 | 169.8_1715 | 169.8_1715 | 169.8_644.6 | | | | | |
| A 80 3 | | | | 82.3_156.8 | 82.3_156.8 | 82.3_156.8 | 82.3_156.8 | 19.3_156.8 ⛀ (22.6_38.5) | 12.3_156.8 ⛀ (22.6_24.5) | 9.8_156.8 | 9.8_104.0 | 9.8_104.0 | |
| A 80 4 | | 354.0_1558 | 354.0_1558 | 171.3_1558 | 171.3_1558 | 171.3_1558 | 171.3_1558 | 171.3_762.1 | | | | | |
| A 90 3 | | | | 98.6_151.0 | 98.6_151.0 | 98.6_151.0 | 98.6_151.0 | 55.0_151.0 | 19.4_151.0 ⛀ (22.3_38.8) | 9.7_151.0 | 9.7_126.6 | 9.7_126.6 | 9.7_126.6 |
| A 90 4 | | 449.2_1632 | 449.2_1632 | 166.1_1632 | 166.1_1632 | 166.1_1632 | 166.1_1632 | 166.1_937.2 | 166.1_937.2 | 166.1_937.2 | | | |



(C 35)

| | | M05 | M1 | M2 - ME2 | ME3 | ME4 | ME5 |
|---|---|---|---|---|---|---|---|
| | |  | | | | | |
| **A 05 2** | | 5.5_91.6 | 5.5_51.3 | 5.5_65.9 | | | |
| **A 10 2** | | 5.5_91.6 | 5.5_51.3 | 5.5_65.9 | 5.5_65.9 | | |
| **A 20 2** | | 7.3_92.3<br>⛀ (10.3) | 7.3_63.1<br>⛀ (10.3) | 5.4_79.9 | 5.4_79.9 | | |
| **A 20 3** | | 109.2_380.8 | 109.2_380.8 | 109.2_380.8 | 109.2_380.8 | | |
| **A 30 2** | | | 9.3_76.5<br>⛀ (10.5 ; 13.6_16.3) | 5.4_97.5 | 5.4_97.5 | | |
| **A 30 3** | | 109.1_400.8 | 109.1_400.8 | 109.1_400.8 | 109.1_400.8 | | |
| **A 35 2** | | | 9.3_95.6<br>⛀ (13.1_20.4) | 5.4_95.6 | 5.4_95.6 | 5.4_11.8 | |
| **A 35 3** | | 105.5_393.2 | 105.5_393.2 | 105.5_393.2 | 105.5_393.2 | | |
| **A 41 2** | | | 11.7_79.2<br>⛀ (13.8_17.8) | 5.2_79.2 | 5.2_79.2 | 5.2_45.1 | |
| **A 41 3** | | 92.8_376.8 | 92.8_376.8 | 92.8_376.8 | 92.8_376.8 | | |
| **A 50 2** | | | 20.9 | 7.7_20.9 | 7.7_20.9 | 7.7_20.9 | 7.7_20.9 |
| **A 50 3** | | | 51.7_190.6 | 24.0_190.6 | 24.0_190.6 | 24.0_109.4 | 24.0_109.4 |
| **A 50 4** | **i =** | | 211.0_778.2 | 211.0_778.2 | 211.0_778.2 | | |
| **A 55 2** | | | | 13.1_19.2 | 13.1_19.2 | 4.9_19.2 | 4.9_19.2 |
| **A 55 3** | | | 64.3_194.2 | 23.8_194.2 | 23.8_194.2 | 23.8_123.9 | 23.8_123.9 |
| **A 55 4** | | | 208.1_793.0 | 208.1_793.0 | 208.1_793.0 | | |
| **A 60 2** | | | | 10.3_20.6 | 10.3_20.6 | 7.9_20.6 | 7.9_20.6 |
| **A 60 3** | | | | 25.7_185.8 | 25.7_185.8 | 25.7_133.3 | 25.7_133.3 |
| **A 60 4** | | | 208.7_755.4 | 208.7_755.4 | 208.7_755.4 | | |
| **A 70 3** | | | | 66.9_153.7 | 66.9_153.7 | 15.4_153.7<br>⛀ (23.5_30.1) | 15.4_153.7<br>⛀ (23.5_30.1) |
| **A 70 4** | | | 292.0_1715 | 169.8_1715 | 169.8_1715 | 169.8_644.6 | |
| **A 80 3** | | | | | 82.3_156.8 | 19.3_156.8<br>⛀ (22.6_38.5) | 19.3_156.8<br>⛀ (22.6_38.5) |
| **A 80 4** | | | 354.0_1558 | 171.3_1558 | 171.3_1558 | 171.3_762.1 | |
| **A 90 3** | | | | | 98.6_151.0 | 55.0_151.0 | 55.0_151.0 |
| **A 90 4** | | | 449.2_1632 | 166.1_1632 | 166.1_1632 | 166.1_937.2 | |



Predisposiciones motor que están disponibles para ser acoplados a reductores A05 ... A60 con servomotores de los tipos mas comunes. Las dimensiones de las bridas están indicadas en la sección de dimensiones de cada reductor. La sigla **SK** identifica la fijación con el eje del motor provisto de chavetero, mientras la sigla **SC** corresponde a la fijación mediante Aro de apriete (suministrado).

(C 36)

| | | SERVO INPUT | | | | | |
|---|---|---|---|---|---|---|---|
| | | SK40A | SK60A | SK60B | SK80A | SK80B | SK80C |
| | | SC40A | SC60A | SC60B | SC80A | SC80B | SC80C |
| A 05 2 | i = | 5.5_91.6 | 5.5_91.6 | 5.5_51.3 | 5.5_51.3 | | |
| A 10 2 | | | 5.5_91.6 | 5.5_51.3 | 5.5_51.3 | | 5.5_65.9 |
| A 20 2 | | | 7.3_92.3<br>⛀ (10.3) | 7.3_63.1<br>⛀ (10.3) | 7.3_63.1<br>⛀ (10.3) | | 5.4_79.9 |
| A 20 3 | | | 109.2_380.8 | 109.2_380.8 | 109.2_380.8 | | 109.2_380.8 |
| A 30 2 | | | 9.3_97.5<br>⛀ (10.5 ; 13.6_16.3) | 9.3_76.5<br>⛀ (10.5 ; 13.6_16.3) | 9.3_76.5<br>⛀ (10.5 ; 13.6_16.3) | | 5.4_97.5 |
| A 30 3 | | | 109.1_400.8 | 109.1_400.8 | 109.1_400.8 | | 109.1_400.8 |
| A 35 2 | | | 9.3_95.6<br>⛀ (13.1_20.4) | 9.3_95.6<br>⛀ (13.1_20.4) | 9.3_95.6<br>⛀ (13.1_20.4) | | 5.4_95.6 |
| A 35 3 | | | 105.5_393.2 | 105.5_393.2 | 105.5_393.2 | | 105.5_393.2 |
| A 41 2 | | | | | | 11.7_79.2<br>⛀ (13.8_17.8) | 5.2_79.2 |
| A 41 3 | | | 92.8_376.8 | 92.8_376.8 | 92.8_376.8 | | 92.8_376.8 |
| A 50 2 | | | | | | 20.9 | 7.7_20.9 |
| A 50 3 | | | | | | 51.7_190.6 | 24.0_190.6 |
| A 50 4 | | | | | | | 211.0_778.2 |
| A 55 2 | | | | | | | 13.1_19.2 |
| A 55 3 | | | | | | 64.3_194.2 | 23.8_194.2 |
| A 55 4 | | | | | | | 208.1_793.0 |
| A 60 2 | | | | | | | 10.3_20.6 |
| A 60 3 | | | | | | | 25.7_185.8 |
| A 60 4 | | | | | | 208.7_755.4 | 208.7_755.4 |

(C 37)

| | | SERVO INPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SK95A | SK95B | SK95C | SK110A | SK110B | SK130A | SK130B | SK180A | SK180B |
| | | SC95A | SC95B | SC95C | SC110A | SC110B | SC130A | SC130B | SC180A | SC180B |
| A 10 2 | i = | 5.5_51.3 | 5.5_65.9 | 5.5_65.9 | 5.5_65.9 | 5.5_65.9 | | | | |
| A 20 2 | | 7.3_63.1<br>⛀ (10.3) | 5.4_79.9 | 5.4_79.9 | 5.4_79.9 | 5.4_79.9 | | | | |
| A 20 3 | | 109.2_380.8 | 109.2_380.8 | 109.2_380.8 | 109.2_380.8 | 109.2_380.8 | | | | |
| A 30 2 | | 9.3_76.5<br>⛀ (10.5 ; 13.6_16.3) | 5.4_97.5 | 5.4_97.5 | 5.4_97.5 | 5.4_97.5 | 5.4_97.5 | | | |
| A 30 3 | | 109.1_400.8 | 109.1_400.8 | 109.1_400.8 | 109.1_400.8 | 109.1_400.8 | | | | |
| A 35 2 | | 9.3_95.6<br>⛀ (13.1_20.4) | 5.4_95.6 | 5.4_95.6 | 5.4_95.6 | 5.4_95.6 | 5.4_95.6 | | | |
| A 35 3 | | 105.5_393.2 | 105.5_393.2 | 105.5_393.2 | 105.5_393.2 | 105.5_393.2 | | | | |
| A 41 2 | | 11.7_79.2<br>⛀ (13.8_17.8) | 5.2_79.2 | 5.2_79.2 | 5.2_79.2 | 5.2_79.2 | 5.2_79.2 | 5.2_45.1 | 5.2_45.1 | 5.2_45.1 |
| A 41 3 | | 92.8_376.8 | 92.8_376.8 | 92.8_376.8 | 92.8_376.8 | 92.8_376.8 | | | | |
| A 50 2 | | 20.9 | 7.7_20.9 | 7.7_20.9 | 7.7_20.9 | 7.7_20.9 | 7.7_20.9 | 7.7_20.9 | 7.7_20.9 | 7.7_20.9 |
| A 50 3 | | 51.7_190.6 | 24.0_190.6 | 24.0_190.6 | 24.0_190.6 | 24.0_190.6 | 24.0_190.6 | 24.0_109.4 | 24.0_109.4 | 24.0_109.4 |
| A 50 4 | | 211.0_778.2 | 211.0_778.2 | 211.0_778.2 | 211.0_778.2 | 211.0_778.2 | 211.0_778.2 | | | |
| A 55 2 | | | 13.1_19.2 | 13.1_19.2 | 13.1_19.2 | 13.1_19.2 | 13.1_19.2 | 4.9_19.2 | 4.9_19.2 | 4.9_19.2 |
| A 55 3 | | 64.3_194.2 | 23.8_194.2 | 23.8_194.2 | 23.8_194.2 | 23.8_194.2 | 23.8_194.2 | 23.8_123.9 | 23.8_123.9 | 23.8_123.9 |
| A 55 4 | | 208.1_793.0 | 208.1_793.0 | 208.1_793.0 | 208.1_793.0 | 208.1_793.0 | 208.1_793.0 | | | |
| A 60 2 | | | 10.3_20.6 | 10.3_20.6 | 10.3_20.6 | 10.3_20.6 | 10.3_20.6 | 7.9_20.6 | 7.9_20.6 | 7.9_20.6 |
| A 60 3 | | 65.0_185.8 | 25.7_185.8 | 25.7_185.8 | 25.7_185.8 | 25.7_185.8 | 25.7_185.8 | 25.7_133.3 | 25.7_133.3 | 25.7_133.3 |
| A 60 4 | | 208.7_755.4 | 208.7_755.4 | 208.7_755.4 | 208.7_755.4 | 208.7_755.4 | 208.7_755.4 | | | |

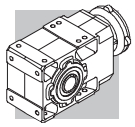
## 43 MOMENTO DE INERCIA

Las tablas siguientes indican los valores del momento de inercia $J_r$ [Kgm²] referido al eje de entrada del reductor; para una mejor facilidad de comprensión rogamos tengan presente el significado de los símbolos usados.

| | |
|---|---|
| | Los valores referidos a este símbolo corresponden al reductor compacto sin motor. En este caso para obtener el momento de inercia del motorreductor, se deberá sumar al valor correspondiente al reductor compacto, el del motor que se aplique (dato que se encuentra en las tablas de características técnicas de los motores eléctricos). |
| IEC | El valor relativo a este símbolo corresponde al reductor predispuesto para el montaje de motor (tamaño IEC). |
| | El valor atribuido al reductor es referido a este símbolo. |
| SERVO | Los valores relativos a estos simbolos deben atribuirse al reductor predispuesto para acomplarse a servomotores. |

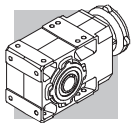
# A 05

| | i | J (•10⁻⁴) [kgm²] | | | | |
|---|---|---|---|---|---|---|
| | | | IEC | | | |
| | | | 63 | 71 | 80 | |
| **A 05 2_5.5** | 5.5 | 0.72 | 0.99 | 1.0 | 1.4 | — |
| **A 05 2_6.3** | 6.3 | 0.56 | 0.83 | 0.86 | 1.2 | — |
| **A 05 2_7.2** | 7.2 | 0.48 | 0.74 | 0.77 | 1.1 | — |
| **A 05 2_8.5** | 8.5 | 0.36 | 0.63 | 0.65 | 1.0 | — |
| **A 05 2_9.6** | 9.6 | 0.29 | 0.55 | 0.58 | 0.92 | — |
| **A 05 2_10.6** | 10.6 | 0.50 | 0.77 | 0.80 | 1.1 | — |
| **A 05 2_12.3** | 12.3 | 0.18 | 0.45 | 0.48 | 0.82 | — |
| **A 05 2_13.9** | 13.9 | 0.35 | 0.62 | 0.65 | 0.99 | — |
| **A 05 2_16.4** | 16.4 | 0.27 | 0.54 | 0.57 | 0.91 | — |
| **A 05 2_18.6** | 18.6 | 0.22 | 0.49 | 0.51 | 0.86 | — |
| **A 05 2_21.4** | 21.4 | 0.16 | 0.43 | 0.46 | 0.80 | — |
| **A 05 2_23.8** | 23.8 | 0.14 | 0.41 | 0.43 | 0.78 | — |
| **A 05 2_25.5** | 25.5 | 0.13 | 0.39 | 0.42 | 0.76 | — |
| **A 05 2_28.6** | 28.6 | 0.11 | 0.38 | 0.40 | 0.75 | — |
| **A 05 2_32.2** | 32.2 | 0.09 | 0.36 | 0.39 | 0.73 | — |
| **A 05 2_35.1** | 35.1 | 0.08 | 0.35 | 0.37 | 0.72 | — |
| **A 05 2_40.9** | 40.9 | 0.07 | 0.33 | 0.36 | 0.70 | — |
| **A 05 2_45.4** | 45.4 | 0.05 | 0.32 | 0.35 | 0.69 | — |
| **A 05 2_51.3** | 51.3 | 0.04 | 0.31 | 0.34 | 0.68 | — |
| **A 05 2_58.6** | 58.6 | 0.04 | 0.31 | — | — | — |
| **A 05 2_65.9** | 65.9 | 0.03 | 0.30 | — | — | — |
| **A 05 2_76.4** | 76.4 | 0.02 | 0.29 | — | — | — |
| **A 05 2_91.6** | 91.6 | 0.02 | 0.28 | — | — | — |

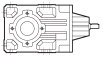


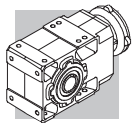
# A 05

| | i | J (•10-4) [kgm2] | | | | | |
|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | |
| | | 40A | | 60A | | 60B 80A | |
| | | SK | SC | SK | SC | SK | SC |
| **A 05 2_5.5** | 5.5 | 0.89 | 1.1 | 0.99 | 1.3 | 1.0 | 1.4 |
| **A 05 2_6.3** | 6.3 | 0.73 | 0.89 | 0.83 | 1.1 | 0.86 | 1.3 |
| **A 05 2_7.2** | 7.2 | 0.65 | 0.81 | 0.74 | 1.0 | 0.77 | 1.2 |
| **A 05 2_8.5** | 8.5 | 0.53 | 0.69 | 0.63 | 0.89 | 0.65 | 1.1 |
| **A 05 2_9.6** | 9.6 | 0.46 | 0.62 | 0.55 | 0.81 | 0.58 | 1.0 |
| **A 05 2_10.6** | 10.6 | 0.67 | 0.83 | 0.77 | 1.0 | 0.80 | 1.2 |
| **A 05 2_12.3** | 12.3 | 0.35 | 0.51 | 0.45 | 0.71 | 0.48 | 0.92 |
| **A 05 2_13.9** | 13.9 | 0.52 | 0.68 | 0.62 | 0.88 | 0.65 | 1.1 |
| **A 05 2_16.4** | 16.4 | 0.44 | 0.60 | 0.54 | 0.80 | 0.57 | 1.0 |
| **A 05 2_18.6** | 18.6 | 0.39 | 0.55 | 0.49 | 0.75 | 0.51 | 0.95 |
| **A 05 2_21.4** | 21.4 | 0.33 | 0.49 | 0.43 | 0.69 | 0.46 | 0.90 |
| **A 05 2_23.8** | 23.8 | 0.31 | 0.47 | 0.41 | 0.67 | 0.43 | 0.87 |
| **A 05 2_25.5** | 25.5 | 0.30 | 0.46 | 0.39 | 0.65 | 0.42 | 0.86 |
| **A 05 2_28.6** | 28.6 | 0.28 | 0.44 | 0.38 | 0.64 | 0.40 | 0.84 |
| **A 05 2_32.2** | 32.2 | 0.26 | 0.42 | 0.36 | 0.62 | 0.39 | 0.83 |
| **A 05 2_35.1** | 35.1 | 0.25 | 0.41 | 0.35 | 0.61 | 0.37 | 0.81 |
| **A 05 2_40.9** | 40.9 | 0.24 | 0.40 | 0.33 | 0.59 | 0.36 | 0.80 |
| **A 05 2_45.4** | 45.4 | 0.22 | 0.38 | 0.32 | 0.58 | 0.35 | 0.79 |
| **A 05 2_51.3** | 51.3 | 0.21 | 0.37 | 0.31 | 0.57 | 0.34 | 0.78 |
| **A 05 2_58.6** | 58.6 | 0.21 | 0.37 | 0.31 | 0.57 | — | — |
| **A 05 2_65.9** | 65.9 | 0.20 | 0.36 | 0.30 | 0.56 | — | — |
| **A 05 2_76.4** | 76.4 | 0.19 | 0.35 | 0.29 | 0.55 | — | — |
| **A 05 2_91.6** | 91.6 | 0.19 | 0.35 | 0.28 | 0.54 | — | — |



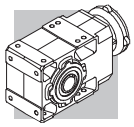
# A 10

| | i | J (•10-4) [kgm2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC | | | | | |  |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | |
| **A 10 2_5.5** | 5.5 | 1.0 | 2.5 | 2.5 | 3.9 | 3.8 | 5.1 | 5.1 | 1.8 |
| **A 10 2_6.3** | 6.3 | 0.80 | 2.3 | 2.3 | 3.7 | 3.6 | 4.9 | 4.9 | 1.6 |
| **A 10 2_7.2** | 7.2 | 0.60 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 1.5 |
| **A 10 2_8.5** | 8.5 | 0.45 | 1.9 | 1.9 | 3.3 | 3.1 | 4.5 | 4.5 | 1.4 |
| **A 10 2_9.6** | 9.6 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 1.3 |
| **A 10 2_10.6** | 10.6 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | 1.4 |
| **A 10 2_12.3** | 12.3 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 1.1 |
| **A 10 2_13.9** | 13.9 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.6 | 4.6 | 1.2 |
| **A 10 2_16.4** | 16.4 | 0.25 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 1.1 |
| **A 10 2_18.6** | 18.6 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 1.0 |
| **A 10 2_21.4** | 21.4 | 0.15 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 1.0 |
| **A 10 2_23.8** | 23.8 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 1.0 |
| **A 10 2_25.5** | 25.5 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 1.0 |
| **A 10 2_28.6** | 28.6 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 10 2_32.2** | 32.2 | 0.08 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 10 2_35.1** | 35.1 | 0.07 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 10 2_40.9** | 40.9 | 0.06 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 10 2_45.4** | 45.4 | 0.05 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 10 2_51.3** | 51.3 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 10 2_58.6** | 58.6 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 10 2_65.9** | 65.9 | 0.02 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 10 2_76.4** | 76.4 | 0.02 | 1.5 | 1.5 | — | — | — | — | 0.90 |
| **A 10 2_91.6** | 91.6 | 0.01 | 1.5 | 1.5 | — | — | — | — | 0.90 |



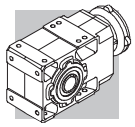
# A 10

| | i | J (•10-4) [kgm2] SERVO | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 60A | | 60B 80A | | 95A | | 80C 95B 110A | | 95C 110B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **A 10 2_5.5** | 5.5 | 1.3 | 1.5 | 1.3 | 1.7 | 3.8 | 4.3 | 3.9 | 4.4 | 3.8 | 4.8 |
| **A 10 2_6.3** | 6.3 | 1.1 | 1.3 | 1.1 | 1.5 | 3.6 | 4.1 | 3.7 | 4.2 | 3.6 | 4.6 |
| **A 10 2_7.2** | 7.2 | 0.87 | 1.1 | 0.89 | 1.3 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 |
| **A 10 2_8.5** | 8.5 | 0.72 | 0.98 | 0.74 | 1.2 | 3.3 | 3.7 | 3.3 | 3.8 | 3.1 | 4.1 |
| **A 10 2_9.6** | 9.6 | 0.57 | 0.83 | 0.59 | 1.0 | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 |
| **A 10 2_10.6** | 10.6 | 0.77 | 1.0 | 0.79 | 1.2 | 3.3 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 |
| **A 10 2_12.3** | 12.3 | 0.47 | 0.73 | 0.49 | 0.93 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 |
| **A 10 2_13.9** | 13.9 | 0.57 | 0.83 | 0.59 | 1.0 | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 |
| **A 10 2_16.4** | 16.4 | 0.52 | 0.78 | 0.54 | 0.98 | 3.1 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 |
| **A 10 2_18.6** | 18.6 | 0.47 | 0.73 | 0.49 | 0.93 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 |
| **A 10 2_21.4** | 21.4 | 0.42 | 0.68 | 0.44 | 0.88 | 3.0 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **A 10 2_23.8** | 23.8 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **A 10 2_25.5** | 25.5 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **A 10 2_28.6** | 28.6 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **A 10 2_32.2** | 32.2 | 0.35 | 0.61 | 0.37 | 0.81 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 |
| **A 10 2_35.1** | 35.1 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 |
| **A 10 2_40.9** | 40.9 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 |
| **A 10 2_45.4** | 45.4 | 0.32 | 0.58 | 0.34 | 0.78 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 |
| **A 10 2_51.3** | 51.3 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 10 2_58.6** | 58.6 | 0.30 | 0.56 | — | — | — | — | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 10 2_65.9** | 65.9 | 0.29 | 0.55 | — | — | — | — | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 10 2_76.4** | 76.4 | 0.29 | 0.55 | — | — | — | — | — | — | — | — |
| **A 10 2_91.6** | 91.6 | 0.28 | 0.54 | — | — | — | — | — | — | — | — |



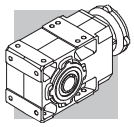
# A 20

| | i | J (•10-4) [kgm2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | |
| **A 20 2_5.4** | 5.4 | 2.4 | — | — | 5.3 | 5.2 | 6.5 | 6.5 | 4.3 |
| **A 20 2_6.5** | 6.5 | 1.9 | — | — | 4.8 | 4.7 | 6.0 | 6.0 | 3.8 |
| **A 20 2_7.3** | 7.3 | 1.4 | 2.9 | 2.9 | 4.3 | 4.2 | 5.5 | 5.5 | 3.3 |
| **A 20 2_8.4** | 8.4 | 1.1 | 2.6 | 2.6 | 4.0 | 3.9 | 5.2 | 5.2 | 3.0 |
| **A 20 2_9.4** | 9.4 | 0.90 | 2.4 | 2.4 | 3.8 | 3.7 | 5.0 | 5.0 | 2.8 |
| **A 20 2_10.3** | 10.3 | 1.2 | — | — | 4.1 | 4.0 | 5.3 | 5.3 | 3.0 |
| **A 20 2_12.0** | 12.0 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | 2.4 |
| **A 20 2_14.1** | 14.1 | 0.70 | 2.2 | 2.2 | 3.6 | 3.5 | 4.8 | 4.8 | 2.6 |
| **A 20 2_16.2** | 16.2 | 0.55 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | 2.5 |
| **A 20 2_18.1** | 18.1 | 0.40 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | 2.4 |
| **A 20 2_21.2** | 21.2 | 0.35 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 2.3 |
| **A 20 2_23.1** | 23.1 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 2.2 |
| **A 20 2_26.5** | 26.5 | 0.25 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 2.1 |
| **A 20 2_29.2** | 29.2 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 2.1 |
| **A 20 2_31.3** | 31.3 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 2.1 |
| **A 20 2_35.4** | 35.4 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 2.1 |
| **A 20 2_39.6** | 39.6 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.0 |
| **A 20 2_43.2** | 43.2 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.0 |
| **A 20 2_48.3** | 48.3 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.0 |
| **A 20 2_53.7** | 53.7 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.0 |
| **A 20 2_63.1** | 63.1 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.0 |
| **A 20 2_71.0** | 71.0 | 0.05 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 2.0 |
| **A 20 2_79.9** | 79.9 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 2.0 |
| **A 20 2_92.3** | 92.3 | 0.02 | 1.5 | 1.5 | — | — | — | — | 2.0 |
| **A 20 3_109.2** | 109.2 | 0.02 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 20 3_120.5** | 120.5 | 0.02 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 20 3_129.1** | 129.1 | 0.02 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 20 3_146.1** | 146.1 | 0.02 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 20 3_163.4** | 163.4 | 0.01 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 20 3_178.3** | 178.3 | 0.01 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 20 3_199.2** | 199.2 | 0.01 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 20 3_221.3** | 221.3 | 0.01 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 20 3_260.5** | 260.5 | 0.01 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 20 3_292.8** | 292.8 | 0.01 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 20 3_329.4** | 329.4 | 0.01 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **A 20 3_380.8** | 380.8 | 0.01 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |



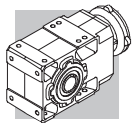
# A 20

| | i | J (•10-4) [kgm2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | |
| | | 60A | | 60B 80A | | 95A | | 80C 95B 110A | | 95C 110B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **A 20 2_5.4** | 5.4 | — | — | — | — | — | — | 5.3 | 5.8 | 5.2 | 6.2 |
| **A 20 2_6.5** | 6.5 | — | — | — | — | — | — | 4.8 | 5.3 | 4.7 | 5.7 |
| **A 20 2_7.3** | 7.3 | 1.7 | 1.9 | 1.7 | 2.1 | 4.2 | 4.7 | 4.3 | 4.8 | 4.2 | 5.2 |
| **A 20 2_8.4** | 8.4 | 1.4 | 1.6 | 1.4 | 1.8 | 3.9 | 4.6 | 4.0 | 4.5 | 3.9 | 4.9 |
| **A 20 2_9.4** | 9.4 | 1.2 | 1.4 | 1.2 | 1.6 | 3.7 | 4.2 | 3.8 | 4.3 | 3.7 | 4.7 |
| **A 20 2_10.3** | 10.3 | — | — | — | — | — | — | 4.1 | 4.6 | 4.0 | 5.0 |
| **A 20 2_12.0** | 12.0 | 0.77 | 1.0 | 0.79 | 1.2 | 3.3 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 |
| **A 20 2_14.1** | 14.1 | 0.97 | 1.2 | 0.99 | 1.4 | 3.5 | 4.0 | 3.6 | 4.1 | 3.5 | 4.5 |
| **A 20 2_16.2** | 16.2 | 0.82 | 1.1 | 0.84 | 1.3 | 3.4 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 |
| **A 20 2_18.1** | 18.1 | 0.67 | 0.93 | 0.69 | 1.1 | 3.2 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 |
| **A 20 2_21.2** | 21.2 | 0.62 | 0.88 | 0.64 | 1.1 | 3.2 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 |
| **A 20 2_23.1** | 23.1 | 0.57 | 0.83 | 0.59 | 1.0 | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 |
| **A 20 2_26.5** | 26.5 | 0.52 | 0.78 | 0.54 | 0.98 | 3.1 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 |
| **A 20 2_29.2** | 29.2 | 0.47 | 0.73 | 0.49 | 0.93 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 |
| **A 20 2_31.3** | 31.3 | 0.47 | 0.73 | 0.49 | 0.93 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 |
| **A 20 2_35.4** | 35.4 | 0.47 | 0.73 | 0.49 | 0.93 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 |
| **A 20 2_39.6** | 39.6 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **A 20 2_43.2** | 43.2 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **A 20 2_48.3** | 48.3 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **A 20 2_53.7** | 53.7 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **A 20 2_63.1** | 63.1 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **A 20 2_71.0** | 71.0 | 0.32 | 0.58 | — | — | — | — | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 20 2_79.9** | 79.9 | 0.30 | 0.56 | — | — | — | — | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 20 2_92.3** | 92.3 | 0.29 | 0.55 | — | — | — | — | — | — | — | — |
| **A 20 3_109.2** | 109.2 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 20 3_120.5** | 120.5 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 20 3_129.1** | 129.1 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 20 3_146.1** | 146.1 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 20 3_163.4** | 163.4 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 20 3_178.3** | 178.3 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 20 3_199.2** | 199.2 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 20 3_221.3** | 221.3 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 20 3_260.5** | 260.5 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 20 3_292.8** | 292.8 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 20 3_329.4** | 329.4 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **A 20 3_380.8** | 380.8 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |



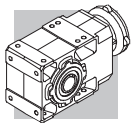
# A 30

| | i | J (•10-4) [kgm2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | |
| **A 30 2_5.4** | 5.4 | 4.5 | — | — | 7.4 | 7.3 | 8.6 | 8.6 | 6.9 |
| **A 30 2_6.4** | 6.4 | 3.4 | — | — | 6.6 | 6.6 | 7.8 | 7.8 | 6.0 |
| **A 30 2_7.0** | 7.0 | 2.9 | — | — | 5.8 | 5.8 | 7.0 | 7.0 | 5.2 |
| **A 30 2_8.5** | 8.5 | 2.2 | — | — | 5.1 | 5.1 | 6.3 | 6.3 | 4.6 |
| **A 30 2_9.3** | 9.3 | 1.6 | 3.1 | 3.1 | 4.5 | 4.4 | 5.7 | 5.7 | 4.0 |
| **A 30 2_10.5** | 10.5 | 2.3 | — | — | 5.2 | 5.1 | 6.4 | 6.4 | 4.6 |
| **A 30 2_11.8** | 11.8 | 1.1 | 2.6 | 2.6 | 4.0 | 3.9 | 5.2 | 5.2 | 3.4 |
| **A 30 2_13.6** | 13.6 | 1.5 | — | — | 4.4 | 4.3 | 5.6 | 5.6 | 3.9 |
| **A 30 2_16.3** | 16.3 | 1.2 | — | — | 4.1 | 4.0 | 5.3 | 5.3 | 3.5 |
| **A 30 2_18.0** | 18.0 | 0.90 | 2.4 | 2.4 | 3.8 | 3.7 | 5.0 | 5.0 | 3.2 |
| **A 30 2_20.5** | 20.5 | 0.70 | 2.2 | 2.2 | 3.6 | 3.5 | 4.8 | 4.8 | 3.1 |
| **A 30 2_22.8** | 22.8 | 0.60 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 3.0 |
| **A 30 2_26.5** | 26.5 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | 2.9 |
| **A 30 2_29.3** | 29.3 | 0.40 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | 2.8 |
| **A 30 2_33.4** | 33.4 | 0.35 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 2.7 |
| **A 30 2_36.6** | 36.6 | 0.30 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 2.7 |
| **A 30 2_39.3** | 39.3 | 0.25 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 2.6 |
| **A 30 2_43.4** | 43.4 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 2.6 |
| **A 30 2_48.3** | 48.3 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 2.6 |
| **A 30 2_52.7** | 52.7 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 2.5 |
| **A 30 2_59.4** | 59.4 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.5 |
| **A 30 2_66.0** | 66.0 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.5 |
| **A 30 2_76.5** | 76.5 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.5 |
| **A 30 2_86.7** | 86.7 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.5 |
| **A 30 2_97.5** | 97.5 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.4 |
| | | | | | | | | | |
| **A 30 3_109.1** | 109.1 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 30 3_120.5** | 120.5 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 30 3_137.4** | 137.4 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 30 3_150.7** | 150.7 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 30 3_161.4** | 161.4 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 30 3_178.6** | 178.6 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 30 3_198.5** | 198.5 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 30 3_216.6** | 216.6 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 30 3_244.3** | 244.3 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 30 3_271.5** | 271.5 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 30 3_314.6** | 314.6 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 30 3_356.3** | 356.3 | 0.06 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.90 |
| **A 30 3_400.8** | 400.8 | 0.04 | 1.5 | 1.6 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |



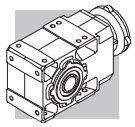
# A 30

| | i | J (•10-4) [kgm2] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | | | |
| | | 60A | | 60B 80A | | 95A | | 80C 95B 110A | | 95C 110B | | 130A | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **A 30 2_5.4** | 5.4 | — | — | — | — | — | — | 7.4 | 7.9 | 7.3 | 8.3 | 7.3 | 8.3 |
| **A 30 2_6.4** | 6.4 | — | — | — | — | — | — | 6.6 | 7.1 | 6.6 | 7.6 | 6.6 | 7.6 |
| **A 30 2_7.0** | 7.0 | — | — | — | — | — | — | 5.8 | 6.3 | 5.8 | 6.8 | 5.8 | 6.8 |
| **A 30 2_8.5** | 8.5 | — | — | — | — | — | — | 5.1 | 5.6 | 5.1 | 6.1 | 5.1 | 6.1 |
| **A 30 2_9.3** | 9.3 | 1.9 | 2.1 | 1.9 | 2.3 | 4.4 | 4.9 | 4.5 | 5.0 | 4.4 | 5.4 | 4.4 | 5.4 |
| **A 30 2_10.5** | 10.5 | — | — | — | — | — | — | 5.2 | 5.7 | 5.1 | 6.1 | 5.1 | 6.1 |
| **A 30 2_11.8** | 11.8 | 1.4 | 1.6 | 1.4 | 1.8 | 3.9 | 4.4 | 4.0 | 4.5 | 3.9 | 4.9 | 3.9 | 4.9 |
| **A 30 2_13.6** | 13.6 | — | — | — | — | — | — | 4.4 | 4.9 | 4.3 | 5.3 | 4.3 | 5.3 |
| **A 30 2_16.3** | 16.3 | — | — | — | — | — | — | 4.1 | 4.6 | 4.0 | 5.0 | 4.0 | 5.0 |
| **A 30 2_18.0** | 18.0 | 1.2 | 1.4 | 1.2 | 1.6 | 3.7 | 4.2 | 3.8 | 4.3 | 3.7 | 4.7 | 3.7 | 4.7 |
| **A 30 2_20.5** | 20.5 | 0.97 | 1.2 | 0.99 | 1.4 | 3.5 | 4.0 | 3.6 | 4.1 | 3.5 | 4.5 | 3.5 | 4.5 |
| **A 30 2_22.8** | 22.8 | 0.87 | 1.1 | 0.89 | 1.3 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | 3.4 | 4.4 |
| **A 30 2_26.5** | 26.5 | 0.77 | 1.0 | 0.79 | 1.2 | 3.3 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 | 3.3 | 4.3 |
| **A 30 2_29.3** | 29.3 | 0.67 | 0.93 | 0.69 | 1.1 | 3.2 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 | 3.2 | 4.2 |
| **A 30 2_33.4** | 33.4 | 0.62 | 0.88 | 0.64 | 1.1 | 3.2 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 |
| **A 30 2_36.6** | 36.6 | 0.57 | 0.83 | 0.59 | 1.0 | 3.1 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 |
| **A 30 2_39.3** | 39.3 | 0.52 | 0.78 | 0.54 | 0.98 | 3.1 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **A 30 2_43.4** | 43.4 | 0.47 | 0.73 | 0.49 | 0.93 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **A 30 2_48.3** | 48.3 | 0.47 | 0.73 | 0.49 | 0.93 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **A 30 2_52.7** | 52.7 | 0.47 | 0.73 | 0.49 | 0.93 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **A 30 2_59.4** | 59.4 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **A 30 2_66.0** | 66.0 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **A 30 2_76.5** | 76.5 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **A 30 2_86.7** | 86.7 | 0.37 | 0.63 | — | — | — | — | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **A 30 2_97.5** | 97.5 | 0.37 | 0.63 | — | — | — | — | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| | | | | | | | | | | | | | |
| **A 30 3_109.1** | 109.1 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **A 30 3_120.5** | 120.5 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **A 30 3_137.4** | 137.4 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **A 30 3_150.7** | 150.7 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **A 30 3_161.4** | 161.4 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **A 30 3_178.6** | 178.6 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **A 30 3_198.5** | 198.5 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **A 30 3_216.6** | 216.6 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **A 30 3_244.3** | 244.3 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **A 30 3_271.5** | 271.5 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **A 30 3_314.6** | 314.6 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **A 30 3_356.3** | 356.3 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 3.0 | 3.5 | 2.9 | 3.9 | — | — |
| **A 30 3_400.8** | 400.8 | 0.31 | 0.57 | 0.33 | 0.77 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |



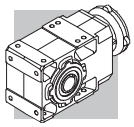
# A 35

| | i | J (•10-4) [kgm2] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | |
| **A 35 2_5.4** | 5.4 | 7.3 | — | — | 10 | 9.9 | 11 | 11 | 24 | 9.4 |
| **A 35 2_6.4** | 6.4 | 5.4 | — | — | 8.1 | 8.0 | 9.2 | 9.2 | 22 | 7.4 |
| **A 35 2_7.0** | 7.0 | 4.6 | — | — | 7.3 | 7.2 | 8.4 | 8.4 | 21 | 6.6 |
| **A 35 2_8.5** | 8.5 | 3.3 | — | — | 6.1 | 5.9 | 7.1 | 7.1 | 20 | 5.4 |
| **A 35 2_9.3** | 9.3 | 2.8 | 3.5 | 3.5 | 5.6 | 5.4 | 6.6 | 6.6 | 19 | 4.9 |
| **A 35 2_10.6** | 10.6 | 2.1 | 2.9 | 2.9 | 4.9 | 4.8 | 6.0 | 6.0 | 19 | 4.2 |
| **A 35 2_11.8** | 11.8 | 1.8 | 2.5 | 2.5 | 4.6 | 4.4 | 5.7 | 5.7 | 18 | 3.9 |
| **A 35 2_13.1** | 13.1 | 3.0 | — | — | 5.7 | 5.6 | 6.8 | 6.8 | — | 5.0 |
| **A 35 2_15.5** | 15.5 | 2.2 | — | — | 5.0 | 4.9 | 6.1 | 6.1 | — | 4.3 |
| **A 35 2_17.0** | 17.0 | 2.0 | — | — | 4.7 | 4.6 | 5.8 | 5.8 | — | 4.0 |
| **A 35 2_20.4** | 20.4 | 1.6 | — | — | 4.3 | 4.2 | 5.4 | 5.4 | — | 3.6 |
| **A 35 2_22.5** | 22.5 | 1.3 | 2.0 | 2.0 | 4.1 | 3.9 | 5.1 | 5.1 | — | 3.4 |
| **A 35 2_25.7** | 25.7 | 0.97 | 1.7 | 1.7 | 3.7 | 3.6 | 4.8 | 4.8 | — | 3.0 |
| **A 35 2_28.4** | 28.4 | 0.86 | 1.6 | 1.6 | 3.6 | 3.5 | 4.7 | 4.7 | — | 2.9 |
| **A 35 2_33.2** | 33.2 | 0.69 | 1.4 | 1.4 | 3.5 | 3.3 | 4.5 | 4.5 | — | 2.8 |
| **A 35 2_36.6** | 36.6 | 0.58 | 1.3 | 1.3 | 3.3 | 3.2 | 4.4 | 4.4 | — | 2.6 |
| **A 35 2_41.8** | 41.8 | 0.48 | 1.2 | 1.2 | 3.2 | 3.1 | 4.3 | 4.3 | — | 2.5 |
| **A 35 2_45.8** | 45.8 | 0.42 | 1.1 | 1.1 | 3.2 | 3.1 | 4.3 | 4.3 | — | 2.5 |
| **A 35 2_49.1** | 49.1 | 0.38 | 1.1 | 1.1 | 3.1 | 3.0 | 4.2 | 4.2 | — | 2.4 |
| **A 35 2_54.3** | 54.3 | 0.33 | 1.1 | 1.0 | 3.1 | 3.0 | 4.2 | 4.2 | — | 2.4 |
| **A 35 2_60.4** | 60.4 | 0.29 | 1.0 | 1.0 | 3.0 | 2.9 | 4.1 | 4.1 | — | 2.3 |
| **A 35 2_65.8** | 65.8 | 0.25 | 1.0 | 1.0 | 3.0 | 2.9 | 4.1 | 4.1 | — | 2.3 |
| **A 35 2_74.3** | 74.3 | 0.21 | 0.95 | 0.93 | 3.0 | 2.8 | 4.1 | 4.1 | — | 2.3 |
| **A 35 2_82.5** | 82.5 | 0.18 | 0.92 | 0.90 | 2.9 | 2.8 | 4.0 | 4.0 | — | 2.2 |
| **A 35 2_95.6** | 95.6 | 0.15 | 0.88 | 0.87 | 2.9 | 2.8 | 4.0 | 4.0 | — | 2.2 |
| | | | | | | | | | | |
| **A 35 3_105.5** | 105.5 | 0.11 | 0.89 | 0.87 | 2.9 | 2.8 | 4.0 | 4.0 | — | 0.80 |
| **A 35 3_116.9** | 116.9 | 0.11 | 0.88 | 0.87 | 2.9 | 2.8 | 4.0 | 4.0 | — | 0.79 |
| **A 35 3_136.3** | 136.3 | 0.10 | 0.87 | 0.86 | 2.9 | 2.8 | 4.0 | 4.0 | — | 0.78 |
| **A 35 3_150.6** | 150.6 | 0.09 | 0.86 | 0.85 | 2.9 | 2.8 | 4.0 | 4.0 | — | 0.77 |
| **A 35 3_171.8** | 171.8 | 0.08 | 0.86 | 0.84 | 2.9 | 2.8 | 4.0 | 4.0 | — | 0.77 |
| **A 35 3_188.3** | 188.3 | 0.08 | 0.85 | 0.84 | 2.9 | 2.7 | 4.0 | 4.0 | — | 0.76 |
| **A 35 3_201.8** | 201.8 | 0.08 | 0.85 | 0.84 | 2.9 | 2.7 | 4.0 | 4.0 | — | 0.76 |
| **A 35 3_223.2** | 223.2 | 0.08 | 0.85 | 0.84 | 2.9 | 2.7 | 4.0 | 4.0 | — | 0.76 |
| **A 35 3_248.1** | 248.1 | 0.07 | 0.85 | 0.83 | 2.9 | 2.7 | 4.0 | 4.0 | — | 0.76 |
| **A 35 3_270.7** | 270.7 | 0.07 | 0.84 | 0.83 | 2.9 | 2.7 | 4.0 | 4.0 | — | 0.75 |
| **A 35 3_305.4** | 305.4 | 0.07 | 0.84 | 0.83 | 2.9 | 2.7 | 4.0 | 4.0 | — | 0.75 |
| **A 35 3_339.3** | 339.3 | 0.07 | 0.84 | 0.83 | 2.9 | 2.7 | 4.0 | 4.0 | — | 0.75 |
| **A 35 3_393.2** | 393.2 | 0.07 | 0.84 | 0.83 | 2.9 | 2.7 | 3.9 | 3.9 | — | 0.75 |



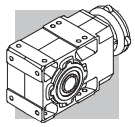
# A 35

| | i | J (•10-4) [kgm2] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | | | |
| | | 60A | | 60B 80A | | 95A | | 80C 95B 110A | | 95C 110B | | 130A | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **A 35 2_5.4** | 5.4 | — | — | — | — | — | — | 10 | 11 | 9.9 | 10.9 | 9.9 | 11 |
| **A 35 2_6.4** | 6.4 | — | — | — | — | — | — | 8.1 | 8.6 | 8.0 | 9.0 | 8.0 | 9.0 |
| **A 35 2_7.0** | 7.0 | — | — | — | — | — | — | 7.3 | 7.8 | 7.2 | 8.2 | 7.2 | 8.2 |
| **A 35 2_8.5** | 8.5 | — | — | — | — | — | — | 6.1 | 6.6 | 5.9 | 6.9 | 5.9 | 6.9 |
| **A 35 2_9.3** | 9.3 | 3.1 | 3.3 | 3.1 | 3.5 | 5.6 | 6.1 | 5.6 | 6.1 | 5.4 | 6.4 | 5.4 | 6.4 |
| **A 35 2_10.6** | 10.6 | 2.4 | 2.6 | 2.4 | 2.8 | 4.9 | 5.4 | 4.9 | 5.4 | 4.8 | 5.8 | 4.8 | 5.8 |
| **A 35 2_11.8** | 11.8 | 2.1 | 2.3 | 2.1 | 2.5 | 4.6 | 5.1 | 4.6 | 5.1 | 4.4 | 5.4 | 4.4 | 5.4 |
| **A 35 2_13.1** | 13.1 | — | — | — | — | — | — | 5.7 | 6.2 | 5.6 | 6.6 | 5.6 | 6.6 |
| **A 35 2_15.5** | 15.5 | — | — | — | — | — | — | 5.0 | 5.5 | 4.9 | 5.9 | 4.9 | 5.9 |
| **A 35 2_17.0** | 17.0 | — | — | — | — | — | — | 4.7 | 5.2 | 4.6 | 5.6 | 4.6 | 5.6 |
| **A 35 2_20.4** | 20.4 | — | — | — | — | — | — | 4.3 | 4.8 | 4.2 | 5.2 | 4.2 | 5.2 |
| **A 35 2_22.5** | 22.5 | 1.6 | 1.8 | 1.6 | 2.0 | 4.1 | 4.6 | 4.1 | 4.6 | 3.9 | 4.9 | 3.9 | 4.9 |
| **A 35 2_25.7** | 25.7 | 1.2 | 1.5 | 1.3 | 1.7 | 3.8 | 4.2 | 3.7 | 4.2 | 3.6 | 4.6 | 3.6 | 4.6 |
| **A 35 2_28.4** | 28.4 | 1.1 | 1.4 | 1.2 | 1.6 | 3.7 | 4.1 | 3.6 | 4.1 | 3.5 | 4.5 | 3.5 | 4.5 |
| **A 35 2_33.2** | 33.2 | 0.96 | 1.2 | 0.98 | 1.4 | 3.5 | 3.9 | 3.5 | 4.0 | 3.3 | 4.3 | 3.3 | 4.3 |
| **A 35 2_36.6** | 36.6 | 0.85 | 1.1 | 0.87 | 1.3 | 3.4 | 3.8 | 3.3 | 3.8 | 3.2 | 4.2 | 3.2 | 4.2 |
| **A 35 2_41.8** | 41.8 | 0.75 | 1.0 | 0.77 | 1.2 | 3.3 | 3.7 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 |
| **A 35 2_45.8** | 45.8 | 0.69 | 0.95 | 0.71 | 1.1 | 3.2 | 3.7 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 |
| **A 35 2_49.1** | 49.1 | 0.65 | 0.91 | 0.67 | 1.1 | 3.2 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **A 35 2_54.3** | 54.3 | 0.60 | 0.86 | 0.62 | 1.1 | 3.2 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **A 35 2_60.4** | 60.4 | 0.56 | 0.82 | 0.58 | 1.0 | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **A 35 2_65.8** | 65.8 | 0.52 | 0.78 | 0.54 | 0.98 | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **A 35 2_74.3** | 74.3 | 0.48 | 0.74 | 0.50 | 0.94 | 3.0 | 3.5 | 3.0 | 3.5 | 2.8 | 3.8 | 2.8 | 3.8 |
| **A 35 2_82.5** | 82.5 | 0.45 | 0.71 | 0.47 | 0.91 | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | 2.8 | 3.8 |
| **A 35 2_95.6** | 95.6 | 0.42 | 0.68 | 0.44 | 0.88 | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | 2.8 | 3.8 |
| | | | | | | | | | | | | | |
| **A 35 3_105.5** | 105.5 | 0.38 | 0.64 | 0.40 | 0.84 | 2.9 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **A 35 3_116.9** | 116.9 | 0.38 | 0.64 | 0.40 | 0.84 | 2.9 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **A 35 3_136.3** | 136.3 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **A 35 3_150.6** | 150.6 | 0.36 | 0.62 | 0.38 | 0.82 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **A 35 3_171.8** | 171.8 | 0.35 | 0.61 | 0.37 | 0.81 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **A 35 3_188.3** | 188.3 | 0.35 | 0.61 | 0.37 | 0.81 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **A 35 3_201.8** | 201.8 | 0.35 | 0.61 | 0.37 | 0.81 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **A 35 3_223.2** | 223.2 | 0.35 | 0.61 | 0.37 | 0.81 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **A 35 3_248.1** | 248.1 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **A 35 3_270.7** | 270.7 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **A 35 3_305.4** | 305.4 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **A 35 3_339.3** | 339.3 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **A 35 3_393.2** | 393.2 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |



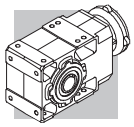
# A 41

| | i | J (•10-4) [kgm2] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | |
| **A 41 2_5.2** | 5.2 | 13 | — | — | 16 | 16 | 17 | 17 | 32 | 23 |
| **A 41 2_7.1** | 7.1 | 7.3 | — | — | 10 | 10 | 11 | 11 | 26 | 18 |
| **A 41 2_8.3** | 8.3 | 5.9 | — | — | 8.8 | 8.7 | 10 | 10 | 25 | 16 |
| **A 41 2_9.2** | 9.2 | 4.5 | — | — | 7.4 | 7.3 | 8.6 | 8.6 | 23 | 15 |
| **A 41 2_10.1** | 10.1 | 5.9 | — | — | 8.8 | 8.7 | 10 | 10 | 25 | 16 |
| **A 41 2_11.7** | 11.7 | 2.9 | 4.4 | 4.4 | 5.8 | 5.7 | 7.0 | 7.0 | 22 | 13 |
| **A 41 2_13.8** | 13.8 | 3.6 | — | — | 6.5 | 6.4 | 7.7 | 7.7 | 23 | 14 |
| **A 41 2_16.1** | 16.1 | 2.9 | — | — | 5.8 | 5.7 | 7.0 | 7.0 | 22 | 13 |
| **A 41 2_17.8** | 17.8 | 2.2 | — | — | 5.1 | 5.0 | 6.3 | 6.3 | 21 | 11 |
| **A 41 2_22.7** | 22.7 | 1.5 | 3.0 | 3.0 | 4.4 | 4.3 | 5.6 | 5.6 | 20 | 11 |
| **A 41 2_28.3** | 28.3 | 1.1 | 2.6 | 2.6 | 4.0 | 3.9 | 5.2 | 5.2 | 20 | 10 |
| **A 41 2_35.9** | 35.9 | 1.7 | 3.2 | 3.2 | 4.6 | 4.5 | 5.8 | 5.8 | 20 | 9.8 |
| **A 41 2_45.1** | 45.1 | 1.5 | 3.0 | 3.0 | 4.4 | 4.3 | 5.6 | 5.6 | 20 | 9.6 |
| **A 41 2_48.3** | 48.3 | 1.4 | 2.9 | 2.9 | 4.3 | 4.2 | 5.5 | 5.5 | — | 9.5 |
| **A 41 2_53.1** | 53.1 | 1.4 | 2.9 | 2.9 | 4.3 | 4.2 | 5.5 | 5.5 | — | 9.5 |
| **A 41 2_58.8** | 58.8 | 1.3 | 2.8 | 2.8 | 4.2 | 4.1 | 5.4 | 5.4 | — | 9.4 |
| **A 41 2_64.2** | 64.2 | 1.3 | 2.8 | 2.8 | 4.2 | 4.1 | 5.4 | 5.4 | — | 9.4 |
| **A 41 2_71.3** | 71.3 | 1.2 | 2.7 | 2.7 | 4.1 | 4.0 | 5.3 | 5.3 | — | 9.3 |
| **A 41 2_79.2** | 79.2 | 1.2 | 2.7 | 2.7 | 4.1 | 4.0 | 5.3 | 5.3 | — | 9.3 |
| | | | | | | | | | | |
| **A 41 3_92.8** | 92.8 | 1.1 | 2.6 | 2.6 | 4.0 | 3.9 | 5.2 | 5.2 | — | 9.2 |
| **A 41 3_115.9** | 115.9 | 0.20 | 1.7 | 1.7 | 2.9 | 3.0 | 4.3 | 4.3 | — | 2.1 |
| **A 41 3_146.9** | 146.9 | 0.10 | 1.6 | 1.6 | 2.8 | 2.9 | 4.2 | 4.2 | — | 2.1 |
| **A 41 3_184.4** | 184.4 | 0.10 | 1.6 | 1.6 | 2.8 | 2.9 | 4.2 | 4.2 | — | 2.1 |
| **A 41 3_197.5** | 197.5 | 0.10 | 1.6 | 1.6 | 2.8 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **A 41 3_217.4** | 217.4 | 0.10 | 1.6 | 1.6 | 2.8 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **A 41 3_240.6** | 240.6 | 0.10 | 1.6 | 1.6 | 2.8 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **A 41 3_262.5** | 262.5 | 0.10 | 1.6 | 1.6 | 2.8 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **A 41 3_291.7** | 291.7 | 0.10 | 1.6 | 1.6 | 2.8 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **A 41 3_324.2** | 324.2 | 0.10 | 1.6 | 1.6 | 2.8 | 2.9 | 4.2 | 4.2 | — | 2.0 |
| **A 41 3_376.8** | 376.8 | 0.10 | 1.6 | 1.6 | 2.8 | 2.9 | 4.2 | 4.2 | — | 2.0 |



# A 41

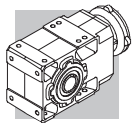
| | i | J (•10-4) [kgm2] | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | | | | | | | | | |
| | | 60A | | 60B 80A | | 80B | | 95A | | 80C 95B 110A | | 95C 110B | | 130A | | 130B 180A | | 180B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **A 41 2_5.2** | 5.2 | — | — | — | — | — | — | — | — | 16 | 16.5 | 16 | 17 | 16 | 17 | 30 | 32 | 32 | 37 |
| **A 41 2_7.1** | 7.1 | — | — | — | — | — | — | — | — | 10 | 10.5 | 10 | 11 | 10 | 11 | 24 | 27 | 26 | 31 |
| **A 41 2_8.3** | 8.3 | — | — | — | — | — | — | — | — | 8.8 | 9.3 | 8.7 | 9.7 | 8.7 | 9.7 | 23 | 25 | 25 | 30 |
| **A 41 2_9.2** | 9.2 | — | — | — | — | — | — | — | — | 7.4 | 7.9 | 7.3 | 8.3 | 7.3 | 8.3 | 21 | 24 | 23 | 28 |
| **A 41 2_10.1** | 10.1 | — | — | — | — | — | — | — | — | 8.8 | 9.3 | 8.7 | 9.7 | 8.7 | 9.7 | 23 | 25 | 25 | 30 |
| **A 41 2_11.7** | 11.7 | — | — | — | — | 5.7 | 6.2 | 5.7 | 6.2 | 5.8 | 6.3 | 5.7 | 6.7 | 5.7 | 6.7 | 20 | 22 | 22 | 27 |
| **A 41 2_13.8** | 13.8 | — | — | — | — | — | — | — | — | 6.5 | 7.0 | 6.4 | 7.4 | 6.4 | 7.4 | 21 | 23 | 23 | 28 |
| **A 41 2_16.1** | 16.1 | — | — | — | — | — | — | — | — | 5.8 | 6.3 | 5.7 | 6.7 | 5.7 | 6.7 | 20 | 22 | 22 | 27 |
| **A 41 2_17.8** | 17.8 | — | — | — | — | — | — | — | — | 5.1 | 5.6 | 5.0 | 6.0 | 5.0 | 6.0 | 19 | 22 | 21 | 26 |
| **A 41 2_22.7** | 22.7 | — | — | — | — | 4.3 | 4.8 | 4.3 | 4.8 | 4.4 | 4.9 | 4.3 | 5.3 | 4.3 | 5.3 | 18 | 21 | 20 | 25 |
| **A 41 2_28.3** | 28.3 | — | — | — | — | 3.9 | 4.4 | 3.9 | 4.4 | 4.0 | 4.5 | 3.9 | 4.9 | 3.9 | 4.9 | 18 | 21 | 20 | 25 |
| **A 41 2_35.9** | 35.9 | — | — | — | — | 4.5 | 5.0 | 4.5 | 5.0 | 4.6 | 5.1 | 4.5 | 5.5 | 4.5 | 5.5 | 19 | 21 | 20 | 25 |
| **A 41 2_45.1** | 45.1 | — | — | — | — | 4.3 | 4.8 | 4.3 | 4.8 | 4.4 | 4.9 | 4.3 | 5.3 | 4.3 | 5.3 | 18 | 21 | 20 | 25 |
| **A 41 2_48.3** | 48.3 | — | — | — | — | 4.2 | 4.7 | 4.2 | 4.7 | 4.3 | 4.8 | 4.2 | 5.2 | 4.2 | 5.2 | — | — | — | — |
| **A 41 2_53.1** | 53.1 | — | — | — | — | 4.2 | 4.7 | 4.2 | 4.7 | 4.3 | 4.8 | 4.2 | 5.2 | 4.2 | 5.2 | — | — | — | — |
| **A 41 2_58.8** | 58.8 | — | — | — | — | 4.1 | 4.6 | 4.1 | 4.6 | 4.2 | 4.7 | 4.1 | 5.1 | 4.1 | 5.1 | — | — | — | — |
| **A 41 2_64.2** | 64.2 | — | — | — | — | 4.1 | 4.6 | 4.1 | 4.6 | 4.2 | 4.7 | 4.1 | 5.1 | 4.1 | 5.1 | — | — | — | — |
| **A 41 2_71.3** | 71.3 | — | — | — | — | 4.0 | 4.5 | 4.0 | 4.5 | 4.1 | 4.6 | 4.0 | 5.0 | 4.0 | 5.0 | — | — | — | — |
| **A 41 2_79.2** | 79.2 | — | — | — | — | 4.0 | 4.5 | 4.0 | 4.5 | 4.1 | 4.6 | 4.0 | 5.0 | 4.0 | 5.0 | — | — | — | — |
| | | | | | | | | | | | | | | | | | | | |
| **A 41 3_92.8** | 92.8 | 1.4 | 1.6 | 1.4 | 1.8 | — | — | 3.9 | 4.4 | 4.0 | 4.5 | 3.9 | 4.9 | — | — | — | — | — | — |
| **A 41 3_115.9** | 115.9 | 0.47 | 0.73 | 0.49 | 0.93 | — | — | 3.0 | 3.5 | 2.9 | 3.4 | 3.0 | 4.0 | — | — | — | — | — | — |
| **A 41 3_146.9** | 146.9 | 0.37 | 0.63 | 0.39 | 0.83 | — | — | 2.9 | 3.4 | 2.8 | 3.3 | 2.9 | 3.9 | — | — | — | — | — | — |
| **A 41 3_184.4** | 184.4 | 0.37 | 0.63 | 0.39 | 0.83 | — | — | 2.9 | 3.4 | 2.8 | 3.3 | 2.9 | 3.9 | — | — | — | — | — | — |
| **A 41 3_197.5** | 197.5 | 0.37 | 0.63 | 0.39 | 0.83 | — | — | 2.9 | 3.4 | 2.8 | 3.3 | 2.9 | 3.9 | — | — | — | — | — | — |
| **A 41 3_217.4** | 217.4 | 0.37 | 0.63 | 0.39 | 0.83 | — | — | 2.9 | 3.4 | 2.8 | 3.3 | 2.9 | 3.9 | — | — | — | — | — | — |
| **A 41 3_240.6** | 240.6 | 0.37 | 0.63 | 0.39 | 0.83 | — | — | 2.9 | 3.4 | 2.8 | 3.3 | 2.9 | 3.9 | — | — | — | — | — | — |
| **A 41 3_262.5** | 262.5 | 0.37 | 0.63 | 0.39 | 0.83 | — | — | 2.9 | 3.4 | 2.8 | 3.3 | 2.9 | 3.9 | — | — | — | — | — | — |
| **A 41 3_291.7** | 291.7 | 0.37 | 0.63 | 0.39 | 0.83 | — | — | 2.9 | 3.4 | 2.8 | 3.3 | 2.9 | 3.9 | — | — | — | — | — | — |
| **A 41 3_324.2** | 324.2 | 0.37 | 0.63 | 0.39 | 0.83 | — | — | 2.9 | 3.4 | 2.8 | 3.3 | 2.9 | 3.9 | — | — | — | — | — | — |
| **A 41 3_376.8** | 376.8 | 0.37 | 0.63 | 0.39 | 0.83 | — | — | 2.9 | 3.4 | 2.8 | 3.3 | 2.9 | 3.9 | — | — | — | — | — | — |



# A 50

| | i | J (•10-4) [kgm2] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | |
| **A 50 2_7.7** | 7.7 | 15 | — | — | 18 | 18 | 19 | 19 | 34 | 93 | 91 | 24 |
| **A 50 2_9.7** | 9.7 | 10 | — | — | 13 | 13 | 14 | 14 | 29 | 89 | 86 | 19 |
| **A 50 2_13.1** | 13.1 | 6.3 | — | — | 9.2 | 9.1 | 10 | 10 | 25 | 85 | 82 | 15 |
| **A 50 2_16.6** | 16.6 | 4.2 | — | — | 7.0 | 7.0 | 8.2 | 8.2 | 23 | 82 | 80 | 13 |
| **A 50 2_20.9** | 20.9 | 2.8 | 4.2 | 4.2 | 5.7 | 5.6 | 6.9 | 6.9 | 22 | 81 | 79 | 12 |
| | | | | | | | | | | | | |
| **A 50 3_24.0** | 24.0 | 6.0 | — | — | 8.9 | 8.8 | 10 | 10 | 25 | 84 | 82 | 15 |
| **A 50 3_26.4** | 26.4 | 5.8 | — | — | 8.7 | 8.6 | 9.9 | 9.9 | 25 | 84 | 82 | 15 |
| **A 50 3_32.4** | 32.4 | 4.0 | — | — | 6.8 | 6.8 | 8.1 | 8.1 | 23 | 82 | 80 | 13 |
| **A 50 3_35.6** | 35.6 | 3.9 | — | — | 6.7 | 6.7 | 8.0 | 8.0 | 23 | 82 | 80 | 13 |
| **A 50 3_40.9** | 40.9 | 2.7 | — | — | 5.6 | 5.5 | 6.8 | 6.8 | 22 | 81 | 79 | 12 |
| **A 50 3_45.0** | 45.0 | 2.6 | — | — | 5.5 | 5.4 | 6.7 | 6.7 | 22 | 81 | 79 | 12 |
| **A 50 3_51.7** | 51.7 | 1.9 | 3.4 | 3.4 | 4.7 | 4.7 | 6.0 | 6.0 | 21 | 80 | 78 | 11 |
| **A 50 3_56.8** | 56.8 | 1.9 | 3.3 | 3.3 | 4.7 | 4.6 | 5.9 | 5.9 | 21 | 80 | 78 | 11 |
| **A 50 3_63.9** | 63.9 | 1.4 | 2.9 | 2.8 | 4.2 | 4.2 | 5.5 | 5.5 | 20 | 80 | 77 | 11 |
| **A 50 3_70.2** | 70.2 | 1.4 | 2.8 | 2.8 | 4.2 | 4.1 | 5.4 | 5.4 | 20 | 80 | 77 | 10 |
| **A 50 3_81.5** | 81.5 | 0.90 | 2.4 | 2.4 | 3.8 | 3.7 | 5.0 | 5.0 | 20 | 79 | 77 | 10 |
| **A 50 3_89.5** | 89.5 | 0.90 | 2.4 | 2.4 | 3.7 | 3.7 | 5.0 | 5.0 | 20 | 79 | 77 | 10 |
| **A 50 3_99.5** | 99.5 | 0.60 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 20 | 79 | 77 | 9.7 |
| **A 50 3_109.4** | 109.4 | 0.60 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 20 | 79 | 77 | 9.7 |
| **A 50 3_118.0** | 118.0 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 9.6 |
| **A 50 3_129.7** | 129.7 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 9.6 |
| **A 50 3_140.6** | 140.6 | 0.40 | 1.8 | 1.8 | 3.2 | 3.2 | 4.4 | 4.4 | — | — | — | 9.4 |
| **A 50 3_154.6** | 154.6 | 0.40 | 1.8 | 1.8 | 3.2 | 3.2 | 4.4 | 4.4 | — | — | — | 9.4 |
| **A 50 3_173.4** | 173.4 | 0.30 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | — | — | 9.3 |
| **A 50 3_190.6** | 190.6 | 0.20 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | — | — | 9.3 |

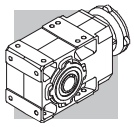
Para los valores de los momentos de inercia correspondientes a los reductores de 4 etapas, consultar con nuestro Servicio Técnico.



# A 50

| | i | J (•10-4) [kgm2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | |
| | | 80B 95A | | 80C 95B 110A | | 95C 110B 130A | | 130B 180A | | 180B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **A 50 2_7.7** | 7.7 | — | — | 18 | 19 | 18 | 19 | 32 | 34 | 34 | 39 |
| **A 50 2_9.7** | 9.7 | — | — | 13 | 14 | 13 | 14 | 27 | 29 | 29 | 34 |
| **A 50 2_13.1** | 13.1 | — | — | 9.2 | 9.7 | 9.1 | 10 | 23 | 26 | 25 | 30 |
| **A 50 2_16.6** | 16.6 | — | — | 7.0 | 7.5 | 7.0 | 8.0 | 21 | 24 | 23 | 28 |
| **A 50 2_20.9** | 20.9 | 5.6 | 6.1 | 5.7 | 6.2 | 5.6 | 6.6 | 20 | 22 | 22 | 27 |
| | | | | | | | | | | | |
| **A 50 3_24.0** | 24.0 | — | — | 8.9 | 9.4 | 8.8 | 9.8 | 23 | 25 | 25 | 30 |
| **A 50 3_26.4** | 26.4 | — | — | 8.7 | 9.2 | 8.6 | 9.6 | 23 | 25 | 25 | 30 |
| **A 50 3_32.4** | 32.4 | — | — | 6.8 | 7.3 | 6.8 | 7.8 | 21 | 23 | 23 | 28 |
| **A 50 3_35.6** | 35.6 | — | — | 6.7 | 7.2 | 6.7 | 7.7 | 21 | 23 | 23 | 28 |
| **A 50 3_40.9** | 40.9 | — | — | 5.6 | 6.1 | 5.5 | 6.5 | 20 | 22 | 22 | 27 |
| **A 50 3_45.0** | 45.0 | — | — | 5.5 | 6.0 | 5.4 | 6.4 | 20 | 22 | 22 | 27 |
| **A 50 3_51.7** | 51.7 | 4.7 | 5.1 | 4.7 | 5.2 | 4.7 | 5.7 | 19 | 21 | 21 | 26 |
| **A 50 3_56.8** | 56.8 | 4.7 | 5.1 | 4.7 | 5.2 | 4.6 | 5.6 | 19 | 21 | 21 | 26 |
| **A 50 3_63.9** | 63.9 | 4.2 | 4.7 | 4.2 | 5.2 | 4.2 | 5.2 | 18 | 21 | 20 | 25 |
| **A 50 3_70.2** | 70.2 | 4.2 | 4.7 | 4.2 | 5.2 | 4.1 | 5.1 | 18 | 21 | 20 | 25 |
| **A 50 3_81.5** | 81.5 | 3.7 | 4.1 | 3.8 | 4.3 | 3.7 | 4.7 | 18 | 20 | 20 | 25 |
| **A 50 3_89.5** | 89.5 | 3.7 | 4.1 | 3.7 | 4.2 | 3.7 | 4.7 | 18 | 20 | 20 | 25 |
| **A 50 3_99.5** | 99.5 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | 18 | 20 | 20 | 25 |
| **A 50 3_109.4** | 109.4 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | 18 | 20 | 20 | 25 |
| **A 50 3_118.0** | 118.0 | 3.3 | 3.8 | 3.4 | 4.0 | 3.3 | 4.3 | — | — | — | — |
| **A 50 3_129.7** | 129.7 | 3.3 | 3.8 | 3.4 | 4.0 | 3.3 | 4.3 | — | — | — | — |
| **A 50 3_140.6** | 140.6 | 3.2 | 3.7 | 3.2 | 3.7 | 3.2 | 4.2 | — | — | — | — |
| **A 50 3_154.6** | 154.6 | 3.2 | 3.7 | 3.2 | 3.7 | 3.2 | 4.2 | — | — | — | — |
| **A 50 3_173.4** | 173.4 | 3.1 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |
| **A 50 3_190.6** | 190.6 | 3.0 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |

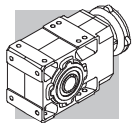
Para los valores de los momentos de inercia correspondientes a los reductores de 4 etapas, consultar con nuestro Servicio Técnico.



# A 55

| | i | J (•10-4) [kgm2] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | |
| **A 55 2_4.9** | 4.9 | 61 | — | — | — | — | — | — | 77 | 123 | 120 | 70 |
| **A 55 2_6.4** | 6.4 | 41 | — | — | — | — | — | — | 57 | 103 | 100 | 50 |
| **A 55 2_8.5** | 8.5 | 26 | — | — | — | — | — | — | 42 | 88 | 85 | 35 |
| **A 55 2_10.4** | 10.4 | 19 | — | — | — | — | — | — | 35 | 81 | 78 | 28 |
| **A 55 2_13.1** | 13.1 | 12 | — | — | 14 | 14 | 17 | 17 | 28 | 74 | 72 | 21 |
| **A 55 2_15.7** | 15.7 | 8.9 | — | — | 11 | 11 | 14 | 14 | 25 | 71 | 68 | 18 |
| **A 55 2_19.2** | 19.2 | 6.2 | — | — | 8.6 | 8.5 | 11 | 11 | 23 | 68 | 66 | 15 |
| | | | | | | | | | | | | |
| **A 55 3_23.8** | 23.8 | 11 | — | — | 13 | 13 | 16 | 16 | 27 | 73 | 70 | 20 |
| **A 55 3_29.9** | 29.9 | 7.9 | — | — | 10 | 10 | 13 | 13 | 24 | 70 | 67 | 17 |
| **A 55 3_40.3** | 40.3 | 5.3 | — | — | 7.8 | 7.6 | 10 | 10 | 22 | 68 | 65 | 14 |
| **A 55 3_51.0** | 51.0 | 3.6 | — | — | 6.0 | 5.9 | 8.6 | 8.6 | 20 | 66 | 63 | 13 |
| **A 55 3_64.3** | 64.3 | 2.6 | 3.1 | 3.0 | 5.1 | 5.0 | 7.7 | 7.7 | 19 | 65 | 62 | 12 |
| **A 55 3_79.5** | 79.5 | 2.0 | 2.4 | 2.4 | 4.5 | 4.4 | 7.1 | 7.1 | 18 | 64 | 62 | 11 |
| **A 55 3_101.4** | 101.4 | 1.3 | 1.8 | 1.8 | 3.8 | 3.7 | 6.5 | 6.5 | 18 | 64 | 61 | 10 |
| **A 55 3_123.9** | 123.9 | 1.0 | 1.5 | 1.5 | 3.6 | 3.4 | 6.2 | 6.2 | 17 | 63 | 61 | 10 |
| **A 55 3_132.7** | 132.7 | 0.71 | 1.4 | 1.4 | 3.5 | 3.3 | 6.1 | 6.1 | — | — | — | 9.5 |
| **A 55 3_146.8** | 146.8 | 0.66 | 1.4 | 1.4 | 3.4 | 3.3 | 6.0 | 6.0 | — | — | — | 9.4 |
| **A 55 3_160.4** | 160.4 | 0.58 | 1.3 | 1.3 | 3.3 | 3.2 | 6.0 | 6.0 | — | — | — | 9.4 |
| **A 55 3_175.0** | 175.0 | 0.50 | 1.2 | 1.2 | 3.3 | 3.1 | 5.9 | 5.9 | — | — | — | 9.3 |
| **A 55 3_194.2** | 194.2 | 0.43 | 1.2 | 1.2 | 3.2 | 3.1 | 5.8 | 5.8 | — | — | — | 9.2 |

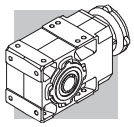
Para los valores de los momentos de inercia correspondientes a los reductores de 4 etapas, consultar con nuestro Servicio Técnico.



# A 55

| | i | J (•10-4) [kgm2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | |
| | | 80B 95A | | 80C 95B 110A | | 95C 110B 130A | | 130B 180A | | 180B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **A 55 2_4.9** | 4.9 | — | — | — | — | — | — | 78 | 80 | 77 | 82 |
| **A 55 2_6.4** | 6.4 | — | — | — | — | — | — | 58 | 60 | 57 | 62 |
| **A 55 2_8.5** | 8.5 | — | — | — | — | — | — | 43 | 45 | 42 | 47 |
| **A 55 2_10.4** | 10.4 | — | — | — | — | — | — | 36 | 38 | 35 | 40 |
| **A 55 2_13.1** | 13.1 | — | — | 14 | 15 | 14 | 15 | 29 | 31 | 28 | 33 |
| **A 55 2_15.7** | 15.7 | — | — | 11 | 12 | 11 | 12 | 26 | 28 | 25 | 30 |
| **A 55 2_19.2** | 19.2 | — | — | 8.6 | 9.1 | 8.5 | 9.5 | 23 | 26 | 23 | 28 |
| | | | | | | | | | | | |
| **A 55 3_23.8** | 23.8 | — | — | 13 | 14 | 13 | 14 | 28 | 30 | 27 | 32 |
| **A 55 3_29.9** | 29.9 | — | — | 10 | 11 | 10 | 11 | 25 | 27 | 24 | 29 |
| **A 55 3_40.3** | 40.3 | — | — | 7.8 | 8.3 | 7.6 | 8.6 | 22 | 25 | 22 | 27 |
| **A 55 3_51.0** | 51.0 | — | — | 6.0 | 6.5 | 5.9 | 6.9 | 21 | 23 | 20 | 25 |
| **A 55 3_64.3** | 64.3 | 5.4 | 5.9 | 5.1 | 5.6 | 5.0 | 6.0 | 20 | 22 | 19 | 24 |
| **A 55 3_79.5** | 79.5 | 4.8 | 5.3 | 4.5 | 5.0 | 4.4 | 5.4 | 19 | 21 | 18 | 23 |
| **A 55 3_101.4** | 101.4 | 4.1 | 4.6 | 3.8 | 4.3 | 3.7 | 4.7 | 18 | 21 | 18 | 23 |
| **A 55 3_123.9** | 123.9 | 3.8 | 4.3 | 3.6 | 4.1 | 3.4 | 4.4 | 18 | 20 | 17 | 22 |
| **A 55 3_132.7** | 132.7 | 3.5 | 4.0 | 3.5 | 4.0 | 3.3 | 4.3 | — | — | — | — |
| **A 55 3_146.8** | 146.8 | 3.5 | 3.9 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **A 55 3_160.4** | 160.4 | 3.4 | 3.8 | 3.3 | 3.8 | 3.2 | 4.2 | — | — | — | — |
| **A 55 3_175.0** | 175.0 | 3.3 | 3.8 | 3.3 | 3.8 | 3.1 | 4.1 | — | — | — | — |
| **A 55 3_194.2** | 194.2 | 3.3 | 3.7 | 3.2 | 3.7 | 3.1 | 4.1 | — | — | — | — |

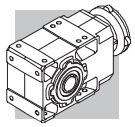
Para los valores de los momentos de inercia correspondientes a los reductores de 4 etapas, consultar con nuestro Servicio Técnico.



# A 60

| | i | J (•10-4) [kgm2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | |
| **A 60 2_7.9** | 7.9 | 36 | — | — | — | — | — | — | 54 | 114 | 112 | 57 |
| **A 60 2_10.3** | 10.3 | 23 | — | — | 25 | 25 | 27 | 27 | 41 | 101 | 99 | 44 |
| **A 60 2_12.7** | 12.7 | 16 | — | — | 19 | 19 | 20 | 20 | 35 | 94 | 92 | 37 |
| **A 60 2_16.7** | 16.7 | 9.4 | — | — | 12 | 12 | 14 | 14 | 28 | 88 | 85 | 30 |
| **A 60 2_20.6** | 20.6 | 6.7 | — | — | 9.6 | 9.5 | 11 | 11 | 26 | 85 | 83 | 28 |
| | | | | | | | | | | | | |
| **A 60 3_25.7** | 25.7 | 14 | — | — | 17 | 17 | 18 | 18 | 33 | 92 | 90 | 35 |
| **A 60 3_27.9** | 27.9 | 14 | — | — | 17 | 17 | 18 | 18 | 33 | 92 | 90 | 35 |
| **A 60 3_31.7** | 31.7 | 10 | — | — | 13 | 13 | 15 | 15 | 29 | 89 | 86 | 31 |
| **A 60 3_34.3** | 34.3 | 10 | — | — | 13 | 13 | 14 | 14 | 29 | 89 | 86 | 31 |
| **A 60 3_41.7** | 41.7 | 6.1 | — | — | 9.0 | 8.9 | 10 | 10 | 25 | 84 | 82 | 27 |
| **A 60 3_45.2** | 45.2 | 6.1 | — | — | 8.9 | 8.9 | 10 | 10 | 25 | 84 | 82 | 27 |
| **A 60 3_51.3** | 51.3 | 5.0 | — | — | 7.4 | 7.4 | 8.7 | 8.7 | 24 | 83 | 81 | 26 |
| **A 60 3_55.6** | 55.6 | 4.5 | — | — | 7.4 | 7.3 | 8.6 | 8.6 | 23 | 83 | 81 | 26 |
| **A 60 3_65.0** | 65.0 | 3.2 | 4.7 | 4.6 | 6.1 | 6.0 | 7.3 | 7.3 | 22 | 82 | 79 | 24 |
| **A 60 3_70.4** | 70.4 | 3.2 | 4.7 | 4.6 | 6.1 | 6.0 | 7.3 | 7.3 | 22 | 81 | 79 | 24 |
| **A 60 3_79.7** | 79.7 | 2.1 | 3.6 | 3.5 | 5.0 | 4.9 | 6.2 | 6.2 | 21 | 80 | 78 | 23 |
| **A 60 3_86.4** | 86.4 | 2.1 | 3.6 | 3.5 | 5.0 | 4.9 | 6.2 | 6.2 | 21 | 80 | 78 | 23 |
| **A 60 3_99.5** | 99.5 | 2.0 | 3.5 | 3.4 | 4.3 | 4.3 | 5.6 | 5.6 | 20 | 80 | 78 | 23 |
| **A 60 3_107.8** | 107.8 | 1.5 | 3.0 | 2.9 | 4.3 | 4.3 | 5.6 | 5.6 | 20 | 80 | 78 | 22 |
| **A 60 3_123.0** | 123.0 | 1.1 | 2.6 | 2.5 | 4.0 | 3.9 | 5.2 | 5.2 | 20 | 79 | 77 | 22 |
| **A 60 3_133.3** | 133.3 | 1.1 | 2.6 | 2.5 | 3.9 | 3.9 | 5.2 | 5.2 | 20 | 79 | 77 | 22 |
| **A 60 3_144.0** | 144.0 | 0.80 | 2.3 | 2.2 | 3.7 | 3.6 | 5.0 | 5.0 | — | — | — | 22 |
| **A 60 3_156.0** | 156.0 | 0.80 | 2.3 | 2.2 | 3.7 | 3.6 | 5.0 | 5.0 | — | — | — | 22 |
| **A 60 3_171.5** | 171.5 | 0.60 | 2.1 | 2.0 | 3.5 | 3.4 | 4.7 | 4.7 | — | — | — | 22 |
| **A 60 3_185.8** | 185.8 | 0.60 | 2.1 | 2.0 | 3.5 | 3.4 | 4.7 | 4.7 | — | — | — | 22 |

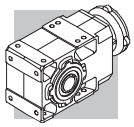
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# A 60

| | i | J (•10-4) [kgm2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | |
| | | 95A | | 80C 95B 110A | | 95C 110B 130A | | 130B 180A | | 180B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **A 60 2_7.9** | 7.9 | — | — | — | — | — | — | 53 | 55 | 54 | 59 |
| **A 60 2_10.3** | 10.3 | — | — | 25 | 26 | 25 | 26 | 40 | 42 | 41 | 46 |
| **A 60 2_12.7** | 12.7 | — | — | 19 | 20 | 19 | 20 | 33 | 35 | 35 | 40 |
| **A 60 2_16.7** | 16.7 | — | — | 12 | 13 | 12 | 13 | 26 | 29 | 28 | 33 |
| **A 60 2_20.6** | 20.6 | — | — | 9.6 | 10 | 9.5 | 10 | 24 | 26 | 26 | 31 |
| | | | | | | | | | | | |
| **A 60 3_25.7** | 25.7 | — | — | 17 | 18 | 17 | 18 | 31 | 33 | 33 | 38 |
| **A 60 3_27.9** | 27.9 | — | — | 17 | 18 | 17 | 18 | 31 | 33 | 33 | 38 |
| **A 60 3_31.7** | 31.7 | — | — | 13 | 14 | 13 | 14 | 27 | 29 | 29 | 34 |
| **A 60 3_34.3** | 34.3 | — | — | 13 | 14 | 13 | 14 | 27 | 29 | 29 | 34 |
| **A 60 3_41.7** | 41.7 | — | — | 9.0 | 9.5 | 8.9 | 9.9 | 23 | 26 | 25 | 30 |
| **A 60 3_45.2** | 45.2 | — | — | 8.9 | 9.4 | 8.9 | 9.9 | 23 | 26 | 25 | 30 |
| **A 60 3_51.3** | 51.3 | — | — | 7.4 | 7.9 | 7.4 | 8.4 | 22 | 24 | 24 | 29 |
| **A 60 3_55.6** | 55.6 | — | — | 7.4 | 7.9 | 7.3 | 8.3 | 21 | 24 | 23 | 28 |
| **A 60 3_65.0** | 65.0 | 6.0 | 6.5 | 6.1 | 6.6 | 6.0 | 7.0 | 20 | 23 | 22 | 27 |
| **A 60 3_70.4** | 70.4 | 6.0 | 6.5 | 6.1 | 6.6 | 6.0 | 7.0 | 20 | 23 | 22 | 27 |
| **A 60 3_79.7** | 79.7 | 4.9 | 5.4 | 5.0 | 5.5 | 4.9 | 5.9 | 19 | 22 | 21 | 26 |
| **A 60 3_86.4** | 86.4 | 4.9 | 5.4 | 5.0 | 5.5 | 4.9 | 5.9 | 19 | 22 | 21 | 26 |
| **A 60 3_99.5** | 99.5 | 4.8 | 5.3 | 4.3 | 4.8 | 4.3 | 5.3 | 19 | 21 | 20 | 25 |
| **A 60 3_107.8** | 107.8 | 4.3 | 4.8 | 4.3 | 4.8 | 4.3 | 5.3 | 18 | 21 | 20 | 25 |
| **A 60 3_123.0** | 123.0 | 3.9 | 4.4 | 4.0 | 4.5 | 3.9 | 4.9 | 18 | 21 | 20 | 25 |
| **A 60 3_133.3** | 133.3 | 3.9 | 4.4 | 3.9 | 4.4 | 3.9 | 4.9 | 18 | 21 | 20 | 25 |
| **A 60 3_144.0** | 144.0 | 3.6 | 4.1 | 3.7 | 4.2 | 3.6 | 4.6 | — | — | — | — |
| **A 60 3_156.0** | 156.0 | 3.6 | 4.1 | 3.7 | 4.2 | 3.6 | 4.6 | — | — | — | — |
| **A 60 3_171.5** | 171.5 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | — | — | — | — |
| **A 60 3_185.8** | 185.8 | 3.4 | 3.9 | 3.5 | 4.0 | 3.4 | 4.4 | — | — | — | — |

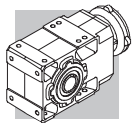
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# A 70

| | i | J (•10-4) [kgm2] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | | |
| | | | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250 | |
| **A 70 3_9.4** | 9.4 | — | — | — | — | — | — | 187 | 185 | 194 | — | — | 150 |
| **A 70 3_10.2** | 10.2 | — | — | — | — | — | — | 183 | 180 | 190 | — | — | 146 |
| **A 70 3_12.1** | 12.1 | — | — | — | — | — | — | 150 | 148 | 157 | — | — | 113 |
| **A 70 3_13.1** | 13.1 | — | — | — | — | — | — | 147 | 145 | 154 | — | — | 111 |
| **A 70 3_15.4** | 15.4 | 45 | — | — | — | — | 64 | 124 | 121 | 161 | — | — | 87 |
| **A 70 3_16.7** | 16.7 | 44 | — | — | — | — | 63 | 122 | 120 | 129 | — | — | 85 |
| **A 70 3_19.7** | 19.7 | 30 | — | — | — | — | 49 | 109 | 107 | — | — | — | 72 |
| **A 70 3_21.3** | 21.3 | 29 | — | — | — | — | 48 | 108 | 106 | — | — | — | 71 |
| **A 70 3_23.5** | 23.5 | — | — | — | — | — | — | 116 | 114 | 123 | — | — | 79 |
| **A 70 3_27.8** | 27.8 | — | — | — | — | — | — | 118 | 116 | 125 | — | — | 81 |
| **A 70 3_30.1** | 30.1 | — | — | — | — | — | — | 117 | 115 | 124 | — | — | 81 |
| **A 70 3_35.4** | 35.4 | 26 | — | — | — | — | 45 | 104 | 102 | 111 | — | — | 67 |
| **A 70 3_38.4** | 38.4 | 25 | — | — | — | — | 44 | 104 | 101 | 111 | — | — | 67 |
| **A 70 3_45.2** | 45.2 | 18 | — | — | — | — | 37 | 97 | 94 | — | — | — | 59 |
| **A 70 3_49.0** | 49.0 | 18 | — | — | — | — | 37 | 96 | 94 | — | — | — | 59 |
| **A 70 3_53.2** | 53.2 | 15 | — | — | — | — | 34 | 93 | 91 | — | — | — | 56 |
| **A 70 3_57.7** | 57.7 | 15 | — | — | — | — | 34 | 93 | 91 | — | — | — | 56 |
| **A 70 3_66.9** | 66.9 | 9.7 | 12 | 12 | 13 | 13 | 29 | 88 | 86 | — | — | — | 51 |
| **A 70 3_72.5** | 72.5 | 9.6 | 12 | 12 | 13 | 13 | 28 | 88 | 86 | — | — | — | 51 |
| **A 70 3_79.3** | 79.3 | 6.8 | 9.4 | 9.3 | 11 | 11 | 26 | 85 | 83 | — | — | — | 48 |
| **A 70 3_85.9** | 85.9 | 6.7 | 9.3 | 9.3 | 11 | 11 | 26 | 85 | 83 | — | — | — | 48 |
| **A 70 3_96.2** | 96.2 | 5.4 | 8.2 | 8.2 | 9.4 | 9.4 | 24 | 84 | 82 | — | — | — | 47 |
| **A 70 3_104.2** | 104.2 | 5.4 | 8.2 | 8.1 | 9.4 | 9.4 | 24 | 84 | 81 | — | — | — | 47 |
| **A 70 3_120.6** | 120.6 | 3.4 | 6.2 | 6.2 | 7.5 | 7.5 | 22 | 82 | 79 | — | — | — | 45 |
| **A 70 3_130.7** | 130.7 | 3.4 | 6.2 | 6.2 | 7.4 | 7.4 | 22 | 82 | 79 | — | — | — | 45 |
| **A 70 3_141.9** | 141.9 | 2.4 | 5.3 | 5.2 | 6.5 | 6.5 | 21 | 81 | 78 | — | — | — | 44 |
| **A 70 3_153.7** | 153.7 | 2.4 | 5.2 | 5.2 | 6.5 | 6.5 | 21 | 81 | 78 | — | — | — | 44 |

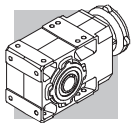
Para los valores de los momentos de inercia correspondientes a los reductores de 4 etapas, consultar con nuestro Servicio Técnico.



# A 80

| | i | J (•10-4) [kgm2] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | | |
| | | | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250 | |
| **A 80 3_9.8** | 9.8 | — | — | — | — | — | — | — | 320 | 333 | 611 | — | 286 |
| **A 80 3_10.7** | 10.7 | — | — | — | — | — | — | — | 309 | 323 | 601 | — | 276 |
| **A 80 3_12.3** | 12.3 | — | — | — | — | — | — | 239 | 239 | 253 | 531 | — | 205 |
| **A 80 3_13.3** | 13.3 | — | — | — | — | — | — | 232 | 233 | 246 | 524 | — | 199 |
| **A 80 3_15.5** | 15.5 | — | — | — | — | — | — | 187 | 185 | 194 | 478 | — | 150 |
| **A 80 3_16.7** | 16.7 | — | — | — | — | — | — | 183 | 180 | 190 | 474 | — | 150 |
| **A 80 3_19.3** | 19.3 | 69 | — | — | — | — | 88 | 147 | 145 | 154 | 440 | — | 111 |
| **A 80 3_20.9** | 20.9 | 66 | — | — | — | — | 85 | 145 | 142 | 152 | 437 | — | 108 |
| **A 80 3_22.6** | 22.6 | — | — | — | — | — | — | — | 205 | 219 | 496 | — | 171 |
| **A 80 3_24.5** | 24.5 | — | — | — | — | — | — | — | 203 | 217 | 494 | — | 169 |
| **A 80 3_28.2** | 28.2 | — | — | — | — | — | — | 165 | 166 | 179 | 457 | — | 132 |
| **A 80 3_30.6** | 30.6 | — | — | — | — | — | — | 164 | 164 | 178 | 456 | — | 130 |
| **A 80 3_35.5** | 35.5 | — | — | — | — | — | — | 140 | 138 | 147 | 432 | — | 104 |
| **A 80 3_38.5** | 38.5 | — | — | — | — | — | — | 140 | 137 | 147 | 431 | — | 103 |
| **A 80 3_44.5** | 44.5 | 39 | — | — | — | — | 58 | 118 | 115 | 125 | 410 | — | 81 |
| **A 80 3_48.2** | 48.2 | 39 | — | — | — | — | 58 | 117 | 115 | 124 | 410 | — | 90 |
| **A 80 3_55.2** | 55.2 | 29 | — | — | — | — | 48 | 108 | 105 | 136 | 399 | — | 70 |
| **A 80 3_59.8** | 59.8 | 29 | — | — | — | — | 48 | 107 | 105 | 136 | 399 | — | 70 |
| **A 80 3_66.8** | 66.8 | 22 | — | — | — | — | 41 | 101 | 98 | 128 | 391 | — | 63 |
| **A 80 3_72.4** | 72.4 | 22 | — | — | — | — | 41 | 100 | 98 | 128 | 391 | — | 63 |
| **A 80 3_82.3** | 82.3 | 15 | 17 | 17 | 18 | 18 | 34 | 94 | 91 | 120 | 384 | — | 56 |
| **A 80 3_89.2** | 89.2 | 15 | 17 | 17 | 18 | 18 | 34 | 93 | 91 | 120 | 386 | — | 56 |
| **A 80 3_96.0** | 96.0 | 14 | 16 | 16 | 17 | 17 | 32 | 92 | 90 | 119 | 382 | — | 55 |
| **A 80 3_104.0** | 104.0 | 13 | 16 | 16 | 17 | 17 | 32 | 92 | 89 | 119 | 382 | — | 55 |
| **A 80 3_116.0** | 116.0 | 9.1 | 12 | 12 | 13 | 13 | 28 | 87 | 85 | — | — | — | 50 |
| **A 80 3_125.6** | 125.6 | 9.1 | 12 | 12 | 13 | 13 | 28 | 87 | 85 | — | — | — | 50 |
| **A 80 3_144.7** | 144.7 | 5.4 | 8.3 | 8.2 | 10 | 10 | 24 | 84 | 82 | — | — | — | 47 |
| **A 80 3_156.8** | 156.8 | 5.4 | 3.0 | 2.9 | 4.2 | 4.2 | 19 | 78 | 76 | — | — | — | 41 |

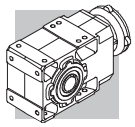
Para los valores de los momentos de inercia correspondientes a los reductores de 4 etapas, consultar con nuestro Servicio Técnico.



# A 90

| | i | J (•10-4) [kgm2] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | | |
| | | | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250 | |
| **A 90 3_9.7** | 9.7 | — | — | — | — | — | — | — | 597 | 611 | 889 | 918 | 898 |
| **A 90 3_10.5** | 10.5 | — | — | — | — | — | — | — | 575 | 589 | 867 | 896 | 876 |
| **A 90 3_12.6** | 12.6 | — | — | — | — | — | — | — | 402 | 416 | 693 | 723 | 703 |
| **A 90 3_13.7** | 13.7 | — | — | — | — | — | — | — | 389 | 403 | 681 | 710 | 690 |
| **A 90 3_15.6** | 15.6 | — | — | — | — | — | — | — | 306 | 319 | 597 | 627 | 607 |
| **A 90 3_16.9** | 16.9 | — | — | — | — | — | — | — | 297 | 311 | 589 | 618 | 598 |
| **A 90 3_19.4** | 19.4 | — | — | — | — | — | — | 236 | 234 | 243 | 527 | 559 | 530 |
| **A 90 3_21.0** | 21.0 | — | — | — | — | — | — | 231 | 228 | 238 | 522 | 553 | 524 |
| **A 90 3_22.3** | 22.3 | — | — | — | — | — | — | — | 326 | 340 | 618 | 647 | 627 |
| **A 90 3_24.1** | 24.1 | — | — | — | — | — | — | — | 322 | 336 | 614 | 643 | 623 |
| **A 90 3_29.1** | 29.1 | — | — | — | — | — | — | — | 243 | 257 | 535 | 564 | 544 |
| **A 90 3_31.5** | 31.5 | — | — | — | — | — | — | — | 241 | 254 | 532 | 562 | 542 |
| **A 90 3_35.8** | 35.8 | — | — | — | — | — | — | — | 201 | 215 | 493 | 522 | 502 |
| **A 90 3_38.8** | 38.8 | — | — | — | — | — | — | — | 200 | 213 | 491 | 521 | 500 |
| **A 90 3_44.6** | 44.6 | — | — | — | — | — | — | 169 | 166 | 176 | 460 | 491 | 462 |
| **A 90 3_48.3** | 48.3 | — | — | — | — | — | — | 168 | 165 | 175 | 459 | 490 | 461 |
| **A 90 3_55.0** | 55.0 | 66 | — | — | — | — | 85 | 144 | 142 | 151 | 437 | 468 | 438 |
| **A 90 3_59.6** | 59.6 | 66 | — | — | — | — | 84 | 144 | 141 | 151 | 436 | 468 | 437 |
| **A 90 3_68.8** | 68.8 | 48 | — | — | — | — | 67 | 126 | 124 | 154 | 418 | 449 | 416 |
| **A 90 3_74.5** | 74.5 | 47 | — | — | — | — | 66 | 126 | 123 | 154 | 417 | 449 | 416 |
| **A 90 3_80.4** | 80.4 | 43 | — | — | — | — | 62 | 121 | 119 | 149 | 412 | 443 | 412 |
| **A 90 3_87.1** | 87.1 | 43 | — | — | — | — | 62 | 121 | 119 | 148 | 412 | 443 | 412 |
| **A 90 3_98.6** | 98.6 | 28 | 30 | 30 | 32 | 32 | 47 | 106 | 104 | 134 | 397 | 428 | 399 |
| **A 90 3_106.8** | 106.8 | 28 | 30 | 30 | 31 | 31 | 47 | 106 | 104 | 133 | 397 | 428 | 399 |
| **A 90 3_116.9** | 116.9 | 23 | 25 | 25 | 26 | 26 | 41 | 101 | 99 | 128 | 391 | 423 | 394 |
| **A 90 3_126.6** | 126.6 | 22 | 25 | 25 | 26 | 26 | 41 | 101 | 98 | 128 | 391 | 422 | 394 |
| **A 90 3_139.4** | 139.4 | 15 | 17 | 17 | 19 | 19 | 33 | 93 | 91 | — | — | — | 386 |
| **A 90 3_151.0** | 151.0 | 14 | 3.0 | 3.0 | 4.3 | 4.3 | 19 | 79 | 76 | — | — | — | 372 |

Para los valores de los momentos de inercia correspondientes a los reductores de 4 etapas, consultar con nuestro Servicio Técnico.



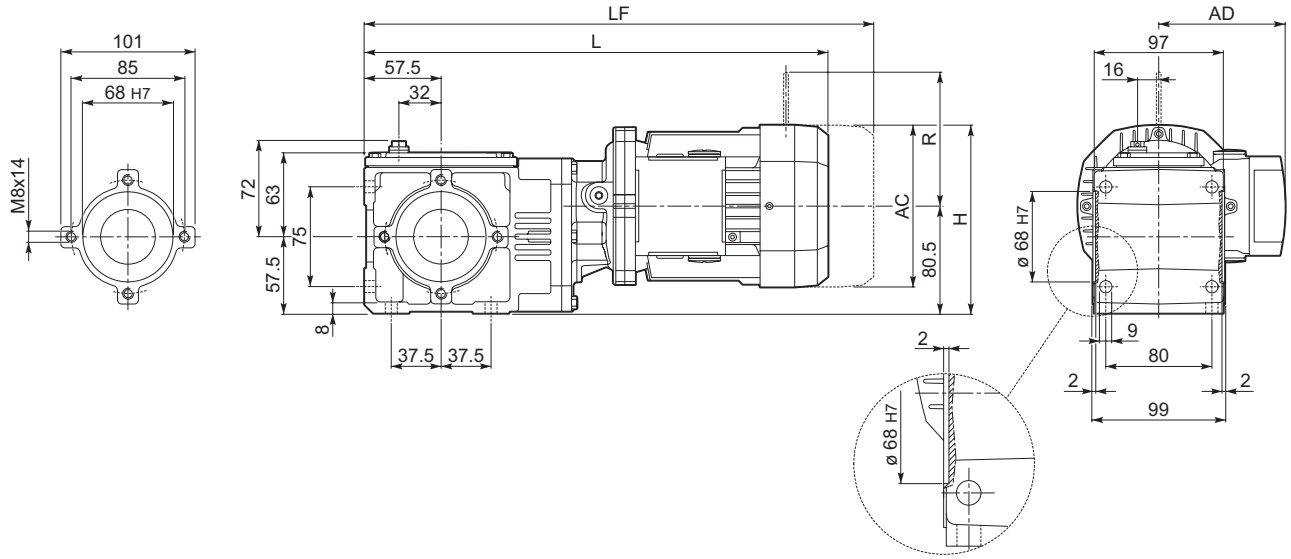
## 44 RELACIONES EXACTAS

| $i_N$ | A 05 | A 10 | A 20 | A 30 | A 35 | A 41 | A 50 | A 55 | A 60 | A 70 | A 80 | A 90 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.0 | | | | | | | | 4.94505 | | | | |
| 5.6 | 5.46559 | 5.46559 | 5.35117 | 5.41311 | 5.41311 | 5.24476 | | | | | | |
| 6.3 | 6.33484 | 6.33484 | 6.53846 | 6.41026 | 6.41026 | | | 6.41026 | | | | |
| 7.1 | 7.21154 | 7.21154 | 7.28745 | 7.02341 | 7.02341 | 7.12251 | | | | | | |
| 8.0 | 8.51648 | 8.51648 | 8.37104 | 8.46154 | 8.46154 | 8.33333 | 7.73684 | 8.46154 | 7.86420 | | | |
| 9.0 | 9.61538 | 9.61538 | 9.37500 | 9.31174 | 9.31174 | 9.19732 | | | | 9.43946 | | 9.67545 |
| 10.0 | 10.55639 | 10.55639 | 10.33540 | 10.45503 | 10.63348 | 10.12987 | 9.73401 | 10.35503 | 10.31579 | 10.22609 | 9.83278 | 10.48174 |
| 11.2 | | | | 11.77885 | 11.77885 | 11.74089 | | | | 12.08027 | 10.65217 | 12.64214 |
| 12.5 | 12.30769 | 12.30769 | 11.96581 | | 13.06878 | | 13.10700 | 13.07692 | 12.70370 | 13.08696 | 12.27130 | 13.69565 |
| 14.0 | 13.92857 | 13.92857 | 14.07519 | 13.56522 | 15.47619 | 13.75661 | | | | 15.40468 | 13.29391 | 15.57512 |
| 16.0 | 16.44898 | 16.44898 | 16.16807 | 16.34286 | 16.95652 | 16.09524 | 16.57005 | 15.68047 | 16.73663 | 16.68841 | 15.45151 | 16.87304 |
| 18.0 | 18.57143 | 18.57143 | 18.10714 | 17.98496 | | 17.76398 | | | | | 19.33779 | 19.38462 |
| 20.0 | 21.35714 | 21.35714 | 21.22449 | 20.53782 | 20.42857 | | 20.91813 | 19.23077 | 20.5942 | 19.66555 | 20.94928 | 21.00000 |
| 22.4 | 23.77143 | 23.77143 | 23.11111 | 22.75000 | 22.48120 | 22.67669 | | | | 21.30435 | 22.61538 | 22.25354 |
| 25.0 | 25.46939 | 25.46939 | 26.46429 | 26.53061 | 25.67227 | | 24.04795 | 23.79021 | 25.71012 | 23.52000 | 24.50000 | 24.10800 |
| 28.0 | 28.57143 | 28.57143 | 29.21905 | 29.30159 | 28.43750 | 28.32143 | 26.43733 | | 27.85263 | 27.78462 | 28.22400 | 29.07692 |
| 31.5 | 32.19048 | 32.19048 | 31.30612 | 33.42857 | 33.16327 | | 32.38095 | 29.93134 | 31.66154 | 30.10000 | 30.57600 | 31.50000 |
| 35.5 | 35.11688 | 35.11688 | 35.42857 | 36.64762 | 36.62698 | 35.90476 | 35.59829 | | 34.30000 | 35.43077 | 35.53846 | 35.82277 |
| 40.0 | 40.85714 | 40.85714 | 39.61905 | 39.26531 | 41.78571 | 45.06667 | 40.93645 | 40.30303 | 41.71282 | 38.38333 | 38.50000 | 38.80800 |
| 45.0 | 45.39683 | 45.39683 | 43.22078 | 43.42857 | 45.80952 | 48.28571 | 45.00386 | | 45.18889 | 45.23077 | 44.47692 | 44.58462 |
| 50.0 | 51.25714 | 51.25714 | 48.28571 | 48.28571 | 49.08163 | 53.14286 | 51.67843 | 50.95166 | 51.32709 | 49.00000 | 48.18333 | 48.30000 |
| 56.0 | 58.60317 | 58.60317 | 53.65079 | 52.67532 | 54.28571 | 58.80952 | 56.81314 | | 55.60435 | 53.23314 | 55.18154 | 55.03077 |
| 63.0 | 65.92857 | 65.92857 | 63.14286 | 59.42857 | 60.35714 | 64.15584 | 63.89011 | 64.32168 | 64.98947 | 66.94154 | 66.80237 | 59.61667 |
| 71.0 | | | 70.98413 | 66.03175 | 65.84416 | 71.31429 | 70.23817 | | 70.40526 | 72.52000 | 72.36923 | 68.75077 |
| 80.0 | 76.40816 | 76.40816 | 79.85714 | 76.51429 | 74.28571 | 79.23810 | 81.45055 | 79.52098 | 79.71923 | 79.32781 | 82.32000 | 80.37160 |
| 90.0 | 91.61905 | 91.61905 | 92.32653 | 86.66667 | 82.53968 | 92.76828 | 89.54339 | | 86.36250 | 85.93846 | 89.18000 | 87.06923 |
| 100.0 | | | | 97.50000 | 95.64286 | | 99.53407 | 101.37762 | 99.50769 | 96.21818 | 104.03077 | 98.60308 |
| 112.2 | | | 109.16518 | 109.07029 | 105.54155 | 115.86039 | 109.42367 | 123.88531 | 107.80000 | 104.23636 | 115.95524 | 116.90414 |
| 125.0 | | | 120.52857 | 120.46208 | 116.90972 | | 129.67046 | 132.73427 | 123.02769 | 120.61538 | 125.61818 | 126.64615 |
| 140.0 | | | 146.14286 | 137.42857 | 136.33787 | 146.88312 | 140.61938 | 146.80796 | 144.04260 | 141.86014 | 144.73846 | 139.39301 |
| 160.0 | | | 163.42857 | 161.42404 | 150.57760 | | 154.59118 | 160.43706 | 171.46573 | 169.75499 | 156.80000 | 166.12694 |
| 180.0 | | | 178.28571 | 178.53968 | 171.78571 | 184.36364 | 173.36264 | 175.02225 | 185.75455 | 183.90123 | 171.29752 | 179.97085 |
| 200.0 | | | 199.17857 | 198.50794 | 201.78005 | 197.53247 | 190.58777 | 194.19860 | 208.73017 | | 214.73193 | 209.01044 |
| 225.0 | | | 221.30952 | 216.55411 | 223.17460 | 217.40260 | 231.98700 | 208.05260 | 226.12435 | 220.25418 | 232.62626 | 226.42797 |
| 250.0 | | | 260.46429 | 244.31746 | 248.13492 | 240.58442 | 260.88462 | | 264.29053 | 238.60870 | | |
| 280.0 | | | 292.80952 | 271.46384 | 270.69264 | 291.74026 | 286.80584 | 262.64685 | 286.31474 | 292.01619 | 277.28428 | 281.43590 |
| 315.0 | | | 329.41071 | 314.55873 | 305.39683 | 324.15584 | 332.58974 | | 324.19154 | 316.35088 | 300.39130 | 304.88889 |
| 355.0 | | | | 356.29630 | 339.32981 | 376.83117 | 365.63552 | 324.71066 | 351.20750 | 369.38462 | 353.96864 | 355.79521 |
| 400.0 | | | 380.84694 | 400.83333 | 393.19841 | | 406.43077 | | 404.66462 | 400.16667 | 383.46603 | 385.44482 |
| 450.0 | | | | | | | 446.81331 | 413.95862 | 438.38667 | 475.76068 | 442.07937 | 449.15802 |
| 500.0 | | | | | | | 481.63314 | 505.86503 | 500.31262 | 515.40741 | 478.91932 | 486.58785 |
| 560.0 | | | | | | | 574.19580 | 541.99825 | 585.77325 | 595.03590 | 560.45035 | 555.29467 |
| 630.0 | | | | | | | 631.24731 | 655.11801 | 634.58769 | 644.62222 | 607.15455 | 601.56923 |
| 710.0 | | | | | | | 707.89744 | 714.67419 | 697.29399 | 705.13609 | 703.46182 | 707.91953 |
| 800.0 | | | | | | | 778.23340 | 792.97762 | 755.40182 | 855.27273 | 829.52598 | 766.91282 |
| 900.0 | | | | | | | | | | 926.54545 | 898.65315 | 865.09065 |
| 1000.0 | | | | | | | | | | 1072.13675 | 1001.43166 | 1025.1594 |
| 1125.0 | | | | | | | | | | 1161.48148 | 1084.88430 | 1110.58935 |
| 1250.0 | | | | | | | | | | 1242.33846 | 1236.85594 | 1222.17967 |
| 1400.0 | | | | | | | | | | 1345.86667 | 1339.92727 | 1324.02797 |
| 1600.0 | | | | | | | | | | 1583.07692 | 1557.66545 | 1506.76450 |
| 1800.0 | | | | | | | | | | 1715.00000 | | 1632.32821 |

2x 3x 4x

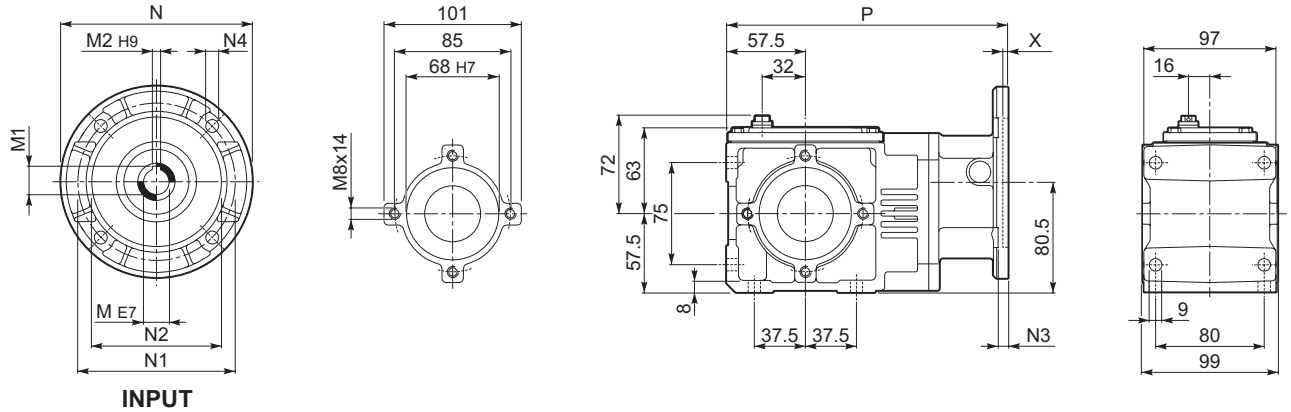
## 45 DIMENSIONES

# A 05...M/ME



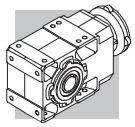

| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **A 05 2** | **S05** | **M05** | 121 | 141 | 360.5 | 95 | 7.5 | 426.5 | 9 | 96 | 122 | 116 | 95 |
| **A 05 2** | **S1** | **M1** | 138 | 149.5 | 389.5 | 108 | 11.5 | 450.5 | 14 | 103 | 135 | 124 | 108 |
| **A 05 2** | **S2** | **ME2S** | 156 | 158.5 | 418.5 | 119 | 15.5 | — | — | — | — | — | — |

# A 05...P(IEC)

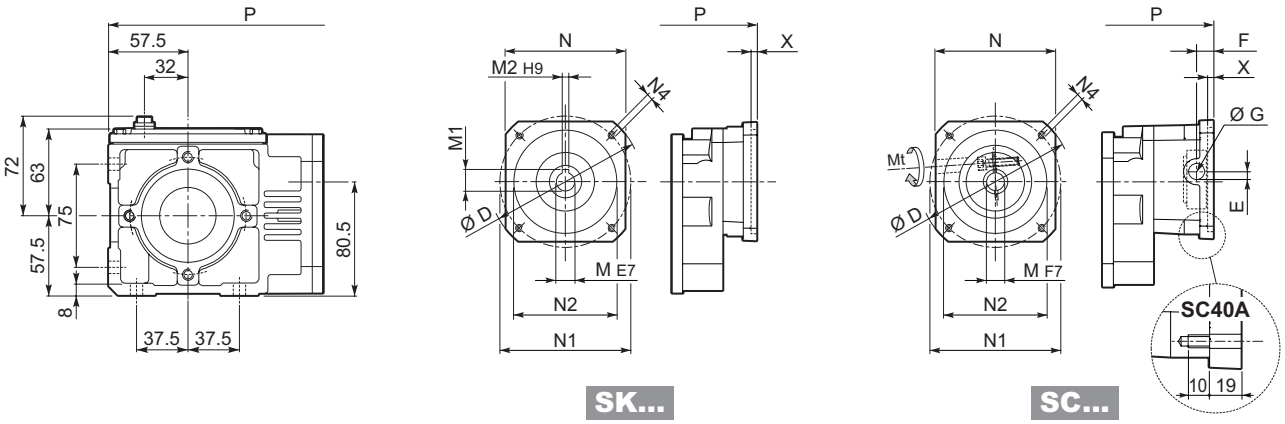



| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 05 2** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | 7 | 9.5 | 3.5 | 206 | 5 |
| **A 05 2** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | 7 | 9.5 | 4 | 213 | 5 |
| **A 05 2** | **P80** | 19 | 20.8# | 6 | 200 | 165 | 130 | 7 | 11.5 | 4 | 223 | 5.5 |

# Chaveta rebajada suministrada por Bonfiglioli.



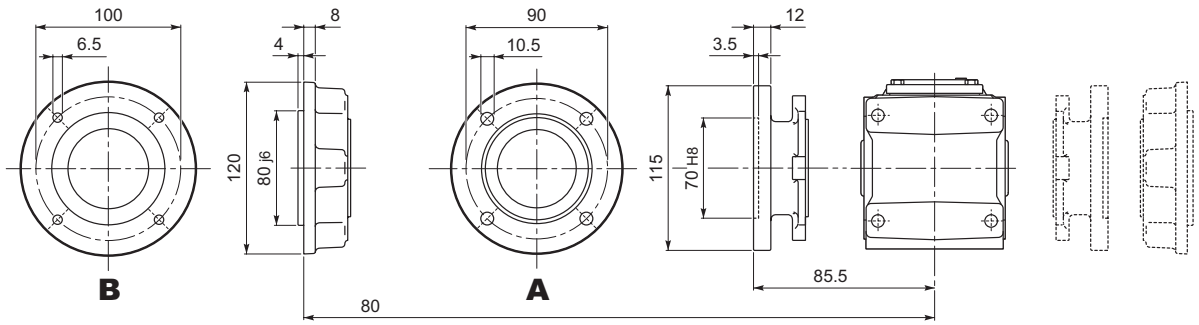
# A 05...SK / SC

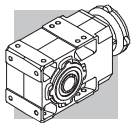



| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 05 2** | **SK40A** | 74 | 9 | 10.4 | 3 | 55 | 63 | 40 | M5x10 | 3 | 207.5 | 5 |
| **A 05 2** | **SK60A** | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | 206 | 5 |
| **A 05 2** | **SK60B** | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | 213 | 5 |
| **A 05 2** | **SK80A** | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | 213 | 5 |

| | | Mt | | D | E | F | G | M | N | N1 | N2 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 05 2** | **SC40A** | M5 | 15 Nm | 74 | 10.5 | 9.5 | 12.5 | 9 | 55 | 63 | 40 | M5x10 | 3 | 226.5 | 6 |
| **A 05 2** | **SC60A** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | 233 | 6 |
| **A 05 2** | **SC60B** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | 233 | 6 |
| **A 05 2** | **SC80A** | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | 233 | 6 |

# A 05...F...

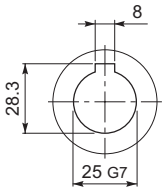


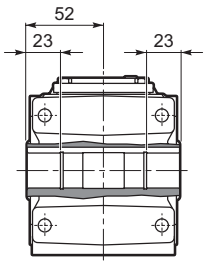


# A 05

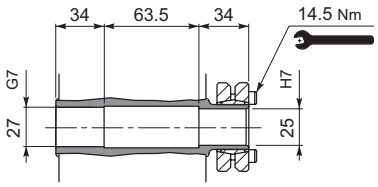
## A 05...UH

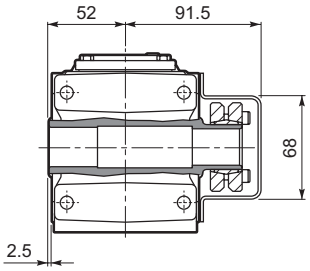
**H25**



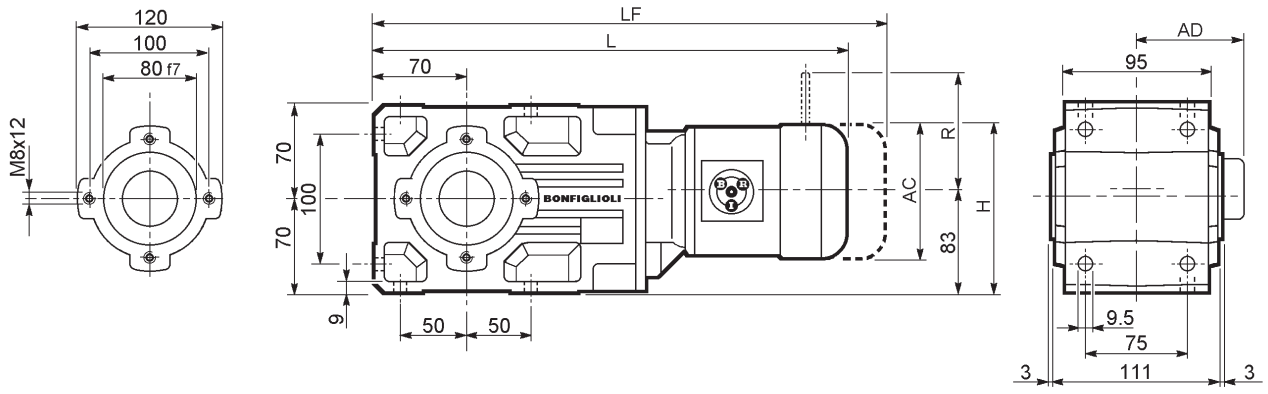




## A 05...US

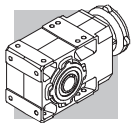


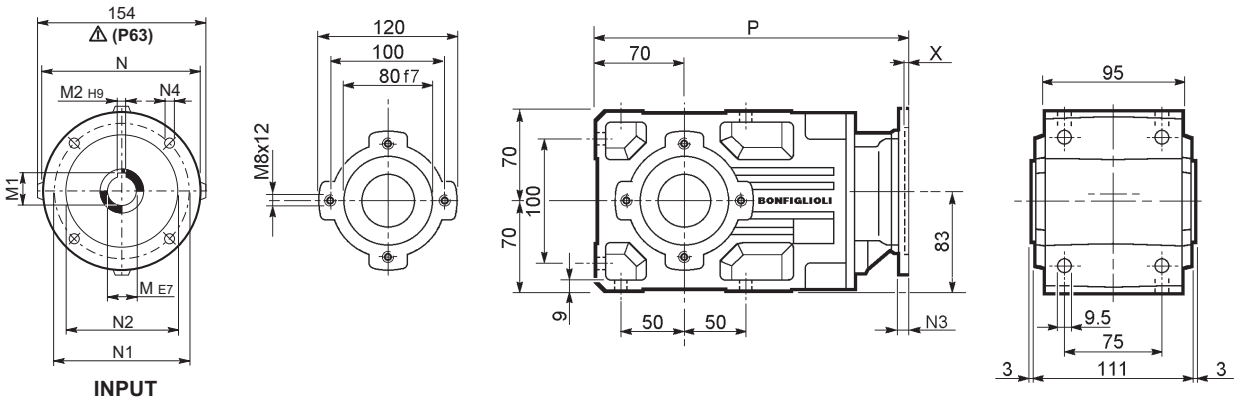
# A 10...M/ME




| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **A 10 2** | **S05** | **M05** | 121 | 143.5 | 408.5 | 95 | 12 | 474.5 | 14 | 96 | 122 | 116 | 95 |
| **A 10 2** | **S1** | **M1** | 138 | 152 | 437.5 | 108 | 14 | 498.5 | 17 | 103 | 135 | 124 | 108 |
| **A 10 2** | **S2** | **ME2S** | 156 | 161 | 466.5 | 119 | 18 | — | — | — | — | — | — |
| **A 10 2** | **S3** | **ME3S** | 195 | 180.5 | 509.5 | 142 | 24.5 | — | — | — | — | — | — |
| **A 10 2** | **S3** | **ME3L** | 195 | 180.5 | 541.5 | 142 | 30 | — | — | — | — | — | — |

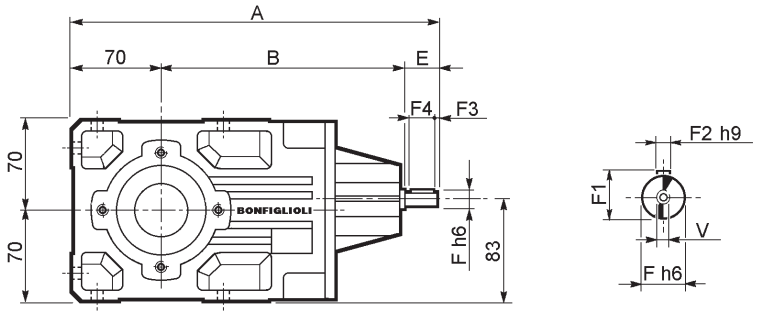


# A 10...P(IEC)



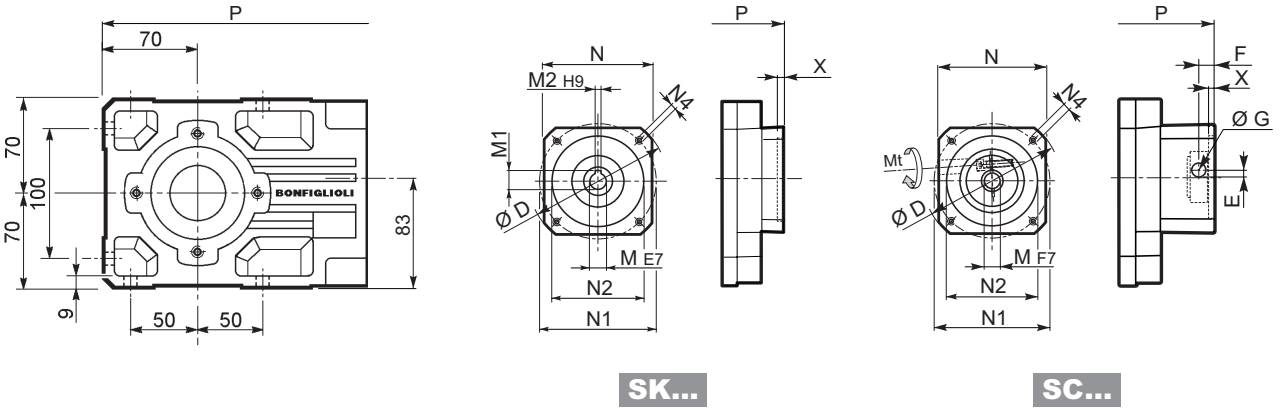

| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 10 2** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x10 | 4 | 282.5 | 8 |
| **A 10 2** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x10 | 4.5 | 282.5 | 9 |
| **A 10 2** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 302 | 9 |
| **A 10 2** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 302 | 9 |
| **A 10 2** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 312 | 13 |
| **A 10 2** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 312 | 13 |

# A 10...HS




| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 10 2** | **HS** | 289.5 | 179.5 | 40 | 16 | 18 | 5 | 2.5 | 35 | M6x16 | 7.8 |

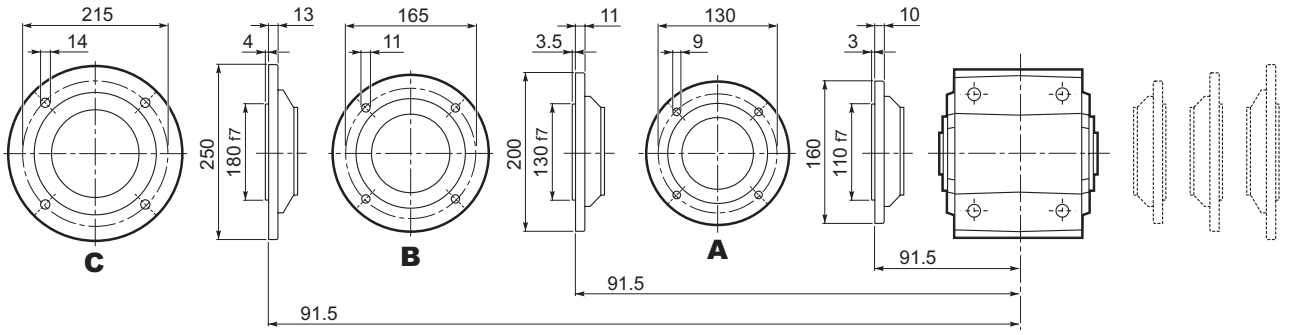
# A 10...SK / SC




| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 10 2** | **SK60A** | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | 254 | 8 |
| **A 10 2** | **SK60B** | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | 261 | 8 |
| **A 10 2** | **SK80A** | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | 261 | 8 |
| **A 10 2** | **SK80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 302 | 9 |
| **A 10 2** | **SK95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 302 | 9 |
| **A 10 2** | **SK95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 302 | 9 |
| **A 10 2** | **SK95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 302 | 9 |
| **A 10 2** | **SK110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 302 | 9 |
| **A 10 2** | **SK110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 302 | 9 |

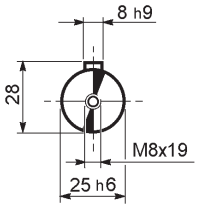
| | | Mt | | D | E | F | G | M | N | N1 | N2 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 10 2** | **SC60A** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | 281 | 9 |
| **A 10 2** | **SC60B** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | 281 | 9 |
| **A 10 2** | **SC80A** | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | 281 | 9 |
| **A 10 2** | **SC80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 325.5 | 10 |
| **A 10 2** | **SC95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 325.5 | 10 |
| **A 10 2** | **SC95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 325.5 | 10 |
| **A 10 2** | **SC95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 325.5 | 10 |
| **A 10 2** | **SC110A** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 325.5 | 12 |
| **A 10 2** | **SC110B** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 325.5 | 12 |

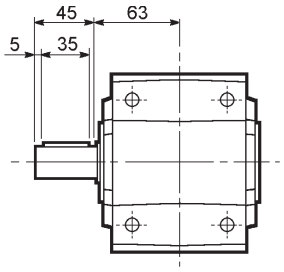
# A 10...F...



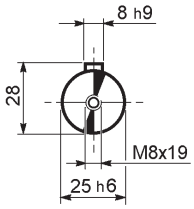
# A 10

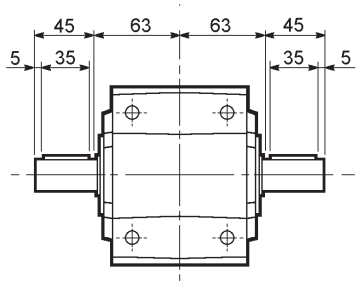
## A 10...UR



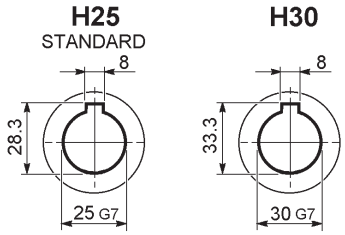



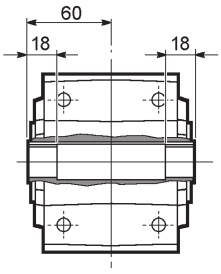

## A 10...UD



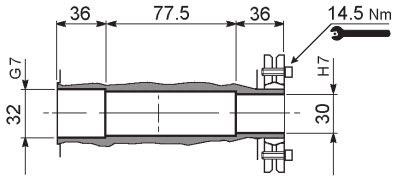



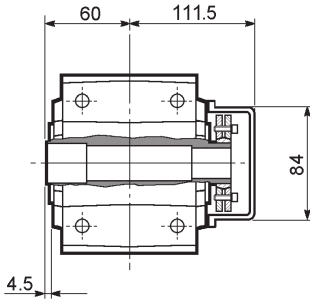

## A 10...UH



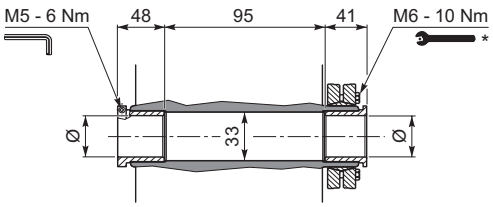

## A 10...US

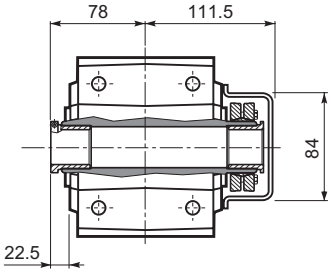


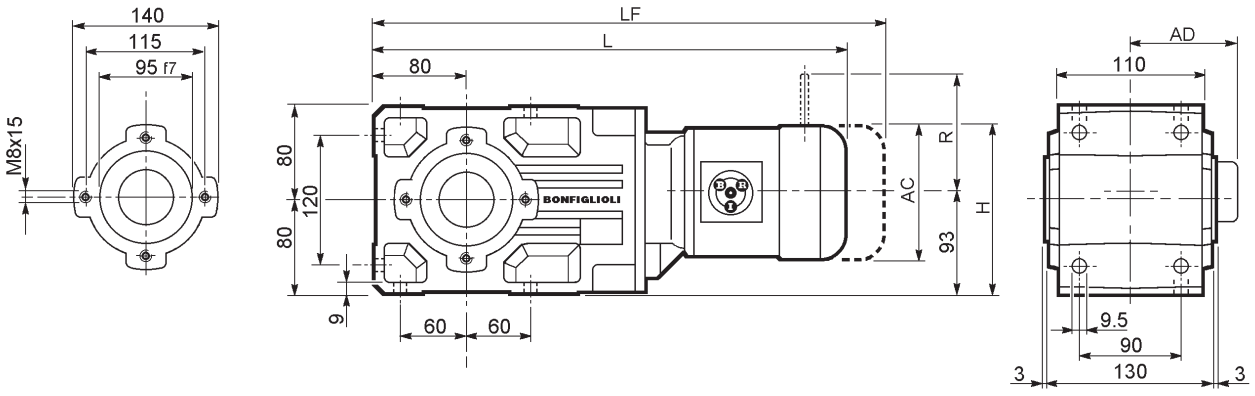

## A 10...QF

| | Ø |
|---|---|
| **QF25** | 25 |
| **QF30** | 30 |

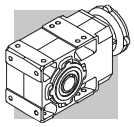


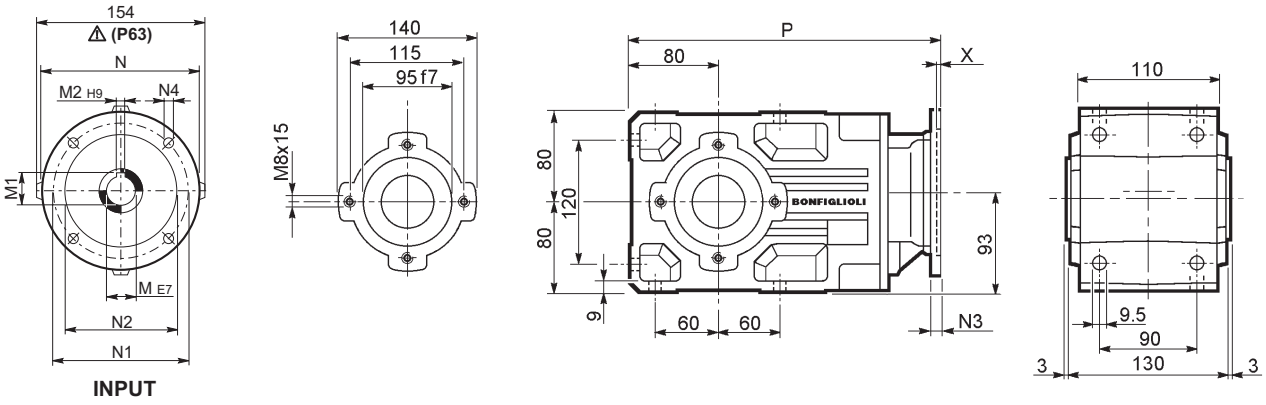

* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.




| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **A 20 2** | **S05** | **M05** | 121 | 143.5 | 432 | 95 | 16 | 498 | 18 | 96 | 122 | 116 | 95 |
| **A 20 2** | **S1** | **M1** | 138 | 152 | 461 | 108 | 18 | 522 | 21 | 103 | 135 | 124 | 108 |
| **A 20 2** | **S2** | **ME2S** | 156 | 161 | 490 | 119 | 22 | — | — | — | — | — | — |
| **A 20 2** | **S3** | **ME3S** | 195 | 180.5 | 533 | 142 | 28.5 | — | — | — | — | — | — |
| **A 20 2** | **S3** | **ME3L** | 195 | 180.5 | 565 | 142 | 34 | — | — | — | — | — | — |
| **A 20 3** | **S05** | **M05** | 121 | 143.5 | 457.5 | 95 | 16 | 553.5 | 18 | 96 | 122 | 116 | 95 |
| **A 20 3** | **S1** | **M1** | 138 | 152 | 486.5 | 108 | 19 | 577.5 | 21 | 103 | 135 | 124 | 108 |
| **A 20 3** | **S2** | **ME2S** | 156 | 161 | 545.5 | 119 | 23 | — | — | — | — | — | — |
| **A 20 3** | **S3** | **ME3S** | 195 | 180.5 | 588.5 | 142 | 29.5 | — | — | — | — | — | — |
| **A 20 3** | **S3** | **ME3L** | 195 | 180.5 | 620.5 | 142 | 35 | — | — | — | — | — | — |

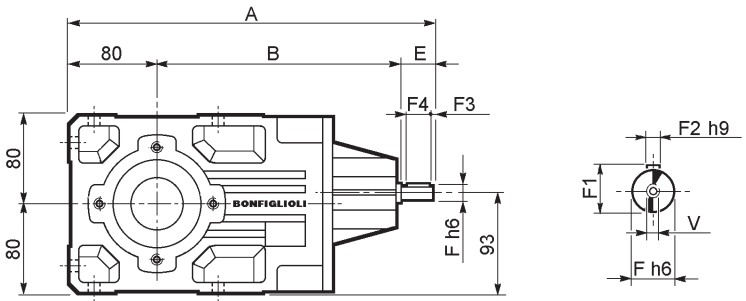


## A 20...P(IEC)

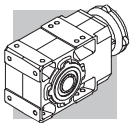



| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 20 2** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 306 | 12 |
| **A 20 2** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 306 | 12 |
| **A 20 2** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 325.5 | 13 |
| **A 20 2** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 325.5 | 13 |
| **A 20 2** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 335.5 | 17 |
| **A 20 2** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 335.5 | 17 |
| **A 20 3** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 361.5 | 13 |
| **A 20 3** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 361.5 | 13 |
| **A 20 3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 381 | 14 |
| **A 20 3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 381 | 14 |
| **A 20 3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 391 | 18 |
| **A 20 3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 391 | 18 |

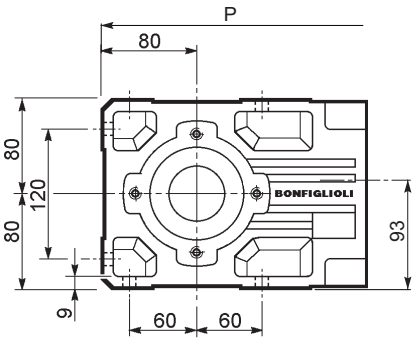
## A 20...HS

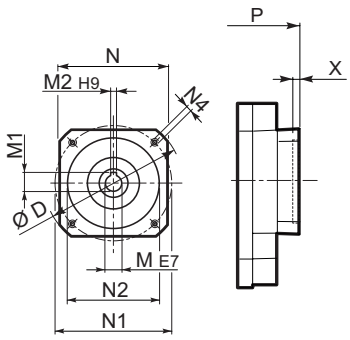



| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 20 2** | **HS** | 356 | 236 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 11.9 |
| **A 20 3** | | 368.5 | 248.5 | 40 | 16 | 18 | 5 | 2.5 | 35 | M6x16 | 12.2 |

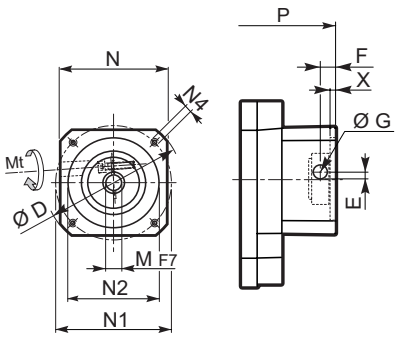


# A 20...SK / SC




SK...

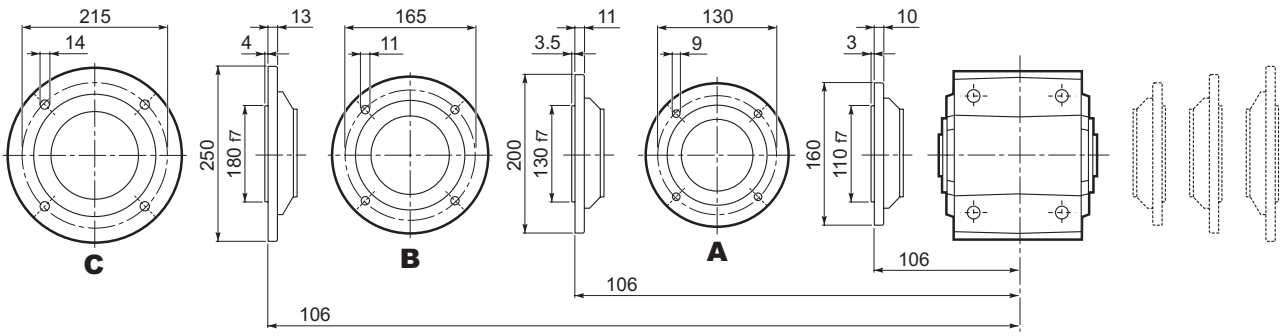


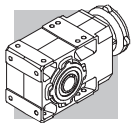

SC...

| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P 2x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 20 2/3** | **SK60A** | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | 277.5 | 333 | 11/12 |
| **A 20 2/3** | **SK60B** | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | 284.5 | 340 | 12/13 |
| **A 20 2/3** | **SK80A** | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | 284.5 | 340 | 12/13 |
| **A 20 2/3** | **SK80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 325.5 | 381 | 13/14 |
| **A 20 2/3** | **SK95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 325.5 | 381 | 13/14 |
| **A 20 2/3** | **SK95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 325.5 | 381 | 13/14 |
| **A 20 2/3** | **SK95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 325.5 | 381 | 13/14 |
| **A 20 2/3** | **SK110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 325.5 | 381 | 13/14 |
| **A 20 2/3** | **SK110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 325.5 | 381 | 13/14 |

| | | Mt | | D | E | F | G | M | N | N1 | N2 | N4 | X | P 2x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 20 2/3** | **SC60A** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | 304.5 | 360 | 12/13 |
| **A 20 2/3** | **SC60B** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | 304.5 | 360 | 13/14 |
| **A 20 2/3** | **SC80A** | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | 304.5 | 360 | 13/14 |
| **A 20 2/3** | **SC80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 349 | 404.5 | 14/15 |
| **A 20 2/3** | **SC95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 349 | 404.5 | 14/15 |
| **A 20 2/3** | **SC95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 349 | 404.5 | 14/15 |
| **A 20 2/3** | **SC95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 349 | 404.5 | 14/15 |
| **A 20 2/3** | **SC110A** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 349 | 404.5 | 15/16 |
| **A 20 2/3** | **SC110B** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 349 | 404.5 | 15/16 |

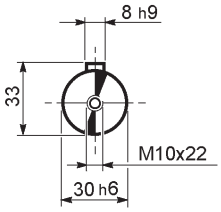
# A 20...F...

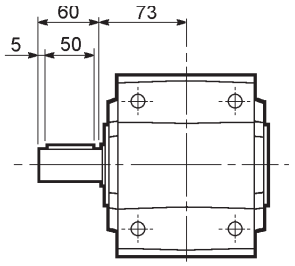




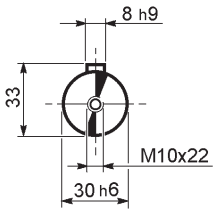
# A 20

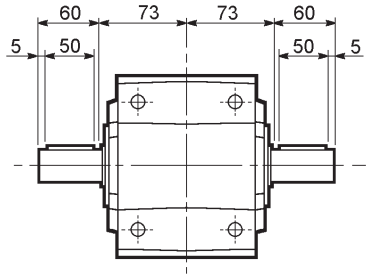
## A 20...UR



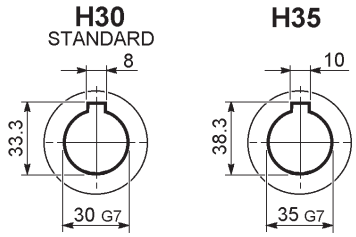



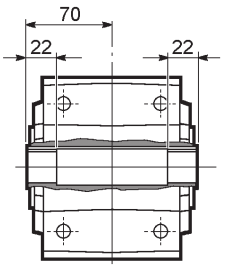

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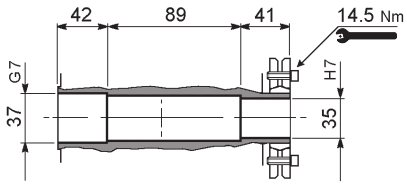



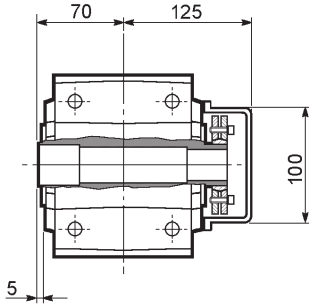

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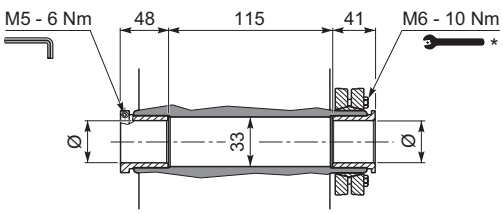

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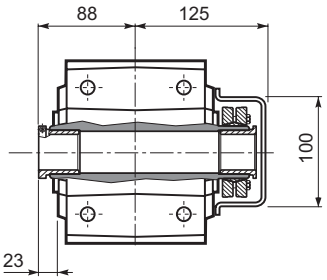


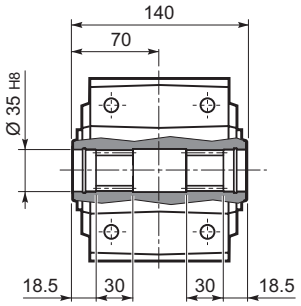

## A 20...QF

| | Ø |
|---|---|
| **QF25** | 25 |
| **QF30** | 30 |



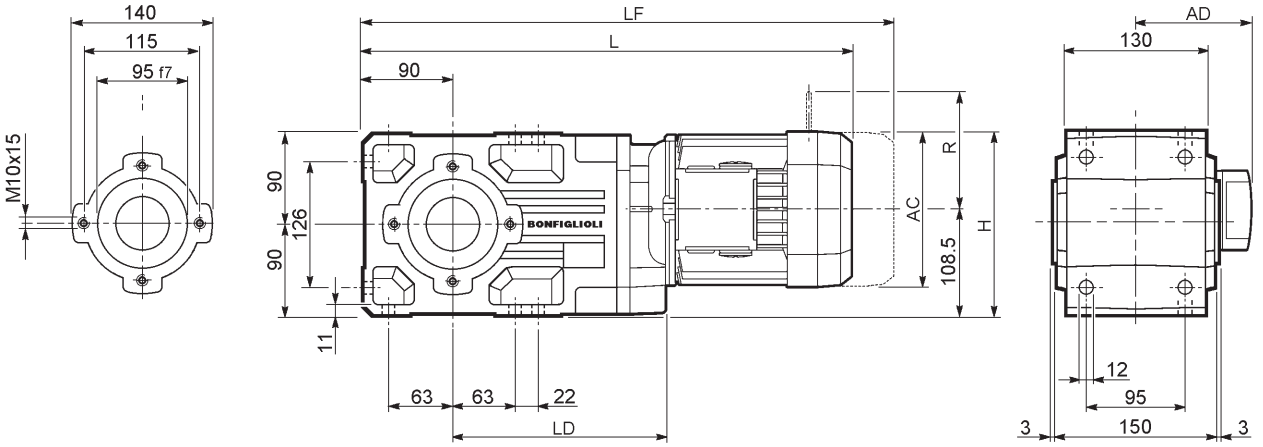




## A 20...UV

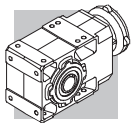



* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.

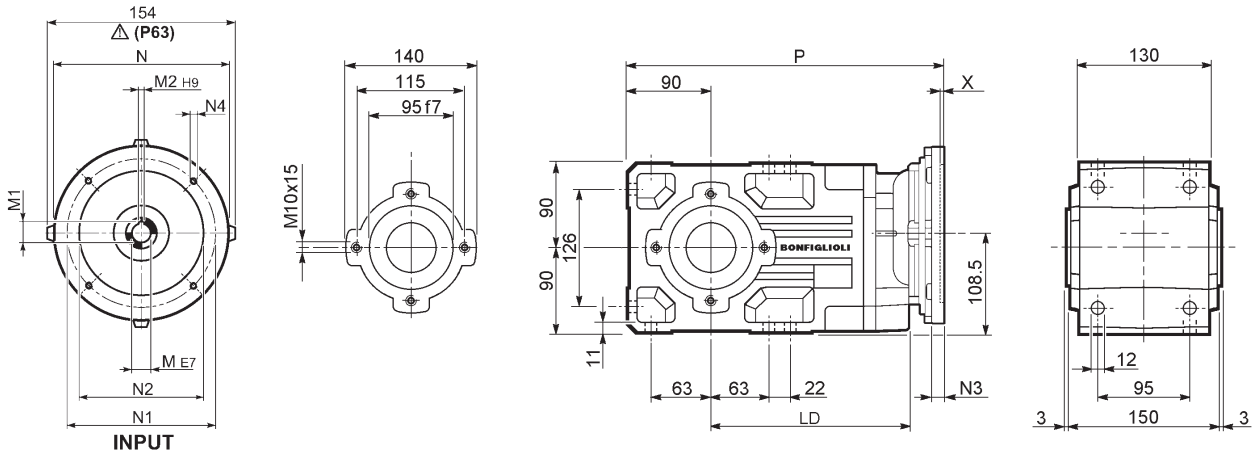
# A 30...M/ME




| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| **A 30 2** | **S1** | **M1** | 138 | 177.5 | 488 | 201 | 108 | 22 | 549 | 24 | 103 | 135 | 124 | 108 |
| **A 30 2** | **S2** | **ME2S** | 156 | 186.5 | 517 | 213 | 119 | 25 | — | — | — | — | — | — |
| **A 30 2** | **S3** | **ME3S** | 195 | 206 | 560 | 223 | 142 | 31.5 | — | — | — | — | — | — |
| **A 30 2** | **S3** | **ME3L** | 195 | 206 | 592 | 223 | 142 | 38 | — | — | — | — | — | — |
| **A 30 3** | **S05** | **M05** | 121 | 169 | 516.5 | — | 95 | 21 | 582.5 | 22 | 96 | 122 | 116 | 95 |
| **A 30 3** | **S1** | **M1** | 138 | 177.5 | 545.5 | — | 108 | 23 | 606.5 | 26 | 103 | 135 | 124 | 108 |
| **A 30 3** | **S2** | **ME2S** | 156 | 186.5 | 574.5 | — | 119 | 25 | — | — | — | — | — | — |
| **A 30 3** | **S3** | **ME3S** | 195 | 206 | 617.5 | — | 142 | 31.5 | — | — | — | — | — | — |
| **A 30 3** | **S3** | **ME3L** | 195 | 206 | 649.5 | — | 142 | 38 | — | — | — | — | — | — |

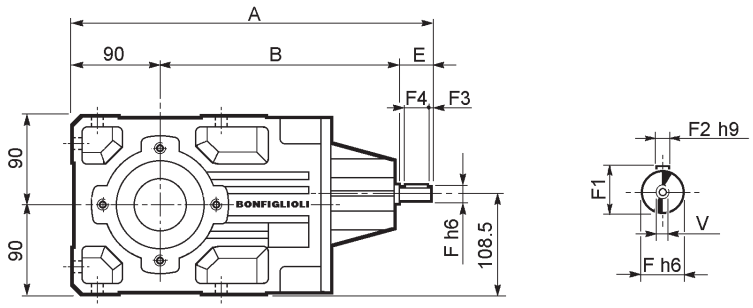


## A 30...P(IEC)




| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 30 2** | **P63** | 213 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 333 | 16 |
| **A 30 2** | **P71** | 213 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 333 | 16 |
| **A 30 2** | **P80** | 223 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 352.5 | 17 |
| **A 30 2** | **P90** | 223 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 352.5 | 17 |
| **A 30 2** | **P100** | 223 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 362.5 | 20 |
| **A 30 2** | **P112** | 223 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 362.5 | 20 |
| **A 30 3** | **P63** | — | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 390.5 | 17 |
| **A 30 3** | **P71** | — | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 390.5 | 17 |
| **A 30 3** | **P80** | — | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 410 | 18 |
| **A 30 3** | **P90** | — | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 410 | 18 |
| **A 30 3** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 420 | 22 |
| **A 30 3** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 420 | 22 |

## A 30...HS

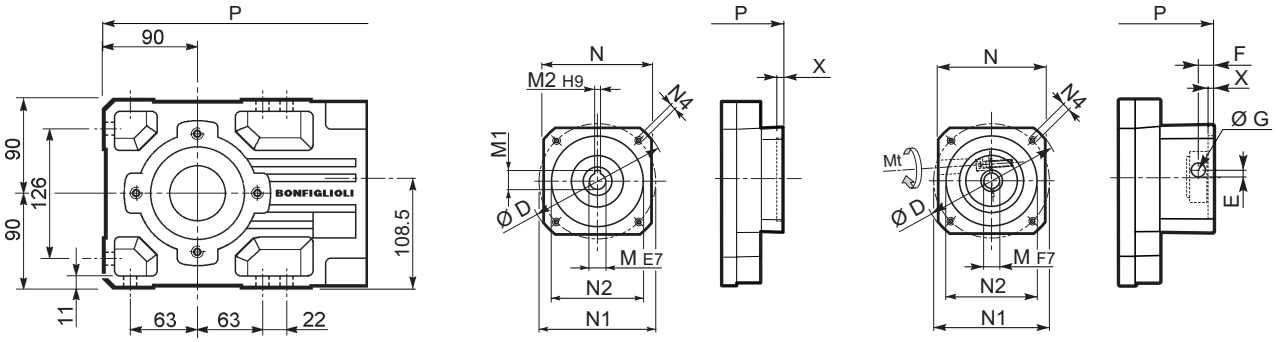



| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 30 2** | **HS** | 383 | 253 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 16.7 |
| **A 30 3** | | 397.5 | 267.5 | 40 | 16 | 18 | 5 | 2.5 | 35 | M6x16 | 16.5 |



Bonfiglioli Riduttori

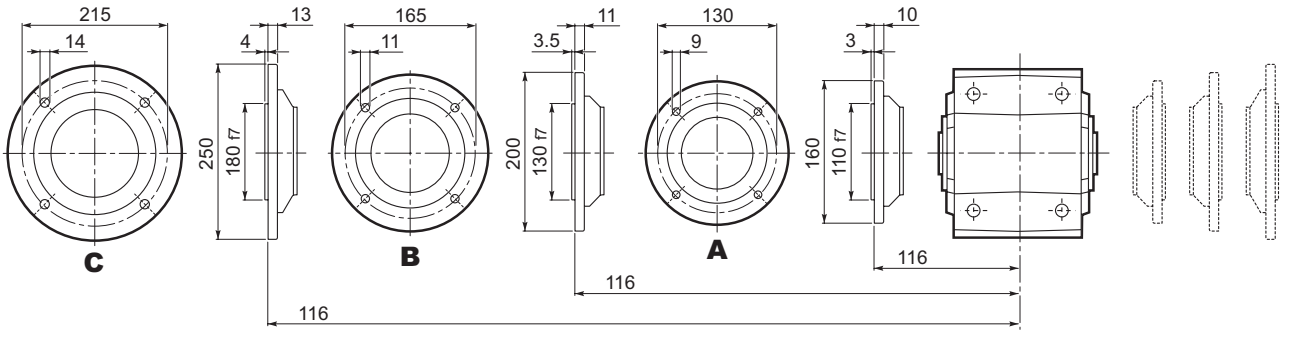
# A 30...SK / SC

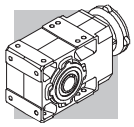



| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P 2x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 30 2/3** | **SK60A** | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | 304.5 | 362 | 15/16 |
| **A 30 2/3** | **SK60B** | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | 311.5 | 369 | 16/17 |
| **A 30 2/3** | **SK80A** | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | 311.5 | 369 | 16/17 |
| **A 30 2/3** | **SK80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 352.5 | 410 | 17/18 |
| **A 30 2/3** | **SK95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 352.5 | 410 | 17/18 |
| **A 30 2/3** | **SK95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 352.5 | 410 | 17/18 |
| **A 30 2/3** | **SK95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 352.5 | 410 | 17/18 |
| **A 30 2/3** | **SK110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 352.5 | 410 | 17/18 |
| **A 30 2/3** | **SK110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 352.5 | 410 | 17/18 |
| **A 30 2** | **SK130A** | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 352.5 | — | 18 |

| | | Mt | | D | E | F | G | M | N | N1 | N2 | N4 | X | P 2x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 30 2/3** | **SC60A** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | 331.5 | 389 | 16/17 |
| **A 30 2/3** | **SC60B** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | 331.5 | 389 | 17/18 |
| **A 30 2/3** | **SC80A** | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | 331.5 | 389 | 17/18 |
| **A 30 2/3** | **SC80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 376 | 433.5 | 18/19 |
| **A 30 2/3** | **SC95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 376 | 433.5 | 18/19 |
| **A 30 2/3** | **SC95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 376 | 433.5 | 18/19 |
| **A 30 2/3** | **SC95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 376 | 433.5 | 18/19 |
| **A 30 2/3** | **SC 110A** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 376 | 433.5 | 19/20 |
| **A 30 2/3** | **SC 110B** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 376 | 433.5 | 19/20 |
| **A 30 2** | **SC 130A** | M6 | 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 376 | — | 20 |

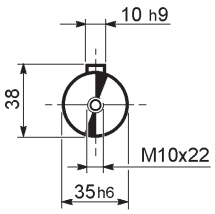
# A 30...F...

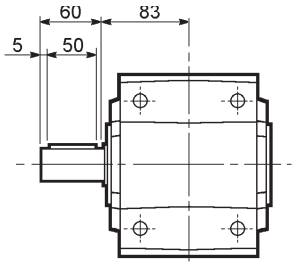




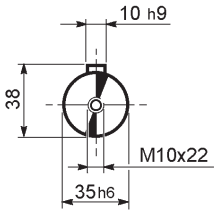
# A 30

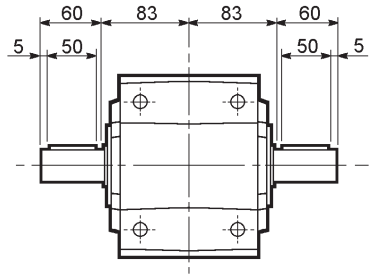
## A 30...UR



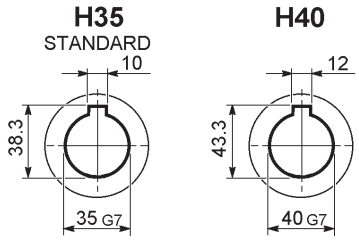



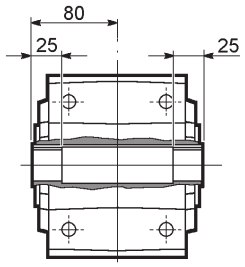

## A 30...UD



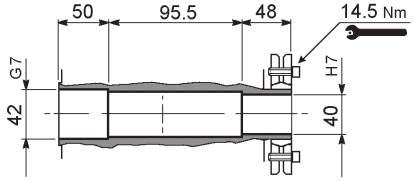



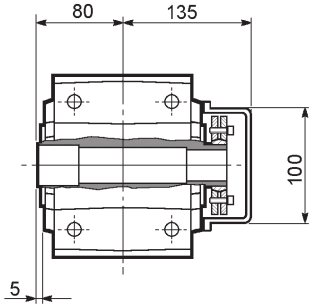

## A 30...UH



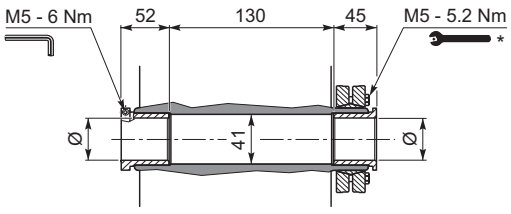

## A 30...US

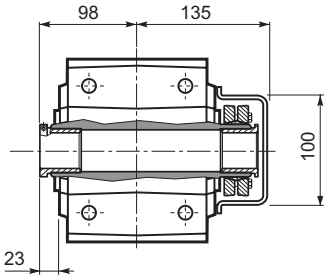


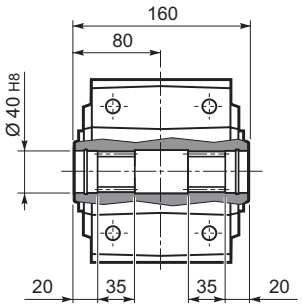

## A 30...QF

| | Ø |
|---|---|
| **QF35** | 35 |
| **QF40** | 40 |

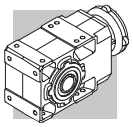


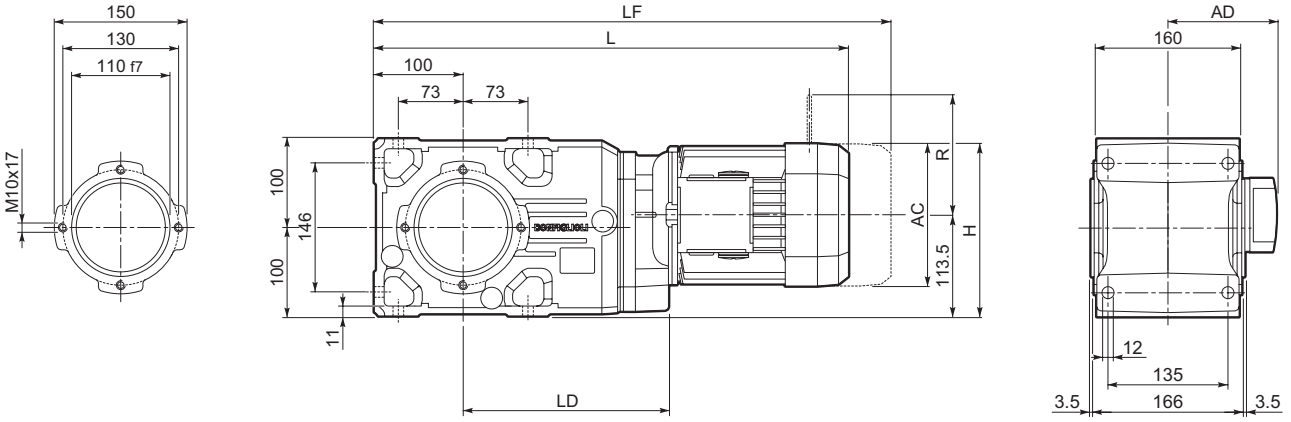

## A 30...UV



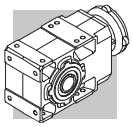

* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.



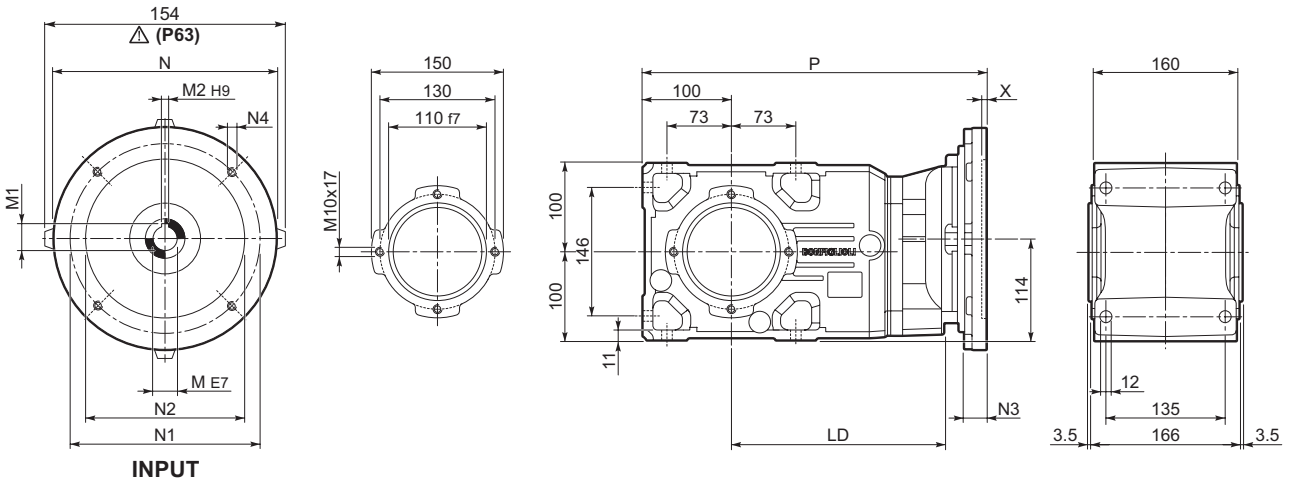
# A 35...M/ME




| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| **A 35 2** | **S1** | **M1** | 138 | 182.5 | 514.5 | 217.5 | 108 | 34 | 575.5 | 36 | 103 | 135 | 124 | 108 |
| **A 35 2** | **S2** | **ME2S** | 156 | 191.5 | 543.5 | 229.5 | 119 | 37 | — | — | — | — | — | — |
| **A 35 2** | **S3** | **ME3S** | 195 | 211 | 586.5 | 239.5 | 142 | 43.5 | — | — | — | — | — | — |
| **A 35 2** | **S3** | **ME3L** | 195 | 211 | 618.5 | 239.5 | 142 | 50 | — | — | — | — | — | — |
| **A 35 2** | **S4** | **ME4** | 258 | 242.5 | 726.5 | — | 193 | 89 | — | — | — | — | — | — |
| **A 35 2** | **S4** | **ME4LB** | 258 | 242.5 | 761.5 | — | 193 | 97 | — | — | — | — | — | — |
| **A 35 3** | **S05** | **M05S** | 121 | 174 | 543 | — | 95 | 33 | 609 | 34 | 96 | 122 | 116 | 95 |
| **A 35 3** | **S1** | **M1** | 138 | 182.5 | 572 | — | 108 | 35 | 633 | 38 | 103 | 135 | 124 | 108 |
| **A 35 3** | **S2** | **ME2S** | 156 | 191.5 | 601 | — | 119 | 37 | — | — | — | — | — | — |
| **A 35 3** | **S3** | **ME3S** | 195 | 211 | 644 | — | 142 | 43.5 | — | — | — | — | — | — |
| **A 35 3** | **S3** | **ME3L** | 195 | 211 | 676 | — | 142 | 50 | — | — | — | — | — | — |

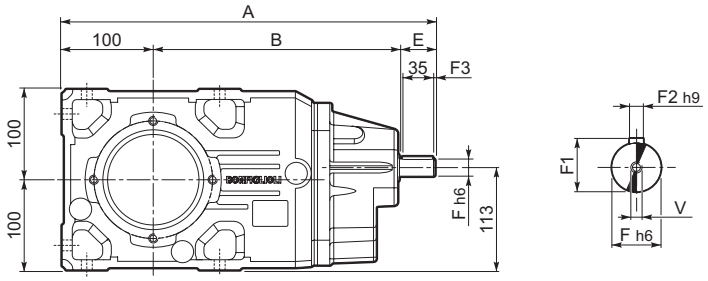


## A 35...P(IEC)

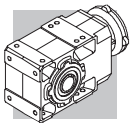



| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 35 2** | **P63** | 229.5 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 359.5 | 28 |
| **A 35 2** | **P71** | 229.5 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 359.5 | 28 |
| **A 35 2** | **P80** | 239.5 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 379 | 29 |
| **A 35 2** | **P90** | 239.5 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 379 | 29 |
| **A 35 2** | **P100** | 239.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 389 | 32 |
| **A 35 2** | **P112** | 239.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 389 | 32 |
| **A 35 2** | **P132** | — | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 425.5 | 40 |
| **A 35 3** | **P63** | — | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 417 | 29 |
| **A 35 3** | **P71** | — | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 417 | 29 |
| **A 35 3** | **P80** | — | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 436.5 | 30 |
| **A 35 3** | **P90** | — | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 436.5 | 30 |
| **A 35 3** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 446.5 | 34 |
| **A 35 3** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 446.5 | 34 |

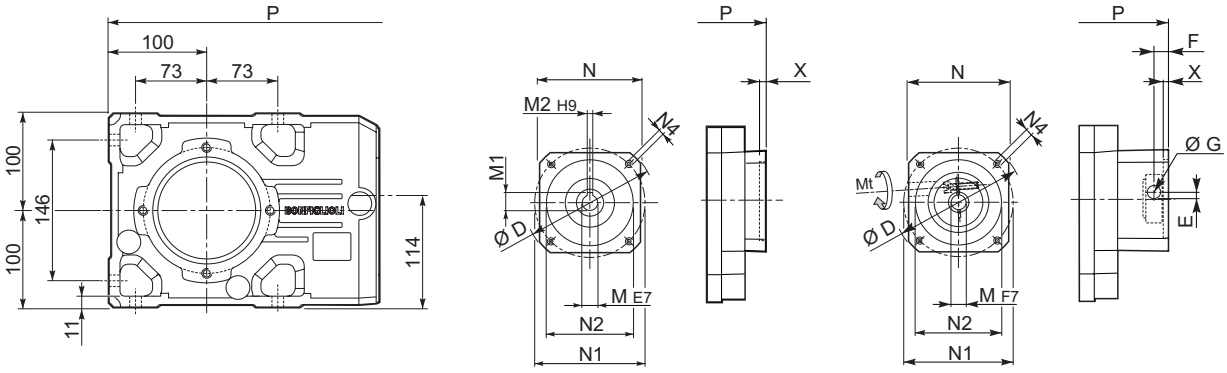
## A 35...HS




| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 35 2** | **HS** | 409.5 | 269.5 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 29 |
| **A 35 3** | | 424 | 284 | 40 | 16 | 18 | 5 | 2.5 | 35 | M6x16 | 29 |



# A 35...SK / SC



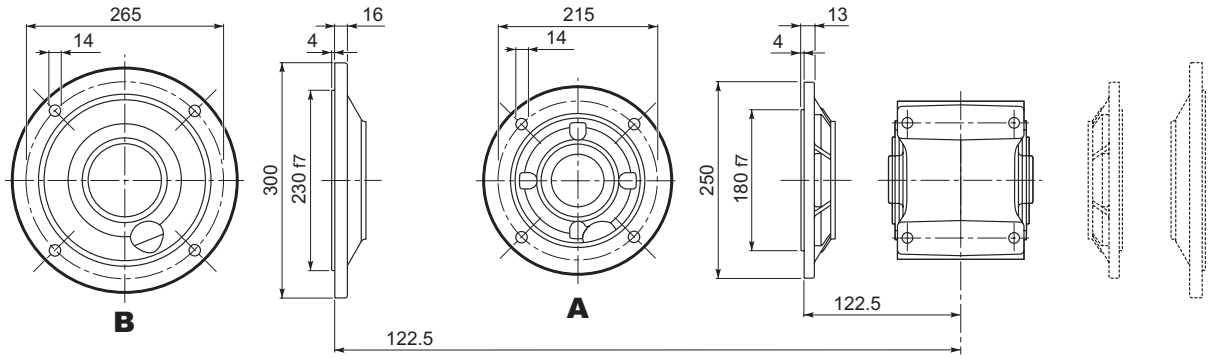

SK...

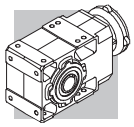
SC...

| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P 2x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 35 2/3** | **SK60A** | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | 331 | 388.5 | 27/28 |
| **A 35 2/3** | **SK60B** | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | 338 | 395.5 | 28/29 |
| **A 35 2/3** | **SK80A** | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | 338 | 395.5 | 28/29 |
| **A 35 2/3** | **SK80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 379 | 436.5 | 29/30 |
| **A 35 2/3** | **SK95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 379 | 436.5 | 29/30 |
| **A 35 2/3** | **SK95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 379 | 436.5 | 29/30 |
| **A 35 2/3** | **SK95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 379 | 436.5 | 29/30 |
| **A 35 2/3** | **SK110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 379 | 436.5 | 29/30 |
| **A 35 2/3** | **SK110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 379 | 436.5 | 29/30 |
| **A 35 2** | **SK130A** | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 379 | — | 30 |

| | | Mt | | D | E | F | G | M | N | N1 | N2 | N4 | X | P 2x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 35 2/3** | **SC60A** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | 358 | 415.5 | 28/29 |
| **A 35 2/3** | **SC60B** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | 358 | 415.5 | 29/30 |
| **A 35 2/3** | **SC80A** | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | 358 | 415.5 | 29/30 |
| **A 35 2/3** | **SC80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 402.5 | 460 | 30/31 |
| **A 35 2/3** | **SC95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 402.5 | 460 | 30/31 |
| **A 35 2/3** | **SC95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 402.5 | 460 | 30/31 |
| **A 35 2/3** | **SC95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 402.5 | 460 | 30/31 |
| **A 35 2/3** | **SC110A** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 402.5 | 460 | 32/33 |
| **A 35 2/3** | **SC110B** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 402.5 | 460 | 32/33 |
| **A 35 2** | **SC130A** | M6 | 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 402.5 | — | 33 |

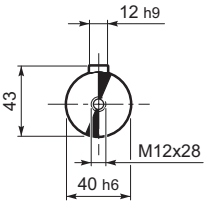
# A 35...F...

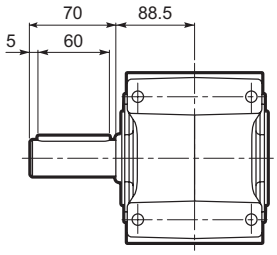




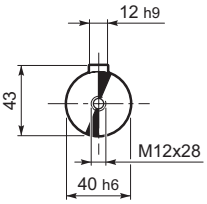
# A 35

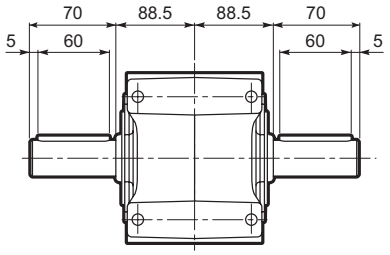
## A 35...UR



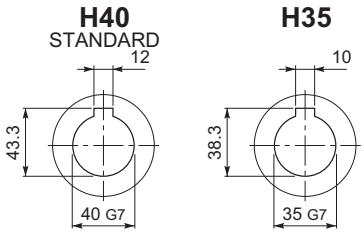



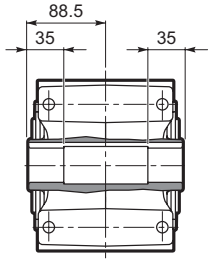

## A 35...UD



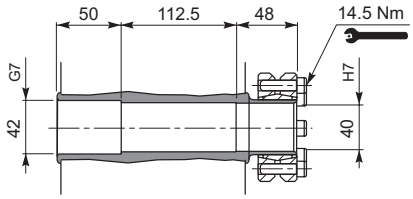



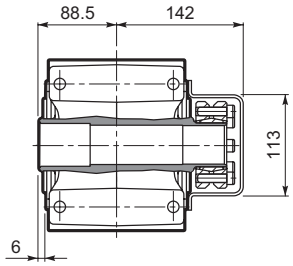

## A 35...UH



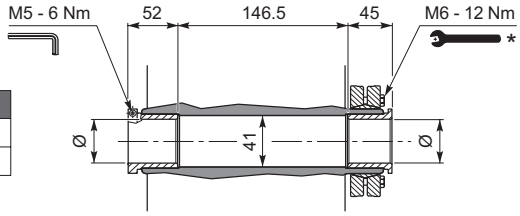

## A 35...US

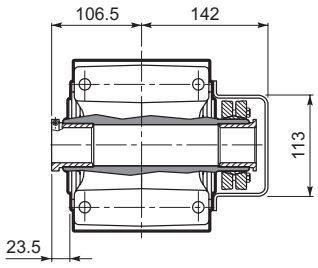


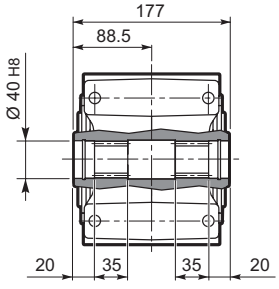

## A 35...QF

| | Ø |
|---|---|
| **QF35** | 35 |
| **QF40** | 40 |



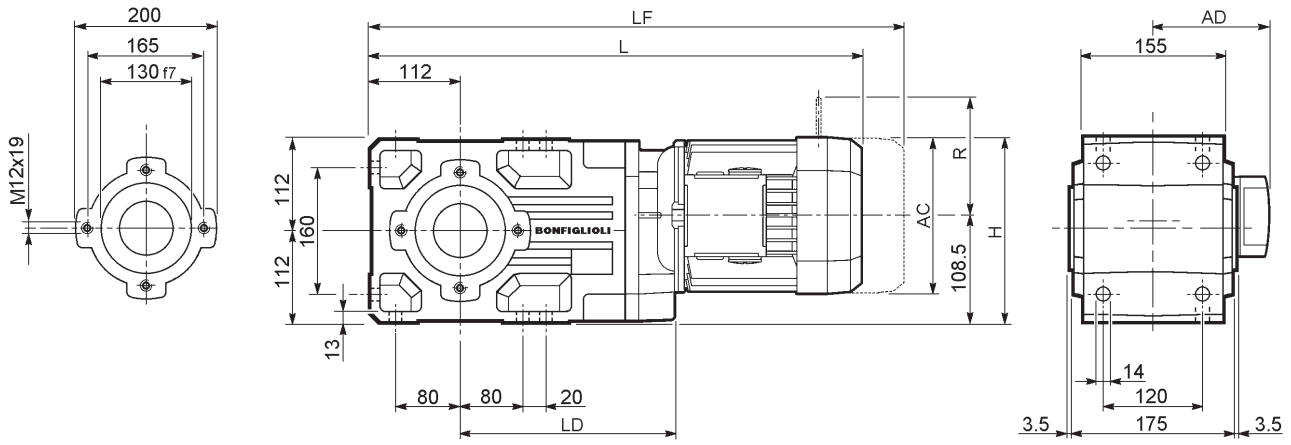




## A 35...UV



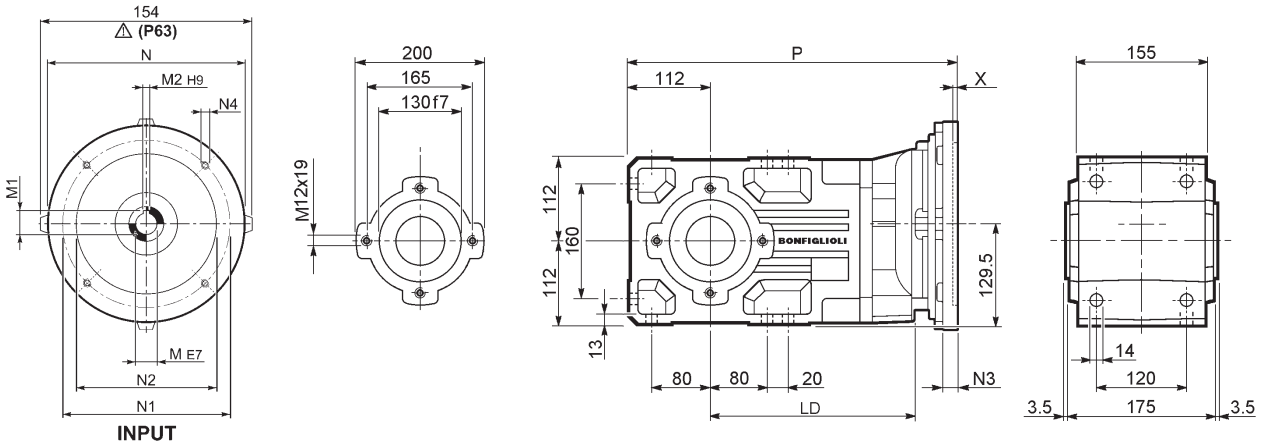

* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.

# A 41...M/ME



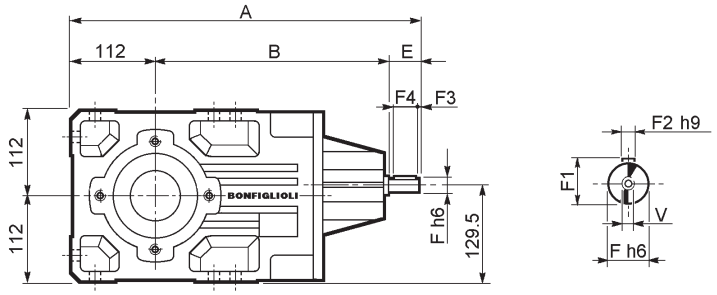

| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| **A 41 2** | **S1** | **M1** | 138 | 198.5 | 530 | 216.5 | 108 | 41 | 591 | 44 | 103 | 135 | 124 | 108 |
| **A 41 2** | **S2** | **ME2S** | 156 | 207.5 | 559 | 232 | 119 | 45 | — | — | — | — | — | — |
| **A 41 2** | **S3** | **ME3S** | 195 | 227 | 602 | 248 | 142 | 51.5 | — | — | — | — | — | — |
| **A 41 2** | **S3** | **ME3L** | 195 | 227 | 634 | 248 | 142 | 58 | — | — | — | — | — | — |
| **A 41 2** | **S4** | **ME4** | 258 | 258.5 | 742 | — | 193 | 92 | — | — | — | — | — | — |
| **A 41 2** | **S4** | **ME4LB** | 258 | 258.5 | 777 | — | 193 | 100 | — | — | — | — | — | — |
| **A 41 3** | **S05** | **M05** | 121 | 245 | 562.5 | — | 95 | 44 | 628.5 | 46 | 96 | 122 | 116 | 95 |
| **A 41 3** | **S1** | **M1** | 138 | 198.5 | 591.5 | — | 108 | 46 | 652.5 | 49 | 103 | 135 | 124 | 108 |
| **A 41 3** | **S2** | **ME2S** | 156 | 207.5 | 620.5 | — | 119 | 50 | — | — | — | — | — | — |
| **A 41 3** | **S3** | **ME3S** | 195 | 227 | 663.5 | — | 142 | 56.5 | — | — | — | — | — | — |
| **A 41 3** | **S3** | **ME3L** | 195 | 227 | 695.5 | — | 142 | 61 | — | — | — | — | — | — |

# A 41...P(IEC)

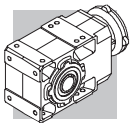



| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 41 2** | **P63** | 232 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 375 | 37 |
| **A 41 2** | **P71** | 232 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 375 | 38 |
| **A 41 2** | **P80** | 248 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 394.5 | 39 |
| **A 41 2** | **P90** | 248 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 394.5 | 39 |
| **A 41 2** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 404.5 | 43 |
| **A 41 2** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 404.5 | 43 |
| **A 41 2** | **P132** | — | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 441 | 46 |
| **A 41 3** | **P63** | — | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 436.5 | 39 |
| **A 41 3** | **P71** | — | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 436.5 | 39 |
| **A 41 3** | **P80** | — | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 456 | 40 |
| **A 41 3** | **P90** | — | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 456 | 40 |
| **A 41 3** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 466 | 44 |
| **A 41 3** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 466 | 44 |

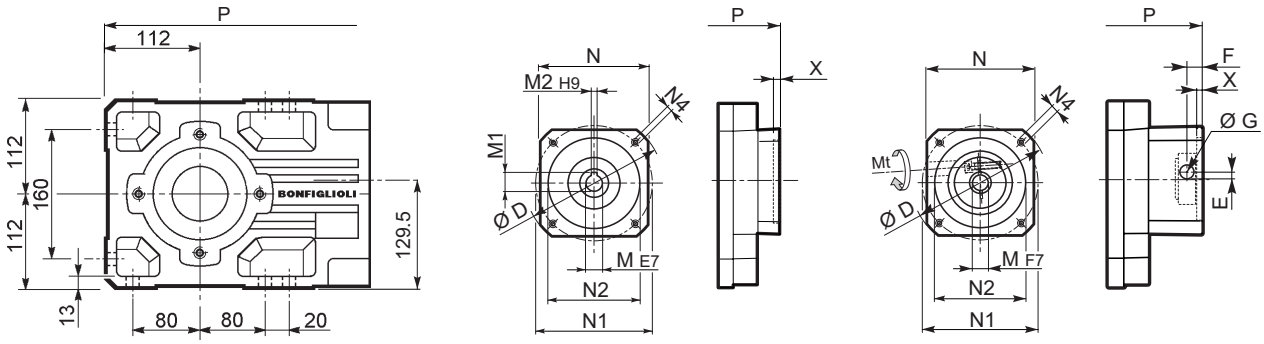
# A 41...HS




| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 41 2** | **HS** | 464 | 302.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 40.7 |
| **A 41 3** | | 486.5 | 334.5 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 39.5 |



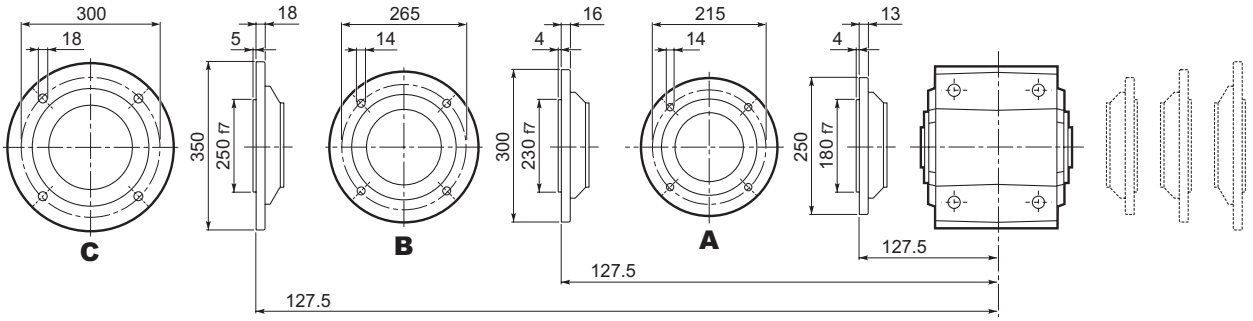
# A 41...SK / SC




| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P 2x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A41 3** | **SK60A** | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | — | 408 | 40 |
| **A41 3** | **SK60B** | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | — | 415 | 40 |
| **A41 3** | **SK80A** | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | — | 415 | 40 |
| **A41 2** | **SK80B** | 120 | 14 | 16.3 | 5 | 96 | 100 | 80 | M6x12 | 4 | 394.5 | — | 39 |
| **A41 2/3** | **SK80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 394.5 | 456 | 39/40 |
| **A41 2/3** | **SK95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 394.5 | 456 | 39/40 |
| **A41 2/3** | **SK95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 394.5 | 456 | 39/41 |
| **A41 2/3** | **SK95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 394.5 | 456 | 39/44 |
| **A41 2/3** | **SK110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 394.5 | 456 | 39/44 |
| **A41 2/3** | **SK110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 394.5 | 456 | 39/44 |
| **A41 2** | **SK130A** | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 394.5 | — | 41 |
| **A41 2** | **SK130B** | 189 | 32 | 35.3 | 10 | 160 | 165 | 130 | M10x20 | 5 | 441 | — | 43 |
| **A41 2** | **SK180A** | 240 | 32 | 35.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 441 | — | 43 |
| **A41 2** | **SK180B** | 240 | 38 | 41.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 441 | — | 43 |

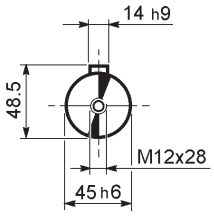
| | | Mt | | D | E | F | G | M | N | N1 | N2 | N4 | X | P 2x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A41 3** | **SC60A** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | — | 435 | 41 |
| **A41 3** | **SC60B** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | — | 435 | 41 |
| **A41 3** | **SC80A** | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | — | 435 | 41 |
| **A41 2** | **SC80B** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 14 | 96 | 100 | 80 | M6x12 | 4 | 418 | — | 40 |
| **A41 2/3** | **SC80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 418 | 479.5 | 40/41 |
| **A41 2/3** | **SC95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 418 | 479.5 | 40/42 |
| **A41 2/3** | **SC95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 418 | 479.5 | 40/42 |
| **A41 2/3** | **SC95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 418 | 479.5 | 40/43 |
| **A41 2/3** | **SC110A** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 418 | 479.5 | 41/47 |
| **A41 2/3** | **SC110B** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 418 | 479.5 | 41/47 |
| **A41 2** | **SC130A** | M6 | 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 418 | — | 42 |
| **A41 2** | **SC130B** | M8 | 36 Nm | 189 | 20 | 17 | 17.75 | 32 | 160 | 165 | 130 | M10x20 | 5 | 464 | — | 46 |
| **A41 2** | **SC180A** | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 32 | 192 | 215 | 180 | M12x24 | 5 | 468 | — | 46 |
| **A41 2** | **SC180B** | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 38 | 192 | 215 | 180 | M12x24 | 5 | 468 | — | 46 |

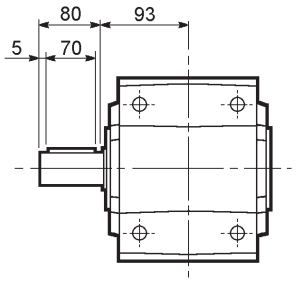
# A 41...F...



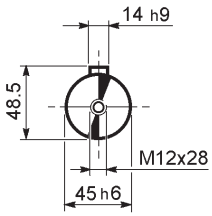
# A 41

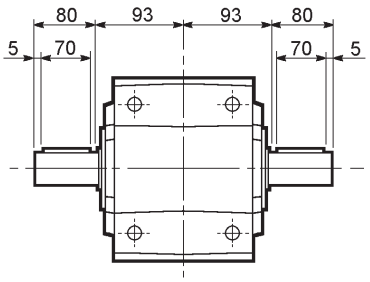
## A 41...UR



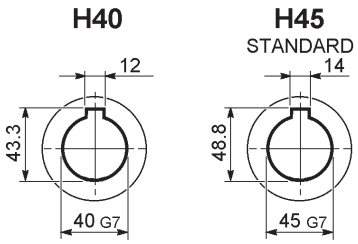



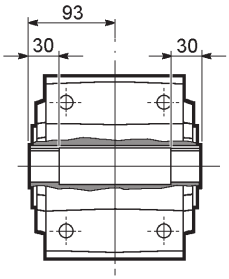

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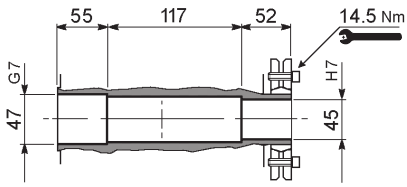



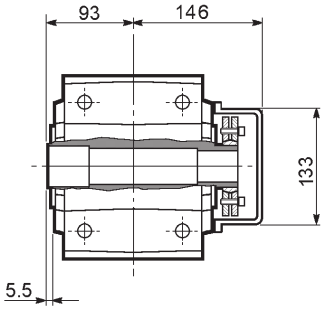

## A 41...UH



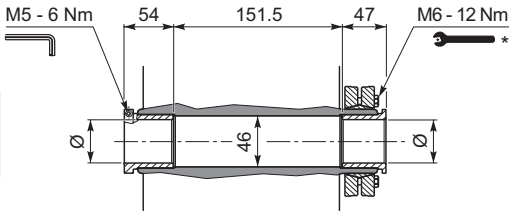

## A 41...US

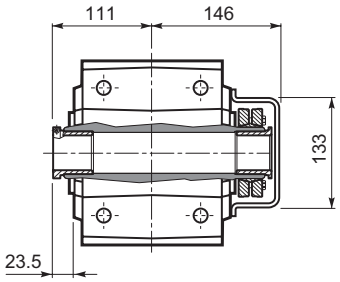


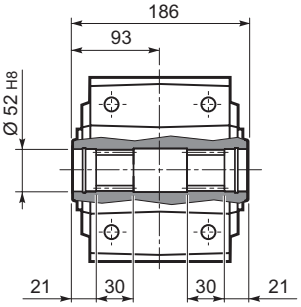

## A 41...QF

| | Ø |
|---|---|
| **QF40** | 40 |
| **QF45** | 45 |



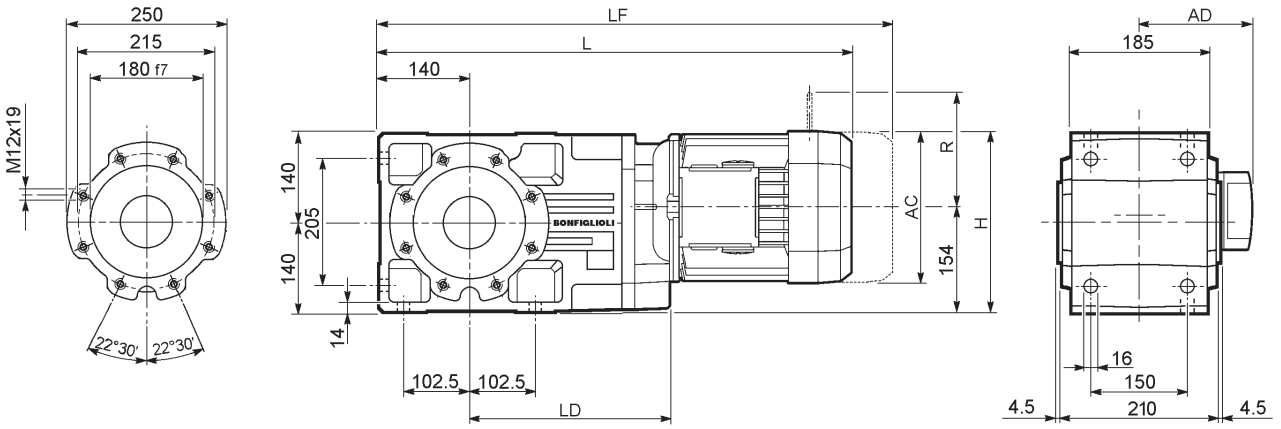




## A 41...UV



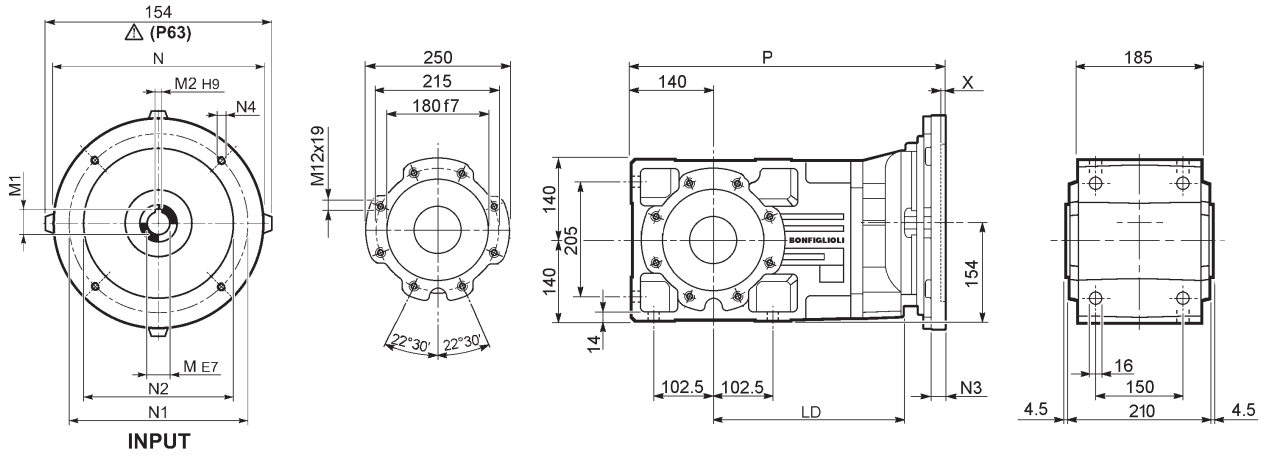

* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.

# A 50...M/ME



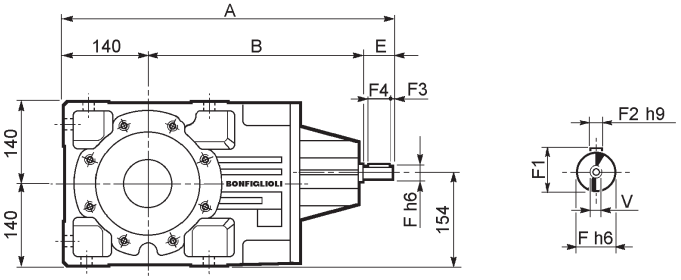

| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| **A 50 2/3** | **S1** | **M1** | 138 | 223 | 609.5 | — | 108 | 66 | 670.5 | 69 | 103 | 135 | 124 | 108 |
| **A 50 2/3** | **S2** | **ME2S** | 156 | 232 | 638.5 | 284.5 | 119 | 68 | — | — | — | — | — | — |
| **A 50 2/3** | **S3** | **ME3S** | 195 | 251.5 | 681.5 | 299.5 | 142 | 74.5 | — | — | — | — | — | — |
| **A 50 2/3** | **S3** | **ME3L** | 195 | 251.5 | 713.5 | 299.5 | 142 | 81 | — | — | — | — | — | — |
| **A 50 2/3** | **S4** | **ME4** | 258 | 283 | 821.5 | 284.5 | 193 | 115 | — | — | — | — | — | — |
| **A 50 2/3** | **S4** | **ME4LB** | 258 | 283 | 856.5 | 284.5 | 193 | 123 | — | — | — | — | — | — |
| **A 50 2/3** | **S5** | **ME5S** | 310 | 309 | 908 | — | 245 | 143 | — | — | — | — | — | — |
| **A 50 2/3** | **S5** | **ME5L** | 310 | 309 | 952 | — | 245 | 159 | — | — | — | — | — | — |
| **A 50 4** | **S1** | **M1** | 138 | 223 | 681 | — | 108 | 67 | 742 | 70 | 103 | 135 | 124 | 108 |
| **A 50 4** | **S2** | **ME2S** | 156 | 232 | 710 | — | 119 | 71 | — | — | — | — | — | — |
| **A 50 4** | **S3** | **ME3S** | 195 | 251.5 | 753 | — | 142 | 77.5 | — | — | — | — | — | — |
| **A 50 4** | **S3** | **ME3L** | 195 | 251.5 | 785 | — | 142 | 83 | — | — | — | — | — | — |

# A 50...P(IEC)



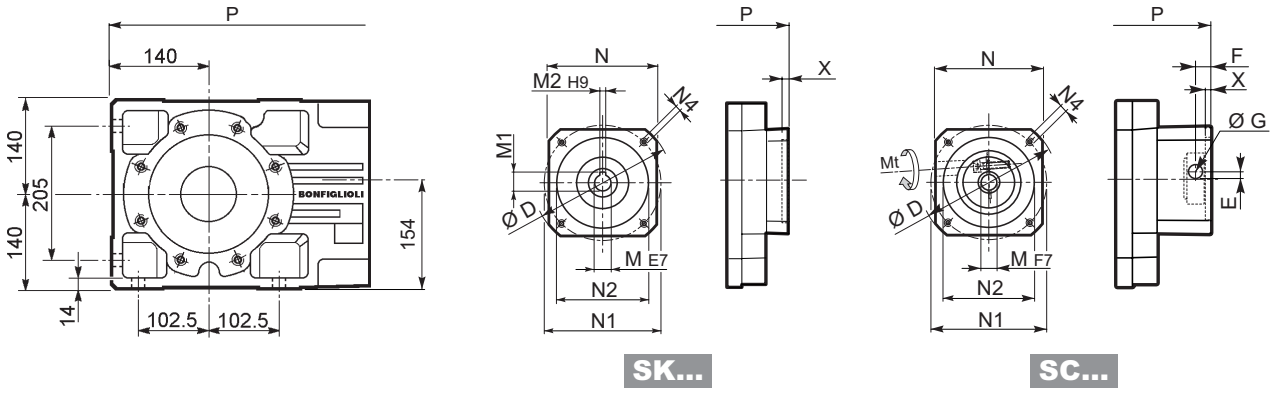

| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 50 2/3** | **P63** | 284.5 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 454.5 | 60 |
| **A 50 2/3** | **P71** | 284.5 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 454.5 | 60 |
| **A 50 2/3** | **P80** | 299.5 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 474 | 61 |
| **A 50 2/3** | **P90** | 299.5 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 474 | 61 |
| **A 50 2/3** | **P100** | 284.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 484 | 65 |
| **A 50 2/3** | **P112** | 284.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 484 | 65 |
| **A 50 2/3** | **P132** | 284.5 | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 520.5 | 68 |
| **A 50 2/3** | **P160** | — | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 5.5 | 571 | 72 |
| **A 50 2/3** | **P180** | — | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 5.5 | 571 | 72 |
| **A 50 4** | **P63** | — | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 526 | 62 |
| **A 50 4** | **P71** | — | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 526 | 62 |
| **A 50 4** | **P80** | — | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 545.5 | 63 |
| **A 50 4** | **P90** | — | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 545.5 | 63 |
| **A 50 4** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 555.5 | 67 |
| **A 50 4** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 555.5 | 67 |

# A 50...HS




| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 50 2** | | 543.5 | 353.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 72 |
| **A 50 3** | **HS** | 543.5 | 353.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 76 |
| **A 50 4** | | 576 | 396 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 77 |

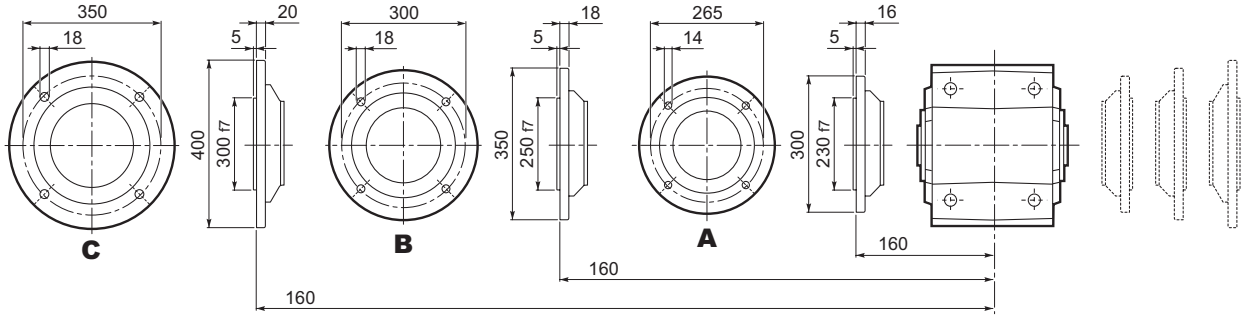
# A 50...SK / SC

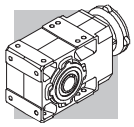



| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P 2/3x | P 4x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 50 2/3** | **SK80B** | 120 | 14 | 16.3 | 5 | 96 | 100 | 80 | M6x12 | 4 | 474 | — | 61/61 |
| **A 50 2/3/4** | **SK80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 474 | 545.5 | 61/61/63 |
| **A 50 2/3/4** | **SK95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 474 | 545.5 | 61/61/63 |
| **A 50 2/3/4** | **SK95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 474 | 545.5 | 61/61/63 |
| **A 50 2/3/4** | **SK95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 474 | 545.5 | 61/61/63 |
| **A 50 2/3/4** | **SK110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 474 | 545.5 | 61/61/65 |
| **A 50 2/3/4** | **SK110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 474 | 575 | 61/61/65 |
| **A 50 2/3/4** | **SK130A** | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 474 | 575 | 63/63/66 |
| **A 50 2/3** | **SK130B** | 189 | 32 | 35.3 | 10 | 160 | 165 | 130 | M10x20 | 5 | 520.5 | — | 69/69 |
| **A 50 2/3** | **SK180A** | 240 | 32 | 35.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 520.5 | — | 69/69 |
| **A 50 2/3** | **SK180B** | 240 | 38 | 41.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 520.5 | — | 69/69 |

| | | Mt | D | E | F | G | M | N | N1 | N2 | N4 | X | P 2/3x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 50 2/3** | **SC80B** | M6 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 14 | 96 | 100 | 80 | M6x12 | 4 | 497.5 | — | 62/62 |
| **A 50 2/3/4** | **SC80C** | M6 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 497.5 | 569 | 62/62/64 |
| **A 50 2/3/4** | **SC95A** | M6 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 497.5 | 569 | 62/62/64 |
| **A 50 2/3/4** | **SC95B** | M6 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 497.5 | 569 | 62/62/64 |
| **A 50 2/3/4** | **SC95C** | M6 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 497.5 | 569 | 62/62/64 |
| **A 50 2/3/4** | **SC110A** | M6 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 497.5 | 569 | 63/63/66 |
| **A 50 2/3/4** | **SC110B** | M6 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 497.5 | 569 | 63/63/66 |
| **A 50 2/3/4** | **SC130A** | M6 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 497.5 | 569 | 64/64/67 |
| **A 50 2/3** | **SC130B** | M8 36 Nm | 189 | 20 | 17 | 17.75 | 32 | 160 | 165 | 130 | M10x20 | 5 | 543.5 | — | 68/68 |
| **A 50 2/3** | **SC180A** | M8 36 Nm | 240 | 20 | 17.5 | 17.75 | 32 | 192 | 215 | 180 | M12x24 | 5 | 547.5 | — | 68/68 |
| **A 50 2/3** | **SC180B** | M8 36 Nm | 240 | 20 | 17.5 | 17.75 | 38 | 192 | 215 | 180 | M12x24 | 5 | 547.5 | — | 68/68 |

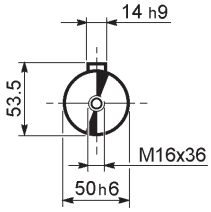
# A 50...F...

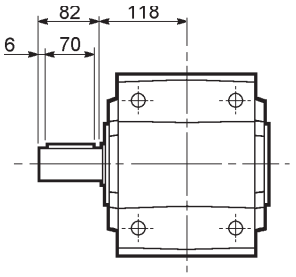




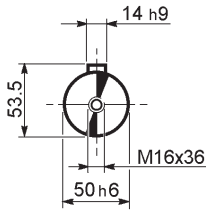
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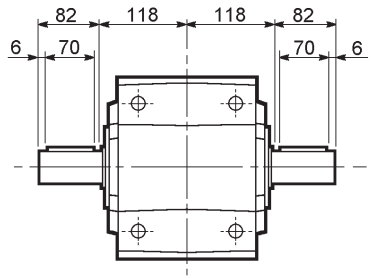
## A 50...UR



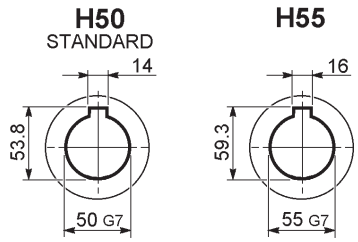



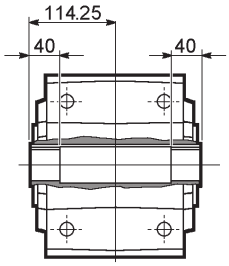

## A 50...UD



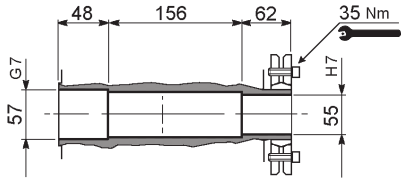



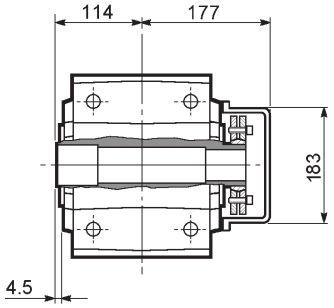

## A 50...UH



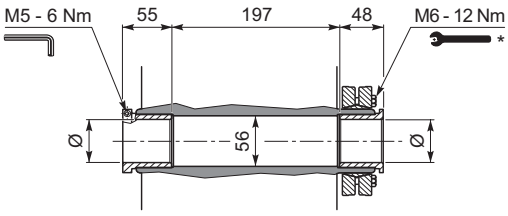

## A 50...US

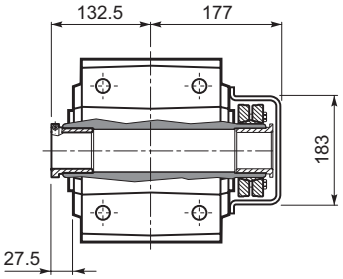


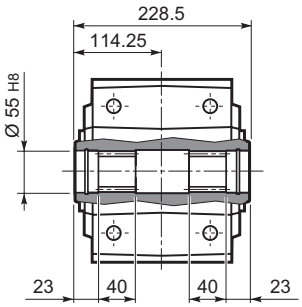

## A 50...QF

| | Ø |
|---|---|
| **QF50** | 50 |
| **QF55** | 55 |



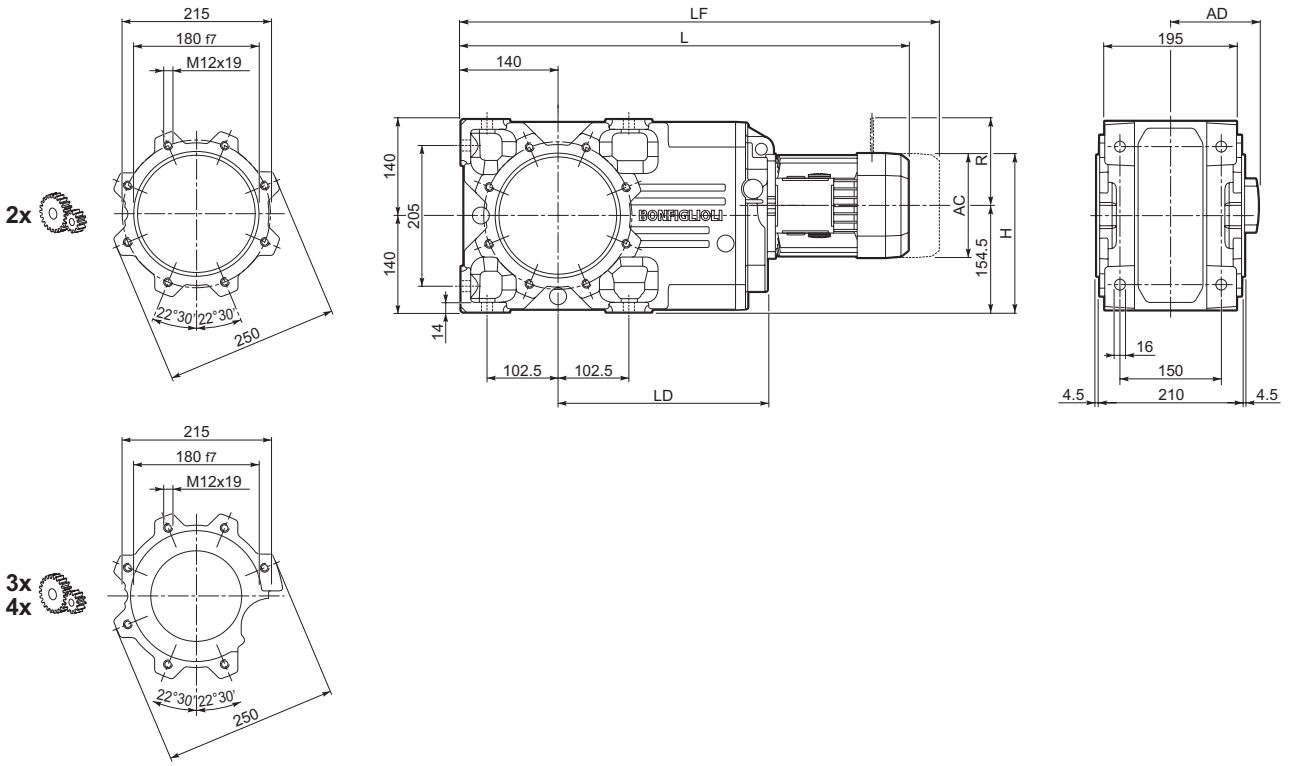




## A 50...UV

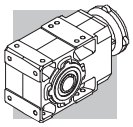



* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.

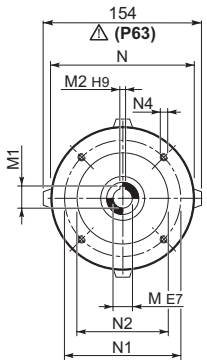
# A 55...M/ME



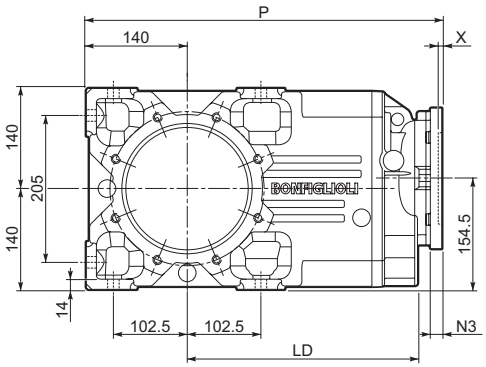

| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| **A 55 3** | **S1** | **M1** | 138 | 198.5 | 627.5 | — | 108 | 81 | 688.5 | 84 | 103 | 135 | 124 | 108 |
| **A 55 2/3** | **S2** | **ME2S** | 156 | 232 | 656.5 | 302.5 | 119 | 88 | — | — | — | — | — | — |
| **A 55 2/3** | **S3** | **ME3S** | 195 | 251 | 699.5 | 317.5 | 142 | 94.5 | — | — | — | — | — | — |
| **A 55 2/3** | **S3** | **ME3L** | 195 | 251 | 731.5 | 317.5 | 142 | 101 | — | — | — | — | — | — |
| **A 55 2/3** | **S4** | **ME4** | 258 | 283 | 839.5 | 302.5 | 193 | 135 | — | — | — | — | — | — |
| **A 55 2/3** | **S4** | **ME4LB** | 258 | 283 | 874.5 | 302.5 | 193 | 143 | — | — | — | — | — | — |
| **A 55 2/3** | **S5** | **ME5S** | 310 | 309.5 | 926 | — | 245 | 163 | — | — | — | — | — | — |
| **A 55 2/3** | **S5** | **ME5L** | 310 | 309.5 | 970 | — | 245 | 179 | — | — | — | — | — | — |
| **A 55 4** | **S1** | **M1** | 138 | 223 | 699 | — | 108 | 82 | 760 | 85 | 103 | 135 | 124 | 108 |
| **A 55 4** | **S2** | **ME2S** | 156 | 232 | 728 | — | 119 | 86 | — | — | — | — | — | — |
| **A 55 4** | **S3** | **ME3S** | 195 | 251.5 | 771 | — | 142 | 92.5 | — | — | — | — | — | — |
| **A 55 4** | **S3** | **ME3L** | 195 | 251.5 | 803 | — | 142 | 98 | — | — | — | — | — | — |

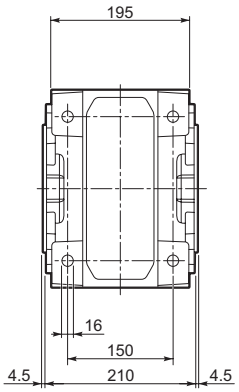


# A 55...P(IEC)



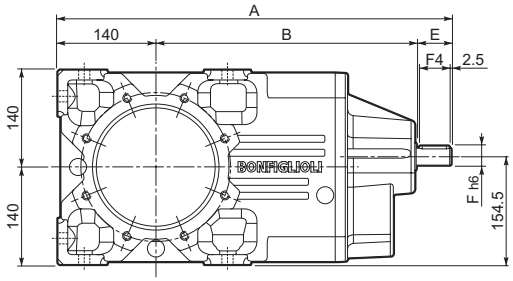

INPUT

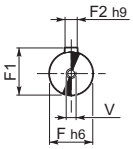


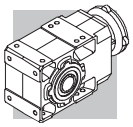

| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 55 3** | **P63** | 302.5 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 472.5 | 75 |
| **A 55 3** | **P71** | 302.5 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 472.5 | 75 |
| **A 55 2/3** | **P80** | 317.5 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 492 | 81 |
| **A 55 2/3** | **P90** | 317.5 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 492 | 81 |
| **A 55 2/3** | **P100** | 302.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 502 | 85 |
| **A 55 2/3** | **P112** | 302.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 502 | 85 |
| **A 55 2/3** | **P132** | 302.5 | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 538.5 | 93 |
| **A 55 2/3** | **P160** | — | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 5.5 | 589 | 110 |
| **A 55 2/3** | **P180** | — | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 5.5 | 589 | 110 |
| **A 55 4** | **P63** | — | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 544 | 77 |
| **A 55 4** | **P71** | — | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 544 | 77 |
| **A 55 4** | **P80** | — | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 563.5 | 78 |
| **A 55 4** | **P90** | — | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 563.5 | 78 |
| **A 55 4** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 573.5 | 82 |
| **A 55 4** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 573.5 | 82 |

# A 55...HS

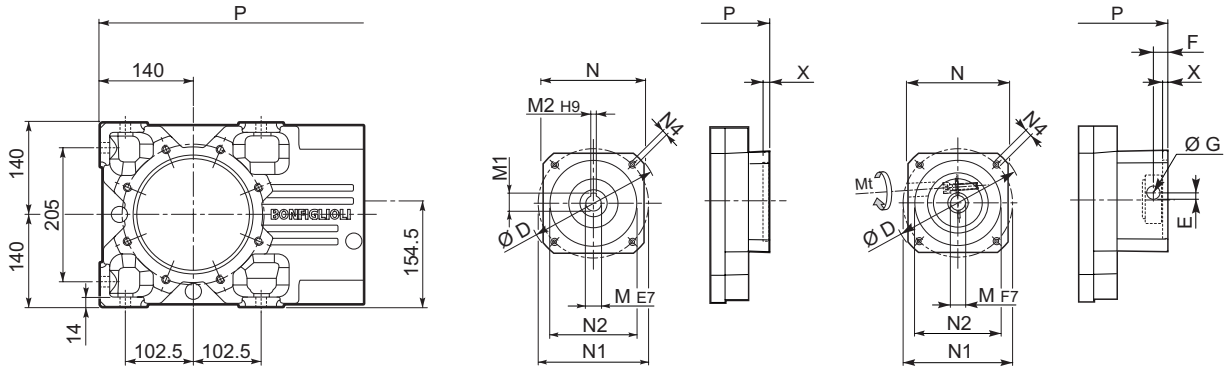



| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 55 2** | | 561.5 | 371.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 96 |
| **A 55 3** | **HS** | 561.5 | 371.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 91 |
| **A 55 4** | | 594 | 414 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 92 |



# A 55...SK / SC

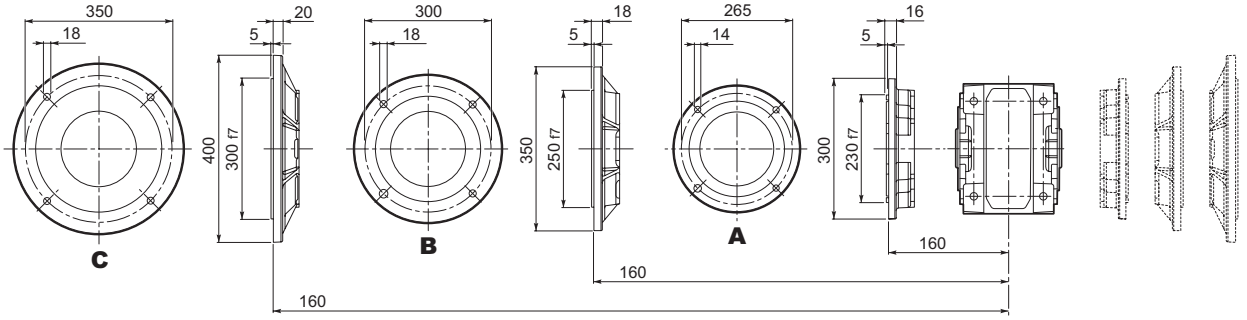


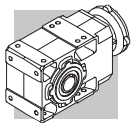

**SK...** **SC...**

| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P 2/3x | P 4x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 55 3** | **SK80B** | 120 | 14 | 16.3 | 5 | 96 | 100 | 80 | M6x12 | 4 | 492 | — | 81 |
| **A 55 2/3/4** | **SK80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 492 | 563.5 | 81/81/77 |
| **A 55 3/4** | **SK95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 492 | 563.5 | 81/81/77 |
| **A 55 2/3/4** | **SK95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 492 | 563.5 | 81/81/77 |
| **A 55 2/3/4** | **SK95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 492 | 563.5 | 81/81/77 |
| **A 55 2/3/4** | **SK110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 492 | 593 | 81/81/78 |
| **A 55 2/3/4** | **SK110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 492 | 593 | 81/81/78 |
| **A 55 2/3/4** | **SK130A** | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 492 | 593 | 83/83/79 |
| **A 55 2/3** | **SK130B** | 189 | 32 | 35.3 | 10 | 160 | 165 | 130 | M10x20 | 5 | 538.5 | — | 90/90 |
| **A 55 2/3** | **SK180A** | 240 | 32 | 35.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 538.5 | — | 90/90 |
| **A 55 2/3** | **SK180B** | 240 | 38 | 41.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 538.5 | — | 90/90 |

| | | Mt | D | E | F | G | M | N | N1 | N2 | N4 | X | P 2/3x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 55 3** | **SC80B** | M6 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 14 | 96 | 100 | 80 | M6x12 | 4 | 515.5 | — | 82 |
| **A 55 2/3/4** | **SC80C** | M6 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 515.5 | 587 | 82/82/78 |
| **A 55 3/4** | **SC95A** | M6 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 515.5 | 587 | 82/82/78 |
| **A 55 2/3/4** | **SC95B** | M6 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 515.5 | 587 | 82/82/78 |
| **A 55 2/3/4** | **SC95C** | M6 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 515.5 | 587 | 82/82/78 |
| **A 55 2/3/4** | **SC110A** | M6 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 515.5 | 587 | 83/83/79 |
| **A 55 2/3/4** | **SC110B** | M6 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 515.5 | 587 | 83/83/79 |
| **A 55 2/3/4** | **SC130A** | M6 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 515.5 | 587 | 84/84/80 |
| **A 55 2/3** | **SC130B** | M8 36 Nm | 189 | 20 | 17 | 17.75 | 32 | 160 | 165 | 130 | M10x20 | 5 | 561.5 | — | 93/93 |
| **A 55 2/3** | **SC180A** | M8 36 Nm | 240 | 20 | 17.5 | 17.75 | 32 | 192 | 215 | 180 | M12x24 | 5 | 565.5 | — | 93/93 |
| **A 55 2/3** | **SC180B** | M8 36 Nm | 240 | 20 | 17.5 | 17.75 | 38 | 192 | 215 | 180 | M12x24 | 5 | 565.5 | — | 93/93 |

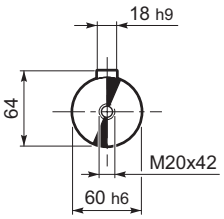
# A 55...F...

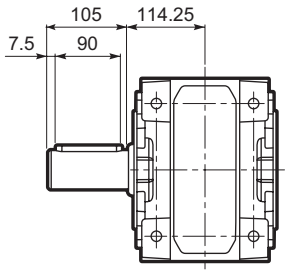




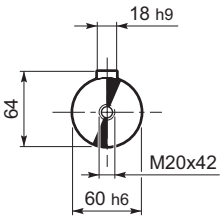
# A 55

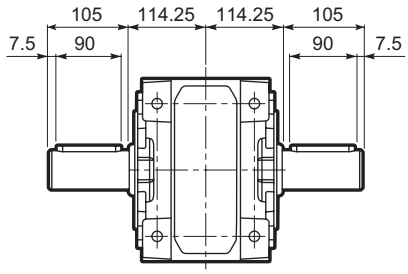
## A 55...UR



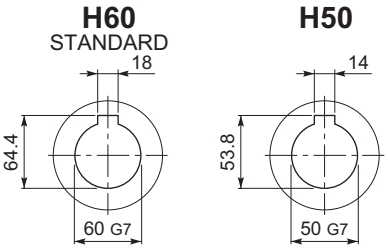



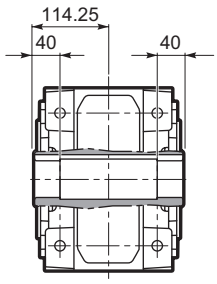

## A 55...UD



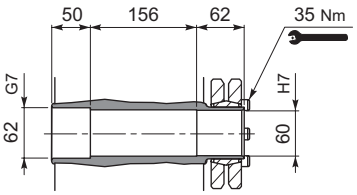



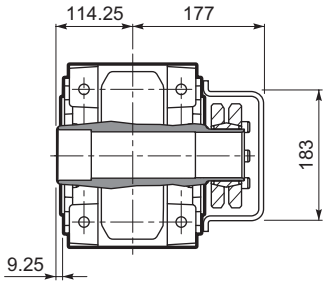

## A 55...UH



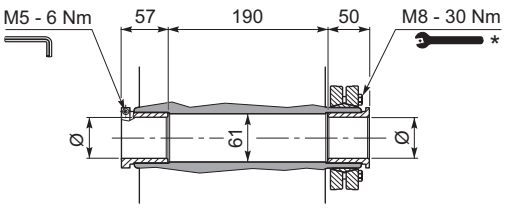

## A 55...US

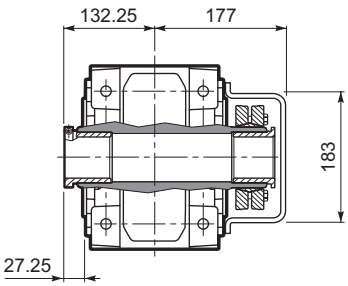


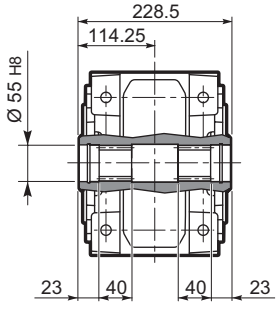

## A 55...QF

| | Ø |
|---|---|
| **QF55** | 55 |
| **QF60** | 60 |



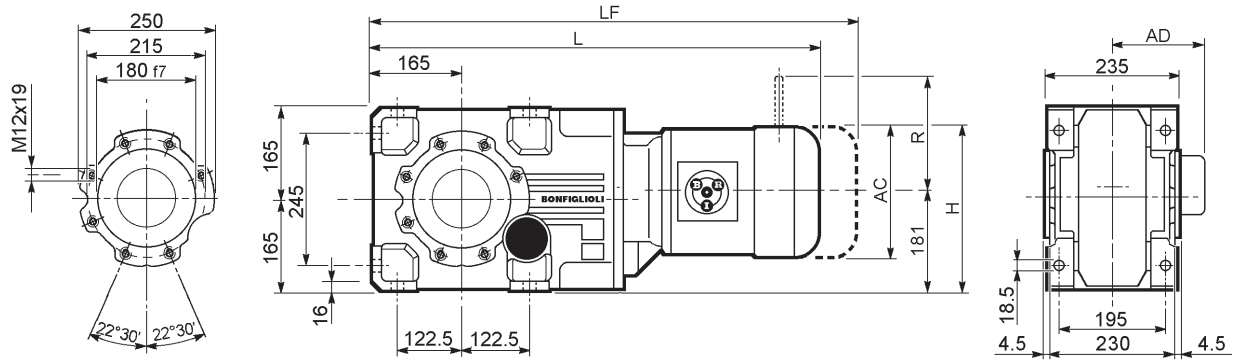




## A 55...UV

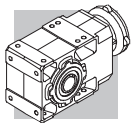



* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.

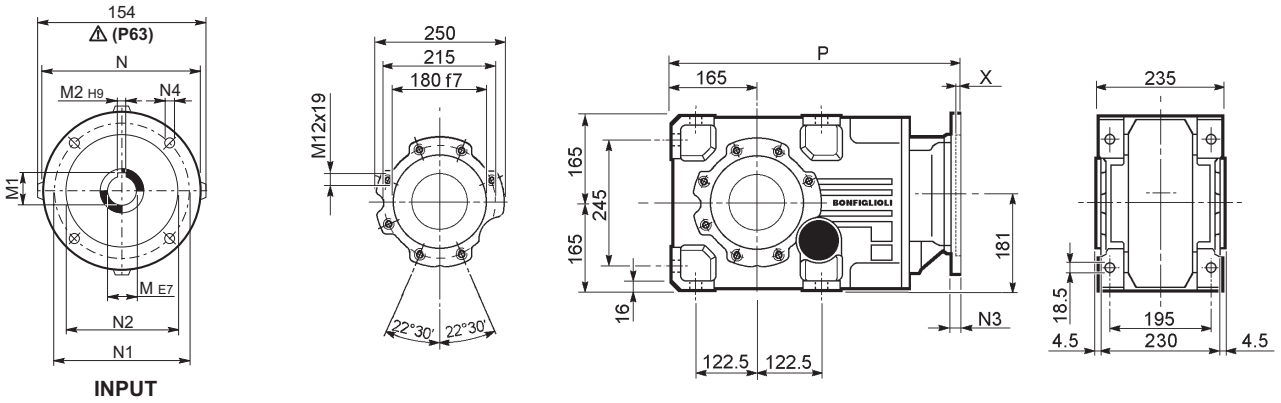
# A 60...M/ME




| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **A 60 2/3** | **S2** | **ME2S** | 156 | 256.5 | 700.5 | 119 | 98 | — | — | — | — | — | — |
| **A 60 2/3** | **S3** | **ME3S** | 195 | 276 | 743.5 | 142 | 103 | — | — | — | — | — | — |
| **A 60 2/3** | **S3** | **ME3L** | 195 | 276 | 775.5 | 142 | 111 | — | — | — | — | — | — |
| **A 60 2/3** | **S4** | **ME4** | 258 | 307.5 | 883.5 | 193 | 145 | — | — | — | — | — | — |
| **A 60 2/3** | **S4** | **ME4LB** | 258 | 307.5 | 918.5 | 193 | 153 | — | — | — | — | — | — |
| **A 60 2/3** | **S5** | **ME5S** | 310 | 333.5 | 970 | 245 | 173 | — | — | — | — | — | — |
| **A 60 2/3** | **S5** | **ME5L** | 310 | 333.5 | 1014 | 245 | 189 | — | — | — | — | — | — |
| **A 60 4** | **S1** | **M1** | 138 | 247.5 | 742 | 108 | 100 | 803 | 103 | 103 | 135 | 124 | 108 |
| **A 60 4** | **S2** | **ME2S** | 156 | 256.5 | 771 | 119 | 104 | — | — | — | — | — | — |
| **A 60 4** | **S3** | **ME3S** | 195 | 276 | 814 | 142 | 109 | — | — | — | — | — | — |
| **A 60 4** | **S3** | **ME3L** | 195 | 276 | 846 | 142 | 117 | — | — | — | — | — | — |

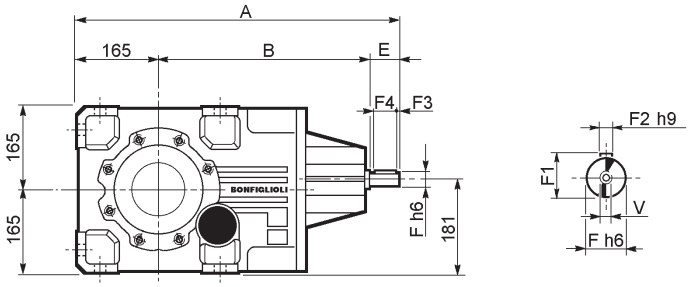


# A 60...P(IEC)



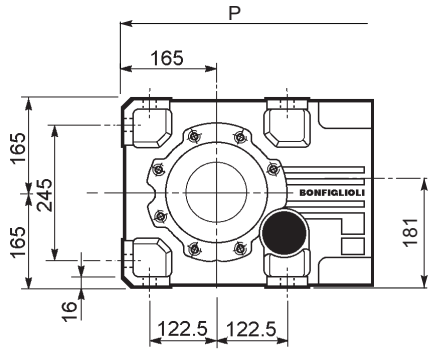

| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 60 3** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 516.5 | 90 |
| **A 60 3** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 516.5 | 90 |
| **A 60 2/3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 536 | 91 |
| **A 60 2/3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 536 | 91 |
| **A 60 2/3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 546 | 95 |
| **A 60 2/3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 546 | 95 |
| **A 60 2/3** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 582.5 | 104 |
| **A 60 2/3** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 5.5 | 633 | 121 |
| **A 60 2/3** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 5.5 | 633 | 121 |
| **A 60 4** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 587 | 88 |
| **A 60 4** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 587 | 88 |
| **A 60 4** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 606.5 | 90 |
| **A 60 4** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 606.5 | 90 |
| **A 60 4** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 616.5 | 94 |
| **A 60 4** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 616.5 | 94 |

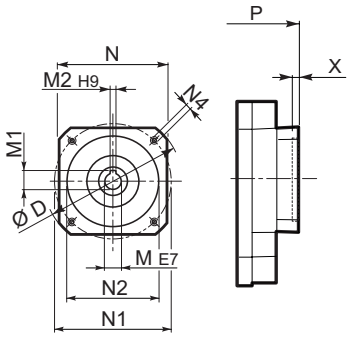
# A 60...HS



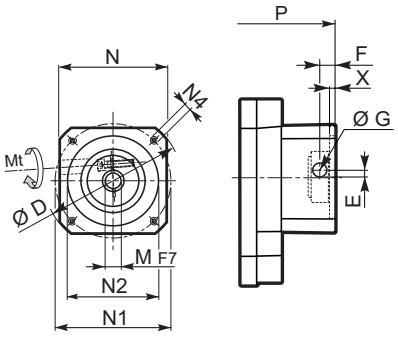

| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 60 2** | | 633 | 408 | 60 | 28 | 31 | 8 | 5.0 | 50 | M10x22 | 106 |
| **A 60 3** | **HS** | 633 | 408 | 60 | 28 | 31 | 8 | 5.0 | 50 | M10x22 | 106 |
| **A 60 4** | | 676 | 461 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 112 |

# A 60...SK / SC




SK...

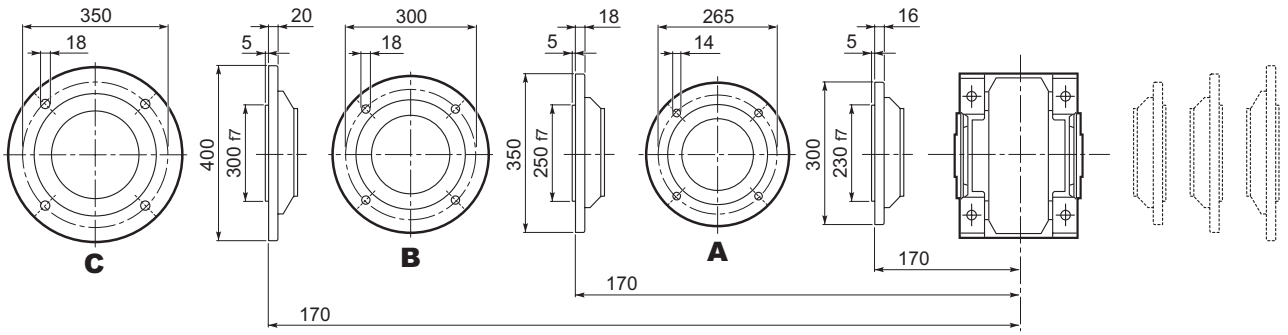


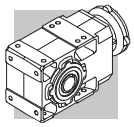

SC...

| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P 2/3x | P 4x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 60 4** | **SK80B** | 120 | 14 | 16.3 | 5 | 96 | 100 | 80 | M6x12 | 4 | — | 606.5 | 89 |
| **A 60 2/3/4** | **SK80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 536 | 606.5 | 93/93/92 |
| **A 60 2/3/4** | **SK95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 536 | 606.5 | 93/93/92 |
| **A 60 2/3/4** | **SK95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 536 | 606.5 | 93/93/92 |
| **A 60 2/3/4** | **SK95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 536 | 606.5 | 93/93/92 |
| **A 60 2/3/4** | **SK110A** | 140 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 536 | 606.5 | 93/93/92 |
| **A 60 2/3/4** | **SK110B** | 140 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 536 | 606.5 | 93/93/92 |
| **A 60 2/3/4** | **SK130A** | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 536 | 606.5 | 97/97/103 |
| **A 60 2/3** | **SK130B** | 189 | 32 | 35.3 | 10 | 160 | 165 | 130 | M10x20 | 5 | 582.5 | — | 102/102 |
| **A 60 2/3** | **SK180A** | 240 | 32 | 35.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 582.5 | — | 102/102 |
| **A 60 2/3** | **SK180B** | 240 | 38 | 41.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 582.5 | — | 102/102 |

| | | Mt | | D | E | F | G | M | N | N1 | N2 | N4 | X | P 2/3x | P 3x | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 60 4** | **SC80B** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 14 | 96 | 100 | 80 | M6x12 | 4 | — | 630 | 90 |
| **A 60 2/3/4** | **SC80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 559.5 | 630 | 94/94/93 |
| **A 60 2/3/4** | **SC95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 559.5 | 630 | 94/94/93 |
| **A 60 2/3/4** | **SC95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 559.5 | 630 | 94/94/93 |
| **A 60 2/3/4** | **SC95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 559.5 | 630 | 94/94/93 |
| **A 60 2/3/4** | **SC110A** | M6 | 15 Nm | 140 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 559.5 | 630 | 95/95/93 |
| **A 60 2/3/4** | **SC110B** | M6 | 15 Nm | 140 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 559.5 | 630 | 95/95/93 |
| **A 60 2/3/4** | **SC130A** | M6 | 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 559.5 | 630 | 96/96/104 |
| **A 60 2/3** | **SC130B** | M8 | 36 Nm | 189 | 20 | 17 | 17.75 | 32 | 160 | 165 | 130 | M10x20 | 5 | 605.5 | — | 105/105 |
| **A 60 2/3** | **SC180A** | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 32 | 192 | 215 | 180 | M12x24 | 5 | 609.5 | — | 105/105 |
| **A 60 2/3** | **SC180B** | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 38 | 192 | 215 | 180 | M12x24 | 5 | 609.5 | — | 105/105 |

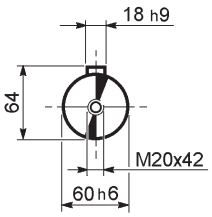
# A 60...F...

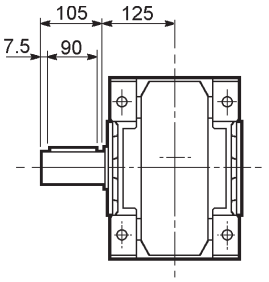




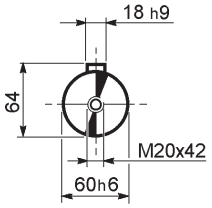
# A 60

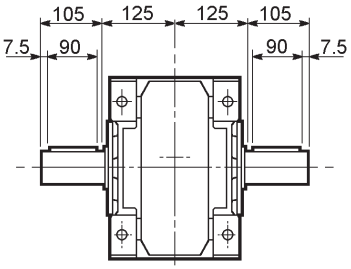
## A 60...UR



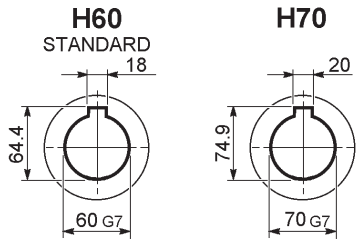



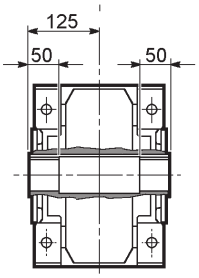

## A 60...UD



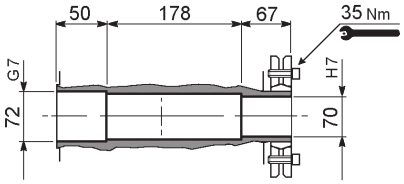



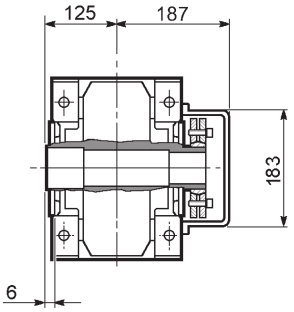

## A 60...UH



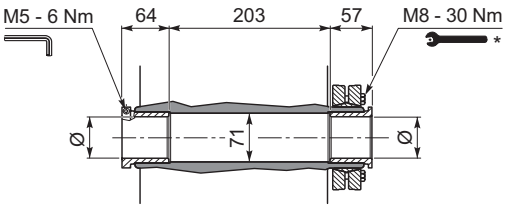

## A 60...US

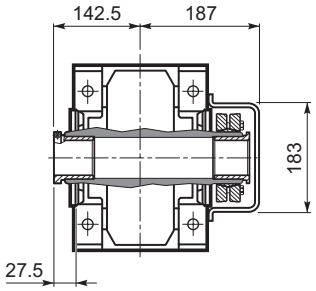


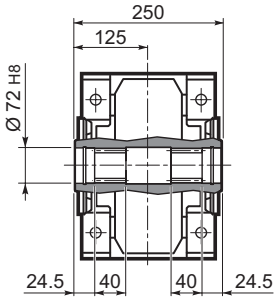

## A 60...QF

| | Ø |
|---|---|
| **QF60** | 60 |
| **QF65** | 65 |
| **QF70** | 70 |

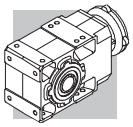


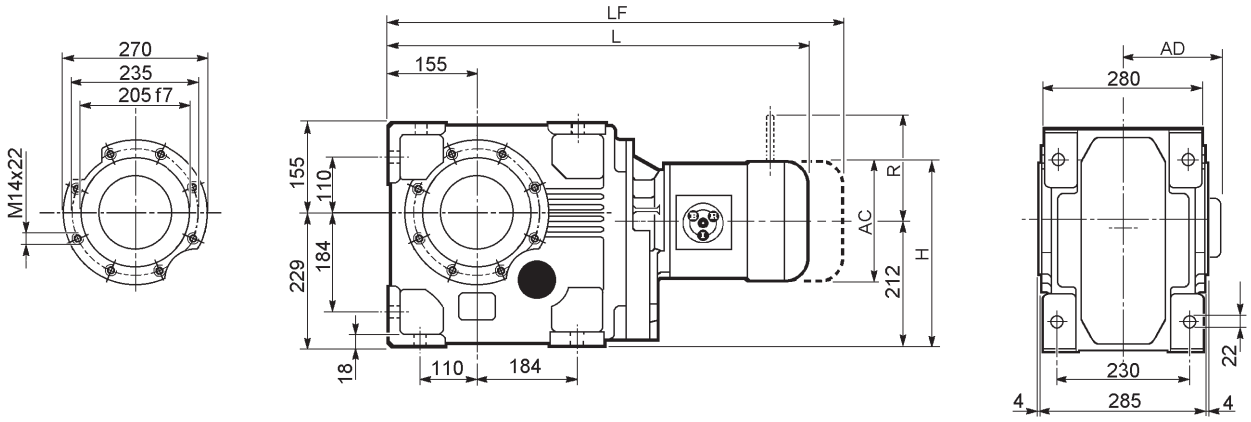

## A 60...UV



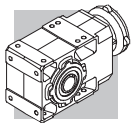

* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.



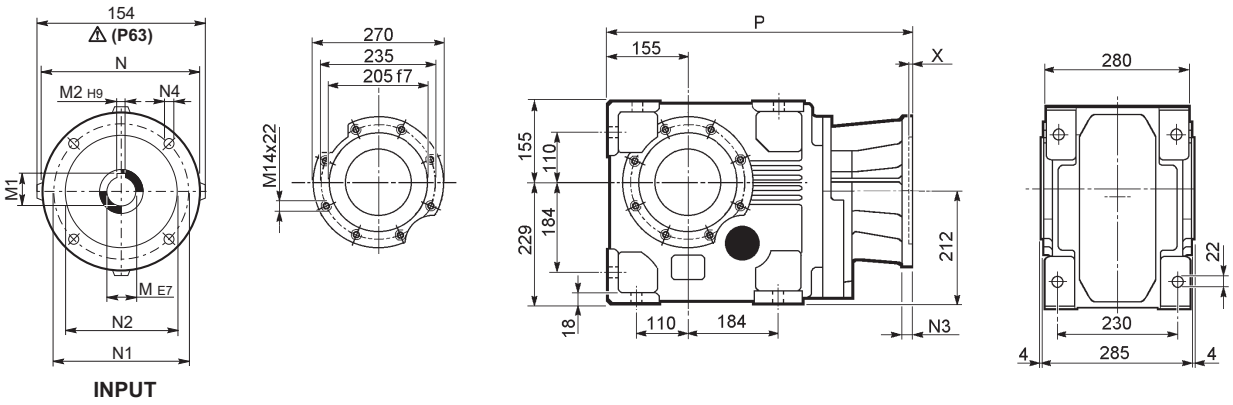
# A 70...M/ME




| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **A 70 3** | **S2** | **ME2S** | 156 | 290 | 688.5 | 119 | 152 | — | — | — | — | — | — |
| **A 70 3** | **S3** | **ME3S** | 195 | 309.5 | 731.5 | 142 | 158.5 | — | — | — | — | — | — |
| **A 70 3** | **S3** | **ME3L** | 195 | 309.5 | 763.5 | 142 | 164 | — | — | — | — | — | — |
| **A 70 3** | **S4** | **ME4** | 258 | 341 | 872.5 | 193 | 198 | — | — | — | — | — | — |
| **A 70 3** | **S4** | **ME4LB** | 258 | 341 | 907.5 | 193 | 206 | — | — | — | — | — | — |
| **A 70 3** | **S5** | **ME5S** | 310 | 367 | 958 | 245 | 226 | — | — | — | — | — | — |
| **A 70 3** | **S5** | **ME5L** | 310 | 367 | 1002 | 245 | 242 | — | — | — | — | — | — |
| **A 70 4** | **S1** | **M1** | 138 | 281 | 710.5 | 108 | 152 | 771.5 | 155 | 103 | 135 | 124 | 108 |
| **A 70 4** | **S2** | **ME2S** | 156 | 290 | 739.5 | 119 | 156 | — | — | — | — | — | — |
| **A 70 4** | **S3** | **ME3S** | 195 | 309.5 | 782.5 | 142 | 162.5 | — | — | — | — | — | — |
| **A 70 4** | **S3** | **ME3L** | 195 | 309.5 | 814.5 | 142 | 168 | — | — | — | — | — | — |
| **A 70 4** | **S4** | **ME4** | 258 | 341 | 922.5 | 193 | 202 | — | — | — | — | — | — |
| **A 70 4** | **S4** | **ME4LB** | 258 | 341 | 957.5 | 193 | 210 | — | — | — | — | — | — |

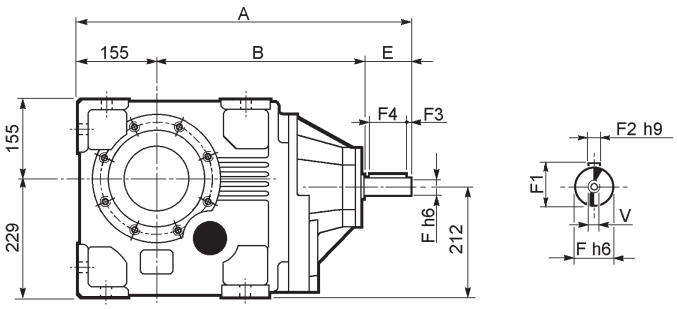


# A 70...P (IEC)




| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 70 3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 524 | 144 |
| **A 70 3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 524 | 144 |
| **A 70 3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 534 | 146 |
| **A 70 3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 534 | 146 |
| **A 70 3** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 570.5 | 154 |
| **A 70 3** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 6 | 626 | 169 |
| **A 70 3** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 6 | 626 | 169 |
| **A 70 3** | **P200** | 55 | 59.3 | 16 | 400 | 350 | 300 | — | M16x25 | 7 | 651 | 179 |
| **A 70 4** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 555.5 | 146 |
| **A 70 4** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 555.5 | 146 |
| **A 70 4** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 575 | 147 |
| **A 70 4** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 575 | 147 |
| **A 70 4** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 585 | 148 |
| **A 70 4** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 585 | 148 |
| **A 70 4** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 618.5 | 157 |

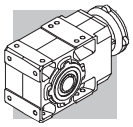
# A 70...HS




| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 70 3** | **HS** | 708.5 | 443.5 | 110 | 42 | 45 | 12 | 10 | 90 | M12x28 | 165 |
| **A 70 4** | | 644.5 | 439.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 149 |

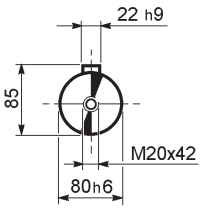


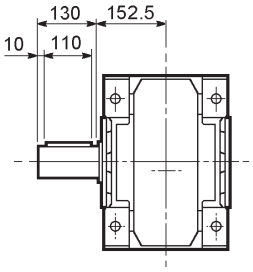
Bonfiglioli Riduttori



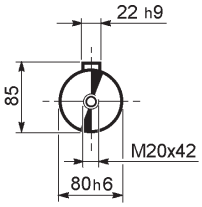
# A 70

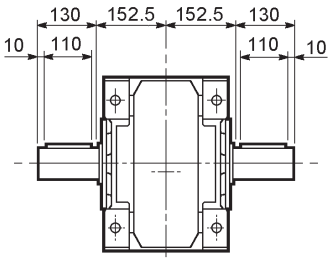
**A 70...UR**



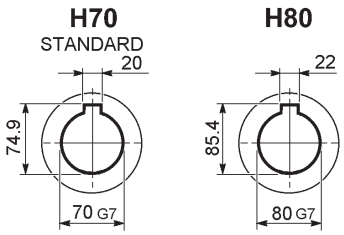



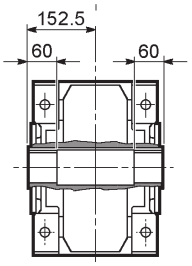

**A 70...UD**



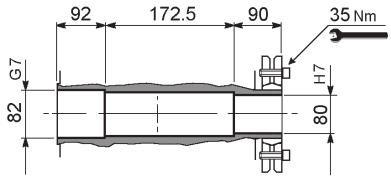



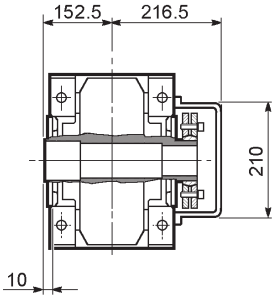

**A 70...UH**



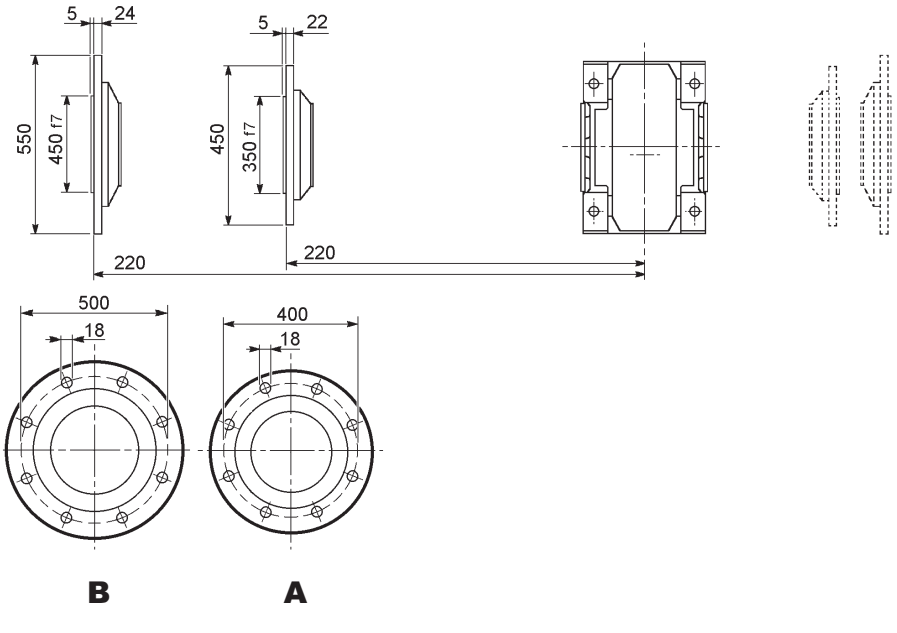



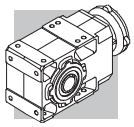

**A 70...US**



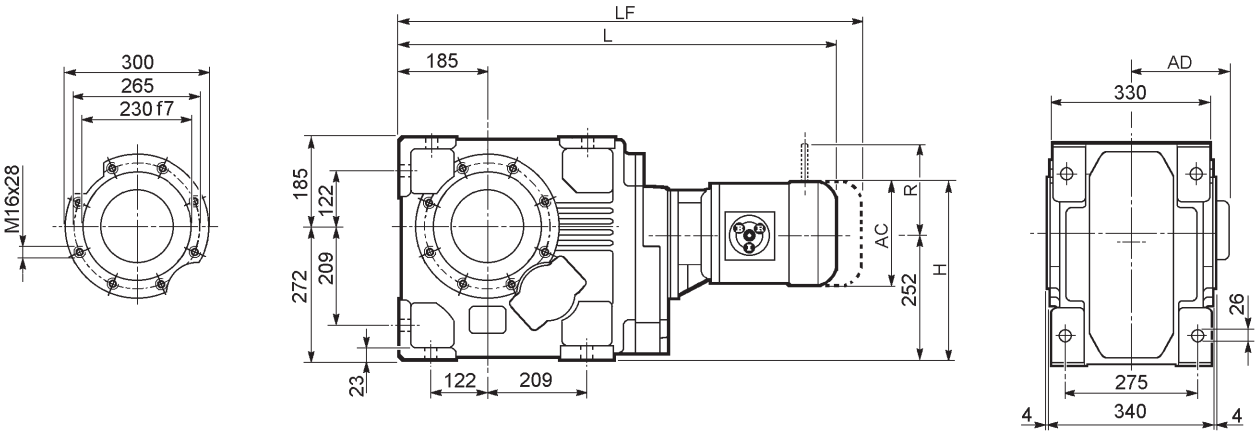




**A 70...F...**

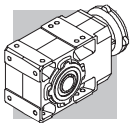




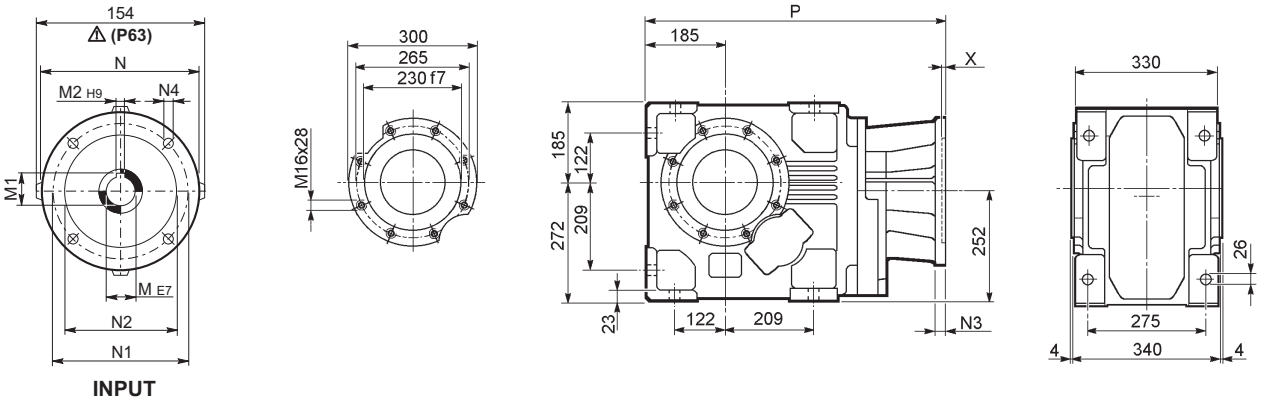
# A 80...M/ME




| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **A 80 3** | **S3** | **ME3S** | 195 | 349.5 | 809.5 | 142 | 257.5 | — | — | — | — | — | — |
| **A 80 3** | **S3** | **ME3L** | 195 | 349.5 | 841.5 | 142 | 264 | — | — | — | — | — | — |
| **A 80 3** | **S4** | **ME4** | 258 | 381 | 949.5 | 193 | 298 | — | — | — | — | — | — |
| **A 80 3** | **S4** | **ME4LB** | 258 | 381 | 984.5 | 193 | 306 | — | — | — | — | — | — |
| **A 80 3** | **S5** | **ME5S** | 310 | 407 | 1036 | 245 | 326 | — | — | — | — | — | — |
| **A 80 3** | **S5** | **ME5L** | 310 | 407 | 1080 | 245 | 342 | — | — | — | — | — | — |
| **A 80 4** | **S1** | **M1** | 138 | 321 | 800.5 | 108 | 246 | 861.5 | 249 | 103 | 135 | 124 | 108 |
| **A 80 4** | **S2** | **M2S** | 156 | 330 | 829.5 | 119 | 250 | 899.5 | 254 | 129 | 146 | 134 | 119 |
| **A 80 4** | **S2** | **ME2S** | 156 | 330 | 829.5 | 119 | 250 | — | — | — | — | — | — |
| **A 80 4** | **S3** | **ME3S** | 195 | 349.5 | 872.5 | 142 | 256.5 | — | — | — | — | — | — |
| **A 80 4** | **S3** | **ME3L** | 195 | 349.5 | 904.5 | 142 | 262 | — | — | — | — | — | — |
| **A 80 4** | **S4** | **ME4** | 258 | 381 | 1012.5 | 193 | 296 | — | — | — | — | — | — |
| **A 80 4** | **S4** | **ME4LB** | 258 | 381 | 1047.5 | 193 | 304 | — | — | — | — | — | — |

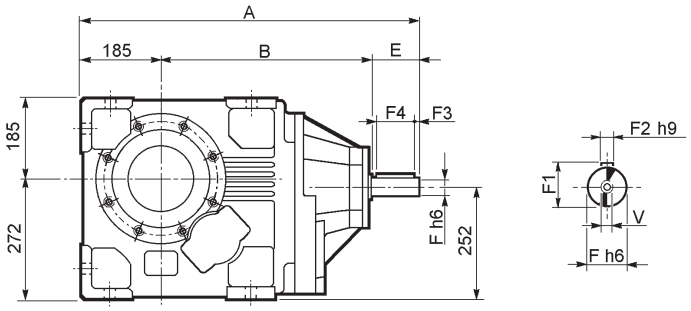


# A 80...P(IEC)

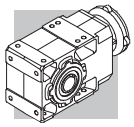



| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 80 3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 602 | 243 |
| **A 80 3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 602 | 243 |
| **A 80 3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 612 | 245 |
| **A 80 3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 612 | 245 |
| **A 80 3** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 648.5 | 253 |
| **A 80 3** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 6 | 704 | 268 |
| **A 80 3** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 6 | 704 | 268 |
| **A 80 3** | **P200** | 55 | 59.3 | 16 | 400 | 350 | 300 | — | M16x25 | 7 | 729 | 279 |
| **A 80 3** | **P225** | 60 | 64.4 | 18 | 450 | 400 | 350 | 25 | 18 | 6 | 774.5 | 298 |
| **A 80 4** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 645.5 | 248 |
| **A 80 4** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 645.5 | 248 |
| **A 80 4** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 665 | 249 |
| **A 80 4** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 665 | 249 |
| **A 80 4** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 675 | 250 |
| **A 80 4** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 675 | 250 |
| **A 80 4** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | M12x16 | 5 | 711.5 | 259 |

# A 80...HS

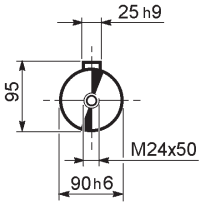


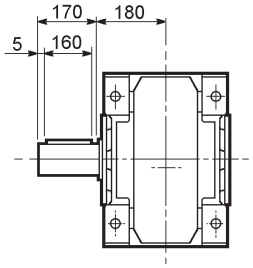

| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 80 3** | **HS** | 786.5 | 491.5 | 110 | 42 | 45 | 12 | 10 | 90 | M12x28 | 265 |
| **A 80 4** | | 735 | 499 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 250 |



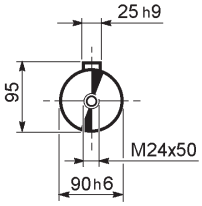
# A 80

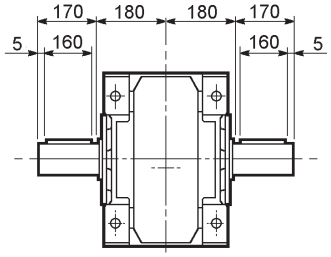
**A 80...UR**



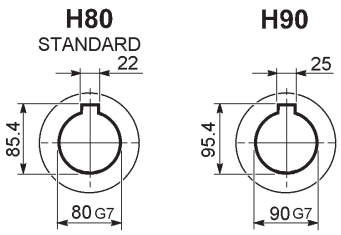



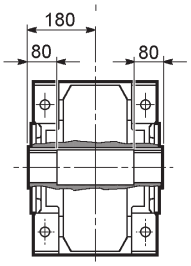

**A 80...UD**



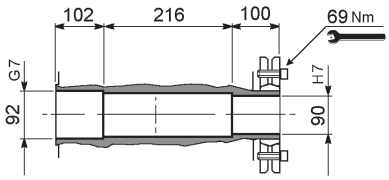



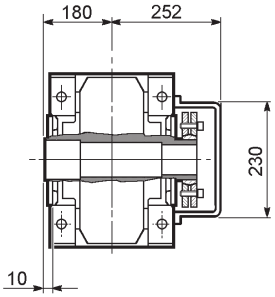

**A 80...UH**



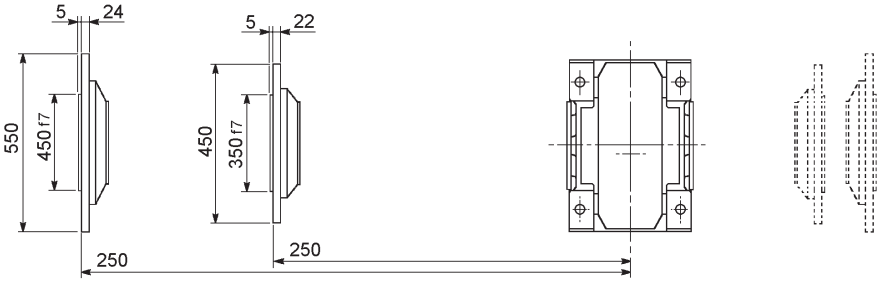



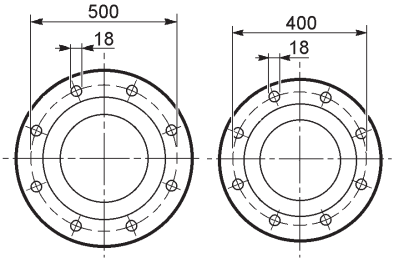

**A 80...US**



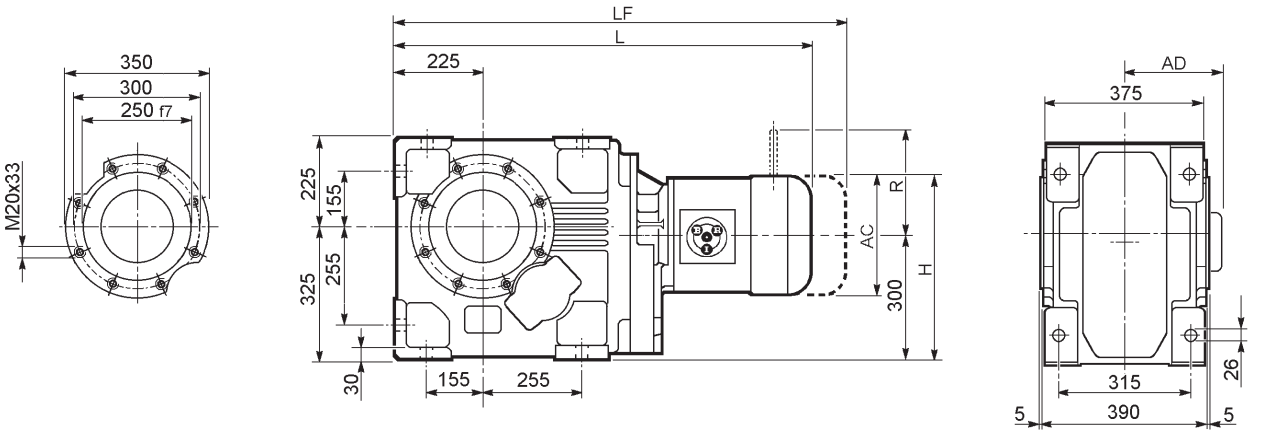




**A 80...F...**

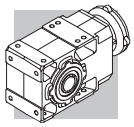


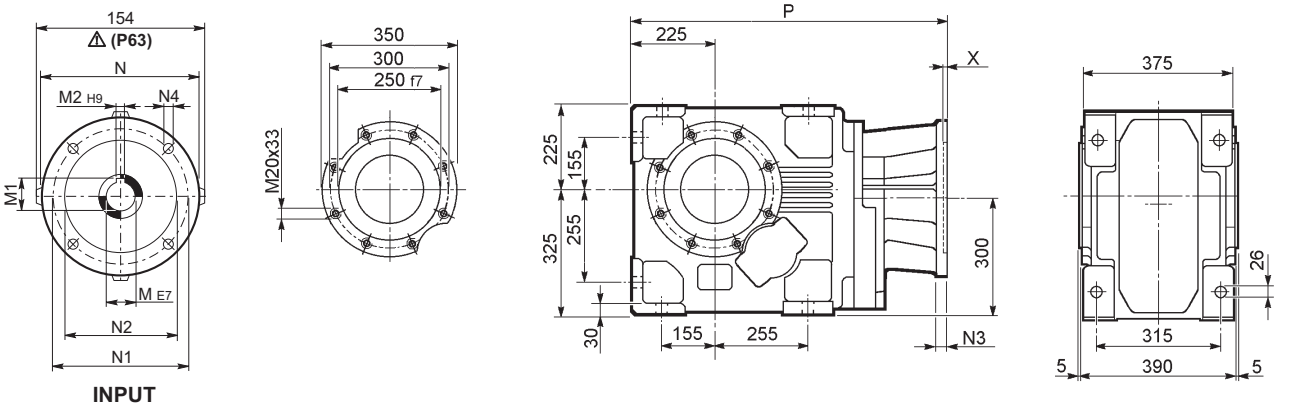
# A 90...M/ME




| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **A 90 3** | **S3** | **ME3S** | 195 | 397.5 | 930.5 | 142 | 414.5 | — | — | — | — | — | — |
| **A 90 3** | **S3** | **ME3L** | 195 | 397.5 | 962.5 | 142 | 420 | — | — | — | — | — | — |
| **A 90 3** | **S4** | **ME4** | 258 | 429 | 1070.5 | 193 | 454 | — | — | — | — | — | — |
| **A 90 3** | **S4** | **ME4LB** | 258 | 429 | 1105.5 | 193 | 462 | — | — | — | — | — | — |
| **A 90 3** | **S5** | **ME5S** | 310 | 455 | 1157 | 245 | 482 | — | — | — | — | — | — |
| **A 90 3** | **S5** | **ME5L** | 310 | 455 | 1201 | 245 | 498 | — | — | — | — | — | — |
| **A 90 4** | **S1** | **M1** | 138 | 369 | 941.5 | 108 | 412 | 1002.5 | 249 | 103 | 135 | 124 | 108 |
| **A 90 4** | **S2** | **M2S** | 156 | 378 | 970.5 | 119 | 422 | 1040.5 | 426 | 129 | 146 | 134 | 119 |
| **A 90 4** | **S2** | **ME2S** | 156 | 378 | 970.5 | 119 | 422 | — | — | — | — | — | — |
| **A 90 4** | **S3** | **ME3S** | 195 | 397.5 | 1013.5 | 142 | 428.5 | — | — | — | — | — | — |
| **A 90 4** | **S3** | **ME3L** | 195 | 397.5 | 1045.5 | 142 | 434 | — | — | — | — | — | — |
| **A 90 4** | **S4** | **ME4** | 258 | 429 | 1153.5 | 193 | 468 | — | — | — | — | — | — |
| **A 90 4** | **S4** | **ME4LB** | 258 | 429 | 1188.5 | 193 | 476 | — | — | — | — | — | — |

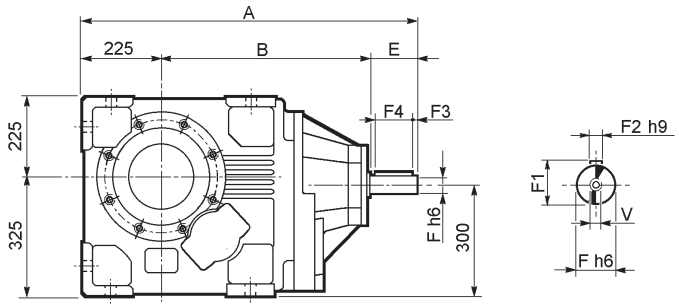


## A 90...P (IEC)

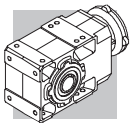



| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 90 3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 723 | 400 |
| **A 90 3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 723 | 400 |
| **A 90 3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 733 | 401 |
| **A 90 3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 733 | 401 |
| **A 90 3** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 769.5 | 409 |
| **A 90 3** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 6 | 825 | 428 |
| **A 90 3** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 6 | 825 | 429 |
| **A 90 3** | **P200** | 55 | 59.3 | 16 | 400 | 350 | 300 | — | M16x25 | 7 | 850 | 436 |
| **A 90 3** | **P225** | 60 | 64.4 | 18 | 450 | 400 | 350 | 30 | 18 | 6 | 895.5 | 472 |
| **A 90 3** | **P250** | 65 | 69.4 | 18 | 550 | 500 | 450 | 30 | 18 | 6 | 925.5 | 475 |
| **A 90 4** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 786.5 | 411 |
| **A 90 4** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 786.5 | 412 |
| **A 90 4** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 806 | 413 |
| **A 90 4** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 806 | 413 |
| **A 90 4** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 816 | 415 |
| **A 90 4** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 816 | 415 |
| **A 90 4** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 852.5 | 423 |
| **A 90 4** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 5.5 | 903 | 434 |
| **A 90 4** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 5.5 | 903 | 434 |

## A 90...HS

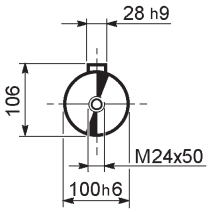


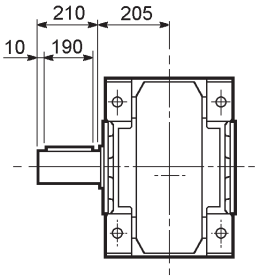

| | | A | B | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 90 3** | **HS** | 1009 | 644 | 140 | 60 | 64 | 18 | 10 | 120 | M16x36 | 465 |
| **A 90 4** | | 875.5 | 600.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 415 |



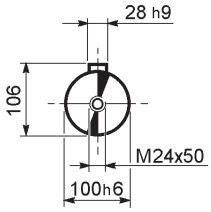
# A 90

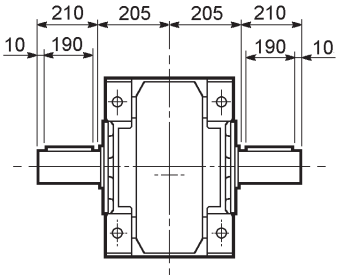
## A 90...UR



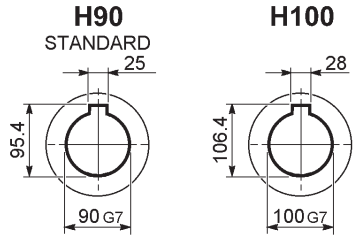



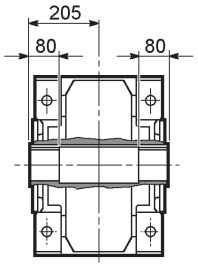

## A 90...UD



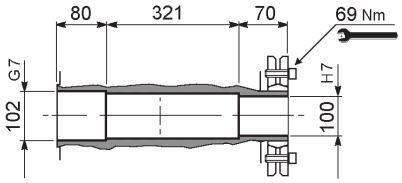



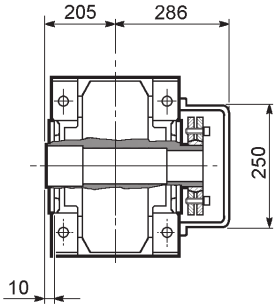

## A 90...UH



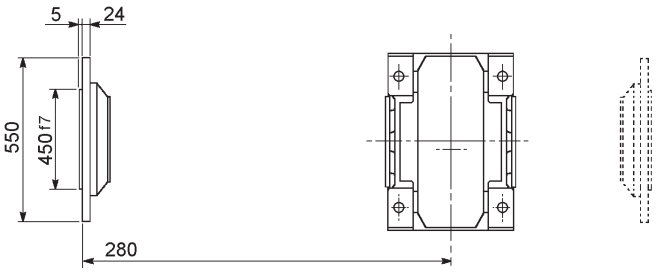



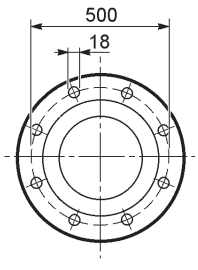

## A 90...US




## A 90...F...



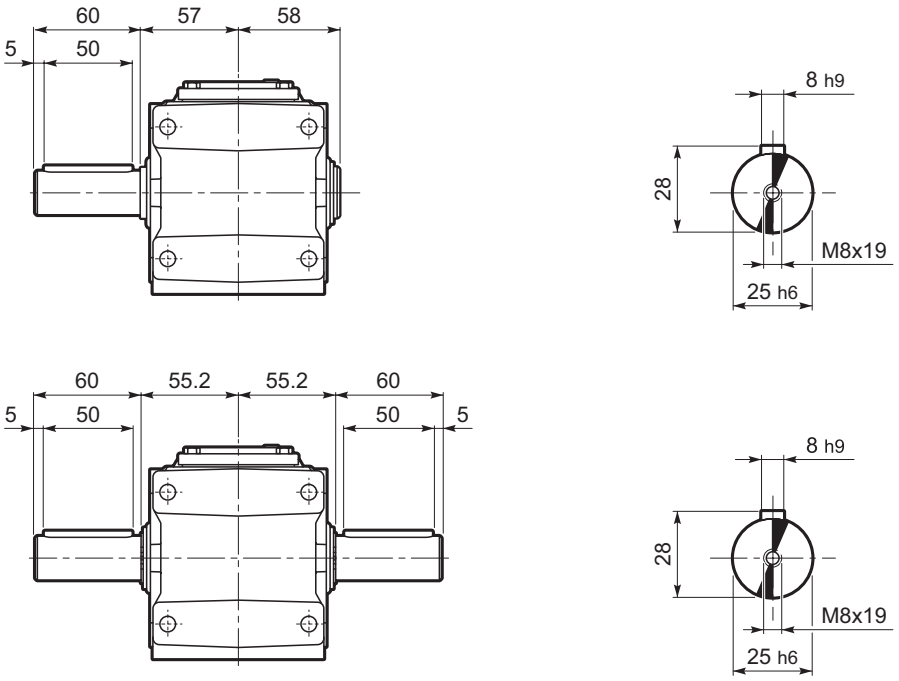

A

## 46 ACCESORIOS

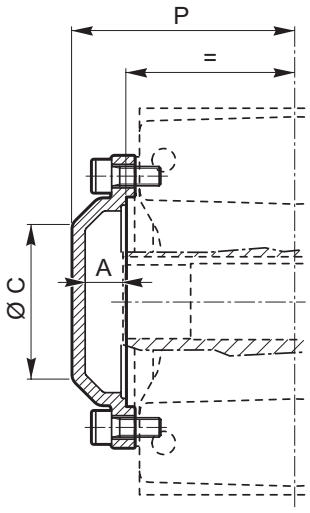
### 46.1 Eje de salida extraíble A05

Para el reductor A 05 está disponible un Kit eje de salida que contiene: eje, anillo elástico, arandela y chaveta, ya sea en ejecución monolateral (**Kit eje de salida simple A 05**) o bilateral (**Kit eje de salida doble A 05**).

El eje se puede montar en ambos lados del reductor y no se requiere ninguna herramienta especial.



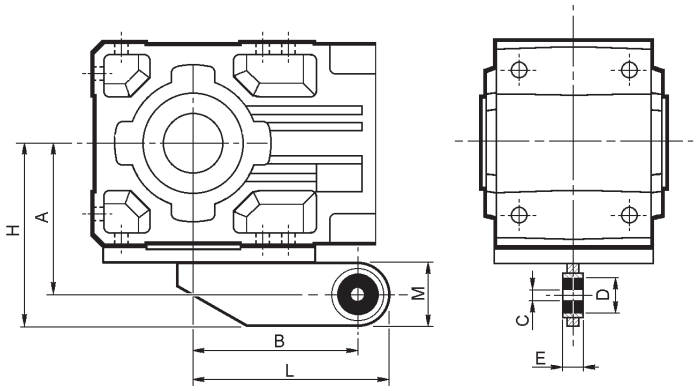

### 46.2 Tapa de seguridad



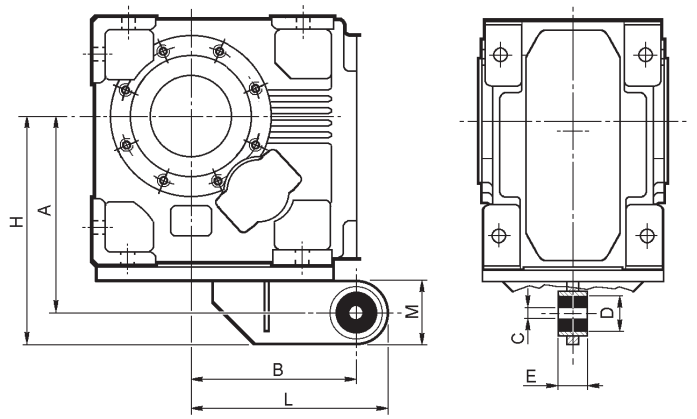

| | A | Ø C | P |
|---|---|---|---|
| **A 05** | 17.5 | 36 | 73.5 |
| **A 10** | 20.5 | 60 | 84.5 |
| **A 20** | 20 | 75 | 94 |
| **A 30** | 20 | 75 | 104 |
| **A 35** | 19.5 | 80 | 114 |
| **A 41** | 21 | 110 | 120 |
| **A 50** | 26 | 100 | 148.5 |
| **A 55** | 27 | 100 | 149 |
| **A 60** | 25 | 100 | 158 |
| **A 70** | 33.5 | 120 | 193.5 |
| **A 80** | 38 | 140 | 228 |
| **A 90** | 43 | 152 | 258 |

## 46.3 Brazo de reacción

El brazo de reacción se suministra con los tornillos para su fijación al reductor.




| | A | B | C | D | E | H | L | M |
|---|---|---|---|---|---|---|---|---|
| **A 05** | 90.5 | 80 | 10 | 30 | 20 | 115.5 | 105 | 50 |
| **A 10** | 108 | 118 | 10 | 30 | 20 | 138 | 148 | 60 |
| **A 20** | 118 | 137 | 10 | 30 | 20 | 148 | 167 | 60 |
| **A 30** | 135 | 150 | 20 | 40 | 25 | 170 | 185 | 70 |
| **A 35** | 145 | 165 | 20 | 40 | 25 | 180 | 200 | 70 |
| **A 41** | 157 | 200 | 20 | 40 | 25 | 192 | 235 | 70 |
| **A 50** | 200 | 250 | 32 | 56 | 40 | 245 | 295 | 90 |
| **A 55** | 200 | 250 | 32 | 56 | 40 | 245 | 295 | 90 |
| **A 60** | 225 | 300 | 32 | 56 | 40 | 270 | 345 | 90 |



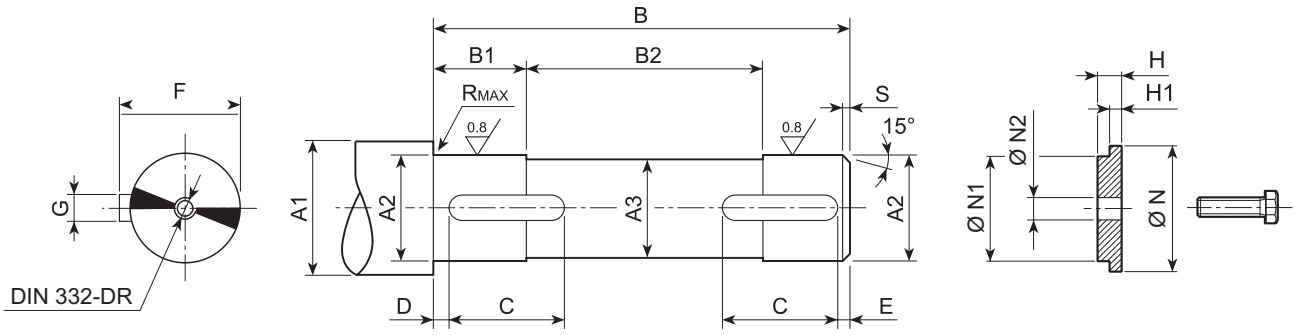

| | A | B | C | D | E | H | L | M |
|---|---|---|---|---|---|---|---|---|
| **A 70** | 289 | 250 | 32 | 56 | 40 | 334 | 295 | 90 |
| **A 80** | 357 | 300 | 42 | 78 | 60 | 422 | 365 | 130 |
| **A 90** | 410 | 350 | 42 | 78 | 60 | 475 | 415 | 130 |

## 47 EJE MAQUINA

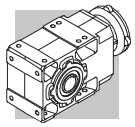
En la construcción del eje de la máquina que ha de acoplarse al reductor se aconseja utilizar acero de buena calidad y efectuar la mecanización como se indica en el esquema siguiente.

Aconsejamos, además, completar que asegure la fijación axial del eje (no diseñado). La cantidad y dimensiones del/de lo/s taladro/s roscado/s en la extremidad del eje se determinará/ n según las diversas exigencias de la aplicación.

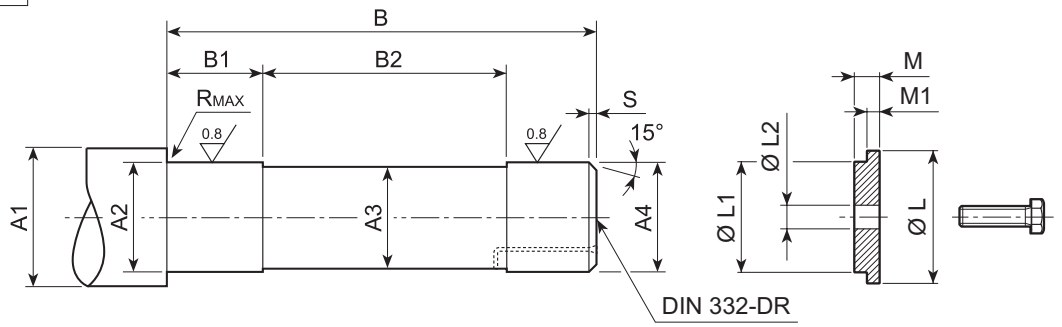
**UH_**




| | A1 | A2 | A3 | B | B1 | B2 | C | D | E | F | G | R | S | UNI 6604 | N | N1 | N2 | H | H1 | UNI 5739 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A05 UH25** | ≥ 30 | 25 h7 | 24 | 102 | 21 | 62 | 20 | 2 | 2 | 28 | 8 h9 | 0.5 | 1.5 | 8x7x20 A | 35 | 25 d9 | 9 | 7 | 5.5 | M8x25 |
| **A10 UH30** | ≥ 35 | 30 h7 | 29 | 118 | 16 | 87 | 20 | 2 | 2 | 33 | 8 h9 | 0.5 | 1.5 | 8x7x20 A | 35 | 30 d9 | 11 | 8.5 | 7 | M10x30 |
| **A10 UH25** | ≥ 30 | 25 h7 | 24 | 118 | 16 | 87 | 20 | 2 | 2 | 28 | 8 h9 | 0.5 | 1.5 | 8x7x20 A | 30÷35 | 25 d9 | 9 | 7 | 5.5 | M8x25 |
| **A20 UH35** | ≥ 42 | 35 h7 | 34 | 138 | 20 | 98 | 20 | 2 | 2 | 38 | 10 h9 | 0.5 | 1.5 | 10x8x20 A | 42 | 35 d9 | 11 | 8.5 | 7 | M10x30 |
| **A20 UH30** | ≥ 35 | 30 h7 | 29 | 138 | 20 | 98 | 25 | 2 | 2 | 33 | 8 h9 | 0.5 | 1.5 | 8x7x25 A | 35÷42 | 30 d9 | 11 | 8.5 | 7 | M10x30 |
| **A30 UH40** | ≥ 47 | 40 h7 | 39 | 158 | 23 | 112 | 30 | 2 | 2 | 43 | 12 h9 | 0.5 | 1.5 | 12x8x30 A | 47 | 40 d9 | 14 | 8.5 | 7 | M12x35 |
| **A30 UH35** | ≥ 42 | 35 h7 | 34 | 158 | 23 | 112 | 30 | 2 | 2 | 38 | 10 h9 | 0.5 | 1.5 | 10x8x30 A | 42÷47 | 35 d9 | 11 | 8.5 | 7 | M10x30 |
| **A35 UH40** | ≥ 47 | 40 h7 | 39 | 175 | 33 | 109 | 40 | 2 | 2 | 43 | 12 h9 | 1 | 1.5 | 12x8x40 A | 47 | 40 d9 | 14 | 8.5 | 7 | M12x35 |
| **A35 UH35** | ≥ 42 | 35 h7 | 34 | 175 | 33 | 109 | 40 | 2 | 2 | 38 | 10 h9 | 1 | 1.5 | 10x8x40 A | 42÷47 | 35 d9 | 11 | 8.5 | 7 | M10x30 |
| **A41 UH45** | ≥ 52 | 45 h7 | 44 | 184 | 28 | 128 | 45 | 2.5 | 2.5 | 49.5 | 14 h9 | 1 | 2 | 14x9x45 A | 52 | 45 d9 | 14 | 8.5 | 7 | M12x35 |
| **A41 UH40** | ≥ 47 | 40 h7 | 39 | 184 | 28 | 128 | 50 | 2.5 | 2.5 | 43 | 12 h9 | 1 | 2 | 12x8x50 A | 47÷52 | 40 d9 | 14 | 8.5 | 7 | M12x35 |
| **A50 UH55** | ≥ 63 | 55 h7 | 54 | 226 | 37.5 | 151 | 55 | 2.5 | 2.5 | 59 | 16 h9 | 1 | 2 | 16x10x55 A | 63 | 55 d9 | 22 | 10 | 8 | M20x50 |
| **A50 UH50** | ≥ 57 | 50 h7 | 49 | 226 | 37.5 | 151 | 65 | 2.5 | 2.5 | 53.5 | 14 h9 | 1 | 2 | 14x9x65 A | 57÷63 | 50 d9 | 18 | 10 | 8 | M16x45 |
| **A55 UH60** | ≥ 70 | 60 h7 | 59 | 226 | 37.5 | 151 | 65 | 2.5 | 2.5 | 64 | 18 h9 | 2 | 2 | 18x11x65 A | 70 | 60 d9 | 22 | 10 | 8 | M20x50 |
| **A55 UH50** | ≥ 60 | 50 h7 | 49 | 226 | 37.5 | 151 | 75 | 2.5 | 2.5 | 53.5 | 14 h9 | 2 | 2 | 14x9x75 A | 60÷70 | 50 d9 | 18 | 10 | 8 | M16x45 |
| **A60 UH70** | ≥ 78 | 70 h7 | 69 | 248 | 48 | 152 | 70 | 2.5 | 2.5 | 74.5 | 20 h9 | 2.5 | 2 | 20x12x70 A | 78 | 70 d9 | 22 | 10 | 8.5 | M20x50 |
| **A60 UH60** | ≥ 68 | 60 h7 | 59 | 248 | 48 | 152 | 80 | 2.5 | 2.5 | 64 | 18 h9 | 2.5 | 2 | 18x11x80 A | 68÷78 | 60 d9 | 22 | 10 | 8.5 | M20x50 |
| **A70 UH80** | v89 | 80 h7 | 79 | 303 | 58 | 187 | 90 | 3 | 3 | 85 | 22 h9 | 2.5 | 2.5 | 22x14x90 A | 89 | 80 d9 | 22 | 10 | 8.5 | M20x50 |
| **A70 UH70** | ≥ 78 | 70 h7 | 69 | 303 | 58 | 187 | 110 | 3 | 3 | 74.5 | 20 h9 | 2.5 | 2.5 | 20x12x110 A | 78÷89 | 70 d9 | 22 | 10 | 8.5 | M20x50 |
| **A80 UH90** | ≥ 99 | 90 h7 | 89 | 358 | 78 | 202 | 120 | 3 | 3 | 95 | 25 h9 | 2.5 | 2.5 | 25x14x120 A | 99 | 90 d9 | 26 | 22 | 20.5 | M24x70 |
| **A80 UH80** | ≥ 89 | 80 h7 | 79 | 358 | 78 | 202 | 130 | 3 | 3 | 85 | 22 h9 | 2.5 | 2.5 | 22x14x130 A | 89÷99 | 80 d9 | 22 | 10 | 8.5 | M20x50 |
| **A90 UH100** | ≥ 111 | 100 h7 | 99 | 408 | 78 | 252 | 160 | 3 | 3 | 106 | 28 h9 | 2.5 | 2.5 | 28x16x160 A | 111 | 100 d9 | 26 | 22 | 20.5 | M24x70 |
| **A90 UH90** | ≥ 99 | 90 h7 | 89 | 408 | 78 | 252 | 190 | 3 | 3 | 95 | 25 h9 | 2.5 | 2.5 | 25x14x190 A | 99÷111 | 90 d9 | 26 | 22 | 20.5 | M24x70 |

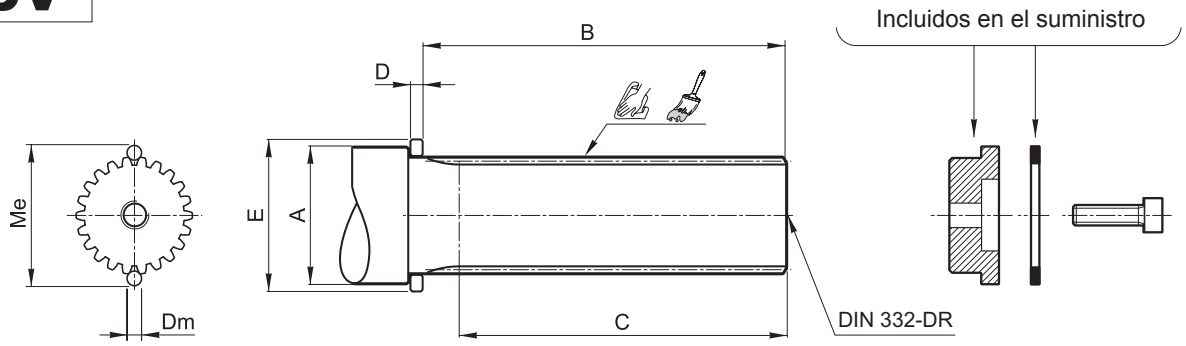


# US

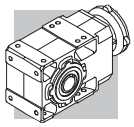



| | A1 | A2 | A3 | A4 | B | B1 | B2 | R | S | L | L1 | L2 | M | M1 | UNI 5739 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A 05** | ≥ 35 | 27 h7 | 24 | 25 h6 | 129.5 | 32 | 63.5 | 0.5 | 1.5 | 29.5 | 25 d9 | 11 | 8.5 | 7 | M10x30 |
| **A 10** | ≥ 42 | 32 h7 | 29 | 30 h6 | 147.5 | 34 | 77.5 | 0.5 | 1.5 | 35.5 | 30 d9 | 11 | 8.5 | 7 | M10x30 |
| **A 20** | ≥ 48 | 37 h7 | 34 | 35 h6 | 170 | 40 | 89 | 0.5 | 1.5 | 43 | 35 d9 | 14 | 8.5 | 7 | M12x35 |
| **A 30** | ≥ 54 | 42 h7 | 39 | 40 h6 | 191.5 | 48 | 95.5 | 0.5 | 1.5 | 49 | 40 d9 | 18 | 10 | 8.5 | M16x45 |
| **A 35** | ≥ 54 | 42 h7 | 39 | 40 h6 | 208.5 | 48 | 112.5 | 0.5 | 1.5 | 49 | 40 d9 | 18 | 10 | 8.5 | M16x45 |
| **A 41** | ≥ 60 | 47 h7 | 44 | 45 h6 | 222 | 53 | 117 | 1 | 2 | 54 | 45 d9 | 18 | 10 | 8.5 | M16x45 |
| **A 50** | ≥ 72 | 57 h7 | 54 | 55 g6 | 264 | 46 | 156 | 1 | 2 | 72 | 55 d9 | 22 | 10 | 8.5 | M20x50 |
| **A 55** | ≥ 72 | 62 h7 | 59 | 60 g6 | 266 | 46 | 158 | 2.5 | 2 | 72 | 60 d9 | 22 | 10 | 8.5 | M20x50 |
| **A 60** | ≥ 90 | 72 h7 | 69 | 70 g6 | 293 | 48 | 178 | 2.5 | 2.5 | 85 | 70 d9 | 22 | 10 | 8.5 | M20x50 |
| **A 70** | ≥ 104 | 82 h7 | 79 | 80 g6 | 352.5 | 90 | 172.5 | 2.5 | 2.5 | 95 | 80 d9 | 22 | 10 | 8.5 | M20x50 |
| **A 80** | ≥ 114 | 92 h7 | 89 | 90 g6 | 416 | 100 | 216 | 2.5 | 2.5 | 105 | 90 d9 | 26 | 22 | 20.5 | M24x70 |
| **A 90** | ≥ 126 | 102 h7 | 99 | 100 g6 | 469 | 78 | 321 | 2.5 | 2.5 | 120 | 100 d9 | 26 | 22 | 20.5 | M24x70 |

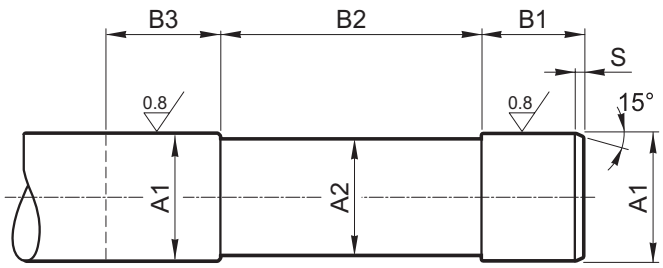
# UV



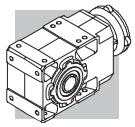

| | DIN 5480 | Me | Dm | A | B | C | D | E | ISO 4762 |
|---|---|---|---|---|---|---|---|---|---|
| **A 20** | 30x1.25x30x22 | 33.04 +0/-0.04 | 2.75 | ≥ 40 | 111.5 | ≥ 95 | 7 | 45 | M10x35 |
| **A 30** | 35x2x30x16 | 38.93 +0/-0.04 | 4 | ≥ 45 | 130.5 | ≥ 112 | 7 | 50 | M12x40 |
| **A 35** | 35x2x30x16 | 38.93 +0/-0.04 | 4 | ≥ 45 | 147.5 | ≥ 129 | 7 | 50 | M12x40 |
| **A 41** | 45x2x30x21 | 48.86 +0/-0.04 | 4 | ≥ 55 | 155.5 | ≥ 136 | 7 | 60 | M16x45 |
| **A 50** | 50x2x30x24 | 54.14 +0/-0.05 | 4 | ≥ 60 | 196 | ≥ 175 | 7 | 65 | M16x45 |
| **A 55** | 50x2x30x24 | 54.14 +0/-0.05 | 4 | ≥ 60 | 196 | ≥ 175 | 7 | 65 | M16x45 |
| **A 60** | 65x2x30x31 | 68.97 +0 /-0.05 | 4 | ≥ 75 | 213.5 | ≥ 191 | 7 | 80 | M20x55 |



**QF**



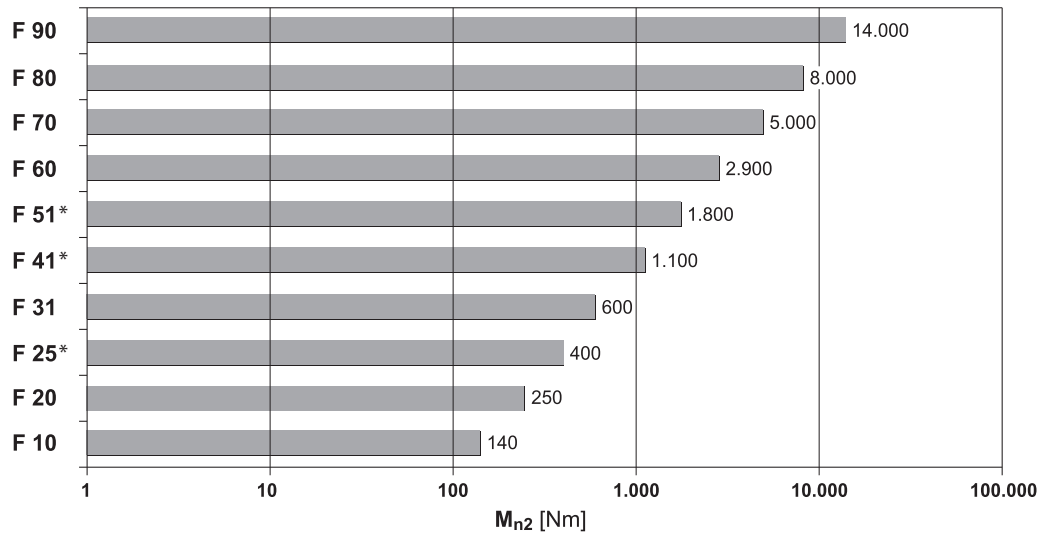

| | | A1 | A2 | B1 | B2 | B3 | S |
|---|---|---|---|---|---|---|---|
| **A 10** | **QF25** | 25 h6 | 24 | 41 | 95 | ≥ 50 | 1.5 |
| | **QF30** | 30 h6 | 29 | | | | |
| **A 20** | **QF25** | 25 h6 | 24 | 41 | 115 | ≥ 50 | 1.5 |
| | **QF30** | 30 h6 | 29 | | | | |
| **A 30** | **QF35** | 35 h6 | 34 | 45 | 130 | ≥ 54 | 1.5 |
| | **QF40** | 40 h6 | 39 | | | | |
| **A 35** | **QF35** | 35 h6 | 34 | 45 | 146.5 | ≥ 54 | 1.5 |
| | **QF40** | 40 h6 | 39 | | | | |
| **A 41** | **QF40** | 40 h6 | 39 | 47 | 151.5 | ≥ 56 | 2 |
| | **QF45** | 45 h6 | 44 | | | | |
| **A 50** | **QF50** | 50 h6 | 49 | 48 | 197 | ≥ 57 | 2 |
| | **QF55** | 55 h6 | 54 | | | | |
| **A 55** | **QF55** | 55 h6 | 54 | 50 | 190 | ≥ 59 | 2 |
| | **QF60** | 60 h6 | 59 | | | | |
| **A 60** | **QF60** | 60 h6 | 59 | 57 | 203 | ≥ 66 | 2.5 |
| | **QF65** | 65 h6 | 64 | | | | |
| | **QF70** | 70 h6 | 69 | | | | |



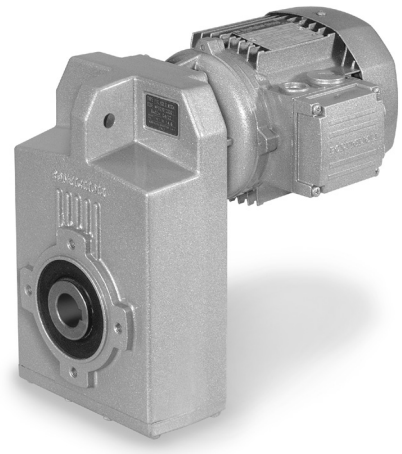
## 48 CARACTERÍSTICAS CONSTRUCTIVAS

Las principales características constructivas son:
- modularidad
- diseño compacto
- montajes universales
- rendimientos elevados
- bajo nivel de ruido
- engranajes de acero aleado, cementados y templados
- cajas de aluminio sin pintar en los tamaños 10, 20 y 25;
  cajas de fundición de alta resistencia pintadas para los otros tamaños.

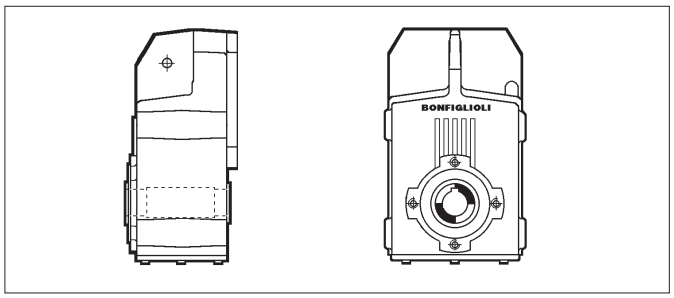
(D 38)




* Para eventuales limitaciones de la forma constructiva QF ver el capitulo “FORMAS CONSTRUCTIVAS”



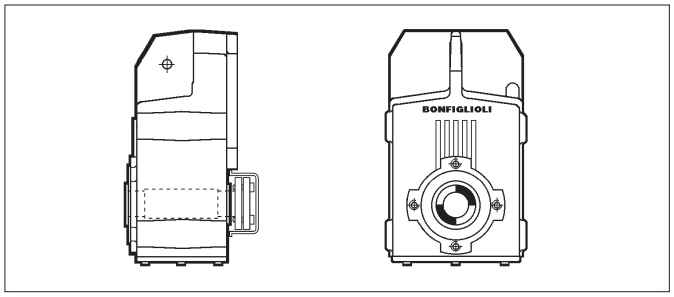
## 49 FORMAS CONSTRUCTIVAS




# H

**Eje de salida hueco con chavetero**

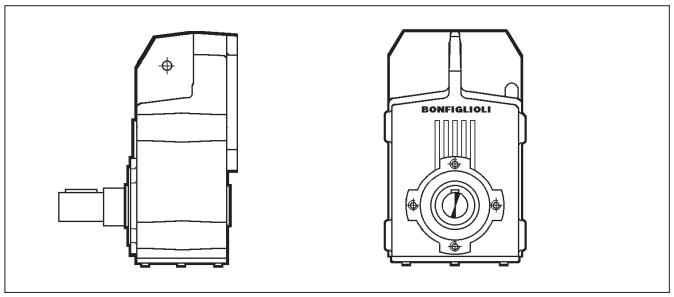
**F 10 ... F 90**




# S

**Eje de salida hueco con aro cónico de apriete**

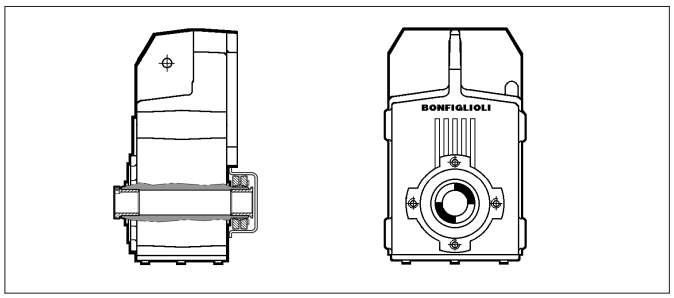
**F 10 ... F 90**




# R

**Eje de salida cilíndrico**

**F 10 ... F 90**




# QF (Quick-fit)

**Eje hueco con casquillo de adaptación y aro de apriete**

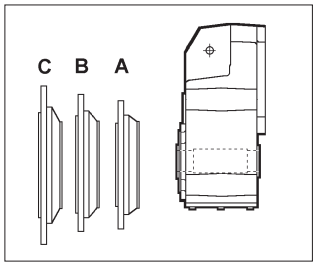
**F 10 ... F 60**

| $M_{n2\ max}$ [Nm] | |
|---|---|
| **F 25 QF30** | 350 |
| **F 41 QF42** | 850 |
| **F 41 QF45** | 1000 |
| **F 51 QF50** | 1750 |

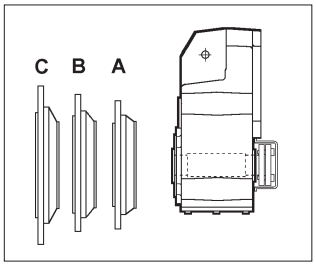
**Formas constructivas con brida postiza**

Los esquemas reseñados indican las bridas que pueden aplicarse en la forma constructiva base.

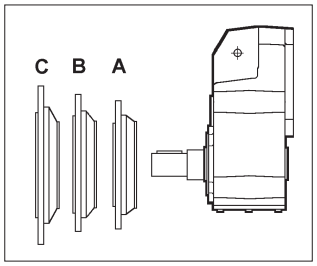
**H... F...**



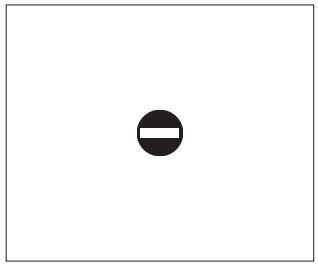

**S F...**




**R F...**




**QF...**



## 50 DESIGNACIÓN

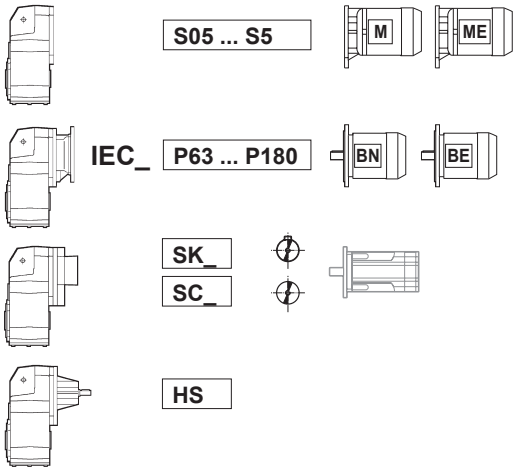
REDUCTOR

**F 10 2 H30 FA 9.8 S2 H5** .....

OPCIONES 312

POSICIÓN DE MONTAJE 314
**H1** (por defecto), **H2**, **H3**, **H4**, **H5**, **H6**

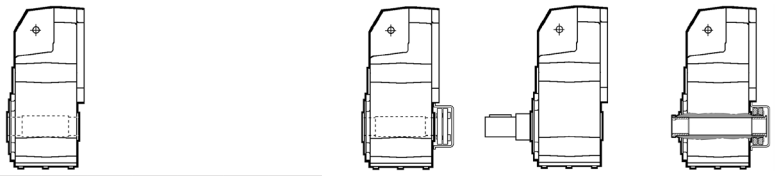
DESIGNACION DE LA ENTRADA




RELACIÓN DE REDUCCIÓN

TAMAÑO DE LA BRIDA DE SALIDA (sólo si se solicita)
**F** = Versión con brida
**A**, **B**, **C** = Tamaño de la brida

FORMA CONSTRUCTIVA



| H | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | F 10 | F 20 | F 25 | F 31 | F 41 | F 51 | F 60 | F 70 | F 80 | F 90 |
| Standard | **H25** | **H30** | **H35** | **H35** | **H40** | **H50** | **H60** | **H80** | **H90** | **H100** |
| Alternative | H30 | H35 | H40 | H40 | H45 | H55 | H70 | H70 | H80 | H90 |

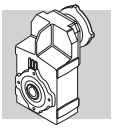
Diámetros alternativos disponibles bajo pedido

**S** (F 10...F 90) **R** (F 10...F 90) **QF** (F 10...F 60)

Nº DE ETAPAS DE REDUCCIÓN
**2** (F 10...F 51), **3** (F 20...F 90), **4** (F 31...F 90)

TAMAÑO DEL REDUCTOR
**10**, **20**, **25**, **31**, **41**, **51**, **60**, **70**, **80**, **90**

TIPO: **F** = pendular



MOTOR FRENO

**M 1LA 4** 230/400-50 IP54 CLF ..... **W FD** 7.5 R SB 220 SA .....

OPCIONES 312

ALIMENTACIÓN FRENO 526 531 536 539

TIPO DE RECTIFICADOR AC/DC
**NB**, **SB**, **NBR**, **SBR** 527 532

PALANCA DESBLOQUEO FRENO
**R**, **RM** 541

PAR DE FRENADO 528 533 536 539

TIPO DE FRENO
**FD**, **AFD** (freno c.c.)
**FA**, **BA** (freno c.a.) 525 530 535 538

POSICIÓN CAJA DE BORNES
**W** (por defecto), **N**, **E**, **S** 314

FORMA CONSTRUCTIVA
— (motor integrado)
**B5** (motor IEC)

CLASE DE AISLAMIENTO
**CL F** estandar
**CL H** opción 492 519

GRADO DE PROTECCIÓN
**IP55** estandard (IP54 - motor freno) 492 514

TENSIÓN - FRECUENCIA 488 517

NÚMERO DE POLOS
**2**, **4**, **6**, **2/4**, **2/6**, **2/8**, **2/12**, **4/6**, **4/8**

TAMAÑO MOTOR
**0B ... 5LA** (motor integrado)
**63A ... 280M** (motor IEC)

TIPO MOTOR
**M** = trifásico integrado
**BN** = trifásico IEC
**ME** = trifásico integrado, clase IE2
**BE** = trifásico IEC, clase IE2

## 50.1 Opciones reductores

**AL, AR**
Antirretorno. En el párrafo 55 están indicados los sentidos de giro a indicar y los tipos de reductor a los que puede aplicarse el dispositivo antirretorno.

**SO**
Los reductores F 10...F 41, que normalmente se suministran con lubricante por parte de BONFIGLIOLI RIDUTTORI, se suministran sin lubricante.

**LO**
Los reductores F 51...F 90, que normalmente se suministran sin lubricante, son suministrados con aceite sintético del tipo utilizado normalmente por BONFIGLIOLI RIDUTTORI y llenados de acuerdo con la posición de montaje solicitada.

**DV**
Dos retenes en el eje de entrada. (Disponible únicamente en los motorreductores compactos).

**VV**
Reten de fluoro-elastómero en el eje rápido.

**PV**
Todos los retenes de fluoro-elastómero.

**FL**
Mecanizado adicional y taladrado lateral (F 10...F 41). (Estándar para F 51...F 90)

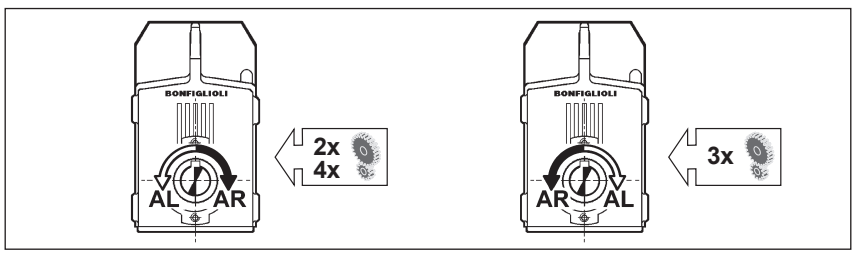
**Accesorios**
Ver el capítulo 63 de este catálogo.

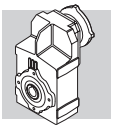
## 50.2 Opciones motores

**AA, AC, AD**
Posición angular de la palanca de desbloqueo del freno respecto a la caja de conexiones, visto desde el lado del ventilador.
Posición estándar = 90º en sentido horario. AA = 0º, AC = 180º, AD = 90º en sentido antihorario.

**AL, AR**
Para los motorreductores equipados con motor compacto serie M o ME, está disponible la opción antirretorno colocado sobre el propio motor e indicado en la sección motores eléctricos de este catálogo. La tabla D39 indica el sentido de giro libre del reductor, en base al cual, deberá de realizarse la selección de la opción.

(D 39)





**CF**
Filtro capacitativo.

**D3**
n° 3 sonda bimetálica en los bobinados con temperatura a 150 ºC.

**E3**
nº 3 termistores en el bobinado, con temperatura 150 ºC.

**F1**
Volante de inercia.

**H1**
Resistencias de caldeo. Alimentación normalizada 230 V 10 %.

**PN**
Potencia a 60 Hz. Correspondiente a la potencia normalizada a 50 Hz.

**PS**
Doble eje (excluye posiciones RC y U1).

**RC**
Sombrerete antilluvia (excluye opción PS).

**RV**
Equilibrado del rotor para grado de vibración B.

**TC**
La opción de sombrerete tipo TC deberá ser especificada cuando el motor se instale en ambientes de la industria textil. Esta opción excluye las variantes EN_ y no es aplicable a motores con freno de tipo BA.

**TP**
Tropicalización.

**U1**
Ventilación independiente (excluye opción PS y CUS).

**U2**
Ventilador sin caja de conexiones, precableado interiormente. Excluye la opción PS y CUS.
Disponible para motores:
BN 71,
BE 80 ... BE 132,
M1,
ME2 ... ME4.

**Para mayor información sobre las opciones, consultar el correspondiente capítulo en la sección de motores eléctricos.**

## 51 LUBRICACIÓN

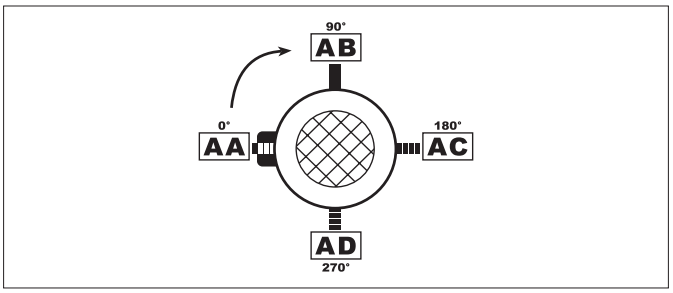
Los componentes internos de los reductores Bonfiglioli se lubrican mediante un sistema mixto de inmersión y barboteo del aceite. Los tamaños F10...F41, se suministran normalmente desde fábrica con la carga de aceite.
Los grupos de tamaño F51 y superiores se suministran sin aceite y es responsabilidad del usuario el llenado de aceite antes de la puesta en servicio. En ambos casos, según la versión, antes de la puesta en marcha será necesario substituir el tapón ciego usado en transporte por un tapón depresor que se suministra con el reductor.
Para las tablas de situación de los tapones y de la cantidad de lubricante, consultar el Manual de uso y mantenimiento (disponible en www.bonfiglioli.com).
El lubricante ”long life” que se suministra de serie es de naturaleza sintética y a menos que sea contaminado por agentes externos, no requiere sustituirse periódicamente durante toda la vida del reductor. El funcionamiento del reductor está calculado para una temperatura ambiente de entre -20ºC y +40ºC. Para temperaturas ambiente comprendidas entre -20ºC y -10ºC , solo se debe poner en funcionamiento el reductor después de haber efectuado un calentamiento progresivo y homogéneo del grupo o, en todo caso, hacerlo funcionar sin carga. La carga podrá ser aplicada al eje del reductor cuando la temperatura del mismo alcance los -10ºC o más.

## 52 POSICIÓN DE MONTAJE Y ORIENTACIÓN DE LA CAJA DE CONEXIONES

La orientación de la caja de conexiones del motor se identifica observando el motor por el lado del ventilador; la orientación estándar está resaltada en negrita (W).

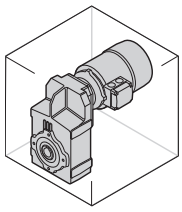
**Posición angular de la palanca del desbloqueo del freno.**
En los motores freno, la palanca de desbloqueo del freno (opcional) tiene la orientación estándar a 90º respecto a la caja de conexiones (posición AB); en caso de requerir una orientación distinta, especifíquese mediante los correspondientes códigos de opciones.

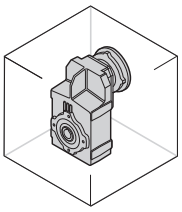
(D 40)

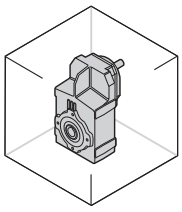


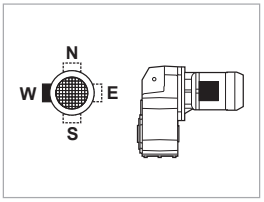
# F ...

## H1

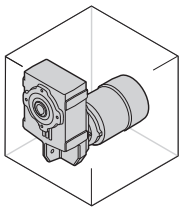

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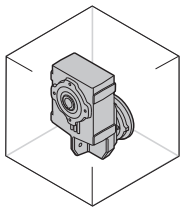

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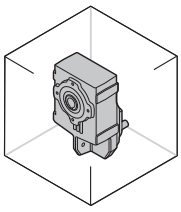

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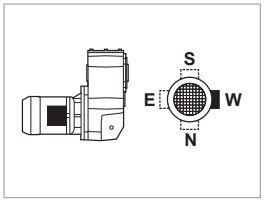



## H2

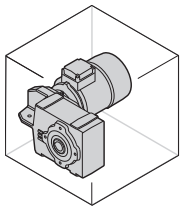

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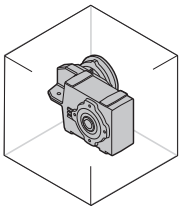

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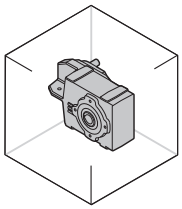

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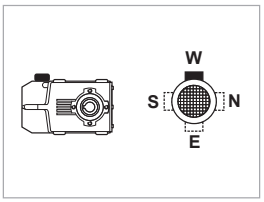



## H3

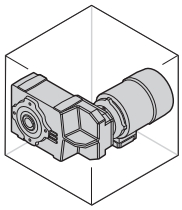

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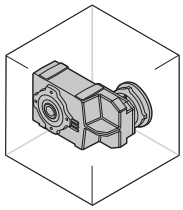

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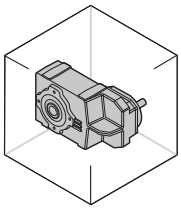

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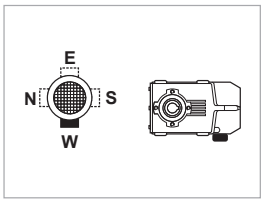



## H4

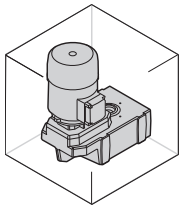

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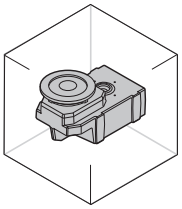

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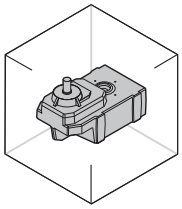

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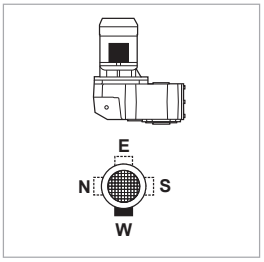



## H5

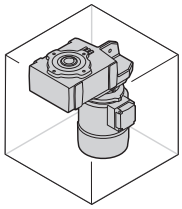

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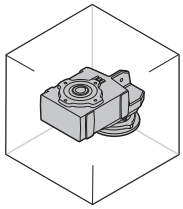

_P(IEC) _SK / _SC

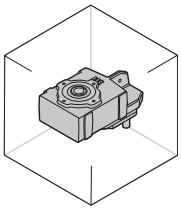

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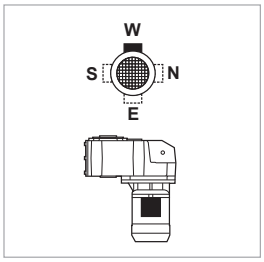



## H6


_S


_P(IEC) _SK / _SC


_HS




**W** = Default

## 53 CARGAS RADIALES

Los órganos de transmisión acoplados en los ejes de entrada y/o salida del reductor generan una fuerza resultante en sentido radial que actúa sobre el mismo eje.
El valor de dichas cargas deberá ser compatible con la capacidad del sistema eje–cojinetes del reductor para soportarlas, en particular el valor absoluto de la carga aplicada ($R_{c1}$ para el eje de entrada, $R_{c2}$ para el eje de salida) deberá ser inferior al valor nominal ($R_{n1}$ para el eje de entrada, $R_{n2}$ para el de salida) contenido en las tablas de datos técnicos.
En las siguientes fórmulas, el subíndice (1) se refiere a los valores correspondientes al eje de entrada y el subíndice (2) a los valores correspondientes al eje de salida.
La carga generada por un sistema de transmisión externo puede ser calculada, con una buena aproximación, mediante la siguiente fórmula:

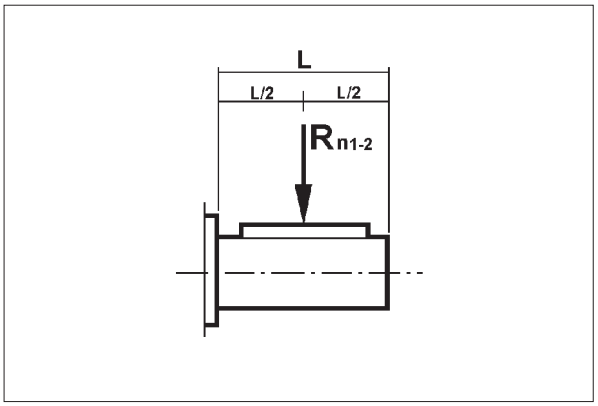
$$R_{c1}\,[N] = \frac{2000 \cdot M_1[Nm] \cdot K_r}{d\,[mm]} \quad ; \quad R_{c2}\,[N] = \frac{2000 \cdot M_2[Nm] \cdot K_r}{d\,[mm]} \qquad (35)$$

(D 41)

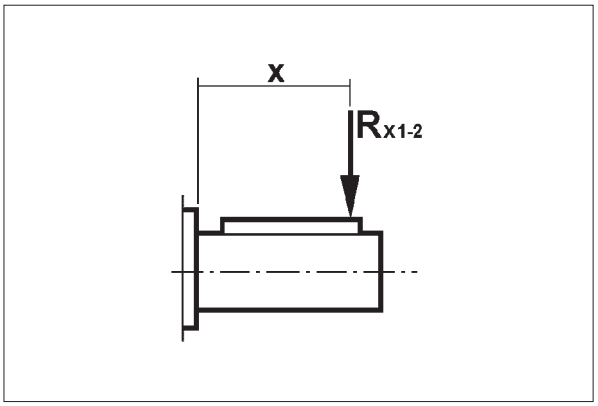
| | |
|---|---|
| **$M_1$** [Nm] | Par aplicado en el eje de entrada |
| **$M_2$** [Nm] | Par suministrado en el eje de salida |
| **d** [mm] | Diámetro primitivo de la pieza montada sobre el eje |
| **$K_r$ = 1** | Transmisión por cadena |
| **$K_r$ = 1,25** | Transmisión por engranaje |
| **$K_r$ = 1,5** | Transmisión por correa trapecial |
| **$K_r$ = 2,0** | Transmisión por correa plana |

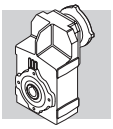
Dependiendo del punto de aplicación de la carga sobre el eje, la verificación de compatibilidad se procederá de manera diferente y en particular:

(D 42)




(D 43)





**a) Aplicación de la carga en el punto medio del eje, tabla (D42)**

La carga anteriormente calculada se deberá comparar con el correspondiente valor nominal de catálogo y deberá verificarse:

$R_{c1} \leq R_{n1}$ [eje de entrda]

o bien

$R_{c2} \leq R_{n2}$ [eje de salida]

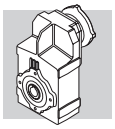
**b) Aplicación de la carga a una distancia x del apoyo del eje, tabla (D43)**

Cuando la carga se aplica a una distancia “x” del resalte del eje, se debe recalcular el valor admisible a dicha distancia.
El nuevo valor se distingue con el símbolo $R_{x1}$ (eje rápido) y $R_{x2}$ (eje lento) y se obtiene a partir de los valores de catalogo $R_{n1}$ y $R_{n2}$ respectivamente a través del Factor.

$$\frac{a}{b+x} \qquad (36)$$

(D 44)

| | **Constantes del reductor** | | | | | |
|---|---|---|---|---|---|---|
| | Eje de salida | | | Eje de entrada | | |
| | **a** | **b** | **c** | **a** | **b** | **c** |
| **F 10 2** | 123 | 100.5 | 450 | 21 | 1 | 300 |
| **F 20 2** | 145 | 115 | 600 | 40 | 20 | 350 |
| **F 20 3** | 145 | 115 | 600 | 21 | 1 | 300 |
| **F 25 2 - F 25 3** | 157.5 | 127.5 | 800 | 40 | 20 | 350 |
| **F 25 4** | 157.5 | 127.5 | 800 | 21 | 1 | 300 |
| **F 31 2 - F 31 3** | 165 | 135 | 850 | 38.5 | 18.5 | 350 |
| **F 31 4** | 165 | 135 | 850 | 21 | 1 | 300 |
| **F 41 2 - F 41 3** | 191.5 | 151.5 | 1000 | 49.5 | 24.5 | 450 |
| **F 41 4** | 191.5 | 151.5 | 1000 | 40 | 20 | 350 |
| **F 51 2 - F 51 3** | 233.5 | 183.5 | 1300 | 49.5 | 24.5 | 450 |
| **F 51 4** | 233.5 | 183.5 | 1300 | 38.5 | 18.5 | 350 |
| **F 60 3** | 258.5 | 198.5 | 1100 | 55.5 | 25.5 | 600 |
| **F 60 4** | 258.5 | 198.5 | 1100 | 49.5 | 24.5 | 450 |
| **F 70 3** | 342 | 277 | 1600 | 86 | 31 | 1000 |
| **F 70 4** | 342 | 277 | 1600 | 49.5 | 24.5 | 450 |
| **F 80 3** | 386.5 | 301.5 | 1800 | 86 | 31 | 1000 |
| **F 80 4** | 386.5 | 301.5 | 1800 | 49.5 | 24.5 | 450 |
| **F 90 3** | 458.5 | 353.5 | 2400 | 116 | 46 | 1400 |
| **F 90 4** | 458.5 | 353.5 | 2400 | 49.5 | 24.5 | 450 |



El procedimiento de verificación implica los siguientes pasos sucesivos.

**EJE DE ENTRADA**

1. Cálculo de:

$$R_{x1} = R_{n1} \cdot \frac{a}{b + x} \quad (37)$$

NOTA. Siempre que se cumpla:

$$\frac{L}{2} \leq x \leq c \quad (38)$$

Finalmente será necesario comprobar que:

$$R_{c1} \leq R_{x1} \quad (39)$$

**EJE DE SALIDA**

1. Cálculo de:

$$R_{x2} = R_{n2} \cdot \frac{a}{b + x} \quad (40)$$

NOTA. Siempre que se cumpla:

$$\frac{L}{2} \leq x \leq c \quad (41)$$

Finalmente será necesario comprobar que:

$$R_{c2} \leq R_{x2} \quad (42)$$

## 54 CARGAS AXIALES, $A_{n1}$, $A_{n2}$

Las cargas axiales máximas admisibles en el eje de entrada [$A_{n1}$] y en el de salida [$A_{n2}$] se pueden obtener a partir de los correspondientes valores de la carga radial [$R_{n1}$] y [$R_{n2}$] mediante las siguientes expresiones:

$$A_{n1} = R_{n1} \cdot 0{,}2$$
$$A_{n2} = R_{n2} \cdot 0{,}2 \qquad (43)$$

Los valores de las cargas axiales admisibles así calculados, están referidos a cargas axiales actuando a la vez con las cargas radiales nominales.
Únicamente en el caso en que la carga radial que actúe sobre el eje del reductor sea nula, se podrá considerar que la carga axial admisible [$A_n$] es el 50% del valor de la carga radial [$R_n$] admisible para el eje en cuestión.
Ante cargas axiales que superen los valores admisibles o de fuerzas axiales que resulten claramente dominantes sobre las cargas radiales, se recomienda contacten con el Servicio Técnico de Bonfiglioli Riduttori.

## 55 DISPOSITIVO ANTIRRETORNO

Bajo pedido se puede suministrar el reductor/motorreductor provisto de un dispositivo antirretorno que permite el giro del eje de salida solamente en el sentido deseado (opciones AL – AR).
La tabla (D45) indica los reductores a los que es posible aplicar el dispositivo antirretorno.

(D 45)

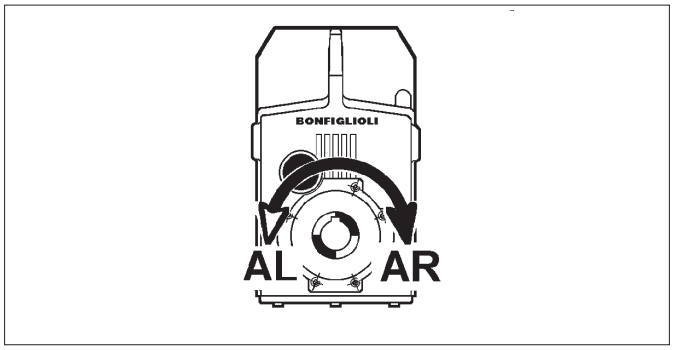
| | | | | | | |
|---|---|---|---|---|---|---|
| **F 31 2*** | **F 41 2** ⛀ (6.7; 10.8) | | | | | |
| **F 31 3*** | **F 41 3** | **F 51 3** | **F 60 3** | **F 70 3** | **F 80 3** | **F 90 3** |
| | | **F 51 4** | **F 60 4** | **F 70 4** | **F 80 4** | **F 90 4** |

* El suministro del dispositivo antirretorno no incluye las bridas para servomotores del tipo S_60A, S_60B, S_80A.

Al efectuar el pedido deberá especificarse el sentido de rotación mediante la opción AL o AR (tabla D46) en la designación del reductor o en la del motor.

N.B.Cuando la intervención del dispositivo antirretorno sea solicitado de forma repetitiva, verificar que el par en el eje de salida resultante de la aplicación de la carga no supere el 70 % del par nominal $M_{n2}$ del reductor.

(D 46)



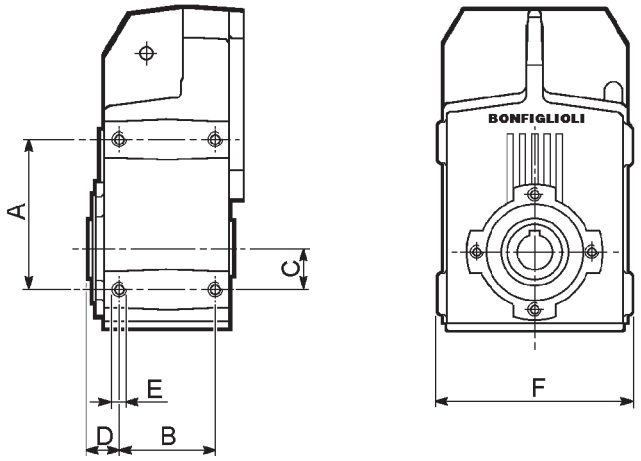

## 56 OPCIONES Y ALTERNATIVAS

**Mecanizado lateral (Opción FL)**

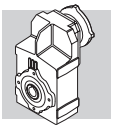
Bajo pedido, el reductor o motorreductor puede suministrarse con los laterales mecanizados y taladrados para permitir la fijación (opción FL).

La tabla (D47) muestra las dimensiones de los taladros y los correspondientes entre ejes. Los reductores F 51 a F90 se suministran de serie según este listado.

(D 47)




| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| **F 10** | 115 | 60 | 35 | 21.25 | M8x16 | 163 |
| **F 20** | 130 | 70 | 40 | 26.5 | M10x20 | 181 |
| **F 25** | 130 | 70 | 40 | 27.5 | M10x20 | 181 |
| **F 31** | 147 | 80 | 45 | 30 | M12x20 | 203 |
| **F 41** | 190 | 95 | 60 | 32.5 | M12x22 | 235 |

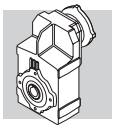


## 57 DATOS TÉCNICOS MOTORREDUCTORES

La selección de los motores sin freno cumplen las prescripciones del reglamiento CE 640/2009 (ver paragrafo **M1.1** de este catalogo): para potencias nominales iguales o superiores a 0.75kW,deve preverse motores BE/ME (se contempla en la sección **M1** de este catalogo). Para potencias nominales inferiores a 0.75kW,pueden preverse motores BN/M (ver sección **M2** de este catalogo).
La regulación CE 640/2009 no se aplica a los motores freno, por lo tanto la selección de los motores freno tiene cuenta de los motores BN/M, a prescindir delos valores de la potencia nominal. Los motores BE/ME freno están disponibles bajo demanda.

# 0.09 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.40** | 1945 | 2.6 | 2188 | 35000 | | | **F704_2188 P63 BN63A6** | 424 |
| **0.50** | 1526 | 3.4 | 1717 | 35000 | | | **F704_1717 P63 BN63A6** | 424 |
| **0.62** | 1254 | 0.9 | 1411 | 8500 | **F414_1411 S05 M05A6** | 411 | **F414_1411 P63 BN63A6** | 412 |
| **0.73** | 1079 | 1.0 | 1213 | 8500 | **F414_1213 S05 M05A6** | 411 | **F414_1213 P63 BN63A6** | 412 |
| **0.81** | 971 | 1.1 | 1092 | 8500 | **F414_1092 S05 M05A6** | 411 | **F414_1092 P63 BN63A6** | 412 |
| **0.90** | 874 | 1.3 | 982.4 | 8500 | **F414_982.4 S05 M05A6** | 411 | **F414_982.4 P63 BN63A6** | 412 |
| **0.98** | 801 | 1.4 | 900.5 | 8500 | **F414_900.5 S05 M05A6** | 411 | **F414_900.5 P63 BN63A6** | 412 |
| **1.1** | 724 | 1.5 | 813.8 | 8500 | **F414_813.8 S05 M05A6** | 411 | **F414_813.8 P63 BN63A6** | 412 |
| **1.2** | 678 | 0.9 | 762.3 | 6500 | **F314_762.3 S05 M05A6** | 407 | **F314_762.3 P63 BN63A6** | 408 |
| **1.2** | 658 | 1.7 | 739.4 | 8500 | **F414_739.4 S05 M05A6** | 411 | **F414_739.4 P63 BN63A6** | 412 |
| **1.3** | 610 | 1.0 | 685.6 | 6500 | **F314_685.6 S05 M05A6** | 407 | **F314_685.6 P63 BN63A6** | 408 |
| **1.3** | 614 | 1.8 | 690.1 | 8500 | **F414_690.1 S05 M05A6** | 411 | **F414_690.1 P63 BN63A6** | 412 |
| **1.4** | 551 | 1.1 | 619.9 | 6500 | **F314_619.9 S05 M05A6** | 407 | **F314_619.9 P63 BN63A6** | 408 |
| **1.5** | 515 | 1.2 | 578.6 | 6500 | **F314_578.6 S05 M05A6** | 407 | **F314_578.6 P63 BN63A6** | 408 |
| **1.6** | 489 | 2.2 | 549.8 | 8500 | **F414_549.8 S05 M05A6** | 411 | **F414_549.8 P63 BN63A6** | 412 |
| **1.7** | 469 | 0.9 | 527.3 | 6500 | **F254_527.3 S05 M05A6** | 403 | **F254_527.3 P63 BN63A6** | 404 |
| **1.7** | 469 | 1.3 | 527.8 | 6500 | **F314_527.8 S05 M05A6** | 407 | **F314_527.8 P63 BN63A6** | 408 |
| **1.9** | 414 | 1.0 | 466.0 | 6500 | **F254_466.0 S05 M05A6** | 403 | **F254_466.0 P63 BN63A6** | 404 |
| **1.9** | 411 | 1.5 | 462.6 | 6500 | **F314_462.6 S05 M05A6** | 407 | **F314_462.6 P63 BN63A6** | 408 |
| **2.0** | 387 | 1.0 | 434.9 | 6500 | **F254_434.9 S05 M05A6** | 403 | **F254_434.9 P63 BN63A6** | 404 |
| **2.0** | 386 | 2.9 | 433.7 | 8500 | **F414_433.7 S05 M05A6** | 411 | **F414_433.7 P63 BN63A6** | 412 |
| **2.1** | 372 | 1.6 | 418.9 | 6500 | **F314_418.9 S05 M05A6** | 407 | **F314_418.9 P63 BN63A6** | 408 |
| **2.2** | 350 | 1.1 | 393.9 | 6500 | **F254_393.9 S05 M05A6** | 403 | **F254_393.9 P63 BN63A6** | 404 |
| **2.4** | 340 | 1.8 | 374.4 | 6500 | | | **F313_374.4 P63 BN63A6** | 408 |
| **2.6** | 302 | 2.0 | 332.8 | 6500 | | | **F313_332.8 P63 BN63A6** | 408 |
| **2.6** | 313 | 3.5 | 344.8 | 8500 | | | **F413_344.8 P63 BN63A6** | 412 |
| **2.8** | 288 | 0.9 | 316.9 | 4000 | **F203_316.9 S05 M05A6** | 399 | **F203_316.9 P63 BN63A6** | 400 |
| **3.0** | 267 | 2.2 | 293.8 | 6500 | | | **F313_293.8 P63 BN63A6** | 408 |
| **3.1** | 259 | 1.0 | 285.2 | 4000 | **F203_285.2 S05 M05A6** | 399 | **F203_285.2 P63 BN63A6** | 400 |
| **3.4** | 232 | 1.1 | 255.3 | 4000 | **F203_255.3 S05 M05A6** | 399 | **F203_255.3 P63 BN63A6** | 400 |
| **3.5** | 230 | 2.6 | 253.6 | 6500 | | | **F313_253.6 P63 BN63A6** | 408 |
| **3.9** | 207 | 2.9 | 228.2 | 6500 | | | **F313_228.2 P63 BN63A6** | 408 |
| **4.2** | 190 | 1.3 | 209.3 | 4000 | **F203_209.3 S05 M05A6** | 399 | **F203_209.3 P63 BN63A6** | 400 |
| **4.4** | 184 | 3.3 | 202.3 | 6500 | | | **F313_202.3 P63 BN63A6** | 408 |
| **4.8** | 168 | 1.5 | 184.9 | 4000 | **F203_184.9 S05 M05A6** | 399 | **F203_184.9 P63 BN63A6** | 400 |
| **5.1** | 157 | 1.6 | 172.6 | 4000 | **F203_172.6 S05 M05A6** | 399 | **F203_172.6 P63 BN63A6** | 400 |
| **5.6** | 142 | 1.8 | 156.3 | 4000 | **F203_156.3 S05 M05A6** | 399 | **F203_156.3 P63 BN63A6** | 400 |
| **6.7** | 123 | 2.0 | 132.2 | 4000 | **F202_132.2 S05 M05A6** | 399 | **F202_132.2 P63 BN63A6** | 400 |
| **6.9** | 118 | 1.2 | 127.1 | 2800 | **F102_127.1 S05 M05A6** | 395 | **F102_127.1 P63 BN63A6** | 396 |

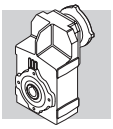


## 0.09 kW

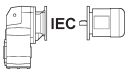
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **7.7** | 106 | 2.4 | 114.3 | 4000 | **F202_114.3 S05 M05A6** | 399 | **F202_114.3 P63 BN63A6** | 400 |
| **8.3** | 98 | 1.4 | 106.0 | 2800 | **F102_106.0 S05 M05A6** | 395 | **F102_106.0 P63 BN63A6** | 396 |
| **8.7** | 94 | 2.6 | 101.6 | 4000 | **F202_101.6 S05 M05A6** | 399 | **F202_101.6 P63 BN63A6** | 400 |
| **9.6** | 85 | 1.6 | 91.5 | 2800 | **F102_91.5 S05 M05A6** | 395 | **F102_91.5 P63 BN63A6** | 396 |
| **9.7** | 84 | 3.0 | 90.4 | 4000 | **F202_90.4 S05 M05A6** | 399 | **F202_90.4 P63 BN63A6** | 400 |
| **10.8** | 75 | 1.9 | 81.3 | 2800 | **F102_81.3 S05 M05A6** | 395 | **F102_81.3 P63 BN63A6** | 396 |
| **11.5** | 71 | 3.5 | 76.8 | 4000 | **F202_76.8 S05 M05A6** | 399 | **F202_76.8 P63 BN63A6** | 400 |
| **12.4** | 66 | 2.1 | 71.1 | 2800 | **F102_71.1 S05 M05A6** | 395 | **F102_71.1 P63 BN63A6** | 396 |
| **14.0** | 58 | 2.4 | 63.0 | 2800 | **F102_63.0 S05 M05A6** | 395 | **F102_63.0 P63 BN63A6** | 396 |
| **15.5** | 53 | 2.7 | 56.7 | 2800 | **F102_56.7 S05 M05A6** | 395 | **F102_56.7 P63 BN63A6** | 396 |
| **18.1** | 45 | 3.1 | 48.7 | 2800 | **F102_48.7 S05 M05A6** | 395 | **F102_48.7 P63 BN63A6** | 396 |
| **19.7** | 41 | 3.4 | 44.7 | 2800 | **F102_44.7 S05 M05A6** | 395 | **F102_44.7 P63 BN63A6** | 396 |
| **22.2** | 37 | 3.8 | 39.6 | 2800 | **F102_39.6 S05 M05A6** | 395 | **F102_39.6 P63 BN63A6** | 396 |
| **24.9** | 33 | 4.3 | 35.3 | 2800 | **F102_35.3 S05 M05A6** | 395 | **F102_35.3 P63 BN63A6** | 396 |
| **26.7** | 31 | 4.6 | 33.0 | 2800 | **F102_33.0 S05 M05A6** | 395 | **F102_33.0 P63 BN63A6** | 396 |
| **29.7** | 28 | 5.1 | 29.6 | 2800 | **F102_29.6 S05 M05A6** | 395 | **F102_29.6 P63 BN63A6** | 396 |
| **34** | 24 | 5.9 | 25.8 | 2800 | **F102_25.8 S05 M05A6** | 395 | **F102_25.8 P63 BN63A6** | 396 |
| **39** | 21 | 6.6 | 22.8 | 2800 | **F102_22.8 S05 M05A6** | 395 | **F102_22.8 P63 BN63A6** | 396 |
| **46** | 18 | 7.8 | 19.3 | 2800 | **F102_19.3 S05 M05A6** | 395 | **F102_19.3 P63 BN63A6** | 396 |
| **52** | 16 | 8.9 | 17.0 | 2800 | **F102_17.0 S05 M05A6** | 395 | **F102_17.0 P63 BN63A6** | 396 |
| **60** | 14 | 10.1 | 14.6 | 2700 | **F102_14.6 S05 M05A6** | 395 | **F102_14.6 P63 BN63A6** | 396 |
| **68** | 12 | 10.3 | 13.0 | 2600 | **F102_13.0 S05 M05A6** | 395 | **F102_13.0 P63 BN63A6** | 396 |
| **76** | 11 | 10.3 | 11.5 | 2500 | **F102_11.5 S05 M05A6** | 395 | **F102_11.5 P63 BN63A6** | 396 |
| **90** | 9 | 11.8 | 9.8 | 2370 | **F102_9.8 S05 M05A6** | 395 | **F102_9.8 P63 BN63A6** | 396 |
| **103** | 8 | 11.8 | 8.6 | 2270 | **F102_8.6 S05 M05A6** | 395 | **F102_8.6 P63 BN63A6** | 396 |
| **119** | 7 | 13.2 | 7.4 | 2160 | **F102_7.4 S05 M05A6** | 395 | **F102_7.4 P63 BN63A6** | 396 |

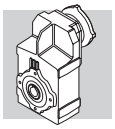
## 0.12 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.40** | 2623 | 1.9 | 2188 | 35000 | | | **F704_2188 P63 BN63B6** | 424 |
| **0.51** | 2058 | 2.5 | 1717 | 35000 | | | **F704_1717 P63 BN63B6** | 424 |
| **0.60** | 1742 | 2.9 | 2188 | 35000 | | | **F704_2188 P63 BN63A4** | 424 |
| **0.65** | 1607 | 3.1 | 2019 | 35000 | | | **F704_2019 P63 BN63A4** | 424 |
| **0.76** | 1368 | 2.1 | 1141 | 20000 | | | **F604_1141 P63 BN63B6** | 420 |
| **0.89** | 1178 | 0.9 | 982.4 | 8500 | **F414_982.4 S05 M05B6** | 411 | **F414_982.4 P63 BN63B6** | 412 |
| **0.96** | 1090 | 1.0 | 1411 | 8500 | **F414_1411 S05 M05A4** | 411 | **F414_1411 P63 BN63A4** | 412 |
| **1.1** | 938 | 1.2 | 1213 | 8500 | **F414_1213 S05 M05A4** | 411 | **F414_1213 P63 BN63A4** | 412 |
| **1.2** | 844 | 1.3 | 1092 | 8500 | **F414_1092 S05 M05A4** | 411 | **F414_1092 P63 BN63A4** | 412 |
| **1.4** | 759 | 1.4 | 982.4 | 8500 | **F414_982.4 S05 M05A4** | 411 | **F414_982.4 P63 BN63A4** | 412 |
| **1.5** | 696 | 1.6 | 900.5 | 8500 | **F414_900.5 S05 M05A4** | 411 | **F414_900.5 P63 BN63A4** | 412 |
| **1.6** | 643 | 0.9 | 831.6 | 6500 | **F314_831.6 S05 M05A4** | 407 | **F314_831.6 P63 BN63A4** | 408 |
| **1.7** | 629 | 1.7 | 813.8 | 8500 | **F414_813.8 S05 M05A4** | 411 | **F414_813.8 P63 BN63A4** | 412 |
| **1.8** | 589 | 1.0 | 762.3 | 6500 | **F314_762.3 S05 M05A4** | 407 | **F314_762.3 P63 BN63A4** | 408 |
| **1.8** | 571 | 1.9 | 739.4 | 8500 | **F414_739.4 S05 M05A4** | 411 | **F414_739.4 P63 BN63A4** | 412 |
| **2.0** | 530 | 1.1 | 685.6 | 6500 | **F314_685.6 S05 M05A4** | 407 | **F314_685.6 P63 BN63A4** | 408 |
| **2.0** | 533 | 2.1 | 690.1 | 8500 | **F414_690.1 S05 M05A4** | 411 | **F414_690.1 P63 BN63A4** | 412 |
| **2.2** | 479 | 1.3 | 619.9 | 6500 | **F314_619.9 S05 M05A4** | 407 | **F314_619.9 P63 BN63A4** | 408 |
| **2.3** | 456 | 0.9 | 589.7 | 6500 | **F254_589.7 S05 M05A4** | 403 | **F254_589.7 P63 BN63A4** | 404 |
| **2.3** | 447 | 1.3 | 578.6 | 6500 | **F314_578.6 S05 M05A4** | 407 | **F314_578.6 P63 BN63A4** | 408 |
| **2.5** | 425 | 2.6 | 549.8 | 8500 | **F414_549.8 S05 M05A4** | 411 | **F414_549.8 P63 BN63A4** | 412 |
| **2.6** | 408 | 1.0 | 527.3 | 6500 | **F254_527.3 S05 M05A4** | 403 | **F254_527.3 P63 BN63A4** | 404 |



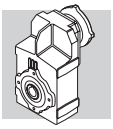
# 0.12 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **2.6** | 408 | 1.5 | 527.8 | 6500 | **F314_527.8 S05 M05A4** | 407 | **F314_527.8 P63 BN63A4** | 408 |
| **2.9** | 360 | 1.1 | 466.0 | 6500 | **F254_466.0 S05 M05A4** | 403 | **F254_466.0 P63 BN63A4** | 404 |
| **2.9** | 358 | 1.7 | 462.6 | 6500 | **F314_462.6 S05 M05A4** | 407 | **F314_462.6 P63 BN63A4** | 408 |
| **3.1** | 336 | 1.2 | 434.9 | 6500 | **F254_434.9 S05 M05A4** | 403 | **F254_434.9 P63 BN63A4** | 404 |
| **3.1** | 335 | 3.3 | 433.7 | 8500 | **F414_433.7 S05 M05A4** | 411 | **F414_433.7 P63 BN63A4** | 412 |
| **3.2** | 324 | 1.9 | 418.9 | 6500 | **F314_418.9 S05 M05A4** | 407 | **F314_418.9 P63 BN63A4** | 408 |
| **3.4** | 304 | 1.3 | 393.9 | 6500 | **F254_393.9 S05 M05A4** | 403 | **F254_393.9 P63 BN63A4** | 404 |
| **3.6** | 296 | 2.0 | 374.4 | 6500 | | | **F313_374.4 P63 BN63A4** | 408 |
| **4.1** | 263 | 1.5 | 333.1 | 6500 | **F253_333.1 S05 M05A4** | 403 | **F253_333.1 P63 BN63A4** | 404 |
| **4.1** | 263 | 2.3 | 332.8 | 6500 | | | **F313_332.8 P63 BN63A4** | 408 |
| **4.3** | 250 | 1.0 | 316.9 | 4000 | **F203_316.9 S05 M05A4** | 399 | **F203_316.9 P63 BN63A4** | 400 |
| **4.6** | 232 | 2.6 | 293.8 | 6500 | | | **F313_293.8 P63 BN63A4** | 408 |
| **4.7** | 225 | 1.1 | 285.2 | 4000 | **F203_285.2 S05 M05A4** | 399 | **F203_285.2 P63 BN63A4** | 400 |
| **4.7** | 228 | 1.8 | 288.1 | 6500 | **F253_288.1 S05 M05A4** | 403 | **F253_288.1 P63 BN63A4** | 404 |
| **5.3** | 202 | 1.2 | 255.3 | 4000 | **F203_255.3 S05 M05A4** | 399 | **F203_255.3 P63 BN63A4** | 400 |
| **5.3** | 202 | 2.0 | 256.1 | 6500 | **F253_256.1 S05 M05A4** | 403 | **F253_256.1 P63 BN63A4** | 404 |
| **5.3** | 200 | 3.0 | 253.6 | 6500 | | | **F313_253.6 P63 BN63A4** | 408 |
| **5.9** | 180 | 2.2 | 227.8 | 6500 | **F253_227.8 S05 M05A4** | 403 | **F253_227.8 P63 BN63A4** | 404 |
| **5.9** | 180 | 3.3 | 228.2 | 6500 | | | **F313_228.2 P63 BN63A4** | 408 |
| **6.5** | 165 | 1.5 | 209.3 | 4000 | **F203_209.3 S05 M05A4** | 399 | **F203_209.3 P63 BN63A4** | 400 |
| **7.0** | 153 | 2.6 | 193.6 | 6500 | **F253_193.6 S05 M05A4** | 403 | **F253_193.6 P63 BN63A4** | 404 |
| **7.3** | 146 | 1.7 | 184.9 | 4000 | **F203_184.9 S05 M05A4** | 399 | **F203_184.9 P63 BN63A4** | 400 |
| **7.7** | 138 | 2.9 | 174.2 | 6500 | **F253_174.2 S05 M05A4** | 403 | **F253_174.2 P63 BN63A4** | 404 |
| **7.8** | 136 | 1.8 | 172.6 | 4000 | **F203_172.6 S05 M05A4** | 399 | **F203_172.6 P63 BN63A4** | 400 |
| **8.6** | 123 | 2.0 | 156.3 | 4000 | **F203_156.3 S05 M05A4** | 399 | **F203_156.3 P63 BN63A4** | 400 |
| **8.7** | 123 | 3.2 | 155.9 | 6500 | **F253_155.9 S05 M05A4** | 403 | **F253_155.9 P63 BN63A4** | 404 |
| **9.4** | 113 | 3.5 | 143.0 | 6500 | **F253_143.0 S05 M05A4** | 403 | **F253_143.0 P63 BN63A4** | 404 |
| **10.2** | 107 | 2.3 | 132.2 | 4000 | **F202_132.2 S05 M05A4** | 399 | **F202_132.2 P63 BN63A4** | 400 |
| **10.6** | 103 | 1.4 | 127.1 | 2800 | **F102_127.1 S05 M05A4** | 395 | **F102_127.1 P63 BN63A4** | 396 |
| **11.8** | 92 | 2.7 | 114.3 | 4000 | **F202_114.3 S05 M05A4** | 399 | **F202_114.3 P63 BN63A4** | 400 |
| **12.7** | 86 | 1.6 | 106.0 | 2800 | **F102_106.0 S05 M05A4** | 395 | **F102_106.0 P63 BN63A4** | 396 |
| **13.3** | 82 | 3.0 | 101.6 | 4000 | **F202_101.6 S05 M05A4** | 399 | **F202_101.6 P63 BN63A4** | 400 |
| **14.8** | 74 | 1.9 | 91.5 | 2800 | **F102_91.5 S05 M05A4** | 395 | **F102_91.5 P63 BN63A4** | 396 |
| **14.9** | 73 | 3.4 | 90.4 | 4000 | **F202_90.4 S05 M05A4** | 399 | **F202_90.4 P63 BN63A4** | 400 |
| **16.6** | 66 | 2.1 | 81.3 | 2800 | **F102_81.3 S05 M05A4** | 395 | **F102_81.3 P63 BN63A4** | 396 |
| **19.0** | 57 | 2.4 | 71.1 | 2800 | **F102_71.1 S05 M05A4** | 395 | **F102_71.1 P63 BN63A4** | 396 |
| **21.4** | 51 | 2.8 | 63.0 | 2800 | **F102_63.0 S05 M05A4** | 395 | **F102_63.0 P63 BN63A4** | 396 |
| **23.8** | 46 | 3.1 | 56.7 | 2800 | **F102_56.7 S05 M05A4** | 395 | **F102_56.7 P63 BN63A4** | 396 |
| **27.7** | 39 | 3.6 | 48.7 | 2800 | **F102_48.7 S05 M05A4** | 395 | **F102_48.7 P63 BN63A4** | 396 |
| **30** | 36 | 3.9 | 44.7 | 2800 | **F102_44.7 S05 M05A4** | 395 | **F102_44.7 P63 BN63A4** | 396 |
| **34** | 32 | 4.4 | 39.6 | 2800 | **F102_39.6 S05 M05A4** | 395 | **F102_39.6 P63 BN63A4** | 396 |
| **38** | 29 | 4.9 | 35.3 | 2800 | **F102_35.3 S05 M05A4** | 395 | **F102_35.3 P63 BN63A4** | 396 |
| **41** | 27 | 5.3 | 33.0 | 2800 | **F102_33.0 S05 M05A4** | 395 | **F102_33.0 P63 BN63A4** | 396 |
| **46** | 24 | 5.9 | 29.6 | 2800 | **F102_29.6 S05 M05A4** | 395 | **F102_29.6 P63 BN63A4** | 396 |
| **52** | 21 | 6.7 | 25.8 | 2800 | **F102_25.8 S05 M05A4** | 395 | **F102_25.8 P63 BN63A4** | 396 |
| **59** | 18 | 7.6 | 22.8 | 2700 | **F102_22.8 S05 M05A4** | 395 | **F102_22.8 P63 BN63A4** | 396 |
| **70** | 16 | 8.7 | 19.3 | 2560 | **F102_19.3 S05 M05A4** | 395 | **F102_19.3 P63 BN63A4** | 396 |
| **80** | 14 | 9.3 | 17.0 | 2450 | **F102_17.0 S05 M05A4** | 395 | **F102_17.0 P63 BN63A4** | 396 |
| **92** | 12 | 10.1 | 14.6 | 2340 | **F102_14.6 S05 M05A4** | 395 | **F102_14.6 P63 BN63A4** | 396 |
| **104** | 11 | 9.9 | 13.0 | 2250 | **F102_13.0 S05 M05A4** | 395 | **F102_13.0 P63 BN63A4** | 396 |
| **117** | 9 | 10.3 | 11.5 | 2160 | **F102_11.5 S05 M05A4** | 395 | **F102_11.5 P63 BN63A4** | 396 |
| **138** | 8 | 11.3 | 9.8 | 2050 | **F102_9.8 S05 M05A4** | 395 | **F102_9.8 P63 BN63A4** | 396 |
| **157** | 7 | 11.8 | 8.6 | 1970 | **F102_8.6 S05 M05A4** | 395 | **F102_8.6 P63 BN63A4** | 396 |
| **182** | 6 | 12.7 | 7.4 | 1870 | **F102_7.4 S05 M05A4** | 395 | **F102_7.4 P63 BN63A4** | 396 |

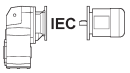


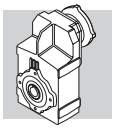
# 0.18 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.41** | 3804 | 1.3 | 2188 | 35000 | **F704_2188 S1 M1SC6** | 423 | **F704_2188 P71 BN71A6** | 424 |
| **0.45** | 3511 | 1.4 | 2019 | 35000 | **F704_2019 S1 M1SC6** | 423 | **F704_2019 P71 BN71A6** | 424 |
| **0.45** | 3455 | 2.3 | 1987 | 45000 | **F804_1987 S1 M1SC6** | 426 | **F804_1987 P71 BN71A6** | 427 |
| **0.49** | 3189 | 2.5 | 1834 | 45000 | **F804_1834 S1 M1SC6** | 426 | **F804_1834 P71 BN71A6** | 427 |
| **0.52** | 2985 | 1.7 | 1717 | 35000 | **F704_1717 S1 M1SC6** | 423 | **F704_1717 P71 BN71A6** | 424 |
| **0.53** | 2972 | 2.7 | 1709 | 45000 | **F804_1709 S1 M1SC6** | 426 | **F804_1709 P71 BN71A6** | 427 |
| **0.57** | 2756 | 1.8 | 1585 | 35000 | **F704_1585 S1 M1SC6** | 423 | **F704_1585 P71 BN71A6** | 424 |
| **0.57** | 2744 | 2.9 | 1578 | 45000 | **F804_1578 S1 M1SC6** | 426 | **F804_1578 P71 BN71A6** | 427 |
| **0.61** | 2576 | 1.9 | 1481 | 35000 | **F704_1481 S1 M1SC6** | 423 | **F704_1481 P71 BN71A6** | 424 |
| **0.65** | 2406 | 3.3 | 1384 | 45000 | **F804_1384 S1 M1SC6** | 426 | **F804_1384 P71 BN71A6** | 427 |
| **0.66** | 2378 | 2.1 | 1368 | 35000 | **F704_1368 S1 M1SC6** | 423 | **F704_1368 P71 BN71A6** | 424 |
| **0.76** | 2055 | 2.4 | 1182 | 35000 | **F704_1182 S1 M1SC6** | 423 | **F704_1182 P71 BN71A6** | 424 |
| **0.77** | 2030 | 0.9 | 1168 | 12000 | **F514_1168 S1 M1SC6** | 415 | **F514_1168 P71 BN71A6** | 416 |
| **0.79** | 1985 | 1.5 | 1141 | 20000 | **F604_1141 S1 M1SC6** | 419 | **F604_1141 P71 BN71A6** | 420 |
| **0.83** | 1897 | 2.6 | 1091 | 35000 | **F704_1091 S1 M1SC6** | 423 | **F704_1091 P71 BN71A6** | 424 |
| **0.84** | 1861 | 1.0 | 1070 | 12000 | **F514_1070 S1 M1SC6** | 415 | **F514_1070 P71 BN71A6** | 416 |
| **0.85** | 1832 | 1.6 | 1054 | 20000 | **F604_1054 S1 M1SC6** | 419 | **F604_1054 P71 BN71A6** | 420 |
| **0.92** | 1703 | 1.1 | 979.4 | 12000 | **F514_979.4 S1 M1SC6** | 415 | **F514_979.4 P71 BN71A6** | 416 |
| **0.92** | 1694 | 3.0 | 974.4 | 35000 | **F704_974.4 S1 M1SC6** | 423 | **F704_974.4 P71 BN71A6** | 424 |
| **0.94** | 1667 | 1.7 | 958.9 | 20000 | **F604_958.9 S1 M1SC6** | 419 | **F604_958.9 P71 BN71A6** | 420 |
| **1.0** | 1540 | 1.2 | 885.5 | 12000 | **F514_885.5 S1 M1SC6** | 415 | **F514_885.5 P71 BN71A6** | 416 |
| **1.0** | 1539 | 1.9 | 885.1 | 20000 | **F604_885.1 S1 M1SC6** | 419 | **F604_885.1 P71 BN71A6** | 420 |
| **1.0** | 1564 | 3.2 | 899.4 | 35000 | **F704_899.4 S1 M1SC6** | 423 | **F704_899.4 P71 BN71A6** | 424 |
| **1.1** | 1437 | 1.3 | 826.4 | 12000 | **F514_826.4 S1 M1SC6** | 415 | **F514_826.4 P71 BN71A6** | 416 |
| **1.1** | 1430 | 3.5 | 822.2 | 35000 | **F704_822.2 S1 M1SC6** | 423 | **F704_822.2 P71 BN71A6** | 424 |
| **1.2** | 1286 | 0.9 | 739.4 | 8500 | **F414_739.4 S1 M1SC6** | 411 | **F414_739.4 P71 BN71A6** | 412 |
| **1.2** | 1286 | 0.9 | 739.4 | 8500 | **F414_739.4 S1 M1SC6** | 411 | **F414_739.4 P71 BN71A6** | 412 |
| **1.3** | 1200 | 0.9 | 690.1 | 8500 | **F414_690.1 S1 M1SC6** | 411 | **F414_690.1 P71 BN71A6** | 412 |
| **1.3** | 1200 | 0.9 | 690.1 | 8500 | **F414_690.1 S1 M1SC6** | 411 | **F414_690.1 P71 BN71A6** | 412 |
| **1.3** | 1165 | 0.9 | 982.4 | 8500 | **F414_982.4 S05 M05B4** | 411 | **F414_982.4 P63 BN63B4** | 412 |
| **1.5** | 1068 | 1.0 | 900.5 | 8500 | **F414_900.5 S05 M05B4** | 411 | **F414_900.5 P63 BN63B4** | 412 |
| **1.6** | 965 | 1.1 | 813.8 | 8500 | **F414_813.8 S05 M05B4** | 411 | **F414_813.8 P63 BN63B4** | 412 |
| **1.8** | 877 | 1.3 | 739.4 | 8500 | **F414_739.4 S05 M05B4** | 411 | **F414_739.4 P63 BN63B4** | 412 |
| **1.9** | 818 | 1.3 | 690.1 | 8500 | **F414_690.1 S05 M05B4** | 411 | **F414_690.1 P63 BN63B4** | 412 |
| **2.3** | 686 | 0.9 | 578.6 | 6500 | **F314_578.6 S05 M05B4** | 407 | **F314_578.6 P63 BN63B4** | 408 |
| **2.4** | 652 | 1.7 | 549.8 | 8500 | **F414_549.8 S05 M05B4** | 411 | **F414_549.8 P63 BN63B4** | 412 |
| **2.5** | 626 | 1.0 | 527.8 | 6500 | **F314_527.8 S05 M05B4** | 407 | **F314_527.8 P63 BN63B4** | 408 |
| **2.9** | 549 | 1.1 | 462.6 | 6500 | **F314_462.6 S05 M05B4** | 407 | **F314_462.6 P63 BN63B4** | 408 |
| **3.0** | 514 | 2.1 | 433.7 | 8500 | **F414_433.7 S05 M05B4** | 411 | **F414_433.7 P63 BN63B4** | 412 |
| **3.2** | 497 | 1.2 | 418.9 | 6500 | **F314_418.9 S05 M05B4** | 407 | **F314_418.9 P63 BN63B4** | 408 |
| **3.4** | 467 | 0.9 | 393.9 | 6500 | **F254_393.9 S05 M05B4** | 403 | **F254_393.9 P63 BN63B4** | 404 |
| **3.5** | 454 | 1.3 | 374.4 | 6500 | | | **F313_374.4 P63 BN63B4** | 408 |
| **3.8** | 418 | 2.6 | 344.8 | 8500 | | | **F413_344.8 P63 BN63B4** | 412 |
| **4.0** | 404 | 1.0 | 333.1 | 6500 | **F253_333.1 S05 M05B4** | 403 | **F253_333.1 P63 BN63B4** | 404 |
| **4.0** | 403 | 1.5 | 332.8 | 6500 | | | **F313_332.8 P63 BN63B4** | 408 |
| **4.5** | 356 | 1.7 | 293.8 | 6500 | | | **F313_293.8 P63 BN63B4** | 408 |
| **4.5** | 359 | 3.1 | 296.6 | 8500 | | | **F413_296.6 P63 BN63B4** | 412 |
| **4.6** | 349 | 1.1 | 288.1 | 6500 | **F253_288.1 S05 M05B4** | 403 | **F253_288.1 P63 BN63B4** | 404 |
| **4.9** | 323 | 3.4 | 266.9 | 8500 | | | **F413_266.9 P63 BN63B4** | 412 |
| **5.2** | 310 | 1.3 | 256.1 | 6500 | **F253_256.1 S05 M05B4** | 403 | **F253_256.1 P63 BN63B4** | 404 |
| **5.2** | 307 | 2.0 | 253.6 | 6500 | | | **F313_253.6 P63 BN63B4** | 408 |
| **5.8** | 276 | 1.4 | 227.8 | 6500 | **F253_227.8 S05 M05B4** | 403 | **F253_227.8 P63 BN63B4** | 404 |
| **5.8** | 277 | 2.2 | 228.2 | 6500 | | | **F313_228.2 P63 BN63B4** | 408 |
| **6.3** | 254 | 1.0 | 209.3 | 4000 | **F203_209.3 S05 M05B4** | 399 | **F203_209.3 P63 BN63B4** | 400 |
| **6.5** | 245 | 2.4 | 202.3 | 6500 | | | **F313_202.3 P63 BN63B4** | 408 |
| **6.8** | 235 | 1.7 | 193.6 | 6500 | **F253_193.6 S05 M05B4** | 403 | **F253_193.6 P63 BN63B4** | 404 |
| **7.1** | 224 | 1.1 | 184.9 | 4000 | **F203_184.9 S05 M05B4** | 399 | **F203_184.9 P63 BN63B4** | 400 |



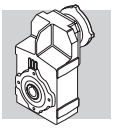
# 0.18 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **7.1** | 225 | 2.7 | 185.4 | 6500 | | | **F313_185.4 P63 BN63B4** | 408 |
| **7.6** | 209 | 1.2 | 172.6 | 4000 | **F203_172.6 S05 M05B4** | 399 | **F203_172.6 P63 BN63B4** | 400 |
| **7.6** | 211 | 1.9 | 174.2 | 6500 | **F253_174.2 S05 M05B4** | 403 | **F253_174.2 P63 BN63B4** | 404 |
| **7.9** | 202 | 3.0 | 166.8 | 6500 | | | **F313_166.8 P63 BN63B4** | 408 |
| **8.4** | 189 | 1.3 | 156.3 | 4000 | **F203_156.3 S05 M05B4** | 399 | **F203_156.3 P63 BN63B4** | 400 |
| **8.5** | 189 | 2.1 | 155.9 | 6500 | **F253_155.9 S05 M05B4** | 403 | **F253_155.9 P63 BN63B4** | 404 |
| **8.8** | 183 | 3.3 | 150.8 | 6500 | | | **F313_150.8 P63 BN63B4** | 408 |
| **9.2** | 173 | 2.3 | 143.0 | 6500 | **F253_143.0 S05 M05B4** | 403 | **F253_143.0 P63 BN63B4** | 404 |
| **9.4** | 171 | 3.5 | 140.7 | 6500 | | | **F313_140.7 P63 BN63B4** | 408 |
| **10.0** | 164 | 1.5 | 132.2 | 4000 | **F202_132.2 S05 M05B4** | 399 | **F202_132.2 P63 BN63B4** | 400 |
| **10.3** | 155 | 2.6 | 127.8 | 6500 | **F253_127.8 S05 M05B4** | 403 | **F253_127.8 P63 BN63B4** | 404 |
| **10.4** | 157 | 0.9 | 127.1 | 2800 | **F102_127.1 S05 M05B4** | 395 | **F102_127.1 P63 BN63B4** | 396 |
| **11.5** | 142 | 1.8 | 114.3 | 4000 | **F202_114.3 S05 M05B4** | 399 | **F202_114.3 P63 BN63B4** | 400 |
| **11.7** | 137 | 2.9 | 113.0 | 6500 | **F253_113.0 S05 M05B4** | 403 | **F253_113.0 P63 BN63B4** | 404 |
| **12.5** | 131 | 1.1 | 106.0 | 2800 | **F102_106.0 S05 M05B4** | 395 | **F102_106.0 P63 BN63B4** | 396 |
| **12.5** | 128 | 3.1 | 105.4 | 6500 | **F253_105.4 S05 M05B4** | 403 | **F253_105.4 P63 BN63B4** | 404 |
| **13.0** | 126 | 2.0 | 101.6 | 4000 | **F202_101.6 S05 M05B4** | 399 | **F202_101.6 P63 BN63B4** | 400 |
| **13.8** | 116 | 3.5 | 95.5 | 6500 | **F253_95.5 S05 M05B4** | 403 | **F253_95.5 P63 BN63B4** | 404 |
| **14.4** | 113 | 1.2 | 91.5 | 2800 | **F102_91.5 S05 M05B4** | 395 | **F102_91.5 P63 BN63B4** | 396 |
| **14.6** | 112 | 2.2 | 90.4 | 4000 | **F202_90.4 S05 M05B4** | 399 | **F202_90.4 P63 BN63B4** | 400 |
| **16.2** | 101 | 1.4 | 81.3 | 2800 | **F102_81.3 S05 M05B4** | 395 | **F102_81.3 P63 BN63B4** | 396 |
| **17.2** | 95 | 2.6 | 76.8 | 4000 | **F202_76.8 S05 M05B4** | 399 | **F202_76.8 P63 BN63B4** | 400 |
| **18.6** | 88 | 1.6 | 71.1 | 2800 | **F102_71.1 S05 M05B4** | 395 | **F102_71.1 P63 BN63B4** | 396 |
| **19.1** | 86 | 2.9 | 69.1 | 4000 | **F202_69.1 S05 M05B4** | 399 | **F202_69.1 P63 BN63B4** | 400 |
| **21.0** | 78 | 1.8 | 63.0 | 2800 | **F102_63.0 S05 M05B4** | 395 | **F102_63.0 P63 BN63B4** | 396 |
| **21.3** | 77 | 3.3 | 61.9 | 4000 | **F202_61.9 S05 M05B4** | 399 | **F202_61.9 P63 BN63B4** | 400 |
| **23.3** | 70 | 2.0 | 56.7 | 2800 | **F102_56.7 S05 M05B4** | 395 | **F102_56.7 P63 BN63B4** | 396 |
| **27.1** | 60 | 2.3 | 48.7 | 2800 | **F102_48.7 S05 M05B4** | 395 | **F102_48.7 P63 BN63B4** | 396 |
| **29.6** | 55 | 2.5 | 44.7 | 2800 | **F102_44.7 S05 M05B4** | 395 | **F102_44.7 P63 BN63B4** | 396 |
| **33** | 49 | 2.9 | 39.6 | 2800 | **F102_39.6 S05 M05B4** | 395 | **F102_39.6 P63 BN63B4** | 396 |
| **37** | 44 | 3.2 | 35.3 | 2800 | **F102_35.3 S05 M05B4** | 395 | **F102_35.3 P63 BN63B4** | 396 |
| **40** | 41 | 3.4 | 33.0 | 2800 | **F102_33.0 S05 M05B4** | 395 | **F102_33.0 P63 BN63B4** | 396 |
| **45** | 37 | 3.8 | 29.6 | 2800 | **F102_29.6 S05 M05B4** | 395 | **F102_29.6 P63 BN63B4** | 396 |
| **51** | 32 | 4.4 | 25.8 | 2780 | **F102_25.8 S05 M05B4** | 395 | **F102_25.8 P63 BN63B4** | 396 |
| **58** | 28 | 5.0 | 22.8 | 2680 | **F102_22.8 S05 M05B4** | 395 | **F102_22.8 P63 BN63B4** | 396 |
| **68** | 24 | 5.7 | 19.3 | 2540 | **F102_19.3 S05 M05B4** | 395 | **F102_19.3 P63 BN63B4** | 396 |
| **78** | 21 | 6.1 | 17.0 | 2440 | **F102_17.0 S05 M05B4** | 395 | **F102_17.0 P63 BN63B4** | 396 |
| **90** | 18 | 6.6 | 14.6 | 2330 | **F102_14.6 S05 M05B4** | 395 | **F102_14.6 P63 BN63B4** | 396 |
| **101** | 16 | 6.4 | 13.0 | 2240 | **F102_13.0 S05 M05B4** | 395 | **F102_13.0 P63 BN63B4** | 396 |
| **114** | 14 | 6.7 | 11.5 | 2150 | **F102_11.5 S05 M05B4** | 395 | **F102_11.5 P63 BN63B4** | 396 |
| **135** | 12 | 7.4 | 9.8 | 2040 | **F102_9.8 S05 M05B4** | 395 | **F102_9.8 P63 BN63B4** | 396 |
| **154** | 11 | 7.7 | 8.6 | 1960 | **F102_8.6 S05 M05B4** | 395 | **F102_8.6 P63 BN63B4** | 396 |
| **178** | 9 | 8.3 | 7.4 | 1870 | **F102_7.4 S05 M05B4** | 395 | **F102_7.4 P63 BN63B4** | 396 |
| **186** | 9 | 10.7 | 14.6 | 1860 | **F102_14.6 S05 M05A2** | 395 | **F102_14.6 P63 BN63A2** | 396 |
| **210** | 8 | 10.9 | 13.0 | 1790 | **F102_13.0 S05 M05A2** | 395 | **F102_13.0 P63 BN63A2** | 396 |
| **237** | 7 | 11.3 | 11.5 | 1720 | **F102_11.5 S05 M05A2** | 395 | **F102_11.5 P63 BN63A2** | 396 |
| **279** | 6 | 12.5 | 9.8 | 1630 | **F102_9.8 S05 M05A2** | 395 | **F102_9.8 P63 BN63A2** | 396 |
| **318** | 5 | 13.0 | 8.6 | 1560 | **F102_8.6 S05 M05A2** | 395 | **F102_8.6 P63 BN63A2** | 396 |
| **369** | 4 | 14.2 | 7.4 | 1490 | **F102_7.4 S05 M05A2** | 395 | **F102_7.4 P63 BN63A2** | 396 |

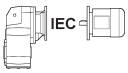


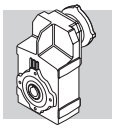
# 0.25 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.41** | 5283 | 0.9 | 2188 | 35000 | **F704_2188 S1 M1SD6** | 423 | **F704_2188 P71 BN71B6** | 424 |
| **0.45** | 4877 | 1.0 | 2019 | 35000 | **F704_2019 S1 M1SD6** | 423 | **F704_2019 P71 BN71B6** | 424 |
| **0.45** | 4799 | 1.7 | 1987 | 45000 | **F804_1987 S1 M1SD6** | 426 | **F804_1987 P71 BN71B6** | 427 |
| **0.49** | 4430 | 1.8 | 1834 | 45000 | **F804_1834 S1 M1SD6** | 426 | **F804_1834 P71 BN71B6** | 427 |
| **0.52** | 4146 | 1.2 | 1717 | 35000 | **F704_1717 S1 M1SD6** | 423 | **F704_1717 P71 BN71B6** | 424 |
| **0.53** | 4128 | 1.9 | 1709 | 45000 | **F804_1709 S1 M1SD6** | 426 | **F804_1709 P71 BN71B6** | 427 |
| **0.57** | 3827 | 1.3 | 1585 | 35000 | **F704_1585 S1 M1SD6** | 423 | **F704_1585 P71 BN71B6** | 424 |
| **0.57** | 3810 | 2.1 | 1578 | 45000 | **F804_1578 S1 M1SD6** | 426 | **F804_1578 P71 BN71B6** | 427 |
| **0.61** | 3578 | 1.4 | 1481 | 35000 | **F704_1481 S1 M1SD6** | 423 | **F704_1481 P71 BN71B6** | 424 |
| **0.65** | 3342 | 2.4 | 1384 | 45000 | **F804_1384 S1 M1SD6** | 426 | **F804_1384 P71 BN71B6** | 427 |
| **0.66** | 3303 | 1.5 | 1368 | 35000 | **F704_1368 S1 M1SD6** | 423 | **F704_1368 P71 BN71B6** | 424 |
| **0.70** | 3085 | 2.6 | 1277 | 45000 | **F804_1277 S1 M1SD6** | 426 | **F804_1277 P71 BN71B6** | 427 |
| **0.76** | 2854 | 1.8 | 1182 | 35000 | **F704_1182 S1 M1SD6** | 423 | **F704_1182 P71 BN71B6** | 424 |
| **0.79** | 2757 | 1.1 | 1141 | 20000 | **F604_1141 S1 M1SD6** | 419 | **F604_1141 P71 BN71B6** | 420 |
| **0.79** | 2769 | 2.9 | 1146 | 45000 | **F804_1146 S1 M1SD6** | 426 | **F804_1146 P71 BN71B6** | 427 |
| **0.83** | 2635 | 1.9 | 1091 | 35000 | **F704_1091 S1 M1SD6** | 423 | **F704_1091 P71 BN71B6** | 424 |
| **0.85** | 2545 | 1.1 | 1054 | 20000 | **F604_1054 S1 M1SD6** | 419 | **F604_1054 P71 BN71B6** | 420 |
| **0.85** | 2556 | 3.1 | 1058 | 45000 | **F804_1058 S1 M1SD6** | 426 | **F804_1058 P71 BN71B6** | 427 |
| **0.92** | 2353 | 2.1 | 974.4 | 35000 | **F704_974.4 S1 M1SD6** | 423 | **F704_974.4 P71 BN71B6** | 424 |
| **0.94** | 2316 | 1.3 | 958.9 | 20000 | **F604_958.9 S1 M1SD6** | 419 | **F604_958.9 P71 BN71B6** | 420 |
| **1.0** | 2138 | 1.4 | 885.1 | 20000 | **F604_885.1 S1 M1SD6** | 419 | **F604_885.1 P71 BN71B6** | 420 |
| **1.0** | 2172 | 2.3 | 899.4 | 35000 | **F704_899.4 S1 M1SD6** | 423 | **F704_899.4 P71 BN71B6** | 424 |
| **1.1** | 1996 | 0.9 | 826.4 | 12000 | **F514_826.4 S1 M1SD6** | 415 | **F514_826.4 P71 BN71B6** | 416 |
| **1.1** | 1986 | 2.5 | 822.2 | 35000 | **F704_822.2 S1 M1SD6** | 423 | **F704_822.2 P71 BN71B6** | 424 |
| **1.3** | 1633 | 1.1 | 676.3 | 12000 | **F514_676.3 S1 M1SD6** | 415 | **F514_676.3 P71 BN71B6** | 416 |
| **1.4** | 1600 | 1.8 | 662.4 | 20000 | **F604_662.4 S1 M1SD6** | 419 | **F604_662.4 P71 BN71B6** | 420 |
| **1.4** | 1588 | 3.1 | 657.4 | 35000 | **F704_657.4 S1 M1SD6** | 423 | **F704_657.4 P71 BN71B6** | 424 |
| **1.5** | 1477 | 2.0 | 611.4 | 20000 | **F604_611.4 S1 M1SD6** | 419 | **F604_611.4 P71 BN71B6** | 420 |
| **1.5** | 1466 | 3.4 | 606.8 | 35000 | **F704_606.8 S1 M1SD6** | 423 | **F704_606.8 P71 BN71B6** | 424 |
| **1.7** | 1282 | 0.9 | 813.8 | 8500 | **F414_813.8 S05 M05C4** | 411 | **F414_813.8 P71 BN71A4** | 412 |
| **1.8** | 1199 | 0.9 | 739.4 | 8500 | **F414_739.4 S05 M05C4** | 411 | **F414_739.4 P71 BN71A4** | 412 |
| **1.9** | 1119 | 1.0 | 690.1 | 8500 | **F414_690.1 S05 M05C4** | 411 | **F414_690.1 P71 BN71A4** | 412 |
| **2.4** | 892 | 1.2 | 549.8 | 8500 | **F414_549.8 S05 M05C4** | 411 | **F414_549.8 P71 BN71A4** | 412 |
| **2.8** | 783 | 2.3 | 317.3 | 12000 | **F513_317.3 S1 M1SD6** | 415 | **F513_317.3 P71 BN71B6** | 416 |
| **3.1** | 704 | 1.6 | 433.7 | 8500 | **F414_433.7 S05 M05C4** | 411 | **F414_433.7 P71 BN71A4** | 412 |
| **3.2** | 679 | 0.9 | 418.9 | 6500 | **F314_418.9 S05 M05C4** | 407 | **F314_418.9 P71 BN71A4** | 408 |
| **3.7** | 603 | 1.0 | 374.4 | 6500 | | | **F313_374.4 P71 BN71A4** | 408 |
| **4.0** | 555 | 2.0 | 344.8 | 8500 | | | **F413_344.8 P71 BN71A4** | 412 |
| **4.1** | 536 | 1.1 | 332.8 | 6500 | | | **F313_332.8 P71 BN71A4** | 408 |
| **4.7** | 473 | 1.3 | 293.8 | 6500 | | | **F313_293.8 P71 BN71A4** | 408 |
| **4.7** | 477 | 2.3 | 296.6 | 8500 | | | **F413_296.6 P71 BN71A4** | 412 |
| **5.2** | 425 | 0.9 | 256.1 | 6500 | **F253_256.1 S05 M05C4** | 403 | **F253_256.1 P71 BN71A4** | 404 |
| **5.2** | 430 | 2.6 | 266.9 | 8500 | | | **F413_266.9 P71 BN71A4** | 412 |
| **5.4** | 408 | 1.5 | 253.6 | 6500 | | | **F313_253.6 P71 BN71A4** | 408 |
| **5.7** | 387 | 2.8 | 240.1 | 8500 | | | **F413_240.1 P71 BN71A4** | 412 |
| **5.9** | 378 | 1.1 | 227.8 | 6500 | **F253_227.8 S05 M05C4** | 403 | **F253_227.8 P71 BN71A4** | 404 |
| **6.0** | 367 | 1.6 | 228.2 | 6500 | | | **F313_228.2 P71 BN71A4** | 408 |
| **6.3** | 354 | 3.1 | 220.1 | 8500 | | | **F413_220.1 P71 BN71A4** | 412 |
| **6.8** | 326 | 1.8 | 202.3 | 6500 | | | **F313_202.3 P71 BN71A4** | 408 |
| **6.9** | 321 | 1.2 | 193.6 | 6500 | **F253_193.6 S05 M05C4** | 403 | **F253_193.6 P71 BN71A4** | 404 |
| **6.9** | 320 | 3.4 | 198.9 | 8500 | | | **F413_198.9 P71 BN71A4** | 412 |
| **7.4** | 299 | 2.0 | 185.4 | 6500 | | | **F313_185.4 P71 BN71A4** | 408 |
| **7.7** | 289 | 1.4 | 174.2 | 6500 | **F253_174.2 S05 M05C4** | 403 | **F253_174.2 P71 BN71A4** | 404 |
| **8.0** | 278 | 0.9 | 172.6 | 4000 | **F203_172.6 S05 M05C4** | 399 | **F203_172.6 P71 BN71A4** | 400 |
| **8.3** | 268 | 2.2 | 166.8 | 6500 | | | **F313_166.8 P71 BN71A4** | 408 |
| **8.6** | 259 | 1.0 | 156.3 | 4000 | **F203_156.3 S05 M05C4** | 399 | **F203_156.3 P71 BN71A4** | 400 |
| **8.6** | 259 | 1.5 | 155.9 | 6500 | **F253_155.9 S05 M05C4** | 403 | **F253_155.9 P71 BN71A4** | 404 |



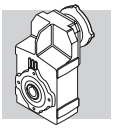
# 0.25 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **9.2** | 243 | 2.5 | 150.8 | 6500 | | | **F313_150.8 P71 BN71A4** | 408 |
| **9.7** | 230 | 1.7 | 143.0 | 6500 | **F253_143.0 S05 M05C4** | 403 | **F253_143.0 P71 BN71A4** | 404 |
| **9.8** | 227 | 2.6 | 140.7 | 6500 | | | **F313_140.7 P71 BN71A4** | 408 |
| **10.1** | 224 | 1.1 | 132.2 | 4000 | **F202_132.2 S05 M05C4** | 399 | **F202_132.2 P71 BN71A4** | 400 |
| **10.5** | 212 | 1.9 | 127.8 | 6500 | **F253_127.8 S05 M05C4** | 403 | **F253_127.8 P71 BN71A4** | 404 |
| **10.7** | 207 | 2.9 | 128.4 | 6500 | | | **F313_128.4 P71 BN71A4** | 408 |
| **11.7** | 194 | 1.3 | 114.3 | 4000 | **F202_114.3 S05 M05C4** | 399 | **F202_114.3 P71 BN71A4** | 400 |
| **12.2** | 182 | 2.2 | 113.0 | 6500 | **F253_113.0 S05 M05C4** | 403 | **F253_113.0 P71 BN71A4** | 404 |
| **12.3** | 181 | 3.3 | 112.5 | 6500 | | | **F313_112.5 P71 BN71A4** | 408 |
| **12.7** | 175 | 2.3 | 105.4 | 6500 | **F253_105.4 S05 M05C4** | 403 | **F253_105.4 P71 BN71A4** | 404 |
| **13.2** | 172 | 1.5 | 101.6 | 4000 | **F202_101.6 S05 M05C4** | 399 | **F202_101.6 P71 BN71A4** | 400 |
| **14.0** | 158 | 2.5 | 95.5 | 6500 | **F253_95.5 S05 M05C4** | 403 | **F253_95.5 P71 BN71A4** | 404 |
| **14.6** | 155 | 0.9 | 91.5 | 2800 | **F102_91.5 S05 M05C4** | 395 | **F102_91.5 P71 BN71A4** | 396 |
| **14.8** | 153 | 1.6 | 90.4 | 4000 | **F202_90.4 S05 M05C4** | 399 | **F202_90.4 P71 BN71A4** | 400 |
| **16.1** | 138 | 2.9 | 83.4 | 6500 | **F253_83.4 S05 M05C4** | 403 | **F253_83.4 P71 BN71A4** | 404 |
| **16.5** | 138 | 1.0 | 81.3 | 2800 | **F102_81.3 S05 M05C4** | 395 | **F102_81.3 P71 BN71A4** | 396 |
| **17.4** | 130 | 1.9 | 76.8 | 4000 | **F202_76.8 S05 M05C4** | 399 | **F202_76.8 P71 BN71A4** | 400 |
| **17.5** | 127 | 3.2 | 76.6 | 6420 | **F253_76.6 S05 M05C4** | 403 | **F253_76.6 P71 BN71A4** | 404 |
| **18.8** | 120 | 1.2 | 71.1 | 2800 | **F102_71.1 S05 M05C4** | 395 | **F102_71.1 P71 BN71A4** | 396 |
| **19.4** | 117 | 2.1 | 69.1 | 4000 | **F202_69.1 S05 M05C4** | 399 | **F202_69.1 P71 BN71A4** | 400 |
| **21.3** | 107 | 1.3 | 63.0 | 2800 | **F102_63.0 S05 M05C4** | 395 | **F102_63.0 P71 BN71A4** | 396 |
| **21.7** | 105 | 2.4 | 61.9 | 4000 | **F202_61.9 S05 M05C4** | 399 | **F202_61.9 P71 BN71A4** | 400 |
| **23.6** | 96 | 1.5 | 56.7 | 2800 | **F102_56.7 S05 M05C4** | 395 | **F102_56.7 P71 BN71A4** | 396 |
| **23.6** | 96 | 2.6 | 56.7 | 4000 | **F202_56.7 S05 M05C4** | 399 | **F202_56.7 P71 BN71A4** | 400 |
| **26.4** | 86 | 2.9 | 50.7 | 4000 | **F202_50.7 S05 M05C4** | 399 | **F202_50.7 P71 BN71A4** | 400 |
| **27.5** | 83 | 1.7 | 48.7 | 2800 | **F102_48.7 S05 M05C4** | 395 | **F102_48.7 P71 BN71A4** | 396 |
| **29.9** | 76 | 3.3 | 44.8 | 3870 | **F202_44.8 S05 M05C4** | 399 | **F202_44.8 P71 BN71A4** | 400 |
| **30** | 76 | 1.9 | 44.7 | 2800 | **F102_44.7 S05 M05C4** | 395 | **F102_44.7 P71 BN71A4** | 396 |
| **34** | 67 | 2.1 | 39.6 | 2800 | **F102_39.6 S05 M05C4** | 395 | **F102_39.6 P71 BN71A4** | 396 |
| **38** | 60 | 2.3 | 35.3 | 2800 | **F102_35.3 S05 M05C4** | 395 | **F102_35.3 P71 BN71A4** | 396 |
| **41** | 56 | 2.5 | 33.0 | 2800 | **F102_33.0 S05 M05C4** | 395 | **F102_33.0 P71 BN71A4** | 396 |
| **45** | 50 | 2.8 | 29.6 | 2800 | **F102_29.6 S05 M05C4** | 395 | **F102_29.6 P71 BN71A4** | 396 |
| **52** | 44 | 3.2 | 25.8 | 2750 | **F102_25.8 S05 M05C4** | 395 | **F102_25.8 P71 BN71A4** | 396 |
| **59** | 39 | 3.6 | 22.8 | 2650 | **F102_22.8 S05 M05C4** | 395 | **F102_22.8 P71 BN71A4** | 396 |
| **69** | 33 | 4.2 | 19.3 | 2520 | **F102_19.3 S05 M05C4** | 395 | **F102_19.3 P71 BN71A4** | 396 |
| **81** | 28 | 4.6 | 17.0 | 2420 | **F102_17.0 S05 M05C4** | 395 | **F102_17.0 P71 BN71A4** | 396 |
| **91** | 25 | 4.8 | 14.6 | 2310 | **F102_14.6 S05 M05C4** | 395 | **F102_14.6 P71 BN71A4** | 396 |
| **103** | 22 | 4.7 | 13.0 | 2230 | **F102_13.0 S05 M05C4** | 395 | **F102_13.0 P71 BN71A4** | 396 |
| **120** | 19 | 5.1 | 11.5 | 2140 | **F102_11.5 S05 M05C4** | 395 | **F102_11.5 P71 BN71A4** | 396 |
| **137** | 17 | 5.4 | 9.8 | 2030 | **F102_9.8 S05 M05C4** | 395 | **F102_9.8 P71 BN71A4** | 396 |
| **161** | 14 | 5.8 | 8.6 | 1950 | **F102_8.6 S05 M05C4** | 395 | **F102_8.6 P71 BN71A4** | 396 |
| **181** | 13 | 6.1 | 7.4 | 1860 | **F102_7.4 S05 M05C4** | 395 | **F102_7.4 P71 BN71A4** | 396 |
| **187** | 12 | 7.7 | 14.6 | 1850 | **F102_14.6 S05 M05B2** | 395 | **F102_14.6 P63 BN63B2** | 396 |
| **210** | 11 | 7.9 | 13.0 | 1780 | **F102_13.0 S05 M05B2** | 395 | **F102_13.0 P63 BN63B2** | 396 |
| **237** | 10 | 8.2 | 11.5 | 1710 | **F102_11.5 S05 M05B2** | 395 | **F102_11.5 P63 BN63B2** | 396 |
| **280** | 8 | 9.0 | 9.8 | 1620 | **F102_9.8 S05 M05B2** | 395 | **F102_9.8 P63 BN63B2** | 396 |
| **319** | 7 | 9.4 | 8.6 | 1550 | **F102_8.6 S05 M05B2** | 395 | **F102_8.6 P63 BN63B2** | 396 |
| **370** | 6 | 10.3 | 7.4 | 1480 | **F102_7.4 S05 M05B2** | 395 | **F102_7.4 P63 BN63B2** | 396 |

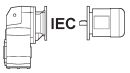


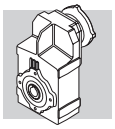
# 0.37 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.46** | 7024 | 1.1 | 1987 | 45000 | **F804_1987 S1 M1LA6** | 426 | **F804_1987 P80 BN80A6** | 427 |
| **0.50** | 6484 | 1.2 | 1834 | 45000 | **F804_1834 S1 M1LA6** | 426 | **F804_1834 P80 BN80A6** | 427 |
| **0.53** | 6042 | 1.3 | 1709 | 45000 | **F804_1709 S1 M1LA6** | 426 | **F804_1709 P80 BN80A6** | 427 |
| **0.57** | 5602 | 0.9 | 1585 | 35000 | **F704_1585 S1 M1LA6** | 423 | **F704_1585 P80 BN80A6** | 424 |
| **0.58** | 5577 | 1.4 | 1578 | 45000 | **F804_1578 S1 M1LA6** | 426 | **F804_1578 P80 BN80A6** | 427 |
| **0.61** | 5238 | 1.0 | 1481 | 35000 | **F704_1481 S1 M1LA6** | 423 | **F704_1481 P80 BN80A6** | 424 |
| **0.63** | 5137 | 1.0 | 2188 | 35000 | **F704_2188 S1 M1SD4** | 423 | **F704_2188 P71 BN71B4** | 424 |
| **0.68** | 4742 | 1.1 | 2019 | 35000 | **F704_2019 S1 M1SD4** | 423 | **F704_2019 P71 BN71B4** | 424 |
| **0.69** | 4666 | 1.7 | 1987 | 45000 | **F804_1987 S1 M1SD4** | 426 | **F804_1987 P71 BN71B4** | 427 |
| **0.75** | 4307 | 1.9 | 1834 | 45000 | **F804_1834 S1 M1SD4** | 426 | **F804_1834 P71 BN71B4** | 427 |
| **0.80** | 4031 | 1.2 | 1717 | 35000 | **F704_1717 S1 M1SD4** | 423 | **F704_1717 P71 BN71B4** | 424 |
| **0.80** | 4013 | 2.0 | 1709 | 45000 | **F804_1709 S1 M1SD4** | 426 | **F804_1709 P71 BN71B4** | 427 |
| **0.86** | 3721 | 1.3 | 1585 | 35000 | **F704_1585 S1 M1SD4** | 423 | **F704_1585 P71 BN71B4** | 424 |
| **0.87** | 3705 | 2.2 | 1578 | 45000 | **F804_1578 S1 M1SD4** | 426 | **F804_1578 P71 BN71B4** | 427 |
| **0.92** | 3479 | 1.4 | 1481 | 35000 | **F704_1481 S1 M1SD4** | 423 | **F704_1481 P71 BN71B4** | 424 |
| **0.99** | 3250 | 2.5 | 1384 | 45000 | **F804_1384 S1 M1SD4** | 426 | **F804_1384 P71 BN71B4** | 427 |
| **1.0** | 3211 | 1.6 | 1368 | 35000 | **F704_1368 S1 M1SD4** | 423 | **F704_1368 P71 BN71B4** | 424 |
| **1.1** | 3000 | 2.7 | 1277 | 45000 | **F804_1277 S1 M1SD4** | 426 | **F804_1277 P71 BN71B4** | 427 |
| **1.2** | 2680 | 1.1 | 1141 | 20000 | **F604_1141 S1 M1SD4** | 419 | **F604_1141 P71 BN71B4** | 420 |
| **1.2** | 2775 | 1.8 | 1182 | 35000 | **F704_1182 S1 M1SD4** | 423 | **F704_1182 P71 BN71B4** | 424 |
| **1.2** | 2692 | 3.0 | 1146 | 45000 | **F804_1146 S1 M1SD4** | 426 | **F804_1146 P71 BN71B4** | 427 |
| **1.3** | 2474 | 1.2 | 1054 | 20000 | **F604_1054 S1 M1SD4** | 419 | **F604_1054 P71 BN71B4** | 420 |
| **1.3** | 2562 | 2.0 | 1091 | 35000 | **F704_1091 S1 M1SD4** | 423 | **F704_1091 P71 BN71B4** | 424 |
| **1.3** | 2485 | 3.2 | 1058 | 45000 | **F804_1058 S1 M1SD4** | 426 | **F804_1058 P71 BN71B4** | 427 |
| **1.4** | 2252 | 1.3 | 958.9 | 20000 | **F604_958.9 S1 M1SD4** | 419 | **F604_958.9 P71 BN71B4** | 420 |
| **1.4** | 2288 | 2.2 | 974.4 | 35000 | **F704_974.4 S1 M1SD4** | 423 | **F704_974.4 P71 BN71B4** | 424 |
| **1.5** | 2079 | 0.9 | 885.5 | 12000 | **F514_885.5 S1 M1SD4** | 415 | **F514_885.5 P71 BN71B4** | 416 |
| **1.5** | 2078 | 1.4 | 885.1 | 20000 | **F604_885.1 S1 M1SD4** | 419 | **F604_885.1 P71 BN71B4** | 420 |
| **1.5** | 2112 | 2.4 | 899.4 | 35000 | **F704_899.4 S1 M1SD4** | 423 | **F704_899.4 P71 BN71B4** | 424 |
| **1.7** | 1941 | 0.9 | 826.4 | 12000 | **F514_826.4 S1 M1SD4** | 415 | **F514_826.4 P71 BN71B4** | 416 |
| **1.7** | 1931 | 2.6 | 822.2 | 35000 | **F704_822.2 S1 M1SD4** | 423 | **F704_822.2 P71 BN71B4** | 424 |
| **2.0** | 1588 | 1.1 | 676.3 | 12000 | **F514_676.3 S1 M1SD4** | 415 | **F514_676.3 P71 BN71B4** | 416 |
| **2.1** | 1556 | 1.9 | 662.4 | 20000 | **F604_662.4 S1 M1SD4** | 419 | **F604_662.4 P71 BN71B4** | 420 |
| **2.1** | 1544 | 3.2 | 657.4 | 35000 | **F704_657.4 S1 M1SD4** | 423 | **F704_657.4 P71 BN71B4** | 424 |
| **2.2** | 1436 | 2.0 | 611.4 | 20000 | **F604_611.4 S1 M1SD4** | 419 | **F604_611.4 P71 BN71B4** | 420 |
| **2.3** | 1425 | 3.5 | 606.8 | 35000 | **F704_606.8 S1 M1SD4** | 423 | **F704_606.8 P71 BN71B4** | 424 |
| **2.5** | 1291 | 0.9 | 549.8 | 8500 | **F414_549.8 S1 M1SD4** | 411 | **F414_549.8 P71 BN71B4** | 412 |
| **2.6** | 1246 | 1.4 | 530.5 | 12000 | **F514_530.5 S1 M1SD4** | 415 | **F514_530.5 P71 BN71B4** | 416 |
| **2.6** | 1246 | 2.3 | 530.7 | 20000 | **F604_530.7 S1 M1SD4** | 419 | **F604_530.7 P71 BN71B4** | 420 |
| **2.8** | 1150 | 2.5 | 489.8 | 20000 | **F604_489.8 S1 M1SD4** | 419 | **F604_489.8 P71 BN71B4** | 420 |
| **3.2** | 1018 | 1.1 | 433.7 | 8500 | **F414_433.7 S1 M1SD4** | 411 | **F414_433.7 P71 BN71B4** | 412 |
| **3.2** | 1008 | 1.8 | 429.1 | 12000 | **F514_429.1 S1 M1SD4** | 415 | **F514_429.1 P71 BN71B4** | 416 |
| **3.2** | 1016 | 2.9 | 432.6 | 20000 | **F604_432.6 S1 M1SD4** | 419 | **F604_432.6 P71 BN71B4** | 420 |
| **3.4** | 938 | 3.1 | 399.3 | 20000 | **F604_399.3 S1 M1SD4** | 419 | **F604_399.3 P71 BN71B4** | 420 |
| **3.9** | 846 | 2.1 | 352.5 | 12000 | **F513_352.5 S1 M1SD4** | 415 | **F513_352.5 P71 BN71B4** | 416 |
| **4.0** | 827 | 1.3 | 344.8 | 8500 | **F413_344.8 S1 M1SD4** | 411 | **F413_344.8 P71 BN71B4** | 412 |
| **4.3** | 761 | 2.4 | 317.3 | 12000 | **F513_317.3 S1 M1SD4** | 415 | **F513_317.3 P71 BN71B4** | 416 |
| **4.6** | 712 | 1.5 | 296.6 | 8500 | **F413_296.6 S1 M1SD4** | 411 | **F413_296.6 P71 BN71B4** | 412 |
| **4.8** | 686 | 2.6 | 285.9 | 12000 | **F513_285.9 S1 M1SD4** | 415 | **F513_285.9 P71 BN71B4** | 416 |
| **5.1** | 641 | 1.7 | 266.9 | 8500 | **F413_266.9 S1 M1SD4** | 411 | **F413_266.9 P71 BN71B4** | 412 |
| **5.2** | 629 | 2.9 | 262.1 | 12000 | **F513_262.1 S1 M1SD4** | 415 | **F513_262.1 P71 BN71B4** | 416 |
| **5.4** | 609 | 1.0 | 253.6 | 6500 | **F313_253.6 S1 M1SD4** | 407 | **F313_253.6 P71 BN71B4** | 408 |
| **5.7** | 576 | 1.9 | 240.1 | 8500 | **F413_240.1 S1 M1SD4** | 411 | **F413_240.1 P71 BN71B4** | 412 |
| **5.7** | 576 | 3.1 | 239.8 | 12000 | **F513_239.8 S1 M1SD4** | 415 | **F513_239.8 P71 BN71B4** | 416 |
| **6.0** | 548 | 1.1 | 228.2 | 6500 | **F313_228.2 S1 M1SD4** | 407 | **F313_228.2 P71 BN71B4** | 408 |
| **6.2** | 528 | 2.1 | 220.1 | 8500 | **F413_220.1 S1 M1SD4** | 411 | **F413_220.1 P71 BN71B4** | 412 |
| **6.3** | 520 | 3.5 | 216.9 | 12000 | **F513_216.9 S1 M1SD4** | 415 | **F513_216.9 P71 BN71B4** | 416 |

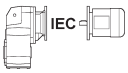


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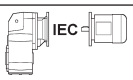
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **6.8** | 485 | 1.2 | 202.3 | 6500 | **F313_202.3 S1 M1SD4** | 407 | **F313_202.3 P71 BN71B4** | 408 |
| **6.9** | 477 | 2.3 | 198.9 | 8500 | **F413_198.9 S1 M1SD4** | 411 | **F413_198.9 P71 BN71B4** | 412 |
| **7.4** | 445 | 1.3 | 185.4 | 6500 | **F313_185.4 S1 M1SD4** | 407 | **F313_185.4 P71 BN71B4** | 408 |
| **7.6** | 434 | 2.5 | 180.7 | 8500 | **F413_180.7 S1 M1SD4** | 411 | **F413_180.7 P71 BN71B4** | 412 |
| **7.9** | 418 | 1.0 | 174.2 | 6500 | **F253_174.2 S1 M1SD4** | 403 | **F253_174.2 P71 BN71B4** | 404 |
| **8.1** | 405 | 2.7 | 168.7 | 8500 | **F413_168.7 S1 M1SD4** | 411 | **F413_168.7 P71 BN71B4** | 412 |
| **8.2** | 400 | 1.5 | 166.8 | 6500 | **F313_166.8 S1 M1SD4** | 407 | **F313_166.8 P71 BN71B4** | 408 |
| **8.8** | 374 | 1.1 | 155.9 | 6500 | **F253_155.9 S1 M1SD4** | 403 | **F253_155.9 P71 BN71B4** | 404 |
| **9.1** | 362 | 1.7 | 150.8 | 6500 | **F313_150.8 S1 M1SD4** | 407 | **F313_150.8 P71 BN71B4** | 408 |
| **9.6** | 343 | 1.2 | 143.0 | 6500 | **F253_143.0 S1 M1SD4** | 403 | **F253_143.0 P71 BN71B4** | 404 |
| **9.7** | 338 | 1.8 | 140.7 | 6500 | **F313_140.7 S1 M1SD4** | 407 | **F313_140.7 P71 BN71B4** | 408 |
| **10.2** | 323 | 3.4 | 134.4 | 8500 | **F413_134.4 S1 M1SD4** | 411 | **F413_134.4 P71 BN71B4** | 412 |
| **10.7** | 307 | 1.3 | 127.8 | 6500 | **F253_127.8 S1 M1SD4** | 403 | **F253_127.8 P71 BN71B4** | 404 |
| **10.7** | 308 | 1.9 | 128.4 | 6500 | **F313_128.4 S1 M1SD4** | 407 | **F313_128.4 P71 BN71B4** | 408 |
| **12.1** | 271 | 1.5 | 113.0 | 6500 | **F253_113.0 S1 M1SD4** | 403 | **F253_113.0 P71 BN71B4** | 404 |
| **12.2** | 270 | 2.2 | 112.5 | 6500 | **F313_112.5 S1 M1SD4** | 407 | **F313_112.5 P71 BN71B4** | 408 |
| **13.0** | 253 | 1.6 | 105.4 | 6500 | **F253_105.4 S1 M1SD4** | 403 | **F253_105.4 P71 BN71B4** | 404 |
| **13.4** | 245 | 2.5 | 101.9 | 6500 | **F313_101.9 S1 M1SD4** | 407 | **F313_101.9 P71 BN71B4** | 408 |
| **13.5** | 249 | 1.0 | 101.6 | 4000 | | | **F202_101.6 P71 BN71B4** | 400 |
| **14.3** | 229 | 1.7 | 95.5 | 6490 | **F253_95.5 S1 M1SD4** | 403 | **F253_95.5 P71 BN71B4** | 404 |
| **15.2** | 222 | 1.1 | 90.4 | 4000 | **F202_90.4 S1 M1SD4** | 399 | **F202_90.4 P71 BN71B4** | 400 |
| **15.7** | 210 | 2.9 | 87.4 | 6500 | **F313_87.4 S1 M1SD4** | 407 | **F313_87.4 P71 BN71B4** | 408 |
| **16.4** | 200 | 2.0 | 83.4 | 6280 | **F253_83.4 S1 M1SD4** | 403 | **F253_83.4 P71 BN71B4** | 404 |
| **17.4** | 189 | 3.2 | 78.9 | 6500 | **F313_78.9 S1 M1SD4** | 407 | **F313_78.9 P71 BN71B4** | 408 |
| **17.8** | 188 | 1.3 | 76.8 | 4000 | **F202_76.8 S1 M1SD4** | 399 | **F202_76.8 P71 BN71B4** | 400 |
| **17.9** | 184 | 2.2 | 76.6 | 6160 | **F253_76.6 S1 M1SD4** | 403 | **F253_76.6 P71 BN71B4** | 404 |
| **19.8** | 169 | 1.5 | 69.1 | 4000 | **F202_69.1 S1 M1SD4** | 399 | **F202_69.1 P71 BN71B4** | 400 |
| **21.0** | 157 | 2.6 | 65.3 | 5920 | **F253_65.3 S1 M1SD4** | 403 | **F253_65.3 P71 BN71B4** | 404 |
| **21.7** | 154 | 0.9 | 63.0 | 2800 | **F102_63.0 S1 M1SD4** | 395 | **F102_63.0 P71 BN71B4** | 396 |
| **22.1** | 152 | 1.6 | 61.9 | 4000 | **F202_61.9 S1 M1SD4** | 399 | **F202_61.9 P71 BN71B4** | 400 |
| **23.5** | 140 | 2.9 | 58.3 | 5750 | **F253_58.3 S1 M1SD4** | 403 | **F253_58.3 P71 BN71B4** | 404 |
| **24.2** | 139 | 1.0 | 56.7 | 2800 | **F102_56.7 S1 M1SD4** | 395 | **F102_56.7 P71 BN71B4** | 396 |
| **24.2** | 139 | 1.8 | 56.7 | 4000 | **F202_56.7 S1 M1SD4** | 399 | **F202_56.7 P71 BN71B4** | 400 |
| **27.0** | 124 | 2.0 | 50.7 | 3900 | **F202_50.7 S1 M1SD4** | 399 | **F202_50.7 P71 BN71B4** | 400 |
| **27.0** | 122 | 3.3 | 50.8 | 5540 | **F253_50.8 S1 M1SD4** | 403 | **F253_50.8 P71 BN71B4** | 404 |
| **28.1** | 119 | 1.2 | 48.7 | 2800 | **F102_48.7 S1 M1SD4** | 395 | **F102_48.7 P71 BN71B4** | 396 |
| **31** | 110 | 1.3 | 44.7 | 2800 | **F102_44.7 S1 M1SD4** | 395 | **F102_44.7 P71 BN71B4** | 396 |
| **31** | 110 | 2.3 | 44.8 | 3770 | **F202_44.8 S1 M1SD4** | 399 | **F202_44.8 P71 BN71B4** | 400 |
| **31** | 109 | 3.5 | 44.4 | 5370 | **F252_44.4 S1 M1SD4** | 403 | **F252_44.4 P71 BN71B4** | 404 |
| **33** | 103 | 2.4 | 41.8 | 3700 | **F202_41.8 S1 M1SD4** | 399 | **F202_41.8 P71 BN71B4** | 400 |
| **35** | 97 | 1.4 | 39.6 | 2800 | **F102_39.6 S1 M1SD4** | 395 | **F102_39.6 P71 BN71B4** | 396 |
| **36** | 93 | 2.7 | 37.9 | 3600 | **F202_37.9 S1 M1SD4** | 399 | **F202_37.9 P71 BN71B4** | 400 |
| **39** | 87 | 1.6 | 35.3 | 2800 | **F102_35.3 S1 M1SD4** | 395 | **F102_35.3 P71 BN71B4** | 396 |
| **41** | 81 | 3.1 | 33.1 | 3460 | **F202_33.1 S1 M1SD4** | 399 | **F202_33.1 P71 BN71B4** | 400 |
| **42** | 81 | 1.7 | 33.0 | 2800 | **F102_33.0 S1 M1SD4** | 395 | **F102_33.0 P71 BN71B4** | 396 |
| **45** | 75 | 3.4 | 30.4 | 3380 | **F202_30.4 S1 M1SD4** | 399 | **F202_30.4 P71 BN71B4** | 400 |
| **46** | 73 | 1.9 | 29.6 | 2800 | **F102_29.6 S1 M1SD4** | 395 | **F102_29.6 P71 BN71B4** | 396 |
| **53** | 63 | 2.2 | 25.8 | 2690 | **F102_25.8 S1 M1SD4** | 395 | **F102_25.8 P71 BN71B4** | 396 |
| **60** | 56 | 2.5 | 22.8 | 2600 | **F102_22.8 S1 M1SD4** | 395 | **F102_22.8 P71 BN71B4** | 396 |
| **71** | 47 | 2.9 | 19.3 | 2470 | **F102_19.3 S1 M1SD4** | 395 | **F102_19.3 P71 BN71B4** | 396 |
| **81** | 42 | 3.1 | 17.0 | 2380 | **F102_17.0 S1 M1SD4** | 395 | **F102_17.0 P71 BN71B4** | 396 |
| **94** | 36 | 3.3 | 14.6 | 2280 | **F102_14.6 S1 M1SD4** | 395 | **F102_14.6 P71 BN71B4** | 396 |
| **105** | 32 | 3.3 | 13.0 | 2200 | **F102_13.0 S1 M1SD4** | 395 | **F102_13.0 P71 BN71B4** | 396 |
| **119** | 28 | 3.4 | 11.5 | 2120 | **F102_11.5 S1 M1SD4** | 395 | **F102_11.5 P71 BN71B4** | 396 |
| **140** | 24 | 3.7 | 9.8 | 2010 | **F102_9.8 S1 M1SD4** | 395 | **F102_9.8 P71 BN71B4** | 396 |
| **160** | 21 | 3.9 | 8.6 | 1930 | **F102_8.6 S1 M1SD4** | 395 | **F102_8.6 P71 BN71B4** | 396 |
| **185** | 18 | 4.2 | 7.4 | 1850 | **F102_7.4 S1 M1SD4** | 395 | **F102_7.4 P71 BN71B4** | 396 |

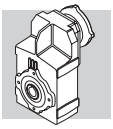


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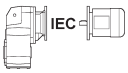
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  | |
|---|---|---|---|---|---|---|---|---|
| **193** | 17 | 5.4 | 14.6 | 1830 | **F102_14.6 S05 M05C2** | 395 | **F102_14.6 P71 BN71A2** | 396 |
| **216** | 16 | 5.5 | 13.0 | 1760 | **F102_13.0 S05 M05C2** | 395 | **F102_13.0 P71 BN71A2** | 396 |
| **244** | 14 | 5.7 | 11.5 | 1690 | **F102_11.5 S05 M05C2** | 395 | **F102_11.5 P71 BN71A2** | 396 |
| **289** | 12 | 6.3 | 9.8 | 1610 | **F102_9.8 S05 M05C2** | 395 | **F102_9.8 P71 BN71A2** | 396 |
| **329** | 10 | 6.6 | 8.6 | 1540 | **F102_8.6 S05 M05C2** | 395 | **F102_8.6 P71 BN71A2** | 396 |
| **381** | 9 | 7.1 | 7.4 | 1470 | **F102_7.4 S05 M05C2** | 395 | **F102_7.4 P71 BN71A2** | 396 |

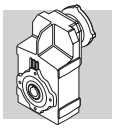
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| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  | |
|---|---|---|---|---|---|---|---|---|
| **0.44** | 10909 | 1.3 | 2099 | 55000 | **F904_2099 S2 M2SA6** | 429 | **F904_2099 P80 BN80B6** | 430 |
| **0.47** | 10070 | 1.4 | 1937 | 55000 | **F904_1937 S2 M2SA6** | 429 | **F904_1937 P80 BN80B6** | 430 |
| **0.54** | 8884 | 0.9 | 1709 | 45000 | **F804_1709 S2 M2SA6** | 426 | **F804_1709 P80 BN80B6** | 427 |
| **0.54** | 8849 | 1.6 | 1702 | 55000 | **F904_1702 S2 M2SA6** | 429 | **F904_1702 P80 BN80B6** | 430 |
| **0.58** | 8201 | 1.0 | 1578 | 45000 | **F804_1578 S2 M2SA6** | 426 | **F804_1578 P80 BN80B6** | 427 |
| **0.59** | 8168 | 1.7 | 1571 | 55000 | **F904_1571 S2 M2SA6** | 429 | **F904_1571 P80 BN80B6** | 430 |
| **0.64** | 7422 | 1.9 | 1428 | 55000 | **F904_1428 S2 M2SA6** | 429 | **F904_1428 P80 BN80B6** | 430 |
| **0.66** | 7193 | 1.1 | 1384 | 45000 | **F804_1384 S2 M2SA6** | 426 | **F804_1384 P80 BN80B6** | 427 |
| **0.69** | 6885 | 1.2 | 1987 | 45000 | **F804_1987 S1 M1LA4** | 426 | **F804_1987 P80 BN80A4** | 427 |
| **0.75** | 6356 | 1.3 | 1834 | 45000 | **F804_1834 S1 M1LA4** | 426 | **F804_1834 P80 BN80A4** | 427 |
| **0.81** | 5923 | 1.4 | 1709 | 45000 | **F804_1709 S1 M1LA4** | 426 | **F804_1709 P80 BN80A4** | 427 |
| **0.87** | 5491 | 0.9 | 1585 | 35000 | **F704_1585 S1 M1LA4** | 423 | **F704_1585 P80 BN80A4** | 424 |
| **0.87** | 5467 | 1.5 | 1578 | 45000 | **F804_1578 S1 M1LA4** | 426 | **F804_1578 P80 BN80A4** | 427 |
| **0.93** | 5134 | 1.0 | 1481 | 35000 | **F704_1481 S1 M1LA4** | 423 | **F704_1481 P80 BN80A4** | 424 |
| **1.0** | 4739 | 1.1 | 1368 | 35000 | **F704_1368 S1 M1LA4** | 423 | **F704_1368 P80 BN80A4** | 424 |
| **1.0** | 4795 | 1.7 | 1384 | 45000 | **F804_1384 S1 M1LA4** | 426 | **F804_1384 P80 BN80A4** | 427 |
| **1.1** | 4427 | 1.8 | 1277 | 45000 | **F804_1277 S1 M1LA4** | 426 | **F804_1277 P80 BN80A4** | 427 |
| **1.2** | 4095 | 1.2 | 1182 | 35000 | **F704_1182 S1 M1LA4** | 423 | **F704_1182 P80 BN80A4** | 424 |
| **1.2** | 3972 | 2.0 | 1146 | 45000 | **F804_1146 S1 M1LA4** | 426 | **F804_1146 P80 BN80A4** | 427 |
| **1.3** | 3780 | 1.3 | 1091 | 35000 | **F704_1091 S1 M1LA4** | 423 | **F704_1091 P80 BN80A4** | 424 |
| **1.3** | 3667 | 2.2 | 1058 | 45000 | **F804_1058 S1 M1LA4** | 426 | **F804_1058 P80 BN80A4** | 427 |
| **1.4** | 3323 | 0.9 | 958.9 | 20000 | **F604_958.9 S1 M1LA4** | 419 | **F604_958.9 P80 BN80A4** | 420 |
| **1.4** | 3377 | 1.5 | 974.4 | 35000 | **F704_974.4 S1 M1LA4** | 423 | **F704_974.4 P80 BN80A4** | 424 |
| **1.5** | 3117 | 1.6 | 899.4 | 35000 | **F704_899.4 S1 M1LA4** | 423 | **F704_899.4 P80 BN80A4** | 424 |
| **1.5** | 3109 | 2.6 | 897.3 | 45000 | **F804_897.3 S1 M1LA4** | 426 | **F804_897.3 P80 BN80A4** | 427 |
| **1.6** | 3067 | 0.9 | 885.1 | 20000 | **F604_885.1 S1 M1LA4** | 419 | **F604_885.1 P80 BN80A4** | 420 |
| **1.7** | 2849 | 1.8 | 822.2 | 35000 | **F704_822.2 S1 M1LA4** | 423 | **F704_822.2 P80 BN80A4** | 424 |
| **1.8** | 2684 | 3.0 | 774.4 | 45000 | **F804_774.4 S1 M1LA4** | 426 | **F804_774.4 P80 BN80A4** | 427 |
| **1.9** | 2477 | 3.2 | 714.9 | 45000 | **F804_714.9 S1 M1LA4** | 426 | **F804_714.9 P80 BN80A4** | 427 |
| **2.1** | 2295 | 1.3 | 662.4 | 20000 | **F604_662.4 S1 M1LA4** | 419 | **F604_662.4 P80 BN80A4** | 420 |
| **2.1** | 2278 | 2.2 | 657.4 | 35000 | **F704_657.4 S1 M1LA4** | 423 | **F704_657.4 P80 BN80A4** | 424 |
| **2.3** | 2119 | 1.4 | 611.4 | 20000 | **F604_611.4 S1 M1LA4** | 419 | **F604_611.4 P80 BN80A4** | 420 |
| **2.3** | 2103 | 2.4 | 606.8 | 35000 | **F704_606.8 S1 M1LA4** | 423 | **F704_606.8 P80 BN80A4** | 424 |
| **2.6** | 1838 | 1.0 | 530.5 | 12000 | **F514_530.5 S1 M1LA4** | 415 | **F514_530.5 P80 BN80A4** | 416 |
| **2.6** | 1839 | 1.6 | 530.7 | 20000 | **F604_530.7 S1 M1LA4** | 419 | **F604_530.7 P80 BN80A4** | 420 |
| **2.7** | 1769 | 2.8 | 510.4 | 35000 | **F704_510.4 S1 M1LA4** | 423 | **F704_510.4 P80 BN80A4** | 424 |
| **2.8** | 1698 | 1.7 | 489.8 | 20000 | **F604_489.8 S1 M1LA4** | 419 | **F604_489.8 P80 BN80A4** | 420 |
| **2.9** | 1633 | 3.1 | 471.2 | 35000 | **F704_471.2 S1 M1LA4** | 423 | **F704_471.2 P80 BN80A4** | 424 |
| **3.2** | 1487 | 1.2 | 429.1 | 12000 | **F514_429.1 S1 M1LA4** | 415 | **F514_429.1 P80 BN80A4** | 416 |
| **3.2** | 1499 | 1.9 | 432.6 | 20000 | **F604_432.6 S1 M1LA4** | 419 | **F604_432.6 P80 BN80A4** | 420 |
| **3.5** | 1384 | 2.1 | 399.3 | 20000 | **F604_399.3 S1 M1LA4** | 419 | **F604_399.3 P80 BN80A4** | 420 |
| **3.9** | 1248 | 1.4 | 352.5 | 12000 | **F513_352.5 S1 M1LA4** | 415 | **F513_352.5 P80 BN80A4** | 416 |
| **4.0** | 1221 | 0.9 | 344.8 | 8500 | **F413_344.8 S1 M1LA4** | 411 | **F413_344.8 P80 BN80A4** | 412 |

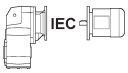


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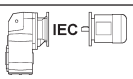
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **4.0** | 1184 | 2.4 | 341.7 | 20000 | **F604_341.7 S1 M1LA4** | 419 | **F604_341.7 P80 BN80A4** | 420 |
| **4.3** | 1124 | 1.6 | 317.3 | 12000 | **F513_317.3 S1 M1LA4** | 415 | **F513_317.3 P80 BN80A4** | 416 |
| **4.4** | 1093 | 2.7 | 315.4 | 20000 | **F604_315.4 S1 M1LA4** | 419 | **F604_315.4 P80 BN80A4** | 420 |
| **4.7** | 1050 | 1.0 | 296.6 | 8500 | **F413_296.6 S1 M1LA4** | 411 | **F413_296.6 P80 BN80A4** | 412 |
| **4.8** | 1013 | 1.8 | 285.9 | 12000 | **F513_285.9 S1 M1LA4** | 415 | **F513_285.9 P80 BN80A4** | 416 |
| **5.2** | 945 | 1.2 | 266.9 | 8500 | **F413_266.9 S1 M1LA4** | 411 | **F413_266.9 P80 BN80A4** | 412 |
| **5.3** | 928 | 1.9 | 262.1 | 12000 | **F513_262.1 S1 M1LA4** | 415 | **F513_262.1 P80 BN80A4** | 416 |
| **5.7** | 850 | 1.3 | 240.1 | 8500 | **F413_240.1 S1 M1LA4** | 411 | **F413_240.1 P80 BN80A4** | 412 |
| **5.8** | 849 | 2.1 | 239.8 | 12000 | **F513_239.8 S1 M1LA4** | 415 | **F513_239.8 P80 BN80A4** | 416 |
| **6.3** | 780 | 1.4 | 220.1 | 8500 | **F413_220.1 S1 M1LA4** | 411 | **F413_220.1 P80 BN80A4** | 412 |
| **6.4** | 768 | 2.3 | 216.9 | 12000 | **F513_216.9 S1 M1LA4** | 415 | **F513_216.9 P80 BN80A4** | 416 |
| **6.8** | 717 | 2.5 | 202.4 | 12000 | **F513_202.4 S1 M1LA4** | 415 | **F513_202.4 P80 BN80A4** | 416 |
| **6.9** | 704 | 1.6 | 198.9 | 8500 | **F413_198.9 S1 M1LA4** | 411 | **F413_198.9 P80 BN80A4** | 412 |
| **7.4** | 657 | 0.9 | 185.4 | 6500 | **F313_185.4 S1 M1LA4** | 407 | **F313_185.4 P80 BN80A4** | 408 |
| **7.6** | 640 | 1.7 | 180.7 | 8500 | **F413_180.7 S1 M1LA4** | 411 | **F413_180.7 P80 BN80A4** | 412 |
| **8.2** | 597 | 1.8 | 168.7 | 8500 | **F413_168.7 S1 M1LA4** | 411 | **F413_168.7 P80 BN80A4** | 412 |
| **8.3** | 591 | 1.0 | 166.8 | 6500 | **F313_166.8 S1 M1LA4** | 407 | **F313_166.8 P80 BN80A4** | 408 |
| **8.3** | 587 | 3.1 | 165.6 | 12000 | **F513_165.6 S1 M1LA4** | 415 | **F513_165.6 P80 BN80A4** | 416 |
| **9.2** | 534 | 1.1 | 150.8 | 6500 | **F313_150.8 S1 M1LA4** | 407 | **F313_150.8 P80 BN80A4** | 408 |
| **9.8** | 498 | 1.2 | 140.7 | 6500 | **F313_140.7 S1 M1LA4** | 407 | **F313_140.7 P80 BN80A4** | 408 |
| **10.3** | 476 | 2.3 | 134.4 | 8500 | **F413_134.4 S1 M1LA4** | 411 | **F413_134.4 P80 BN80A4** | 412 |
| **10.7** | 455 | 1.3 | 128.4 | 6500 | **F313_128.4 S1 M1LA4** | 407 | **F313_128.4 P80 BN80A4** | 408 |
| **12.2** | 400 | 1.0 | 113.0 | 6130 | **F253_113.0 S1 M1LA4** | 403 | **F253_113.0 P80 BN80A4** | 404 |
| **12.3** | 399 | 1.5 | 112.5 | 6500 | **F313_112.5 S1 M1LA4** | 407 | **F313_112.5 P80 BN80A4** | 408 |
| **13.0** | 375 | 2.9 | 106.0 | 8500 | **F413_106.0 S1 M1LA4** | 411 | **F413_106.0 P80 BN80A4** | 412 |
| **13.1** | 373 | 1.1 | 105.4 | 6070 | **F253_105.4 S1 M1LA4** | 403 | **F253_105.4 P80 BN80A4** | 404 |
| **13.5** | 361 | 1.7 | 101.9 | 6500 | **F313_101.9 S1 M1LA4** | 407 | **F313_101.9 P80 BN80A4** | 408 |
| **14.5** | 338 | 1.2 | 95.5 | 5980 | **F253_95.5 S1 M1LA4** | 403 | **F253_95.5 P80 BN80A4** | 404 |
| **15.8** | 309 | 1.9 | 87.4 | 6500 | **F313_87.4 S1 M1LA4** | 407 | **F313_87.4 P80 BN80A4** | 408 |
| **16.5** | 295 | 1.4 | 83.4 | 5840 | **F253_83.4 S1 M1LA4** | 403 | **F253_83.4 P80 BN80A4** | 404 |
| **17.5** | 279 | 2.1 | 78.9 | 6500 | **F313_78.9 S1 M1LA4** | 407 | **F313_78.9 P80 BN80A4** | 408 |
| **18.0** | 278 | 0.9 | 76.8 | 4000 | **F202_76.8 S1 M1LA4** | 399 | **F202_76.8 P80 BN80A4** | 400 |
| **18.0** | 271 | 1.5 | 76.6 | 5750 | **F253_76.6 S1 M1LA4** | 403 | **F253_76.6 P80 BN80A4** | 404 |
| **20.0** | 250 | 1.0 | 69.1 | 3980 | **F202_69.1 S1 M1LA4** | 399 | **F202_69.1 P80 BN80A4** | 400 |
| **20.0** | 245 | 2.5 | 69.1 | 6500 | **F313_69.1 S1 M1LA4** | 407 | **F313_69.1 P80 BN80A4** | 408 |
| **21.1** | 231 | 1.7 | 65.3 | 5570 | **F253_65.3 S1 M1LA4** | 403 | **F253_65.3 P80 BN80A4** | 404 |
| **22.1** | 221 | 2.7 | 62.8 | 6500 | | | **F313_62.8 P80 BN80A4** | 408 |
| **22.3** | 224 | 1.1 | 61.9 | 3890 | **F202_61.9 S1 M1LA4** | 399 | **F202_61.9 P80 BN80A4** | 400 |
| **23.7** | 207 | 1.9 | 58.3 | 5430 | **F253_58.3 S1 M1LA4** | 403 | **F253_58.3 P80 BN80A4** | 404 |
| **24.3** | 205 | 1.2 | 56.7 | 3810 | **F202_56.7 S1 M1LA4** | 399 | **F202_56.7 P80 BN80A4** | 400 |
| **26.7** | 183 | 3.3 | 52.1 | 6500 | | | **F313_52.1 P80 BN80A4** | 408 |
| **27.2** | 184 | 1.4 | 50.7 | 3720 | **F202_50.7 S1 M1LA4** | 399 | **F202_50.7 P80 BN80A4** | 400 |
| **27.2** | 180 | 2.2 | 50.8 | 5270 | **F253_50.8 S1 M1LA4** | 403 | **F253_50.8 P80 BN80A4** | 404 |
| **29.2** | 167 | 3.5 | 47.5 | 6500 | | | **F313_47.5 P80 BN80A4** | 408 |
| **31** | 162 | 1.5 | 44.8 | 3610 | **F202_44.8 S1 M1LA4** | 399 | **F202_44.8 P80 BN80A4** | 400 |
| **31** | 161 | 2.4 | 44.4 | 5140 | **F252_44.4 S1 M1LA4** | 403 | **F252_44.4 P80 BN80A4** | 404 |
| **31** | 160 | 2.5 | 45.6 | 5130 | | | **F253_45.6 P80 BN80A4** | 404 |
| **33** | 151 | 1.7 | 41.8 | 3550 | **F202_41.8 S1 M1LA4** | 399 | **F202_41.8 P80 BN80A4** | 400 |
| **34** | 147 | 2.5 | 40.7 | 5030 | **F252_40.7 S1 M1LA4** | 403 | **F252_40.7 P80 BN80A4** | 404 |
| **35** | 143 | 1.0 | 39.6 | 2800 | **F102_39.6 S1 M1LA4** | 395 | **F102_39.6 P80 BN80A4** | 396 |
| **36** | 137 | 1.8 | 37.9 | 3460 | **F202_37.9 S1 M1LA4** | 399 | **F202_37.9 P80 BN80A4** | 400 |
| **38** | 132 | 3.0 | 36.4 | 4890 | **F252_36.4 S1 M1LA4** | 403 | **F252_36.4 P80 BN80A4** | 404 |
| **39** | 128 | 1.1 | 35.3 | 2800 | **F102_35.3 S1 M1LA4** | 395 | **F102_35.3 P80 BN80A4** | 396 |
| **42** | 119 | 1.2 | 33.0 | 2750 | **F102_33.0 S1 M1LA4** | 395 | **F102_33.0 P80 BN80A4** | 396 |
| **42** | 120 | 2.1 | 33.1 | 3340 | **F202_33.1 S1 M1LA4** | 399 | **F202_33.1 P80 BN80A4** | 400 |
| **43** | 116 | 3.4 | 32.2 | 4730 | **F252_32.2 S1 M1LA4** | 403 | **F252_32.2 P80 BN80A4** | 404 |
| **45** | 110 | 2.3 | 30.4 | 3260 | **F202_30.4 S1 M1LA4** | 399 | **F202_30.4 P80 BN80A4** | 400 |

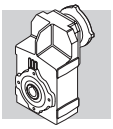


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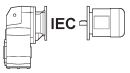
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **47** | 107 | 1.3 | 29.6 | 2680 | **F102_29.6 S1 M1LA4** | 395 | **F102_29.6 P80 BN80A4** | 396 |
| **53** | 94 | 2.6 | 25.9 | 3130 | **F202_25.9 S1 M1LA4** | 399 | **F202_25.9 P80 BN80A4** | 400 |
| **54** | 93 | 1.5 | 25.8 | 2590 | **F102_25.8 S1 M1LA4** | 395 | **F102_25.8 P80 BN80A4** | 396 |
| **60** | 83 | 1.7 | 22.8 | 2510 | **F102_22.8 S1 M1LA4** | 395 | **F102_22.8 P80 BN80A4** | 396 |
| **60** | 84 | 2.8 | 23.1 | 3030 | **F202_23.1 S1 M1LA4** | 399 | **F202_23.1 P80 BN80A4** | 400 |
| **68** | 73 | 3.1 | 20.2 | 2910 | **F202_20.2 S1 M1LA4** | 399 | **F202_20.2 P80 BN80A4** | 400 |
| **71** | 70 | 1.9 | 19.3 | 2400 | **F102_19.3 S1 M1LA4** | 395 | **F102_19.3 P80 BN80A4** | 396 |
| **77** | 65 | 3.3 | 18.1 | 2820 | **F202_18.1 S1 M1LA4** | 399 | **F202_18.1 P80 BN80A4** | 400 |
| **81** | 61 | 2.1 | 17.0 | 2310 | **F102_17.0 S1 M1LA4** | 395 | **F102_17.0 P80 BN80A4** | 396 |
| **94** | 53 | 2.2 | 14.6 | 2220 | **F102_14.6 S1 M1LA4** | 395 | **F102_14.6 P80 BN80A4** | 396 |
| **106** | 47 | 2.2 | 13.0 | 2140 | **F102_13.0 S1 M1LA4** | 395 | **F102_13.0 P80 BN80A4** | 396 |
| **120** | 42 | 2.3 | 11.5 | 2070 | **F102_11.5 S1 M1LA4** | 395 | **F102_11.5 P80 BN80A4** | 396 |
| **141** | 35 | 2.5 | 9.8 | 1970 | **F102_9.8 S1 M1LA4** | 395 | **F102_9.8 P80 BN80A4** | 396 |
| **161** | 31 | 2.6 | 8.6 | 1890 | **F102_8.6 S1 M1LA4** | 395 | **F102_8.6 P80 BN80A4** | 396 |
| **186** | 27 | 2.8 | 7.4 | 1810 | **F102_7.4 S1 M1LA4** | 395 | **F102_7.4 P80 BN80A4** | 396 |
| **193** | 26 | 3.6 | 14.6 | 1800 | **F102_14.6 S1 M1SD2** | 395 | **F102_14.6 P71 BN71B2** | 396 |
| **216** | 23 | 3.7 | 13.0 | 1730 | **F102_13.0 S1 M1SD2** | 395 | **F102_13.0 P71 BN71B2** | 396 |
| **244** | 20 | 3.8 | 11.5 | 1670 | **F102_11.5 S1 M1SD2** | 395 | **F102_11.5 P71 BN71B2** | 396 |
| **289** | 17 | 4.2 | 9.8 | 1590 | **F102_9.8 S1 M1SD2** | 395 | **F102_9.8 P71 BN71B2** | 396 |
| **329** | 15 | 4.4 | 8.6 | 1530 | **F102_8.6 S1 M1SD2** | 395 | **F102_8.6 P71 BN71B2** | 396 |
| **381** | 13 | 4.8 | 7.4 | 1460 | **F102_7.4 S1 M1SD2** | 395 | **F102_7.4 P71 BN71B2** | 396 |

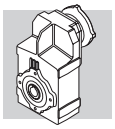
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| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.45** | 14391 | 1.0 | 2098.7 | 55000 | **F904_2099 S3 ME3SA6** | 429 | **F904_2099 P90 BE90S6** | 430 |
| **0.49** | 13284 | 1.1 | 1937.3 | 55000 | **F904_1937 S3 ME3SA6** | 429 | **F904_1937 P90 BE90S6** | 430 |
| **0.55** | 11673 | 1.2 | 1702.3 | 55000 | **F904_1702 S3 ME3SA6** | 429 | **F904_1702 P90 BE90S6** | 430 |
| **0.60** | 10775 | 1.3 | 1571.4 | 55000 | **F904_1571 S3 ME3SA6** | 429 | **F904_1571 P90 BE90S6** | 430 |
| **0.66** | 9791 | 1.4 | 1427.9 | 55000 | **F904_1428 S3 ME3SA6** | 429 | **F904_1428 P90 BE90S6** | 430 |
| **0.68** | 9444 | 1.5 | 2098.7 | 55000 | **F904_2099 S2 ME2SB4** | 429 | **F904_2099 P80 BE80B4** | 430 |
| **0.72** | 8941 | 0.9 | 1986.8 | 45000 | **F804_1987 S2 ME2SB4** | 426 | **F804_1987 P80 BE80B4** | 427 |
| **0.74** | 8718 | 1.6 | 1937.3 | 55000 | **F904_1937 S2 ME2SB4** | 429 | **F904_1937 P80 BE80B4** | 430 |
| **0.78** | 8253 | 1.0 | 1834.0 | 45000 | **F804_1834 S2 ME2SB4** | 426 | **F804_1834 P80 BE80B4** | 427 |
| **0.84** | 7691 | 1.0 | 1709.1 | 45000 | **F804_1709 S2 ME2SB4** | 426 | **F804_1709 P80 BE80B4** | 427 |
| **0.84** | 7660 | 1.8 | 1702.3 | 55000 | **F904_1702 S2 ME2SB4** | 429 | **F904_1702 P80 BE80B4** | 430 |
| **0.91** | 7099 | 1.1 | 1577.6 | 45000 | **F804_1578 S2 ME2SB4** | 426 | **F804_1578 P80 BE80B4** | 427 |
| **0.91** | 7071 | 2.0 | 1571.4 | 55000 | **F904_1571 S2 ME2SB4** | 429 | **F904_1571 P80 BE80B4** | 430 |
| **1.0** | 6426 | 2.2 | 1427.9 | 55000 | **F904_1428 S2 ME2SB4** | 429 | **F904_1428 P80 BE80B4** | 430 |
| **1.0** | 6227 | 1.3 | 1383.8 | 45000 | **F804_1384 S2 ME2SB4** | 426 | **F804_1384 P80 BE80B4** | 427 |
| **1.1** | 5931 | 2.4 | 1318.1 | 55000 | **F904_1318 S2 ME2SB4** | 429 | **F904_1318 P80 BE80B4** | 430 |
| **1.1** | 5748 | 1.4 | 1277.3 | 45000 | **F804_1277 S2 ME2SB4** | 426 | **F804_1277 P80 BE80B4** | 427 |
| **1.2** | 5422 | 2.6 | 1204.9 | 55000 | **F904_1205 S2 ME2SB4** | 429 | **F904_1205 P80 BE80B4** | 430 |
| **1.2** | 5318 | 0.9 | 1181.8 | 35000 | **F704_1182 S2 ME2SB4** | 423 | **F704_1182 P80 BE80B4** | 424 |
| **1.2** | 5158 | 1.6 | 1146.2 | 45000 | **F804_1146 S2 ME2SB4** | 426 | **F804_1146 P80 BE80B4** | 427 |
| **1.3** | 5005 | 2.8 | 1112.3 | 55000 | **F904_1112 S2 ME2SB4** | 429 | **F904_1112 P80 BE80B4** | 430 |
| **1.3** | 4909 | 1.0 | 1090.9 | 35000 | **F704_1091 S2 ME2SB4** | 423 | **F704_1091 P80 BE80B4** | 424 |
| **1.4** | 4761 | 1.7 | 1058.1 | 45000 | **F804_1058 S2 ME2SB4** | 426 | **F804_1058 P80 BE80B4** | 427 |
| **1.5** | 4437 | 3.2 | 986.0 | 55000 | **F904_986.0 S2 ME2SB4** | 429 | **F904_986.0 P80 BE80B4** | 430 |
| **1.5** | 4385 | 1.1 | 974.4 | 35000 | **F704_974.4 S2 ME2SB4** | 423 | **F704_974.4 P80 BE80B4** | 424 |
| **1.5** | 4374 | 1.8 | 972.0 | 45000 | **F804_972.0 S2 ME2SB4** | 426 | **F804_972.0 P80 BE80B4** | 427 |
| **1.6** | 4096 | 3.4 | 910.2 | 55000 | **F904_910.2 S2 ME2SB4** | 429 | **F904_910.2 P80 BE80B4** | 430 |
| **1.6** | 4047 | 1.2 | 899.4 | 35000 | **F704_899.4 S2 ME2SB4** | 423 | **F704_899.4 P80 BE80B4** | 424 |



# 0.75 kW

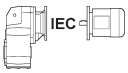
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **1.6** | 4038 | 2.0 | 897.3 | 45000 | **F804_897.3 S2 ME2SB4** | 426 | **F804_897.3 P80 BE80B4** | 427 |
| **1.7** | 3700 | 1.4 | 822.2 | 35000 | **F704_822.2 S2 ME2SB4** | 423 | **F704_822.2 P80 BE80B4** | 424 |
| **1.8** | 3485 | 2.3 | 774.4 | 45000 | **F804_774.4 S2 ME2SB4** | 426 | **F804_774.4 P80 BE80B4** | 427 |
| **1.9** | 3415 | 1.5 | 759.0 | 35000 | **F704_759.0 S2 ME2SB4** | 423 | **F704_759.0 P80 BE80B4** | 424 |
| **2.0** | 3217 | 2.5 | 714.9 | 45000 | **F804_714.9 S2 ME2SB4** | 426 | **F804_714.9 P80 BE80B4** | 427 |
| **2.2** | 2981 | 1.0 | 662.4 | 20000 | **F604_662.4 S2 ME2SB4** | 419 | **F604_662.4 P80 BE80B4** | 420 |
| **2.2** | 2958 | 1.7 | 657.4 | 35000 | **F704_657.4 S2 ME2SB4** | 423 | **F704_657.4 P80 BE80B4** | 424 |
| **2.3** | 2751 | 1.1 | 611.4 | 20000 | **F604_611.4 S2 ME2SB4** | 419 | **F604_611.4 P80 BE80B4** | 420 |
| **2.3** | 2749 | 2.9 | 610.9 | 45000 | **F804_610.9 S2 ME2SB4** | 426 | **F804_610.9 P80 BE80B4** | 427 |
| **2.4** | 2731 | 1.8 | 606.8 | 35000 | **F704_606.8 S2 ME2SB4** | 423 | **F704_606.8 P80 BE80B4** | 424 |
| **2.5** | 2537 | 3.2 | 563.9 | 45000 | **F804_563.9 S2 ME2SB4** | 426 | **F804_563.9 P80 BE80B4** | 427 |
| **2.7** | 2388 | 1.2 | 530.7 | 20000 | **F604_530.7 S2 ME2SB4** | 419 | **F604_530.7 P80 BE80B4** | 420 |
| **2.8** | 2297 | 2.2 | 510.4 | 35000 | **F704_510.4 S2 ME2SB4** | 423 | **F704_510.4 P80 BE80B4** | 424 |
| **2.9** | 2204 | 1.3 | 489.8 | 20000 | **F604_489.8 S2 ME2SB4** | 419 | **F604_489.8 P80 BE80B4** | 420 |
| **3.0** | 2120 | 2.4 | 471.2 | 35000 | **F704_471.2 S2 ME2SB4** | 423 | **F704_471.2 P80 BE80B4** | 424 |
| **3.3** | 1947 | 1.5 | 432.6 | 20000 | **F604_432.6 S2 ME2SB4** | 419 | **F604_432.6 P80 BE80B4** | 420 |
| **3.3** | 1931 | 0.9 | 429.1 | 12000 | **F514_429.1 S2 ME2SB4** | 415 | **F514_429.1 P80 BE80B4** | 416 |
| **3.5** | 1816 | 2.8 | 403.5 | 35000 | **F704_403.5 S2 ME2SB4** | 423 | **F704_403.5 P80 BE80B4** | 424 |
| **3.6** | 1797 | 1.6 | 399.3 | 20000 | **F604_399.3 S2 ME2SB4** | 419 | **F604_399.3 P80 BE80B4** | 420 |
| **3.8** | 1676 | 3.0 | 372.5 | 35000 | **F704_372.5 S2 ME2SB4** | 423 | **F704_372.5 P80 BE80B4** | 424 |
| **4.1** | 1639 | 1.1 | 352.5 | 12000 | **F513_352.5 S2 ME2SB4** | 415 | **F513_352.5 P80 BE80B4** | 416 |
| **4.2** | 1538 | 1.9 | 341.7 | 20000 | **F604_341.7 S2 ME2SB4** | 419 | **F604_341.7 P80 BE80B4** | 420 |
| **4.5** | 1475 | 1.2 | 317.3 | 12000 | **F513_317.3 S2 ME2SB4** | 415 | **F513_317.3 P80 BE80B4** | 416 |
| **4.5** | 1419 | 2.0 | 315.4 | 20000 | **F604_315.4 S2 ME2SB4** | 419 | **F604_315.4 P80 BE80B4** | 420 |
| **4.7** | 1370 | 3.7 | 304.3 | 35000 | **F704_304.3 S2 ME2SB4** | 423 | **F704_304.3 P80 BE80B4** | 424 |
| **5.0** | 1330 | 1.4 | 285.9 | 12000 | **F513_285.9 S2 ME2SB4** | 415 | **F513_285.9 P80 BE80B4** | 416 |
| **5.1** | 1305 | 2.2 | 280.7 | 20000 | **F603_280.7 S2 ME2SB4** | 419 | **F603_280.7 P80 BE80B4** | 420 |
| **5.5** | 1219 | 1.5 | 262.1 | 12000 | **F513_262.1 S2 ME2SB4** | 415 | **F513_262.1 P80 BE80B4** | 416 |
| **5.5** | 1205 | 2.4 | 259.1 | 20000 | **F603_259.1 S2 ME2SB4** | 419 | **F603_259.1 P80 BE80B4** | 420 |
| **6.0** | 1117 | 1.0 | 240.1 | 8500 | **F413_240.1 S2 ME2SB4** | 411 | **F413_240.1 P80 BE80B4** | 412 |
| **6.0** | 1115 | 1.6 | 239.8 | 12000 | **F513_239.8 S2 ME2SB4** | 415 | **F513_239.8 P80 BE80B4** | 416 |
| **6.1** | 1096 | 2.6 | 235.8 | 20000 | **F603_235.8 S2 ME2SB4** | 419 | **F603_235.8 P80 BE80B4** | 420 |
| **6.5** | 1024 | 1.1 | 220.1 | 8500 | **F413_220.1 S2 ME2SB4** | 411 | **F413_220.1 P80 BE80B4** | 412 |
| **6.6** | 1012 | 2.9 | 217.6 | 20000 | **F603_217.6 S2 ME2SB4** | 419 | **F603_217.6 P80 BE80B4** | 420 |
| **6.6** | 1008 | 1.8 | 216.9 | 12000 | **F513_216.9 S2 ME2SB4** | 415 | **F513_216.9 P80 BE80B4** | 416 |
| **7.1** | 941 | 1.9 | 202.4 | 12000 | **F513_202.4 S2 ME2SB4** | 415 | **F513_202.4 P80 BE80B4** | 416 |
| **7.1** | 936 | 3.1 | 201.4 | 20000 | **F603_201.4 S2 ME2SB4** | 419 | **F603_201.4 P80 BE80B4** | 420 |
| **7.2** | 925 | 1.2 | 198.9 | 8500 | **F413_198.9 S2 ME2SB4** | 411 | **F413_198.9 P80 BE80B4** | 412 |
| **7.7** | 864 | 3.4 | 185.9 | 20000 | **F603_185.9 S2 ME2SB4** | 419 | **F603_185.9 P80 BE80B4** | 420 |
| **7.9** | 840 | 1.3 | 180.7 | 8500 | **F413_180.7 S2 ME2SB4** | 411 | **F413_180.7 P80 BE80B4** | 412 |
| **8.5** | 784 | 1.4 | 168.7 | 8500 | **F413_168.7 S2 ME2SB4** | 411 | **F413_168.7 P80 BE80B4** | 412 |
| **8.6** | 770 | 2.3 | 165.6 | 12000 | **F513_165.6 S2 ME2SB4** | 415 | **F513_165.6 P80 BE80B4** | 416 |
| **8.8** | 757 | 3.8 | 162.9 | 20000 | **F603_162.9 S2 ME2SB4** | 419 | **F603_162.9 P80 BE80B4** | 420 |
| **10.2** | 654 | 0.9 | 140.7 | 6500 | **F313_140.7 S2 ME2SB4** | 407 | **F313_140.7 P80 BE80B4** | 408 |
| **10.6** | 625 | 1.8 | 134.4 | 8500 | **F413_134.4 S2 ME2SB4** | 411 | **F413_134.4 P80 BE80B4** | 412 |
| **11.0** | 604 | 3.0 | 129.9 | 12000 | **F513_129.9 S2 ME2SB4** | 415 | **F513_129.9 P80 BE80B4** | 416 |
| **11.1** | 597 | 1.0 | 128.4 | 6500 | **F313_128.4 S2 ME2SB4** | 407 | **F313_128.4 P80 BE80B4** | 408 |
| **12.7** | 523 | 1.1 | 112.5 | 6500 | **F313_112.5 S2 ME2SB4** | 407 | **F313_112.5 P80 BE80B4** | 408 |
| **13.5** | 493 | 2.2 | 106.0 | 8500 | **F413_106.0 S2 ME2SB4** | 411 | **F413_106.0 P80 BE80B4** | 412 |
| **14.0** | 474 | 1.3 | 101.9 | 6500 | **F313_101.9 S2 ME2SB4** | 407 | **F313_101.9 P80 BE80B4** | 408 |
| **15.0** | 444 | 0.9 | 95.5 | 5450 | **F253_95.5 S2 ME2SB4** | 403 | **F253_95.5 P80 BE80B4** | 404 |
| **16.4** | 406 | 1.5 | 87.4 | 6500 | **F313_87.4 S2 ME2SB4** | 407 | **F313_87.4 P80 BE80B4** | 408 |
| **16.8** | 395 | 2.8 | 84.9 | 8500 | **F413_84.9 S2 ME2SB4** | 411 | **F413_84.9 P80 BE80B4** | 412 |
| **17.1** | 388 | 1.0 | 83.4 | 5350 | **F253_83.4 S2 ME2SB4** | 403 | **F253_83.4 P80 BE80B4** | 404 |
| **18.1** | 367 | 1.6 | 78.9 | 6500 | **F313_78.9 S2 ME2SB4** | 407 | **F313_78.9 P80 BE80B4** | 408 |
| **18.7** | 356 | 1.1 | 76.6 | 5300 | **F253_76.6 S2 ME2SB4** | 403 | **F253_76.6 P80 BE80B4** | 404 |
| **20.7** | 321 | 1.9 | 69.1 | 6500 | **F313_69.1 S2 ME2SB4** | 407 | **F313_69.1 P80 BE80B4** | 408 |

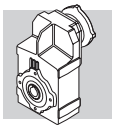


# 0.75 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **21.5** | 309 | 3.6 | 66.5 | 8500 | **F413_66.5 S2 ME2SB4** | 411 | **F413_66.5 P80 BE80B4** | 412 |
| **21.9** | 304 | 1.3 | 65.3 | 5180 | **F253_65.3 S2 ME2SB4** | 403 | **F253_65.3 P80 BE80B4** | 404 |
| **22.8** | 292 | 2.1 | 62.8 | 6500 | **F313_62.8 S2 ME2SB4** | 407 | **F313_62.8 P80 BE80B4** | 408 |
| **24.5** | 271 | 1.5 | 58.3 | 5080 | **F253_58.3 S2 ME2SB4** | 403 | **F253_58.3 P80 BE80B4** | 404 |
| **25.2** | 269 | 0.9 | 56.7 | 3590 | **F202_56.7 S2 ME2SB4** | 399 | **F202_56.7 P80 BE80B4** | 400 |
| **27.5** | 242 | 2.5 | 52.1 | 6500 | **F313_52.1 S2 ME2SB4** | 407 | **F313_52.1 P80 BE80B4** | 408 |
| **28.2** | 236 | 1.7 | 50.8 | 4960 | **F253_50.8 S2 ME2SB4** | 403 | **F253_50.8 P80 BE80B4** | 404 |
| **28.2** | 241 | 1.0 | 50.7 | 3510 | **F202_50.7 S2 ME2SB4** | 399 | **F202_50.7 P80 BE80B4** | 400 |
| **30** | 221 | 2.6 | 47.5 | 6500 | **F313_47.5 S2 ME2SB4** | 407 | **F313_47.5 P80 BE80B4** | 408 |
| **31** | 212 | 1.9 | 45.6 | 4860 | **F253_45.6 S2 ME2SB4** | 403 | **F253_45.6 P80 BE80B4** | 404 |
| **32** | 213 | 1.2 | 44.8 | 3420 | **F202_44.8 S2 ME2SB4** | 399 | **F202_44.8 P80 BE80B4** | 400 |
| **32** | 212 | 2.8 | 44.6 | 6500 | **F312_44.6 S2 ME2SB4** | 407 | **F312_44.6 P80 BE80B4** | 408 |
| **32** | 211 | 1.8 | 44.4 | 4890 | **F252_44.4 S2 ME2SB4** | 403 | **F252_44.4 P80 BE80B4** | 404 |
| **34** | 199 | 1.3 | 41.8 | 3370 | **F202_41.8 S2 ME2SB4** | 399 | **F202_41.8 P80 BE80B4** | 400 |
| **35** | 193 | 1.9 | 40.7 | 4790 | **F252_40.7 S2 ME2SB4** | 403 | **F252_40.7 P80 BE80B4** | 404 |
| **35** | 192 | 3.1 | 40.4 | 6500 | **F312_40.4 S2 ME2SB4** | 407 | **F312_40.4 P80 BE80B4** | 408 |
| **38** | 180 | 1.4 | 37.9 | 3300 | **F202_37.9 S2 ME2SB4** | 399 | **F202_37.9 P80 BE80B4** | 400 |
| **38** | 179 | 3.4 | 37.7 | 6500 | **F312_37.7 S2 ME2SB4** | 407 | **F312_37.7 P80 BE80B4** | 408 |
| **39** | 173 | 2.3 | 36.4 | 4680 | **F252_36.4 S2 ME2SB4** | 403 | **F252_36.4 P80 BE80B4** | 404 |
| **43** | 157 | 1.6 | 33.1 | 3200 | **F202_33.1 S2 ME2SB4** | 399 | **F202_33.1 P80 BE80B4** | 400 |
| **44** | 153 | 2.6 | 32.2 | 4540 | **F252_32.2 S2 ME2SB4** | 403 | **F252_32.2 P80 BE80B4** | 404 |
| **47** | 144 | 1.7 | 30.4 | 3140 | **F202_30.4 S2 ME2SB4** | 399 | **F202_30.4 P80 BE80B4** | 400 |
| **48** | 143 | 2.8 | 30.0 | 4470 | **F252_30.0 S2 ME2SB4** | 403 | **F252_30.0 P80 BE80B4** | 404 |
| **48** | 141 | 1.0 | 29.6 | 2550 | **F102_29.6 S2 ME2SB4** | 395 | **F102_29.6 P80 BE80B4** | 396 |
| **53** | 129 | 3.1 | 27.2 | 4360 | **F252_27.2 S2 ME2SB4** | 403 | **F252_27.2 P80 BE80B4** | 404 |
| **55** | 123 | 1.9 | 25.9 | 3020 | **F202_25.9 S2 ME2SB4** | 399 | **F202_25.9 P80 BE80B4** | 400 |
| **55** | 122 | 1.1 | 25.8 | 2470 | **F102_25.8 S2 ME2SB4** | 395 | **F102_25.8 P80 BE80B4** | 396 |
| **60** | 113 | 3.5 | 23.8 | 4210 | **F252_23.8 S2 ME2SB4** | 403 | **F252_23.8 P80 BE80B4** | 404 |
| **62** | 110 | 2.1 | 23.1 | 2930 | **F202_23.1 S2 ME2SB4** | 399 | **F202_23.1 P80 BE80B4** | 400 |
| **63** | 108 | 1.3 | 22.8 | 2400 | **F102_22.8 S2 ME2SB4** | 395 | **F102_22.8 P80 BE80B4** | 396 |
| **71** | 96 | 2.3 | 20.2 | 2830 | **F202_20.2 S2 ME2SB4** | 399 | **F202_20.2 P80 BE80B4** | 400 |
| **74** | 92 | 1.5 | 19.3 | 2310 | **F102_19.3 S2 ME2SB4** | 395 | **F102_19.3 P80 BE80B4** | 396 |
| **79** | 86 | 2.5 | 18.1 | 2740 | **F202_18.1 S2 ME2SB4** | 399 | **F202_18.1 P80 BE80B4** | 400 |
| **84** | 81 | 1.6 | 17.0 | 2230 | **F102_17.0 S2 ME2SB4** | 395 | **F102_17.0 P80 BE80B4** | 396 |
| **97** | 70 | 2.9 | 14.8 | 2600 | **F202_14.8 S2 ME2SB4** | 399 | **F202_14.8 P80 BE80B4** | 400 |
| **98** | 70 | 1.7 | 14.6 | 2150 | **F102_14.6 S2 ME2SB4** | 395 | **F102_14.6 P80 BE80B4** | 396 |
| **110** | 62 | 1.7 | 13.0 | 2070 | **F102_13.0 S2 ME2SB4** | 395 | **F102_13.0 P80 BE80B4** | 396 |
| **124** | 55 | 1.8 | 11.5 | 2010 | **F102_11.5 S2 ME2SB4** | 395 | **F102_11.5 P80 BE80B4** | 396 |
| **146** | 46 | 1.9 | 9.8 | 1920 | **F102_9.8 S2 ME2SB4** | 395 | **F102_9.8 P80 BE80B4** | 396 |
| **167** | 41 | 2.0 | 8.6 | 1850 | **F102_8.6 S2 ME2SB4** | 395 | **F102_8.6 P80 BE80B4** | 396 |
| **193** | 35 | 2.2 | 7.4 | 1770 | **F102_7.4 S2 ME2SB4** | 395 | **F102_7.4 P80 BE80B4** | 396 |
| **195** | 35 | 2.7 | 14.6 | 1770 | **F102_14.6 S2 ME2SA2** | 395 | **F102_14.6 P80 BE80A2** | 396 |
| **219** | 31 | 2.7 | 13.0 | 1710 | **F102_13.0 S2 ME2SA2** | 395 | **F102_13.0 P80 BE80A2** | 396 |
| **247** | 28 | 2.8 | 11.5 | 1650 | **F102_11.5 S2 ME2SA2** | 395 | **F102_11.5 P80 BE80A2** | 396 |
| **292** | 23 | 3.1 | 9.8 | 1570 | **F102_9.8 S2 ME2SA2** | 395 | **F102_9.8 P80 BE80A2** | 396 |
| **332** | 20.5 | 3.2 | 8.6 | 1510 | **F102_8.6 S2 ME2SA2** | 395 | **F102_8.6 P80 BE80A2** | 396 |
| **385** | 17.7 | 3.6 | 7.4 | 1440 | **F102_7.4 S2 ME2SA2** | 395 | **F102_7.4 P80 BE80A2** | 396 |

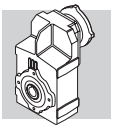
# 1.1 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **0.60** | 15694 | 0.9 | 1571.4 | 55000 | **F904_1571 S3 ME3LA6** | 429 | **F904_1571 P100 BE100M6** | 430 |
| **0.66** | 14285 | 1.0 | 1427.9 | 55000 | **F904_1428 S3 ME3LA6** | 429 | **F904_1428 P100 BE100M6** | 430 |
| **0.68** | 13977 | 1.0 | 2098.7 | 55000 | **F904_2099 S3 ME3SA4** | 429 | **F904_2099 P90 BE90S4** | 430 |
| **0.74** | 12902 | 1.1 | 1937.3 | 55000 | **F904_1937 S3 ME3SA4** | 429 | **F904_1937 P90 BE90S4** | 430 |
| **0.84** | 11337 | 1.2 | 1702.3 | 55000 | **F904_1702 S3 ME3SA4** | 429 | **F904_1702 P90 BE90S4** | 430 |
| **0.91** | 10465 | 1.3 | 1571.4 | 55000 | **F904_1571 S3 ME3SA4** | 429 | **F904_1571 P90 BE90S4** | 430 |
| **1.0** | 9510 | 1.5 | 1427.9 | 55000 | **F904_1428 S3 ME3SA4** | 429 | **F904_1428 P90 BE90S4** | 430 |
| **1.1** | 8778 | 1.6 | 1318.1 | 55000 | **F904_1318 S3 ME3SA4** | 429 | **F904_1318 P90 BE90S4** | 430 |
| **1.1** | 8507 | 0.9 | 1277.3 | 45000 | **F804_1277 S3 ME3SA4** | 426 | **F804_1277 P90 BE90S4** | 427 |
| **1.2** | 8025 | 1.7 | 1204.9 | 55000 | **F904_1205 S3 ME3SA4** | 429 | **F904_1205 P90 BE90S4** | 430 |
| **1.2** | 7634 | 1.0 | 1146.2 | 45000 | **F804_1146 S3 ME3SA4** | 426 | **F804_1146 P90 BE90S4** | 427 |
| **1.3** | 7408 | 1.9 | 1112.3 | 55000 | **F904_1112 S3 ME3SA4** | 429 | **F904_1112 P90 BE90S4** | 430 |
| **1.4** | 7047 | 1.1 | 1058.1 | 45000 | **F804_1058 S3 ME3SA4** | 426 | **F804_1058 P90 BE90S4** | 427 |
| **1.5** | 6567 | 2.1 | 986.0 | 55000 | **F904_986.0 S3 ME3SA4** | 429 | **F904_986.0 P90 BE90S4** | 430 |
| **1.5** | 6474 | 1.2 | 972.0 | 45000 | **F804_972.0 S3 ME3SA4** | 426 | **F804_972.0 P90 BE90S4** | 427 |
| **1.6** | 6062 | 2.3 | 910.2 | 55000 | **F904_910.2 S3 ME3SA4** | 429 | **F904_910.2 P90 BE90S4** | 430 |
| **1.6** | 5976 | 1.3 | 897.3 | 45000 | **F804_897.3 S3 ME3SA4** | 426 | **F804_897.3 P90 BE90S4** | 427 |
| **1.7** | 5476 | 0.9 | 822.2 | 35000 | **F704_822.2 S3 ME3SA4** | 423 | **F704_822.2 P90 BE90S4** | 424 |
| **1.8** | 5158 | 1.6 | 774.4 | 45000 | **F804_774.4 S3 ME3SA4** | 426 | **F804_774.4 P90 BE90S4** | 427 |
| **1.8** | 5151 | 2.7 | 773.4 | 55000 | **F904_773.4 S3 ME3SA4** | 429 | **F904_773.4 P90 BE90S4** | 430 |
| **1.9** | 5055 | 1.0 | 759.0 | 35000 | **F704_759.0 S3 ME3SA4** | 423 | **F704_759.0 P90 BE90S4** | 424 |
| **1.9** | 4893 | 1.6 | 489.1 | 45000 | **F804_489.1 S3 ME3LA6** | 426 | **F804_489.1 P100 BE100M6** | 427 |
| **2.0** | 4761 | 1.7 | 714.9 | 45000 | **F804_714.9 S3 ME3SA4** | 426 | **F804_714.9 P90 BE90S4** | 427 |
| **2.0** | 4755 | 2.9 | 714.0 | 55000 | **F904_714.0 S3 ME3SA4** | 429 | **F904_714.0 P90 BE90S4** | 430 |
| **2.1** | 4517 | 1.8 | 451.5 | 45000 | **F804_451.5 S3 ME3LA6** | 426 | **F804_451.5 P100 BE100M6** | 427 |
| **2.2** | 4378 | 1.1 | 657.4 | 35000 | **F704_657.4 S3 ME3SA4** | 423 | **F704_657.4 P90 BE90S4** | 424 |
| **2.3** | 4167 | 3.4 | 625.6 | 55000 | **F904_625.6 S3 ME3SA4** | 429 | **F904_625.6 P90 BE90S4** | 430 |
| **2.3** | 4068 | 2.0 | 610.9 | 45000 | **F804_610.9 S3 ME3SA4** | 426 | **F804_610.9 P90 BE90S4** | 427 |
| **2.4** | 4042 | 1.2 | 606.8 | 35000 | **F704_606.8 S3 ME3SA4** | 423 | **F704_606.8 P90 BE90S4** | 424 |
| **2.5** | 3846 | 3.6 | 577.5 | 55000 | **F904_577.5 S3 ME3SA4** | 429 | **F904_577.5 P90 BE90S4** | 430 |
| **2.5** | 3755 | 2.1 | 563.9 | 45000 | **F804_563.9 S3 ME3SA4** | 426 | **F804_563.9 P90 BE90S4** | 427 |
| **2.8** | 3399 | 1.5 | 510.4 | 35000 | **F704_510.4 S3 ME3SA4** | 423 | **F704_510.4 P90 BE90S4** | 424 |
| **2.9** | 3262 | 0.9 | 489.8 | 20000 | **F604_489.8 S3 ME3SA4** | 419 | **F604_489.8 P90 BE90S4** | 420 |
| **2.9** | 3258 | 2.5 | 489.1 | 45000 | **F804_489.1 S3 ME3SA4** | 426 | **F804_489.1 P90 BE90S4** | 427 |
| **3.0** | 3138 | 1.6 | 471.2 | 35000 | **F704_471.2 S3 ME3SA4** | 423 | **F704_471.2 P90 BE90S4** | 424 |
| **3.2** | 3007 | 2.7 | 451.5 | 45000 | **F804_451.5 S3 ME3SA4** | 426 | **F804_451.5 P90 BE90S4** | 427 |
| **3.3** | 2881 | 1.0 | 432.6 | 20000 | **F604_432.6 S3 ME3SA4** | 419 | **F604_432.6 P90 BE90S4** | 420 |
| **3.5** | 2687 | 1.9 | 403.5 | 35000 | **F704_403.5 S3 ME3SA4** | 423 | **F704_403.5 P90 BE90S4** | 424 |
| **3.6** | 2660 | 1.1 | 399.3 | 20000 | **F604_399.3 S3 ME3SA4** | 419 | **F604_399.3 P90 BE90S4** | 420 |
| **3.7** | 2552 | 3.1 | 383.2 | 45000 | **F804_383.2 S3 ME3SA4** | 426 | **F804_383.2 P90 BE90S4** | 427 |
| **3.8** | 2481 | 2.0 | 372.5 | 35000 | **F704_372.5 S3 ME3SA4** | 423 | **F704_372.5 P90 BE90S4** | 424 |
| **4.0** | 2356 | 3.4 | 353.7 | 45000 | **F804_353.7 S3 ME3SA4** | 426 | **F804_353.7 P90 BE90S4** | 427 |
| **4.2** | 2276 | 1.3 | 341.7 | 20000 | **F604_341.7 S3 ME3SA4** | 419 | **F604_341.7 P90 BE90S4** | 420 |
| **4.5** | 2100 | 1.4 | 315.4 | 20000 | **F604_315.4 S3 ME3SA4** | 419 | **F604_315.4 P90 BE90S4** | 420 |
| **4.7** | 2027 | 2.5 | 304.3 | 35000 | **F704_304.3 S3 ME3SA4** | 423 | **F704_304.3 P90 BE90S4** | 424 |
| **5.0** | 1968 | 0.9 | 285.9 | 12000 | **F513_285.9 S3 ME3SA4** | 415 | **F513_285.9 P90 BE90S4** | 416 |
| **5.1** | 1871 | 2.7 | 280.9 | 35000 | **F704_280.9 S3 ME3SA4** | 423 | **F704_280.9 P90 BE90S4** | 424 |
| **5.1** | 1932 | 1.5 | 280.7 | 20000 | **F603_280.7 S3 ME3SA4** | 419 | **F603_280.7 P90 BE90S4** | 420 |
| **5.5** | 1804 | 1.0 | 262.1 | 12000 | **F513_262.1 S3 ME3SA4** | 415 | **F513_262.1 P90 BE90S4** | 416 |
| **5.5** | 1783 | 1.6 | 259.1 | 20000 | **F603_259.1 S3 ME3SA4** | 419 | **F603_259.1 P90 BE90S4** | 420 |
| **6.0** | 1651 | 1.1 | 239.8 | 12000 | **F513_239.8 S3 ME3SA4** | 415 | **F513_239.8 P90 BE90S4** | 416 |
| **6.1** | 1623 | 1.8 | 235.8 | 20000 | **F603_235.8 S3 ME3SA4** | 419 | **F603_235.8 P90 BE90S4** | 420 |
| **6.1** | 1562 | 3.2 | 234.6 | 35000 | **F704_234.6 S3 ME3SA4** | 423 | **F704_234.6 P90 BE90S4** | 424 |
| **6.6** | 1498 | 1.9 | 217.6 | 20000 | **F603_217.6 S3 ME3SA4** | 419 | **F603_217.6 P90 BE90S4** | 420 |
| **6.6** | 1492 | 1.2 | 216.9 | 12000 | **F513_216.9 S3 ME3SA4** | 415 | **F513_216.9 P90 BE90S4** | 416 |
| **6.6** | 1442 | 3.5 | 216.5 | 35000 | **F704_216.5 S3 ME3SA4** | 423 | **F704_216.5 P90 BE90S4** | 424 |
| **7.1** | 1393 | 1.3 | 202.4 | 12000 | **F513_202.4 S3 ME3SA4** | 415 | **F513_202.4 P90 BE90S4** | 416 |

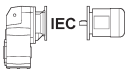


# 1.1 kW

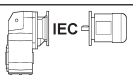
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **7.1** | 1386 | 2.1 | 201.4 | 20000 | **F603_201.4 S3 ME3SA4** | 419 | **F603_201.4 P90 BE90S4** | 420 |
| **7.7** | 1279 | 2.3 | 185.9 | 20000 | **F603_185.9 S3 ME3SA4** | 419 | **F603_185.9 P90 BE90S4** | 420 |
| **7.9** | 1244 | 0.9 | 180.7 | 8500 | **F413_180.7 S3 ME3SA4** | 411 | **F413_180.7 P90 BE90S4** | 412 |
| **8.5** | 1161 | 0.9 | 168.7 | 8500 | **F413_168.7 S3 ME3SA4** | 411 | **F413_168.7 P90 BE90S4** | 412 |
| **8.6** | 1140 | 1.6 | 165.6 | 12000 | **F513_165.6 S3 ME3SA4** | 415 | **F513_165.6 P90 BE90S4** | 416 |
| **8.8** | 1121 | 2.6 | 162.9 | 20000 | **F603_162.9 S3 ME3SA4** | 419 | **F603_162.9 P90 BE90S4** | 420 |
| **9.5** | 1035 | 2.8 | 150.4 | 20000 | **F603_150.4 S3 ME3SA4** | 419 | **F603_150.4 P90 BE90S4** | 420 |
| **10.6** | 925 | 1.2 | 134.4 | 8500 | **F413_134.4 S3 ME3SA4** | 411 | **F413_134.4 P90 BE90S4** | 412 |
| **11.0** | 894 | 2.0 | 129.9 | 12000 | **F513_129.9 S3 ME3SA4** | 415 | **F513_129.9 P90 BE90S4** | 416 |
| **13.5** | 730 | 1.5 | 106.0 | 8500 | **F413_106.0 S3 ME3SA4** | 411 | **F413_106.0 P90 BE90S4** | 412 |
| **13.6** | 723 | 2.5 | 105.1 | 12000 | **F513_105.1 S3 ME3SA4** | 415 | **F513_105.1 P90 BE90S4** | 416 |
| **16.4** | 601 | 1.0 | 87.4 | 6500 | **F313_87.4 S3 ME3SA4** | 407 | **F313_87.4 P90 BE90S4** | 408 |
| **16.8** | 584 | 1.9 | 84.9 | 8500 | **F413_84.9 S3 ME3SA4** | 411 | **F413_84.9 P90 BE90S4** | 412 |
| **17.2** | 573 | 3.1 | 83.2 | 12000 | **F513_83.2 S3 ME3SA4** | 415 | **F513_83.2 P90 BE90S4** | 416 |
| **18.1** | 543 | 1.1 | 78.9 | 6500 | **F313_78.9 S3 ME3SA4** | 407 | **F313_78.9 P90 BE90S4** | 408 |
| **20.7** | 475 | 1.3 | 69.1 | 6500 | **F313_69.1 S3 ME3SA4** | 407 | **F313_69.1 P90 BE90S4** | 408 |
| **21.5** | 458 | 2.4 | 66.5 | 8500 | **F413_66.5 S3 ME3SA4** | 411 | **F413_66.5 P90 BE90S4** | 412 |
| **21.9** | 450 | 0.9 | 65.3 | 4610 | **F253_65.3 S3 ME3SA4** | 403 | **F253_65.3 P90 BE90S4** | 404 |
| **22.8** | 432 | 1.4 | 62.8 | 6500 | **F313_62.8 S3 ME3SA4** | 407 | **F313_62.8 P90 BE90S4** | 408 |
| **23.7** | 415 | 2.7 | 60.2 | 8500 | **F413_60.2 S3 ME3SA4** | 411 | **F413_60.2 P90 BE90S4** | 412 |
| **24.5** | 401 | 1.0 | 58.3 | 4500 | **F253_58.3 S3 ME3SA4** | 403 | **F253_58.3 P90 BE90S4** | 404 |
| **27.5** | 359 | 1.7 | 52.1 | 6500 | **F313_52.1 S3 ME3SA4** | 407 | **F313_52.1 P90 BE90S4** | 408 |
| **27.8** | 354 | 3.1 | 51.5 | 8500 | **F413_51.5 S3 ME3SA4** | 411 | **F413_51.5 P90 BE90S4** | 412 |
| **28.2** | 350 | 1.1 | 50.8 | 4450 | **F253_50.8 S3 ME3SA4** | 403 | **F253_50.8 P90 BE90S4** | 404 |
| **29.8** | 337 | 3.2 | 47.9 | 8500 | **F412_47.9 S3 ME3SA4** | 411 | **F412_47.9 P90 BE90S4** | 412 |
| **30** | 327 | 1.8 | 47.5 | 6500 | **F313_47.5 S3 ME3SA4** | 407 | **F313_47.5 P90 BE90S4** | 408 |
| **31** | 314 | 1.3 | 45.6 | 4400 | **F253_45.6 S3 ME3SA4** | 403 | **F253_45.6 P90 BE90S4** | 404 |
| **32** | 314 | 1.9 | 44.6 | 6500 | **F312_44.6 S3 ME3SA4** | 407 | **F312_44.6 P90 BE90S4** | 408 |
| **32** | 312 | 1.2 | 44.4 | 4470 | **F252_44.4 S3 ME3SA4** | 403 | **F252_44.4 P90 BE90S4** | 404 |
| **35** | 286 | 1.3 | 40.7 | 4410 | **F252_40.7 S3 ME3SA4** | 403 | **F252_40.7 P90 BE90S4** | 404 |
| **35** | 284 | 2.1 | 40.4 | 6500 | **F312_40.4 S3 ME3SA4** | 407 | **F312_40.4 P90 BE90S4** | 408 |
| **38** | 266 | 0.9 | 37.9 | 3050 | **F202_37.9 S3 ME3SA4** | 399 | **F202_37.9 P90 BE90S4** | 400 |
| **38** | 265 | 2.3 | 37.7 | 6500 | **F312_37.7 S3 ME3SA4** | 407 | **F312_37.7 P90 BE90S4** | 408 |
| **39** | 256 | 1.6 | 36.4 | 4330 | **F252_36.4 S3 ME3SA4** | 403 | **F252_36.4 P90 BE90S4** | 404 |
| **42** | 242 | 2.5 | 34.4 | 6500 | **F312_34.4 S3 ME3SA4** | 407 | **F312_34.4 P90 BE90S4** | 408 |
| **43** | 233 | 1.1 | 33.1 | 2980 | **F202_33.1 S3 ME3SA4** | 399 | **F202_33.1 P90 BE90S4** | 400 |
| **44** | 226 | 1.8 | 32.2 | 4240 | **F252_32.2 S3 ME3SA4** | 403 | **F252_32.2 P90 BE90S4** | 404 |
| **47** | 214 | 1.2 | 30.4 | 2930 | **F202_30.4 S3 ME3SA4** | 399 | **F202_30.4 P90 BE90S4** | 400 |
| **47** | 212 | 2.8 | 30.1 | 6500 | **F312_30.1 S3 ME3SA4** | 407 | **F312_30.1 P90 BE90S4** | 408 |
| **48** | 211 | 1.9 | 30.0 | 4190 | **F252_30.0 S3 ME3SA4** | 403 | **F252_30.0 P90 BE90S4** | 404 |
| **52** | 192 | 3.1 | 27.3 | 6500 | **F312_27.3 S3 ME3SA4** | 407 | **F312_27.3 P90 BE90S4** | 408 |
| **53** | 191 | 2.1 | 27.2 | 4100 | **F252_27.2 S3 ME3SA4** | 403 | **F252_27.2 P90 BE90S4** | 404 |
| **55** | 182 | 1.3 | 25.9 | 2840 | **F202_25.9 S3 ME3SA4** | 399 | **F202_25.9 P90 BE90S4** | 400 |
| **60** | 167 | 2.4 | 23.8 | 3990 | **F252_23.8 S3 ME3SA4** | 403 | **F252_23.8 P90 BE90S4** | 404 |
| **62** | 163 | 1.4 | 23.1 | 2780 | **F202_23.1 S3 ME3SA4** | 399 | **F202_23.1 P90 BE90S4** | 400 |
| **66** | 153 | 2.6 | 21.8 | 3920 | **F252_21.8 S3 ME3SA4** | 403 | **F252_21.8 P90 BE90S4** | 404 |
| **71** | 142 | 1.6 | 20.2 | 2690 | **F202_20.2 S3 ME3SA4** | 399 | **F202_20.2 P90 BE90S4** | 400 |
| **74** | 136 | 1.0 | 19.3 | 2170 | **F102_19.3 S3 ME3SA4** | 395 | **F102_19.3 P90 BE90S4** | 396 |
| **77** | 131 | 3.1 | 18.6 | 3780 | **F252_18.6 S3 ME3SA4** | 403 | **F252_18.6 P90 BE90S4** | 404 |
| **79** | 127 | 1.7 | 18.1 | 2620 | **F202_18.1 S3 ME3SA4** | 399 | **F202_18.1 P90 BE90S4** | 400 |
| **84** | 119 | 1.1 | 17.0 | 2110 | **F102_17.0 S3 ME3SA4** | 395 | **F102_17.0 P90 BE90S4** | 396 |
| **86** | 117 | 3.4 | 16.6 | 3670 | **F252_16.6 S3 ME3SA4** | 403 | **F252_16.6 P90 BE90S4** | 404 |
| **97** | 104 | 2.0 | 14.8 | 2500 | **F202_14.8 S3 ME3SA4** | 399 | **F202_14.8 P90 BE90S4** | 400 |
| **98** | 103 | 1.2 | 14.6 | 2050 | **F102_14.6 S3 ME3SA4** | 395 | **F102_14.6 P90 BE90S4** | 396 |
| **110** | 92 | 1.1 | 13.0 | 1980 | **F102_13.0 S3 ME3SA4** | 395 | **F102_13.0 P90 BE90S4** | 396 |
| **124** | 81 | 1.2 | 11.5 | 1920 | **F102_11.5 S3 ME3SA4** | 395 | **F102_11.5 P90 BE90S4** | 396 |
| **127** | 79 | 2.2 | 11.2 | 2310 | **F202_11.2 S3 ME3SA4** | 399 | **F202_11.2 P90 BE90S4** | 400 |

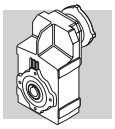


# 1.1 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  | |
|---|---|---|---|---|---|---|---|---|
| **143** | 71 | 2.3 | 10.0 | 2200 | **F202_10.0 S3 ME3SA4** | 399 | **F202_10.0 P90 BE90S4** | 400 |
| **146** | 69 | 1.3 | 9.8 | 1840 | **F102_9.8 S3 ME3SA4** | 395 | **F102_9.8 P90 BE90S4** | 396 |
| **164** | 61 | 2.5 | 8.7 | 2160 | **F202_8.7 S3 ME3SA4** | 399 | **F202_8.7 P90 BE90S4** | 400 |
| **167** | 60 | 1.4 | 8.6 | 1780 | **F102_8.6 S3 ME3SA4** | 395 | **F102_8.6 P90 BE90S4** | 396 |
| **183** | 55 | 2.6 | 7.8 | 2100 | **F202_7.8 S3 ME3SA4** | 399 | **F202_7.8 P90 BE90S4** | 400 |
| **193** | 52 | 1.5 | 7.4 | 1720 | **F102_7.4 S3 ME3SA4** | 395 | **F102_7.4 P90 BE90S4** | 396 |
| **223** | 45 | 2.9 | 6.4 | 1980 | **F202_6.4 S3 ME3SA4** | 399 | **F202_6.4 P90 BE90S4** | 400 |
| **245** | 41 | 1.9 | 11.5 | 1600 | **F102_11.5S2ME2SB2** | 395 | **F102_11.5 P90 BE90B2** | 396 |
| **252** | 40 | 3.6 | 11.2 | 1910 | **F202_11.2S2ME2SB2** | 399 | **F202_11.2 P90 BE90B2** | 400 |
| **290** | 34 | 2.1 | 9.8 | 1530 | **F102_9.8S2ME2SB2** | 395 | **F102_9.8 P90 BE90B2** | 396 |
| **330** | 30 | 2.2 | 8.6 | 1480 | **F102_8.6S2ME2SB2** | 395 | **F102_8.6 P90 BE90B2** | 396 |
| **382** | 26 | 2.4 | 7.4 | 1410 | **F102_7.4S2ME2SB2** | 395 | **F102_7.4 P90 BE90B2** | 396 |

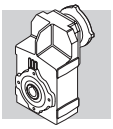
# 1.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  | |
|---|---|---|---|---|---|---|---|---|
| **0.8** | 15321 | 0.9 | 1702.3 | 55000 | **F904_1702 S3 ME3SB4** | 429 | **F904_1702 P90 BE90LA4** | 430 |
| **0.9** | 14142 | 1.0 | 1571.4 | 55000 | **F904_1571 S3 ME3SB4** | 429 | **F904_1571 P90 BE90LA4** | 430 |
| **1.0** | 12851 | 1.1 | 1427.9 | 55000 | **F904_1428 S3 ME3SB4** | 429 | **F904_1428 P90 BE90LA4** | 430 |
| **1.1** | 11863 | 1.2 | 1318.1 | 55000 | **F904_1318 S3 ME3SB4** | 429 | **F904_1318 P90 BE90LA4** | 430 |
| **1.2** | 10845 | 1.3 | 1204.9 | 55000 | **F904_1205 S3 ME3SB4** | 429 | **F904_1205 P90 BE90LA4** | 430 |
| **1.3** | 10010 | 1.4 | 1112.3 | 55000 | **F904_1112 S3 ME3SB4** | 429 | **F904_1112 P90 BE90LA4** | 430 |
| **1.5** | 8874 | 1.6 | 986.0 | 55000 | **F904_986.0 S3 ME3SB4** | 429 | **F904_986.0 P90 BE90LA4** | 430 |
| **1.5** | 8748 | 0.9 | 972.0 | 45000 | **F804_972.0 S3 ME3SB4** | 426 | **F804_972.0 P90 BE90LA4** | 427 |
| **1.6** | 8192 | 1.7 | 910.2 | 55000 | **F904_910.2 S3 ME3SB4** | 429 | **F904_910.2 P90 BE90LA4** | 430 |
| **1.6** | 8075 | 1.0 | 897.3 | 45000 | **F804_897.3 S3 ME3SB4** | 426 | **F804_897.3 P90 BE90LA4** | 427 |
| **1.8** | 6970 | 1.1 | 774.4 | 45000 | **F804_774.4 S3 ME3SB4** | 426 | **F804_774.4 P90 BE90LA4** | 427 |
| **1.8** | 6961 | 2.0 | 773.4 | 55000 | **F904_773.4 S3 ME3SB4** | 429 | **F904_773.4 P90 BE90LA4** | 430 |
| **2.0** | 6434 | 1.2 | 714.9 | 45000 | **F804_714.9 S3 ME3SB4** | 426 | **F804_714.9 P90 BE90LA4** | 427 |
| **2.0** | 6426 | 2.2 | 714.0 | 55000 | **F904_714.0 S3 ME3SB4** | 429 | **F904_714.0 P90 BE90LA4** | 430 |
| **2.3** | 5631 | 2.5 | 625.6 | 55000 | **F904_625.6 S3 ME3SB4** | 429 | **F904_625.6 P90 BE90LA4** | 430 |
| **2.3** | 5498 | 1.5 | 610.9 | 45000 | **F804_610.9 S3 ME3SB4** | 426 | **F804_610.9 P90 BE90LA4** | 427 |
| **2.4** | 5462 | 0.9 | 606.8 | 35000 | **F704_606.8 S3 ME3SB4** | 423 | **F704_606.8 P90 BE90LA4** | 424 |
| **2.5** | 5197 | 2.7 | 577.5 | 55000 | **F904_577.5 S3 ME3SB4** | 429 | **F904_577.5 P90 BE90LA4** | 430 |
| **2.5** | 5075 | 1.6 | 563.9 | 45000 | **F804_563.9 S3 ME3SB4** | 426 | **F804_563.9 P90 BE90LA4** | 427 |
| **2.8** | 4594 | 1.1 | 510.4 | 35000 | **F704_510.4 S3 ME3SB4** | 423 | **F704_510.4 P90 BE90LA4** | 424 |
| **2.9** | 4460 | 3.1 | 495.6 | 55000 | **F904_495.6 S3 ME3SB4** | 429 | **F904_495.6 P90 BE90LA4** | 430 |
| **2.9** | 4402 | 1.8 | 489.1 | 45000 | **F804_489.1 S3 ME3SB4** | 426 | **F804_489.1 P90 BE90LA4** | 427 |
| **3.0** | 4240 | 1.2 | 471.2 | 35000 | **F704_471.2 S3 ME3SB4** | 423 | **F704_471.2 P90 BE90LA4** | 424 |
| **3.1** | 4117 | 3.4 | 457.5 | 55000 | **F904_457.5 S3 ME3SB4** | 429 | **F904_457.5 P90 BE90LA4** | 430 |
| **3.2** | 4063 | 2.0 | 451.5 | 45000 | **F804_451.5 S3 ME3SB4** | 426 | **F804_451.5 P90 BE90LA4** | 427 |
| **3.5** | 3632 | 1.4 | 403.5 | 35000 | **F704_403.5 S3 ME3SB4** | 423 | **F704_403.5 P90 BE90LA4** | 424 |
| **3.7** | 3448 | 2.3 | 383.2 | 45000 | **F804_383.2 S3 ME3SB4** | 426 | **F804_383.2 P90 BE90LA4** | 427 |
| **3.8** | 3352 | 1.5 | 372.5 | 35000 | **F704_372.5 S3 ME3SB4** | 423 | **F704_372.5 P90 BE90LA4** | 424 |
| **4.0** | 3183 | 2.5 | 353.7 | 45000 | **F804_353.7 S3 ME3SB4** | 426 | **F804_353.7 P90 BE90LA4** | 427 |
| **4.2** | 3075 | 0.9 | 341.7 | 20000 | **F604_341.7 S3 ME3SB4** | 419 | **F604_341.7 P90 BE90LA4** | 420 |
| **4.5** | 2839 | 1.0 | 315.4 | 20000 | **F604_315.4 S3 ME3SB4** | 419 | **F604_315.4 P90 BE90LA4** | 420 |
| **4.7** | 2739 | 1.8 | 304.3 | 35000 | **F704_304.3 S3 ME3SB4** | 423 | **F704_304.3 P90 BE90LA4** | 424 |
| **4.8** | 2670 | 3.0 | 296.7 | 45000 | **F804_296.7 S3 ME3SB4** | 426 | **F804_296.7 P90 BE90LA4** | 427 |
| **5.1** | 2528 | 2.0 | 280.9 | 35000 | **F704_280.9 S3 ME3SB4** | 423 | **F704_280.9 P90 BE90LA4** | 424 |
| **5.1** | 2610 | 1.1 | 280.7 | 20000 | **F603_280.7 S3 ME3SB4** | 419 | **F603_280.7 P90 BE90LA4** | 420 |
| **5.2** | 2465 | 3.2 | 273.9 | 45000 | **F804_273.9 S3 ME3SB4** | 426 | **F804_273.9 P90 BE90LA4** | 427 |
| **5.5** | 2409 | 1.2 | 259.1 | 20000 | **F603_259.1 S3 ME3SB4** | 419 | **F603_259.1 P90 BE90LA4** | 420 |

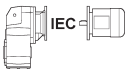


# 1.5 kW

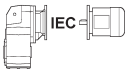
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **6.1** | 2193 | 1.3 | 235.8 | 20000 | **F603_235.8 S3 ME3SB4** | 419 | **F603_235.8 P90 BE90LA4** | 420 |
| **6.1** | 2111 | 2.4 | 234.6 | 35000 | **F704_234.6 S3 ME3SB4** | 423 | **F704_234.6 P90 BE90LA4** | 424 |
| **6.6** | 2024 | 1.4 | 217.6 | 20000 | **F603_217.6 S3 ME3SB4** | 419 | **F603_217.6 P90 BE90LA4** | 420 |
| **6.6** | 1949 | 2.6 | 216.5 | 35000 | **F704_216.5 S3 ME3SB4** | 423 | **F704_216.5 P90 BE90LA4** | 424 |
| **7.1** | 1882 | 1.0 | 202.4 | 12000 | **F513_202.4 S3 ME3SB4** | 415 | **F513_202.4 P90 BE90LA4** | 416 |
| **7.1** | 1873 | 1.5 | 201.4 | 20000 | **F603_201.4 S3 ME3SB4** | 419 | **F603_201.4 P90 BE90LA4** | 420 |
| **7.3** | 1823 | 2.7 | 196.0 | 35000 | **F703_196.0 S3 ME3SB4** | 423 | **F703_196.0 P90 BE90LA4** | 424 |
| **7.7** | 1729 | 1.7 | 185.9 | 20000 | **F603_185.9 S3 ME3SB4** | 419 | **F603_185.9 P90 BE90LA4** | 420 |
| **7.9** | 1683 | 3.0 | 180.9 | 35000 | **F703_180.9 S3 ME3SB4** | 423 | **F703_180.9 P90 BE90LA4** | 424 |
| **8.6** | 1550 | 3.2 | 166.7 | 35000 | **F703_166.7 S3 ME3SB4** | 423 | **F703_166.7 P90 BE90LA4** | 424 |
| **8.6** | 1540 | 1.2 | 165.6 | 12000 | **F513_165.6 S3 ME3SB4** | 415 | **F513_165.6 P90 BE90LA4** | 416 |
| **8.8** | 1515 | 1.9 | 162.9 | 20000 | **F603_162.9 S3 ME3SB4** | 419 | **F603_162.9 P90 BE90LA4** | 420 |
| **9.3** | 1431 | 3.5 | 153.8 | 35000 | **F703_153.8 S3 ME3SB4** | 423 | **F703_153.8 P90 BE90LA4** | 424 |
| **9.5** | 1398 | 2.1 | 150.4 | 20000 | **F603_150.4 S3 ME3SB4** | 419 | **F603_150.4 P90 BE90LA4** | 420 |
| **10.6** | 1250 | 0.9 | 134.4 | 8500 | **F413_134.4 S3 ME3SB4** | 411 | **F413_134.4 P90 BE90LA4** | 412 |
| **11.0** | 1214 | 2.4 | 130.5 | 20000 | **F603_130.5 S3 ME3SB4** | 419 | **F603_130.5 P90 BE90LA4** | 420 |
| **11.0** | 1208 | 1.5 | 129.9 | 12000 | **F513_129.9 S3 ME3SB4** | 415 | **F513_129.9 P90 BE90LA4** | 416 |
| **11.9** | 1120 | 2.6 | 120.5 | 20000 | **F603_120.5 S3 ME3SB4** | 419 | **F603_120.5 P90 BE90LA4** | 420 |
| **13.4** | 989 | 2.9 | 106.4 | 20000 | **F603_106.4 S3 ME3SB4** | 419 | **F603_106.4 P90 BE90LA4** | 420 |
| **13.5** | 986 | 1.1 | 106.0 | 8500 | **F413_106.0 S3 ME3SB4** | 411 | **F413_106.0 P90 BE90LA4** | 412 |
| **13.6** | 977 | 1.8 | 105.1 | 12000 | **F513_105.1 S3 ME3SB4** | 415 | **F513_105.1 P90 BE90LA4** | 416 |
| **14.6** | 913 | 3.2 | 98.2 | 20000 | **F603_98.2 S3 ME3SB4** | 419 | **F603_98.2 P90 BE90LA4** | 420 |
| **16.8** | 789 | 1.4 | 84.9 | 8500 | **F413_84.9 S3 ME3SB4** | 411 | **F413_84.9 P90 BE90LA4** | 412 |
| **17.2** | 774 | 2.3 | 83.2 | 12000 | **F513_83.2 S3 ME3SB4** | 415 | **F513_83.2 P90 BE90LA4** | 416 |
| **20.7** | 642 | 0.9 | 69.1 | 6500 | **F313_69.1 S3 ME3SB4** | 407 | **F313_69.1 P90 BE90LA4** | 408 |
| **21.5** | 618 | 1.8 | 66.5 | 8500 | **F413_66.5 S3 ME3SB4** | 411 | **F413_66.5 P90 BE90LA4** | 412 |
| **21.7** | 612 | 2.9 | 65.8 | 12000 | **F513_65.8 S3 ME3SB4** | 415 | **F513_65.8 P90 BE90LA4** | 416 |
| **22.8** | 584 | 1.0 | 62.8 | 6500 | **F313_62.8 S3 ME3SB4** | 407 | **F313_62.8 P90 BE90LA4** | 408 |
| **23.7** | 560 | 2.0 | 60.2 | 8500 | **F413_60.2 S3 ME3SB4** | 411 | **F413_60.2 P90 BE90LA4** | 412 |
| **27.5** | 484 | 1.2 | 52.1 | 6500 | **F313_52.1 S3 ME3SB4** | 407 | **F313_52.1 P90 BE90LA4** | 408 |
| **27.8** | 479 | 2.3 | 51.5 | 8500 | **F413_51.5 S3 ME3SB4** | 411 | **F413_51.5 P90 BE90LA4** | 412 |
| **29.8** | 455 | 2.4 | 47.9 | 8500 | **F412_47.9 S3 ME3SB4** | 411 | **F412_47.9 P90 BE90LA4** | 412 |
| **30** | 442 | 1.3 | 47.5 | 6500 | **F313_47.5 S3 ME3SB4** | 407 | **F313_47.5 P90 BE90LA4** | 408 |
| **31** | 424 | 0.9 | 45.6 | 3880 | **F253_45.6 S3 ME3SB4** | 403 | **F253_45.6 P90 BE90LA4** | 404 |
| **32** | 424 | 1.4 | 44.6 | 6500 | **F312_44.6 S3 ME3SB4** | 407 | **F312_44.6 P90 BE90LA4** | 408 |
| **32** | 422 | 0.9 | 44.4 | 4180 | **F252_44.4 S3 ME3SB4** | 403 | **F252_44.4 P90 BE90LA4** | 404 |
| **35** | 387 | 1.0 | 40.7 | 3970 | **F252_40.7 S3 ME3SB4** | 403 | **F252_40.7 P90 BE90LA4** | 404 |
| **35** | 383 | 1.6 | 40.4 | 6500 | **F312_40.4 S3 ME3SB4** | 407 | **F312_40.4 P90 BE90LA4** | 408 |
| **37** | 363 | 3.0 | 38.2 | 8500 | **F412_38.2 S3 ME3SB4** | 411 | **F412_38.2 P90 BE90LA4** | 412 |
| **38** | 358 | 1.7 | 37.7 | 6500 | **F312_37.7 S3 ME3SB4** | 407 | **F312_37.7 P90 BE90LA4** | 408 |
| **39** | 346 | 1.2 | 36.4 | 3940 | **F252_36.4 S3 ME3SB4** | 403 | **F252_36.4 P90 BE90LA4** | 404 |
| **42** | 326 | 1.8 | 34.4 | 6500 | **F312_34.4 S3 ME3SB4** | 407 | **F312_34.4 P90 BE90LA4** | 408 |
| **44** | 306 | 1.3 | 32.2 | 3890 | **F252_32.2 S3 ME3SB4** | 403 | **F252_32.2 P90 BE90LA4** | 404 |
| **47** | 286 | 2.1 | 30.1 | 6500 | **F312_30.1 S3 ME3SB4** | 407 | **F312_30.1 P90 BE90LA4** | 408 |
| **48** | 285 | 1.4 | 30.0 | 3860 | **F252_30.0 S3 ME3SB4** | 403 | **F252_30.0 P90 BE90LA4** | 404 |
| **52** | 259 | 2.3 | 27.3 | 6500 | **F312_27.3 S3 ME3SB4** | 407 | **F312_27.3 P90 BE90LA4** | 408 |
| **53** | 258 | 1.5 | 27.2 | 3810 | **F252_27.2 S3 ME3SB4** | 403 | **F252_27.2 P90 BE90LA4** | 404 |
| **55** | 246 | 1.0 | 25.9 | 2640 | **F202_25.9 S3 ME3SB4** | 399 | **F202_25.9 P90 BE90LA4** | 400 |
| **60** | 226 | 1.8 | 23.8 | 3730 | **F252_23.8 S3 ME3SB4** | 403 | **F252_23.8 P90 BE90LA4** | 404 |
| **61** | 222 | 2.7 | 23.4 | 6480 | **F312_23.4 S3 ME3SB4** | 407 | **F312_23.4 P90 BE90LA4** | 408 |
| **62** | 220 | 1.1 | 23.1 | 2600 | **F202_23.1 S3 ME3SB4** | 399 | **F202_23.1 P90 BE90LA4** | 400 |
| **66** | 207 | 1.9 | 21.8 | 3680 | **F252_21.8 S3 ME3SB4** | 403 | **F252_21.8 P90 BE90LA4** | 404 |
| **68** | 201 | 3.0 | 21.1 | 6320 | **F312_21.1 S3 ME3SB4** | 407 | **F312_21.1 P90 BE90LA4** | 408 |
| **71** | 191 | 1.2 | 20.2 | 2530 | **F202_20.2 S3 ME3SB4** | 399 | **F202_20.2 P90 BE90LA4** | 400 |
| **77** | 177 | 2.3 | 18.6 | 3570 | **F252_18.6 S3 ME3SB4** | 403 | **F252_18.6 P90 BE90LA4** | 404 |
| **77** | 176 | 3.4 | 18.5 | 6110 | **F312_18.5 S3 ME3SB4** | 407 | **F312_18.5 P90 BE90LA4** | 408 |
| **79** | 172 | 1.2 | 18.1 | 2480 | **F202_18.1 S3 ME3SB4** | 399 | **F202_18.1 P90 BE90LA4** | 400 |

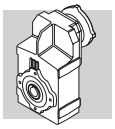


# 1.5 kW

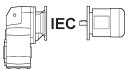
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **86** | 158 | 2.5 | 16.6 | 3490 | **F252_16.6 S3 ME3SB4** | 403 | **F252_16.6 P90 BE90LA4** | 404 |
| **97** | 141 | 1.4 | 14.8 | 2380 | **F202_14.8 S3 ME3SB4** | 399 | **F202_14.8 P90 BE90LA4** | 400 |
| **99** | 137 | 2.9 | 14.5 | 3390 | **F252_14.5 S3 ME3SB4** | 403 | **F252_14.5 P90 BE90LA4** | 404 |
| **110** | 123 | 3.2 | 13.0 | 3310 | **F252_13.0 S3 ME3SB4** | 403 | **F252_13.0 P90 BE90LA4** | 404 |
| **124** | 110 | 0.9 | 11.5 | 1160 | **F102_11.5 S3 ME3SB4** | 395 | **F102_11.5 P90 BE90LA4** | 396 |
| **127** | 107 | 1.7 | 11.2 | 2220 | **F202_11.2 S3 ME3SB4** | 399 | **F202_11.2 P90 BE90LA4** | 400 |
| **143** | 95 | 1.7 | 10.0 | 2160 | **F202_10.0 S3 ME3SB4** | 399 | **F202_10.0 P90 BE90LA4** | 400 |
| **146** | 93 | 1.0 | 9.8 | 1760 | **F102_9.8 S3 ME3SB4** | 395 | **F102_9.8 P90 BE90LA4** | 396 |
| **153** | 89 | 3.0 | 9.4 | 3070 | **F252_9.4 S3 ME3SB4** | 403 | **F252_9.4 P90 BE90LA4** | 404 |
| **164** | 83 | 1.9 | 8.7 | 2090 | **F202_8.7 S3 ME3SB4** | 399 | **F202_8.7 P90 BE90LA4** | 400 |
| **167** | 82 | 1.0 | 8.6 | 1710 | **F102_8.6 S3 ME3SB4** | 395 | **F102_8.6 P90 BE90LA4** | 396 |
| **170** | 80 | 3.3 | 8.4 | 2980 | **F252_8.4 S3 ME3SB4** | 403 | **F252_8.4 P90 BE90LA4** | 404 |
| **183** | 74 | 1.9 | 7.8 | 2030 | **F202_7.8 S3 ME3SB4** | 399 | **F202_7.8 P90 BE90LA4** | 400 |
| **193** | 70 | 1.1 | 7.4 | 1650 | **F102_7.4 S3 ME3SB4** | 395 | **F102_7.4 P90 BE90LA4** | 396 |
| **223** | 61 | 2.1 | 6.4 | 1930 | **F202_6.4 S3 ME3SB4** | 399 | **F202_6.4 P90 BE90LA4** | 400 |
| **247** | 55 | 1.4 | 11.5 | 1560 | **F102_11.5 S3 ME3SA2** | 395 | **F102_11.5 P90 BE90SA2** | 396 |
| **254** | 54 | 2.6 | 11.2 | 1860 | **F202_11.2 S3 ME3SA2** | 399 | **F202_11.2 P90 BE90SA2** | 400 |
| **292** | 47 | 1.6 | 9.8 | 1490 | **F102_9.8 S3 ME3SA2** | 395 | **F102_9.8 P90 BE90SA2** | 396 |
| **327** | 42 | 3.0 | 8.7 | 1740 | **F202_8.7 S3 ME3SA2** | 399 | **F202_8.7 P90 BE90SA2** | 400 |
| **333** | 41 | 1.6 | 8.6 | 1440 | **F102_8.6 S3 ME3SA2** | 395 | **F102_8.6 P90 BE90SA2** | 396 |
| **364** | 37 | 3.1 | 7.8 | 1680 | **F202_7.8 S3 ME3SA2** | 399 | **F202_7.8 P90 BE90SA2** | 400 |
| **386** | 35 | 1.8 | 7.4 | 1380 | **F102_7.4 S3 ME3SA2** | 395 | **F102_7.4 P90 BE90SA2** | 396 |
| **445** | 31 | 3.4 | 6.4 | 1590 | **F202_6.4 S3 ME3SA2** | 399 | **F202_6.4 P90 BE90SA2** | 400 |

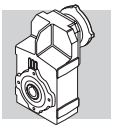
# 2.2 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **1.2** | 15941 | 0.9 | 1204.9 | 55000 | **F904_1205 S3 ME3LA4** | 429 | **F904_1205 P100 BE100LA4** | 430 |
| **1.3** | 14715 | 1.0 | 1112.3 | 55000 | **F904_1112 S3 ME3LA4** | 429 | **F904_1112 P100 BE100LA4** | 430 |
| **1.5** | 13045 | 1.1 | 986.0 | 55000 | **F904_986.0 S3 ME3LA4** | 429 | **F904_986.0 P100 BE100LA4** | 430 |
| **1.6** | 12042 | 1.2 | 910.2 | 55000 | **F904_910.2 S3 ME3LA4** | 429 | **F904_910.2 P100 BE100LA4** | 430 |
| **1.8** | 10233 | 1.4 | 773.4 | 55000 | **F904_773.4 S3 ME3LA4** | 429 | **F904_773.4 P100 BE100LA4** | 430 |
| **2.0** | 9446 | 1.5 | 714.0 | 55000 | **F904_714.0 S3 ME3LA4** | 429 | **F904_714.0 P100 BE100LA4** | 430 |
| **2.3** | 8277 | 1.7 | 625.6 | 55000 | **F904_625.6 S3 ME3LA4** | 429 | **F904_625.6 P100 BE100LA4** | 430 |
| **2.3** | 8082 | 1.0 | 610.9 | 45000 | **F804_610.9 S3 ME3LA4** | 426 | **F804_610.9 P100 BE100LA4** | 427 |
| **2.5** | 7640 | 1.8 | 577.5 | 55000 | **F904_577.5 S3 ME3LA4** | 429 | **F904_577.5 P100 BE100LA4** | 430 |
| **2.5** | 7460 | 1.1 | 563.9 | 45000 | **F804_563.9 S3 ME3LA4** | 426 | **F804_563.9 P100 BE100LA4** | 427 |
| **2.9** | 6556 | 2.1 | 495.6 | 55000 | **F904_495.6 S3 ME3LA4** | 429 | **F904_495.6 P100 BE100LA4** | 430 |
| **2.9** | 6471 | 1.2 | 489.1 | 45000 | **F804_489.1 S3 ME3LA4** | 426 | **F804_489.1 P100 BE100LA4** | 427 |
| **3.1** | 6052 | 2.3 | 457.5 | 55000 | **F904_457.5 S3 ME3LA4** | 429 | **F904_457.5 P100 BE100LA4** | 430 |
| **3.2** | 5973 | 1.3 | 451.5 | 45000 | **F804_451.5 S3 ME3LA4** | 426 | **F804_451.5 P100 BE100LA4** | 427 |
| **3.5** | 5338 | 0.9 | 403.5 | 35000 | **F704_403.5 S3 ME3LA4** | 423 | **F704_403.5 P100 BE100LA4** | 424 |
| **3.6** | 5186 | 2.7 | 392.0 | 55000 | **F904_392.0 S3 ME3LA4** | 429 | **F904_392.0 P100 BE100LA4** | 430 |
| **3.7** | 5069 | 1.6 | 383.2 | 45000 | **F804_383.2 S3 ME3LA4** | 426 | **F804_383.2 P100 BE100LA4** | 427 |
| **3.8** | 4928 | 1.0 | 372.5 | 35000 | **F704_372.5 S3 ME3LA4** | 423 | **F704_372.5 P100 BE100LA4** | 424 |
| **4.0** | 4787 | 2.9 | 361.8 | 55000 | **F904_361.8 S3 ME3LA4** | 429 | **F904_361.8 P100 BE100LA4** | 430 |
| **4.0** | 4679 | 1.7 | 353.7 | 45000 | **F804_353.7 S3 ME3LA4** | 426 | **F804_353.7 P100 BE100LA4** | 427 |
| **4.7** | 4027 | 1.2 | 304.3 | 35000 | **F704_304.3 S3 ME3LA4** | 423 | **F704_304.3 P100 BE100LA4** | 424 |
| **4.8** | 3926 | 2.0 | 296.7 | 45000 | **F804_296.7 S3 ME3LA4** | 426 | **F804_296.7 P100 BE100LA4** | 427 |
| **4.9** | 3852 | 3.6 | 291.1 | 55000 | **F904_291.1 S3 ME3LA4** | 429 | **F904_291.1 P100 BE100LA4** | 430 |
| **5.1** | 3717 | 1.3 | 280.9 | 35000 | **F704_280.9 S3 ME3LA4** | 423 | **F704_280.9 P100 BE100LA4** | 424 |
| **5.2** | 3624 | 2.2 | 273.9 | 45000 | **F804_273.9 S3 ME3LA4** | 426 | **F804_273.9 P100 BE100LA4** | 427 |
| **6.1** | 3223 | 0.9 | 235.8 | 20000 | **F603_235.8 S3 ME3LA4** | 419 | **F603_235.8 P100 BE100LA4** | 420 |

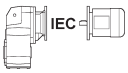


# 2.2 kW

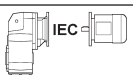
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **6.1** | 3103 | 1.6 | 234.6 | 35000 | **F704_234.6 S3 ME3LA4** | 423 | **F704_234.6 P100 BE100LA4** | 424 |
| **6.5** | 2891 | 2.8 | 218.5 | 45000 | **F804_218.5 S3 ME3LA4** | 426 | **F804_218.5 P100 BE100LA4** | 427 |
| **6.6** | 2975 | 1.0 | 217.6 | 20000 | **F603_217.6 S3 ME3LA4** | 419 | **F603_217.6 P100 BE100LA4** | 420 |
| **6.6** | 2865 | 1.7 | 216.5 | 35000 | **F704_216.5 S3 ME3LA4** | 423 | **F704_216.5 P100 BE100LA4** | 424 |
| **7.1** | 2753 | 1.1 | 201.4 | 20000 | **F603_201.4 S3 ME3LA4** | 419 | **F603_201.4 P100 BE100LA4** | 420 |
| **7.2** | 2734 | 2.9 | 200.0 | 45000 | **F803_200.0 S3 ME3LA4** | 426 | **F803_200.0 P100 BE100LA4** | 427 |
| **7.3** | 2680 | 1.9 | 196.0 | 35000 | **F703_196.0 S3 ME3LA4** | 423 | **F703_196.0 P100 BE100LA4** | 424 |
| **7.7** | 2541 | 1.1 | 185.9 | 20000 | **F603_185.9 S3 ME3LA4** | 419 | **F603_185.9 P100 BE100LA4** | 420 |
| **7.7** | 2524 | 3.2 | 184.6 | 45000 | **F803_184.6 S3 ME3LA4** | 426 | **F803_184.6 P100 BE100LA4** | 427 |
| **7.9** | 2474 | 2.0 | 180.9 | 35000 | **F703_180.9 S3 ME3LA4** | 423 | **F703_180.9 P100 BE100LA4** | 424 |
| **8.6** | 2279 | 2.2 | 166.7 | 35000 | **F703_166.7 S3 ME3LA4** | 423 | **F703_166.7 P100 BE100LA4** | 424 |
| **8.8** | 2227 | 1.3 | 162.9 | 20000 | **F603_162.9 S3 ME3LA4** | 419 | **F603_162.9 P100 BE100LA4** | 420 |
| **9.3** | 2103 | 2.4 | 153.8 | 35000 | **F703_153.8 S3 ME3LA4** | 423 | **F703_153.8 P100 BE100LA4** | 424 |
| **9.5** | 2056 | 1.4 | 150.4 | 20000 | **F603_150.4 S3 ME3LA4** | 419 | **F603_150.4 P100 BE100LA4** | 420 |
| **10.8** | 1818 | 2.8 | 133.0 | 35000 | **F703_133.0 S3 ME3LA4** | 423 | **F703_133.0 P100 BE100LA4** | 424 |
| **11.0** | 1784 | 1.6 | 130.5 | 20000 | **F603_130.5 S3 ME3LA4** | 419 | **F603_130.5 P100 BE100LA4** | 420 |
| **11.0** | 1776 | 1.0 | 129.9 | 12000 | **F513_129.9 S3 ME3LA4** | 415 | **F513_129.9 P100 BE100LA4** | 416 |
| **11.7** | 1678 | 3.0 | 122.7 | 35000 | **F703_122.7 S3 ME3LA4** | 423 | **F703_122.7 P100 BE100LA4** | 424 |
| **11.9** | 1647 | 1.8 | 120.5 | 20000 | **F603_120.5 S3 ME3LA4** | 419 | **F603_120.5 P100 BE100LA4** | 420 |
| **13.0** | 1499 | 3.3 | 109.6 | 35000 | **F703_109.6 S3 ME3LA4** | 423 | **F703_109.6 P100 BE100LA4** | 424 |
| **13.4** | 1454 | 2.0 | 106.4 | 20000 | **F603_106.4 S3 ME3LA4** | 419 | **F603_106.4 P100 BE100LA4** | 420 |
| **13.6** | 1437 | 1.3 | 105.1 | 12000 | **F513_105.1 S3 ME3LA4** | 415 | **F513_105.1 P100 BE100LA4** | 416 |
| **14.1** | 1383 | 3.6 | 101.2 | 35000 | **F703_101.2 S3 ME3LA4** | 423 | **F703_101.2 P100 BE100LA4** | 424 |
| **14.6** | 1342 | 2.2 | 98.2 | 20000 | **F603_98.2 S3 ME3LA4** | 419 | **F603_98.2 P100 BE100LA4** | 420 |
| **16.8** | 1160 | 0.9 | 84.9 | 8500 | **F413_84.9 S3 ME3LA4** | 411 | **F413_84.9 P100 BE100LA4** | 412 |
| **17.0** | 1149 | 2.5 | 84.0 | 20000 | **F603_84.0 S3 ME3LA4** | 419 | **F603_84.0 P100 BE100LA4** | 420 |
| **17.2** | 1138 | 1.6 | 83.2 | 12000 | **F513_83.2 S3 ME3LA4** | 415 | **F513_83.2 P100 BE100LA4** | 416 |
| **18.4** | 1060 | 2.7 | 77.6 | 20000 | **F603_77.6 S3 ME3LA4** | 419 | **F603_77.6 P100 BE100LA4** | 420 |
| **20.9** | 933 | 3.1 | 68.3 | 20000 | **F603_68.3 S3 ME3LA4** | 419 | **F603_68.3 P100 BE100LA4** | 420 |
| **21.5** | 909 | 1.2 | 66.5 | 8500 | **F413_66.5 S3 ME3LA4** | 411 | **F413_66.5 P100 BE100LA4** | 412 |
| **21.7** | 900 | 2.0 | 65.8 | 12000 | **F513_65.8 S3 ME3LA4** | 415 | **F513_65.8 P100 BE100LA4** | 416 |
| **22.7** | 862 | 3.4 | 63.0 | 20000 | **F603_63.0 S3 ME3LA4** | 419 | **F603_63.0 P100 BE100LA4** | 420 |
| **23.7** | 824 | 1.3 | 60.2 | 8500 | **F413_60.2 S3 ME3LA4** | 411 | **F413_60.2 P100 BE100LA4** | 412 |
| **27.8** | 704 | 1.5 | 51.5 | 8500 | **F413_51.5 S3 ME3LA4** | 411 | **F413_51.5 P100 BE100LA4** | 412 |
| **29.2** | 669 | 2.7 | 48.9 | 12000 | **F513_48.9 S3 ME3LA4** | 415 | **F513_48.9 P100 BE100LA4** | 416 |
| **29.8** | 669 | 1.6 | 47.9 | 8500 | **F412_47.9 S3 ME3LA4** | 411 | **F412_47.9 P100 BE100LA4** | 412 |
| **30** | 650 | 0.9 | 47.5 | 6500 | **F313_47.5 S3 ME3LA4** | 407 | **F313_47.5 P100 BE100LA4** | 408 |
| **32** | 623 | 1.0 | 44.6 | 6500 | **F312_44.6 S3 ME3LA4** | 407 | **F312_44.6 P100 BE100LA4** | 408 |
| **35** | 564 | 1.1 | 40.4 | 6500 | **F312_40.4 S3 ME3LA4** | 407 | **F312_40.4 P100 BE100LA4** | 408 |
| **37** | 533 | 2.1 | 38.2 | 8500 | **F412_38.2 S3 ME3LA4** | 411 | **F412_38.2 P100 BE100LA4** | 412 |
| **38** | 526 | 1.1 | 37.7 | 6500 | **F312_37.7 S3 ME3LA4** | 407 | **F312_37.7 P100 BE100LA4** | 408 |
| **39** | 519 | 3.3 | 37.1 | 12000 | **F512_37.1 S3 ME3LA4** | 415 | **F512_37.1 P100 BE100LA4** | 416 |
| **42** | 480 | 1.3 | 34.4 | 6490 | **F312_34.4 S3 ME3LA4** | 407 | **F312_34.4 P100 BE100LA4** | 408 |
| **44** | 449 | 0.9 | 32.2 | 3620 | **F252_32.2 S3 ME3LA4** | 403 | **F252_32.2 P100 BE100LA4** | 404 |
| **47** | 421 | 1.4 | 30.1 | 6360 | **F312_30.1 S3 ME3LA4** | 407 | **F312_30.1 P100 BE100LA4** | 408 |
| **47** | 421 | 2.6 | 30.1 | 8500 | **F412_30.1 S3 ME3LA4** | 411 | **F412_30.1 P100 BE100LA4** | 412 |
| **48** | 419 | 1.0 | 30.0 | 3300 | **F252_30.0 S3 ME3LA4** | 403 | **F252_30.0 P100 BE100LA4** | 404 |
| **52** | 381 | 1.6 | 27.3 | 6250 | **F312_27.3 S3 ME3LA4** | 407 | **F312_27.3 P100 BE100LA4** | 408 |
| **53** | 380 | 1.1 | 27.2 | 3300 | **F252_27.2 S3 ME3LA4** | 403 | **F252_27.2 P100 BE100LA4** | 404 |
| **59** | 337 | 3.3 | 24.1 | 8400 | **F412_24.1 S3 ME3LA4** | 411 | **F412_24.1 P100 BE100LA4** | 412 |
| **60** | 332 | 1.2 | 23.8 | 3290 | **F252_23.8 S3 ME3LA4** | 403 | **F252_23.8 P100 BE100LA4** | 404 |
| **61** | 327 | 1.8 | 23.4 | 6080 | **F312_23.4 S3 ME3LA4** | 407 | **F312_23.4 P100 BE100LA4** | 408 |
| **66** | 305 | 1.3 | 21.8 | 3270 | **F252_21.8 S3 ME3LA4** | 403 | **F252_21.8 P100 BE100LA4** | 404 |
| **68** | 295 | 2.0 | 21.1 | 5960 | **F312_21.1 S3 ME3LA4** | 407 | **F312_21.1 P100 BE100LA4** | 408 |
| **77** | 260 | 1.5 | 18.6 | 3220 | **F252_18.6 S3 ME3LA4** | 403 | **F252_18.6 P100 BE100LA4** | 404 |
| **77** | 258 | 2.3 | 18.5 | 5790 | **F312_18.5 S3 ME3LA4** | 407 | **F312_18.5 P100 BE100LA4** | 408 |
| **85** | 235 | 2.6 | 16.8 | 5670 | **F312_16.8 S3 ME3LA4** | 407 | **F312_16.8 P100 BE100LA4** | 408 |

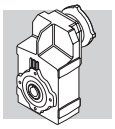


## 2.2 kW

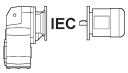
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **86** | 232 | 1.7 | 16.6 | 3180 | **F252_16.6 S3 ME3LA4** | 403 | **F252_16.6 P100 BE100LA4** | 404 |
| **97** | 207 | 1.0 | 14.8 | 2190 | **F202_14.8 S3 ME3LA4** | 399 | **F202_14.8 P100 BE100LA4** | 400 |
| **99** | 202 | 2.0 | 14.5 | 3120 | **F252_14.5 S3 ME3LA4** | 403 | **F252_14.5 P100 BE100LA4** | 404 |
| **103** | 195 | 3.1 | 13.9 | 5430 | **F312_13.9 S3 ME3LA4** | 407 | **F312_13.9 P100 BE100LA4** | 408 |
| **110** | 181 | 2.2 | 13.0 | 3070 | **F252_13.0 S3 ME3LA4** | 403 | **F252_13.0 P100 BE100LA4** | 404 |
| **112** | 178 | 3.4 | 12.7 | 5310 | **F312_12.7 S3 ME3LA4** | 407 | **F312_12.7 P100 BE100LA4** | 408 |
| **127** | 157 | 1.1 | 11.2 | 2060 | **F202_11.2 S3 ME3LA4** | 399 | **F202_11.2 P100 BE100LA4** | 400 |
| **135** | 148 | 2.7 | 10.6 | 2960 | **F252_10.6 S3 ME3LA4** | 403 | **F252_10.6 P100 BE100LA4** | 404 |
| **143** | 140 | 1.2 | 10.0 | 2000 | **F202_10.0 S3 ME3LA4** | 399 | **F202_10.0 P100 BE100LA4** | 400 |
| **153** | 131 | 2.0 | 9.4 | 2900 | **F252_9.4 S3 ME3LA4** | 403 | **F252_9.4 P100 BE100LA4** | 404 |
| **159** | 126 | 3.1 | 9.0 | 4830 | **F312_9.0 S3 ME3LA4** | 407 | **F312_9.0 P100 BE100LA4** | 408 |
| **164** | 122 | 1.3 | 8.7 | 1960 | **F202_8.7 S3 ME3LA4** | 399 | **F202_8.7 P100 BE100LA4** | 400 |
| **170** | 117 | 2.2 | 8.4 | 2830 | **F252_8.4 S3 ME3LA4** | 403 | **F252_8.4 P100 BE100LA4** | 404 |
| **174** | 115 | 3.4 | 8.2 | 4720 | **F312_8.2 S3 ME3LA4** | 407 | **F312_8.2 P100 BE100LA4** | 408 |
| **183** | 109 | 1.3 | 7.8 | 1920 | **F202_7.8 S3 ME3LA4** | 399 | **F202_7.8 P100 BE100LA4** | 400 |
| **208** | 96 | 2.7 | 6.9 | 2710 | **F252_6.9 S3 ME3LA4** | 403 | **F252_6.9 P100 BE100LA4** | 404 |
| **223** | 90 | 1.5 | 6.4 | 1840 | **F202_6.4 S3 ME3LA4** | 399 | **F202_6.4 P100 BE100LA4** | 400 |
| **248** | 80 | 1.0 | 11.5 | 1470 | **F102_11.5 S3 ME3LA2** | 395 | **F102_11.5 P90 BE90L2** | 396 |
| **255** | 78 | 1.8 | 11.2 | 1780 | **F202_11.2 S3 ME3LA2** | 399 | **F202_11.2 P90 BE90L2** | 400 |
| **293** | 68 | 1.1 | 9.8 | 1410 | **F102_9.8 S3 ME3LA2** | 395 | **F102_9.8 P90 BE90L2** | 396 |
| **328** | 61 | 2.0 | 8.7 | 1670 | **F202_8.7 S3 ME3LA2** | 399 | **F202_8.7 P90 BE90L2** | 400 |
| **334** | 60 | 1.1 | 8.6 | 1370 | **F102_8.6 S3 ME3LA2** | 395 | **F102_8.6 P90 BE90L2** | 396 |
| **366** | 55 | 2.1 | 7.8 | 1630 | **F202_7.8 S3 ME3LA2** | 399 | **F202_7.8 P90 BE90L2** | 400 |
| **387** | 52 | 1.2 | 7.4 | 1330 | **F102_7.4 S3 ME3LA2** | 395 | **F102_7.4 P90 BE90L2** | 396 |
| **447** | 45 | 2.3 | 6.4 | 1540 | **F202_6.4 S3 ME3LA2** | 399 | **F202_6.4 P90 BE90L2** | 400 |

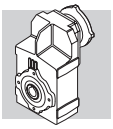
## 3 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **1.9** | 13922 | 1.0 | 773.4 | 55000 | **F904_773.4 S3 ME3LB4** | 429 | **F904_773.4 P100 BE100LB4** | 430 |
| **2.0** | 12851 | 1.1 | 714.0 | 55000 | **F904_714.0 S3 ME3LB4** | 429 | **F904_714.0 P100 BE100LB4** | 430 |
| **2.3** | 11261 | 1.2 | 625.6 | 55000 | **F904_625.6 S3 ME3LB4** | 429 | **F904_625.6 P100 BE100LB4** | 430 |
| **2.5** | 10395 | 1.3 | 577.5 | 55000 | **F904_577.5 S3 ME3LB4** | 429 | **F904_577.5 P100 BE100LB4** | 430 |
| **2.9** | 8920 | 1.6 | 495.6 | 55000 | **F904_495.6 S3 ME3LB4** | 429 | **F904_495.6 P100 BE100LB4** | 430 |
| **2.9** | 8804 | 0.9 | 489.1 | 45000 | **F804_489.1 S3 ME3LB4** | 426 | **F804_489.1 P100 BE100LB4** | 427 |
| **3.1** | 8234 | 1.7 | 457.5 | 55000 | **F904_457.5 S3 ME3LB4** | 429 | **F904_457.5 P100 BE100LB4** | 430 |
| **3.2** | 8127 | 1.0 | 451.5 | 45000 | **F804_451.5 S3 ME3LB4** | 426 | **F804_451.5 P100 BE100LB4** | 427 |
| **3.7** | 7056 | 2.0 | 392.0 | 55000 | **F904_392.0 S3 ME3LB4** | 429 | **F904_392.0 P100 BE100LB4** | 430 |
| **3.8** | 6897 | 1.2 | 383.2 | 45000 | **F804_383.2 S3 ME3LB4** | 426 | **F804_383.2 P100 BE100LB4** | 427 |
| **4.0** | 6513 | 2.1 | 361.8 | 55000 | **F904_361.8 S3 ME3LB4** | 429 | **F904_361.8 P100 BE100LB4** | 430 |
| **4.1** | 6366 | 1.3 | 353.7 | 45000 | **F804_353.7 S3 ME3LB4** | 426 | **F804_353.7 P100 BE100LB4** | 427 |
| **4.7** | 5478 | 0.9 | 304.3 | 35000 | **F704_304.3 S3 ME3LB4** | 423 | **F704_304.3 P100 BE100LB4** | 424 |
| **4.9** | 5341 | 1.5 | 296.7 | 45000 | **F804_296.7 S3 ME3LB4** | 426 | **F804_296.7 P100 BE100LB4** | 427 |
| **4.9** | 5240 | 2.7 | 291.1 | 55000 | **F904_291.1 S3 ME3LB4** | 429 | **F904_291.1 P100 BE100LB4** | 430 |
| **5.1** | 5057 | 1.0 | 280.9 | 35000 | **F704_280.9 S3 ME3LB4** | 423 | **F704_280.9 P100 BE100LB4** | 424 |
| **5.3** | 4930 | 1.6 | 273.9 | 45000 | **F804_273.9 S3 ME3LB4** | 426 | **F804_273.9 P100 BE100LB4** | 427 |
| **5.4** | 4837 | 2.9 | 268.7 | 55000 | **F904_268.7 S3 ME3LB4** | 429 | **F904_268.7 P100 BE100LB4** | 430 |
| **6.1** | 4222 | 1.2 | 234.6 | 35000 | **F704_234.6 S3 ME3LB4** | 423 | **F704_234.6 P100 BE100LB4** | 424 |
| **6.2** | 4165 | 3.4 | 231.4 | 55000 | **F904_231.4 S3 ME3LB4** | 429 | **F904_231.4 P100 BE100LB4** | 430 |
| **6.6** | 3933 | 2.0 | 218.5 | 45000 | **F804_218.5 S3 ME3LB4** | 426 | **F804_218.5 P100 BE100LB4** | 427 |
| **6.7** | 3897 | 1.3 | 216.5 | 35000 | **F704_216.5 S3 ME3LB4** | 423 | **F704_216.5 P100 BE100LB4** | 424 |
| **6.7** | 3845 | 3.6 | 213.6 | 55000 | **F904_213.6 S3 ME3LB4** | 429 | **F904_213.6 P100 BE100LB4** | 430 |
| **7.2** | 3720 | 2.2 | 200.0 | 45000 | **F803_200.0 S3 ME3LB4** | 426 | **F803_200.0 P100 BE100LB4** | 427 |

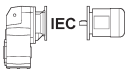


# 3 kW

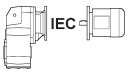
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  IEC |  |
|---|---|---|---|---|---|---|---|---|
| **7.3** | 3646 | 1.4 | 196.0 | 35000 | **F703_196.0 S3 ME3LB4** | 423 | **F703_196.0 P100 BE100LB4** | 424 |
| **7.8** | 3434 | 2.3 | 184.6 | 45000 | **F803_184.6 S3 ME3LB4** | 426 | **F803_184.6 P100 BE100LB4** | 427 |
| **8.0** | 3366 | 1.5 | 180.9 | 35000 | **F703_180.9 S3 ME3LB4** | 423 | **F703_180.9 P100 BE100LB4** | 424 |
| **8.6** | 3100 | 1.6 | 166.7 | 35000 | **F703_166.7 S3 ME3LB4** | 423 | **F703_166.7 P100 BE100LB4** | 424 |
| **8.8** | 3030 | 1.0 | 162.9 | 20000 | **F603_162.9 S3 ME3LB4** | 419 | **F603_162.9 P100 BE100LB4** | 420 |
| **9.0** | 2980 | 2.7 | 160.2 | 45000 | **F803_160.2 S3 ME3LB4** | 426 | **F803_160.2 P100 BE100LB4** | 427 |
| **9.4** | 2862 | 1.7 | 153.8 | 35000 | **F703_153.8 S3 ME3LB4** | 423 | **F703_153.8 P100 BE100LB4** | 424 |
| **9.6** | 2797 | 1.0 | 150.4 | 20000 | **F603_150.4 S3 ME3LB4** | 419 | **F603_150.4 P100 BE100LB4** | 420 |
| **9.7** | 2751 | 2.9 | 147.9 | 45000 | **F803_147.9 S3 ME3LB4** | 426 | **F803_147.9 P100 BE100LB4** | 427 |
| **10.8** | 2473 | 2.0 | 133.0 | 35000 | **F703_133.0 S3 ME3LB4** | 423 | **F703_133.0 P100 BE100LB4** | 424 |
| **10.9** | 2468 | 3.2 | 132.7 | 45000 | **F803_132.7 S3 ME3LB4** | 426 | **F803_132.7 P100 BE100LB4** | 427 |
| **11.0** | 2427 | 1.2 | 130.5 | 20000 | **F603_130.5 S3 ME3LB4** | 419 | **F603_130.5 P100 BE100LB4** | 420 |
| **11.7** | 2283 | 2.2 | 122.7 | 35000 | **F703_122.7 S3 ME3LB4** | 423 | **F703_122.7 P100 BE100LB4** | 424 |
| **12.0** | 2240 | 1.3 | 120.5 | 20000 | **F603_120.5 S3 ME3LB4** | 419 | **F603_120.5 P100 BE100LB4** | 420 |
| **13.1** | 2039 | 2.5 | 109.6 | 35000 | **F703_109.6 S3 ME3LB4** | 423 | **F703_109.6 P100 BE100LB4** | 424 |
| **13.5** | 1979 | 1.5 | 106.4 | 20000 | **F603_106.4 S3 ME3LB4** | 419 | **F603_106.4 P100 BE100LB4** | 420 |
| **13.7** | 1955 | 0.9 | 105.1 | 12000 | **F513_105.1 S3 ME3LB4** | 415 | **F513_105.1 P100 BE100LB4** | 416 |
| **14.2** | 1882 | 2.7 | 101.2 | 35000 | **F703_101.2 S3 ME3LB4** | 423 | **F703_101.2 P100 BE100LB4** | 424 |
| **14.7** | 1826 | 1.6 | 98.2 | 20000 | **F603_98.2 S3 ME3LB4** | 419 | **F603_98.2 P100 BE100LB4** | 420 |
| **15.6** | 1721 | 2.9 | 92.5 | 35000 | **F703_92.5 S3 ME3LB4** | 423 | **F703_92.5 P100 BE100LB4** | 424 |
| **16.9** | 1588 | 3.1 | 85.4 | 35000 | **F703_85.4 S3 ME3LB4** | 423 | **F703_85.4 P100 BE100LB4** | 424 |
| **17.1** | 1563 | 1.9 | 84.0 | 20000 | **F603_84.0 S3 ME3LB4** | 419 | **F603_84.0 P100 BE100LB4** | 420 |
| **17.3** | 1548 | 1.2 | 83.2 | 12000 | **F513_83.2 S3 ME3LB4** | 415 | **F513_83.2 P100 BE100LB4** | 416 |
| **18.6** | 1443 | 2.0 | 77.6 | 20000 | **F603_77.6 S3 ME3LB4** | 419 | **F603_77.6 P100 BE100LB4** | 420 |
| **19.6** | 1368 | 3.7 | 73.6 | 35000 | **F703_73.6 S3 ME3LB4** | 423 | **F703_73.6 P100 BE100LB4** | 424 |
| **21.1** | 1270 | 2.3 | 68.3 | 20000 | **F603_68.3 S3 ME3LB4** | 419 | **F603_68.3 P100 BE100LB4** | 420 |
| **21.9** | 1225 | 1.5 | 65.8 | 12000 | **F513_65.8 S3 ME3LB4** | 415 | **F513_65.8 P100 BE100LB4** | 416 |
| **22.8** | 1172 | 2.5 | 63.0 | 20000 | **F603_63.0 S3 ME3LB4** | 419 | **F603_63.0 P100 BE100LB4** | 420 |
| **23.9** | 1121 | 1.0 | 60.2 | 8500 | **F413_60.2 S3 ME3LB4** | 411 | **F413_60.2 P100 BE100LB4** | 412 |
| **27.8** | 964 | 3.0 | 51.8 | 20000 | **F603_51.8 S3 ME3LB4** | 419 | **F603_51.8 P100 BE100LB4** | 420 |
| **28.0** | 958 | 1.1 | 51.5 | 8500 | **F413_51.5 S3 ME3LB4** | 411 | **F413_51.5 P100 BE100LB4** | 412 |
| **29.4** | 910 | 2.0 | 48.9 | 12000 | **F513_48.9 S3 ME3LB4** | 415 | **F513_48.9 P100 BE100LB4** | 416 |
| **30** | 911 | 1.2 | 47.9 | 8500 | **F412_47.9 S3 ME3LB4** | 411 | **F412_47.9 P100 BE100LB4** | 412 |
| **30** | 890 | 3.3 | 47.8 | 20000 | **F603_47.8 S3 ME3LB4** | 419 | **F603_47.8 P100 BE100LB4** | 420 |
| **38** | 725 | 1.5 | 38.2 | 8500 | **F412_38.2 S3 ME3LB4** | 411 | **F412_38.2 P100 BE100LB4** | 412 |
| **39** | 706 | 2.4 | 37.1 | 11800 | **F512_37.1 S3 ME3LB4** | 415 | **F512_37.1 P100 BE100LB4** | 416 |
| **42** | 653 | 0.9 | 34.4 | 5810 | **F312_34.4 S3 ME3LB4** | 407 | **F312_34.4 P100 BE100LB4** | 408 |
| **48** | 572 | 1.0 | 30.1 | 5770 | **F312_30.1 S3 ME3LB4** | 407 | **F312_30.1 P100 BE100LB4** | 408 |
| **48** | 572 | 1.9 | 30.1 | 8290 | **F412_30.1 S3 ME3LB4** | 411 | **F412_30.1 P100 BE100LB4** | 412 |
| **48** | 571 | 3.0 | 30.0 | 11200 | **F512_30.0 S3 ME3LB4** | 415 | **F512_30.0 P100 BE100LB4** | 416 |
| **53** | 518 | 1.2 | 27.3 | 5720 | **F312_27.3 S3 ME3LB4** | 407 | **F312_27.3 P100 BE100LB4** | 408 |
| **60** | 458 | 2.4 | 24.1 | 7960 | **F412_24.1 S3 ME3LB4** | 411 | **F412_24.1 P100 BE100LB4** | 412 |
| **61** | 451 | 0.9 | 23.8 | 3100 | **F252_23.8 S3 ME3LB4** | 403 | **F252_23.8 P100 BE100LB4** | 404 |
| **62** | 444 | 1.4 | 23.4 | 5620 | **F312_23.4 S3 ME3LB4** | 407 | **F312_23.4 P100 BE100LB4** | 408 |
| **66** | 415 | 1.0 | 21.8 | 2800 | **F252_21.8 S3 ME3LB4** | 403 | **F252_21.8 P100 BE100LB4** | 404 |
| **68** | 401 | 1.5 | 21.1 | 5540 | **F312_21.1 S3 ME3LB4** | 407 | **F312_21.1 P100 BE100LB4** | 408 |
| **76** | 359 | 3.0 | 18.9 | 7560 | **F412_18.9 S3 ME3LB4** | 411 | **F412_18.9 P100 BE100LB4** | 412 |
| **77** | 354 | 1.1 | 18.6 | 2830 | **F252_18.6 S3 ME3LB4** | 403 | **F252_18.6 P100 BE100LB4** | 404 |
| **78** | 351 | 1.7 | 18.5 | 5430 | **F312_18.5 S3 ME3LB4** | 407 | **F312_18.5 P100 BE100LB4** | 408 |
| **84** | 325 | 3.2 | 17.1 | 7400 | **F412_17.1 S3 ME3LB4** | 411 | **F412_17.1 P100 BE100LB4** | 412 |
| **86** | 319 | 1.9 | 16.8 | 5340 | **F312_16.8 S3 ME3LB4** | 407 | **F312_16.8 P100 BE100LB4** | 408 |
| **87** | 316 | 1.3 | 16.6 | 2830 | **F252_16.6 S3 ME3LB4** | 403 | **F252_16.6 P100 BE100LB4** | 404 |
| **100** | 275 | 1.5 | 14.5 | 2810 | **F252_14.5 S3 ME3LB4** | 403 | **F252_14.5 P100 BE100LB4** | 404 |
| **103** | 265 | 2.3 | 13.9 | 5150 | **F312_13.9 S3 ME3LB4** | 407 | **F312_13.9 P100 BE100LB4** | 408 |
| **111** | 247 | 1.6 | 13.0 | 2790 | **F252_13.0 S3 ME3LB4** | 403 | **F252_13.0 P100 BE100LB4** | 404 |
| **113** | 242 | 2.5 | 12.7 | 5060 | **F312_12.7 S3 ME3LB4** | 407 | **F312_12.7 P100 BE100LB4** | 408 |
| **134** | 204 | 2.9 | 10.7 | 4880 | **F312_10.7 S3 ME3LB4** | 407 | **F312_10.7 P100 BE100LB4** | 408 |

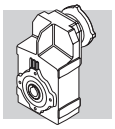


## 3 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **136** | 202 | 2.0 | 10.6 | 2730 | **F252_10.6 S3 ME3LB4** | 403 | **F252_10.6 P100 BE100LB4** | 404 |
| **154** | 178 | 1.5 | 9.4 | 2710 | **F252_9.4 S3 ME3LB4** | 403 | **F252_9.4 P100 BE100LB4** | 404 |
| **160** | 171 | 2.3 | 9.0 | 4650 | **F312_9.0 S3 ME3LB4** | 407 | **F312_9.0 P100 BE100LB4** | 408 |
| **165** | 166 | 0.9 | 8.7 | 1820 | **F202_8.7 S3 ME3LB4** | 399 | **F202_8.7 P100 BE100LB4** | 400 |
| **172** | 159 | 1.6 | 8.4 | 2660 | **F252_8.4 S3 ME3LB4** | 403 | **F252_8.4 P100 BE100LB4** | 404 |
| **175** | 156 | 2.5 | 8.2 | 4550 | **F312_8.2 S3 ME3LB4** | 407 | **F312_8.2 P100 BE100LB4** | 408 |
| **184** | 149 | 1.0 | 7.8 | 1790 | **F202_7.8 S3 ME3LB4** | 399 | **F202_7.8 P100 BE100LB4** | 400 |
| **207** | 132 | 3.0 | 6.9 | 4360 | **F312_6.9 S3 ME3LB4** | 407 | **F312_6.9 P100 BE100LB4** | 408 |
| **210** | 131 | 2.0 | 6.9 | 2560 | **F252_6.9 S3 ME3LB4** | 403 | **F252_6.9 P100 BE100LB4** | 404 |
| **222** | 123 | 2.9 | 13.0 | 2510 | **F252_13.0 S3 ME3LB2** | 403 | **F252_13.0 P100 BE100L2** | 404 |
| **225** | 122 | 1.1 | 6.4 | 1730 | **F202_6.4 S3 ME3LB4** | 399 | **F202_6.4 P100 BE100LB4** | 400 |
| **256** | 106 | 1.3 | 11.2 | 1680 | **F202_11.2 S3 ME3LB2** | 399 | **F202_11.2 P100 BE100L2** | 400 |
| **271** | 100 | 3.2 | 10.6 | 2410 | **F252_10.6 S3 ME3LB2** | 403 | **F252_10.6 P100 BE100L2** | 404 |
| **308** | 88 | 3.0 | 9.4 | 2350 | **F252_9.4 S3 ME3LB2** | 403 | **F252_9.4 P100 BE100L2** | 404 |
| **330** | 83 | 1.5 | 8.7 | 1600 | **F202_8.7 S3 ME3LB2** | 399 | **F202_8.7 P100 BE100L2** | 400 |
| **343** | 79 | 3.3 | 8.4 | 2290 | **F252_8.4 S3 ME3LB2** | 403 | **F252_8.4 P100 BE100L2** | 404 |
| **368** | 74 | 1.6 | 7.8 | 1560 | **F202_7.8 S3 ME3LB2** | 399 | **F202_7.8 P100 BE100L2** | 400 |
| **449** | 61 | 1.7 | 6.4 | 1480 | **F202_6.4 S3 ME3LB2** | 399 | **F202_6.4 P100 BE100L2** | 400 |

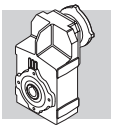
## 4 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **2.3** | 15202 | 0.9 | 625.6 | 55000 | **F904_625.6 S4 ME4SA4** | 429 | **F904_625.6 P112 BE112M4** | 430 |
| **2.5** | 14033 | 1.0 | 577.5 | 55000 | **F904_577.5 S4 ME4SA4** | 429 | **F904_577.5 P112 BE112M4** | 430 |
| **2.9** | 12042 | 1.2 | 495.6 | 55000 | **F904_495.6 S4 ME4SA4** | 429 | **F904_495.6 P112 BE112M4** | 430 |
| **3.1** | 11116 | 1.3 | 457.5 | 55000 | **F904_457.5 S4 ME4SA4** | 429 | **F904_457.5 P112 BE112M4** | 430 |
| **3.7** | 9526 | 1.5 | 392.0 | 55000 | **F904_392.0 S4 ME4SA4** | 429 | **F904_392.0 P112 BE112M4** | 430 |
| **4.0** | 8793 | 1.6 | 361.8 | 55000 | **F904_361.8 S4 ME4SA4** | 429 | **F904_361.8 P112 BE112M4** | 430 |
| **4.1** | 8594 | 0.9 | 353.7 | 45000 | **F804_353.7 S4 ME4SA4** | 426 | **F804_353.7 P112 BE112M4** | 427 |
| **4.9** | 7210 | 1.1 | 296.7 | 45000 | **F804_296.7 S4 ME4SA4** | 426 | **F804_296.7 P112 BE112M4** | 427 |
| **4.9** | 7074 | 2.0 | 291.1 | 55000 | **F904_291.1 S4 ME4SA4** | 429 | **F904_291.1 P112 BE112M4** | 430 |
| **5.3** | 6656 | 1.2 | 273.9 | 45000 | **F804_273.9 S4 ME4SA4** | 426 | **F804_273.9 P112 BE112M4** | 427 |
| **5.4** | 6530 | 2.1 | 268.7 | 55000 | **F904_268.7 S4 ME4SA4** | 429 | **F904_268.7 P112 BE112M4** | 430 |
| **6.1** | 5700 | 0.9 | 234.6 | 35000 | **F704_234.6 S4 ME4SA4** | 423 | **F704_234.6 P112 BE112M4** | 424 |
| **6.2** | 5623 | 2.5 | 231.4 | 55000 | **F904_231.4 S4 ME4SA4** | 429 | **F904_231.4 P112 BE112M4** | 430 |
| **6.6** | 5309 | 1.5 | 218.5 | 45000 | **F804_218.5 S4 ME4SA4** | 426 | **F804_218.5 P112 BE112M4** | 427 |
| **6.7** | 5262 | 1.0 | 216.5 | 35000 | **F704_216.5 S4 ME4SA4** | 423 | **F704_216.5 P112 BE112M4** | 424 |
| **6.7** | 5190 | 2.7 | 213.6 | 55000 | **F904_213.6 S4 ME4SA4** | 429 | **F904_213.6 P112 BE112M4** | 430 |
| **7.2** | 5022 | 1.6 | 200.0 | 45000 | **F803_200.0 S4 ME4SA4** | 426 | **F803_200.0 P112 BE112M4** | 427 |
| **7.3** | 4922 | 1.0 | 196.0 | 35000 | **F703_196.0 S4 ME4SA4** | 423 | **F703_196.0 P112 BE112M4** | 424 |
| **7.4** | 4875 | 2.9 | 194.2 | 55000 | **F903_194.2 S4 ME4SA4** | 429 | **F903_194.2 P112 BE112M4** | 430 |
| **7.8** | 4636 | 1.7 | 184.6 | 45000 | **F803_184.6 S4 ME4SA4** | 426 | **F803_184.6 P112 BE112M4** | 427 |
| **8.0** | 4544 | 1.1 | 180.9 | 35000 | **F703_180.9 S4 ME4SA4** | 423 | **F703_180.9 P112 BE112M4** | 424 |
| **8.0** | 4500 | 3.1 | 179.2 | 55000 | **F903_179.2 S4 ME4SA4** | 429 | **F903_179.2 P112 BE112M4** | 430 |
| **8.6** | 4185 | 1.2 | 166.7 | 35000 | **F703_166.7 S4 ME4SA4** | 423 | **F703_166.7 P112 BE112M4** | 424 |
| **8.8** | 4089 | 3.4 | 162.8 | 55000 | **F903_162.8 S4 ME4SA4** | 429 | **F903_162.8 P112 BE112M4** | 430 |
| **9.0** | 4023 | 2.0 | 160.2 | 45000 | **F803_160.2 S4 ME4SA4** | 426 | **F803_160.2 P112 BE112M4** | 427 |
| **9.4** | 3863 | 1.3 | 153.8 | 35000 | **F703_153.8 S4 ME4SA4** | 423 | **F703_153.8 P112 BE112M4** | 424 |
| **9.7** | 3714 | 2.2 | 147.9 | 45000 | **F803_147.9 S4 ME4SA4** | 426 | **F803_147.9 P112 BE112M4** | 427 |
| **10.8** | 3338 | 1.5 | 133.0 | 35000 | **F703_133.0 S4 ME4SA4** | 423 | **F703_133.0 P112 BE112M4** | 424 |
| **10.9** | 3332 | 2.4 | 132.7 | 45000 | **F803_132.7 S4 ME4SA4** | 426 | **F803_132.7 P112 BE112M4** | 427 |
| **11.0** | 3277 | 0.9 | 130.5 | 20000 | **F603_130.5 S4 ME4SA4** | 419 | **F603_130.5 P112 BE112M4** | 420 |
| **11.7** | 3082 | 1.6 | 122.7 | 35000 | **F703_122.7 S4 ME4SA4** | 423 | **F703_122.7 P112 BE112M4** | 424 |

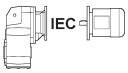


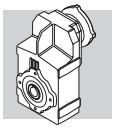
# 4 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **11.8** | 3076 | 2.6 | 122.5 | 45000 | **F803_122.5 S4 ME4SA4** | 426 | **F803_122.5 P112 BE112M4** | 427 |
| **12.0** | 3025 | 1.0 | 120.5 | 20000 | **F603_120.5 S4 ME4SA4** | 419 | **F603_120.5 P112 BE112M4** | 420 |
| **12.7** | 2856 | 2.8 | 113.8 | 45000 | **F803_113.8 S4 ME4SA4** | 426 | **F803_113.8 P112 BE112M4** | 427 |
| **13.1** | 2752 | 1.8 | 109.6 | 35000 | **F703_109.6 S4 ME4SA4** | 423 | **F703_109.6 P112 BE112M4** | 424 |
| **13.5** | 2671 | 1.1 | 106.4 | 20000 | **F603_106.4 S4 ME4SA4** | 419 | **F603_106.4 P112 BE112M4** | 420 |
| **13.7** | 2637 | 3.0 | 105.0 | 45000 | **F803_105.0 S4 ME4SA4** | 426 | **F803_105.0 P112 BE112M4** | 427 |
| **14.2** | 2541 | 2.0 | 101.2 | 35000 | **F703_101.2 S4 ME4SA4** | 423 | **F703_101.2 P112 BE112M4** | 424 |
| **14.7** | 2466 | 1.2 | 98.2 | 20000 | **F603_98.2 S4 ME4SA4** | 419 | **F603_98.2 P112 BE112M4** | 420 |
| **15.6** | 2323 | 2.2 | 92.5 | 35000 | **F703_92.5 S4 ME4SA4** | 423 | **F703_92.5 P112 BE112M4** | 424 |
| **16.9** | 2144 | 2.3 | 85.4 | 35000 | **F703_85.4 S4 ME4SA4** | 423 | **F703_85.4 P112 BE112M4** | 424 |
| **17.1** | 2110 | 1.4 | 84.0 | 20000 | **F603_84.0 S4 ME4SA4** | 419 | **F603_84.0 P112 BE112M4** | 420 |
| **18.6** | 1947 | 1.5 | 77.6 | 20000 | **F603_77.6 S4 ME4SA4** | 419 | **F603_77.6 P112 BE112M4** | 420 |
| **19.6** | 1847 | 2.7 | 73.6 | 35000 | **F703_73.6 S4 ME4SA4** | 423 | **F703_73.6 P112 BE112M4** | 424 |
| **21.1** | 1715 | 1.7 | 68.3 | 20000 | **F603_68.3 S4 ME4SA4** | 419 | **F603_68.3 P112 BE112M4** | 420 |
| **21.2** | 1705 | 2.9 | 67.9 | 35000 | **F703_67.9 S4 ME4SA4** | 423 | **F703_67.9 P112 BE112M4** | 424 |
| **21.9** | 1653 | 1.1 | 65.8 | 12000 | **F513_65.8 S4 ME4SA4** | 415 | **F513_65.8 P112 BE112M4** | 416 |
| **22.8** | 1583 | 1.8 | 63.0 | 20000 | **F603_63.0 S4 ME4SA4** | 419 | **F603_63.0 P112 BE112M4** | 420 |
| **23.0** | 1569 | 3.2 | 62.5 | 35000 | **F703_62.5 S4 ME4SA4** | 423 | **F703_62.5 P112 BE112M4** | 424 |
| **25.0** | 1449 | 3.5 | 57.7 | 35000 | **F703_57.7 S4 ME4SA4** | 423 | **F703_57.7 P112 BE112M4** | 424 |
| **27.8** | 1301 | 2.2 | 51.8 | 20000 | **F603_51.8 S4 ME4SA4** | 419 | **F603_51.8 P112 BE112M4** | 420 |
| **29.4** | 1228 | 1.5 | 48.9 | 11600 | **F513_48.9 S4 ME4SA4** | 415 | **F513_48.9 P112 BE112M4** | 416 |
| **30** | 1201 | 2.4 | 47.8 | 20000 | **F603_47.8 S4 ME4SA4** | 419 | **F603_47.8 P112 BE112M4** | 420 |
| **34** | 1057 | 2.7 | 42.1 | 20000 | **F603_42.1 S4 ME4SA4** | 419 | **F603_42.1 P112 BE112M4** | 420 |
| **37** | 975 | 3.0 | 38.8 | 20000 | **F603_38.8 S4 ME4SA4** | 419 | **F603_38.8 P112 BE112M4** | 420 |
| **38** | 979 | 1.1 | 38.2 | 7720 | **F412_38.2 S4 ME4SA4** | 411 | **F412_38.2 P112 BE112M4** | 412 |
| **39** | 953 | 1.8 | 37.1 | 11200 | **F512_37.1 S4 ME4SA4** | 415 | **F512_37.1 P112 BE112M4** | 416 |
| **45** | 806 | 3.6 | 32.1 | 20000 | **F603_32.1 S4 ME4SA4** | 419 | | |
| **48** | 773 | 1.4 | 30.1 | 7610 | **F412_30.1 S4 ME4SA4** | 411 | **F412_30.1 P112 BE112M4** | 412 |
| **48** | 770 | 2.2 | 30.0 | 10700 | **F512_30.0 S4 ME4SA4** | 415 | **F512_30.0 P112 BE112M4** | 416 |
| **57** | 638 | 3.0 | 25.4 | 20000 | **F603_25.4 S4 ME4SA4** | 419 | **F603_25.4 P112 BE112M4** | 420 |
| **60** | 619 | 1.8 | 24.1 | 7420 | **F412_24.1 S4 ME4SA4** | 411 | **F412_24.1 P112 BE112M4** | 412 |
| **61** | 610 | 2.7 | 23.8 | 10200 | **F512_23.8 S4 ME4SA4** | 415 | **F512_23.8 P112 BE112M4** | 416 |
| **61** | 589 | 3.2 | 23.5 | 20000 | **F603_23.5 S4 ME4SA4** | 419 | **F603_23.5 P112 BE112M4** | 420 |
| **62** | 600 | 1.0 | 23.4 | 5040 | **F312_23.4 S4 ME4SA4** | 407 | **F312_23.4 P112 BE112M4** | 408 |
| **68** | 542 | 1.1 | 21.1 | 5020 | **F312_21.1 S4 ME4SA4** | 407 | **F312_21.1 P112 BE112M4** | 408 |
| **76** | 485 | 2.2 | 18.9 | 7150 | **F412_18.9 S4 ME4SA4** | 411 | **F412_18.9 P112 BE112M4** | 412 |
| **77** | 483 | 3.2 | 18.8 | 9640 | **F512_18.8 S4 ME4SA4** | 415 | **F512_18.8 P112 BE112M4** | 416 |
| **78** | 474 | 1.3 | 18.5 | 4980 | **F312_18.5 S4 ME4SA4** | 407 | **F312_18.5 P112 BE112M4** | 408 |
| **84** | 439 | 2.4 | 17.1 | 7030 | **F412_17.1 S4 ME4SA4** | 411 | **F412_17.1 P112 BE112M4** | 412 |
| **86** | 431 | 1.4 | 16.8 | 4930 | **F312_16.8 S4 ME4SA4** | 407 | **F312_16.8 P112 BE112M4** | 408 |
| **98** | 375 | 2.7 | 14.6 | 6820 | **F412_14.6 S4 ME4SA4** | 411 | **F412_14.6 P112 BE112M4** | 412 |
| **103** | 358 | 1.7 | 13.9 | 4820 | **F312_13.9 S4 ME4SA4** | 407 | **F312_13.9 P112 BE112M4** | 408 |
| **113** | 326 | 1.8 | 12.7 | 4750 | **F312_12.7 S4 ME4SA4** | 407 | **F312_12.7 P112 BE112M4** | 408 |
| **134** | 276 | 3.3 | 10.8 | 6380 | **F412_10.8 S4 ME4SA4** | 411 | **F412_10.8 P112 BE112M4** | 412 |
| **134** | 276 | 2.2 | 10.7 | 4620 | **F312_10.7 S4 ME4SA4** | 407 | **F312_10.7 P112 BE112M4** | 408 |
| **158** | 234 | 3.0 | 9.1 | 6160 | **F412_9.1 S4 ME4SA4** | 411 | **F412_9.1 P112 BE112M4** | 412 |
| **160** | 231 | 1.7 | 9.0 | 4420 | **F312_9.0 S4 ME4SA4** | 407 | **F312_9.0 P112 BE112M4** | 408 |
| **175** | 211 | 1.8 | 8.2 | 4350 | **F312_8.2 S4 ME4SA4** | 407 | **F312_8.2 P112 BE112M4** | 408 |
| **207** | 178 | 2.2 | 6.9 | 4200 | **F312_6.9 S4 ME4SA4** | 407 | **F312_6.9 P112 BE112M4** | 408 |
| **228** | 159 | 3.5 | 12.7 | 4120 | **F312_12.7 S4 ME4SA2** | 407 | **F312_12.7 P112 BE112M2** | 408 |
| **322** | 113 | 3.4 | 9.0 | 3760 | **F312_9.0 S4 ME4SA2** | 407 | **F312_9.0 P112 BE112M2** | 408 |



# 5.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **2.9** | 16057 | 0.9 | 495.6 | 55000 | **F904_495.6 S4 ME4SB4** | 429 | **F904_495.6 P132 BE132S4** | 430 |
| **3.2** | 14821 | 0.9 | 457.5 | 55000 | **F904_457.5 S4 ME4SB4** | 429 | **F904_457.5 P132 BE132S4** | 430 |
| **3.7** | 12701 | 1.1 | 392.0 | 55000 | **F904_392.0 S4 ME4SB4** | 429 | **F904_392.0 P132 BE132S4** | 430 |
| **4.0** | 11724 | 1.2 | 361.8 | 55000 | **F904_361.8 S4 ME4SB4** | 429 | **F904_361.8 P132 BE132S4** | 430 |
| **5.0** | 9432 | 1.5 | 291.1 | 55000 | **F904_291.1 S4 ME4SB4** | 429 | **F904_291.1 P132 BE132S4** | 430 |
| **5.3** | 8874 | 0.9 | 273.9 | 45000 | **F804_273.9 S4 ME4SB4** | 426 | **F804_273.9 P132 BE132S4** | 427 |
| **5.4** | 8707 | 1.6 | 268.7 | 55000 | **F904_268.7 S4 ME4SB4** | 429 | **F904_268.7 P132 BE132S4** | 430 |
| **6.3** | 7497 | 1.9 | 231.4 | 55000 | **F904_231.4 S4 ME4SB4** | 429 | **F904_231.4 P132 BE132S4** | 430 |
| **6.7** | 7079 | 1.1 | 218.5 | 45000 | **F804_218.5 S4 ME4SB4** | 426 | **F804_218.5 P132 BE132S4** | 427 |
| **6.8** | 6920 | 2.0 | 213.6 | 55000 | **F904_213.6 S4 ME4SB4** | 429 | **F904_213.6 P132 BE132S4** | 430 |
| **7.3** | 6696 | 1.2 | 200.0 | 45000 | **F803_200.0 S4 ME4SB4** | 426 | **F803_200.0 P132 BE132S4** | 427 |
| **7.5** | 6500 | 2.2 | 194.2 | 55000 | **F903_194.2 S4 ME4SB4** | 429 | **F903_194.2 P132 BE132S4** | 430 |
| **7.9** | 6181 | 1.3 | 184.6 | 45000 | **F803_184.6 S4 ME4SB4** | 426 | **F803_184.6 P132 BE132S4** | 427 |
| **8.1** | 6000 | 2.3 | 179.2 | 55000 | **F903_179.2 S4 ME4SB4** | 429 | **F903_179.2 P132 BE132S4** | 430 |
| **8.8** | 5580 | 0.9 | 166.7 | 35000 | **F703_166.7 S4 ME4SB4** | 423 | **F703_166.7 P132 BE132S4** | 424 |
| **9.0** | 5452 | 2.6 | 162.8 | 55000 | **F903_162.8 S4 ME4SB4** | 429 | **F903_162.8 P132 BE132S4** | 430 |
| **9.1** | 5364 | 1.5 | 160.2 | 45000 | **F803_160.2 S4 ME4SB4** | 426 | **F803_160.2 P132 BE132S4** | 427 |
| **9.5** | 5151 | 1.0 | 153.8 | 35000 | **F703_153.8 S4 ME4SB4** | 423 | **F703_153.8 P132 BE132S4** | 424 |
| **9.7** | 5032 | 2.8 | 150.3 | 55000 | **F903_150.3 S4 ME4SB4** | 429 | **F903_150.3 P132 BE132S4** | 430 |
| **9.9** | 4952 | 1.6 | 147.9 | 45000 | **F803_147.9 S4 ME4SB4** | 426 | **F803_147.9 P132 BE132S4** | 427 |
| **10.6** | 4598 | 3.0 | 137.3 | 55000 | **F903_137.3 S4 ME4SB4** | 429 | **F903_137.3 P132 BE132S4** | 430 |
| **11.0** | 4451 | 1.1 | 133.0 | 35000 | **F703_133.0 S4 ME4SB4** | 423 | **F703_133.0 P132 BE132S4** | 424 |
| **11.0** | 4443 | 1.8 | 132.7 | 45000 | **F803_132.7 S4 ME4SB4** | 426 | **F803_132.7 P132 BE132S4** | 427 |
| **11.5** | 4244 | 3.3 | 126.8 | 55000 | **F903_126.8 S4 ME4SB4** | 429 | **F903_126.8 P132 BE132S4** | 430 |
| **11.9** | 4109 | 1.2 | 122.7 | 35000 | **F703_122.7 S4 ME4SB4** | 423 | **F703_122.7 P132 BE132S4** | 424 |
| **11.9** | 4101 | 2.0 | 122.5 | 45000 | **F803_122.5 S4 ME4SB4** | 426 | **F803_122.5 P132 BE132S4** | 427 |
| **12.8** | 3808 | 2.1 | 113.8 | 45000 | **F803_113.8 S4 ME4SB4** | 426 | **F803_113.8 P132 BE132S4** | 427 |
| **13.3** | 3670 | 1.4 | 109.6 | 35000 | **F703_109.6 S4 ME4SB4** | 423 | **F703_109.6 P132 BE132S4** | 424 |
| **13.9** | 3515 | 2.3 | 105.0 | 45000 | **F803_105.0 S4 ME4SB4** | 426 | **F803_105.0 P132 BE132S4** | 427 |
| **14.4** | 3388 | 1.5 | 101.2 | 35000 | **F703_101.2 S4 ME4SB4** | 423 | **F703_101.2 P132 BE132S4** | 424 |
| **15.8** | 3097 | 1.6 | 92.5 | 35000 | **F703_92.5 S4 ME4SB4** | 423 | **F703_92.5 P132 BE132S4** | 424 |
| **15.8** | 3090 | 2.6 | 92.3 | 45000 | **F803_92.3 S4 ME4SB4** | 426 | **F803_92.3 P132 BE132S4** | 427 |
| **17.1** | 2859 | 1.7 | 85.4 | 35000 | **F703_85.4 S4 ME4SB4** | 423 | **F703_85.4 P132 BE132S4** | 424 |
| **17.1** | 2853 | 2.8 | 85.2 | 45000 | **F803_85.2 S4 ME4SB4** | 426 | **F803_85.2 P132 BE132S4** | 427 |
| **17.4** | 2813 | 1.0 | 84.0 | 20000 | **F603_84.0 S4 ME4SB4** | 419 | **F603_84.0 P132 BE132S4** | 420 |
| **18.8** | 2597 | 1.1 | 77.6 | 20000 | **F603_77.6 S4 ME4SB4** | 419 | **F603_77.6 P132 BE132S4** | 420 |
| **19.1** | 2553 | 3.1 | 76.3 | 45000 | **F803_76.3 S4 ME4SB4** | 426 | **F803_76.3 P132 BE132S4** | 427 |
| **19.8** | 2463 | 2.0 | 73.6 | 35000 | **F703_73.6 S4 ME4SB4** | 423 | **F703_73.6 P132 BE132S4** | 424 |
| **20.7** | 2356 | 3.4 | 70.4 | 45000 | **F803_70.4 S4 ME4SB4** | 426 | **F803_70.4 P132 BE132S4** | 427 |
| **21.4** | 2286 | 1.3 | 68.3 | 20000 | **F603_68.3 S4 ME4SB4** | 419 | **F603_68.3 P132 BE132S4** | 420 |
| **21.5** | 2273 | 2.2 | 67.9 | 35000 | **F703_67.9 S4 ME4SB4** | 423 | **F703_67.9 P132 BE132S4** | 424 |
| **23.2** | 2110 | 1.4 | 63.0 | 20000 | **F603_63.0 S4 ME4SB4** | 419 | **F603_63.0 P132 BE132S4** | 420 |
| **23.4** | 2093 | 2.4 | 62.5 | 35000 | **F703_62.5 S4 ME4SB4** | 423 | **F703_62.5 P132 BE132S4** | 424 |
| **25.3** | 1932 | 2.6 | 57.7 | 35000 | **F703_57.7 S4 ME4SB4** | 423 | **F703_57.7 P132 BE132S4** | 424 |
| **28.2** | 1735 | 1.7 | 51.8 | 20000 | **F603_51.8 S4 ME4SB4** | 419 | **F603_51.8 P132 BE132S4** | 420 |
| **30** | 1639 | 3.1 | 49.0 | 35000 | **F703_49.0 S4 ME4SB4** | 423 | **F703_49.0 P132 BE132S4** | 424 |
| **30** | 1637 | 1.1 | 48.9 | 10300 | **F513_48.9 S4 ME4SB4** | 415 | **F513_48.9 P132 BE132S4** | 416 |
| **31** | 1602 | 1.8 | 47.8 | 20000 | **F603_47.8 S4 ME4SB4** | 419 | **F603_47.8 P132 BE132S4** | 420 |
| **32** | 1513 | 3.3 | 45.2 | 34300 | **F703_45.2 S4 ME4SB4** | 423 | **F703_45.2 P132 BE132S4** | 424 |
| **35** | 1409 | 2.1 | 42.1 | 20000 | **F603_42.1 S4 ME4SB4** | 419 | **F603_42.1 P132 BE132S4** | 420 |
| **38** | 1301 | 2.2 | 38.8 | 20000 | **F603_38.8 S4 ME4SB4** | 419 | **F603_38.8 P132 BE132S4** | 420 |
| **39** | 1270 | 1.3 | 37.1 | 10300 | **F512_37.1 S4 ME4SB4** | 415 | **F512_37.1 P132 BE132S4** | 416 |
| **46** | 1074 | 2.7 | 32.1 | 20000 | **F603_32.1 S4 ME4SB4** | 419 | **F603_32.1 P132 BE132S4** | 420 |
| **48** | 1030 | 1.1 | 30.1 | 6580 | **F412_30.1 S4 ME4SB4** | 411 | **F412_30.1 P132 BE132S4** | 412 |
| **49** | 1027 | 1.7 | 30.0 | 9950 | **F512_30.0 S4 ME4SB4** | 415 | **F512_30.0 P132 BE132S4** | 416 |
| **49** | 992 | 2.9 | 29.6 | 20000 | **F603_29.6 S4 ME4SB4** | 419 | **F603_29.6 P132 BE132S4** | 420 |
| **57** | 851 | 2.2 | 25.4 | 20000 | **F603_25.4 S4 ME4SB4** | 419 | **F603_25.4 P132 BE132S4** | 420 |

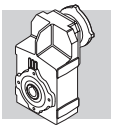


## 5.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **61** | 825 | 1.3 | 24.1 | 6580 | **F412_24.1 S4 ME4SB4** | 411 | **F412_24.1 P132 BE132S4** | 412 |
| **61** | 814 | 2.0 | 23.8 | 9560 | **F512_23.8 S4 ME4SB4** | 415 | **F512_23.8 P132 BE132S4** | 416 |
| **62** | 786 | 2.4 | 23.5 | 20000 | **F603_23.5 S4 ME4SB4** | 419 | **F603_23.5 P132 BE132S4** | 420 |
| **71** | 692 | 2.7 | 20.7 | 20000 | **F603_20.7 S4 ME4SB4** | 419 | **F603_20.7 P132 BE132S4** | 420 |
| **77** | 638 | 3.0 | 19.1 | 20000 | **F603_19.1 S4 ME4SB4** | 419 | **F603_19.1 P132 BE132S4** | 420 |
| **77** | 646 | 1.7 | 18.9 | 6480 | **F412_18.9 S4 ME4SB4** | 411 | **F412_18.9 P132 BE132S4** | 412 |
| **78** | 644 | 2.4 | 18.8 | 9110 | **F512_18.8 S4 ME4SB4** | 415 | **F512_18.8 P132 BE132S4** | 416 |
| **79** | 632 | 0.9 | 18.5 | 4480 | **F312_18.5 S4 ME4SB4** | 407 | **F312_18.5 P132 BE132S4** | 408 |
| **85** | 585 | 1.8 | 17.1 | 6410 | **F412_17.1 S4 ME4SB4** | 411 | **F412_17.1 P132 BE132S4** | 412 |
| **87** | 575 | 1.0 | 16.8 | 4300 | **F312_16.8 S4 ME4SB4** | 407 | **F312_16.8 P132 BE132S4** | 408 |
| **100** | 500 | 2.0 | 14.6 | 6280 | **F412_14.6 S4 ME4SB4** | 411 | **F412_14.6 P132 BE132S4** | 412 |
| **104** | 478 | 3.0 | 14.0 | 8520 | **F512_14.0 S4 ME4SB4** | 415 | **F512_14.0 P132 BE132S4** | 416 |
| **105** | 477 | 1.3 | 13.9 | 4180 | **F312_13.9 S4 ME4SB4** | 407 | **F312_13.9 P132 BE132S4** | 408 |
| **115** | 435 | 1.4 | 12.7 | 3980 | **F312_12.7 S4 ME4SB4** | 407 | **F312_12.7 P132 BE132S4** | 408 |
| **131** | 380 | 3.5 | 11.1 | 8050 | **F512_11.1 S4 ME4SB4** | 415 | **F512_11.1 P132 BE132S4** | 416 |
| **136** | 368 | 2.4 | 10.8 | 5970 | **F412_10.8 S4 ME4SB4** | 411 | **F412_10.8 P132 BE132S4** | 412 |
| **136** | 368 | 1.6 | 10.7 | 3880 | **F312_10.7 S4 ME4SB4** | 407 | **F312_10.7 P132 BE132S4** | 408 |
| **160** | 312 | 2.2 | 9.1 | 5810 | **F412_9.1 S4 ME4SB4** | 411 | **F412_9.1 P132 BE132S4** | 412 |
| **161** | 310 | 3.6 | 9.1 | 7590 | **F512_9.1 S4 ME4SB4** | 415 | **F512_9.1 P132 BE132S4** | 416 |
| **162** | 308 | 1.3 | 9.0 | 3850 | **F312_9.0 S4 ME4SB4** | 407 | **F312_9.0 P132 BE132S4** | 408 |
| **177** | 281 | 1.4 | 8.2 | 3750 | **F312_8.2 S4 ME4SB4** | 407 | **F312_8.2 P132 BE132S4** | 408 |
| **200** | 250 | 3.3 | 14.6 | 5510 | **F412_14.6 S4 ME4SB2** | 411 | **F412_14.6 P132 BE132SA2** | 412 |
| **210** | 238 | 1.6 | 6.9 | 3610 | **F312_6.9 S4 ME4SB4** | 407 | **F312_6.9 P132 BE132S4** | 408 |
| **217** | 230 | 2.8 | 6.7 | 5430 | **F412_6.7 S4 ME4SB4** | 411 | **F412_6.7 P132 BE132S4** | 412 |
| **272** | 184 | 4.0 | 10.8 | 5120 | **F412_10.8 S4 ME4SB2** | 411 | **F412_10.8 P132 BE132SA2** | 412 |
| **320** | 156 | 3.9 | 9.1 | 4930 | **F412_9.1 S4 ME4SB2** | 411 | **F412_9.1 P132 BE132SA2** | 412 |

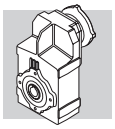
## 7.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **4.0** | 15957 | 0.9 | 361.8 | 55000 | **F904_361.8 S4 ME4LA4** | 429 | **F904_361.8 P132 BE132MA4** | 430 |
| **5.0** | 12838 | 1.1 | 291.1 | 55000 | **F904_291.1 S4 ME4LA4** | 429 | **F904_291.1 P132 BE132MA4** | 430 |
| **5.4** | 11851 | 1.2 | 268.7 | 55000 | **F904_268.7 S4 ME4LA4** | 429 | **F904_268.7 P132 BE132MA4** | 430 |
| **6.3** | 10204 | 1.4 | 231.4 | 55000 | **F904_231.4 S4 ME4LA4** | 429 | **F904_231.4 P132 BE132MA4** | 430 |
| **6.8** | 9419 | 1.5 | 213.6 | 55000 | **F904_213.6 S4 ME4LA4** | 429 | **F904_213.6 P132 BE132MA4** | 430 |
| **7.3** | 9114 | 0.9 | 200.0 | 45000 | **F803_200.0 S4 ME4LA4** | 426 | **F803_200.0 P132 BE132MA4** | 427 |
| **7.5** | 8848 | 1.6 | 194.2 | 55000 | **F903_194.2 S4 ME4LA4** | 429 | **F903_194.2 P132 BE132MA4** | 430 |
| **7.9** | 8413 | 1.0 | 184.6 | 45000 | **F803_184.6 S4 ME4LA4** | 426 | **F803_184.6 P132 BE132MA4** | 427 |
| **8.1** | 8167 | 1.7 | 179.2 | 55000 | **F903_179.2 S4 ME4LA4** | 429 | **F903_179.2 P132 BE132MA4** | 430 |
| **8.9** | 7420 | 1.9 | 162.8 | 55000 | **F903_162.8 S4 ME4LA4** | 429 | **F903_162.8 P132 BE132MA4** | 430 |
| **9.1** | 7302 | 1.1 | 160.2 | 45000 | **F803_160.2 S4 ME4LA4** | 426 | **F803_160.2 P132 BE132MA4** | 427 |
| **9.7** | 6849 | 2.0 | 150.3 | 55000 | **F903_150.3 S4 ME4LA4** | 429 | **F903_150.3 P132 BE132MA4** | 430 |
| **9.8** | 6740 | 1.2 | 147.9 | 45000 | **F803_147.9 S4 ME4LA4** | 426 | **F803_147.9 P132 BE132MA4** | 427 |
| **10.6** | 6259 | 2.2 | 137.3 | 55000 | **F903_137.3 S4 ME4LA4** | 429 | **F903_137.3 P132 BE132MA4** | 430 |
| **11.0** | 6047 | 1.3 | 132.7 | 45000 | **F803_132.7 S4 ME4LA4** | 426 | **F803_132.7 P132 BE132MA4** | 427 |
| **11.5** | 5777 | 2.4 | 126.8 | 55000 | **F903_126.8 S4 ME4LA4** | 429 | **F903_126.8 P132 BE132MA4** | 430 |
| **11.9** | 5593 | 0.9 | 122.7 | 35000 | **F703_122.7 S4 ME4LA4** | 423 | **F703_122.7 P132 BE132MA4** | 424 |
| **11.9** | 5582 | 1.4 | 122.5 | 45000 | **F803_122.5 S4 ME4LA4** | 426 | **F803_122.5 P132 BE132MA4** | 427 |
| **12.8** | 5184 | 1.5 | 113.8 | 45000 | **F803_113.8 S4 ME4LA4** | 426 | **F803_113.8 P132 BE132MA4** | 427 |
| **13.0** | 5101 | 2.7 | 111.9 | 55000 | **F903_111.9 S4 ME4LA4** | 429 | **F903_111.9 P132 BE132MA4** | 430 |
| **13.3** | 4995 | 1.0 | 109.6 | 35000 | **F703_109.6 S4 ME4LA4** | 423 | **F703_109.6 P132 BE132MA4** | 424 |
| **13.9** | 4785 | 1.7 | 105.0 | 45000 | **F803_105.0 S4 ME4LA4** | 426 | **F803_105.0 P132 BE132MA4** | 427 |
| **14.1** | 4709 | 3.0 | 103.3 | 55000 | **F903_103.3 S4 ME4LA4** | 429 | **F903_103.3 P132 BE132MA4** | 430 |

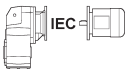


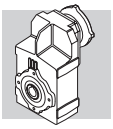
# 7.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **14.4** | 4611 | 1.1 | 101.2 | 35000 | **F703_101.2 S4 ME4LA4** | 423 | **F703_101.2 P132 BE132MA4** | 424 |
| **15.2** | 4364 | 3.2 | 95.8 | 55000 | **F903_95.8 S4 ME4LA4** | 429 | **F903_95.8 P132 BE132MA4** | 430 |
| **15.7** | 4215 | 1.2 | 92.5 | 35000 | **F703_92.5 S4 ME4LA4** | 423 | **F703_92.5 P132 BE132MA4** | 424 |
| **15.8** | 4206 | 1.9 | 92.3 | 45000 | **F803_92.3 S4 ME4LA4** | 426 | **F803_92.3 P132 BE132MA4** | 427 |
| **16.5** | 4028 | 3.5 | 88.4 | 55000 | **F903_88.4 S4 ME4LA4** | 429 | **F903_88.4 P132 BE132MA4** | 430 |
| **17.0** | 3891 | 1.3 | 85.4 | 35000 | **F703_85.4 S4 ME4LA4** | 423 | **F703_85.4 P132 BE132MA4** | 424 |
| **17.1** | 3883 | 2.1 | 85.2 | 45000 | **F803_85.2 S4 ME4LA4** | 426 | **F803_85.2 P132 BE132MA4** | 427 |
| **19.1** | 3475 | 2.3 | 76.3 | 45000 | **F803_76.3 S4 ME4LA4** | 426 | **F803_76.3 P132 BE132MA4** | 427 |
| **19.8** | 3352 | 1.5 | 73.6 | 35000 | **F703_73.6 S4 ME4LA4** | 423 | **F703_73.6 P132 BE132MA4** | 424 |
| **20.7** | 3207 | 2.5 | 70.4 | 44700 | **F803_70.4 S4 ME4LA4** | 426 | **F803_70.4 P132 BE132MA4** | 427 |
| **21.3** | 3112 | 0.9 | 68.3 | 20000 | **F603_68.3 S4 ME4LA4** | 419 | **F603_68.3 P132 BE132MA4** | 420 |
| **21.4** | 3094 | 1.6 | 67.9 | 35000 | **F703_67.9 S4 ME4LA4** | 423 | **F703_67.9 P132 BE132MA4** | 424 |
| **23.1** | 2872 | 1.0 | 63.0 | 20000 | **F603_63.0 S4 ME4LA4** | 419 | **F603_63.0 P132 BE132MA4** | 420 |
| **23.3** | 2848 | 1.8 | 62.5 | 35000 | **F703_62.5 S4 ME4LA4** | 423 | **F703_62.5 P132 BE132MA4** | 424 |
| **23.7** | 2801 | 2.9 | 61.5 | 43500 | **F803_61.5 S4 ME4LA4** | 426 | **F803_61.5 P132 BE132MA4** | 427 |
| **25.2** | 2629 | 1.9 | 57.7 | 34900 | **F703_57.7 S4 ME4LA4** | 423 | **F703_57.7 P132 BE132MA4** | 424 |
| **25.6** | 2585 | 3.1 | 56.7 | 42600 | **F803_56.7 S4 ME4LA4** | 426 | **F803_56.7 P132 BE132MA4** | 427 |
| **28.1** | 2362 | 1.2 | 51.8 | 20000 | **F603_51.8 S4 ME4LA4** | 419 | **F603_51.8 P132 BE132MA4** | 420 |
| **29.7** | 2231 | 2.2 | 49.0 | 33800 | **F703_49.0 S4 ME4LA4** | 423 | **F703_49.0 P132 BE132MA4** | 424 |
| **30** | 2180 | 1.3 | 47.8 | 20000 | **F603_47.8 S4 ME4LA4** | 419 | **F603_47.8 P132 BE132MA4** | 420 |
| **32** | 2059 | 2.4 | 45.2 | 33200 | **F703_45.2 S4 ME4LA4** | 423 | **F703_45.2 P132 BE132MA4** | 424 |
| **35** | 1918 | 1.5 | 42.1 | 20000 | **F603_42.1 S4 ME4LA4** | 419 | **F603_42.1 P132 BE132MA4** | 420 |
| **37** | 1770 | 1.6 | 38.8 | 20000 | **F603_38.8 S4 ME4LA4** | 419 | **F603_38.8 P132 BE132MA4** | 420 |
| **39** | 1729 | 1.0 | 37.1 | 9090 | **F512_37.1 S4 ME4LA4** | 415 | **F512_37.1 P132 BE132MA4** | 416 |
| **45** | 1462 | 2.0 | 32.1 | 20000 | **F603_32.1 S4 ME4LA4** | 419 | **F603_32.1 P132 BE132MA4** | 420 |
| **48** | 1398 | 1.2 | 30.0 | 9010 | **F512_30.0 S4 ME4LA4** | 415 | **F512_30.0 P132 BE132MA4** | 416 |
| **49** | 1350 | 2.1 | 29.6 | 20000 | **F603_29.6 S4 ME4LA4** | 419 | **F603_29.6 P132 BE132MA4** | 420 |
| **57** | 1158 | 1.6 | 25.4 | 20000 | **F603_25.4 S4 ME4LA4** | 419 | **F603_25.4 P132 BE132MA4** | 420 |
| **60** | 1123 | 1.0 | 24.1 | 5500 | **F412_24.1 S4 ME4LA4** | 411 | **F412_24.1 P132 BE132MA4** | 412 |
| **61** | 1108 | 1.5 | 23.8 | 8810 | **F512_23.8 S4 ME4LA4** | 415 | **F512_23.8 P132 BE132MA4** | 416 |
| **62** | 1069 | 1.8 | 23.5 | 20000 | **F603_23.5 S4 ME4LA4** | 419 | **F603_23.5 P132 BE132MA4** | 420 |
| **70** | 941 | 2.0 | 20.7 | 20000 | **F603_20.7 S4 ME4LA4** | 419 | **F603_20.7 P132 BE132MA4** | 420 |
| **76** | 869 | 2.2 | 19.1 | 20000 | **F603_19.1 S4 ME4LA4** | 419 | **F603_19.1 P132 BE132MA4** | 420 |
| **77** | 879 | 1.2 | 18.9 | 5630 | **F412_18.9 S4 ME4LA4** | 411 | **F412_18.9 P132 BE132MA4** | 412 |
| **77** | 876 | 1.8 | 18.8 | 8520 | **F512_18.8 S4 ME4LA4** | 415 | **F512_18.8 P132 BE132MA4** | 416 |
| **85** | 797 | 1.3 | 17.1 | 5650 | **F412_17.1 S4 ME4LA4** | 411 | **F412_17.1 P132 BE132MA4** | 412 |
| **93** | 715 | 2.7 | 15.7 | 20000 | **F603_15.7 S4 ME4LA4** | 419 | **F603_15.7 P132 BE132MA4** | 420 |
| **99** | 681 | 1.5 | 14.6 | 5630 | **F412_14.6 S4 ME4LA4** | 411 | **F412_14.6 P132 BE132MA4** | 412 |
| **101** | 660 | 2.9 | 14.5 | 20000 | **F603_14.5 S4 ME4LA4** | 419 | **F603_14.5 P132 BE132MA4** | 420 |
| **104** | 651 | 2.2 | 14.0 | 8080 | **F512_14.0 S4 ME4LA4** | 415 | **F512_14.0 P132 BE132MA4** | 416 |
| **104** | 649 | 0.9 | 13.9 | 3980 | **F312_13.9 S4 ME4LA4** | 407 | **F312_13.9 P132 BE132MA4** | 408 |
| **114** | 580 | 3.3 | 12.7 | 19900 | **F603_12.7 S4 ME4LA4** | 419 | **F603_12.7 P132 BE132MA4** | 420 |
| **114** | 592 | 1.0 | 12.7 | 3880 | **F312_12.7 S4 ME4LA4** | 407 | **F312_12.7 P132 BE132MA4** | 408 |
| **124** | 536 | 3.5 | 11.8 | 19500 | **F603_11.8 S4 ME4LA4** | 419 | **F603_11.8 P132 BE132MA4** | 420 |
| **131** | 517 | 2.6 | 11.1 | 7700 | **F512_11.1 S4 ME4LA4** | 415 | **F512_11.1 P132 BE132MA4** | 416 |
| **135** | 501 | 1.8 | 10.8 | 5490 | **F412_10.8 S4 ME4LA4** | 411 | **F412_10.8 P132 BE132MA4** | 412 |
| **135** | 500 | 1.2 | 10.7 | 3730 | **F312_10.7 S4 ME4LA4** | 407 | **F312_10.7 P132 BE132MA4** | 408 |
| **159** | 425 | 1.6 | 9.1 | 5410 | **F412_9.1 S4 ME4LA4** | 411 | **F412_9.1 P132 BE132MA4** | 412 |
| **161** | 421 | 2.6 | 9.1 | 7290 | **F512_9.1 S4 ME4LA4** | 415 | **F512_9.1 P132 BE132MA4** | 416 |
| **161** | 420 | 0.9 | 9.0 | 3770 | **F312_9.0 S4 ME4LA4** | 407 | **F312_9.0 P132 BE132MA4** | 408 |
| **177** | 383 | 1.0 | 8.2 | 3680 | **F312_8.2 S4 ME4LA4** | 407 | **F312_8.2 P132 BE132MA4** | 408 |
| **202** | 335 | 2.9 | 7.2 | 6900 | **F512_7.2 S4 ME4LA4** | 415 | **F512_7.2 P132 BE132MA4** | 416 |
| **209** | 323 | 1.2 | 6.9 | 3520 | **F312_6.9 S4 ME4LA4** | 407 | **F312_6.9 P132 BE132MA4** | 408 |
| **216** | 313 | 2.0 | 6.7 | 5140 | **F412_6.7 S4 ME4LA4** | 411 | **F412_6.7 P132 BE132MA4** | 412 |
| **272** | 251 | 2.9 | 10.8 | 4880 | **F412_10.8 S4 ME4LA2** | 411 | **F412_10.8 P132 BE132SB2** | 412 |
| **320** | 213 | 2.9 | 9.1 | 4730 | **F412_9.1 S4 ME4LA2** | 411 | **F412_9.1 P132 BE132SB2** | 412 |
| **435** | 156 | 3.3 | 6.7 | 4390 | **F412_6.7 S4 ME4LA2** | 411 | **F412_6.7 P132 BE132SB2** | 412 |



# 9.2 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **5.0** | 15983 | 0.9 | 291.1 | 55000 | **F904_291.1 S4 ME4LB4** | 429 | **F904_291.1 P132 BE132MB4** | 430 |
| **5.4** | 14753 | 0.9 | 268.7 | 55000 | **F904_268.7 S4 ME4LB4** | 429 | **F904_268.7 P132 BE132MB4** | 430 |
| **6.3** | 12703 | 1.1 | 231.4 | 55000 | **F904_231.4 S4 ME4LB4** | 429 | **F904_231.4 P132 BE132MB4** | 430 |
| **6.8** | 11726 | 1.2 | 213.6 | 55000 | **F904_213.6 S4 ME4LB4** | 429 | **F904_213.6 P132 BE132MB4** | 430 |
| **7.5** | 11014 | 1.3 | 194.2 | 55000 | **F903_194.2 S4 ME4LB4** | 429 | **F903_194.2 P132 BE132MB4** | 430 |
| **8.1** | 10167 | 1.4 | 179.2 | 55000 | **F903_179.2 S4 ME4LB4** | 429 | **F903_179.2 P132 BE132MB4** | 430 |
| **8.9** | 9237 | 1.5 | 162.8 | 55000 | **F903_162.8 S4 ME4LB4** | 429 | **F903_162.8 P132 BE132MB4** | 430 |
| **9.0** | 9090 | 0.9 | 160.2 | 45000 | **F803_160.2 S4 ME4LB4** | 426 | **F803_160.2 P132 BE132MB4** | 427 |
| **9.6** | 8527 | 1.6 | 150.3 | 55000 | **F903_150.3 S4 ME4LB4** | 429 | **F903_150.3 P132 BE132MB4** | 430 |
| **9.8** | 8390 | 1.0 | 147.9 | 45000 | **F803_147.9 S4 ME4LB4** | 426 | **F803_147.9 P132 BE132MB4** | 427 |
| **10.6** | 7791 | 1.8 | 137.3 | 55000 | **F903_137.3 S4 ME4LB4** | 429 | **F903_137.3 P132 BE132MB4** | 430 |
| **10.9** | 7528 | 1.1 | 132.7 | 45000 | **F803_132.7 S4 ME4LB4** | 426 | **F803_132.7 P132 BE132MB4** | 427 |
| **11.4** | 7192 | 1.9 | 126.8 | 55000 | **F903_126.8 S4 ME4LB4** | 429 | **F903_126.8 P132 BE132MB4** | 430 |
| **11.8** | 6949 | 1.2 | 122.5 | 45000 | **F803_122.5 S4 ME4LB4** | 426 | **F803_122.5 P132 BE132MB4** | 427 |
| **12.7** | 6453 | 1.2 | 113.8 | 45000 | **F803_113.8 S4 ME4LB4** | 426 | **F803_113.8 P132 BE132MB4** | 427 |
| **13.0** | 6351 | 2.2 | 111.9 | 55000 | **F903_111.9 S4 ME4LB4** | 429 | **F903_111.9 P132 BE132MB4** | 430 |
| **13.8** | 5957 | 1.3 | 105.0 | 45000 | **F803_105.0 S4 ME4LB4** | 426 | **F803_105.0 P132 BE132MB4** | 427 |
| **14.0** | 5862 | 2.4 | 103.3 | 55000 | **F903_103.3 S4 ME4LB4** | 429 | **F903_103.3 P132 BE132MB4** | 430 |
| **15.1** | 5432 | 2.6 | 95.8 | 55000 | **F903_95.8 S4 ME4LB4** | 429 | **F903_95.8 P132 BE132MB4** | 430 |
| **15.7** | 5248 | 1.0 | 92.5 | 35000 | **F703_92.5 S4 ME4LB4** | 423 | **F703_92.5 P132 BE132MB4** | 424 |
| **15.7** | 5237 | 1.5 | 92.3 | 45000 | **F803_92.3 S4 ME4LB4** | 426 | **F803_92.3 P132 BE132MB4** | 427 |
| **16.4** | 5015 | 2.8 | 88.4 | 55000 | **F903_88.4 S4 ME4LB4** | 429 | **F903_88.4 P132 BE132MB4** | 430 |
| **17.0** | 4844 | 1.0 | 85.4 | 35000 | **F703_85.4 S4 ME4LB4** | 423 | **F703_85.4 P132 BE132MB4** | 424 |
| **17.0** | 4834 | 1.7 | 85.2 | 45000 | **F803_85.2 S4 ME4LB4** | 426 | **F803_85.2 P132 BE132MB4** | 427 |
| **18.9** | 4348 | 3.2 | 76.7 | 55000 | **F903_76.7 S4 ME4LB4** | 429 | **F903_76.7 P132 BE132MB4** | 430 |
| **19.0** | 4326 | 1.8 | 76.3 | 44100 | **F803_76.3 S4 ME4LB4** | 426 | **F803_76.3 P132 BE132MB4** | 427 |
| **19.7** | 4173 | 1.2 | 73.6 | 35000 | **F703_73.6 S4 ME4LB4** | 423 | **F703_73.6 P132 BE132MB4** | 424 |
| **20.5** | 4014 | 3.5 | 70.8 | 55000 | **F903_70.8 S4 ME4LB4** | 429 | **F903_70.8 P132 BE132MB4** | 430 |
| **20.6** | 3993 | 2.0 | 70.4 | 43700 | **F803_70.4 S4 ME4LB4** | 426 | **F803_70.4 P132 BE132MB4** | 427 |
| **21.4** | 3852 | 1.3 | 67.9 | 34600 | **F703_67.9 S4 ME4LB4** | 423 | **F703_67.9 P132 BE132MB4** | 424 |
| **23.2** | 3546 | 1.4 | 62.5 | 34200 | **F703_62.5 S4 ME4LB4** | 423 | **F703_62.5 P132 BE132MB4** | 424 |
| **23.6** | 3487 | 2.3 | 61.5 | 42200 | **F803_61.5 S4 ME4LB4** | 426 | **F803_61.5 P132 BE132MB4** | 427 |
| **25.1** | 3273 | 1.5 | 57.7 | 33700 | **F703_57.7 S4 ME4LB4** | 423 | **F703_57.7 P132 BE132MB4** | 424 |
| **25.6** | 3218 | 2.5 | 56.7 | 41400 | **F803_56.7 S4 ME4LB4** | 426 | **F803_56.7 P132 BE132MB4** | 427 |
| **28.0** | 2940 | 1.0 | 51.8 | 20000 | **F603_51.8 S4 ME4LB4** | 419 | **F603_51.8 P132 BE132MB4** | 420 |
| **29.6** | 2777 | 1.8 | 49.0 | 32800 | **F703_49.0 S4 ME4LB4** | 423 | **F703_49.0 P132 BE132MB4** | 424 |
| **30** | 2714 | 1.1 | 47.8 | 20000 | **F603_47.8 S4 ME4LB4** | 419 | **F603_47.8 P132 BE132MB4** | 420 |
| **32** | 2564 | 2.0 | 45.2 | 32300 | **F703_45.2 S4 ME4LB4** | 423 | **F703_45.2 P132 BE132MB4** | 424 |
| **34** | 2387 | 1.2 | 42.1 | 20000 | **F603_42.1 S4 ME4LB4** | 419 | **F603_42.1 P132 BE132MB4** | 420 |
| **37** | 2204 | 1.3 | 38.8 | 20000 | **F603_38.8 S4 ME4LB4** | 419 | **F603_38.8 P132 BE132MB4** | 420 |
| **45** | 1820 | 1.6 | 32.1 | 20000 | **F603_32.1 S4 ME4LB4** | 419 | **F603_32.1 P132 BE132MB4** | 420 |
| **48** | 1741 | 1.0 | 30.0 | 8210 | **F512_30.0 S4 ME4LB4** | 415 | **F512_30.0 P132 BE132MB4** | 416 |
| **49** | 1680 | 1.7 | 29.6 | 20000 | **F603_29.6 S4 ME4LB4** | 419 | **F603_29.6 P132 BE132MB4** | 420 |
| **57** | 1442 | 1.3 | 25.4 | 20000 | **F603_25.4 S4 ME4LB4** | 419 | **F603_25.4 P132 BE132MB4** | 420 |
| **59** | 1393 | 2.9 | 24.6 | 28300 | **F703_24.6 S4 ME4LB4** | 423 | **F703_24.6 P132 BE132MB4** | 424 |
| **61** | 1379 | 1.2 | 23.8 | 8170 | **F512_23.8 S4 ME4LB4** | 415 | **F512_23.8 P132 BE132MB4** | 416 |
| **62** | 1331 | 1.4 | 23.5 | 20000 | **F603_23.5 S4 ME4LB4** | 419 | **F603_23.5 P132 BE132MB4** | 420 |
| **64** | 1282 | 3.4 | 22.6 | 27800 | **F703_22.6 S4 ME4LB4** | 423 | **F703_22.6 P132 BE132MB4** | 424 |
| **69** | 1184 | 3.4 | 20.9 | 27200 | **F703_20.9 S4 ME4LB4** | 423 | **F703_20.9 P132 BE132MB4** | 424 |
| **70** | 1172 | 1.6 | 20.7 | 20000 | **F603_20.7 S4 ME4LB4** | 419 | **F603_20.7 P132 BE132MB4** | 420 |
| **76** | 1082 | 1.8 | 19.1 | 20000 | **F603_19.1 S4 ME4LB4** | 419 | **F603_19.1 P132 BE132MB4** | 420 |
| **77** | 1095 | 1.0 | 18.9 | 4920 | **F412_18.9 S4 ME4LB4** | 411 | **F412_18.9 P132 BE132MB4** | 412 |
| **77** | 1091 | 1.4 | 18.8 | 8020 | **F512_18.8 S4 ME4LB4** | 415 | **F512_18.8 P132 BE132MB4** | 416 |
| **85** | 992 | 1.1 | 17.1 | 5000 | **F412_17.1 S4 ME4LB4** | 411 | **F412_17.1 P132 BE132MB4** | 412 |
| **92** | 890 | 2.1 | 15.7 | 20000 | **F603_15.7 S4 ME4LB4** | 419 | **F603_15.7 P132 BE132MB4** | 420 |
| **99** | 848 | 1.2 | 14.6 | 5070 | **F412_14.6 S4 ME4LB4** | 411 | **F412_14.6 P132 BE132MB4** | 412 |
| **100** | 821 | 2.3 | 14.5 | 20000 | **F603_14.5 S4 ME4LB4** | 419 | **F603_14.5 P132 BE132MB4** | 420 |

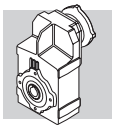


## 9.2 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **104** | 810 | 1.8 | 14.0 | 7700 | **F512_14.0 S4 ME4LB4** | 415 | **F512_14.0 P132 BE132MB4** | 416 |
| **114** | 722 | 2.6 | 12.7 | 19700 | **F603_12.7 S4 ME4LB4** | 419 | **F603_12.7 P132 BE132MB4** | 420 |
| **123** | 667 | 2.8 | 11.8 | 19300 | **F603_11.8 S4 ME4LB4** | 419 | **F603_11.8 P132 BE132MB4** | 420 |
| **131** | 644 | 2.1 | 11.1 | 7400 | **F512_11.1 S4 ME4LB4** | 415 | **F512_11.1 P132 BE132MB4** | 416 |
| **135** | 624 | 1.4 | 10.8 | 5080 | **F412_10.8 S4 ME4LB4** | 411 | **F412_10.8 P132 BE132MB4** | 412 |
| **135** | 623 | 1.0 | 10.7 | 3660 | **F312_10.7 S4 ME4LB4** | 407 | **F312_10.7 P132 BE132MB4** | 408 |
| **149** | 551 | 3.5 | 9.7 | 18400 | **F603_9.7 S4 ME4LB4** | 419 | **F603_9.7 P132 BE132MB4** | 420 |
| **159** | 529 | 1.3 | 9.1 | 5080 | **F412_9.1 S4 ME4LB4** | 411 | **F412_9.1 P132 BE132MB4** | 412 |
| **160** | 525 | 2.1 | 9.1 | 7040 | **F512_9.1 S4 ME4LB4** | 415 | **F512_9.1 P132 BE132MB4** | 416 |
| **202** | 417 | 2.3 | 7.2 | 6700 | **F512_7.2 S4 ME4LB4** | 415 | **F512_7.2 P132 BE132MB4** | 416 |
| **209** | 403 | 1.0 | 6.9 | 3450 | **F312_6.9 S4 ME4LB4** | 407 | **F312_6.9 P132 BE132MB4** | 408 |
| **216** | 390 | 1.6 | 6.7 | 4890 | **F412_6.7 S4 ME4LB4** | 411 | **F412_6.7 P132 BE132MB4** | 412 |
| **263** | 318 | 3.4 | 11.1 | 6340 | **F512_11.1 S4 ME4LB2** | 415 | **F512_11.1 P132 BE132MB2** | 416 |
| **271** | 308 | 2.4 | 10.8 | 4680 | **F412_10.8 S4 ME4LB2** | 411 | **F412_10.8 P132 BE132MB2** | 412 |
| **320** | 261 | 2.3 | 9.1 | 4560 | **F412_9.1 S4 ME4LB2** | 411 | **F412_9.1 P132 BE132MB2** | 412 |
| **323** | 259 | 3.5 | 9.1 | 5980 | **F512_9.1 S4 ME4LB2** | 415 | **F512_9.1 P132 BE132MB2** | 416 |
| **434** | 192 | 2.7 | 6.7 | 4270 | **F412_6.7 S4 ME4LB2** | 411 | **F412_6.7 P132 BE132MB2** | 412 |

## 11 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **6.4** | 14994 | 0.9 | 231.4 | 55000 | **F904_231.4 S5 ME5SA4** | 429 | **F904_231.4 P160 BE160M4** | 430 |
| **6.9** | 13841 | 1.0 | 213.6 | 55000 | **F904_213.6 S5 ME5SA4** | 429 | **F904_213.6 P160 BE160M4** | 430 |
| **7.6** | 13001 | 1.1 | 194.2 | 55000 | **F903_194.2 S5 ME5SA4** | 429 | **F903_194.2 P160 BE160M4** | 430 |
| **8.2** | 12001 | 1.2 | 179.2 | 55000 | **F903_179.2 S5 ME5SA4** | 429 | **F903_179.2 P160 BE160M4** | 430 |
| **9.0** | 10903 | 1.3 | 162.8 | 55000 | **F903_162.8 S5 ME5SA4** | 429 | **F903_162.8 P160 BE160M4** | 430 |
| **9.8** | 10064 | 1.4 | 150.3 | 55000 | **F903_150.3 S5 ME5SA4** | 429 | **F903_150.3 P160 BE160M4** | 430 |
| **10.7** | 9196 | 1.5 | 137.3 | 55000 | **F903_137.3 S5 ME5SA4** | 429 | **F903_137.3 P160 BE160M4** | 430 |
| **11.1** | 8885 | 0.9 | 132.7 | 45000 | **F803_132.7 S5 ME5SA4** | 426 | **F803_132.7 P160 BE160M4** | 427 |
| **11.6** | 8489 | 1.6 | 126.8 | 55000 | **F903_126.8 S5 ME5SA4** | 429 | **F903_126.8 P160 BE160M4** | 430 |
| **12.0** | 8202 | 1.0 | 122.5 | 45000 | **F803_122.5 S5 ME5SA4** | 426 | **F803_122.5 P160 BE160M4** | 427 |
| **12.9** | 7617 | 1.1 | 113.8 | 45000 | **F803_113.8 S5 ME5SA4** | 426 | **F803_113.8 P160 BE160M4** | 427 |
| **13.1** | 7496 | 1.9 | 111.9 | 55000 | **F903_111.9 S5 ME5SA4** | 429 | **F903_111.9 P160 BE160M4** | 430 |
| **14.0** | 7031 | 1.1 | 105.0 | 44400 | **F803_105.0 S5 ME5SA4** | 426 | **F803_105.0 P160 BE160M4** | 427 |
| **14.2** | 6919 | 2.0 | 103.3 | 55000 | **F903_103.3 S5 ME5SA4** | 429 | **F903_103.3 P160 BE160M4** | 430 |
| **15.4** | 6412 | 2.2 | 95.8 | 55000 | **F903_95.8 S5 ME5SA4** | 429 | **F903_95.8 P160 BE160M4** | 430 |
| **15.9** | 6181 | 1.3 | 92.3 | 44100 | **F803_92.3 S5 ME5SA4** | 426 | **F803_92.3 P160 BE160M4** | 427 |
| **16.6** | 5919 | 2.4 | 88.4 | 55000 | **F903_88.4 S5 ME5SA4** | 429 | **F903_88.4 P160 BE160M4** | 430 |
| **17.3** | 5705 | 1.4 | 85.2 | 44000 | **F803_85.2 S5 ME5SA4** | 426 | **F803_85.2 P160 BE160M4** | 427 |
| **19.2** | 5132 | 2.7 | 76.7 | 55000 | **F903_76.7 S5 ME5SA4** | 429 | **F903_76.7 P160 BE160M4** | 430 |
| **19.3** | 5106 | 1.6 | 76.3 | 42800 | **F803_76.3 S5 ME5SA4** | 426 | **F803_76.3 P160 BE160M4** | 427 |
| **20.0** | 4925 | 1.0 | 73.6 | 33500 | **F703_73.6 S5 ME5SA4** | 423 | **F703_73.6 P160 BE160M4** | 424 |
| **20.8** | 4738 | 3.0 | 70.8 | 55000 | **F903_70.8 S5 ME5SA4** | 429 | **F903_70.8 P160 BE160M4** | 430 |
| **20.9** | 4713 | 1.7 | 70.4 | 42500 | **F803_70.4 S5 ME5SA4** | 426 | **F803_70.4 P160 BE160M4** | 427 |
| **21.6** | 4547 | 1.1 | 67.9 | 33100 | **F703_67.9 S5 ME5SA4** | 423 | **F703_67.9 P160 BE160M4** | 424 |
| **23.5** | 4185 | 1.2 | 62.5 | 32900 | **F703_62.5 S5 ME5SA4** | 423 | **F703_62.5 P160 BE160M4** | 424 |
| **23.7** | 4158 | 3.4 | 62.1 | 55000 | | | **F903_62.1 P160 BE160M4** | 430 |
| **23.9** | 4115 | 1.9 | 61.5 | 41100 | **F803_61.5 S5 ME5SA4** | 426 | **F803_61.5 P160 BE160M4** | 427 |
| **25.5** | 3863 | 1.3 | 57.7 | 32500 | **F703_57.7 S5 ME5SA4** | 423 | **F703_57.7 P160 BE160M4** | 424 |
| **25.9** | 3799 | 2.1 | 56.7 | 40800 | **F803_56.7 S5 ME5SA4** | 426 | **F803_56.7 P160 BE160M4** | 427 |
| **29.9** | 3288 | 2.4 | 49.1 | 39100 | | | **F803_49.1 P160 BE160M4** | 427 |
| **30** | 3278 | 1.5 | 49.0 | 31800 | **F703_49.0 S5 ME5SA4** | 423 | **F703_49.0 P160 BE160M4** | 424 |
| **31** | 3203 | 0.9 | 47.8 | 20000 | **F603_47.8 S5 ME5SA4** | 419 | **F603_47.8 P160 BE160M4** | 420 |

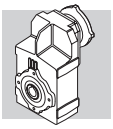


## 11 kW

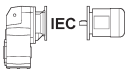
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **32** | 3035 | 2.6 | 45.3 | 38900 | | | **F803_45.3 P160 BE160M4** | 427 |
| **33** | 3026 | 1.7 | 45.2 | 31300 | **F703_45.2 S5 ME5SA4** | 423 | **F703_45.2 P160 BE160M4** | 424 |
| **35** | 2818 | 1.0 | 42.1 | 20000 | **F603_42.1 S5 ME5SA4** | 419 | **F603_42.1 P160 BE160M4** | 420 |
| **38** | 2611 | 3.1 | 39.0 | 36400 | | | **F803_39.0 P160 BE160M4** | 427 |
| **38** | 2601 | 1.1 | 38.8 | 20000 | **F603_38.8 S5 ME5SA4** | 419 | **F603_38.8 P160 BE160M4** | 420 |
| **38** | 2571 | 1.9 | 38.4 | 30200 | | | **F703_38.4 P160 BE160M4** | 424 |
| **41** | 2411 | 3.3 | 36.0 | 35600 | | | **F803_36.0 P160 BE160M4** | 427 |
| **41** | 2373 | 2.1 | 35.4 | 29600 | | | **F703_35.4 P160 BE160M4** | 424 |
| **46** | 2148 | 1.3 | 32.1 | 20000 | **F603_32.1 S5 ME5SA4** | 419 | **F603_32.1 P160 BE160M4** | 420 |
| **49** | 2009 | 2.5 | 30.0 | 29000 | | | **F703_30.0 P160 BE160M4** | 424 |
| **50** | 1983 | 1.5 | 29.6 | 20000 | **F603_29.6 S5 ME5SA4** | 419 | **F603_29.6 P160 BE160M4** | 420 |
| **53** | 1854 | 2.5 | 27.7 | 28300 | | | **F703_27.7 P160 BE160M4** | 424 |
| **58** | 1702 | 1.1 | 25.4 | 20000 | **F603_25.4 S5 ME5SA4** | 419 | **F603_25.4 P160 BE160M4** | 420 |
| **60** | 1644 | 2.4 | 24.6 | 27800 | **F703_24.6 S5 ME5SA4** | 423 | **F703_24.6 P160 BE160M4** | 424 |
| **62** | 1628 | 1.0 | 23.8 | 7500 | **F512_23.8 S5 ME5SA4** | 415 | **F512_23.8 P160 BE160M4** | 416 |
| **63** | 1571 | 1.2 | 23.5 | 20000 | **F603_23.5 S5 ME5SA4** | 419 | **F603_23.5 P160 BE160M4** | 420 |
| **65** | 1514 | 2.9 | 22.6 | 27300 | **F703_22.6 S5 ME5SA4** | 423 | **F703_22.6 P160 BE160M4** | 424 |
| **70** | 1397 | 2.9 | 20.9 | 26800 | **F703_20.9 S5 ME5SA4** | 423 | **F703_20.9 P160 BE160M4** | 424 |
| **71** | 1383 | 1.4 | 20.7 | 20000 | **F603_20.7 S5 ME5SA4** | 419 | **F603_20.7 P160 BE160M4** | 420 |
| **77** | 1277 | 1.5 | 19.1 | 20000 | **F603_19.1 S5 ME5SA4** | 419 | **F603_19.1 P160 BE160M4** | 420 |
| **78** | 1287 | 1.2 | 18.8 | 7490 | **F512_18.8 S5 ME5SA4** | 415 | **F512_18.8 P160 BE160M4** | 416 |
| **94** | 1050 | 1.8 | 15.7 | 20000 | **F603_15.7 S5 ME5SA4** | 419 | **F603_15.7 P160 BE160M4** | 420 |
| **102** | 969 | 2.0 | 14.5 | 20000 | **F603_14.5 S5 ME5SA4** | 419 | **F603_14.5 P160 BE160M4** | 420 |
| **105** | 956 | 1.5 | 14.0 | 7310 | **F512_14.0 S5 ME5SA4** | 415 | **F512_14.0 P160 BE160M4** | 416 |
| **115** | 853 | 2.2 | 12.7 | 19400 | **F603_12.7 S5 ME5SA4** | 419 | **F603_12.7 P160 BE160M4** | 420 |
| **125** | 787 | 2.4 | 11.8 | 19000 | **F603_11.8 S5 ME5SA4** | 419 | **F603_11.8 P160 BE160M4** | 420 |
| **132** | 760 | 1.8 | 11.1 | 7090 | **F512_11.1 S5 ME5SA4** | 415 | **F512_11.1 P160 BE160M4** | 416 |
| **151** | 650 | 2.9 | 9.7 | 18200 | **F603_9.7 S5 ME5SA4** | 419 | **F603_9.7 P160 BE160M4** | 420 |
| **162** | 619 | 1.8 | 9.1 | 6770 | **F512_9.1 S5 ME5SA4** | 415 | **F512_9.1 P160 BE160M4** | 416 |
| **164** | 600 | 3.2 | 9.0 | 17800 | **F603_9.0 S5 ME5SA4** | 419 | **F603_9.0 P160 BE160M4** | 420 |
| **204** | 492 | 2.0 | 7.2 | 6490 | **F512_7.2 S5 ME5SA4** | 415 | **F512_7.2 P160 BE160M4** | 416 |
| **265** | 377 | 2.9 | 11.1 | 6170 | **F512_11.1 S5 ME5SA2** | 415 | **F512_11.1 P160 BE160MA2** | 416 |
| **325** | 307 | 2.9 | 9.1 | 5840 | **F512_9.1 S5 ME5SA2** | 415 | **F512_9.1 P160 BE160MA2** | 416 |
| **409** | 244 | 3.3 | 7.2 | 5510 | **F512_7.2 S5 ME5SA2** | 415 | **F512_7.2 P160 BE160MA2** | 416 |

## 15 kW

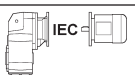
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **9.0** | 14840 | 0.9 | 162.8 | 55000 | **F903_162.8 S5 ME5LA4** | 429 | **F903_162.8 P160 BE160L4** | 430 |
| **9.8** | 13699 | 1.0 | 150.3 | 55000 | **F903_150.3 S5 ME5LA4** | 429 | **F903_150.3 P160 BE160L4** | 430 |
| **10.7** | 12517 | 1.1 | 137.3 | 55000 | **F903_137.3 S5 ME5LA4** | 429 | **F903_137.3 P160 BE160L4** | 430 |
| **11.6** | 11554 | 1.2 | 126.8 | 55000 | **F903_126.8 S5 ME5LA4** | 429 | **F903_126.8 P160 BE160L4** | 430 |
| **13.1** | 10203 | 1.4 | 111.9 | 55000 | **F903_111.9 S5 ME5LA4** | 429 | **F903_111.9 P160 BE160L4** | 430 |
| **14.2** | 9418 | 1.5 | 103.3 | 55000 | **F903_103.3 S5 ME5LA4** | 429 | **F903_103.3 P160 BE160L4** | 430 |
| **15.4** | 8728 | 1.6 | 95.8 | 55000 | **F903_95.8 S5 ME5LA4** | 429 | **F903_95.8 P160 BE160L4** | 430 |
| **15.9** | 8413 | 1.0 | 92.3 | 41300 | **F803_92.3 S5 ME5LA4** | 426 | **F803_92.3 P160 BE160L4** | 427 |
| **16.6** | 8056 | 1.7 | 88.4 | 55000 | **F903_88.4 S5 ME5LA4** | 429 | **F903_88.4 P160 BE160L4** | 430 |
| **17.3** | 7766 | 1.0 | 85.2 | 40800 | **F803_85.2 S5 ME5LA4** | 426 | **F803_85.2 P160 BE160L4** | 427 |
| **19.2** | 6986 | 2.0 | 76.7 | 55000 | **F903_76.7 S5 ME5LA4** | 429 | **F903_76.7 P160 BE160L4** | 430 |
| **19.3** | 6949 | 1.2 | 76.3 | 40500 | **F803_76.3 S5 ME5LA4** | 426 | **F803_76.3 P160 BE160L4** | 427 |
| **20.8** | 6449 | 2.2 | 70.8 | 55000 | **F903_70.8 S5 ME5LA4** | 429 | **F903_70.8 P160 BE160L4** | 430 |
| **20.9** | 6415 | 1.2 | 70.4 | 39900 | **F803_70.4 S5 ME5LA4** | 426 | **F803_70.4 P160 BE160L4** | 427 |
| **23.5** | 5696 | 0.9 | 62.5 | 31300 | **F703_62.5 S5 ME5LA4** | 423 | **F703_62.5 P160 BE160L4** | 424 |

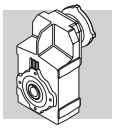


# 15 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **23.7** | 5660 | 2.5 | 62.1 | 55000 | | | **F903_62.1 P160 BE160L4** | 430 |
| **23.9** | 5601 | 1.4 | 61.5 | 38700 | **F803_61.5 S5 ME5LA4** | 426 | **F803_61.5 P160 BE160L4** | 427 |
| **25.5** | 5258 | 1.0 | 57.7 | 29700 | **F703_57.7 S5 ME5LA4** | 423 | **F703_57.7 P160 BE160L4** | 424 |
| **25.6** | 5224 | 2.7 | 57.3 | 55000 | | | **F903_57.3 P160 BE160L4** | 430 |
| **25.9** | 5170 | 1.5 | 56.7 | 38600 | **F803_56.7 S5 ME5LA4** | 426 | **F803_56.7 P160 BE160L4** | 427 |
| **29.5** | 4548 | 3.1 | 49.9 | 54400 | | | **F903_49.9 P160 BE160L4** | 430 |
| **29.9** | 4476 | 1.8 | 49.1 | 37800 | | | **F803_49.1 P160 BE160L4** | 427 |
| **30** | 4462 | 1.1 | 49.0 | 29400 | **F703_49.0 S5 ME5LA4** | 423 | **F703_49.0 P160 BE160L4** | 424 |
| **32** | 4198 | 3.3 | 46.1 | 53500 | | | **F903_46.1 P160 BE160L4** | 430 |
| **32** | 4131 | 1.9 | 45.3 | 37200 | | | **F803_45.3 P160 BE160L4** | 427 |
| **33** | 4119 | 1.2 | 45.2 | 29100 | **F703_45.2 S5 ME5LA4** | 423 | **F703_45.2 P160 BE160L4** | 424 |
| **38** | 3554 | 2.3 | 39.0 | 35800 | | | **F803_39.0 P160 BE160L4** | 427 |
| **38** | 3499 | 1.4 | 38.4 | 28600 | | | **F703_38.4 P160 BE160L4** | 424 |
| **41** | 3281 | 2.4 | 36.0 | 35200 | | | **F803_36.0 P160 BE160L4** | 427 |
| **41** | 3230 | 1.5 | 35.4 | 28200 | | | **F703_35.4 P160 BE160L4** | 424 |
| **46** | 2924 | 1.0 | 32.1 | 20000 | **F603_32.1 S5 ME5LA4** | 419 | **F603_32.1 P160 BE160L4** | 420 |
| **49** | 2734 | 1.8 | 30.0 | 27700 | | | **F703_30.0 P160 BE160L4** | 424 |
| **50** | 2699 | 1.1 | 29.6 | 20000 | **F603_29.6 S5 ME5LA4** | 419 | **F603_29.6 P160 BE160L4** | 420 |
| **53** | 2524 | 1.9 | 27.7 | 27100 | | | **F703_27.7 P160 BE160L4** | 424 |
| **58** | 2299 | 2.7 | 25.2 | 32900 | **F803_25.2 S5 ME5LA4** | 426 | **F803_25.2 P160 BE160L4** | 427 |
| **60** | 2238 | 1.8 | 24.6 | 26500 | **F703_24.6 S5 ME5LA4** | 423 | **F703_24.6 P160 BE160L4** | 424 |
| **63** | 2138 | 0.9 | 23.5 | 20000 | **F603_23.5 S5 ME5LA4** | 419 | **F603_23.5 P160 BE160L4** | 420 |
| **65** | 2060 | 2.1 | 22.6 | 26200 | **F703_22.6 S5 ME5LA4** | 423 | **F703_22.6 P160 BE160L4** | 424 |
| **67** | 2008 | 3.3 | 22.0 | 31900 | **F803_22.0 S5 ME5LA4** | 426 | **F803_22.0 P160 BE160L4** | 427 |
| **70** | 1902 | 2.1 | 20.9 | 25700 | **F703_20.9 S5 ME5LA4** | 423 | **F703_20.9 P160 BE160L4** | 424 |
| **71** | 1883 | 1.0 | 20.7 | 20000 | **F603_20.7 S5 ME5LA4** | 419 | **F603_20.7 P160 BE160L4** | 420 |
| **72** | 1853 | 3.3 | 20.3 | 31300 | **F803_20.3 S5 ME5LA4** | 426 | **F803_20.3 P160 BE160L4** | 427 |
| **77** | 1738 | 1.1 | 19.1 | 20000 | **F603_19.1 S5 ME5LA4** | 419 | **F603_19.1 P160 BE160L4** | 420 |
| **78** | 1752 | 0.9 | 18.8 | 6800 | **F512_18.8 S5 ME5LA4** | 415 | **F512_18.8 P160 BE160L4** | 416 |
| **83** | 1614 | 2.7 | 17.7 | 24900 | **F703_17.7 S5 ME5LA4** | 423 | **F703_17.7 P160 BE160L4** | 424 |
| **90** | 1490 | 2.7 | 16.3 | 24400 | **F703_16.3 S5 ME5LA4** | 423 | **F703_16.3 P160 BE160L4** | 424 |
| **94** | 1429 | 1.3 | 15.7 | 19600 | **F603_15.7 S5 ME5LA4** | 419 | **F603_15.7 P160 BE160L4** | 420 |
| **102** | 1319 | 1.4 | 14.5 | 19200 | **F603_14.5 S5 ME5LA4** | 419 | **F603_14.5 P160 BE160L4** | 420 |
| **105** | 1301 | 1.1 | 14.0 | 6450 | **F512_14.0 S5 ME5LA4** | 415 | **F512_14.0 P160 BE160L4** | 416 |
| **106** | 1266 | 3.1 | 13.9 | 23600 | **F703_13.9 S5 ME5LA4** | 423 | **F703_13.9 P160 BE160L4** | 424 |
| **115** | 1168 | 3.1 | 12.8 | 23100 | **F703_12.8 S5 ME5LA4** | 423 | **F703_12.8 P160 BE160L4** | 424 |
| **115** | 1160 | 1.6 | 12.7 | 18800 | **F603_12.7 S5 ME5LA4** | 419 | **F603_12.7 P160 BE160L4** | 420 |
| **125** | 1071 | 1.8 | 11.8 | 18400 | **F603_11.8 S5 ME5LA4** | 419 | **F603_11.8 P160 BE160L4** | 420 |
| **132** | 1034 | 1.3 | 11.1 | 6000 | **F512_11.1 S5 ME5LA4** | 415 | **F512_11.1 P160 BE160L4** | 416 |
| **135** | 989 | 3.5 | 10.9 | 22300 | **F703_10.9 S5 ME5LA4** | 423 | **F703_10.9 P160 BE160L4** | 424 |
| **147** | 913 | 3.5 | 10.0 | 21800 | **F703_10.0 S5 ME5LA4** | 423 | **F703_10.0 P160 BE160L4** | 424 |
| **151** | 885 | 2.1 | 9.7 | 17700 | **F603_9.7 S5 ME5LA4** | 419 | **F603_9.7 P160 BE160L4** | 420 |
| **162** | 843 | 1.3 | 9.1 | 5800 | **F512_9.1 S5 ME5LA4** | 415 | **F512_9.1 P160 BE160L4** | 416 |
| **164** | 817 | 2.3 | 9.0 | 17300 | **F603_9.0 S5 ME5LA4** | 419 | **F603_9.0 P160 BE160L4** | 420 |
| **204** | 670 | 1.5 | 7.2 | 5640 | **F512_7.2 S5 ME5LA4** | 415 | **F512_7.2 P160 BE160L4** | 416 |

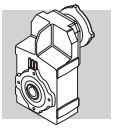
# 18.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **10.7** | 15327 | 0.9 | 137.3 | 55000 | | | **F903_137.3 P180 BE180M4** | 430 |
| **11.6** | 14148 | 1.0 | 126.8 | 55000 | | | **F903_126.8 P180 BE180M4** | 430 |
| **13.1** | 12493 | 1.1 | 111.9 | 55000 | | | **F903_111.9 P180 BE180M4** | 430 |
| **14.2** | 11532 | 1.2 | 103.3 | 55000 | | | **F903_103.3 P180 BE180M4** | 430 |

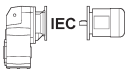


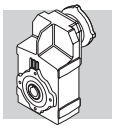
# 18.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **15.4** | 10687 | 1.3 | 95.8 | 55000 | | | **F903_95.8 P180 BE180M4** | 430 |
| **16.6** | 9865 | 1.4 | 88.4 | 55000 | | | **F903_88.4 P180 BE180M4** | 430 |
| **19.2** | 8554 | 1.6 | 76.7 | 55000 | | | **F903_76.7 P180 BE180M4** | 430 |
| **19.3** | 8510 | 0.9 | 76.3 | 38100 | | | **F803_76.3 P180 BE180M4** | 427 |
| **20.8** | 7896 | 1.8 | 70.8 | 55000 | | | **F903_70.8 P180 BE180M4** | 430 |
| **20.9** | 7855 | 1.0 | 70.4 | 37600 | | | **F803_70.4 P180 BE180M4** | 427 |
| **23.7** | 6930 | 2.0 | 62.1 | 55000 | | | **F903_62.1 P180 BE180M4** | 430 |
| **23.9** | 6859 | 1.2 | 61.5 | 37400 | | | **F803_61.5 P180 BE180M4** | 427 |
| **25.6** | 6397 | 2.2 | 57.3 | 55000 | | | **F903_57.3 P180 BE180M4** | 430 |
| **25.9** | 6331 | 1.3 | 56.7 | 36800 | | | **F803_56.7 P180 BE180M4** | 427 |
| **29.5** | 5568 | 2.5 | 49.9 | 55000 | | | **F903_49.9 P180 BE180M4** | 430 |
| **29.9** | 5480 | 1.5 | 49.1 | 35800 | | | **F803_49.1 P180 BE180M4** | 427 |
| **30** | 5464 | 0.9 | 49.0 | 27400 | | | **F703_49.0 P180 BE180M4** | 424 |
| **32** | 5140 | 2.7 | 46.1 | 55000 | | | **F903_46.1 P180 BE180M4** | 430 |
| **32** | 5059 | 1.6 | 45.3 | 35700 | | | **F803_45.3 P180 BE180M4** | 427 |
| **33** | 5043 | 1.0 | 45.2 | 27200 | | | **F703_45.2 P180 BE180M4** | 424 |
| **36** | 4520 | 3.1 | 40.5 | 52300 | | | **F903_40.5 P180 BE180M4** | 430 |
| **38** | 4352 | 1.8 | 39.0 | 35000 | | | **F803_39.0 P180 BE180M4** | 427 |
| **38** | 4285 | 1.2 | 38.4 | 27000 | | | **F703_38.4 P180 BE180M4** | 424 |
| **39** | 4172 | 3.2 | 37.4 | 51400 | | | **F903_37.4 P180 BE180M4** | 430 |
| **41** | 4018 | 2.0 | 36.0 | 34400 | | | **F803_36.0 P180 BE180M4** | 427 |
| **41** | 3955 | 1.3 | 35.4 | 26700 | | | **F703_35.4 P180 BE180M4** | 424 |
| **47** | 3488 | 2.3 | 31.3 | 33400 | | | **F803_31.3 P180 BE180M4** | 427 |
| **49** | 3348 | 1.5 | 30.0 | 26500 | | | **F703_30.0 P180 BE180M4** | 424 |
| **51** | 3219 | 2.5 | 28.8 | 33000 | | | **F803_28.8 P180 BE180M4** | 427 |
| **53** | 3090 | 1.5 | 27.7 | 26000 | | | **F703_27.7 P180 BE180M4** | 424 |
| **58** | 2815 | 2.2 | 25.2 | 32100 | | | **F803_25.2 P180 BE180M4** | 427 |
| **60** | 2741 | 1.5 | 24.6 | 25500 | | | **F703_24.6 P180 BE180M4** | 424 |
| **65** | 2523 | 1.7 | 22.6 | 25200 | | | **F703_22.6 P180 BE180M4** | 424 |
| **67** | 2458 | 2.7 | 22.0 | 31300 | | | **F803_22.0 P180 BE180M4** | 427 |
| **70** | 2329 | 1.7 | 20.9 | 24900 | | | **F703_20.9 P180 BE180M4** | 424 |
| **72** | 2269 | 2.7 | 20.3 | 30600 | | | **F803_20.3 P180 BE180M4** | 427 |
| **77** | 2128 | 0.9 | 19.1 | 19200 | | | **F603_19.1 P180 BE180M4** | 420 |
| **83** | 1976 | 2.2 | 17.7 | 24200 | | | **F703_17.7 P180 BE180M4** | 424 |
| **84** | 1964 | 3.4 | 17.6 | 29700 | | | **F803_17.6 P180 BE180M4** | 427 |
| **90** | 1824 | 2.2 | 16.3 | 23800 | | | **F703_16.3 P180 BE180M4** | 424 |
| **90** | 1813 | 3.4 | 16.2 | 29100 | | | **F803_16.2 P180 BE180M4** | 427 |
| **94** | 1750 | 1.1 | 15.7 | 18700 | | | **F603_15.7 P180 BE180M4** | 420 |
| **102** | 1615 | 1.2 | 14.5 | 18600 | | | **F603_14.5 P180 BE180M4** | 420 |
| **106** | 1550 | 2.5 | 13.9 | 23000 | | | **F703_13.9 P180 BE180M4** | 424 |
| **115** | 1430 | 2.5 | 12.8 | 22600 | | | **F703_12.8 P180 BE180M4** | 424 |
| **115** | 1421 | 1.3 | 12.7 | 18300 | | | **F603_12.7 P180 BE180M4** | 420 |
| **125** | 1312 | 1.4 | 11.8 | 17900 | | | **F603_11.8 P180 BE180M4** | 420 |
| **132** | 1267 | 1.1 | 11.1 | 5800 | | | **F512_11.1 P180 BE180M4** | 416 |
| **135** | 1211 | 2.8 | 10.9 | 21800 | | | **F703_10.9 P180 BE180M4** | 424 |
| **147** | 1118 | 2.9 | 10.0 | 21400 | | | **F703_10.0 P180 BE180M4** | 424 |
| **151** | 1083 | 1.8 | 9.7 | 17300 | | | **F603_9.7 P180 BE180M4** | 420 |
| **162** | 1032 | 1.1 | 9.1 | 5630 | | | **F512_9.1 P180 BE180M4** | 416 |
| **164** | 1000 | 1.9 | 9.0 | 16900 | | | **F603_9.0 P180 BE180M4** | 420 |
| **204** | 820 | 1.2 | 7.2 | 5400 | | | **F512_7.2 P180 BE180M4** | 416 |



# 22 kW

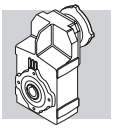
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **13.1** | 14888 | 0.9 | 111.9 | 55000 | | | **F903_111.9 P180 BE180L4** | 430 |
| **14.2** | 13743 | 1.0 | 103.3 | 55000 | | | **F903_103.3 P180 BE180L4** | 430 |
| **15.4** | 12735 | 1.1 | 95.8 | 55000 | | | **F903_95.8 P180 BE180L4** | 430 |
| **16.6** | 11755 | 1.2 | 88.4 | 55000 | | | **F903_88.4 P180 BE180L4** | 430 |
| **19.2** | 10194 | 1.4 | 76.7 | 55000 | | | **F903_76.7 P180 BE180L4** | 430 |
| **20.8** | 9410 | 1.5 | 70.8 | 55000 | | | **F903_70.8 P180 BE180L4** | 430 |
| **23.7** | 8259 | 1.7 | 62.1 | 55000 | | | **F903_62.1 P180 BE180L4** | 430 |
| **23.9** | 8173 | 1.0 | 61.5 | 35400 | | | **F803_61.5 P180 BE180L4** | 427 |
| **25.6** | 7623 | 1.8 | 57.3 | 55000 | | | **F903_57.3 P180 BE180L4** | 430 |
| **25.9** | 7545 | 1.1 | 56.7 | 35000 | | | **F803_56.7 P180 BE180L4** | 427 |
| **29.5** | 6636 | 2.1 | 49.9 | 54400 | | | **F903_49.9 P180 BE180L4** | 430 |
| **29.9** | 6531 | 1.2 | 49.1 | 34100 | | | **F803_49.1 P180 BE180L4** | 427 |
| **32** | 6125 | 2.3 | 46.1 | 53500 | | | **F903_46.1 P180 BE180L4** | 430 |
| **32** | 6028 | 1.3 | 45.3 | 34300 | | | **F803_45.3 P180 BE180L4** | 427 |
| **36** | 5386 | 2.6 | 40.5 | 52300 | | | **F903_40.5 P180 BE180L4** | 430 |
| **38** | 5187 | 1.5 | 39.0 | 33300 | | | **F803_39.0 P180 BE180L4** | 427 |
| **38** | 5106 | 1.0 | 38.4 | 25400 | | | **F703_38.4 P180 BE180L4** | 424 |
| **39** | 4972 | 2.7 | 37.4 | 51400 | | | **F903_37.4 P180 BE180L4** | 430 |
| **41** | 4788 | 1.7 | 36.0 | 33200 | | | **F803_36.0 P180 BE180L4** | 427 |
| **41** | 4713 | 1.1 | 35.4 | 25300 | | | **F703_35.4 P180 BE180L4** | 424 |
| **47** | 4156 | 1.9 | 31.3 | 32600 | | | **F803_31.3 P180 BE180L4** | 427 |
| **47** | 4122 | 3.2 | 31.0 | 49500 | | | **F903_31.0 P180 BE180L4** | 430 |
| **49** | 3990 | 1.3 | 30.0 | 25100 | | | **F703_30.0 P180 BE180L4** | 424 |
| **51** | 3836 | 2.1 | 28.8 | 32000 | | | **F803_28.8 P180 BE180L4** | 427 |
| **51** | 3805 | 3.2 | 28.6 | 48600 | | | **F903_28.6 P180 BE180L4** | 430 |
| **53** | 3683 | 1.3 | 27.7 | 24800 | | | **F703_27.7 P180 BE180L4** | 424 |
| **58** | 3355 | 1.8 | 25.2 | 31300 | | | **F803_25.2 P180 BE180L4** | 427 |
| **60** | 3266 | 1.2 | 24.6 | 24500 | | | **F703_24.6 P180 BE180L4** | 424 |
| **65** | 3006 | 1.4 | 22.6 | 24300 | | | **F703_22.6 P180 BE180L4** | 424 |
| **67** | 2929 | 2.3 | 22.0 | 30200 | | | **F803_22.0 P180 BE180L4** | 427 |
| **70** | 2775 | 1.4 | 20.9 | 24000 | | | **F703_20.9 P180 BE180L4** | 424 |
| **72** | 2704 | 2.3 | 20.3 | 29900 | | | **F803_20.3 P180 BE180L4** | 427 |
| **83** | 2355 | 1.9 | 17.7 | 23400 | | | **F703_17.7 P180 BE180L4** | 424 |
| **84** | 2341 | 2.9 | 17.6 | 29100 | | | **F803_17.6 P180 BE180L4** | 427 |
| **90** | 2174 | 1.8 | 16.3 | 23100 | | | **F703_16.3 P180 BE180L4** | 424 |
| **90** | 2161 | 2.9 | 16.2 | 28500 | | | **F803_16.2 P180 BE180L4** | 427 |
| **94** | 2085 | 0.9 | 15.7 | 18200 | | | **F603_15.7 P180 BE180L4** | 420 |
| **102** | 1925 | 1.0 | 14.5 | 18000 | | | **F603_14.5 P180 BE180L4** | 420 |
| **106** | 1847 | 2.1 | 13.9 | 22400 | | | **F703_13.9 P180 BE180L4** | 424 |
| **115** | 1705 | 2.1 | 12.8 | 22100 | | | **F703_12.8 P180 BE180L4** | 424 |
| **115** | 1693 | 1.1 | 12.7 | 17700 | | | **F603_12.7 P180 BE180L4** | 420 |
| **125** | 1563 | 1.2 | 11.8 | 17400 | | | **F603_11.8 P180 BE180L4** | 420 |
| **135** | 1443 | 2.4 | 10.9 | 21400 | | | **F703_10.9 P180 BE180L4** | 424 |
| **147** | 1332 | 2.4 | 10.0 | 21000 | | | **F703_10.0 P180 BE180L4** | 424 |
| **151** | 1291 | 1.5 | 9.7 | 16900 | | | **F603_9.7 P180 BE180L4** | 420 |
| **164** | 1192 | 1.6 | 9.0 | 16500 | | | **F603_9.0 P180 BE180L4** | 420 |
| **204** | 977 | 1.0 | 7.2 | 5250 | | | **F512_7.2 P180 BE180L4** | 416 |



## 58 DATOS TÉCNICOS REDUCTORES

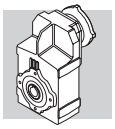
# F 10 — 140 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 10 2_7.4** | 7.4 | 378 | 63 | 2.6 | 1000 | 1290 | 189 | 76 | 1.6 | 1290 | 1640 | |
| **F 10 2_8.6** | 8.6 | 326 | 67 | 2.4 | 980 | 1350 | 163 | 82 | 1.5 | 1260 | 1710 | |
| **F 10 2_9.8** | 9.8 | 287 | 73 | 2.3 | 980 | 1410 | 143 | 89 | 1.4 | 1250 | 1780 | |
| **F 10 2_11.5** | 11.5 | 243 | 78 | 2.1 | 950 | 1480 | 121 | 96 | 1.3 | 1220 | 1870 | |
| **F 10 2_13.0** | 13.0 | 215 | 85 | 2.0 | 940 | 1530 | 107 | 104 | 1.2 | 1210 | 1940 | |
| **F 10 2_14.6** | 14.6 | 191 | 94 | 2.0 | 1120 | 1590 | 96 | 119 | 1.3 | 1300 | 2000 | |
| **F 10 2_17.0** | 17.0 | 165 | 104 | 1.9 | 1090 | 1650 | 82 | 128 | 1.2 | 1300 | 2090 | |
| **F 10 2_19.3** | 19.3 | 145 | 108 | 1.7 | 1100 | 1730 | 72 | 136 | 1.1 | 1300 | 2180 | |
| **F 10 2_22.8** | 22.8 | 123 | 119 | 1.6 | 1080 | 1810 | 61 | 140 | 0.95 | 1300 | 2310 | |
| **F 10 2_25.8** | 25.8 | 109 | 123 | 1.5 | 1090 | 1890 | 54 | 140 | 0.84 | 1300 | 2430 | |
| **F 10 2_29.6** | 29.6 | 94 | 132 | 1.4 | 1060 | 1970 | 47 | 140 | 0.73 | 1300 | 2560 | |
| **F 10 2_33.0** | 33.0 | 85 | 137 | 1.3 | 1070 | 2040 | 42 | 140 | 0.65 | 1300 | 2670 | 396 |
| **F 10 2_35.3** | 35.3 | 79 | 140 | 1.2 | 1060 | 2090 | 40 | 140 | 0.61 | 1300 | 2740 | |
| **F 10 2_39.6** | 39.6 | 71 | 140 | 1.1 | 1080 | 2190 | 35 | 140 | 0.54 | 1300 | 2800 | |
| **F 10 2_44.7** | 44.7 | 63 | 140 | 0.97 | 1080 | 2290 | 31 | 140 | 0.48 | 1300 | 2800 | |
| **F 10 2_48.7** | 48.7 | 57 | 140 | 0.89 | 1090 | 2370 | 28.7 | 140 | 0.44 | 1300 | 2800 | |
| **F 10 2_56.7** | 56.7 | 49 | 140 | 0.76 | 1100 | 2520 | 24.7 | 140 | 0.38 | 1300 | 2800 | |
| **F 10 2_63.0** | 63.0 | 44 | 140 | 0.69 | 1110 | 2620 | 22.2 | 140 | 0.34 | 1300 | 2800 | |
| **F 10 2_71.1** | 71.1 | 39 | 140 | 0.61 | 1000 | 2750 | 19.7 | 140 | 0.30 | 1300 | 2800 | |
| **F 10 2_81.3** | 81.3 | 34 | 140 | 0.53 | 1110 | 2800 | 17.2 | 140 | 0.27 | 1300 | 2800 | |
| **F 10 2_91.5** | 91.5 | 31 | 140 | 0.47 | 1110 | 2800 | 15.3 | 140 | 0.24 | 1300 | 2800 | |
| **F 10 2_106.0** | 106.0 | 26.4 | 140 | 0.41 | 1120 | 2800 | 13.2 | 140 | 0.20 | 1300 | 2800 | |
| **F 10 2_127.1** | 127.1 | 22.0 | 140 | 0.34 | 1130 | 2800 | 11.0 | 140 | 0.17 | 1300 | 2800 | |



# F 10 — 140 Nm

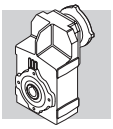
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 10 2_7.4** | 7.4 | 122 | 91 | 1.2 | 1300 | 1890 | 68 | 111 | 0.83 | 1300 | 2300 | |
| **F 10 2_8.6** | 8.6 | 105 | 94 | 1.1 | 1300 | 1970 | 58 | 112 | 0.72 | 1300 | 2430 | |
| **F 10 2_9.8** | 9.8 | 92 | 107 | 1.1 | 1300 | 2050 | 51 | 130 | 0.73 | 1300 | 2490 | |
| **F 10 2_11.5** | 11.5 | 78 | 110 | 0.95 | 1300 | 2180 | 43 | 131 | 0.63 | 1300 | 2660 | |
| **F 10 2_13.0** | 13.0 | 69 | 124 | 0.94 | 1300 | 2240 | 38 | 140 | 0.59 | 1300 | 2800 | |
| **F 10 2_14.6** | 14.6 | 61 | 138 | 0.93 | 1300 | 2320 | 34 | 140 | 0.53 | 1300 | 2800 | |
| **F 10 2_17.0** | 17.0 | 53 | 140 | 0.82 | 1300 | 2450 | 29.5 | 140 | 0.46 | 1300 | 2800 | |
| **F 10 2_19.3** | 19.3 | 47 | 140 | 0.72 | 1300 | 2580 | 25.9 | 140 | 0.40 | 1300 | 2800 | |
| **F 10 2_22.8** | 22.8 | 39 | 140 | 0.61 | 1300 | 2750 | 21.9 | 140 | 0.34 | 1300 | 2800 | |
| **F 10 2_25.8** | 25.8 | 35 | 140 | 0.54 | 1300 | 2800 | 19.4 | 140 | 0.30 | 1300 | 2800 | |
| **F 10 2_29.6** | 29.6 | 30 | 140 | 0.47 | 1300 | 2800 | 16.9 | 140 | 0.26 | 1300 | 2800 | |
| **F 10 2_33.0** | 33.0 | 27.3 | 140 | 0.42 | 1300 | 2800 | 15.2 | 140 | 0.23 | 1300 | 2800 | 396 |
| **F 10 2_35.3** | 35.3 | 25.5 | 140 | 0.39 | 1300 | 2800 | 14.1 | 140 | 0.22 | 1300 | 2800 | |
| **F 10 2_39.6** | 39.6 | 22.7 | 140 | 0.35 | 1300 | 2800 | 12.6 | 140 | 0.19 | 1300 | 2800 | |
| **F 10 2_44.7** | 44.7 | 20.1 | 140 | 0.31 | 1300 | 2800 | 11.2 | 140 | 0.17 | 1300 | 2800 | |
| **F 10 2_48.7** | 48.7 | 18.5 | 140 | 0.29 | 1300 | 2800 | 10.3 | 140 | 0.16 | 1300 | 2800 | |
| **F 10 2_56.7** | 56.7 | 15.9 | 140 | 0.24 | 1300 | 2800 | 8.8 | 140 | 0.14 | 1300 | 2800 | |
| **F 10 2_63.0** | 63.0 | 14.3 | 140 | 0.22 | 1300 | 2800 | 7.9 | 140 | 0.12 | 1300 | 2800 | |
| **F 10 2_71.1** | 71.1 | 12.7 | 140 | 0.20 | 1300 | 2800 | 7.0 | 140 | 0.11 | 1300 | 2800 | |
| **F 10 2_81.3** | 81.3 | 11.1 | 140 | 0.17 | 1300 | 2800 | 6.1 | 140 | 0.09 | 1300 | 2800 | |
| **F 10 2_91.5** | 91.5 | 9.8 | 140 | 0.15 | 1300 | 2800 | 5.5 | 140 | 0.08 | 1300 | 2800 | |
| **F 10 2_106.0** | 106.0 | 8.5 | 140 | 0.13 | 1300 | 2800 | 4.7 | 140 | 0.07 | 1300 | 2800 | |
| **F 10 2_127.1** | 127.1 | 7.1 | 140 | 0.11 | 1300 | 2800 | 3.9 | 140 | 0.06 | 1300 | 2800 | |



# F 20 — 250 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 20 2_6.4** | 6.4 | 437 | 103 | 5.0 | — | 1370 | 218 | 130 | 3.1 | — | 1720 | |
| **F 20 2_7.8** | 7.8 | 357 | 115 | 4.5 | — | 1440 | 179 | 144 | 2.8 | — | 1820 | |
| **F 20 2_8.7** | 8.7 | 321 | 123 | 4.3 | — | 1490 | 160 | 155 | 2.7 | — | 1870 | |
| **F 20 2_10.0** | 10.0 | 279 | 131 | 4.0 | — | 1550 | 140 | 165 | 2.5 | — | 1950 | |
| **F 20 2_11.2** | 11.2 | 249 | 141 | 3.9 | — | 1590 | 125 | 177 | 2.4 | — | 2010 | |
| **F 20 2_14.8** | 14.8 | 189 | 166 | 3.5 | 760 | 1740 | 95 | 203 | 2.1 | 1010 | 2210 | |
| **F 20 2_18.1** | 18.1 | 155 | 175 | 3.0 | 750 | 1870 | 77 | 213 | 1.8 | 1020 | 2380 | |
| **F 20 2_20.2** | 20.2 | 139 | 182 | 2.8 | 810 | 1940 | 69 | 223 | 1.7 | 1070 | 2460 | |
| **F 20 2_23.1** | 23.1 | 121 | 190 | 2.5 | 770 | 2030 | 60 | 235 | 1.6 | 1000 | 2570 | |
| **F 20 2_25.9** | 25.9 | 108 | 196 | 2.3 | 830 | 2110 | 54 | 240 | 1.4 | 1100 | 2680 | |
| **F 20 2_30.4** | 30.4 | 92 | 205 | 2.1 | 780 | 2230 | 46 | 250 | 1.3 | 1050 | 2840 | |
| **F 20 2_33.1** | 33.1 | 85 | 210 | 2.0 | 800 | 2300 | 42 | 250 | 1.2 | 1120 | 2940 | |
| **F 20 2_37.9** | 37.9 | 74 | 220 | 1.8 | 740 | 2400 | 37 | 250 | 1.0 | 1130 | 3110 | |
| **F 20 2_41.8** | 41.8 | 67 | 225 | 1.7 | 780 | 2490 | 33 | 250 | 0.92 | 1220 | 3240 | |
| **F 20 2_44.8** | 44.8 | 62 | 235 | 1.6 | 690 | 2540 | 31 | 250 | 0.86 | 1200 | 3330 | |
| **F 20 2_50.7** | 50.7 | 55 | 238 | 1.4 | 780 | 2660 | 27.6 | 250 | 0.76 | 1320 | 3500 | |
| **F 20 2_56.7** | 56.7 | 49 | 250 | 1.4 | 730 | 2750 | 24.7 | 250 | 0.68 | 1360 | 3660 | |
| **F 20 2_61.9** | 61.9 | 45 | 250 | 1.2 | 750 | 2860 | 22.6 | 250 | 0.62 | 1370 | 3790 | |
| **F 20 2_69.1** | 69.1 | 40 | 250 | 1.1 | 760 | 2990 | 20.2 | 250 | 0.56 | 1370 | 3950 | 400 |
| **F 20 2_76.8** | 76.8 | 36 | 250 | 1.0 | 780 | 3130 | 18.2 | 250 | 0.50 | 1380 | 4000 | |
| **F 20 2_90.4** | 90.4 | 31 | 250 | 0.85 | 830 | 3340 | 15.5 | 250 | 0.43 | 1390 | 4000 | |
| **F 20 2_101.6** | 101.6 | 27.5 | 250 | 0.76 | 830 | 3500 | 13.8 | 250 | 0.38 | 1390 | 4000 | |
| **F 20 2_114.3** | 114.3 | 24.5 | 250 | 0.67 | 850 | 3670 | 12.2 | 250 | 0.34 | 1400 | 4000 | |
| **F 20 2_132.2** | 132.2 | 21.2 | 250 | 0.58 | 870 | 3890 | 10.6 | 250 | 0.29 | 1400 | 4000 | |
| **F 20 3_156.3** | 156.3 | 17.9 | 250 | 0.50 | 1170 | 4000 | 9.0 | 250 | 0.25 | 1300 | 4000 | |
| **F 20 3_172.6** | 172.6 | 16.2 | 250 | 0.46 | 1200 | 4000 | 8.1 | 250 | 0.23 | 1300 | 4000 | |
| **F 20 3_184.9** | 184.9 | 15.1 | 250 | 0.43 | 1210 | 4000 | 7.6 | 250 | 0.21 | 1300 | 4000 | |
| **F 20 3_209.3** | 209.3 | 13.4 | 250 | 0.38 | 1240 | 4000 | 6.7 | 250 | 0.19 | 1300 | 4000 | |
| **F 20 3_234.0** | 234.0 | 12.0 | 250 | 0.34 | 1270 | 4000 | 6.0 | 250 | 0.17 | 1300 | 4000 | |
| **F 20 3_255.3** | 255.3 | 11.0 | 250 | 0.31 | 1280 | 4000 | 5.5 | 250 | 0.15 | 1300 | 4000 | |
| **F 20 3_285.2** | 285.2 | 9.8 | 250 | 0.28 | 1300 | 4000 | 4.9 | 250 | 0.14 | 1300 | 4000 | |
| **F 20 3_316.9** | 316.9 | 8.8 | 250 | 0.25 | 1300 | 4000 | 4.4 | 250 | 0.12 | 1300 | 4000 | |
| **F 20 3_372.9** | 372.9 | 7.5 | 250 | 0.21 | 1300 | 4000 | 3.8 | 250 | 0.11 | 1300 | 4000 | |
| **F 20 3_419.3** | 419.3 | 6.7 | 250 | 0.19 | 1300 | 4000 | 3.3 | 250 | 0.09 | 1300 | 4000 | |
| **F 20 3_471.7** | 471.7 | 5.9 | 250 | 0.17 | 1300 | 4000 | 3.0 | 250 | 0.08 | 1300 | 4000 | |
| **F 20 3_545.3** | 545.3 | 5.1 | 250 | 0.14 | 1300 | 4000 | 2.6 | 250 | 0.07 | 1300 | 4000 | |

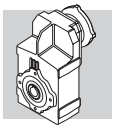
(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



# F 20 — 250 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 20 2_6.4** | 6.4 | 140 | 150 | 2.3 | — | 1990 | 218 | 183 | 4.4 | — | 2420 | |
| **F 20 2_7.8** | 7.8 | 115 | 167 | 2.1 | — | 2110 | 64 | 189 | 1.3 | — | 2610 | |
| **F 20 2_8.7** | 8.7 | 103 | 180 | 2.0 | — | 2170 | 57 | 219 | 1.4 | — | 2640 | |
| **F 20 2_10.0** | 10.0 | 90 | 191 | 1.9 | — | 2260 | 50 | 221 | 1.2 | — | 2790 | |
| **F 20 2_11.2** | 11.2 | 80 | 205 | 1.8 | — | 2330 | 45 | 250 | 1.2 | — | 2830 | |
| **F 20 2_14.8** | 14.8 | 61 | 232 | 1.6 | 1210 | 2570 | 34 | 250 | 0.93 | 1790 | 3230 | |
| **F 20 2_18.1** | 18.1 | 50 | 250 | 1.4 | 1150 | 2740 | 27.7 | 250 | 0.76 | 1910 | 3500 | |
| **F 20 2_20.2** | 20.2 | 45 | 250 | 1.2 | 1320 | 2870 | 24.8 | 250 | 0.68 | 1960 | 3650 | |
| **F 20 2_23.1** | 23.1 | 39 | 250 | 1.1 | 1350 | 3040 | 21.6 | 250 | 0.60 | 1970 | 3860 | |
| **F 20 2_25.9** | 25.9 | 35 | 250 | 0.96 | 1500 | 3190 | 19.3 | 250 | 0.53 | 2010 | 4000 | |
| **F 20 2_30.4** | 30.4 | 29.6 | 250 | 0.82 | 1530 | 3400 | 16.5 | 250 | 0.45 | 2020 | 4000 | |
| **F 20 2_33.1** | 33.1 | 27.2 | 250 | 0.75 | 1580 | 3520 | 15.1 | 250 | 0.42 | 2040 | 4000 | |
| **F 20 2_37.9** | 37.9 | 23.8 | 250 | 0.65 | 1590 | 3720 | 13.2 | 250 | 0.36 | 2040 | 4000 | |
| **F 20 2_41.8** | 41.8 | 21.5 | 250 | 0.59 | 1610 | 3870 | 12.0 | 250 | 0.33 | 2070 | 4000 | |
| **F 20 2_44.8** | 44.8 | 20.1 | 250 | 0.55 | 1610 | 3970 | 11.2 | 250 | 0.31 | 2060 | 4000 | |
| **F 20 2_50.7** | 50.7 | 17.7 | 250 | 0.49 | 1640 | 4000 | 9.9 | 250 | 0.27 | 2090 | 4000 | |
| **F 20 2_56.7** | 56.7 | 15.9 | 250 | 0.44 | 1650 | 4000 | 8.8 | 250 | 0.24 | 2110 | 4000 | |
| **F 20 2_61.9** | 61.9 | 14.5 | 250 | 0.40 | 1660 | 4000 | 8.1 | 250 | 0.22 | 2110 | 4000 | |
| **F 20 2_69.1** | 69.1 | 13.0 | 250 | 0.36 | 1660 | 4000 | 7.2 | 250 | 0.20 | 2110 | 4000 | 400 |
| **F 20 2_76.8** | 76.8 | 11.7 | 250 | 0.32 | 1670 | 4000 | 6.5 | 250 | 0.18 | 2120 | 4000 | |
| **F 20 2_90.4** | 90.4 | 10.0 | 250 | 0.27 | 1680 | 4000 | 5.5 | 250 | 0.15 | 2130 | 4000 | |
| **F 20 2_101.6** | 101.6 | 8.9 | 250 | 0.24 | 1680 | 4000 | 4.9 | 250 | 0.14 | 2130 | 4000 | |
| **F 20 2_114.3** | 114.3 | 7.9 | 250 | 0.22 | 1690 | 4000 | 4.4 | 250 | 0.12 | 2140 | 4000 | |
| **F 20 2_132.2** | 132.2 | 6.8 | 250 | 0.19 | 1690 | 4000 | 3.8 | 250 | 0.10 | 2150 | 4000 | |
| **F 20 3_156.3** | 156.3 | 5.8 | 250 | 0.16 | 1300 | 4000 | 3.2 | 250 | 0.09 | 1300 | 4000 | |
| **F 20 3_172.6** | 172.6 | 5.2 | 250 | 0.15 | 1300 | 4000 | 2.9 | 250 | 0.08 | 1300 | 4000 | |
| **F 20 3_184.9** | 184.9 | 4.9 | 250 | 0.14 | 1300 | 4000 | 2.7 | 250 | 0.08 | 1300 | 4000 | |
| **F 20 3_209.3** | 209.3 | 4.3 | 250 | 0.12 | 1300 | 4000 | 2.4 | 250 | 0.07 | 1300 | 4000 | |
| **F 20 3_234.0** | 234.0 | 3.8 | 250 | 0.11 | 1300 | 4000 | 2.1 | 250 | 0.06 | 1300 | 4000 | |
| **F 20 3_255.3** | 255.3 | 3.5 | 250 | 0.10 | 1300 | 4000 | 2.0 | 250 | 0.06 | 1300 | 4000 | |
| **F 20 3_285.2** | 285.2 | 3.2 | 250 | 0.09 | 1300 | 4000 | 1.8 | 250 | 0.05 | 1300 | 4000 | |
| **F 20 3_316.9** | 316.9 | 2.8 | 250 | 0.08 | 1300 | 4000 | 1.6 | 250 | 0.04 | 1300 | 4000 | |
| **F 20 3_372.9** | 372.9 | 2.4 | 250 | 0.07 | 1300 | 4000 | 1.3 | 250 | 0.04 | 1300 | 4000 | |
| **F 20 3_419.3** | 419.3 | 2.1 | 250 | 0.06 | 1300 | 4000 | 1.2 | 250 | 0.03 | 1300 | 4000 | |
| **F 20 3_471.7** | 471.7 | 1.9 | 250 | 0.05 | 1300 | 4000 | 1.1 | 250 | 0.03 | 1300 | 4000 | |
| **F 20 3_545.3** | 545.3 | 1.7 | 250 | 0.05 | 1300 | 4000 | 0.92 | 250 | 0.03 | 1300 | 4000 | |

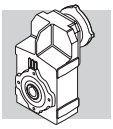
(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



# F 25 — 400 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 25 2_6.9** | 6.9 | 408 | 155 | 7.0 | — | 1840 | 204 | 195 | 4.4 | — | 2320 | |
| **F 25 2_8.4** | 8.4 | 334 | 170 | 6.3 | — | 1950 | 167 | 215 | 4.0 | — | 2450 | |
| **F 25 2_9.4** | 9.4 | 299 | 180 | 5.9 | — | 2010 | 150 | 225 | 3.7 | — | 2540 | |
| **F 25 2_10.6** | 10.6 | 264 | 240 | 7.0 | — | 1850 | 132 | 305 | 4.4 | — | 2320 | |
| **F 25 2_13.0** | 13.0 | 216 | 255 | 6.1 | — | 1990 | 108 | 320 | 3.8 | — | 2510 | |
| **F 25 2_14.5** | 14.5 | 194 | 260 | 5.5 | — | 2080 | 97 | 330 | 3.5 | — | 2610 | |
| **F 25 2_16.6** | 16.6 | 168 | 270 | 5.0 | — | 2190 | 84 | 340 | 3.2 | — | 2760 | |
| **F 25 2_18.6** | 18.6 | 150 | 280 | 4.6 | — | 2270 | 75 | 350 | 2.9 | — | 2870 | |
| **F 25 2_21.8** | 21.8 | 128 | 280 | 4.0 | — | 2460 | 64 | 355 | 2.5 | 250 | 3090 | |
| **F 25 2_23.8** | 23.8 | 118 | 285 | 3.7 | 250 | 2540 | 59 | 360 | 2.3 | 300 | 3200 | |
| **F 25 2_27.2** | 27.2 | 103 | 290 | 3.3 | 250 | 2690 | 51 | 365 | 2.1 | 320 | 3400 | |
| **F 25 2_30.0** | 30.0 | 93 | 295 | 3.0 | 310 | 2800 | 47 | 370 | 1.9 | 410 | 3540 | |
| **F 25 2_32.2** | 32.2 | 87 | 295 | 2.8 | 310 | 2900 | 44 | 370 | 1.8 | 410 | 3660 | |
| **F 25 2_36.4** | 36.4 | 77 | 295 | 2.5 | 460 | 3070 | 38 | 370 | 1.6 | 600 | 3880 | |
| **F 25 2_40.7** | 40.7 | 69 | 295 | 2.2 | 560 | 3230 | 34 | 370 | 1.4 | 720 | 4080 | |
| **F 25 2_44.4** | 44.4 | 63 | 295 | 2.0 | 720 | 3360 | 32 | 370 | 1.3 | 720 | 4250 | |
| **F 25 3_45.6** | 45.6 | 61 | 340 | 2.4 | 1440 | 3100 | 31 | 400 | 1.4 | 1830 | 4030 | |
| **F 25 3_50.8** | 50.8 | 55 | 350 | 2.2 | 1450 | 3230 | 27.6 | 400 | 1.2 | 1850 | 4250 | |
| **F 25 3_58.3** | 58.3 | 48 | 365 | 2.0 | 1450 | 3390 | 24.0 | 400 | 1.1 | 1860 | 4530 | |
| **F 25 3_65.3** | 65.3 | 43 | 375 | 1.8 | 1450 | 3530 | 21.4 | 400 | 0.97 | 1870 | 4780 | |
| **F 25 3_76.6** | 76.6 | 37 | 395 | 1.6 | 1450 | 3730 | 18.3 | 400 | 0.82 | 1880 | 5140 | |
| **F 25 3_83.4** | 83.4 | 34 | 400 | 1.5 | 1450 | 3860 | 16.8 | 400 | 0.76 | 1880 | 5330 | |
| **F 25 3_95.5** | 95.5 | 29.3 | 400 | 1.3 | 1460 | 4130 | 14.7 | 400 | 0.66 | 1890 | 5660 | 404 |
| **F 25 3_105.4** | 105.4 | 26.6 | 400 | 1.2 | 1470 | 4320 | 13.3 | 400 | 0.60 | 1890 | 5910 | |
| **F 25 3_113.0** | 113.0 | 24.8 | 400 | 1.1 | 1470 | 4470 | 12.4 | 400 | 0.56 | 1890 | 6090 | |
| **F 25 3_127.8** | 127.8 | 21.9 | 400 | 0.99 | 1480 | 4730 | 11.0 | 400 | 0.49 | 1900 | 6430 | |
| **F 25 3_143.0** | 143.0 | 19.6 | 400 | 0.88 | 1480 | 4980 | 9.8 | 400 | 0.44 | 1910 | 6500 | |
| **F 25 3_155.9** | 155.9 | 18.0 | 400 | 0.81 | 1480 | 5180 | 9.0 | 400 | 0.40 | 1910 | 6500 | |
| **F 25 3_174.2** | 174.2 | 16.1 | 400 | 0.72 | 1490 | 5440 | 8.0 | 400 | 0.36 | 1910 | 6500 | |
| **F 25 3_193.6** | 193.6 | 14.5 | 400 | 0.65 | 1490 | 5700 | 7.2 | 400 | 0.33 | 1910 | 6500 | |
| **F 25 3_227.8** | 227.8 | 12.3 | 400 | 0.55 | 1490 | 6120 | 6.1 | 400 | 0.28 | 1920 | 6500 | |
| **F 25 3_256.1** | 256.1 | 10.9 | 400 | 0.49 | 1490 | 6430 | 5.5 | 400 | 0.25 | 1920 | 6500 | |
| **F 25 3_288.1** | 288.1 | 9.7 | 400 | 0.44 | 1490 | 6500 | 4.9 | 400 | 0.22 | 1920 | 6500 | |
| **F 25 3_333.1** | 333.1 | 8.4 | 400 | 0.38 | 1500 | 6500 | 4.2 | 400 | 0.19 | 1930 | 6500 | |
| **F 25 4_393.9** | 393.9 | 7.1 | 400 | 0.33 | 1270 | 6500 | 3.6 | 400 | 0.17 | 1300 | 6500 | |
| **F 25 4_434.9** | 434.9 | 6.4 | 400 | 0.30 | 1290 | 6500 | 3.2 | 400 | 0.15 | 1300 | 6500 | |
| **F 25 4_466.0** | 466.0 | 6.0 | 400 | 0.28 | 1300 | 6500 | 3.0 | 400 | 0.14 | 1300 | 6500 | |
| **F 25 4_527.3** | 527.3 | 5.3 | 400 | 0.25 | 1300 | 6500 | 2.7 | 400 | 0.12 | 1300 | 6500 | |
| **F 25 4_589.7** | 589.7 | 4.7 | 400 | 0.22 | 1300 | 6500 | 2.4 | 400 | 0.11 | 1300 | 6500 | |
| **F 25 4_643.3** | 643.3 | 4.4 | 400 | 0.20 | 1300 | 6500 | 2.2 | 400 | 0.10 | 1300 | 6500 | |
| **F 25 4_718.7** | 718.7 | 3.9 | 400 | 0.18 | 1300 | 6500 | 1.9 | 400 | 0.09 | 1300 | 6500 | |
| **F 25 4_798.5** | 798.5 | 3.5 | 400 | 0.16 | 1300 | 6500 | 1.8 | 400 | 0.08 | 1300 | 6500 | |
| **F 25 4_939.8** | 939.8 | 3.0 | 400 | 0.14 | 1300 | 6500 | 1.5 | 400 | 0.07 | 1300 | 6500 | |
| **F 25 4_1057** | 1057 | 2.7 | 400 | 0.12 | 1300 | 6500 | 1.3 | 400 | 0.06 | 1300 | 6500 | |
| **F 25 4_1189** | 1189 | 2.4 | 400 | 0.11 | 1300 | 6500 | 1.2 | 400 | 0.05 | 1300 | 6500 | |
| **F 25 4_1374** | 1374 | 2.0 | 400 | 0.09 | 1300 | 6500 | 1.0 | 400 | 0.05 | 1300 | 6500 | |

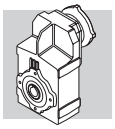
(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



# F 25 — 400 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 25 2_6.9** | 6.9 | 131 | 225 | 3.2 | — | 2690 | 73 | 255 | 2.0 | 370 | 3350 | |
| **F 25 2_8.4** | 8.4 | 107 | 250 | 3.0 | — | 2840 | 60 | 260 | 1.7 | 590 | 3630 | |
| **F 25 2_9.4** | 9.4 | 96 | 260 | 2.8 | — | 2940 | 53 | 265 | 1.6 | 820 | 3780 | |
| **F 25 2_10.6** | 10.6 | 85 | 355 | 3.3 | — | 2680 | 47 | 395 | 2.0 | 360 | 3420 | |
| **F 25 2_13.0** | 13.0 | 69 | 370 | 2.8 | — | 2910 | 39 | 400 | 1.7 | 620 | 3750 | |
| **F 25 2_14.5** | 14.5 | 62 | 380 | 2.6 | — | 3030 | 35 | 400 | 1.5 | 940 | 3950 | |
| **F 25 2_16.6** | 16.6 | 54 | 395 | 2.4 | — | 3190 | 30 | 400 | 1.3 | 1070 | 4210 | |
| **F 25 2_18.6** | 18.6 | 48 | 400 | 2.1 | 300 | 3350 | 26.9 | 400 | 1.2 | 1330 | 4440 | |
| **F 25 2_21.8** | 21.8 | 41 | 400 | 1.8 | 420 | 3630 | 22.9 | 400 | 1.0 | 1450 | 4770 | |
| **F 25 2_23.8** | 23.8 | 38 | 400 | 1.7 | 530 | 3780 | 21.0 | 400 | 0.93 | 1560 | 4950 | |
| **F 25 2_27.2** | 27.2 | 33 | 400 | 1.5 | 610 | 4030 | 18.4 | 400 | 0.81 | 1640 | 5260 | |
| **F 25 2_30.0** | 30.0 | 30 | 400 | 1.3 | 760 | 4220 | 16.6 | 400 | 0.73 | 1790 | 5490 | |
| **F 25 2_32.2** | 32.2 | 28.0 | 400 | 1.2 | 760 | 4360 | 15.5 | 400 | 0.69 | 1790 | 5660 | |
| **F 25 2_36.4** | 36.4 | 24.7 | 400 | 1.1 | 970 | 4610 | 13.7 | 400 | 0.61 | 2000 | 5970 | |
| **F 25 2_40.7** | 40.7 | 22.1 | 375 | 0.91 | 1330 | 4950 | 12.3 | 375 | 0.51 | 2000 | 6360 | |
| **F 25 2_44.4** | 44.4 | 20.3 | 385 | 0.86 | 1230 | 5100 | 11.3 | 385 | 0.48 | 2000 | 6500 | |
| **F 25 3_45.6** | 45.6 | 19.8 | 400 | 0.89 | 2160 | 4960 | 11.0 | 400 | 0.49 | 2200 | 6420 | |
| **F 25 3_50.8** | 50.8 | 17.7 | 400 | 0.80 | 2180 | 5210 | 9.8 | 400 | 0.44 | 2200 | 6500 | |
| **F 25 3_58.3** | 58.3 | 15.4 | 400 | 0.69 | 2190 | 5540 | 8.6 | 400 | 0.39 | 2200 | 6500 | |
| **F 25 3_65.3** | 65.3 | 13.8 | 400 | 0.62 | 2200 | 5820 | 7.7 | 400 | 0.34 | 2200 | 6500 | |
| **F 25 3_76.6** | 76.6 | 11.8 | 400 | 0.53 | 2200 | 6240 | 6.5 | 400 | 0.29 | 2200 | 6500 | |
| **F 25 3_83.4** | 83.4 | 10.8 | 400 | 0.49 | 2200 | 6470 | 6.0 | 400 | 0.27 | 2200 | 6500 | |
| **F 25 3_95.5** | 95.5 | 9.4 | 400 | 0.42 | 2200 | 6500 | 5.2 | 400 | 0.24 | 2200 | 6500 | 404 |
| **F 25 3_105.4** | 105.4 | 8.5 | 400 | 0.38 | 2200 | 6500 | 4.7 | 400 | 0.21 | 2200 | 6500 | |
| **F 25 3_113.0** | 113.0 | 8.0 | 400 | 0.36 | 2200 | 6500 | 4.4 | 400 | 0.20 | 2200 | 6500 | |
| **F 25 3_127.8** | 127.8 | 7.0 | 400 | 0.32 | 2200 | 6500 | 3.9 | 400 | 0.18 | 2200 | 6500 | |
| **F 25 3_143.0** | 143.0 | 6.3 | 400 | 0.28 | 2200 | 6500 | 3.5 | 400 | 0.16 | 2200 | 6500 | |
| **F 25 3_155.9** | 155.9 | 5.8 | 400 | 0.26 | 2200 | 6500 | 3.2 | 400 | 0.14 | 2200 | 6500 | |
| **F 25 3_174.2** | 174.2 | 5.2 | 400 | 0.23 | 2200 | 6500 | 2.9 | 400 | 0.13 | 2200 | 6500 | |
| **F 25 3_193.6** | 193.6 | 4.6 | 400 | 0.21 | 2200 | 6500 | 2.6 | 400 | 0.12 | 2200 | 6500 | |
| **F 25 3_227.8** | 227.8 | 4.0 | 400 | 0.18 | 2200 | 6500 | 2.2 | 400 | 0.10 | 2200 | 6500 | |
| **F 25 3_256.1** | 256.1 | 3.5 | 400 | 0.16 | 2200 | 6500 | 2.0 | 400 | 0.09 | 2200 | 6500 | |
| **F 25 3_288.1** | 288.1 | 3.1 | 400 | 0.14 | 2200 | 6500 | 1.7 | 400 | 0.08 | 2200 | 6500 | |
| **F 25 3_333.1** | 333.1 | 2.7 | 400 | 0.12 | 2200 | 6500 | 1.5 | 400 | 0.07 | 2200 | 6500 | |
| **F 25 4_393.9** | 393.9 | 2.3 | 400 | 0.11 | 1300 | 6500 | 1.3 | 400 | 0.06 | 1300 | 6500 | |
| **F 25 4_434.9** | 434.9 | 2.1 | 400 | 0.10 | 1300 | 6500 | 1.1 | 400 | 0.05 | 1300 | 6500 | |
| **F 25 4_466.0** | 466.0 | 1.9 | 400 | 0.09 | 1300 | 6500 | 1.1 | 400 | 0.05 | 1300 | 6500 | |
| **F 25 4_527.3** | 527.3 | 1.7 | 400 | 0.08 | 1300 | 6500 | 0.95 | 400 | 0.04 | 1300 | 6500 | |
| **F 25 4_589.7** | 589.7 | 1.5 | 400 | 0.07 | 1300 | 6500 | 0.85 | 400 | 0.04 | 1300 | 6500 | |
| **F 25 4_643.3** | 643.3 | 1.4 | 400 | 0.07 | 1300 | 6500 | 0.78 | 400 | 0.04 | 1300 | 6500 | |
| **F 25 4_718.7** | 718.7 | 1.3 | 400 | 0.06 | 1300 | 6500 | 0.70 | 400 | 0.03 | 1300 | 6500 | |
| **F 25 4_798.5** | 798.5 | 1.1 | 400 | 0.05 | 1300 | 6500 | 0.63 | 400 | 0.03 | 1300 | 6500 | |
| **F 25 4_939.8** | 939.8 | 0.96 | 400 | 0.04 | 1300 | 6500 | 0.53 | 400 | 0.02 | 1300 | 6500 | |
| **F 25 4_1057** | 1057 | 0.85 | 400 | 0.04 | 1300 | 6500 | 0.47 | 400 | 0.02 | 1300 | 6500 | |
| **F 25 4_1189** | 1189 | 0.76 | 400 | 0.04 | 1300 | 6500 | 0.42 | 400 | 0.02 | 1300 | 6500 | |
| **F 25 4_1374** | 1374 | 0.65 | 400 | 0.03 | 1300 | 6500 | 0.36 | 400 | 0.02 | 1300 | 6500 | |

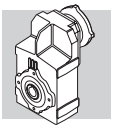
(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



# F 31 — 600 Nm

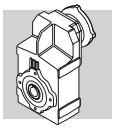
| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 31 2_6.9** | 6.9 | 403 | 295 | 13.1 | — | 2710 | 201 | 360 | 8.0 | — | 3460 | 408 |
| **F 31 2_8.2** | 8.2 | 340 | 310 | 11.6 | — | 2880 | 170 | 375 | 7.0 | — | 3690 | |
| **F 31 2_9.0** | 9.0 | 311 | 310 | 10.6 | — | 3000 | 155 | 385 | 6.6 | 390 | 3810 | |
| **F 31 2_10.7** | 10.7 | 261 | 450 | 12.9 | — | 2790 | 130 | 525 | 7.5 | 500 | 3670 | |
| **F 31 2_12.7** | 12.7 | 220 | 475 | 11.5 | — | 2950 | 110 | 555 | 6.7 | 490 | 3880 | |
| **F 31 2_13.9** | 13.9 | 201 | 475 | 10.5 | 290 | 3100 | 100 | 570 | 6.3 | 650 | 4010 | |
| **F 31 2_16.8** | 16.8 | 167 | 475 | 8.7 | 510 | 3410 | 83 | 595 | 5.5 | 680 | 4310 | |
| **F 31 2_18.5** | 18.5 | 151 | 475 | 7.9 | 730 | 3580 | 76 | 600 | 5.0 | 910 | 4510 | |
| **F 31 2_21.1** | 21.1 | 133 | 475 | 6.9 | 830 | 3830 | 66 | 600 | 4.4 | 1030 | 4820 | |
| **F 31 2_23.4** | 23.4 | 120 | 475 | 6.3 | 1020 | 4020 | 60 | 600 | 4.0 | 1270 | 5060 | |
| **F 31 2_27.3** | 27.3 | 103 | 475 | 5.4 | 1100 | 4330 | 51 | 600 | 3.4 | 1380 | 5450 | |
| **F 31 2_30.1** | 30.1 | 93 | 475 | 4.9 | 1270 | 4540 | 46 | 600 | 3.1 | 1590 | 5710 | |
| **F 31 2_34.4** | 34.4 | 81 | 475 | 4.3 | 1330 | 4820 | 41 | 600 | 2.7 | 1660 | 6070 | |
| **F 31 2_37.7** | 37.7 | 74 | 475 | 3.9 | 1430 | 5030 | 37 | 600 | 2.5 | 1800 | 6330 | |
| **F 31 2_40.4** | 40.4 | 69 | 475 | 3.6 | 1440 | 5190 | 35 | 600 | 2.3 | 1800 | 6500 | |
| **F 31 2_44.6** | 44.6 | 63 | 475 | 3.3 | 1540 | 5430 | 31 | 600 | 2.1 | 1930 | 6500 | |
| **F 31 3_47.5** | 47.5 | 59 | 475 | 3.1 | 2110 | 5490 | 29.4 | 580 | 1.9 | 2200 | 6500 | |
| **F 31 3_52.1** | 52.1 | 54 | 485 | 2.9 | 2120 | 5680 | 26.9 | 600 | 1.8 | 2200 | 6500 | |
| **F 31 3_62.8** | 62.8 | 45 | 515 | 2.6 | 2120 | 6040 | 22.3 | 600 | 1.5 | 2200 | 6500 | |
| **F 31 3_69.1** | 69.1 | 41 | 530 | 2.4 | 2130 | 6250 | 20.3 | 600 | 1.4 | 2200 | 6500 | |
| **F 31 3_78.9** | 78.9 | 36 | 550 | 2.2 | 2120 | 6500 | 17.8 | 600 | 1.2 | 2200 | 6500 | |
| **F 31 3_87.4** | 87.4 | 32 | 570 | 2.1 | 2130 | 6500 | 16.0 | 600 | 1.1 | 2200 | 6500 | |
| **F 31 3_101.9** | 101.9 | 27.5 | 595 | 1.8 | 2130 | 6500 | 13.7 | 600 | 0.93 | 2200 | 6500 | |
| **F 31 3_112.5** | 112.5 | 24.9 | 600 | 1.7 | 2130 | 6500 | 12.4 | 600 | 0.84 | 2200 | 6500 | |
| **F 31 3_128.4** | 128.4 | 21.8 | 600 | 1.5 | 2140 | 6500 | 10.9 | 600 | 0.74 | 2200 | 6500 | |
| **F 31 3_140.7** | 140.7 | 19.9 | 600 | 1.3 | 2140 | 6500 | 9.9 | 600 | 0.67 | 2200 | 6500 | |
| **F 31 3_150.8** | 150.8 | 18.6 | 600 | 1.3 | 2140 | 6500 | 9.3 | 600 | 0.63 | 2200 | 6500 | |
| **F 31 3_166.8** | 166.8 | 16.8 | 600 | 1.1 | 2150 | 6500 | 8.4 | 600 | 0.57 | 2200 | 6500 | |
| **F 31 3_185.4** | 185.4 | 15.1 | 600 | 1.0 | 2160 | 6500 | 7.5 | 600 | 0.51 | 2200 | 6500 | |
| **F 31 3_202.3** | 202.3 | 13.8 | 600 | 0.94 | 2160 | 6500 | 6.9 | 600 | 0.47 | 2200 | 6500 | |
| **F 31 3_228.2** | 228.2 | 12.3 | 600 | 0.83 | 2160 | 6500 | 6.1 | 600 | 0.41 | 2200 | 6500 | |
| **F 31 3_253.6** | 253.6 | 11.0 | 600 | 0.75 | 2160 | 6500 | 5.5 | 600 | 0.37 | 2200 | 6500 | |
| **F 31 3_293.8** | 293.8 | 9.5 | 600 | 0.64 | 2170 | 6500 | 4.8 | 600 | 0.32 | 2200 | 6500 | |
| **F 31 3_332.8** | 332.8 | 8.4 | 600 | 0.57 | 2170 | 6500 | 4.2 | 600 | 0.28 | 2200 | 6500 | |
| **F 31 3_374.4** | 374.4 | 7.5 | 600 | 0.51 | 2170 | 6500 | 3.7 | 600 | 0.25 | 2200 | 6500 | |
| **F 31 4_418.9** | 418.9 | 6.7 | 600 | 0.47 | 1230 | 6500 | 3.3 | 600 | 0.23 | 1300 | 6500 | |
| **F 31 4_462.6** | 462.6 | 6.1 | 600 | 0.42 | 1250 | 6500 | 3.0 | 600 | 0.21 | 1300 | 6500 | |
| **F 31 4_527.8** | 527.8 | 5.3 | 600 | 0.37 | 1270 | 6500 | 2.7 | 600 | 0.19 | 1300 | 6500 | |
| **F 31 4_578.6** | 578.6 | 4.8 | 600 | 0.34 | 1290 | 6500 | 2.4 | 600 | 0.17 | 1300 | 6500 | |
| **F 31 4_619.9** | 619.9 | 4.5 | 600 | 0.32 | 1300 | 6500 | 2.3 | 600 | 0.16 | 1300 | 6500 | |
| **F 31 4_685.6** | 685.6 | 4.1 | 600 | 0.29 | 1300 | 6500 | 2.0 | 600 | 0.14 | 1300 | 6500 | |
| **F 31 4_762.3** | 762.3 | 3.7 | 600 | 0.26 | 1300 | 6500 | 1.8 | 600 | 0.13 | 1300 | 6500 | |
| **F 31 4_831.6** | 831.6 | 3.4 | 600 | 0.24 | 1300 | 6500 | 1.7 | 600 | 0.12 | 1300 | 6500 | |
| **F 31 4_938.2** | 938.2 | 3.0 | 600 | 0.21 | 1300 | 6500 | 1.5 | 600 | 0.10 | 1300 | 6500 | |
| **F 31 4_1042** | 1042 | 2.7 | 600 | 0.19 | 1300 | 6500 | 1.3 | 600 | 0.09 | 1300 | 6500 | |
| **F 31 4_1208** | 1208 | 2.3 | 600 | 0.16 | 1300 | 6500 | 1.2 | 600 | 0.08 | 1300 | 6500 | |
| **F 31 4_1368** | 1368 | 2.0 | 600 | 0.14 | 1300 | 6500 | 1.0 | 600 | 0.07 | 1300 | 6500 | |
| **F 31 4_1539** | 1539 | 1.8 | 600 | 0.13 | 1300 | 6500 | 0.91 | 600 | 0.06 | 1300 | 6500 | |

(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



# F 31 — 600 Nm

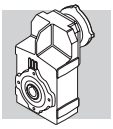
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 31 2_6.9** | 6.9 | 130 | 390 | 5.6 | 640 | 4120 | 72 | 390 | 3.1 | 2200 | 5350 | |
| **F 31 2_8.2** | 8.2 | 109 | 390 | 4.7 | 990 | 4450 | 61 | 390 | 2.6 | 2200 | 5760 | |
| **F 31 2_9.0** | 9.0 | 100 | 390 | 4.3 | 1320 | 4640 | 55 | 390 | 2.4 | 2200 | 5980 | |
| **F 31 2_10.7** | 10.7 | 84 | 600 | 5.5 | 670 | 4280 | 47 | 600 | 3.1 | 2200 | 5710 | |
| **F 31 2_12.7** | 12.7 | 71 | 600 | 4.7 | 1020 | 4670 | 39 | 600 | 2.6 | 2200 | 6170 | |
| **F 31 2_13.9** | 13.9 | 65 | 600 | 4.3 | 1350 | 4880 | 36 | 600 | 2.4 | 2200 | 6440 | |
| **F 31 2_16.8** | 16.8 | 54 | 600 | 3.5 | 1640 | 5340 | 29.8 | 600 | 2.0 | 2200 | 6500 | |
| **F 31 2_18.5** | 18.5 | 49 | 600 | 3.2 | 1915 | 5580 | 27.0 | 600 | 1.8 | 2200 | 6500 | |
| **F 31 2_21.1** | 21.1 | 43 | 600 | 2.8 | 2040 | 5950 | 23.7 | 600 | 1.6 | 2200 | 6500 | |
| **F 31 2_23.4** | 23.4 | 38 | 600 | 2.5 | 2200 | 6230 | 21.4 | 600 | 1.4 | 2200 | 6500 | |
| **F 31 2_27.3** | 27.3 | 33 | 600 | 2.2 | 2200 | 6500 | 18.3 | 600 | 1.2 | 2200 | 6500 | |
| **F 31 2_30.1** | 30.1 | 29.9 | 600 | 2.0 | 2200 | 6500 | 16.6 | 600 | 1.1 | 2200 | 6500 | |
| **F 31 2_34.4** | 34.4 | 26.2 | 600 | 1.7 | 2200 | 6500 | 14.6 | 600 | 0.96 | 2200 | 6500 | |
| **F 31 2_37.7** | 37.7 | 23.9 | 600 | 1.6 | 2200 | 6500 | 13.3 | 600 | 0.88 | 2200 | 6500 | |
| **F 31 2_40.4** | 40.4 | 22.3 | 600 | 1.5 | 2200 | 6500 | 12.4 | 600 | 0.82 | 2200 | 6500 | |
| **F 31 2_44.6** | 44.6 | 20.2 | 600 | 1.3 | 2200 | 6500 | 11.2 | 600 | 0.74 | 2200 | 6500 | |
| **F 31 3_47.5** | 47.5 | 18.9 | 600 | 1.3 | 2200 | 6500 | 10.5 | 600 | 0.71 | 2200 | 6500 | |
| **F 31 3_52.1** | 52.1 | 17.3 | 600 | 1.2 | 2200 | 6500 | 9.6 | 600 | 0.65 | 2200 | 6500 | |
| **F 31 3_62.8** | 62.8 | 14.3 | 600 | 0.97 | 2200 | 6500 | 8.0 | 600 | 0.54 | 2200 | 6500 | |
| **F 31 3_69.1** | 69.1 | 13.0 | 600 | 0.88 | 2200 | 6500 | 7.2 | 600 | 0.49 | 2200 | 6500 | |
| **F 31 3_78.9** | 78.9 | 11.4 | 600 | 0.77 | 2200 | 6500 | 6.3 | 600 | 0.43 | 2200 | 6500 | |
| **F 31 3_87.4** | 87.4 | 10.3 | 600 | 0.70 | 2200 | 6500 | 5.7 | 600 | 0.39 | 2200 | 6500 | |
| **F 31 3_101.9** | 101.9 | 8.8 | 600 | 0.60 | 2200 | 6500 | 4.9 | 600 | 0.33 | 2200 | 6500 | |
| **F 31 3_112.5** | 112.5 | 8.0 | 600 | 0.54 | 2200 | 6500 | 4.4 | 600 | 0.30 | 2200 | 6500 | 408 |
| **F 31 3_128.4** | 128.4 | 7.0 | 600 | 0.47 | 2200 | 6500 | 3.9 | 600 | 0.26 | 2200 | 6500 | |
| **F 31 3_140.7** | 140.7 | 6.4 | 600 | 0.43 | 2200 | 6500 | 3.6 | 600 | 0.24 | 2200 | 6500 | |
| **F 31 3_150.8** | 150.8 | 6.0 | 600 | 0.40 | 2200 | 6500 | 3.3 | 600 | 0.22 | 2200 | 6500 | |
| **F 31 3_166.8** | 166.8 | 5.4 | 600 | 0.36 | 2200 | 6500 | 3.0 | 600 | 0.20 | 2200 | 6500 | |
| **F 31 3_185.4** | 185.4 | 4.9 | 600 | 0.33 | 2200 | 6500 | 2.7 | 600 | 0.18 | 2200 | 6500 | |
| **F 31 3_202.3** | 202.3 | 4.4 | 600 | 0.30 | 2200 | 6500 | 2.5 | 600 | 0.17 | 2200 | 6500 | |
| **F 31 3_228.2** | 228.2 | 3.9 | 600 | 0.27 | 2200 | 6500 | 2.2 | 600 | 0.15 | 2200 | 6500 | |
| **F 31 3_253.6** | 253.6 | 3.5 | 600 | 0.24 | 2200 | 6500 | 2.0 | 600 | 0.13 | 2200 | 6500 | |
| **F 31 3_293.8** | 293.8 | 3.1 | 600 | 0.21 | 2200 | 6500 | 1.7 | 600 | 0.11 | 2200 | 6500 | |
| **F 31 3_332.8** | 332.8 | 2.7 | 600 | 0.18 | 2200 | 6500 | 1.5 | 600 | 0.10 | 2200 | 6500 | |
| **F 31 3_374.4** | 374.4 | 2.4 | 600 | 0.16 | 2200 | 6500 | 1.3 | 600 | 0.09 | 2200 | 6500 | |
| **F 31 4_418.9** | 418.9 | 2.1 | 600 | 0.15 | 1300 | 6500 | 1.2 | 600 | 0.08 | 1300 | 6500 | |
| **F 31 4_462.6** | 462.6 | 1.9 | 600 | 0.14 | 1300 | 6500 | 1.1 | 600 | 0.08 | 1300 | 6500 | |
| **F 31 4_527.8** | 527.8 | 1.7 | 600 | 0.12 | 1300 | 6500 | 0.95 | 600 | 0.07 | 1300 | 6500 | |
| **F 31 4_578.6** | 578.6 | 1.6 | 600 | 0.11 | 1300 | 6500 | 0.86 | 600 | 0.06 | 1300 | 6500 | |
| **F 31 4_619.9** | 619.9 | 1.5 | 600 | 0.10 | 1300 | 6500 | 0.81 | 600 | 0.06 | 1300 | 6500 | |
| **F 31 4_685.6** | 685.6 | 1.3 | 600 | 0.09 | 1300 | 6500 | 0.73 | 600 | 0.05 | 1300 | 6500 | |
| **F 31 4_762.3** | 762.3 | 1.2 | 600 | 0.08 | 1300 | 6500 | 0.66 | 600 | 0.05 | 1300 | 6500 | |
| **F 31 4_831.6** | 831.6 | 1.1 | 600 | 0.08 | 1300 | 6500 | 0.60 | 600 | 0.04 | 1300 | 6500 | |
| **F 31 4_938.2** | 938.2 | 0.96 | 600 | 0.07 | 1300 | 6500 | 0.53 | 600 | 0.04 | 1300 | 6500 | |
| **F 31 4_1042** | 1042 | 0.86 | 600 | 0.06 | 1300 | 6500 | 0.48 | 600 | 0.03 | 1300 | 6500 | |
| **F 31 4_1208** | 1208 | 0.75 | 600 | 0.05 | 1300 | 6500 | 0.41 | 600 | 0.03 | 1300 | 6500 | |
| **F 31 4_1368** | 1368 | 0.66 | 600 | 0.05 | 1300 | 6500 | 0.37 | 600 | 0.03 | 1300 | 6500 | |
| **F 31 4_1539** | 1539 | 0.58 | 600 | 0.04 | 1300 | 6500 | 0.32 | 600 | 0.02 | 1300 | 6500 | |



# F 41 — 1100 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 41 2_6.7** | 6.7 | 416 | 460 | 21 | — | 3410 | 208 | 580 | 13.3 | — | 4290 | |
| **F 41 2_9.1** | 9.1 | 306 | 515 | 17.4 | — | 3750 | 153 | 650 | 11.0 | — | 4730 | |
| **F 41 2_10.8** | 10.8 | 260 | 715 | 21 | — | 3310 | 130 | 900 | 12.9 | — | 4170 | |
| **F 41 2_14.6** | 14.6 | 191 | 805 | 17.0 | — | 3620 | 96 | 1015 | 10.7 | — | 4560 | |
| **F 41 2_17.1** | 17.1 | 164 | 835 | 15.1 | — | 3860 | 82 | 1055 | 9.5 | — | 4850 | |
| **F 41 2_18.9** | 18.9 | 148 | 860 | 14.0 | 410 | 4000 | 74 | 1085 | 8.9 | 500 | 5030 | |
| **F 41 2_24.1** | 24.1 | 116 | 875 | 11.2 | 650 | 4540 | 58 | 1100 | 7.0 | 840 | 5730 | |
| **F 41 2_30.1** | 30.1 | 93 | 875 | 9.0 | 980 | 5130 | 46 | 1100 | 5.6 | 1260 | 6470 | |
| **F 41 2_38.2** | 38.2 | 73 | 875 | 7.1 | 1260 | 5810 | 37 | 1100 | 4.4 | 1600 | 7330 | |
| **F 41 2_47.9** | 47.9 | 58 | 850 | 5.5 | 1680 | 6600 | 29.2 | 1070 | 3.4 | 2120 | 8320 | |
| **F 41 3_51.5** | 51.5 | 54 | 880 | 5.4 | 3030 | 6750 | 27.2 | 1085 | 3.3 | 3500 | 8500 | |
| **F 41 3_60.2** | 60.2 | 46 | 930 | 4.9 | 3030 | 7100 | 23.2 | 1100 | 2.9 | 3500 | 8500 | |
| **F 41 3_66.5** | 66.5 | 42 | 980 | 4.6 | 3030 | 7280 | 21.1 | 1100 | 2.6 | 3500 | 8500 | |
| **F 41 3_84.9** | 84.9 | 33 | 1065 | 4.0 | 3030 | 7890 | 16.5 | 1100 | 2.0 | 3500 | 8500 | |
| **F 41 3_106.0** | 106.0 | 26.4 | 1100 | 3.3 | 3040 | 8500 | 13.2 | 1100 | 1.6 | 3500 | 8500 | |
| **F 41 3_134.4** | 134.4 | 20.8 | 1100 | 2.6 | 3050 | 8500 | 10.4 | 1100 | 1.3 | 3500 | 8500 | |
| **F 41 3_168.7** | 168.7 | 16.6 | 1100 | 2.1 | 3070 | 8500 | 8.3 | 1100 | 1.0 | 3500 | 8500 | |
| **F 41 3_180.7** | 180.7 | 15.5 | 1100 | 1.9 | 3070 | 8500 | 7.7 | 1100 | 0.96 | 3500 | 8500 | 412 |
| **F 41 3_198.9** | 198.9 | 14.1 | 1100 | 1.7 | 3080 | 8500 | 7.0 | 1100 | 0.87 | 3500 | 8500 | |
| **F 41 3_220.1** | 220.1 | 12.7 | 1100 | 1.6 | 3090 | 8500 | 6.4 | 1100 | 0.79 | 3500 | 8500 | |
| **F 41 3_240.1** | 240.1 | 11.7 | 1100 | 1.4 | 3090 | 8500 | 5.8 | 1100 | 0.72 | 3500 | 8500 | |
| **F 41 3_266.9** | 266.9 | 10.5 | 1100 | 1.3 | 3090 | 8500 | 5.2 | 1100 | 0.65 | 3500 | 8500 | |
| **F 41 3_296.6** | 296.6 | 9.4 | 1100 | 1.2 | 3090 | 8500 | 4.7 | 1100 | 0.58 | 3500 | 8500 | |
| **F 41 3_344.8** | 344.8 | 8.1 | 1100 | 1.0 | 3100 | 8500 | 4.1 | 1100 | 0.50 | 3500 | 8500 | |
| **F 41 4_433.7** | 433.7 | 6.5 | 1100 | 0.83 | 1480 | 8500 | 3.2 | 1100 | 0.41 | 1910 | 8500 | |
| **F 41 4_549.8** | 549.8 | 5.1 | 1100 | 0.65 | 1520 | 8500 | 2.5 | 1100 | 0.33 | 1940 | 8500 | |
| **F 41 4_690.1** | 690.1 | 4.1 | 1100 | 0.52 | 1540 | 8500 | 2.0 | 1100 | 0.26 | 1970 | 8500 | |
| **F 41 4_739.4** | 739.4 | 3.8 | 1100 | 0.48 | 1550 | 8500 | 1.9 | 1100 | 0.24 | 1980 | 8500 | |
| **F 41 4_813.8** | 813.8 | 3.4 | 1100 | 0.44 | 1560 | 8500 | 1.7 | 1100 | 0.22 | 1990 | 8500 | |
| **F 41 4_900.5** | 900.5 | 3.1 | 1100 | 0.40 | 1570 | 8500 | 1.6 | 1100 | 0.20 | 2000 | 8500 | |
| **F 41 4_982.4** | 982.4 | 2.9 | 1100 | 0.36 | 1570 | 8500 | 1.4 | 1100 | 0.18 | 2000 | 8500 | |
| **F 41 4_1092** | 1092 | 2.6 | 1100 | 0.33 | 1580 | 8500 | 1.3 | 1100 | 0.16 | 2010 | 8500 | |
| **F 41 4_1213** | 1213 | 2.3 | 1100 | 0.30 | 1590 | 8500 | 1.2 | 1100 | 0.15 | 2020 | 8500 | |
| **F 41 4_1411** | 1411 | 2.0 | 1100 | 0.25 | 1600 | 8500 | 1.0 | 1100 | 0.13 | 2020 | 8500 | |

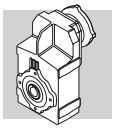
(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



# F 41 — 1100 Nm

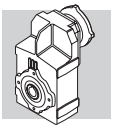
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 41 2_6.7** | 6.7 | 134 | 670 | 9.9 | — | 4980 | 74 | 700 | 5.7 | 1760 | 6450 | |
| **F 41 2_9.1** | 9.1 | 99 | 700 | 7.6 | 680 | 5660 | 55 | 700 | 4.2 | 2850 | 7410 | |
| **F 41 2_10.8** | 10.8 | 84 | 1025 | 9.4 | 480 | 4900 | 46 | 1100 | 5.6 | 1950 | 6480 | |
| **F 41 2_14.6** | 14.6 | 62 | 1100 | 7.5 | 860 | 5550 | 34 | 1100 | 4.1 | 3030 | 7590 | |
| **F 41 2_17.1** | 17.1 | 53 | 1100 | 6.4 | 1230 | 6060 | 29.2 | 1100 | 3.5 | 3400 | 8210 | |
| **F 41 2_18.9** | 18.9 | 48 | 1100 | 5.8 | 1760 | 6390 | 26.5 | 1100 | 3.2 | 3500 | 8500 | |
| **F 41 2_24.1** | 24.1 | 37 | 1100 | 4.5 | 2210 | 7260 | 20.7 | 1100 | 2.5 | 3500 | 8500 | |
| **F 41 2_30.1** | 30.1 | 29.9 | 1100 | 3.6 | 2630 | 8120 | 16.6 | 1100 | 2.0 | 3500 | 8500 | |
| **F 41 2_38.2** | 38.2 | 23.6 | 1100 | 2.9 | 2970 | 8500 | 13.1 | 1100 | 1.6 | 3500 | 8500 | |
| **F 41 2_47.9** | 47.9 | 18.8 | 1070 | 2.2 | 3490 | 8500 | 10.4 | 1070 | 1.2 | 3500 | 8500 | |
| **F 41 3_51.5** | 51.5 | 17.5 | 1100 | 2.2 | 3500 | 8500 | 9.7 | 1100 | 1.2 | 3500 | 8500 | |
| **F 41 3_60.2** | 60.2 | 14.9 | 1100 | 1.9 | 3500 | 8500 | 8.3 | 1100 | 1.0 | 3500 | 8500 | |
| **F 41 3_66.5** | 66.5 | 13.5 | 1100 | 1.7 | 3500 | 8500 | 7.5 | 1100 | 0.93 | 3500 | 8500 | |
| **F 41 3_84.9** | 84.9 | 10.6 | 1100 | 1.3 | 3500 | 8500 | 5.9 | 1100 | 0.73 | 3500 | 8500 | |
| **F 41 3_106.0** | 106.0 | 8.5 | 1100 | 1.1 | 3500 | 8500 | 4.7 | 1100 | 0.58 | 3500 | 8500 | |
| **F 41 3_134.4** | 134.4 | 6.7 | 1100 | 0.83 | 3500 | 8500 | 3.7 | 1100 | 0.46 | 3500 | 8500 | |
| **F 41 3_168.7** | 168.7 | 5.3 | 1100 | 0.66 | 3500 | 8500 | 3.0 | 1100 | 0.37 | 3500 | 8500 | |
| **F 41 3_180.7** | 180.7 | 5.0 | 1100 | 0.62 | 3500 | 8500 | 2.8 | 1100 | 0.34 | 3500 | 8500 | 412 |
| **F 41 3_198.9** | 198.9 | 4.5 | 1100 | 0.56 | 3500 | 8500 | 2.5 | 1100 | 0.31 | 3500 | 8500 | |
| **F 41 3_220.1** | 220.1 | 4.1 | 1100 | 0.51 | 3500 | 8500 | 2.3 | 1100 | 0.28 | 3500 | 8500 | |
| **F 41 3_240.1** | 240.1 | 3.7 | 1100 | 0.46 | 3500 | 8500 | 2.1 | 1100 | 0.26 | 3500 | 8500 | |
| **F 41 3_266.9** | 266.9 | 3.4 | 1100 | 0.42 | 3500 | 8500 | 1.9 | 1100 | 0.23 | 3500 | 8500 | |
| **F 41 3_296.6** | 296.6 | 3.0 | 1100 | 0.38 | 3500 | 8500 | 1.7 | 1100 | 0.21 | 3500 | 8500 | |
| **F 41 3_344.8** | 344.8 | 2.6 | 1100 | 0.32 | 3500 | 8500 | 1.5 | 1100 | 0.18 | 3500 | 8500 | |
| **F 41 4_433.7** | 433.7 | 2.1 | 1100 | 0.27 | 2200 | 8500 | 1.2 | 1100 | 0.15 | 2200 | 8500 | |
| **F 41 4_549.8** | 549.8 | 1.6 | 1100 | 0.21 | 2200 | 8500 | 0.91 | 1100 | 0.12 | 2200 | 8500 | |
| **F 41 4_690.1** | 690.1 | 1.3 | 1100 | 0.17 | 2200 | 8500 | 0.72 | 1100 | 0.09 | 2200 | 8500 | |
| **F 41 4_739.4** | 739.4 | 1.2 | 1100 | 0.16 | 2200 | 8500 | 0.68 | 1100 | 0.09 | 2200 | 8500 | |
| **F 41 4_813.8** | 813.8 | 1.1 | 1100 | 0.14 | 2200 | 8500 | 0.61 | 1100 | 0.08 | 2200 | 8500 | |
| **F 41 4_900.5** | 900.5 | 1.0 | 1100 | 0.13 | 2200 | 8500 | 0.56 | 1100 | 0.07 | 2200 | 8500 | |
| **F 41 4_982.4** | 982.4 | 0.92 | 1100 | 0.12 | 2200 | 8500 | 0.51 | 1100 | 0.07 | 2200 | 8500 | |
| **F 41 4_1092** | 1092 | 0.82 | 1100 | 0.11 | 2200 | 8500 | 0.46 | 1100 | 0.06 | 2200 | 8500 | |
| **F 41 4_1213** | 1213 | 0.74 | 1100 | 0.09 | 2200 | 8500 | 0.41 | 1100 | 0.05 | 2200 | 8500 | |
| **F 41 4_1411** | 1411 | 0.64 | 1100 | 0.08 | 2200 | 8500 | 0.35 | 1100 | 0.05 | 2200 | 8500 | |

(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



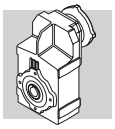
# F 51 — 1800 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 51 2_7.2** | 7.2 | 389 | 775 | 33 | 990 | 4170 | 195 | 975 | 21 | 1440 | 5260 | |
| **F 51 2_9.1** | 9.1 | 309 | 875 | 30 | 890 | 4400 | 155 | 1100 | 18.8 | 1320 | 5550 | |
| **F 51 2_11.1** | 11.1 | 252 | 1055 | 29 | 1460 | 4530 | 126 | 1330 | 18.5 | 2010 | 5700 | |
| **F 51 2_14.0** | 14.0 | 200 | 1125 | 25 | 1580 | 4920 | 100 | 1420 | 15.7 | 2150 | 6200 | |
| **F 51 2_18.8** | 18.8 | 149 | 1225 | 20 | 1660 | 5480 | 74 | 1545 | 12.7 | 2240 | 6900 | |
| **F 51 2_23.8** | 23.8 | 118 | 1310 | 17.0 | 1710 | 5960 | 59 | 1650 | 10.7 | 2290 | 7520 | |
| **F 51 2_30.0** | 30.0 | 93 | 1350 | 13.9 | 1760 | 6610 | 47 | 1700 | 8.7 | 2330 | 8340 | |
| **F 51 2_37.1** | 37.1 | 75 | 1350 | 11.2 | 1910 | 7350 | 38 | 1700 | 7.1 | 2410 | 9260 | |
| | | | | | | | | | | | | |
| **F 51 3_48.9** | 48.9 | 57 | 1505 | 9.7 | 2600 | 7800 | 28.6 | 1800 | 5.8 | 3310 | 10100 | |
| **F 51 3_65.8** | 65.8 | 43 | 1650 | 7.9 | 2610 | 8640 | 21.3 | 1800 | 4.3 | 3380 | 11600 | |
| **F 51 3_83.2** | 83.2 | 34 | 1770 | 6.7 | 2630 | 9380 | 16.8 | 1800 | 3.4 | 3440 | 12000 | |
| **F 51 3_105.1** | 105.1 | 26.6 | 1800 | 5.4 | 2650 | 10400 | 13.3 | 1800 | 2.7 | 3460 | 12000 | |
| **F 51 3_129.9** | 129.9 | 21.6 | 1800 | 4.4 | 2670 | 11600 | 10.8 | 1800 | 2.2 | 3490 | 12000 | |
| **F 51 3_165.6** | 165.6 | 16.9 | 1800 | 3.4 | 2700 | 12000 | 8.5 | 1800 | 1.7 | 3500 | 12000 | |
| **F 51 3_202.4** | 202.4 | 13.8 | 1800 | 2.8 | 2710 | 12000 | 6.9 | 1800 | 1.4 | 3500 | 12000 | |
| **F 51 3_216.9** | 216.9 | 12.9 | 1800 | 2.6 | 2710 | 12000 | 6.5 | 1800 | 1.3 | 3500 | 12000 | 416 |
| **F 51 3_239.8** | 239.8 | 11.7 | 1800 | 2.4 | 2730 | 12000 | 5.8 | 1800 | 1.2 | 3500 | 12000 | |
| **F 51 3_262.1** | 262.1 | 10.7 | 1800 | 2.2 | 2730 | 12000 | 5.3 | 1800 | 1.1 | 3500 | 12000 | |
| **F 51 3_285.9** | 285.9 | 9.8 | 1800 | 2.0 | 2730 | 12000 | 4.9 | 1800 | 0.99 | 3500 | 12000 | |
| **F 51 3_317.3** | 317.3 | 8.8 | 1800 | 1.8 | 2740 | 12000 | 4.4 | 1800 | 0.89 | 3500 | 12000 | |
| **F 51 3_352.5** | 352.5 | 7.9 | 1800 | 1.6 | 2740 | 12000 | 4.0 | 1800 | 0.80 | 3500 | 12000 | |
| | | | | | | | | | | | | |
| **F 51 4_429.1** | 429.1 | 6.5 | 1800 | 1.4 | 1930 | 12000 | 3.3 | 1800 | 0.68 | 2200 | 12000 | |
| **F 51 4_530.5** | 530.5 | 5.3 | 1800 | 1.1 | 1970 | 12000 | 2.6 | 1800 | 0.55 | 2200 | 12000 | |
| **F 51 4_676.3** | 676.3 | 4.1 | 1800 | 0.87 | 2020 | 12000 | 2.1 | 1800 | 0.43 | 2200 | 12000 | |
| **F 51 4_826.4** | 826.4 | 3.4 | 1800 | 0.71 | 2040 | 12000 | 1.7 | 1800 | 0.35 | 2200 | 12000 | |
| **F 51 4_885.5** | 885.5 | 3.2 | 1800 | 0.66 | 2050 | 12000 | 1.6 | 1800 | 0.33 | 2200 | 12000 | |
| **F 51 4_979.4** | 979.4 | 2.9 | 1800 | 0.60 | 2060 | 12000 | 1.4 | 1800 | 0.30 | 2200 | 12000 | |
| **F 51 4_1070** | 1070 | 2.6 | 1800 | 0.55 | 2070 | 12000 | 1.3 | 1800 | 0.27 | 2200 | 12000 | |
| **F 51 4_1168** | 1168 | 2.4 | 1800 | 0.50 | 2080 | 12000 | 1.2 | 1800 | 0.25 | 2200 | 12000 | |
| **F 51 4_1296** | 1296 | 2.2 | 1800 | 0.45 | 2090 | 12000 | 1.1 | 1800 | 0.23 | 2200 | 12000 | |
| **F 51 4_1439** | 1439 | 1.9 | 1800 | 0.41 | 2100 | 12000 | 1.0 | 1800 | 0.20 | 2200 | 12000 | |



# F 51 — 1800 Nm

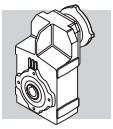
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 51 2_7.2** | 7.2 | 125 | 1100 | 15.2 | 1940 | 6170 | 70 | 1100 | 8.4 | 3190 | 8140 | |
| **F 51 2_9.1** | 9.1 | 99 | 1100 | 12.1 | 2450 | 6900 | 55 | 1100 | 6.7 | 3440 | 9030 | |
| **F 51 2_11.1** | 11.1 | 81 | 1520 | 13.6 | 2450 | 6660 | 45 | 1700 | 8.4 | 3190 | 8480 | |
| **F 51 2_14.0** | 14.0 | 64 | 1620 | 11.5 | 2550 | 7250 | 36 | 1700 | 6.7 | 3440 | 9500 | |
| **F 51 2_18.8** | 18.8 | 48 | 1700 | 9.0 | 2690 | 8230 | 26.6 | 1700 | 5.0 | 3500 | 10900 | |
| **F 51 2_23.8** | 23.8 | 38 | 1700 | 7.1 | 2870 | 9250 | 21.0 | 1700 | 3.9 | 3500 | 12000 | |
| **F 51 2_30.0** | 30.0 | 30 | 1700 | 5.6 | 2960 | 10300 | 16.6 | 1700 | 3.1 | 3500 | 12000 | |
| **F 51 2_37.1** | 37.1 | 24.2 | 1700 | 4.5 | 3040 | 11400 | 13.5 | 1700 | 2.5 | 3500 | 12000 | |
| **F 51 3_48.9** | 48.9 | 18.4 | 1800 | 3.7 | 3500 | 12000 | 10.2 | 1800 | 2.1 | 3500 | 12000 | |
| **F 51 3_65.8** | 65.8 | 13.7 | 1800 | 2.8 | 3500 | 12000 | 7.6 | 1800 | 1.5 | 3500 | 12000 | |
| **F 51 3_83.2** | 83.2 | 10.8 | 1800 | 2.2 | 3500 | 12000 | 6.0 | 1800 | 1.2 | 3500 | 12000 | |
| **F 51 3_105.1** | 105.1 | 8.6 | 1800 | 1.7 | 3500 | 12000 | 4.8 | 1800 | 0.96 | 3500 | 12000 | |
| **F 51 3_129.9** | 129.9 | 6.9 | 1800 | 1.4 | 3500 | 12000 | 3.8 | 1800 | 0.78 | 3500 | 12000 | |
| **F 51 3_165.6** | 165.6 | 5.4 | 1800 | 1.1 | 3500 | 12000 | 3.0 | 1800 | 0.61 | 3500 | 12000 | |
| **F 51 3_202.4** | 202.4 | 4.4 | 1800 | 0.90 | 3500 | 12000 | 2.5 | 1800 | 0.50 | 3500 | 12000 | |
| **F 51 3_216.9** | 216.9 | 4.2 | 1800 | 0.84 | 3500 | 12000 | 2.3 | 1800 | 0.47 | 3500 | 12000 | 416 |
| **F 51 3_239.8** | 239.8 | 3.8 | 1800 | 0.76 | 3500 | 12000 | 2.1 | 1800 | 0.42 | 3500 | 12000 | |
| **F 51 3_262.1** | 262.1 | 3.4 | 1800 | 0.70 | 3500 | 12000 | 1.9 | 1800 | 0.39 | 3500 | 12000 | |
| **F 51 3_285.9** | 285.9 | 3.1 | 1800 | 0.64 | 3500 | 12000 | 1.7 | 1800 | 0.35 | 3500 | 12000 | |
| **F 51 3_317.3** | 317.3 | 2.8 | 1800 | 0.57 | 3500 | 12000 | 1.6 | 1800 | 0.32 | 3500 | 12000 | |
| **F 51 3_352.5** | 352.5 | 2.6 | 1800 | 0.52 | 3500 | 12000 | 1.4 | 1800 | 0.29 | 3500 | 12000 | |
| **F 51 4_429.1** | 429.1 | 2.1 | 1800 | 0.44 | 2200 | 12000 | 1.2 | 1800 | 0.24 | 2200 | 12000 | |
| **F 51 4_530.5** | 530.5 | 1.7 | 1800 | 0.36 | 2200 | 12000 | 0.94 | 1800 | 0.20 | 2200 | 12000 | |
| **F 51 4_676.3** | 676.3 | 1.3 | 1800 | 0.28 | 2200 | 12000 | 0.74 | 1800 | 0.15 | 2200 | 12000 | |
| **F 51 4_826.4** | 826.4 | 1.1 | 1800 | 0.23 | 2200 | 12000 | 0.61 | 1800 | 0.13 | 2200 | 12000 | |
| **F 51 4_885.5** | 885.5 | 1.0 | 1800 | 0.21 | 2200 | 12000 | 0.56 | 1800 | 0.12 | 2200 | 12000 | |
| **F 51 4_979.4** | 979.4 | 0.92 | 1800 | 0.19 | 2200 | 12000 | 0.51 | 1800 | 0.11 | 2200 | 12000 | |
| **F 51 4_1070** | 1070 | 0.84 | 1800 | 0.18 | 2200 | 12000 | 0.47 | 1800 | 0.10 | 2200 | 12000 | |
| **F 51 4_1168** | 1168 | 0.77 | 1800 | 0.16 | 2200 | 12000 | 0.43 | 1800 | 0.09 | 2200 | 12000 | |
| **F 51 4_1296** | 1296 | 0.69 | 1800 | 0.15 | 2200 | 12000 | 0.39 | 1800 | 0.08 | 2200 | 12000 | |
| **F 51 4_1439** | 1439 | 0.63 | 1800 | 0.13 | 2200 | 12000 | 0.35 | 1800 | 0.07 | 2200 | 12000 | |



# F 60 — 2900 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 60 3_9.0** | 9.0 | 311 | 920 | 32 | — | 13300 | 156 | 1160 | 20 | — | 16500 | |
| **F 60 3_9.7** | 9.7 | 289 | 1000 | 33 | — | 13600 | 144 | 1250 | 20 | — | 16700 | |
| **F 60 3_11.8** | 11.8 | 237 | 1030 | 28 | — | 14600 | 119 | 1300 | 17.4 | — | 17800 | |
| **F 60 3_12.7** | 12.7 | 220 | 1110 | 28 | — | 14700 | 110 | 1400 | 17.4 | — | 18000 | |
| **F 60 3_14.5** | 14.5 | 193 | 1110 | 24 | — | 15500 | 97 | 1400 | 15.3 | — | 19000 | |
| **F 60 3_15.7** | 15.7 | 178 | 1200 | 24 | — | 15600 | 89 | 1500 | 15.1 | — | 19200 | |
| **F 60 3_19.1** | 19.1 | 147 | 1200 | 19.9 | — | 16800 | 73 | 1500 | 12.4 | — | 20000 | |
| **F 60 3_20.7** | 20.7 | 135 | 1300 | 19.9 | — | 17000 | 68 | 1640 | 12.5 | — | 20000 | |
| **F 60 3_23.5** | 23.5 | 119 | 1260 | 17.0 | — | 17900 | 60 | 1590 | 10.7 | — | 20000 | |
| **F 60 3_25.4** | 25.4 | 110 | 1370 | 17.1 | — | 18100 | 55 | 1720 | 10.7 | — | 20000 | |
| **F 60 3_29.6** | 29.6 | 95 | 2750 | 29 | 820 | 15900 | 47 | 2900 | 15.5 | 2630 | 20000 | |
| **F 60 3_32.1** | 32.1 | 87 | 2800 | 28 | 1290 | 16200 | 44 | 2900 | 14.3 | 3260 | 20000 | |
| **F 60 3_38.8** | 38.8 | 72 | 2900 | 24 | 1260 | 17500 | 36 | 2900 | 11.8 | 3480 | 20000 | |
| **F 60 3_42.1** | 42.1 | 67 | 2900 | 22 | 1820 | 17900 | 33 | 2900 | 10.9 | 3720 | 20000 | |
| **F 60 3_47.8** | 47.8 | 59 | 2900 | 19.2 | 1770 | 19100 | 29.3 | 2900 | 9.6 | 3730 | 20000 | |
| **F 60 3_51.8** | 51.8 | 54 | 2900 | 17.7 | 2290 | 19500 | 27.0 | 2900 | 8.9 | 3830 | 20000 | |
| **F 60 3_63.0** | 63.0 | 44 | 2900 | 14.6 | 2310 | 20000 | 22.2 | 2900 | 7.3 | 3850 | 20000 | |
| **F 60 3_68.3** | 68.3 | 41 | 2900 | 13.4 | 2790 | 20000 | 20.5 | 2900 | 6.7 | 3940 | 20000 | |
| **F 60 3_77.6** | 77.6 | 36 | 2900 | 11.8 | 2620 | 20000 | 18.0 | 2900 | 5.9 | 3920 | 20000 | |
| **F 60 3_84.0** | 84.0 | 33 | 2900 | 10.9 | 2960 | 20000 | 16.7 | 2900 | 5.5 | 4010 | 20000 | |
| **F 60 3_98.2** | 98.2 | 28.5 | 2900 | 9.3 | 2910 | 20000 | 14.3 | 2900 | 4.7 | 3980 | 20000 | |
| **F 60 3_106.4** | 106.4 | 26.3 | 2900 | 8.6 | 3020 | 20000 | 13.2 | 2900 | 4.3 | 4070 | 20000 | |
| **F 60 3_120.5** | 120.5 | 23.2 | 2900 | 7.6 | 2970 | 20000 | 11.6 | 2900 | 3.8 | 4030 | 20000 | |
| **F 60 3_130.5** | 130.5 | 21.5 | 2900 | 7.0 | 3060 | 20000 | 10.7 | 2900 | 3.5 | 4110 | 20000 | 420 |
| **F 60 3_150.4** | 150.4 | 18.6 | 2900 | 6.1 | 3010 | 20000 | 9.3 | 2900 | 3.0 | 4060 | 20000 | |
| **F 60 3_162.9** | 162.9 | 17.2 | 2900 | 5.6 | 3090 | 20000 | 8.6 | 2900 | 2.8 | 4140 | 20000 | |
| **F 60 3_185.9** | 185.9 | 15.1 | 2900 | 4.9 | 3050 | 20000 | 7.5 | 2900 | 2.5 | 4100 | 20000 | |
| **F 60 3_201.4** | 201.4 | 13.9 | 2900 | 4.6 | 3130 | 20000 | 7.0 | 2900 | 2.3 | 4180 | 20000 | |
| **F 60 3_217.6** | 217.6 | 12.9 | 2900 | 4.2 | 3070 | 20000 | 6.4 | 2900 | 2.1 | 4120 | 20000 | |
| **F 60 3_235.8** | 235.8 | 11.9 | 2900 | 3.9 | 3140 | 20000 | 5.9 | 2900 | 1.9 | 4190 | 20000 | |
| **F 60 3_259.1** | 259.1 | 10.8 | 2900 | 3.5 | 3080 | 20000 | 5.4 | 2900 | 1.8 | 4130 | 20000 | |
| **F 60 3_280.7** | 280.7 | 10.0 | 2900 | 3.3 | 3150 | 20000 | 5.0 | 2900 | 1.6 | 4200 | 20000 | |
| **F 60 4_315.4** | 315.4 | 8.9 | 2900 | 3.0 | 3500 | 20000 | 4.4 | 2900 | 1.5 | 3500 | 20000 | |
| **F 60 4_341.7** | 341.7 | 8.2 | 2900 | 2.8 | 3500 | 20000 | 4.1 | 2900 | 1.4 | 3500 | 20000 | |
| **F 60 4_399.3** | 399.3 | 7.0 | 2900 | 2.4 | 3500 | 20000 | 3.5 | 2900 | 1.2 | 3500 | 20000 | |
| **F 60 4_432.6** | 432.6 | 6.5 | 2900 | 2.2 | 3500 | 20000 | 3.2 | 2900 | 1.1 | 3500 | 20000 | |
| **F 60 4_489.8** | 489.8 | 5.7 | 2900 | 1.9 | 3500 | 20000 | 2.9 | 2900 | 0.96 | 3500 | 20000 | |
| **F 60 4_530.7** | 530.7 | 5.3 | 2900 | 1.8 | 3500 | 20000 | 2.6 | 2900 | 0.89 | 3500 | 20000 | |
| **F 60 4_611.4** | 611.4 | 4.6 | 2900 | 1.5 | 3500 | 20000 | 2.3 | 2900 | 0.77 | 3500 | 20000 | |
| **F 60 4_662.4** | 662.4 | 4.2 | 2900 | 1.4 | 3500 | 20000 | 2.1 | 2900 | 0.71 | 3500 | 20000 | |
| **F 60 4_756.0** | 756.0 | 3.7 | 2900 | 1.2 | 3500 | 20000 | 1.9 | 2900 | 0.62 | 3500 | 20000 | |
| **F 60 4_819.0** | 819.0 | 3.4 | 2900 | 1.1 | 3500 | 20000 | 1.7 | 2900 | 0.57 | 3500 | 20000 | |
| **F 60 4_885.1** | 885.1 | 3.2 | 2900 | 1.1 | 3500 | 20000 | 1.6 | 2900 | 0.53 | 3500 | 20000 | |
| **F 60 4_958.9** | 958.9 | 2.9 | 2900 | 0.98 | 3500 | 20000 | 1.5 | 2900 | 0.49 | 3500 | 20000 | |
| **F 60 4_1054** | 1054 | 2.7 | 2900 | 0.89 | 3500 | 20000 | 1.3 | 2900 | 0.45 | 3500 | 20000 | |
| **F 60 4_1141** | 1141 | 2.5 | 2900 | 0.83 | 3500 | 20000 | 1.2 | 2900 | 0.41 | 3500 | 20000 | |

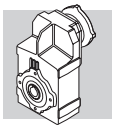
(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



# F 60 — 2900 Nm

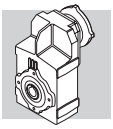
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 60 3_9.0** | 9.0 | 100 | 1340 | 15.1 | — | 18800 | 56 | 1630 | 10.2 | — | 20000 | |
| **F 60 3_9.7** | 9.7 | 93 | 1460 | 15.3 | — | 19000 | 52 | 1780 | 10.4 | — | 20000 | |
| **F 60 3_11.8** | 11.8 | 76 | 1500 | 12.9 | — | 20000 | 42 | 1830 | 8.8 | — | 20000 | |
| **F 60 3_12.7** | 12.7 | 71 | 1620 | 13.0 | — | 20000 | 39 | 1900 | 8.4 | 600 | 20000 | |
| **F 60 3_14.5** | 14.5 | 62 | 1620 | 11.4 | — | 20000 | 34 | 1900 | 7.4 | 490 | 20000 | |
| **F 60 3_15.7** | 15.7 | 57 | 1750 | 11.3 | — | 20000 | 32 | 1900 | 6.8 | 1630 | 20000 | |
| **F 60 3_19.1** | 19.1 | 47 | 1750 | 9.3 | — | 20000 | 26.2 | 1900 | 5.6 | 1660 | 20000 | |
| **F 60 3_20.7** | 20.7 | 43 | 1900 | 9.3 | — | 20000 | 24.2 | 1900 | 5.2 | 2700 | 20000 | |
| **F 60 3_23.5** | 23.5 | 38 | 1840 | 8.0 | — | 20000 | 21.3 | 1900 | 4.6 | 2340 | 20000 | |
| **F 60 3_25.4** | 25.4 | 35 | 1900 | 7.6 | 620 | 20000 | 19.7 | 1900 | 4.2 | 3330 | 20000 | |
| **F 60 3_29.6** | 29.6 | 30 | 2900 | 10.0 | 4220 | 20000 | 16.9 | 2900 | 5.5 | 4700 | 20000 | |
| **F 60 3_32.1** | 32.1 | 28.0 | 2900 | 9.2 | 4350 | 20000 | 15.6 | 2900 | 5.1 | 4700 | 20000 | |
| **F 60 3_38.8** | 38.8 | 23.2 | 2900 | 7.6 | 4420 | 20000 | 12.9 | 2900 | 4.2 | 4700 | 20000 | |
| **F 60 3_42.1** | 42.1 | 21.4 | 2900 | 7.0 | 4530 | 20000 | 11.9 | 2900 | 3.9 | 4700 | 20000 | |
| **F 60 3_47.8** | 47.8 | 18.8 | 2900 | 6.2 | 4530 | 20000 | 10.5 | 2900 | 3.4 | 4700 | 20000 | |
| **F 60 3_51.8** | 51.8 | 17.4 | 2900 | 5.7 | 4640 | 20000 | 9.7 | 2900 | 3.2 | 4700 | 20000 | |
| **F 60 3_63.0** | 63.0 | 14.3 | 2900 | 4.7 | 4660 | 20000 | 7.9 | 2900 | 2.6 | 4700 | 20000 | |
| **F 60 3_68.3** | 68.3 | 13.2 | 2900 | 4.3 | 4700 | 20000 | 7.3 | 2900 | 2.4 | 4700 | 20000 | |
| **F 60 3_77.6** | 77.6 | 11.6 | 2900 | 3.8 | 4700 | 20000 | 6.4 | 2900 | 2.1 | 4700 | 20000 | |
| **F 60 3_84.0** | 84.0 | 10.7 | 2900 | 3.5 | 4700 | 20000 | 6.0 | 2900 | 1.9 | 4700 | 20000 | |
| **F 60 3_98.2** | 98.2 | 9.2 | 2900 | 3.0 | 4700 | 20000 | 5.1 | 2900 | 1.7 | 4700 | 20000 | |
| **F 60 3_106.4** | 106.4 | 8.5 | 2900 | 2.8 | 4700 | 20000 | 4.7 | 2900 | 1.5 | 4700 | 20000 | |
| **F 60 3_120.5** | 120.5 | 7.5 | 2900 | 2.4 | 4700 | 20000 | 4.1 | 2900 | 1.4 | 4700 | 20000 | |
| **F 60 3_130.5** | 130.5 | 6.9 | 2900 | 2.3 | 4700 | 20000 | 3.8 | 2900 | 1.3 | 4700 | 20000 | 420 |
| **F 60 3_150.4** | 150.4 | 6.0 | 2900 | 2.0 | 4700 | 20000 | 3.3 | 2900 | 1.1 | 4700 | 20000 | |
| **F 60 3_162.9** | 162.9 | 5.5 | 2900 | 1.8 | 4700 | 20000 | 3.1 | 2900 | 1.0 | 4700 | 20000 | |
| **F 60 3_185.9** | 185.9 | 4.8 | 2900 | 1.6 | 4700 | 20000 | 2.7 | 2900 | 0.88 | 4700 | 20000 | |
| **F 60 3_201.4** | 201.4 | 4.5 | 2900 | 1.5 | 4700 | 20000 | 2.5 | 2900 | 0.81 | 4700 | 20000 | |
| **F 60 3_217.6** | 217.6 | 4.1 | 2900 | 1.4 | 4700 | 20000 | 2.3 | 2900 | 0.75 | 4700 | 20000 | |
| **F 60 3_235.8** | 235.8 | 3.8 | 2900 | 1.3 | 4700 | 20000 | 2.1 | 2900 | 0.69 | 4700 | 20000 | |
| **F 60 3_259.1** | 259.1 | 3.5 | 2900 | 1.1 | 4700 | 20000 | 1.9 | 2900 | 0.63 | 4700 | 20000 | |
| **F 60 3_280.7** | 280.7 | 3.2 | 2900 | 1.1 | 4700 | 20000 | 1.8 | 2900 | 0.58 | 4700 | 20000 | |
| **F 60 4_315.4** | 315.4 | 2.9 | 2900 | 0.96 | 3500 | 20000 | 1.6 | 2900 | 0.53 | 3500 | 20000 | |
| **F 60 4_341.7** | 341.7 | 2.6 | 2900 | 0.89 | 3500 | 20000 | 1.5 | 2900 | 0.49 | 3500 | 20000 | |
| **F 60 4_399.3** | 399.3 | 2.3 | 2900 | 0.76 | 3500 | 20000 | 1.3 | 2900 | 0.42 | 3500 | 20000 | |
| **F 60 4_432.6** | 432.6 | 2.1 | 2900 | 0.70 | 3500 | 20000 | 1.2 | 2900 | 0.39 | 3500 | 20000 | |
| **F 60 4_489.8** | 489.8 | 1.8 | 2900 | 0.62 | 3500 | 20000 | 1.0 | 2900 | 0.34 | 3500 | 20000 | |
| **F 60 4_530.7** | 530.7 | 1.7 | 2900 | 0.57 | 3500 | 20000 | 0.94 | 2900 | 0.32 | 3500 | 20000 | |
| **F 60 4_611.4** | 611.4 | 1.5 | 2900 | 0.50 | 3500 | 20000 | 0.82 | 2900 | 0.28 | 3500 | 20000 | |
| **F 60 4_662.4** | 662.4 | 1.4 | 2900 | 0.46 | 3500 | 20000 | 0.75 | 2900 | 0.25 | 3500 | 20000 | |
| **F 60 4_756.0** | 756.0 | 1.2 | 2900 | 0.40 | 3500 | 20000 | 0.66 | 2900 | 0.22 | 3500 | 20000 | |
| **F 60 4_819.0** | 819.0 | 1.1 | 2900 | 0.37 | 3500 | 20000 | 0.61 | 2900 | 0.21 | 3500 | 20000 | |
| **F 60 4_885.1** | 885.1 | 1.0 | 2900 | 0.34 | 3500 | 20000 | 0.56 | 2900 | 0.19 | 3500 | 20000 | |
| **F 60 4_958.9** | 958.9 | 0.94 | 2900 | 0.32 | 3500 | 20000 | 0.52 | 2900 | 0.18 | 3500 | 20000 | |
| **F 60 4_1054** | 1054 | 0.85 | 2900 | 0.29 | 3500 | 20000 | 0.47 | 2900 | 0.16 | 3500 | 20000 | |
| **F 60 4_1141** | 1141 | 0.79 | 2900 | 0.27 | 3500 | 20000 | 0.44 | 2900 | 0.15 | 3500 | 20000 | |

(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



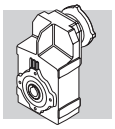
# F 70 — 5000 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 70 3_10.0** | 10.0 | 280 | 2600 | 82 | 1410 | 14800 | 140 | 3200 | 51 | 1750 | 18200 | 424 |
| **F 70 3_10.9** | 10.9 | 257 | 2800 | 81 | 1510 | 14700 | 128 | 3450 | 50 | 1840 | 18100 | |
| **F 70 3_12.8** | 12.8 | 219 | 2900 | 72 | 860 | 15700 | 109 | 3600 | 44 | 880 | 19300 | |
| **F 70 3_13.9** | 13.9 | 201 | 3150 | 72 | 810 | 15600 | 101 | 3900 | 44 | 880 | 19100 | |
| **F 70 3_16.3** | 16.3 | 172 | 3250 | 63 | 570 | 16600 | 86 | 4000 | 39 | 710 | 20500 | |
| **F 70 3_17.7** | 17.7 | 158 | 3550 | 63 | 430 | 16400 | 79 | 4350 | 39 | 630 | 20200 | |
| **F 70 3_20.9** | 20.9 | 134 | 3450 | 52 | 690 | 18000 | 67 | 4000 | 30 | 2090 | 22700 | |
| **F 70 3_22.6** | 22.6 | 124 | 3750 | 52 | 640 | 17800 | 62 | 4350 | 30 | 2010 | 22500 | |
| **F 70 3_24.6** | 24.6 | 114 | 3550 | 46 | 560 | 19000 | 57 | 4000 | 26 | 2510 | 24200 | |
| **F 70 3_27.7** | 27.7 | 101 | 3750 | 43 | 5070 | 19600 | 51 | 4650 | 27 | 6410 | 24100 | |
| **F 70 3_30.0** | 30.0 | 93 | 4050 | 43 | 5080 | 19400 | 47 | 5000 | 26 | 6420 | 23900 | |
| **F 70 3_35.4** | 35.4 | 79 | 4150 | 37 | 5070 | 20900 | 40 | 5000 | 22 | 6440 | 25900 | |
| **F 70 3_38.4** | 38.4 | 73 | 4500 | 37 | 5060 | 20700 | 36 | 5000 | 21 | 6540 | 26500 | |
| **F 70 3_45.2** | 45.2 | 62 | 4600 | 32 | 5080 | 22200 | 31 | 5000 | 17.5 | 6590 | 28700 | |
| **F 70 3_49.0** | 49.0 | 57 | 4600 | 30 | 5170 | 22700 | 28.6 | 5000 | 16.1 | 6680 | 29300 | |
| **F 70 3_57.7** | 57.7 | 49 | 5000 | 27 | 5090 | 23800 | 24.3 | 5000 | 13.7 | 6680 | 31600 | |
| **F 70 3_62.5** | 62.5 | 45 | 5000 | 25 | 5170 | 24300 | 22.4 | 5000 | 12.7 | 6760 | 32300 | |
| **F 70 3_67.9** | 67.9 | 41 | 5000 | 23 | 5110 | 25500 | 20.6 | 5000 | 11.6 | 6710 | 33600 | |
| **F 70 3_73.6** | 73.6 | 38 | 5000 | 21 | 5190 | 26100 | 19.0 | 5000 | 10.7 | 6790 | 34400 | |
| **F 70 3_85.4** | 85.4 | 33 | 5000 | 18.5 | 5190 | 28000 | 16.4 | 5000 | 9.3 | 6780 | 35000 | |
| **F 70 3_92.5** | 92.5 | 30 | 5000 | 17.1 | 5260 | 28700 | 15.1 | 5000 | 8.5 | 6860 | 35000 | |
| **F 70 3_101.2** | 101.2 | 27.7 | 5000 | 15.6 | 5220 | 30000 | 13.8 | 5000 | 7.8 | 6820 | 35000 | |
| **F 70 3_109.6** | 109.6 | 25.5 | 5000 | 14.4 | 5290 | 30700 | 12.8 | 5000 | 7.2 | 6890 | 35000 | |
| **F 70 3_122.7** | 122.7 | 22.8 | 5000 | 12.9 | 5250 | 32300 | 11.4 | 5000 | 6.4 | 6850 | 35000 | |
| **F 70 3_133.0** | 133.0 | 21.1 | 5000 | 11.9 | 5320 | 33100 | 10.5 | 5000 | 5.9 | 6920 | 35000 | |
| **F 70 3_153.8** | 153.8 | 18.2 | 5000 | 10.3 | 5280 | 35000 | 9.1 | 5000 | 5.1 | 6880 | 35000 | |
| **F 70 3_166.7** | 166.7 | 16.8 | 5000 | 9.5 | 5350 | 35000 | 8.4 | 5000 | 4.7 | 6950 | 35000 | |
| **F 70 3_180.9** | 180.9 | 15.5 | 5000 | 8.7 | 5310 | 35000 | 7.7 | 5000 | 4.4 | 6910 | 35000 | |
| **F 70 3_196.0** | 196.0 | 14.3 | 5000 | 8.1 | 5370 | 35000 | 7.1 | 5000 | 4.0 | 6970 | 35000 | |
| | | | | | | | | | | | | |
| **F 70 4_216.5** | 216.5 | 12.9 | 5000 | 7.5 | 2130 | 35000 | 6.5 | 5000 | 3.7 | 2860 | 35000 | |
| **F 70 4_234.6** | 234.6 | 11.9 | 5000 | 6.9 | 2130 | 35000 | 6.0 | 5000 | 3.5 | 2860 | 35000 | |
| **F 70 4_280.9** | 280.9 | 10.0 | 5000 | 5.8 | 2200 | 35000 | 5.0 | 5000 | 2.9 | 2940 | 35000 | |
| **F 70 4_304.3** | 304.3 | 9.2 | 5000 | 5.3 | 2200 | 35000 | 4.6 | 5000 | 2.7 | 2940 | 35000 | |
| **F 70 4_372.5** | 372.5 | 7.5 | 5000 | 4.4 | 2260 | 35000 | 3.8 | 5000 | 2.2 | 3000 | 35000 | |
| **F 70 4_403.5** | 403.5 | 6.9 | 5000 | 4.0 | 2260 | 35000 | 3.5 | 5000 | 2.0 | 3000 | 35000 | |
| **F 70 4_471.2** | 471.2 | 5.9 | 5000 | 3.4 | 2300 | 35000 | 3.0 | 5000 | 1.7 | 3040 | 35000 | |
| **F 70 4_510.4** | 510.4 | 5.5 | 5000 | 3.2 | 2300 | 35000 | 2.7 | 5000 | 1.6 | 3040 | 35000 | |
| **F 70 4_606.8** | 606.8 | 4.6 | 5000 | 2.7 | 2340 | 35000 | 2.3 | 5000 | 1.3 | 3070 | 35000 | |
| **F 70 4_657.4** | 657.4 | 4.3 | 5000 | 2.5 | 2340 | 35000 | 2.1 | 5000 | 1.2 | 3070 | 35000 | |
| **F 70 4_759.0** | 759.0 | 3.7 | 5000 | 2.1 | 2360 | 35000 | 1.8 | 5000 | 1.1 | 3090 | 35000 | |
| **F 70 4_822.2** | 822.2 | 3.4 | 5000 | 2.0 | 2360 | 35000 | 1.7 | 5000 | 1.0 | 3090 | 35000 | |
| **F 70 4_899.4** | 899.4 | 3.1 | 5000 | 1.8 | 2370 | 35000 | 1.6 | 5000 | 0.90 | 3110 | 35000 | |
| **F 70 4_974.4** | 974.4 | 2.9 | 5000 | 1.7 | 2370 | 35000 | 1.4 | 5000 | 0.83 | 3110 | 35000 | |
| **F 70 4_1091** | 1091 | 2.6 | 5000 | 1.5 | 2390 | 35000 | 1.3 | 5000 | 0.74 | 3120 | 35000 | |
| **F 70 4_1182** | 1182 | 2.4 | 5000 | 1.4 | 2390 | 35000 | 1.2 | 5000 | 0.69 | 3120 | 35000 | |
| **F 70 4_1368** | 1368 | 2.0 | 5000 | 1.2 | 2400 | 35000 | 1.0 | 5000 | 0.59 | 3130 | 35000 | |
| **F 70 4_1481** | 1481 | 1.9 | 5000 | 1.1 | 2400 | 35000 | 0.95 | 5000 | 0.55 | 3130 | 35000 | |
| **F 70 4_1585** | 1585 | 1.8 | 5000 | 1.0 | 2410 | 35000 | 0.88 | 5000 | 0.51 | 3140 | 35000 | |
| **F 70 4_1717** | 1717 | 1.6 | 5000 | 0.95 | 2410 | 35000 | 0.82 | 5000 | 0.47 | 3140 | 35000 | |
| **F 70 4_2019** | 2019 | 1.4 | 5000 | 0.80 | 2420 | 35000 | 0.69 | 5000 | 0.40 | 3150 | 35000 | |
| **F 70 4_2188** | 2188 | 1.3 | 5000 | 0.74 | 2420 | 35000 | 0.64 | 5000 | 0.37 | 3150 | 35000 | |



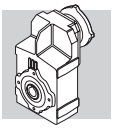
# F 70 — 5000 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 70 3_10.0** | 10.0 | 90 | 3200 | 33 | 4870 | 21700 | 50 | 3200 | 18.1 | 7000 | 27000 | 424 |
| **F 70 3_10.9** | 10.9 | 83 | 3450 | 32 | 4970 | 21700 | 46 | 3450 | 17.9 | 7000 | 27200 | |
| **F 70 3_12.8** | 12.8 | 70 | 3850 | 31 | 2540 | 22500 | 39 | 3600 | 15.9 | 7000 | 28300 | |
| **F 70 3_13.9** | 13.9 | 65 | 4200 | 31 | 2380 | 22400 | 36 | 3900 | 15.8 | 7000 | 28300 | |
| **F 70 3_16.3** | 16.3 | 55 | 4000 | 25 | 3830 | 24500 | 31 | 4000 | 13.9 | 7000 | 30700 | |
| **F 70 3_17.7** | 17.7 | 51 | 4350 | 25 | 3750 | 24400 | 28.2 | 4350 | 13.9 | 7000 | 30800 | |
| **F 70 3_20.9** | 20.9 | 43 | 4000 | 19.5 | 5210 | 27000 | 23.9 | 4000 | 10.8 | 7000 | 33700 | |
| **F 70 3_22.6** | 22.6 | 40 | 4350 | 19.6 | 5130 | 26900 | 22.1 | 4350 | 10.9 | 7000 | 33800 | |
| **F 70 3_24.6** | 24.6 | 37 | 4000 | 16.5 | 5630 | 28700 | 20.3 | 4000 | 9.2 | 7000 | 35000 | |
| **F 70 3_27.7** | 27.7 | 32 | 5000 | 18.4 | 7000 | 28100 | 18.1 | 4650 | 9.5 | 7000 | 35000 | |
| **F 70 3_30.0** | 30.0 | 30 | 5000 | 16.9 | 7000 | 28800 | 16.7 | 5000 | 9.4 | 7000 | 35000 | |
| **F 70 3_35.4** | 35.4 | 25.4 | 5000 | 14.4 | 7000 | 31000 | 14.1 | 5000 | 8.0 | 7000 | 35000 | |
| **F 70 3_38.4** | 38.4 | 23.4 | 5000 | 13.2 | 7000 | 31700 | 13.0 | 5000 | 7.4 | 7000 | 35000 | |
| **F 70 3_45.2** | 45.2 | 19.9 | 5000 | 11.2 | 7000 | 34100 | 11.1 | 5000 | 6.2 | 7000 | 35000 | |
| **F 70 3_49.0** | 49.0 | 18.4 | 5000 | 10.4 | 7000 | 34900 | 10.2 | 5000 | 5.8 | 7000 | 35000 | |
| **F 70 3_57.7** | 57.7 | 15.6 | 5000 | 8.8 | 7000 | 35000 | 8.7 | 5000 | 4.9 | 7000 | 35000 | |
| **F 70 3_62.5** | 62.5 | 14.4 | 5000 | 8.1 | 7000 | 35000 | 8.0 | 5000 | 4.5 | 7000 | 35000 | |
| **F 70 3_67.9** | 67.9 | 13.3 | 5000 | 7.5 | 7000 | 35000 | 7.4 | 5000 | 4.2 | 7000 | 35000 | |
| **F 70 3_73.6** | 73.6 | 12.2 | 5000 | 6.9 | 7000 | 35000 | 6.8 | 5000 | 3.8 | 7000 | 35000 | |
| **F 70 3_85.4** | 85.4 | 10.5 | 5000 | 6.0 | 7000 | 35000 | 5.9 | 5000 | 3.3 | 7000 | 35000 | |
| **F 70 3_92.5** | 92.5 | 9.7 | 5000 | 5.5 | 7000 | 35000 | 5.4 | 5000 | 3.1 | 7000 | 35000 | |
| **F 70 3_101.2** | 101.2 | 8.9 | 5000 | 5.0 | 7000 | 35000 | 4.9 | 5000 | 2.8 | 7000 | 35000 | |
| **F 70 3_109.6** | 109.6 | 8.2 | 5000 | 4.6 | 7000 | 35000 | 4.6 | 5000 | 2.6 | 7000 | 35000 | |
| **F 70 3_122.7** | 122.7 | 7.3 | 5000 | 4.1 | 7000 | 35000 | 4.1 | 5000 | 2.3 | 7000 | 35000 | |
| **F 70 3_133.0** | 133.0 | 6.8 | 5000 | 3.8 | 7000 | 35000 | 3.8 | 5000 | 2.1 | 7000 | 35000 | |
| **F 70 3_153.8** | 153.8 | 5.9 | 5000 | 3.3 | 7000 | 35000 | 3.3 | 5000 | 1.8 | 7000 | 35000 | |
| **F 70 3_166.7** | 166.7 | 5.4 | 5000 | 3.0 | 7000 | 35000 | 3.0 | 5000 | 1.7 | 7000 | 35000 | |
| **F 70 3_180.9** | 180.9 | 5.0 | 5000 | 2.8 | 7000 | 35000 | 2.8 | 5000 | 1.6 | 7000 | 35000 | |
| **F 70 3_196.0** | 196.0 | 4.6 | 5000 | 2.6 | 7000 | 35000 | 2.6 | 5000 | 1.4 | 7000 | 35000 | |
| | | | | | | | | | | | | |
| **F 70 4_216.5** | 216.5 | 4.2 | 5000 | 2.4 | 3430 | 35000 | 2.3 | 5000 | 1.3 | 3500 | 35000 | |
| **F 70 4_234.6** | 234.6 | 3.8 | 5000 | 2.2 | 3430 | 35000 | 2.1 | 5000 | 1.2 | 3500 | 35000 | |
| **F 70 4_280.9** | 280.9 | 3.2 | 5000 | 1.9 | 3500 | 35000 | 1.8 | 5000 | 1.0 | 3500 | 35000 | |
| **F 70 4_304.3** | 304.3 | 3.0 | 5000 | 1.7 | 3500 | 35000 | 1.6 | 5000 | 0.95 | 3500 | 35000 | |
| **F 70 4_372.5** | 372.5 | 2.4 | 5000 | 1.4 | 3500 | 35000 | 1.3 | 5000 | 0.78 | 3500 | 35000 | |
| **F 70 4_403.5** | 403.5 | 2.2 | 5000 | 1.3 | 3500 | 35000 | 1.2 | 5000 | 0.72 | 3500 | 35000 | |
| **F 70 4_471.2** | 471.2 | 1.9 | 5000 | 1.1 | 3500 | 35000 | 1.1 | 5000 | 0.62 | 3500 | 35000 | |
| **F 70 4_510.4** | 510.4 | 1.8 | 5000 | 1.0 | 3500 | 35000 | 0.98 | 5000 | 0.57 | 3500 | 35000 | |
| **F 70 4_606.8** | 606.8 | 1.5 | 5000 | 0.86 | 3500 | 35000 | 0.82 | 5000 | 0.48 | 3500 | 35000 | |
| **F 70 4_657.4** | 657.4 | 1.4 | 5000 | 0.79 | 3500 | 35000 | 0.76 | 5000 | 0.44 | 3500 | 35000 | |
| **F 70 4_759.0** | 759.0 | 1.2 | 5000 | 0.69 | 3500 | 35000 | 0.66 | 5000 | 0.38 | 3500 | 35000 | |
| **F 70 4_822.2** | 822.2 | 1.1 | 5000 | 0.63 | 3500 | 35000 | 0.61 | 5000 | 0.35 | 3500 | 35000 | |
| **F 70 4_899.4** | 899.4 | 1.0 | 5000 | 0.58 | 3500 | 35000 | 0.56 | 5000 | 0.32 | 3500 | 35000 | |
| **F 70 4_974.4** | 974.4 | 0.92 | 5000 | 0.54 | 3500 | 35000 | 0.51 | 5000 | 0.30 | 3500 | 35000 | |
| **F 70 4_1091** | 1091 | 0.82 | 5000 | 0.48 | 3500 | 35000 | 0.46 | 5000 | 0.27 | 3500 | 35000 | |
| **F 70 4_1182** | 1182 | 0.76 | 5000 | 0.44 | 3500 | 35000 | 0.42 | 5000 | 0.25 | 3500 | 35000 | |
| **F 70 4_1368** | 1368 | 0.66 | 5000 | 0.38 | 3500 | 35000 | 0.37 | 5000 | 0.21 | 3500 | 35000 | |
| **F 70 4_1481** | 1481 | 0.61 | 5000 | 0.35 | 3500 | 35000 | 0.34 | 5000 | 0.20 | 3500 | 35000 | |
| **F 70 4_1585** | 1585 | 0.57 | 5000 | 0.33 | 3500 | 35000 | 0.32 | 5000 | 0.18 | 3500 | 35000 | |
| **F 70 4_1717** | 1717 | 0.52 | 5000 | 0.30 | 3500 | 35000 | 0.29 | 5000 | 0.17 | 3500 | 35000 | |
| **F 70 4_2019** | 2019 | 0.45 | 5000 | 0.26 | 3500 | 35000 | 0.25 | 5000 | 0.14 | 3500 | 35000 | |
| **F 70 4_2188** | 2188 | 0.41 | 5000 | 0.24 | 3500 | 35000 | 0.23 | 5000 | 0.13 | 3500 | 35000 | |



# F 80 — 8000 Nm

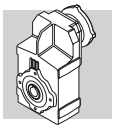
| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 80 3_10.3** | 10.3 | 272 | 3250 | 100 | 610 | 17200 | 136 | 4100 | 63 | 220 | 21800 | |
| **F 80 3_11.2** | 11.2 | 250 | 3520 | 99 | 620 | 17800 | 125 | 4440 | 63 | 230 | 21700 | |
| **F 80 3_12.9** | 12.9 | 217 | 3560 | 87 | 670 | 18900 | 109 | 4480 | 55 | 350 | 23100 | |
| **F 80 3_14.0** | 14.0 | 200 | 3850 | 87 | 700 | 18800 | 100 | 4860 | 55 | 310 | 23000 | |
| **F 80 3_16.2** | 16.2 | 173 | 3760 | 73 | 760 | 20300 | 86 | 4740 | 46 | 430 | 24800 | |
| **F 80 3_17.6** | 17.6 | 159 | 4000 | 72 | 730 | 20300 | 80 | 5140 | 46 | 410 | 24700 | |
| **F 80 3_20.3** | 20.3 | 138 | 4060 | 63 | 780 | 21700 | 69 | 5120 | 40 | 440 | 26500 | |
| **F 80 3_22.0** | 22.0 | 127 | 4400 | 63 | 780 | 21600 | 64 | 5540 | 40 | 470 | 26400 | |
| **F 80 3_25.2** | 25.2 | 111 | 4230 | 53 | 700 | 23300 | 56 | 5330 | 33 | 360 | 28500 | |
| **F 80 3_28.8** | 28.8 | 97 | 6550 | 72 | 4590 | 20500 | 49 | 8000 | 44 | 5890 | 25400 | |
| **F 80 3_31.3** | 31.3 | 89 | 7100 | 72 | 4590 | 20000 | 45 | 8000 | 40 | 6040 | 26000 | |
| **F 80 3_36.0** | 36.0 | 78 | 7250 | 64 | 4560 | 21500 | 39 | 8000 | 35 | 6110 | 28100 | |
| **F 80 3_39.0** | 39.0 | 72 | 6700 | 54 | 4890 | 23000 | 36 | 8000 | 32 | 6240 | 28800 | |
| **F 80 3_45.3** | 45.3 | 62 | 7900 | 55 | 4440 | 22700 | 31 | 8000 | 28 | 6240 | 31100 | |
| **F 80 3_49.1** | 49.1 | 57 | 8000 | 52 | 4750 | 23200 | 28.5 | 8000 | 26 | 6360 | 31900 | |
| **F 80 3_56.7** | 56.7 | 49 | 8000 | 45 | 4780 | 25200 | 24.7 | 8000 | 22 | 6390 | 34300 | |
| **F 80 3_61.5** | 61.5 | 46 | 8000 | 41 | 4890 | 25800 | 22.8 | 8000 | 21 | 6500 | 35100 | |
| **F 80 3_70.4** | 70.4 | 40 | 8000 | 36 | 4850 | 27800 | 19.9 | 8000 | 18.0 | 6460 | 37500 | |
| **F 80 3_76.3** | 76.3 | 37 | 8000 | 33 | 4950 | 28500 | 18.3 | 8000 | 16.6 | 6560 | 38400 | |
| **F 80 3_85.2** | 85.2 | 33 | 8000 | 30 | 4940 | 30300 | 16.4 | 8000 | 14.8 | 6550 | 40500 | |
| **F 80 3_92.3** | 92.3 | 30 | 8000 | 27 | 5040 | 31000 | 15.2 | 8000 | 13.7 | 6640 | 41500 | |
| **F 80 3_105.0** | 105.0 | 26.7 | 8000 | 24 | 5000 | 33200 | 13.3 | 8000 | 12.0 | 6610 | 44000 | |
| **F 80 3_113.8** | 113.8 | 24.6 | 8000 | 22 | 5090 | 34000 | 12.3 | 8000 | 11.1 | 6700 | 45000 | |
| **F 80 3_122.5** | 122.5 | 22.9 | 8000 | 21 | 5020 | 35400 | 11.4 | 8000 | 10.3 | 6630 | 45000 | |
| **F 80 3_132.7** | 132.7 | 21.1 | 8000 | 19.1 | 5110 | 36200 | 10.6 | 8000 | 9.5 | 6720 | 45000 | |
| **F 80 3_147.9** | 147.9 | 18.9 | 8000 | 17.1 | 5060 | 38200 | 9.5 | 8000 | 8.6 | 6660 | 45000 | 427 |
| **F 80 3_160.2** | 160.2 | 17.5 | 8000 | 15.8 | 5140 | 39100 | 8.7 | 8000 | 7.9 | 6750 | 45000 | |
| **F 80 3_184.6** | 184.6 | 15.2 | 8000 | 13.7 | 5090 | 41800 | 7.6 | 8000 | 6.9 | 6700 | 45000 | |
| **F 80 3_200.0** | 200.0 | 14.0 | 8000 | 12.7 | 5180 | 42800 | 7.0 | 8000 | 6.3 | 6780 | 45000 | |
| | | | | | | | | | | | | |
| **F 80 4_218.5** | 218.5 | 12.8 | 8000 | 11.9 | 1020 | 45000 | 6.4 | 8000 | 5.9 | 2400 | 45000 | |
| **F 80 4_273.9** | 273.9 | 10.2 | 8000 | 9.5 | 1470 | 45000 | 5.1 | 8000 | 4.7 | 2680 | 45000 | |
| **F 80 4_296.7** | 296.7 | 9.4 | 8000 | 8.8 | 1470 | 45000 | 4.7 | 8000 | 4.4 | 2680 | 45000 | |
| **F 80 4_353.7** | 353.7 | 7.9 | 8000 | 7.3 | 1850 | 45000 | 4.0 | 8000 | 3.7 | 2770 | 45000 | |
| **F 80 4_383.2** | 383.2 | 7.3 | 8000 | 6.8 | 1850 | 45000 | 3.7 | 8000 | 3.4 | 2770 | 45000 | |
| **F 80 4_451.5** | 451.5 | 6.2 | 8000 | 5.8 | 2040 | 45000 | 3.1 | 8000 | 2.9 | 2820 | 45000 | |
| **F 80 4_489.1** | 489.1 | 5.7 | 8000 | 5.3 | 2040 | 45000 | 2.9 | 8000 | 2.7 | 2820 | 45000 | |
| **F 80 4_563.9** | 563.9 | 5.0 | 8000 | 4.6 | 2130 | 45000 | 2.5 | 8000 | 2.3 | 2860 | 45000 | |
| **F 80 4_610.9** | 610.9 | 4.6 | 8000 | 4.3 | 2130 | 45000 | 2.3 | 8000 | 2.1 | 2860 | 45000 | |
| **F 80 4_714.9** | 714.9 | 3.9 | 8000 | 3.6 | 2160 | 45000 | 2.0 | 8000 | 1.8 | 2890 | 45000 | |
| **F 80 4_774.4** | 774.4 | 3.6 | 8000 | 3.4 | 2160 | 45000 | 1.8 | 8000 | 1.7 | 2890 | 45000 | |
| **F 80 4_897.3** | 897.3 | 3.1 | 8000 | 2.9 | 2200 | 45000 | 1.6 | 8000 | 1.4 | 2930 | 45000 | |
| **F 80 4_972.0** | 972.0 | 2.9 | 8000 | 2.7 | 2200 | 45000 | 1.4 | 8000 | 1.3 | 2930 | 45000 | |
| **F 80 4_1058** | 1058 | 2.6 | 8000 | 2.5 | 2210 | 45000 | 1.3 | 8000 | 1.2 | 2950 | 45000 | |
| **F 80 4_1146** | 1146 | 2.4 | 8000 | 2.3 | 2210 | 45000 | 1.2 | 8000 | 1.1 | 2950 | 45000 | |
| **F 80 4_1277** | 1277 | 2.2 | 8000 | 2.0 | 2230 | 45000 | 1.1 | 8000 | 1.0 | 2960 | 45000 | |
| **F 80 4_1384** | 1384 | 2.0 | 8000 | 1.9 | 2230 | 45000 | 1.0 | 8000 | 0.94 | 2960 | 45000 | |
| **F 80 4_1578** | 1578 | 1.8 | 8000 | 1.6 | 2240 | 45000 | 0.89 | 8000 | 0.82 | 2970 | 45000 | |
| **F 80 4_1709** | 1709 | 1.6 | 8000 | 1.5 | 2240 | 45000 | 0.82 | 8000 | 0.76 | 2970 | 45000 | |
| **F 80 4_1834** | 1834 | 1.5 | 8000 | 1.4 | 2250 | 45000 | 0.76 | 8000 | 0.71 | 2980 | 45000 | |
| **F 80 4_1987** | 1987 | 1.4 | 8000 | 1.3 | 2250 | 45000 | 0.70 | 8000 | 0.65 | 2980 | 45000 | |



# F 80 — 8000 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 80 3_10.3** | 10.3 | 87 | 4740 | 47 | — | 24700 | 49 | 5770 | 32 | — | 29300 | |
| **F 80 3_11.2** | 11.2 | 80 | 5140 | 47 | — | 24600 | 45 | 6250 | 32 | — | 29200 | |
| **F 80 3_12.9** | 12.9 | 70 | 5200 | 41 | — | 26200 | 39 | 6320 | 28 | — | 31100 | |
| **F 80 3_14.0** | 14.0 | 64 | 5620 | 41 | — | 26100 | 36 | 6800 | 27 | — | 31000 | |
| **F 80 3_16.2** | 16.2 | 56 | 5490 | 34 | — | 28200 | 31 | 6250 | 22 | 1540 | 34200 | |
| **F 80 3_17.6** | 17.6 | 51 | 5960 | 34 | — | 28100 | 28.4 | 6800 | 22 | 1410 | 30000 | |
| **F 80 3_20.3** | 20.3 | 44 | 5930 | 30 | — | 30100 | 24.6 | 6250 | 17.4 | 3710 | 37300 | |
| **F 80 3_22.0** | 22.0 | 41 | 6420 | 30 | — | 30000 | 22.7 | 6800 | 17.5 | 3590 | 37200 | |
| **F 80 3_25.2** | 25.2 | 36 | 6175 | 25 | — | 32400 | 19.8 | 6250 | 14.0 | 4660 | 40500 | |
| **F 80 3_28.8** | 28.8 | 31 | 8000 | 28 | 7000 | 31000 | 17.4 | 8000 | 15.7 | 7000 | 39600 | |
| **F 80 3_31.3** | 31.3 | 28.8 | 8000 | 26 | 7000 | 31700 | 16.0 | 8000 | 14.4 | 7000 | 40600 | |
| **F 80 3_36.0** | 36.0 | 25.0 | 8000 | 23 | 7000 | 34100 | 13.9 | 8000 | 12.6 | 7000 | 43300 | |
| **F 80 3_39.0** | 39.0 | 23.1 | 8000 | 21 | 7000 | 34900 | 12.8 | 8000 | 11.6 | 7000 | 44300 | |
| **F 80 3_45.3** | 45.3 | 19.9 | 8000 | 18.0 | 7000 | 37500 | 11.0 | 8000 | 10.0 | 7000 | 45000 | |
| **F 80 3_49.1** | 49.1 | 18.3 | 8000 | 16.6 | 7000 | 38400 | 10.2 | 8000 | 9.2 | 7000 | 45000 | |
| **F 80 3_56.7** | 56.7 | 15.9 | 8000 | 14.3 | 7000 | 41100 | 8.8 | 8000 | 8.0 | 7000 | 45000 | |
| **F 80 3_61.5** | 61.5 | 14.6 | 8000 | 13.2 | 7000 | 42000 | 8.1 | 8000 | 7.3 | 7000 | 45000 | |
| **F 80 3_70.4** | 70.4 | 12.8 | 8000 | 11.6 | 7000 | 44700 | 7.1 | 8000 | 6.4 | 7000 | 45000 | |
| **F 80 3_76.3** | 76.3 | 11.8 | 8000 | 10.7 | 7000 | 45000 | 6.6 | 8000 | 5.9 | 7000 | 45000 | |
| **F 80 3_85.2** | 85.2 | 10.6 | 8000 | 9.5 | 7000 | 45000 | 5.9 | 8000 | 5.3 | 7000 | 45000 | |
| **F 80 3_92.3** | 92.3 | 9.8 | 8000 | 8.8 | 7000 | 45000 | 5.4 | 8000 | 4.9 | 7000 | 45000 | |
| **F 80 3_105.0** | 105.0 | 8.6 | 8000 | 7.7 | 7000 | 45000 | 4.8 | 8000 | 4.3 | 7000 | 45000 | |
| **F 80 3_113.8** | 113.8 | 7.9 | 8000 | 7.1 | 7000 | 45000 | 4.4 | 8000 | 4.0 | 7000 | 45000 | |
| **F 80 3_122.5** | 122.5 | 7.3 | 8000 | 6.6 | 7000 | 45000 | 4.1 | 8000 | 3.7 | 7000 | 45000 | |
| **F 80 3_132.7** | 132.7 | 6.8 | 8000 | 6.1 | 7000 | 45000 | 3.8 | 8000 | 3.4 | 7000 | 45000 | |
| **F 80 3_147.9** | 147.9 | 6.1 | 8000 | 5.5 | 7000 | 45000 | 3.4 | 8000 | 3.1 | 7000 | 45000 | 427 |
| **F 80 3_160.2** | 160.2 | 5.6 | 8000 | 5.1 | 7000 | 45000 | 3.1 | 8000 | 2.8 | 7000 | 45000 | |
| **F 80 3_184.6** | 184.6 | 4.9 | 8000 | 4.4 | 7000 | 45000 | 2.7 | 8000 | 2.4 | 7000 | 45000 | |
| **F 80 3_200.0** | 200.0 | 4.5 | 8000 | 4.1 | 7000 | 45000 | 2.5 | 8000 | 2.3 | 7000 | 45000 | |
| | | | | | | | | | | | | |
| **F 80 4_218.5** | 218.5 | 4.1 | 8000 | 3.8 | 3130 | 45000 | 2.3 | 8000 | 2.1 | 3500 | 45000 | |
| **F 80 4_273.9** | 273.9 | 3.3 | 8000 | 3.0 | 3240 | 45000 | 1.8 | 8000 | 1.7 | 3500 | 45000 | |
| **F 80 4_296.7** | 296.7 | 3.0 | 8000 | 2.8 | 3240 | 45000 | 1.7 | 8000 | 1.6 | 3500 | 45000 | |
| **F 80 4_353.7** | 353.7 | 2.5 | 8000 | 2.4 | 3330 | 45000 | 1.4 | 8000 | 1.3 | 3500 | 45000 | |
| **F 80 4_383.2** | 383.2 | 2.3 | 8000 | 2.2 | 3330 | 45000 | 1.3 | 8000 | 1.2 | 3500 | 45000 | |
| **F 80 4_451.5** | 451.5 | 2.0 | 8000 | 1.8 | 3380 | 45000 | 1.1 | 8000 | 1.0 | 3500 | 45000 | |
| **F 80 4_489.1** | 489.1 | 1.8 | 8000 | 1.7 | 3380 | 45000 | 1.0 | 8000 | 0.95 | 3500 | 45000 | |
| **F 80 4_563.9** | 563.9 | 1.6 | 8000 | 1.5 | 3420 | 45000 | 0.89 | 8000 | 0.82 | 3500 | 45000 | |
| **F 80 4_610.9** | 610.9 | 1.5 | 8000 | 1.4 | 3420 | 45000 | 0.82 | 8000 | 0.76 | 3500 | 45000 | |
| **F 80 4_714.9** | 714.9 | 1.3 | 8000 | 1.2 | 3460 | 45000 | 0.70 | 8000 | 0.65 | 3500 | 45000 | |
| **F 80 4_774.4** | 774.4 | 1.2 | 8000 | 1.1 | 3460 | 45000 | 0.65 | 8000 | 0.60 | 3500 | 45000 | |
| **F 80 4_897.3** | 897.3 | 1.0 | 8000 | 0.93 | 3490 | 45000 | 0.56 | 8000 | 0.52 | 3500 | 45000 | |
| **F 80 4_972.0** | 972.0 | 0.93 | 8000 | 0.86 | 3490 | 45000 | 0.51 | 8000 | 0.48 | 3500 | 45000 | |
| **F 80 4_1058** | 1058 | 0.85 | 8000 | 0.79 | 3500 | 45000 | 0.47 | 8000 | 0.44 | 3500 | 45000 | |
| **F 80 4_1146** | 1146 | 0.79 | 8000 | 0.73 | 3500 | 45000 | 0.44 | 8000 | 0.40 | 3500 | 45000 | |
| **F 80 4_1277** | 1277 | 0.70 | 8000 | 0.65 | 3500 | 45000 | 0.39 | 8000 | 0.36 | 3500 | 45000 | |
| **F 80 4_1384** | 1384 | 0.65 | 8000 | 0.60 | 3500 | 45000 | 0.36 | 8000 | 0.34 | 3500 | 45000 | |
| **F 80 4_1578** | 1578 | 0.57 | 8000 | 0.53 | 3500 | 45000 | 0.32 | 8000 | 0.29 | 3500 | 45000 | |
| **F 80 4_1709** | 1709 | 0.53 | 8000 | 0.49 | 3500 | 45000 | 0.29 | 8000 | 0.27 | 3500 | 45000 | |
| **F 80 4_1834** | 1834 | 0.49 | 8000 | 0.46 | 3500 | 45000 | 0.27 | 8000 | 0.25 | 3500 | 45000 | |
| **F 80 4_1987** | 1987 | 0.45 | 8000 | 0.42 | 3500 | 45000 | 0.25 | 8000 | 0.23 | 3500 | 45000 | |

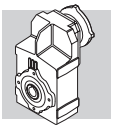
(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



# F 90 — 14000 Nm

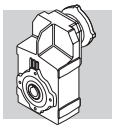
| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 90 3_10.3** | 10.3 | 272 | 6500 | 200 | 5480 | 23800 | 136 | 8000 | 123 | 8000 | 29300 | |
| **F 90 3_11.1** | 11.1 | 252 | 7150 | 204 | 5280 | 23300 | 126 | 8800 | 125 | 7770 | 28700 | |
| **F 90 3_13.4** | 13.4 | 209 | 7550 | 178 | 4880 | 25000 | 104 | 9300 | 110 | 7280 | 30700 | |
| **F 90 3_14.5** | 14.5 | 193 | 8100 | 177 | 5000 | 24700 | 97 | 10000 | 109 | 7400 | 30300 | |
| **F 90 3_16.5** | 16.5 | 170 | 8400 | 161 | 4540 | 26000 | 85 | 10300 | 99 | 6960 | 32000 | |
| **F 90 3_17.9** | 17.9 | 156 | 8950 | 158 | 4560 | 25700 | 78 | 11000 | 97 | 7180 | 31700 | |
| **F 90 3_20.6** | 20.6 | 136 | 9200 | 141 | 3980 | 27400 | 68 | 11300 | 87 | 6260 | 33700 | |
| **F 90 3_22.3** | 22.3 | 126 | 9750 | 138 | 4280 | 27100 | 63 | 12000 | 85 | 6590 | 33400 | |
| **F 90 3_25.4** | 25.4 | 110 | 10050 | 125 | 3620 | 28700 | 55 | 12000 | 75 | 6310 | 36000 | |
| **F 90 3_28.6** | 28.6 | 98 | 9750 | 108 | 9800 | 30900 | 49 | 12000 | 66 | 12400 | 38000 | |
| **F 90 3_31.0** | 31.0 | 90 | 10550 | 108 | 9800 | 30300 | 45 | 13000 | 66 | 12400 | 37300 | |
| **F 90 3_37.4** | 37.4 | 75 | 10950 | 93 | 9820 | 32800 | 37 | 13500 | 57 | 12400 | 40400 | |
| **F 90 3_40.5** | 40.5 | 69 | 11900 | 93 | 9820 | 32100 | 35 | 14000 | 55 | 12500 | 40600 | |
| **F 90 3_46.1** | 46.1 | 61 | 12050 | 83 | 9840 | 34300 | 30 | 14000 | 48 | 12600 | 43600 | |
| **F 90 3_49.9** | 49.9 | 56 | 13050 | 83 | 9840 | 33500 | 28.1 | 14000 | 44 | 12700 | 44700 | |
| **F 90 3_57.3** | 57.3 | 49 | 13050 | 72 | 9810 | 36300 | 24.4 | 14000 | 39 | 12700 | 48100 | |
| **F 90 3_62.1** | 62.1 | 45 | 14000 | 71 | 9830 | 35600 | 22.5 | 14000 | 36 | 12800 | 49300 | |
| **F 90 3_70.8** | 70.8 | 40 | 14000 | 63 | 9830 | 38500 | 19.8 | 14000 | 31 | 12800 | 52700 | |
| **F 90 3_76.7** | 76.7 | 37 | 14000 | 58 | 9960 | 39500 | 18.3 | 14000 | 29 | 13000 | 54000 | |
| **F 90 3_88.4** | 88.4 | 32 | 14000 | 50 | 9930 | 42800 | 15.8 | 14000 | 25 | 12900 | 55000 | |
| **F 90 3_95.8** | 95.8 | 29.2 | 14000 | 46 | 10100 | 43800 | 14.6 | 14000 | 23 | 13100 | 55000 | |
| **F 90 3_103.3** | 103.3 | 27.1 | 14000 | 43 | 9960 | 45900 | 13.6 | 14000 | 21 | 13000 | 55000 | |
| **F 90 3_111.9** | 111.9 | 25.0 | 14000 | 40 | 10100 | 47100 | 12.5 | 14000 | 19.8 | 13100 | 55000 | |
| **F 90 3_126.8** | 126.8 | 22.1 | 14000 | 35 | 10000 | 50300 | 11.0 | 14000 | 17.5 | 13000 | 55000 | |
| **F 90 3_137.3** | 137.3 | 20.4 | 14000 | 32 | 10100 | 51500 | 10.2 | 14000 | 16.1 | 13100 | 55000 | |
| **F 90 3_150.3** | 150.3 | 18.6 | 14000 | 29 | 10100 | 54000 | 9.3 | 14000 | 14.7 | 13100 | 55000 | 430 |
| **F 90 3_162.8** | 162.8 | 17.2 | 14000 | 27 | 10200 | 55000 | 8.6 | 14000 | 13.6 | 13200 | 55000 | |
| **F 90 3_179.2** | 179.2 | 15.6 | 14000 | 25 | 10200 | 55000 | 7.8 | 14000 | 12.4 | 13100 | 55000 | |
| **F 90 3_194.2** | 194.2 | 14.4 | 14000 | 23 | 10200 | 55000 | 7.2 | 14000 | 11.4 | 13200 | 55000 | |
| | | | | | | | | | | | | |
| **F 90 4_213.6** | 213.6 | 13.1 | 14000 | 21 | — | 55000 | 6.6 | 14000 | 10.6 | — | 55000 | |
| **F 90 4_231.4** | 231.4 | 12.1 | 14000 | 19.6 | — | 55000 | 6.1 | 14000 | 9.8 | — | 55000 | |
| **F 90 4_268.7** | 268.7 | 10.4 | 14000 | 16.9 | — | 55000 | 5.2 | 14000 | 8.5 | 420 | 55000 | |
| **F 90 4_291.1** | 291.1 | 9.6 | 14000 | 15.6 | — | 55000 | 4.8 | 14000 | 7.8 | 420 | 55000 | |
| **F 90 4_361.8** | 361.8 | 7.7 | 14000 | 12.6 | — | 55000 | 3.9 | 14000 | 6.3 | 990 | 55000 | |
| **F 90 4_392.0** | 392.0 | 7.1 | 14000 | 11.6 | — | 55000 | 3.6 | 14000 | 5.8 | 990 | 55000 | |
| **F 90 4_457.5** | 457.5 | 6.1 | 14000 | 9.9 | — | 55000 | 3.1 | 14000 | 5.0 | 1390 | 55000 | |
| **F 90 4_495.6** | 495.6 | 5.6 | 14000 | 9.2 | — | 55000 | 2.8 | 14000 | 4.6 | 1390 | 55000 | |
| **F 90 4_577.5** | 577.5 | 4.8 | 14000 | 7.9 | — | 55000 | 2.4 | 14000 | 3.9 | 1600 | 55000 | |
| **F 90 4_625.6** | 625.6 | 4.5 | 14000 | 7.3 | — | 55000 | 2.2 | 14000 | 3.6 | 1600 | 55000 | |
| **F 90 4_714.0** | 714.0 | 3.9 | 14000 | 6.4 | — | 55000 | 2.0 | 14000 | 3.2 | 1800 | 55000 | |
| **F 90 4_773.4** | 773.4 | 3.6 | 14000 | 5.9 | — | 55000 | 1.8 | 14000 | 2.9 | 1800 | 55000 | |
| **F 90 4_910.2** | 910.2 | 3.1 | 14000 | 5.0 | — | 55000 | 1.5 | 14000 | 2.5 | 2020 | 55000 | |
| **F 90 4_986.0** | 986.0 | 2.8 | 14000 | 4.6 | — | 55000 | 1.4 | 14000 | 2.3 | 2020 | 55000 | |
| **F 90 4_1112** | 1112 | 2.5 | 14000 | 4.1 | — | 55000 | 1.3 | 14000 | 2.0 | 2110 | 55000 | |
| **F 90 4_1205** | 1205 | 2.3 | 14000 | 3.8 | — | 55000 | 1.2 | 14000 | 1.9 | 2110 | 55000 | |
| **F 90 4_1318** | 1318 | 2.1 | 14000 | 3.4 | — | 55000 | 1.1 | 14000 | 1.7 | 2220 | 55000 | |
| **F 90 4_1428** | 1428 | 2.0 | 14000 | 3.2 | — | 55000 | 0.98 | 14000 | 1.6 | 2220 | 55000 | |
| **F 90 4_1571** | 1571 | 1.8 | 14000 | 2.9 | — | 55000 | 0.89 | 14000 | 1.4 | 2260 | 55000 | |
| **F 90 4_1702** | 1702 | 1.6 | 14000 | 2.7 | — | 55000 | 0.82 | 14000 | 1.3 | 2260 | 55000 | |
| **F 90 4_1937** | 1937 | 1.4 | 14000 | 2.3 | — | 55000 | 0.72 | 14000 | 1.2 | 2300 | 55000 | |
| **F 90 4_2099** | 2099 | 1.3 | 14000 | 2.2 | — | 55000 | 0.67 | 14000 | 1.1 | 2300 | 55000 | |

(—) Contactar con nuestro servicio técnico facilitando los datos relativos a la carga radial (sentido de giro, orientación y posición)



# F 90 — 14000 Nm

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **F 90 3_10.3** | 10.3 | 87 | 9150 | 90 | 10000 | 33400 | 49 | 9600 | 53 | 15000 | 41900 | |
| **F 90 3_11.1** | 11.1 | 81 | 10050 | 92 | 9780 | 32700 | 45 | 10400 | 53 | 15000 | 41600 | |
| **F 90 3_13.4** | 13.4 | 67 | 10600 | 80 | 9270 | 35100 | 37 | 12500 | 53 | 12700 | 42100 | |
| **F 90 3_14.5** | 14.5 | 62 | 11400 | 80 | 9390 | 34600 | 34 | 13550 | 53 | 12700 | 41400 | |
| **F 90 3_16.5** | 16.5 | 55 | 11750 | 72 | 8890 | 36600 | 30 | 12300 | 42 | 14600 | 46400 | |
| **F 90 3_17.9** | 17.9 | 50 | 12550 | 71 | 9140 | 36200 | 27.9 | 13150 | 41 | 14800 | 46200 | |
| **F 90 3_20.6** | 20.6 | 44 | 12200 | 60 | 9100 | 39700 | 24.3 | 12200 | 33 | 15000 | 51000 | |
| **F 90 3_22.3** | 22.3 | 40 | 13200 | 60 | 9120 | 39000 | 22.4 | 13200 | 33 | 15000 | 50700 | |
| **F 90 3_25.4** | 25.4 | 35 | 12000 | 48 | 10400 | 43800 | 19.7 | 12000 | 27 | 15000 | 55000 | |
| **F 90 3_28.6** | 28.6 | 31 | 13700 | 49 | 14400 | 43400 | 17.5 | 14000 | 28 | 15000 | 55000 | |
| **F 90 3_31.0** | 31.0 | 29.0 | 14000 | 46 | 14500 | 44000 | 16.1 | 14000 | 26 | 15000 | 55000 | |
| **F 90 3_37.4** | 37.4 | 24.1 | 14000 | 38 | 14700 | 48400 | 13.4 | 14000 | 21 | 15000 | 55000 | |
| **F 90 3_40.5** | 40.5 | 22.2 | 14000 | 35 | 14800 | 49600 | 12.3 | 14000 | 19.5 | 15000 | 55000 | |
| **F 90 3_46.1** | 46.1 | 19.5 | 14000 | 31 | 14900 | 53000 | 10.8 | 14000 | 17.2 | 15000 | 55000 | |
| **F 90 3_49.9** | 49.9 | 18.0 | 14000 | 29 | 15000 | 54200 | 10.0 | 14000 | 15.8 | 15000 | 55000 | |
| **F 90 3_57.3** | 57.3 | 15.7 | 14000 | 25 | 15000 | 55000 | 8.7 | 14000 | 13.8 | 15000 | 55000 | |
| **F 90 3_62.1** | 62.1 | 14.5 | 14000 | 23 | 15000 | 55000 | 8.1 | 14000 | 12.7 | 15000 | 55000 | |
| **F 90 3_70.8** | 70.8 | 12.7 | 14000 | 20 | 15000 | 55000 | 7.1 | 14000 | 11.2 | 15000 | 55000 | |
| **F 90 3_76.7** | 76.7 | 11.7 | 14000 | 18.6 | 15000 | 55000 | 6.5 | 14000 | 10.3 | 15000 | 55000 | |
| **F 90 3_88.4** | 88.4 | 10.2 | 14000 | 16.1 | 15000 | 55000 | 5.7 | 14000 | 8.9 | 15000 | 55000 | |
| **F 90 3_95.8** | 95.8 | 9.4 | 14000 | 14.9 | 15000 | 55000 | 5.2 | 14000 | 8.3 | 15000 | 55000 | |
| **F 90 3_103.3** | 103.3 | 8.7 | 14000 | 13.8 | 15000 | 55000 | 4.8 | 14000 | 7.7 | 15000 | 55000 | |
| **F 90 3_111.9** | 111.9 | 8.0 | 14000 | 12.7 | 15000 | 55000 | 4.5 | 14000 | 7.1 | 15000 | 55000 | |
| **F 90 3_126.8** | 126.8 | 7.1 | 14000 | 11.2 | 15000 | 55000 | 3.9 | 14000 | 6.2 | 15000 | 55000 | |
| **F 90 3_137.3** | 137.3 | 6.6 | 14000 | 10.4 | 15000 | 55000 | 3.6 | 14000 | 5.8 | 15000 | 55000 | |
| **F 90 3_150.3** | 150.3 | 6.0 | 14000 | 9.5 | 15000 | 55000 | 3.3 | 14000 | 5.3 | 15000 | 55000 | 430 |
| **F 90 3_162.8** | 162.8 | 5.5 | 14000 | 8.7 | 15000 | 55000 | 3.1 | 14000 | 4.9 | 15000 | 55000 | |
| **F 90 3_179.2** | 179.2 | 5.0 | 14000 | 7.9 | 15000 | 55000 | 2.8 | 14000 | 4.4 | 15000 | 55000 | |
| **F 90 3_194.2** | 194.2 | 4.6 | 14000 | 7.3 | 15000 | 55000 | 2.6 | 14000 | 4.1 | 15000 | 55000 | |
| | | | | | | | | | | | | |
| **F 90 4_213.6** | 213.6 | 4.2 | 14000 | 6.8 | 810 | 55000 | 2.3 | 14000 | 3.8 | 2350 | 55000 | |
| **F 90 4_231.4** | 231.4 | 3.9 | 14000 | 6.3 | 810 | 55000 | 2.2 | 14000 | 3.5 | 2350 | 55000 | |
| **F 90 4_268.7** | 268.7 | 3.3 | 14000 | 5.4 | 1390 | 55000 | 1.9 | 14000 | 3.0 | 2920 | 55000 | |
| **F 90 4_291.1** | 291.1 | 3.1 | 14000 | 5.0 | 1390 | 55000 | 1.7 | 14000 | 2.8 | 2920 | 55000 | |
| **F 90 4_361.8** | 361.8 | 2.5 | 14000 | 4.0 | 1960 | 55000 | 1.4 | 14000 | 2.2 | 3390 | 55000 | |
| **F 90 4_392.0** | 392.0 | 2.3 | 14000 | 3.7 | 1960 | 55000 | 1.3 | 14000 | 2.1 | 3390 | 55000 | |
| **F 90 4_457.5** | 457.5 | 2.0 | 14000 | 3.2 | 2360 | 55000 | 1.1 | 14000 | 1.8 | 3490 | 55000 | |
| **F 90 4_495.6** | 495.6 | 1.8 | 14000 | 2.9 | 2360 | 55000 | 1.0 | 14000 | 1.6 | 3490 | 55000 | |
| **F 90 4_577.5** | 577.5 | 1.6 | 14000 | 2.5 | 2570 | 55000 | 0.87 | 14000 | 1.4 | 3500 | 55000 | |
| **F 90 4_625.6** | 625.6 | 1.4 | 14000 | 2.3 | 2570 | 55000 | 0.80 | 14000 | 1.3 | 3500 | 55000 | |
| **F 90 4_714.0** | 714.0 | 1.3 | 14000 | 2.0 | 2770 | 55000 | 0.70 | 14000 | 1.1 | 3500 | 55000 | |
| **F 90 4_773.4** | 773.4 | 1.2 | 14000 | 1.9 | 2770 | 55000 | 0.65 | 14000 | 1.0 | 3500 | 55000 | |
| **F 90 4_910.2** | 910.2 | 0.99 | 14000 | 1.6 | 2840 | 55000 | 0.55 | 14000 | 0.89 | 3500 | 55000 | |
| **F 90 4_986.0** | 986.0 | 0.91 | 14000 | 1.5 | 2840 | 55000 | 0.51 | 14000 | 0.82 | 3500 | 55000 | |
| **F 90 4_1112** | 1112 | 0.81 | 14000 | 1.3 | 2860 | 55000 | 0.45 | 14000 | 0.73 | 3500 | 55000 | |
| **F 90 4_1205** | 1205 | 0.75 | 14000 | 1.2 | 2860 | 55000 | 0.41 | 14000 | 0.67 | 3500 | 55000 | |
| **F 90 4_1318** | 1318 | 0.68 | 14000 | 1.1 | 2890 | 55000 | 0.38 | 14000 | 0.62 | 3500 | 55000 | |
| **F 90 4_1428** | 1428 | 0.63 | 14000 | 1.0 | 2890 | 55000 | 0.35 | 14000 | 0.57 | 3500 | 55000 | |
| **F 90 4_1571** | 1571 | 0.57 | 14000 | 0.93 | 2900 | 55000 | 0.32 | 14000 | 0.52 | 3500 | 55000 | |
| **F 90 4_1702** | 1702 | 0.53 | 14000 | 0.86 | 2900 | 55000 | 0.29 | 14000 | 0.48 | 3500 | 55000 | |
| **F 90 4_1937** | 1937 | 0.46 | 14000 | 0.75 | 2910 | 55000 | 0.26 | 14000 | 0.42 | 3500 | 55000 | |
| **F 90 4_2099** | 2099 | 0.43 | 14000 | 0.70 | 2910 | 55000 | 0.24 | 14000 | 0.39 | 3500 | 55000 | |



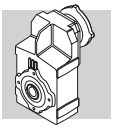
## 59 PREDISPOSICIONES MOTOR

En las tablas (D48) y (D49) se especifican los montajes posibles de motores solo a nivel dimensional.

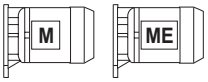
**La selección del motorreductor debe efectuarse siguiendo las instrucciones especificadas en el pàrrafo 11, respetando particularmente la condición $S \geq f_s$.**

(D 48)

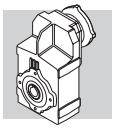
| | | IEC_ BN BE (IM B5) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | P63 P71 | P80 P90 | P100 P112 | P132 | P160 | P180 | P200 | P225 | P250 |
| F 10 2 | | 7.4_127.1 | 7.4_91.5 | 7.4_91.5 | | | | | | |
| F 20 2 | | 8.7_132.2 ⛀ (14.8_18.1) | 6.4_114.3 | 6.4_114.3 | | | | | | |
| F 20 3 | | 156.3_545.3 | 156.3_545.3 | 156.3_545.3 | | | | | | |
| F 25 2 | | 9.4_44.4 ⛀ (10.6_13.0) | 6.9_44.4 | 6.9_44.4 | | | | | | |
| F 25 3 | | 50.8_333.1 | 45.6_288.1 | 45.6_288.1 | | | | | | |
| F 25 4 | | 393.9_1374 | 393.9_1374 | 393.9_1374 | | | | | | |
| F 31 2 | | 18.5_44.6 | 6.9_44.6 | 6.9_44.6 | 6.9_37.7 | | | | | |
| F 31 3 | | 69.1_374.4 | 47.5_374.4 | 47.5_374.4 | 47.5_140.7 | | | | | |
| F 31 4 | | 418.9_1539 | 418.9_1539 | 418.9_1539 | | | | | | |
| F 41 2 | | 24.1_47.9 | 6.7_47.9 | 6.7_47.9 | 6.7_47.9 | | | | | |
| F 41 3 | | 84.9_344.8 | 51.5_344.8 | 51.5_344.8 | 51.5_168.7 | | | | | |
| F 41 4 | i = | 433.7_1411 | 433.7_1411 | 433.7_1411 | | | | | | |
| F 51 2 | | 30.0_37.1 | 7.2_37.1 | 7.2_37.1 | 7.2_37.1 | 7.2_37.1 | 7.2_37.1 | | | |
| F 51 3 | | 105.1_352.5 | 48.9_352.5 | 48.9_352.5 | 48.9_202.4 | 48.9_202.4 | 48.9_202.4 | | | |
| F 51 4 | | 429.1_1439 | 429.1_1439 | 429.1_1439 | 429.1_826.4 | | | | | |
| F 60 3 | | 98.2_280.7 | 11.8_280.7 ⛀ (29.6_32.1) | 11.8_280.7 ⛀ (29.6_32.1) | 9.0_201.4 | 9.0_201.4 | 9.0_201.4 | | | |
| F 60 4 | | 315.4_1141 | 315.4_1141 | 315.4_1141 | | | | | | |
| F 70 3 | | | 85.4_196.0 | 85.4_196.0 | 16.3_196.0 ⛀ (27.7_38.4) | 10.0_196.0 | 10.0_196.0 | 10.0_49.0 ⛀ (20.9_24.6) | | |
| F 70 4 | | 372.5_2188 | 216.5_2188 | 216.5_2188 | 216.5_822.2 | | | | | |
| F 80 3 | | | 105.0_200.0 | 105.0_200.0 | 20.3_200 ⛀ (28.8_49.1) | 12.9_200 ⛀ (28.8_31.3) | 10.3_200.0 | 10.3_132.7 | 10.3_132.7 | |
| F 80 4 | | 451.5_1987 | 218.5_1987 | 218.5_1987 | 218.5_972 | | | | | |
| F 90 3 | | | 126.8_194.2 | 126.8_194.2 | 25.4_194.2 ⛀ (28.6_62.1) | 20.6_194.2 ⛀ (28.6_49.9) | 10.3_194.2 | 10.3_162.8 | 10.3_162.8 | 10.3_162.8 |
| F 90 4 | | 577.5_2099 | 213.6_2099 | 213.6_2099 | 213.6_1205 | 213.6_1205 | 213.6_1205 | | | |



(D 49)




| | | M05 | M1 | M2 - ME2 | ME3 | ME4 | ME5 |
|---|---|---|---|---|---|---|---|
| **F 10 2** | | 7.4_127.1 | 7.4_71.1 | 7.4_91.5 | 7.4_91.5 | | |
| **F 20 2** | | 8.7_132.2<br>⛀ (14.8_18.1) | 8.7_90.4<br>⛀ (14.8_18.1) | 6.4_114.3 | 6.4_114.3 | | |
| **F 20 3** | | 156.3_545.3 | 156.3_545.3 | 156.3_545.3 | 156.3_545.3 | | |
| **F 25 2** | | 9.4_44.4<br>⛀ (10.6_13.0) | 9.4_44.4<br>⛀ (10.6_13.0) | 6.9_44.4 | 6.9_44.4 | | |
| **F 25 3** | | 50.8_333.1 | 50.8_227.8 | 45.6_288.1 | 45.6_288.1 | | |
| **F 25 4** | | 393.9_1374 | 393.9_1374 | 393.9_1374 | 393.9_1374 | | |
| **F 31 2** | | | 18.5_44.6 | 6.9_44.6 | 6.9_44.6 | 6.9_37.7 | |
| **F 31 3** | | | 69.1_293.8 | 47.5_374.4 | 47.5_374.4 | 47.5_140.7 | |
| **F 31 4** | | 418.9_1539 | 418.9_1539 | 418.9_1539 | 418.9_1539 | | |
| **F 41 2** | | | 24.1_47.9 | 6.7_47.9 | 6.7_47.9 | 6.7_47.9 | |
| **F 41 3** | | | 84.9_344.8 | 51.5_344.8 | 51.5_344.8 | 51.5_168.7 | |
| **F 41 4** | **i =** | 433.7_1411 | 433.7_1411 | 433.7_1411 | 433.7_1411 | | |
| **F 51 2** | | | 30.0_37.1 | 7.2_37.1 | 7.2_37.1 | 7.2_37.1 | 7.2_37.1 |
| **F 51 3** | | | 105.1_352.5 | 48.9_352.5 | 48.9_352.5 | 48.9_202.4 | 48.9_202.4 |
| **F 51 4** | | | 429.1_1439 | 429.1_1439 | 429.1_1439 | 429.1_826.4 | |
| **F 60 3** | | | | 11.8_280.7<br>⛀ (29.6_32.1) | 11.8_280.7<br>⛀ (29.6_32.1) | 9_201.4 | 9_201.4 |
| **F 60 4** | | | 315.4_1141 | 315.4_1141 | 315.4_1141 | 315.4_1141 | |
| **F 70 3** | | | | 85.4_196.0 | 85.4_196.0 | 16.3_196.0<br>⛀ (27.7_38.4) | 16.3_196.0<br>⛀ (27.7_38.4) |
| **F 70 4** | | | 372.5_2188 | 216.5_2188 | 216.5_2188 | 216.5_822.2 | |
| **F 80 3** | | | | | 105.0_200.0 | 20.3_200.0<br>⛀ (28.8_49.1) | 20.3_200.0<br>⛀ (28.8_49.1) |
| **F 80 4** | | | 451.5_1987 | 218.5_1987 | 218.5_1987 | 218.5_972.0 | |
| **F 90 3** | | | | | 126.8_194.2 | 25.4_194.2<br>⛀ (28.6_62.1) | 25.4_194.2<br>⛀ (28.6_62.1) |
| **F 90 4** | | | | 213.6_2099 | 213.6_2099 | 213.6_1205 | |



Predisposiciones motor que están disponibles para ser acoplados a reductores F 10 ... F60 con servomotores de los tipos mas comunes. Las dimensiones de las bridas están indicadas en la sección de dimensiones de cada reductor. La sigla **SK** identifica la fijación con el eje del motor provisto de chavetero, mientras la sigla **SC** corresponde a la fijación mediante Aro de apriete (suministrado).

(D 50)

| | | SERVO INPUT | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | SK60A | SK60B | SK80A | SK80B | SK80C | SK95A | SK95B | SK95C |
| | | SC60A | SC60B | SC80A | SC80B | SC80C | SC95A | SC95B | SC95C |
| F 10 2 | | 7.4_127.1 | 7.4_71.1 | 7.4_71.1 | | 7.4_91.5 | 7.4_71.1 | 7.4_91.5 | 7.4_91.5 |
| F 20 2 | | 8.7_132.2 ⛀ (14.8_18.1) | 8.7_90.4 ⛀ (14.8_18.1) | 8.7_90.4 ⛀ (14.8_18.1) | | 6.4_114.3 | 8.7_90.4 ⛀ (14.8_18.1) | 6.4_114.3 | 6.4_114.3 |
| F 20 3 | | 156.3_545.3 | 156.3_545.3 | 156.3_545.3 | | 156.3_545.3 | 156.3_545.3 | 156.3_545.3 | 156.3_545.3 |
| F 25 2 | | 9.4_44.4 ⛀ (10.6_13.0) | 9.4_44.4 ⛀ (10.6_13.0) | 9.4_44.4 ⛀ (10.6_13.0) | | 6.9_44.4 | 9.4_44.4 ⛀ (10.6_13.0) | 6.9_44.4 | 6.9_44.4 |
| F 25 3 | | 45.6_333.1 | 45.6_227.8 | 45.6_227.8 | | 45.6_288.1 | 45.6_227.8 | 45.6_288.1 | 45.6_288.1 |
| F 25 4 | | 393.9_1374 | 393.9_1374 | 393.9_1374 | | 393.9_1374 | 393.9_1374 | 393.9_1374 | 393.9_1374 |
| F 31 2 | | 18.5_44.6 | 18.5_44.6 | 18.5_44.6 | | 6.9_44.6 | 18.5_44.6 | 6.9_44.6 | 6.9_44.6 |
| F 31 3 | | 69.1_374.4 | 69.1_293.8 | 69.1_293.8 | | 47.5_374.4 | 69.1_293.8 | 47.5_374.4 | 47.5_374.4 |
| F 31 4 | i = | 418.9_1539 | 418.9_1539 | 418.9_1539 | | 418.9_1539 | 418.9_1539 | 418.9_1539 | 418.9_1539 |
| F 41 2 | | | | | 24.1_47.9 | 6.7_47.9 | 24.1_47.9 | 6.7_47.9 | 6.7_47.9 |
| F 41 3 | | | | | 84.9_344.8 | 51.5_344.8 | 84.9_344.8 | 51.5_344.8 | 51.5_344.8 |
| F 41 4 | | 433.7_1411 | 433.7_1411 | 433.7_1411 | | 433.7_1411 | 433.7_1411 | 433.7_1411 | 433.7_1411 |
| F 51 2 | | | | | 30.0_37.1 | 7.2_37.1 | 30.0_37.1 | 7.2_37.1 | 7.2_37.1 |
| F 51 3 | | | | | 105.1_352.5 | 48.9_352.5 | 105.1_352.5 | 48.9_352.5 | 48.9_352.5 |
| F 51 4 | | | | | | 429.1_1439 | 429.1_1439 | 429.1_1439 | 429.1_1439 |
| F 60 3 | | | | | | 11.8_280.7 ⛀ (29.6_32.1) | 106.4_280.7 | 11.8_280.7 ⛀ (29.6_32.1) | 11.8_280.7 ⛀ (29.6_32.1) |
| F 60 4 | | | | | 315.4_1141 | 315.4_1141 | 315.4_1141 | 315.4_1141 | 315.4_1141 |

(D 51)

| | | SERVO INPUT | | | | | |
|---|---|---|---|---|---|---|---|
| | | SK110A | SK110B | SK130A | SK130B | SK180A | SK180B |
| | | SC110A | SC110B | SC130A | SC130B | SC180A | SC180B |
| F 10 2 | | 7.4_91.5 | 7.4_91.5 | | | | |
| F 20 2 | | 6.4_114.3 | 6.4_114.3 | | | | |
| F 20 3 | | 156.3_545.3 | 156.3_545.3 | | | | |
| F 25 2 | | 6.9_44.4 | 6.9_44.4 | | | | |
| F 25 3 | | 45.6_288.1 | 45.6_288.1 | | | | |
| F 25 4 | | 393.9_1374 | 393.9_1374 | | | | |
| F 31 2 | | 6.9_44.6 | 6.9_44.6 | 6.9_44.6 | | | |
| F 31 3 | | 47.5_374.4 | 47.5_374.4 | 47.5_374.4 | | | |
| F 31 4 | i = | 418.9_1539 | 418.9_1539 | | | | |
| F 41 2 | | 6.7_47.9 | 6.7_47.9 | 6.7_47.9 | 6.7_47.9 | 6.7_47.9 | 6.7_47.9 |
| F 41 3 | | 51.5_344.8 | 51.5_344.8 | 51.5_344.8 | 51.5_168.7 | 51.5_168.7 | 51.5_168.7 |
| F 41 4 | | 433.7_1411 | 433.7_1411 | | | | |
| F 51 2 | | 7.2_37.1 | 7.2_37.1 | 7.2_37.1 | 7.2_37.1 | 7.2_37.1 | 7.2_37.1 |
| F 51 3 | | 48.9_352.5 | 48.9_352.5 | 48.9_352.5 | 48.9_202.4 | 48.9_202.4 | 48.9_202.4 |
| F 51 4 | | 429.1_1439 | 429.1_1439 | 429.1_1439 | | | |
| F 60 3 | | 11.8_280.7 ⛀ (29.6_32.1) | 11.8_280.7 ⛀ (29.6_32.1) | 11.8_280.7 ⛀ (29.6_32.1) | 9.0_201.4 | 9.0_201.4 | 9.0_201.4 |
| F 60 4 | | 315.4_1141 | 315.4_1141 | 315.4_1141 | | | |

## 60 MOMENTO DE INERCIA

Las tablas siguientes indican los valores del momento de inercia $J_r$ [kgm²] referidos al eje de entrada del reductor; para una mayor facilidad de lectura, a continuación se reproducen los significados de los sÌmbolos utilizados.



Los valores referidos a este símbolo corresponden al reductor compacto sin motor. En este caso para obtener el momento de inercia del motorreductor, se deberá sumar al valor correspondiente al reductor compacto, el del motor que se aplique (dato que se encuentra en las tablas de características técnicas de los motores eléctricos).




Los valores relativos a este sìmbolo corresponden al reductor aislado, configurado para conexión de motor (medida IEC ...).



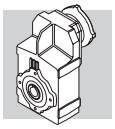
Los valores correspondientes al reductor estàn asociados a este sìmbolo.




Los valores relativos a estos símbolos se deben atribuir al reductor predispuesto para acoplarse a servomotores.

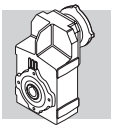
# F 10

| | i | J (•10-4) [kgm²] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC 63 | IEC 71 | IEC 80 | IEC 90 | IEC 100 | IEC 112 |  |
| **F 10 2_7.4** | 7.4 | 1.0 | 1.8 | 1.8 | 3.8 | 3.7 | 4.9 | 4.9 | 1.7 |
| **F 10 2_8.6** | 8.6 | 0.77 | 1.5 | 1.5 | 3.6 | 3.5 | 4.7 | 4.7 | 1.5 |
| **F 10 2_9.8** | 9.8 | 0.64 | 1.4 | 1.4 | 3.4 | 3.3 | 4.5 | 4.5 | 1.3 |
| **F 10 2_11.5** | 11.5 | 0.48 | 1.2 | 1.2 | 3.3 | 3.2 | 4.4 | 4.4 | 1.2 |
| **F 10 2_13.0** | 13.0 | 0.38 | 1.1 | 1.1 | 3.2 | 3.1 | 4.3 | 4.3 | 1.1 |
| **F 10 2_14.6** | 14.6 | 0.61 | 1.4 | 1.4 | 3.4 | 3.3 | 4.5 | 4.5 | 1.3 |
| **F 10 2_17.0** | 17.0 | 0.48 | 1.3 | 1.2 | 3.3 | 3.2 | 4.4 | 4.4 | 1.2 |
| **F 10 2_19.3** | 19.3 | 0.41 | 1.2 | 1.2 | 3.2 | 3.1 | 4.3 | 4.3 | 1.1 |
| **F 10 2_22.8** | 22.8 | 0.32 | 1.1 | 1.1 | 3.1 | 3.0 | 4.2 | 4.2 | 1.0 |
| **F 10 2_25.8** | 25.8 | 0.25 | 1.0 | 1.0 | 3.1 | 2.9 | 4.1 | 4.1 | 0.93 |
| **F 10 2_29.6** | 29.6 | 0.19 | 1.0 | 0.95 | 3.0 | 2.9 | 4.1 | 4.1 | 0.87 |
| **F 10 2_33.0** | 33.0 | 0.16 | 0.93 | 0.92 | 3.0 | 2.8 | 4.1 | 4.1 | 0.84 |
| **F 10 2_35.3** | 35.3 | 0.14 | 0.92 | 0.90 | 3.0 | 2.8 | 4.0 | 4.0 | 0.83 |
| **F 10 2_39.6** | 39.6 | 0.12 | 0.90 | 0.88 | 2.9 | 2.8 | 4.0 | 4.0 | 0.80 |
| **F 10 2_44.7** | 44.7 | 0.10 | 0.88 | 0.86 | 2.9 | 2.8 | 4.0 | 4.0 | 0.79 |
| **F 10 2_48.7** | 48.7 | 0.09 | 0.86 | 0.85 | 2.9 | 2.8 | 4.0 | 4.0 | 0.77 |
| **F 10 2_56.7** | 56.7 | 0.07 | 0.84 | 0.83 | 2.9 | 2.7 | 4.0 | 4.0 | 0.75 |
| **F 10 2_63.0** | 63.0 | 0.06 | 0.83 | 0.82 | 2.9 | 2.7 | 3.9 | 3.9 | 0.74 |
| **F 10 2_71.1** | 71.1 | 0.05 | 0.82 | 0.81 | 2.8 | 2.7 | 3.9 | 3.9 | 0.73 |
| **F 10 2_81.3** | 81.3 | 0.04 | 0.78 | 0.77 | 2.8 | 2.7 | 3.9 | 3.9 | 0.67 |
| **F 10 2_91.5** | 91.5 | 0.03 | 0.78 | 0.76 | 2.8 | 2.7 | 3.9 | 3.9 | 0.66 |
| **F 10 2_106.0** | 106.0 | 0.03 | 0.77 | 0.76 | — | — | — | — | 0.66 |
| **F 10 2_127.1** | 127.1 | 0.02 | 0.76 | 0.75 | — | — | — | — | 0.65 |



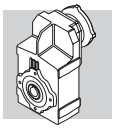
# F 10

| | i | J (•10-4) [kgm2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | |
| | | 60A | | 60B 80A | | 95A | | 80C 95B 110A | | 95C 110B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **F 10 2_7.4** | 7.4 | 1.3 | 1.5 | 1.3 | 1.7 | 3.8 | 4.3 | 3.8 | 4.3 | 3.7 | 4.7 |
| **F 10 2_8.6** | 8.6 | 1.0 | 1.3 | 1.1 | 1.5 | 3.6 | 4.0 | 3.6 | 4.1 | 3.5 | 4.5 |
| **F 10 2_9.8** | 9.8 | 0.91 | 1.2 | 0.93 | 1.4 | 3.5 | 3.9 | 3.4 | 3.9 | 3.3 | 4.3 |
| **F 10 2_11.5** | 11.5 | 0.75 | 1.0 | 0.77 | 1.2 | 3.3 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 |
| **F 10 2_13.0** | 13.0 | 0.65 | 0.91 | 0.67 | 1.1 | 3.2 | 3.6 | 3.2 | 3.7 | 3.1 | 4.1 |
| **F 10 2_14.6** | 14.6 | 0.88 | 1.1 | 0.91 | 1.3 | 3.4 | 3.9 | 3.4 | 3.9 | 3.3 | 4.3 |
| **F 10 2_17.0** | 17.0 | 0.75 | 1.0 | 0.77 | 1.2 | 3.3 | 3.7 | 3.3 | 3.8 | 3.2 | 4.2 |
| **F 10 2_19.3** | 19.3 | 0.68 | 0.94 | 0.70 | 1.1 | 3.2 | 3.7 | 3.2 | 3.7 | 3.1 | 4.1 |
| **F 10 2_22.8** | 22.8 | 0.59 | 0.85 | 0.61 | 1.0 | 3.1 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 |
| **F 10 2_25.8** | 25.8 | 0.52 | 0.78 | 0.54 | 0.98 | 3.1 | 3.5 | 3.1 | 3.6 | 2.9 | 3.9 |
| **F 10 2_29.6** | 29.6 | 0.46 | 0.72 | 0.48 | 0.92 | 3.0 | 3.4 | 3.0 | 3.5 | 2.9 | 3.9 |
| **F 10 2_33.0** | 33.0 | 0.43 | 0.69 | 0.45 | 0.89 | 3.0 | 3.4 | 3.0 | 3.5 | 2.8 | 3.8 |
| **F 10 2_35.3** | 35.3 | 0.41 | 0.67 | 0.43 | 0.87 | 3.0 | 3.4 | 3.0 | 3.5 | 2.8 | 3.8 |
| **F 10 2_39.6** | 39.6 | 0.39 | 0.65 | 0.41 | 0.85 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **F 10 2_44.7** | 44.7 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 |
| **F 10 2_48.7** | 48.7 | 0.36 | 0.62 | 0.38 | 0.82 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 |
| **F 10 2_56.7** | 56.7 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 |
| **F 10 2_63.0** | 63.0 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 |
| **F 10 2_71.1** | 71.1 | 0.32 | 0.58 | 0.34 | 0.78 | 2.9 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 10 2_81.3** | 81.3 | 0.31 | 0.57 | — | — | — | — | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 10 2_91.5** | 91.5 | 0.30 | 0.56 | — | — | — | — | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 10 2_106.0** | 106.0 | 0.30 | 0.56 | — | — | — | — | — | — | — | — |
| **F 10 2_127.1** | 127.1 | 0.29 | 0.55 | — | — | — | — | — | — | — | — |



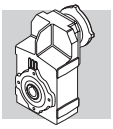
# F 20

| | i | J (•10-4) [kgm2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC 63 | IEC 71 | IEC 80 | IEC 90 | IEC 100 | IEC 112 |  |
| **F 20 2_6.4** | 6.4 | 2.2 | — | — | 5.0 | 4.8 | 6.0 | 6.0 | 3.9 |
| **F 20 2_7.8** | 7.8 | 1.5 | — | — | 4.3 | 4.2 | 5.4 | 5.4 | 3.3 |
| **F 20 2_8.7** | 8.7 | 1.3 | 2.0 | 2.0 | 4.1 | 3.9 | 5.2 | 5.2 | 3.0 |
| **F 20 2_10.0** | 10.0 | 1.0 | 1.8 | 1.7 | 3.8 | 3.7 | 4.9 | 4.9 | 2.7 |
| **F 20 2_11.2** | 11.2 | 0.88 | 1.6 | 1.6 | 3.6 | 3.5 | 4.7 | 4.7 | 2.6 |
| **F 20 2_14.8** | 14.8 | 1.2 | — | — | 4.0 | 3.9 | 5.1 | 5.1 | 2.9 |
| **F 20 2_18.1** | 18.1 | 0.90 | — | — | 3.7 | 3.5 | 4.7 | 4.7 | 2.6 |
| **F 20 2_20.2** | 20.2 | 0.78 | 1.5 | 1.5 | 3.5 | 3.4 | 4.6 | 4.6 | 2.5 |
| **F 20 2_23.1** | 23.1 | 0.64 | 1.4 | 1.3 | 3.4 | 3.3 | 4.5 | 4.5 | 2.4 |
| **F 20 2_25.9** | 25.9 | 0.57 | 1.3 | 1.3 | 3.3 | 3.2 | 4.4 | 4.4 | 2.3 |
| **F 20 2_30.4** | 30.4 | 0.41 | 1.1 | 1.1 | 3.2 | 3.0 | 4.3 | 4.3 | 2.1 |
| **F 20 2_33.1** | 33.1 | 0.36 | 1.1 | 1.1 | 3.1 | 3.0 | 4.2 | 4.2 | 2.1 |
| **F 20 2_37.9** | 37.9 | 0.30 | 1.0 | 1.0 | 3.1 | 2.9 | 4.1 | 4.1 | 2.0 |
| **F 20 2_41.8** | 41.8 | 0.27 | 1.0 | 1.0 | 3.0 | 2.9 | 4.1 | 4.1 | 2.0 |
| **F 20 2_44.8** | 44.8 | 0.24 | 1.0 | 1.0 | 3.0 | 2.9 | 4.1 | 4.1 | 2.0 |
| **F 20 2_50.7** | 50.7 | 0.21 | 0.93 | 0.92 | 3.0 | 2.8 | 4.1 | 4.1 | 1.9 |
| **F 20 2_56.7** | 56.7 | 0.18 | 0.91 | 0.90 | 2.9 | 2.8 | 4.0 | 4.0 | 1.9 |
| **F 20 2_61.9** | 61.9 | 0.16 | 0.89 | 0.88 | 2.9 | 2.8 | 4.0 | 4.0 | 1.9 |
| **F 20 2_69.1** | 69.1 | 0.14 | 0.87 | 0.86 | 2.9 | 2.8 | 4.0 | 4.0 | 1.8 |
| **F 20 2_76.8** | 76.8 | 0.12 | 0.86 | 0.85 | 2.9 | 2.8 | 4.0 | 4.0 | 1.8 |
| **F 20 2_90.4** | 90.4 | 0.10 | 0.84 | 0.82 | 2.9 | 2.7 | 3.9 | 3.9 | 1.8 |
| **F 20 2_101.6** | 101.6 | 0.09 | 0.80 | 0.79 | 2.8 | 2.7 | 3.9 | 3.9 | 1.8 |
| **F 20 2_114.3** | 114.3 | 0.08 | 0.79 | 0.77 | 2.8 | 2.7 | 3.9 | 3.9 | 1.8 |
| **F 20 2_132.2** | 132.2 | 0.03 | 0.78 | 0.77 | — | — | — | — | 1.8 |
| **F 20 3_156.3** | 156.3 | 0.04 | 0.81 | 0.80 | 2.8 | 2.7 | 3.9 | 3.9 | 0.72 |
| **F 20 3_172.6** | 172.6 | 0.04 | 0.81 | 0.80 | 2.8 | 2.7 | 3.9 | 3.9 | 0.72 |
| **F 20 3_184.9** | 184.9 | 0.04 | 0.81 | 0.80 | 2.8 | 2.7 | 3.9 | 3.9 | 0.72 |
| **F 20 3_209.3** | 209.3 | 0.03 | 0.81 | 0.79 | 2.8 | 2.7 | 3.9 | 3.9 | 0.72 |
| **F 20 3_234.0** | 234.0 | 0.03 | 0.81 | 0.79 | 2.8 | 2.7 | 3.9 | 3.9 | 0.71 |
| **F 20 3_255.3** | 255.3 | 0.03 | 0.80 | 0.79 | 2.8 | 2.7 | 3.9 | 3.9 | 0.71 |
| **F 20 3_285.2** | 285.2 | 0.03 | 0.80 | 0.79 | 2.8 | 2.7 | 3.9 | 3.9 | 0.71 |
| **F 20 3_316.9** | 316.9 | 0.03 | 0.80 | 0.79 | 2.8 | 2.7 | 3.9 | 3.9 | 0.71 |
| **F 20 3_372.9** | 372.9 | 0.03 | 0.80 | 0.79 | 2.8 | 2.7 | 3.9 | 3.9 | 0.71 |
| **F 20 3_419.3** | 419.3 | 0.03 | 0.80 | 0.79 | 2.8 | 2.7 | 3.9 | 3.9 | 0.66 |
| **F 20 3_471.7** | 471.7 | 0.03 | 0.80 | 0.79 | 2.8 | 2.7 | 3.9 | 3.9 | 0.66 |
| **F 20 3_545.3** | 545.3 | 0.03 | 0.80 | 0.79 | 2.8 | 2.7 | 3.9 | 3.9 | 0.66 |



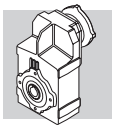
# F 20

| | i | J (•10-4) [kgm2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | |
| | | 60A | | 60B 80A | | 95A | | 80C 95B 110A | | 95C 110B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **F 20 2_6.4** | 6.4 | — | — | — | — | — | — | 5.0 | 5.5 | 4.8 | 5.8 |
| **F 20 2_7.8** | 7.8 | — | — | — | — | — | — | 4.3 | 4.8 | 4.2 | 5.2 |
| **F 20 2_8.7** | 8.7 | 1.6 | 1.8 | 1.6 | 2.0 | 4.1 | 4.6 | 4.1 | 4.6 | 3.9 | 4.9 |
| **F 20 2_10.0** | 10.0 | 1.3 | 1.5 | 1.3 | 1.7 | 3.8 | 4.3 | 3.8 | 4.3 | 3.7 | 4.7 |
| **F 20 2_11.2** | 11.2 | 1.2 | 1.4 | 1.2 | 1.6 | 3.7 | 4.1 | 3.6 | 4.1 | 3.5 | 4.5 |
| **F 20 2_14.8** | 14.8 | — | — | — | — | — | — | 4.0 | 4.5 | 3.9 | 4.9 |
| **F 20 2_18.1** | 18.1 | — | — | — | — | — | — | 3.7 | 4.2 | 3.5 | 4.5 |
| **F 20 2_20.2** | 20.2 | 1.1 | 1.3 | 1.1 | 1.5 | 3.6 | 4.0 | 3.5 | 4.0 | 3.4 | 4.4 |
| **F 20 2_23.1** | 23.1 | 0.91 | 1.2 | 0.93 | 1.4 | 3.5 | 3.9 | 3.4 | 3.9 | 3.3 | 4.3 |
| **F 20 2_25.9** | 25.9 | 0.84 | 1.1 | 0.86 | 1.3 | 3.4 | 3.8 | 3.3 | 3.8 | 3.2 | 4.2 |
| **F 20 2_30.4** | 30.4 | 0.68 | 0.94 | 0.70 | 1.1 | 3.2 | 3.7 | 3.2 | 3.7 | 3.0 | 4.0 |
| **F 20 2_33.1** | 33.1 | 0.63 | 0.89 | 0.65 | 1.1 | 3.2 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 |
| **F 20 2_37.9** | 37.9 | 0.47 | 0.83 | 0.59 | 1.0 | 3.1 | 3.6 | 3.1 | 3.6 | 2.9 | 3.9 |
| **F 20 2_41.8** | 41.8 | 0.44 | 0.80 | 0.56 | 1.0 | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 |
| **F 20 2_44.8** | 44.8 | 0.41 | 0.77 | 0.53 | 0.97 | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 |
| **F 20 2_50.7** | 50.7 | 0.48 | 0.74 | 0.50 | 0.94 | 3.0 | 3.5 | 3.0 | 3.5 | 2.8 | 3.8 |
| **F 20 2_56.7** | 56.7 | 0.45 | 0.71 | 0.47 | 0.91 | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 |
| **F 20 2_61.9** | 61.9 | 0.43 | 0.69 | 0.45 | 0.89 | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 |
| **F 20 2_69.1** | 69.1 | 0.41 | 0.67 | 0.43 | 0.87 | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 |
| **F 20 2_76.8** | 76.8 | 0.39 | 0.65 | 0.41 | 0.85 | 2.9 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 |
| **F 20 2_90.4** | 90.4 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 2.9 | 3.4 | 2.7 | 3.7 |
| **F 20 2_101.6** | 101.6 | 0.36 | 0.62 | — | — | — | — | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 20 2_114.3** | 114.3 | 0.35 | 0.61 | — | — | — | — | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 20 2_132.2** | 132.2 | 0.30 | 0.56 | — | — | — | — | — | — | — | — |
| **F 20 3_156.3** | 156.3 | 0.31 | 0.57 | 0.33 | 0.77 | 2.9 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 20 3_172.6** | 172.6 | 0.31 | 0.57 | 0.33 | 0.77 | 2.9 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 20 3_184.9** | 184.9 | 0.31 | 0.57 | 0.33 | 0.77 | 2.9 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 20 3_209.3** | 209.3 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 20 3_234.0** | 234.0 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 20 3_255.3** | 255.3 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 20 3_285.2** | 285.2 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 20 3_316.9** | 316.9 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 20 3_372.9** | 372.9 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 20 3_419.3** | 419.3 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 20 3_471.7** | 471.7 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 20 3_545.3** | 545.3 | 0.30 | 0.56 | 0.32 | 0.76 | 2.9 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |



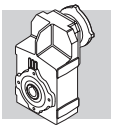
# F 25

| | i | J (•10-4) [kgm2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC 63 | IEC 71 | IEC 80 | IEC 90 | IEC 100 | IEC 112 |  |
| **F 25 2_6.9** | 6.9 | 2.7 | — | — | 5.4 | 5.3 | 6.5 | 6.5 | 4.4 |
| **F 25 2_8.4** | 8.4 | 1.9 | — | — | 4.6 | 4.5 | 5.7 | 5.7 | 3.6 |
| **F 25 2_9.4** | 9.4 | 1.6 | 2.3 | 2.3 | 4.3 | 4.2 | 5.4 | 5.4 | 3.3 |
| **F 25 2_10.6** | 10.6 | 1.9 | — | — | 4.6 | 4.5 | 5.7 | 5.7 | 3.6 |
| **F 25 2_13.0** | 13.0 | 1.3 | — | — | 4.1 | 4.0 | 5.2 | 5.2 | 3.0 |
| **F 25 2_14.5** | 14.5 | 1.1 | 1.8 | 1.8 | 3.9 | 3.8 | 5.0 | 5.0 | 2.8 |
| **F 25 2_16.6** | 16.6 | 0.90 | 1.6 | 1.6 | 3.7 | 3.5 | 4.7 | 4.7 | 2.6 |
| **F 25 2_18.6** | 18.6 | 0.77 | 1.5 | 1.5 | 3.5 | 3.4 | 4.6 | 4.6 | 2.5 |
| **F 25 2_21.8** | 21.8 | 0.57 | 1.3 | 1.3 | 3.3 | 3.2 | 4.4 | 4.4 | 2.3 |
| **F 25 2_23.8** | 23.8 | 0.48 | 1.2 | 1.2 | 3.2 | 3.1 | 4.3 | 4.3 | 2.2 |
| **F 25 2_27.2** | 27.2 | 0.40 | 1.1 | 1.1 | 3.2 | 3.0 | 4.2 | 4.2 | 2.1 |
| **F 25 2_30.0** | 30.0 | 0.35 | 1.1 | 1.1 | 3.1 | 3.0 | 4.2 | 4.2 | 2.1 |
| **F 25 2_32.2** | 32.2 | 0.31 | 1.0 | 1.0 | 3.1 | 2.9 | 4.2 | 4.2 | 2.0 |
| **F 25 2_36.4** | 36.4 | 0.26 | 1.0 | 1.0 | 3.0 | 2.9 | 4.1 | 4.1 | 2.0 |
| **F 25 2_40.7** | 40.7 | 0.22 | 1.0 | 0.94 | 3.0 | 2.9 | 4.1 | 4.1 | 1.9 |
| **F 25 2_44.4** | 44.4 | 0.20 | 0.93 | 0.92 | 3.0 | 2.8 | 4.0 | 4.0 | 1.9 |
| **F 25 3_45.6** | 45.6 | 0.79 | — | — | 3.6 | 3.4 | 4.6 | 4.6 | 2.5 |
| **F 25 3_50.8** | 50.8 | 0.70 | 1.4 | 1.4 | 3.5 | 3.3 | 4.5 | 4.5 | 2.4 |
| **F 25 3_58.3** | 58.3 | 0.58 | 1.3 | 1.3 | 3.3 | 3.2 | 4.4 | 4.4 | 2.3 |
| **F 25 3_65.3** | 65.3 | 0.52 | 1.2 | 1.2 | 3.3 | 3.1 | 4.4 | 4.4 | 2.2 |
| **F 25 3_76.6** | 76.6 | 0.38 | 1.1 | 1.1 | 3.1 | 3.0 | 4.2 | 4.2 | 2.1 |
| **F 25 3_83.4** | 83.4 | 0.32 | 1.0 | 1.0 | 3.1 | 3.0 | 4.2 | 4.2 | 2.0 |
| **F 25 3_95.5** | 95.5 | 0.28 | 1.0 | 1.0 | 3.0 | 2.9 | 4.1 | 4.1 | 2.0 |
| **F 25 3_105.4** | 105.4 | 0.25 | 1.0 | 1.0 | 3.0 | 2.9 | 4.1 | 4.1 | 2.0 |
| **F 25 3_113.0** | 113.0 | 0.23 | 0.95 | 0.94 | 3.0 | 2.9 | 4.1 | 4.1 | 1.9 |
| **F 25 3_127.8** | 127.8 | 0.20 | 0.92 | 0.91 | 3.0 | 2.8 | 4.0 | 4.0 | 1.9 |
| **F 25 3_143.0** | 143.0 | 0.17 | 0.90 | 0.89 | 2.9 | 2.8 | 4.0 | 4.0 | 1.9 |
| **F 25 3_155.9** | 155.9 | 0.15 | 0.88 | 0.87 | 2.9 | 2.8 | 4.0 | 4.0 | 1.9 |
| **F 25 3_174.2** | 174.2 | 0.13 | 0.87 | 0.86 | 2.9 | 2.8 | 4.0 | 4.0 | 1.8 |
| **F 25 3_193.6** | 193.6 | 0.12 | 0.85 | 0.84 | 2.9 | 2.7 | 4.0 | 4.0 | 1.8 |
| **F 25 3_227.8** | 227.8 | 0.10 | 0.83 | 0.82 | 2.9 | 2.7 | 3.9 | 3.9 | 1.8 |
| **F 25 3_256.1** | 256.1 | 0.09 | 0.79 | 0.78 | 2.8 | 2.7 | 3.9 | 3.9 | 1.8 |
| **F 25 3_288.1** | 288.1 | 0.08 | 0.78 | 0.77 | 2.8 | 2.7 | 3.9 | 3.9 | 1.8 |
| **F 25 3_333.1** | 333.1 | 0.03 | 0.78 | 0.76 | — | — | — | — | 1.8 |
| **F 25 4_393.9** | 393.9 | 0.02 | 0.80 | 0.78 | 2.8 | 2.7 | 3.9 | 3.9 | 0.70 |
| **F 25 4_434.9** | 434.9 | 0.02 | 0.79 | 0.78 | 2.8 | 2.7 | 3.9 | 3.9 | 0.70 |
| **F 25 4_466.0** | 466.0 | 0.02 | 0.79 | 0.78 | 2.8 | 2.7 | 3.9 | 3.9 | 0.70 |
| **F 25 4_527.3** | 527.3 | 0.02 | 0.79 | 0.78 | 2.8 | 2.7 | 3.9 | 3.9 | 0.70 |
| **F 25 4_589.7** | 589.7 | 0.02 | 0.79 | 0.78 | 2.8 | 2.7 | 3.9 | 3.9 | 0.70 |
| **F 25 4_643.3** | 643.3 | 0.02 | 0.79 | 0.78 | 2.8 | 2.7 | 3.9 | 3.9 | 0.70 |
| **F 25 4_718.7** | 718.7 | 0.02 | 0.79 | 0.78 | 2.8 | 2.7 | 3.9 | 3.9 | 0.70 |
| **F 25 4_798.5** | 798.5 | 0.01 | 0.79 | 0.77 | 2.8 | 2.7 | 3.9 | 3.9 | 0.70 |
| **F 25 4_939.8** | 939.8 | 0.01 | 0.79 | 0.77 | 2.8 | 2.7 | 3.9 | 3.9 | 0.69 |
| **F 25 4_1057** | 1057 | 0.01 | 0.79 | 0.77 | 2.8 | 2.7 | 3.9 | 3.9 | 0.64 |
| **F 25 4_1189** | 1189 | 0.01 | 0.78 | 0.77 | 2.8 | 2.7 | 3.9 | 3.9 | 0.64 |
| **F 25 4_1374** | 1374 | 0.01 | 0.78 | 0.77 | 2.8 | 2.7 | 3.9 | 3.9 | 0.64 |



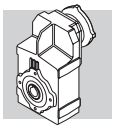
# F 25

| | i | J (•10-4) [kgm2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | |
| | | 60A | | 60B 80A | | 95A | | 80C 95B 110A | | 95C 110B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **F 25 2_6.9** | 6.9 | — | — | — | — | — | — | 5.4 | 5.9 | 5.3 | 6.3 |
| **F 25 2_8.4** | 8.4 | — | — | — | — | — | — | 4.6 | 5.1 | 4.5 | 5.5 |
| **F 25 2_9.4** | 9.4 | 1.9 | 2.1 | 1.9 | 2.3 | 4.4 | 4.9 | 4.3 | 4.8 | 4.2 | 5.2 |
| **F 25 2_10.6** | 10.6 | — | — | — | — | — | — | 4.6 | 5.1 | 4.5 | 5.5 |
| **F 25 2_13.0** | 13.0 | — | — | — | — | — | — | 4.1 | 4.6 | 4.0 | 5.0 |
| **F 25 2_14.5** | 14.5 | 1.4 | 1.6 | 1.4 | 1.8 | 3.9 | 4.4 | 3.9 | 4.4 | 3.8 | 4.8 |
| **F 25 2_16.6** | 16.6 | 1.2 | 1.4 | 1.2 | 1.6 | 3.7 | 4.2 | 3.7 | 4.2 | 3.5 | 4.5 |
| **F 25 2_18.6** | 18.6 | 1.0 | 1.3 | 1.1 | 1.5 | 3.6 | 4.0 | 3.5 | 4.0 | 3.4 | 4.4 |
| **F 25 2_21.8** | 21.8 | 0.84 | 1.1 | 0.86 | 1.3 | 3.4 | 3.8 | 3.3 | 3.8 | 3.2 | 4.2 |
| **F 25 2_23.8** | 23.8 | 0.75 | 1.0 | 0.77 | 1.2 | 3.3 | 3.7 | 3.2 | 3.7 | 3.1 | 4.1 |
| **F 25 2_27.2** | 27.2 | 0.67 | 0.93 | 0.69 | 1.1 | 3.2 | 3.7 | 3.2 | 3.7 | 3.0 | 4.0 |
| **F 25 2_30.0** | 30.0 | 0.62 | 0.88 | 0.64 | 1.1 | 3.2 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 |
| **F 25 2_32.2** | 32.2 | 0.58 | 0.84 | 1.4 | 1.8 | 3.1 | 3.6 | 3.1 | 3.6 | 2.9 | 3.9 |
| **F 25 2_36.4** | 36.4 | 0.53 | 0.79 | 0.55 | 0.99 | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 |
| **F 25 2_40.7** | 40.7 | 0.49 | 0.75 | 0.51 | 0.95 | 3.0 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 |
| **F 25 2_44.4** | 44.4 | 0.47 | 0.73 | 0.49 | 0.93 | 3.0 | 3.5 | 3.0 | 3.5 | 2.8 | 3.8 |
| **F 25 3_45.6** | 45.6 | 1.1 | 1.3 | 1.1 | 1.5 | 3.6 | 4.0 | 3.6 | 4.1 | 3.4 | 4.4 |
| **F 25 3_50.8** | 50.8 | 0.97 | 1.2 | 0.99 | 1.4 | 3.5 | 4.0 | 3.5 | 4.0 | 3.3 | 4.3 |
| **F 25 3_58.3** | 58.3 | 0.85 | 1.1 | 0.87 | 1.3 | 3.4 | 3.8 | 3.3 | 3.8 | 3.2 | 4.2 |
| **F 25 3_65.3** | 65.3 | 0.79 | 1.1 | 0.84 | 1.2 | 3.3 | 3.8 | 3.3 | 3.8 | 3.1 | 4.1 |
| **F 25 3_76.6** | 76.6 | 0.65 | 0.91 | 0.67 | 1.1 | 3.2 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 |
| **F 25 3_83.4** | 83.4 | 0.59 | 0.85 | 0.61 | 1.0 | 3.1 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 |
| **F 25 3_95.5** | 95.5 | 0.55 | 0.81 | 0.57 | 1.0 | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 |
| **F 25 3_105.4** | 105.4 | 0.52 | 0.78 | 0.54 | 0.98 | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 |
| **F 25 3_113.0** | 113.0 | 0.50 | 0.76 | 0.52 | 0.96 | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 |
| **F 25 3_127.8** | 127.8 | 0.47 | 0.73 | 0.49 | 0.93 | 3.0 | 3.5 | 3.0 | 3.5 | 2.8 | 3.8 |
| **F 25 3_143.0** | 143.0 | 0.44 | 0.70 | 0.46 | 0.90 | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 |
| **F 25 3_155.9** | 155.9 | 0.42 | 0.68 | 0.44 | 0.88 | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 |
| **F 25 3_174.2** | 174.2 | 0.40 | 0.66 | 0.42 | 0.86 | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 |
| **F 25 3_193.6** | 193.6 | 0.39 | 0.65 | 0.41 | 0.85 | 2.9 | 3.4 | 2.9 | 3.4 | 2.7 | 3.7 |
| **F 25 3_227.8** | 227.8 | 0.37 | 0.63 | 0.39 | 0.83 | 2.9 | 3.4 | 2.9 | 3.4 | 2.7 | 3.7 |
| **F 25 3_256.1** | 256.1 | 0.36 | 0.62 | — | — | — | — | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 25 3_288.1** | 288.1 | 0.35 | 0.61 | — | — | — | — | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 25 3_333.1** | 333.1 | 0.30 | 0.56 | — | — | — | — | — | — | — | — |
| **F 25 4_393.9** | 393.9 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 25 4_434.9** | 434.9 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 25 4_466.0** | 466.0 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 25 4_527.3** | 527.3 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 25 4_589.7** | 589.7 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 25 4_643.3** | 643.3 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 25 4_718.7** | 718.7 | 0.29 | 0.55 | 0.31 | 0.75 | 2.8 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 25 4_798.5** | 798.5 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 25 4_939.8** | 939.8 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 25 4_1057** | 1057 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 25 4_1189** | 1189 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |
| **F 25 4_1374** | 1374 | 0.28 | 0.54 | 0.30 | 0.74 | 2.8 | 3.3 | 2.8 | 3.3 | 2.7 | 3.7 |



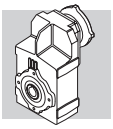
# F 31

| | i | J (•10-4) [kgm2] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | |
| **F 31 2_6.9** | 6.9 | 5.0 | — | — | 7.8 | 7.6 | 8.9 | 8.9 | 22 | 7.1 |
| **F 31 2_8.2** | 8.2 | 3.7 | — | — | 6.5 | 6.3 | 7.5 | 7.5 | 20 | 5.8 |
| **F 31 2_9.0** | 9.0 | 3.2 | — | — | 6.0 | 5.8 | 7.0 | 7.0 | 20 | 5.3 |
| **F 31 2_10.7** | 10.7 | 3.5 | — | — | 6.3 | 6.2 | 7.4 | 7.4 | 20 | 5.6 |
| **F 31 2_12.7** | 12.7 | 2.6 | — | — | 5.4 | 5.3 | 6.5 | 6.5 | 19 | 4.7 |
| **F 31 2_13.9** | 13.9 | 2.3 | — | — | 5.1 | 4.9 | 6.2 | 6.2 | 19 | 4.4 |
| **F 31 2_16.8** | 16.8 | 1.8 | — | — | 4.6 | 4.4 | 5.6 | 5.6 | 18 | 3.9 |
| **F 31 2_18.5** | 18.5 | 1.5 | 2.2 | 2.2 | 4.2 | 4.1 | 5.3 | 5.3 | 18 | 3.5 |
| **F 31 2_21.1** | 21.1 | 1.1 | 1.8 | 1.8 | 3.9 | 3.7 | 5.0 | 5.0 | 18 | 3.2 |
| **F 31 2_23.4** | 23.4 | 1.0 | 1.7 | 1.7 | 3.7 | 3.6 | 4.8 | 4.8 | 18 | 3.0 |
| **F 31 2_27.3** | 27.3 | 0.78 | 1.5 | 1.5 | 3.5 | 3.4 | 4.6 | 4.6 | 17 | 2.8 |
| **F 31 2_30.1** | 30.1 | 0.65 | 1.4 | 1.4 | 3.4 | 3.3 | 4.5 | 4.5 | 17 | 2.7 |
| **F 31 2_34.4** | 34.4 | 0.53 | 1.3 | 1.2 | 3.3 | 3.2 | 4.4 | 4.4 | 17 | 2.6 |
| **F 31 2_37.7** | 37.7 | 0.47 | 1.2 | 1.2 | 3.2 | 3.1 | 4.3 | 4.3 | 17 | 2.5 |
| **F 31 2_40.4** | 40.4 | 0.42 | 1.1 | 1.1 | 3.2 | 3.0 | 4.3 | 4.3 | — | 2.5 |
| **F 31 2_44.6** | 44.6 | 0.37 | 1.1 | 1.1 | 3.1 | 3.0 | 4.2 | 4.2 | — | 2.4 |
| | | | | | | | | | | |
| **F 31 3_47.5** | 47.5 | 1.6 | — | — | 4.3 | 4.2 | 5.4 | 5.4 | 18 | 3.6 |
| **F 31 3_52.1** | 52.1 | 1.4 | — | — | 4.2 | 4.0 | 5.3 | 5.3 | 18 | 3.5 |
| **F 31 3_62.8** | 62.8 | 1.2 | — | — | 3.9 | 3.8 | 5.0 | 5.0 | 18 | 3.2 |
| **F 31 3_69.1** | 69.1 | 1.0 | 1.7 | 1.7 | 3.7 | 3.6 | 4.8 | 4.8 | 18 | 3.0 |
| **F 31 3_78.9** | 78.9 | 0.72 | 1.4 | 1.4 | 3.5 | 3.4 | 4.6 | 4.6 | 17 | 2.8 |
| **F 31 3_87.4** | 87.4 | 0.66 | 1.4 | 1.4 | 3.4 | 3.3 | 4.5 | 4.5 | 17 | 2.7 |
| **F 31 3_101.9** | 101.9 | 0.54 | 1.3 | 1.2 | 3.3 | 3.2 | 4.4 | 4.4 | 17 | 2.6 |
| **F 31 3_112.5** | 112.5 | 0.46 | 1.2 | 1.2 | 3.2 | 3.1 | 4.3 | 4.3 | 17 | 2.5 |
| **F 31 3_128.4** | 128.4 | 0.38 | 1.1 | 1.1 | 3.1 | 3.0 | 4.2 | 4.2 | 17 | 2.4 |
| **F 31 3_140.7** | 140.7 | 0.35 | 1.1 | 1.1 | 3.1 | 3.0 | 4.2 | 4.2 | 17 | 2.4 |
| **F 31 3_150.8** | 150.8 | 0.31 | 1.0 | 1.0 | 3.1 | 2.9 | 4.2 | 4.2 | — | 2.4 |
| **F 31 3_166.8** | 166.8 | 0.28 | 1.0 | 1.0 | 3.0 | 2.9 | 4.1 | 4.1 | — | 2.3 |
| **F 31 3_185.4** | 185.4 | 0.24 | 1.0 | 1.0 | 3.0 | 2.9 | 4.1 | 4.1 | — | 2.3 |
| **F 31 3_202.3** | 202.3 | 0.21 | 0.94 | 0.93 | 3.0 | 2.8 | 4.1 | 4.1 | — | 2.3 |
| **F 31 3_228.2** | 228.2 | 0.18 | 0.92 | 0.90 | 2.9 | 2.8 | 4.0 | 4.0 | — | 2.2 |
| **F 31 3_253.6** | 253.6 | 0.16 | 0.89 | 0.88 | 2.9 | 2.8 | 4.0 | 4.0 | — | 2.2 |
| **F 31 3_293.8** | 293.8 | 0.13 | 0.86 | 0.85 | 2.9 | 2.8 | 4.0 | 4.0 | — | 2.2 |
| **F 31 3_332.8** | 332.8 | 0.11 | 0.82 | 0.81 | 2.9 | 2.7 | 4.0 | 4.0 | — | 2.2 |
| **F 31 3_374.4** | 374.4 | 0.10 | 0.81 | 0.79 | 2.9 | 2.7 | 3.9 | 3.9 | — | 2.2 |
| | | | | | | | | | | |
| **F 31 4_418.9** | 418.9 | 0.09 | 0.86 | 0.85 | 2.9 | 2.8 | 3.9 | 3.9 | — | 0.77 |
| **F 31 4_462.6** | 462.6 | 0.08 | 0.86 | 0.84 | 2.9 | 2.7 | 3.9 | 3.9 | — | 0.77 |
| **F 31 4_527.8** | 527.8 | 0.08 | 0.85 | 0.84 | 2.9 | 2.7 | 3.9 | 3.9 | — | 0.76 |
| **F 31 4_578.6** | 578.6 | 0.08 | 0.85 | 0.84 | 2.9 | 2.7 | 3.9 | 3.9 | — | 0.76 |
| **F 31 4_619.9** | 619.9 | 0.07 | 0.85 | 0.83 | 2.9 | 2.7 | 3.9 | 3.9 | — | 0.76 |
| **F 31 4_685.6** | 685.6 | 0.07 | 0.85 | 0.83 | 2.9 | 2.7 | 3.9 | 3.9 | — | 0.76 |
| **F 31 4_762.3** | 762.3 | 0.07 | 0.84 | 0.83 | 2.9 | 2.7 | 3.9 | 3.9 | — | 0.75 |
| **F 31 4_831.6** | 831.6 | 0.07 | 0.84 | 0.83 | 2.9 | 2.7 | 3.9 | 3.9 | — | 0.75 |
| **F 31 4_938.2** | 938.2 | 0.07 | 0.84 | 0.83 | 2.9 | 2.7 | 3.9 | 3.9 | — | 0.75 |
| **F 31 4_1042** | 1042 | 0.07 | 0.84 | 0.83 | 2.9 | 2.7 | 3.9 | 3.9 | — | 0.75 |
| **F 31 4_1208** | 1208 | 0.06 | 0.84 | 0.82 | 2.9 | 2.7 | 3.9 | 3.9 | — | 0.75 |
| **F 31 4_1368** | 1368 | 0.06 | 0.84 | 0.82 | 2.9 | 2.7 | 3.9 | 3.9 | — | 0.75 |
| **F 31 4_1539** | 1539 | 0.06 | 0.84 | 0.82 | 2.9 | 2.7 | 3.9 | 3.9 | — | 0.75 |



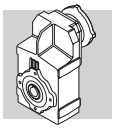
# F 31

| | i | J (•10-4) [kgm2] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | | | |
| | | 60A | | 60B 80A | | 95A | | 80C 95B 110A | | 95C 110B | | 130A | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **F 31 2_6.9** | 6.9 | — | — | — | — | — | — | 7.8 | 8.3 | 7.6 | 8.6 | 7.6 | 8.6 |
| **F 31 2_8.2** | 8.2 | — | — | — | — | — | — | 6.5 | 7.0 | 6.3 | 7.3 | 6.3 | 7.3 |
| **F 31 2_9.0** | 9.0 | — | — | — | — | — | — | 6.0 | 6.5 | 5.8 | 6.8 | 5.8 | 6.8 |
| **F 31 2_10.7** | 10.7 | — | — | — | — | — | — | 6.3 | 6.8 | 6.2 | 7.2 | 6.2 | 7.2 |
| **F 31 2_12.7** | 12.7 | — | — | — | — | — | — | 5.4 | 5.9 | 5.3 | 6.3 | 5.3 | 6.3 |
| **F 31 2_13.9** | 13.9 | — | — | — | — | — | — | 5.1 | 5.6 | 4.9 | 5.9 | 4.9 | 5.9 |
| **F 31 2_16.8** | 16.8 | — | — | — | — | — | — | 4.6 | 5.1 | 4.4 | 5.4 | 4.4 | 5.4 |
| **F 31 2_18.5** | 18.5 | 1.8 | 2.0 | 1.8 | 2.2 | 4.3 | 4.8 | 4.2 | 4.7 | 4.1 | 5.1 | 4.1 | 5.1 |
| **F 31 2_21.1** | 21.1 | 1.4 | 1.6 | 1.4 | 1.8 | 3.9 | 4.3 | 3.9 | 4.4 | 3.7 | 4.7 | 3.7 | 4.7 |
| **F 31 2_23.4** | 23.4 | 1.3 | 1.5 | 1.3 | 1.7 | 3.8 | 4.3 | 3.7 | 4.2 | 3.6 | 4.6 | 3.6 | 4.6 |
| **F 31 2_27.3** | 27.3 | 1.1 | 1.3 | 1.1 | 1.5 | 3.6 | 4.0 | 3.5 | 4.0 | 3.4 | 4.4 | 3.4 | 4.4 |
| **F 31 2_30.1** | 30.1 | 0.92 | 1.2 | 0.94 | 1.4 | 3.5 | 3.9 | 3.4 | 3.9 | 3.3 | 4.3 | 3.3 | 4.3 |
| **F 31 2_34.4** | 34.4 | 0.80 | 1.1 | 0.82 | 1.3 | 3.4 | 3.8 | 3.3 | 3.8 | 3.2 | 4.2 | 3.2 | 4.2 |
| **F 31 2_37.7** | 37.7 | 0.74 | 1.0 | 0.76 | 1.2 | 3.3 | 3.7 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 |
| **F 31 2_40.4** | 40.4 | 0.69 | 0.95 | 0.71 | 1.1 | 3.2 | 3.7 | 3.2 | 3.7 | 3.0 | 4.0 | 3.0 | 4.0 |
| **F 31 2_44.6** | 44.6 | 0.64 | 0.90 | 0.66 | 1.1 | 3.2 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **F 31 3_47.5** | 47.5 | — | — | — | — | — | — | 4.3 | 4.8 | 4.2 | 5.2 | 4.2 | 5.2 |
| **F 31 3_52.1** | 52.1 | — | — | — | — | — | — | 4.2 | 4.7 | 4.0 | 5.0 | 4.0 | 5.0 |
| **F 31 3_62.8** | 62.8 | — | — | — | — | — | — | 3.9 | 4.4 | 3.8 | 4.8 | 3.8 | 4.8 |
| **F 31 3_69.1** | 69.1 | 1.3 | 1.5 | 1.3 | 1.7 | 3.8 | 4.3 | 3.7 | 4.2 | 3.6 | 4.6 | 3.6 | 4.6 |
| **F 31 3_78.9** | 78.9 | 0.99 | 1.3 | 1.0 | 1.4 | 3.5 | 4.0 | 3.5 | 4.0 | 3.4 | 4.4 | 3.4 | 4.4 |
| **F 31 3_87.4** | 87.4 | 0.93 | 1.2 | 0.95 | 1.4 | 3.5 | 3.9 | 3.4 | 3.9 | 3.3 | 4.3 | 3.3 | 4.3 |
| **F 31 3_101.9** | 101.9 | 0.81 | 1.1 | 0.83 | 1.3 | 3.4 | 3.8 | 3.3 | 3.8 | 3.2 | 4.2 | 3.2 | 4.2 |
| **F 31 3_112.5** | 112.5 | 0.73 | 0.99 | 0.75 | 1.2 | 3.3 | 3.7 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 |
| **F 31 3_128.4** | 128.4 | 0.65 | 0.91 | 0.67 | 1.1 | 3.2 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **F 31 3_140.7** | 140.7 | 0.62 | 0.88 | 0.64 | 1.1 | 3.2 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 |
| **F 31 3_150.8** | 150.8 | 0.58 | 0.84 | 0.60 | 1.0 | 3.1 | 3.6 | 3.1 | 3.6 | 2.9 | 3.9 | 2.9 | 3.9 |
| **F 31 3_166.8** | 166.8 | 0.55 | 0.81 | 0.57 | 1.0 | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **F 31 3_185.4** | 185.4 | 0.51 | 0.77 | 0.53 | 0.97 | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 |
| **F 31 3_202.3** | 202.3 | 0.48 | 0.74 | 0.50 | 0.93 | 3.0 | 3.5 | 3.0 | 3.5 | 2.8 | 3.8 | 2.8 | 3.8 |
| **F 31 3_228.2** | 228.2 | 0.45 | 0.71 | 0.47 | 0.91 | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | 2.8 | 3.8 |
| **F 31 3_253.6** | 253.6 | 0.43 | 0.69 | 0.45 | 0.89 | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | 2.8 | 3.8 |
| **F 31 3_293.8** | 293.8 | 0.40 | 0.66 | 0.42 | 0.86 | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | 2.8 | 3.8 |
| **F 31 3_332.8** | 332.8 | 0.38 | 0.64 | — | — | — | — | 2.9 | 3.4 | 2.7 | 3.7 | 2.7 | 3.7 |
| **F 31 3_374.4** | 374.4 | 0.37 | 0.63 | — | — | — | — | 2.9 | 3.4 | 2.7 | 3.7 | 2.7 | 3.7 |
| **F 31 4_418.9** | 418.9 | 0.36 | 0.62 | 0.38 | 0.82 | 2.9 | 3.3 | 2.9 | 3.4 | 2.8 | 3.8 | — | — |
| **F 31 4_462.6** | 462.6 | 0.35 | 0.61 | 0.37 | 0.81 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **F 31 4_527.8** | 527.8 | 0.35 | 0.61 | 0.37 | 0.81 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **F 31 4_578.6** | 578.6 | 0.35 | 0.61 | 0.37 | 0.81 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **F 31 4_619.9** | 619.9 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **F 31 4_685.6** | 685.6 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **F 31 4_762.3** | 762.3 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **F 31 4_831.6** | 831.6 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **F 31 4_938.2** | 938.2 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **F 31 4_1042** | 1042 | 0.34 | 0.60 | 0.36 | 0.80 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **F 31 4_1208** | 1208 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **F 31 4_1368** | 1368 | 0.33 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |
| **F 31 4_1539** | 1539 | 0.83 | 0.59 | 0.35 | 0.79 | 2.9 | 3.3 | 2.9 | 3.4 | 2.7 | 3.7 | — | — |



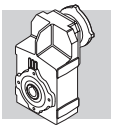
# F 41

| | i | J (•10-4) [kgm2] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC | | | | | | |  |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | |
| **F 41 2_6.7** | 6.7 | 12 | — | — | 15 | 15 | 18 | 18 | 29 | 21 |
| **F 41 2_9.1** | 9.1 | 7.2 | — | — | 10 | 9.8 | 13 | 13 | 24 | 16 |
| **F 41 2_10.8** | 10.8 | 8.0 | — | — | 11 | 11 | 13 | 13 | 25 | 17 |
| **F 41 2_14.6** | 14.6 | 5.0 | — | — | 7.7 | 7.6 | 10 | 10 | 21 | 14 |
| **F 41 2_17.1** | 17.1 | 3.5 | — | — | 6.3 | 6.2 | 8.9 | 8.9 | 20 | 12 |
| **F 41 2_18.9** | 18.9 | 3.1 | — | — | 5.8 | 5.7 | 8.5 | 8.5 | 20 | 12 |
| **F 41 2_24.1** | 24.1 | 2.1 | 2.8 | 2.8 | 4.9 | 4.8 | 7.5 | 7.5 | 19 | 11 |
| **F 41 2_30.1** | 30.1 | 1.5 | 2.2 | 2.2 | 4.3 | 4.2 | 6.9 | 6.9 | 18 | 10 |
| **F 41 2_38.2** | 38.2 | 0.95 | 1.7 | 1.7 | 3.7 | 3.6 | 6.3 | 6.3 | 17 | 9.7 |
| **F 41 2_47.9** | 47.9 | 0.67 | 1.4 | 1.4 | 3.4 | 3.3 | 6.0 | 6.0 | 17 | 9.5 |
| **F 41 3_51.5** | 51.5 | 3.0 | — | — | 5.7 | 5.6 | 8.4 | 8.4 | 19 | 12 |
| **F 41 3_60.2** | 60.2 | 2.1 | — | — | 4.9 | 4.7 | 7.5 | 7.5 | 19 | 11 |
| **F 41 3_66.5** | 66.5 | 1.9 | — | — | 4.7 | 4.5 | 7.3 | 7.3 | 18 | 11 |
| **F 41 3_84.9** | 84.9 | 1.4 | 2.1 | 2.1 | 4.2 | 4.0 | 6.8 | 6.8 | 18 | 10 |
| **F 41 3_106.0** | 106.0 | 1.1 | 1.8 | 1.7 | 3.8 | 3.7 | 6.4 | 6.4 | 18 | 9.8 |
| **F 41 3_134.4** | 134.4 | 0.66 | 1.4 | 1.4 | 3.4 | 3.3 | 6.0 | 6.0 | 17 | 9.4 |
| **F 41 3_168.7** | 168.7 | 0.49 | 1.2 | 1.2 | 3.2 | 3.1 | 5.9 | 5.9 | 17 | 9.3 |
| **F 41 3_180.7** | 180.7 | 0.43 | 1.1 | 1.1 | 3.2 | 3.1 | 5.8 | 5.8 | — | 9.2 |
| **F 41 3_198.9** | 198.9 | 0.39 | 1.1 | 1.1 | 3.1 | 3.0 | 5.8 | 5.8 | — | 9.2 |
| **F 41 3_220.1** | 220.1 | 0.36 | 1.1 | 1.1 | 3.1 | 3.0 | 5.7 | 5.7 | — | 9.1 |
| **F 41 3_240.1** | 240.1 | 0.31 | 1.0 | 1.0 | 3.1 | 2.9 | 5.7 | 5.7 | — | 9.1 |
| **F 41 3_266.9** | 266.9 | 0.28 | 1.0 | 1.0 | 3.0 | 2.9 | 5.7 | 5.7 | — | 9.1 |
| **F 41 3_296.6** | 296.6 | 0.23 | 1.0 | 1.0 | 3.0 | 2.9 | 5.6 | 5.6 | — | 9.0 |
| **F 41 3_344.8** | 344.8 | 0.19 | 0.92 | 0.91 | 2.9 | 2.8 | 5.6 | 5.6 | — | 9.0 |
| **F 41 4_433.7** | 433.7 | 0.21 | 0.94 | 0.93 | 3.0 | 2.8 | 4.1 | 4.1 | — | 1.9 |
| **F 41 4_549.8** | 549.8 | 0.19 | 0.92 | 0.90 | 2.9 | 2.8 | 4.0 | 4.0 | — | 1.9 |
| **F 41 4_690.1** | 690.1 | 0.18 | 0.91 | 0.89 | 2.9 | 2.8 | 4.0 | 4.0 | — | 1.9 |
| **F 41 4_739.4** | 739.4 | 0.17 | 0.90 | 0.89 | 2.9 | 2.8 | 4.0 | 4.0 | — | 1.9 |
| **F 41 4_813.8** | 813.8 | 0.17 | 0.90 | 0.89 | 2.9 | 2.8 | 4.0 | 4.0 | — | 1.9 |
| **F 41 4_900.5** | 900.5 | 0.17 | 0.90 | 0.89 | 2.9 | 2.8 | 4.0 | 4.0 | — | 1.9 |
| **F 41 4_982.4** | 982.4 | 0.17 | 0.90 | 0.88 | 2.9 | 2.8 | 4.0 | 4.0 | — | 1.9 |
| **F 41 4_1092** | 1092 | 0.16 | 0.89 | 0.88 | 2.9 | 2.8 | 4.0 | 4.0 | — | 1.9 |
| **F 41 4_1213** | 1213 | 0.16 | 0.89 | 0.88 | 2.9 | 2.8 | 4.0 | 4.0 | — | 1.9 |
| **F 41 4_1411** | 1411 | 0.16 | 0.89 | 0.88 | 2.9 | 2.8 | 4.0 | 4.0 | — | 1.9 |



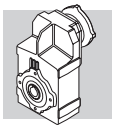
# F 41

| | i | J (•10-4) [kgm2] | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | | | | | | | | | |
| | | 60A | | 60B 80A | | 80B | | 95A | | 80C 95B 110A | | 95C 110B | | 130A | | 130B 180A | | 180B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **F 41 2_6.7** | 6.7 | — | — | — | — | — | — | — | — | 15 | 16 | 15 | 16 | 15 | 16 | 29 | 31 | 29 | 34 |
| **F 41 2_9.1** | 9.1 | — | — | — | — | — | — | — | — | 10 | 11 | 9.8 | 11 | 9.8 | 11 | 24 | 27 | 24 | 29 |
| **F 41 2_10.8** | 10.8 | — | — | — | — | — | — | — | — | 11 | 12 | 11 | 12 | 11 | 12 | 25 | 27 | 25 | 30 |
| **F 41 2_14.6** | 14.6 | — | — | — | — | — | — | — | — | 7.7 | 8.2 | 7.6 | 8.6 | 7.6 | 8.6 | 22 | 24 | 21 | 26 |
| **F 41 2_17.1** | 17.1 | — | — | — | — | — | — | — | — | 6.3 | 6.8 | 6.2 | 7.2 | 6.2 | 7.2 | 20 | 23 | 20 | 25 |
| **F 41 2_18.9** | 18.9 | — | — | — | — | — | — | — | — | 5.8 | 6.3 | 5.7 | 6.7 | 5.7 | 6.7 | 20 | 23 | 20 | 25 |
| **F 41 2_24.1** | 24.1 | — | — | — | — | 4.9 | 5.4 | 4.9 | 5.4 | 4.9 | 5.4 | 4.8 | 5.8 | 4.8 | 5.8 | 19 | 22 | 19 | 24 |
| **F 41 2_30.1** | 30.1 | — | — | — | — | 4.3 | 4.8 | 4.3 | 4.8 | 4.3 | 4.8 | 4.2 | 5.2 | 4.2 | 5.2 | 18 | 21 | 18 | 23 |
| **F 41 2_38.2** | 38.2 | — | — | — | — | 3.8 | 4.2 | 3.8 | 4.2 | 3.7 | 4.2 | 3.6 | 4.6 | 3.6 | 4.6 | 18 | 20 | 17 | 22 |
| **F 41 2_47.9** | 47.9 | — | — | — | — | 3.5 | 3.9 | 3.5 | 3.9 | 3.4 | 3.9 | 3.3 | 4.3 | 3.3 | 4.3 | 18 | 20 | 17 | 22 |
| **F 41 3_51.5** | 51.5 | — | — | — | — | — | — | — | — | 5.7 | 6.2 | 5.6 | 6.6 | 5.6 | 6.6 | 20 | 22 | 19 | 24 |
| **F 41 3_60.2** | 60.2 | — | — | — | — | — | — | — | — | 4.9 | 5.4 | 4.7 | 5.7 | 4.7 | 5.7 | 19 | 22 | 19 | 24 |
| **F 41 3_66.5** | 66.5 | — | — | — | — | — | — | — | — | 4.7 | 5.2 | 4.5 | 5.5 | 4.5 | 5.5 | 19 | 21 | 18 | 23 |
| **F 41 3_84.9** | 84.9 | — | — | — | — | 4.2 | 4.7 | 4.2 | 4.7 | 4.2 | 4.7 | 4.0 | 5.0 | 4.0 | 5.0 | 18 | 21 | 18 | 23 |
| **F 41 3_106.0** | 106.0 | — | — | — | — | 3.9 | 4.4 | 3.9 | 4.4 | 3.8 | 4.3 | 3.7 | 4.7 | 3.7 | 4.7 | 18 | 21 | 18 | 23 |
| **F 41 3_134.4** | 134.4 | — | — | — | — | 3.5 | 3.9 | 3.5 | 3.9 | 3.4 | 3.9 | 3.3 | 4.3 | 3.3 | 4.3 | 18 | 20 | 17 | 22 |
| **F 41 3_168.7** | 168.7 | — | — | — | — | 3.3 | 3.7 | 3.3 | 3.7 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 | 17 | 20 | 17 | 22 |
| **F 41 3_180.7** | 180.7 | — | — | — | — | 3.3 | 3.7 | 3.3 | 3.7 | 3.2 | 3.7 | 3.1 | 4.1 | 3.1 | 4.1 | — | — | — | — |
| **F 41 3_198.9** | 198.9 | — | — | — | — | 3.2 | 3.6 | 3.2 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 | — | — | — | — |
| **F 41 3_220.1** | 220.1 | — | — | — | — | 3.2 | 3.6 | 3.2 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 | 3.0 | 4.0 | — | — | — | — |
| **F 41 3_240.1** | 240.1 | — | — | — | — | 3.1 | 3.6 | 3.1 | 3.6 | 3.1 | 3.6 | 2.9 | 3.9 | 2.9 | 3.9 | — | — | — | — |
| **F 41 3_266.9** | 266.9 | — | — | — | — | 3.1 | 3.5 | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 | — | — | — | — |
| **F 41 3_296.6** | 296.6 | — | — | — | — | 3.1 | 3.5 | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 | 2.9 | 3.9 | — | — | — | — |
| **F 41 3_344.8** | 344.8 | — | — | — | — | 3.0 | 3.4 | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | 2.8 | 3.8 | — | — | — | — |
| **F 41 4_433.7** | 433.7 | 0.48 | 0.74 | 0.50 | 0.94 | — | — | 3.0 | 3.5 | 3.0 | 3.5 | 2.8 | 3.8 | — | — | — | — | — | — |
| **F 41 4_549.8** | 549.8 | 0.46 | 0.72 | 0.48 | 0.92 | — | — | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | — | — | — | — | — | — |
| **F 41 4_690.1** | 690.1 | 0.45 | 0.71 | 0.47 | 0.91 | — | — | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | — | — | — | — | — | — |
| **F 41 4_739.4** | 739.4 | 0.44 | 0.70 | 0.46 | 0.90 | — | — | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | — | — | — | — | — | — |
| **F 41 4_813.8** | 813.8 | 0.44 | 0.70 | 0.46 | 0.90 | — | — | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | — | — | — | — | — | — |
| **F 41 4_900.5** | 900.5 | 0.44 | 0.70 | 0.46 | 0.90 | — | — | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | — | — | — | — | — | — |
| **F 41 4_982.4** | 982.4 | 0.44 | 0.70 | 0.46 | 0.90 | — | — | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | — | — | — | — | — | — |
| **F 41 4_1092** | 1092 | 0.43 | 0.69 | 0.45 | 0.89 | — | — | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | — | — | — | — | — | — |
| **F 41 4_1213** | 1213 | 0.43 | 0.69 | 0.45 | 0.89 | — | — | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | — | — | — | — | — | — |
| **F 41 4_1411** | 1411 | 0.43 | 0.69 | 0.45 | 0.89 | — | — | 3.0 | 3.4 | 2.9 | 3.4 | 2.8 | 3.8 | — | — | — | — | — | — |



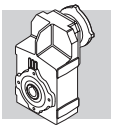
# F 51

| | i | J (•10-4) [kgm2] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | |
| **F 51 2_7.2** | 7.2 | 25 | — | — | 28 | 28 | 30 | 30 | 42 | 101 | 103 | 34 |
| **F 51 2_9.1** | 9.1 | 17 | — | — | 20 | 19 | 22 | 22 | 33 | 92 | 94 | 26 |
| **F 51 2_11.1** | 11.1 | 16 | — | — | 19 | 19 | 22 | 22 | 33 | 92 | 94 | 25 |
| **F 51 2_14.0** | 14.0 | 11 | — | — | 14 | 14 | 17 | 17 | 28 | 87 | 89 | 20 |
| **F 51 2_18.8** | 18.8 | 7.0 | — | — | 9.8 | 9.6 | 12 | 12 | 24 | 83 | 85 | 16 |
| **F 51 2_23.8** | 23.8 | 4.5 | — | — | 7.3 | 7.2 | 9.9 | 9.9 | 21 | 80 | 82 | 13 |
| **F 51 2_30.0** | 30.0 | 3.1 | 3.8 | 3.8 | 5.9 | 5.8 | 8.5 | 8.5 | 20 | 79 | 81 | 12 |
| **F 51 2_37.1** | 37.1 | 2.2 | 3.0 | 3.0 | 5.0 | 4.9 | 7.6 | 7.6 | 19 | 78 | 80 | 11 |
| **F 51 3_48.9** | 48.9 | 6.2 | — | — | 8.9 | 8.8 | 12 | 12 | 23 | 82 | 84 | 15 |
| **F 51 3_65.8** | 65.8 | 4.2 | — | — | 6.9 | 6.8 | 9.6 | 9.6 | 21 | 80 | 82 | 13 |
| **F 51 3_83.2** | 83.2 | 2.7 | — | — | 5.5 | 5.4 | 8.1 | 8.1 | 19 | 78 | 80 | 12 |
| **F 51 3_105.1** | 105.1 | 2.0 | 2.7 | 2.7 | 4.8 | 4.6 | 7.4 | 7.4 | 19 | 78 | 80 | 11 |
| **F 51 3_129.9** | 129.9 | 1.5 | 2.2 | 2.2 | 4.3 | 4.1 | 6.9 | 6.9 | 18 | 77 | 79 | 10 |
| **F 51 3_165.6** | 165.6 | 0.95 | 1.7 | 1.7 | 3.7 | 3.6 | 6.3 | 6.3 | 17 | 76 | 78 | 9.7 |
| **F 51 3_202.4** | 202.4 | 0.72 | 1.4 | 1.4 | 3.5 | 3.3 | 6.1 | 6.1 | 17 | 76 | 78 | 9.5 |
| **F 51 3_216.9** | 216.9 | 0.64 | 1.4 | 1.3 | 3.4 | 3.3 | 6.0 | 6.0 | — | — | — | 9.4 |
| **F 51 3_239.8** | 239.8 | 0.60 | 1.3 | 1.3 | 3.4 | 3.2 | 6.0 | 6.0 | — | — | — | 9.4 |
| **F 51 3_262.1** | 262.1 | 0.53 | 1.3 | 1.3 | 3.3 | 3.2 | 5.9 | 5.9 | — | — | — | 9.3 |
| **F 51 3_285.9** | 285.9 | 0.46 | 1.2 | 1.2 | 3.2 | 3.1 | 5.8 | 5.8 | — | — | — | 9.2 |
| **F 51 3_317.3** | 317.3 | 0.39 | 1.1 | 1.1 | 3.2 | 3.0 | 5.8 | 5.8 | — | — | — | 9.2 |
| **F 51 3_352.5** | 352.5 | 0.28 | 1.1 | 1.1 | 3.1 | 3.0 | 5.7 | 5.7 | — | — | — | 9.1 |
| **F 51 4_429.1** | 429.1 | 0.36 | 1.1 | 1.1 | 3.1 | 3.0 | 5.7 | 5.7 | 18 | — | — | 2.4 |
| **F 51 4_530.5** | 530.5 | 0.33 | 1.1 | 1.0 | 3.1 | 3.0 | 5.7 | 5.7 | 18 | — | — | 2.4 |
| **F 51 4_676.3** | 676.3 | 0.30 | 1.0 | 1.0 | 3.1 | 2.9 | 5.7 | 5.7 | 18 | — | — | 2.4 |
| **F 51 4_826.4** | 826.4 | 0.28 | 1.0 | 1.0 | 3.0 | 2.9 | 5.7 | 5.7 | 18 | — | — | 2.3 |
| **F 51 4_885.5** | 885.5 | 0.28 | 1.0 | 1.0 | 3.0 | 2.9 | 5.7 | 5.7 | — | — | — | 2.3 |
| **F 51 4_979.4** | 979.4 | 0.28 | 1.0 | 1.0 | 3.0 | 2.9 | 5.7 | 5.7 | — | — | — | 2.3 |
| **F 51 4_1070** | 1070 | 0.27 | 1.0 | 1.0 | 3.0 | 2.9 | 5.6 | 5.6 | — | — | — | 2.3 |
| **F 51 4_1168** | 1168 | 0.27 | 1.0 | 1.0 | 3.0 | 2.9 | 5.6 | 5.6 | — | — | — | 2.3 |
| **F 51 4_1296** | 1296 | 0.26 | 1.0 | 1.0 | 3.0 | 2.9 | 5.6 | 5.6 | — | — | — | 2.3 |
| **F 51 4_1439** | 1439 | 0.26 | 1.0 | 1.0 | 3.0 | 2.9 | 5.6 | 5.6 | — | — | — | 2.3 |



# F 51

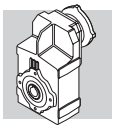
| | i | J (•10-4) [kgm2] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | | | |
| | | 80B | | 95A | | 80C 95B 110A | | 95C 110B 130A | | 130B 180A | | 180B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **F 51 2_7.2** | 7.2 | — | — | — | — | 28 | 29 | 28 | 23 | 42 | 44 | 42 | 47 |
| **F 51 2_9.1** | 9.1 | — | — | — | — | 20 | 21 | 19 | 20 | 34 | 36 | 33 | 38 |
| **F 51 2_11.1** | 11.1 | — | — | — | — | 19 | 20 | 19 | 20 | 33 | 35 | 33 | 38 |
| **F 51 2_14.0** | 14.0 | — | — | — | — | 14 | 15 | 14 | 15 | 28 | 30 | 28 | 33 |
| **F 51 2_18.8** | 18.8 | — | — | — | — | 9.8 | 10 | 9.6 | 11 | 24 | 26 | 24 | 29 |
| **F 51 2_23.8** | 23.8 | — | — | — | — | 7.3 | 7.8 | 7.2 | 8.2 | 21 | 24 | 21 | 26 |
| **F 51 2_30.0** | 30.0 | 5.9 | 6.4 | 5.9 | 6.4 | 5.9 | 6.4 | 5.8 | 6.8 | 20 | 23 | 20 | 25 |
| **F 51 2_37.1** | 37.1 | 5.0 | 5.5 | 5.0 | 5.5 | 5.0 | 5.5 | 4.9 | 5.9 | 19 | 22 | 19 | 24 |
| **F 51 3_48.9** | 48.9 | — | — | — | — | 8.9 | 9.4 | 8.8 | 9.8 | 23 | 26 | 23 | 28 |
| **F 51 3_65.8** | 65.8 | — | — | — | — | 6.9 | 7.4 | 6.8 | 7.8 | 21 | 24 | 21 | 26 |
| **F 51 3_83.2** | 83.2 | — | — | — | — | 5.5 | 6.0 | 5.4 | 6.4 | 20 | 22 | 19 | 24 |
| **F 51 3_105.1** | 105.1 | 4.8 | 5.3 | 4.8 | 5.3 | 4.8 | 5.3 | 4.6 | 5.6 | 19 | 21 | 19 | 24 |
| **F 51 3_129.9** | 129.9 | 4.3 | 4.8 | 4.3 | 4.8 | 4.3 | 4.8 | 4.1 | 5.1 | 18 | 21 | 18 | 23 |
| **F 51 3_165.6** | 165.6 | 3.8 | 4.2 | 3.8 | 4.2 | 3.7 | 4.2 | 3.6 | 4.6 | 18 | 20 | 17 | 22 |
| **F 51 3_202.4** | 202.4 | 3.5 | 4.0 | 3.5 | 4.0 | 3.5 | 4.0 | 3.3 | 4.3 | 18 | 20 | 17 | 22 |
| **F 51 3_216.9** | 216.9 | 3.5 | 3.9 | 3.5 | 3.9 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **F 51 3_239.8** | 239.8 | 3.4 | 3.9 | 3.4 | 3.9 | 3.4 | 3.9 | 3.2 | 4.2 | — | — | — | — |
| **F 51 3_262.1** | 262.1 | 3.4 | 3.8 | 3.4 | 3.8 | 3.3 | 3.8 | 3.2 | 4.2 | — | — | — | — |
| **F 51 3_285.9** | 285.9 | 3.3 | 3.7 | 3.3 | 3.7 | 3.2 | 3.7 | 3.1 | 4.1 | — | — | — | — |
| **F 51 3_317.3** | 317.3 | 3.2 | 3.6 | 3.2 | 3.6 | 3.2 | 3.7 | 3.0 | 4.0 | — | — | — | — |
| **F 51 3_352.5** | 352.5 | 3.1 | 3.5 | 3.1 | 3.5 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |
| **F 51 4_429.1** | 429.1 | — | — | 3.2 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |
| **F 51 4_530.5** | 530.5 | — | — | 3.2 | 3.6 | 3.1 | 3.6 | 3.0 | 4.0 | — | — | — | — |
| **F 51 4_676.3** | 676.3 | — | — | 3.1 | 3.6 | 3.1 | 3.6 | 2.9 | 3.9 | — | — | — | — |
| **F 51 4_826.4** | 826.4 | — | — | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — |
| **F 51 4_885.5** | 885.5 | — | — | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — |
| **F 51 4_979.4** | 979.4 | — | — | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — |
| **F 51 4_1070** | 1070 | — | — | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — |
| **F 51 4_1168** | 1168 | — | — | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — |
| **F 51 4_1296** | 1296 | — | — | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — |
| **F 51 4_1439** | 1439 | — | — | 3.1 | 3.5 | 3.0 | 3.5 | 2.9 | 3.9 | — | — | — | — |



# F 60

| | i | J (•10-4) [kgm2] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | |
| **F 60 3_9.0** | 9.0 | 40 | — | — | — | — | — | — | 59 | 118 | 116 | 61 |
| **F 60 3_9.7** | 9.7 | 38 | — | — | — | — | — | — | 57 | 116 | 114 | 59 |
| **F 60 3_11.8** | 11.8 | 25 | — | — | 28 | 28 | 29 | 29 | 44 | 103 | 101 | 46 |
| **F 60 3_12.7** | 12.7 | 24 | — | — | 27 | 27 | 28 | 28 | 43 | 102 | 100 | 45 |
| **F 60 3_14.5** | 14.5 | 18 | — | — | 21 | 20 | 22 | 22 | 37 | 96 | 94 | 39 |
| **F 60 3_15.7** | 15.7 | 17 | — | — | 20 | 20 | 21 | 21 | 36 | 95 | 93 | 38 |
| **F 60 3_19.1** | 19.1 | 10 | — | — | 13 | 13 | 14 | 14 | 29 | 89 | 86 | 31 |
| **F 60 3_20.7** | 20.7 | 9.9 | — | — | 13 | 13 | 14 | 14 | 29 | 88 | 86 | 31 |
| **F 60 3_23.5** | 23.5 | 7.3 | — | — | 10 | 10 | 11 | 11 | 26 | 86 | 83 | 28 |
| **F 60 3_25.4** | 25.4 | 7.1 | — | — | 9.9 | 9.9 | 11 | 11 | 26 | 85 | 83 | 28 |
| **F 60 3_29.6** | 29.6 | 15 | — | — | — | — | — | — | 34 | 93 | 91 | 36 |
| **F 60 3_32.1** | 32.1 | 15 | — | — | — | — | — | — | 34 | 93 | 91 | 36 |
| **F 60 3_38.8** | 38.8 | 11 | — | — | 14 | 13 | 15 | 15 | 30 | 89 | 87 | 32 |
| **F 60 3_42.1** | 42.1 | 11 | — | — | 13 | 13 | 15 | 15 | 29 | 89 | 87 | 31 |
| **F 60 3_47.8** | 47.8 | 8.2 | — | — | 11 | 11 | 12 | 12 | 27 | 86 | 84 | 29 |
| **F 60 3_51.8** | 51.8 | 8.1 | — | — | 11 | 11 | 12 | 12 | 27 | 86 | 84 | 29 |
| **F 60 3_63.0** | 63.0 | 4.9 | — | — | 7.7 | 7.6 | 8.9 | 8.9 | 24 | 83 | 81 | 26 |
| **F 60 3_68.3** | 68.3 | 4.8 | — | — | 7.7 | 7.6 | 8.9 | 8.9 | 24 | 83 | 81 | 26 |
| **F 60 3_77.6** | 77.6 | 3.7 | — | — | 6.6 | 6.5 | 7.8 | 7.8 | 23 | 82 | 80 | 25 |
| **F 60 3_84.0** | 84.0 | 3.7 | — | — | 6.5 | 6.5 | 7.8 | 7.8 | 23 | 82 | 80 | 25 |
| **F 60 3_98.2** | 98.2 | 2.7 | 4.2 | 4.2 | 5.6 | 5.5 | 6.8 | 6.8 | 22 | 81 | 79 | 24 |
| **F 60 3_106.4** | 106.4 | 2.7 | 4.2 | 4.2 | 5.5 | 5.4 | 6.8 | 6.8 | 22 | 81 | 79 | 24 |
| **F 60 3_120.5** | 120.5 | 1.8 | 3.2 | 3.2 | 4.6 | 4.6 | 5.9 | 5.9 | 21 | 80 | 78 | 23 |
| **F 60 3_130.5** | 130.5 | 1.8 | 3.2 | 3.2 | 4.6 | 4.6 | 5.8 | 5.8 | 21 | 80 | 78 | 23 |
| **F 60 3_150.4** | 150.4 | 1.3 | 2.7 | 2.7 | 4.1 | 4.1 | 5.4 | 5.4 | 20 | 80 | 77 | 22 |
| **F 60 3_162.9** | 162.9 | 1.3 | 2.7 | 2.7 | 4.1 | 4.1 | 5.4 | 5.4 | 20 | 80 | 77 | 22 |
| **F 60 3_185.9** | 185.9 | 0.90 | 2.4 | 2.4 | 3.8 | 3.7 | 5.0 | 5.0 | 20 | 79 | 77 | 22 |
| **F 60 3_201.4** | 201.4 | 0.90 | 2.4 | 2.4 | 3.8 | 3.7 | 5.0 | 5.0 | 20 | 79 | 77 | 22 |
| **F 60 3_217.6** | 217.6 | 0.70 | 2.2 | 2.2 | 3.6 | 3.5 | 4.8 | 4.8 | — | — | — | 22 |
| **F 60 3_235.8** | 235.8 | 0.70 | 2.2 | 2.2 | 3.6 | 3.5 | 4.8 | 4.8 | — | — | — | 22 |
| **F 60 3_259.1** | 259.1 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 22 |
| **F 60 3_280.7** | 280.7 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 22 |

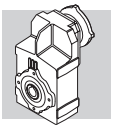
Para los valores de los momentos de inercia correspondientes a los reductores de 4 etapas, consultar con nuestro Servicio Técnico.



# F 60

| | i | J (•10-4) [kgm2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SERVO | | | | | | | | | |
| | | 95A | | 80C 95B 110A | | 95C 110B 130A | | 130B 180A | | 180B | |
| | | SK | SC | SK | SC | SK | SC | SK | SC | SK | SC |
| **F 60 3_9.0** | 9.0 | — | — | — | — | — | — | 57 | 59 | 59 | 64 |
| **F 60 3_9.7** | 9.7 | — | — | — | — | — | — | 55 | 57 | 57 | 62 |
| **F 60 3_11.8** | 11.8 | — | — | 28 | 29 | 28 | 29 | 42 | 44 | 44 | 49 |
| **F 60 3_12.7** | 12.7 | — | — | 27 | 28 | 27 | 28 | 41 | 43 | 43 | 48 |
| **F 60 3_14.5** | 14.5 | — | — | 21 | 22 | 20 | 21 | 35 | 37 | 37 | 42 |
| **F 60 3_15.7** | 15.7 | — | — | 20 | 21 | 20 | 21 | 34 | 36 | 36 | 41 |
| **F 60 3_19.1** | 19.1 | — | — | 13 | 14 | 13 | 14 | 27 | 29 | 29 | 34 |
| **F 60 3_20.7** | 20.7 | — | — | 13 | 14 | 13 | 14 | 27 | 29 | 29 | 34 |
| **F 60 3_23.5** | 23.5 | — | — | 10 | 11 | 10 | 11 | 24 | 27 | 26 | 31 |
| **F 60 3_25.4** | 25.4 | — | — | 9.9 | 10 | 9.9 | 11 | 24 | 27 | 26 | 31 |
| **F 60 3_29.6** | 29.6 | — | — | — | — | — | — | 32 | 34 | 34 | 39 |
| **F 60 3_32.1** | 32.1 | — | — | — | — | — | — | 32 | 34 | 34 | 39 |
| **F 60 3_38.8** | 38.8 | — | — | 14 | 15 | 13 | 14 | 28 | 30 | 30 | 35 |
| **F 60 3_42.1** | 42.1 | — | — | 13 | 14 | 13 | 14 | 28 | 30 | 29 | 34 |
| **F 60 3_47.8** | 47.8 | — | — | 11 | 12 | 11 | 12 | 25 | 28 | 27 | 32 |
| **F 60 3_51.8** | 51.8 | — | — | 11 | 12 | 11 | 12 | 25 | 28 | 27 | 32 |
| **F 60 3_63.0** | 63.0 | — | — | 7.7 | 8.2 | 7.6 | 8.6 | 22 | 24 | 24 | 29 |
| **F 60 3_68.3** | 68.3 | — | — | 7.7 | 8.2 | 7.6 | 8.6 | 22 | 24 | 24 | 29 |
| **F 60 3_77.6** | 77.6 | — | — | 6.6 | 7.1 | 6.5 | 7.5 | 21 | 23 | 23 | 28 |
| **F 60 3_84.0** | 84.0 | — | — | 6.5 | 7.0 | 6.5 | 7.5 | 21 | 23 | 23 | 28 |
| **F 60 3_98.2** | 98.2 | — | — | 5.6 | 6.1 | 5.5 | 6.5 | 20 | 22 | 22 | 27 |
| **F 60 3_106.4** | 106.4 | 5.5 | 6.0 | 5.5 | 6.0 | 5.4 | 6.4 | 20 | 22 | 22 | 27 |
| **F 60 3_120.5** | 120.5 | 2.2 | 2.7 | 4.6 | 5.1 | 4.6 | 5.6 | 19 | 21 | 21 | 26 |
| **F 60 3_130.5** | 130.5 | 2.2 | 2.7 | 4.6 | 5.1 | 4.6 | 5.6 | 19 | 21 | 21 | 26 |
| **F 60 3_150.4** | 150.4 | 4.1 | 4.6 | 4.1 | 4.6 | 4.1 | 5.1 | 18 | 21 | 20 | 25 |
| **F 60 3_162.9** | 162.9 | 4.1 | 4.6 | 4.1 | 4.6 | 4.1 | 5.1 | 18 | 21 | 20 | 25 |
| **F 60 3_185.9** | 185.9 | 3.7 | 4.2 | 3.8 | 4.3 | 3.7 | 4.7 | 18 | 20 | 20 | 25 |
| **F 60 3_201.4** | 201.4 | 3.7 | 4.2 | 3.8 | 4.3 | 3.7 | 4.7 | 18 | 20 | 20 | 25 |
| **F 60 3_217.6** | 217.6 | 3.5 | 4.0 | 3.6 | 4.1 | 3.5 | 4.5 | — | — | — | — |
| **F 60 3_235.8** | 235.8 | 3.5 | 4.0 | 3.6 | 4.1 | 3.5 | 4.5 | — | — | — | — |
| **F 60 3_259.1** | 259.1 | 3.3 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |
| **F 60 3_280.7** | 280.7 | 3.3 | 3.8 | 3.4 | 3.9 | 3.3 | 4.3 | — | — | — | — |

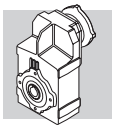
Para los valores de los momentos de inercia correspondientes a los reductores de 4 etapas, consultar con nuestro Servicio Técnico.



# F 70

| | i | J (•10-4) [kgm2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC | | | | | | | |  |
| | | | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | |
| **F 70 3_10.0** | 10.0 | — | — | — | — | — | — | 169 | 167 | 176 | 133 |
| **F 70 3_10.9** | 10.9 | — | — | — | — | — | — | 166 | 163 | 173 | 129 |
| **F 70 3_12.8** | 12.8 | — | — | — | — | — | — | 139 | 137 | 146 | 102 |
| **F 70 3_13.9** | 13.9 | — | — | — | — | — | — | 137 | 135 | 144 | 100 |
| **F 70 3_16.3** | 16.3 | 39 | — | — | — | — | 58 | 117 | 115 | 124 | 80 |
| **F 70 3_17.7** | 17.7 | 37 | — | — | — | — | 56 | 116 | 113 | 123 | 79 |
| **F 70 3_20.9** | 20.9 | 26 | — | — | — | — | 45 | 105 | 102 | — | 68 |
| **F 70 3_22.6** | 22.6 | 26 | — | — | — | — | 44 | 104 | 102 | — | 67 |
| **F 70 3_24.6** | 24.6 | 21 | — | — | — | — | 40 | 99 | 97 | — | 62 |
| **F 70 3_27.7** | 27.7 | — | — | — | — | — | — | 128 | 126 | 135 | 73 |
| **F 70 3_30.0** | 30.0 | — | — | — | — | — | — | 127 | 125 | 134 | 73 |
| **F 70 3_35.4** | 35.4 | — | — | — | — | — | — | 114 | 112 | 121 | 77 |
| **F 70 3_38.4** | 38.4 | — | — | — | — | — | — | 114 | 111 | 121 | 77 |
| **F 70 3_45.2** | 45.2 | 23 | — | — | — | — | 42 | 101 | 99 | 108 | 65 |
| **F 70 3_49.0** | 49.0 | 23 | — | — | — | — | 42 | 101 | 99 | 108 | 65 |
| **F 70 3_57.7** | 57.7 | 17 | — | — | — | — | 36 | 95 | 93 | — | 58 |
| **F 70 3_62.5** | 62.5 | 17 | — | — | — | — | 36 | 95 | 93 | — | 58 |
| **F 70 3_67.9** | 67.9 | 14 | — | — | — | — | 33 | 92 | 90 | — | 55 |
| **F 70 3_73.6** | 73.6 | 14 | — | — | — | — | 33 | 92 | 90 | — | 55 |
| **F 70 3_85.4** | 85.4 | 9.0 | 11 | 11 | 13 | 13 | 28 | 87 | 85 | — | 50 |
| **F 70 3_92.5** | 92.5 | 9.0 | 11 | 11 | 13 | 13 | 28 | 87 | 85 | — | 50 |
| **F 70 3_101.2** | 101.2 | 6.3 | 8.9 | 8.8 | 10 | 10 | 25 | 85 | 82 | — | 47 |
| **F 70 3_109.6** | 109.6 | 6.3 | 8.9 | 8.8 | 10 | 10 | 25 | 85 | 82 | — | 47 |
| **F 70 3_122.7** | 122.7 | 5.1 | 7.9 | 7.8 | 9.1 | 9.1 | 24 | 83 | 81 | — | 46 |
| **F 70 3_133.0** | 133.0 | 5.1 | 7.9 | 7.8 | 9.1 | 9.1 | 24 | 83 | 81 | — | 46 |
| **F 70 3_153.8** | 153.8 | 3.2 | 6.0 | 6.0 | 7.3 | 7.3 | 22 | 81 | 79 | — | 44 |
| **F 70 3_166.7** | 166.7 | 3.2 | 6.0 | 6.0 | 7.3 | 7.3 | 22 | 81 | 79 | — | 44 |
| **F 70 3_180.9** | 180.9 | 2.3 | 5.1 | 5.1 | 6.3 | 6.3 | 21 | 81 | 78 | — | 43 |
| **F 70 3_196.0** | 196.0 | 2.3 | 5.1 | 5.0 | 6.3 | 6.3 | 21 | 81 | 78 | — | 43 |

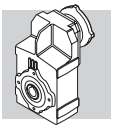
Para los valores de los momentos de inercia correspondientes a los reductores de 4 etapas, consultar con nuestro Servicio Técnico.



# F 80

| | i | J (•10-4) [kgm2] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | | |
| | | | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | |
| **F 80 3_10.3** | 10.3 | — | — | — | — | — | — | — | 286 | 300 | 578 | 252 |
| **F 80 3_11.2** | 11.2 | — | — | — | — | — | — | — | 277 | 291 | 569 | 244 |
| **F 80 3_12.9** | 12.9 | — | — | — | — | — | — | 217 | 218 | 231 | 509 | 184 |
| **F 80 3_14.0** | 14.0 | — | — | — | — | — | — | 212 | 212 | 226 | 504 | 178 |
| **F 80 3_16.2** | 16.2 | — | — | — | — | — | — | 173 | 171 | 180 | 464 | 136 |
| **F 80 3_17.6** | 17.6 | — | — | — | — | — | — | 170 | 167 | 177 | 461 | 133 |
| **F 80 3_20.3** | 20.3 | 60 | — | — | — | — | 79 | 139 | 136 | 146 | 431 | 102 |
| **F 80 3_22.0** | 22.0 | 58 | — | — | — | — | 77 | 136 | 134 | 143 | 429 | 100 |
| **F 80 3_25.2** | 25.2 | 43 | — | — | — | — | 62 | 121 | 119 | 150 | 413 | 84 |
| **F 80 3_28.8** | 28.8 | — | — | — | — | — | — | — | 189 | 203 | 480 | 155 |
| **F 80 3_31.3** | 31.3 | — | — | — | — | — | — | — | 188 | 201 | 479 | 154 |
| **F 80 3_36.0** | 36.0 | — | — | — | — | — | — | 155 | 155 | 169 | 447 | 121 |
| **F 80 3_39.0** | 39.0 | — | — | — | — | — | — | 154 | 154 | 168 | 446 | 121 |
| **F 80 3_45.3** | 45.3 | — | — | — | — | — | — | 133 | 132 | 141 | 425 | 97 |
| **F 80 3_49.1** | 49.1 | — | — | — | — | — | — | 133 | 131 | 140 | 425 | 97 |
| **F 80 3_56.7** | 56.7 | 35 | — | — | — | — | 54 | 113 | 111 | 120 | 406 | 77 |
| **F 80 3_61.5** | 61.5 | 35 | — | — | — | — | 54 | 113 | 111 | 120 | 406 | 76 |
| **F 80 3_70.4** | 70.4 | 27 | — | — | — | — | 46 | 105 | 103 | 133 | 397 | 68 |
| **F 80 3_76.3** | 76.3 | 27 | — | — | — | — | 45 | 105 | 103 | 133 | 396 | 68 |
| **F 80 3_85.2** | 85.2 | 20 | — | — | — | — | 39 | 99 | 96 | 126 | 389 | 62 |
| **F 80 3_92.3** | 92.3 | 20 | — | — | — | — | 39 | 99 | 96 | 126 | 389 | 61 |
| **F 80 3_105.0** | 105.0 | 14 | 16 | 16 | 17 | 17 | 32 | 92 | 90 | 119 | 383 | 55 |
| **F 80 3_113.8** | 113.8 | 14 | 16 | 16 | 17 | 17 | 32 | 92 | 90 | 119 | 382 | 55 |
| **F 80 3_122.5** | 122.5 | 13 | 15 | 15 | 17 | 17 | 32 | 91 | 89 | 118 | 381 | 54 |
| **F 80 3_132.7** | 132.7 | 13 | 15 | 15 | 16 | 16 | 31 | 91 | 89 | 118 | 381 | 54 |
| **F 80 3_147.9** | 147.9 | 8.5 | 11 | 11 | 13 | 13 | 27 | 87 | 85 | 114 | 377 | 50 |
| **F 80 3_160.2** | 160.2 | 8.5 | 11 | 11 | 13 | 13 | 27 | 87 | 84 | — | — | 50 |
| **F 80 3_184.6** | 184.6 | 5.1 | 7.9 | 7.8 | 9.1 | 9.1 | 24 | 83 | 81 | — | — | 46 |
| **F 80 3_200.0** | 200.0 | 5.0 | 7.9 | 7.8 | 9.1 | 9.1 | 24 | 83 | 81 | — | — | 46 |

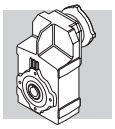
Para los valores de los momentos de inercia correspondientes a los reductores de 4 etapas, consultar con nuestro Servicio Técnico.



# F 90

| | i | J (•10-4) [kgm2] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250 |  |
| **F 90 3_10.3** | 10.3 | — | — | — | — | — | — | — | 549 | 559 | 843 | 870 | 850 |
| **F 90 3_11.1** | 11.1 | — | — | — | — | — | — | — | 529 | 539 | 823 | 850 | 830 |
| **F 90 3_13.4** | 13.4 | — | — | — | — | — | — | — | 373 | 383 | 667 | 694 | 674 |
| **F 90 3_14.5** | 14.5 | — | — | — | — | — | — | — | 361 | 371 | 655 | 682 | 662 |
| **F 90 3_16.5** | 16.5 | — | — | — | — | — | — | — | 286 | 296 | 580 | 607 | 587 |
| **F 90 3_17.9** | 17.9 | — | — | — | — | — | — | — | 278 | 288 | 572 | 599 | 579 |
| **F 90 3_20.6** | 20.6 | — | — | — | — | — | — | 224 | 222 | 232 | 516 | 542 | 513 |
| **F 90 3_22.3** | 22.3 | — | — | — | — | — | — | 220 | 217 | 227 | 511 | 537 | 508 |
| **F 90 3_25.4** | 25.4 | 103 | — | — | — | — | 122 | 181 | 179 | 188 | 474 | 500 | 471 |
| **F 90 3_28.6** | 28.6 | — | — | — | — | — | — | — | 291 | 301 | 585 | 613 | 593 |
| **F 90 3_31.0** | 31.0 | — | — | — | — | — | — | — | 289 | 299 | 583 | 610 | 590 |
| **F 90 3_37.4** | 37.4 | — | — | — | — | — | — | — | 222 | 232 | 516 | 543 | 523 |
| **F 90 3_40.5** | 40.5 | — | — | — | — | — | — | — | 220 | 230 | 514 | 541 | 521 |
| **F 90 3_46.1** | 46.1 | — | — | — | — | — | — | — | 186 | 196 | 480 | 507 | 487 |
| **F 90 3_49.9** | 49.9 | — | — | — | — | — | — | — | 185 | 195 | 479 | 506 | 486 |
| **F 90 3_57.3** | 57.3 | — | — | — | — | — | — | 161 | 158 | 168 | 452 | 479 | 450 |
| **F 90 3_62.1** | 62.1 | — | — | — | — | — | — | 160 | 158 | 167 | 451 | 478 | 449 |
| **F 90 3_70.8** | 70.8 | 61 | — | — | — | — | 80 | 139 | 137 | 146 | 432 | 458 | 429 |
| **F 90 3_76.7** | 76.7 | 60 | — | — | — | — | 79 | 139 | 136 | 146 | 431 | 458 | 429 |
| **F 90 3_88.4** | 88.4 | 44 | — | — | — | — | 63 | 123 | 120 | 151 | 414 | 441 | 412 |
| **F 90 3_95.8** | 95.8 | 44 | — | — | — | — | 63 | 122 | 120 | 151 | 414 | 441 | 412 |
| **F 90 3_103.3** | 103.3 | 41 | — | — | — | — | 59 | 119 | 117 | 146 | 410 | 436 | 408 |
| **F 90 3_111.9** | 111.9 | 40 | — | — | — | — | 59 | 119 | 116 | 146 | 409 | 436 | 407 |
| **F 90 3_126.8** | 126.8 | 26 | 29 | 29 | 30 | 30 | 45 | 105 | 102 | 132 | 395 | 422 | 393 |
| **F 90 3_137.3** | 137.3 | 26 | 29 | 29 | 30 | 30 | 45 | 104 | 102 | 132 | 395 | 422 | 393 |
| **F 90 3_150.3** | 150.3 | 21 | 24 | 24 | 25 | 25 | 40 | 100 | 97 | 127 | 390 | 417 | 388 |
| **F 90 3_162.8** | 162.8 | 21 | 24 | 24 | 25 | 25 | 40 | 100 | 97 | 127 | 390 | 417 | 388 |
| **F 90 3_179.2** | 179.2 | 14 | 16 | 16 | 18 | 18 | 33 | 92 | 90 | — | — | — | 381 |
| **F 90 3_194.2** | 194.2 | 14 | 16 | 16 | 17 | 17 | 33 | 92 | 90 | — | — | — | 381 |

Para los valores de los momentos de inercia correspondientes a los reductores de 4 etapas, consultar con nuestro Servicio Técnico.



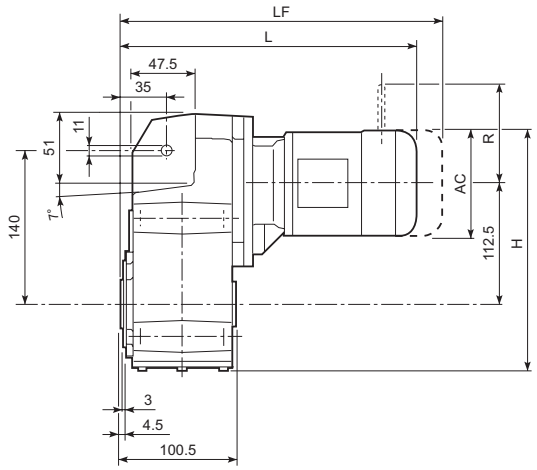
## 61 RELACIONES EXACTAS

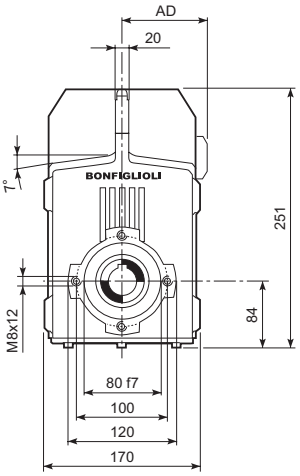
| $i_N$ | F 10 | F 20 | F 25 | F 31 | F 41 | F 51 | F 60 | F 70 | F 80 | F 90 |
|---|---|---|---|---|---|---|---|---|---|---|
| 6.3 | | 6.41210 | | | | | | | | |
| 7.1 | 7.40443 | | 6.86957 | 6.94907 | 6.72727 | 7.19408 | | | | |
| 8.0 | | 7.83478 | 8.39375 | 8.22917 | | | | | | |
| 9.0 | 8.58204 | 8.73227 | 9.35526 | 9.01630 | 9.13580 | 9.05114 | 8.96000 | | | |
| 10.0 | 9.76974 | 10.03069 | 10.62451 | 10.74747 | | | 9.70667 | 10.01538 | 10.33846 | 10.26577 |
| 11.2 | 11.53759 | 11.23370 | | | 10.77273 | 11.11005 | 11.75320 | 10.85000 | 11.20000 | 11.12125 |
| 12.5 | 13.02632 | | 12.98182 | 12.72727 | | 13.97796 | 12.73263 | 12.81731 | 12.90240 | 13.41346 |
| 14.0 | 14.64777 | 14.79842 | 14.46890 | 13.94466 | 14.62963 | | 14.47385 | 13.88542 | 13.97760 | 14.53125 |
| 16.0 | 16.97738 | | 16.62032 | 16.80000 | 17.11667 | | 15.68000 | 16.34455 | 16.24615 | 16.52538 |
| 18.0 | | 18.08182 | 18.61364 | 18.48804 | 18.89130 | 18.82155 | 19.06872 | 17.70660 | 17.60000 | 17.90250 |
| 20.0 | 19.32692 | 20.15311 | 21.81818 | 21.11230 | | | 20.65778 | 20.86538 | 20.33231 | 20.56731 |
| 22.4 | 22.82418 | 23.14973 | 23.75758 | 23.38636 | | 23.79447 | 23.46381 | 22.60417 | 22.02667 | 22.28125 |
| 25.0 | 25.76923 | 25.92614 | 27.20455 | 27.27273 | 24.11579 | | 25.41913 | 24.55695 | 25.22585 | 25.38622 |
| 28.0 | 29.63462 | 30.38961 | 30.03636 | 30.12121 | 30.11875 | 30.03828 | 29.61538 | 27.69231 | 28.84615 | 28.61169 |
| 31.5 | 32.98462 | 33.09091 | 32.18182 | 34.36364 | | | 32.08333 | 30.00000 | 31.25000 | 30.99600 |
| 35.5 | 35.34066 | 37.89205 | 36.41958 | 37.67273 | 38.18333 | 37.13636 | 38.84771 | 35.43956 | 36.00000 | 37.38462 |
| 40.0 | 39.64497 | 41.83636 | 40.72727 | 40.36364 | | | 42.08502 | 38.39286 | 39.00000 | 40.50000 |
| 45.0 | 44.66667 | 44.82468 | 45.56607 | 44.64336 | 47.92667 | | 47.84024 | 45.19231 | 45.32967 | 46.05785 |
| 50.0 | 48.72727 | 50.72727 | 50.78571 | 47.54630 | 51.49270 | 48.89965 | 51.82692 | 48.95833 | 49.10714 | 49.89600 |
| 56.0 | 56.69231 | 56.72727 | 58.33718 | 52.09420 | 60.24646 | | 63.02761 | 57.69231 | 56.73077 | 57.32308 |
| 63.0 | 62.99145 | 61.88430 | 65.33371 | 62.76111 | 66.49275 | 65.84416 | 68.27991 | 62.50000 | 61.45833 | 62.10000 |
| 71.0 | 71.12308 | 69.13636 | 76.58163 | 69.06725 | | | 77.55467 | 73.55769 | 70.38462 | 70.75385 |
| 80.0 | 81.31624 | 76.81818 | 83.38889 | 78.87092 | 84.88166 | 83.24111 | 84.01756 | 85.38462 | 76.25000 | 76.65000 |
| 90.0 | 91.48077 | 90.40909 | 95.48772 | 87.36632 | | | 98.19838 | 92.50000 | 92.30769 | 88.39385 |
| 100.0 | 106.02198 | 101.63636 | 105.42738 | 101.88492 | 106.01061 | 105.08407 | 106.38158 | 101.18343 | 105.00000 | 103.33491 |
| 112.2 | | 114.34091 | 112.95791 | 112.52623 | | | 120.45488 | 109.61538 | 113.75000 | 111.94615 |
| 125.5 | 127.12821 | 132.19481 | 127.83242 | 128.37500 | 134.39596 | 129.91558 | 130.49279 | 122.72727 | 122.48521 | 126.77538 |
| 140.0 | | 156.30469 | 142.95238 | 140.73704 | | | 150.35503 | 132.95455 | 132.69231 | 150.30533 |
| 160.0 | | 172.57500 | 155.94805 | 166.77778 | 168.69010 | 165.62338 | 162.88462 | 166.66667 | 160.22727 | 162.83077 |
| 180.0 | | 184.90179 | 174.22321 | 185.43056 | 180.73939 | 202.39481 | 185.89349 | 180.94406 | 184.61538 | 179.21958 |
| 200.0 | | 209.25000 | 193.58135 | 202.28788 | 198.92028 | 216.85158 | 201.38462 | 196.02273 | 200.00000 | 194.15455 |
| 225.0 | | 234.00000 | 227.83036 | 228.22222 | 220.13131 | 239.84416 | 217.64679 | 216.52422 | 218.49174 | 213.59178 |
| 250.0 | | 255.27273 | 256.12302 | 253.58025 | 240.14325 | 262.11039 | 259.08284 | 234.56790 | 273.89277 | 231.39109 |
| 280.0 | | 285.18750 | 288.13839 | 293.83611 | 266.93818 | 285.93861 | 280.67308 | 280.93645 | 296.71717 | 268.72770 |
| 315.0 | | 316.87500 | 333.13010 | 332.82407 | 296.59798 | 317.26753 | 315.38899 | 304.34783 | 353.67893 | 291.12168 |
| 355.0 | | 372.93750 | | 374.42708 | 344.79515 | 352.51948 | 341.67140 | 372.46964 | 383.15217 | 361.84615 |
| 400.0 | | 419.25000 | 393.88686 | 418.86023 | | 429.09330 | 399.34008 | 403.50877 | 451.49061 | 392.00000 |
| 450.0 | | 471.65625 | 434.88795 | 462.60785 | 433.67975 | | 432.61842 | 471.15385 | 489.11483 | 457.45099 |
| 500.0 | | | 465.95137 | 527.76389 | | | 489.84985 | 510.41667 | 563.87675 | 495.57191 |
| 560.0 | | 545.30357 | 527.30872 | 578.58560 | 549.80165 | 530.48864 | 530.67067 | 606.83761 | 610.86648 | 577.48888 |
| 630.0 | | | 589.67857 | 619.91314 | 690.09587 | 676.29545 | 611.44379 | 657.40741 | 714.86014 | 625.61296 |
| 710.0 | | | 643.28571 | 685.64198 | 739.38843 | 826.44545 | 755.96686 | 758.97436 | 774.43182 | 713.95030 |
| 800.0 | | | 718.67076 | 762.32562 | 813.76478 | 885.47727 | 818.96410 | 822.22222 | 897.27273 | 773.44615 |
| 900.0 | | | 798.52307 | 831.62795 | 900.53719 | 979.36364 | 885.09695 | 899.40828 | 972.04545 | 910.18225 |
| 1000.0 | | | 939.80022 | 938.24691 | 982.40421 | 1070.28409 | 958.85503 | 974.35897 | 1058.06885 | 986.03077 |
| 1125.0 | | | 1056.50744 | 1042.49657 | 1092.01983 | 1167.58264 | 1053.60355 | 1090.90909 | 1146.24126 | 1112.25941 |
| 1250.0 | | | 1188.57087 | 1207.99290 | 1213.35537 | 1295.50909 | 1141.40385 | 1181.81818 | 1277.33630 | 1204.94769 |
| 1400.0 | | | 1374.16167 | 1368.27675 | 1410.52562 | 1439.45455 | | 1367.52137 | 1383.78099 | 1427.90059 |
| 1600.0 | | | | 1539.31134 | | | | 1584.61538 | 1577.62238 | 1571.37386 |
| 1800.0 | | | | | | | | 1716.66667 | 1709.09091 | 1702.32168 |
| 2000.0 | | | | | | | | 2019.23077 | 1833.98601 | 1937.26864 |
| 2250.0 | | | | | | | | 2187.50000 | 1986.81818 | 2098.70769 |

2x 3x 4x

## 62 DIMENSIONES

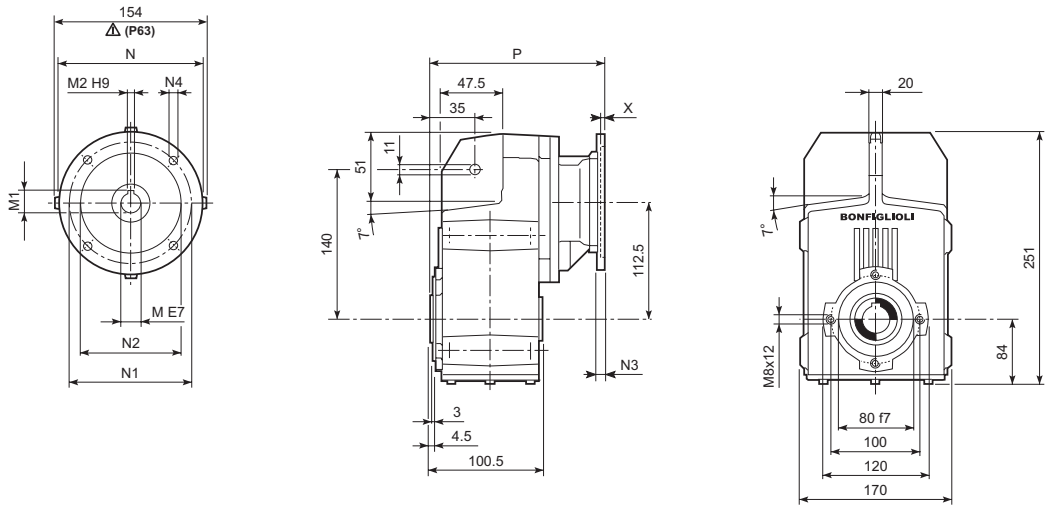
# F 10...M/ME



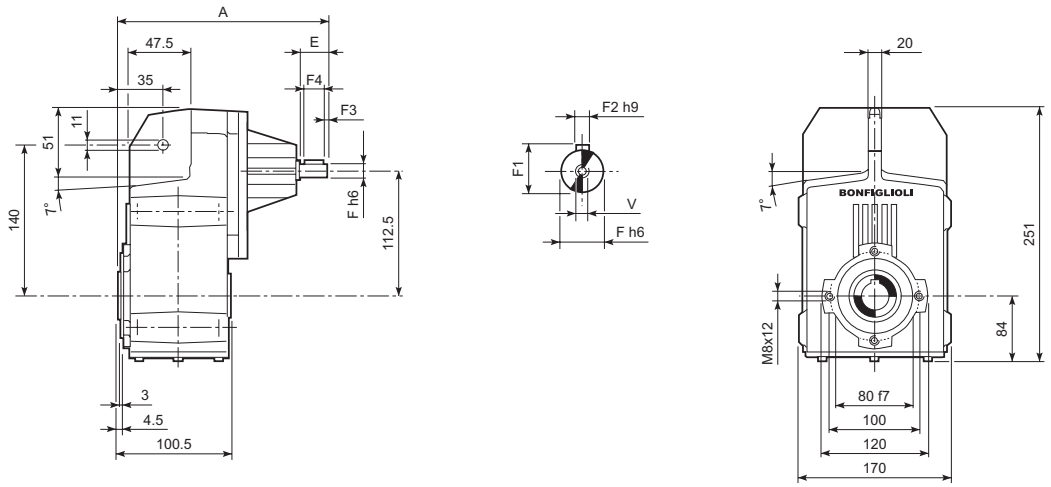

| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **F 10 2** | **S05** | **M05** | 121 | 220.5 | 311.5 | 95 | 12 | 377.5 | 13 | 96 | 122 | 116 | 95 |
| **F 10 2** | **S1** | **M1** | 138 | 265.5 | 340.5 | 108 | 14 | 401.5 | 17 | 103 | 135 | 124 | 108 |
| **F 10 2** | **S2** | **ME2S** | 156 | 274.5 | 369.5 | 119 | 18 | — | — | — | — | — | — |
| **F 10 2** | **S3** | **ME3S** | 195 | 294 | 412.5 | 142 | 22 | — | — | — | — | — | — |
| **F 10 2** | **S3** | **ME3L** | 195 | 294 | 444.5 | 142 | 24 | — | — | — | — | — | — |

# F 10...P(IEC)



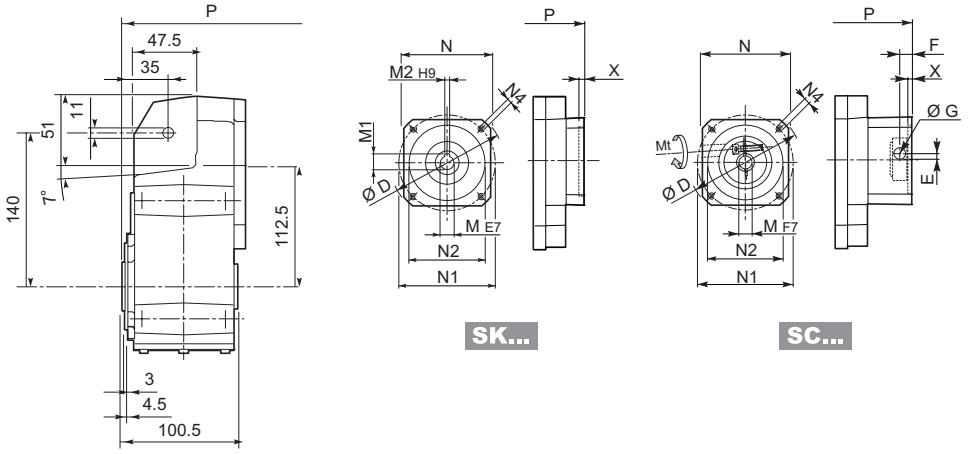

| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 10 2** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 185.5 | 8 |
| **F 10 2** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 185.5 | 8 |
| **F 10 2** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 205 | 9 |
| **F 10 2** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 205 | 9 |
| **F 10 2** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 215 | 13 |
| **F 10 2** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 215 | 13 |

# F 10...HS



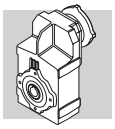

| | | A | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| **F 10 2** | **HS** | 192 | 40 | 16 | 18 | 5 | 2.5 | 35 | M6x16 | 7.5 |

# F 10...SK / SC



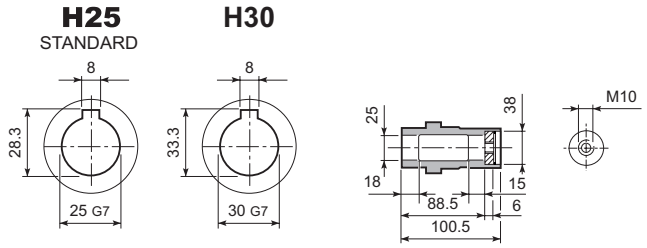

| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 10 2** | **SK 60A** | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | 157 | 8 |
| **F 10 2** | **SK 60B** | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | 164 | 8 |
| **F 10 2** | **SK 80A** | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | 164 | 8 |
| **F 10 2** | **SK 80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 205 | 9 |
| **F 10 2** | **SK 95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 205 | 9 |
| **F 10 2** | **SK 95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 205 | 9 |
| **F 10 2** | **SK 95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 205 | 9 |
| **F 10 2** | **SK 110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 205 | 9 |
| **F 10 2** | **SK 110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 205 | 9 |

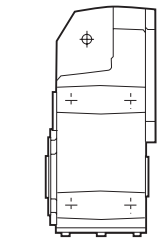
| | | | Mt | D | E | F | G | M | N | N1 | N2 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 10 2** | **SC 60A** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | 184 | 8 |
| **F 10 2** | **SC 60B** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | 184 | 9 |
| **F 10 2** | **SC 80A** | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | 184 | 9 |
| **F 10 2** | **SC 80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 228.5 | 10 |
| **F 10 2** | **SC 95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 228.5 | 10 |
| **F 10 2** | **SC 95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 228.5 | 10 |
| **F 10 2** | **SC 95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 228.5 | 10 |
| **F 10 2** | **SC 110A** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 228.5 | 11 |
| **F 10 2** | **SC 110B** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 228.5 | 11 |



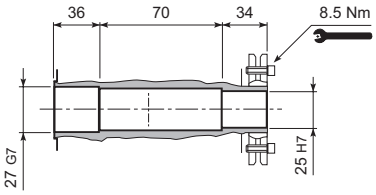
# F 10

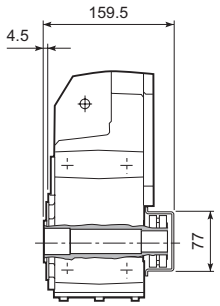
## F 10...H



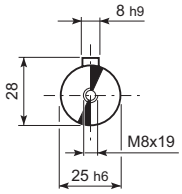



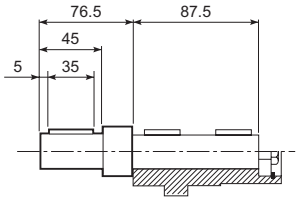
## F 10...S

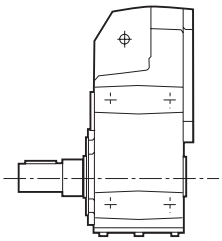



## F 10...R

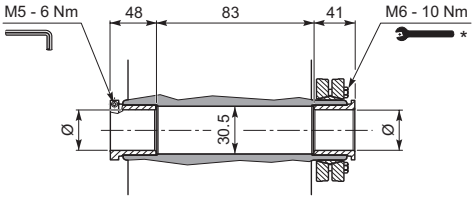


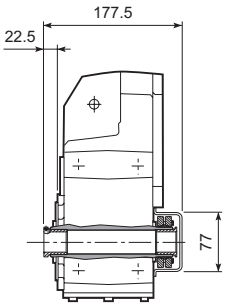



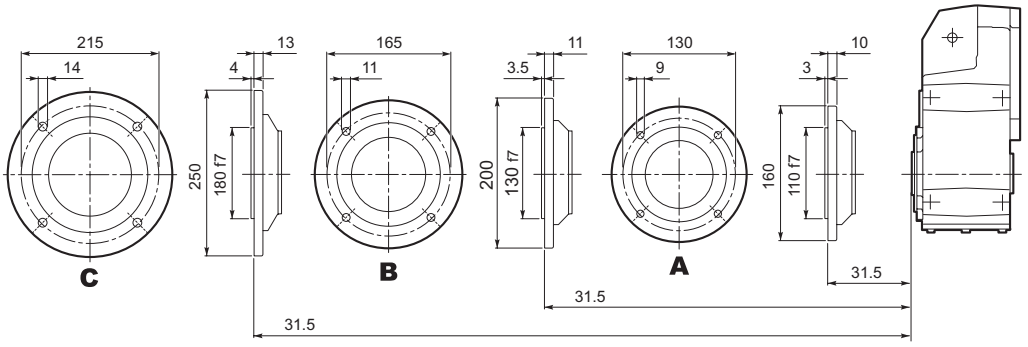
## F 10...QF

| | Ø |
|---|---|
| **QF25** | 25 |
| **QF30** | 30 |



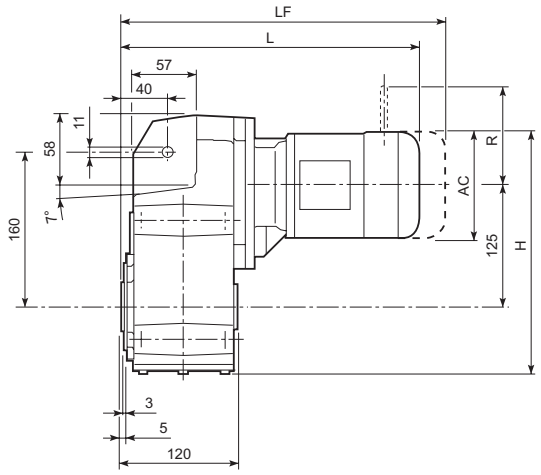

## F 10...F...

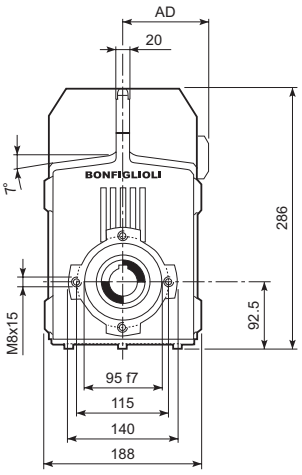





* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.

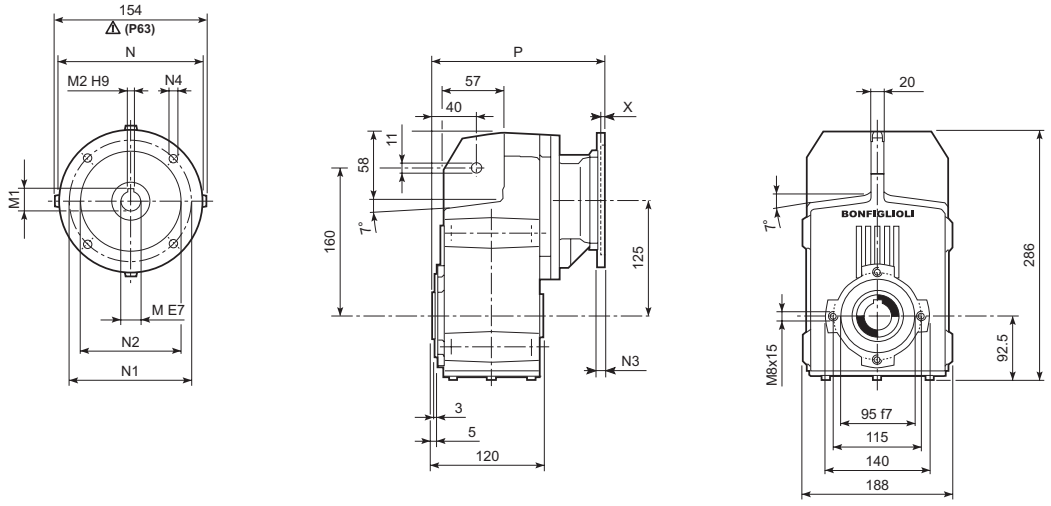
# F 20...M/ME



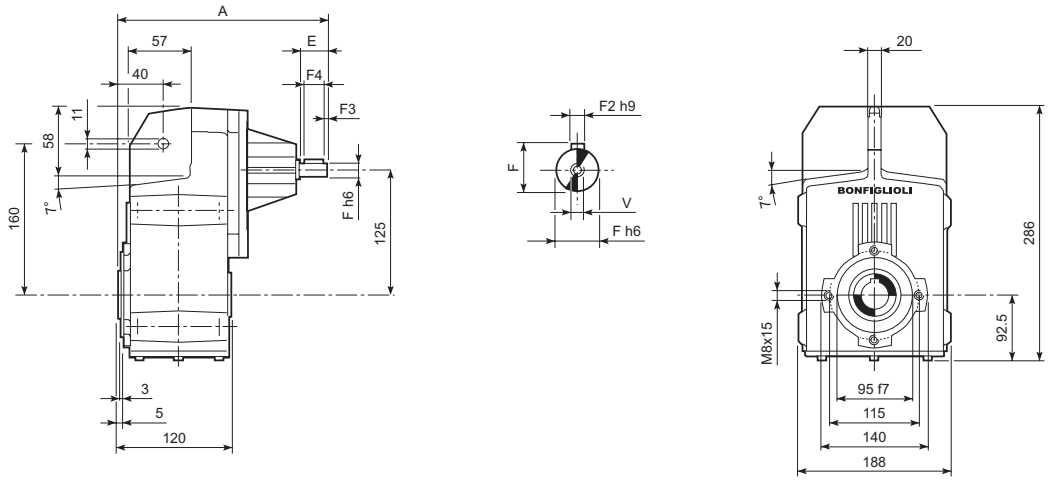

| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **F 20 2** | **S05** | **M05** | 121 | 278.2 | 323.5 | 95 | 15 | 389.5 | 17 | 96 | 122 | 116 | 95 |
| **F 20 2** | **S1** | **M1** | 138 | 286.7 | 352.5 | 108 | 17 | 413.5 | 20 | 103 | 135 | 124 | 108 |
| **F 20 2** | **S2** | **ME2S** | 156 | 295.7 | 381.5 | 119 | 21 | — | — | — | — | — | — |
| **F 20 2** | **S3** | **ME3S** | 195 | 315.2 | 424.5 | 142 | 26 | — | — | — | — | — | — |
| **F 20 2** | **S3** | **ME3L** | 195 | 315.2 | 456.5 | 142 | 33 | — | — | — | — | — | — |
| **F 20 3** | **S05** | **M05** | 121 | 278.2 | 379 | 95 | 17 | 445 | 18 | 96 | 122 | 116 | 95 |
| **F 20 3** | **S1** | **M1** | 138 | 286.7 | 408 | 108 | 19 | 469 | 21 | 103 | 135 | 124 | 108 |
| **F 20 3** | **S2** | **ME2S** | 156 | 295.7 | 437 | 119 | 22 | — | — | — | — | — | — |
| **F 20 3** | **S3** | **ME3S** | 195 | 315.2 | 480 | 142 | 27 | — | — | — | — | — | — |
| **F 20 3** | **S3** | **ME3L** | 195 | 315.2 | 512 | 142 | 34 | — | — | — | — | — | — |

# F 20...P(IEC)



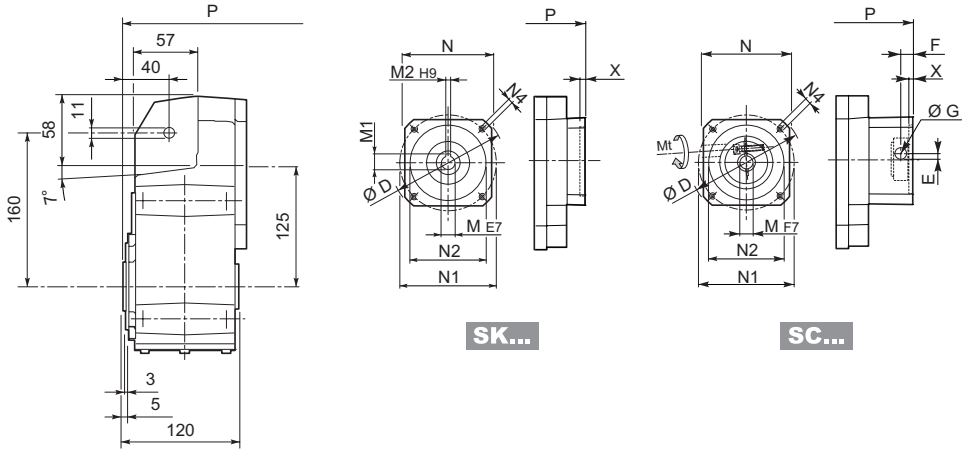

| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 20 2** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 197.5 | 12 |
| **F 20 2** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 197.5 | 12 |
| **F 20 2** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 217 | 13 |
| **F 20 2** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 217 | 12 |
| **F 20 2** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 227 | 16 |
| **F 20 2** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 227 | 16 |
| **F 20 3** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 253 | 13 |
| **F 20 3** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 253 | 13 |
| **F 20 3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 272.5 | 14 |
| **F 20 3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 272.5 | 14 |
| **F 20 3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 282.5 | 18 |
| **F 20 3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 282.5 | 18 |

# F 20...HS




| | | A | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| **F 20 2** | **HS** | 247.5 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 11.5 |
| **F 20 3** | | 260 | 40 | 16 | 18 | 5 | 2.5 | 35 | M6x16 | 12.4 |

# F 20...SK / SC

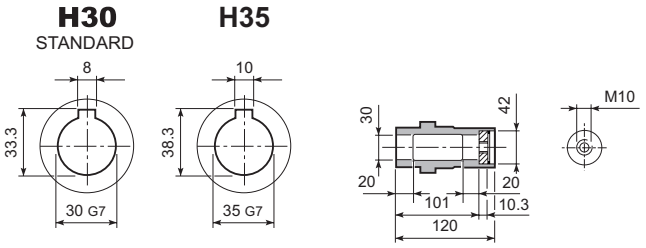


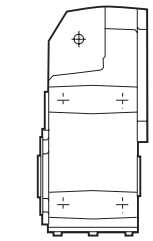

| | | | | | | | | | | | 2x | | 3x | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P | Kg | P | Kg |
| **F 20 2/3** | **SK 60A** | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | 169 | 11 | 224.5 | 12 |
| **F 20 2/3** | **SK 60B** | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | 176 | 12 | 231.5 | 13 |
| **F 20 2/3** | **SK 80A** | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | 217 | 12 | 231.5 | 13 |
| **F 20 2/3** | **SK 80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 217 | 13 | 272.5 | 14 |
| **F 20 2/3** | **SK 95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 217 | 13 | 272.5 | 14 |
| **F 20 2/3** | **SK 95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 217 | 13 | 272.5 | 14 |
| **F 20 2/3** | **SK 95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 217 | 13 | 272.5 | 14 |
| **F 20 2/3** | **SK 110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 217 | 13 | 272.5 | 14 |
| **F 20 2/3** | **SK 110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 217 | 13 | 272.5 | 14 |

| | | | | | | | | | | | | | | | 2x | | 3x | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Mt | D | E | F | G | M | N | N1 | N2 | N4 | X | | P | Kg | P | Kg |
| **F 20 2/3** | **SC 60A** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | | 196 | 12 | 251.5 | 13 |
| **F 20 2/3** | **SC 60B** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | | 196 | 13 | 251.5 | 14 |
| **F 20 2/3** | **SC 80A** | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | | 196 | 13 | 251.5 | 14 |
| **F 20 2/3** | **SC 80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | | 240.5 | 14 | 296 | 15 |
| **F 20 2/3** | **SC 95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | | 240.5 | 14 | 296 | 15 |
| **F 20 2/3** | **SC 95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | | 240.5 | 14 | 296 | 15 |
| **F 20 2/3** | **SC 95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | | 240.5 | 14 | 296 | 15 |
| **F 20 2/3** | **SC 110A** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | | 240.5 | 15 | 296 | 16 |
| **F 20 2/3** | **SC 110B** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | | 240.5 | 15 | 296 | 16 |

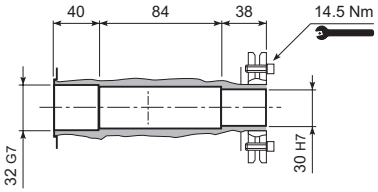
# F 20

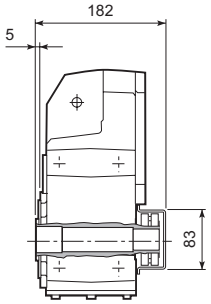
## F 20...H



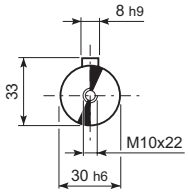



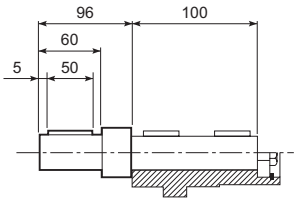
## F 20...S

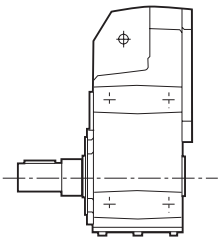



## F 20...R

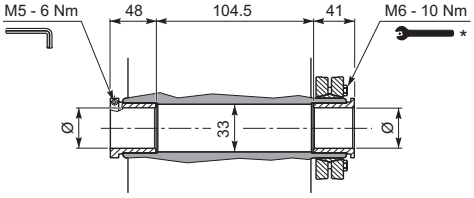


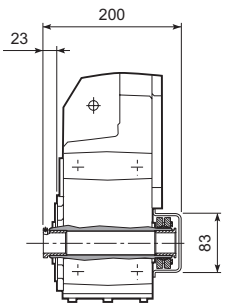



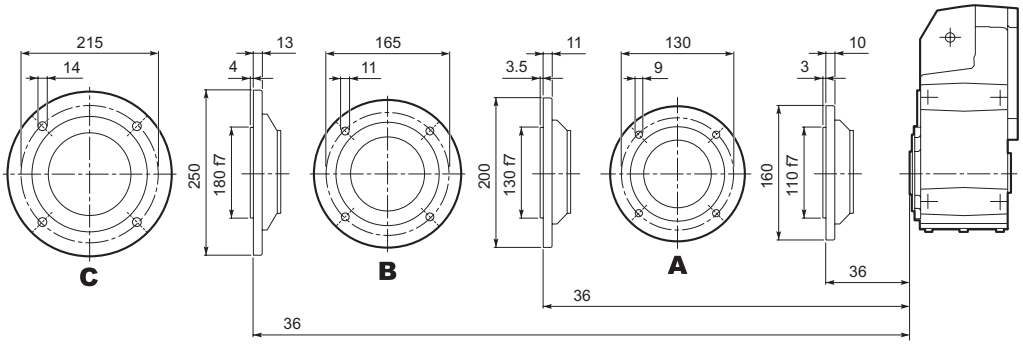
## F 20...QF

| | Ø |
|---|---|
| **QF25** | 25 |
| **QF30** | 30 |



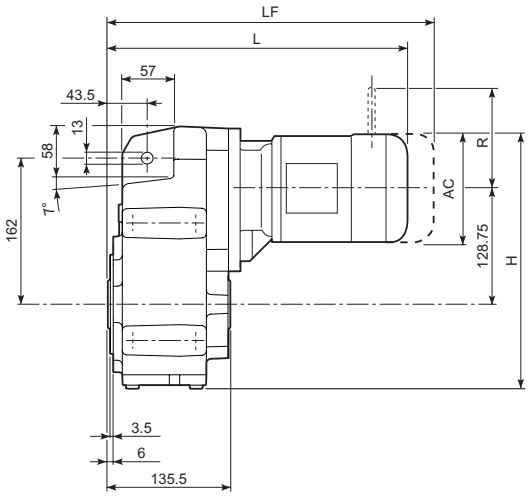



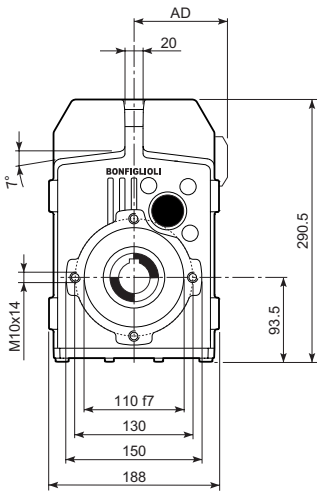

## F 20...F...




* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.

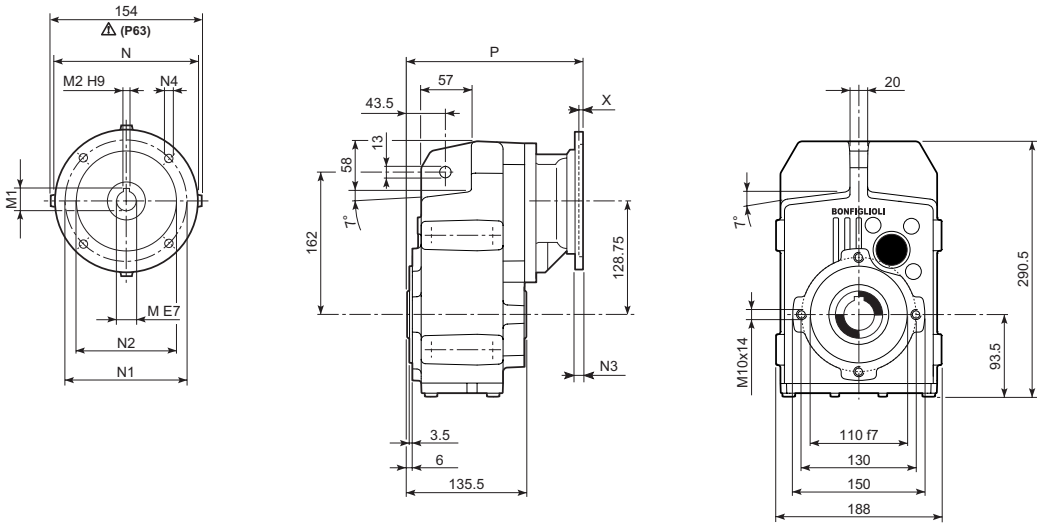
# F 25...M/ME



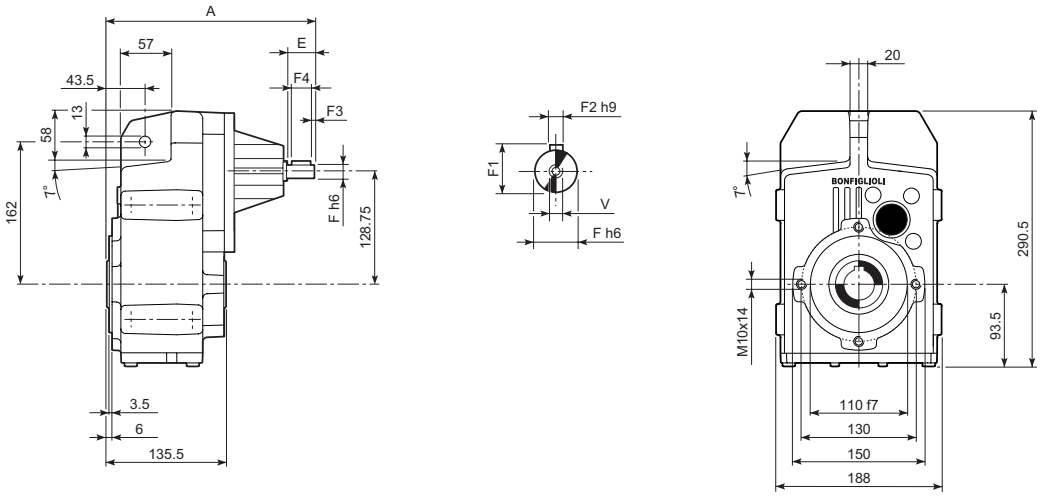

| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **F 25 2/3** | **S05** | **M05** | 121 | 283 | 339 | 95 | 15 | 405 | 17 | 96 | 122 | 116 | 95 |
| **F 25 2/3** | **S1** | **M1** | 138 | 291.5 | 368 | 108 | 17 | 429 | 20 | 103 | 135 | 124 | 108 |
| **F 25 2/3** | **S2** | **ME2S** | 156 | 300.5 | 397 | 119 | 21 | — | — | — | — | — | — |
| **F 25 2/3** | **S3** | **ME3S** | 195 | 320 | 440 | 142 | 26 | — | — | — | — | — | — |
| **F 25 2/3** | **S3** | **ME3L** | 195 | 320 | 472 | 142 | 33 | — | — | — | — | — | — |
| **F 25 4** | **S05** | **M05** | 121 | 283 | 394.5 | 95 | 17 | 460.5 | 18 | 96 | 122 | 116 | 95 |
| **F 25 4** | **S1** | **M1** | 138 | 291.5 | 423.5 | 108 | 19 | 484.5 | 21 | 103 | 135 | 124 | 108 |
| **F 25 4** | **S2** | **ME2S** | 156 | 300.5 | 452.5 | 119 | 22 | — | — | — | — | — | — |
| **F 25 4** | **S3** | **ME3S** | 195 | 320 | 495.5 | 142 | 27 | — | — | — | — | — | — |
| **F 25 4** | **S3** | **ME3L** | 195 | 320 | 527.5 | 142 | 34 | — | — | — | — | — | — |

# F 25...P(IEC)



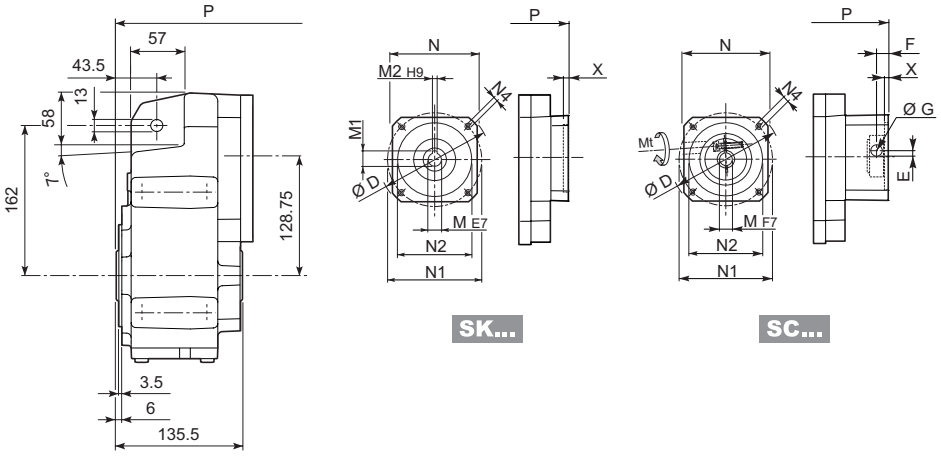

| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 25 2/3** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 213 | 12 |
| **F 25 2/3** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 213 | 12 |
| **F 25 2/3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 232.5 | 13 |
| **F 25 2/3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 232.5 | 13 |
| **F 25 2/3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 242.5 | 16 |
| **F 25 2/3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 242.5 | 16 |
| **F 25 4** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 268.5 | 13 |
| **F 25 4** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 268.5 | 13 |
| **F 25 4** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 288 | 14 |
| **F 25 4** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 288 | 14 |
| **F 25 4** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 298 | 18 |
| **F 25 4** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 298 | 18 |

# F 25...HS




| | | A | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| **F 25 2** | **HS** | 263 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 11.5 |
| **F 25 3** | | 263 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 11.5 |
| **F 25 4** | | 275.5 | 40 | 16 | 18 | 5 | 2.5 | 35 | M6x16 | 12.5 |

# F 25...SK / SC

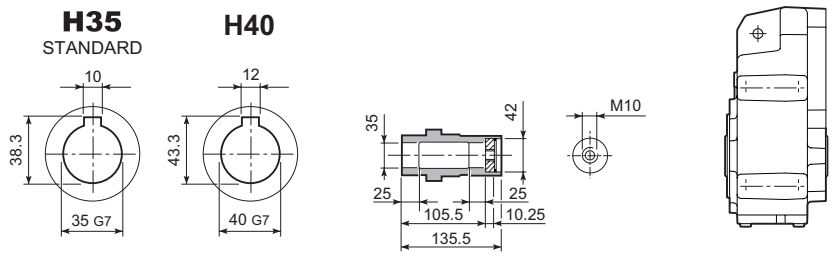



| | | | | | | | | | | | 2/3x | | 4x | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P | Kg | P | Kg |
| **F 25 2/3/4** | **SK 60A** | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | 184.5 | 11 | 240 | 12 |
| **F 25 2/3/4** | **SK 60B** | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | 191.5 | 12 | 247 | 13 |
| **F 25 2/3/4** | **SK 80A** | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | 191.5 | 12 | 247 | 13 |
| **F 25 2/3/4** | **SK 80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 232.5 | 13 | 288 | 14 |
| **F 25 2/3/4** | **SK 95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 232.5 | 13 | 288 | 14 |
| **F 25 2/3/4** | **SK 95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 232.5 | 13 | 288 | 14 |
| **F 25 2/3/4** | **SK 95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 232.5 | 13 | 288 | 14 |
| **F 25 2/3/4** | **SK 110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 232.5 | 13 | 288 | 14 |
| **F 25 2/3/4** | **SK 110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 232.5 | 13 | 288 | 14 |

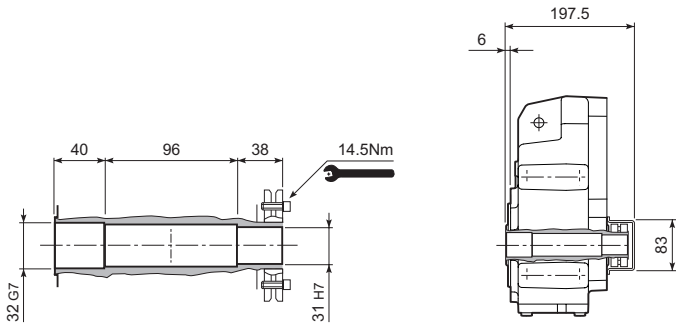
| | | | | | | | | | | | | | | 2/3x | | 4x | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Mt | D | E | F | G | M | N | N1 | N2 | N4 | X | P | Kg | P | Kg |
| **F 25 2/3/4** | **SC 60A** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | 211.5 | 12 | 267 | 13 |
| **F 25 2/3/4** | **SC 60B** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | 211.5 | 13 | 267 | 14 |
| **F 25 2/3/4** | **SC 80A** | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | 211.5 | 13 | 267 | 14 |
| **F 25 2/3/4** | **SC 80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 256 | 14 | 311.5 | 15 |
| **F 25 2/3/4** | **SC 95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 256 | 14 | 311.5 | 15 |
| **F 25 2/3/4** | **SC 95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 256 | 14 | 311.5 | 15 |
| **F 25 2/3/4** | **SC 95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 256 | 14 | 311.5 | 15 |
| **F 25 2/3/4** | **SC 110A** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 256 | 15 | 311.5 | 16 |
| **F 25 2/3/4** | **SC 110B** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 256 | 15 | 311.5 | 16 |

# F 25

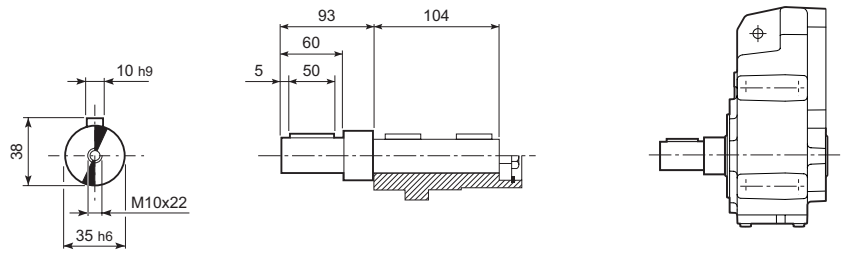
## F 25...H




## F 25...S

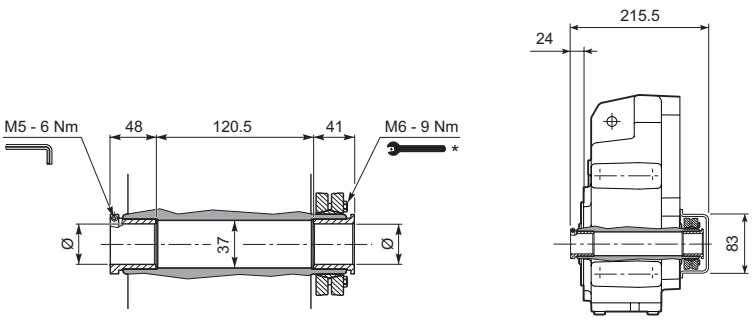



## F 25...R

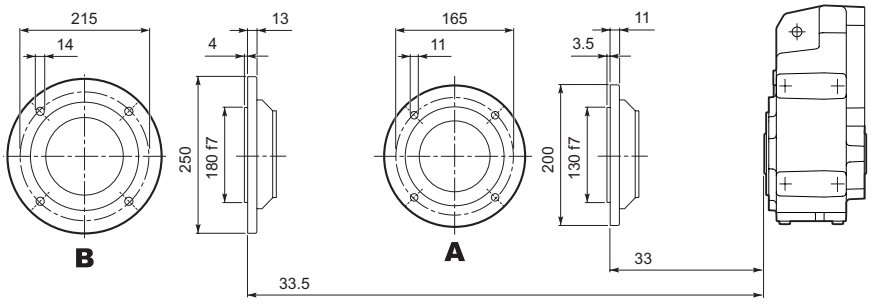



## F 25...QF

| | Ø |
|---|---|
| **QF30** | 30 |
| **QF32** | 32 |

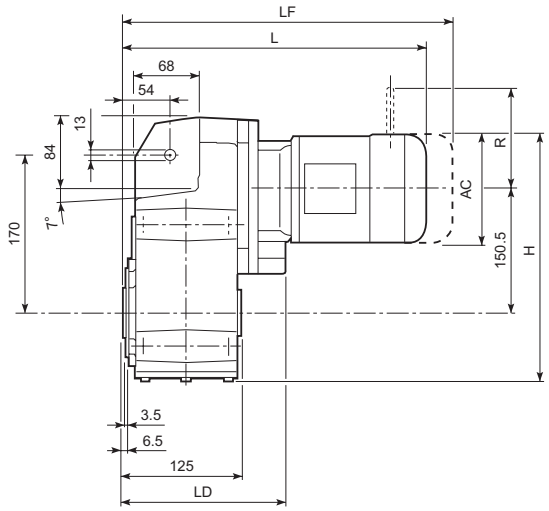


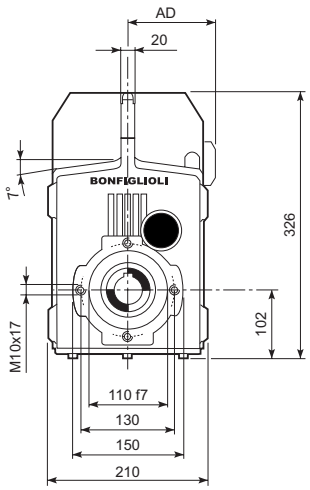

## F 25...F...




* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.

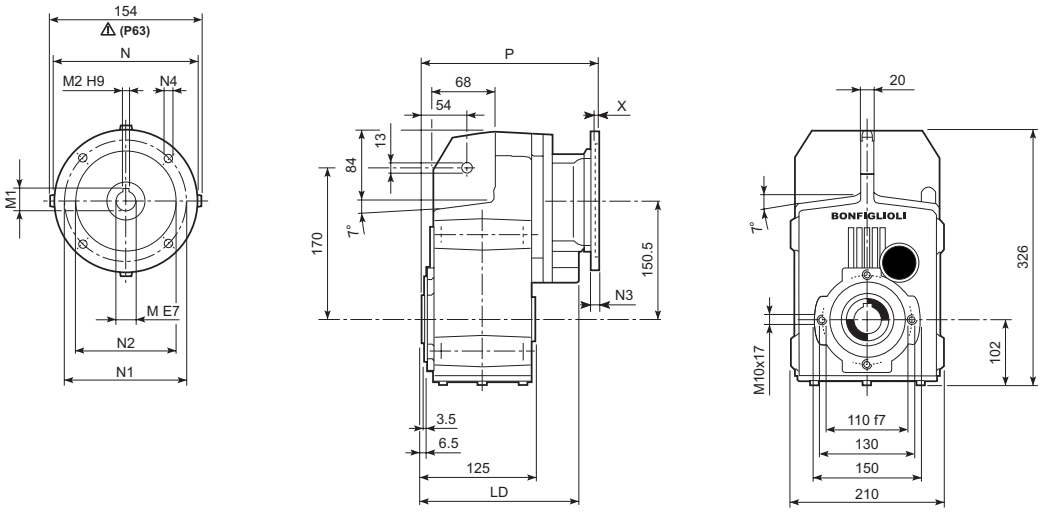
# F 31...M/ME



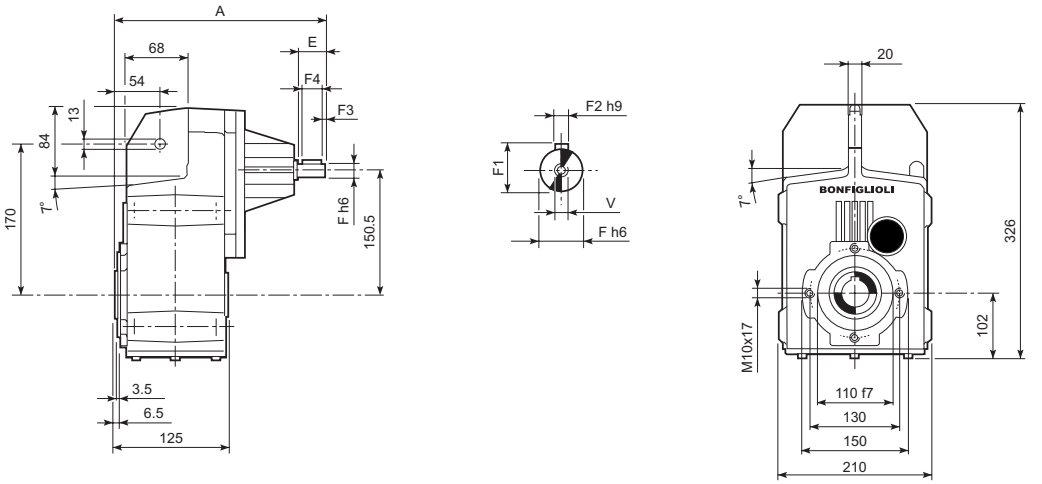

| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| **F 31 2/3** | **S1** | **M1** | 138 | 321.3 | 380.5 | 183.5 | 108 | 22 | 441.5 | 25 | 103 | 135 | 124 | 108 |
| **F 31 2/3** | **S2** | **ME2S** | 156 | 330.3 | 409.5 | 195.5 | 119 | 26 | — | — | — | — | — | — |
| **F 31 2/3** | **S3** | **ME3S** | 195 | 349.8 | 452.5 | 205.5 | 142 | 31 | — | — | — | — | — | — |
| **F 31 2/3** | **S3** | **ME3L** | 195 | 349.8 | 484.5 | 205.5 | 142 | 40 | — | — | — | — | — | — |
| **F 31 2/3** | **S4** | **ME4** | 258 | 381.3 | 592.5 | — | 193 | 72 | — | — | — | — | — | — |
| **F 31 2/3** | **S4** | **ME4LA** | 258 | 381.3 | 592.5 | — | 193 | 78 | — | — | — | — | — | — |
| **F 31 4** | **S05** | **M05** | 121 | 312.8 | 409 | — | 95 | 20 | 475 | 22 | 96 | 122 | 116 | 95 |
| **F 31 4** | **S1** | **M1** | 138 | 321.3 | 438 | — | 108 | 22 | 499 | 25 | 103 | 135 | 124 | 108 |
| **F 31 4** | **S2** | **ME2S** | 156 | 330.3 | 467 | — | 119 | 26 | — | — | — | — | — | — |
| **F 31 4** | **S3** | **ME3S** | 195 | 349.8 | 510 | — | 142 | 31 | — | — | — | — | — | — |
| **F 31 4** | **S3** | **ME3L** | 195 | 349.8 | 542 | — | 142 | 41 | — | — | — | — | — | — |

# F 31...P(IEC)



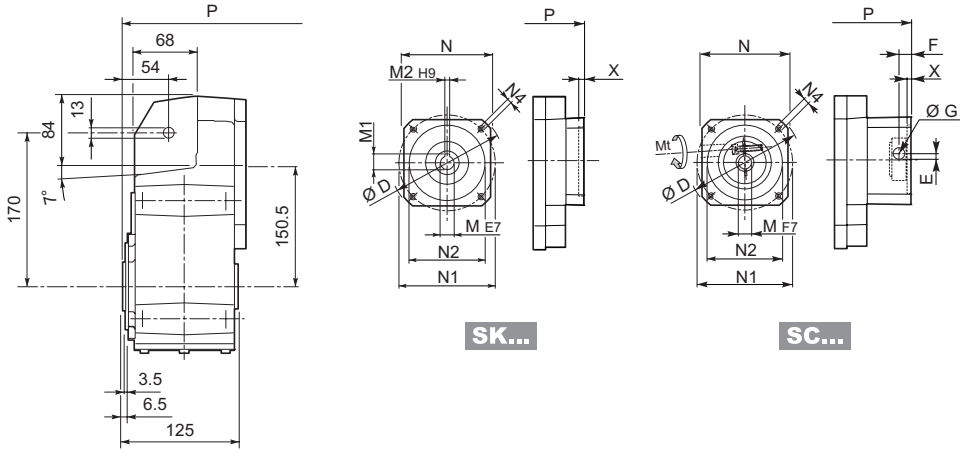

| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 31 2/3** | **P63** | 195.5 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 225.5 | 17 |
| **F 31 2/3** | **P71** | 195.5 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 225.5 | 17 |
| **F 31 2/3** | **P80** | 205.5 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 245 | 18 |
| **F 31 2/3** | **P90** | 205.5 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 245 | 17 |
| **F 31 2/3** | **P100** | 205.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 255 | 21 |
| **F 31 2/3** | **P112** | 205.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 255 | 21 |
| **F 31 2/3** | **P132** | — | 38 | 41.3 | 10 | 300 | 265 | 230 | — | 14 | 5 | 291.5 | 24 |
| **F 31 4** | **P63** | — | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 283 | 17 |
| **F 31 4** | **P71** | — | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 283 | 17 |
| **F 31 4** | **P80** | — | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 302.5 | 18 |
| **F 31 4** | **P90** | — | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 302.5 | 18 |
| **F 31 4** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 312.5 | 22 |
| **F 31 4** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 312.5 | 22 |

# F 31...HS




| | | A | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| **F 31 2** | **HS** | 275.5 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 16.7 |
| **F 31 3** | | 275.5 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 16.7 |
| **F 31 4** | | 290 | 40 | 16 | 18 | 5 | 2.5 | 35 | M6x16 | 16.5 |

# F 31...SK / SC

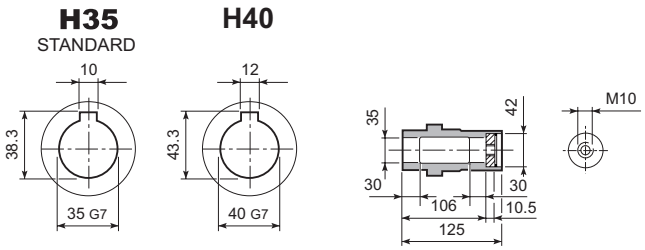


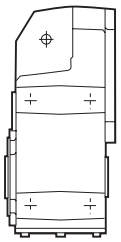

| | | | | | | | | | | | 2/3x | | 4x | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P | Kg | P | Kg |
| **F 31 2/3/4** | **SK 60A** | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | 197 | 16 | 254.5 | 16 |
| **F 31 2/3/4** | **SK 60B** | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | 204 | 17 | 261.5 | 17 |
| **F 31 2/3/4** | **SK 80A** | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | 204 | 17 | 261.5 | 17 |
| **F 31 2/3/4** | **SK 80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 245 | 18 | 302.5 | 18 |
| **F 31 2/3/4** | **SK 95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 245 | 18 | 302.5 | 18 |
| **F 31 2/3/4** | **SK 95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 245 | 18 | 302.5 | 18 |
| **F 31 2/3/4** | **SK 95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 245 | 18 | 302.5 | 18 |
| **F 31 2/3/4** | **SK 110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 245 | 18 | 302.5 | 18 |
| **F 31 2/3/4** | **SK 110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 245 | 18 | 302.5 | 18 |
| **F 31 2/3** | **SK 130A** | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 245 | 18 | — | — |

| | | | | | | | | | | | | | | 2/3x | | 4x | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Mt | D | E | F | G | M | N | N1 | N2 | N4 | X | P | Kg | P | Kg |
| **F 31 2/3/4** | **SC 60A** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | 224 | 17 | 281.5 | 17 |
| **F 31 2/3/4** | **SC 60B** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | 224 | 18 | 281.5 | 18 |
| **F 31 2/3/4** | **SC 80A** | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | 224 | 18 | 281.5 | 18 |
| **F 31 2/3/4** | **SC 80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 268.5 | 19 | 326 | 19 |
| **F 31 2/3/4** | **SC 95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 268.5 | 19 | 326 | 19 |
| **F 31 2/3/4** | **SC 95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 268.5 | 19 | 326 | 19 |
| **F 31 2/3/4** | **SC 95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 268.5 | 19 | 326 | 19 |
| **F 31 2/3/4** | **SC 110A** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 268.5 | 20 | 326 | 20 |
| **F 31 2/3/4** | **SC 110B** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 268.5 | 20 | 326 | 20 |
| **F 31 2/3** | **SC 130A** | M6 | 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 268.5 | 21 | — | — |

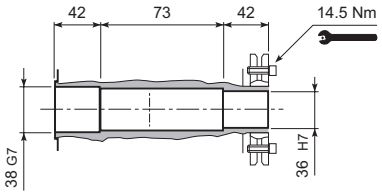
# F 31

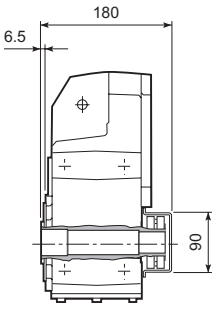
## F 31...H



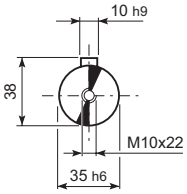



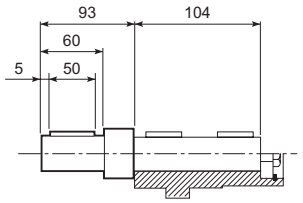
## F 31...S

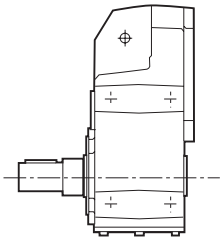



## F 31...R

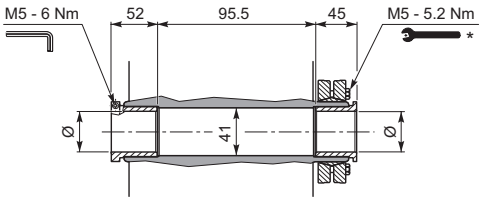


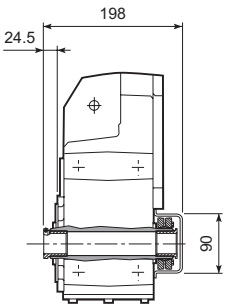



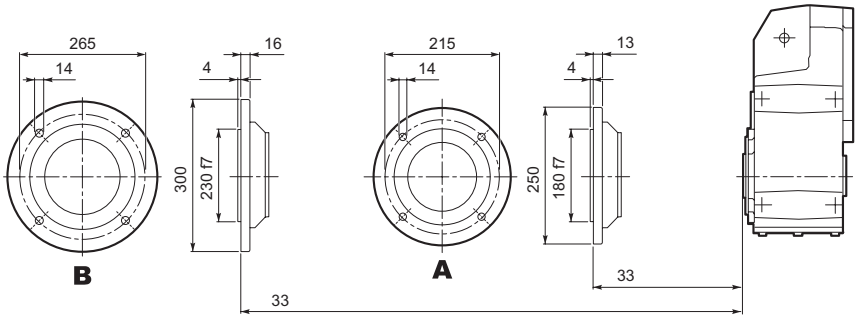
## F 31...QF

| | Ø |
|---|---|
| **QF35** | 35 |
| **QF40** | 40 |

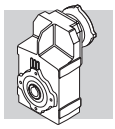


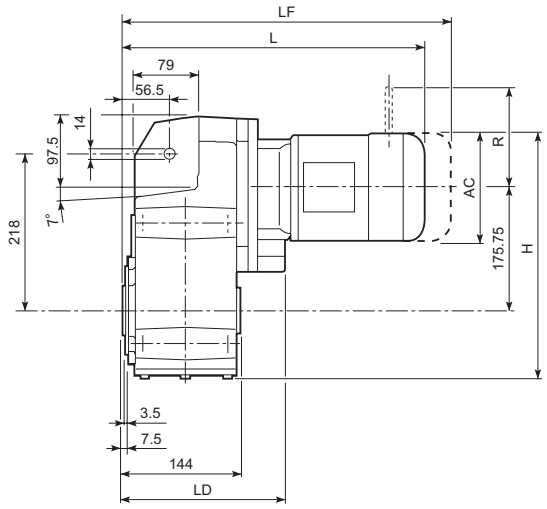

## F 31...F...

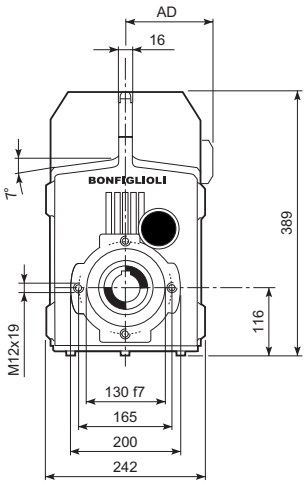



* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.



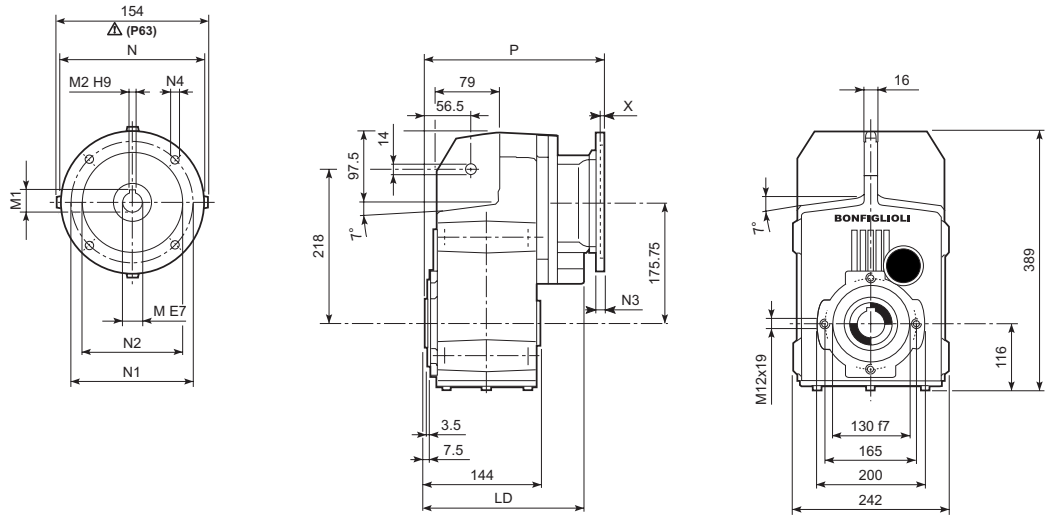
# F 41...M/ME



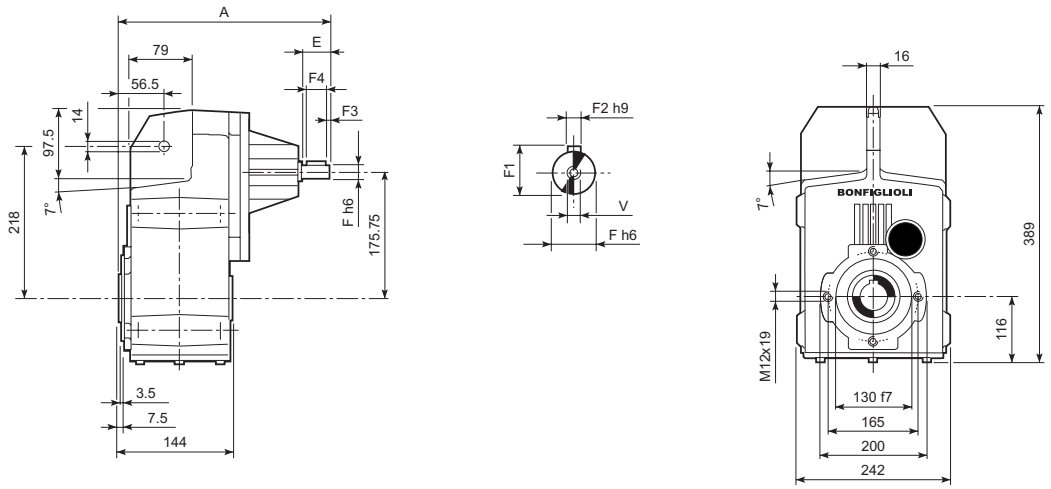

| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| **F 41 2/3** | **S1** | **M1** | 138 | 360.8 | 401 | 199.5 | 108 | 46 | 462 | 48 | 103 | 135 | 124 | 108 |
| **F 41 2/3** | **S2** | **ME2S** | 156 | 369.8 | 430 | 215 | 119 | 49 | — | — | — | — | — | — |
| **F 41 2/3** | **S3** | **ME3S** | 195 | 389.3 | 473 | 231 | 142 | 54 | — | — | — | — | — | — |
| **F 41 2/3** | **S3** | **ME3L** | 195 | 389.3 | 505 | 231 | 142 | 64 | — | — | — | — | — | — |
| **F 41 2/3** | **S4** | **ME4** | 258 | 420.8 | 613 | — | 193 | 96 | — | — | — | — | — | — |
| **F 41 2/3** | **S4** | **ME4LB** | 258 | 420.8 | 648 | — | 193 | 104 | — | — | — | — | — | — |
| **F 41 4** | **S05** | **M05** | 231 | 352.3 | 433.5 | — | 95 | 45 | 499.5 | 46 | 96 | 122 | 116 | 95 |
| **F 41 4** | **S1** | **M1** | 138 | 360.8 | 462.5 | — | 108 | 47 | 523.5 | 49 | 103 | 135 | 124 | 108 |
| **F 41 4** | **S2** | **ME2S** | 156 | 369.8 | 491.5 | — | 119 | 50 | — | — | — | — | — | — |
| **F 41 4** | **S3** | **ME3S** | 195 | 389.3 | 534.5 | — | 142 | 55 | — | — | — | — | — | — |
| **F 41 4** | **S3** | **ME3L** | 195 | 389.3 | 566.5 | — | 142 | 65 | — | — | — | — | — | — |

# F 41...P(IEC)



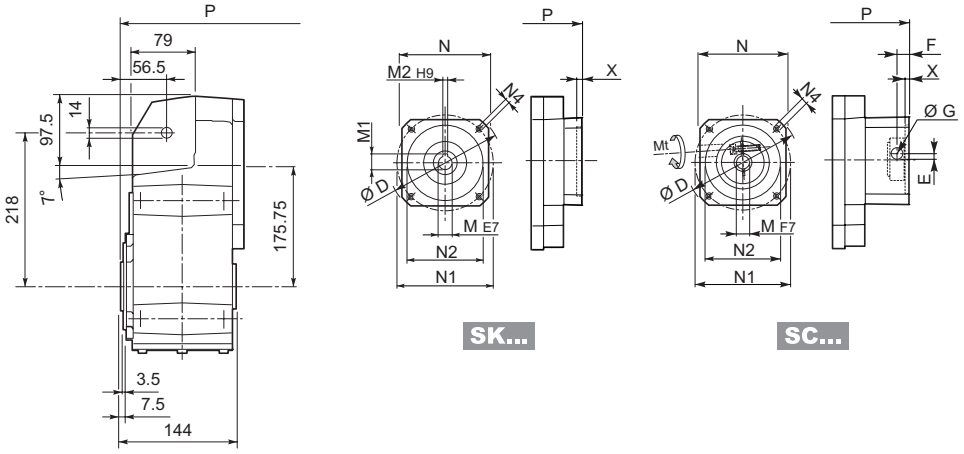

| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 41 2/3** | **P63** | 215 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 246 | 42 |
| **F 41 2/3** | **P71** | 215 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 246 | 42 |
| **F 41 2/3** | **P80** | 231 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 265.5 | 43 |
| **F 41 2/3** | **P90** | 231 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 265.5 | 43 |
| **F 41 2/3** | **P100** | 231 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 275.5 | 47 |
| **F 41 2/3** | **P112** | 231 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 275.5 | 47 |
| **F 41 2/3** | **P132** | — | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 312 | 50 |
| **F 41 4** | **P63** | — | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 307.5 | 44 |
| **F 41 4** | **P71** | — | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 307.5 | 44 |
| **F 41 4** | **P80** | — | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 327 | 45 |
| **F 41 4** | **P90** | — | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 327 | 45 |
| **F 41 4** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 337 | 49 |
| **F 41 4** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 337 | 49 |

# F 41...HS



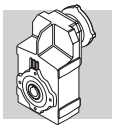

| | | A | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| **F 41 2** | **HS** | 335.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 44.9 |
| **F 41 3** | | 335.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 46.4 |
| **F 41 4** | | 357.5 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 43.5 |

# F 41...SK / SC



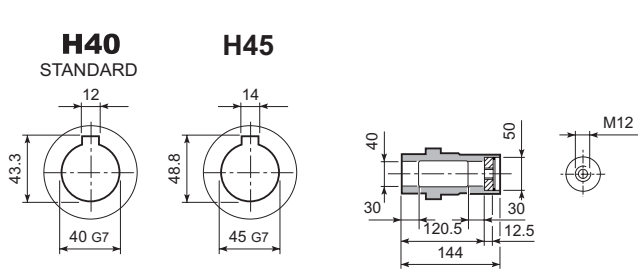

| | | | | | | | | | | | 2/3x | | 4x | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P | Kg | P | Kg |
| **F 41 4** | **SK 60A** | 102 | 11 | 12.8 | 4 | 82 | 75 | 60 | M5x10 | 3.5 | — | — | 279 | 43 |
| **F 41 4** | **SK 60B** | 102 | 14 | 16.3 | 5 | 82 | 75 | 60 | M5x10 | 4 | — | — | 286 | 44 |
| **F 41 4** | **SK 80A** | 115 | 14 | 16.3 | 5 | 90 | 100 | 80 | M6x12 | 4 | — | — | 286 | 44 |
| **F 41 2/3** | **SK 80B** | 120 | 14 | 16.3 | 5 | 96 | 100 | 80 | M6x12 | 4 | 265.5 | 43 | — | — |
| **F 41 2/3/4** | **SK 80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 265.5 | 43 | 327 | 45 |
| **F 41 2/3/4** | **SK 95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 265.5 | 43 | 327 | 45 |
| **F 41 2/3/4** | **SK 95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 265.5 | 43 | 327 | 45 |
| **F 41 2/3/4** | **SK 95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 265.5 | 43 | 327 | 45 |
| **F 41 2/3/4** | **SK 110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 265.5 | 43 | 327 | 45 |
| **F 41 2/3/4** | **SK 110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 265.5 | 43 | 327 | 45 |
| **F 41 2/3** | **SK 130A** | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 265.5 | 45 | — | — |
| **F 41 2/3** | **SK 130B** | 189 | 32 | 35.3 | 10 | 160 | 165 | 130 | M10x20 | 5 | 312 | 47 | — | — |
| **F 41 2/3** | **SK 180A** | 240 | 32 | 35.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 312 | 47 | — | — |
| **F 41 2/3** | **SK 180B** | 240 | 38 | 41.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 312 | 47 | — | — |

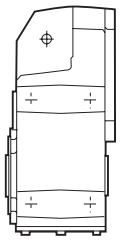
| | | | | | | | | | | | | | | 2/3x | | 4x | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Mt | D | E | F | G | M | N | N1 | N2 | N4 | X | P | Kg | P | Kg |
| **F 41 4** | **SC 60A** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 11 | 82 | 75 | 60 | M5x10 | 4 | — | — | 306 | 44 |
| **F 41 4** | **SC 60B** | M6 | 15 Nm | 102 | 7 | 12.5 | 12.5 | 14 | 82 | 75 | 60 | M5x10 | 4 | — | — | 306 | 45 |
| **F 41 4** | **SC 80A** | M6 | 15 Nm | 115 | 6 | 12.5 | 12.5 | 14 | 90 | 100 | 80 | M6x12 | 4 | — | — | 306 | 45 |
| **F 41 2/3** | **SC 80B** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 14 | 96 | 100 | 80 | M6x12 | 4 | 289 | 44 | — | — |
| **F 41 2/3/4** | **SC 80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 289 | 44 | 350.5 | 46 |
| **F 41 2/3/4** | **SC 95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 289 | 44 | 350.5 | 46 |
| **F 41 2/3/4** | **SC 95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 289 | 44 | 350.5 | 46 |
| **F 41 2/3/4** | **SC 95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 289 | 44 | 350.5 | 46 |
| **F 41 2/3/4** | **SC 110A** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 289 | 45 | 350.5 | 47 |
| **F 41 2/3/4** | **SC 110B** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 289 | 45 | 350.5 | 47 |
| **F 41 2/3** | **SC 130A** | M6 | 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 289 | 46 | — | — |
| **F 41 2/3** | **SC 130B** | M8 | 36 Nm | 189 | 20 | 17 | 17.75 | 32 | 160 | 165 | 130 | M10x20 | 5 | 335 | 50 | — | — |
| **F 41 2/3** | **SC 180A** | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 32 | 192 | 215 | 180 | M12x24 | 5 | 339 | 50 | — | — |
| **F 41 2/3** | **SC 180B** | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 38 | 192 | 215 | 180 | M12x24 | 5 | 339 | 50 | — | — |



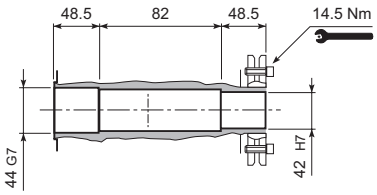
# F 41

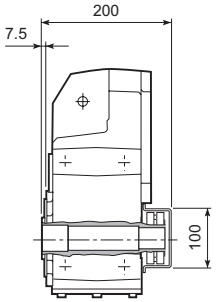
## F 41...H



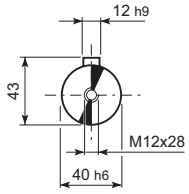



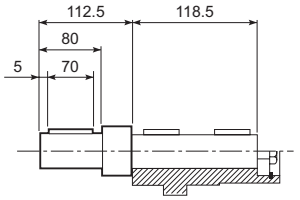
## F 41...S

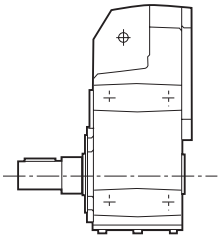



## F 41...R

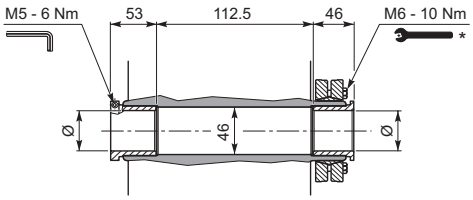


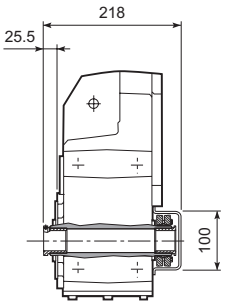



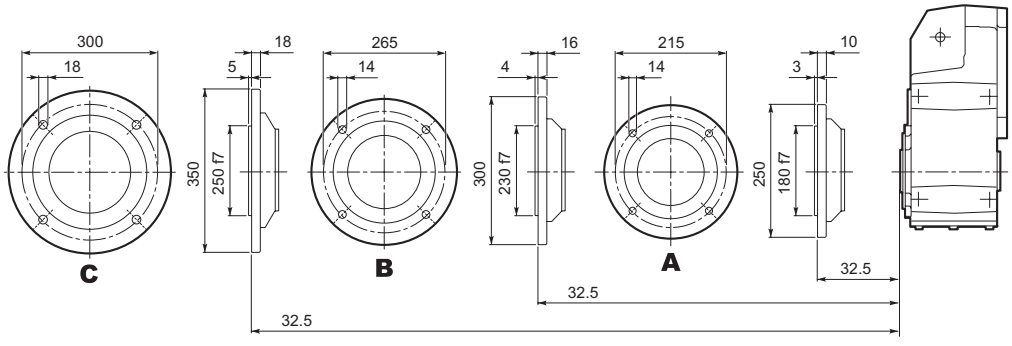
## F 41...QF

| | Ø |
|---|---|
| **QF42** | 42 |
| **QF45** | 45 |




## F 41...F...

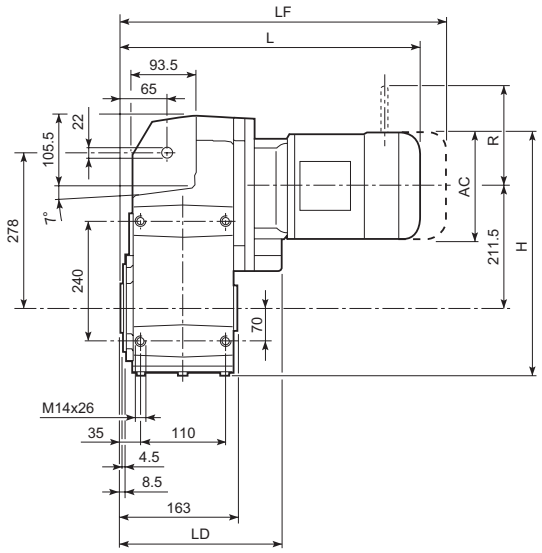


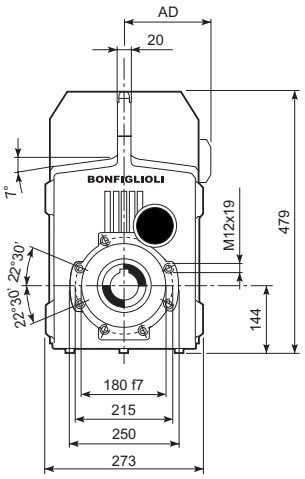

* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.



Bonfiglioli Riduttori

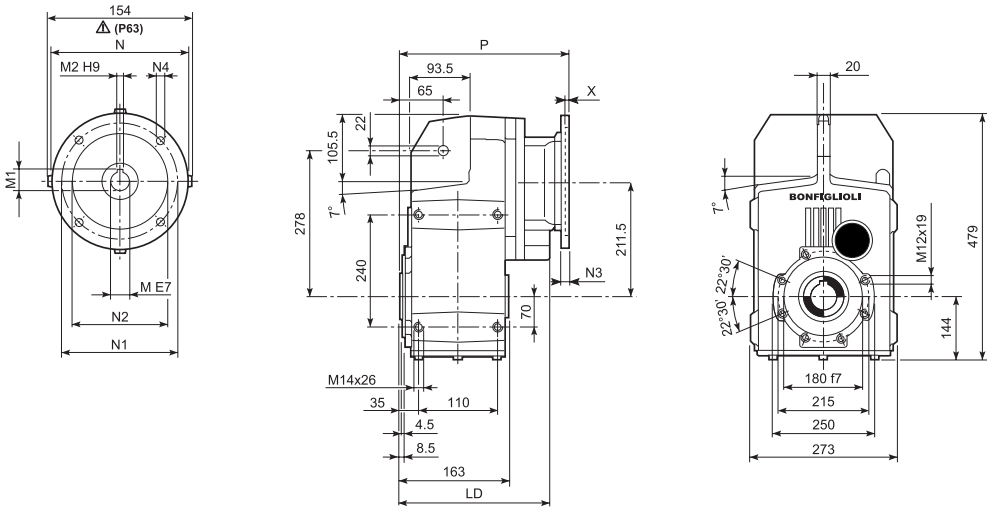
# F 51...M/ME



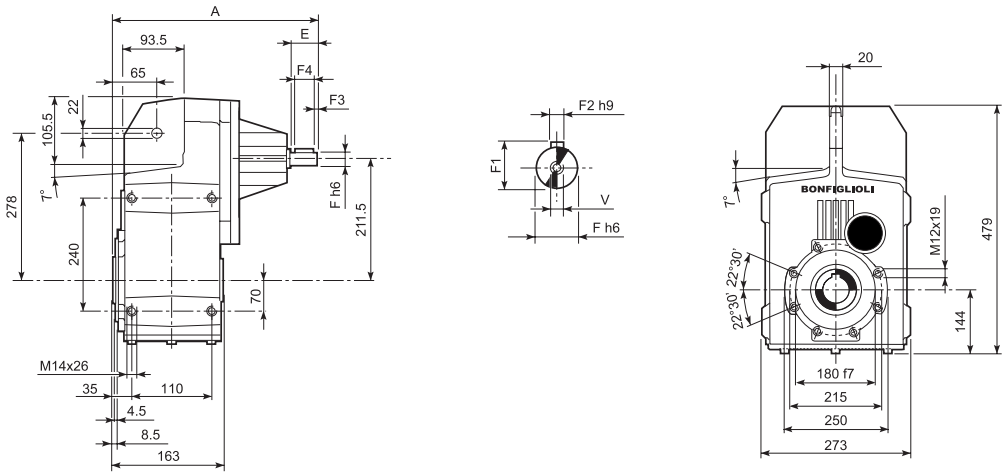

| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| **F 51 2/3** | **S1** | **M1** | 138 | 424 | 423 | — | 108 | 73 | 484 | 76 | 103 | 135 | 124 | 108 |
| **F 51 2/3** | **S2** | **ME2S** | 156 | 433 | 452 | 238 | 119 | 73 | — | — | — | — | — | — |
| **F 51 2/3** | **S3** | **ME3S** | 195 | 452.5 | 495 | 253 | 142 | 77 | — | — | — | — | — | — |
| **F 51 2/3** | **S3** | **ME3L** | 195 | 452.5 | 527 | 253 | 142 | 87 | — | — | — | — | — | — |
| **F 51 2/3** | **S4** | **ME4** | 258 | 484 | 635 | 238 | 193 | 119 | — | — | — | — | — | — |
| **F 51 2/3** | **S4** | **ME4LB** | 258 | 484 | 670 | 238 | 193 | 127 | — | — | — | — | — | — |
| **F 51 2/3** | **S5** | **ME5S** | 310 | 510 | 721.5 | — | 245 | 153 | — | — | — | — | — | — |
| **F 51 2/3** | **S5** | **ME5L** | 310 | 510 | 765.5 | — | 245 | 169 | — | — | — | — | — | — |
| **F 51 4** | **S1** | **M1** | 138 | 424 | 494.5 | — | 108 | 75 | 555.5 | 78 | 103 | 135 | 124 | 108 |
| **F 51 4** | **S2** | **ME2S** | 156 | 433 | 523.5 | — | 119 | 79 | — | — | — | — | — | — |
| **F 51 4** | **S3** | **ME3S** | 195 | 452.5 | 566.5 | — | 142 | 84 | — | — | — | — | — | — |
| **F 51 4** | **S3** | **ME3L** | 195 | 452.5 | 598.5 | — | 142 | 93 | — | — | — | — | — | — |

# F 51...P(IEC)



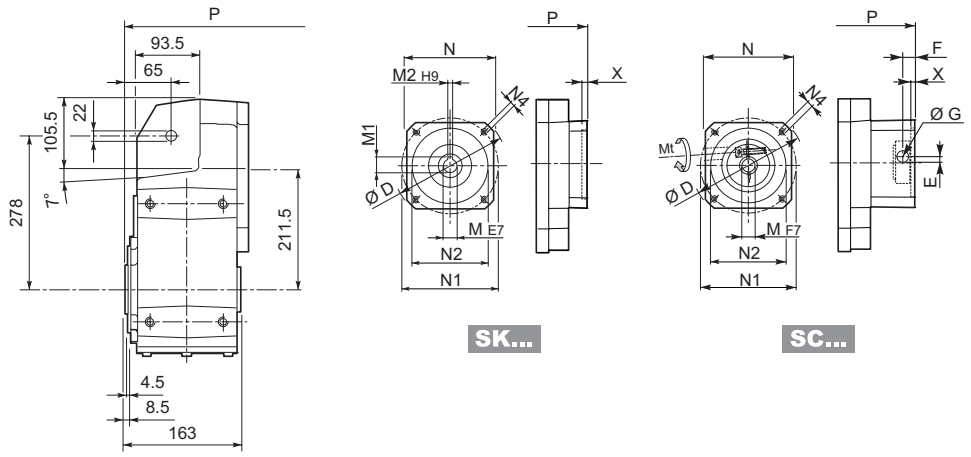

| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 51 2/3** | **P63** | 238 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 268 | 65 |
| **F 51 2/3** | **P71** | 238 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 268 | 65 |
| **F 51 2/3** | **P80** | 253 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 287.5 | 67 |
| **F 51 2/3** | **P90** | 253 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 287.5 | 67 |
| **F 51 2/3** | **P100** | 238 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 297.5 | 71 |
| **F 51 2/3** | **P112** | 238 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 297.5 | 71 |
| **F 51 2/3** | **P132** | 238 | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 334 | 74 |
| **F 51 2/3** | **P160** | — | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 5.5 | 384.5 | 78 |
| **F 51 2/3** | **P180** | — | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 5.5 | 384.5 | 78 |
| **F 51 4** | **P63** | — | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 339.5 | 70 |
| **F 51 4** | **P71** | — | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 339.5 | 70 |
| **F 51 4** | **P80** | — | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 359 | 71 |
| **F 51 4** | **P90** | — | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 359 | 71 |
| **F 51 4** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 369 | 75 |
| **F 51 4** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 369 | 75 |
| **F 51 4** | **P132** | — | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 405.5 | 78 |

# F 51...HS



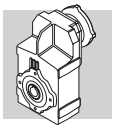

| | | A | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| **F 51 2** | **HS** | 357.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 65 |
| **F 51 3** | | 357.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 68 |
| **F 51 4** | | 389.5 | 40 | 19 | 21.5 | 6 | 2.5 | 35 | M6x16 | 70 |

# F 51...SK / SC



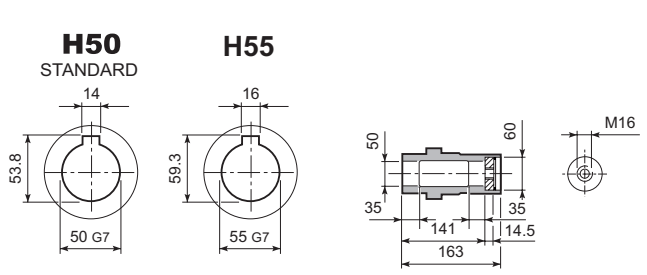

| | | | | | | | | | | | 2/3x | | 4x | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P | Kg | P | Kg |
| **F 51 2/3** | **SK 80B** | 120 | 14 | 16.3 | 5 | 96 | 100 | 80 | M6x12 | 4 | 287.5 | 67 | — | — |
| **F 51 2/3/4** | **SK 80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 287.5 | 67 | 359 | 71 |
| **F 51 2/3/4** | **SK 95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 287.5 | 67 | 359 | 71 |
| **F 51 2/3/4** | **SK 95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 287.5 | 67 | 359 | 71 |
| **F 51 2/3/4** | **SK 95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 287.5 | 67 | 359 | 71 |
| **F 51 2/3/4** | **SK 110A** | 150 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 287.5 | 67 | 359 | 71 |
| **F 51 2/3/4** | **SK 110B** | 150 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 287.5 | 67 | 359 | 71 |
| **F 51 2/3/4** | **SK 130A** | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 287.5 | 69 | 359 | 73 |
| **F 51 2/3** | **SK 130B** | 189 | 32 | 35.3 | 10 | 160 | 165 | 130 | M10x20 | 5 | 334 | 75 | — | — |
| **F 51 2/3** | **SK 180A** | 240 | 32 | 35.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 334 | 75 | — | — |
| **F 51 2/3** | **SK 180B** | 240 | 38 | 41.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 334 | 75 | — | — |

| | | | | | | | | | | | | | | 2/3x | | 4x | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Mt | D | E | F | G | M | N | N1 | N2 | N4 | X | P | Kg | P | Kg |
| **F 51 2/3** | **SC 80B** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 14 | 96 | 100 | 80 | M6x12 | 4 | 311 | 70 | — | — |
| **F 51 2/3/4** | **SC 80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 311 | 70 | 382.5 | 74 |
| **F 51 2/3/4** | **SC 95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 311 | 70 | 382.5 | 74 |
| **F 51 2/3/4** | **SC 95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 311 | 70 | 382.5 | 74 |
| **F 51 2/3/4** | **SC 95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 311 | 70 | 382.5 | 74 |
| **F 51 2/3/4** | **SC 110A** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 311 | 71 | 382.5 | 75 |
| **F 51 2/3/4** | **SC 110B** | M6 | 15 Nm | 150 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 311 | 71 | 382.5 | 75 |
| **F 51 2/3/4** | **SC 130A** | M6 | 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 311 | 72 | 382.5 | 76 |
| **F 51 2/3** | **SC 130B** | M8 | 36 Nm | 189 | 20 | 17 | 17.75 | 32 | 160 | 165 | 130 | M10x20 | 5 | 357 | 75 | — | — |
| **F 51 2/3** | **SC 180A** | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 32 | 192 | 215 | 180 | M12x24 | 5 | 361 | 75 | — | — |
| **F 51 2/3** | **SC 180B** | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 38 | 192 | 215 | 180 | M12x24 | 5 | 361 | 75 | — | — |

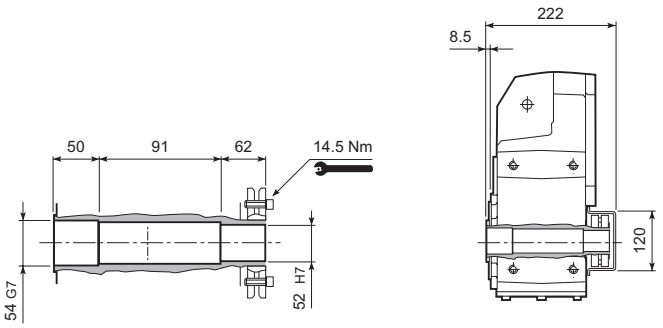


# F 51

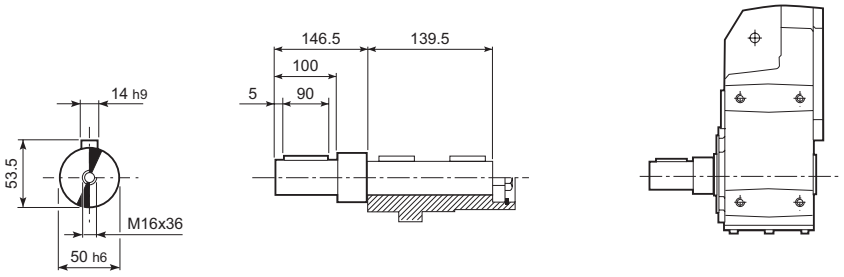
## F 51...H




## F 51...S

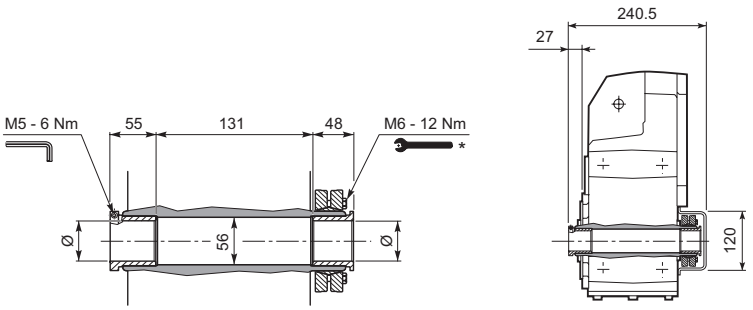



## F 51...R

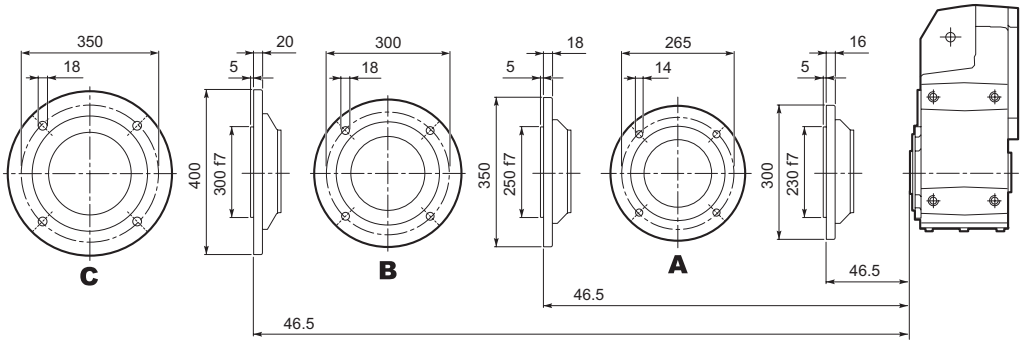



## F 51...QF

| | Ø |
|---|---|
| **QF50** | 50 |
| **QF55** | 55 |

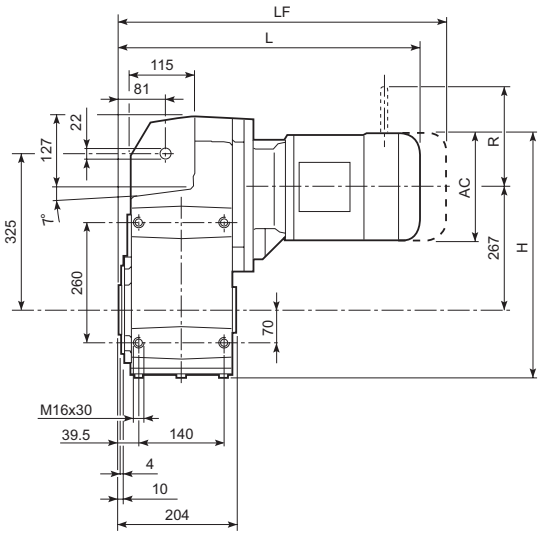


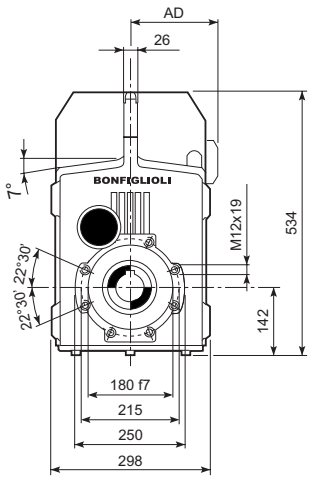

## F 51...F...




* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.

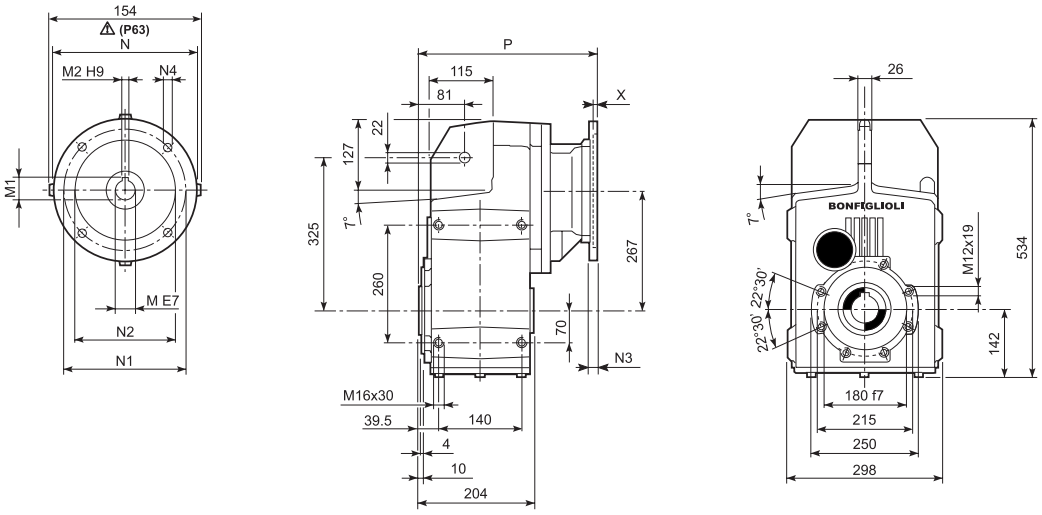
# F 60...M/ME



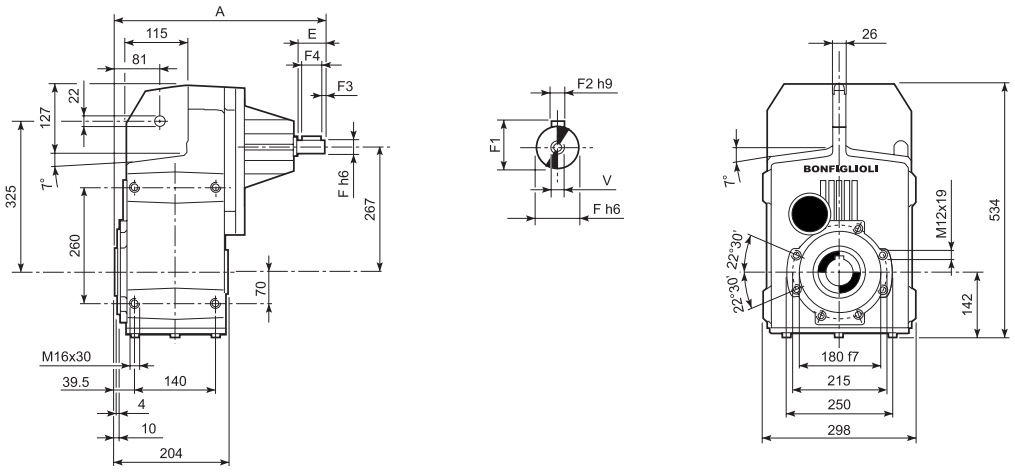

| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **F 60 3** | **S2** | **ME2S** | 156 | 487 | 486.5 | 119 | 114 | — | — | — | — | — | — |
| **F 60 3** | **S3** | **ME3S** | 195 | 506.5 | 529.5 | 142 | 114 | — | — | — | — | — | — |
| **F 60 3** | **S3** | **ME3L** | 195 | 506.5 | 561.5 | 142 | 124 | — | — | — | — | — | — |
| **F 60 3** | **S4** | **ME4** | 258 | 538 | 669.5 | 193 | 156 | — | — | — | — | — | — |
| **F 60 3** | **S4** | **ME4LB** | 258 | 538 | 704.5 | 193 | 164 | — | — | — | — | — | — |
| **F 60 3** | **S5** | **ME5S** | 310 | 564 | 756 | 245 | 184 | — | — | — | — | — | — |
| **F 60 3** | **S5** | **ME5L** | 310 | 564 | 800 | 245 | 200 | — | — | — | — | — | — |
| **F 60 4** | **S1** | **M1** | 138 | 478 | 528 | 108 | 113 | 589 | 116 | 103 | 135 | 124 | 108 |
| **F 60 4** | **S2** | **ME2S** | 156 | 487 | 557 | 119 | 117 | — | — | — | — | — | — |
| **F 60 4** | **S3** | **ME3S** | 195 | 506.5 | 600 | 142 | 122 | — | — | — | — | — | — |
| **F 60 4** | **S3** | **ME3L** | 195 | 506.5 | 632 | 142 | 131 | — | — | — | — | — | — |
| **F 60 4** | **S4** | **ME4** | 258 | 538 | 740 | 193 | 156 | — | — | — | — | — | — |
| **F 60 4** | **S4** | **ME4LB** | 258 | 538 | 775 | 193 | 164 | — | — | — | — | — | — |

# F 60...P(IEC)



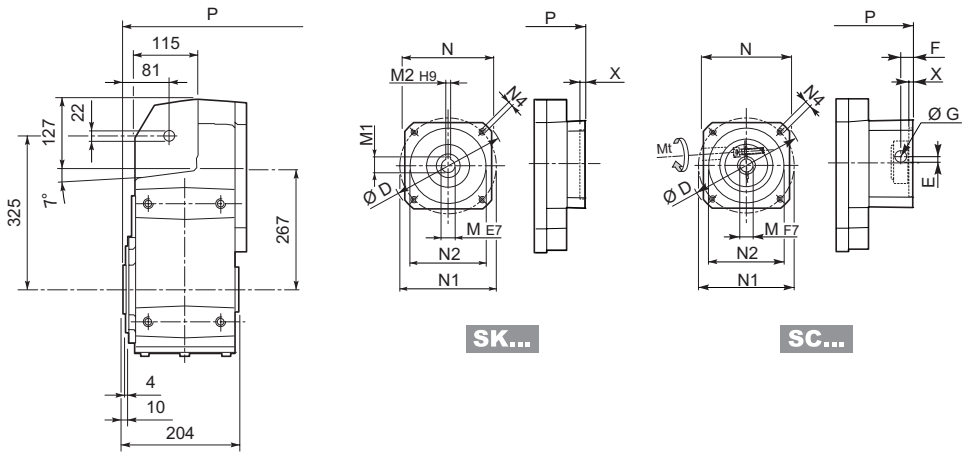

| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 60 3** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 302.5 | 103 |
| **F 60 3** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 302.5 | 103 |
| **F 60 3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 322 | 104 |
| **F 60 3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 322 | 104 |
| **F 60 3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 331 | 108 |
| **F 60 3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 331 | 108 |
| **F 60 3** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 367.5 | 111 |
| **F 60 3** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 5.5 | 419 | 116 |
| **F 60 3** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 5.5 | 419 | 116 |
| **F 60 4** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 373 | 108 |
| **F 60 4** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 373 | 108 |
| **F 60 4** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 392.5 | 110 |
| **F 60 4** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 392.5 | 110 |
| **F 60 4** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 402.5 | 114 |
| **F 60 4** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 402.5 | 114 |

# F 60...HS



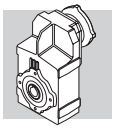

| | | A | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| **F 60 3** | **HS** | 419 | 60 | 28 | 31 | 8 | 5.0 | 50 | M10x22 | 108 |
| **F 60 4** | | 462.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 105 |

# F 60...SK / SC



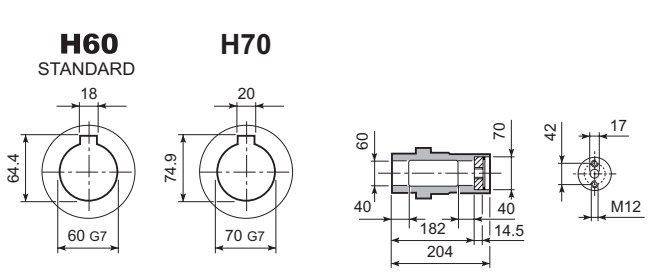

| | | | | | | | | | | | 2/3x | | 4x | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | D | M | M1 | M2 | N | N1 | N2 | N4 | X | P | Kg | P | Kg |
| **F 60 4** | **SK 80B** | 120 | 14 | 16.3 | 5 | 96 | 100 | 80 | M6x12 | 4 | — | — | 392.5 | 109 |
| **F 60 3/4** | **SK 80C** | 120 | 19 | 21.8 | 6 | 96 | 100 | 80 | M6x12 | 4 | 322 | 106 | 392.5 | 112 |
| **F 60 3/4** | **SK 95A** | 130 | 14 | 16.3 | 5 | 102 | 115 | 95 | M8x12 | 4 | 322 | 106 | 392.5 | 112 |
| **F 60 3/4** | **SK 95B** | 130 | 19 | 21.8 | 6 | 102 | 115 | 95 | M8x12 | 4 | 322 | 106 | 392.5 | 112 |
| **F 60 3/4** | **SK 95C** | 130 | 24 | 27.3 | 8 | 102 | 115 | 95 | M8x12 | 4 | 322 | 106 | 392.5 | 112 |
| **F 60 3/4** | **SK 110A** | 140 | 19 | 21.8 | 6 | 120 | 130 | 110 | M8x12 | 5 | 322 | 106 | 392.5 | 112 |
| **F 60 3/4** | **SK 110B** | 140 | 24 | 27.3 | 8 | 120 | 130 | 110 | M8x12 | 5 | 322 | 106 | 392.5 | 112 |
| **F 60 3/4** | **SK 130A** | 188 | 24 | 27.3 | 8 | 142 | 165 | 130 | M10x20 | 5 | 322 | 108 | 392.5 | 112 |
| **F 60 3** | **SK 130B** | 189 | 32 | 35.3 | 10 | 160 | 165 | 130 | M10x20 | 5 | 368.5 | 109 | — | — |
| **F 60 3** | **SK 180A** | 240 | 32 | 35.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 368.5 | 109 | — | — |
| **F 60 3** | **SK 180B** | 240 | 38 | 41.3 | 10 | 192 | 215 | 180 | M12x19 | 5 | 368.5 | 109 | — | — |

| | | | | | | | | | | | | | | 2/3x | | 4x | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Mt | D | E | F | G | M | N | N1 | N2 | N4 | X | P | Kg | P | Kg |
| **F 60 4** | **SC 80B** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 14 | 96 | 100 | 80 | M6x12 | 4 | — | — | 416 | 113 |
| **F 60 3/4** | **SC 80C** | M6 | 15 Nm | 120 | 15.5 | 14.5 | 17.75 | 19 | 96 | 100 | 80 | M6x12 | 4 | 345.5 | 107 | 416 | 113 |
| **F 60 3/4** | **SC 95A** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 14 | 102 | 115 | 95 | M8x16 | 4 | 345.5 | 107 | 416 | 113 |
| **F 60 3/4** | **SC 95B** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 19 | 102 | 115 | 95 | M8x16 | 4 | 345.5 | 107 | 416 | 113 |
| **F 60 3/4** | **SC 95C** | M6 | 15 Nm | 130 | 16.5 | 15 | 17.75 | 24 | 102 | 115 | 95 | M8x16 | 4 | 345.5 | 107 | 416 | 113 |
| **F 60 3/4** | **SC 110A** | M6 | 15 Nm | 140 | 16.5 | 16 | 17.75 | 19 | 120 | 130 | 110 | M8x16 | 5 | 345.5 | 108 | 416 | 113 |
| **F 60 3/4** | **SC 110B** | M6 | 15 Nm | 140 | 16.5 | 16 | 17.75 | 24 | 120 | 130 | 110 | M8x16 | 5 | 345.5 | 108 | 416 | 113 |
| **F 60 3/4** | **SC 130A** | M6 | 15 Nm | 188 | 19 | 16 | 17.75 | 24 | 142 | 165 | 130 | M10x20 | 5 | 345.5 | 109 | 416 | 115 |
| **F 60 3** | **SC 130B** | M8 | 36 Nm | 189 | 20 | 17 | 17.75 | 32 | 160 | 165 | 130 | M10x20 | 5 | 390.5 | 112 | — | — |
| **F 60 3** | **SC 180A** | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 32 | 192 | 215 | 180 | M12x24 | 5 | 394.5 | 112 | — | — |
| **F 60 3** | **SC 180B** | M8 | 36 Nm | 240 | 20 | 17.5 | 17.75 | 38 | 192 | 215 | 180 | M12x24 | 5 | 394.5 | 112 | — | — |

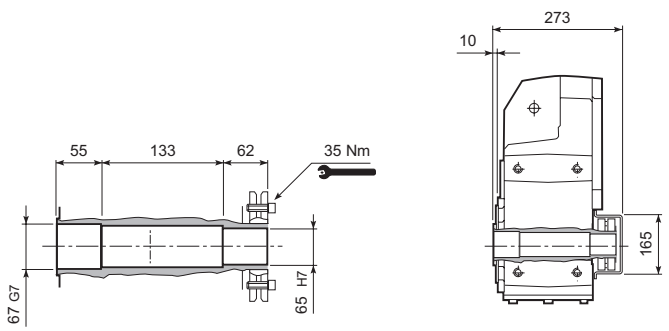


# F 60

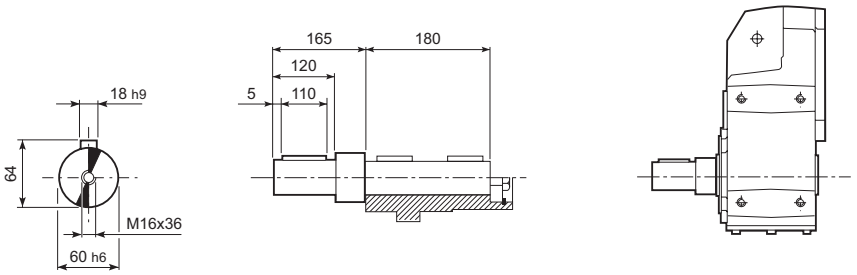
## F 60...H




## F 60...S

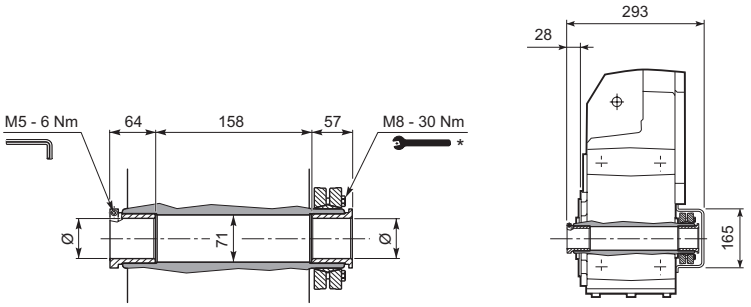



## F 60...R

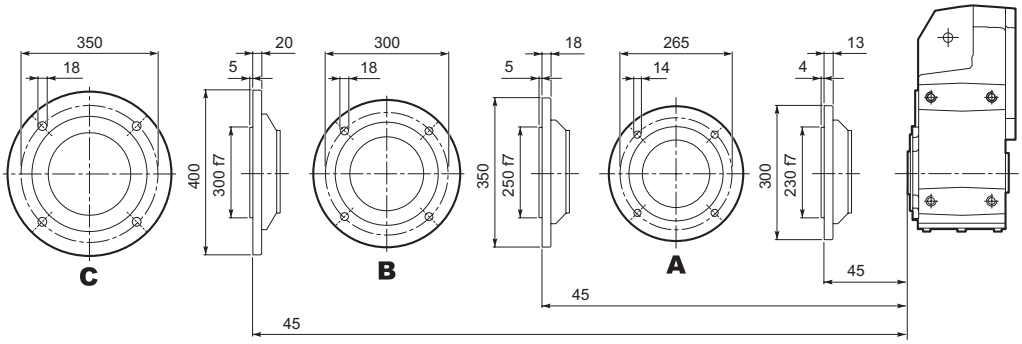



## F 60...QF

| | Ø |
|---|---|
| **QF60** | 60 |
| **QF65** | 65 |
| **QF70** | 70 |

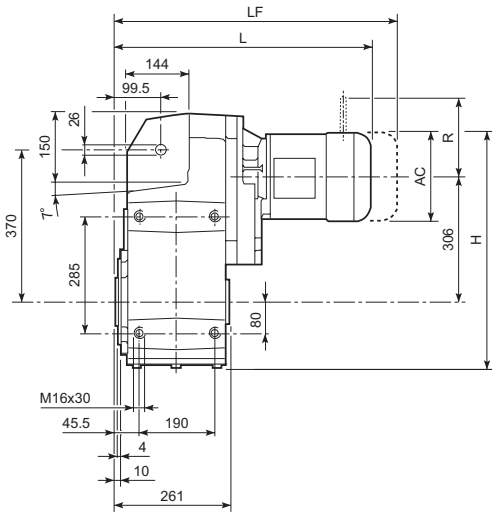


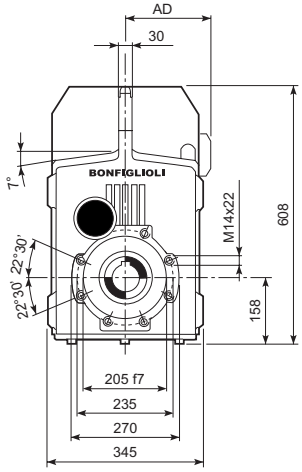

## F 60...F...




* Atenerse a las INSTRUCIONES DE MONTAJE suministradas con el reductor.

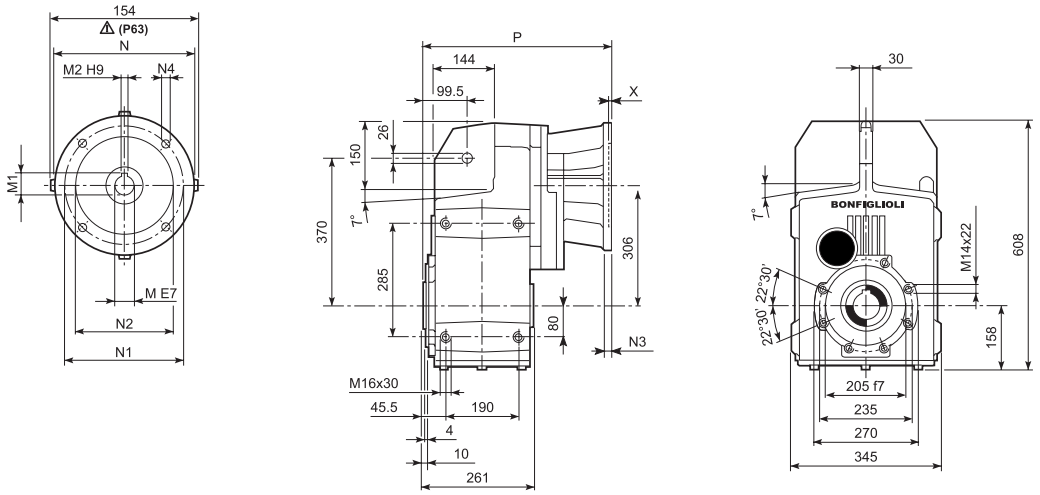
# F 70...M/ME



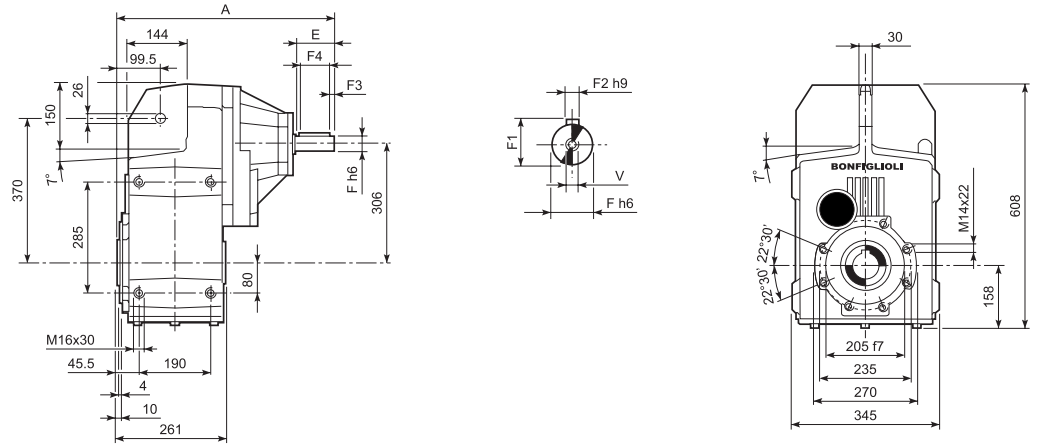

| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **F 70 3** | **S2** | **ME2S** | 156 | 542 | 552 | 119 | 173 | — | — | — | — | — | — |
| **F 70 3** | **S3** | **ME3S** | 195 | 561.5 | 595 | 142 | 178 | — | — | — | — | — | — |
| **F 70 3** | **S3** | **ME3L** | 195 | 561.5 | 627 | 142 | 188 | — | — | — | — | — | — |
| **F 70 3** | **S4** | **ME4** | 258 | 593 | 735 | 193 | 220 | — | — | — | — | — | — |
| **F 70 3** | **S4** | **ME4LB** | 258 | 593 | 770 | 193 | 228 | — | — | — | — | — | — |
| **F 70 3** | **S5** | **ME5SA** | 310 | 619 | 821.5 | 245 | 248 | — | — | — | — | — | — |
| **F 70 3** | **S5** | **ME5LA** | 310 | 619 | 865.5 | 245 | 264 | — | — | — | — | — | — |
| **F 70 4** | **S1** | **M1** | 138 | 533 | 574 | 108 | 173 | 635 | 176 | 103 | 135 | 124 | 108 |
| **F 70 4** | **S2** | **ME2S** | 156 | 542 | 603 | 119 | 177 | — | — | — | — | — | — |
| **F 70 4** | **S3** | **ME3S** | 195 | 561.5 | 646 | 142 | 181 | — | — | — | — | — | — |
| **F 70 4** | **S3** | **ME3L** | 195 | 561.5 | 678 | 142 | 191 | — | — | — | — | — | — |
| **F 70 4** | **S4** | **ME4** | 258 | 593 | 786 | 193 | 223 | — | — | — | — | — | — |
| **F 70 4** | **S4** | **ME4LB** | 258 | 593 | 821 | 193 | 231 | — | — | — | — | — | — |

# F 70...P(IEC)




| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 70 3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 387.5 | 167 |
| **F 70 3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 387.5 | 167 |
| **F 70 3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 397.5 | 171 |
| **F 70 3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 397.5 | 171 |
| **F 70 3** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 434 | 173 |
| **F 70 3** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 6 | 489.5 | 185 |
| **F 70 3** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 6 | 489.5 | 185 |
| **F 70 3** | **P200** | 55 | 59.3 | 16 | 400 | 350 | 300 | — | M16x25 | 7 | 514.5 | 206 |
| **F 70 4** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 419 | 168 |
| **F 70 4** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 419 | 168 |
| **F 70 4** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 438.5 | 170 |
| **F 70 4** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 438.5 | 170 |
| **F 70 4** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 446.5 | 174 |
| **F 70 4** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 446.5 | 174 |
| **F 70 4** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 482 | 176 |

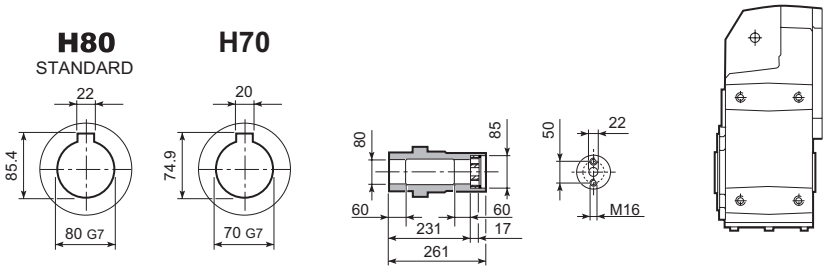
# F 70...HS



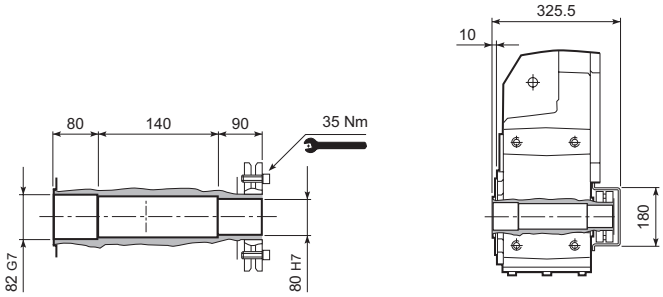

| | | A | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| **F 70 3** | **HS** | 572 | 110 | 42 | 45 | 12 | 10 | 90 | M12x28 | 186 |
| **F 70 4** | | 508.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 174 |

# F 70

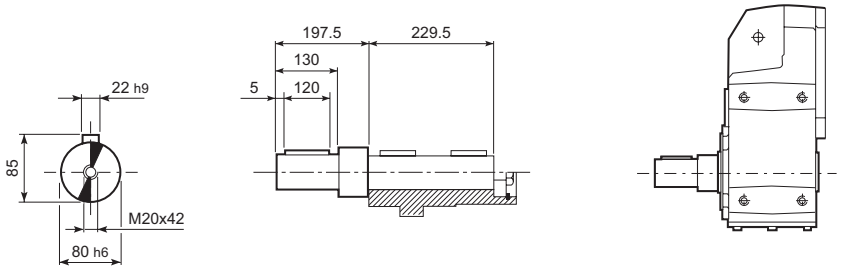
## F 70...H



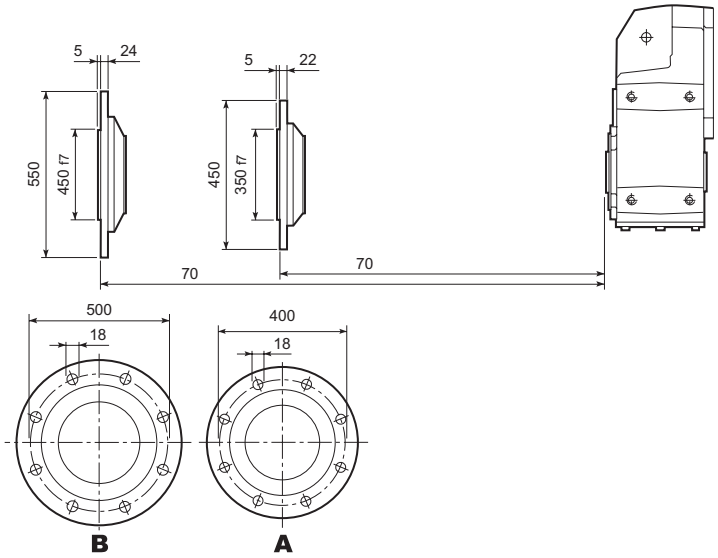

## F 70...S



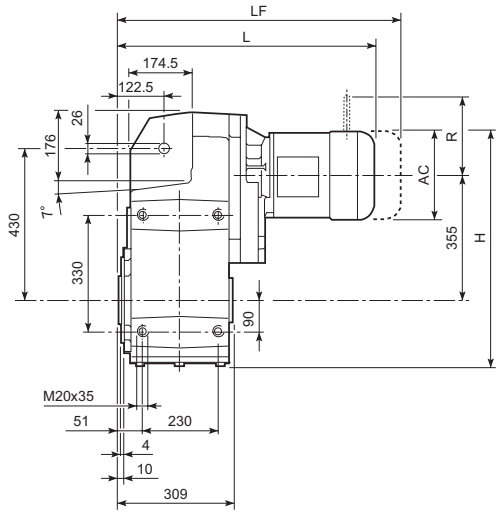

## F 70...R

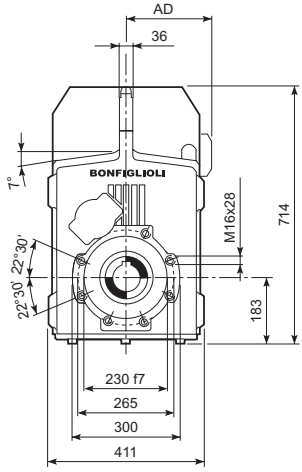



## F 70...F...



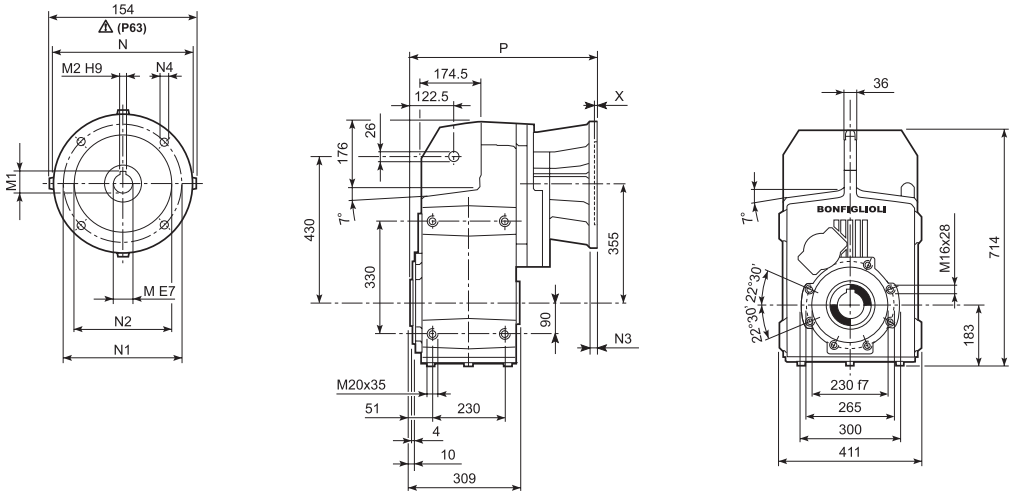
# F 80...M/ME



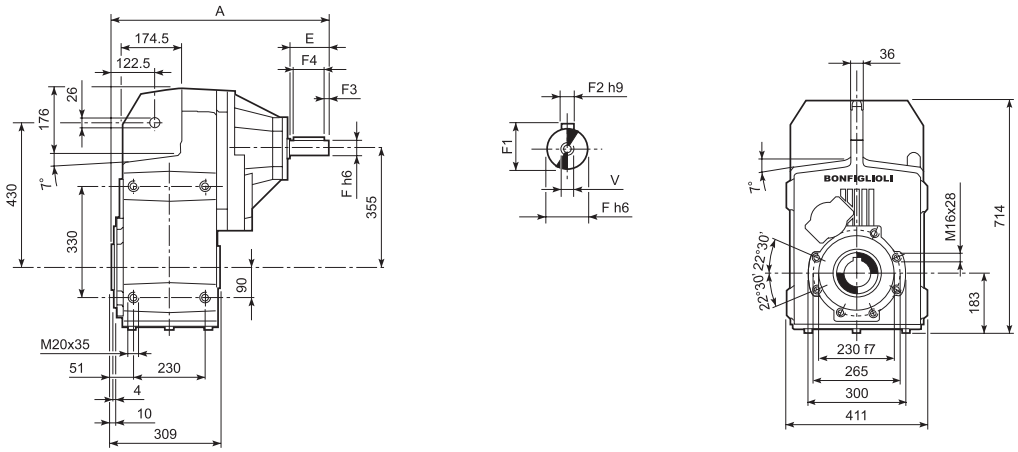

| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **F 80 3** | **S3** | **ME3S** | 195 | 635.5 | 653 | 142 | 266 | — | — | — | — | — | — |
| **F 80 3** | **S3** | **ME3L** | 195 | 635.5 | 685 | 142 | 275 | — | — | — | — | — | — |
| **F 80 3** | **S4** | **ME4** | 258 | 667 | 793 | 193 | 307 | — | — | — | — | — | — |
| **F 80 3** | **S4** | **ME4LB** | 258 | 667 | 828 | 193 | 315 | — | — | — | — | — | — |
| **F 80 3** | **S5** | **ME5S** | 310 | 693 | 879.5 | 245 | 335 | — | — | — | — | — | — |
| **F 80 3** | **S5** | **ME5L** | 310 | 693 | 923.5 | 245 | 351 | — | — | — | — | — | — |
| **F 80 4** | **S1** | **M1** | 138 | 607 | 644 | 108 | 262 | 705 | 265 | 103 | 135 | 124 | 108 |
| **F 80 4** | **S2** | **M2S** | 156 | 616 | 673 | 119 | 266 | 743 | 269 | 129 | 146 | 134 | 119 |
| **F 80 4** | **S2** | **ME2S** | 156 | 616 | 673 | 119 | 266 | — | — | — | — | — | — |
| **F 80 4** | **S3** | **ME3S** | 195 | 635.5 | 716 | 142 | 271 | — | — | — | — | — | — |
| **F 80 4** | **S3** | **ME3L** | 195 | 635.5 | 748 | 142 | 280 | — | — | — | — | — | — |
| **F 80 4** | **S4** | **ME4** | 258 | 667 | 856 | 193 | 312 | — | — | — | — | — | — |
| **F 80 4** | **S4** | **ME4LB** | 258 | 667 | 891 | 193 | 320 | — | — | — | — | — | — |

# F 80...P(IEC)




| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 80 3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 445.5 | 255 |
| **F 80 3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 445.5 | 255 |
| **F 80 3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 455.5 | 259 |
| **F 80 3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 455.5 | 259 |
| **F 80 3** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 492 | 261 |
| **F 80 3** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 6 | 547.5 | 276 |
| **F 80 3** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 6 | 547.5 | 276 |
| **F 80 3** | **P200** | 55 | 59.3 | 16 | 400 | 350 | 300 | — | M16x25 | 7 | 572.5 | 298 |
| **F 80 3** | **P225** | 60 | 64.4 | 18 | 450 | 400 | 350 | 25 | 18 | 6 | 618 | 298 |
| **F 80 4** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 489 | 258 |
| **F 80 4** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 489 | 258 |
| **F 80 4** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 508.5 | 260 |
| **F 80 4** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 508.5 | 260 |
| **F 80 4** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 518.5 | 264 |
| **F 80 4** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 518.5 | 264 |
| **F 80 4** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 552 | 266 |

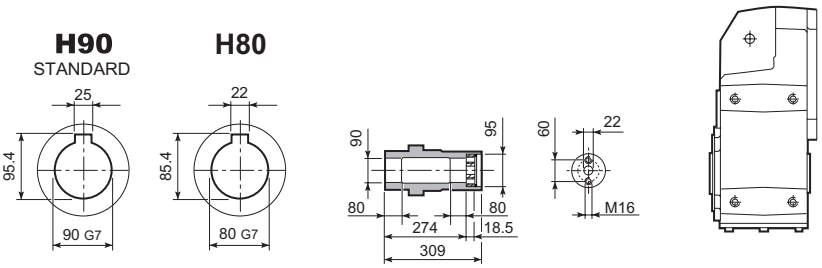
# F 80...HS



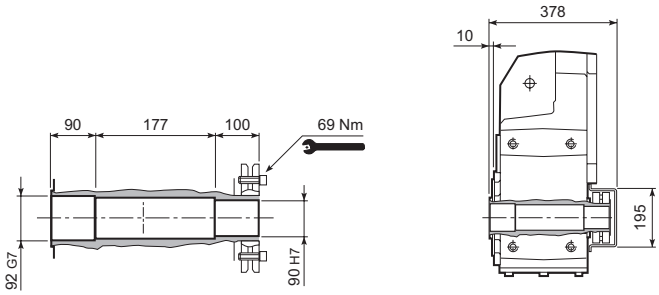

| | | A | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| **F 80 3** | **HS** | 630 | 110 | 42 | 45 | 12 | 10 | 90 | M12x28 | 273 |
| **F 80 4** | | 575.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 263 |

# F 80

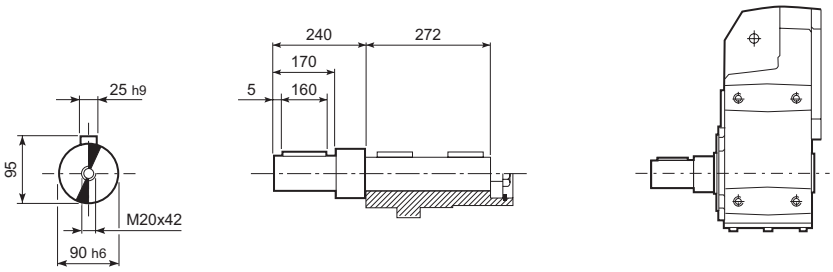
## F 80...H



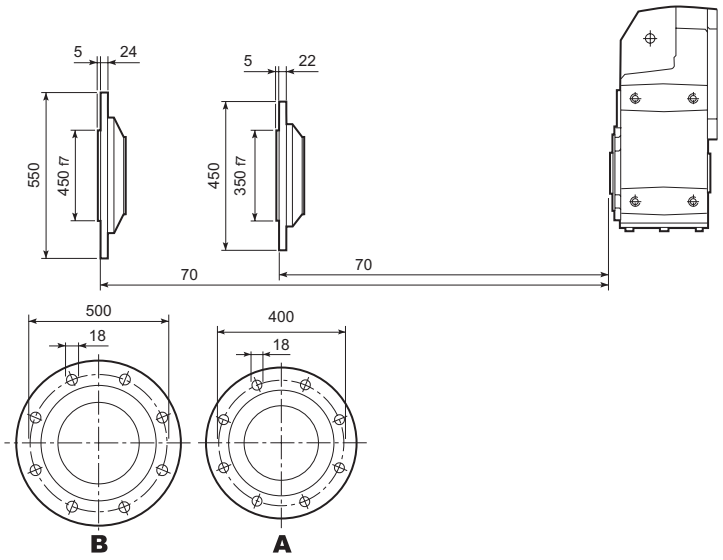

## F 80...S



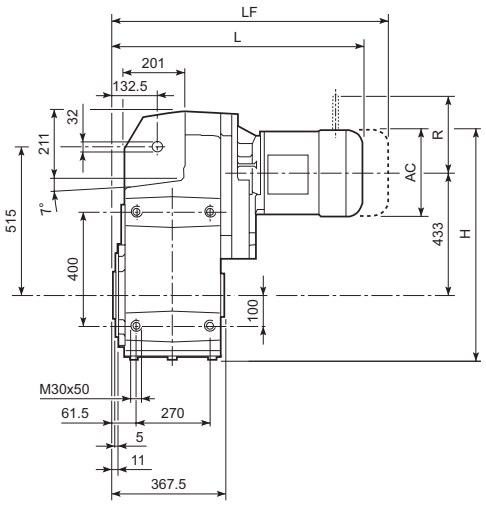

## F 80...R

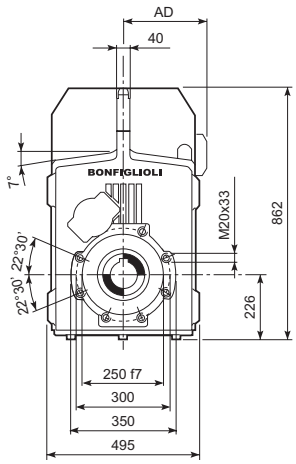



## F 80...F...



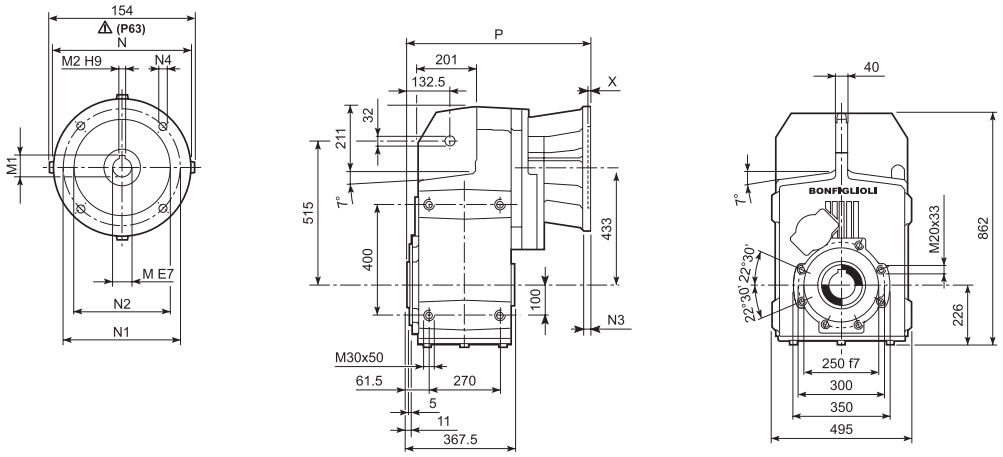
# F 90...M/ME



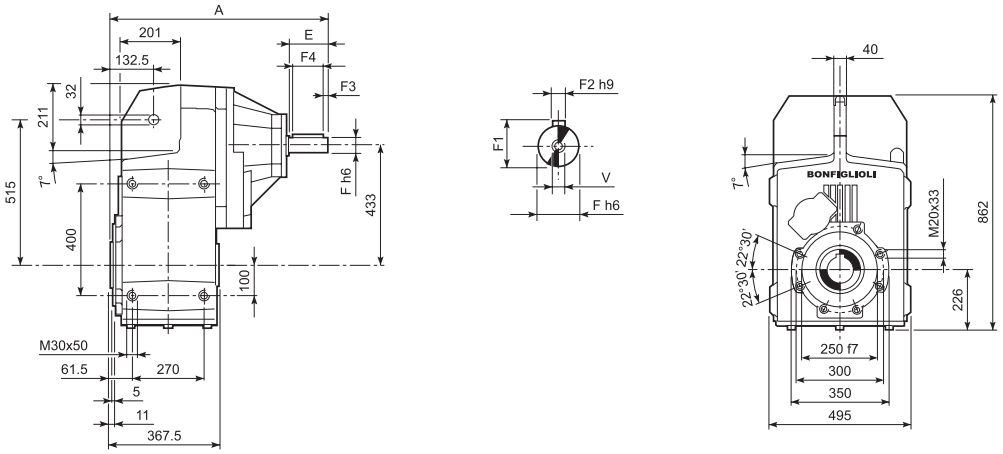

| | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **F 90 3** | **S3** | **ME3S** | 195 | 756 | 728 | 142 | 453 | — | — | — | — | — | — |
| **F 90 3** | **S3** | **ME3L** | 195 | 756 | 760 | 142 | 462 | — | — | — | — | — | — |
| **F 90 3** | **S4** | **ME4** | 258 | 787.5 | 868 | 193 | 494 | — | — | — | — | — | — |
| **F 90 3** | **S5** | **ME5L** | 310 | 813.5 | 998.5 | 245 | 538 | — | — | — | — | — | — |
| **F 90 4** | **S2** | **M2S** | 156 | 736.5 | 768 | 119 | 456 | 838 | 460 | 129 | 146 | 134 | 119 |
| **F 90 4** | **S2** | **ME2S** | 156 | 736.5 | 768 | 119 | 456 | — | — | — | — | — | — |
| **F 90 4** | **S3** | **ME3S** | 195 | 756 | 811 | 142 | 460 | — | — | — | — | — | — |
| **F 90 4** | **S3** | **ME3L** | 195 | 756 | 843 | 142 | 470 | — | — | — | — | — | — |
| **F 90 4** | **S4** | **ME4** | 258 | 787.5 | 951 | 193 | 502 | — | — | — | — | — | — |
| **F 90 4** | **S4** | **ME4LB** | 258 | 787.5 | 986 | 193 | 510 | — | — | — | — | — | — |

# F 90...P(IEC)




| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | X | P | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 90 3** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 520.5 | 442 |
| **F 90 3** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 520.5 | 442 |
| **F 90 3** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 530.5 | 446 |
| **F 90 3** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 530.5 | 446 |
| **F 90 3** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 567 | 449 |
| **F 90 3** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 6 | 622.5 | 463 |
| **F 90 3** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 6 | 622.5 | 463 |
| **F 90 3** | **P200** | 55 | 59.3 | 16 | 400 | 350 | 300 | — | M16x25 | 7 | 647.5 | 485 |
| **F 90 3** | **P225** | 60 | 64.4 | 18 | 450 | 400 | 350 | 30 | 18 | 6 | 693 | 485 |
| **F 90 3** | **P250** | 65 | 69.4 | 18 | 550 | 500 | 450 | 30 | 18 | 6 | 723 | 507 |
| **F 90 4** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x19 | 4 | 584 | 448 |
| **F 90 4** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x16 | 4.5 | 584 | 448 |
| **F 90 4** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 4 | 603.5 | 450 |
| **F 90 4** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 4 | 603.5 | 450 |
| **F 90 4** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 613.5 | 454 |
| **F 90 4** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 4.5 | 613.5 | 454 |
| **F 90 4** | **P132** | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 5 | 650 | 455 |
| **F 90 4** | **P160** | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 5.5 | 700.5 | 461 |
| **F 90 4** | **P180** | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 5.5 | 700.5 | 461 |

# F 90...HS



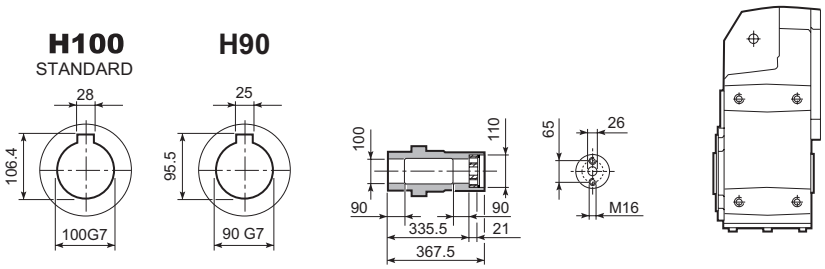

| | | A | E | F | F1 | F2 | F3 | F4 | V | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| **F 90 3** | **HS** | 806.5 | 140 | 60 | 64 | 18 | 10 | 120 | M16x36 | 485 |
| **F 90 4** | | 673.5 | 50 | 24 | 27 | 8 | 2.5 | 45 | M8x19 | 452 |



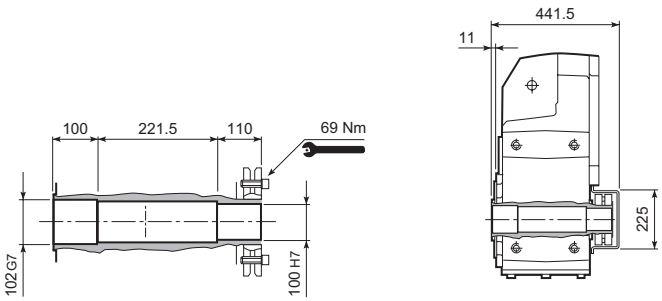
Bonfiglioli Riduttori

# F 90

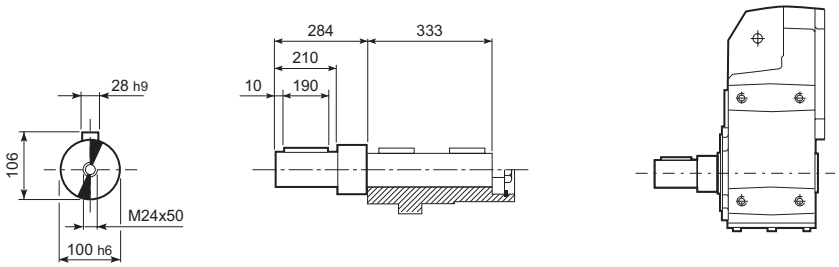
## F 90...H



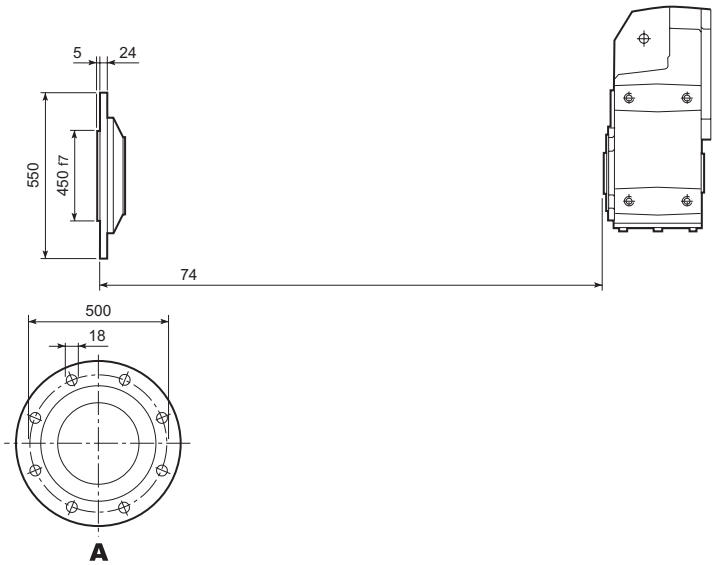

## F 90...S




## F 90...R



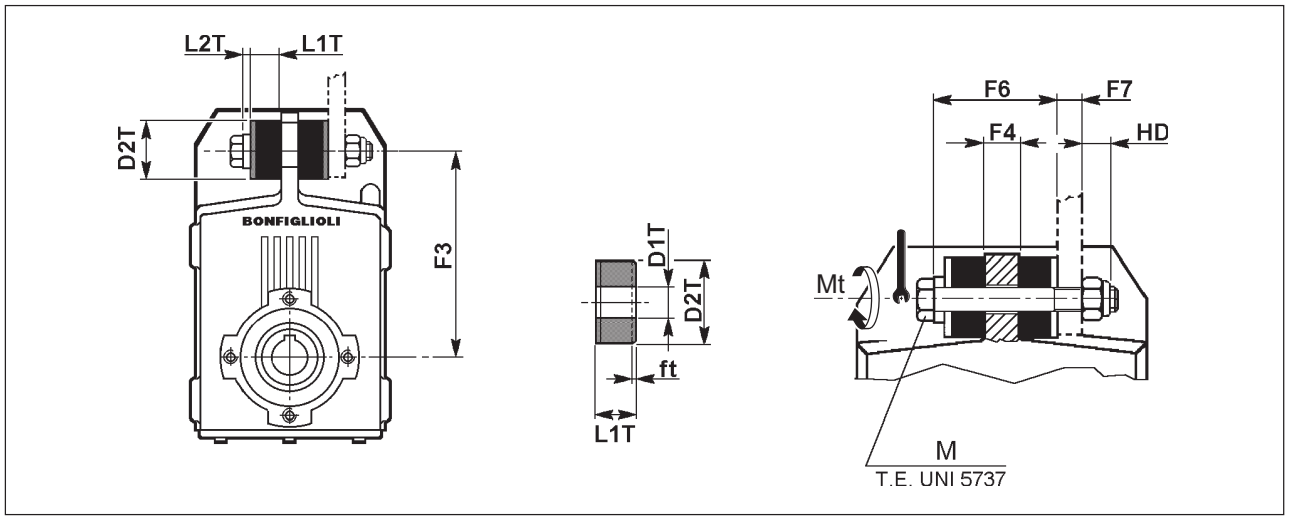

## F 90...F...



## 63 ACCESORIOS

### Kit de fijación para brazo de Reacción

Los reductores de la serie F pueden ser equipados, bajo pedido, de un kit de fijación para brazo de reacción (antivibratorio) que incluye los elementos necesarios para la fijación pendular (brazo de reacción excluido).
Las dimensiones se muestran en la tabla siguiente.



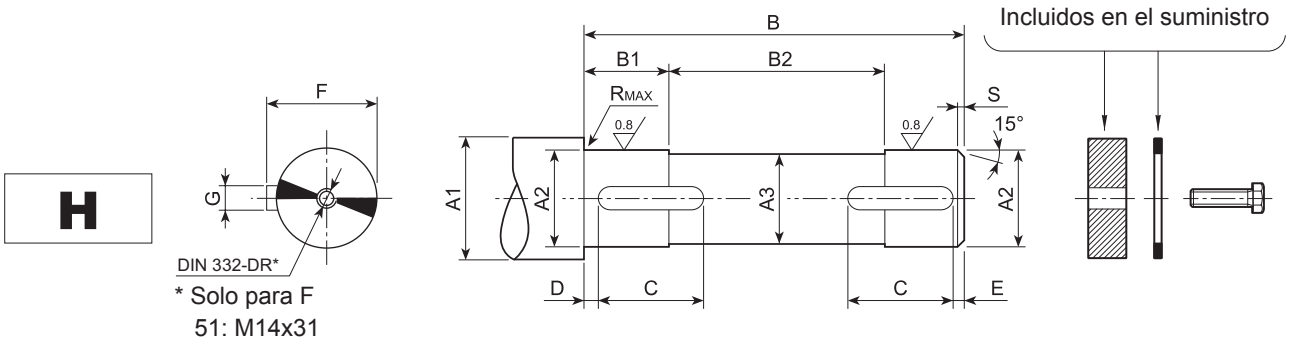

| | F3 | F4 | F6 | F7 (max.) | HD | L1T | L2T | D1T | D2T | M | Mt [Nm] | ft |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 10** | 140 | 20 | 55 | 10 | 12.3 | 15 | 5 | 11 | 30 | M10x80 | 10 | 1.5 |
| **F 20** | 160 | 20 | 55 | 10 | 12.3 | 15 | 5 | 11 | 30 | M10x80 | 10 | 1.5 |
| **F 25** | 162 | 20 | 65 | 20 | 14.8 | 20 | 5 | 12.5 | 40 | M12x100 | 20 | 1.5 |
| **F 31** | 170 | 20 | 65 | 20 | 14.8 | 20 | 5 | 12.5 | 40 | M12x100 | 20 | 1.5 |
| **F 41** | 218 | 16 | 61 | 24 | 14.8 | 20 | 5 | 12.5 | 40 | M12x100 | 20 | 2.3 |
| **F 51** | 278 | 20 | 90 | 47 | 23 | 30 | 10 | 21 | 60 | M20x160 | 50 | 3.0 |
| **F 60** | 325 | 26 | 96 | 41 | 23 | 30 | 10 | 21 | 60 | M20x160 | 50 | 4.0 |
| **F 70** | 370 | 30 | 122 | 50 | 28 | 40 | 12 | 25 | 80 | M24x200 | 100 | 4.0 |
| **F 80** | 430 | 36 | 128 | 44 | 28 | 40 | 12 | 25 | 80 | M24x200 | 100 | 6.0 |
| **F 90** | 515 | 40 | 175 | 40 | 33.2 | 60 | 15 | 32 | 100 | M30x260 | 200 | 9.0 |

$f_t$ = variación dimensional del disco de goma antivibración.

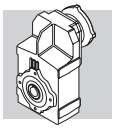
## 64 EJE DE LA MÁQUINA

En la construcción del eje de la máquina que ha de acoplarse al reductor se aconseja utilizar acero de buena calidad y efectuar la mecanización como se indica en el esquema siguiente.

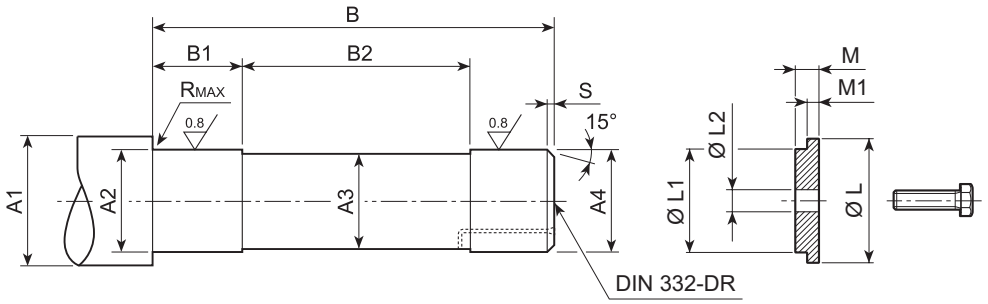
Aconsejamos, además, completar el montaje con un dispositivo que asegure la fijación axial del eje (no diseñado). La cantidad y dimensiones del/de lo/s taladro/s roscado/s en la extremidad del eje se determinará/n según las diversas exigencias de la aplicación.




| | A1 | A2 | A3 | B | B1 | B2 | C | D | E | F | G | R | S | UNI 6604 | UNI 5739 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 10** | ≥ 35 | 30 h7 | 29 | 87.5 | 15.5 | 56.5 | 20 | 2 | 2 | 33 | 8 h9 | 0.5 | 1.5 | 8x7x20 A | M8x25 |
| | ≥ 30 | 25 h7 | 24 | 87.5 | 15.5 | 56.5 | 20 | 2 | 2 | 28 | 8 h9 | 0.5 | 1.5 | 8x7x20 A | |
| **F 20** | ≥ 42 | 35 h7 | 34 | 99 | 18 | 63 | 22 | 2 | 2 | 38 | 10 h9 | 0.5 | 1.5 | 10x8x22 A | M8x30 |
| | ≥ 35 | 30 h7 | 29 | 99 | 18 | 63 | 22 | 2 | 2 | 33 | 8 h9 | 0.5 | 1.5 | 8x7x22 A | |
| **F 25** | ≥ 47 | 40 h7 | 39 | 104 | 23 | 58 | 30 | 2 | 2 | 43 | 12 h9 | 0.5 | 1.5 | 12x8x30 A | M8x30 |
| | ≥ 42 | 35 h7 | 34 | 104 | 23 | 58 | 30 | 2 | 2 | 38 | 10 h9 | 0.5 | 1.5 | 10x8x30 A | |
| **F 31** | ≥ 47 | 40 h7 | 39 | 104 | 28 | 48 | 30 | 2 | 2 | 43 | 12 h9 | 0.5 | 1.5 | 12x8x30 A | M8x30 |
| | ≥ 42 | 35 h7 | 34 | 104 | 28 | 48 | 30 | 2 | 2 | 38 | 10 h9 | 0.5 | 1.5 | 10x8x30 A | |
| **F 41** | ≥ 52 | 45 h7 | 44 | 118 | 27.5 | 63 | 45 | 2.5 | 2.5 | 49.5 | 14 h9 | 1 | 2.0 | 14x9x45 A | M10x30 |
| | ≥ 47 | 40 h7 | 39 | 118 | 27.5 | 63 | 45 | 2.5 | 2.5 | 43 | 12 h9 | 1 | 2.0 | 12x8x45 A | |
| **F 51** | ≥ 63 | 55 h7 | 54 | 139 | 33 | 73 | 50 | 2.5 | 2.5 | 59 | 16 h9 | 1 | 2.0 | 16x10x50 A | M14x45 |
| | ≥ 57 | 50 h7 | 49 | 139 | 33 | 73 | 50 | 2.5 | 2.5 | 53.5 | 14 h9 | 1 | 2.0 | 14x9x50 A | |
| **F 60** | ≥ 78 | 70 h7 | 69 | 180 | 38 | 104 | 70 | 2.5 | 2.5 | 74.5 | 20 h9 | 1 | 2.0 | 20x12x70 A | M16x45 |
| | ≥ 68 | 60 h7 | 59 | 180 | 38 | 104 | 70 | 2.5 | 2.5 | 64 | 18 h9 | 1 | 2.0 | 18x11x70 A | |
| **F 70** | ≥ 89 | 80 h7 | 79 | 229 | 58 | 113 | 75 | 3 | 3 | 85 | 22 h9 | 2.5 | 2.5 | 22x14x75 A | M20x55 |
| | ≥ 78 | 70 h7 | 69 | 229 | 58 | 113 | 75 | 3 | 3 | 74.5 | 20 h9 | 2.5 | 2.5 | 20x12x75 A | |
| **F 80** | ≥ 99 | 90 h7 | 89 | 272 | 78 | 116 | 100 | 3 | 3 | 95 | 25 h9 | 2.5 | 2.5 | 25x14x100 A | M20x55 |
| | v 89 | 80 h7 | 79 | 272 | 78 | 116 | 100 | 3 | 3 | 85 | 22 h9 | 2.5 | 2.5 | 22x14x100 A | |
| **F 90** | ≥ 111 | 100 h7 | 99 | 333 | 87.5 | 158 | 110 | 3 | 3 | 106 | 28 h9 | 2.5 | 2.5 | 28x16x110 A | M24x65 |
| | ≥ 99 | 90 h7 | 89 | 333 | 87.5 | 158 | 110 | 3 | 3 | 95 | 25 h9 | 2.5 | 2.5 | 25x14x110 A | |

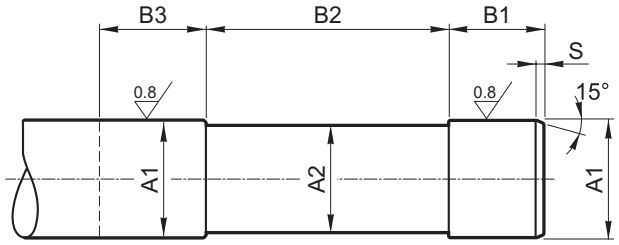


## S

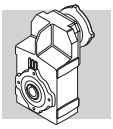



| | A1 | A2 | A3 | A4 | B | B1 | B2 | R | S | L | L1 | L2 | M | M1 | UNI 5739 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F 10** | ≥ 36 | 27 h7 | 24 | 25 h6 | 138 | 34 | 70 | 0.5 | 1.5 | 29.5 | 25 d9 | 9 | 7 | 5.5 | M8x25 |
| **F 20** | ≥ 42 | 32 h7 | 29 | 30 h6 | 160 | 38 | 84 | 0.5 | 1.5 | 35.5 | 30 d9 | 9 | 7 | 5.5 | M8x25 |
| **F 25** | ≥ 42 | 32 h7 | 30 | 31 h6 | 172 | 38 | 96 | 0.5 | 1.5 | 35.5 | 31 d9 | 9 | 7 | 5.5 | M8x25 |
| **F 31** | ≥ 50 | 38 h7 | 35 | 36 h6 | 155 | 40 | 73 | 1 | 2 | 43 | 36 d9 | 9 | 7 | 5.5 | M8x25 |
| **F 41** | ≥ 58 | 44 h7 | 41 | 42 h6 | 177 | 46.5 | 82 | 1 | 2 | 49 | 42 d9 | 11 | 8.5 | 7 | M10x30 |
| **F 51** | ≥ 68 | 54 h7 | 51 | 52 g6 | 201 | 48 | 91 | 1 | 2 | 61 | 52 d9 | 18 | 9 | 7.5 | M16x45 |
| **F 60** | ≥ 84 | 67 h7 | 64 | 65 g6 | 248 | 53 | 133 | 1.5 | 2 | 80 | 65 d9 | 18 | 9 | 7.5 | M16x45 |
| **F 70** | ≥ 104 | 82 h7 | 79 | 80 g6 | 308 | 78 | 140 | 2.5 | 2.5 | 95 | 80 d9 | 22 | 13.5 | 12 | M20x55 |
| **F 80** | ≥ 114 | 92 h7 | 89 | 90 g6 | 365 | 88 | 177 | 2.5 | 2.5 | 105 | 90 d9 | 22 | 13.5 | 12 | M20x55 |
| **F 90** | ≥ 126 | 102 h7 | 99 | 100 g6 | 429.5 | 98 | 221.5 | 2.5 | 2.5 | 120 | 100 d9 | 26 | 20 | 18.5 | M24x70 |

## QF



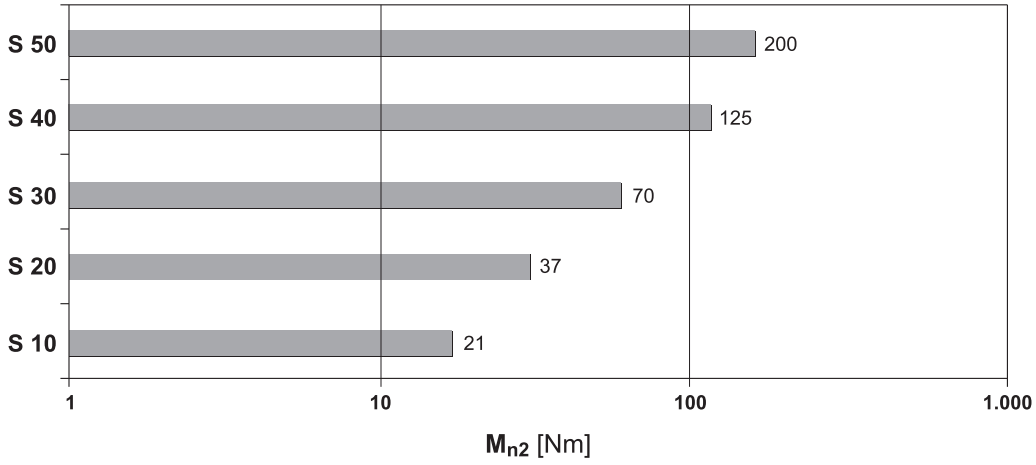

| | | A1 | A2 | B1 | B2 | B3 | S |
|---|---|---|---|---|---|---|---|
| **F 10** | **QF25** | 25 h6 | 24 | 41 | 83 | ≥ 50 | 1.5 |
| | **QF30** | 30 h6 | 29 | | | | |
| **F 20** | **QF25** | 25 h6 | 24 | 41 | 104.5 | ≥ 50 | 1.5 |
| | **QF30** | 30 h6 | 29 | | | | |
| **F 25** | **QF30** | 30 h6 | 29 | 41 | 120.5 | ≥ 50 | 1.5 |
| | **QF32** | 32 h6 | 31 | | | | |
| **F 31** | **QF35** | 35 h6 | 34 | 45 | 95.5 | ≥ 54 | 1.5 |
| | **QF40** | 40 h6 | 39 | | | | |
| **F 41** | **QF42** | 42 h6 | 41 | 46 | 112.5 | ≥ 55 | 2 |
| | **QF45** | 45 h6 | 44 | | | | |
| **F 51** | **QF50** | 50 h6 | 49 | 48 | 131 | ≥ 57 | 2 |
| | **QF55** | 55 h6 | 54 | | | | |
| **F 60** | **QF60** | 60 h6 | 59 | 57 | 158 | ≥ 66 | 2.5 |
| | **QF65** | 65 h6 | 64 | | | | |
| | **QF70** | 70 h6 | 69 | | | | |

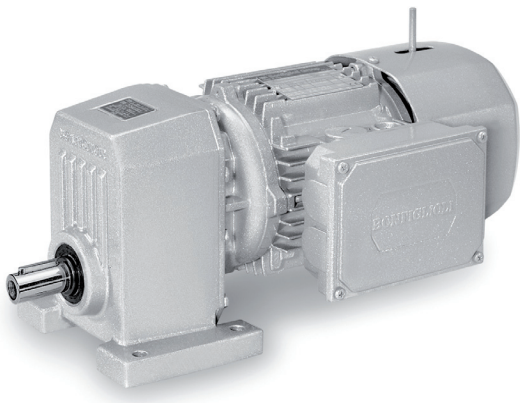


## 65 CARACTERISTICAS CONSTRUCTIVAS

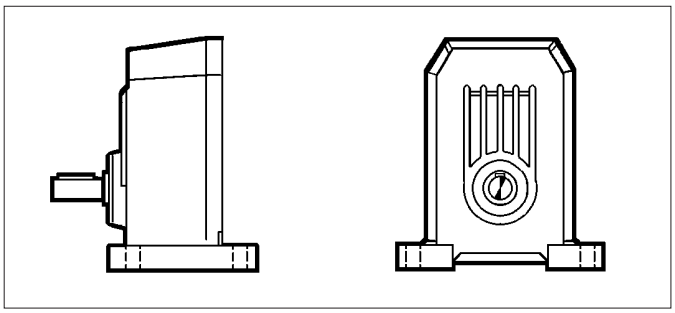
Las principales características constructivas son:
- modularidad
- diseño compacto
- rendimientos elevados
- bajo nivel de rumorosidad
- engranajes de acero aleado, cementados y templados
- cajas de aluminio sin pintar en los tamaños 10, 20, 30, cajas de fundición de alta resistencia, pintadas, para los otros tamaños
- ejes de entrada y salida de acero de alta resistencia.

(E 52)



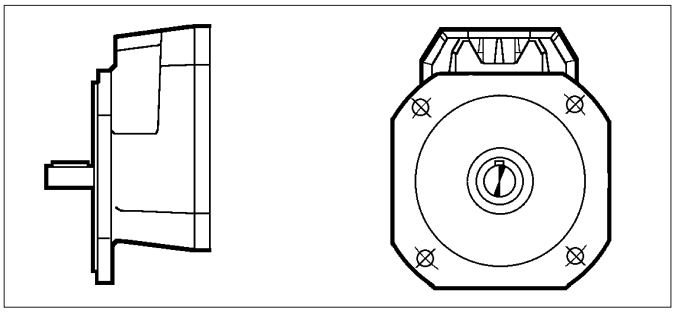
## 66 FORMAS CONSTRUCTIVAS



**P**

**Patas integradas**

**S 10 ... S 50**



**F**

**Brida integrada**

**S 10 ... S 50**

## 67 DESIGNACIÓN

REDUCTOR

**S 10 1 P 1.4 S1 B3 .....**

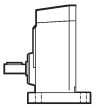
OPCIONES 440

POSICIÓN DE MONTAJE 442

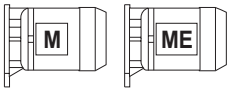
S...P: **B3** (estandar), **B6**, **B7**, **B8**, **V5**, **V6**

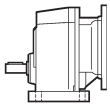
S...F: **B5** (estandar), **B51**, **B52**, **B53**, **V1**, **V3**

DESIGNACION DE LA ENTRADA



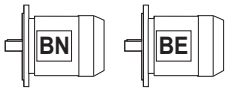
| | |
|---|---|
| **S05** | **S3** |
| **S1** | **S4** |
| **S2** | **S5** |

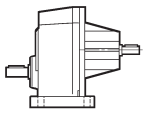


**IEC_**

| | |
|---|---|
| **P63** | **P112** |
| **P71** | **P132** |
| **P80** | **P160** |
| **P90** | **P180** |
| **P100** | |

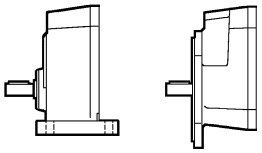


**HS**

RELACION DE REDUCCIÓN

FORMA CONSTRUCTIVA

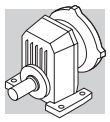


**P** **F**

Nº DE ETAPAS DE REDUCCIÓN
**1**

TAMAÑO REDUCTOR
**10**, **20**, **30**, **40**, **50**

TIPO: **S** = monostadio



MOTOR FRENO

**M 1LA 4** 230/400-50 IP54 CLF ..... **W FD** 7.5 R SB 220 SA .....

OPCIONES 440

ALIMENTACIÓN FRENO 526 531 536 539

RECTIFICADOR AC/DC
**NB**, **SB**, **NBR**, **SBR** 527 532

PALANCA DESBLOQUEO FRENO
**R**, **RM** 541

PAR DE FRENADO 528 533 536 539

TIPO DE FRENO
**FD**, **AFD** (freno c.c.)
**FA**, **BA** (freno c.a.) 525 530 535 538

POSICIÓN CAJA DE BORNES
**W** (por defecto), **N**, **E**, **S** 442

FORMA CONSTRUCTIVA
— (motor integrado)
**B5** (motor IEC)

CLASE DE AISLAMIENTO
**CL F** estandar
**CL H** opción 492 519

GRADO DE PROTECCIÓN
**IP55** estandard (IP54 - motor freno) 492 514

TENSIÓN – FRECUENCIA 488 517

NÚMERO DE POLOS
**2**, **4**, **6**, **2/4**, **2/6**, **2/8**, **2/12**, **4/6**, **4/8**

TAMAÑO MOTOR
**0B ... 5LA** (motor integrado)
**63A ... 280M** (motor IEC)

TIPO MOTOR
**M** = trifásico integrado
**BN** = trifásico IEC
**ME** = trifásico integrado, clase IE2
**BE** = trifase IEC, classe IE2

## 67.1 Opciones reductores

**SO**
Los reductores S10, S20, S30 y S40, normalmente suministrados con lubricante de BONFIGLIOLI RIDUTTORI, se suministran sin Lubricante.

**LO**
Los reductores S50, habitualmente se suministran sin lubricante, están pedidos con aceite sintético del tipo utilizado normalmente por BONFIGLIOLI RIDUTTORI y llenados de acuerdo con la posición de montaje Solicitada.

**DV**
2 retenes en el eje de entrada. (Disponible únicamente en los motorreductores compactos).

**VV**
Reten de fluoro-elastómero en el eje rápido.

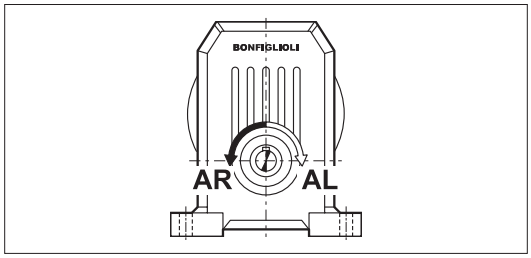
**PV**
Todos los retenes de fluoro-elastómero.

## 67.2 Opciones motores

**AA, AC, AD**
Posición angular de la palanca de desbloqueo del freno respecto a la caja de conexiones, visto desde el lado del ventilador. Posición estándar = 90º en sentido horario. AA = 0º, AC = 180º, AD = 90º en sentido antihorario

**AL, AR**
Para los motorreductores equipados con motor compacto serie M o ME, está disponible la opción antirretorno colocado sobre el propio motor e indicado en la sección motores eléctricos de este catálogo. La tabla E53 indica el sentido de giro libre del reductor, en base al cual, deberá de realizarse la selección de la opción.

(E 53)




**CF**
Filtro capacitativo.

**D3**
n° 3 sonda bimetálica en los bobinados con temperatura a 150 ºC .

**E3**
nº 3 termistores en el bobinado, con temperatura 150 ºC.

**F1**
Volante de inercia para arranque Progresivo.

**H1**
Resistencias de caldeo. Alimentación normalizada 230 V ± 10 %.

**PN**
Potencia a 60 Hz. Correspondiente a la potencia normalizada a 50 Hz.

**PS**
Doble eje (excluye posiciones RC y U1).

**RC**
Sombrerete antilluvia (excluye opción PS).

**RV**
Equilibrado del rotor para grado de vibración B.

**TC**
La opción de sombrerete tipo TC, deberá ser especificada cuando el motor se instale en ambientes de la industria textil. Esta opción excluye las variantes EN_ y no es aplicable a motores con freno de tipo BA.

**TP**
Tropicalización.

**U1**
Ventilación independiente (excluye opción PS y CUS).

**U2**
Ventilador sin caja de conexiones, precableado interiormente. Excluye la opción PS. Disponible para motores:
BN 71,
BE 80 ... BE 132,
M1,
ME2 ... ME4.

**Para mayor información sobre las opciones, consultar el correspondiente capitulo en la sección de motores eléctricos.**

## 68 LUBRICACIÓN

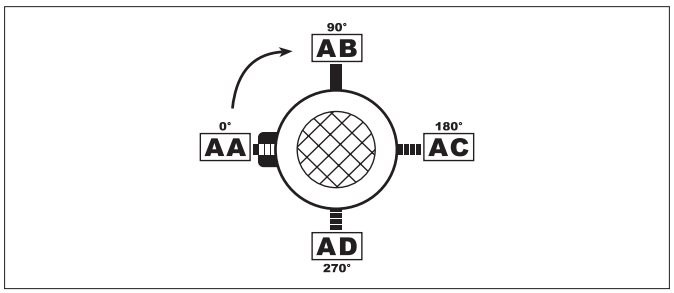
Los componentes internos de los reductores Bonfiglioli son lubrificados con un sistema mixto de inmesión y barboteo de aceite.
Los tamaños S10, S20, S30 y S40 se suministran con aceite desde fábrica o del punto de venta oficial.
Los tamaños S50 se suministran normalmente sin aceite y será responsabilidad del usuario llenarlo de aceite antes de la puesta en marcha.
En cualquiera de los dos casos, antes de la puesta en marcha es necesario substituir el tapón ciego usado en el transporte, por un tapón con depresor, suministrado con el reductor.
Par las tablas de situación de los tapones de servicio y de las cantidades de lubrcante, consultar el Manual de uso y mantenimiento (disponible en www.bonfiglioli.com).
El aceite que se suministar tipo“long life” es de naturaleza sintéticoa y a menos que no se contamine por un agente externo, no requiere substitución periódica en todo el ciclo de vida del reductor.
El reductor puede trabajar en el intérvalo de temperaturas entre -20°C y +40°C. Pera una temperatura ambiente comprendida entre -20°C y -10°C el arranque del reductor sólo podrá efectuarse después de haber realizado un precalentamiento progresivo y homogeneo del grupo o funcionando en vacío, sin carga alguna. La carga podrá aplicarse en el eje del reductor cuando la temperatura del mismo haya alcanzdo los -10°C como mínimo.

## 69 POSICIÓN DE MONTAJE Y ORIENTACIÓN DE LA CAJA DE CONEXIONES

La orientación de la caja de conexiones del motor se identifica observando el motor por el lado del ventilador; la orientación estándar está resaltada en negrita (W)

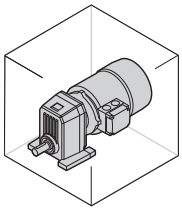
**Posición angular de la palanca del desbloqueo del freno.**
En los motores freno, la palanca de desbloqueo del freno (opcional) tiene la orientación estándar a 90º respecto a la caja de conexiones (posición AB); en caso de requerir una orientación distinta, especifíquese mediante los correspondientes códigos de opciones.

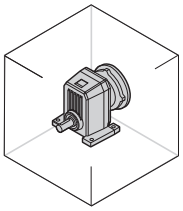
(E 54)

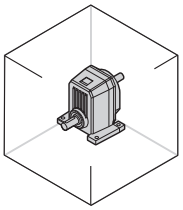


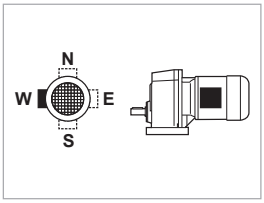
# S ... P

## B3

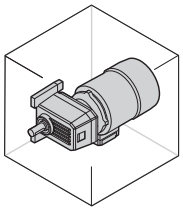

_S

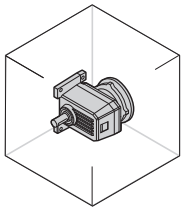

_P(IEC)

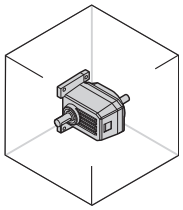

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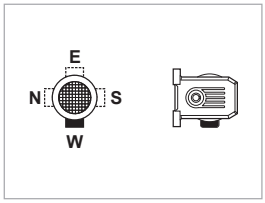



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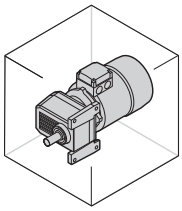

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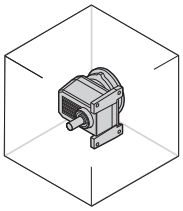

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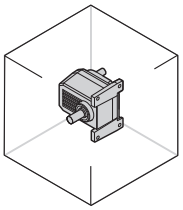

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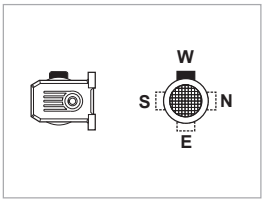



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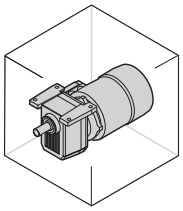

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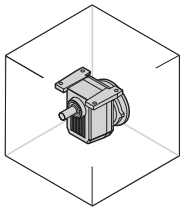

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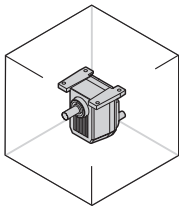

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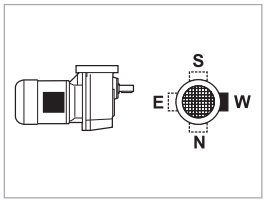



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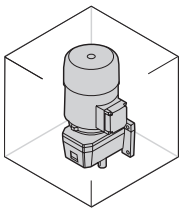

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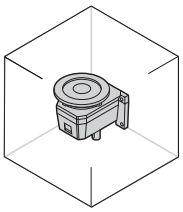

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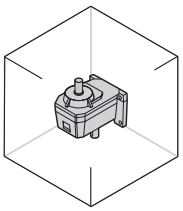

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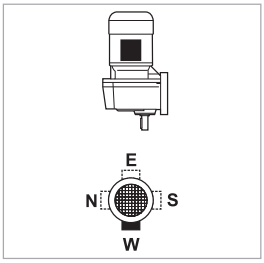



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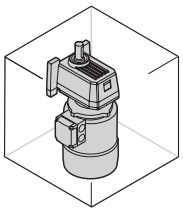

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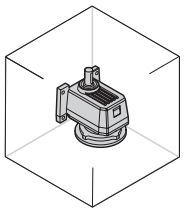

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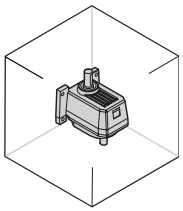

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## V6


_S


_P(IEC)

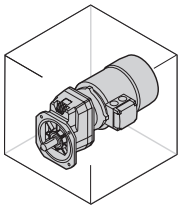

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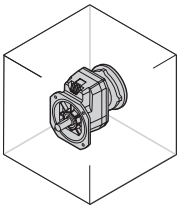


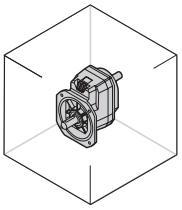

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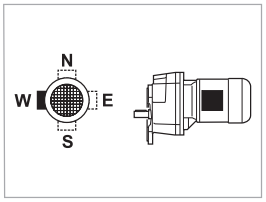
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## B5

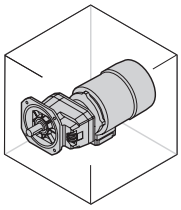

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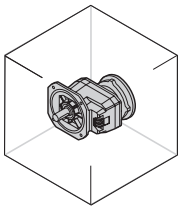

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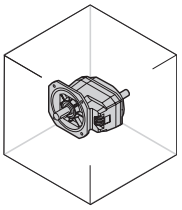

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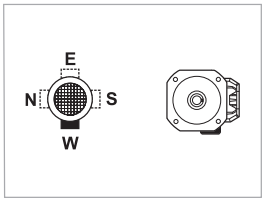



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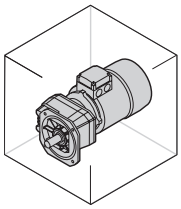

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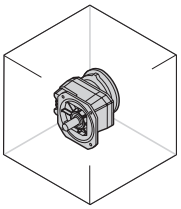

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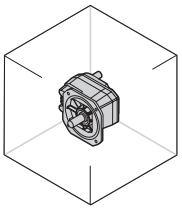

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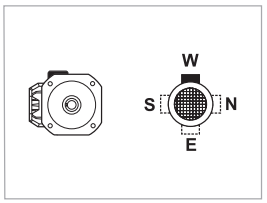



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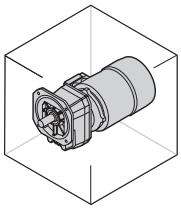

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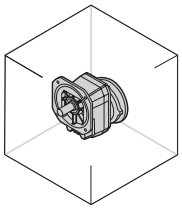

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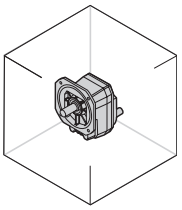

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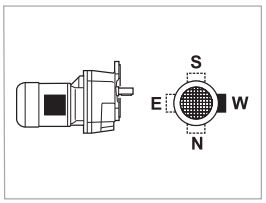



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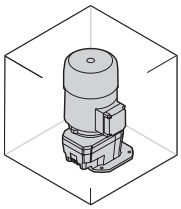

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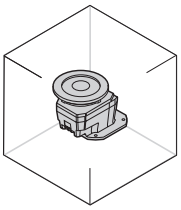

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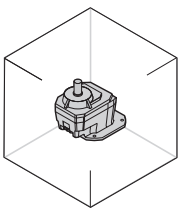

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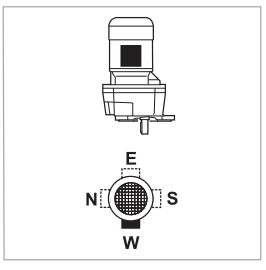



## V1

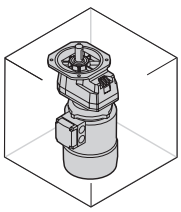

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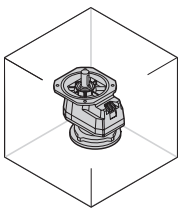

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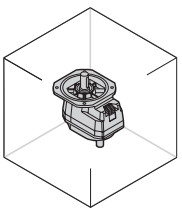

_HS




## V3


_S


_P(IEC)


_HS




**W** = Default

## 70 CARGAS RADIALES

Los órganos de transmisión acoplados en los ejes de entrada y/o salida del reductor generan una fuerza resultante en sentido radial que actúa sobre el mismo eje.
El valor de dichas cargas deberá ser compatible con la capacidad del sistema eje – cojinetes del reductor para soportarlas, en particular el valor absoluto de la carga aplicada ($R_{c1}$ para el eje de entrada, $R_{c2}$ para el eje de salida) deberá ser inferior al valor nominal ($R_{n1}$ para el eje de entrada, y $R_{n2}$ para el de salida) contenido en las tablas de datos técnicos.
En las siguientes formulas, el subíndice (1) se refiere a los valores correspondientes al eje de entrada y el subíndice (2) a los valores correspondientes al eje de salida. La carga generada por un sistema de transmisión externo puede ser calculada, con una buena aproximación, mediante la siguiente formula:

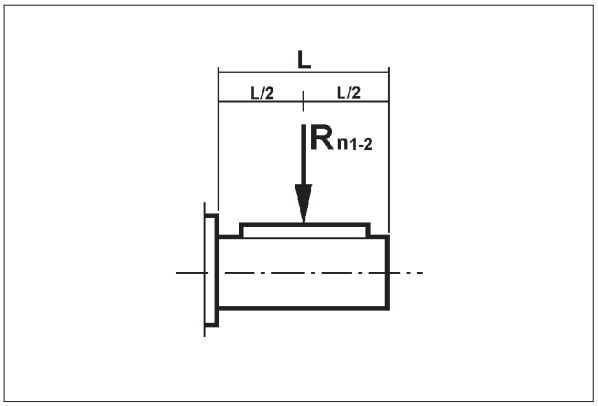
$$R_{c1}\,[N] = \frac{2000 \cdot M_1[Nm] \cdot K_r}{d\,[mm]} \quad ; \quad R_{c2}\,[N] = \frac{2000 \cdot M_2[Nm] \cdot K_r}{d\,[mm]} \qquad (44)$$

(E 55)

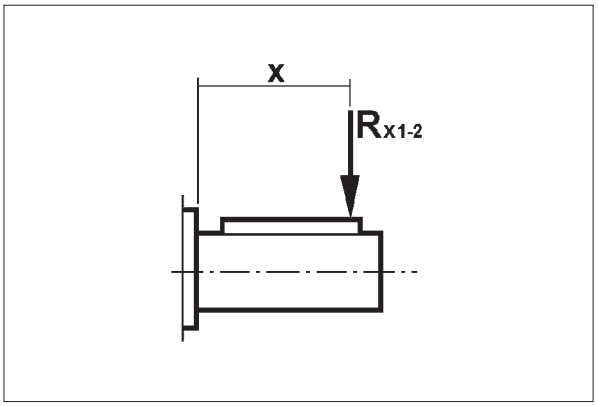
| | |
|---|---|
| **$M_1$** [Nm] | Par aplicado en el eje de entrada |
| **$M_2$** [Nm] | Par suministrado en el eje de Salida |
| **d** [mm] | Diámetro primitivo de la pieza montada sobre el eje |
| **$K_r$ = 1** | Transmisión por cadena |
| **$K_r$ = 1,25** | Transmisión por engranaje |
| **$K_r$ = 1,5** | Transmisión por correa trapecial |
| **$K_r$ = 2,0** | Transmisión por correa plana |

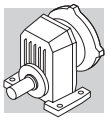
Dependiendo del punto de aplicación de la carga sobre el eje, la verificación de compatibilidad se procederá de modo diverso y en particular:

(E 56)




(E 57)





**a) Aplicación de la carga en el punto medio del eje, tabla (E56)**

La carga anteriormente calculada se deberá comparar con el correspondiente valor nominal de catalogo y deberá verificarse:

$R_{c1} \leq R_{n1}$ [eje de entrada]

o bien

$R_{c2} \leq R_{n2}$ [eje de salida]

**b) Aplicación de la carga a una distancia x del apoyo del eje, tabla (E57)**

Cuando la carga se aplica a una distancia “x” del resalte del eje, se debe recalcular el valor admisible a dicha distancia.
El nuevo valor se distingue con el símbolo $R_{x1}$ (eje rápido) y $R_{x2}$ (eje lento) y se obtiene a partir de los valores de catalogo $R_{n1}$ y $R_{n2}$ respectivamente a través del factor.

$$\frac{a}{b+x} \qquad (45)$$

(E 58)

| | **Constantes del reductor** | | | | | |
|---|---|---|---|---|---|---|
| | Eje de salida | | | Eje de entrada | | |
| | **a** | **b** | **c** | **a** | **b** | **c** |
| **S 10 1** | 61 | 46 | 200 | 21 | 1 | 300 |
| **S 20 1** | 73.5 | 53.5 | 270 | 40 | 20 | 350 |
| **S 30 1** | 91.5 | 66.5 | 380 | 38.5 | 18.5 | 350 |
| **S 40 1** | 126.5 | 96.5 | 600 | 49.5 | 24.5 | 450 |
| **S 50 1** | 153.5 | 113.5 | 680 | 49.5 | 24.5 | 450 |

El procedimiento de verificación implica los siguientes pasos sucesivos.

**EJE DE ENTRADA**

1. Calculo de:

$$R_{x1} = R_{n1} \cdot \frac{a}{b+x} \qquad (46)$$

Siempre que se cumpla:

$$\frac{L}{2} \leq x \leq c \qquad (47)$$

Finalmente será necesario comprobar Que:

$$R_{c1} \leq R_{x1} \qquad (48)$$

**EJE DE SALIDA**

1. Calculo de:

$$R_{x2} = R_{n2} \cdot \frac{a}{b + x} \qquad (49)$$

Siempre que se cumpla:

$$\frac{L}{2} \leq x \leq c \qquad (50)$$

Finalmente será necesario comprobar Que:

$$R_{c2} \leq R_{x2} \qquad (51)$$

## 71 CARGAS AXIALES, $A_{n1}$, $A_{n2}$

Las cargas axiales máximas admisibles en el eje de entrada [$A_{n1}$] y en el de salida [$A_{n2}$], se pueden obtener a partir de los correspondientes valores de la carga radial [$R_{n1}$] y [$R_{n2}$] mediante las siguientes expresiones:

$$A_{n1} = R_{n1} \cdot 0{,}2$$
$$A_{n2} = R_{n2} \cdot 0{,}2 \qquad (52)$$

Los valores de las cargas axiales admisibles así calculados, están referidos a cargas axiales actuando contemporáneamente con las cargas radiales nominales.
Únicamente en el caso en que la carga radial que actúe sobre el eje del reductor sea nula, se podrá considerar que la carga axial admisible [$A_n$] es el 50% del valor de la carga radial [$R_n$] admisible para el eje en cuestión.
Ante cargas axiales que superen los valores admisibles o de fuerzas axiales que resulten claramente dominantes sobre las cargas radiales, se recomienda contacten con nuestro Servicio Técnico.

## 72 DATOS TECNICOS MOTORREDUCTORES

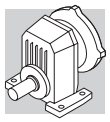
La seleción de los motores sin freno contempla las prescripciones del reglamiento CE 640/2009 (ver paragrafo **M1.1** de este catalogo): para potencias nominales iguales o mayores a 0.75kW, debe preverse motores BE/ME (ver sección **M1** de este catálogo). Para potencias nominales inferiores a 0.75kW, puedenpreverse motores BN/M (si ver sección **M2** de este catalogo).
La regulación CE 640/2009 no se aplica a los motores freno por lo cual la selección de los motores freno tiene en cuenta a la de los motores BN/M, a prescindir del valor de la potencia nominal lo motores freno BE/ME están disponibles bajo pedido

# 0.09 kW

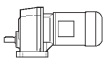
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **69** | 12.1 | 2.9 | 13.1 | 2400 | | | **S301_13.1 P63 BN63A6** | 476 |
| **73** | 11.5 | 1.7 | 12.4 | 1500 | **S201_12.4 S05 M05A6** | 473 | **S201_12.4 P63 BN63A6** | 474 |
| **74** | 11.4 | 1.1 | 12.3 | 1160 | **S101_12.3 S05 M05A6** | 471 | **S101_12.3 P63 BN63A6** | 472 |
| **85** | 10.0 | 2.0 | 10.8 | 1500 | **S201_10.8 S05 M05A6** | 473 | **S201_10.8 P63 BN63A6** | 474 |
| **88** | 9.5 | 1.3 | 10.3 | 1100 | **S101_10.3 S05 M05A6** | 471 | **S101_10.3 P63 BN63A6** | 472 |
| **103** | 8.2 | 1.5 | 8.9 | 1060 | **S101_8.9 S05 M05A6** | 471 | **S101_8.9 P63 BN63A6** | 472 |
| **107** | 7.9 | 2.5 | 8.5 | 1500 | **S201_8.5 S05 M05A6** | 473 | **S201_8.5 P63 BN63A6** | 474 |
| **132** | 6.4 | 2.7 | 6.9 | 990 | **S101_6.9 S05 M05A6** | 471 | **S101_6.9 P63 BN63A6** | 472 |
| **149** | 5.7 | 3.0 | 6.1 | 960 | **S101_6.1 S05 M05A6** | 471 | **S101_6.1 P63 BN63A6** | 472 |
| **193** | 4.4 | 3.2 | 4.7 | 890 | **S101_4.7 S05 M05A6** | 471 | **S101_4.7 P63 BN63A6** | 472 |
| **237** | 3.6 | 3.9 | 3.8 | 830 | **S101_3.8 S05 M05A6** | 471 | **S101_3.8 P63 BN63A6** | 472 |
| **284** | 3.0 | 4.7 | 3.2 | 790 | **S101_3.2 S05 M05A6** | 471 | **S101_3.2 P63 BN63A6** | 472 |
| **364** | 2.3 | 5.2 | 2.5 | 730 | **S101_2.5 S05 M05A6** | 471 | **S101_2.5 P63 BN63A6** | 472 |
| **485** | 1.7 | 6.9 | 1.9 | 670 | **S101_1.9 S05 M05A6** | 471 | **S101_1.9 P63 BN63A6** | 472 |
| **640** | 1.3 | 9.1 | 1.4 | 610 | **S101_1.4 S05 M05A6** | 471 | **S101_1.4 P63 BN63A6** | 472 |

# 0.12 kW

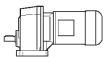
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **69** | 16.2 | 2.2 | 13.1 | 2400 | | | **S301_13.1 P63 BN63A4** | 476 |
| **73** | 15.3 | 1.3 | 12.4 | 1500 | **S201_12.4 S05 M05B6** | 473 | **S201_12.4 P63 BN63B6** | 474 |
| **85** | 13.3 | 1.5 | 10.8 | 1500 | **S201_10.8 S05 M05B6** | 473 | **S201_10.8 P63 BN63B6** | 474 |
| **88** | 12.7 | 2.8 | 10.3 | 2400 | | | **S301_10.3 P63 BN63B6** | 476 |
| **88** | 12.7 | 0.9 | 10.3 | 1060 | **S101_10.3 S05 M05B6** | 471 | **S101_10.3 P63 BN63B6** | 472 |
| **102** | 11.0 | 3.2 | 8.9 | 2400 | | | **S301_8.9 P63 BN63B6** | 476 |
| **103** | 11.0 | 1.1 | 8.9 | 1030 | **S101_8.9 S05 M05B6** | 471 | **S101_8.9 P63 BN63B6** | 472 |
| **107** | 10.5 | 2.8 | 13.1 | 2400 | | | **S301_13.1 P63 BN63B6** | 476 |
| **107** | 10.5 | 1.9 | 8.5 | 1500 | **S201_8.5 S05 M05B6** | 473 | **S201_8.5 P63 BN63B6** | 474 |
| **113** | 10.0 | 1.7 | 12.4 | 1500 | **S201_12.4 S05 M05A4** | 473 | **S201_12.4 P63 BN63A4** | 474 |
| **114** | 9.9 | 1.0 | 12.3 | 1000 | **S101_12.3 S05 M05A4** | 471 | **S101_12.3 P63 BN63A4** | 472 |
| **126** | 8.9 | 3.4 | 7.2 | 1500 | **S201_7.2 S05 M05B6** | 473 | **S201_7.2 P63 BN63B6** | 474 |
| **130** | 8.6 | 2.0 | 10.8 | 1500 | **S201_10.8 S05 M05A4** | 473 | **S201_10.8 P63 BN63A4** | 474 |
| **132** | 8.5 | 2.0 | 6.9 | 960 | **S101_6.9 S05 M05B6** | 471 | **S101_6.9 P63 BN63B6** | 472 |
| **136** | 8.3 | 1.2 | 10.3 | 960 | **S101_10.3 S05 M05A4** | 471 | **S101_10.3 P63 BN63A4** | 472 |
| **149** | 7.5 | 2.3 | 6.1 | 940 | **S101_6.1 S05 M05B6** | 471 | **S101_6.1 P63 BN63B6** | 472 |

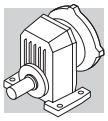


# 0.12 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **158** | 7.1 | 1.4 | 8.9 | 920 | **S101_8.9 S05 M05A4** | 471 | **S101_8.9 P63 BN63A4** | 472 |
| **165** | 6.8 | 2.5 | 8.5 | 1500 | **S201_8.5 S05 M05A4** | 473 | **S201_8.5 P63 BN63A4** | 474 |
| **193** | 5.8 | 2.4 | 4.7 | 870 | **S101_4.7 S05 M05B6** | 471 | **S101_4.7 P63 BN63B6** | 472 |
| **203** | 5.5 | 2.7 | 6.9 | 860 | **S101_6.9 S05 M05A4** | 471 | **S101_6.9 P63 BN63A4** | 472 |
| **229** | 4.9 | 3.1 | 6.1 | 830 | **S101_6.1 S05 M05A4** | 471 | **S101_6.1 P63 BN63A4** | 472 |
| **237** | 4.7 | 2.9 | 3.8 | 820 | **S101_3.8 S05 M05B6** | 471 | **S101_3.8 P63 BN63B6** | 472 |
| **284** | 3.9 | 3.5 | 3.2 | 780 | **S101_3.2 S05 M05B6** | 471 | **S101_3.2 P63 BN63B6** | 472 |
| **296** | 3.8 | 3.2 | 4.7 | 770 | **S101_4.7 S05 M05A4** | 471 | **S101_4.7 P63 BN63A4** | 472 |
| **364** | 3.1 | 3.9 | 3.8 | 720 | **S101_3.8 S05 M05A4** | 471 | **S101_3.8 P63 BN63A4** | 472 |
| **364** | 3.1 | 3.9 | 2.5 | 720 | **S101_2.5 S05 M05B6** | 471 | **S101_2.5 P63 BN63B6** | 472 |
| **438** | 2.6 | 4.7 | 3.2 | 680 | **S101_3.2 S05 M05A4** | 471 | **S101_3.2 P63 BN63A4** | 472 |
| **485** | 2.3 | 5.2 | 1.9 | 660 | **S101_1.9 S05 M05B6** | 471 | **S101_1.9 P63 BN63B6** | 472 |
| **560** | 2.0 | 5.0 | 2.5 | 630 | **S101_2.5 S05 M05A4** | 471 | **S101_2.5 P63 BN63A4** | 472 |
| **640** | 1.8 | 6.8 | 1.4 | 600 | **S101_1.4 S05 M05B6** | 471 | **S101_1.4 P63 BN63B6** | 472 |
| **747** | 1.5 | 6.6 | 1.9 | 580 | **S101_1.9 S05 M05A4** | 471 | **S101_1.9 P63 BN63A4** | 472 |
| **985** | 1.1 | 8.8 | 1.4 | 530 | **S101_1.4 S05 M05A4** | 471 | **S101_1.4 P63 BN63A4** | 472 |

# 0.18 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **69** | 24.6 | 1.4 | 13.1 | 2400 | | | **S301_13.1 P71 BN71A6** | 476 |
| **73** | 23.2 | 2.5 | 12.4 | 3800 | **S401_12.4 S1 M1SC6** | 477 | **S401_12.4 P71 BN71A6** | 478 |
| **84** | 20.1 | 1.0 | 10.8 | 1500 | | | **S201_10.8 P71 BN71A6** | 474 |
| **84** | 20.0 | 2.9 | 10.7 | 3800 | **S401_10.7 S1 M1SC6** | 477 | **S401_10.7 P71 BN71A6** | 478 |
| **87** | 19.3 | 1.8 | 10.3 | 2400 | **S301_10.3 S1 M1SC6** | 475 | **S301_10.3 P71 BN71A6** | 476 |
| **101** | 16.6 | 2.1 | 8.9 | 2400 | **S301_8.9 S1 M1SC6** | 475 | **S301_8.9 P71 BN71A6** | 476 |
| **106** | 15.9 | 1.3 | 8.5 | 1500 | **S201_8.5 S1 M1SC6** | 473 | **S201_8.5 P71 BN71A6** | 474 |
| **106** | 15.9 | 1.9 | 13.1 | 2400 | | | **S301_13.1 P63 BN63B4** | 476 |
| **112** | 15.1 | 1.1 | 12.4 | 1500 | **S201_12.4 S05 M05B4** | 473 | **S201_12.4 P63 BN63B4** | 474 |
| **112** | 15.0 | 3.3 | 12.4 | 3800 | | | **S401_12.4 P63 BN63B4** | 478 |
| **125** | 13.5 | 2.2 | 7.2 | 1500 | **S201_7.2 S1 M1SC6** | 473 | **S201_7.2 P71 BN71A6** | 474 |
| **129** | 13.0 | 1.3 | 10.8 | 1500 | **S201_10.8 S05 M05B4** | 473 | **S201_10.8 P63 BN63B4** | 474 |
| **130** | 12.9 | 1.3 | 6.9 | 910 | **S101_6.9 S1 M1SC6** | 471 | **S101_6.9 P71 BN71A6** | 472 |
| **135** | 12.5 | 2.4 | 10.3 | 2330 | | | **S301_10.3 P63 BN63B4** | 476 |
| **147** | 11.4 | 1.5 | 6.1 | 890 | **S101_6.1 S1 M1SC6** | 471 | **S101_6.1 P71 BN71A6** | 472 |
| **155** | 10.9 | 2.8 | 5.8 | 1500 | **S201_5.8 S1 M1SC6** | 473 | **S201_5.8 P71 BN71A6** | 474 |
| **156** | 10.8 | 2.8 | 8.9 | 2230 | | | **S301_8.9 P63 BN63B4** | 476 |
| **157** | 10.8 | 0.9 | 8.9 | 880 | **S101_8.9 S05 M05B4** | 471 | **S101_8.9 P63 BN63B4** | 472 |
| **164** | 10.3 | 1.7 | 8.5 | 1500 | **S201_8.5 S05 M05B4** | 473 | **S201_8.5 P63 BN63B4** | 474 |
| **189** | 8.9 | 3.4 | 4.8 | 1500 | **S201_4.8 S1 M1SC6** | 473 | **S201_4.8 P71 BN71A6** | 474 |
| **190** | 8.8 | 1.6 | 4.7 | 830 | **S101_4.7 S1 M1SC6** | 471 | **S101_4.7 P71 BN71A6** | 472 |
| **192** | 8.8 | 3.0 | 7.2 | 1500 | **S201_7.2 S05 M05B4** | 473 | **S201_7.2 P63 BN63B4** | 474 |
| **201** | 8.4 | 1.8 | 6.9 | 820 | **S101_6.9 S05 M05B4** | 471 | **S101_6.9 P63 BN63B4** | 472 |
| **214** | 7.9 | 3.1 | 13.1 | 2020 | | | **S301_13.1 P63 BN63A2** | 476 |
| **226** | 7.5 | 1.7 | 12.4 | 1480 | **S201_12.4 S05 M05A2** | 473 | **S201_12.4 P63 BN63A2** | 474 |
| **227** | 7.4 | 2.0 | 6.1 | 800 | **S101_6.1 S05 M05B4** | 471 | **S101_6.1 P63 BN63B4** | 472 |
| **228** | 7.4 | 1.1 | 12.3 | 800 | **S101_12.3 S05 M05A2** | 471 | **S101_12.3 P63 BN63A2** | 472 |
| **234** | 7.2 | 1.9 | 3.8 | 790 | **S101_3.8 S1 M1SC6** | 471 | **S101_3.8 P71 BN71A6** | 472 |
| **261** | 6.4 | 2.0 | 10.8 | 1420 | **S201_10.8 S05 M05A2** | 473 | **S201_10.8 P63 BN63A2** | 474 |
| **273** | 6.2 | 1.3 | 10.3 | 760 | **S101_10.3 S05 M05A2** | 471 | **S101_10.3 P63 BN63A2** | 472 |
| **281** | 6.0 | 2.3 | 3.2 | 750 | **S101_3.2 S1 M1SC6** | 471 | **S101_3.2 P71 BN71A6** | 472 |
| **294** | 5.7 | 2.1 | 4.7 | 750 | **S101_4.7 S05 M05B4** | 471 | **S101_4.7 P63 BN63B4** | 472 |
| **317** | 5.3 | 1.5 | 8.9 | 730 | **S101_8.9 S05 M05A2** | 471 | **S101_8.9 P63 BN63A2** | 472 |

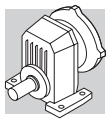


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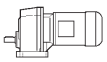
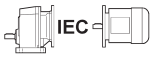
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **331** | 5.1 | 2.6 | 8.5 | 1320 | **S201_8.5 S05 M05A2** | 473 | **S201_8.5 P63 BN63A2** | 474 |
| **360** | 4.7 | 2.6 | 2.5 | 700 | **S101_2.5 S1 M1SC6** | 471 | **S101_2.5 P71 BN71A6** | 472 |
| **361** | 4.7 | 2.6 | 3.8 | 700 | **S101_3.8 S05 M05B4** | 471 | **S101_3.8 P63 BN63B4** | 472 |
| **407** | 4.1 | 2.9 | 6.9 | 680 | **S101_6.9 S05 M05A2** | 471 | **S101_6.9 P63 BN63A2** | 472 |
| **434** | 3.9 | 3.1 | 3.2 | 670 | **S101_3.2 S05 M05B4** | 471 | **S101_3.2 P63 BN63B4** | 472 |
| **460** | 3.7 | 3.3 | 6.1 | 660 | **S101_6.1 S05 M05A2** | 471 | | |
| **480** | 3.5 | 3.4 | 1.9 | 640 | **S101_1.9 S1 M1SC6** | 471 | **S101_1.9 P71 BN71A6** | 472 |
| **556** | 3.0 | 3.3 | 2.5 | 620 | **S101_2.5 S05 M05B4** | 471 | **S101_2.5 P63 BN63B4** | 472 |
| **594** | 2.8 | 3.5 | 4.7 | 610 | **S101_4.7 S05 M05A2** | 471 | **S101_4.7 P63 BN63A2** | 472 |
| **633** | 2.7 | 4.5 | 1.4 | 590 | **S101_1.4 S1 M1SC6** | 471 | **S101_1.4 P71 BN71A6** | 472 |
| **731** | 2.3 | 4.3 | 3.8 | 570 | **S101_3.8 S05 M05A2** | 471 | **S101_3.8 P63 BN63A2** | 472 |
| **741** | 2.3 | 4.4 | 1.9 | 570 | **S101_1.9 S05 M05B4** | 471 | **S101_1.9 P63 BN63B4** | 472 |
| **878** | 1.9 | 5.2 | 3.2 | 540 | **S101_3.2 S05 M05A2** | 471 | **S101_3.2 P63 BN63A2** | 472 |
| **978** | 1.7 | 5.8 | 1.4 | 520 | **S101_1.4 S05 M05B4** | 471 | **S101_1.4 P63 BN63B4** | 472 |
| **1124** | 1.5 | 5.3 | 2.5 | 500 | **S101_2.5 S05 M05A2** | 471 | **S101_2.5 P63 BN63A2** | 472 |
| **1499** | 1.1 | 7.1 | 1.9 | 460 | **S101_1.9 S05 M05A2** | 471 | **S101_1.9 P63 BN63A2** | 472 |
| **1977** | 0.9 | 9.4 | 1.4 | 420 | **S101_1.4 S05 M05A2** | 471 | **S101_1.4 P63 BN63A2** | 472 |

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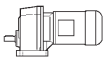
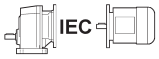
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **69** | 34.1 | 1.0 | 13.1 | 2400 | | | **S301_13.1 P71 BN71B6** | 476 |
| **70** | 33.5 | 3.0 | 12.9 | 6520 | **S501_12.9 S1 M1SD6** | 479 | **S501_12.9 P71 BN71B6** | 480 |
| **73** | 32.2 | 1.8 | 12.4 | 3800 | **S401_12.4 S1 M1SD6** | 477 | **S401_12.4 P71 BN71B6** | 478 |
| **84** | 27.7 | 2.1 | 10.7 | 3800 | **S401_10.7 S1 M1SD6** | 477 | **S401_10.7 P71 BN71B6** | 478 |
| **87** | 26.8 | 1.3 | 10.3 | 2400 | **S301_10.3 S1 M1SD6** | 475 | **S301_10.3 P71 BN71B6** | 476 |
| **101** | 23.1 | 1.5 | 8.9 | 2400 | **S301_8.9 S1 M1SD6** | 475 | **S301_8.9 P71 BN71B6** | 476 |
| **104** | 22.5 | 3.1 | 8.6 | 3800 | **S401_8.6 S1 M1SD6** | 477 | **S401_8.6 P71 BN71B6** | 478 |
| **105** | 22.3 | 1.3 | 13.1 | 2400 | | | **S301_13.1 P71 BN71A4** | 476 |
| **106** | 22.1 | 0.9 | 8.5 | 1500 | **S201_8.5 S1 M1SD6** | 473 | **S201_8.5 P71 BN71B6** | 474 |
| **111** | 21.1 | 2.4 | 12.4 | 3800 | | | **S401_12.4 P71 BN71A4** | 478 |
| **125** | 18.8 | 1.6 | 7.2 | 1500 | **S201_7.2 S1 M1SD6** | 473 | **S201_7.2 P71 BN71B6** | 474 |
| **127** | 18.4 | 3.1 | 7.1 | 2340 | **S301_7.1 S1 M1SD6** | 475 | **S301_7.1 P71 BN71B6** | 476 |
| **128** | 18.3 | 0.9 | 10.8 | 1500 | **S201_10.8 S05 M05C4** | 473 | **S201_10.8 P71 BN71A4** | 474 |
| **129** | 18.2 | 2.8 | 10.7 | 3800 | | | **S401_10.7 P71 BN71A4** | 478 |
| **130** | 17.9 | 0.9 | 6.9 | 850 | **S101_6.9 S1 M1SD6** | 471 | **S101_6.9 P71 BN71B6** | 472 |
| **133** | 17.5 | 1.7 | 10.3 | 2300 | | | **S301_10.3 P71 BN71A4** | 476 |
| **147** | 15.9 | 1.1 | 6.1 | 840 | **S101_6.1 S1 M1SD6** | 471 | **S101_6.1 P71 BN71B6** | 472 |
| **155** | 15.1 | 2.0 | 5.8 | 1500 | **S201_5.8 S1 M1SD6** | 473 | **S201_5.8 P71 BN71B6** | 474 |
| **155** | 15.1 | 2.0 | 8.9 | 2200 | | | **S301_8.9 P71 BN71A4** | 476 |
| **162** | 14.5 | 1.2 | 8.5 | 1500 | **S201_8.5 S05 M05C4** | 473 | **S201_8.5 P71 BN71A4** | 474 |
| **189** | 12.4 | 2.4 | 4.8 | 1500 | **S201_4.8 S1 M1SD6** | 473 | **S201_4.8 P71 BN71B6** | 474 |
| **190** | 12.3 | 1.1 | 4.7 | 790 | **S101_4.7 S1 M1SD6** | 471 | **S101_4.7 P71 BN71B6** | 472 |
| **190** | 12.3 | 2.1 | 7.2 | 1500 | **S201_7.2 S05 M05C4** | 473 | **S201_7.2 P71 BN71A4** | 474 |
| **199** | 11.7 | 1.3 | 6.9 | 780 | **S101_6.9 S05 M05C4** | 471 | **S101_6.9 P71 BN71A4** | 472 |
| **214** | 10.9 | 2.2 | 13.1 | 2000 | | | **S301_13.1 P63 BN63B2** | 476 |
| **225** | 10.4 | 1.4 | 6.1 | 770 | **S101_6.1 S05 M05C4** | 471 | **S101_6.1 P71 BN71A4** | 472 |
| **226** | 10.3 | 1.3 | 12.4 | 1450 | **S201_12.4 S05 M05B2** | 473 | **S201_12.4 P63 BN63B2** | 474 |
| **229** | 10.2 | 2.9 | 3.9 | 1440 | **S201_3.9 S1 M1SD6** | 473 | **S201_3.9 P71 BN71B6** | 474 |
| **234** | 10.0 | 1.4 | 3.8 | 750 | **S101_3.8 S1 M1SD6** | 471 | **S101_3.8 P71 BN71B6** | 472 |
| **236** | 9.9 | 2.6 | 5.8 | 1430 | **S201_5.8 S05 M05C4** | 473 | **S201_5.8 P71 BN71A4** | 474 |
| **261** | 9.0 | 1.5 | 10.8 | 1390 | **S201_10.8 S05 M05B2** | 473 | **S201_10.8 P63 BN63B2** | 474 |
| **273** | 8.6 | 2.8 | 10.3 | 1860 | | | **S301_10.3 P63 BN63B2** | 476 |

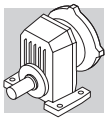


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| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **273** | 8.6 | 0.9 | 10.3 | 730 | **S101_10.3 S05 M05B2** | 471 | **S101_10.3 P63 BN63B2** | 472 |
| **281** | 8.3 | 1.7 | 3.2 | 720 | **S101_3.2 S1 M1SD6** | 471 | **S101_3.2 P71 BN71B6** | 472 |
| **288** | 8.1 | 3.2 | 4.8 | 1350 | **S201_4.8 S05 M05C4** | 473 | **S201_4.8 P71 BN71A4** | 474 |
| **291** | 8.0 | 1.5 | 4.7 | 720 | **S101_4.7 S05 M05C4** | 471 | **S101_4.7 P71 BN71A4** | 472 |
| **316** | 7.4 | 3.2 | 8.9 | 1770 | | | **S301_8.9 P63 BN63B2** | 476 |
| **317** | 7.4 | 1.1 | 8.9 | 710 | **S101_8.9 S05 M05B2** | 471 | **S101_8.9 P63 BN63B2** | 472 |
| **331** | 7.1 | 1.8 | 8.5 | 1300 | **S201_8.5 S05 M05B2** | 473 | **S201_8.5 P63 BN63B2** | 474 |
| **358** | 6.5 | 1.8 | 3.8 | 680 | **S101_3.8 S05 M05C4** | 471 | **S101_3.8 P71 BN71A4** | 472 |
| **360** | 6.5 | 1.8 | 2.5 | 680 | **S101_2.5 S1 M1SD6** | 471 | **S101_2.5 P71 BN71B6** | 472 |
| **389** | 6.0 | 3.5 | 7.2 | 1240 | **S201_7.2 S05 M05B2** | 473 | **S201_7.2 P63 BN63B2** | 474 |
| **407** | 5.7 | 2.1 | 6.9 | 660 | **S101_6.9 S05 M05B2** | 471 | **S101_6.9 P63 BN63B2** | 472 |
| **430** | 5.4 | 2.2 | 3.2 | 650 | **S101_3.2 S05 M05C4** | 471 | **S101_3.2 P71 BN71A4** | 472 |
| **460** | 5.1 | 2.4 | 6.1 | 640 | **S101_6.1 S05 M05B2** | 471 | **S101_6.1 P63 BN63B2** | 472 |
| **480** | 4.9 | 2.5 | 1.9 | 620 | **S101_1.9 S1 M1SD6** | 471 | **S101_1.9 P71 BN71B6** | 472 |
| **550** | 4.3 | 2.4 | 2.5 | 610 | **S101_2.5 S05 M05C4** | 471 | **S101_2.5 P71 BN71A4** | 472 |
| **594** | 3.9 | 2.5 | 4.7 | 600 | **S101_4.7 S05 M05B2** | 471 | **S101_4.7 P63 BN63B2** | 472 |
| **633** | 3.7 | 3.2 | 1.4 | 580 | **S101_1.4 S1 M1SD6** | 471 | **S101_1.4 P71 BN71B6** | 472 |
| **731** | 3.2 | 3.1 | 3.8 | 560 | **S101_3.8 S05 M05B2** | 471 | **S101_3.8 P63 BN63B2** | 472 |
| **733** | 3.2 | 3.1 | 1.9 | 560 | **S101_1.9 S05 M05C4** | 471 | **S101_1.9 P71 BN71A4** | 472 |
| **878** | 2.7 | 3.8 | 3.2 | 530 | **S101_3.2 S05 M05B2** | 471 | **S101_3.2 P63 BN63B2** | 472 |
| **968** | 2.4 | 4.1 | 1.4 | 510 | **S101_1.4 S05 M05C4** | 471 | **S101_1.4 P71 BN71A4** | 472 |
| **1124** | 2.1 | 3.8 | 2.5 | 500 | **S101_2.5 S05 M05B2** | 471 | **S101_2.5 P63 BN63B2** | 472 |
| **1499** | 1.6 | 5.1 | 1.9 | 450 | **S101_1.9 S05 M05B2** | 471 | **S101_1.9 P63 BN63B2** | 472 |
| **1977** | 1.2 | 6.8 | 1.4 | 420 | **S101_1.4 S05 M05B2** | 471 | **S101_1.4 P63 BN63B2** | 472 |

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| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| **71** | 49.0 | 2.0 | 12.9 | 6420 | **S501_12.9 S1 M1LA6** | 479 | **S501_12.9 P80 BN80A6** | 480 |
| **73** | 47.2 | 1.2 | 12.4 | 3800 | **S401_12.4 S1 M1LA6** | 477 | **S401_12.4 P80 BN80A6** | 478 |
| **85** | 40.6 | 1.4 | 10.7 | 3800 | **S401_10.7 S1 M1LA6** | 477 | **S401_10.7 P80 BN80A6** | 478 |
| **87** | 39.8 | 2.9 | 10.5 | 6020 | **S501_10.5 S1 M1LA6** | 479 | **S501_10.5 P80 BN80A6** | 480 |
| **102** | 33.8 | 1.0 | 8.9 | 2400 | **S301_8.9 S1 M1LA6** | 475 | **S301_8.9 P80 BN80A6** | 476 |
| **104** | 33.2 | 0.9 | 13.1 | 2390 | | | **S301_13.1 P71 BN71B4** | 476 |
| **105** | 32.9 | 2.1 | 8.6 | 3800 | **S401_8.6 S1 M1LA6** | 477 | **S401_8.6 P80 BN80A6** | 478 |
| **106** | 32.6 | 3.1 | 12.9 | 5650 | **S501_12.9 S1 M1SD4** | 479 | **S501_12.9 P71 BN71B4** | 480 |
| **110** | 31.3 | 1.6 | 12.4 | 3800 | **S401_12.4 S1 M1SD4** | 477 | **S401_12.4 P71 BN71B4** | 478 |
| **126** | 27.5 | 1.1 | 7.2 | 1500 | **S201_7.2 S1 M1LA6** | 473 | **S201_7.2 P80 BN80A6** | 474 |
| **127** | 27.2 | 3.3 | 7.2 | 3800 | **S401_7.2 S1 M1LA6** | 477 | **S401_7.2 P80 BN80A6** | 478 |
| **128** | 27.0 | 2.1 | 7.1 | 2260 | **S301_7.1 S1 M1LA6** | 475 | **S301_7.1 P80 BN80A6** | 476 |
| **128** | 27.0 | 1.9 | 10.7 | 3800 | **S401_10.7 S1 M1SD4** | 477 | **S401_10.7 P71 BN71B4** | 478 |
| **133** | 26.0 | 1.2 | 10.3 | 2240 | **S301_10.3 S1 M1SD4** | 475 | **S301_10.3 P71 BN71B4** | 476 |
| **154** | 22.5 | 1.3 | 8.9 | 2150 | **S301_8.9 S1 M1SD4** | 475 | **S301_8.9 P71 BN71B4** | 476 |
| **156** | 22.2 | 2.6 | 5.8 | 2140 | **S301_5.8 S1 M1LA6** | 475 | **S301_5.8 P80 BN80A6** | 476 |
| **156** | 22.1 | 1.4 | 5.8 | 1500 | **S201_5.8 S1 M1LA6** | 473 | **S201_5.8 P80 BN80A6** | 474 |
| **159** | 21.8 | 2.7 | 8.6 | 3610 | **S401_8.6 S1 M1SD4** | 477 | **S401_8.6 P71 BN71B4** | 478 |
| **184** | 18.8 | 3.1 | 4.9 | 2040 | **S301_4.9 S1 M1LA6** | 475 | **S301_4.9 P80 BN80A6** | 476 |
| **190** | 18.3 | 1.4 | 7.2 | 1460 | **S201_7.2 S1 M1SD4** | 473 | **S201_7.2 P71 BN71B4** | 474 |
| **191** | 18.1 | 1.7 | 4.8 | 1460 | **S201_4.8 S1 M1LA6** | 473 | **S201_4.8 P80 BN80A6** | 474 |
| **193** | 17.9 | 2.8 | 7.1 | 2020 | **S301_7.1 S1 M1SD4** | 475 | **S301_7.1 P71 BN71B4** | 476 |
| **214** | 16.2 | 1.5 | 13.1 | 1960 | | | **S301_13.1 P71 BN71A2** | 476 |
| **224** | 15.4 | 1.0 | 6.1 | 710 | **S101_6.1 S1 M1SD4** | 471 | **S101_6.1 P71 BN71B4** | 472 |
| **227** | 15.3 | 2.6 | 12.4 | 3230 | | | **S401_12.4 P71 BN71A2** | 478 |

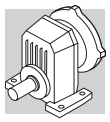


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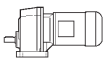
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **231** | 15.0 | 2.0 | 3.9 | 1380 | **S201_3.9 S1 M1LA6** | 473 | **S201_3.9 P80 BN80A6** | 474 |
| **234** | 14.8 | 3.4 | 5.8 | 1900 | **S301_5.8 S1 M1SD4** | 475 | **S301_5.8 P71 BN71B4** | 476 |
| **235** | 14.7 | 1.8 | 5.8 | 1390 | **S201_5.8 S1 M1SD4** | 473 | **S201_5.8 P71 BN71B4** | 474 |
| **237** | 14.6 | 1.0 | 3.8 | 690 | **S101_3.8 S1 M1LA6** | 471 | **S101_3.8 P80 BN80A6** | 472 |
| **261** | 13.2 | 1.0 | 10.8 | 1350 | **S201_10.8 S05 M05C2** | 473 | **S201_10.8 P71 BN71A2** | 474 |
| **263** | 13.1 | 3.0 | 10.7 | 3080 | | | **S401_10.7 P71 BN71A2** | 478 |
| **273** | 12.7 | 1.9 | 10.3 | 1820 | | | **S301_10.3 P71 BN71A2** | 476 |
| **284** | 12.2 | 1.1 | 3.2 | 670 | **S101_3.2 S1 M1LA6** | 471 | **S101_3.2 P80 BN80A6** | 472 |
| **287** | 12.1 | 2.2 | 4.8 | 1310 | **S201_4.8 S1 M1SD4** | 473 | **S201_4.8 P71 BN71B4** | 474 |
| **290** | 11.9 | 1.0 | 4.7 | 670 | **S101_4.7 S1 M1SD4** | 471 | **S101_4.7 P71 BN71B4** | 472 |
| **293** | 11.8 | 2.5 | 3.1 | 1300 | **S201_3.1 S1 M1LA6** | 473 | **S201_3.1 P80 BN80A6** | 474 |
| **316** | 11.0 | 2.2 | 8.9 | 1740 | | | **S301_8.9 P71 BN71A2** | 476 |
| **331** | 10.5 | 1.2 | 8.5 | 1270 | **S201_8.5 S05 M05C2** | 473 | **S201_8.5 P71 BN71A2** | 474 |
| **348** | 9.9 | 2.6 | 3.9 | 1240 | **S201_3.9 S1 M1SD4** | 473 | **S201_3.9 P71 BN71B4** | 474 |
| **356** | 9.7 | 1.2 | 3.8 | 640 | **S101_3.8 S1 M1SD4** | 471 | **S101_3.8 P71 BN71B4** | 472 |
| **364** | 9.5 | 1.3 | 2.5 | 630 | **S101_2.5 S1 M1LA6** | 471 | **S101_2.5 P80 BN80A6** | 472 |
| **373** | 9.3 | 3.2 | 2.4 | 1210 | **S201_2.4 S1 M1LA6** | 473 | **S201_2.4 P80 BN80A6** | 474 |
| **389** | 8.9 | 2.4 | 7.2 | 1210 | **S201_7.2 S05 M05C2** | 473 | **S201_7.2 P71 BN71A2** | 474 |
| **407** | 8.5 | 1.4 | 6.9 | 630 | **S101_6.9 S05 M05C2** | 471 | **S101_6.9 P71 BN71A2** | 472 |
| **428** | 8.1 | 1.5 | 3.2 | 620 | **S101_3.2 S1 M1SD4** | 471 | **S101_3.2 P71 BN71B4** | 472 |
| **440** | 7.9 | 3.3 | 3.1 | 1160 | **S201_3.1 S1 M1SD4** | 473 | **S201_3.1 P71 BN71B4** | 474 |
| **460** | 7.5 | 1.6 | 6.1 | 610 | **S101_6.1 S05 M05C2** | 471 | **S101_6.1 P71 BN71A2** | 472 |
| **480** | 7.2 | 2.8 | 1.9 | 1130 | **S201_1.9 S1 M1LA6** | 473 | **S201_1.9 P80 BN80A6** | 474 |
| **483** | 7.2 | 2.9 | 5.8 | 1130 | **S201_5.8 S05 M05C2** | 473 | **S201_5.8 P71 BN71A2** | 474 |
| **485** | 7.1 | 1.7 | 1.9 | 590 | **S101_1.9 S1 M1LA6** | 471 | **S101_1.9 P80 BN80A6** | 472 |
| **548** | 6.3 | 1.6 | 2.5 | 580 | **S101_2.5 S1 M1SD4** | 471 | **S101_2.5 P71 BN71B4** | 472 |
| **594** | 5.8 | 1.7 | 4.7 | 570 | **S101_4.7 S05 M05C2** | 471 | **S101_4.7 P71 BN71A2** | 472 |
| **640** | 5.4 | 2.2 | 1.4 | 550 | **S101_1.4 S1 M1LA6** | 471 | **S101_1.4 P80 BN80A6** | 472 |
| **731** | 4.7 | 2.1 | 3.8 | 540 | **S101_3.8 S05 M05C2** | 471 | **S101_3.8 P71 BN71A2** | 472 |
| **731** | 4.7 | 2.1 | 1.9 | 540 | **S101_1.9 S1 M1SD4** | 471 | **S101_1.9 P71 BN71B4** | 472 |
| **878** | 3.9 | 2.5 | 3.2 | 520 | **S101_3.2 S05 M05C2** | 471 | **S101_3.2 P71 BN71A2** | 472 |
| **964** | 3.6 | 2.8 | 1.4 | 500 | **S101_1.4 S1 M1SD4** | 471 | **S101_1.4 P71 BN71B4** | 472 |
| **1124** | 3.1 | 2.6 | 2.5 | 480 | **S101_2.5 S05 M05C2** | 471 | **S101_2.5 P71 BN71A2** | 472 |
| **1499** | 2.3 | 3.5 | 1.9 | 440 | **S101_1.9 S05 M05C2** | 471 | **S101_1.9 P71 BN71A2** | 472 |
| **1977** | 1.8 | 4.6 | 1.4 | 410 | **S101_1.4 S05 M05C2** | 471 | **S101_1.4 P71 BN71A2** | 472 |

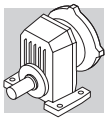
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| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **71** | 72.1 | 1.4 | 12.9 | 6290 | **S501_12.9 S2 M2SA6** | 479 | **S501_12.9 P80 BN80B6** | 480 |
| **86** | 59.7 | 1.0 | 10.7 | 3800 | **S401_10.7 S2 M2SA6** | 477 | **S401_10.7 P80 BN80B6** | 478 |
| **88** | 58.5 | 2.0 | 10.5 | 5910 | **S501_10.5 S2 M2SA6** | 479 | **S501_10.5 P80 BN80B6** | 480 |
| **105** | 49.1 | 2.5 | 8.8 | 5600 | **S501_8.8 S2 M2SA6** | 479 | **S501_8.8 P80 BN80B6** | 480 |
| **107** | 48.3 | 1.4 | 8.6 | 3800 | **S401_8.6 S2 M2SA6** | 477 | **S401_8.6 P80 BN80B6** | 478 |
| **107** | 48.1 | 2.1 | 12.9 | 5560 | **S501_12.9 S1 M1LA4** | 479 | **S501_12.9 P80 BN80A4** | 480 |
| **111** | 46.3 | 1.1 | 12.4 | 3800 | **S401_12.4 S1 M1LA4** | 477 | **S401_12.4 P80 BN80A4** | 478 |
| **124** | 41.4 | 3.4 | 7.4 | 5310 | **S501_7.4 S2 M2SA6** | 479 | **S501_7.4 P80 BN80B6** | 480 |
| **129** | 40.0 | 2.2 | 7.2 | 3780 | **S401_7.2 S2 M2SA6** | 477 | **S401_7.2 P80 BN80B6** | 478 |
| **129** | 39.8 | 1.3 | 10.7 | 3770 | **S401_10.7 S1 M1LA4** | 477 | **S401_10.7 P80 BN80A4** | 478 |
| **130** | 39.7 | 1.5 | 7.1 | 2150 | **S301_7.1 S2 M2SA6** | 475 | **S301_7.1 P80 BN80B6** | 476 |
| **132** | 39.0 | 2.8 | 10.5 | 5220 | **S501_10.5 S1 M1LA4** | 479 | **S501_10.5 P80 BN80A4** | 480 |
| **152** | 33.9 | 3.1 | 6.1 | 3600 | **S401_6.1 S2 M2SA6** | 477 | **S401_6.1 P80 BN80B6** | 478 |
| **155** | 33.2 | 0.9 | 8.9 | 2060 | **S301_8.9 S1 M1LA4** | 475 | **S301_8.9 P80 BN80A4** | 476 |



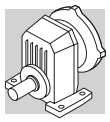
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| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  |  |  IEC |  |
|---|---|---|---|---|---|---|---|---|
| **157** | 32.7 | 1.8 | 5.8 | 2050 | **S301_5.8 S2 M2SA6** | 475 | **S301_5.8 P80 BN80B6** | 476 |
| **157** | 32.7 | 3.4 | 8.8 | 4940 | **S501_8.8 S1 M1LA4** | 479 | **S501_8.8 P80 BN80A4** | 480 |
| **158** | 32.6 | 0.9 | 5.8 | 1420 | **S201_5.8 S2 M2SA6** | 473 | **S201_5.8 P80 BN80B6** | 474 |
| **160** | 32.2 | 1.9 | 8.6 | 3540 | **S401_8.6 S1 M1LA4** | 477 | **S401_8.6 P80 BN80A4** | 478 |
| **186** | 27.6 | 2.1 | 4.9 | 1960 | **S301_4.9 S2 M2SA6** | 475 | **S301_4.9 P80 BN80B6** | 476 |
| **191** | 26.9 | 1.0 | 7.2 | 1370 | **S201_7.2 S1 M1LA4** | 473 | **S201_7.2 P80 BN80A4** | 474 |
| **193** | 26.7 | 1.1 | 4.8 | 1370 | **S201_4.8 S2 M2SA6** | 473 | **S201_4.8 P80 BN80B6** | 474 |
| **193** | 26.7 | 3.0 | 7.2 | 3350 | **S401_7.2 S1 M1LA4** | 477 | **S401_7.2 P80 BN80A4** | 478 |
| **195** | 26.4 | 1.9 | 7.1 | 1940 | **S301_7.1 S1 M1LA4** | 475 | **S301_7.1 P80 BN80A4** | 476 |
| **214** | 24.0 | 1.0 | 13.1 | 1900 | | | **S301_13.1 P71 BN71B2** | 476 |
| **218** | 23.6 | 3.4 | 12.9 | 4460 | **S501_12.9 S1 M1SD2** | 479 | **S501_12.9 P71 BN71B2** | 480 |
| **227** | 22.7 | 1.8 | 12.4 | 3190 | **S401_12.4 S1 M1SD2** | 477 | **S401_12.4 P71 BN71B2** | 478 |
| **233** | 22.1 | 2.6 | 3.9 | 1850 | **S301_3.9 S2 M2SA6** | 475 | **S301_3.9 P80 BN80B6** | 476 |
| **234** | 22.0 | 1.4 | 3.9 | 1300 | **S201_3.9 S2 M2SA6** | 473 | **S201_3.9 P80 BN80B6** | 474 |
| **236** | 21.8 | 2.3 | 5.8 | 1840 | **S301_5.8 S1 M1LA4** | 475 | **S301_5.8 P80 BN80A4** | 476 |
| **237** | 21.7 | 1.2 | 5.8 | 1310 | **S201_5.8 S1 M1LA4** | 473 | **S201_5.8 P80 BN80A4** | 474 |
| **263** | 19.5 | 2.0 | 10.7 | 3040 | **S401_10.7 S1 M1SD2** | 477 | **S401_10.7 P71 BN71B2** | 478 |
| **273** | 18.9 | 1.3 | 10.3 | 1780 | **S301_10.3 S1 M1SD2** | 475 | **S301_10.3 P71 BN71B2** | 476 |
| **280** | 18.4 | 2.7 | 4.9 | 1760 | **S301_4.9 S1 M1LA4** | 475 | **S301_4.9 P80 BN80A4** | 476 |
| **289** | 17.8 | 1.5 | 4.8 | 1250 | **S201_4.8 S1 M1LA4** | 473 | **S201_4.8 P80 BN80A4** | 474 |
| **296** | 17.4 | 1.7 | 3.1 | 1230 | **S201_3.1 S2 M2SA6** | 473 | **S201_3.1 P80 BN80B6** | 474 |
| **300** | 17.1 | 3.4 | 3.1 | 1720 | **S301_3.1 S2 M2SA6** | 475 | **S301_3.1 P80 BN80B6** | 476 |
| **316** | 16.3 | 1.5 | 8.9 | 1700 | **S301_8.9 S1 M1SD2** | 475 | **S301_8.9 P71 BN71B2** | 476 |
| **325** | 15.8 | 3.0 | 8.6 | 2850 | **S401_8.6 S1 M1SD2** | 477 | **S401_8.6 P71 BN71B2** | 478 |
| **350** | 14.7 | 3.4 | 3.9 | 1650 | **S301_3.9 S1 M1LA4** | 475 | **S301_3.9 P80 BN80A4** | 476 |
| **351** | 14.7 | 1.8 | 3.9 | 1190 | **S201_3.9 S1 M1LA4** | 473 | **S201_3.9 P80 BN80A4** | 474 |
| **377** | 13.6 | 2.2 | 2.4 | 1160 | **S201_2.4 S2 M2SA6** | 473 | **S201_2.4 P80 BN80B6** | 474 |
| **389** | 13.2 | 1.6 | 7.2 | 1160 | **S201_7.2 S1 M1SD2** | 473 | **S201_7.2 P71 BN71B2** | 474 |
| **396** | 13.0 | 3.1 | 7.1 | 1600 | **S301_7.1 S1 M1SD2** | 475 | **S301_7.1 P71 BN71B2** | 476 |
| **407** | 12.6 | 0.9 | 6.9 | 570 | **S101_6.9 S1 M1SD2** | 471 | **S101_6.9 P71 BN71B2** | 472 |
| **431** | 11.9 | 1.0 | 3.2 | 560 | **S101_3.2 S1 M1LA4** | 471 | **S101_3.2 P80 BN80A4** | 472 |
| **444** | 11.6 | 2.2 | 3.1 | 1120 | **S201_3.1 S1 M1LA4** | 473 | **S201_3.1 P80 BN80A4** | 474 |
| **460** | 11.2 | 1.1 | 6.1 | 570 | **S101_6.1 S1 M1SD2** | 471 | **S101_6.1 P71 BN71B2** | 472 |
| **483** | 10.7 | 2.0 | 5.8 | 1100 | **S201_5.8 S1 M1SD2** | 473 | **S201_5.8 P71 BN71B2** | 474 |
| **486** | 10.6 | 1.9 | 1.9 | 1080 | **S201_1.9 S2 M2SA6** | 473 | **S201_1.9 P80 BN80B6** | 474 |
| **491** | 10.5 | 1.1 | 1.9 | 540 | **S101_1.9 S2 M2SA6** | 471 | **S101_1.9 P80 BN80B6** | 472 |
| **504** | 10.2 | 3.4 | 1.8 | 1470 | **S301_1.8 S2 M2SA6** | 475 | **S301_1.8 P80 BN80B6** | 476 |
| **552** | 9.3 | 1.1 | 2.5 | 540 | **S101_2.5 S1 M1LA4** | 471 | **S101_2.5 P80 BN80A4** | 472 |
| **566** | 9.1 | 2.9 | 2.4 | 1050 | **S201_2.4 S1 M1LA4** | 473 | **S201_2.4 P80 BN80A4** | 474 |
| **589** | 8.7 | 2.4 | 4.8 | 1040 | **S201_4.8 S1 M1SD2** | 473 | **S201_4.8 P71 BN71B2** | 474 |
| **594** | 8.7 | 1.2 | 4.7 | 540 | **S101_4.7 S1 M1SD2** | 471 | **S101_4.7 P71 BN71B2** | 472 |
| **647** | 8.0 | 1.5 | 1.4 | 510 | **S101_1.4 S2 M2SA6** | 471 | **S101_1.4 P80 BN80B6** | 472 |
| **661** | 7.8 | 2.6 | 1.4 | 990 | **S201_1.4 S2 M2SA6** | 473 | **S201_1.4 P80 BN80B6** | 474 |
| **714** | 7.2 | 2.9 | 3.9 | 980 | **S201_3.9 S1 M1SD2** | 473 | **S201_3.9 P71 BN71B2** | 474 |
| **728** | 7.1 | 2.4 | 1.9 | 970 | **S201_1.9 S1 M1LA4** | 473 | **S201_1.9 P80 BN80A4** | 474 |
| **731** | 7.0 | 1.4 | 3.8 | 510 | **S101_3.8 S1 M1SD2** | 471 | **S101_3.8 P71 BN71B2** | 472 |
| **736** | 7.0 | 1.4 | 1.9 | 500 | **S101_1.9 S1 M1LA4** | 471 | **S101_1.9 P80 BN80A4** | 472 |
| **878** | 5.9 | 1.7 | 3.2 | 490 | **S101_3.2 S1 M1SD2** | 471 | **S101_3.2 P71 BN71B2** | 472 |
| **971** | 5.3 | 1.9 | 1.4 | 470 | **S101_1.4 S1 M1LA4** | 471 | **S101_1.4 P80 BN80A4** | 472 |
| **992** | 5.2 | 3.3 | 1.4 | 890 | | | **S201_1.4 P80 BN80A4** | 474 |
| **1124** | 4.6 | 1.7 | 2.5 | 460 | **S101_2.5 S1 M1SD2** | 471 | **S101_2.5 P71 BN71B2** | 472 |
| **1499** | 3.4 | 2.3 | 1.9 | 430 | **S101_1.9 S1 M1SD2** | 471 | **S101_1.9 P71 BN71B2** | 472 |
| **1977** | 2.6 | 3.1 | 1.4 | 390 | **S101_1.4 S1 M1SD2** | 471 | **S101_1.4 P71 BN71B2** | 472 |

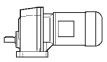


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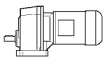
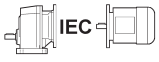
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **73** | 96 | 1.0 | 12.9 | 6170 | **S501_12.9 S3 ME3SA6** | 479 | **S501_12.9 P90 BE90S6** | 480 |
| **90** | 78 | 1.5 | 10.5 | 5810 | **S501_10.5 S3 ME3SA6** | 479 | **S501_10.5 P90 BE90S6** | 480 |
| **107** | 65 | 1.9 | 8.8 | 5520 | **S501_8.8 S3 ME3SA6** | 479 | **S501_8.8 P90 BE90S6** | 480 |
| **111** | 63 | 1.6 | 12.9 | 5460 | **S501_12.9 S2 ME2SB4** | 479 | **S501_12.9 P80 BE80B4** | 480 |
| **127** | 55 | 2.5 | 7.4 | 5240 | **S501_7.4 S3 ME3SA6** | 479 | **S501_7.4 P90 BE90S6** | 480 |
| **131** | 53 | 1.7 | 7.2 | 3700 | **S401_7.2 S3 ME3SA6** | 477 | **S401_7.2 P90 BE90S6** | 478 |
| **134** | 52 | 1.0 | 10.7 | 3670 | **S401_10.7 S2 ME2SB4** | 477 | **S401_10.7 P80 BE80B4** | 478 |
| **137** | 51 | 2.1 | 10.5 | 5130 | **S501_10.5 S2 ME2SB4** | 479 | **S501_10.5 P80 BE80B4** | 480 |
| **155** | 45 | 2.3 | 6.1 | 3530 | **S401_6.1 S3 ME3SA6** | 477 | **S401_6.1 P90 BE90S6** | 478 |
| **161** | 44 | 1.3 | 5.8 | 1960 | **S301_5.8 S3 ME3SA6** | 475 | **S301_5.8 P90 BE90S6** | 476 |
| **163** | 43 | 2.6 | 8.8 | 4870 | **S501_8.8 S2 ME2SB4** | 479 | **S501_8.8 P80 BE80B4** | 480 |
| **166** | 42 | 1.4 | 8.6 | 3460 | **S401_8.6 S2 ME2SB4** | 477 | **S401_8.6 P80 BE80B4** | 478 |
| **191** | 37 | 1.6 | 4.9 | 1880 | **S301_4.9 S3 ME3SA6** | 475 | **S301_4.9 P90 BE90S6** | 476 |
| **194** | 36 | 2.9 | 4.8 | 3300 | **S401_4.8 S3 ME3SA6** | 477 | **S401_4.8 P90 BE90S6** | 478 |
| **200** | 35 | 2.3 | 7.2 | 3280 | **S401_7.2 S2 ME2SB4** | 477 | **S401_7.2 P80 BE80B4** | 478 |
| **202** | 35 | 1.4 | 7.1 | 1860 | **S301_7.1 S2 ME2SB4** | 475 | **S301_7.1 P80 BE80B4** | 476 |
| **221** | 32 | 2.5 | 12.9 | 4420 | **S501_12.9 S2 ME2SA2** | 479 | **S501_12.9 P80 BE80A2** | 480 |
| **230** | 31 | 1.3 | 12.4 | 3150 | **S401_12.4 S2 ME2SA2** | 477 | **S401_12.4 P80 BE80A2** | 478 |
| **236** | 30 | 3.0 | 6.1 | 3120 | **S401_6.1 S2 ME2SB4** | 477 | **S401_6.1 P80 BE80B4** | 478 |
| **238** | 29 | 2.0 | 3.9 | 1780 | **S301_3.9 S3 ME3SA6** | 475 | **S301_3.9 P90 BE90S6** | 476 |
| **245** | 29 | 1.7 | 5.8 | 1780 | **S301_5.8 S2 ME2SB4** | 475 | **S301_5.8 P80 BE80B4** | 476 |
| **246** | 29 | 0.9 | 5.8 | 1160 | **S201_5.8 S2 ME2SB4** | 473 | **S201_5.8 P80 BE80B4** | 474 |
| **267** | 26 | 1.5 | 10.7 | 3000 | **S401_10.7 S2 ME2SA2** | 477 | **S401_10.7 P80 BE80A2** | 478 |
| **273** | 26 | 3.3 | 10.5 | 4140 | **S501_10.5 S2 ME2SA2** | 479 | **S501_10.5 P80 BE80A2** | 480 |
| **277** | 25 | 0.9 | 10.3 | 1730 | **S301_10.3 S2 ME2SA2** | 475 | **S301_10.3 P80 BE80A2** | 476 |
| **290** | 24 | 2.1 | 4.9 | 1700 | **S301_4.9 S2 ME2SB4** | 475 | **S301_4.9 P80 BE80B4** | 476 |
| **300** | 23 | 1.1 | 4.8 | 1180 | **S201_4.8 S2 ME2SB4** | 473 | **S201_4.8 P80 BE80B4** | 474 |
| **302** | 23 | 1.3 | 3.1 | 1160 | **S201_3.1 S3 ME3SA6** | 473 | **S201_3.1 P90 BE90S6** | 474 |
| **307** | 23 | 2.5 | 3.1 | 1670 | **S301_3.1 S3 ME3SA6** | 475 | **S301_3.1 P90 BE90S6** | 476 |
| **321** | 22 | 1.1 | 8.9 | 1660 | **S301_8.9 S2 ME2SA2** | 475 | **S301_8.9 P80 BE80A2** | 476 |
| **330** | 21 | 2.3 | 8.6 | 2820 | **S401_8.6 S2 ME2SA2** | 477 | **S401_8.6 P80 BE80A2** | 478 |
| **363** | 19.3 | 2.6 | 3.9 | 1600 | **S301_3.9 S2 ME2SB4** | 475 | **S301_3.9 P80 BE80B4** | 476 |
| **364** | 19.3 | 1.3 | 3.9 | 1130 | **S201_3.9 S2 ME2SB4** | 473 | **S201_3.9 P80 BE80B4** | 474 |
| **386** | 18.2 | 1.6 | 2.4 | 1110 | **S201_2.4 S3 ME3SA6** | 473 | **S201_2.4 P90 BE90S6** | 474 |
| **388** | 18.1 | 3.2 | 2.4 | 1560 | **S301_2.4 S3 ME3SA6** | 475 | **S301_2.4 P90 BE90S6** | 476 |
| **395** | 17.8 | 1.2 | 7.2 | 1120 | **S201_7.2 S2 ME2SA2** | 473 | **S201_7.2 P80 BE80A2** | 474 |
| **402** | 17.5 | 2.3 | 7.1 | 1560 | **S301_7.1 S2 ME2SA2** | 475 | **S301_7.1 P80 BE80A2** | 476 |
| **460** | 15.2 | 1.7 | 3.1 | 1070 | **S201_3.1 S2 ME2SB4** | 473 | **S201_3.1 P80 BE80B4** | 474 |
| **467** | 15.0 | 3.3 | 3.1 | 1490 | **S301_3.1 S2 ME2SB4** | 475 | **S301_3.1 P80 BE80B4** | 476 |
| **488** | 14.4 | 2.8 | 5.8 | 1480 | **S301_5.8 S2 ME2SA2** | 475 | **S301_5.8 P80 BE80A2** | 476 |
| **490** | 14.3 | 1.5 | 5.8 | 1060 | **S201_5.8 S2 ME2SA2** | 473 | **S201_5.8 P80 BE80A2** | 474 |
| **496** | 14.1 | 1.4 | 1.9 | 1040 | **S201_1.9 S3 ME3SA6** | 473 | **S201_1.9 P90 BE90S6** | 474 |
| **515** | 13.6 | 2.6 | 1.8 | 1440 | **S301_1.8 S3 ME3SA6** | 475 | **S301_1.8 P90 BE90S6** | 476 |
| **578** | 12.1 | 3.3 | 4.9 | 1410 | **S301_4.9 S2 ME2SA2** | 475 | **S301_4.9 P80 BE80A2** | 476 |
| **587** | 11.9 | 2.2 | 2.4 | 1010 | **S201_2.4 S2 ME2SB4** | 473 | **S201_2.4 P80 BE80B4** | 474 |
| **591** | 11.9 | 4.2 | 2.4 | 1380 | **S301_2.4 S2 ME2SB4** | 475 | **S301_2.4 P80 BE80B4** | 476 |
| **598** | 11.7 | 1.8 | 4.8 | 1010 | **S201_4.8 S2 ME2SA2** | 473 | **S201_4.8 P80 BE80A2** | 474 |
| **661** | 10.6 | 1.1 | 1.4 | 460 | **S101_1.4 S3 ME3SA6** | 471 | **S101_1.4 P90 BE90S6** | 472 |
| **668** | 10.5 | 3.3 | 1.4 | 1330 | **S301_1.4 S3 ME3SA6** | 475 | **S301_1.4 P90 BE90S6** | 476 |
| **676** | 10.4 | 1.9 | 1.4 | 960 | **S201_1.4 S3 ME3SA6** | 473 | **S201_1.4 P90 BE90S6** | 474 |
| **725** | 9.7 | 2.2 | 3.9 | 960 | **S201_3.9 S2 ME2SA2** | 473 | **S201_3.9 P80 BE80A2** | 474 |
| **741** | 9.5 | 1.1 | 3.8 | 480 | **S101_3.8 S2 ME2SA2** | 471 | **S101_3.8 P80 BE80A2** | 472 |
| **755** | 9.3 | 1.8 | 1.9 | 940 | **S201_1.9 S2 ME2SB4** | 473 | **S201_1.9 P80 BE80B4** | 474 |
| **763** | 9.2 | 1.1 | 1.9 | 460 | **S101_1.9 S2 ME2SB4** | 471 | **S101_1.9 P80 BE80B4** | 472 |
| **783** | 8.9 | 3.4 | 1.8 | 1280 | **S301_1.8 S2 ME2SB4** | 475 | **S301_1.8 P80 BE80B4** | 476 |
| **891** | 7.9 | 1.3 | 3.2 | 460 | **S101_3.2 S2 ME2SA2** | 471 | **S101_3.2 P80 BE80A2** | 472 |
| **916** | 7.7 | 2.7 | 3.1 | 900 | **S201_3.1 S2 ME2SA2** | 473 | **S201_3.1 P80 BE80A2** | 474 |

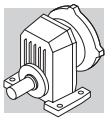


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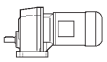
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **1006** | 7.0 | 1.4 | 1.4 | 440 | **S101_1.4 S2 ME2SB4** | 471 | **S101_1.4 P80 BE80B4** | 472 |
| **1028** | 6.8 | 2.5 | 1.4 | 860 | **S201_1.4 S2 ME2SB4** | 473 | **S201_1.4 P80 BE80B4** | 474 |
| **1140** | 6.2 | 1.3 | 2.5 | 440 | **S101_2.5 S2 ME2SA2** | 471 | **S101_2.5 P80 BE80A2** | 472 |
| **1169** | 6.0 | 3.5 | 2.4 | 840 | **S201_2.4 S2 ME2SA2** | 473 | **S201_2.4 P80 BE80A2** | 474 |
| **1504** | 4.7 | 2.8 | 1.9 | 780 | **S201_1.9 S2 ME2SA2** | 473 | **S201_1.9 P80 BE80A2** | 474 |
| **1520** | 4.6 | 1.7 | 1.9 | 410 | **S101_1.9 S2 ME2SA2** | 471 | **S101_1.9 P80 BE80A2** | 472 |
| **2006** | 3.5 | 2.3 | 1.4 | 380 | **S101_1.4 S2 ME2SA2** | 471 | **S101_1.4 P80 BE80A2** | 472 |

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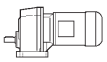
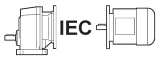
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **90** | 114 | 1.0 | 10.5 | 5650 | **S501_10.5 S3 ME3LA6** | 479 | **S501_10.5 P100 BE100M6** | 480 |
| **108** | 96 | 1.3 | 8.8 | 5380 | **S501_8.8 S3 ME3LA6** | 479 | **S501_8.8 P100 BE100M6** | 480 |
| **111** | 93 | 1.1 | 12.9 | 5320 | **S501_12.9 S3 ME3SA4** | 479 | **S501_12.9 P90 BE90S4** | 480 |
| **128** | 81 | 1.7 | 7.4 | 5120 | **S501_7.4 S3 ME3LA6** | 479 | **S501_7.4 P100 BE100M6** | 480 |
| **132** | 78 | 1.2 | 7.2 | 3550 | **S401_7.2 S3 ME3LA6** | 477 | **S401_7.2 P100 BE100M6** | 478 |
| **137** | 76 | 1.5 | 10.5 | 5020 | **S501_10.5 S3 ME3SA4** | 479 | **S501_10.5 P90 BE90S4** | 480 |
| **156** | 66 | 1.6 | 6.1 | 3400 | **S401_6.1 S3 ME3LA6** | 477 | **S401_6.1 P100 BE100M6** | 478 |
| **156** | 66 | 2.3 | 6.1 | 4840 | **S501_6.1 S3 ME3LA6** | 479 | **S501_6.1 P100 BE100M6** | 480 |
| **163** | 64 | 1.7 | 8.8 | 4770 | **S501_8.8 S3 ME3SA4** | 479 | **S501_8.8 P90 BE90S4** | 480 |
| **166** | 63 | 1.0 | 8.6 | 3350 | **S401_8.6 S3 ME3SA4** | 477 | **S401_8.6 P90 BE90S4** | 478 |
| **192** | 54 | 1.1 | 4.9 | 1740 | **S301_4.9 S3 ME3LA6** | 475 | **S301_4.9 P100 BE100M6** | 476 |
| **193** | 54 | 2.4 | 7.4 | 4530 | **S501_7.4 S3 ME3SA4** | 479 | **S501_7.4 P90 BE90S4** | 480 |
| **196** | 53 | 2.0 | 4.8 | 3200 | **S401_4.8 S3 ME3LA6** | 477 | **S401_4.8 P100 BE100M6** | 478 |
| **200** | 52 | 1.5 | 7.2 | 3180 | **S401_7.2 S3 ME3SA4** | 477 | **S401_7.2 P90 BE90S4** | 478 |
| **202** | 51 | 1.0 | 7.1 | 1730 | **S301_7.1 S3 ME3SA4** | 475 | **S301_7.1 P90 BE90S4** | 476 |
| **220** | 47 | 1.7 | 12.9 | 4350 | **S501_12.9 S2 ME2SB2** | 479 | **S501_12.9 P90 BE90B2** | 480 |
| **236** | 44 | 2.0 | 6.1 | 3040 | **S401_6.1 S3 ME3SA4** | 477 | **S401_6.1 P90 BE90S4** | 478 |
| **236** | 44 | 3.0 | 6.1 | 4270 | **S501_6.1 S3 ME3SA4** | 479 | **S501_6.1 P90 BE90S4** | 480 |
| **240** | 43 | 1.3 | 3.9 | 1670 | **S301_3.9 S3 ME3LA6** | 475 | **S301_3.9 P100 BE100M6** | 476 |
| **245** | 42 | 1.2 | 5.8 | 1670 | **S301_5.8 S3 ME3SA4** | 475 | **S301_5.8 P90 BE90S4** | 476 |
| **248** | 42 | 2.5 | 3.8 | 2990 | **S401_3.8 S3 ME3LA6** | 477 | **S401_3.8 P100 BE100M6** | 478 |
| **265** | 39 | 1.0 | 10.7 | 2930 | **S401_10.7 S2 ME2SB2** | 477 | **S401_10.7 P90 BE90B2** | 478 |
| **271** | 38 | 2.2 | 10.5 | 4090 | **S501_10.5 S2 ME2SB2** | 479 | **S501_10.5 P90 BE90B2** | 480 |
| **290** | 36 | 1.4 | 4.9 | 1610 | **S301_4.9 S3 ME3SA4** | 475 | **S301_4.9 P90 BE90S4** | 476 |
| **296** | 35 | 2.6 | 4.8 | 2850 | **S401_4.8 S3 ME3SA4** | 477 | **S401_4.8 P90 BE90S4** | 478 |
| **309** | 33 | 1.7 | 3.1 | 1580 | **S301_3.1 S3 ME3LA6** | 475 | **S301_3.1 P100 BE100M6** | 476 |
| **310** | 33 | 3.2 | 3.1 | 2810 | **S401_3.1 S3 ME3LA6** | 477 | **S401_3.1 P100 BE100M6** | 478 |
| **323** | 32 | 2.7 | 8.8 | 3870 | **S501_8.8 S2 ME2SB2** | 479 | **S501_8.8 P90 BE90B2** | 480 |
| **328** | 31 | 1.5 | 8.6 | 2760 | **S401_8.6 S2 ME2SB2** | 477 | **S401_8.6 P90 BE90B2** | 478 |
| **363** | 29 | 1.7 | 3.9 | 1530 | **S301_3.9 S3 ME3SA4** | 475 | **S301_3.9 P90 BE90S4** | 476 |
| **364** | 29 | 0.9 | 3.9 | 950 | **S201_3.9 S3 ME3SA4** | 473 | **S201_3.9 P90 BE90S4** | 474 |
| **375** | 28 | 3.3 | 3.8 | 2650 | **S401_3.8 S3 ME3SA4** | 477 | **S401_3.8 P90 BE90S4** | 478 |
| **390** | 26 | 2.2 | 2.4 | 1490 | **S301_2.4 S3 ME3LA6** | 475 | **S301_2.4 P100 BE100M6** | 476 |
| **396** | 26 | 2.4 | 7.2 | 2610 | **S401_7.2 S2 ME2SB2** | 477 | **S401_7.2 P90 BE90B2** | 478 |
| **399** | 26 | 1.6 | 7.1 | 1500 | **S301_7.1 S2 ME2SB2** | 475 | **S301_7.1 P90 BE90B2** | 476 |
| **460** | 23 | 1.2 | 3.1 | 990 | **S201_3.1 S3 ME3SA4** | 473 | **S201_3.1 P90 BE90S4** | 474 |
| **467** | 22 | 2.3 | 3.1 | 1430 | **S301_3.1 S3 ME3SA4** | 475 | **S301_3.1 P90 BE90S4** | 476 |
| **484** | 21 | 1.9 | 5.8 | 1420 | **S301_5.8 S2 ME2SB2** | 475 | **S301_5.8 P90 BE90B2** | 476 |
| **499** | 21 | 1.0 | 1.9 | 960 | **S201_1.9 S3 ME3LA6** | 473 | **S201_1.9 P100 BE100M6** | 474 |
| **510** | 20 | 3.5 | 1.9 | 2420 | **S401_1.9 S3 ME3LA6** | 477 | **S401_1.9 P100 BE100M6** | 478 |
| **518** | 19.9 | 1.8 | 1.8 | 1380 | **S301_1.8 S3 ME3LA6** | 475 | **S301_1.8 P100 BE100M6** | 476 |
| **574** | 17.9 | 2.2 | 4.9 | 1360 | **S301_4.9 S2 ME2SB2** | 475 | **S301_4.9 P90 BE90B2** | 476 |
| **587** | 17.7 | 1.5 | 2.4 | 940 | **S201_2.4 S3 ME3SA4** | 473 | **S201_2.4 P90 BE90S4** | 474 |

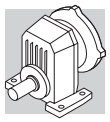


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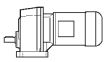
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **591** | 17.6 | 2.8 | 2.4 | 1340 | **S301_2.4 S3 ME3SA4** | 475 | **S301_2.4 P90 BE90S4** | 476 |
| **593** | 17.3 | 1.2 | 4.8 | 950 | **S201_4.8 S2 ME2SB2** | 473 | **S201_4.8 P90 BE90B2** | 474 |
| **671** | 15.3 | 2.3 | 1.4 | 1290 | **S301_1.4 S3 ME3LA6** | 475 | **S301_1.4 P100 BE100M6** | 476 |
| **679** | 15.2 | 1.3 | 1.4 | 900 | **S201_1.4 S3 ME3LA6** | 473 | **S201_1.4 P100 BE100M6** | 474 |
| **717** | 14.3 | 2.8 | 3.9 | 1280 | **S301_3.9 S2 ME2SB2** | 475 | **S301_3.9 P90 BE90B2** | 476 |
| **719** | 14.3 | 1.5 | 3.9 | 910 | **S201_3.9 S2 ME2SB2** | 473 | **S201_3.9 P90 BE90B2** | 474 |
| **755** | 13.7 | 1.2 | 1.9 | 890 | **S201_1.9 S3 ME3SA4** | 473 | **S201_1.9 P90 BE90S4** | 474 |
| **783** | 13.2 | 2.3 | 1.8 | 1240 | **S301_1.8 S3 ME3SA4** | 475 | **S301_1.8 P90 BE90S4** | 476 |
| **910** | 11.3 | 1.9 | 3.1 | 860 | **S201_3.1 S2 ME2SB2** | 473 | **S201_3.1 P90 BE90B2** | 474 |
| **1006** | 10.3 | 1.0 | 1.4 | 390 | **S101_1.4 S3 ME3SA4** | 471 | **S101_1.4 P90 BE90S4** | 472 |
| **1016** | 10.2 | 2.9 | 1.4 | 1150 | **S301_1.4 S3 ME3SA4** | 475 | **S301_1.4 P90 BE90S4** | 476 |
| **1028** | 10.1 | 1.7 | 1.4 | 820 | **S201_1.4 S3 ME3SA4** | 473 | **S201_1.4 P90 BE90S4** | 474 |
| **1161** | 8.9 | 2.4 | 2.4 | 810 | **S201_2.4 S2 ME2SB2** | 473 | **S201_2.4 P90 BE90B2** | 474 |
| **1494** | 6.9 | 1.9 | 1.9 | 750 | **S201_1.9 S2 ME2SB2** | 473 | **S201_1.9 P90 BE90B2** | 474 |
| **1509** | 6.8 | 1.2 | 1.9 | 380 | **S101_1.9 S2 ME2SB2** | 471 | **S101_1.9 P90 BE90B2** | 472 |
| **1991** | 5.2 | 1.5 | 1.4 | 350 | **S101_1.4 S2 ME2SB2** | 471 | **S101_1.4 P90 BE90B2** | 472 |
| **2034** | 5.1 | 2.6 | 1.4 | 690 | **S201_1.4 S2 ME2SB2** | 473 | **S201_1.4 P90 BE90B2** | 474 |

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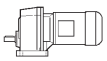
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **108** | 130 | 1.0 | 8.8 | 5190 | **S501_8.8 S3 ME3LB6** | 479 | **S501_8.8 P100 BE100LA6** | 480 |
| **128** | 110 | 1.3 | 7.4 | 4960 | **S501_7.4 S3 ME3LB6** | 479 | **S501_7.4 P100 BE100LA6** | 480 |
| **137** | 102 | 1.1 | 10.5 | 4880 | **S501_10.5 S3 ME3SB4** | 479 | **S501_10.5 P90 BE90LA4** | 480 |
| **156** | 90 | 1.7 | 6.1 | 4700 | **S501_6.1 S3 ME3LB6** | 479 | **S501_6.1 P100 BE100LA6** | 480 |
| **163** | 86 | 1.3 | 8.8 | 4660 | **S501_8.8 S3 ME3SB4** | 479 | **S501_8.8 P90 BE90LA4** | 480 |
| **193** | 73 | 1.8 | 7.4 | 4440 | **S501_7.4 S3 ME3SB4** | 479 | **S501_7.4 P90 BE90LA4** | 480 |
| **196** | 72 | 1.5 | 4.8 | 3070 | **S401_4.8 S3 ME3LB6** | 477 | **S401_4.8 P100 BE100LA6** | 478 |
| **199** | 71 | 2.5 | 4.8 | 4380 | **S501_4.8 S3 ME3LB6** | 479 | **S501_4.8 P100 BE100LA6** | 480 |
| **200** | 70 | 1.1 | 7.2 | 3070 | **S401_7.2 S3 ME3SB4** | 477 | **S401_7.2 P90 BE90LA4** | 478 |
| **222** | 63 | 1.3 | 12.9 | 4270 | **S501_12.9 S3 ME3SA2** | 479 | **S501_12.9 P90 BE90SA2** | 480 |
| **236** | 59 | 1.5 | 6.1 | 2940 | **S401_6.1 S3 ME3SB4** | 477 | **S401_6.1 P90 BE90LA4** | 478 |
| **236** | 59 | 2.2 | 6.1 | 4190 | **S501_6.1 S3 ME3SB4** | 479 | **S501_6.1 P90 BE90LA4** | 480 |
| **248** | 57 | 1.9 | 3.8 | 2880 | **S401_3.8 S3 ME3LB6** | 477 | **S401_3.8 P100 BE100LA6** | 478 |
| **273** | 51 | 1.7 | 10.5 | 4020 | **S501_10.5 S3 ME3SA2** | 479 | **S501_10.5 P90 BE90SA2** | 480 |
| **290** | 48 | 1.0 | 4.9 | 1500 | **S301_4.9 S3 ME3SB4** | 475 | **S301_4.9 P90 BE90LA4** | 476 |
| **296** | 47 | 1.9 | 4.8 | 2770 | **S401_4.8 S3 ME3SB4** | 477 | **S401_4.8 P90 BE90LA4** | 478 |
| **301** | 47 | 3.2 | 4.8 | 3890 | **S501_4.8 S3 ME3SB4** | 479 | **S501_4.8 P90 BE90LA4** | 480 |
| **309** | 45 | 1.3 | 3.1 | 1470 | **S301_3.1 S3 ME3LB6** | 475 | **S301_3.1 P100 BE100LA6** | 476 |
| **310** | 45 | 2.3 | 3.1 | 2720 | **S401_3.1 S3 ME3LB6** | 477 | **S401_3.1 P100 BE100LA6** | 478 |
| **326** | 43 | 2.0 | 8.8 | 3820 | **S501_8.8 S3 ME3SA2** | 479 | **S501_8.8 P90 BE90SA2** | 480 |
| **331** | 42 | 1.1 | 8.6 | 2700 | **S401_8.6 S3 ME3SA2** | 477 | **S401_8.6 P90 BE90SA2** | 478 |
| **363** | 39 | 1.3 | 3.9 | 1440 | **S301_3.9 S3 ME3SB4** | 475 | **S301_3.9 P90 BE90LA4** | 476 |
| **375** | 37 | 2.4 | 3.8 | 2590 | **S401_3.8 S3 ME3SB4** | 477 | **S401_3.8 P90 BE90LA4** | 478 |
| **386** | 36 | 2.7 | 7.4 | 3630 | **S501_7.4 S3 ME3SA2** | 479 | **S501_7.4 P90 BE90SA2** | 480 |
| **390** | 36 | 1.6 | 2.4 | 1400 | **S301_2.4 S3 ME3LB6** | 475 | **S301_2.4 P100 BE100LA6** | 476 |
| **395** | 36 | 3.0 | 2.4 | 2540 | **S401_2.4 S3 ME3LB6** | 477 | **S401_2.4 P100 BE100LA6** | 478 |
| **399** | 35 | 1.8 | 7.2 | 2560 | **S401_7.2 S3 ME3SA2** | 477 | **S401_7.2 P90 BE90SA2** | 478 |
| **403** | 35 | 1.1 | 7.1 | 1420 | **S301_7.1 S3 ME3SA2** | 475 | **S301_7.1 P90 BE90SA2** | 476 |
| **467** | 30 | 1.7 | 3.1 | 1360 | **S301_3.1 S3 ME3SB4** | 475 | **S301_3.1 P90 BE90LA4** | 476 |
| **468** | 30 | 3.0 | 3.1 | 2430 | **S401_3.1 S3 ME3SB4** | 477 | **S401_3.1 P90 BE90LA4** | 478 |
| **471** | 30 | 2.3 | 6.1 | 2440 | **S401_6.1 S3 ME3SA2** | 477 | **S401_6.1 P90 BE90SA2** | 478 |
| **488** | 29 | 1.4 | 5.8 | 1360 | **S301_5.8 S3 ME3SA2** | 475 | **S301_5.8 P90 BE90SA2** | 476 |

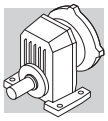


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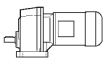
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **510** | 28 | 2.5 | 1.9 | 2350 | **S401_1.9 S3 ME3LB6** | 477 | **S401_1.9 P100 BE100LA6** | 478 |
| **518** | 27 | 1.3 | 1.8 | 1310 | **S301_1.8 S3 ME3LB6** | 475 | **S301_1.8 P100 BE100LA6** | 476 |
| **579** | 24 | 1.6 | 4.9 | 1310 | **S301_4.9 S3 ME3SA2** | 475 | **S301_4.9 P90 BE90SA2** | 476 |
| **587** | 24 | 1.1 | 2.4 | 870 | **S201_2.4 S3 ME3SB4** | 473 | **S201_2.4 P90 BE90LA4** | 474 |
| **591** | 24 | 2.1 | 2.4 | 1290 | **S301_2.4 S3 ME3SB4** | 475 | **S301_2.4 P90 BE90LA4** | 476 |
| **598** | 23 | 3.8 | 2.4 | 2200 | **S401_2.4 S3 ME3SB4** | 477 | **S401_2.4 P90 BE90LA4** | 478 |
| **671** | 21 | 1.7 | 1.4 | 1230 | **S301_1.4 S3 ME3LB6** | 475 | **S301_1.4 P100 BE100LA6** | 476 |
| **679** | 21 | 1.0 | 1.4 | 830 | **S201_1.4 S3 ME3LB6** | 473 | **S201_1.4 P100 BE100LA6** | 474 |
| **693** | 20 | 3.5 | 1.4 | 2150 | **S401_1.4 S3 ME3LB6** | 477 | **S401_1.4 P100 BE100LA6** | 478 |
| **724** | 19.4 | 2.1 | 3.9 | 1240 | **S301_3.9 S3 ME3SA2** | 475 | **S301_3.9 P90 BE90SA2** | 476 |
| **755** | 18.6 | 0.9 | 1.9 | 830 | **S201_1.9 S3 ME3SB4** | 473 | **S201_1.9 P90 BE90LA4** | 474 |
| **772** | 18.1 | 3.3 | 1.9 | 2090 | **S401_1.9 S3 ME3SB4** | 477 | **S401_1.9 P90 BE90LA4** | 478 |
| **783** | 17.9 | 1.7 | 1.8 | 1200 | **S301_1.8 S3 ME3SB4** | 475 | **S301_1.8 P90 BE90LA4** | 476 |
| **918** | 15.3 | 1.4 | 3.1 | 810 | **S201_3.1 S3 ME3SA2** | 473 | **S201_3.1 P90 BE90SA2** | 474 |
| **932** | 15.1 | 2.7 | 3.1 | 1160 | **S301_3.1 S3 ME3SA2** | 475 | **S301_3.1 P90 BE90SA2** | 476 |
| **1016** | 13.8 | 2.2 | 1.4 | 1110 | **S301_1.4 S3 ME3SB4** | 475 | **S301_1.4 P90 BE90LA4** | 476 |
| **1028** | 13.6 | 1.2 | 1.4 | 780 | **S201_1.4 S3 ME3SB4** | 473 | **S201_1.4 P90 BE90LA4** | 474 |
| **1171** | 12.0 | 1.8 | 2.4 | 770 | **S201_2.4 S3 ME3SA2** | 473 | **S201_2.4 P90 BE90SA2** | 474 |
| **1507** | 9.3 | 1.4 | 1.9 | 720 | **S201_1.9 S3 ME3SA2** | 473 | **S201_1.9 P90 BE90SA2** | 474 |
| **1563** | 9.0 | 2.7 | 1.8 | 1000 | **S301_1.8 S3 ME3SA2** | 475 | **S301_1.8 P90 BE90SA2** | 476 |
| **2009** | 7.0 | 1.1 | 1.4 | 320 | **S101_1.4 S3 ME3SA2** | 471 | **S101_1.4 P90 BE90SA2** | 472 |
| **2029** | 6.9 | 3.5 | 1.4 | 920 | **S301_1.4 S3 ME3SA2** | 475 | **S301_1.4 P90 BE90SA2** | 476 |
| **2052** | 6.8 | 1.9 | 1.4 | 670 | **S201_1.4 S3 ME3SA2** | 473 | **S201_1.4 P90 BE90SA2** | 474 |

# 2.2 kW

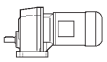
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | | IEC  | |
|---|---|---|---|---|---|---|---|---|
| **158** | 131 | 1.1 | 6.1 | 4520 | **S501_6.1 S4 ME4SA6** | 479 | **S501_6.1 P112 BE112M6** | 480 |
| **193** | 107 | 1.2 | 7.4 | 4280 | **S501_7.4 S3 ME3LA4** | 479 | **S501_7.4 P100 BE100LA4** | 480 |
| **201** | 102 | 1.7 | 4.8 | 4230 | **S501_4.8 S4 ME4SA6** | 479 | **S501_4.8 P112 BE112M6** | 480 |
| **236** | 87 | 1.0 | 6.1 | 2790 | **S401_6.1 S3 ME3LA4** | 477 | **S401_6.1 P100 BE100LA4** | 478 |
| **236** | 87 | 1.5 | 6.1 | 4060 | **S501_6.1 S3 ME3LA4** | 479 | **S501_6.1 P100 BE100LA4** | 480 |
| **249** | 83 | 2.1 | 3.8 | 4000 | **S501_3.8 S4 ME4SA6** | 479 | **S501_3.8 P112 BE112M6** | 480 |
| **250** | 82 | 1.3 | 3.8 | 2730 | **S401_3.8 S4 ME4SA6** | 477 | **S401_3.8 P112 BE112M6** | 478 |
| **274** | 75 | 1.1 | 10.5 | 3910 | **S501_10.5 S3 ME3LA2** | 479 | **S501_10.5 P90 BE90L2** | 480 |
| **296** | 70 | 1.3 | 4.8 | 2640 | **S401_4.8 S3 ME3LA4** | 477 | **S401_4.8 P100 BE100LA4** | 478 |
| **301** | 68 | 2.2 | 4.8 | 3790 | **S501_4.8 S3 ME3LA4** | 479 | **S501_4.8 P100 BE100LA4** | 480 |
| **313** | 66 | 1.6 | 3.1 | 2590 | **S401_3.1 S4 ME4SA6** | 477 | **S401_3.1 P112 BE112M6** | 478 |
| **314** | 66 | 2.4 | 3.0 | 3750 | **S501_3.0 S4 ME4SA6** | 479 | **S501_3.0 P112 BE112M6** | 480 |
| **327** | 63 | 1.3 | 8.8 | 3730 | **S501_8.8 S3 ME3LA2** | 479 | **S501_8.8 P90 BE90L2** | 480 |
| **372** | 55 | 2.7 | 3.8 | 3570 | **S501_3.8 S3 ME3LA4** | 479 | **S501_3.8 P100 BE100LA4** | 480 |
| **375** | 55 | 1.6 | 3.8 | 2490 | **S401_3.8 S3 ME3LA4** | 477 | **S401_3.8 P100 BE100LA4** | 478 |
| **387** | 53 | 1.9 | 7.4 | 3540 | **S501_7.4 S3 ME3LA2** | 479 | **S501_7.4 P90 BE90L2** | 480 |
| **394** | 52 | 1.1 | 2.4 | 1260 | **S301_2.4 S4 ME4SA6** | 475 | **S301_2.4 P112 BE112M6** | 476 |
| **399** | 52 | 2.0 | 2.4 | 2450 | **S401_2.4 S4 ME4SA6** | 477 | **S401_2.4 P112 BE112M6** | 478 |
| **400** | 51 | 1.2 | 7.2 | 2460 | **S401_7.2 S3 ME3LA2** | 477 | **S401_7.2 P90 BE90L2** | 478 |
| **467** | 44 | 1.1 | 3.1 | 1240 | **S301_3.1 S3 ME3LA4** | 475 | **S301_3.1 P100 BE100LA4** | 476 |
| **468** | 44 | 2.0 | 3.1 | 2340 | **S401_3.1 S3 ME3LA4** | 477 | **S401_3.1 P100 BE100LA4** | 478 |
| **470** | 44 | 3.2 | 3.0 | 3340 | **S501_3.0 S3 ME3LA4** | 479 | **S501_3.0 P100 BE100LA4** | 480 |
| **472** | 44 | 1.6 | 6.1 | 2360 | **S401_6.1 S3 ME3LA2** | 477 | **S401_6.1 P90 BE90L2** | 478 |
| **473** | 44 | 2.3 | 6.1 | 3340 | **S501_6.1 S3 ME3LA2** | 479 | **S501_6.1 P90 BE90L2** | 480 |
| **490** | 42 | 1.0 | 5.8 | 1250 | **S301_5.8 S3 ME3LA2** | 475 | **S301_5.8 P90 BE90L2** | 476 |
| **516** | 40 | 1.8 | 1.9 | 2280 | **S401_1.9 S4 ME4SA6** | 477 | **S401_1.9 P112 BE112M6** | 478 |

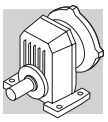


## 2.2 kW

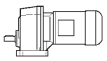
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **534** | 39 | 3.2 | 1.8 | 3210 | **S501_1.8 S4 ME4SA6** | 479 | **S501_1.8 P112 BE112M6** | 480 |
| **581** | 35 | 1.1 | 4.9 | 1220 | **S301_4.9 S3 ME3LA2** | 475 | **S301_4.9 P90 BE90L2** | 476 |
| **591** | 35 | 1.4 | 2.4 | 1190 | **S301_2.4 S3 ME3LA4** | 475 | **S301_2.4 P100 BE100LA4** | 476 |
| **593** | 35 | 2.0 | 4.8 | 2210 | **S401_4.8 S3 ME3LA2** | 477 | **S401_4.8 P90 BE90L2** | 478 |
| **598** | 34 | 2.6 | 2.4 | 2200 | **S401_2.4 S3 ME3LA4** | 477 | **S401_2.4 P100 BE100LA4** | 478 |
| **679** | 30 | 1.2 | 1.4 | 1140 | **S301_1.4 S4 ME4SA6** | 475 | **S301_1.4 P112 BE112M6** | 476 |
| **700** | 29 | 2.4 | 1.4 | 2090 | **S401_1.4 S4 ME4SA6** | 477 | **S401_1.4 P112 BE112M6** | 478 |
| **726** | 28 | 1.4 | 3.9 | 1160 | **S301_3.9 S3 ME3LA2** | 475 | **S301_3.9 P90 BE90L2** | 476 |
| **751** | 27 | 2.6 | 3.8 | 2070 | **S401_3.8 S3 ME3LA2** | 477 | **S401_3.8 P90 BE90L2** | 478 |
| **772** | 27 | 2.2 | 1.9 | 2040 | **S401_1.9 S3 ME3LA4** | 477 | **S401_1.9 P100 BE100LA4** | 478 |
| **783** | 26 | 1.1 | 1.8 | 1120 | **S301_1.8 S3 ME3LA4** | 475 | **S301_1.8 P100 BE100LA4** | 476 |
| **921** | 22 | 0.9 | 3.1 | 730 | **S201_3.1 S3 ME3LA2** | 473 | **S201_3.1 P90 BE90L2** | 474 |
| **936** | 22 | 1.8 | 3.1 | 1100 | **S301_3.1 S3 ME3LA2** | 475 | **S301_3.1 P90 BE90L2** | 476 |
| **1016** | 20 | 1.5 | 1.4 | 1050 | **S301_1.4 S3 ME3LA4** | 475 | **S301_1.4 P100 BE100LA4** | 476 |
| **1049** | 19.6 | 3.1 | 1.4 | 1860 | **S401_1.4 S3 ME3LA4** | 477 | **S401_1.4 P100 BE100LA4** | 478 |
| **1175** | 17.5 | 1.2 | 2.4 | 710 | **S201_2.4 S3 ME3LA2** | 473 | **S201_2.4 P90 BE90L2** | 474 |
| **1183** | 17.4 | 2.3 | 2.4 | 1030 | **S301_2.4 S3 ME3LA2** | 475 | **S301_2.4 P90 BE90L2** | 476 |
| **1512** | 13.6 | 1.0 | 1.9 | 670 | **S201_1.9 S3 ME3LA2** | 473 | **S201_1.9 P90 BE90L2** | 474 |
| **1569** | 13.1 | 1.8 | 1.8 | 960 | **S301_1.8 S3 ME3LA2** | 475 | **S301_1.8 P90 BE90L2** | 476 |
| **2036** | 10.1 | 2.4 | 1.4 | 890 | **S301_1.4 S3 ME3LA2** | 475 | **S301_1.4 P90 BE90L2** | 476 |
| **2059** | 10.0 | 1.3 | 1.4 | 630 | **S201_1.4 S3 ME3LA2** | 473 | **S201_1.4 P90 BE90L2** | 474 |

## 3 kW

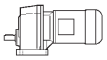
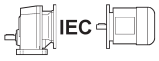
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **201** | 140 | 1.3 | 4.8 | 4040 | **S501_4.8 S4 ME4SB6** | 479 | **S501_4.8 P132 BE132S6** | 480 |
| **238** | 119 | 1.1 | 6.1 | 3910 | **S501_6.1 S3 ME3LB4** | 479 | **S501_6.1 P100 BE100LB4** | 480 |
| **249** | 113 | 1.5 | 3.8 | 3840 | **S501_3.8 S4 ME4SB6** | 479 | **S501_3.8 P132 BE132S6** | 480 |
| **298** | 95 | 1.0 | 4.8 | 2490 | **S401_4.8 S3 ME3LB4** | 477 | **S401_4.8 P100 BE100LB4** | 478 |
| **303** | 93 | 1.6 | 4.8 | 3670 | **S501_4.8 S3 ME3LB4** | 479 | **S501_4.8 P100 BE100LB4** | 480 |
| **313** | 90 | 1.2 | 3.1 | 2440 | **S401_3.1 S4 ME4SB6** | 477 | **S401_3.1 P132 BE132S6** | 478 |
| **314** | 89 | 1.8 | 3.0 | 3630 | **S501_3.0 S4 ME4SB6** | 479 | **S501_3.0 P132 BE132S6** | 480 |
| **328** | 85 | 1.0 | 8.8 | 3600 | **S501_8.8 S3 ME3LB2** | 479 | **S501_8.8 P100 BE100L2** | 480 |
| **375** | 75 | 2.0 | 3.8 | 3470 | **S501_3.8 S3 ME3LB4** | 479 | **S501_3.8 P100 BE100LB4** | 480 |
| **378** | 75 | 1.2 | 3.8 | 2370 | **S401_3.8 S3 ME3LB4** | 477 | **S401_3.8 P100 BE100LB4** | 478 |
| **389** | 72 | 1.4 | 7.4 | 3440 | **S501_7.4 S3 ME3LB2** | 479 | **S501_7.4 P100 BE100L2** | 480 |
| **397** | 71 | 2.1 | 2.4 | 3390 | **S501_2.4 S4 ME4SB6** | 479 | **S501_2.4 P132 BE132S6** | 480 |
| **399** | 70 | 1.5 | 2.4 | 2320 | **S401_2.4 S4 ME4SB6** | 477 | **S401_2.4 P132 BE132S6** | 478 |
| **472** | 60 | 1.5 | 3.1 | 2250 | **S401_3.1 S3 ME3LB4** | 477 | **S401_3.1 P100 BE100LB4** | 478 |
| **473** | 60 | 2.3 | 3.0 | 3260 | **S501_3.0 S3 ME3LB4** | 479 | **S501_3.0 P100 BE100LB4** | 480 |
| **516** | 54 | 1.3 | 1.9 | 2170 | **S401_1.9 S4 ME4SB6** | 477 | **S401_1.9 P132 BE132S6** | 478 |
| **534** | 53 | 2.4 | 1.8 | 3120 | **S501_1.8 S4 ME4SB6** | 479 | **S501_1.8 P132 BE132S6** | 480 |
| **595** | 47 | 1.1 | 2.4 | 1080 | **S301_2.4 S3 ME3LB4** | 475 | **S301_2.4 P100 BE100LB4** | 476 |
| **596** | 47 | 1.5 | 4.8 | 2130 | **S401_4.8 S3 ME3LB2** | 477 | **S401_4.8 P100 BE100L2** | 478 |
| **598** | 47 | 2.8 | 2.4 | 3040 | **S501_2.4 S3 ME3LB4** | 479 | **S501_2.4 P100 BE100LB4** | 480 |
| **602** | 47 | 1.9 | 2.4 | 2120 | **S401_2.4 S3 ME3LB4** | 477 | **S401_2.4 P100 BE100LB4** | 478 |
| **606** | 46 | 2.6 | 4.8 | 3030 | **S501_4.8 S3 ME3LB2** | 479 | **S501_4.8 P100 BE100L2** | 480 |
| **672** | 42 | 3.0 | 1.4 | 2920 | **S501_1.4 S4 ME4SB6** | 479 | **S501_1.4 P132 BE132S6** | 480 |
| **700** | 40 | 1.7 | 1.4 | 2010 | **S401_1.4 S4 ME4SB6** | 477 | **S401_1.4 P132 BE132S6** | 478 |
| **730** | 38 | 1.0 | 3.9 | 1070 | **S301_3.9 S3 ME3LB2** | 475 | **S301_3.9 P100 BE100L2** | 476 |
| **755** | 37 | 1.9 | 3.8 | 2000 | **S401_3.8 S3 ME3LB2** | 477 | **S401_3.8 P100 BE100L2** | 478 |
| **778** | 36 | 1.7 | 1.9 | 1970 | **S401_1.9 S3 ME3LB4** | 477 | **S401_1.9 P100 BE100LB4** | 478 |
| **789** | 36 | 0.8 | 1.8 | 900 | **S301_1.8 S3 ME3LB4** | 475 | **S301_1.8 P100 BE100LB4** | 476 |

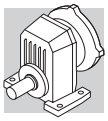


## 3 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **805** | 35 | 3.1 | 1.8 | 2780 | **S501_1.8 S3 ME3LB4** | 479 | **S501_1.8 P100 BE100LB4** | 480 |
| **940** | 30 | 1.3 | 3.1 | 1020 | **S301_3.1 S3 ME3LB2** | 475 | **S301_3.1 P100 BE100L2** | 476 |
| **943** | 30 | 2.4 | 3.1 | 1880 | **S401_3.1 S3 ME3LB2** | 477 | **S401_3.1 P100 BE100L2** | 478 |
| **1023** | 28 | 1.1 | 1.4 | 980 | **S301_1.4 S3 ME3LB4** | 475 | **S301_1.4 P100 BE100LB4** | 476 |
| **1056** | 27 | 2.2 | 1.4 | 1820 | **S401_1.4 S3 ME3LB4** | 477 | **S401_1.4 P100 BE100LB4** | 478 |
| **1190** | 24 | 1.7 | 2.4 | 980 | **S301_2.4 S3 ME3LB2** | 475 | **S301_2.4 P100 BE100L2** | 476 |
| **1204** | 23 | 3.0 | 2.4 | 1760 | **S401_2.4 S3 ME3LB2** | 477 | **S401_2.4 P100 BE100L2** | 478 |
| **1555** | 18.1 | 2.7 | 1.9 | 1630 | **S401_1.9 S3 ME3LB2** | 477 | **S401_1.9 P100 BE100L2** | 478 |
| **1577** | 17.8 | 1.3 | 1.8 | 910 | **S301_1.8 S3 ME3LB2** | 475 | **S301_1.8 P100 BE100L2** | 476 |
| **2046** | 13.7 | 1.7 | 1.4 | 850 | **S301_1.4 S3 ME3LB2** | 475 | **S301_1.4 P100 BE100L2** | 476 |
| **2070** | 13.6 | 1.0 | 1.4 | 580 | **S201_1.4 S3 ME3LB2** | 473 | **S201_1.4 P100 BE100L2** | 474 |

## 4 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **203** | 184 | 0.9 | 4.8 | 3810 | **S501_4.8 S4 ME4LA6** | 479 | **S501_4.8 P132 BE132MA6** | 480 |
| **251** | 149 | 1.2 | 3.8 | 3650 | **S501_3.8 S4 ME4LA6** | 479 | **S501_3.8 P132 BE132MA6** | 480 |
| **303** | 126 | 1.2 | 4.8 | 3530 | **S501_4.8 S4 ME4SA4** | 479 | **S501_4.8 P112 BE112M4** | 480 |
| **317** | 118 | 1.4 | 3.0 | 3470 | **S501_3.0 S4 ME4LA6** | 479 | **S501_3.0 P132 BE132MA6** | 480 |
| **375** | 102 | 1.5 | 3.8 | 3360 | **S501_3.8 S4 ME4SA4** | 479 | **S501_3.8 P112 BE112M4** | 480 |
| **392** | 96 | 1.0 | 7.4 | 3320 | **S501_7.4 S4 ME4SA2** | 479 | **S501_7.4 P112 BE112M2** | 480 |
| **401** | 93 | 1.6 | 2.4 | 3270 | **S501_2.4 S4 ME4LA6** | 479 | **S501_2.4 P132 BE132MA6** | 480 |
| **472** | 81 | 1.1 | 3.1 | 2130 | **S401_3.1 S4 ME4SA4** | 477 | **S401_3.1 P112 BE112M4** | 478 |
| **473** | 81 | 1.7 | 3.0 | 3170 | **S501_3.0 S4 ME4SA4** | 479 | **S501_3.0 P112 BE112M4** | 480 |
| **479** | 78 | 1.3 | 6.1 | 3160 | **S501_6.1 S4 ME4SA2** | 479 | **S501_6.1 P112 BE112M2** | 480 |
| **521** | 72 | 1.0 | 1.9 | 2050 | **S401_1.9 S4 ME4LA6** | 477 | **S401_1.9 P132 BE132MA6** | 478 |
| **540** | 69 | 1.8 | 1.8 | 3020 | **S501_1.8 S4 ME4LA6** | 479 | **S501_1.8 P132 BE132MA6** | 480 |
| **598** | 64 | 2.0 | 2.4 | 2970 | **S501_2.4 S4 ME4SA4** | 479 | **S501_2.4 P112 BE112M4** | 480 |
| **602** | 63 | 1.4 | 2.4 | 2030 | **S401_2.4 S4 ME4SA4** | 477 | **S401_2.4 P112 BE112M4** | 478 |
| **611** | 61 | 2.0 | 4.8 | 2960 | **S501_4.8 S4 ME4SA2** | 479 | **S501_4.8 P112 BE112M2** | 480 |
| **679** | 55 | 2.3 | 1.4 | 2830 | **S501_1.4 S4 ME4LA6** | 479 | **S501_1.4 P132 BE132MA6** | 480 |
| **708** | 53 | 1.3 | 1.4 | 1920 | **S401_1.4 S4 ME4LA6** | 477 | **S401_1.4 P132 BE132MA6** | 478 |
| **755** | 50 | 2.4 | 3.8 | 2790 | **S501_3.8 S4 ME4SA2** | 479 | **S501_3.8 P112 BE112M2** | 480 |
| **761** | 49 | 1.4 | 3.8 | 1930 | **S401_3.8 S4 ME4SA2** | 477 | **S401_3.8 P112 BE112M2** | 478 |
| **778** | 49 | 1.2 | 1.9 | 1900 | **S401_1.9 S4 ME4SA4** | 477 | **S401_1.9 P112 BE112M4** | 478 |
| **805** | 47 | 2.3 | 1.8 | 2730 | **S501_1.8 S4 ME4SA4** | 479 | **S501_1.8 P112 BE112M4** | 480 |
| **953** | 39 | 2.8 | 3.0 | 2610 | **S501_3.0 S4 ME4SA2** | 479 | **S501_3.0 P112 BE112M2** | 480 |
| **950** | 39 | 1.8 | 3.1 | 1820 | **S401_3.1 S4 ME4SA2** | 477 | **S401_3.1 P112 BE112M2** | 478 |
| **1013** | 38 | 2.9 | 1.4 | 2560 | **S501_1.4 S4 ME4SA4** | 479 | **S501_1.4 P112 BE112M4** | 480 |
| **1056** | 36 | 1.7 | 1.4 | 1760 | **S401_1.4 S4 ME4SA4** | 477 | **S401_1.4 P112 BE112M4** | 478 |
| **1198** | 31 | 1.3 | 2.4 | 910 | **S301_2.4 S4 ME4SA2** | 475 | **S301_2.4 P112 BE112M2** | 476 |
| **1213** | 31 | 2.3 | 2.4 | 1710 | **S401_2.4 S4 ME4SA2** | 477 | **S401_2.4 P112 BE112M2** | 478 |
| **1566** | 24 | 2.0 | 1.9 | 1590 | **S401_1.9 S4 ME4SA2** | 477 | **S401_1.9 P112 BE112M2** | 478 |
| **1588** | 24 | 1.0 | 1.8 | 860 | **S301_1.8 S4 ME4SA2** | 475 | **S301_1.8 P112 BE112M2** | 476 |
| **2061** | 18.2 | 1.3 | 1.4 | 810 | **S301_1.4 S4 ME4SA2** | 475 | **S301_1.4 P112 BE112M2** | 476 |
| **2127** | 17.6 | 2.7 | 1.4 | 1460 | **S401_1.4 S4 ME4SA2** | 477 | **S401_1.4 P112 BE112M2** | 478 |



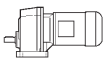
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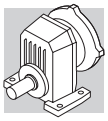
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **317** | 162 | 1.0 | 3.0 | 3260 | **S501_3.0 S5 ME5SA6** | 479 | **S501_3.0 P160 BE160MA6** | 480 |
| **380** | 136 | 1.1 | 3.8 | 3150 | **S501_3.8 S4 ME4SB4** | 479 | **S501_3.8 P132 BE132S4** | 480 |
| **401** | 128 | 1.2 | 2.4 | 3090 | **S501_2.4 S5 ME5SA6** | 479 | **S501_2.4 P160 BE160MA6** | 480 |
| **480** | 107 | 1.3 | 3.0 | 3000 | **S501_3.0 S4 ME4SB4** | 479 | **S501_3.0 P132 BE132S4** | 480 |
| **540** | 95 | 1.3 | 1.8 | 2880 | **S501_1.8 S5 ME5SA6** | 479 | **S501_1.8 P160 BE160MA6** | 480 |
| **606** | 85 | 1.5 | 2.4 | 2830 | **S501_2.4 S4 ME4SB4** | 479 | **S501_2.4 P132 BE132S4** | 480 |
| **611** | 84 | 1.1 | 2.4 | 1870 | **S401_2.4 S4 ME4SB4** | 477 | **S401_2.4 P132 BE132S4** | 478 |
| **616** | 84 | 1.4 | 4.8 | 2840 | **S501_4.8 S4 ME4SB2** | 479 | **S501_4.8 P132 BE132SA2** | 480 |
| **679** | 76 | 1.6 | 1.4 | 2720 | **S501_1.4 S5 ME5SA6** | 479 | **S501_1.4 P160 BE160MA6** | 480 |
| **708** | 73 | 1.0 | 1.4 | 1780 | | | **S401_1.4 P160 BE160MA6** | 478 |
| **761** | 68 | 1.8 | 3.8 | 2690 | **S501_3.8 S4 ME4SB2** | 479 | **S501_3.8 P132 BE132SA2** | 480 |
| **767** | 67 | 1.0 | 3.8 | 1810 | **S401_3.8 S4 ME4SB2** | 477 | **S401_3.8 P132 BE132SA2** | 478 |
| **788** | 65 | 0.9 | 1.9 | 1770 | **S401_1.9 S4 ME4SB4** | 477 | **S401_1.9 P132 BE132S4** | 478 |
| **817** | 63 | 1.7 | 1.8 | 2610 | **S501_1.8 S4 ME4SB4** | 479 | **S501_1.8 P132 BE132S4** | 480 |
| **958** | 54 | 1.3 | 3.1 | 1730 | **S401_3.1 S4 ME4SB2** | 477 | **S401_3.1 P132 BE132SA2** | 478 |
| **961** | 54 | 2.1 | 3.0 | 2530 | **S501_3.0 S4 ME4SB2** | 479 | **S501_3.0 P132 BE132SA2** | 480 |
| **1027** | 50 | 2.2 | 1.4 | 2450 | **S501_1.4 S4 ME4SB4** | 479 | **S501_1.4 P132 BE132S4** | 480 |
| **1071** | 48 | 1.2 | 1.4 | 1660 | **S401_1.4 S4 ME4SB4** | 477 | **S401_1.4 P132 BE132S4** | 478 |
| **1215** | 42 | 2.4 | 2.4 | 2370 | **S501_2.4 S4 ME4SB2** | 479 | **S501_2.4 P132 BE132SA2** | 480 |
| **1223** | 42 | 1.7 | 2.4 | 1640 | **S401_2.4 S4 ME4SB2** | 477 | **S401_2.4 P132 BE132SA2** | 478 |
| **1580** | 33 | 1.5 | 1.9 | 1530 | **S401_1.9 S4 ME4SB2** | 477 | **S401_1.9 P132 BE132SA2** | 478 |
| **1636** | 31 | 2.7 | 1.8 | 2170 | **S501_1.8 S4 ME4SB2** | 479 | **S501_1.8 P132 BE132SA2** | 480 |
| **2058** | 25 | 3.4 | 1.4 | 2030 | **S501_1.4 S4 ME4SB2** | 479 | **S501_1.4 P132 BE132SA2** | 480 |
| **2145** | 24 | 2.0 | 1.4 | 1410 | **S401_1.4 S4 ME4SB2** | 477 | **S401_1.4 P132 BE132SA2** | 478 |

## 7.5 kW

| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N | | | IEC | |
|---|---|---|---|---|---|---|---|---|
| **478** | 146 | 1.0 | 3.0 | 2810 | **S501_3.0 S4 ME4LA4** | 479 | **S501_3.0 P132 BE132MA4** | 480 |
| **540** | 130 | 1.0 | 1.8 | 2690 | **S501_1.8 S5 ME5SB6** | 479 | **S501_1.8 P160 BE160MB6** | 480 |
| **604** | 116 | 1.1 | 2.4 | 2670 | **S501_2.4 S4 ME4LA4** | 479 | **S501_2.4 P132 BE132MA4** | 480 |
| **679** | 103 | 1.2 | 1.4 | 2560 | **S501_1.4 S5 ME5SB6** | 479 | **S501_1.4 P160 BE160MB6** | 480 |
| **761** | 92 | 1.3 | 3.8 | 2570 | **S501_3.8 S4 ME4LA2** | 479 | **S501_3.8 P132 BE132SB2** | 480 |
| **814** | 86 | 1.3 | 1.8 | 2490 | **S501_1.8 S4 ME4LA4** | 479 | **S501_1.8 P132 BE132MA4** | 480 |
| **958** | 73 | 1.0 | 3.1 | 1610 | **S401_3.1 S4 ME4LA2** | 477 | **S401_3.1 P132 BE132SB2** | 478 |
| **961** | 73 | 1.5 | 3.0 | 2440 | **S501_3.0 S4 ME4LA2** | 479 | **S501_3.0 P132 BE132SB2** | 480 |
| **1024** | 68 | 1.6 | 1.4 | 2350 | **S501_1.4 S4 ME4LA4** | 479 | **S501_1.4 P132 BE132MA4** | 480 |
| **1067** | 65 | 0.9 | 1.4 | 1540 | **S401_1.4 S4 ME4LA4** | 477 | **S401_1.4 P132 BE132MA4** | 478 |
| **1215** | 58 | 1.7 | 2.4 | 2290 | **S501_2.4 S4 ME4LA2** | 479 | **S501_2.4 P132 BE132SB2** | 480 |
| **1223** | 57 | 1.2 | 2.4 | 1540 | **S401_2.4 S4 ME4LA2** | 477 | **S401_2.4 P132 BE132SB2** | 478 |
| **1580** | 44 | 1.1 | 1.9 | 1450 | **S401_1.9 S4 ME4LA2** | 477 | **S401_1.9 P132 BE132SB2** | 478 |
| **1636** | 43 | 2.0 | 1.8 | 2110 | **S501_1.8 S4 ME4LA2** | 479 | **S501_1.8 P132 BE132SB2** | 480 |
| **2058** | 34 | 2.5 | 1.4 | 1980 | **S501_1.4 S4 ME4LA2** | 479 | **S501_1.4 P132 BE132SB2** | 480 |
| **2145** | 33 | 1.5 | 1.4 | 1350 | **S401_1.4 S4 ME4LA2** | 477 | **S401_1.4 P132 BE132SB2** | 478 |

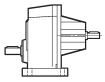
# 9.2 kW

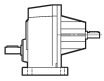
| $n_2$ min$^{-1}$ | $M_2$ Nm | S | i | $R_{n2}$ N |  | |  IEC | |
|---|---|---|---|---|---|---|---|---|
| **602** | 144 | 0.9 | 2.4 | 2530 | **S501_2.4 S4 ME4LB4** | 479 | **S501_2.4 P132 BE132MB4** | 480 |
| **760** | 113 | 1.1 | 3.8 | 2470 | **S501_3.8 S4 ME4LB2** | 479 | **S501_3.8 P132 BE132MB2** | 480 |
| **811** | 107 | 1.0 | 1.8 | 2390 | **S501_1.8 S4 ME4LB4** | 479 | **S501_1.8 P132 BE132MB4** | 480 |
| **959** | 90 | 1.2 | 3.0 | 2360 | **S501_3.0 S4 ME4LB2** | 479 | **S501_3.0 P132 BE132MB2** | 480 |
| **1020** | 85 | 1.3 | 1.4 | 2270 | **S501_1.4 S4 ME4LB4** | 479 | **S501_1.4 P132 BE132MB4** | 480 |
| **1213** | 71 | 1.4 | 2.4 | 2220 | **S501_2.4 S4 ME4LB2** | 479 | **S501_2.4 P132 BE132MB2** | 480 |
| **1221** | 71 | 1.0 | 2.4 | 1460 | **S401_2.4 S4 ME4LB2** | 477 | **S401_2.4 P132 BE132MB2** | 478 |
| **1633** | 53 | 1.6 | 1.8 | 2060 | **S501_1.8 S4 ME4LB2** | 479 | **S501_1.8 P132 BE132MB2** | 480 |
| **2055** | 42 | 2.0 | 1.4 | 1930 | **S501_1.4 S4 ME4LB2** | 479 | **S501_1.4 P132 BE132MB2** | 480 |
| **2141** | 40 | 1.2 | 1.4 | 1300 | **S401_1.4 S4 ME4LB2** | 477 | **S401_1.4 P132 BE132MB2** | 478 |

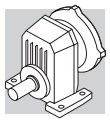


## 73 DATOS TECNICOS REDUCTORES

# S 10 — 21 Nm

|  | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **S 10 1_1.4** | 1.4 | 1972 | 8.0 | 1.7 | 800 | 310 | 986 | 10.0 | 1.1 | 800 | 390 | |
| **S 10 1_1.9** | 1.9 | 1489 | 8.0 | 1.3 | 800 | 360 | 745 | 10.0 | 0.80 | 800 | 460 | |
| **S 10 1_2.5** | 2.5 | 1120 | 8.0 | 0.96 | 800 | 420 | 560 | 10.0 | 0.60 | 800 | 520 | |
| **S 10 1_3.2** | 3.2 | 875 | 10.0 | 0.93 | 800 | 440 | 438 | 12.0 | 0.56 | 800 | 560 | |
| **S 10 1_3.8** | 3.8 | 727 | 10.0 | 0.78 | 800 | 480 | 364 | 12.0 | 0.47 | 800 | 610 | |
| **S 10 1_4.7** | 4.7 | 592 | 10.0 | 0.63 | 800 | 520 | 296 | 12.0 | 0.38 | 800 | 660 | 472 |
| **S 10 1_6.1** | 6.1 | 458 | 12.0 | 0.59 | 800 | 560 | 229 | 15.0 | 0.37 | 800 | 710 | |
| **S 10 1_6.9** | 6.9 | 406 | 12.0 | 0.52 | 800 | 580 | 203 | 15.0 | 0.33 | 800 | 740 | |
| **S 10 1_8.9** | 8.9 | 315 | 8.0 | 0.27 | 800 | 700 | 158 | 10.0 | 0.17 | 800 | 880 | |
| **S 10 1_10.3** | 10.3 | 272 | 8.0 | 0.23 | 800 | 740 | 136 | 10.0 | 0.15 | 800 | 930 | |
| **S 10 1_12.3** | 12.3 | 227 | 8.0 | 0.19 | 800 | 800 | 114 | 10.0 | 0.12 | 800 | 1000 | |

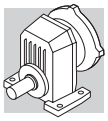
|  | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **S 10 1_1.4** | 1.4 | 634 | 12.0 | 0.81 | 800 | 450 | 352 | 14.0 | 0.53 | 800 | 560 | |
| **S 10 1_1.9** | 1.9 | 479 | 12.0 | 0.61 | 800 | 520 | 266 | 14.0 | 0.40 | 800 | 640 | |
| **S 10 1_2.5** | 2.5 | 360 | 12.0 | 0.46 | 800 | 600 | 200 | 14.0 | 0.30 | 800 | 740 | |
| **S 10 1_3.2** | 3.2 | 281 | 14.0 | 0.42 | 800 | 650 | 156 | 17.0 | 0.28 | 800 | 790 | |
| **S 10 1_3.8** | 3.8 | 234 | 14.0 | 0.35 | 800 | 700 | 130 | 17.0 | 0.24 | 800 | 850 | |
| **S 10 1_4.7** | 4.7 | 190 | 14.0 | 0.28 | 800 | 770 | 106 | 17.0 | 0.19 | 800 | 930 | 472 |
| **S 10 1_6.1** | 6.1 | 147 | 17.0 | 0.27 | 800 | 820 | 82 | 21 | 0.18 | 800 | 1000 | |
| **S 10 1_6.9** | 6.9 | 130 | 17.0 | 0.24 | 800 | 860 | 72 | 21 | 0.16 | 800 | 1040 | |
| **S 10 1_8.9** | 8.9 | 101 | 12.0 | 0.13 | 800 | 1020 | 56 | 14.0 | 0.08 | 800 | 1200 | |
| **S 10 1_10.3** | 10.3 | 87 | 12.0 | 0.11 | 800 | 1080 | 49 | 14.0 | 0.07 | 800 | 1200 | |
| **S 10 1_12.3** | 12.3 | 73 | 12.0 | 0.09 | 800 | 1160 | 41 | 14.0 | 0.06 | 800 | 1200 | |



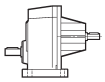
# S 20 — 37 Nm

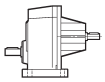
| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **S 20 1_1.4** | 1.4 | 2014 | 13.0 | 2.8 | 1000 | 590 | 1007 | 17.0 | 1.8 | 1000 | 740 | |
| **S 20 1_1.9** | 1.9 | 1481 | 13.0 | 2.1 | 1000 | 680 | 741 | 17.0 | 1.3 | 1000 | 860 | |
| **S 20 1_2.4** | 2.4 | 1148 | 21 | 2.6 | 640 | 680 | 574 | 26 | 1.6 | 850 | 860 | |
| **S 20 1_3.1** | 3.1 | 900 | 21 | 2.0 | 730 | 750 | 450 | 26 | 1.3 | 960 | 950 | |
| **S 20 1_3.9** | 3.9 | 712 | 21 | 1.6 | 820 | 840 | 356 | 26 | 0.99 | 1000 | 1060 | |
| **S 20 1_4.8** | 4.8 | 587 | 21 | 1.3 | 910 | 920 | 294 | 26 | 0.82 | 1000 | 1160 | 474 |
| **S 20 1_5.8** | 5.8 | 481 | 21 | 1.1 | 960 | 1000 | 241 | 26 | 0.67 | 1000 | 1260 | |
| **S 20 1_7.2** | 7.2 | 388 | 21 | 0.87 | 980 | 1090 | 194 | 26 | 0.54 | 1000 | 1370 | |
| **S 20 1_8.5** | 8.5 | 329 | 13.0 | 0.46 | 1000 | 1240 | 165 | 17.0 | 0.30 | 1000 | 1500 | |
| **S 20 1_10.8** | 10.8 | 260 | 13.0 | 0.36 | 1000 | 1350 | 130 | 17.0 | 0.24 | 1000 | 1500 | |
| **S 20 1_12.4** | 12.4 | 225 | 13.0 | 0.31 | 1000 | 1430 | 113 | 17.0 | 0.20 | 1000 | 1500 | |

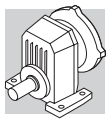
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **S 20 1_1.4** | 1.4 | 647 | 20 | 1.4 | 1000 | 850 | 360 | 24 | 0.92 | 1000 | 1040 | |
| **S 20 1_1.9** | 1.9 | 476 | 20 | 1.0 | 1000 | 990 | 265 | 24 | 0.68 | 1000 | 1210 | |
| **S 20 1_2.4** | 2.4 | 369 | 30 | 1.2 | 990 | 990 | 205 | 37 | 0.81 | 1000 | 1200 | |
| **S 20 1_3.1** | 3.1 | 289 | 30 | 0.93 | 1000 | 1110 | 161 | 37 | 0.64 | 1000 | 1340 | |
| **S 20 1_3.9** | 3.9 | 229 | 30 | 0.73 | 1000 | 1230 | 127 | 37 | 0.50 | 1000 | 1490 | |
| **S 20 1_4.8** | 4.8 | 189 | 30 | 0.60 | 1000 | 1350 | 105 | 37 | 0.41 | 1000 | 1500 | 474 |
| **S 20 1_5.8** | 5.8 | 155 | 30 | 0.50 | 1000 | 1460 | 86 | 37 | 0.34 | 1000 | 1500 | |
| **S 20 1_7.2** | 7.2 | 125 | 30 | 0.40 | 1000 | 1500 | 69 | 37 | 0.27 | 1000 | 1500 | |
| **S 20 1_8.5** | 8.5 | 106 | 20 | 0.23 | 1000 | 1500 | 59 | 24 | 0.15 | 1000 | 1500 | |
| **S 20 1_10.8** | 10.8 | 84 | 20 | 0.18 | 1000 | 1500 | 47 | 24 | 0.12 | 1000 | 1500 | |
| **S 20 1_12.4** | 12.4 | 72 | 20 | 0.15 | 1000 | 1500 | 40 | 24 | 0.10 | 1000 | 1500 | |



# S 30 — 70 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N |  |
| **S 30 1_1.4** | 1.4 | 1986 | 24 | 5.1 | 1500 | 770 | 993 | 30 | 3.2 | 1500 | 970 | |
| **S 30 1_1.8** | 1.8 | 1530 | 24 | 3.9 | 1500 | 870 | 765 | 30 | 2.5 | 1500 | 1090 | |
| **S 30 1_2.4** | 2.4 | 1157 | 40 | 4.9 | 1270 | 850 | 579 | 50 | 3.1 | 1500 | 1070 | |
| **S 30 1_3.1** | 3.1 | 915 | 40 | 3.9 | 1470 | 950 | 458 | 50 | 2.4 | 1500 | 1200 | |
| **S 30 1_3.9** | 3.9 | 711 | 40 | 3.0 | 1500 | 1070 | 355 | 50 | 1.9 | 1500 | 1360 | |
| **S 30 1_4.9** | 4.9 | 568 | 40 | 2.4 | 1500 | 1190 | 284 | 50 | 1.5 | 1500 | 1500 | 476 |
| **S 30 1_5.8** | 5.8 | 479 | 40 | 2.0 | 1500 | 1280 | 239 | 50 | 1.3 | 1500 | 1610 | |
| **S 30 1_7.1** | 7.1 | 395 | 40 | 1.7 | 1500 | 1390 | 197 | 50 | 1.1 | 1500 | 1750 | |
| **S 30 1_8.9** | 8.9 | 315 | 24 | 0.81 | 1500 | 1650 | 157 | 30 | 0.50 | 1500 | 2080 | |
| **S 30 1_10.3** | 10.3 | 272 | 24 | 0.70 | 1500 | 1740 | 136 | 30 | 0.44 | 1500 | 2190 | |
| **S 30 1_13.1** | 13.1 | 213 | 24 | 0.55 | 1500 | 1900 | 107 | 30 | 0.34 | 1500 | 2400 | |

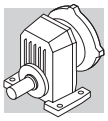
| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N |  |
| **S 30 1_1.4** | 1.4 | 638 | 35 | 2.4 | 1500 | 1120 | 355 | 42 | 1.6 | 1500 | 1360 | |
| **S 30 1_1.8** | 1.8 | 492 | 35 | 1.8 | 1500 | 1260 | 273 | 42 | 1.2 | 1500 | 1540 | |
| **S 30 1_2.4** | 2.4 | 372 | 58 | 2.3 | 1500 | 1240 | 207 | 70 | 1.5 | 1500 | 1510 | |
| **S 30 1_3.1** | 3.1 | 294 | 58 | 1.8 | 1500 | 1390 | 163 | 70 | 1.2 | 1500 | 1700 | |
| **S 30 1_3.9** | 3.9 | 228 | 58 | 1.4 | 1500 | 1570 | 127 | 70 | 0.95 | 1500 | 1920 | |
| **S 30 1_4.9** | 4.9 | 183 | 58 | 1.1 | 1500 | 1740 | 101 | 70 | 0.76 | 1500 | 2120 | 476 |
| **S 30 1_5.8** | 5.8 | 154 | 58 | 0.95 | 1500 | 1870 | 85 | 70 | 0.64 | 1500 | 2280 | |
| **S 30 1_7.1** | 7.1 | 127 | 58 | 0.79 | 1500 | 2030 | 71 | 62 | 0.47 | 1500 | 2400 | |
| **S 30 1_8.9** | 8.9 | 101 | 35 | 0.38 | 1500 | 2400 | 56 | 42 | 0.25 | 1500 | 2400 | |
| **S 30 1_10.3** | 10.3 | 87 | 35 | 0.33 | 1500 | 2400 | 49 | 42 | 0.22 | 1500 | 2400 | |
| **S 30 1_13.1** | 13.1 | 69 | 35 | 0.26 | 1500 | 2400 | 38 | 37 | 0.15 | 1500 | 2400 | |



# S 40 — 125 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **S 40 1_1.4** | 1.4 | 2059 | 48 | 10.6 | 2000 | 1270 | 1029 | 60 | 6.6 | 2000 | 1600 | |
| **S 40 1_1.9** | 1.9 | 1514 | 48 | 7.8 | 2000 | 1450 | 757 | 60 | 4.9 | 2000 | 1830 | |
| **S 40 1_2.4** | 2.4 | 1172 | 70 | 8.8 | 1860 | 1490 | 586 | 90 | 5.6 | 2000 | 1870 | |
| **S 40 1_3.1** | 3.1 | 918 | 70 | 6.9 | 2000 | 1660 | 459 | 90 | 4.4 | 2000 | 2080 | |
| **S 40 1_3.8** | 3.8 | 735 | 70 | 5.5 | 2000 | 1830 | 367 | 90 | 3.5 | 2000 | 2290 | |
| **S 40 1_4.8** | 4.8 | 580 | 70 | 4.3 | 2000 | 2020 | 290 | 90 | 2.8 | 2000 | 2530 | 478 |
| **S 40 1_6.1** | 6.1 | 461 | 70 | 3.5 | 2000 | 2220 | 231 | 90 | 2.2 | 2000 | 2790 | |
| **S 40 1_7.2** | 7.2 | 392 | 63 | 2.6 | 2000 | 2410 | 196 | 80 | 1.7 | 2000 | 3030 | |
| **S 40 1_8.6** | 8.6 | 324 | 48 | 1.7 | 2000 | 2670 | 162 | 60 | 1.0 | 2000 | 3370 | |
| **S 40 1_10.7** | 10.7 | 262 | 40 | 1.1 | 2000 | 2930 | 131 | 50 | 0.70 | 2000 | 3690 | |
| **S 40 1_12.4** | 12.4 | 226 | 40 | 1.0 | 2000 | 3100 | 113 | 50 | 0.60 | 2000 | 3800 | |

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **S 40 1_1.4** | 1.4 | 662 | 70 | 4.9 | 2000 | 1850 | 368 | 85 | 3.3 | 2000 | 2250 | |
| **S 40 1_1.9** | 1.9 | 486 | 70 | 3.6 | 2000 | 2120 | 270 | 85 | 2.5 | 2000 | 2580 | |
| **S 40 1_2.4** | 2.4 | 377 | 105 | 4.2 | 2000 | 2160 | 209 | 125 | 2.8 | 2000 | 2650 | |
| **S 40 1_3.1** | 3.1 | 295 | 105 | 3.3 | 2000 | 2400 | 164 | 125 | 2.2 | 2000 | 2940 | |
| **S 40 1_3.8** | 3.8 | 236 | 105 | 2.7 | 2000 | 2650 | 131 | 125 | 1.8 | 2000 | 3240 | |
| **S 40 1_4.8** | 4.8 | 186 | 105 | 2.1 | 2000 | 2930 | 104 | 125 | 1.4 | 2000 | 3580 | 478 |
| **S 40 1_6.1** | 6.1 | 148 | 105 | 1.7 | 2000 | 3220 | 82 | 110 | 1.0 | 2000 | 3800 | |
| **S 40 1_7.2** | 7.2 | 126 | 90 | 1.2 | 2000 | 3530 | 70 | 90 | 0.67 | 2000 | 3800 | |
| **S 40 1_8.6** | 8.6 | 104 | 70 | 0.78 | 2000 | 3800 | 58 | 85 | 0.53 | 2000 | 3800 | |
| **S 40 1_10.7** | 10.7 | 84 | 58 | 0.52 | 2000 | 3800 | 47 | 70 | 0.35 | 2000 | 3800 | |
| **S 40 1_12.4** | 12.4 | 73 | 58 | 0.45 | 2000 | 3800 | 40 | 70 | 0.30 | 2000 | 3800 | |



# S 50 — 200 Nm

| | i | $n_1$ = 2800 min$^{-1}$ | | | | | $n_1$ = 1400 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **S 50 1_1.4** | 1.4 | 1972 | 85 | 17.9 | 730 | 1720 | 986 | 110 | 11.6 | 730 | 2150 | |
| **S 50 1_1.8** | 1.8 | 1564 | 85 | 14.2 | 1220 | 1920 | 782 | 110 | 9.2 | 1370 | 2400 | |
| **S 50 1_2.4** | 2.4 | 1162 | 100 | 12.4 | 930 | 2110 | 581 | 130 | 8.1 | 970 | 2640 | |
| **S 50 1_3.0** | 3.0 | 921 | 110 | 10.8 | 860 | 2300 | 461 | 140 | 6.9 | 1020 | 2880 | |
| **S 50 1_3.8** | 3.8 | 729 | 120 | 9.3 | 640 | 2480 | 365 | 150 | 5.8 | 860 | 3130 | |
| **S 50 1_4.8** | 4.8 | 589 | 120 | 7.6 | 880 | 2710 | 295 | 150 | 4.7 | 1160 | 3420 | 480 |
| **S 50 1_6.1** | 6.1 | 462 | 100 | 4.9 | 1980 | 3100 | 231 | 130 | 3.2 | 2330 | 3880 | |
| **S 50 1_7.4** | 7.4 | 378 | 100 | 4.0 | 2060 | 3340 | 189 | 130 | 2.6 | 2400 | 4190 | |
| **S 50 1_8.8** | 8.8 | 319 | 85 | 2.9 | 2400 | 3640 | 160 | 110 | 1.9 | 2400 | 4570 | |
| **S 50 1_10.5** | 10.5 | 268 | 85 | 2.4 | 2400 | 3880 | 134 | 110 | 1.6 | 2400 | 4870 | |
| **S 50 1_12.9** | 12.9 | 217 | 80 | 1.9 | 2400 | 4200 | 109 | 100 | 1.2 | 2400 | 5300 | |

| | i | $n_1$ = 900 min$^{-1}$ | | | | | $n_1$ = 500 min$^{-1}$ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | $n_2$ min$^{-1}$ | $M_{n2}$ Nm | $P_{n1}$ kW | $R_{n1}$ N | $R_{n2}$ N | |
| **S 50 1_1.4** | 1.4 | 634 | 125 | 8.5 | 1010 | 2510 | 352 | 155 | 5.8 | 1040 | 3040 | |
| **S 50 1_1.8** | 1.8 | 503 | 125 | 6.7 | 1730 | 2790 | 279 | 155 | 4.6 | 1940 | 3380 | |
| **S 50 1_2.4** | 2.4 | 373 | 150 | 6.0 | 1160 | 3060 | 207 | 180 | 4.0 | 1530 | 3730 | |
| **S 50 1_3.0** | 3.0 | 296 | 160 | 5.1 | 1290 | 3350 | 164 | 200 | 3.5 | 1310 | 4050 | |
| **S 50 1_3.8** | 3.8 | 234 | 175 | 4.4 | 940 | 3620 | 130 | 200 | 2.8 | 1740 | 4460 | |
| **S 50 1_4.8** | 4.8 | 189 | 175 | 3.5 | 1290 | 3960 | 105 | 180 | 2.0 | 2400 | 4970 | 480 |
| **S 50 1_6.1** | 6.1 | 149 | 150 | 2.4 | 2400 | 4500 | 83 | 150 | 1.3 | 2400 | 5620 | |
| **S 50 1_7.4** | 7.4 | 122 | 140 | 1.8 | 2400 | 4900 | 68 | 140 | 1.0 | 2400 | 6100 | |
| **S 50 1_8.8** | 8.8 | 103 | 125 | 1.4 | 2400 | 5310 | 57 | 125 | 0.80 | 2400 | 6580 | |
| **S 50 1_10.5** | 10.5 | 86 | 115 | 1.1 | 2400 | 5700 | 48 | 115 | 0.60 | 2400 | 7050 | |
| **S 50 1_12.9** | 12.9 | 70 | 100 | 0.70 | 2400 | 6210 | 39 | 100 | 0.40 | 2400 | 7200 | |

## 74 PREDISPOSICIONES MOTOR

En las tablas (E59) y (E60) se especifican los montajes posibles de motores en términos puramente geométricos.

**La selección del motorreductor debe efectuarse siguiendo las instrucciones especificadas en el párrafo 11, respetando particularmente la condición $S \geq f_s$.**

(E 59)

| | | IEC_ BN BE (IM B5) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | **P63** | **P71** | **P80** | **P90** | **P100** | **P112** | **P132** | **P160** | **P180** |
| **S 10 1** | **i =** | 1.4_12.3 | 1.4_12.3 | 1.4_8.9 | 1.4_8.9 | 1.4_8.9 | 1.4_8.9 | | | |
| **S 20 1** | | 1.9_12.4 | 1.9_12.4 | 1.4_10.8 | 1.4_10.8 | 1.4_10.8 | 1.4_10.8 | | | |
| **S 30 1** | | 2.4_13.1 | 2.4_13.1 | 1.4_13.1 | 1.4_13.1 | 1.4_13.1 | 1.4_13.1 | 1.4_4.9 | | |
| **S 40 1** | | 3.1_12.4 | 3.1_12.4 | 1.4_12.4 | 1.4_12.4 | 1.4_12.4 | 1.4_12.4 | 1.4_6.1 | | |
| **S 50 1** | | 3.8_12.9 | 3.8_12.9 | 1.4_12.9 | 1.4_12.9 | 1.4_12.9 | 1.4_12.9 | 1.4_7.4 | 1.4_7.4 | 1.4_7.4 |

(E 60)

| | | M ME | | | | | |
|---|---|---|---|---|---|---|---|
| | | **M05** | **M1** | **M2 - ME2** | **ME3** | **ME4** | **ME5** |
| **S 10 1** | **i =** | 1.4_12.3 | 1.4_6.9 | 1.4_8.9 | 1.4_8.9 | | |
| **S 20 1** | | 1.9_12.4 | 1.9_8.5 | 1.4_10.8 | 1.4_10.8 | | |
| **S 30 1** | | | 2.4_10.3 | 1.4_13.1 | 1.4_13.1 | 1.4_4.9 | |
| **S 40 1** | | | 3.1_12.4 | 1.4_12.4 | 1.4_12.4 | 1.4_6.1 | |
| **S 50 1** | | | 3.8_12.9 | 1.4_12.9 | 1.4_12.9 | 1.4_7.4 | 1.4_7.4 |

## 75 MOMENTO DE INERCIA

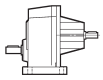
Las tablas siguientes indican los valores del momento de inercia $J_r$ [Kgm$^2$] referido al eje de entrada del reductor; para una mejor facilidad de comprensión rogamos tengan presente el significado de los símbolos usados.



Los valores referidos a este símbolo corresponden al reductor compacto sin motor. En este caso para obtener el momento de inercia del motorreductor, se deberá sumar al valor correspondiente al reductor compacto, el del motor que se aplique (dato que se encuentra en las tablas de características técnicas de los motores eléctricos).



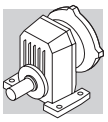

El valor relativo a este símbolo corresponde al reductor predispuesto para el montaje de motor (tamaño IEC).



El valor atribuido al reductor es referido a este símbolo.

# S 10

| | i | J (•10$^{-4}$) [kgm$^2$] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC | | | | | |  |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | |
| **S 10 1_1.4** | 1.4 | 0.33 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 1.2 |
| **S 10 1_1.9** | 1.9 | 0.22 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 1.1 |
| **S 10 1_2.5** | 2.5 | 0.16 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 1.0 |
| **S 10 1_3.2** | 3.2 | 0.10 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 0.97 |
| **S 10 1_3.9** | 3.9 | 0.08 | 1.5 | 1.5 | 2.9 | 2.9 | 4.2 | 4.2 | 0.95 |
| **S 10 1_4.7** | 4.7 | 0.06 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.93 |
| **S 10 1_6.1** | 6.1 | 0.04 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.92 |
| **S 10 1_6.9** | 6.9 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.91 |
| **S 10 1_8.9** | 8.9 | 0.02 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 0.90 |
| **S 10 1_10.3** | 10.3 | 0.02 | 1.5 | 1.5 | — | — | — | — | 0.89 |
| **S 10 1_12.3** | 12.3 | 0.01 | 1.5 | 1.5 | — | — | — | — | 0.89 |

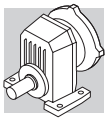


# S 20

| | i | J (•10-4) [kgm2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC 63 | IEC 71 | IEC 80 | IEC 90 | IEC 100 | IEC 112 |  |
| **S 20 1_1.4** | 1.4 | 0.73 | — | — | 3.6 | 3.5 | 4.8 | 4.8 | 2.7 |
| **S 20 1_1.9** | 1.9 | 0.48 | 1.9 | 1.9 | 3.3 | 3.3 | 4.6 | 4.6 | 2.4 |
| **S 20 1_2.4** | 2.4 | 0.34 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 2.3 |
| **S 20 1_3.1** | 3.1 | 0.20 | 1.7 | 1.7 | 3.0 | 3.0 | 4.3 | 4.3 | 2.1 |
| **S 20 1_3.9** | 3.9 | 0.14 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.1 |
| **S 20 1_4.8** | 4.8 | 0.12 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | 2.0 |
| **S 20 1_5.8** | 5.8 | 0.08 | 1.6 | 1.5 | 2.9 | 2.9 | 4.2 | 4.2 | 2.0 |
| **S 20 1_7.2** | 7.2 | 0.06 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 2.0 |
| **S 20 1_8.5** | 8.5 | 0.05 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 2.0 |
| **S 20 1_10.8** | 10.8 | 0.03 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | 1.9 |
| **S 20 1_12.4** | 12.4 | 0.02 | 1.5 | 1.5 | — | — | — | — | 1.9 |

# S 30

| | i | J (•10-4) [kgm2] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | |  | IEC 63 | IEC 71 | IEC 80 | IEC 90 | IEC 100 | IEC 112 | IEC 132 |  |
| **S 30 1_1.4** | 1.4 | 1.5 | — | — | 4.3 | 4.3 | 5.6 | 5.6 | 18 | 3.8 |
| **S 30 1_1.8** | 1.8 | 1.1 | — | — | 3.9 | 3.8 | 5.1 | 5.1 | 18 | 3.4 |
| **S 30 1_2.4** | 2.4 | 0.59 | 2.1 | 2.0 | 3.4 | 3.4 | 4.7 | 4.7 | 17 | 2.9 |
| **S 30 1_3.1** | 3.1 | 0.45 | 1.9 | 1.9 | 3.3 | 3.2 | 4.5 | 4.5 | 17 | 2.8 |
| **S 30 1_3.9** | 3.9 | 0.33 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | 17 | 2.7 |
| **S 30 1_4.9** | 4.9 | 0.24 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | 17 | 2.6 |
| **S 30 1_5.8** | 5.8 | 0.19 | 1.7 | 1.7 | 3.0 | 3.0 | 4.3 | 4.3 | — | 2.6 |
| **S 30 1_7.1** | 7.1 | 0.14 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 2.5 |
| **S 30 1_8.9** | 8.9 | 0.10 | 1.6 | 1.6 | 2.9 | 2.9 | 4.2 | 4.2 | — | 2.5 |
| **S 30 1_10.3** | 10.3 | 0.08 | 1.5 | 1.5 | 2.9 | 2.9 | 4.2 | 4.2 | — | 2.4 |
| **S 30 1_13.1** | 13.1 | 0.05 | 1.5 | 1.5 | 2.9 | 2.8 | 4.1 | 4.1 | — | 2.4 |



# S 40

| | i | J (•10-4) [kgm2] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | |
| **S 40 1_1.4** | 1.4 | 3.7 | — | — | 6.5 | 6.5 | 7.8 | 7.8 | 23 | 14 |
| **S 40 1_1.9** | 1.9 | 2.4 | — | — | 5.2 | 5.2 | 6.5 | 6.5 | 21 | 13 |
| **S 40 1_2.4** | 2.4 | 1.6 | — | — | 4.4 | 4.4 | 5.7 | 5.7 | 21 | 12 |
| **S 40 1_3.1** | 3.1 | 1.1 | 2.6 | 2.6 | 4.0 | 3.9 | 5.2 | 5.2 | 20 | 12 |
| **S 40 1_3.8** | 3.8 | 0.82 | 2.3 | 2.3 | 3.7 | 3.6 | 4.9 | 4.9 | 18 | 11 |
| **S 40 1_4.8** | 4.8 | 0.50 | 2.0 | 2.0 | 3.3 | 3.3 | 4.6 | 4.6 | 18 | 11 |
| **S 40 1_6.1** | 6.1 | 0.39 | 1.8 | 1.8 | 3.2 | 3.2 | 4.5 | 4.5 | 18 | 11 |
| **S 40 1_7.2** | 7.2 | 0.30 | 1.8 | 1.8 | 3.1 | 3.1 | 4.4 | 4.4 | — | 11 |
| **S 40 1_8.6** | 8.6 | 0.22 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | 11 |
| **S 40 1_10.7** | 10.7 | 0.15 | 1.6 | 1.6 | 3.0 | 2.9 | 4.2 | 4.2 | — | 11 |
| **S 40 1_12.4** | 12.4 | 0.12 | 1.6 | 1.6 | 3.0 | 2.8 | 4.2 | 4.2 | — | 11 |

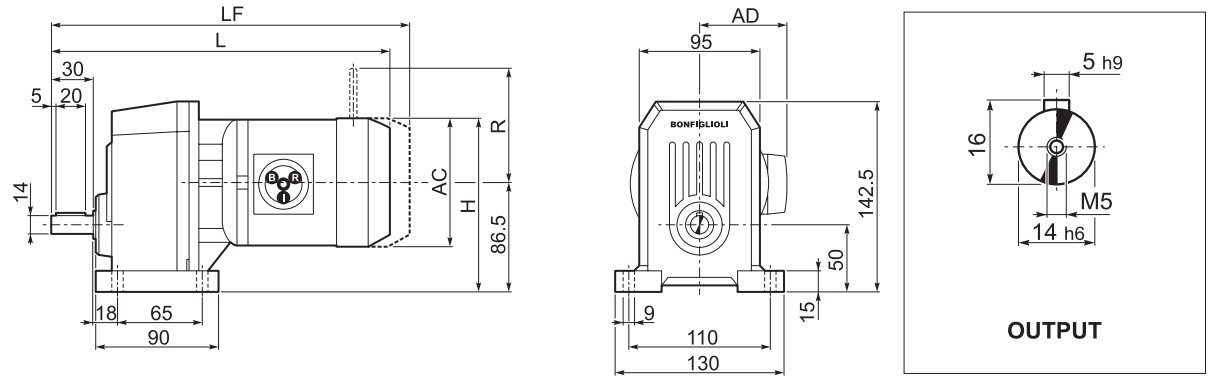
# S 50

| | i | J (•10-4) [kgm2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IEC | | | | | | | | |
| | | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | |
| **S 50 1_1.4** | 1.4 | 8.2 | — | — | 11 | 11 | 12 | 12 | 27 | 86 | 84 | 19 |
| **S 50 1_1.8** | 1.8 | 5.9 | — | — | 8.8 | 8.7 | 10 | 10 | 25 | 84 | 82 | 16 |
| **S 50 1_2.4** | 2.4 | 3.9 | — | — | 6.8 | 6.7 | 8.0 | 8.0 | 23 | 82 | 80 | 14 |
| **S 50 1_3.0** | 3.0 | 2.7 | — | — | 5.5 | 5.5 | 6.8 | 6.8 | 22 | 81 | 79 | 13 |
| **S 50 1_3.8** | 3.8 | 1.9 | 3.3 | 3.3 | 4.7 | 4.6 | 5.9 | 5.9 | 21 | 80 | 78 | 12 |
| **S 50 1_4.8** | 4.8 | 1.4 | 2.8 | 2.8 | 4.2 | 4.1 | 5.4 | 5.4 | 21 | 79 | 77 | 12 |
| **S 50 1_6.1** | 6.1 | 0.89 | 2.4 | 2.4 | 3.7 | 3.7 | 5.0 | 5.0 | 21 | 79 | 77 | 11 |
| **S 50 1_7.4** | 7.4 | 0.63 | 2.1 | 2.1 | 3.5 | 3.4 | 4.7 | 4.7 | 20 | 79 | 77 | 11 |
| **S 50 1_8.8** | 8.8 | 0.50 | 2.0 | 2.0 | 3.4 | 3.3 | 4.6 | 4.6 | — | — | — | 11 |
| **S 50 1_10.5** | 10.5 | 0.36 | 1.8 | 1.8 | 3.2 | 3.1 | 4.4 | 4.4 | — | — | — | 11 |
| **S 50 1_12.9** | 12.9 | 0.25 | 1.7 | 1.7 | 3.1 | 3.0 | 4.3 | 4.3 | — | — | — | 11 |

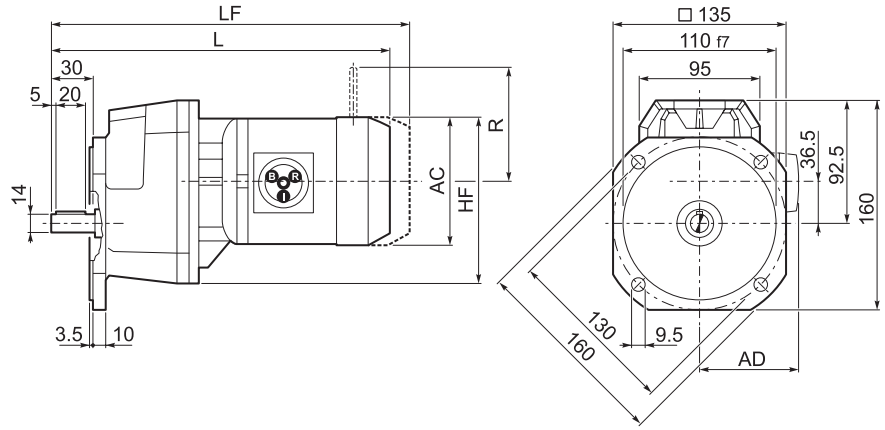
## 76 DIMENSIONES

# S 10...M/ME

P

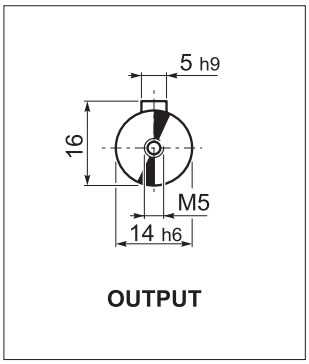


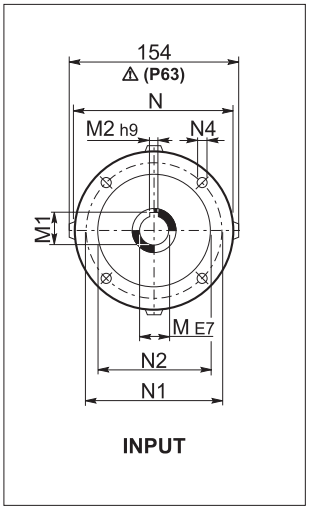

F

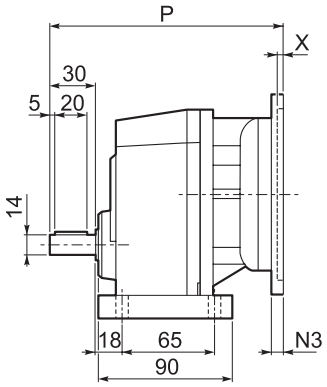


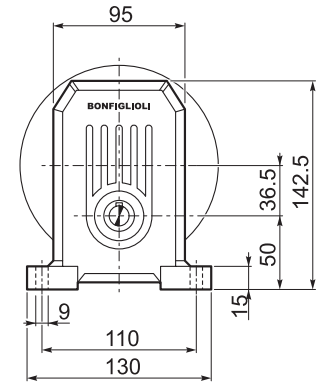

| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **S 10 1** | **S05** | **M05** | 121 | 147 | 143 | 315 | 95 | 8 | 381 | 11 | 96 | 122 | 116 | 95 |
| **S 10 1** | **S1** | **M1** | 137 | 155 | 151 | 344 | 102 | 10 | 405 | 13 | 103 | 135 | 124 | 108 |
| **S 10 1** | **S2** | **M2S** | 156 | 164 | 160 | 367 | 111 | 13 | 443 | 17 | 129 | 146 | 134 | 119 |
| **S 10 1** | **S2** | **ME2S** | 156 | 164 | 160 | 367 | 111 | 13 | — | — | — | — | — | — |
| **S 10 1** | **S3** | **ME3S** | 195 | 184 | 180 | 416 | 135 | 20.5 | — | — | — | — | — | — |
| **S 10 1** | **S3** | **ME3L** | 195 | 184 | 180 | 448 | 135 | 21 | — | — | — | — | — | — |

# S 10...P (IEC)

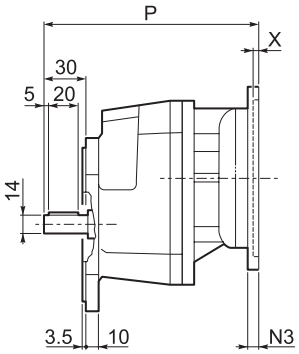


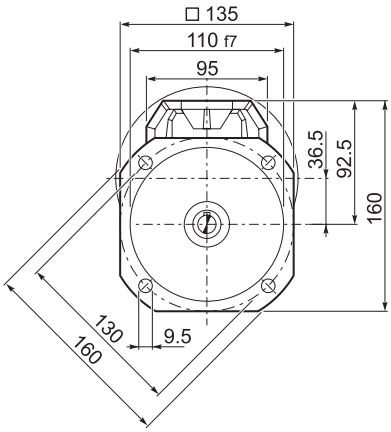




P

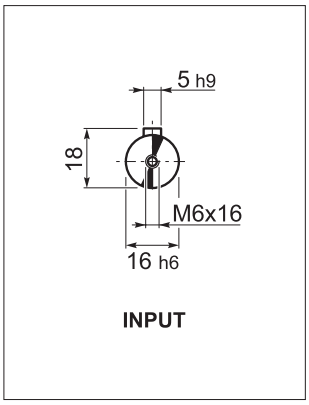


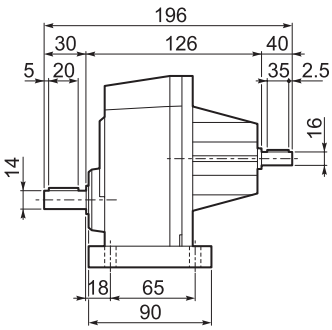




F

| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | P | X | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S 10 1** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x10 | 189 | 4 | 5 |
| **S 10 1** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x10 | 189 | 4.5 | 5 |
| **S 10 1** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 208 | 4 | 6 |
| **S 10 1** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 208 | 4 | 6 |
| **S 10 1** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 218 | 4.5 | 10 |
| **S 10 1** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 218 | 4.5 | 10 |

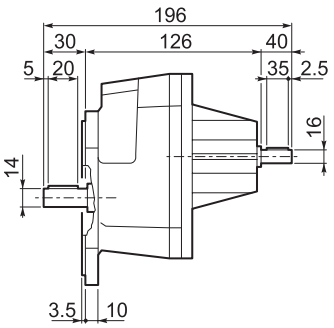
# S 10...HS




P

| Kg | 4.4 |
|---|---|

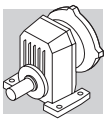



F

| Kg | 4.5 |
|---|---|

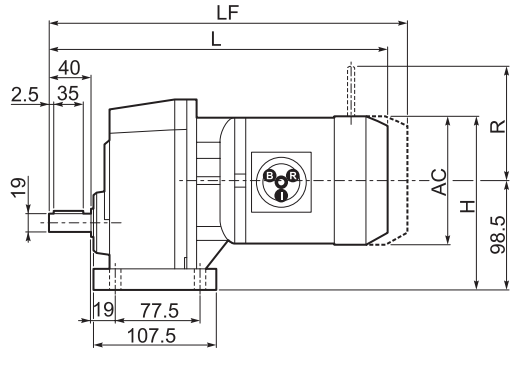


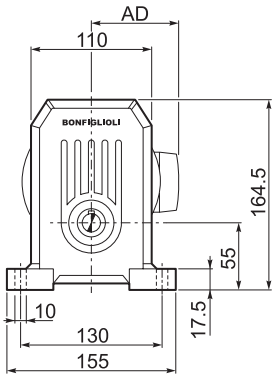
Bonfiglioli Riduttori

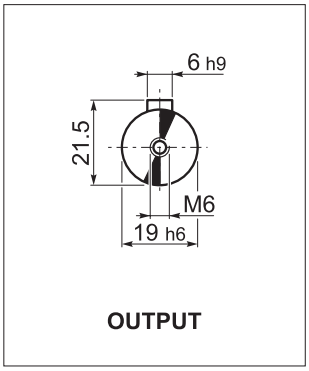


# S 20...M/ME

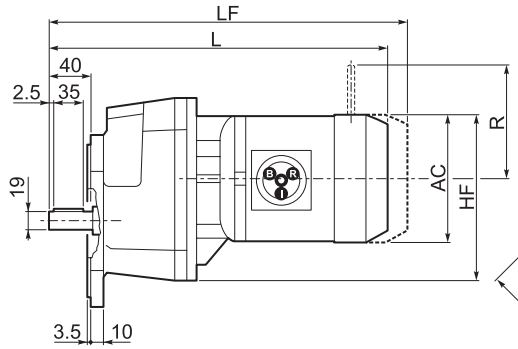
**P**

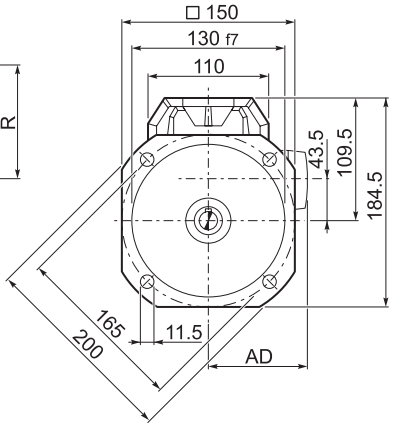


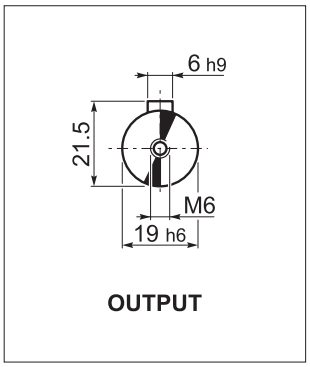

**F**

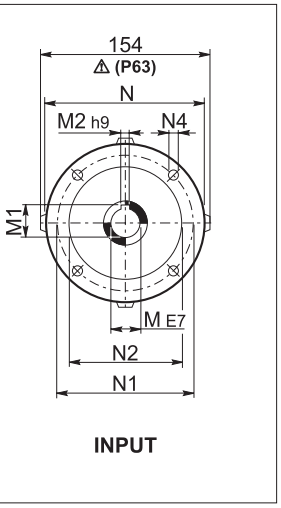


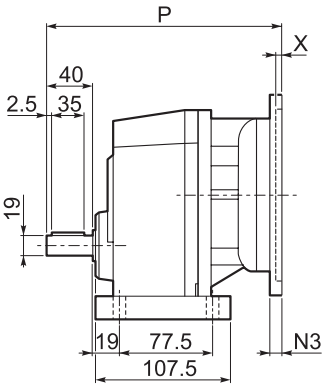



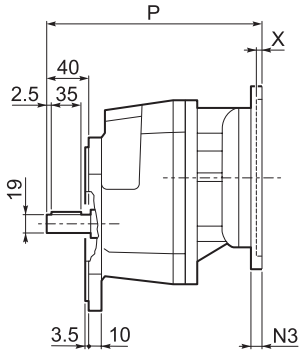

| | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | AD | Kg | LF | Kg | R | AD | R | AD |
| **S 20 1** | **S05** | **M05** | 121 | 159 | 153 | 333.5 | 95 | 10 | 399.5 | 12 | 96 | 122 | 116 | 95 |
| **S 20 1** | **S1** | **M1** | 137 | 167 | 161 | 362.5 | 102 | 12 | 423.5 | 14 | 103 | 135 | 124 | 108 |
| **S 20 1** | **S2** | **M2S** | 156 | 176 | 170 | 385.5 | 111 | 16 | 461.5 | 19 | 129 | 146 | 134 | 119 |
| **S 20 1** | **S2** | **ME2S** | 156 | 176 | 170 | 385.5 | 111 | 16 | — | — | — | — | — | — |
| **S 20 1** | **S3** | **ME3S** | 195 | 196 | 190 | 434.5 | 135 | 21.5 | — | — | — | — | — | — |
| **S 20 1** | **S3** | **ME3L** | 195 | 196 | 190 | 466.5 | 135 | 26 | — | — | — | — | — | — |

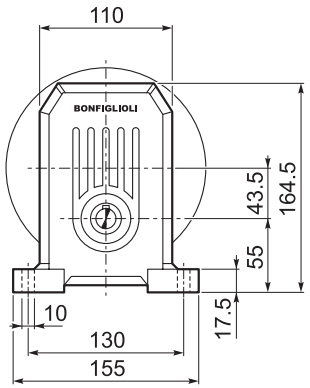
# S 20...P(IEC)



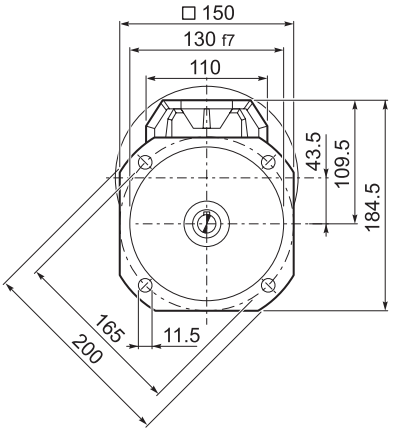



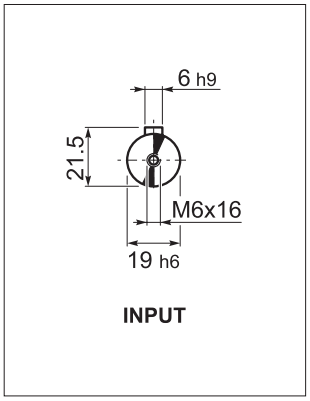

P

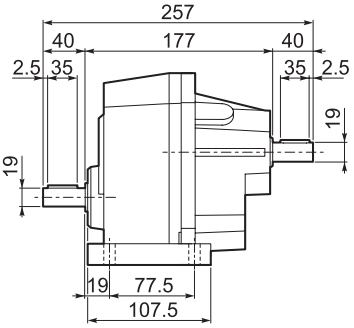



F

| | | M | M1 | M2 | N | N1 | N2 | N3 | N4 | P | X | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S 20 1** | **P63** | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x10 | 207 | 4 | 6 |
| **S 20 1** | **P71** | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x10 | 207 | 4.5 | 6 |
| **S 20 1** | **P80** | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 227 | 4 | 7 |
| **S 20 1** | **P90** | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 227 | 4 | 7 |
| **S 20 1** | **P100** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 237 | 4.5 | 11 |
| **S 20 1** | **P112** | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 237 | 4.5 | 11 |

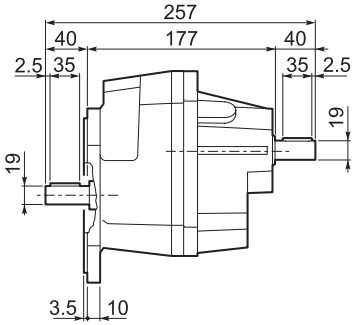
# S 20...HS




P

| Kg | 6.0 |
|---|---|

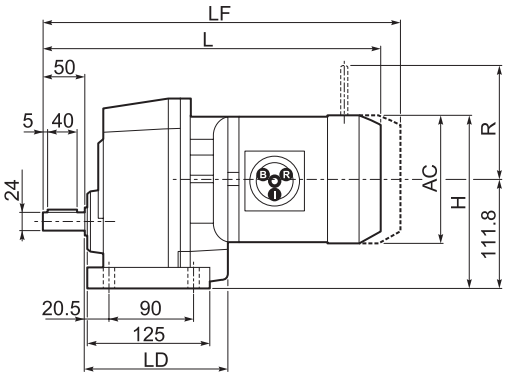


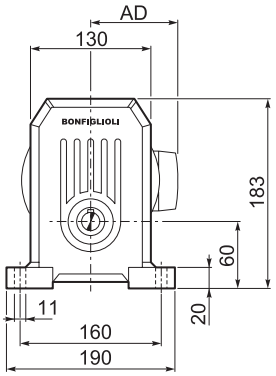

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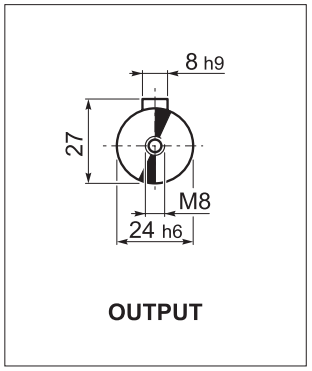
| Kg | 6.2 |
|---|---|

# S 30...M/ME

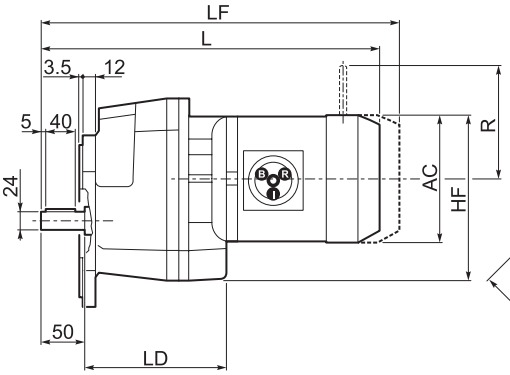
**P**

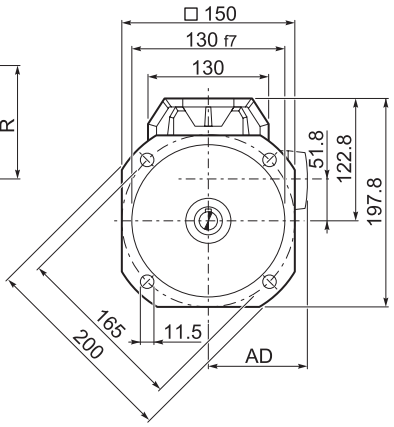


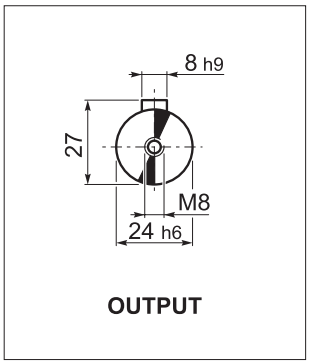

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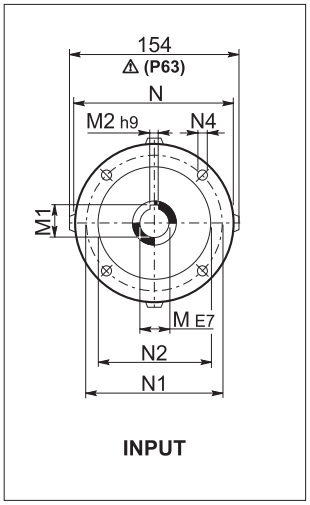


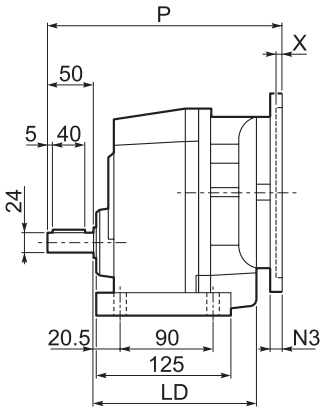



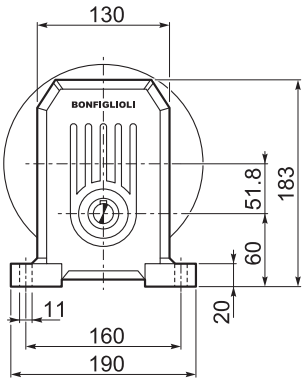

| | | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| **S 30 1** | **S1** | **M1** | 137 | 180 | 177 | 387.5 | 140.5 | 102 | 14 | 448.5 | 16 | 103 | 135 | 124 | 108 |
| **S 30 1** | **S2** | **MES** | 156 | 190 | 186 | 410.5 | 152.5 | 111 | 18 | 486.5 | 21 | 129 | 146 | 134 | 119 |
| **S 30 1** | **S2** | **ME2S** | 156 | 190 | 186 | 410.5 | 152.5 | 111 | 18 | — | — | — | — | — | — |
| **S 30 1** | **S3** | **ME3S** | 195 | 209 | 206 | 459.5 | 162.5 | 135 | 24.5 | — | — | — | — | — | — |
| **S 30 1** | **S3** | **ME3L** | 195 | 209 | 206 | 491.5 | 162.5 | 135 | 32 | — | — | — | — | — | — |
| **S 30 1** | **S4** | **ME4** | 258 | 240.8 | 237 | 599.5 | — | 193 | 71 | — | — | — | — | — | — |
| **S 30 1** | **S4** | **ME4LB** | 258 | 240.8 | 237 | 634.5 | — | 193 | 79 | — | — | — | — | — | — |

# S 30...P(IEC)

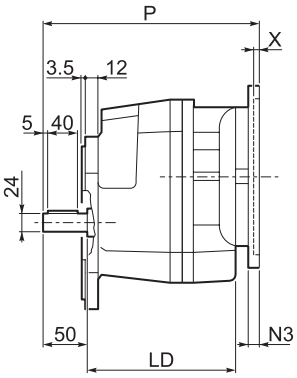


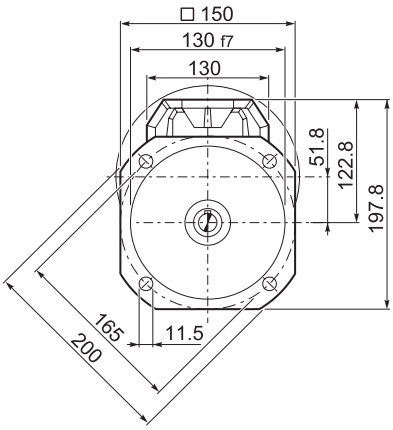




P

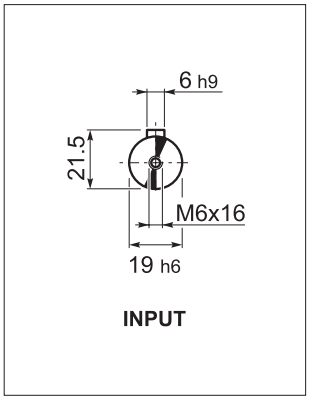


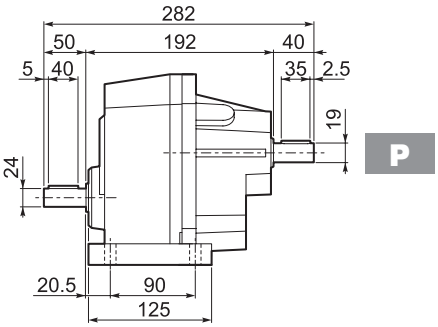




F

| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | P | X | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S 30 1** | **P63** | 152.5 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x10 | 232 | 4 | 8 |
| **S 30 1** | **P71** | 152.5 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x10 | 232 | 4.5 | 8 |
| **S 30 1** | **P80** | 162.5 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 252 | 4 | 9 |
| **S 30 1** | **P90** | 162.5 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 252 | 4 | 9 |
| **S 30 1** | **P100** | 162.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 262 | 4.5 | 13 |
| **S 30 1** | **P112** | 162.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 262 | 4.5 | 13 |
| **S 30 1** | **P132** | — | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 298.5 | 5 | 21 |

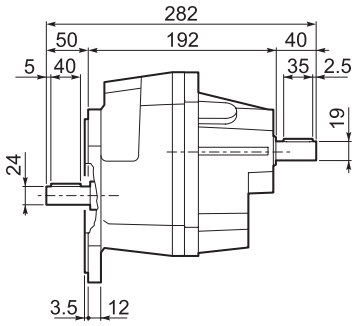
# S 30...HS




P

| Kg | 9.0 |
|---|---|




F

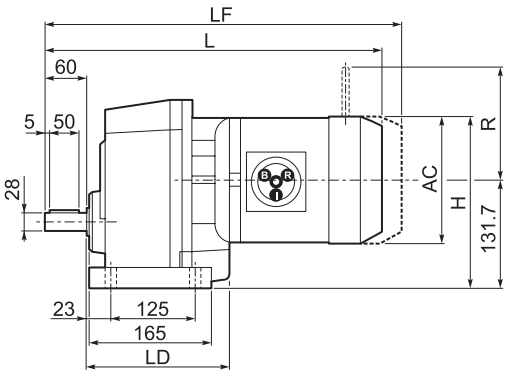
| Kg | 9.3 |
|---|---|

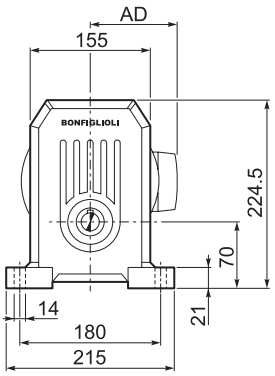


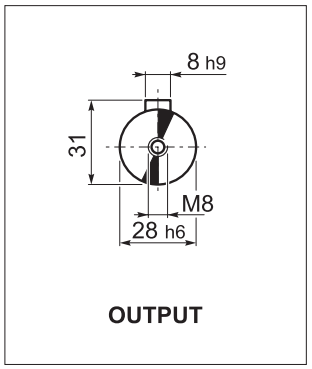
Bonfiglioli Riduttori

# S 40...M/ME

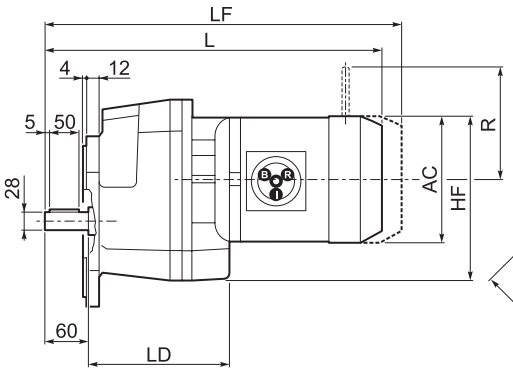
**P**

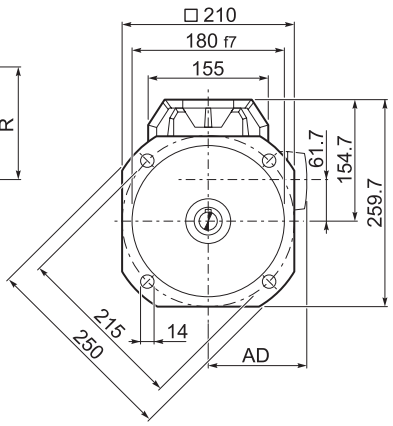


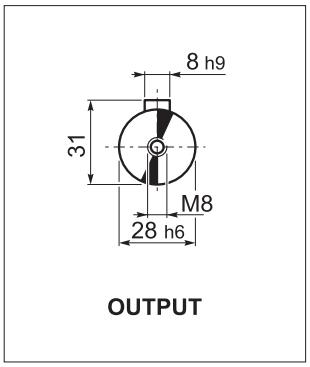

**F**

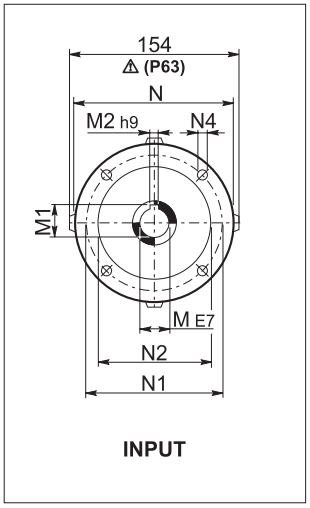


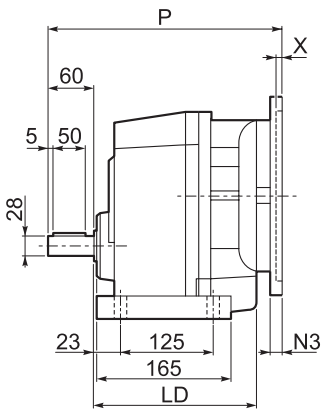



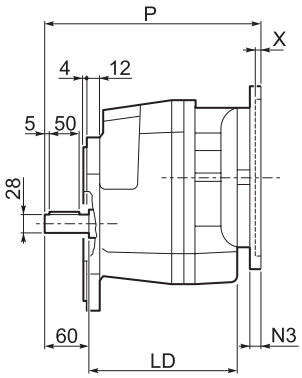

| | | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| **S 40 1** | **S1** | **M1** | 137 | 200 | 197 | 429.5 | 168 | 102 | 28 | 490.5 | 31 | 103 | 135 | 124 | 108 |
| **S 40 1** | **S2** | **M2S** | 156 | 210 | 206 | 452.5 | 183.5 | 111 | 34 | 528.5 | 37 | 129 | 146 | 134 | 119 |
| **S 40 1** | **S2** | **ME2S** | 156 | 210 | 206 | 452.5 | 183.5 | 111 | 34 | — | — | — | — | — | — |
| **S 40 1** | **S3** | **ME3S** | 195 | 229 | 226 | 501.5 | 199.5 | 135 | 40.5 | — | — | — | — | — | — |
| **S 40 1** | **S3** | **ME3L** | 195 | 229 | 226 | 533.5 | 199.5 | 135 | 48 | — | — | — | — | — | — |
| **S 40 1** | **S4** | **ME4** | 258 | 261 | 257 | 641.5 | — | 193 | 82 | — | — | — | — | — | — |
| **S 40 1** | **S4** | **ME4LB** | 258 | 261 | 257 | 676.5 | — | 193 | 90 | — | — | — | — | — | — |

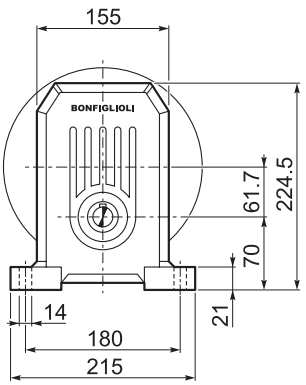
# S 40...P(IEC)



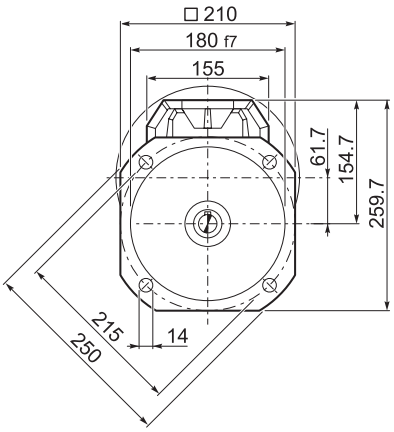



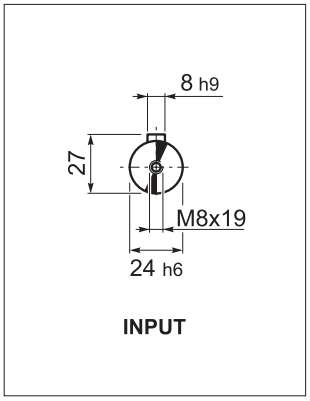

P

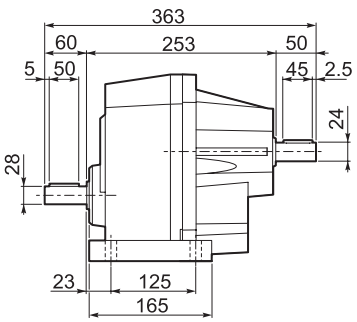



F

| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | P | X | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S 40 1** | **P63** | 183.5 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x10 | 274 | 4 | 25 |
| **S 40 1** | **P71** | 183.5 | 14 | 16.3 | 5 | 160 | 130 | 110 | — | M8x10 | 274 | 4.5 | 26 |
| **S 40 1** | **P80** | 199.5 | 19 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 294 | 4 | 26 |
| **S 40 1** | **P90** | 199.5 | 24 | 27.3 | 8 | 200 | 165 | 130 | — | M10x12 | 294 | 4 | 30 |
| **S 40 1** | **P100** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 304 | 4.5 | 30 |
| **S 40 1** | **P112** | — | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 304 | 4.5 | 30 |
| **S 40 1** | **P132** | — | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 340 | 5 | 32 |

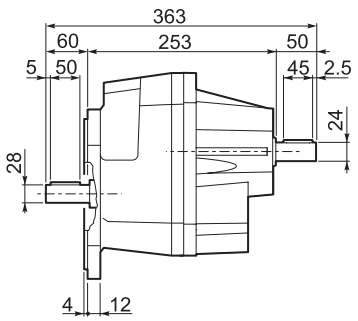
# S 40...HS




P

| Kg | 26.0 |
|---|---|

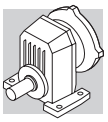



F

| Kg | 27.7 |
|---|---|

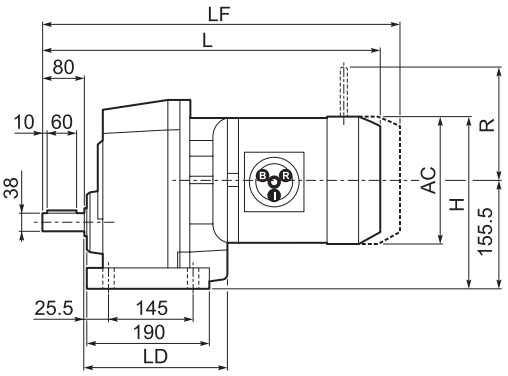


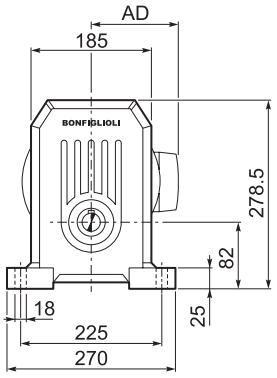
Bonfiglioli Riduttori

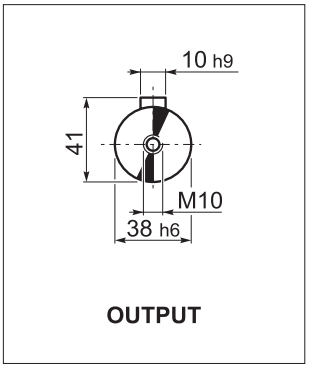


# S 50...M/ME

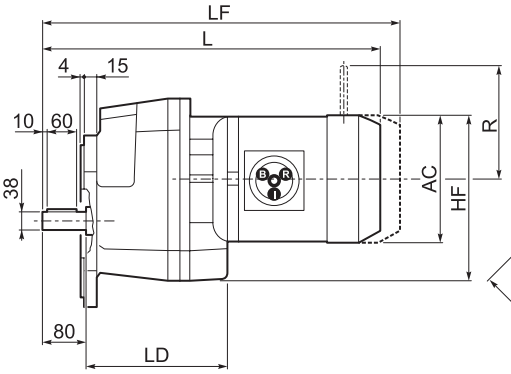
**P**

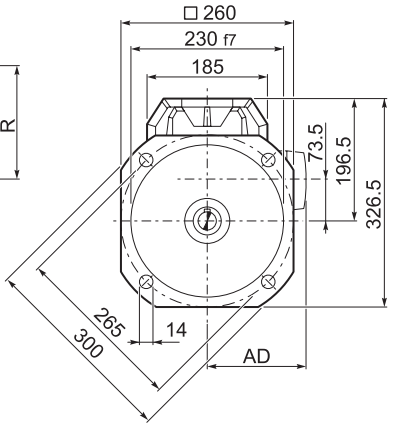


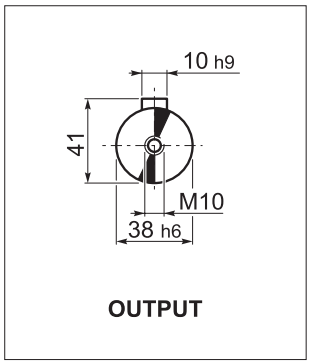

**F**

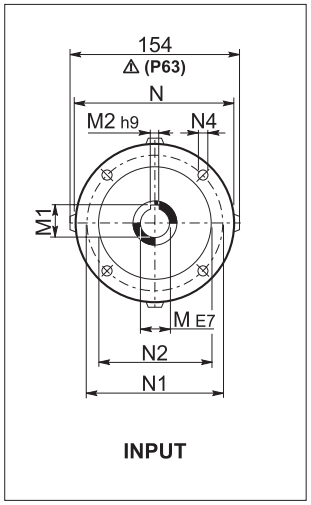


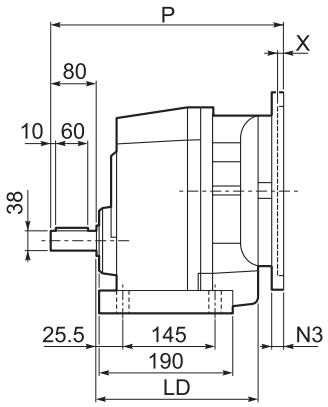



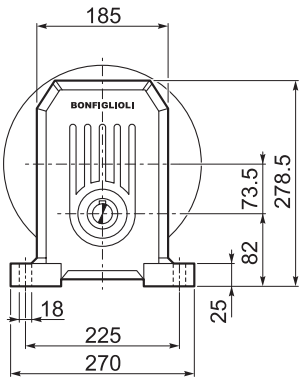

| | | | | | | | | | | M...FD M...FA | | M...FD | | M...FA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AC | H | HF | L | LD | AD | Kg | LF | Kg | R | AD | R | AD |
| **S 50 1** | **S1** | **M1** | 137 | 225 | 222 | 469 | — | 102 | 40 | 530 | 42 | 103 | 135 | 124 | 108 |
| **S 50 1** | **S2** | **M2S** | 156 | 233 | 230 | 492.5 | 204.5 | 111 | 44 | 568.5 | 47 | 129 | 146 | 134 | 119 |
| **S 50 1** | **S2** | **ME2S** | 156 | 233 | 230 | 492.5 | 204.5 | 111 | 44 | — | — | — | — | — | — |
| **S 50 1** | **S3** | **ME3S** | 195 | 253 | 250 | 541.5 | 219.5 | 135 | 52.5 | — | — | — | — | — | — |
| **S 50 1** | **S3** | **ME3L** | 195 | 253 | 250 | 573.5 | 219.5 | 135 | 60 | — | — | — | — | — | — |
| **S 50 1** | **S4** | **ME4** | 258 | 284 | 281 | 681.5 | 204.5 | 193 | 86 | — | — | — | — | — | — |
| **S 50 1** | **S4** | **ME4LB** | 258 | 284 | 281 | 716.5 | 204.5 | 193 | 94 | — | — | — | — | — | — |
| **S 50 1** | **S5** | **ME5S** | 310 | 310.5 | 307 | 768 | — | 245 | 114 | — | — | — | — | — | — |
| **S 50 1** | **S5** | **ME5L** | 310 | 310.5 | 307 | 812 | — | 245 | 130 | — | — | — | — | — | — |

# S 50...P(IEC)

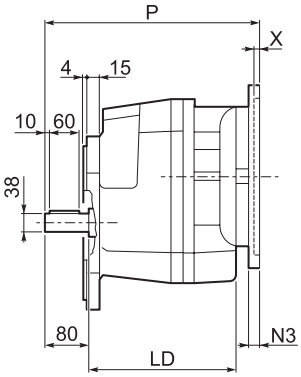


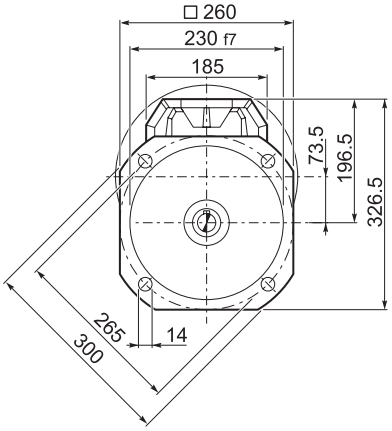




P

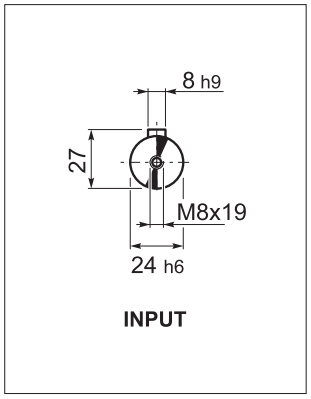


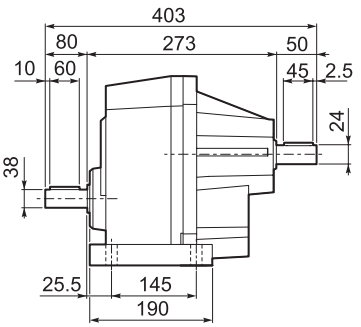




F

| | | LD | M | M1 | M2 | N | N1 | N2 | N3 | N4 | P | X | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S 50 1** | **P63** | 204.5 | 11 | 12.8 | 4 | 140 | 115 | 95 | — | M8x10 | 314 | 4 | 35 |
| **S 50 1** | **P71** | 204.5 | 14 | 12.8 | 4 | 160 | 130 | 110 | — | M8x10 | 314 | 4.5 | 35 |
| **S 50 1** | **P80** | 219.5 | 19 | 16.3 | 5 | 200 | 165 | 130 | — | M10x12 | 314 | 4 | 37 |
| **S 50 1** | **P90** | 219.5 | 24 | 21.8 | 6 | 200 | 165 | 130 | — | M10x12 | 334 | 4 | 37 |
| **S 50 1** | **P100** | 204.5 | 28 | 27.3 | 8 | 250 | 215 | 180 | — | M12x16 | 344 | 4.5 | 41 |
| **S 50 1** | **P112** | 204.5 | 28 | 31.3 | 8 | 250 | 215 | 180 | — | M12x16 | 344 | 4.5 | 41 |
| **S 50 1** | **P132** | 204.5 | 38 | 41.3 | 10 | 300 | 265 | 230 | 16 | 14 | 380 | 5 | 44 |
| **S 50 1** | **P160** | — | 42 | 45.3 | 12 | 350 | 300 | 250 | 23 | 18 | 431 | 5.5 | 48 |
| **S 50 1** | **P180** | — | 48 | 51.8 | 14 | 350 | 300 | 250 | 23 | 18 | 431 | 5.5 | 48 |

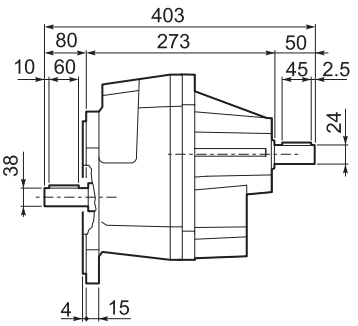
# S 50...HS




P

| Kg | 36 |
|---|---|

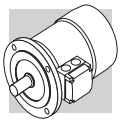



F

| Kg | 39 |
|---|---|



Bonfiglioli Riduttori



# MOTORES ELÉCTRICOS

## SÍMBOLOS Y UNIDADES DE MEDIDA

| Símbolos | Unidades de medida | Descripción |
|---|---|---|
| $\cos\varphi$ | – | Factor de potencia |
| $\eta$ | – | Rendimiento |
| $f_m$ | – | Factor corrector de la potencia |
| I | – | Relación de intermitencia |
| $I_N$ | [A] | Intensidad nominal |
| $I_S$ | [A] | Intensidad de arranque |
| $J_C$ | [Kgm$^2$] | Momento de inercia de la carga |
| $J_M$ | [Kgm$^2$] | Momento de inercia del motor |
| $K_c$ | – | Factor de par |
| $K_d$ | – | Factor de carga |
| $K_J$ | – | Factor de inercia |
| $M_A$ | [Nm] | Par de aceleración medio |
| $M_B$ | [Nm] | Par de frenado |
| $M_N$ | [Nm] | Par nominal |
| $M_L$ | [Nm] | Par resistente medio |
| $M_S$ | [Nm] | Par de arranque |

| Símbolos | Unidades de medida | Descripción |
|---|---|---|
| n | [min$^{-1}$] | Velocidad nominal |
| $P_B$ | [W] | Potencia absorbida por el freno a 20ºC |
| $P_n$ | [kW] | Potencia nominal |
| $P_r$ | [kW] | Potencia requerida |
| $t_1$ | [ms] | Retardo de desbloqueo del freno con alimentación de semionda |
| $t_{1s}$ | [ms] | Tiempo de desbloqueo del freno con alimentación con control electrónico |
| $t_2$ | [ms] | Retardo de la frenada con desconexión lado c.a. |
| $t_{2c}$ | [ms] | Retardo en la frenada con desconexión circuito c.a. y c.c. |
| $t_a$ | [°C] | Temperatura ambiente |
| $t_f$ | [min] | Tiempo de funcionamiento con carga constante |
| $t_r$ | [min] | Tiempo de reposo |
| W | [J] | Trabajo acumulado del freno entre dos operaciones de regulación del entrehierro. |
| $W_{max}$ | [J] | Energía máxima por frenada |
| Z | [1/h] | Número de arranques admisibles con carga |
| $Z_0$ | [1/h] | Número de arranques admisibles en vacío (I = 50 %) |

# M1 MOTORES DE ALTA EFICIENCIA

## M1.1

**Clases de rendimiento y método de prueba**

El rendimento describe la eficiencia con las cuales el motor eléctrico tranforma la energía eléctrica en mecánica.

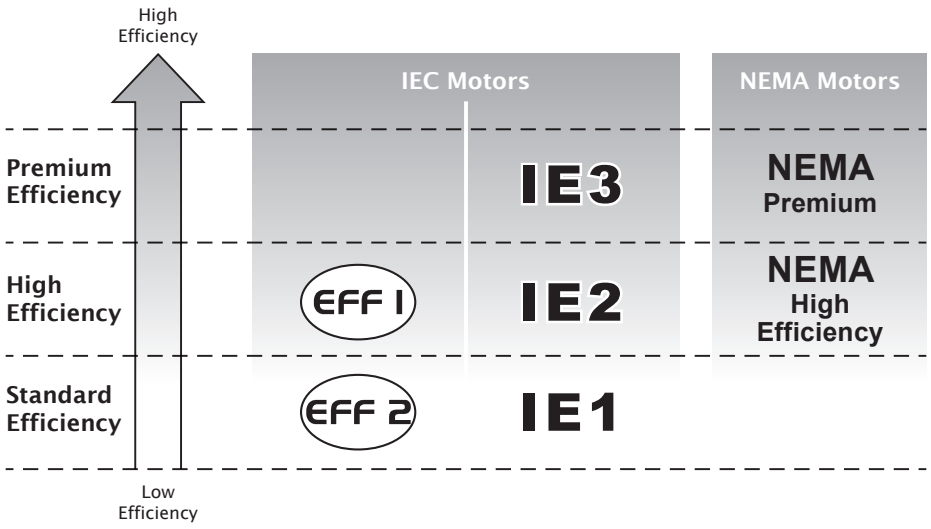
En Europa el sistema de clasificación energética de los motores en baja tensión, se hacía de modo voluntario respecto a las clases Eff1/Eff2/Eff3; otros países utilizaban sus propios sistemas nacionales, a menudo muy diferentes al europeo.

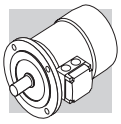
Esta incertidumbre normativa ha empujado a los fabricantes a promover una unificación internacional y la emisión de la Norma IEC (International Electrotechnical Commission) IEC 60034-30:2008 “Clase de rendimiento de los motores asíncronos trifásicos de jaula de ardilla de una sola velocidad (código IE)”.

La nueva Norma:

- define las nuevas clases de eficiencia:
  **IE1** (rendimiento estándar)
  **IE2** (alto rendimiento)
  **IE3** (rendimiento premium)
- proporcina una referencia común intenacional para la clasificación de los motores eléctricos así como para la actividad legislativa nacional.
- introduce el nuevo método de medida del rendimiento según la Norma IEC 60034-1-2:2007

En la siguiente tabla se muestra la correspondencia entre las principales clasificaciones.





**Reglamentación CE Nº 640/2009 de las comisiones**

La Norma IEC 60034-30 suministra la guia técnica aun que no establece terminos legales y requisitos necesarios para la adopcion de una cierta clase de rendimiento; estos requisitos son especicados por las Directivas y leyes nacionales. El reglamiento de aplicación de las Directivas 2005/32/CE, adoptado el 22 de Julio 2009, establece estos requisitos y especifica los criterios para el proyecto ecocompatible de los motores eléctricos, fijando los limites del rendimiento según los siguientes plazos.:

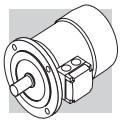
- **16/06/2011**: Los motores eléctricos deben tener un nivel minimo eficiencia correspondiente a **IE2**
- **01/01/2015** Los motores eléctricos con potencia nominal comprendida entre 7,5 y 375 kW. Los motores eléctricos deberan tener un nivel minimo eficiencia correspondiente a **IE3** o bien **IE2** si estan accionados con convertidor de frecuencia
- **01/01/2017**: Los motores eléctricos con una potencia nominal comprendida entre 0,75 kW y 375 kW deberán tener un nivel minimo eficiencia correspondiente a **IE3** o bien **IE2** si estan accionados con convertidor de frecuencia

**Objetivo y exclusiones**

El reglamento (CE) N. 640/2009 se aplica a los motores de inducción de jaula de ardilla de 2, 4 y 6 polos, de una velocidad, trifásicos de 50 Hz o 60 Hz, con una potencia de salida entre 0,75 KW y 375 KW, tensión nominal hasta 1000V, cuyas características están basadas en un funcionamiento continio (S1).

Están excluidos de este reglamento:

- Los motores freno.
- Los motores proyectados para funcionar sumergidos completamente en un líquido.
- Los motores integrados completamente en un productor (por ejemplo: reductores, bombas, ventiladores), no permitiendo medir las prestaciones de modo independiente al productor.
- Los motores diseñados para trabajar:
  - a una altitud superior a los 1000 m respecto el nivel del mar;
  - donde la temperatura ambiente supera los 40 °C;
  - a temperaturas máximas de ejercicio superiores a los 400 °C;
  - donde la temperatura ambiente es inferior a -15 °C (para cualquier motor) o inferior a 0 °C (para los motores refrigerados por aire);
  - donde la temperatura del líquido refrigerante en entrada es inferior a 5 °C o supera los 25 °C;
  - en atmósferas potencialmente explosivas como se definen en la direttiva 94/9/CE.

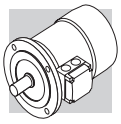


## M1.2 MOTORES BONFIGLIOLI SERIE BE - ME

Los nuevos motores asíncronos trifásicos de la serie **BE** (BE 80B.... BE 180L) y **ME** (ME 2S.....ME 5L), Fabricados por BONFIGLIOLI RIDUTTORI son del tipo cerrado con ventilación externa con rotor de jaula de ardilla , con potencias disponibles de 0,75 a 22 kW clasificados **IE2** (alto rendimiento). Los motores **BE** y **ME** están previstos en su ejecución estándar para tensiones nominales de 230/400 V YΔ (400/690V Y/Δ para los tamaños BE 160 y BE 180) 50Hz y tolerancia 10 %. Los motores de la serie **BE** y **ME** están conforme a los requisitos de las Directivas 2006/95/CCE (directiva de Baja Tensión) y 2004/108CE (Directiva de Compatibilidad Electromagnética). Además los motores de las series **BE** y **NE** están construidos de acuerdo a la norma indicada en tabla siguiente.

(F 1)

| Titulo | CEI | IEC |
|---|---|---|
| Prescripciones generales para máquinas rotativas eléctricas | **CEI EN 60034-1** | **IEC 60034-1** |
| Marcado de los terminales y sentido de giro para máquinas rotativas eléctricas | **CEI 2-8** | **IEC 60034-8** |
| Métodos de refrigeración de las máquinas eléctricas | **CEI EN 60034-6** | **IEC 60034-6** |
| Dimensiones y potencias nominales para máquinas eléctricas rotativas | **EN 50347** | **IEC 60072** |
| Clasificación de los grados de protección máquinas eléctricas rotativas | **CEI EN 60034-5** | **IEC 60034-5** |
| Limite de rumorosidad | **CEI EN 60034-9** | **IEC 60034-9** |
| Códigos de designación de la forma constructiva y del tipo de instalación | **CEI EN 60034-7** | **IEC 60034-7** |
| Tensión nominal para los sistemas de distribución pública de la energía eléctrica en baja tensión | **CEI 8-6** | **IEC 60038** |
| Grado de vibración de las máquinas eléctricas | **CEI EN 60034-14** | **IEC 60034-14** |
| Clase de rendimiento de los motores asíncronos trifásicos con rotor de jaula de ardilla y de una sola velocidad (Código IE) | **CEI EN 60034-30** | **IEC 60034-30** |
| Métodos normalizados para la determinación mediante ensayos de las pérdidas y del rendimiento | **CEI EN 60034-2-1** | **IEC 60034-2-1** |



## M1.3 DESIGNACION MOTOR

**BE** **90LA** **4** 230/400-50 IP55 CLF **B5** ... ...

OPCIONES

POSICION CAJA DE BORNAS
**W** (default), **N**, **E**, **S**

FORMA CONSTRUCTIVA
**—** (motor integrado)
**IM B5** - IM V1, IM V3
**IM B14** - IM V18, IM V19

CLASE DE AISLAMIENTO
**CL F**, **CL H**

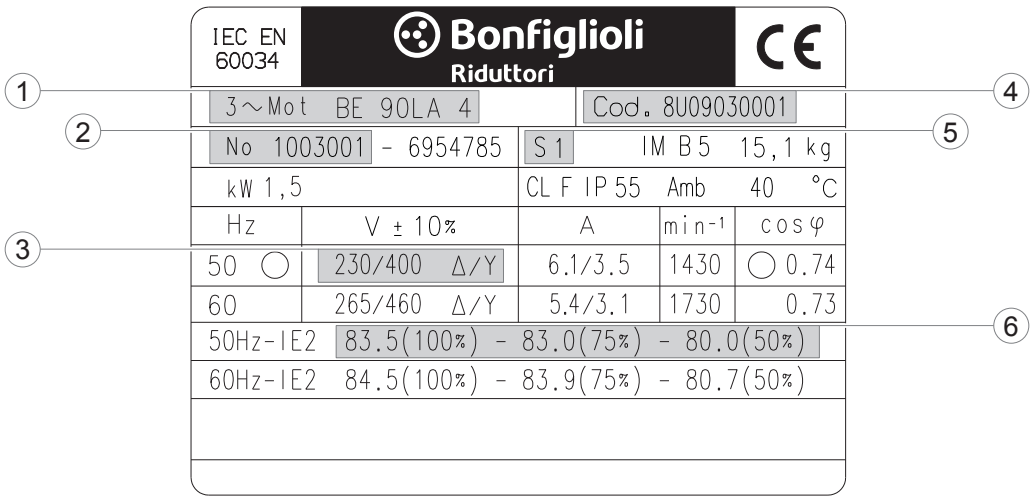
GRADO DE PROTECCIO
**IP55**

TENSION - FRECUENCIA
**230/400 V Δ/Y - 50 Hz** (BE 80 ... BE 132 / ME 2 ... ME 4)
**460 V Y - 60 Hz** (BE 80 ... BE 132 / ME 2 ... ME 4)
**400/690 V Δ/Y - 50 Hz** (BE 160 - BE 180 / ME 5)
**460 V Δ - 60 Hz** (BE 160 - BE 180 / ME 5)

NUMERO DE POLOS
**2, 4, 6**

TAMAÑO MOTOR
**BE 80B ... BE 180L**
**ME 2S ... ME 5L**

TIPO MOTOR
**BE** trifásico IEC, clase IE2
**ME** trifásico integrado clase IE2




① Identificación motor BONFIGLIOLI
② Numero de serie
③ Tensión nominal
④ Código motor
⑤ Tipo de servicio S1 servicio continuo

## M1.4 TOLERANCIA

Según la Norma CEI EN 60034-1 esta admitida la tolerancia indicada por el tamaño garantizado:

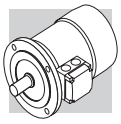
(F 2)

| | |
|---|---|
| -0.15 (1 - η) P ≤ 50kW | Rendimiento |
| -(1 - cosφ)/6 min 0.02 max 0.07 | Factor de potencia |
| ±20% * | Deslizamiento |
| +20% | Intensidad con rotor bloqueado |
| -15% +25% | Par con rotor bloqueado |
| -10% | Par máx |

(*) ± 30% para motores con Pn < 1 kW

## M1.4.1 TOLERANCIA GEOMETRICA

La extremidad del eje,la chaveta y la brida tienen las dimensiones y toleracia según EN 50347, IEC 60072-1, CEI-UNEL 13501. En la cabeza de laextremidad del eje está previsto un taladro roscado según UNI 9321, DIN 332.
Los motores se suministran siempre con la chaveta montada en su alojamiento.
La tabla siguiente indica la tolerancia prevista para las distintas partes:



(F 3)

| Componente | Dimensiones | | Tolerancia |
|---|---|---|---|
| Extremidad eje | **D - DA** | Ø 11 - 28 | **j6** |
| | | Ø 38 - 48 | **k6** |
| | | Ø ≥ 55 | **m6** |
| Chaveta | **F - FA** | | **h9** |
| Brida | **N** | Ø < 250 | **j6** |
| | | Ø ≥ 250 | **h6** |

## M1.4.2 RUMOROSIDAD

Los valores de rumorosidad obtenidos según el metodo indicado en la Norma ISO 1680, estan dentro de los niveles máximos previstos en la Norma CEI EN 60034-9.

## M1.5 SENTIDO DE GIRO

Los motores pueden funcionar en ambos sentidos de giro. Con las conexiones de la caja de empalmes U1, V1, W1 a las fases L1, L2, L3, se obtiene el giro horario, observando el eje por el lado del acoplamiento. La marcha anti horaria, se obtiene intercambiando dos fases.

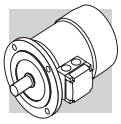
## M1.6 RODAMIENTOS

Los rodamientos previstos son del tipo radial a bolas , precargados axialmente, con carga de grasa para lubricación permanente. La duración nominal a fatiga $L_{10h}$ sin cargas externas aplicadas en el eje y montaje horizontal es superior a 40.000 horas. Los tipos utilizados están indicados en la tabla siguiente:

(F 4)

|  |  | **DE** | **NDE** |
|---|---|---|---|
| | | Todos los motores | |
| **BE 80** | **ME 2** | 6204 2Z C3 | 6204 2Z C3 |
| **BE 90** | **—** | 6205 2Z C3 | 6205 2Z C3 |
| **BE 100** | **ME 3** | 6206 2Z C3 | 6206 2Z C3 |
| **BE 112** | **—** | 6306 2Z C3 | 6306 2Z C3 |
| **BE 132** | **ME 4** | 6308 2Z C3 | 6308 2Z C3 |
| **BE 160M/L** | **ME 5** | 6309 2Z C3 | 6309 2Z C3 |
| **BE 180M** | **—** | 6310 2Z C3 | 6310 2Z C3 |
| **BE 180L** | **—** | 6310 2Z C3 | 6310 2Z C3 |

**DE** = lado mando
**NDE** = lado opuesto al mando



## M1.7 OPERATIVA ESTANDAR

### M1.7.1 TENSION

Los motores BE/ME en ejecución estándar están previstos para funcionar con tensiones nominales de 230/400V Δ/Y (o 400/690V Δ/Y para el tamaño BE 160, BE 180 e ME 5) 50 Hz con tolerancia ± 10%;el rendimiento a plena carga está garantizado solamente a los valores de tensión indicados en placa.
Los motores idóneos para su funcionamiento en la red de distribución europea con tensión de acuerdo a la publicación IEC 60038.

(F 5)

|  |  | Vmot ± 10%<br>3 ~ | | Ejecución |
|---|---|---|---|---|
| **BE 80 ... BE 132** | **ME 2 ... ME 4** | 230/400 V Δ /Y<br>460 V Y | 50 Hz<br>60 Hz (*) | Estándar |
| **BE 160, BE 180** | **ME 5** | 400/690 V Δ /Y<br>460 V Δ | 50 Hz<br>60 Hz (*) | Estándar |
| **BE 80 ... BE 132** | **ME 2 ... ME 4** | 400/690 V Δ /Y<br>460 V Δ | 50 Hz<br>60 Hz (*) | Bajo demanda |

(*) solo motores a 4 polos

### M1.7.2 FRECUENCIA

Los motores BE/ME están diseñados para ser utilizados normalmente en redes a 50Hz.
Los motores BE/ME 4 polos pueden utilizarse en redes a 60Hz.

### M1.7.3 TEMPERATURA AMBIENTE

La tabla de datos técnicos del catálogo indican las características de funcionamiento a 50 Hz, para las condiciones de instalación prevista en la Norma CEI EN 60034-1 (temperatura comprendida entre -15 °C y +40 °C y altitud ≤ 1000 m s/m.).

## M1.8 FUNCIONAMIENTO A 60Hz

Los motores BE/ME 4 polos pueden utilizarse normalmente en redes a 60Hz; en placa de características, además de los datos referidos a 50 Hz, están indicados los valores correspondientes a 460V - 60 Hz con el mismo valor de potencia disponible a 50 Hz.

Los motores BE/EM 4 polos con bobinado estándar, si se utilizan en redes a 60 Hz, presentan variaciones del tamaño principal como se describe seguidamente.

(F 6)

| 50 Hz | 60 Hz | | | |
|---|---|---|---|---|
| V | V | $P_n$ | $M_n$, $M_a/M_n$ | n [$min^{-1}$] |
| 230/400 Δ /Y | 265/460 Δ/Y | 1 | 0.83 | 1.2 |
| 400/690 Δ /Y | 460 Δ | | | |

## M1.8.1 MOTORES PARA USA Y CANADA

### CUS

Los motores BE y ME están disponibles en ejecución NEMA Design C (para las características eléctricas certificado en conformidad con la norma CSA (Canadian Standard) C22.2 N°100 e UL (Underwriters Laboratory) UL 1004-1 con placa de características indicada entre ambas marcas a bajo ilustradas:

C US

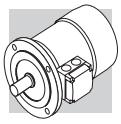
(tensión ≤ 600V)

Las tensiones de las redes de distribución americanas y las correspondientes tensiones nominales a especificar para el motor están indicadas en la tabla siguiente:

(F 7)

| Frecuencia | Tensión de red | Tensión nominal del motor |
|---|---|---|
| 60 Hz | 208 V | 200 V |
| | 240 V | 230 V |
| | 480 V | 460 V |
| | 600 V | 575 V |

Los motores con conexionado yy/y (es. 230/460-60; 220/440-60) montan de serie caja de conexiones con 9 terminales.
La opción CUS no es aplicable a los motores con ventilación independiente.



## M1.9 CAJA DE BORNES MOTOR

La caja de bornes principal contiene 6 bornes para el conexionado con pasa cables (en ejecuciones con 9 bornes para tensiones americanas “dual voltaje”). En el interior de la caja de bornes está previsto un borne de tierra para el conexionado del conductor de protección. Las dimensiones de los terminales están indicadas en la tabla siguiente. Los motores de forma constructiva IM B3 la caja de conexiones está situada enlo alto (posición opuesta a las patas).
Realizar el conexionado eléctrico según el esquema incluido en el interior de la caja de conexiones.

(F 8)

|   | | Nº de terminales | Rosca terminales | Sección máx. del conductor mm² |
|---|---|---|---|---|
| **BE 80, BE 90** | **ME 2** | 6 | M4 | 2.5 |
| **BE 100 ... BE 132** | **ME 3, ME 4** | 6 | M5 | 6 |
| **BE 160** | **ME 5** | 6 | M6 | 16 |
| **BE 180** | **—** | 6 | M8 | 25 |

## M1.9.1 ENTRADA CABLES

En la ejecución estandar la entrada de los cables de alimentación está prevista con pasa cables metrico de acuerdo a la Norma CEI EN 50262.Dimensiones y disposiciones como está indicado en la tabla siguiente.

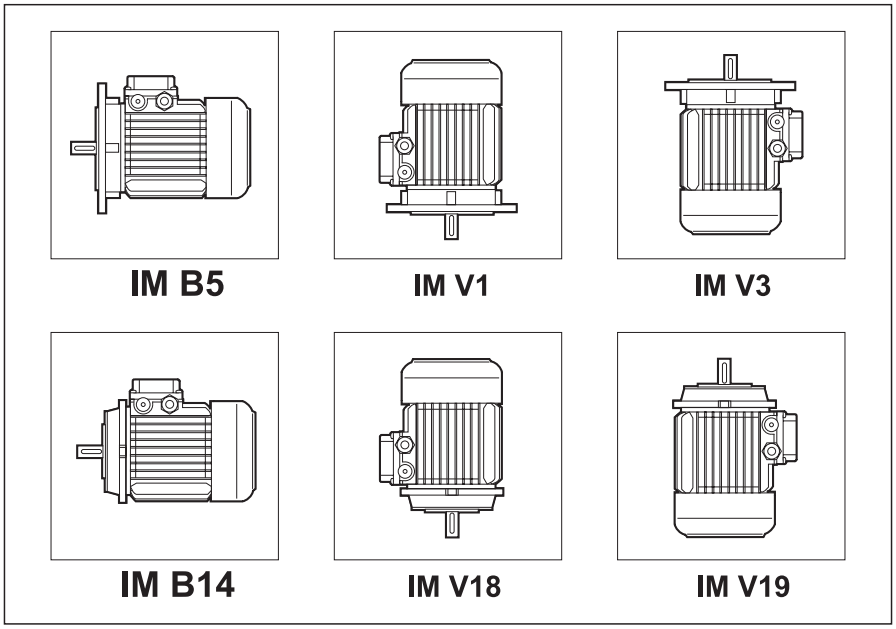
(F 9)

|   | | N° entradas cable y dimensiones | | Ø Max. cable [mm] |
|---|---|---|---|---|
| **BE 80, BE 90** | **ME 2** | 2 x M 25 x 1.5 | 1 taladro por lado | 17 |
| **BE 100, BE 112** | **ME 3** | 2 x M 32 x 1.5<br>2 x M 25 x 1.5 | 2 taladro por lado | 21<br>17 |
| **BE 132** | **ME 4** | 4 x M 32 x 1.5 | | 21 |
| **BE 160, BE 180** | **ME 5** | 2 x M 40 x 1.5 | Orientables 4 x 90º | 28 |

## M.1.10 FORMA CONSTRUCTIVA

Los motores están previstos en las formas constructivas IM B5; IM B14 y derivadas en acuerdo a la Norma CEI EN 60034-7, como se indica en la tabla siguiente.

(F 10)



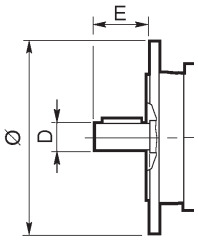

Los motores matriculados exclusivamente en la forma constructiva base, también pueden instalarse en forma constructiva derivada, como se ilustra en la tabla siguiente.

(F 11)

| Forma constructiva base | Forma constructiva derivada | |
|---|---|---|
| **IM B5** | IM V1 | IM V3 |
| **IM B14** | IM V18 | IM V19 |

En las instalaciones con el eje hacia abajo es aconsejable especificar la opción RC - sombrerete para lluvia.
Los motores en forma embridada pueden suministrarse con dimensiones de acoplamiento reducido, correspondientes a la forma constructiva B5R o B14R, con dimensiones detalladas en la tabla siguiente:

(F 12)

| |  | | | | |
|---|---|---|---|---|---|
| | **BE 80** | **BE 90** | **BE 100** | **BE 112** | **BE 132** |
| | DxE - Ø | | | | |
| **B5R** (1) | 14x30 - 160 | 19x40 - 200 | 24x50 - 200 | 24x50 - 200 | 28x60 - 250 |
| **B14R** (2) | 14x30 - 105 | 19x40 - 120 | 24x50 - 140 | — | — |



(1) Brida con taladros pasantes
(2) Brida con taladros roscados

## M1.11 GRADO DE PROTECCION

### IP..

En las ejecuciones estándar y en los motores tipo BE/ME el grado de protección es IP55, bajo demanda puede suministrarse protección aumentada IP56.
Independientemente del grado de protección especificado, para instalaciones a la intemperie los motores deben protegerse de la irrigación directa y en el caso de instalaciones con el eje hacia abajo es necesario especificar el sombrerete de protección contra la entrada de agua y de cuerpos solidos (opción **RC**).

## M1.12 CLASE DE AISLAMIENTO

### CL F

Los motores fabricados por Bonfiglioli emplean, de serie, materiales de aislamiento de clase **F**.

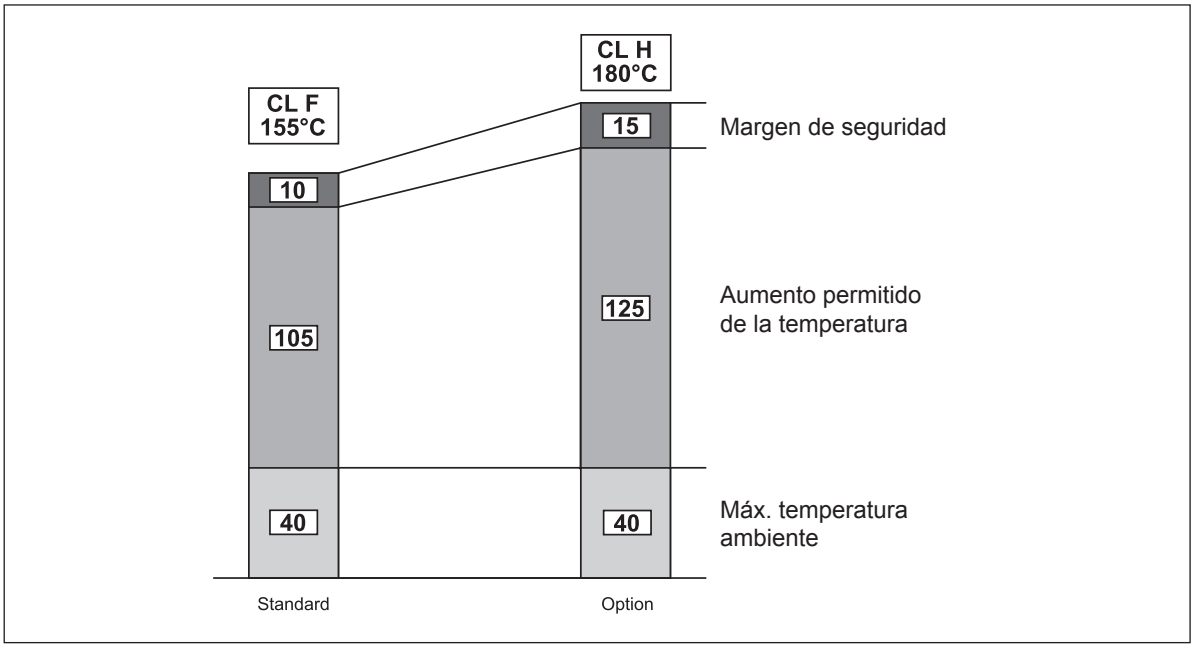
En general para los motores de ejecución estándar la sobre temperatura del bobinado del estator esta contenida dentro del limite de 80K, correspondiente sobre temperatura de clase B.
La detallada selección de los componentes del sistema aislante permite el empleo de los motores en climas tropicales y en presencia de vibraciones normales.

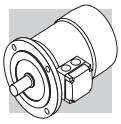
Para aplicaciones en presencia de sustancias químicas agresivas de humedad elevada es aconsejable contactar con el Servicio Técnico Bonfiglioli para seleccionar el producto idóneo.

### CL H

Bajo demanda puede especificarse la clase de aislamiento **H**.
La opción no está disponible para los motores conformes a la norma CSA y UL (opción CUS)

(F 13)





## M1.13 OPCIONES

(F 14)

| Descripción | Valores | | | | | |
|---|---|---|---|---|---|---|
| Protecciones térmicas | **D3** | **E3** | **K1** | | | |
| Tipos de encoder | **EN1** | **EN2** | **EN3** | **EN4** | **EN5** | **EN6** |
| Calentadores anticondensación | **H1** | | | | | |
| Tropicalización bobinado | **TP** | | | | | |
| Doble extremidad del eje | **PS** | | | | | |
| Equilibrado rotor en grado B | **RV** | | | | | |
| Protecciones mecánicas externas | **RC** | **TC** | | | | |
| Ventilación forzada | **U1** | **U2** | | | | |
| Ejecución certificada | **CUS** | | | | | |
| Motor con conector | **CON** | | | | | |

### M1.13.1 Protecciones térmicas

Además de la protección garantizada por el interruptor magneto térmico los motores pueden proveerse de sondas térmicas incorporadas para proteger el bobinado de un excesivo calentamiento debido a la insuficiente ventilación o servicio intermitente. Una protección añadida de este tipo deberá especificarse siempre para los motores con ventilación independiente. Las variantes disponibles son las siguientes

## D3

**n° 3 sonda bimetálica en los bobinados con temperatura a 150 ºC**
Los protectores de este tipo contienen en su interior un disco metálico, que cuando se alcanza la temperatura nominal de intervención, conmuta los contactos desde la posición de reposo.
Con la disminución de la temperatura, el disco y los contactos retornan a la posición de reposo.
Normalmente se emplean tres sondas bimetálicas conectadas en serie con contactos normalmente cerrados, disponibles en una caja de bornes auxiliar.

## E3

**nº 3 termistores PTC en el bobinado, con temperatura 150 ºC**
Los termistores son semiconductores que presentan una rápida variación de la resistencia cuando se aproxima a la temperatura nominal de intervención (150 ºC).En general se utilizan termistores con coeficientes de temperatura positivos, conocidos también con las siglas PTC.
Estos sensores presentan la ventaja de tener unas dimensiones reducidas, y un tiempo de respuesta muy corto con total ausencia de desgastes A diferencia de las sondas térmicas bimetálicas, los termistores no pueden accionar los relés directamente, por que deben conectarse a un elemento particular de conexión.
Los terminales de 3 PTC conectadas en serie, están disponibles en una caja de bornes auxiliar.

## K1

**nº1 KTY 84-130 en los bobinados**

Son un subgrupo de termistores PTC las caracteristicas constructivas de los cuales permiten la función como sensores de temperatura con un coeficiente de temperatura positivo en función de la resistencia. La temperatura de trabajo es: 0ºC…+260ºC.

Los termistores no pueden gobernar directamente los relés y deben por tanto ser conectados a un adecuado sistema de desenganche.

Los terminales (polarizados) de n.1 KTY 84-130 están disponibles en una caja de bornas auxiliar.

### M1.13.2 Conectores

## CON

**Motor con conector**

Están disponibles tres tipos de conectores (CON 1, CON 2, CON 3) que pueden ser instalados en dos posiciones de montaje: lado derecho de la tapa de la caja de bornas (C1D, C2D, C3D); lado izquierdo de la tapa de la caja de bornas (C1S, C2S, C3S).

La opción CON está disponible para los motores BE del tamaño indicado en la tabla siguiente.

**Sobre el motor está fijado el conector macho (dotado de pin), el conector hembra no se suministra. Con la opción CON está siempre previsto la conexión a Y de la fase.**

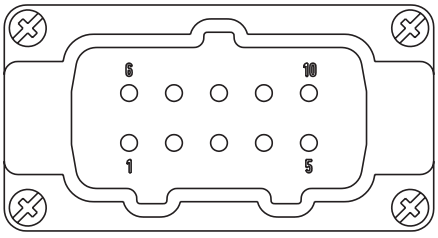
Para motores previstos de servo ventilación (opción U1) la alimentación del ventilador está previsao en la caja de bornas separada fijada a la tapa del ventilador.

En los motores dotados de encoder (opción EN1...EN6) los terminales de la conexión del encoder se lleva a cabo a través del volate no conectado al conector.

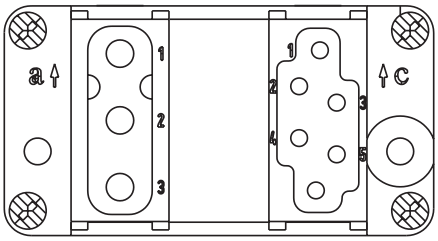
La opcíon CON no és compatible con las opciones U2 y CUS.

**Datos tecnicos**

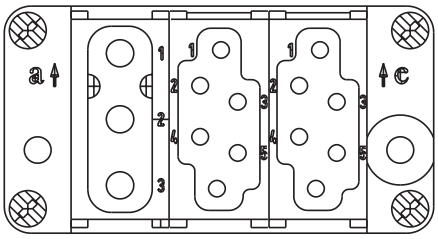
(F 15)

| Opción | **CON 1** |
|---|---|
| Tamaño motor | **BE80…BE112 / ME2...ME3** |
| Vista conector |  |
| Tipo de conector | Harting Han 10ES |
| Cuerpo conector | Han EMC 10B con 2 levas |
| Número de pins - corriente norminal | 10 x 16A |
| Tensión de alimentación | 500 Vac |
| Tipo de conexión contactos | Terminales con tornillo |

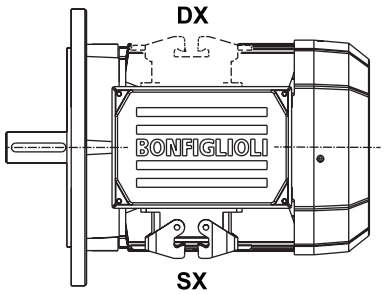
(F 16)

| Opción | **CON 2** |
|---|---|
| Tamaño motor | **BE80…BE132M / ME2...ME4** |
| Vista conector |  |
| Tipo de conector | Harting Han Modular |
| Cuerpo conector | Han EMC 10B con 2 levas |
| Tipo Modulo | Modulo C + Modulo vacío + Modulo E |
| Número de pins - corriente norminal | 3 x 36A / 6 x 16A |
| Tensión de alimentación | 500 Vac |
| Tipo de conexión contactos | Contactos a crimpar |

(F 17)

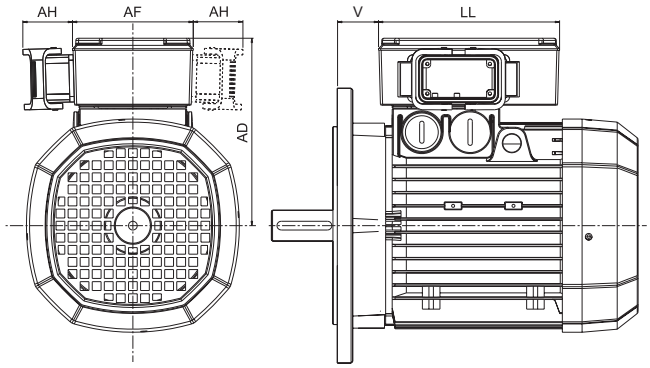
| Opción | **CON 3** |
|---|---|
| Tamaño motor | **BE80…BE132M / ME2...ME4** |
| Vista conector |  |
| Tipo de conector | Harting Han Modular |
| Cuerpo conector | Han EMC 10B con 2 levas |
| Tipo Modulo | Modulo C + Modulo vacío + Modulo E |
| Número de pins - corriente norminal | 3 x 36A / 6 + 6 x 16A |
| Tensión de alimentación | 500 Vac |
| Tipo de conexión contactos | Contactos a crimpar |

(F 18)

| **Orientamiento conectores** |
|---|
|  |

(F 19)

**Diseño de dimensiones motores sin freno**

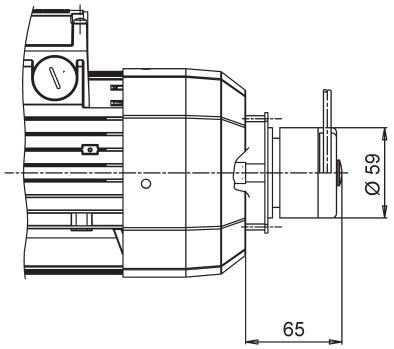



| | | **AD** (mm) | **AF** (mm) | **AH** (mm) | **LL** (mm) | **V**(*) (mm) |
|---|---|---|---|---|---|---|
| **BE80** | **ME2** | 160 | 110 | 45 | 165 | 16.5 |
| **BE90** | **—** | 162 | 110 | 45 | 165 | 31.5 |
| **BE100** | **ME3** | 171 | 110 | 45 | 165 | 37.5 |
| **BE112** | **—** | 186 | 110 | 45 | 165 | 39 |
| **BE132** | **ME4** | 210 | 140 | 45 | 188 | 45.5 |

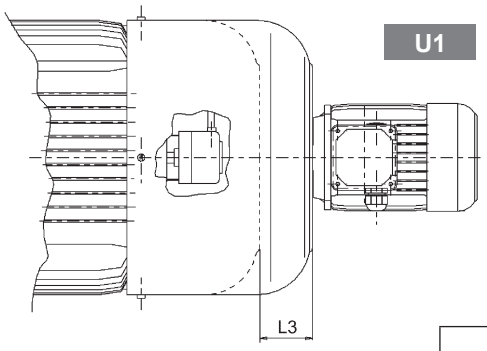
(*) Dimension válida solo para motores BE.

### M1.13.3 Dispositivos de retroacción

(F 20)

| EN1, EN2, EN3, EN4, EN5, EN6 | |
|---|---|
|  | |
| **BE 80B ... BE 180L** | **ME 2S ... ME 5L** |

(F 21)

| EN_ + U1 | | |
|---|---|---|
|  | | |
| | | **L3** |
| **BE 160** | **ME 5** | 72 |
| **BE 180** | **—** | 82 |

Si la opción EN_ se solicita para motores de tamaño BE80B...BE132MB / ME2...ME4, contemporáneamente con la opción U1/U2, las variaciones dimensionales coinciden con las de las opciones U1/U2.

## EN1

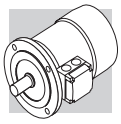
Encoder incremental, $V_{IN}$= 5 V, salida “line-driver” RS 422.

## EN2

Encoder incremental, $V_{IN}$= 10-30 V, salida “line-driver” RS 422.

## EN3

Encoder incremental, $V_{IN}$= 12-30 V, salida “push-pull” 12-30 V



## EN4

Encoder sin/cos, $V_{IN}$ = 4.5-5.5 V, salida Sinus 0.5 $V_{PP}$.

## EN5

Encoder absoluto monogiro, interfaz HIPERFACE®, $V_{IN}$ = 7-12 V.

## EN6

Encoder absoluto multigiro, interfaz HIPERFACE®, $V_{IN}$ = 7-12 V.

(F 22)

| | | EN1 | EN2 | EN3 | EN4 | EN5 | EN6 |
|---|---|---|---|---|---|---|---|
| Interfaz | | TTL/RS 422 | TTL/RS 422 | HTL/push-pull | Sinus 0.5 VPP | HIPERFACE® | HIPERFACE® |
| Tensión de alimentación | [V] | 4...6 | 10...30 | 12...30 | 4.4...5.5 | 7...12 | 7...12 |
| Tensión de salida | [V] | 5 | 5 | 12...30 | — | — | — |
| Intensidad de trabajo sin carga | [mA] | 120 | 100 | 100 | 40 | 80 | 80 |
| Nº de impulsos por vuelta | | 1024 | | | | | |
| resolución | | — | — | — | — | 15 bit | 15 bit |
| revoluciones | | — | — | — | — | — | 12 bit |
| Nº de señales | | 6 (A, B, Z + Señales invertidas) | | | 6 (cos-, cos+, sin-, sin+, Z, $\overline{Z}$) | — | — |
| Máx. frecuencia de salida | [kHz] | 600 | | | 200 | | |
| Máx. velocidad | [$min^{-1}$] | 6000 (9000 $min^{-1}$ para 10 s) | | | | | |
| Campo de temperatura | [°C] | -30 ... +100 | | | | | |
| Grado de protección | | IP 65 | | | | | |

### M1.13.4 Calentadores anticondensacion (Resistencias de caldeo)

## H1

Los motores funcionando en ambientes muy húmedos y/o en presencia de fuertes variaciones térmicas, pueden equiparse con una resistencia de caldeo (anticondensación).
La alimentación monofásica está prevista en regleta auxiliar situada en la caja de conexiones principal.

(F 23)

| | | H1 |
|---|---|---|
| | | 1~ 230V ± 10%<br>**P [W]** |
| **BE 80** | **ME 2** | 10 |
| **BE 90 ... BE 132MB** | **ME 3, ME 4** | 25 |
| **BE 160, BE 180** | **ME 5** | 50 |

**Durante el funcionamiento del motor la resistencia de caldeo no debe estar nunca conectada.**

### M1.13.5 Tropicalización

**TP**

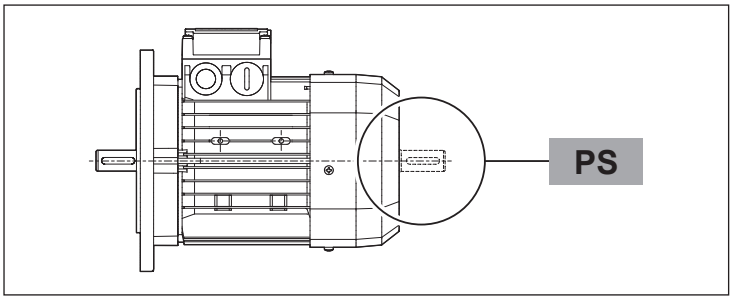
Bajo pedido, mediante la especificación de la opción **TP**, los bobinados del motor obtienen una protección añadida que permite el funcionamiento idóneo en condiciones de elevada temperatura de y humedad.

### M1.13.6 Ejecuciones eje

**PS**

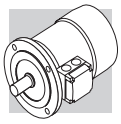
**Segunda extremidad del eje**
La opción excluye las variantes RC, TC, U1, U2, EN1, EN2, EN3, EN3, EN4, EN5, EN6. Las dimensiones se encuentran en la tabla de dimensiones de los motores.

(F 24)




### M1.13.7 Equilibrado del rotor

Los motores están equilibrados dinámicamente con media chaveta y comprendidas en el grado de vibración **A** según la Norma CEI EN 60034-14.



## RV

Para aplicaciones donde se requiera baja rumorosidad, está disponible la opción **RV** que garantiza la vibración reducida, según el grado **B.** La tabla abajo incluida indica la velocidad eficaz (critica) de vibraciones para el equilibrado normal (A) y en grado B.

(F 25)

| Grado de vibración | Velocidad de giro<br>n [$min^{-1}$] | Limites de las velocidades de vibración (mm/s)<br>**80 ≤ H ≤ 180L** |
|---|---|---|
| **A** | 600 < n < 3600 | 1.6 |
| **B** | 600 < n < 3600 | 0.70 |

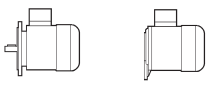
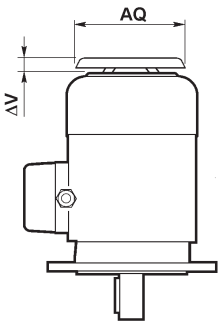
Los valores están referidos a la medición realizada con el motor suspendido libremente y funcionando en vacío: tolerancia ±10%.

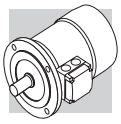
### M1.13.8 Protecciones mecánicas externas

## RC

El dispositivo paralluvia, está recomendado cuando el motor esté instalado verticalmente con el eje hacia abajo, sirve para proteger al motor de la introducción de cuerpos sólidos o del goteo. Las dimensiones adicionales están indicadas en la tabla de abajo.
El sombrerete excluye las variantes PS, EN1, EN2, EN3, EN3, EN4, EN5, EN6.

(F 26)

|  | | **AQ** | **ΔV** |  |
|---|---|---|---|---|
| **BE 80** | **ME 2** | 152 | 25 | |
| **BE 90** | **—** | 168 | 30 | |
| **BE 100** | **ME 3** | 190 | 28 | |
| **BE 112** | **—** | 211 | 32 | |
| **BE 132** | **ME 4** | 254 | 32 | |
| **BE 160** | **ME 5** | 302 | 36 | |
| **BE 180** | **—** | 340 | 36 | |



## TC

La variante del sombrerete tipo TC, se tiene que especificar cuando el motor se instale en ambientes de la industria textil, donde están presentes, filamentos que podrían obstruir la rejilla de la tapa del ventilador, impidiendo el flujo regular del aire de refrigeración.
Esta opción excluye las variantes EN1, EN2, EN3, EN3, EN4, EN5, EN6.
Las dimensiones totales son las mismas que las del sombrerete tipo RC.

### M1.13.9 Ventilación

Los motores están refrigerados mediante ventilación externa (IC 411 según CEI EN 60034-6) y están provistos de un ventilador radial de plástico que funciona en ambos sentidos de giro.
En la instalación debe asegurarse una distancia mínima entre la tapa del ventilador y la pared, de modo que no exista impedimento a la circulación del aire y permitir la ejecución del mantenimiento ordinario del motor.
Bajo pedido, los motores pueden suministrarse con ventilación forzada y alimentación independiente. La refrigeración se realiza por medio de un ventilador axial con alimentación independiente, montado en la tapa del ventilador (método de refrigeración IC 416).

Esta ejecución es utilizada cuando el motor es alimentado con variador de frecuencia, con el fin de extender el campo de funcionamiento a par constante aun a baja velocidad, o cuando se precisan elevadas frecuencia de arranque.
De esta opción quedan excluidos los motores con doble eje (opción PS).

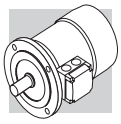
Para la variante están disponibles dos ejecuciones alternativas, denominadas **U1** y **U2**, que tienen el mismo empacho en el sentido longitudinal. Para ambas ejecuciones, la mayor longitud de la tapa del ventilador (ΔL.) está indicada en la siguiente tabla. Las dimensiones generales pueden obtenerse en las tablas de dimensiones de los motores.

**Incremento de la longitud en los motores con ventilación independiente**

(F 27)

|  |  | $\Delta L_1$ [mm] |
|---|---|---|
| **BE 80** | **ME 2** | 127 |
| **BE 90** | **—** | 131 |
| **BE 100** | **ME 3** | 119 |
| **BE 112** | **—** | 130 |
| **BE 132** | **ME 4** | 161 |
| **BE 160, BE 180** | **ME 5** | 184 |

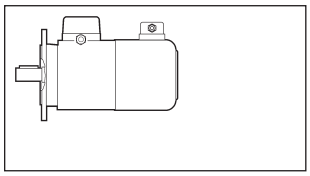
$\Delta L_1$ = variaciones dimensionales respecto a la longitud LB del motor entandar correspondiente.



## U1

Terminales de alimentación del ventilador, en caja de conexiones separada.
Esta opción no esta disponible para los motores conformes a las normas CSA y UL (opción CUS)

(F 28)

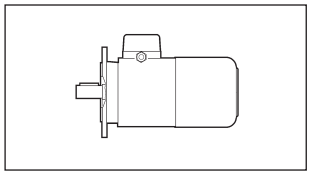


| | | V a.c. ±10% | Hz | P [W] | I [A] |
|---|---|---|---|---|---|
| **BE 80** | **ME 2** | 1 ~ 230 | 50 / 60 | 22 | 0.12 |
| **BE 90** | **—** | | | 40 | 0.30 |
| **BE 100** | **ME 3** | | | 50 | 0.25 |
| **BE 112** | **—** | 3 ~ 230Δ / 400Y | | 50 | 0.26 / 0.15 |
| **BE 132** | **ME 4** | | | 110 | 0.38 / 0.22 |
| **BE 160** | **ME 5** | | 50 | 180 | 1.25 / 0.72 |
| **BE 180** | **—** | | | 250 | 1.51 / 0.87 |

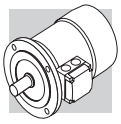
## U2

Terminales de alimentación del ventilador, en caja de conexiones principal del motor.
Esta opción no esta disponible para los motores conformes a las normas CSA y UL (opción CUS)

(F 29)



| | | V a.c. ±10% | Hz | P [W] | I [A] |
|---|---|---|---|---|---|
| **BE 80** | **ME 2** | 1 ~ 230 | 50 / 60 | 22 | 0.12 |
| **BE 90** | **—** | | | 40 | 0.30 |
| **BE 100** | **ME 3** | 3 ~ 230Δ / 400Y | | 40 | 0.12 / 0.09 |
| **BE 112** | **—** | | | 50 | 0.26 / 0.15 |
| **BE 132** | **ME 4** | | | 110 | 0.38 / 0.22 |



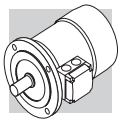
## M1.14 DATOS TECNICOS MOTORES

| 2 P | 3000 min$^{-1}$ - S1 | 50 Hz - IE2 |
|---|---|---|

| $P_n$ kW | | | $n$ min$^{-1}$ | $M_n$ Nm | In 400V A | η% 100% | η% 75% | η% 50% | cos φ | $\frac{I_s}{I_n}$ | $\frac{M_s}{M_n}$ | $\frac{M_a}{M_n}$ | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.75 | **BE 80A** | **2** | 2860 | 2.5 | 1.65 | 80.0 | 79.6 | 76.4 | 0.83 | 6.8 | 3.8 | 3.5 | 9.0 | 9.5 |
| 1.1 | **BE 80B** | **2** | 2845 | 3.7 | 2.35 | 81.5 | 82.2 | 79.9 | 0.83 | 6.9 | 3.8 | 3.1 | 11.4 | 11.3 |
| 1.5 | **BE 90SA** | **2** | 2865 | 5.0 | 3.2 | 81.3 | 80.7 | 78.1 | 0.82 | 6.8 | 3.6 | 2.8 | 12.5 | 12.3 |
| 2.2 | **BE 90L** | **2** | 2870 | 7.3 | 4.7 | 83.2 | 83.1 | 80.8 | 0.82 | 6.9 | 3.1 | 2.9 | 16.7 | 14 |
| 3 | **BE 100L** | **2** | 2880 | 9.9 | 6.2 | 84.6 | 84.6 | 83.7 | 0.83 | 7.3 | 3.5 | 3.1 | 39 | 23 |
| 4 | **BE 112M** | **2** | 2920 | 13.1 | 8.2 | 85.8 | 85.5 | 84.3 | 0.82 | 7.9 | 3.5 | 3.1 | 57 | 28 |
| 5.5 | **BE 132SA** | **2** | 2925 | 18.0 | 10.6 | 87.0 | 85.0 | 81.7 | 0.86 | 8.5 | 3.6 | 3.3 | 145 | 42 |
| 7.5 | **BE 132SB** | **2** | 2935 | 24 | 14.3 | 88.1 | 87.4 | 84.7 | 0.86 | 8.8 | 3.9 | 3.6 | 178 | 53 |
| 9.2 | **BE 132MB** | **2** | 2920 | 30 | 16.4 | 88.8 | 86.5 | 84.2 | 0.91 | 8.4 | 3.7 | 3.3 | 210 | 65 |
| 11 | **BE 160MA** | **2** | 2940 | 36 | 20.0 | 89.4 | 89.5 | 88.0 | 0.89 | 8.1 | 3.0 | 2.9 | 340 | 84 |
| 15 | **BE 160MB** | **2** | 2950 | 49 | 27.2 | 90.5 | 90.5 | 89.5 | 0.88 | 8.5 | 3.0 | 2.8 | 420 | 97 |
| 18.5 | **BE 160L** | **2** | 2945 | 60 | 32 | 90.9 | 90.5 | 89.8 | 0.91 | 7.7 | 2.9 | 2.7 | 490 | 109 |

| 4 P | 1500 min$^{-1}$ - S1 | 50 Hz - IE2 |
|---|---|---|

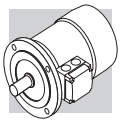
| $P_n$ kW | | | $n$ min$^{-1}$ | $M_n$ Nm | In 400V A | η% 100% | η% 75% | η% 50% | cos φ | $\frac{I_s}{I_n}$ | $\frac{M_s}{M_n}$ | $\frac{M_a}{M_n}$ | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.75 | **BE 80B** | **4** | 1430 | 5.0 | 1.65 | 81.0 | 80.5 | 78.0 | 0.81 | 6.1 | 3.2 | 3.0 | 28 | 12.2 |
| 1.1 | **BE 90S** | **4** | 1430 | 7.4 | 2.53 | 82.5 | 82.0 | 79.5 | 0.76 | 6.3 | 2.9 | 2.8 | 28 | 13.6 |
| 1.5 | **BE 90LA** | **4** | 1430 | 10.0 | 3.5 | 83.5 | 83.0 | 80.0 | 0.74 | 5.9 | 3.1 | 3.0 | 34 | 15.1 |
| 2.2 | **BE 100LA** | **4** | 1430 | 14.7 | 4.9 | 85.4 | 85.0 | 84.0 | 0.76 | 5.8 | 3.0 | 2.8 | 54 | 22 |
| 3 | **BE 100LB** | **4** | 1420 | 20 | 6.6 | 85.5 | 86.0 | 85.5 | 0.77 | 5.9 | 2.8 | 2.6 | 61 | 24 |
| 4 | **BE 112M** | **4** | 1440 | 27 | 8.3 | 87.0 | 87.0 | 86.0 | 0.80 | 6.5 | 2.8 | 2.8 | 105 | 32 |
| 5.5 | **BE 132S** | **4** | 1460 | 36 | 11.1 | 88.5 | 88.5 | 87.5 | 0.81 | 7.3 | 2.9 | 2.9 | 270 | 53 |
| 7.5 | **BE 132MA** | **4** | 1460 | 49 | 14.8 | 89.0 | 89.0 | 88.5 | 0.82 | 6.9 | 2.9 | 2.8 | 319 | 59 |
| 9.2 | **BE 132MB** | **4** | 1460 | 60 | 18.1 | 89.5 | 89.5 | 88.5 | 0.82 | 6.9 | 2.9 | 3.0 | 360 | 70 |
| 11 | **BE 160M** | **4** | 1465 | 72 | 21.5 | 91.0 | 91.3 | 90.5 | 0.81 | 6.5 | 2.8 | 2.6 | 650 | 99 |
| 15 | **BE 160L** | **4** | 1465 | 98 | 28.7 | 90.8 | 91.0 | 90.5 | 0.83 | 6.5 | 2.6 | 2.3 | 790 | 115 |
| 18.5 | **BE 180M** | **4** | 1465 | 121 | 35 | 91.6 | 92.0 | 91.3 | 0.83 | 6.5 | 2.6 | 2.5 | 1250 | 135 |
| 22 | **BE 180L** | **4** | 1465 | 143 | 41 | 91.6 | 91.8 | 91.4 | 0.84 | 6.8 | 2.7 | 2.6 | 1650 | 157 |



| 6 P | 1000 $min^{-1}$ - S1 | 50 Hz - IE2 |
|---|---|---|

| $P_n$ kW | | n $min^{-1}$ | $M_n$ Nm | In 400V A | η% 100% | η% 75% | η% 50% | cos φ | $\frac{I_s}{I_n}$ | $\frac{M_s}{M_n}$ | $\frac{M_a}{M_n}$ | $J_m$ x $10^{-4}$ $kgm^2$ | IM B5 Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.75 | **BE 90S 6** | 935 | 7.7 | 2.06 | 75.9 | 75.9 | 73.0 | 0.69 | 5.1 | 3.1 | 2.9 | 33 | 15 |
| 1.1 | **BE 100M 6** (*) | 945 | 11.1 | 2.75 | 78.1 | 76.2 | 73.0 | 0.74 | 4.9 | 2.2 | 1.9 | 82 | 22 |
| 1.5 | **BE 100LA 6** | 945 | 15.2 | 3.9 | 79.8 | 77.5 | 74.0 | 0.72 | 5.6 | 2.5 | 2.3 | 95 | 24 |
| 2.2 | **BE 112M 6** | 950 | 22 | 5.2 | 81.8 | 81.8 | 79.3 | 0.74 | 5.2 | 2.6 | 2.3 | 168 | 32 |
| 3 | **BE 132S 6** | 955 | 30 | 6.6 | 83.3 | 83.3 | 82.4 | 0.79 | 6.1 | 2.1 | 1.9 | 295 | 44 |
| 4 | **BE 132MA 6** | 965 | 40 | 8.7 | 84.6 | 85.0 | 83.1 | 0.79 | 6.9 | 2.2 | 2.0 | 383 | 56 |
| 5.5 | **BE 160MA 6** (*) | 965 | 54 | 11.6 | 87.0 | 87.0 | 86.4 | 0.79 | 6.6 | 2.5 | 2.3 | 740 | 83 |
| 7.5 | **BE 160MB 6** (*) | 965 | 74 | 15.0 | 88.0 | 88.0 | 87.2 | 0.82 | 6.6 | 2.3 | 2.1 | 970 | 103 |

(*) Relación potencia/tamaño no normalizada

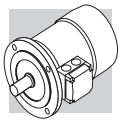


| 2 P | 3000 min$^{-1}$ - S1 | 50 Hz - IE2 |
|---|---|---|

| $P_n$ kW | | | n min$^{-1}$ | $M_n$ Nm | In 400V A | η% 100% | η% 75% | η% 50% | cos φ | $I_s/I_n$ | $M_s/M_n$ | $M_a/M_n$ | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B9 Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.75 | **ME 2SA** | **2** | 2860 | 2.5 | 1.63 | 80.0 | 79.6 | 76.4 | 0.83 | 6.8 | 3.8 | 3.5 | 9.0 | 8.8 |
| 1.1 | **ME 2SB** | **2** | 2845 | 3.7 | 2.35 | 81.5 | 82.2 | 79.9 | 0.83 | 6.9 | 3.8 | 3.1 | 11.4 | 10.6 |
| 1.5 | **ME 3SA** | **2** | 2845 | 5.0 | 3.2 | 81.3 | 79.0 | 76.0 | 0.84 | 6.1 | 2.9 | 2.7 | 24 | 15.5 |
| 2.2 | **ME 3LA** | **2** | 2895 | 7.3 | 4.8 | 83.2 | 83.2 | 81.5 | 0.80 | 6.3 | 2.7 | 2.5 | 31 | 18.7 |
| 3 | **ME 3LB** | **2** | 2880 | 9.9 | 6.2 | 84.6 | 84.6 | 83.7 | 0.83 | 7.3 | 3.5 | 3.1 | 39 | 22 |
| 4 | **ME 4SA** | **2** | 2900 | 13.2 | 7.8 | 85.8 | 84.5 | 82.2 | 0.87 | 7.0 | 2.9 | 2.8 | 101 | 33 |
| 5.5 | **ME 4SB** | **2** | 2925 | 18.0 | 10.6 | 87.0 | 85.0 | 81.7 | 0.86 | 8.5 | 3.6 | 3.3 | 145 | 40 |
| 7.5 | **ME 4LA** | **2** | 2935 | 24 | 14.3 | 88.1 | 87.4 | 84.7 | 0.86 | 8.8 | 3.9 | 3.6 | 178 | 51 |
| 9.2 | **ME 4LB** | **2** | 2920 | 30 | 16.4 | 88.8 | 86.5 | 84.2 | 0.91 | 8.4 | 3.7 | 3.3 | 210 | 60 |
| 11 | **ME 5SA** | **2** | 2940 | 36 | 20.0 | 89.4 | 89.5 | 88.0 | 0.89 | 8.1 | 3.0 | 2.9 | 340 | 70 |
| 15 | **ME 5SB** | **2** | 2950 | 49 | 27.2 | 90.5 | 90.5 | 89.5 | 0.88 | 8.5 | 3 | 2.8 | 420 | 83 |
| 18.5 | **ME 5LA** | **2** | 2945 | 60 | 32 | 90.9 | 90.5 | 89.8 | 0.91 | 7.7 | 2.9 | 2.7 | 490 | 95 |

| 4 P | 1500 min$^{-1}$ - S1 | 50 Hz - IE2 |
|---|---|---|

| $P_n$ kW | | | n min$^{-1}$ | $M_n$ Nm | In 400V A | η% 100% | η% 75% | η% 50% | cos φ | $I_s/I_n$ | $M_s/M_n$ | $M_a/M_n$ | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B9 Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.75 | **ME 2SB** | **4** | 1430 | 5.0 | 1.65 | 81.0 | 80.5 | 78.0 | 0.81 | 6.1 | 3.2 | 3 | 28 | 10.9 |
| 1.1 | **ME 3SA** | **4** | 1430 | 7.4 | 2.60 | 82.5 | 82.0 | 79.0 | 0.74 | 5.5 | 2.5 | 2.8 | 34 | 15.5 |
| 1.5 | **ME 3SB** | **4** | 1420 | 10.1 | 3.48 | 84.0 | 84.0 | 83.0 | 0.74 | 6.2 | 2.9 | 2.9 | 40 | 17 |
| 2.2 | **ME 3LA** | **4** | 1430 | 14.7 | 4.89 | 85.4 | 85.0 | 84.0 | 0.76 | 5.8 | 3 | 2.8 | 54 | 21 |
| 3 | **ME 3LB** | **4** | 1420 | 20 | 6.58 | 85.5 | 86.0 | 85.5 | 0.77 | 5.9 | 2.8 | 2.6 | 61 | 23 |
| 4 | **ME 4SA** | **4** | 1440 | 27 | 8.25 | 87.5 | 86.8 | 84.0 | 0.80 | 7.1 | 3.0 | 3.1 | 213 | 42 |
| 5.5 | **ME 4SB** | **4** | 1460 | 36 | 11.07 | 88.5 | 88.5 | 87.5 | 0.81 | 7.3 | 2.9 | 2.9 | 270 | 51 |
| 7.5 | **ME 4LA** | **4** | 1460 | 49 | 14.83 | 89.0 | 89.0 | 88.5 | 0.82 | 6.9 | 2.9 | 2.8 | 319 | 57 |
| 9.2 | **ME 4LB** | **4** | 1460 | 60 | 18.09 | 89.5 | 89.5 | 88.5 | 0.82 | 6.9 | 2.9 | 3 | 360 | 65 |
| 11 | **ME 5SA** | **4** | 1465 | 72 | 21.54 | 91.0 | 91.3 | 90.5 | 0.81 | 6.5 | 2.8 | 2.6 | 650 | 85 |
| 15 | **ME 5LA** | **4** | 1465 | 98 | 28.73 | 90.8 | 91.0 | 90.5 | 0.83 | 6.5 | 2.6 | 2.3 | 790 | 101 |

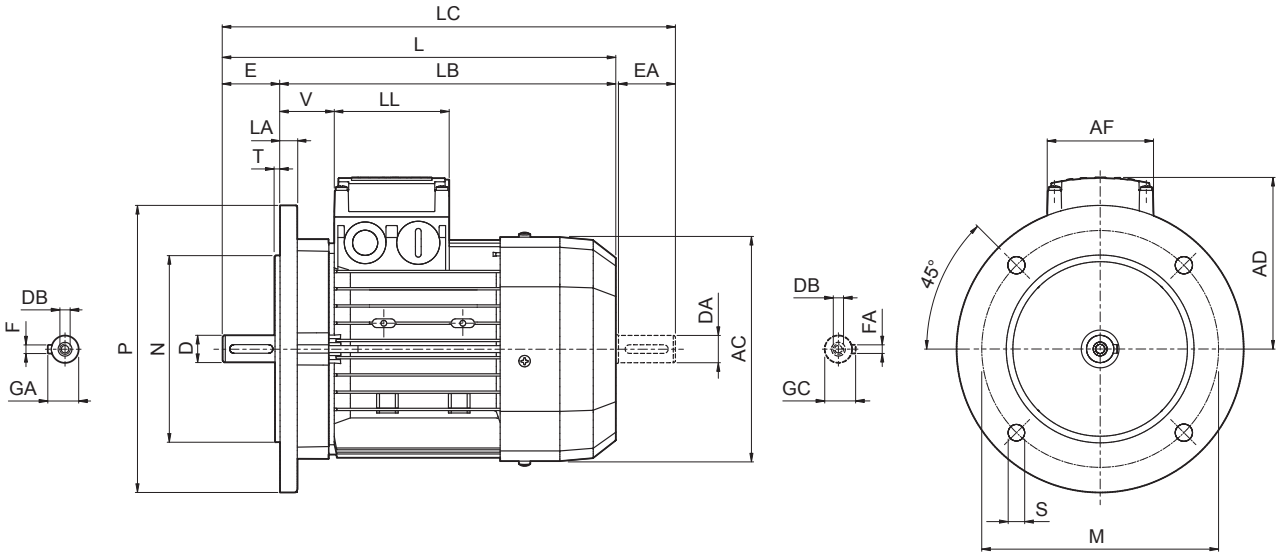


| 6 P | 1000 min$^{-1}$ - S1 | 50 Hz - IE2 |
|---|---|---|

| $P_n$ kW | | n min$^{-1}$ | $M_n$ Nm | In 400V A | η% 100% | η% 75% | η% 50% | cos φ | $I_s/I_n$ | $M_s/M_n$ | $M_a/M_n$ | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B9 Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.75 | **ME 3SA 6** | 940 | 7.6 | 1.98 | 75.9 | 75.0 | 70.7 | 0.72 | 4.7 | 2.2 | 2.0 | 33 | 17 |
| 1.1 | **ME 3LA 6** (*) | 945 | 11.1 | 2.75 | 78.1 | 76.2 | 73.0 | 0.74 | 4.9 | 2.2 | 1.9 | 82 | 21 |
| 1.5 | **ME 3LB 6** | 945 | 15.2 | 3.8 | 79.8 | 77.5 | 74.0 | 0.72 | 5.6 | 2.5 | 2.3 | 95 | 23 |
| 2.2 | **ME 4SA 6** | 955 | 22 | 4.9 | 81.8 | 81.8 | 80.0 | 0.80 | 5.7 | 1.9 | 1.7 | 216 | 34 |
| 3 | **ME 4SB 6** | 955 | 30 | 6.6 | 83.3 | 83.3 | 82.4 | 0.79 | 6.1 | 2.1 | 1.9 | 295 | 43 |
| 4 | **ME 4LA 6** | 965 | 40 | 8.6 | 84.6 | 85 | 83.1 | 0.79 | 6.9 | 2.2 | 2 | 383 | 54 |
| 5.5 | **ME 5SA 6** (*) | 965 | 54 | 11.6 | 87.0 | 87.0 | 86.4 | 0.79 | 6.6 | 2.5 | 2.3 | 740 | 69 |
| 7.5 | **ME 5SB 6** (*) | 965 | 74 | 15.0 | 88.0 | 88.0 | 87.2 | 0.82 | 6.6 | 2.3 | 2.1 | 970 | 89 |

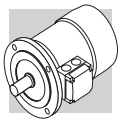
(*) Relación potencia/tamaño no normalizada

# BE - IM B5

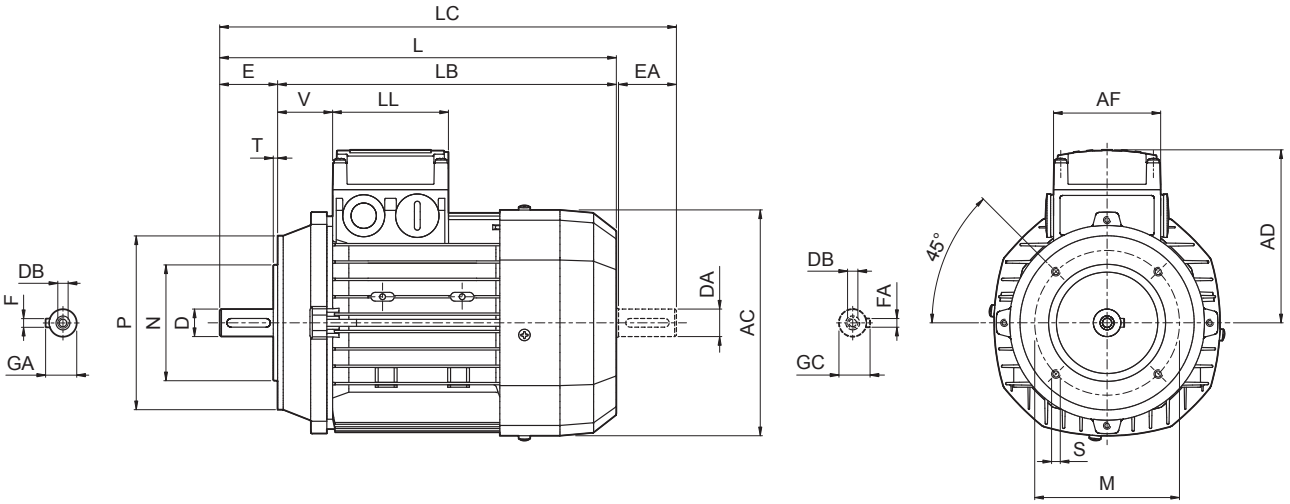



| | Eje | | | | | Brida | | | | | | Motor | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **D<br>DA** | **E<br>EA** | **DB** | **GA<br>GC** | **F<br>FA** | **M** | **N** | **P** | **S** | **T** | **LA** | **AC** | **L** | **LB** | **LC** | **AD** | **AF** | **LL** | **V** |
| **BE 80** | 19 | 40 | M6 | 21.5 | 6 | 165 | 130 | 200 | 11.5 | 3.5 | 11.5 | 156 | 274 | 234 | 315 | 119 | 74 | 80 | 38 |
| **BE 90 S** | 24 | 50 | M8 | 27 | 8 | 165 | 130 | 200 | 11.5 | 3.5 | 11.5 | 176 | 326 | 276 | 378 | 133 | 98 | 98 | 44 |
| **BE 90 L** | 24 | 50 | M8 | 27 | 8 | 165 | 130 | 200 | 11.5 | 3.5 | 11.5 | 176 | 326 | 276 | 378 | 133 | 98 | 98 | 44 |
| **BE 100** | 28 | 60 | M10 | 31 | 8 | 215 | 180 | 250 | 14 | 4 | 14 | 195 | 367 | 307 | 429 | 142 | 98 | 98 | 50 |
| **BE 112** | 28 | 60 | M10 | 31 | 8 | 215 | 180 | 250 | 14 | 4 | 15 | 219 | 385 | 325 | 448 | 157 | 98 | 98 | 52 |
| **BE 132 S** | 38 | 80 | M12 | 41 | 10 | 265 | 230 | 300 | 14 | 4 | 16 | 258 | 493 | 413 | 576 | 193 | 118 | 118 | 58 |
| **BE 132 MA** | 38 | 80 | M12 | 41 | 10 | 265 | 230 | 300 | 14 | 4 | 16 | 258 | 493 | 413 | 576 | 193 | 118 | 118 | 58 |
| **BE 132 MB** | 38 | 80 | M12 | 41 | 10 | 265 | 230 | 300 | 14 | 4 | 16 | 258 | 528 | 448 | 611 | 193 | 118 | 118 | 58 |
| **BE 160 M** | 42<br>38(1) | 110<br>80(1) | M16<br>M12(1) | 45<br>41(1) | 12<br>10(1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 310 | 596 | 486 | 680 | 245 | 187 | 187 | 51 |
| **BE 160 L** | 42<br>38(1) | 110<br>80(1) | M16<br>M12(1) | 45<br>41(1) | 12<br>10(1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 310 | 640 | 530 | 724 | 245 | 187 | 187 | 51 |
| **BE 180 M** | 48<br>42(1) | 110<br>110(1) | M16<br>M16(1) | 51.5<br>45(1) | 14<br>12(1) | 300 | 250 | 350 | 18.5 | 5 | 18 | 348 | 708 | 598 | 823 | 261 | 187 | 187 | 52 |
| **BE 180 L** | 48<br>42(1) | 110<br>110(1) | M16<br>M16(1) | 51.5<br>45(1) | 14<br>12(1) | 300 | 250 | 350 | 18.5 | 5 | 18 | 348 | 708 | 598 | 823 | 261 | 187 | 187 | 52 |

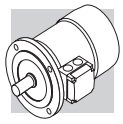
NB:
(1) Estas dimensiones están referidas a la segunda extremidad del eje



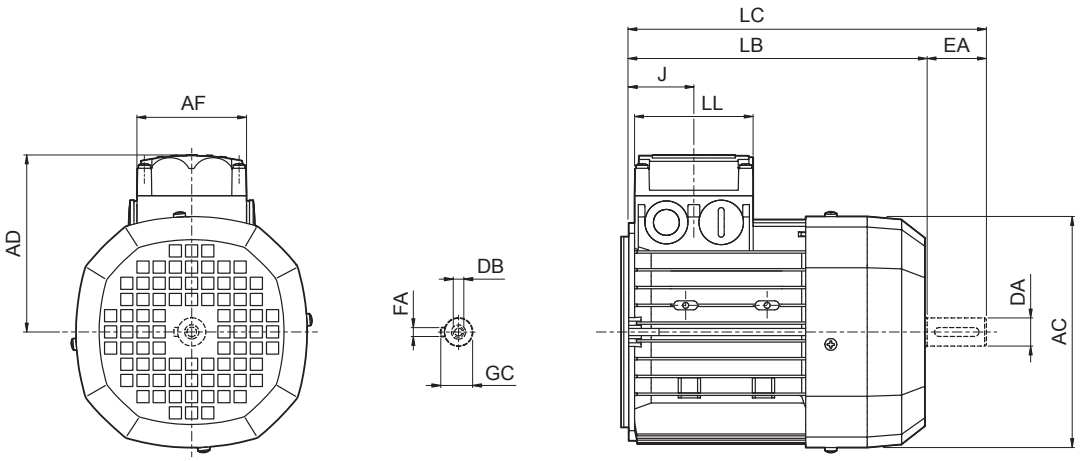
# BE - IM B14



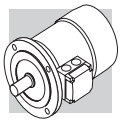

| | Eje | | | | | Brida | | | | | Motor | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **D DA** | **E EA** | **DB** | **GA GC** | **F FA** | **M** | **N** | **P** | **S** | **T** | **AC** | **L** | **LB** | **LC** | **AD** | **AF** | **LL** | **V** |
| **BE 80** | 19 | 40 | M6 | 21.5 | 6 | 100 | 80 | 120 | M6 | 3 | 156 | 274 | 234 | 315 | 119 | 74 | 80 | 38 |
| **BE 90 S** | 24 | 50 | M8 | 27 | 8 | 115 | 95 | 140 | M8 | 3 | 176 | 326 | 276 | 378 | 133 | 98 | 98 | 44 |
| **BE 90 L** | 24 | 50 | M8 | 27 | 8 | 115 | 95 | 140 | M8 | 3 | 176 | 326 | 276 | 378 | 133 | 98 | 98 | 44 |
| **BE 100** | 28 | 60 | M10 | 31 | 8 | 130 | 110 | 160 | M8 | 3.5 | 195 | 367 | 307 | 429 | 142 | 98 | 98 | 50 |
| **BE 112** | 28 | 60 | M10 | 31 | 8 | 130 | 110 | 160 | M8 | 3.5 | 219 | 385 | 325 | 448 | 157 | 98 | 98 | 52 |
| **BE 132 S** | 38 | 80 | M12 | 41 | 10 | 165 | 130 | 200 | M10 | 4 | 258 | 493 | 413 | 576 | 193 | 118 | 118 | 58 |
| **BE 132 MA** | 38 | 80 | M12 | 41 | 10 | 165 | 130 | 200 | M10 | 4 | 258 | 493 | 413 | 576 | 193 | 118 | 118 | 58 |
| **BE 132 MB** | 38 | 80 | M12 | 41 | 10 | 165 | 130 | 200 | M10 | 4 | 258 | 528 | 448 | 611 | 193 | 118 | 118 | 58 |



# ME




| | Segunda extremidad eje | | | | | Motor | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **DA** | **EA** | **DB** | **FA** | **GC** | **AC** | **LB** | **LC** | **AF** | **LL** | **J** | **AD** |
| **ME 2S** | 19 | 40 | M6 | 6 | 21.5 | 156 | 202 | 245 | 74 | 80 | 44 | 119 |
| **ME 3S** | 28 | 60 | M10 | 8 | 31 | 195 | 230 | 293 | 98 | 98 | 53.5 | 142 |
| **ME 3L** | 28 | 60 | M10 | 8 | 31 | 195 | 262 | 325 | 98 | 98 | 53.5 | 142 |
| **ME 4S** | 38 | 80 | M12 | 10 | 41 | 258 | 361 | 444 | 118 | 118 | 64.5 | 193 |
| **ME 4L** | 38 | 80 | M12 | 10 | 41 | 258 | 361 | 444 | 118 | 118 | 64.5 | 193 |
| **ME 4LB** | 38 | 80 | M12 | 10 | 41 | 258 | 396 | 479 | 118 | 118 | 64.5 | 193 |
| **ME 5S** | 38 | 80 | M12 | 10 | 41 | 310 | 418 | 502 | 187 | 187 | 77 | 245 |
| **ME 5L** | 38 | 80 | M12 | 10 | 41 | 310 | 462 | 546 | 187 | 187 | 77 | 245 |



# M2 MOTORES ELÉCTRICOS ESTANDARD

## M2.1 CARACTERÍSTICAS GENERALES

### M2.1.1 Programa de producción

Los motores eléctricos asíncronos trifásicos del programa de producción de BONFIGLIOLI RIDUTTORI están previstos en las formas constructivas básicas IMB5, IMB14 y sus derivadas con las siguientes polaridades: 2, 4, 6, 2/4, 2/6, 2/8, 2/12. En el presente catálogo se destacan, además, las características técnicas de los motores en la versión integrada, tipo M.

### M2.1.2 Normativa

Los motores descritos en el presente catálogo están fabricados de acuerdo con las Normas y unificaciones aplicables y relacionadas en la tabla siguiente.

(G 1)

| Título | CEI | IEC |
|---|---|---|
| Requisitos generales para máquinas eléctricas rotativas | **CEI EN 60034-1** | **IEC 60034-1** |
| Identificación de terminales y sentido de giro para máquinas eléctricas rotativas | **CEI 2-8** | **IEC 60034-8** |
| Métodos de refrigeración de las máquinas eléctricas | **CEI EN 60034-6** | **IEC 60034-6** |
| Dimensiones y potencias nominales para máquinas eléctricas rotativas | **EN 50347** | **IEC 60072** |
| Clasificación de los grados de protección de las máquinas eléctricas rotativas | **CEI EN 60034-5** | **IEC 60034-5** |
| Límites de rumorosidad | **CEI EN 60034-9** | **IEC 60034-9** |
| Siglas de identificación de las formas constructivas y de los tipos de las instalaciones | **CEI EN 60034-7** | **IEC 60034-7** |
| Tensión nominal para los sistemas de distribución pública de la energía eléctrica de baja tensión | **CEI 8-6** | **IEC 60038** |
| Grado de vibración de las máquinas eléctricas | **CEI EN 60034-14** | **IEC 60034-14** |

Los motores cumplen, además, las normas extranjeras adaptadas a las IEC 60034 -31 indicadas en la tabla.

(G 2)

| | |
|---|---|
| **DIN VDE 0530** | Alemania |
| **BS5000 / BS4999** | Gran Bretaña |
| **AS 1359** | Australia |
| **NBNC 51 - 101** | Bélgica |
| **NEK - IEC 34** | Noruega |
| **NF C 51** | Francia |
| **OEVE M 10** | Austria |
| **SEV 3009** | Suiza |
| **NEN 3173** | Holanda |
| **SS 426 01 01** | Suecia |

### M2.1.3 Motores para Usa y Canada

## CUS

Los motores BN y M están disponibles en la ejecución NEMA Diseño C (para las características eléctricas), certificados conforme a la norma CSA (Canadian Standard) C22.2 Nº 100 y UL (Underwriters Laboratory) UL1004. Especificando la opción CUS, la placa de características viene marcada con los símbolos indicados a continuación.






La tensión de las redes eléctricas americanas y la correspondiente tensión nominal que se debe especificar para el motor, están indicadas en la tabla siguiente.

(G 3)

| Frecuencia | Tensión de la red | $V_{mot}$ |
|---|---|---|
| 60 Hz | 208 V | **200 V** |
| | 240 V | **230 V** |
| | 480 V | **460 V** |
| | 600 V | **575 V** |

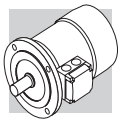
Los motores con conexión YY/Y (230/460-60; 220/440-60) tienen de serie 9 terminales.
Para las mismas ejecuciones y con alimentación 575V-60Hz, la potencia de la placa corresponde a la normalizada a 50Hz.
Para los motores con freno en c.c. tipo BN/M_FD y BN/M_AFD la alimentación del rectificador se realiza a través de la caja de bornas del motor con tensión 230V corriente alterna monofásica.
Para los motores con freno la alimentación del freno se realiza del siguiente modo:

(G 4)

| **BN_FD ; BN_AFD<br>M_FD ; M_AFD** |
|---|
| De caja de bornes motor 1~230V c.a. |

| **BN_FA ; BN_BA<br>M_FA** | Especificar |
|---|---|
| Alimentación independiente 230V Δ - 60Hz | 230SA |
| Alimentación independiente 460V Y - 60Hz | 460SA |

La opción CUS, es incompatible con los motores que incorporan ventilación independiente o a los motores con freno AFD.



### M2.1.4 China Compulsory Certification

**CCC**

Los motores eléctricos destinados a ser comercializados en la Republica Popular China están afectados por la aplicación del sistema de certificación CCC (China Compulsory Certification) y motores BN con par nominal hasta 7 Nm están disponibles con certificación CCC y tarjeta especial que incluye la marca abajo indicada.

La opción CCC no es posible en motores con freno AFD.

### M2.1.5 Directivas 2006/95/CE (LVD) y 2004/108/CE (EMC)

Los motores de las series BN y M cumplen los requisitos de las Directivas 2006/95/CE (Directiva de Baja Tensión) y 2004/108/CE (Directiva de Compatibilidad Electromagnética). En sus placas muestran el sello CE.
Por lo que se refiere a la Directiva EMC, la construcción de estos motores es conforme a las Normas CEI EN 60034-1, EN 61000-6-2, EN 61000-6-4.
Los motores con freno de c.c. FD y AFD, si están equipados con el correspondiente filtro capacitativo en la entrada del rectificador (opción **CF**), cumplen con los límites de emisión previstas en la Norma EN 61000-6-3:2007 “Compatibilidad electromagnética – Norma Genérica sobre emisiones – Parte 6-3: Ambientes residenciales, comerciales y de la industria ligera”. Los motores cumplen, además, los requisitos de la Norma CEI EN 60204-1 “Equipamiento eléctrico de las máquinas”.
Es responsabilidad del fabricante o del montador de la instalación que incorpora los motores como componentes, garantizar la seguridad y la conformidad del producto final a las directivas.

### M2.1.6 Tolerancias

Según la Norma CEI EN 60034-1, las tolerancias admitidas para los tamaños garantizados, están indicadas en la tabla siguiente.

(G 5)

| | |
|---|---|
| -0.15 (1 - η) P ≤ 50kW | Rendimiento |
| -(1 - cosφ)/6 min 0.02 max 0.07 | Factor de potencia |
| ±20% * | Deslizamiento |
| +20% | Intensidad con rotor bloqueado |
| -15% +25% | Par con rotor bloqueado |
| -10% | Par máximo |

* ± 30% para motores con Pn < 1 kW

## M2.2 CARACTERÍSTICAS MECÁNICAS

### M2.2.1 Formas constructivas

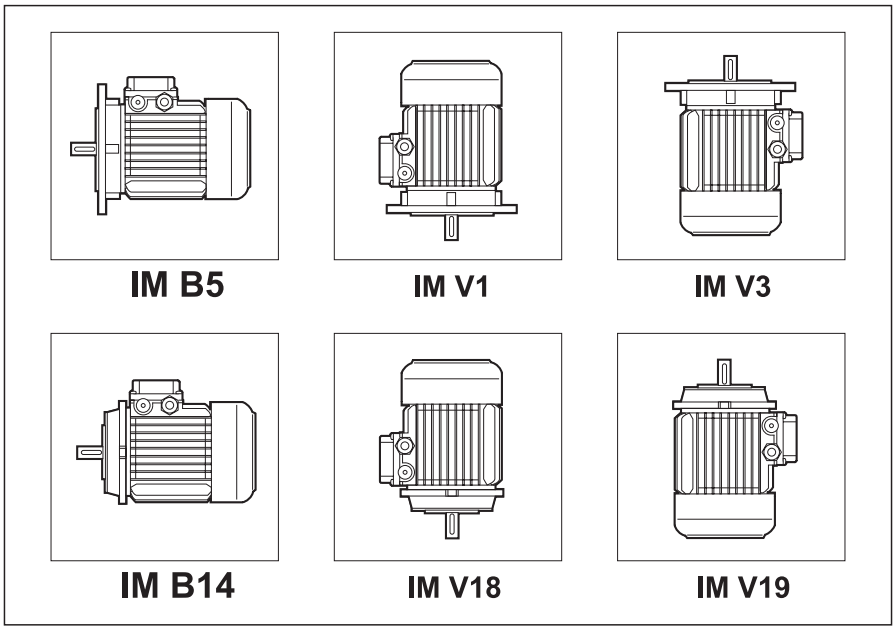
Los motores serie BN están previstos en las formas constructivas indicadas en la tabla (G6) según la Norma CEI EN 60034-14.

Las formas constructivas son las siguientes:

**IM B5** (base)
IM V1, IM V3 (variante)
**IM B14** (base)
IM V18, IMV19 (variante)

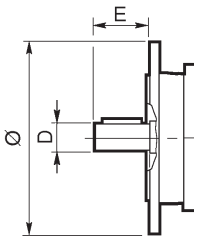
Los motores de forma constructiva IM B5 pueden instalarse en las posiciones IMV1y IMV3; los motores de forma constructiva IM B14 pueden instalarse en las posiciones IMV18 y IMV19. En estos casos, en la placa del motor se indicará la forma constructiva base IM B5 o IM B14.
En las formas constructivas donde el motor está en posición vertical con el eje hacia abajo, se aconseja solicitar el sombrerete antilluvia (se tiene que prever siempre en el caso de motores- freno). Estas ejecuciones se tienen que pedir expresamente en el pedido, ya que no están previstas en la opción base.

(G 6)




Los motores embridados pueden suministrarse con dimensiones de acoplamiento reducido, como queda indicado en la tabla (G7) - ejecuciones **B5R, B14R.**

(G 7)

| |  | | | | | |
|---|---|---|---|---|---|---|
| | **BN 71** | **BN 80** | **BN 90** | **BN 100** | **BN 112** | **BN 132** |
| | DxE - Ø | | | | | |
| **B5R** (1) | 11x23 - 140 | 14x30 - 160 | 19x40 - 200 | 24x50 - 200 | 24x50 - 200 | 28x60 - 250 |
| **B14R** (2) | 11x23 - 90 | 14x30 - 105 | 19x40 - 120 | 24x50 - 140 | — | — |

(1) brida con taladros pasantes
(2) brida con taladros roscados

### M2.2.2 Grado de protección

**IP..**

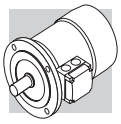
La tabla de abajo resume la disponibilidad de los varios grados de protección.
Independientemente del grado de protección especificado, para la instalación al aire libre, los motores deberán estar protegidos de las irradiaciones directas y, en el caso de instalación con el eje mirando hacia abajo, es necesario especificar, además, el sombrerete de protección contra la entrada de agua y cuerpos sólidos (opción **RC**)

(G 8)

|  |  | **IP 54** | **IP 55** | **IP 56** |
|---|---|---|---|---|
| **BN** | **M** | ⛔ | standard |  |
| **BN_FD**<br>**BN_AFD**<br>**BN_FA** | **M_FD**<br>**M_AFD**<br>**M_FA** | standard |  | ⛔ |
| **BN_BA** | **–** | ⛔ | standard | ⛔ |

### M2.2.3 Ventilación

Los motores están refrigerados mediante ventilación externa (C 411 según CEI EN 60034-6) y están provistos de un ventilador radial de plástico que actúa en ambos sentidos de giro.
En la instalación debe asegurarse una distancia mínima entre la tapa del ventilador y la pared, de modo que no exista impedimento a la libre circulación del aire y permitir la posibilidad del mantenimiento y, si éste está, del freno. Opcionalmente puede suministrarse la ventilación forzada independiente (opción U1). Esta solución permite aumentar el factor de utilización del motor, accionado con variador de frecuencia y a velocidad reducida.



### M2.2.4 Sentido de giro

Es posible el funcionamiento en ambos sentidos de giro.
Conectando los bornes U1, V1, W1 a las fases de línea L1, L2, L3, el giro será en sentido horario visto por el lado del acoplamiento; el sentido de giro antihorario se obtiene invirtiendo dos de las fases.

### M2.2.5 Rumorosidad

Los valores de nivel sonoro, medidos en conformidad con el procedimiento previsto por las Normas ISO 1680, están contenidos dentro de los límites máximos previstos por las Normas CEI EN 60034-9.

### M2.2.6 Vibraciones y equilibrado

Todos los rotores están equilibrados con media chaveta y están dentro de los límites de intensidad de vibración previstos por la Norma CEI EN 60034-14. Para exigencias particulares de baja rumorosidad, opcionalmente, está disponible una ejecución antivibrante de grado reducido B. La tabla siguiente indica los valores de velocidad eficaz de vibración para un equilibrado estándar (A) e incrementada (B).

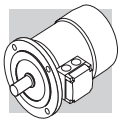
(G 9)

| Grado de vibración | Velocidad de giro<br>n [$min^{-1}$] | Límites de la velocidad de vibración<br>[mm/s]<br>**BN 56 ≤ H ≤ BN 200**<br>**M05 ≤ H ≤ M5** |
|---|---|---|
| **A** | 600 < n < 3600 | 1.6 |
| **B** | 600 < n < 3600 | 0.70 |

Los valores están referidos a la medición efectuada con el motor libremente suspendido y funcionamiento en vacío.

### M2.2.7 Caja de conexiones del motor

La caja de conexiones principal contiene seis bornes para conexionado con terminales de cable.
En el interior de la caja está previsto un borne para el conductor de tierra. Las dimensiones de los terminales están indicadas en la tabla siguiente.
Para la alimentación del freno ver párrafor M6, M7 (freno FD y AFD), M8, M9 (freno FA e BA).
En los motores freno, el rectificador para la alimentación del freno está situado en el interior de la caja de bornes y provisto de los bornes adecuados para su conexionado.
Efectuar el conexionado según los esquemas incluidos en el interior de la caja de bornes o en el manual de instrucciones.



(G 10)

|  |  | Nº terminales | Rosca de los terminales | Sección máx. del conductor $mm^2$ |
|---|---|---|---|---|
| **BN 56...BN 71** | **M05, M1** | 6 | M4 | 2.5 |
| **BN 80, BN 90** | **M2** | 6 | M4 | 2.5 |
| **BN 100...BN 112** | **M3** | 6 | M5 | 6 |
| **BN 132...BN 160MR** | **M4** | 6 | M5 | 6 |
| **BN 160M...BN 180M** | **M5** | 6 | M6 | 16 |
| **BN 180L...BN 200L** | **–** | 6 | M8 | 25 |

### M2.2.8 Entrada de cables

Respetando la Norma EN 50262,los taladros de entrada de cables en la caja de bornes están realizados con rosca métrica cuya medida se indica en la tabla siguiente.

(G 11)

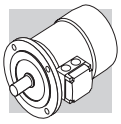
|  |  | Entrada de cables | Diámetro máx. del cable [mm] |
|---|---|---|---|
| **BN 63** | **M05** | 2 x M20 x 1.5 | 13 |
| **BN 71** | **M1** | 2 x M25 x 1.5 | 17 |
| **BN 80 - BN 90** | **M2** | 2 x M25 x 1.5 | 17 |
| **BN 100** | **M3** | 2 x M32 x 1.5 | 21 |
| | | 2 x M25 x 1.5 | 17 |
| **BN 112** | **—** | 2 x M32 x 1.5 | 17 |
| | | 4 x M25 x 1.5 | |
| **BN 132...BN 160MR** | **M4** | 4 x M32 x 1.5 | 21 |
| **BN 160M...BN 200L** | **M5** | 2 x M40 x 1.5 | 29 |

### M2.2.9 Rodamientos

Los rodamientos montados son del tipo radial a bolas, con lubricación permanente y precargados Axialmente. Los tipos utilizados se indican en la siguiente tabla. La duración nominal a fatiga $L_{10h}$ de los rodamientos, en ausencia de cargas externas aplicadas, es superior a 40.000 horas, calculadas según ISO 281.
**DE =** lado eje
**NDE =** lado ventilador

(G 12)

|  | **DE** | **NDE** | |
|---|---|---|---|
| | **M, M_FD, M_AFD, M_FA** | **M** | **M_FD, M_AFD, M_FA** |
| **M05** | 6004 2Z C3 | 6201 2Z C3 | 6201 2RS C3 |
| **M1** | 6004 2Z C3 | 6202 2Z C3 | 6202 2RS C3 |
| **M2** | 6007 2Z C3 | 6204 2Z C3 | 6204 2RS C3 |
| **M3** | 6207 2Z C3 | 6206 2Z C3 | 6206 2RS C3 |
| **M4** | 6309 2Z C3 | 6308 2Z C3 | 6308 2RS C3 |
| **M5** | 6309 2Z C3 | 6309 2Z C3 | 6309 2RS C3 |



(G 13)

|  | DE | NDE | |
|---|---|---|---|
| | BN, BN_FD, BN_AFD, BN_FA, BN_BA | BN, BN_BA | BN_FD, BN_AFD, BN_FA |
| **BN 56** | | 6201 2Z C3 | – |
| **BN 63** | 6201 2Z C3 | 6201 2Z C3 | 6201 2RS C3 |
| **BN 71** | 6202 2Z C3 | 6202 2Z C3 | 6202 2RS C3 |
| **BN 80** | 6204 2Z C3 | 6204 2Z C3 | 6204 2RS C3 |
| **BN 90** | 6205 2Z C3 | 6205 2Z C3 | 6305 2RS C3 |
| **BN 100** | 6206 2Z C3 | 6206 2Z C3 | 6206 2RS C3 |
| **BN 112** | 6306 2Z C3 | 6306 2Z C3 | 6306 2RS C3 |
| **BN 132** | 6308 2Z C3 | 6308 2Z C3 | 6308 2RS C3 |
| **BN 160MR** | 6309 2Z C3 | 6308 2Z C3 | 6308 2RS C3 |
| **BN 160M/L** | 6309 2Z C3 | 6309 2Z C3 | 6309 2RS C3 |
| **BN 180M** | 6310 2Z C3 | 6309 2Z C3 | 6309 2RS C3 |
| **BN 180L** | 6310 2Z C3 | 6310 2Z C3 | 6310 2RS C3 |
| **BN 200L** | 6312 2Z C3 | 6310 2Z C3 | 6310 2RS C3 |

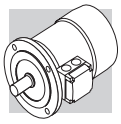
## M2.3 CARACTERÍSTICAS ELÉCTRICAS

### M2.3.1 Tensión

Los motores de una sola velocidad en ejecución normal, están previstos para una tensión nominal de 230V Δ / 400V Y, 50Hz con una tolerancia de tensión ± 10% (excluidos los tipos M3LC4 y M3LC6). En la placa de características están indicados, además de la tensión nominal, el campo de funcionamiento permitido, por ejemplo:
220 - 240V Δ
380 - 415V Y/50 Hz.
De acuerdo con la Norma CEI EN 60034-1, los motores pueden funcionar correctamente a las tensiones arriba indicadas con una tolerancia de ± 5%.
Para el funcionamiento al límite de la tolerancia, la temperatura puede superar en 10 K el límite previsto para la clase adoptada de aislamiento. A excepción de los motores freno tipo BN/M_FD y BN/M_AFD en la placa se indica, además del valor correspondiente al funcionamiento a 60 Hz (p. e. 460Y, 60Hz), el correspondiente campo de tensión:
440 - 480VY, 60Hz
Las tensiones estándar para los motores freno tipo FD y AFD son:
220V - 240V Δ - 50Hz
380V - 415V Y - 50Hz
con una tensión de alimentación del freno de 230V ± 10%.
En la tabla siguiente se indica la tensión prevista para los motores.

(G 14)

|  |  | BN M | BN_FD ; BN_AFD M_FD ; M_AFD | | BN_FA ; BN_BA M_FA | | Ejecución |
|---|---|---|---|---|---|---|---|
| | | $V_{mot}$ ± 10 % 3 ~ | $V_{mot}$ ± 10 % 3 ~ | $V_B$ ± 10 % 1 ~ | $V_{mot}$ ± 10 % 3 ~ | $V_B$ ± 10 % 3 ~ | |
| **BN 56 - BN 132** | **M05…M4** | 230/400 - 50 Hz 460 - 60 Hz | 230/400V Δ/Y- 50 Hz | 230V | 230/400V Δ/Y- 50 Hz 460V Y - 60Hz | 230/400V Δ/Y- 50 Hz 460V Y - 60Hz | Estandar |
| **BN 100 - BN 132** | **M3 - M4** | 400/690 - 50 Hz 460 - 60Hz | 400/690V Δ/Y- 50 Hz | 400V | 400/690V Δ/Y- 50 Hz 460V Y - 60Hz | 400/690V Δ/Y- 50 Hz 460V Y - 60Hz | Opcional sin sobre precio |



Los motores de dos velocidades 400V/50Hz, están previstos para una tensión nominal estándar de 400V; tolerancia aplicable según Norma CEI EN 60034-1

En la tabla siguiente están indicados los distintos tipos de conexionado previstos para los motores en función de la polaridad.

(G 15)

|  |  | Polos | Conexión del bobinado |
|---|---|---|---|
| **BN 56…BN 200** | **M05…M5** | 2, 4, 6 | Δ / Y |
| | | 2/4 | Δ / YY (Dahlander) |
| | | 2/6, 2/8, 2/12 | Y / Y (Doble bobinado) |

### M2.3.2 Frecuencia

En la placa de características de los motores de una velocidad en ejecución estándar, están indicada además de la tensión de funcionamiento a 50Hz, el campo de tensión 440 – 480V 60Hz (excluidos los motores con freno FD y AFD) con la potencia aumentada en aproximadamente el 20%. La potencia de placa de los motores a 60Hz corresponde a la indicada en la tabla siguiente.

(G 16)

|  |  | 2P | 4P | 6P |
|---|---|---|---|---|
| | | $P_n$ [kW] | | |
| **BN 56A** | **–** | – | 0.06 | – |
| **BN 56B** | **M0B** | – | 0.10 | – |
| **BN 63A** | **M05A** | 0.21 | 0.14 | 0.10 |
| **BN 63B** | **M05B** | 0.30 | 0.21 | 0.14 |
| **BN 71A** | **M05C** | 0.45 | 0.30 | 0.21 |
| **BN 71B** | **M1SD** | 0.65 | 0.45 | 0.30 |
| **BN 80A** | **M1LA** | 0.90 | 0.65 | 0.45 |
| **BN 80B** | **M2SA** | 1.30 | 0.90 | 0.65 |
| **BN 90S** | **M2SB** | – | 1.30 | 0.90 |
| **BN 90SA** | **M2SB** | 1.8 | – | – |
| **BN 90L** | **M3SA** | 2.5 | – | 1.3 |
| **BN 90LA** | **M3SA** | – | 1.8 | – |
| **BN 100L** | **M3LA** | 3.5 | – | – |
| **BN 100LA** | **M3LA** | – | 2.5 | 1.8 |
| **BN 100LB** | **M3LB** | 4.7 | 3.5 | 2.2 |

|  |  | 2P | 4P | 6P |
|---|---|---|---|---|
| | | $P_n$ [kW] | | |
| **BN 112M** | **M3LB** | 4.7 | 4.7 | 2.5 |
| | **M3LC** | – | 4.7 | 2.5 |
| **BN 132S** | **M4SA** | – | 6.5 | 3.5 |
| **BN 132SA** | **M4SA** | 6.3 | – | – |
| **BN 132SB** | **M4SB** | 8.7 | – | – |
| **BN 132M** | **M4LA** | 11 | – | – |
| **BN 132MA** | **M4LA** | – | 8.7 | 4.6 |
| **BN 132MB** | **M4LB** | – | 11 | 6.5 |
| **BN 160MR** | **M4LC** | 12.5 | 12.5 | – |
| **BN 160MB** | **M5SB** | 17.5 | – | – |
| **BN 160M** | **M5SA** | – | – | 8.6 |
| **BN 160L** | **M5S** | 21.5 | 17.5 | 12.6 |
| **BN 180M** | **M5LA** | 24.5 | 21.5 | – |
| **BN 180L** | **–** | – | 25.3 | 17.5 |
| **BN 200L** | **–** | 34 | 34 | 22 |

Los motores de doble polaridad alimentados a 60Hz, ven incrementada su potencia en aproximadamente un 15% su potencia nominal, con relación a la correspondiente a 50Hz. Cuando en la placa de un motor preparado para ser alimentado con una frecuencia de 60Hz, se requiera la misma potencia nominal que la correspondiente a la normalizada para 50 Hz, deberá especificarse en la designación con la opción PN.
Los motores bobinados normalmente para una frecuencia de 50Hz, pueden utilizarse en redes de 60Hz con los datos corregidos como se indica en la tabla siguiente.
Si existe freno, éste deberá alimentarse a la tensión $V_b$ indicada en la placa.

(G 17)

| **50 Hz** | **60 Hz** | | | |
|---|---|---|---|---|
| **V** - 50 Hz | **V** - 60 Hz | **Pn** - 60 Hz | $\mathbf{M_n}$, $\mathbf{M_a/M_n}$ - 60 Hz | **n** [$min^{-1}$] - 60 Hz |
| **230/400 Δ/Y** | 220 - 240 Δ | 1 | 0.83 | 1.2 |
| | 380 - 415 Y | | | |
| **400/690 Δ/Y** | 380 - 415 Δ | | | |
| **230/400 Δ/Y** | 265 - 280 Δ | 1.15 | 1 | 1.2 |
| | 440 - 480 Y | | | |
| **400/690 Δ/Y** | 440 - 480 Δ | | | |

### M2.3.3 Potencia nominal

Las tablas de los datos técnicos del catálogo presentan las características funcionales a 50Hz en condiciones ambientales estándar, según la Norma CEI EN 60034-1 (temperatura 40ºC y altitud < 1000 m s.n.m.).
Los motores pueden emplearse a temperaturas comprendidas entre 40ºC a 60ºC aplicando las disminuciones de potencia indicadas en la tabla siguiente.

(G 18)

| Temperatura ambiente (°C) | 40° | 45° | 50° | 55° | 60° |
|---|---|---|---|---|---|
| Potencia admisible en % de la potencia nominal | 100% | 95% | 90% | 85% | 80% |

Cuando se precisa una disminución del motor superior del 15%, consultar con nuestro Servicio Técnico.

### M2.3.4 Clase de aislamiento

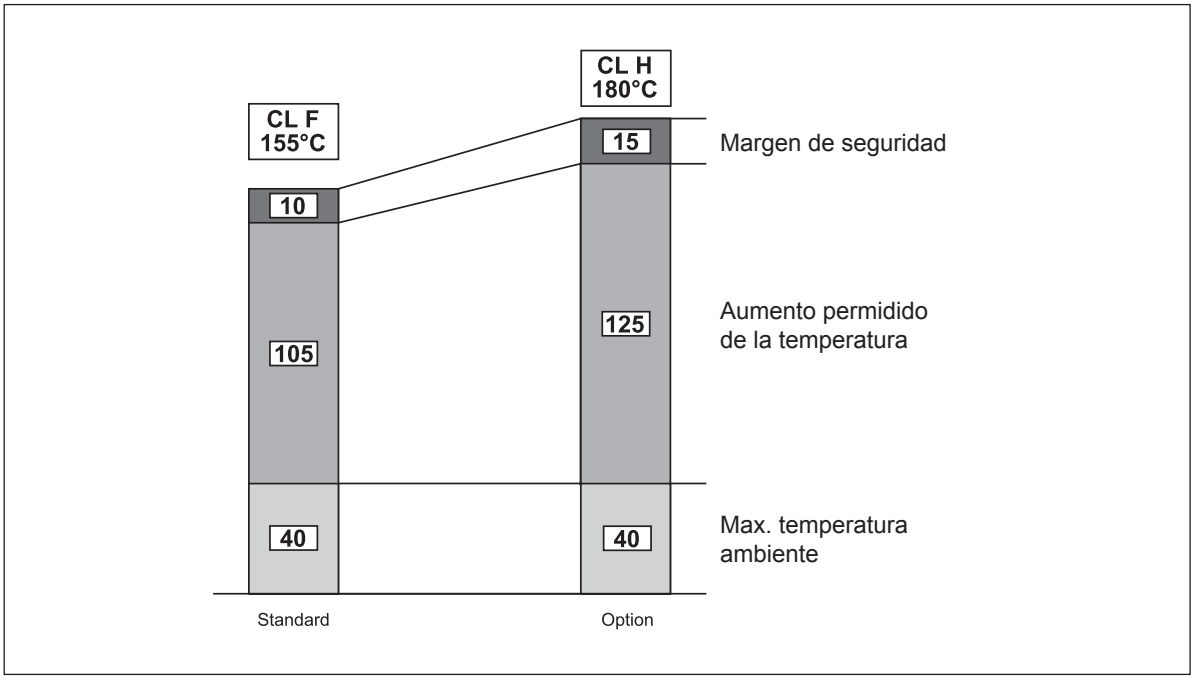
**CL F**

Los motores de producción Bonfiglioli emplean, de serie, material aislante (hilo esmaltado, aislante, resina de impregnación) en clase **F.**

**CL H**

Bajo pedido puede suministrarse los motores con aislamiento clase **H.**
En general, para los motores de ejecución estándar, el aumento de temperatura en el bobinado del estator está comprendido dentro del limite de 80 K, correspondiente a la sobretemperatura de la clase B**.**
La cuidadosa selección de los componentes del sistema aislante, permite el empleo de los motores incluso en climas tropicales y en presencia de vibraciones normales.
Para aplicaciones en presencia de sustancias químicas agresivas o de elevada humedad, es aconsejable contactar con nuestro Servicio Técnico para seleccionar el producto más idóneo. No disponible para los motores conformes a las normas CSA y UL (opción CUS).

(G 19)




### M2.3.5 Tipo de servicio

Si no se indica lo contrario, la potencia indicada en el catálogo se refiere al servicio continuo S1. Para los motores utilizados en condiciones distintas a S1 será necesario identificar el tipo de servicio previsto con referencia a las normas a CEI EN 60034-1. En concreto para servicio S2 y S3 es posible obtener un aumento de la potencia respecto a la prevista para servicio continuo según se indica en la siguiente tabla,válida para los motores de una sola velocidad.

**Como alternativa al servicio contínuo S1, en fase de configuración del producto es posibile seleccionar uno de los siguientes valores: S2, S3 o S9; la placa del motor indicará una potencia aumentada en correspondencia al tipo de servicio, datos eléctricos y tipo de servicio S2-30min, S3-70% o S9, respectivamente. Para mayor información es necesario contactar con el Servicio Técnico de Bonfiglioli.**

Para el dimensionado de los motores de doble velocidad, consultar al Servicio Técnico de Bonfiglioli.

(G 20)

| | **Servicio** | | | | | | |
|---|---|---|---|---|---|---|---|
| | **S2** | | | **S3 *** | | | **S4 - S9** |
| | Duración del ciclo (min) | | | Relación de intermitencia (I) | | | |
| | **10** | **20** | **60** | **25%** | **40%** | **60%** | Consultar |
| $f_m$ | 1.35 | 1.15 | 1.05 | 1.25 | 1.15 | 1.1 | |

* La duración del ciclo deberá ser igual o inferior a 10 minutos; si fuese superior consultar con nuestro Servicio Técnico.

### M2.3.5.1 Relación de intermitencia

$$I = \frac{t_f}{t_f + t_r} \cdot 100 \qquad (23)$$

$t_f$ = tiempo de funcionamiento con carga constante
$t_r$ = tiempo de reposo

### M2.3.5.2 Servicio de duración limitada S2

Se caracteriza por el funcionamiento a carga constante, durante un periodo de tiempo limitado, inferior al requerido para alcanzar el equilibrio térmico, seguido de un periodo de reposo de duración suficiente para que restablezca, en el motor, la temperatura ambiente.

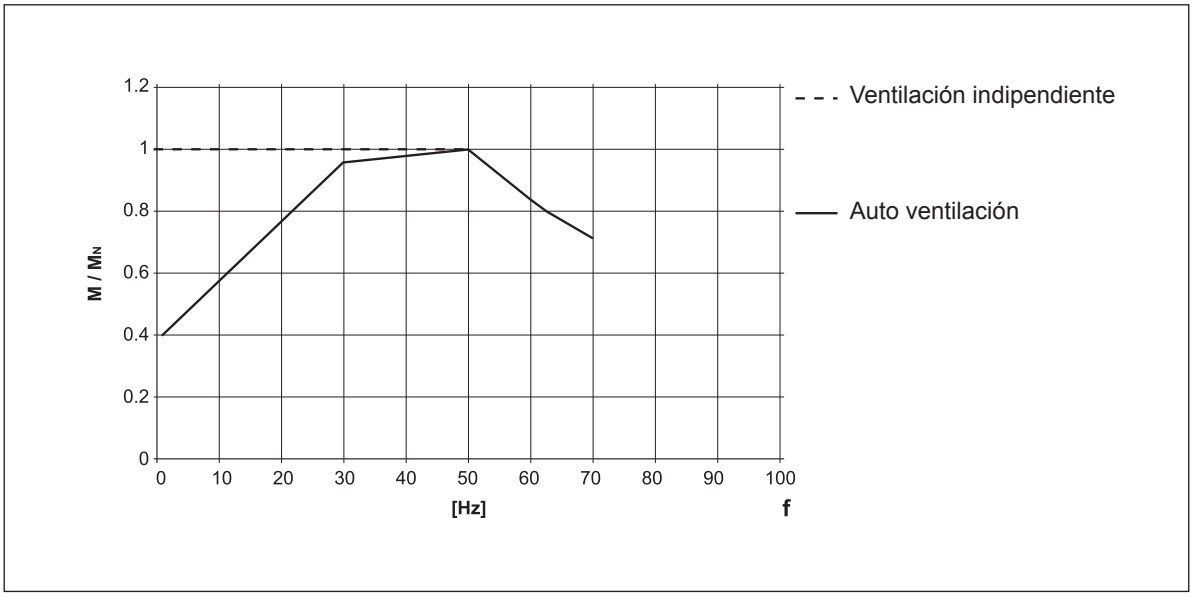
### M2.3.5.3 Servicio intermitente periódico S3:

Caracterizado por una secuencia de ciclos idénticos de funcionamiento, cada uno de los cuales comprende un periodo de funcionamiento a carga constante y un periodo de reposo. En este servicio, la intensidad de arranque no influye significativamente en un aumento de la temperatura.

### M2.3.6 Funcionamiento con variador de frecuencia

Los motores eléctricos de las series BN y M pueden ser utilizados alimentados con variador de frecuencia PWM, con tensión nominal en la entrada del variador de hasta 500V.
El sistema aislante de los motores de serie prevé el aislamiento de fase con separadores, la utilización de hilo esmaltado en grado 2 y resina de impregnación en clase H (límite de retención de la tensión punta a 1600V pico a pico enfrente de salida $t_s$> 0.1µs en bornes del motor).
La tabla (G30) refleja las características típicas de par / velocidad, de los motores con una frecuencia base $f_b$ = 50Hz en servicio S1.
El funcionamiento con frecuencias inferiores a 30Hz, comporta la disminución del par en los motores estándar autoventilados (IC411) como resultado de la reducción originada en la ventilación, o bien como alternativa, utilizar ventilación independiente.
Para frecuencias superiores a la frecuencia base, y con la tensión máx. a la salida del variador, el motor trabaja en un campo de funcionamiento a potencia constante, en estas condiciones, el par en el eje del motor se reduce según la relación ($f/f_b$).
Como el par máximo del motor decrece $(f/f_b)^2$, el margen de sobrecarga admisible deberá ser reducido gradualmente.

(G 21)




Para el funcionamiento a frecuencias superiores a la nominal, la velocidad límite mecánica de los motores se indica en la tabla (G22).

(G 22)

|  |  | **n** [min$^{-1}$] | | |
|---|---|---|---|---|
| | | **2p** | **4p** | **6p** |
| **≤ BN 112** | **M05…M3** | 5200 | 4000 | 3000 |
| **BN 132...BN 200L** | **M4, M5** | 4500 | 4000 | 3000 |

A velocidades superiores a la nominal, los motores presentan mayores vibraciones mecánicas y rumorosidad de la ventilación; en estas aplicaciones, es aconsejable el equilibrado del rotor con grado B y eventualmente montar ventilación independiente.

Los ventiladores independientes y los frenos electromagnéticos deben de alimentarse siempre directamente de la red.

### M2.3.7 Frecuencia máxima de arranque Z

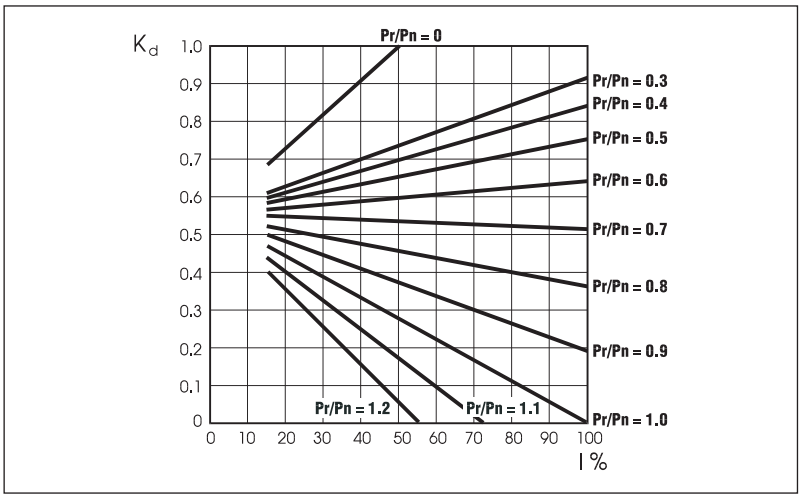
Las tablas de los datos técnicos de los motores indican la frecuencia máxima de arranque admisible en vacío $Z_0$ con I = 50% correspondiente a la versión de motor freno. Este valor define el número máx. de arranques / hora en vacío que el motor puede soportar sin superar la temperatura máxima admisible por el aislamiento clase F.
En la práctica, para un motor acoplado a una carga externa con potencia absorbida $P_r$, inercia $J_c$, un par resistente durante el arranque $M_L$, el número de arranques admisibles se puede calcular con la siguiente fórmula:

$$Z = \frac{Z_0 \cdot K_c \cdot K_d}{K_J} \qquad (24)$$

Donde:

| | |
|---|---|
| $K_J = \frac{J_m + J_c}{J_m}$ | factor de inercia |
| $K_c = \frac{M_a - M_L}{M_a}$ | factor de par |
| $K_d =$ | factor de carga ver tabla siguiente |

(G 23)



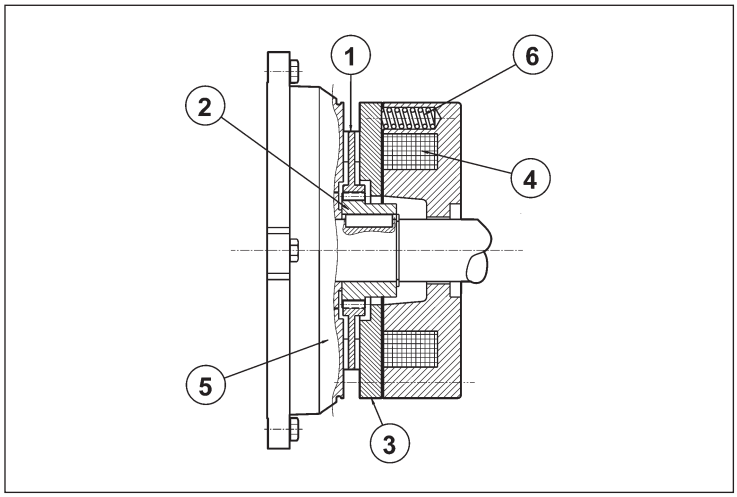

Con el número de arranques así obtenido deberá verificarse que el trabajo máximo de frenado sea compatible con la capacidad térmica del freno $W_{máx}$. Indicada en la tabla (G30)

## M2.4 MOTORES FRENO ASÍNCRONOS

### M2.4.1 Funcionamiento

La ejecución con freno prevé el uso de frenos de presión por muelles alimentados en c.c. (tipo FD, AFD) o en c.a. (tipo FA, BA).
Todos los frenos funcionan según el principio de seguridad, es decir, intervienen como efecto de la presión ejercida por los muelles, cuando falta la alimentación.

(G 24)




Leyenda:
① disco
② cubo
③ armadura móvil
④ bobina
⑤ escudo posterior motor
⑥ muelles

A falta de tensión, la armadura móvil, empujada por los muelles de presión, bloquea el disco de freno entre la superficie de la propia armaduramóvil y el escudo del motor impidiendo el giro del eje. Cuando se excita la bobina, se produce una atracción magnética sobre la armaduramóvil, que venciendo la reacción elástica de los muelles, libera el disco del freno y el eje al cual es solidario, permitiendo el giro libre del motor.

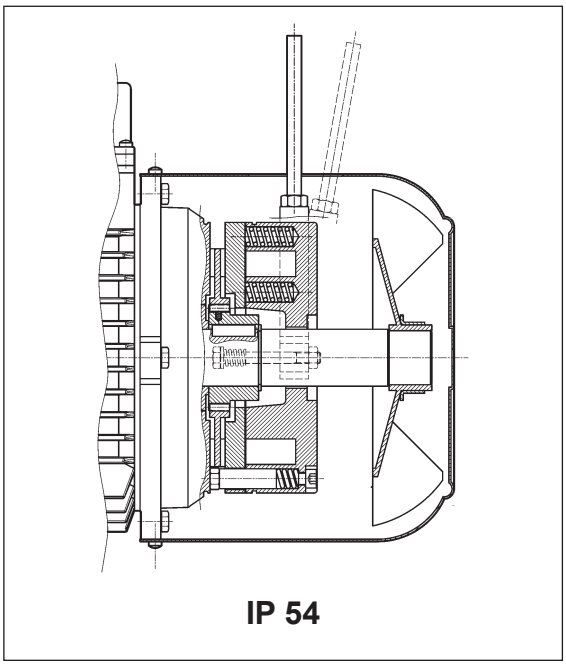
### M2.4.2 Características generales

- Par de frenado elevado (generalmente $M_b \approx 2\ M_n$) y regulable
- Disco freno con estructura de acero y doble superficie de fricción (material muy resistente al desgaste, sin amianto).
- Taladro hexagonal en el eje del motor lado ventilador (NDE), para el giro manual (no previsto cuando están presentes las opciones PS, RC,TC ,U1, U2, EN1, EN2, EN3, EN4, EN5, EN6).
- Desbloqueo mecánico manual (opciones **R** y **RM** para BN/M_FD ; opción **R** para BN/M_FA).
- Desbloqueo mecánico manual (opción **R** para BN/M_AFD)
- Tratamiento anticorrosivo sobre toda la superficie del freno.
- Aislamiento clase F.

## M2.5 MOTORES FRENO EN C.C., TIPO BN_FD y M_FD

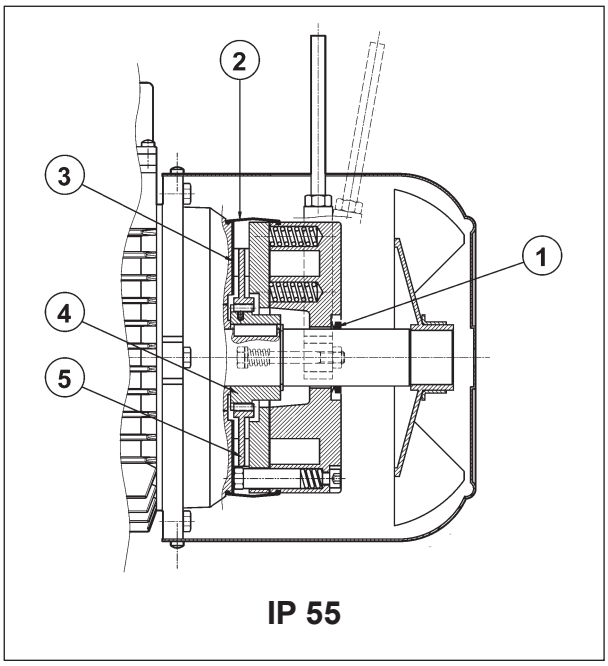
**Tamaños :** BN 63 … BN 200L / M05 ... M5

(G 25)



**IP 54**

(G 26)

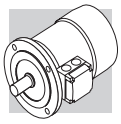



**IP 55**

Freno electromagnético con bobina toroidal en **corriente continua** fijado con tornillos al escudo del motor; los muelles de precarga realizan el posicionamiento axial del cuerpo magnético. El disco freno es deslizable sobre el cubo de accionamiento de acero acoplado sobre el eje y provisto de muelles antivibración. Los motores se suministran con el freno tarado en fábrica a los valores de par indicados en las tablas de datos técnicos; el par de frenado puede ser regulado modificando el tipo y/o el número de los muelles.
Bajo pedido, los motores pueden incorporar una palanca de desbloqueo manual con retorno automático **(R)** o con mantenimiento de la posición de desbloqueo freno (**RM**); para determinar la posición angular de la palanca de desbloqueo ver descripción de la variante correspondiente en el párrafo “SISTEMAS DE BLOQUEO DEL FRENO”.
El freno FD garantiza elevadas prestaciones dinámicas y baja rumorosidad; las características de la intervención del freno en corriente continua pueden ser optimizadas en función de la alimentación utilizando los diferentes tipos de alimentación disponibles y/o realizando el cableado oportuno.
**Para aplicaciones de elevación y/o para trabajos de mucha duración diaria, contacar con el departamento técnico comercial.**

### M2.5.1 Grado de protección

La ejecución estándar está prevista con el grado de protección IP54. Opcionalmente el motor freno tipo FD puede suministrarse con protección **IP55**, con las siguientes variantes constructivas:

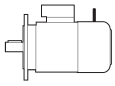


① retén axial V – ring montado en el eje del motor N.D.E.
② junta de goma de protección contra agua y polvo
③ anillo de acero inox. Situado entre el escudo del motor y el disco del freno
④ cubo de arrastre en acero inox.
⑤ disco freno en acero inox.

### M2.5.2 Alimentación del freno FD

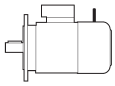
La alimentación de la bobina del freno en c.c. está prevista por medio de un rectificador apropiado, montado en el interior de la caja de bornes y cableado a la bobina del freno. Además, para los motores de simple polaridad, está prevista de serie la conexión del rectificador a los de bornes del motor. Independientemente de la frecuencia de red, la tensión estándar de alimentación del rectificador VB está indicada en la tabla siguiente:

(G 27)

| **2, 4, 6 P** | | | | | **1 speed** |
|---|---|---|---|---|---|
|  |  | **BN_FD / M_FD** $V_{mot}$ ± 10% 3 ~ | **BN_FD / M_FD** $V_B$ ± 10% 1 ~ | alimentación del freno desde la caja de bornes | alimentación independiente |
| **BN 63…BN 132** | **M05...M4LB** | 230/400 V – 50 Hz | 230 V | estandar | especificar **$V_B$ SA** o **$V_B$ SD** |
| **BN 160…BN 200** | **M4LC...M5** | 400/690 V – 50 Hz | 400 V | estandar | especificar **$V_B$ SA** o **$V_B$ SD** |

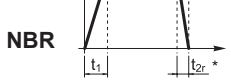
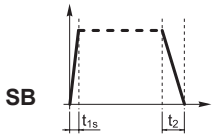
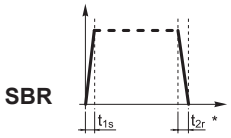
Para los motores de doble polaridad, la alimentación estándar del freno se realiza mediante una línea independiente con tensión de entrada al rectificador $V_B$ como se indica en la tabla siguiente:

(G 28)

| **2/4, 2/6, 2/8, 2/12, 4/6, 4/8 P** | | | | | **2 speed** |
|---|---|---|---|---|---|
|  |  | **BN_FD / M_FD** $V_{mot}$ ± 10% 3 ~ | **BN_FD / M_FD** $V_B$ ± 10% 1 ~ | alimentación del freno desde la caja de bornes | alimentación independiente |
| **BN 63…BN 132** | **M05...M4LB** | 400 V – 50 Hz | 230 V | ⛔ | especificar **$V_B$ SA** o **$V_B$ SD** |

El rectificador es del tipo de diodos a semionda (Vc.c ≈ 0,45 x Vc.a.) y está disponible en las versiones **NB, SB, NBR** y **SBR**, como se detalla en la tabla siguiente:

(G 29)

| | | freno | estandar | bajo pedido |
|---|---|---|---|---|
| **BN 63** | **M05** | **FD 02** |   |       |
| **BN 71** | **M1** | **FD 03** | | |
| | | **FD 53** | | |
| **BN 80** | **M2** | **FD 04** | | |
| **BN 90S** | **—** | **FD 14** | | |
| **BN 90L** | **—** | **FD 05** | | |
| **BN 100** | **M3** | **FD 15** | | |
| **—** | | **FD 55** |   |   |
| **BN 112** | **—** | **FD 06S** | | |
| **BN 132...160MR** | **M4** | **FD 56** | | |
| **BN 160L - BN 180M** | **M5** | **FD 06** | | |
| **BN 180L - NM 200L** | **—** | **FD 07** | | |

(*) $t_{2c} < t_{2r} < t_2$

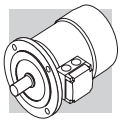
El rectificador **SB** con la excitación controlada electrónicamente, reduce los tiempos de desbloqueo del freno sobreexcitando el electroimán en los primeros instantes de la inserción, pasando seguidamente al funcionamiento normal de semionda una vez se ha desactivado el freno.

El uso del rectificador tipo **SB** debe preverse siempre en los casos siguientes:
- elevado número de arranques por hora
- tiempos de desbloqueo del freno reducidos
- elevadas solicitaciones térmicas del freno

Para aquellas aplicaciones donde se requiere un desbloqueo rápido del freno, pueden suministrarse bajo pedido los rectificadores **NBR** o **SBR**.
Estos rectificadores completanlos tipos **NB** y **SB**, integrando en el circuito electrónico un interruptor estático que interviene desactivando rápidamente el freno en el caso de falta de tensión.
Esta solución permite reducir el tiempo de desbloqueo del freno evitando ulteriores cableados y contactos externos. Para un mejor uso de los rectificadores **NBR** y **SBR** es necesario efectuar la alimentación del freno independiente. Tensiones disponibles: 230V ±10%, 400V ±10%, 50/60 Hz.

### M2.5.3 Datos técnicos del freno FD

En la tabla siguiente se indican las características técnicas de los frenos en c.c. tipo FD.



(G 30)

| Freno | Par de frenado $M_b$ [Nm] muelles | | | Desbloqueo $t_1$ | Desbloqueo $t_{1s}$ | Frenada $t_2$ | Frenada $t_{2c}$ | $W_{max}$ por frenada [ J ] | | | W | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 4 | 2 | [ms] | [ms] | [ms] | [ms] | 10 s/h | 100 s/h | 1000 s/h | [MJ] | [W] |
| **FD02** | – | 3.5 | 1.75 | 30 | 15 | 80 | 9 | 4500 | 1400 | 180 | 15 | 17 |
| **FD03** | 5 | 3.5 | 1.75 | 50 | 20 | 100 | 12 | 7000 | 1900 | 230 | 25 | 24 |
| **FD53** | 7.5 | 5 | 2.5 | 60 | 30 | 100 | 12 | | | | | |
| **FD04** | 15 | 10 | 5 | 80 | 35 | 140 | 15 | 10000 | 3100 | 350 | 30 | 33 |
| **FD14** | | | | | | | | | | | | |
| **FD05** | 40 | 26 | 13 | 130 | 65 | 170 | 20 | 18000 | 4500 | 500 | 50 | 45 |
| **FD15** | 40 | 26 | 13 | 130 | 65 | 170 | 20 | | | | | |
| **FD55** | 55 | 37 | 18 | – | 65 | 170 | 20 | | | | | |
| **FD06S** | 60 | 40 | 20 | – | 80 | 220 | 25 | 20000 | 4800 | 550 | 70 | 55 |
| **FD56** | – | 75 | 37 | – | 90 | 250 | 20 | 29000 | 7400 | 800 | 80 | 65 |
| **FD06** | | 100 | 50 | | 100 | 250 | 20 | | | | | |
| **FD07** | 150 | 100 | 50 | – | 120 | 200 | 25 | 40000 | 9300 | 1000 | 130 | 65 |
| **FD08*** | 250 | 200 | 170 | – | 140 | 350 | 30 | 60000 | 14000 | 1500 | 230 | 100 |
| **FD09**** | 400 | 300 | 200 | – | 200 | 450 | 40 | 70000 | 15000 | 1700 | 230 | 120 |

* valores de par de frenado con 9, 7 y 6 muelles respectivamente.

** valores de par de frenado con 12, 9 y 6 muelles respectivamente.

$t_1$ = tiempos de desbloqueo del freno con alimentador de semionda
$t_{1s}$ = tiempos de desbloqueo del freno con dispositivo con alimentador de la excitación a control electrónico
$t_2$ = retardo de la frenada con interrupción lado c.a. y alimentación independiente
$t_{2c}$ = retardo de la frenada con interrupción lado c.a. y c.c. – Los valores $t_1$, $t_{1s}$, $t_2$, $t_{2c}$ indicados en la tabla (F30) se refieren al freno tarado al par máximo, entrehierro medio y tensión nominal
$W_{max}$ = energía máxima por frenada
W = energía de frenada entre dos regulaciones sucesivas del entrehierro
$P_b$ = potencia absorbida por el freno a 20ºC
$M_b$ = par de frenado estático (±15%)
s/h = arranques hora

**El desgaste del ferodo depende de las condiciones de trabajo (temperatura, humedad, velocidad de deslizamientos, presión específica); los valores de desgaste deben de considerarse como indicativas.**

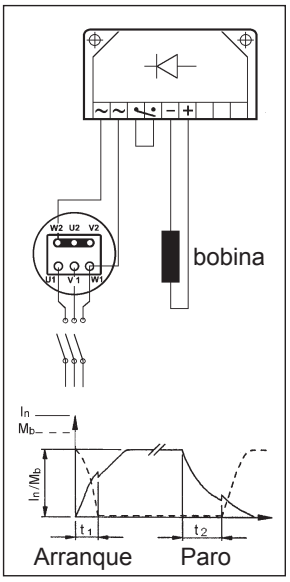
### M2.5.4 Conexiones del freno FD

Los motores estándar de una velocidad, se suministran con la conexión del rectificador a la caja de bornes realizada en fábrica.
Para los motores de 2 velocidades, y donde se requiera la alimentación independiente del freno, prever la conexión al rectificador de acuerdo con la tensión del freno VB indicada en la placa del motor.
**Dada la naturaleza inductiva de la carga, para el mando del freno y para la interrupción lado corriente continua, deben utilizarse contactos con categoría de uso AC-3 según IEC 60947-4-1.**

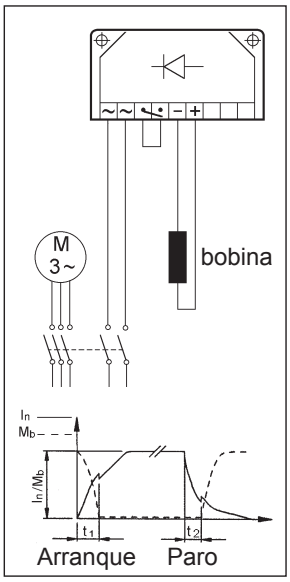
Tabla (G31) - Alimentación del freno desde los bornes del motor e interrupción lado c.a.
Tiempo de parada $t_2$ retardado en función de las constantes de tiempo del motor. Debe preverse cuando se requieran arranques/ paradas progresivos.
Tabla (G32) - Bobina del freno con alimentación independiente e interrupción del lado c.a.
Tiempo de parada normal e independiente del motor.
Los tiempos de paro $t_2$ están indicados en la tabla (G30).
Tabla (G33) - Bobina freno con alimentación independiente e interrupción del lado c.a. y c.c.
Tiempo de parada reducido según los valores $t_{2c}$ indicados en la tabla (G30).
Tabla (G34) - Bobina de freno con alimentación separada e interrupción lado c.a. y c.c.
Tiempo de parada reducido según los valores $t_{2c}$ indicados en la tabla (G30).

En las tablas de (G31) a (G34) están representados los esquemas típicos de conexión para una alimentación de 400 V, motores 230/400V conectados en estrella y freno a 230V.

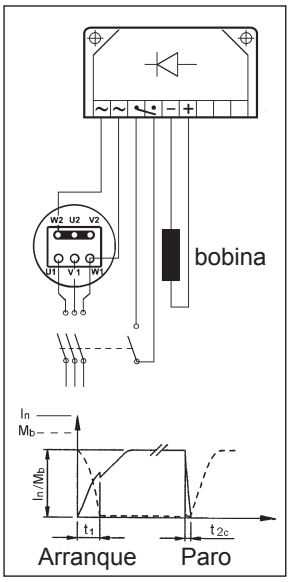
(G 31)



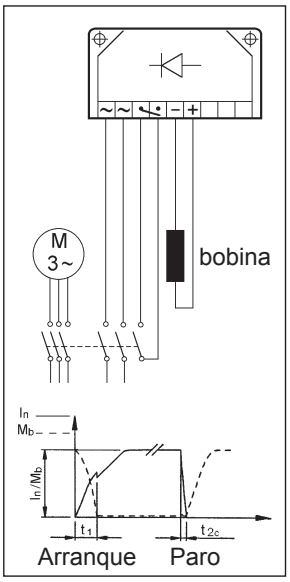

(G 32)




(G 33)



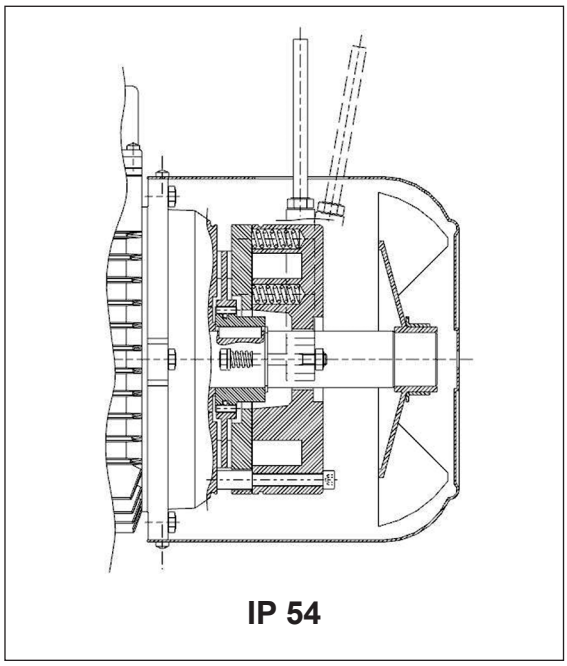

(G 34)



## M2.6 MOTORES FRENO EN C.C., TIPO BN_AFD y M_AFD

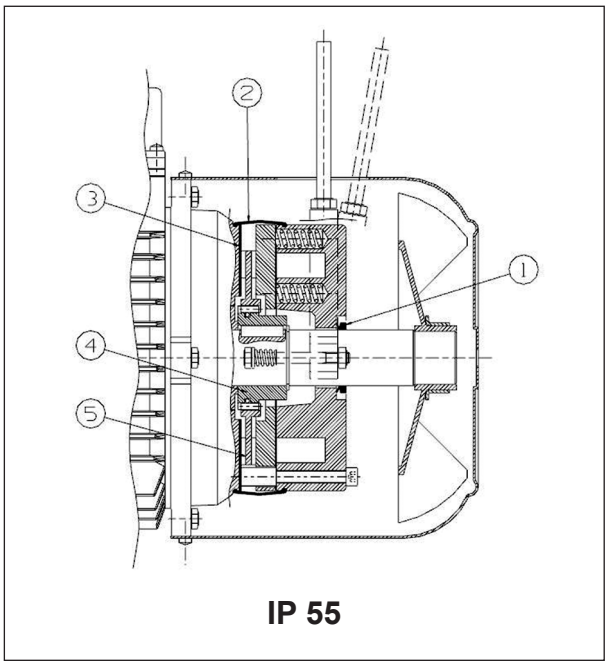
**Tamaños :** BN 63 … BN 200L / M05 ... M5

(G 35)



**IP 54**

(G 36)



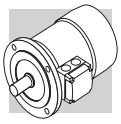

**IP 55**

**Freno con entrehierro fijo, sin mantenimiento hasta llegar al desgaste máximo admisible del ferodo del disco freno. El entrehierro viene impuesto y no debe de ser regulado.**

Freno electromagnético con bobina toroidal en **corriente continua** fijado con tornillos al escudo del motor.El disco feno desliza sobre el cubo de acero calado sobre el eje y dotado de dipositivo antivibración. Los motore se fabrican con el freno tarado en fábrica al valor de par indicado en la tabla de datos técnicosI; el par de frenado puede regularse modificando el tipo y/o el número de muelles.
Bajo pedido, los motores pueden llevar leva de desbloqueo manual del freno con retorno automático (**R**); para la posición angular de la leva de desbloqueo ver descripcióon de dicha variante en el párrafo “SISTEMAS DE DESBLOQUEO DEL FRENO”.
El freno AFD garantiza elevadas prestaciones dinámicas y baja rumorosidad; las características de intervención del freno en corriente continua pueden ser optimizadas en función de la aplicación, utilizando los diversos tipo de rectificador disponibles y/o realizando el correspondiente cableado.
El freno AFD está aconsejado para aplicaciones en las cuales se utiliza como freno de estacionamiento.
**Para aplicacion de elevación y/o muchas horas de trabajo al día, contactar con el servicio técnico comercial.**

### M2.6.1 Grado de protección

La ejecución estándar está prevista con el grado de protección IP54. Opcionalmente el motor freno tipo AFD puede suministrarse con protección **IP55**, con las siguientes variantes constructivas:

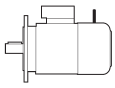


① retén axial V – ring montado en el eje del motor N.D.E.
② junta de goma de protección contra agua y polvo
③ anillo de acero inox. Situado entre el escudo del motor y el disco del freno
④ cubo de arrastre en acero inox.
⑤ disco freno en acero inox.

### M2.6.2 Alimentación del freno AFD

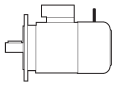
La alimentación de la bobina del freno en c.c. está prevista por medio de un rectificador apropiado, montado en el interior de la caja de bornes y cableado a la bobina del freno. Además, para los motores de simple polaridad, está prevista de serie la conexión del rectificador a los de bornes del motor. Independientemente de la frecuencia de red, la tensión estándar de alimentación del rectificador $V_B$ está indicada en la tabla siguiente:

(G 37)

| **2, 4, 6 P** | | | | | **1 speed** |
|---|---|---|---|---|---|
|  |  | **BN_AFD / M_AFD** $V_{mot}$ ± 10% 3 ~ | **BN_AFD / M_AFD** $V_B$ ± 10% 1 ~ | alimentación del freno desde la caja de bornes | alimentación independiente |
| **BN 63…BN 132** | **M05...M4LB** | 230/400 V – 50 Hz | 230 V | estandar | especificar **$V_B$ SA** o **$V_B$ SD** |
| **BN 160MR** | **M4LC** | 400/690 V – 50 Hz | 400 V | estandar | especificar **$V_B$ SA** o **$V_B$ SD** |

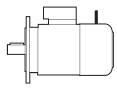
Para los motores de doble polaridad, la alimentación estándar del freno se realiza mediante una línea independiente con tensión de entrada al rectificador $V_B$ como se indica en la tabla siguiente:

(G 38)

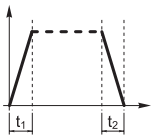
| **2/4, 2/6, 2/8, 2/12, 4/6, 4/8 P** | | | | | **2 speed** |
|---|---|---|---|---|---|
|  |  | **BN_AFD / M_AFD** $V_{mot}$ ± 10% 3 ~ | **BN_AFD / M_AFD** $V_B$ ± 10% 1 ~ | alimentación del freno desde la caja de bornes | alimentación independiente |
| **BN 63…BN 132** | **M05...M4LB** | 400 V – 50 Hz | 230 V | ⛔ | especificar **$V_B$ SA** o **$V_B$ SD** |

El rectificador es del tipo de diodos a semionda (Vc.c ≈ 0,45 x Vc.a.) y está disponible en las versiones **NB, SB, NBR** y **SBR**, como se detalla en la tabla siguiente:

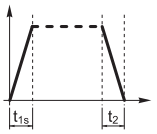
(G 39)

|  |  | freno | estandar | bajo pedido |
|---|---|---|---|---|
| **BN 63** | **M05** | **AFD 02** | | |
| **BN 71** | **M1** | **AFD 03** | | |
| **BN 80** | **M2** | **AFD 04** | | |
| **BN 90S** | **—** | **AFD 14** | | |
| **BN 90L** | **—** | **AFD 05** | | |
| **BN 100** | **M3** | **AFD 15** | | |
| **BN 112** | **—** | **AFD 06S** | | |
| **BN 132...160MR** | **M4** | **AFD 06** | | |
| | | **AFD 07** | | |

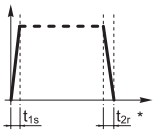
**NB**



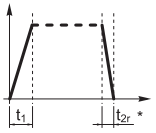

**SB**



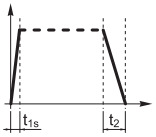

**SBR**



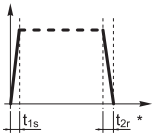

**NBR**




**SB**




**SBR**




(*) $t_{2c} < t_{2r} < t_2$

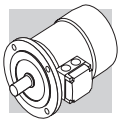
El rectificador **SB** con la excitación controlada electrónicamente, reduce los tiempos de desbloqueo del freno sobreexcitando el electroimán en los primeros instantes de la inserción, pasando seguidamente al funcionamiento normal de semionda una vez se ha desactivado el freno.

El uso del rectificador tipo **SB** debe preverse siempre en los casos siguientes:
- elevado número de arranques por hora
- tiempos de desbloqueo del freno reducidos
- elevadas solicitaciones térmicas del freno

Para aquellas aplicaciones donde se requiere un desbloqueo rápido del freno, pueden suministrarse bajo pedido los rectificadores **NBR** o **SBR**.
Estos rectificadores completanlos tipos **NB** y **SB**, integrando en el circuito electrónico un interruptor estático que interviene desactivando rápidamente el freno en el caso de falta de tensión.
Esta solución permite reducir el tiempo de desbloqueo del freno evitando ulteriores cableados y contactos externos. Para un mejor uso de los rectificadores **NBR** y **SBR** es necesario efectuar la alimentación del freno independiente.
**Tensiones disponibles: 230Vac ±10%, 400V ±10%, 50/60 Hz (con rectificador); 100Vdc ±10%, 180Vdc ±10% (con opciónSD).**

### M2.6.3 Datos técnicos del freno AFD

En la tabla siguiente se indican las características técnicas de los frenos en c.c. tipo AFD.



(G 40)

| Freno | Par de frenado $M_b$ [Nm] muelles | | | Desbloqueo | | Frenada | | $W_{max}$ por frenada [ J ] | | | W | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $t_1$ | $t_{1s}$ | $t_2$ | $t_{2c}$ | | | | | |
| | 6 | 4 | 2 | [ms] | [ms] | [ms] | [ms] | 10 s/h | 100 s/h | 1000 s/h | [MJ] | [W] |
| **AFD 02** | — | 3.5 | 1.75 | 40 | 20 | 110 | 112 | 4500 | 1400 | 180 | 40 | 13 |
| **AFD 03** | 7.5 | 5 | 2.5 | 80 | 35 | 140 | 15 | 7000 | 1900 | 230 | 60 | 17 |
| **AFD 04** | 15 | 10 | 5 | 120 | 55 | 180 | 20 | 10000 | 3100 | 350 | 75 | 23 |
| **AFD 14** | | | | | | | | | | | | |
| **AFD 05** | 40 | 26 | 13 | 200 | 85 | 250 | 30 | 18000 | 4500 | 500 | 125 | 32 |
| **AFD 15** | | | | | | | | | | | | |
| **AFD 06S** | 60 | 40 | 20 | — | 110 | 280 | 35 | 20000 | 4800 | 550 | 175 | 40 |
| **AFD 06** | 100 | 75(*) / 62(*) | 37 | — | 130 | 330 | 45 | 29000 | 7400 | 800 | 200 | 45 |
| **AFD 07** | 150 | 100 | 50 | — | 170 | 400 | 50 | 40000 | 9300 | 1000 | 320 | 50 |

(*) in funzione della tipologia di molle

$t_1$ = tiempos de desbloqueo del freno con alimentador de semionda
$t_{1s}$ = tiempos de desbloqueo del freno con dispositivo con alimentador de la excitación a control electrónico
$t_2$ = retardo de la frenada con interrupción lado c.a. y alimentación independiente
$t_{2c}$ = retardo de la frenada con interrupción lado c.a. y c.c. – Los valores $t_1$, $t_{1s}$, $t_2$, $t_{2c}$ indicados en la tabla (F30) se refieren al freno tarado al par máximo, entrehierro medio y tensión nominal
$W_{max}$ = energía máxima por frenada
W = energía de frenada entre dos regulaciones sucesivas del entrehierro
$P_b$ = potencia absorbida por el freno a 20ºC
$M_b$ = par de frenado estático (±15%)
s/h = arranques hora

**El desgaste del ferodo depende de las condiciones de trabajo (temperatura, humedad, velocidad de deslizamientos, presión específica); los valores de desgaste deben de considerarse como indicativas.**

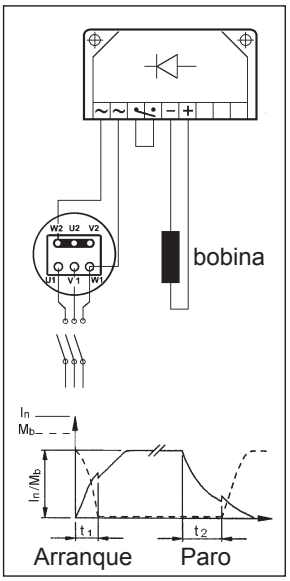
### M2.6.4 Conexiones del freno AFD

Los motores estándar de una velocidad, se suministran con la conexión del rectificador a la caja de bornes realizada en fábrica.
Para los motores de 2 velocidades, y donde se requiera la alimentación independiente del freno, prever la conexión al rectificador de acuerdo con la tensión del freno VB indicada en la placa del motor.
**Dada la naturaleza inductiva de la carga, para el accionamiento del freno y para la interrupción lado corriente continua, deben utilizarse contactos con categoría de uso AC-3 según IEC 60947-4-1.**

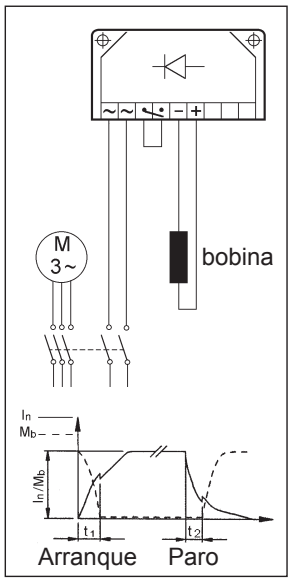
Tabla (G41) - Alimentación del freno desde los bornes del motor e interrupción lado c.a.
Tiempo de parada $t_2$ retardado en función de las constantes de tiempo del motor. Debe preverse cuando se requieran arranques/ paradas progresivos.
Tabla (G42) - Bobina del freno con alimentación independiente e interrupción del lado c.a.
Tiempo de parada normal e independiente del motor.
Los tiempos de paro $t_2$ están indicados en la tabla (G40).
Tabla (G43) - Bobina freno con alimentación independiente e interrupción del lado c.a. y c.c.
Tiempo de parada reducido según los valores $t_{2c}$ indicados en la tabla (G40).
Tabla (G44) - Bobina de freno con alimentación separada e interrupción lado c.a. y c.c.
Tiempo de parada reducido según los valores $t_{2c}$ indicados en la tabla (G40).

En las tablas de (G41) a (G44) están representados los esquemas típicos de conexión para una alimentación de 400 V, motores 230/400V conectados en estrella y freno a 230V.

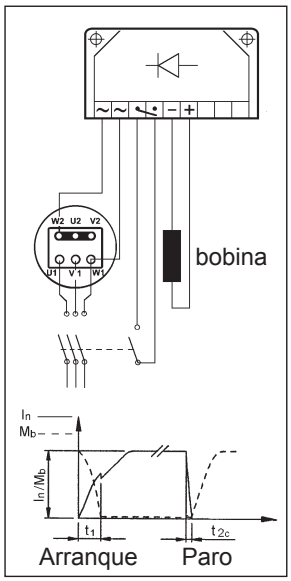
(G 41)



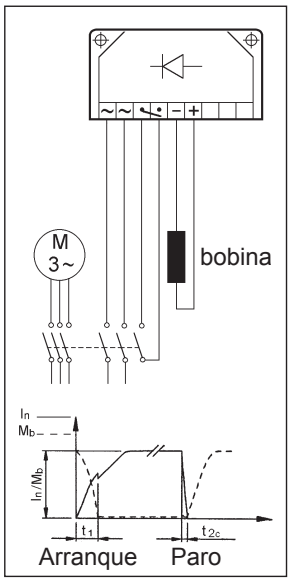

(G 42)




(G 43)



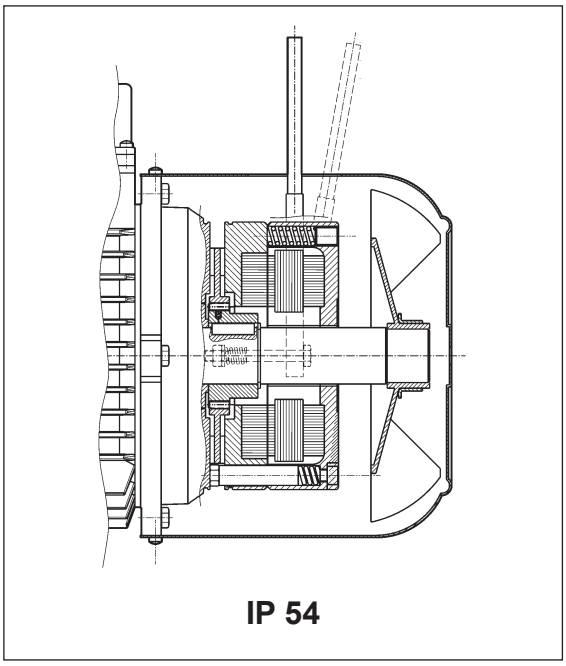

(G 44)



## M2.7 MOTORES FRENO DE C.A., TIPO BN_FA y M_FA

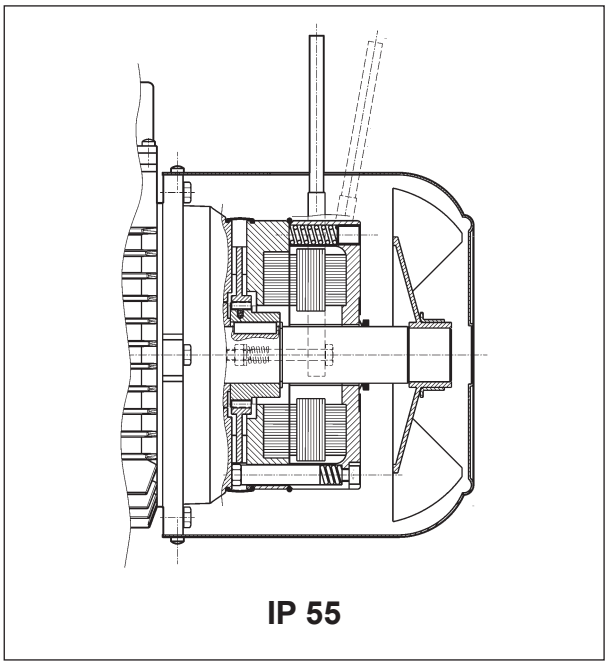
**Tamaños:** BN 63 … BN 180M / M05 ... M5

(G 45)



**IP 54**

(G 46)



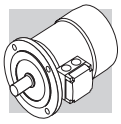
**IP 55**

Freno electromagnético alimentado con corriente corriente alterna trifásica, fijado con tornillos al escudo del motor; los muelles de precarga efectúan el posicionamiento axial del cuerpo magnético. El disco freno es deslizable axialmente sobre el cubo de accionamiento en acero, acoplado sobre el eje y provisto de muelles antivibración. El par de frenado viene regulado de fábrica con los valores que se indican en las tablas de características técnicas de los motores correspondientes. La acción del freno también es ajustable, regulando gradualmente el par de frenado a través del tornillo que realiza la precarga de los muelles; el campo de regulación del par es: 30% $M_{bMAX} < M_b < M_{bMAX}$ ($M_{bMAX}$ es el momento de frenado máximo indicado en la tabla (G48).
El freno tipo FA presenta unas características dinámicas muy elevadas que lo hacen idóneo en aplicaciones donde se requieren frecuencias de arranque elevadas con tiempos de intervención muy rápidos.
Bajo pedido, los motores pueden ser equipados con palanca para el desbloqueo manual con retorno automático (**R**). Para la especificar la posición angular de la palanca, ver la variante en el párrafo “SISTEMAS DE DESBLOQUEO DEL FRENO”.
**Para apliaciones de elevación y/o elevada disipación de energía diaria, contactar con el servicio técnico comercial**

### M2.7.1 Grado de protección

En la ejecución estándar está previsto el grado de protección IP54. Como opción, el motor freno BN_FA puede suministrarse con grado de protección **IP55** comportando las siguientes variantes constructivas.

- retén axial V-ring montado sobre el eje motor NDE.
- banda de protección de goma
- junta tórica



### M2.7.2 Alimentación del freno FA

En los motores de polaridad simple, la alimentación de la bobina del freno está conectada directamente en los bornes del motor, por tanto, la tensión del freno coincide con la tensión del motor. En este caso la tensión del freno puede ser omitida en la designación.
Para los motores de doble polaridad, y también para los motores con alimentación independiente del freno, existe una caja de bornes auxiliar con 6 terminales para la conexión del freno a la línea. En ambos casos el valor de la tensión del freno deberá especificarse en la designación.
En la tabla siguiente se indican los valores de la alimentación estándar del freno en c.a. Para los motores de simple o doble Polaridad.

(G 47)

| | BN 63…BN 132 | BN 160…BN 180 |
|---|---|---|
| **Motores de una sola velocidad** | **M05...M4LB** | **M4LC...M5** |
| | 230Δ / 400Y V ±10% – 50 Hz | 400Δ/ 690Y V ±10% – 50 Hz |
| | 265Δ / 460Y ±10% - 60 Hz | 460Y – 60 Hz |

| | BN 63…BN 132 |
|---|---|
| **Motor de doble velocidad (alimentación de línea independiente)** | **M05...M4** |
| | 230Δ / 400Y V ±10% – 50 Hz |
| | 460Y - 60 Hz |

Si no se especifica otra distinta, la alimentación estándar del freno es de 230Δ / 400 Y V. 50Hz.

Bajo pedido, pueden suministrarse tensiones especiales en el rango 24…690 V, 50-60 Hz.

### M2.7.3 Datos técnicos frenos FA

(G 48)

| Freno | Par de frenado $M_b$ | Desbloqueo $t_1$ | Frenada $t_2$ | $W_{max}$ [ J ] | | | W | P |
|---|---|---|---|---|---|---|---|---|
| | [Nm] | [ms] | [ms] | **10 s/h** | **100 s/h** | **1000 s/h** | [MJ] | [VA] |
| **FA 02** | 3.5 | 4 | 20 | 4500 | 1400 | 180 | 15 | 60 |
| **FA 03** | 7.5 | 4 | 40 | 7000 | 1900 | 230 | 25 | 80 |
| **FA 04** | 15 | 6 | 60 | 10000 | 3100 | 350 | 30 | 110 |
| **FA 14** | | | | | | | | |
| **FA 05** | 40 | 8 | 90 | 18000 | 4500 | 500 | 50 | 250 |
| **FA 15** | | | | | | | | |
| **FA 06S** | 60 | 16 | 120 | 20000 | 4800 | 550 | 70 | 470 |
| **FA 06** | 75 | 16 | 140 | 29000 | 7400 | 800 | 80 | 550 |
| **FA 07** | 150 | 16 | 180 | 40000 | 9300 | 1000 | 130 | 600 |
| **FA 08** | 250 | 20 | 200 | 60000 | 14000 | 1500 | 230 | 1200 |

Leyenda:
$M_b$ = par máx de frenado estático (±15%)
$t_1$ = tiempo de desbloqueo del freno
$t_2$ = retardo de la frenada
$W_{max}$ = energía máx. por frenada (capacidad térmica del freno)
W = energía de frenado entre dos regulaciones sucesivas del entrehierro
P = potencia absorbida por el freno a 20° (50 Hz)

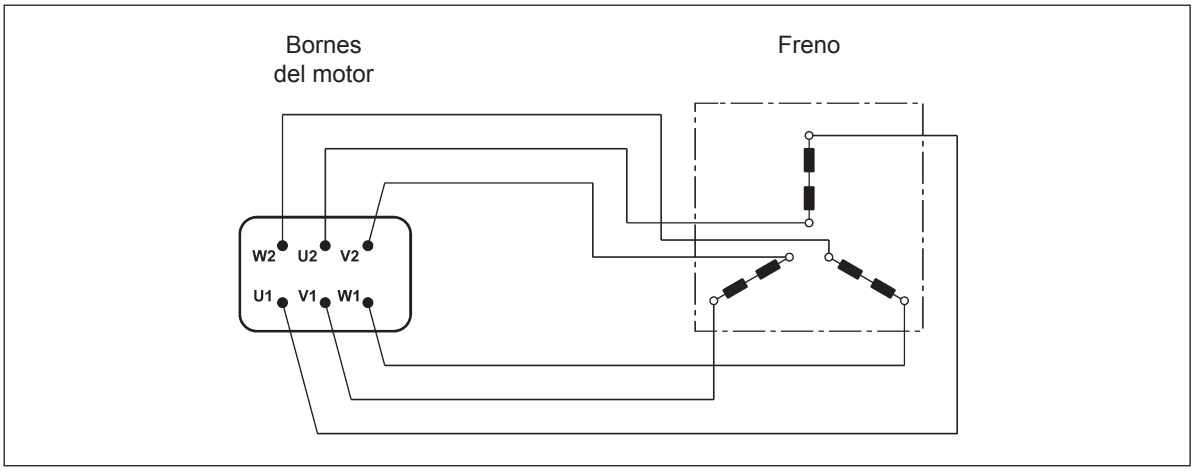
NOTA.
Los valores de $t_1$ y $t_2$ indicados en la tabla están referidos al valor del freno regulado en par, entrehierro medio y tensión nominales.

**El desgaste del ferodo depende de las condiciones de trabajo (temperatura, humedad, velocidad de deslizamientos, presión específica); los valores de desgaste deben de considerarse como indicativas.**

### M2.7.4 Conexiones del freno FA

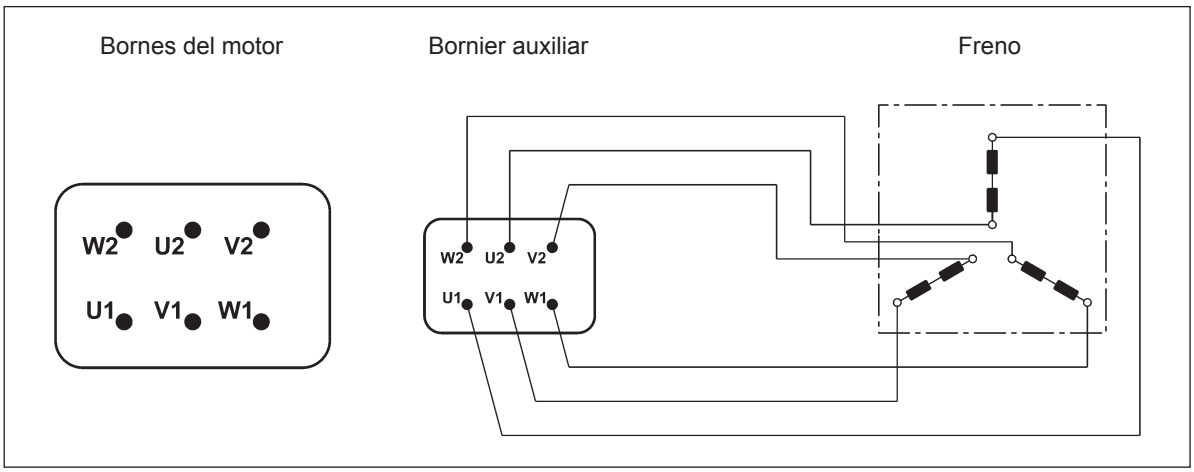
Para los motores con la alimentación del freno efectuada directamente desde la alimentación del motor, las conexiones a la caja de bornes corresponden a las indicaciones del esquema (G49):

(G 49)




Para los motores de doble polaridad, y cuando se requiera, los motores de una velocidad con alimentación independiente, está prevista una regleta auxiliar con 6 bornes para la conexión del freno; en esta ejecución los motores incorporan una caja de bornes mayor. Ver esquema (G50):

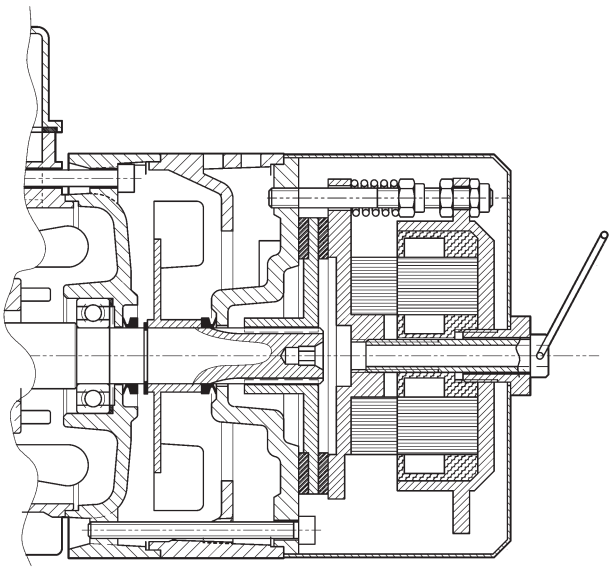
(G 50)



## M2.8 MOTORES FRENO EN C.A., TIPO BN_BA

**Tamaños:** BN 63 … BN 132M

(G 51)

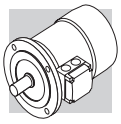


**IP 55**

Freno electromagnético con alimentación en **corriente alterna** trifásica, fijado con tornillos al escudo posterior del motor. El disco freno de acero, desliza axialmente sobre el eje motor acanalado (cubo deslizante en acero, acoplado sobre el eje para el tamaño 244).
Los motores se suministran con el freno regulado al par máximo.
El par de frenado es regulable actuando gradualmente sobre los tornillos de compresión de los muelles; el campo de regulación admitido es de un 30% $M_{bMAX} < M_b < M_{bMAX}$ ($M_{bMAX}$ es el momento de frenado máximo indicado en la tabla (F53).
Los motores se suministran de serie con tornillo para el desbloqueo manual del freno y mantenimiento de la posición de desbloqueo, permitiendo, de esta forma, el giro del eje motor. El tornillo de desbloqueo debe ser desmontado después de su utilización para asegurar el correcto funcionamiento del freno y evitar situaciones potencialmente peligrosas.
El freno BA, además de las elevadas características dinámicas típicas de los frenos de corriente alterna, presenta una construcción robusta con una energía de frenado aumentada que le hace particularmente idóneo para servicios pesados amén de aquellas aplicaciones donde se requieren elevadas frecuencias de maniobra y tiempos de intervención muy rápidos.
**Para aplicaciones de elevación y/o en las que se deban disipar elevados valores de energía diaria, contactar con el servicio técnico comercial.**

### M2.8.1 Grado de protección

Está contemplada una única ejecución con grado de protección IP55.



### M2.8.2 Alimentación freno BA

En los motores de simple polaridad, la alimentación de la bobina del freno se conecta directamente a la caja de bornes del motor, por tanto, la tensión del freno, coincide con la tensión del motor. En este caso la tensión del freno puede ser omitida en la designación. Para los motores de doble polaridad, y para los motores con alimentación independiente del freno, existe una caja de bornes auxiliar con 6 terminales para la conexión del freno directamente a la línea. En ambos casos el valor de la tensión del freno deberá especificarse en la designación. En la tabla siguiente se indican las condiciones de alimentación estándar del freno en c.a. Para los motores de una y dos polaridades.

(G 52)

| | BN 63 … BN 132 |
|---|---|
| **motor de simple polaridad** | 230Δ / 400Y V ±10% – 50 Hz |
| | 265Δ / 460Y ±10% - 60 Hz |

| | BN 63 … BN 132 |
|---|---|
| **motor de doble polaridad (alimentación de línea independiente)** | 230Δ / 400Y V ±10% – 50 Hz |
| | 460Y - 60 Hz |

Si no se especifica otra distinta, la alimentación estándar del freno es de 230Δ / 400 Y V – 50Hz.

Bajo pedido, están disponibles tensiones especiales, en el rango 24…690 V, 50-60 Hz

### M2.8.3 Datos técnicos frenos BA

En la tabla siguiente están descritos los datos técnicos de los frenos en c.a. tipo BA.

(G 53)

| **Freno** | **Par de frenado** $M_b$ [Nm] | **Desbloqueo** $t_1$ [ms] | **Frenada** $t_2$ [ms] | $W_{max}$ [ J ] **10 s/h** | **100 s/h** | **1000 s/h** | **W** [MJ] | $P_B$ [VA] |
|---|---|---|---|---|---|---|---|---|
| **BA 60** | 5 | 5 | 20 | 4000 | 1500 | 180 | 30 | 60 |
| **BA 70** | 8 | 6 | 25 | 7000 | 2700 | 300 | 60 | 75 |
| **BA 80** | 18 | 6 | 25 | 10000 | 3100 | 350 | 80 | 110 |
| **BA 90** | 35 | 8 | 35 | 13000 | 3600 | 400 | 88 | 185 |
| **BA 100** | 50 | 8 | 35 | 18000 | 4500 | 500 | 112 | 225 |
| **BA 110** | 75 | 8 | 35 | 28000 | 6800 | 750 | 132 | 270 |
| **BA 140** | 150 | 15 | 60 | 60000 | 14000 | 1500 | 240 | 530 |

Leyenda:
$M_b$ = par máx de frenado estático (±15%)
$t_1$ = tiempo de desbloqueo del freno
$t_2$ = retardo de la frenada
$W_{max}$ = energía máx. por frenada (capacidad térmica del freno)
W = energía de frenado entre dos regulaciones sucesivas del entrehierro

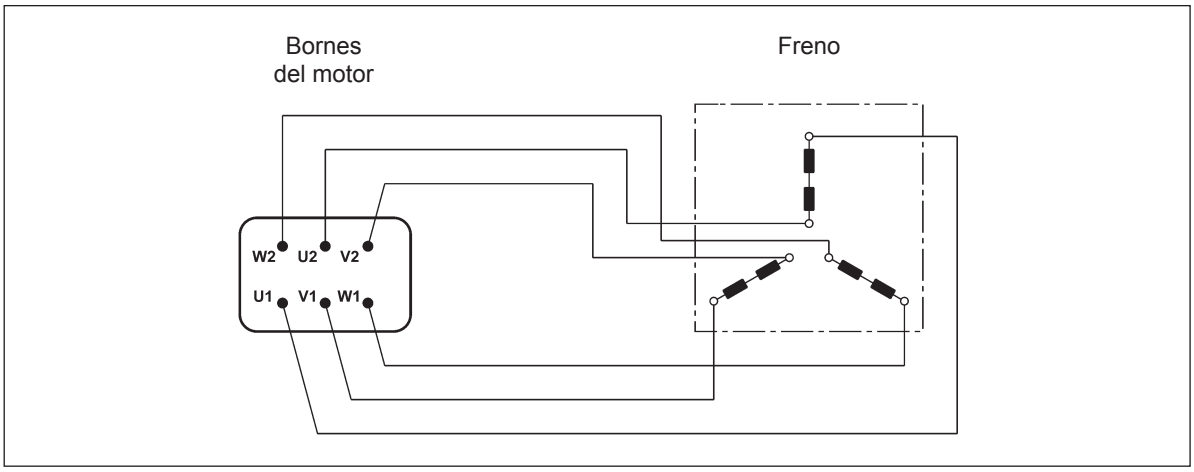
NOTA.
Los valores de $t_1$ y $t_2$ indicados en la tabla están referidos al freno regulado el par, entrehierro medio y la tensión nominal.

**El desgaste del ferodo depende de las condiciones de trabajo (temperatura, humedad, velocidad de deslizamientos, presión específica); los valores de desgaste deben de considerarse como indicativas.**

### M2.8.4 Conexiones del freno BA

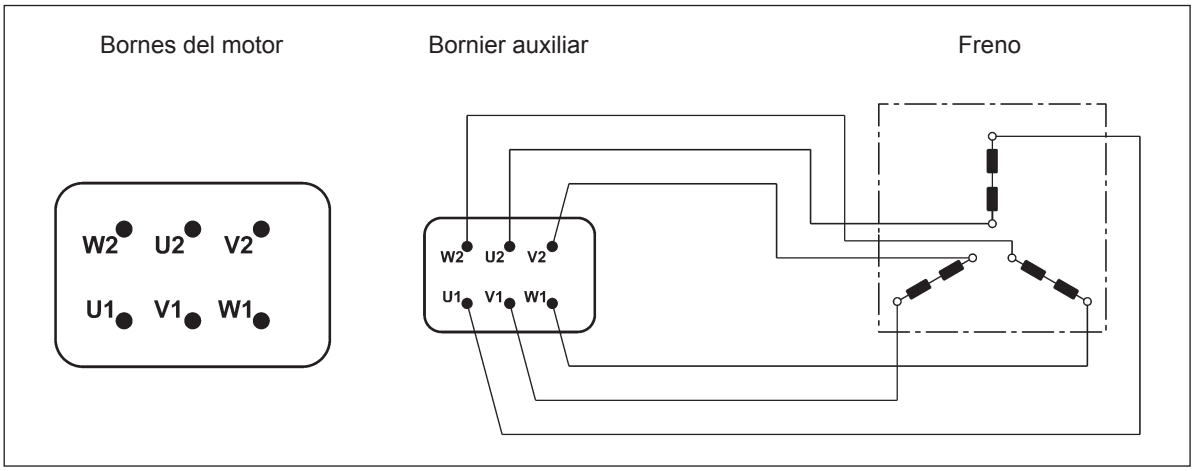
Para los motores con la alimentación del freno efectuada directamente desde la alimentación del motor, las conexiones a la caja de bornes corresponden a las indicaciones del esquema (G54):

(G 54)




Para los motores de doble polaridad y, cuando se requiera, los motores de una velocidad con alimentación independiente, tienen prevista una regleta auxiliar con 6 bornes para la conexión del freno; en esta ejecución, los motores llevan la caja de bornes mayor. Ver esquema (G55):

(G 55)

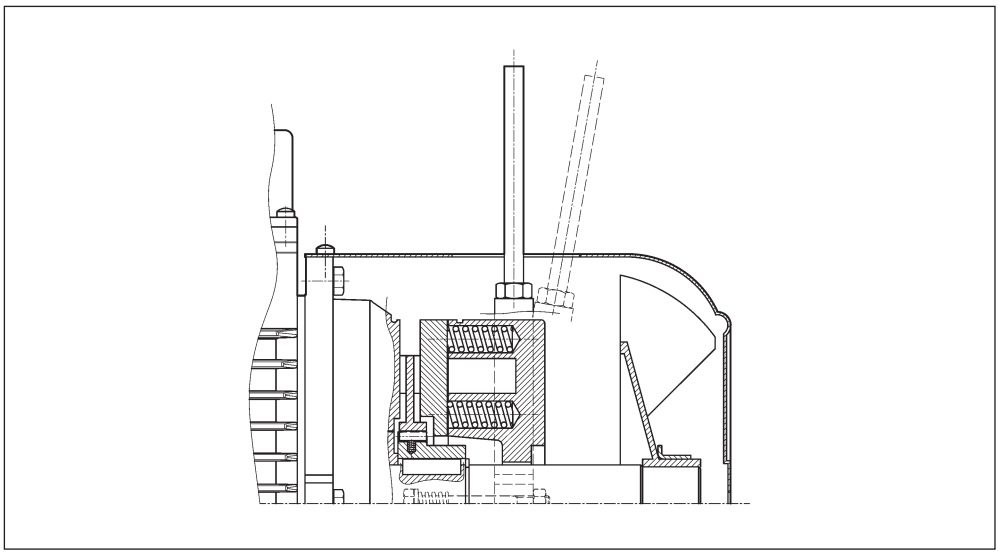


## M2.9 SISTEMA DE DESBLOQUEO DEL FRENO

Los frenos por presión de muelles tipo FD, AFD y FA pueden dotarse opcionalmente de dispositivos para el desbloqueo manual del freno, normalmente utilizados para efectuar intervenciones de mantenimiento sobre los componentes de la máquina, o de la instalación, accionados por el Motor.

**R**

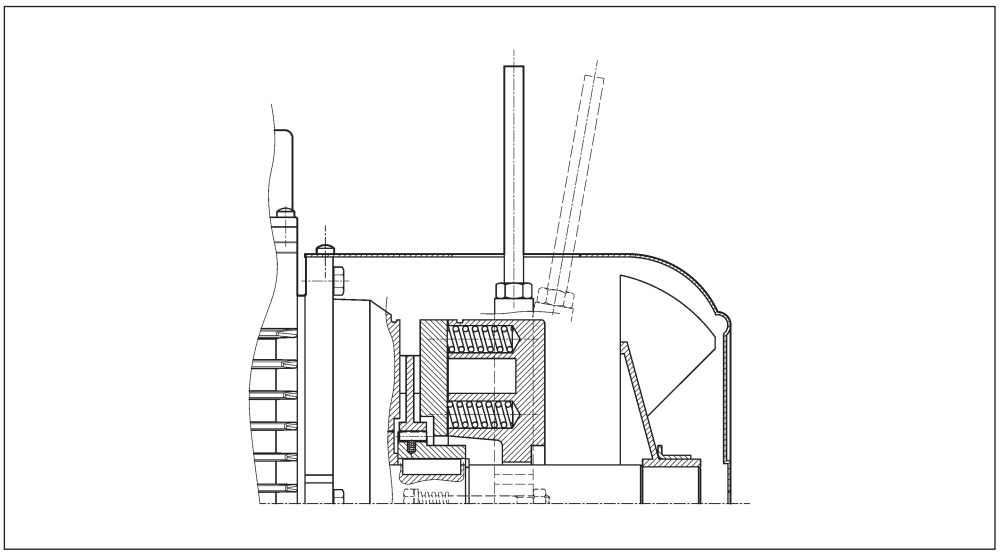
(G 56)



La palanca de desbloqueo incorpora el retorno automático a través de un dispositivo demuelles.

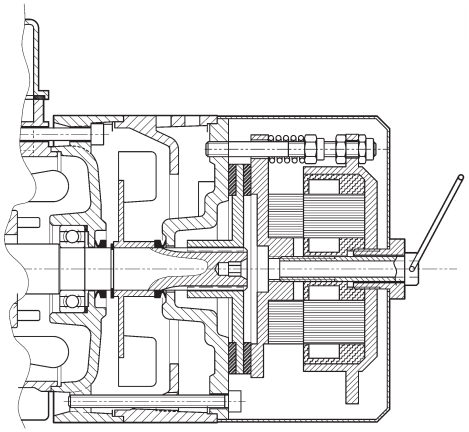
**RM**

(G 57)



En los motores BN_FD la palanca de desbloqueo puede fijarse temporalmente en posición de desbloqueo del freno, ajustando la misma hasta sujetar la extremidad en un resalte del cuerpo del freno.
La disponibilidad de los sistemas de desbloqueo del freno es distinta para los diversos tipos de motor, y se describe en la tabla siguiente:

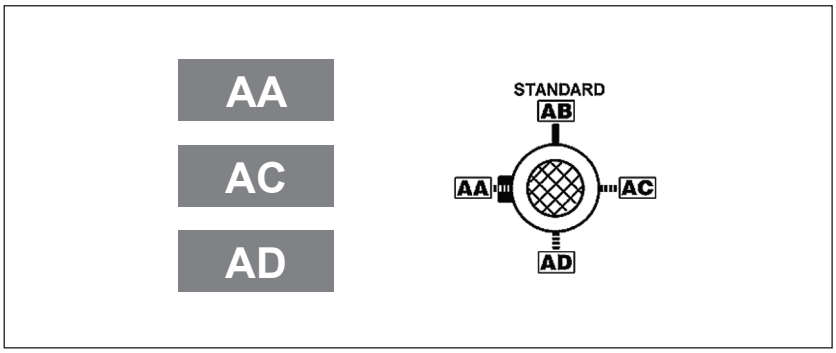
(G 58)

| | R | RM |
|---|---|---|
| **BN_FD** | **BN 63...BN 200** | **2p 63A2 ≤ H ≤ 132M2**<br>**4p 63A4 ≤ H ≤ 132MA4**<br>**6p 63A6 ≤ H ≤ 132MA6** |
| **BN_AFD** | **BN 63...BN 160MR** | ⛔ |
| **M_FD** | **M 05...M 5** | **M 05...M 4LA** |
| **M_AFD** | **M 05...M 4LC** | ⛔ |
| **BN_FA** | **BN 63...BN 180M** | ⛔ |
| **M_FA** | **M 05...M 5** | |
| **BN_BA** |  **de serie** | |

### M2.9.1 Orientación de la palanca de desbloqueo

Para las dos opciones **R** y **RM**, si no se especifica lo contrario, la palanca de desbloqueo del freno viene situada con orientación de 90º en sentido horario, respecto a la posición de la caja de bornes - referencia [**AB**] en el dibujo de abajo.
Orientaciones alternativas, tipo [**AA**], [**AC**] y [**AD**] se pueden solicitar citando la especificación correspondiente:

(G 59)




### M2.9.2 Características de los volantes de inercia (F1)

En la siguiente tabla se detallan el peso y la inercia suplementaria del volante que puede ser solicitado con la opción F1. Las dimensiones generales del motor permanecen invariables.

(G 60)

| Datos técnicos del volante para motores tipo: BN_FD, BN_AFD, M_FD, M_AFD | | | |
|---|---|---|---|
|  |  | **Peso del volante** [Kg] | **Inercia del volante** [Kgm²] |
| **BN 63** | **M05** | 0.69 | 0.00063 |
| **BN 71** | **M1** | 1.13 | 0.00135 |
| **BN 80** | **M2** | 1.67 | 0.00270 |
| **BN 90 S - BN 90 L** | **–** | 2.51 | 0.00530 |
| **BN 100** | **M3** | 3.48 | 0.00840 |
| **BN 112** | **–** | 4.82 | 0.01483 |
| **BN 132 S - BN 132 M** | **M4** | 6.19 | 0.02580 |

## M2.10 OPCIONES

### M2.10.1 Protecciones térmicas

Además de la protección garantizada por el interruptor magnetotérmico, los motores pueden ser equipados con sondas térmicas incorporadas, para proteger al bobinado contra las excesivas temperaturas producidas por una ventilación insuficiente o a un servicio intermitente. Esta protección debería estar siempre prevista para motores con ventilación independiente (IC416).

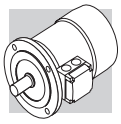
### M2.10.2 Sonda térmica de termistores

**E3**

Los termistores son semiconductores que presentan una rápida variación de su resistencia cuando se aproxima a la temperatura nominal de actuación (150 °C).
La evolución de la característica R = f (T) está definida por las normas DIN 440811, IEC 34-11
Estos sensores presentan la ventaja de tener unas dimensiones reducidas, una respuesta muy rápida y dado que el funcionamiento se realiza sin contactos, están completamente libres de desgaste.
En general, se utilizan termistores con coeficientes de temperatura positivos, también denominados “resistores de conductor frío” PTC.
A diferencia de las sondas térmicas bimetálicas, no pueden intervenir directamente en la corriente de las bobinas de excitación y deben, por tanto, conectarse a una unidad especial de control (elemento de desconexión) que intercepte la conexión externa.
Con esta protección se instalan tres PTC (conectadas en serie) en el bobinado con los terminales situados en una caja de bornes Auxiliar.

**K1**

Son un subgrupo de termistores PTC las caracteristicas constructivas de los cuales permiten la función como sensores de temperatura teniendo un coeficiente de temperatura positivo en función de la resistencia. La temperatura de trabajo es: 0ºC…+260ºC.
Los termistores no pueden comandar directamente los relés y deben por tanto ser conectados a un adecuado sistema de desenganche.
Los terminales (polarizados) de n.1 KTY 84-130 están disponibles en una caja de bornas auxiliar.



### M2.10.3 Sondas térmicas bimetálicas

## D3

Los protectores de este tipo contienen en su interior un disco metálico que, al alcanzar la temperatura nominal de intervención (150 °C), conmuta los contactos desde la posición de reposo.
Al disminuir la temperatura, el disco y los contactos retornan automáticamente a la posición de reposo.
Normalmente se emplean tres sondas bimetálicas conectadas en serie con contactos normalmente cerrados y los terminales situados en una caja de bornes auxiliar.

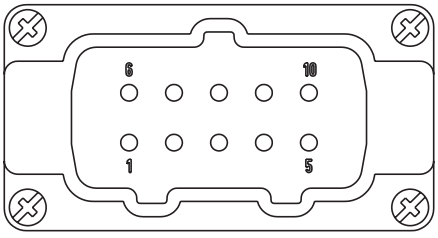
### M2.10.4 Motor con conector

## CON

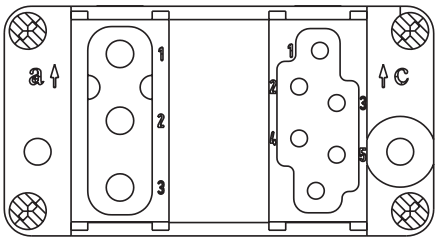
Hay disponibles tres tipos de conector (CON 1, CON 2, CON 3) que pueden instalarse en dos posiciones de montaje: lado derecho de la caja de bornas (C1D, C2D, C3D); lado izquierdo caja de bornas (C1S, C2S, C3S).
L'opción CON está prevista para los motores BN  M y una sola polarida (2, 4, 6, 8, polos) y en los tamaños indicados en la siguiente tablan. Quedan excluidas todas las versiones con doble polaridad.
Los conectores están disponibles para los motores BN y M en la versión sin freno y para los motores con freno  BN y M con freno en corriente continua FD o AFD, en los tamaños indicados en la sigiene tabla.
**Sobre el motor se fija el conector macho (von pin), el conector hembra no se suministra,**
**Con la opción CON siempre está prevista la conexión de las fases en  Y.**
Para los motores con servoventilación (opción U1) la alimentación el ventilador está prevista en una caja de bornas separada y fijado sobre la tapa del ventilador.
En los motores con encoder (opciones EN1...EN6) los terminales de la conexión del encoder se realiza a través del cable volante no contectado al conector.
La opción CON no se aplica a los motores con freno en corriente alterna FA, BA.
La opción CON no es compatible con las opciones U2, CUS, IC

**Datos técnicos**

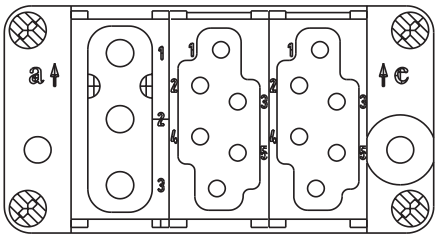
(G 61)

| Opción | **CON 1** |
|---|---|
| Tamaño motor | **BN63…BN112 / M05...M3** |
| Vista conector |   |
| Tipo de conector | Harting Han 10ES |
| Cuerpo conector | Han EMC 10B  con 2 levas |
| Número de pins - corriente norminal | 10 x 16A |
| Tensión de alimentación | 500 Vac |
| Tipo de conexión contactos | Terminales con tornillo |

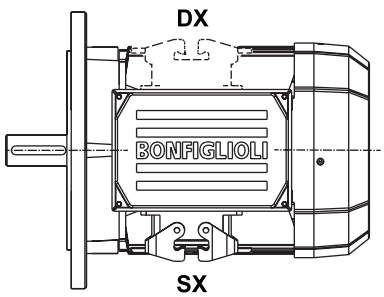
(G 62)

| Opción | **CON 2** |
|---|---|
| Tamaño motor | **BN63…BN160MR / M05...M4LC** |
| Vista conector |  |
| Tipo de conector | Harting Han Modular |
| Cuerpo conector | Han EMC 10B con 2 levas |
| Tipo Modulo | Modulo C + Modulo vacío + Modulo E |
| Número de pins - corriente norminal | 3 x 36A / 6 x 16A |
| Tensión de alimentación | 500 Vac |
| Tipo de conexión contactos | Contactos a crimpar |

(G 63)

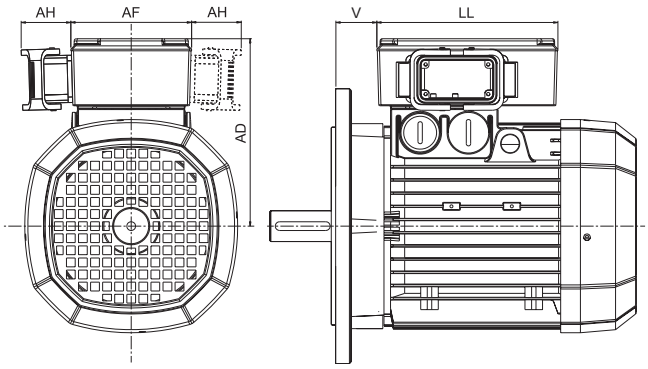
| Opción | **CON 3** |
|---|---|
| Tamaño motor | **BN63…BN160MR / M05...M4LC** |
| Vista conector |  |
| Tipo de conector | Harting Han Modular |
| Cuerpo conector | Han EMC 10B con 2 levas |
| Tipo Modulo | Modulo C + Modulo vacío + Modulo E |
| Número de pins - corriente norminal | 3 x 36A / 6 + 6 x 16A |
| Tensión de alimentación | 500 Vac |
| Tipo de conexión contactos | Contactos a crimpar |

(G 64)

| **Orientamiento conectores** |
|---|
|  |

(G 65)

**Diseño de dimensiones motores sin freno**

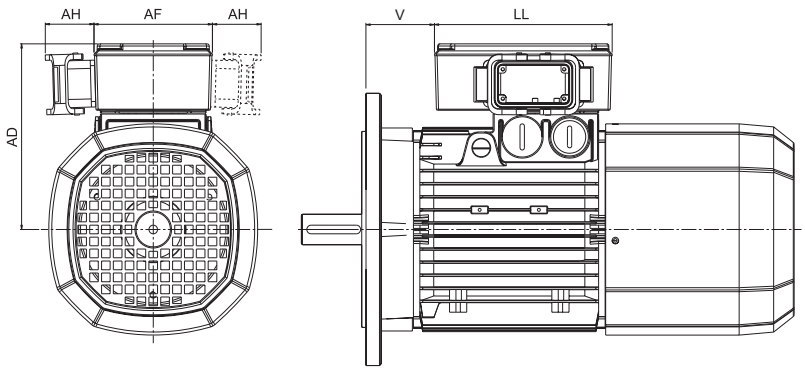



| | | **AD** (mm) | **AF** (mm) | **AH** (mm) | **LL** (mm) | **V**(*) (mm) |
|---|---|---|---|---|---|---|
| **BN63** | **M05** | 136 | 110 | 45 | 165 | 4.5 |
| **BN71** | **M1** | 149 | 110 | 45 | 165 | 15.5 |
| **BN80** | **M2** | 160 | 110 | 45 | 165 | 16.5 |
| **BN90** | **—** | 162 | 110 | 45 | 165 | 31.5 |
| **BN100** | **M3** | 171 | 110 | 45 | 165 | 37.5 |
| **BN112** | **—** | 186 | 110 | 45 | 165 | 39 |
| **BN132** | **M4** | 210 | 140 | 45 | 188 | 45.5 |
| **BN160MR** | **—** | 210 | 140 | 45 | 188 | 161 |

(*) Dimension válida solo para motores BN

(G 66)

**Diseño de dimensiones motores con freno FD**




| | | **AD** (mm) | **AF** (mm) | **AH** (mm) | **LL** (mm) | **V**(*) (mm) |
|---|---|---|---|---|---|---|
| **BN63** | **M05** | 136 | 110 | 45 | 165 | 4.5 |
| **BN71** | **M1** | 149 | 110 | 45 | 165 | 1.5 |
| **BN80** | **M2** | 160 | 110 | 45 | 165 | 18.5 |
| **BN90** | **—** | 162 | 110 | 45 | 165 | 39.5 |
| **BN100** | **M3** | 171 | 110 | 45 | 165 | 63.5 |
| **BN112** | **—** | 186 | 110 | 45 | 165 | 75 |
| **BN132** | **M4** | 210 | 140 | 45 | 188 | 122 |
| **BN160MR** | **—** | 210 | 140 | 45 | 188 | 161 |

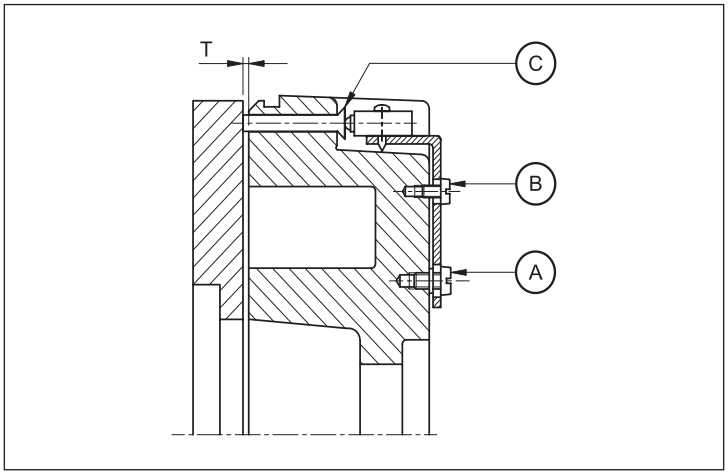
(*) Dimension válida solo para motores BN

### M2.10.5 Control de la funcionalidad de freno

## MSW

El microinterruptor puede ser regulado para indicar la atracción/liberación del áncora móvil o para señalar que se ha llegado al valor máximo admisible del entrehierro.
**La pción MSW está disponible para los freno FD03...FD09 y AFD03...AFD07.**
El microswitch tiene tres terminales NC, NO, COM. En la sigura de abajo, vienen indicados los principales componentes del freno equipado con microswitch.

(G 67)




A: Tornillo de fijación
B: Tornillo de regulación
C: Actuador

### M2.10.6 Entrada de cables suplementarios para motores autofrenantes

## IC

En la tapa de la caja de bornas de los motores freno BN63...BN160MR / M05...M4 están disponibles dos entradas adicionales para cables M16 x 1.5 (uno por cada lado).
En la tapa de la caja de bornas de los motores freno BN160...BN200 / M5 está disponible una entrada para cable de M16 x 1.5 al lado de la entrada del cable del freno.

### M2.10.7 Resistencias anticondensación

## H1

Los motores funcionando en ambientes muy húmedos y/o con grandes variaciones de temperatura, pueden equiparse con una resistencia de caldeo (anticondensación).
La alimentación monofásica se realiza mediante un una regleta auxiliar situada en la caja principal.
La potencia absorbida por la resistencia eléctrica, está indicada en la lista siguiente:

(G 68)

|  |  | H1<br>1~ 230V ± 10%<br>P [W] |
|---|---|---|
| **BN 56...BN 80** | **M0...M2** | 10 |
| **BN 90...BN 160MR** | **M3 - M4** | 25 |
| **BN 160M...BN 180M** | **M5** | 50 |
| **BN 180L...BN 200L** | **—** | 50 |

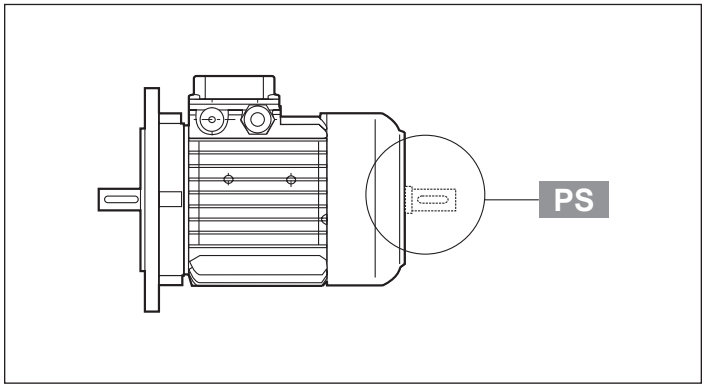
**Importante**
**Durante el funcionamiento del motor, la resistencia de caldeo nunca debe permanecer alimentada.**

### M2.10.8 Segunda extremidad del eje

**PS**

Esta opción excluye las opciones RC, TC, U1, U2, EN1, EN2, EN3, EN4, EN5, EN6 – no es aplicable a los motores freno tipo BA.
Las dimensiones pueden obtenerse en la tabla de dimensiones de los motores.

(G 69)




### M2.10.9 Dispositivo antirretorno

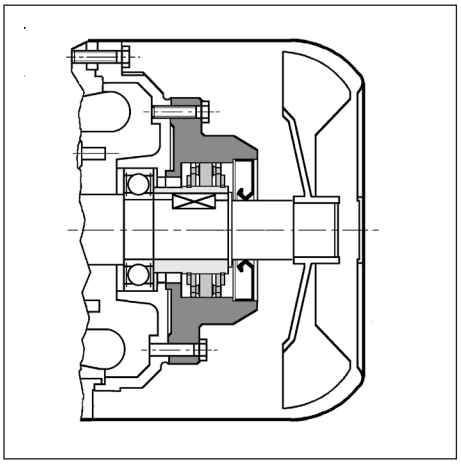
**AL** **AR**

En las aplicaciones donde sea necesario impedir el giro inverso del motor motivado por la carga, es posible emplear motores provistos de un dispositivo antirretorno (solamente disponible en los motores serie M). Este dispositivo permite el giro libre en el sentido de marcha, interviniendo instantáneamente en ausencia de la corriente bloqueando el giro del eje en el sentido inverso.
El dispositivo antirretorno está lubricado de por vida con grasa específica para está aplicación.
En el momento del pedido deberá indicarse con claridad el sentido de giro previsto.
En ningún caso, el dispositivo antirretorno, deberá utilizarse para impedir el giro inverso en caso de conexión eléctrica errónea.
En la tabla (G70) están indicados los valores del par nominal y máximo de retención, aplicable al dispositivo antirretorno utilizado, la representación esquemática del dispositivo se muestra en la tabla (G71).
Las dimensiones son las mismas que las del motor freno.El sentido de girlo libre está descrito en el párrafo “OPCIONES MOTORES” para cada sección dedicadas a los reductores.

(G 70)

| | Par nominal de bloqueo [Nm] | Par máx. de bloqueo [Nm] | Velocidad de liberación [$min^{-1}$] |
|---|---|---|---|
| **M1** | 6 | 10 | 750 |
| **M2** | 16 | 27 | 650 |
| **M3** | 54 | 92 | 520 |
| **M4** | 110 | 205 | 430 |

(G 71)



### M2.10.10 Ventilación

Los motores están refrigerados mediante ventilación externa (IC 411 según CEI EN 60034-6) y están equipados con un ventilador radial de plástico que funciona en ambos sentidos de giro.
En la instalación deberá asegurarse una distancia mínima entre la tapa del ventilador y la pared más cercana, de modo que se asegure una buena circulación del aire y permita realizar el mantenimiento oportuno del motor y, si lo lleva, el del freno.
Bajo pedido, y a partir del tamaño BN 71, o bien M1, los motores pueden suministrarse con ventilación y alimentación independientes.
La refrigeración se realiza mediante un ventilador axial, con alimentación independiente, montado sobre la tapa del ventilador (método de enfriamiento IC 416).
Esta ejecución es utilizada cuando el motor es alimentado mediante variador de frecuencia, con objeto de ampliar el campo de funcionamiento del motor a par constante, incluso a baja velocidad o cuando está solicitado con frecuencias de arranque elevadas.
Quedan excluidos de esta opción los motores freno tipo BN_BA y todos los motores con doble eje (opción PS)

(G 72)

| Datos de la alimentación | | | | | |
|---|---|---|---|---|---|
| | | **V a.c. ± 10%** | **Hz** | **P** [W] | **I** [A] |
| **BN 71** | **M1** | 1~ 230 | 50 / 60 | 22 | 0.12 |
| **BN 80** | **M2** | | | 22 | 0.12 |
| **BN 90** | **—** | | | 40 | 0.30 |
| **BN 100 (*)** | **M3** | | | 50 | 0.25 |
| **BN 112** | **—** | 3~ 230 Δ / 400Y | | 50 | 0.26 / 0.15 |
| **BN 132S** | **M4S** | | | 110 | 0.38 / 0.22 |
| **BN 132M...BN 160MR** | **M4L** | | | | |
| **BN 160...BN 180M** | **M5** | | 50 | 180 | 1.25 / 0.72 |

Para esta variante, están disponibles dos ejecuciones alternativas, denominadas **U1** y **U2**, que tienen la misma dimensión en el sentido longitudinal. Para ambas ejecuciones, el incremento de longitud de la tapa del ventilador (**ΔL**) está indicado en la tabla siguiente. Las dimensiones generales se obtienen de las tablas dimensionales de los motores.

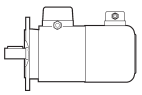
(G 73)

| Tabla del incremento de la longitud del motor | | | |
|---|---|---|---|
|  |  | **Δ $L_1$** | **Δ $L_2$** |
| **BN 71** | **M1** | 93 | 32 |
| **BN 80** | **M2** | 127 | 55 |
| **BN 90** | **—** | 131 | 48 |
| **BN 100** | **M3** | 119 | 28 |
| **BN 112** | **—** | 130 | 31 |
| **BN 132S** | **M4S** | 161 | 51 |
| **BN 132M** | **M4L** | 161 | 51 |

$\Delta L_1$ = incremento de la longitud respecto a la cota LB del motor estándar correspondiente

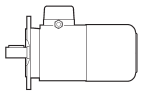
$\Delta L_2$ = incremento de la longitud respecto a la cota LB del motor freno correspondiente

## U1



Terminales de alimentación del ventilador en caja de bornes independiente.
Los motores freno de tamaños BN 71...BN 160MR, con variante **U1**, la palanca de desbloqueo no permite su montaje en la posición AA.
La opción es incompatible con motores según las normas CSA y UL (opción CUS).

## U2



Los terminales de alimentación del ventilador están situados en la caja de bornes principal del motor. Esta opción no es aplicable para los motores BN 160M ... BN 200L, con excepción del motor 160 MR, por lo cual la opción está disponible a los motores con opción CUS (conformes a las normas CSA y UL)

(G 74)

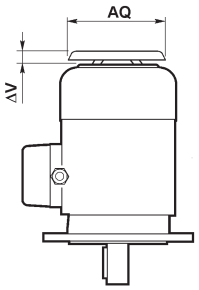
| **(*)** |  |  | **V a.c. ± 10%** | **Hz** | **P** [W] | **I** [A] |
|---|---|---|---|---|---|---|
| | **BN 100_U2** | **M3** | 3~ 230 Δ / 400Y | 50 / 60 | 40 | 0.12 / 0.09 |

### M2.10.11 Sombrerete protector de la lluvia

## RC

El dispositivo protector de la lluvia está recomendado cuando el motor se instale verticalmente con el eje hacia abajo; sirve para proteger al proprio motor de la entrada de cuerpos sólidos y del goteo
Las dimensiones adicionales están indicadas en la tabla siguiente.
El sombrerete excluye las variantes PS, EN1, EN2, EN3, EN4, EN5, EN6 y no es aplicable a los motores con freno tipo BA.

(G 75)

|  |  | AQ | ΔV |   |
|---|---|---|---|---|
| **BN 63** | **M05** | 118 | 24 | |
| **BN 71** | **M1** | 134 | 27 | |
| **BN 80** | **M2** | 152 | 25 | |
| **BN 90** | **—** | 168 | 30 | |
| **BN 100** | **M3** | 190 | 28 | |
| **BN 112** | **—** | 211 | 32 | |
| **BN 132...BN 160MR** | **M4** | 254 | 32 | |
| **BN 160M...BN 180M** | **M5** | 302 | 36 | |
| **BN 180L...BN 200L** | **—** | 340 | 36 | |

### M2.10.12 Sombrerete para ambiente textil

**TC**

La variante del sombrerete tipo TC se ha de especificar cuando el motor se instale en ambientes de la industria textil, donde existen filamentos que podrían obstruir la rejilla de la tapa del ventilador, impidiendo el flujo regular del aire de refrigeración.
Esta opción excluye las variantes EN1, EN2, EN3, EN4, EN5, EN6 y no puede aplicarse a los motores con freno tipo BA. Las dimensiones totales son las mismas que las del sombrerete tipo RC.

### M2.10.13 Dispositivos de retroacción

Los motores pueden dotarse con tres tipos distintos de encoder que se describen a continuación. El montaje del encoder excluye la ejecución con doble eje (PS) y del sombrerete de protección (RC, TC). El dispositivo no puede aplicarse a los motores con freno de c.a. tipo BA.

**EN1**

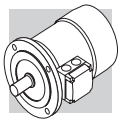
Encoder incremental, $V_{IN}$= 5 V, salida “line-driver” RS 422.

**EN2**

Encoder incremental, $V_{IN}$ = 10-30 V, salida “line-driver” RS 422

**EN3**

Encoder incremental, $V_{IN}$ = 12-30 V, salida “push-pull” 12-30 V



## EN4

Encoder sin/cos, $V_{IN}$ = 4.5-5.5 V, salida Sinus 0.5$V_{PP}$.

## EN5

Encoder absoluto monogiro, interfaz HIPERFACE®, $V_{IN}$ = 7-12 V.

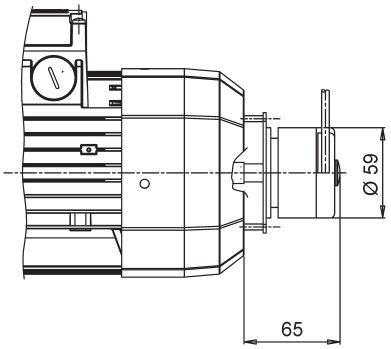
## EN6

Encoder absoluto multigiro, interfaz HIPERFACE®, $V_{IN}$ = 7-12 V.

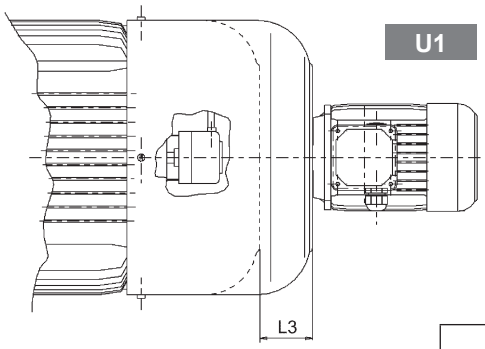
(G 76)

| | | EN1 | EN2 | EN3 | EN4 | EN5 | EN6 |
|---|---|---|---|---|---|---|---|
| Interfaz | | TTL/RS 422 | TTL/RS 422 | HTL/push-pull | Sinus 0.5 VPP | HIPERFACE® | HIPERFACE® |
| Tensión alimentación | [V] | 4...6 | 10...30 | 12...30 | 4.4...5.5 | 7...12 | 7...12 |
| Tensión de salida | [V] | 5 | 5 | 12...30 | — | — | — |
| Intensidad de utilización sin carga | [mA] | 120 | 100 | 100 | 40 | 80 | 80 |
| Nº de impulsos por revolución | | 1024 | | | | | |
| resolución | | — | — | — | — | 15 bit | 15 bit |
| revoluciones | | — | — | — | — | — | 12 bit |
| Nº de señales | | 6 (A, B, Z + señales invertidas) | | | 6 (cos-, cos+, sin-, sin+, Z, $\overline{Z}$) | — | — |
| Frecuencia máx. de salida | [kHz] | 600 | | | 200 | | |
| Velocidad máxima | [$min^{-1}$] | 6000 (9000 $min^{-1}$ para 10 s ) | | | | | |
| Rango de temperatura | [°C] | -30 ... +100 | | | | | |
| Grado de protección | | IP 65 | | | | | |

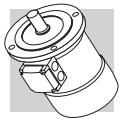
(G 77)

| EN1, EN2, EN3, EN4, EN5, EN6 | |
|---|---|
|  | |
| **BN 63...BN 200L** | **M05...M5** |
| **BN 63_FD...BN 200L_FD** | **M05_FD...M5_FD** |
| **BN 63_AFD...BN 160MR_AFD** | **M05_AFD...M4LC_AFD** |
| **BN 63_FA...BN 200L_FA** | **M05_FA...M5_FA** |

(G 78)

| EN_ + U1 | | |
|---|---|---|
|  | | |
| | | **L3** |
| **BN 160M...BN 180M** | **M5** | 72 |
| **BN 180L...BN 200L** | **-** | 82 |
| **BN 160M_FD...BN 180M_FD** | **M5_FD** | 35 |
| **BN 180L_FD...BN 200L_FD** | **-** | 41 |

Si la opción EN_ se solicita para motores de tamaño BN71...BN160MR / M1...M4 junto a la opción U1/U2, la variación de las dimensiones del motor coincide con las de la opción U1/U2.



## 2P — 3000 min-1 - S1 — 50 Hz

| | | | | | | | | | | | | | | | freno c.c. | | | | | | freno c.c. a entrehierro fijo | | | | | | freno c.a. | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | FD | | | | | | AFD | | | | | | FA | | | | | | BA | | | | |
| $P_n$ | | n | $M_n$ | IE1 | η | η | η | cosφ | In | Is | Ms | Ma | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 |
| | | | | | (100%) | (75%) | (50%) | | 400V | In | Mn | Mn | x $10^{-4}$ | | | | 1/h | | x $10^{-4}$ | | | | 1/h | | x $10^{-4}$ | | | | 1/h | x $10^{-4}$ | | | | 1/h | x $10^{-4}$ | |
| kW | | $min^{-1}$ | Nm | | % | % | % | | A | | | | $kgm^2$ | Kg | | Nm | NB | SB | $kgm^2$ | Kg | | Nm | NB | SB | $kgm^2$ | Kg | | Nm | | $kgm^2$ | Kg | | Nm | | $kgm^2$ | Kg |
| 0.18 | **BN 63A 2** | 2730 | 0.63 | ○ | 59.9 | 56.9 | 51.9 | 0.77 | 0.56 | 3.0 | 2.1 | 2.0 | 2.0 | 3.5 | **FD 02** | 1.75 | 3900 | 4800 | 2.6 | 5.2 | **AFD 02** | 1.75 | 3900 | 4800 | 2.6 | 5.0 | **FA 02** | 1.75 | 4800 | 2.6 | 5.0 | **BA 60** | 5 | 3500 | 4.0 | 5.8 |
| 0.25 | **BN 63B 2** | 2740 | 0.87 | ○ | 66.0 | 64.8 | 64.8 | 0.76 | 0.72 | 3.3 | 2.3 | 2.3 | 2.3 | 3.9 | **FD 02** | 1.75 | 3900 | 4800 | 3.0 | 5.6 | **AFD 02** | 1.75 | 3900 | 4800 | 3.0 | 5.4 | **FA 02** | 1.75 | 4800 | 3.0 | 5.4 | **BA 60** | 5 | 3600 | 4.3 | 6.2 |
| 0.37 | **BN 63C 2** | 2800 | 1.26 | ○ | 69.1 | 66.8 | 66.8 | 0.78 | 0.99 | 3.9 | 2.6 | 2.6 | 3.3 | 5.1 | **FD 02** | 3.5 | 3600 | 4500 | 3.9 | 6.8 | **AFD 02** | 3.5 | 3600 | 4500 | 3.9 | 6.6 | **FA 02** | 3.5 | 4500 | 3.9 | 6.6 | **BA 60** | 5 | 3500 | 5.3 | 7.4 |
| 0.37 | **BN 71A 2** | 2820 | 1.25 | ○ | 73.8 | 73.0 | 70.6 | 0.76 | 0.95 | 4.8 | 2.8 | 2.6 | 3.5 | 5.4 | **FD 03** | 3.5 | 3000 | 4100 | 4.6 | 8.1 | **AFD 03** | 5 | 3000 | 4100 | 4.6 | 7.8 | **FA 03** | 3.5 | 4200 | 4.6 | 7.8 | **BA 70** | 8 | 3500 | 5.5 | 9.3 |
| 0.55 | **BN 71B 2** | 2820 | 1.86 | ○ | 76.0 | 75.8 | 74.8 | 0.76 | 1.37 | 5.0 | 2.9 | 2.8 | 4.1 | 6.2 | **FD 03** | 5 | 2900 | 4200 | 5.3 | 8.9 | **AFD 03** | 5 | 2900 | 4200 | 5.3 | 8.6 | **FA 03** | 5 | 4200 | 5.3 | 8.6 | **BA 70** | 8 | 3600 | 6.1 | 10.1 |
| 0.75 | **BN 71C 2** | 2810 | 2.6 | ○ | 76.6 | 76.2 | 76.2 | 0.76 | 1.86 | 5.1 | 3.1 | 2.8 | 5.0 | 7.3 | **FD 03** | 5 | 1900 | 3300 | 6.1 | 10.0 | **AFD 03** | 7.5 | 1900 | 3300 | 6.1 | 9.7 | **FA 03** | 5 | 3600 | 6.1 | 9.7 | **BA 70** | 8 | 3200 | 7.0 | 11.2 |
| 0.75 | **BN 80A 2** | 2810 | 2.6 | • | 76.2 | 75.5 | 68.3 | 0.81 | 1.75 | 4.8 | 2.6 | 2.2 | 7.8 | 8.6 | **FD 04** | 5 | 1700 | 3200 | 9.4 | 12.5 | **AFD 04** | 5 | 1700 | 3200 | 9.4 | 12.1 | **FA 04** | 5 | 3200 | 9.4 | 12.4 | **BA 80** | 18 | 2800 | 10.8 | 13.9 |
| 1.1 | **BN 80B 2** | 2800 | 3.8 | • | 76.4 | 76.2 | 75.0 | 0.81 | 2.57 | 4.8 | 2.8 | 2.4 | 9.0 | 9.5 | **FD 04** | 10 | 1500 | 3000 | 10.6 | 13.4 | **AFD 04** | 10 | 1500 | 3000 | 10.6 | 13.0 | **FA 04** | 10 | 3000 | 10.6 | 13.3 | **BA 80** | 18 | 2700 | 12.0 | 14.8 |
| 1.5 | **BN 80C 2** | 2800 | 5.1 | • | 79.1 | 79.5 | 77.2 | 0.81 | 3.4 | 4.9 | 2.7 | 2.4 | 11.4 | 11.3 | **FD 04** | 15 | 1300 | 2600 | 13.0 | 15.2 | **AFD 04** | 15 | 1300 | 2600 | 13.0 | 14.8 | **FA 04** | 15 | 2600 | 13.0 | 15.1 | **BA 80** | 18 | 2400 | 14.4 | 16.6 |
| 1.5 | **BN 90SA 2** | 2870 | 5.0 | • | 82.0 | 81.5 | 78.1 | 0.80 | 3.4 | 5.9 | 2.7 | 2.6 | 12.5 | 12.3 | **FD 14** | 15 | 900 | 2200 | 14.1 | 16.5 | **AFD 14** | 15 | 900 | 2200 | 14.1 | 16.1 | **FA 14** | 15 | 2200 | 14.1 | 16.4 | **BA 90** | 35 | 1600 | 19.5 | 19.6 |
| 1.85 | **BN 90SB 2** | 2880 | 6.1 | • | 82.5 | 82.0 | 75.4 | 0.80 | 4.0 | 6.2 | 2.9 | 2.6 | 16.7 | 14 | **FD 14** | 15 | 900 | 2200 | 18.3 | 18.2 | **AFD 14** | 15 | 900 | 2200 | 18.3 | 17.8 | **FA 14** | 15 | 2200 | 18.3 | 18.1 | **BA 90** | 35 | 1700 | 23.7 | 21.3 |
| 2.2 | **BN 90L 2** | 2880 | 7.3 | • | 82.7 | 82.1 | 80.8 | 0.80 | 4.8 | 6.3 | 2.9 | 2.7 | 16.7 | 14 | **FD 05** | 26 | 900 | 2200 | 21 | 20 | **AFD 05** | 26 | 900 | 2200 | 21 | 19.4 | **FA 05** | 26 | 2200 | 21 | 20.7 | **BA 90** | 35 | 1700 | 24 | 21.3 |
| 3 | **BN 100L 2** | 2860 | 10.0 | • | 81.5 | 81.3 | 77.4 | 0.79 | 6.7 | 5.6 | 2.6 | 2.2 | 31 | 20 | **FD 15** | 26 | 700 | 1600 | 35 | 26 | **AFD 15** | 26 | 700 | 1600 | 35 | 25 | **FA 15** | 26 | 1600 | 35 | 27 | **BA 100** | 50 | 1300 | 43 | 30 |
| 4 | **BN 100LB 2** | 2870 | 13.3 | • | 83.1 | 83.0 | 77.8 | 0.80 | 8.7 | 5.8 | 2.7 | 2.5 | 39 | 23 | **FD 15** | 40 | 450 | 900 | 43 | 29 | **AFD 15** | 40 | 450 | 900 | 43 | 28 | **FA 15** | 40 | 1000 | 43 | 30 | **BA 100** | 50 | 850 | 51 | 33 |
| 4 | **BN 112M 2** | 2900 | 13.2 | • | 85.5 | 84.5 | 83.0 | 0.82 | 8.2 | 6.9 | 3.0 | 2.9 | 57 | 28 | **FD 06S** | 40 | — | 950 | 66 | 39 | **AFD 06S** | 40 | — | 950 | 66 | 38 | **FA 06S** | 40 | 950 | 66 | 40 | **BA 110** | 75 | 850 | 73 | 41 |
| 5.5 | **BN 132SA 2** | 2890 | 18.2 | • | 84.7 | 84.5 | 81.2 | 0.84 | 11.2 | 5.9 | 2.6 | 2.2 | 101 | 35 | **FD 06** | 50 | — | 600 | 112 | 48 | **AFD 06** | 62 | — | 600 | 112 | 47 | **FA 06** | 50 | 600 | 112 | 49 | **BA 140** | 150 | 500 | 151 | 67 |
| 7.5 | **BN 132SB 2** | 2900 | 25 | • | 86.5 | 86.3 | 84.4 | 0.85 | 14.7 | 6.4 | 2.6 | 2.2 | 145 | 42 | **FD 06** | 50 | — | 550 | 154 | 55 | **AFD 06** | 62 | — | 550 | 154 | 54 | **FA 06** | 50 | 550 | 154 | 56 | **BA 140** | 150 | 450 | 195 | 74 |
| 9.2 | **BN 132M 2** | 2930 | 30 | • | 87.0 | 86.5 | 83.6 | 0.86 | 17.7 | 6.7 | 2.8 | 2.3 | 178 | 53 | **FD 56** | 75 | — | 430 | 189 | 66 | **AFD 06** | 75 | — | 430 | 189 | 65 | **FA 06** | 75 | 430 | 189 | 67 | **BA 140** | 150 | 400 | 228 | 85 |
| 11 | **BN 160MR 2** | 2920 | 36 | • | 87.6 | 87.0 | 86.0 | 0.88 | 20.6 | 6.9 | 2.9 | 2.5 | 210 | 65 | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | **BN 160MB 2** | 2930 | 49 | • | 89.6 | 89.4 | 88.0 | 0.86 | 28.1 | 7.1 | 2.6 | 2.3 | 340 | 84 | | | | | | | | | | | | | | | | | | | | | | | |
| 18.5 | **BN 160L 2** | 2930 | 60 | • | 90.4 | 90.1 | 89.0 | 0.86 | 34 | 7.6 | 2.7 | 2.3 | 420 | 97 | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | **BN 180M 2** | 2930 | 72 | • | 89.9 | 89.7 | 89.5 | 0.88 | 40 | 7.8 | 2.6 | 2.4 | 490 | 109 | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | **BN 200LA 2** | 2930 | 98 | • | 90.7 | 90.1 | 87.6 | 0.89 | 54 | 7.8 | 2.7 | 2.9 | 770 | 140 | | | | | | | | | | | | | | | | | | | | | | | |

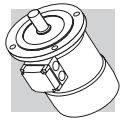
○ = n.a. • = IE1

## 4P — 1500 min$^{-1}$ - S1 — 50 Hz

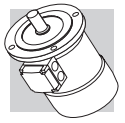
| | | | | | | | | | | | | | | | freno c.c. | | | | | | freno c.c. a entrehierro fijo | | | | | | freno c.a. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | FD | | | | | | AFD | | | | | | FA | | | | | | BA | | | |
| $P_n$ | | n | $M_n$ | IE1 | η | η | η | cosφ | In | Is | Ms | Ma | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 |
| | | | | | (100%) | (75%) | (50%) | | 400V | In | Mn | Mn | x $10^{-4}$ | | | | 1/h | | x $10^{-4}$ | | | | 1/h | | x $10^{-4}$ | | | | 1/h | x $10^{-4}$ | | | | 1/h | x $10^{-4}$ | |
| kW | | min$^{-1}$ | Nm | | % | % | % | | A | | | | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | | kgm$^2$ | Kg | | Nm | | kgm$^2$ | Kg |
| 0.06 | **BN 56A 4** | 1340 | 0.43 | ○ | 46.8 | 44.2 | 41.3 | 0.65 | 0.28 | 2.6 | 2.3 | 2.0 | 1.5 | 3.1 | | | | | | | | | | | | | | | | | | | | | | |
| 0.09 | **BN 56B 4** | 1350 | 0.64 | ○ | 51.7 | 47.6 | 42.9 | 0.60 | 0.42 | 2.6 | 2.5 | 2.4 | 1.5 | 3.1 | | | | | | | | | | | | | | | | | | | | | | |
| 0.12 | **BN 63A 4** | 1350 | 0.85 | ○ | 59.8 | 56.2 | 47.0 | 0.62 | 0.47 | 2.6 | 1.9 | 1.8 | 2.0 | 3.5 | **FD 02** | 1.75 | 10000 | 13000 | 2.6 | 5.2 | **AFD 02** | 1.75 | 10000 | 13000 | 2.6 | 5.0 | **FA 02** | 1.75 | 13000 | 2.6 | 5.0 | **BA 60** | 5.0 | 9000 | 4.0 | 5.8 |
| 0.18 | **BN 63B 4** | 1320 | 1.30 | ○ | 54.8 | 52.9 | 52.5 | 0.67 | 0.71 | 2.6 | 2.2 | 2.0 | 2.3 | 3.9 | **FD 02** | 3.5 | 10000 | 13000 | 3.0 | 5.6 | **AFD 02** | 3.5 | 10000 | 13000 | 3.0 | 5.4 | **FA 02** | 3.5 | 13000 | 3.0 | 5.4 | **BA 60** | 5.0 | 9000 | 4.3 | 6.2 |
| 0.25 | **BN 63C 4** | 1340 | 1.78 | ○ | 65.3 | 65.0 | 57.9 | 0.69 | 0.80 | 2.7 | 2.1 | 1.9 | 3.3 | 5.1 | **FD 02** | 3.5 | 7800 | 10000 | 3.9 | 6.8 | **AFD 02** | 3.5 | 7800 | 10000 | 3.9 | 6.6 | **FA 02** | 3.5 | 10000 | 3.9 | 6.6 | **BA 60** | 5.0 | 8500 | 5.3 | 7.4 |
| 0.25 | **BN 71A 4** | 1380 | 1.73 | ○ | 63.7 | 62.2 | 59.1 | 0.73 | 0.78 | 3.3 | 1.9 | 1.7 | 5.8 | 5.1 | **FD 03** | 3.5 | 7700 | 11000 | 6.9 | 7.8 | **AFD 03** | 5 | 7700 | 11000 | 6.9 | 7.5 | **FA 03** | 3.5 | 11000 | 6.9 | 7.5 | **BA 70** | 8.0 | 9700 | 7.8 | 9.0 |
| 0.37 | **BN 71B 4** | 1370 | 2.6 | ○ | 66.8 | 66.7 | 63.0 | 0.76 | 1.05 | 3.7 | 2.0 | 1.9 | 6.9 | 5.9 | **FD 03** | 5 | 6000 | 9400 | 8.0 | 8.6 | **AFD 03** | 5 | 6000 | 9400 | 8.0 | 8.3 | **FA 03** | 5.0 | 9400 | 8.0 | 8.3 | **BA 70** | 8.0 | 8500 | 8.9 | 9.8 |
| 0.55 | **BN 71C 4** | 1380 | 3.8 | ○ | 69.0 | 68.9 | 68.8 | 0.74 | 1.55 | 4.1 | 2.3 | 2.3 | 9.1 | 7.3 | **FD 53** | 7.5 | 4300 | 8700 | 10.2 | 10.0 | **AFD 03** | 7.5 | 4300 | 8700 | 10.2 | 9.7 | **FA 03** | 7.5 | 8700 | 10.2 | 9.7 | **BA 70** | 8.0 | 8000 | 11.1 | 11.2 |
| 0.55 | **BN 80A 4** | 1390 | 3.8 | ○ | 72.0 | 71.3 | 69.7 | 0.77 | 1.43 | 4.1 | 2.3 | 2.0 | 15 | 8.2 | **FD 04** | 10 | 4100 | 8000 | 16.6 | 12.1 | **AFD 04** | 10 | 4100 | 8000 | 16.6 | 11.7 | **FA 04** | 10 | 8000 | 16.6 | 12.0 | **BA 80** | 18 | 7400 | 18 | 13.5 |
| 0.75 | **BN 80B 4** | 1400 | 5.1 | • | 75.0 | 74.5 | 69.3 | 0.78 | 1.85 | 4.9 | 2.7 | 2.5 | 20 | 9.9 | **FD 04** | 15 | 4100 | 7800 | 22 | 13.8 | **AFD 04** | 15 | 4100 | 7800 | 22 | 13.4 | **FA 04** | 15 | 7800 | 22 | 13.7 | **BA 80** | 18 | 7400 | 23 | 15.2 |
| 1.1 | **BN 80C 4** | 1400 | 7.5 | • | 75.5 | 76.2 | 70.4 | 0.78 | 2.7 | 5.1 | 2.8 | 2.5 | 25 | 11.3 | **FD 04** | 15 | 2600 | 5300 | 27 | 15.2 | **AFD 04** | 15 | 2600 | 5300 | 27 | 14.8 | **FA 04** | 15 | 5300 | 27 | 15.1 | **BA 80** | 18 | 5100 | 28 | 16.6 |
| 1.1 | **BN 90S 4** | 1390 | 7.6 | • | 76.5 | 76.2 | 72.2 | 0.77 | 2.70 | 4.6 | 2.6 | 2.2 | 21 | 12.2 | **FD 14** | 15 | 4800 | 8000 | 23 | 16.4 | **AFD 14** | 15 | 4800 | 8000 | 23 | 16 | **FA 14** | 15 | 8000 | 23 | 16.3 | **BA 90** | 35 | 6500 | 28 | 19.5 |
| 1.5 | **BN 90LA 4** | 1410 | 10.2 | • | 78.7 | 78.5 | 74.9 | 0.77 | 3.6 | 5.3 | 2.8 | 2.4 | 28 | 13.6 | **FD 05** | 26 | 3400 | 6000 | 32 | 19.6 | **AFD 05** | 26 | 3400 | 6000 | 32 | 19 | **FA 05** | 26 | 6000 | 32 | 20.3 | **BA 90** | 35 | 5400 | 35 | 21.0 |
| 1.85 | **BN 90LB 4** | 1390 | 12.7 | • | 78.6 | 78.9 | 77.2 | 0.79 | 4.3 | 5.1 | 2.8 | 2.6 | 30 | 15.1 | **FD 05** | 26 | 3200 | 5900 | 34 | 21.1 | **AFD 05** | 26 | 3200 | 5900 | 34 | 20.5 | **FA 05** | 26 | 5900 | 34 | 21.8 | **BA 90** | 35 | 5400 | 37 | 22.5 |
| 2.2 | **BN 100LA 4** | 1410 | 14.9 | • | 81.1 | 81.4 | 79.9 | 0.75 | 5.2 | 4.5 | 2.2 | 2.0 | 40 | 18 | **FD 15** | 40 | 2600 | 4700 | 44 | 25 | **AFD 15** | 40 | 2600 | 4700 | 44 | 24.4 | **FA 15** | 40 | 4700 | 44 | 25 | **BA 100** | 50 | 4000 | 52 | 29 |
| 3 | **BN 100LB 4** | 1410 | 20 | • | 82.6 | 83.8 | 83.7 | 0.77 | 6.8 | 5.0 | 2.3 | 2.2 | 54 | 22 | **FD 15** | 40 | 2400 | 4400 | 58 | 28 | **AFD 15** | 40 | 2400 | 4400 | 58 | 27 | **FA 15** | 40 | 4400 | 58 | 29 | **BA 100** | 50 | 3800 | 66 | 32 |
| 4 | **BN 112M 4** | 1430 | 27 | • | 84.4 | 84.2 | 81.6 | 0.81 | 8.4 | 5.6 | 2.7 | 2.5 | 98 | 30 | **FD 06S** | 60 | — | 1400 | 107 | 40 | **AFD 06S** | 60 | — | 1400 | 107 | 39 | **FA 06S** | 60 | 2100 | 107 | 42 | **BA 110** | 75 | 2000 | 114 | 43 |
| 5.5 | **BN 132S 4** | 1440 | 36 | • | 84.7 | 84.8 | 82.5 | 0.81 | 11.6 | 5.5 | 2.3 | 2.2 | 213 | 44 | **FD 56** | 75 | — | 1050 | 223 | 57 | **AFD 06** | 75 | — | 1050 | 223 | 56 | **FA 06** | 75 | 1200 | 223 | 58 | **BA 140** | 150 | 1200 | 263 | 76 |
| 7.5 | **BN 132MA 4** | 1440 | 50 | • | 86.0 | 86.3 | 85.3 | 0.81 | 15.5 | 5.7 | 2.5 | 2.4 | 270 | 53 | **FD 06** | 100 | — | 950 | 280 | 66 | **AFD 06** | 100 | — | 950 | 280 | 65 | **FA 07** | 100 | 1000 | 280 | 71 | **BA 140** | 150 | 1000 | 320 | 85 |
| 9.2 | **BN 132MB 4** | 1440 | 61 | • | 88.4 | 88.6 | 87.5 | 0.81 | 18.8 | 5.9 | 2.7 | 2.5 | 319 | 59 | **FD 07** | 150 | — | 900 | 342 | 75 | **AFD 07** | 150 | — | 900 | 342 | 73 | **FA 07** | 150 | 900 | 342 | 77 | **BA 140** | 150 | 900 | 369 | 91 |
| 11 | **BN 160MR 4** | 1440 | 73 | • | 87.6 | 87.8 | 86.0 | 0.81 | 22.4 | 6.0 | 2.7 | 2.5 | 360 | 70 | **FD 07** | 150 | — | 850 | 382 | 86 | **AFD 07** | 150 | — | 850 | 382 | 84 | **FA 07** | 150 | 850 | 382 | 88 | | | | | |
| 15 | **BN 160L 4** | 1460 | 98 | • | 88.7 | 88.5 | 88.4 | 0.81 | 30 | 6.0 | 2.3 | 2.1 | 650 | 99 | **FD 08** | 200 | — | 750 | 725 | 129 | | | | | | | **FA 08** | 200 | 750 | 710 | 128 | | | | | |
| 18.5 | **BN 180M 4** | 1460 | 121 | • | 89.3 | 89.5 | 89.2 | 0.81 | 37 | 6.2 | 2.6 | 2.5 | 790 | 115 | **FD 08** | 250 | — | 700 | 865 | 145 | | | | | | | **FA 08** | 250 | 700 | 850 | 144 | | | | | |
| 22 | **BN 180L 4** | 1460 | 144 | • | 89.9 | 90.0 | 90.0 | 0.80 | 44 | 6.4 | 2.5 | 2.5 | 1250 | 135 | **FD 09** | 300 | — | 400 | 1450 | 175 | | | | | | | | | | | | | | | | |
| 30 | **BN 200L 4** | 1460 | 196 | • | 91.4 | 91.7 | 91.0 | 0.80 | 59 | 7.1 | 2.7 | 2.8 | 1650 | 157 | **FD 09** | 400 | — | 300 | 1850 | 197 | | | | | | | | | | | | | | | | |

○ = n.a. • = IE1





## 6P — 1000 min$^{-1}$ - S1 — 50 Hz



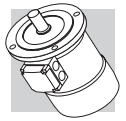
| | | | | | | | | | | | | | | | freno c.c. | | | | | | freno c.c. a entrehierro fijo | | | | | | freno c.a. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | FD | | | | | | AFD | | | | | | FA | | | | | | BA | | | |
| $P_n$ | | n | $M_n$ | IE1 | η | η | η | cosφ | In | Is | Ms | Ma | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 |
| | | | | | (100%) | (75%) | (50%) | | | | | | | | | | 1/h | | | | | | 1/h | | | | | | 1/h | | | | | 1/h | | |
| kW | | min$^{-1}$ | Nm | | % | % | % | | A | In | Mn | Mn | x $10^{-4}$ kgm$^2$ | Kg | | Nm | NB | SB | x $10^{-4}$ kgm$^2$ | Kg | | Nm | NB | SB | x $10^{-4}$ kgm$^2$ | Kg | | Nm | | x $10^{-4}$ kgm$^2$ | Kg | | Nm | | x $10^{-4}$ kgm$^2$ | Kg |
| 0.09 | **BN 63A 6** | 880 | 0.98 | ○ | 41.0 | 41.0 | 32.9 | 0.53 | 0.60 | 2.1 | 2.1 | 1.8 | 3.4 | 4.6 | **FD 02** | 3.5 | 9000 | 14000 | 4.0 | 6.3 | **AFD 02** | 3.5 | 9000 | 14000 | 4.0 | 6.1 | **FA 02** | 3.5 | 14000 | 4.0 | 6.1 | **BA 60** | 5.0 | 12000 | 5.4 | 6.9 |
| 0.12 | **BN 63B 6** | 870 | 1.32 | ○ | 45.0 | 44.0 | 41.8 | 0.60 | 0.64 | 2.1 | 1.9 | 1.7 | 3.7 | 4.9 | **FD 02** | 3.5 | 9000 | 14000 | 4.3 | 6.6 | **AFD 02** | 3.5 | 9000 | 14000 | 4.3 | 6.4 | **FA 02** | 3.5 | 14000 | 4.3 | 6.4 | **BA 60** | 5.0 | 12000 | 5.7 | 7.2 |
| 0.18 | **BN 71A 6** | 900 | 1.91 | ○ | 55.0 | 55.5 | 51.0 | 0.69 | 0.68 | 2.6 | 1.9 | 1.7 | 8.4 | 5.5 | **FD 03** | 5 | 8100 | 13500 | 9.5 | 8.2 | **AFD 03** | 5 | 8100 | 13500 | 9.5 | 7.9 | **FA 03** | 5.0 | 13500 | 9.5 | 7.9 | **BA 70** | 8.0 | 12300 | 10.4 | 9.4 |
| 0.25 | **BN 71B 6** | 900 | 2.70 | ○ | 62.0 | 58.5 | 51.4 | 0.71 | 0.82 | 2.6 | 1.9 | 1.7 | 10.9 | 6.7 | **FD 03** | 5 | 7800 | 13000 | 12 | 9.4 | **AFD 03** | 5 | 7800 | 13000 | 12 | 9.1 | **FA 03** | 5.0 | 13000 | 12 | 9.1 | **BA 70** | 8.0 | 12000 | 12.9 | 10.6 |
| 0.37 | **BN 71C 6** | 910 | 3.9 | ○ | 66.0 | 60.0 | 53.3 | 0.69 | 1.17 | 3.0 | 2.4 | 2.0 | 12.9 | 7.7 | **FD 53** | 7.5 | 5100 | 9500 | 14 | 10.4 | **AFD 03** | 7.5 | 5100 | 9500 | 14 | 10.1 | **FA 03** | 7.5 | 9500 | 14 | 10.1 | **BA 70** | 8.0 | 8900 | 14.9 | 11.6 |
| 0.37 | **BN 80A 6** | 910 | 3.9 | ○ | 68.0 | 67.4 | 63.3 | 0.68 | 1.15 | 3.2 | 2.2 | 2.0 | 21 | 9.9 | **FD 04** | 10 | 5200 | 8500 | 23 | 13.8 | **AFD 04** | 10 | 5200 | 8500 | 23 | 13.4 | **FA 04** | 10 | 8500 | 23 | 13.7 | **BA 80** | 18 | 8000 | 24 | 15.2 |
| 0.55 | **BN 80B 6** | 920 | 5.7 | ○ | 70.0 | 69.8 | 64.3 | 0.68 | 1.67 | 3.9 | 2.6 | 2.2 | 25 | 11.3 | **FD 04** | 15 | 4800 | 7200 | 27 | 15.2 | **AFD 04** | 15 | 4800 | 7200 | 27 | 14.8 | **FA 04** | 15 | 7200 | 27 | 15.1 | **BA 80** | 18 | 6800 | 28 | 16.6 |
| 0.75 | **BN 80C 6** | 920 | 7.8 | • | 70.0 | 70.0 | 64.4 | 0.65 | 2.38 | 3.8 | 2.5 | 2.2 | 28 | 12.2 | **FD 04** | 15 | 3400 | 6400 | 30 | 16.1 | **AFD 04** | 15 | 3400 | 6400 | 30 | 15.7 | **FA 04** | 15 | 6400 | 30 | 16.0 | **BA 80** | 18 | 6100 | 31 | 17.5 |
| 0.75 | **BN 90S 6** | 920 | 7.8 | • | 70.0 | 69.0 | 64.2 | 0.68 | 2.27 | 3.8 | 2.4 | 2.2 | 26 | 12.6 | **FD 14** | 15 | 3400 | 6500 | 28 | 16.8 | **AFD 14** | 15 | 3400 | 6500 | 28 | 16.4 | **FA 14** | 15 | 6500 | 28 | 16.7 | **BA 90** | 35 | 5500 | 33 | 19.9 |
| 1.1 | **BN 90L 6** | 920 | 11.4 | • | 72.9 | 72.6 | 69.1 | 0.69 | 3.2 | 3.9 | 2.3 | 2.0 | 33 | 15 | **FD 05** | 26 | 2700 | 5000 | 37 | 21 | **AFD 05** | 26 | 2700 | 5000 | 37 | 20 | **FA 05** | 26 | 5000 | 37 | 22 | **BA 90** | 35 | 4600 | 40 | 22 |
| 1.5 | **BN 100LA 6** | 940 | 15.2 | • | 75.2 | 74.2 | 70.3 | 0.72 | 4.0 | 4.1 | 2.1 | 2.0 | 82 | 22 | **FD 15** | 40 | 1900 | 4100 | 86 | 28 | **AFD 15** | 40 | 1900 | 4100 | 86 | 27 | **FA 15** | 40 | 4100 | 86 | 29 | **BA 100** | 50 | 3800 | 94 | 32 |
| 1.85 | **BN 100LB 6** | 930 | 19.0 | • | 76.6 | 72.8 | 62.6 | 0.73 | 4.8 | 4.6 | 2.1 | 2.0 | 95 | 24 | **FD 15** | 40 | 1700 | 3600 | 99 | 30 | **AFD 15** | 40 | 1700 | 3600 | 99 | 29 | **FA 15** | 40 | 3600 | 99 | 31 | **BA 100** | 50 | 3400 | 107 | 34 |
| 2.2 | **BN 112M 6** | 940 | 22 | • | 78.5 | 79.0 | 76.5 | 0.73 | 5.5 | 4.8 | 2.2 | 2.0 | 168 | 32 | **FD 06S** | 60 | — | 2100 | 177 | 42 | **AFD 06S** | 60 | — | 2100 | 177 | 41 | **FA 06S** | 60 | 2100 | 177 | 44 | **BA 110** | 75 | 2000 | 184 | 45 |
| 3 | **BN 132S 6** | 940 | 30 | • | 79.7 | 77.0 | 75.1 | 0.76 | 7.1 | 5.1 | 1.9 | 1.8 | 216 | 36 | **FD 56** | 75 | — | 1400 | 226 | 49 | **AFD 06** | 75 | — | 1400 | 226 | 48 | **FA 06** | 75 | 1400 | 226 | 50 | **BA 140** | 150 | 1200 | 266 | 68 |
| 4 | **BN 132MA 6** | 950 | 40 | • | 81.4 | 81.5 | 79.5 | 0.77 | 9.2 | 5.5 | 2.0 | 1.8 | 295 | 45 | **FD 06** | 100 | — | 1200 | 305 | 58 | **AFD 06** | 100 | — | 1200 | 305 | 57 | **FA 07** | 100 | 1200 | 318 | 63 | **BA 140** | 150 | 1050 | 345 | 77 |
| 5.5 | **BN 132MB 6** | 945 | 56 | • | 83.1 | 80.9 | 79.1 | 0.78 | 12.2 | 6.1 | 2.1 | 1.9 | 383 | 56 | **FD 07** | 150 | — | 1050 | 406 | 72 | **AFD 07** | 150 | — | 1050 | 406 | 70 | **FA 07** | 150 | 1050 | 406 | 74 | **BA 140** | 150 | 1000 | 433 | 88 |
| 7.5 | **BN 160M 6** | 955 | 75 | • | 85.0 | 85.0 | 84.8 | 0.81 | 15.7 | 5.9 | 2.2 | 2.0 | 740 | 83 | **FD 08** | 170 | — | 900 | 815 | 112 | | | | | | | **FA 08** | 170 | 900 | 815 | 113 | | | | | |
| 11 | **BN 160L 6** | 960 | 109 | • | 86.4 | 86.5 | 85.9 | 0.81 | 22.7 | 6.6 | 2.5 | 2.3 | 970 | 103 | **FD 08** | 200 | — | 800 | 1045 | 133 | | | | | | | **FA 08** | 200 | 800 | 1045 | 133 | | | | | |
| 15 | **BN 180L 6** | 970 | 148 | • | 87.7 | 88.0 | 87.3 | 0.82 | 30 | 6.2 | 2.0 | 2.4 | 1550 | 130 | **FD 09** | 300 | — | 600 | 1750 | 170 | | | | | | | | | | | | | | | | |
| 18.5 | **BN 200LA 6** | 960 | 184 | • | 88.6 | 88.0 | 87.3 | 0.81 | 37 | 5.9 | 2.0 | 2.3 | 1700 | 145 | **FD 09** | 400 | — | 450 | 1900 | 185 | | | | | | | | | | | | | | | | |

○ = n.a. • = IE1

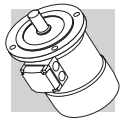
## 2/4P — 3000/1500 min$^{-1}$ - S1 — 50 Hz

| | | | | | | | | | | | | freno c.c. | | | | | | freno c.a. | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | FD | | | | | | FD | | | | | | FA | | | | | | BA | | | | | |
| $P_n$ | | n | $M_n$ | η | cosφ | In | Is/In | Ms/Mn | Ma/Mn | $J_m$ | IM B5 | Mod | Mb | $Z_o$ 1/h | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ 1/h | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 | | | |
| kW | | min$^{-1}$ | Nm | % | | 400V A | | | | x 10$^{-4}$ kgm$^2$ | Kg | | Nm | NB | SB | x 10$^{-4}$ kgm$^2$ | Kg | | Nm | NB | SB | x 10$^{-4}$ kgm$^2$ | Kg | | Nm | 1/h | x 10$^{-4}$ kgm$^2$ | Kg | | max. Nm | 1/h | x 10$^{-4}$ kgm$^2$ | Kg | | | |
| 0.20 | **BN 63B** 2 | 2700 | 0.71 | 55 | 0.82 | 0.64 | 3.5 | 2.1 | 1.9 | 2.9 | 4.4 | **FD 02** | 3.5 | 2200 | 2600 | 3.5 | 6.1 | **AFD 02** | 3.5 | 2200 | 2600 | 3.5 | 5.9 | **FA 02** | 3.5 | 2600 | 3.5 | 5.9 | **BA 60** | 5.0 | 2000 | 4.9 | 6.7 | | |
| 0.15 | 4 | 1350 | 1.06 | 49 | 0.67 | 0.66 | 2.6 | 1.8 | 1.7 | | | | | 4000 | 5100 | | | | | 4000 | 5100 | | | | | 5100 | | | | | 4000 | | | | |
| 0.28 | **BN 71A** 2 | 2700 | 0.99 | 56 | 0.82 | 0.88 | 2.9 | 1.9 | 1.7 | 4.7 | 4.4 | **FD 03** | 3.5 | 2100 | 2400 | 5.8 | 7.1 | **AFD 03** | 5 | 2100 | 2400 | 5.8 | 6.8 | **FA 03** | 3.5 | 2400 | 5.8 | 6.8 | **BA 70** | 8.0 | 2100 | 5.6 | 8.3 | | |
| 0.20 | 4 | 1370 | 1.39 | 59 | 0.72 | 0.68 | 3.1 | 1.8 | 1.7 | | | | | 3800 | 4800 | | | | | 3800 | 4800 | | | | | 4800 | | | | | 4200 | | | | |
| 0.37 | **BN 71B** 2 | 2740 | 1.29 | 56 | 0.82 | 1.16 | 3.5 | 1.8 | 1.8 | 5.8 | 5.1 | **FD 03** | 5.0 | 1400 | 2100 | 6.9 | 7.8 | **AFD 03** | 5 | 1400 | 2100 | 6.9 | 7.5 | **FA 03** | 5.0 | 2100 | 6.9 | 7.5 | **BA 70** | 8.0 | 1800 | 7.8 | 9.0 | | |
| 0.25 | 4 | 1390 | 1.72 | 60 | 0.73 | 0.82 | 3.3 | 2.0 | 1.9 | | | | | 2900 | 4200 | | | | | 2900 | 4200 | | | | | 4200 | | | | | 3600 | | | | |
| 0.45 | **BN 71C** 2 | 2780 | 1.55 | 63 | 0.85 | 1.21 | 3.8 | 1.8 | 1.8 | 6.9 | 5.9 | **FD 03** | 5.0 | 1400 | 2100 | 8.0 | 8.6 | **AFD 03** | 5 | 1400 | 2100 | 8.0 | 8.3 | **FA 03** | 5.0 | 2100 | 8.0 | 8.3 | **BA 70** | 8.0 | 1800 | 8.9 | 9.8 | | |
| 0.30 | 4 | 1400 | 2.0 | 63 | 0.73 | 0.94 | 3.6 | 2.0 | 1.9 | | | | | 2900 | 4200 | | | | | 2900 | 4200 | | | | | 4200 | | | | | 3600 | | | | |
| 0.55 | **BN 80A** 2 | 2800 | 1.9 | 63 | 0.85 | 1.48 | 3.9 | 1.7 | 1.7 | 15 | 8.2 | **FD 04** | 5.0 | 1600 | 2300 | 17 | 12.1 | **AFD 04** | 5 | 1600 | 2300 | 17 | 11.7 | **FA 04** | 5.0 | 2300 | 16.6 | 12.0 | **BA 80** | 18 | 2100 | 18 | 13.5 | | |
| 0.37 | 4 | 1400 | 2.5 | 67 | 0.79 | 1.01 | 4.1 | 1.8 | 1.9 | | | | | 3000 | 4000 | | | | | 3000 | 4000 | | | | | 4000 | | | | | 3700 | | | | |
| 0.75 | **BN 80B** 2 | 2780 | 2.6 | 65 | 0.85 | 1.96 | 3.8 | 1.9 | 1.8 | 20 | 9.9 | **FD 04** | 10 | 1400 | 1600 | 22 | 13.8 | **AFD 04** | 10 | 1400 | 1600 | 22 | 13.4 | **FA 04** | 10 | 1600 | 22 | 13.7 | **BA 80** | 18 | 1500 | 22 | 15.2 | | |
| 0.55 | 4 | 1400 | 3.8 | 68 | 0.81 | 1.44 | 3.9 | 1.7 | 1.7 | | | | | 2700 | 3600 | | | | | 2700 | 3600 | | | | | 3600 | | | | | 3300 | | | | |
| 1.1 | **BN 90S** 2 | 2790 | 3.8 | 71 | 0.82 | 2.73 | 4.7 | 2.3 | 2.0 | 21 | 12.2 | **FD 14** | 10 | 1500 | 1600 | 23 | 16.4 | **AFD 14** | 10 | 1500 | 1600 | 23 | 16 | **FA 14** | 10 | 1600 | 23 | 16.3 | **BA 90** | 35 | 1300 | 28 | 19.5 | | |
| 0.75 | 4 | 1390 | 5.2 | 66 | 0.79 | 2.08 | 4.6 | 2.4 | 2.2 | | | | | 2300 | 2800 | | | | | 2300 | 2800 | | | | | 2800 | | | | | 2300 | | | | |
| 1.5 | **BN 90L** 2 | 2780 | 5.2 | 70 | 0.85 | 3.64 | 4.5 | 2.4 | 2.1 | 28 | 14.0 | **FD 05** | 26 | 1050 | 1200 | 32 | 20 | **AFD 05** | 26 | 1050 | 1200 | 32 | 19.4 | **FA 05** | 26 | 1200 | 32 | 21 | **BA 90** | 35 | 1100 | 35 | 21 | | |
| 1.1 | 4 | 1390 | 7.6 | 73 | 0.81 | 2.69 | 4.7 | 2.5 | 2.2 | | | | | 1600 | 2000 | | | | | 1600 | 2000 | | | | | 2000 | | | | | 1800 | | | | |
| 2.2 | **BN 100LA** 2 | 2800 | 7.5 | 72 | 0.85 | 5.2 | 4.5 | 2.0 | 1.9 | 40 | 18.3 | **FD 15** | 26 | 600 | 900 | 44 | 25 | **AFD 15** | 26 | 600 | 900 | 44 | 24.4 | **FA 15** | 26 | 900 | 44 | 25 | **BA 100** | 50 | 750 | 51 | 29 | | |
| 1.5 | 4 | 1410 | 10.2 | 73 | 0.79 | 3.8 | 4.7 | 2.0 | 2.0 | | | | | 1300 | 2300 | | | | | 1300 | 2300 | | | | | 2300 | | | | | 1900 | | | | |
| 3.5 | **BN 100LB** 2 | 2850 | 11.7 | 80 | 0.84 | 7.5 | 5.4 | 2.2 | 2.1 | 61 | 25 | **FD 15** | 40 | 500 | 900 | 65 | 31 | **AFD 15** | 40 | 500 | 900 | 65 | 30 | **FA 15** | 40 | 900 | 65 | 32 | **BA 100** | 50 | 750 | 72 | 35 | | |
| 2.5 | 4 | 1420 | 16.8 | 82 | 0.80 | 5.5 | 5.2 | 2.2 | 2.2 | | | | | 1000 | 2100 | | | | | 1000 | 2100 | | | | | 2100 | | | | | 1800 | | | | |
| 4 | **BN 112M** 2 | 2880 | 13.3 | 79 | 0.83 | 8.8 | 6.1 | 2.4 | 2.0 | 98 | 30 | **FD 06S** | 60 | — | 700 | 107 | 40 | **AFD 06S** | 60 | — | 700 | 107 | 39 | **FA 06S** | 60 | 700 | 107 | 42 | **BA 110** | 75 | 600 | 114 | 43 | | |
| 3.3 | 4 | 1420 | 22.2 | 80 | 0.80 | 7.4 | 5.1 | 2.1 | 2.0 | | | | | — | 1200 | | | | | — | 1200 | | | | | 1200 | | | | | 1100 | | | | |
| 5.5 | **BN 132S** 2 | 2890 | 18.2 | 80 | 0.87 | 11.4 | 5.9 | 2.4 | 2.0 | 213 | 44 | **FD 56** | 75 | — | 350 | 223 | 57 | **AFD 06** | 75 | — | 350 | 223 | 56 | **FA 06** | 75 | 350 | 223 | 58 | **BA 140** | 150 | 300 | 263 | 76 | | |
| 4.4 | 4 | 1440 | 29 | 82 | 0.84 | 9.2 | 5.3 | 2.2 | 2.0 | | | | | — | 900 | | | | | — | 900 | | | | | 900 | | | | | 750 | | | | |
| 7.5 | **BN 132MA** 2 | 2900 | 25 | 82 | 0.87 | 15.2 | 6.5 | 2.4 | 2.0 | 270 | 53 | **FD 06** | 100 | — | 350 | 280 | 66 | **AFD 06** | 100 | — | 350 | 280 | 65 | **FA 07** | 100 | 350 | 293 | 71 | **BA 140** | 150 | 300 | 320 | 85 | | |
| 6 | 4 | 1430 | 40 | 84 | 0.85 | 12.1 | 5.8 | 2.3 | 2.1 | | | | | — | 900 | | | | | — | 900 | | | | | 900 | | | | | 800 | | | | |
| 9.2 | **BN 132MB** 2 | 2920 | 30 | 83 | 0.86 | 18.6 | 6.0 | 2.6 | 2.2 | 319 | 59 | **FD 07** | 150 | — | 300 | 342 | 75 | **AFD 07** | 150 | — | 300 | 342 | 73 | **FA 07** | 150 | 300 | 342 | 77 | **BA 140** | 150 | 300 | 369 | 91 | | |
| 7.3 | 4 | 1440 | 48 | 85 | 0.85 | 14.6 | 5.5 | 2.3 | 2.1 | | | | | — | 800 | | | | | — | 800 | | | | | 800 | | | | | 750 | | | | |





## 2/6P — 3000/1000 min$^{-1}$ - S3 60/40% — 50 Hz

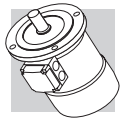


| | | | | | | | | | | | | freno c.c. | | | | | | freno c.c. a entrehierro fijo | | | | | | freno c.a. | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | FD | | | | | | FD | | | | | | FA | | | | | BA | | | | | |
| $P_n$ | | n | $M_n$ | η | cosφ | In | Is/In | Ms/Mn | Ma/Mn | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 | |
| | | | | | | 400V | | | | x 10$^{-4}$ | | | | 1/h | | x 10$^{-4}$ | | | | 1/h | | x 10$^{-4}$ | | | | 1/h | x 10$^{-4}$ | | | max. | 1/h | x 10$^{-4}$ | | |
| kW | | min$^{-1}$ | Nm | % | | A | | | | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | | kgm$^2$ | Kg | | Nm | | kgm$^2$ | Kg | |
| 0.25 | **BN 71A 2** | 2850 | 0.84 | 60 | 0.82 | 0.73 | 4.3 | 1.9 | 1.8 | 6.9 | 5.9 | **FD 03** | 1.75 | 1500 | 1700 | 8.0 | 8.6 | **AFD 03** | 2.5 | 1500 | 1700 | 8.0 | 8.3 | **FA 03** | 2.5 | 1700 | 8.0 | 8.3 | **BA 70** | 8.0 | 1500 | 8.9 | 9.8 | |
| 0.08 | **6** | 910 | 0.84 | 43 | 0.70 | 0.38 | 2.1 | 1.4 | 1.5 | | | | | 10000 | 13000 | | | | | 10000 | 13000 | | | | | 13000 | | | | | 11000 | | | |
| 0.37 | **BN 71B 2** | 2880 | 1.23 | 62 | 0.80 | 1.08 | 4.4 | 1.9 | 1.8 | 9.1 | 7.3 | **FD 03** | 3.5 | 1000 | 1300 | 10.2 | 10.0 | **AFD 03** | 5 | 1000 | 1300 | 10.2 | 9.7 | **FA 03** | 3.5 | 1300 | 10.2 | 9.7 | **BA 70** | 8.0 | 1200 | 11.1 | 11.2 | |
| 0.12 | **6** | 900 | 1.27 | 44 | 0.73 | 0.54 | 2.4 | 1.4 | 1.5 | | | | | 9000 | 11000 | | | | | 9000 | 11000 | | | | | 11000 | | | | | 10000 | | | |
| 0.55 | **BN 80A 2** | 2800 | 1.88 | 63 | 0.86 | 1.47 | 4.5 | 1.9 | 1.7 | 20 | 9.9 | **FD 04** | 5.0 | 1500 | 1800 | 22 | 13.8 | **AFD 04** | 5 | 1500 | 1800 | 22 | 13.4 | **FA 04** | 5.0 | 1800 | 22 | 13.7 | **BA 80** | 18 | 1700 | 23 | 15.2 | |
| 0.18 | **6** | 930 | 1.85 | 52 | 0.65 | 0.77 | 3.3 | 2.0 | 1.9 | | | | | 4100 | 6300 | | | | | 4100 | 6300 | | | | | 6300 | | | | | 6000 | | | |
| 0.75 | **BN 80B 2** | 2800 | 2.6 | 66 | 0.87 | 1.89 | 4.3 | 1.8 | 1.6 | 25 | 11.3 | **FD 04** | 5.0 | 1700 | 1900 | 27 | 15.2 | **AFD 04** | 5 | 1700 | 1900 | 27 | 14.8 | **FA 04** | 5.0 | 1900 | 27 | 15.1 | **BA 80** | 18 | 1800 | 28 | 16.6 | |
| 0.25 | **6** | 930 | 2.6 | 54 | 0.67 | 1.00 | 3.2 | 1.7 | 1.8 | | | | | 3800 | 6000 | | | | | 3800 | 6000 | | | | | 6000 | | | | | 5600 | | | |
| 1.10 | **BN 90L 2** | 2860 | 3.7 | 67 | 0.84 | 2.82 | 4.7 | 2.1 | 1.9 | 28 | 14.0 | **FD 05** | 13 | 1400 | 1600 | 32 | 20 | **AFD 05** | 13 | 1400 | 1600 | 32 | 19.4 | **FA 05** | 13 | 1600 | 32 | 21 | **BA 90** | 35 | 1500 | 35 | 21 | |
| 0.37 | **6** | 920 | 3.8 | 59 | 0.71 | 1.27 | 3.3 | 1.6 | 1.6 | | | | | 3400 | 5200 | | | | | 3400 | 5200 | | | | | 5200 | | | | | 4700 | | | |
| 1.5 | **BN 100LA 2** | 2880 | 5 | 73 | 0.84 | 3.53 | 5.1 | 1.9 | 2.0 | 40 | 18.3 | **FD 15** | 13 | 1000 | 1200 | 44 | 24 | **AFD 15** | 13 | 1000 | 1200 | 44 | 23.4 | **FA 15** | 13 | 1200 | 44 | 25 | **BA 100** | 50 | 1050 | 51 | 29 | |
| 0.55 | **6** | 940 | 5.6 | 64 | 0.67 | 1.85 | 3.5 | 1.7 | 1.8 | | | | | 2900 | 4000 | | | | | 2900 | 4000 | | | | | 4000 | | | | | 3500 | | | |
| 2.2 | **BN 100LB 2** | 2900 | 7.2 | 77 | 0.85 | 4.9 | 5.9 | 2.0 | 2.0 | 61 | 25 | **FD 15** | 26 | 700 | 900 | 65 | 31 | **AFD 15** | 26 | 700 | 900 | 65 | 30 | **FA 15** | 26 | 900 | 65 | 32 | **BA 100** | 50 | 800 | 72 | 36 | |
| 0.75 | **6** | 950 | 7.5 | 67 | 0.64 | 2.5 | 3.3 | 1.9 | 1.8 | | | | | 2100 | 3000 | | | | | 2100 | 3000 | | | | | 3000 | | | | | 2700 | | | |
| 3 | **BN 112M 2** | 2900 | 9.9 | 78 | 0.87 | 6.4 | 6.3 | 2.0 | 2.1 | 98 | 30 | **FD 06S** | 40 | — | 1000 | 107 | 40 | **AFD 06S** | 40 | — | 1000 | 107 | 39 | **FA 06S** | 40 | 1000 | 107 | 32 | **BA 110** | 75 | 930 | 114 | 43 | |
| 1.1 | **6** | 950 | 11.1 | 72 | 0.64 | 3.4 | 3.9 | 1.8 | 1.8 | | | | | — | 2600 | | | | | — | 2600 | | | | | 2600 | | | | | 2400 | | | |
| 4.5 | **BN 132S 2** | 2910 | 14.8 | 78 | 0.84 | 9.9 | 5.8 | 1.9 | 1.8 | 213 | 44 | **FD 56** | 37 | — | 500 | 223 | 57 | **AFD 06** | 37 | — | 500 | 223 | 56 | **FA 06** | 37 | 500 | 223 | 58 | **BA 140** | 150 | 400 | 263 | 76 | |
| 1.5 | **6** | 960 | 14.9 | 74 | 0.67 | 4.4 | 4.2 | 1.9 | 2.0 | | | | | — | 2100 | | | | | — | 2100 | | | | | 2100 | | | | | 1700 | | | |
| 5.5 | **BN 132M 2** | 2920 | 18.0 | 78 | 0.87 | 11.7 | 6.2 | 2.1 | 1.9 | 270 | 53 | **FD 56** | 50 | — | 400 | 280 | 66 | **AFD 06** | 62 | — | 400 | 280 | 65 | **FA 06** | 50 | 400 | 280 | 67 | **BA 140** | 150 | 350 | 320 | 85 | |
| 2.2 | **6** | 960 | 22 | 77 | 0.71 | 5.8 | 4.3 | 2.1 | 2.0 | | | | | — | 1900 | | | | | — | 1900 | | | | | 1900 | | | | | 1600 | | | |

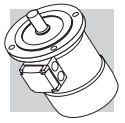
## 2/8P — 3000/750 min$^{-1}$ - S3 60/40% — 50 Hz

| | | | | | | | | | | | | freno c.c. | | | | | | freno c.c. a entrehierro fijo | | | | | | freno c.a. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | FD | | | | | | FD | | | | | | FA | | | | | BA | | | | |
| $P_n$ kW | | n min$^{-1}$ | $M_n$ Nm | η % | cosφ | In 400V A | Is / In | Ms / Mn | Ma / Mn | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h NB | $Z_o$ 1/h SB | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h NB | $Z_o$ 1/h SB | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb max. Nm | $Z_o$ 1/h | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg |
| 0.25 | **BN 71A** **2** | 2790 | 0.86 | 61 | 0.87 | 0.68 | 3.9 | 1.8 | 1.9 | 10.9 | 6.7 | **FD 03** | 1.75 | 1300 | 1400 | 12 | 9.4 | **AFD 03** | 2.5 | 1300 | 1400 | 12 | 9.1 | **FA 03** | 2.5 | 1400 | 12 | 9.1 | **BA 70** | 8.0 | 1300 | 12.9 | 10.6 |
| 0.06 | **8** | 680 | 0.84 | 31 | 0.61 | 0.46 | 2.0 | 1.8 | 1.9 | | | | | 10000 | 13000 | | | | | 10000 | 13000 | | | | | 13000 | | | | | 12000 | | |
| 0.37 | **BN 71B** **2** | 2800 | 1.26 | 63 | 0.86 | 0.99 | 3.9 | 1.8 | 1.9 | 12.9 | 7.7 | **FD 03** | 3.5 | 1200 | 1300 | 14 | 10.4 | **AFD 03** | 5 | 1200 | 1300 | 14 | 10.1 | **FA 03** | 3.5 | 1300 | 14 | 10.1 | **BA 70** | 8.0 | 1200 | 14.9 | 11.6 |
| 0.09 | **8** | 670 | 1.28 | 34 | 0.75 | 0.51 | 1.8 | 1.4 | 1.5 | | | | | 9500 | 13000 | | | | | 9500 | 13000 | | | | | 13000 | | | | | 12000 | | |
| 0.55 | **BN 80A** **2** | 2830 | 1.86 | 66 | 0.86 | 1.40 | 4.4 | 2.1 | 2.0 | 20 | 9.9 | **FD 04** | 5.0 | 1500 | 1800 | 22 | 13.8 | **AFD 04** | 5 | 1500 | 1800 | 22 | 13.4 | **FA 04** | 5.0 | 1800 | 22 | 13.7 | **BA 80** | 18 | 1700 | 23 | 15.2 |
| 0.13 | **8** | 690 | 1.80 | 41 | 0.64 | 0.72 | 2.3 | 1.6 | 1.7 | | | | | 5600 | 8000 | | | | | 5600 | 8000 | | | | | 8000 | | | | | 7500 | | |
| 0.75 | **BN 80B** **2** | 2800 | 2.6 | 68 | 0.88 | 1.81 | 4.6 | 2.1 | 2.0 | 25 | 11.3 | **FD 04** | 10 | 1700 | 1900 | 27 | 15.2 | **AFD 04** | 10 | 1700 | 1900 | 27 | 14.8 | **FA 04** | 10 | 1900 | 27 | 15.1 | **BA 80** | 18 | 1800 | 28 | 16.6 |
| 0.18 | **8** | 690 | 2.5 | 43 | 0.66 | 0.92 | 2.3 | 1.6 | 1.7 | | | | | 4800 | 7300 | | | | | 4800 | 7300 | | | | | 7300 | | | | | 7000 | | |
| 1.10 | **BN 90L** **2** | 2830 | 3.7 | 63 | 0.84 | 3.00 | 4.5 | 2.1 | 1.9 | 28 | 14.0 | **FD 05** | 13 | 1400 | 1600 | 32 | 20 | **AFD 05** | 13 | 1400 | 1600 | 32 | 19.4 | **FA 05** | 13 | 1600 | 32 | 21 | **BA 90** | 35 | 1400 | 35 | 21 |
| 0.28 | **8** | 690 | 3.9 | 48 | 0.63 | 1.34 | 2.4 | 1.8 | 1.9 | | | | | 3400 | 5100 | | | | | 3400 | 5100 | | | | | 5100 | | | | | 4500 | | |
| 1.5 | **BN 100LA** **2** | 2880 | 5.0 | 69 | 0.85 | 3.69 | 4.7 | 1.9 | 1.8 | 40 | 18.3 | **FD 15** | 13 | 1000 | 1200 | 44 | 25 | **AFD 15** | 13 | 1000 | 1200 | 44 | 14.4 | **FA 15** | 13 | 1200 | 44 | 25 | **BA 100** | 50 | 1000 | 52 | 29 |
| 0.37 | **8** | 690 | 5.1 | 46 | 0.63 | 1.84 | 2.1 | 1.6 | 1.6 | | | | | 3300 | 5000 | | | | | 3300 | 5000 | | | | | 5000 | | | | | 4200 | | |
| 2.4 | **BN 100LB** **2** | 2900 | 7.9 | 75 | 0.82 | 5.6 | 5.4 | 2.1 | 2.0 | 61 | 25 | **FD 15** | 26 | 550 | 700 | 65 | 31 | **AFD 15** | 26 | 550 | 700 | 65 | 30 | **FA 15** | 26 | 700 | 65 | 32 | **BA 100** | 50 | 600 | 72 | 36 |
| 0.55 | **8** | 700 | 7.5 | 54 | 0.58 | 2.5 | 2.6 | 1.8 | 1.8 | | | | | 2000 | 3500 | | | | | 2000 | 3500 | | | | | 3500 | | | | | 3100 | | |
| 3 | **BN 112M** **2** | 2900 | 9.9 | 76 | 0.87 | 6.5 | 6.3 | 2.1 | 1.9 | 98 | 30 | **FD 06S** | 40 | — | 900 | 107 | 40 | **AFD 06S** | 40 | — | 900 | 107 | 39 | **FA 06S** | 40 | 900 | 107 | 42 | **BA 110** | 75 | 800 | 114 | 43 |
| 0.75 | **8** | 690 | 10.4 | 60 | 0.65 | 2.8 | 2.5 | 1.6 | 1.6 | | | | | — | 2900 | | | | | — | 2900 | | | | | 2900 | | | | | 2700 | | |
| 4 | **BN 132S** **2** | 2870 | 13.3 | 73 | 0.84 | 9.4 | 5.6 | 2.3 | 2.4 | 213 | 44 | **FD 56** | 37 | — | 500 | 223 | 57 | **AFD 06** | 37 | — | 500 | 223 | 56 | **FA 06** | 37 | 500 | 223 | 58 | **BA 140** | 150 | 400 | 263 | 76 |
| 1 | **8** | 690 | 13.8 | 66 | 0.62 | 3.5 | 2.9 | 1.9 | 1.8 | | | | | — | 3500 | | | | | — | 3500 | | | | | 3500 | | | | | 3000 | | |
| 5.5 | **BN 132M** **2** | 2870 | 18.3 | 75 | 0.84 | 12.6 | 6.1 | 2.4 | 2.5 | 270 | 53 | **FD 06** | 50 | — | 400 | 280 | 66 | **AFD 06** | 62 | — | 400 | 280 | 65 | **FA 06** | 50 | 400 | 280 | 67 | **BA 140** | 150 | 350 | 320 | 85 |
| 1.5 | **8** | 690 | 21 | 68 | 0.63 | 5.1 | 2.9 | 1.9 | 1.9 | | | | | — | 2400 | | | | | — | 2400 | | | | | 2400 | | | | | 2100 | | |





## 2/12P — 3000/500 min$^{-1}$ - S3 60/40% — 50 Hz

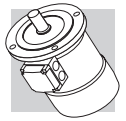


| | | | | | | | | | | | | freno c.c. | | | | | | freno c.c. a entrehierro fijo | | | | | | freno c.a. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | FD | | | | | | FD | | | | | | FA | | | | | BA | | | | |
| $P_n$ | | n | $M_n$ | η | cosφ | In | Is | Ms | Ma | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 |
| | | | | | | 400V | | | | x $10^{-4}$ | | | | 1/h | | x $10^{-4}$ | | | | 1/h | | x $10^{-4}$ | | | | 1/h | x $10^{-4}$ | | | max. | 1/h | x $10^{-4}$ | |
| kW | | min$^{-1}$ | Nm | % | | A | In | Mn | Mn | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | | kgm$^2$ | Kg | | Nm | | kgm$^2$ | Kg |
| 0.55 | **BN 80B 2** | 2820 | 1.86 | 64 | 0.89 | 1.39 | 4.2 | 1.6 | 1.7 | 25 | 11.3 | **FD 04** | 5.0 | 1000 | 1300 | 27 | 15.2 | **AFD 04** | 5 | 1000 | 1300 | 27 | 14.8 | **FA 04** | 5.0 | 1300 | 27 | 15.1 | **BA 80** | 18 | 1200 | 28 | 16.6 |
| 0.09 | **12** | 430 | 2.0 | 30 | 0.63 | 0.69 | 1.8 | 1.9 | 1.8 | | | | | 8000 | 12000 | | | | | 8000 | 12000 | | | | | 12000 | | | | | 11000 | | |
| 0.75 | **BN 90L 2** | 2790 | 2.6 | 56 | 0.89 | 2.17 | 4.2 | 1.8 | 1.7 | 26 | 12.6 | **FD 05** | 13 | 1000 | 1150 | 30 | 18.6 | **AFD 05** | 13 | 1000 | 1150 | 30 | 18.0 | **FA 05** | 13 | 1150 | 30 | 19.3 | **BA 90** | 35 | 1050 | 33 | 19.9 |
| 0.12 | **12** | 430 | 2.7 | 26 | 0.63 | 1.06 | 1.7 | 1.4 | 1.6 | | | | | 4600 | 6300 | | | | | 4600 | 6300 | | | | | 6300 | | | | | 5700 | | |
| 1.10 | **BN 100LA 2** | 2850 | 3.7 | 65 | 0.85 | 2.87 | 4.5 | 1.6 | 1.8 | 40 | 18.3 | **FD 15** | 13 | 700 | 900 | 44 | 25 | **AFD 15** | 13 | 700 | 900 | 44 | 24.4 | **FA 15** | 13 | 900 | 44 | 25 | **BA 100** | 50 | 750 | 52 | 29 |
| 0.18 | **12** | 430 | 4.0 | 26 | 0.54 | 1.85 | 1.5 | 1.3 | 1.5 | | | | | 4000 | 6000 | | | | | 4000 | 6000 | | | | | 6000 | | | | | 5000 | | |
| 1.5 | **BN 100LB 2** | 2900 | 4.9 | 67 | 0.86 | 3.76 | 5.6 | 1.9 | 1.9 | 54 | 22 | **FD 15** | 13 | 700 | 900 | 58 | 28 | **AFD 15** | 13 | 700 | 900 | 58 | 27 | **FA 15** | 13 | 900 | 58 | 29 | **BA 100** | 50 | 800 | 66 | 32 |
| 0.25 | **12** | 440 | 5.4 | 36 | 0.46 | 2.18 | 1.8 | 1.7 | 1.8 | | | | | 3800 | 5000 | | | | | 3800 | 5000 | | | | | 5000 | | | | | 4300 | | |
| 2 | **BN 112M 2** | 2900 | 6.6 | 74 | 0.88 | 4.43 | 6.5 | 2.1 | 2.0 | 98 | 30 | **FD 06S** | 20 | — | 800 | 107 | 40 | **AFD 06S** | 20 | — | 800 | 107 | 39 | **FA 06S** | 20 | 800 | 107 | 42 | **BA 110** | 75 | 750 | 114 | 43 |
| 0.3 | **12** | 460 | 6.2 | 46 | 0.43 | 2.19 | 2.0 | 2.1 | 2.0 | | | | | — | 3400 | | | | | — | 3400 | | | | | 3400 | | | | | 3200 | | |
| 3 | **BN 132S 2** | 2920 | 9.8 | 74 | 0.87 | 6.7 | 6.8 | 2.3 | 1.9 | 213 | 44 | **FD 56** | 37 | — | 450 | 223 | 57 | **AFD 06** | 37 | — | 450 | 223 | 56 | **FA 06** | 37 | 450 | 223 | 58 | **BA 140** | 150 | 380 | 263 | 76 |
| 0.5 | **12** | 470 | 10.2 | 51 | 0.43 | 3.3 | 2.0 | 1.7 | 1.6 | | | | | — | 3000 | | | | | — | 3000 | | | | | 3000 | | | | | 2500 | | |
| 4 | **BN 132M 2** | 2920 | 13.1 | 75 | 0.89 | 8.6 | 5.9 | 2.4 | 2.3 | 270 | 53 | **FD 56** | 37 | — | 400 | 280 | 66 | **AFD 06** | 37 | — | 400 | 280 | 65 | **FA 06** | 37 | 400 | 280 | 67 | **BA 140** | 150 | 350 | 320 | 85 |
| 0.7 | **12** | 460 | 14.5 | 53 | 0.44 | 4.3 | 1.9 | 1.7 | 1.6 | | | | | — | 2800 | | | | | — | 2800 | | | | | 2800 | | | | | 2500 | | |

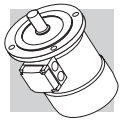
## 4/6P — 1500/1000 min$^{-1}$ - S1 — 50 Hz

| | | | | | | | | | | | | freno c.c. | | | | | | freno c.a. | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | FD | | | | | | FD | | | | | | FA | | | | | BA | | | | | | | |
| $P_n$ | | n | $M_n$ | η | cosφ | In | Is/In | Ms/Mn | Ma/Mn | $J_m$ | IM B5 | Mod | Mb | $Z_o$ 1/h | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ 1/h | | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ | IM B5 | | | | |
| kW | | min$^{-1}$ | Nm | % | | 400V A | | | | x 10$^{-4}$ kgm$^2$ | Kg | | Nm | NB | SB | x 10$^{-4}$ kgm$^2$ | Kg | | Nm | NB | SB | x 10$^{-4}$ kgm$^2$ | Kg | | Nm | 1/h | x 10$^{-4}$ kgm$^2$ | Kg | | max. Nm | 1/h | x 10$^{-4}$ kgm$^2$ | Kg | | | | |
| 0.22 | **BN 71B** 4 | 1410 | 1.5 | 64 | 0.74 | 0.67 | 3.9 | 1.8 | 1.9 | 9.1 | 7.3 | **FD 03** | 3.5 | 2500 | 3500 | 10.2 | 10.0 | **AFD 03** | 5 | 2500 | 3500 | 10.2 | 9.7 | **FA 03** | 3.5 | 3500 | 10.2 | 9.7 | **BA 70** | 8.0 | 3200 | 11.1 | 11.2 | | | | |
| 0.13 | 6 | 920 | 1.4 | 43 | 0.67 | 0.65 | 2.3 | 1.6 | 1.7 | | | | | 5000 | 9000 | | | | | 5000 | 9000 | | | | | 9000 | | | | | 8200 | | | | | | |
| 0.30 | **BN 80A** 4 | 1410 | 2.0 | 61 | 0.82 | 0.87 | 3.5 | 1.3 | 1.5 | 15 | 8.2 | **FD 04** | 5.0 | 2500 | 3100 | 16.6 | 12.1 | **AFD 04** | 5 | 2500 | 3100 | 16.6 | 11.7 | **FA 04** | 5.0 | 3100 | 16.6 | 12.0 | **BA 80** | 18 | 2800 | 18 | 13.5 | | | | |
| 0.20 | 6 | 930 | 2.1 | 54 | 0.66 | 0.81 | 3.2 | 1.9 | 2.0 | | | | | 4000 | 6000 | | | | | 4000 | 6000 | | | | | 6000 | | | | | 5500 | | | | | | |
| 0.40 | **BN 80B** 4 | 1430 | 2.7 | 63 | 0.75 | 1.22 | 3.9 | 1.8 | 1.8 | 20 | 9.9 | **FD 04** | 10 | 1800 | 2300 | 22 | 13.8 | **AFD 04** | 10 | 1800 | 2300 | 22 | 13.4 | **FA 04** | 10 | 2300 | 22 | 13.7 | **BA 80** | 18 | 2200 | 23 | 15.2 | | | | |
| 0.26 | 6 | 930 | 2.7 | 55 | 0.70 | 0.97 | 2.7 | 1.5 | 1.6 | | | | | 3600 | 5500 | | | | | 3600 | 5500 | | | | | 5500 | | | | | 5200 | | | | | | |
| 0.55 | **BN 90S** 4 | 1420 | 3.7 | 70 | 0.78 | 1.45 | 4.5 | 2.0 | 1.9 | 21 | 12.2 | **FD 14** | 10 | 1500 | 2100 | 23 | 16.1 | **AFD 14** | 10 | 1500 | 2100 | 23 | 15.7 | **FA 14** | 10 | 2100 | 23 | 16.3 | **BA 90** | 35 | 1700 | 28 | 19.5 | | | | |
| 0.33 | 6 | 930 | 3.4 | 62 | 0.70 | 1.10 | 3.7 | 2.3 | 2.0 | | | | | 2500 | 4100 | | | | | 2500 | 4100 | | | | | 4100 | | | | | 3300 | | | | | | |
| 0.75 | **BN 90L** 4 | 1420 | 5.0 | 74 | 0.78 | 1.88 | 4.3 | 1.9 | 1.8 | 28 | 14 | **FD 05** | 13 | 1400 | 2000 | 32 | 20 | **AFD 05** | 13 | 1400 | 2000 | 32 | 19.4 | **FA 05** | 13 | 2000 | 32 | 21 | **BA 90** | 35 | 1800 | 35 | 21 | | | | |
| 0.45 | 6 | 920 | 4.7 | 66 | 0.71 | 1.39 | 3.3 | 2.0 | 1.9 | | | | | 2300 | 3600 | | | | | 2300 | 3600 | | | | | 3600 | | | | | 3300 | | | | | | |
| 1.1 | **BN 100LA** 4 | 1450 | 7.2 | 74 | 0.79 | 2.72 | 5.0 | 1.7 | 1.9 | 82 | 22 | **FD 15** | 26 | 1400 | 2000 | 86 | 28 | **AFD 15** | 26 | 1400 | 2000 | 86 | 27 | **FA 15** | 26 | 2000 | 86 | 29 | **BA 100** | 50 | 1800 | 94 | 32 | | | | |
| 0.8 | 6 | 950 | 8.0 | 65 | 0.69 | 2.57 | 4.1 | 1.9 | 2.1 | | | | | 2100 | 3300 | | | | | 2100 | 3300 | | | | | 3300 | | | | | 3000 | | | | | | |
| 1.5 | **BN 100LB** 4 | 1450 | 9.9 | 75 | 0.79 | 3.65 | 5.1 | 1.7 | 1.9 | 95 | 25 | **FD 15** | 26 | 1300 | 1800 | 99 | 31 | **AFD 15** | 26 | 1300 | 1800 | 99 | 30 | **FA 15** | 26 | 1800 | 99 | 32 | **BA 100** | 50 | 1600 | 107 | 34 | | | | |
| 1.1 | 6 | 950 | 11.1 | 72 | 0.68 | 3.24 | 4.3 | 2.0 | 2.1 | | | | | 2000 | 3000 | | | | | 2000 | 3000 | | | | | 3000 | | | | | 2800 | | | | | | |
| 2.3 | **BN 112M** 4 | 1450 | 15.2 | 75 | 0.78 | 5.7 | 5.2 | 1.8 | 1.9 | 168 | 32 | **FD 06S** | 40 | — | 1600 | 177 | 42 | **AFD 06S** | 40 | — | 1600 | 177 | 41 | **FA 06S** | 40 | 1600 | 177 | 44 | **BA 110** | 75 | 1500 | 184 | 45 | | | | |
| 1.5 | 6 | 960 | 14.9 | 73 | 0.72 | 4.1 | 4.9 | 2.0 | 2.0 | | | | | — | 2400 | | | | | — | 2400 | | | | | 2400 | | | | | 2300 | | | | | | |
| 3.1 | **BN 132S** 4 | 1460 | 20 | 83 | 0.83 | 6.5 | 5.9 | 2.1 | 2.0 | 213 | 44 | **FD 56** | 37 | — | 1200 | 223 | 57 | **AFD 06** | 62 | — | 1200 | 223 | 56 | **FA 06** | 37 | 1200 | 223 | 58 | **BA 140** | 150 | 1000 | 263 | 76 | | | | |
| 2 | 6 | 960 | 20 | 77 | 0.75 | 4.9 | 4.5 | 2.1 | 2.1 | | | | | — | 1900 | | | | | — | 1900 | | | | | 1900 | | | | | 1600 | | | | | | |
| 4.2 | **BN 132MA** 4 | 1460 | 27 | 84 | 0.82 | 8.8 | 5.9 | 2.1 | 2.2 | 270 | 53 | **FD 06** | 50 | — | 900 | 280 | 66 | **AFD 06** | 62 | — | 900 | 280 | 65 | **FA 06** | 50 | 900 | 280 | 67 | **BA 140** | 150 | 800 | 320 | 85 | | | | |
| 2.6 | 6 | 960 | 26 | 79 | 0.72 | 6.6 | 4.3 | 2.0 | 2.0 | | | | | — | 1500 | | | | | — | 1500 | | | | | 1500 | | | | | 1300 | | | | | | |





## 4/8P — 1500/750 min$^{-1}$ - S1 — 50 Hz

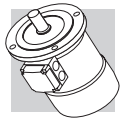


| | | | | | | | | | | | | freno c.c. | | | | | | freno c.c. a entrehierro fijo | | | | | | freno c.a. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | FD | | | | | | FD | | | | | | FA | | | | | BA | | | | |
| $P_n$ | | n | $M_n$ | η | cosφ | In | Is/In | Ms/Mn | Ma/Mn | $J_m$ x $10^{-4}$ | IM B5 | Mod | Mb | $Z_o$ 1/h | | $J_m$ x $10^{-4}$ | IM B5 | Mod | Mb | $Z_o$ 1/h | | $J_m$ x $10^{-4}$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ x $10^{-4}$ | IM B5 | Mod | Mb | $Z_o$ | $J_m$ x $10^{-4}$ | IM B5 |
| kW | | min$^{-1}$ | Nm | % | | 400V A | | | | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | 1/h | kgm$^2$ | Kg | | max. Nm | 1/h | kgm$^2$ | Kg |
| 0.37 | **BN 80A** 4 | 1400 | 2.5 | 63 | 0.82 | 1.03 | 3.3 | 1.4 | 1.4 | 15 | 8.2 | **FD 04** | 10 | 2300 | 3500 | 16.6 | 12.1 | **AFD 04** | 10 | 2300 | 3500 | 16.6 | 11.7 | **FA 04** | 10 | 3500 | 16.6 | 12.0 | **BA 80** | 18 | 3200 | 18 | 13.5 |
| 0.18 | 8 | 690 | 2.5 | 44 | 0.60 | 0.98 | 2.2 | 1.5 | 1.6 | | | | | 4500 | 7000 | | | | | 4500 | 7000 | | | | | 7000 | | | | | 6500 | | |
| 0.55 | **BN 80B** 4 | 1390 | 3.8 | 65 | 0.86 | 1.42 | 3.8 | 1.7 | 1.6 | 20 | 9.9 | **FD 04** | 10 | 2200 | 2900 | 22 | 13.8 | **AFD 04** | 10 | 2200 | 2900 | 22 | 13.4 | **FA 04** | 10 | 2900 | 22 | 13.7 | **BA 80** | 18 | 2500 | 23 | 15.2 |
| 0.30 | 8 | 670 | 4.3 | 49 | 0.65 | 1.36 | 2.3 | 1.7 | 1.8 | | | | | 4200 | 6500 | | | | | 4200 | 6500 | | | | | 6500 | | | | | 5600 | | |
| 0.65 | **BN 90S** 4 | 1390 | 4.5 | 73 | 0.85 | 1.51 | 4.0 | 1.9 | 1.9 | 28 | 13.6 | **FD 14** | 15 | 2300 | 2800 | 30 | 17.8 | **AFD 14** | 15 | 2300 | 2800 | 30 | 17.4 | **FA 14** | 15 | 2800 | 30 | 17.7 | **BA 90** | 35 | 2400 | 35 | 21 |
| 0.35 | 8 | 690 | 4.8 | 49 | 0.57 | 1.81 | 2.5 | 2.1 | 2.2 | | | | | 3500 | 6000 | | | | | 3500 | 6000 | | | | | 6000 | | | | | 5100 | | |
| 0.9 | **BN 90L** 4 | 1370 | 6.3 | 73 | 0.87 | 2.05 | 3.8 | 1.8 | 1.8 | 30 | 15.1 | **FD 05** | 26 | 1700 | 2100 | 34 | 21 | **AFD 05** | 26 | 1700 | 2100 | 34 | 20.4 | **FA 05** | 26 | 2100 | 34 | 22 | **BA 90** | 35 | 1900 | 37 | 22 |
| 0.5 | 8 | 670 | 7.1 | 57 | 0.62 | 2.04 | 2.4 | 2.1 | 2.0 | | | | | 2500 | 4200 | | | | | 2500 | 4200 | | | | | 4200 | | | | | 3800 | | |
| 1.30 | **BN 100LA** 4 | 1420 | 8.7 | 72 | 0.83 | 3.14 | 4.3 | 1.7 | 1.8 | 82 | 22 | **FD 15** | 40 | 1300 | 1700 | 86 | 28 | **AFD 15** | 40 | 1300 | 1700 | 86 | 27 | **FA 15** | 40 | 1700 | 86 | 29 | **BA 100** | 50 | 1500 | 94 | 32 |
| 0.70 | 8 | 700 | 9.6 | 58 | 0.64 | 2.72 | 2.8 | 1.8 | 1.8 | | | | | 2000 | 3400 | | | | | 2000 | 3400 | | | | | 3400 | | | | | 3100 | | |
| 1.8 | **BN 100LB** 4 | 1420 | 12.1 | 69 | 0.87 | 4.3 | 4.2 | 1.6 | 1.7 | 95 | 25 | **FD 15** | 40 | 1200 | 1700 | 99 | 31 | **AFD 15** | 40 | 1200 | 1700 | 99 | 30 | **FA 15** | 40 | 1700 | 99 | 32 | **BA 100** | 50 | 1500 | 107 | 34 |
| 0.9 | 8 | 700 | 12.3 | 62 | 0.63 | 3.3 | 3.2 | 1.7 | 1.8 | | | | | 1600 | 2600 | | | | | 1600 | 2600 | | | | | 2600 | | | | | 2400 | | |
| 2.2 | **BN 112M** 4 | 1440 | 14.6 | 77 | 0.85 | 4.9 | 5.3 | 1.8 | 1.8 | 168 | 32 | **FD 06S** | 60 | — | 1200 | 177 | 42 | **AFD 06S** | 60 | — | 1200 | 177 | 41 | **FA 06S** | 60 | 1200 | 177 | 43 | **BA 110** | 75 | 1100 | 184 | 45 |
| 1.2 | 8 | 710 | 16.1 | 70 | 0.63 | 3.9 | 3.3 | 1.9 | 1.8 | | | | | — | 2000 | | | | | — | 2000 | | | | | 2000 | | | | | 1900 | | |
| 3.6 | **BN 132S** 4 | 1440 | 24 | 80 | 0.82 | 7.9 | 6.5 | 2.1 | 1.9 | 295 | 45 | **FD 56** | 75 | — | 1000 | 305 | 58 | **AFD 06** | 75 | — | 1000 | 305 | 57 | **FA 06** | 75 | 1000 | 305 | 59 | **BA 140** | 150 | 900 | 345 | 77 |
| 1.8 | 8 | 720 | 24 | 72 | 0.55 | 6.6 | 4.6 | 1.9 | 2.0 | | | | | — | 1400 | | | | | — | 1400 | | | | | 1400 | | | | | 1200 | | |
| 4.6 | **BN 132M** 4 | 1450 | 30 | 81 | 0.83 | 9.9 | 6.5 | 2.2 | 1.9 | 383 | 56 | **FD 06** | 100 | — | 1000 | 393 | 69 | **AFD 06** | 100 | — | 1000 | 393 | 68 | **FA 07** | 100 | 1000 | 406 | 74 | **BA 140** | 150 | 900 | 433 | 88 |
| 2.3 | 8 | 720 | 31 | 73 | 0.54 | 8.4 | 4.4 | 2.3 | 2.0 | | | | | — | 1300 | | | | | — | 1300 | | | | | 1300 | | | | | 1200 | | |

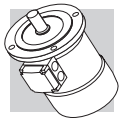
## 2P — 3000 min$^{-1}$ - S1 — 50 Hz

| | | | | | | | | | | | | | | | freno c.c. | | | | | | freno c.c. a entrehierro fijo | | | | | | freno c.a. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | FD | | | | | | AFD | | | | | | FA | | | | |
| $P_n$ | | n | $M_n$ | IE1 | η (100%) | η (75%) | η (50%) | cosφ | In 400V | Is / In | Ms / Mn | Ma / Mn | $J_m$ x $10^{-4}$ | IM B5 | Mod | Mb | $Z_o$ 1/h | | $J_m$ x $10^{-4}$ | IM B5 | Mod | Mb | $Z_o$ 1/h | | $J_m$ x $10^{-4}$ | IM B5 | Mod | Mb | $Z_o$ 1/h | $J_m$ x $10^{-4}$ | IM B5 |
| kW | | min$^{-1}$ | Nm | | % | % | % | | A | | | | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | | kgm$^2$ | Kg |
| 0.18 | **M 05A 2** | 2730 | 0.63 | ○ | 59.9 | 56.9 | 51.9 | 0.77 | 0.56 | 3.0 | 2.1 | 2.0 | 2.0 | 3.2 | **FD 02** | 1.75 | 3900 | 4800 | 2.6 | 4.9 | **AFD 02** | 1.75 | 3900 | 4800 | 2.6 | 4.7 | **FA 02** | 1.75 | 4800 | 2.6 | 4.7 |
| 0.25 | **M 05B 2** | 2740 | 0.87 | ○ | 66.0 | 64.8 | 64.8 | 0.76 | 0.72 | 3.3 | 2.3 | 2.3 | 2.3 | 3.6 | **FD 02** | 1.75 | 3900 | 4800 | 3.0 | 5.3 | **AFD 02** | 1.75 | 3900 | 4800 | 3.0 | 5.1 | **FA 02** | 1.75 | 4800 | 3.0 | 5.1 |
| 0.37 | **M 05C 2** | 2800 | 1.26 | ○ | 69.1 | 66.8 | 66.8 | 0.78 | 0.99 | 3.9 | 2.6 | 2.6 | 3.3 | 4.8 | **FD 02** | 3.5 | 3600 | 4500 | 3.9 | 6.5 | **AFD 02** | 3.5 | 3600 | 4500 | 3.9 | 6.3 | **FA 02** | 3.5 | 4500 | 3.9 | 6.3 |
| 0.55 | **M 1SD 2** | 2820 | 1.86 | ○ | 76.0 | 75.8 | 74.8 | 0.76 | 1.37 | 5.0 | 2.9 | 2.8 | 4.1 | 5.8 | **FD 03** | 5 | 2900 | 4200 | 5.3 | 8.5 | **AFD 03** | 5 | 2900 | 4200 | 5.3 | 8.2 | **FA 03** | 5 | 4200 | 5.3 | 8.2 |
| 0.75 | **M 1LA 2** | 2810 | 2.6 | ○ | 76.6 | 76.2 | 76.2 | 0.76 | 1.86 | 5.1 | 3.1 | 2.8 | 5.0 | 6.9 | **FD 03** | 5 | 1900 | 3300 | 6.1 | 9.6 | **AFD 03** | 7.5 | 1900 | 3300 | 6.1 | 9.3 | **FA 03** | 5 | 3300 | 6.1 | 9.3 |
| 1.1 | **M 2SA 2** | 2800 | 3.8 | • | 76.4 | 76.2 | 75.0 | 0.81 | 2.57 | 4.8 | 2.8 | 2.4 | 9.0 | 8.8 | **FD 04** | 10 | 1500 | 3000 | 10.6 | 11.9 | **AFD 04** | 10 | 1500 | 3000 | 10.6 | 11.5 | **FA 04** | 10 | 3000 | 10.6 | 12.6 |
| 1.5 | **M 2SB 2** | 2800 | 5.1 | • | 79.1 | 79.5 | 77.2 | 0.81 | 3.4 | 4.9 | 2.7 | 2.4 | 11.4 | 10.6 | **FD 04** | 15 | 1300 | 2600 | 13.0 | 9.9 | **AFD 04** | 15 | 1300 | 2600 | 13.0 | 9.5 | **FA 04** | 15 | 2600 | 13.0 | 14.4 |
| 2.2 | **M 3SA 2** | 2880 | 7.3 | • | 82.7 | 82.1 | 81.0 | 0.80 | 4.8 | 6.3 | 2.9 | 2.7 | 24 | 15.5 | **FD 15** | 26 | 1100 | 2400 | 28 | 22 | **AFD 15** | 26 | 1100 | 2400 | 28 | 21.4 | **FA 15** | 26 | 2400 | 28 | 23 |
| 3 | **M 3LA 2** | 2860 | 10.0 | • | 81.5 | 81.3 | 77.4 | 0.79 | 6.7 | 5.6 | 2.6 | 2.2 | 31 | 18.7 | **FD 15** | 26 | 700 | 1600 | 35 | 25 | **AFD 15** | 26 | 700 | 1600 | 35 | 24.4 | **FA 15** | 26 | 1600 | 35 | 26 |
| 4 | **M 3LB 2** | 2870 | 13.3 | • | 83.1 | 83.0 | 77.8 | 0.80 | 8.7 | 5.8 | 2.7 | 2.5 | 39 | 22 | **FD 15** | 40 | 450 | 900 | 43 | 28 | **AFD 15** | 40 | 450 | 900 | 43 | 27 | **FA 15** | 40 | 900 | 43 | 29 |
| 5.5 | **M 4SA 2** | 2890 | 18.2 | • | 84.7 | 84.5 | 81.2 | 0.84 | 11.2 | 5.9 | 2.6 | 2.2 | 101 | 33 | **FD 06** | 50 | — | 600 | 112 | 46 | **AFD 06** | 62 | — | 600 | 112 | 45 | **FA 06** | 50 | 600 | 112 | 47 |
| 7.5 | **M 4SB 2** | 2900 | 25 | • | 86.5 | 86.3 | 84.4 | 0.85 | 14.7 | 6.4 | 2.6 | 2.2 | 145 | 40 | **FD 06** | 50 | — | 550 | 154 | 53 | **AFD 06** | 62 | — | 550 | 154 | 52 | **FA 06** | 50 | 550 | 154 | 54 |
| 9.2 | **M 4LA 2** | 2930 | 30 | • | 87.0 | 86.5 | 83.6 | 0.86 | 17.7 | 6.7 | 2.8 | 2.3 | 178 | 51 | **FD 56** | 75 | — | 430 | 189 | 64 | **AFD 06** | 75 | — | 430 | 189 | 63 | **FA 06** | 75 | 430 | 189 | 65 |
| 11 | **M 4LC 2** | 2920 | 36 | • | 87.6 | 87.0 | 86.0 | 0.88 | 20.6 | 6.9 | 2.9 | 2.5 | 210 | 60 | | | | | | | | | | | | | | | | | |
| 15 | **M 5SB 2** | 2930 | 49 | • | 89.6 | 89.4 | 88.0 | 0.86 | 28.1 | 7.1 | 2.6 | 2.3 | 340 | 70 | | | | | | | | | | | | | | | | | |
| 18.5 | **M 5SC 2** | 2930 | 60 | • | 90.4 | 90.1 | 89.0 | 0.86 | 34 | 7.6 | 2.7 | 2.3 | 420 | 83 | | | | | | | | | | | | | | | | | |
| 22 | **M 5LA 2** | 2930 | 72 | • | 89.9 | 89.7 | 89.5 | 0.88 | 40 | 7.8 | 2.6 | 2.4 | 490 | 95 | | | | | | | | | | | | | | | | | |

○ = n.a. • = IE1



## 4P — 1500 min$^{-1}$ - S1 — 50 Hz



| | | | | | | | | | | | | | | | freno c.c. | | | | | | freno c.c. a entrehierro fijo | | | | | | freno c.a. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | FD | | | | | | AFD | | | | | | FA | | | | |
| $P_n$ | | n | $M_n$ | IE1 | η (100%) | η (75%) | η (50%) | cosφ | In 400V | Is / In | Ms / Mn | Ma / Mn | $J_m$ x $10^{-4}$ | IM B5 | Mod | Mb | $Z_o$ 1/h | | $J_m$ x $10^{-4}$ | IM B5 | Mod | Mb | $Z_o$ 1/h | | $J_m$ x $10^{-4}$ | IM B5 | Mod | Mb | $Z_o$ 1/h | $J_m$ x $10^{-4}$ | IM B5 |
| kW | | min$^{-1}$ | Nm | | % | % | % | | A | | | | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | 1/h | kgm$^2$ | Kg |
| 0.09 | M 0B 4 | 1350 | 0.64 | ○ | 51.7 | 47.6 | 42.9 | 0.60 | 0.42 | 2.6 | 2.5 | 2.4 | 1.5 | 2.9 | | | | | | | | | | | | | | | | | |
| 0.12 | M 05A 4 | 1350 | 0.85 | ○ | 59.8 | 56.2 | 47.0 | 0.62 | 0.47 | 2.6 | 1.9 | 1.8 | 2.0 | 3.2 | FD 02 | 1.75 | 10000 | 13000 | 2.6 | 4.9 | AFD 02 | 1.75 | 10000 | 13000 | 2.6 | 4.7 | FA 02 | 1.75 | 13000 | 2.6 | 4.7 |
| 0.18 | M 05B 4 | 1320 | 1.30 | ○ | 54.8 | 52.9 | 52.5 | 0.67 | 0.71 | 2.6 | 2.2 | 2.0 | 2.3 | 3.6 | FD 02 | 3.5 | 10000 | 13000 | 3.0 | 5.3 | AFD 02 | 3.5 | 10000 | 13000 | 3.0 | 5.1 | FA 02 | 3.5 | 13000 | 3.0 | 5.1 |
| 0.25 | M 05C 4 | 1340 | 1.78 | ○ | 65.3 | 65.0 | 57.9 | 0.69 | 0.80 | 2.7 | 2.1 | 1.9 | 3.3 | 4.8 | FD 02 | 3.5 | 7800 | 10000 | 3.9 | 6.5 | AFD 02 | 3.5 | 7800 | 10000 | 3.9 | 6.3 | FA 02 | 3.5 | 10000 | 3.9 | 6.3 |
| 0.37 | M 1SD 4 | 1370 | 2.6 | ○ | 66.8 | 66.7 | 63.0 | 0.76 | 1.05 | 3.7 | 2.0 | 1.9 | 6.9 | 5.5 | FD 03 | 5 | 6000 | 9400 | 8.0 | 8.2 | AFD 03 | 7.5 | 6000 | 9400 | 8.0 | 7.9 | FA 03 | 5 | 9400 | 8.0 | 7.9 |
| 0.55 | M 1LA 4 | 1380 | 3.8 | ○ | 69.0 | 68.9 | 68.8 | 0.74 | 1.55 | 4.1 | 2.3 | 2.3 | 9.1 | 6.9 | FD 53 | 7.5 | 4300 | 8700 | 10.2 | 9.6 | AFD 03 | 7.5 | 4300 | 8700 | 10.2 | 9.3 | FA 03 | 7.5 | 8700 | 10.2 | 9.3 |
| 0.75 | M 2SA 4 | 1400 | 5.1 | • | 75.0 | 74.5 | 69.3 | 0.78 | 1.85 | 4.9 | 2.7 | 2.5 | 20 | 9.2 | FD 04 | 15 | 4100 | 7800 | 22 | 13.1 | AFD 04 | 15 | 4100 | 7800 | 22 | 12.7 | FA 04 | 15 | 7800 | 22 | 13.0 |
| 1.1 | M 2SB 4 | 1400 | 7.5 | • | 76.4 | 76.2 | 70.4 | 0.78 | 2.66 | 5.1 | 2.8 | 2.5 | 25 | 10.6 | FD 04 | 15 | 2600 | 5300 | 27 | 14.5 | AFD 04 | 15 | 2600 | 5300 | 27 | 14.1 | FA 04 | 15 | 5300 | 27 | 14.4 |
| 1.5 | M 3SA 4 | 1410 | 10.2 | • | 79.6 | 80.5 | 79.3 | 0.77 | 3.5 | 4.6 | 2.1 | 2.1 | 34 | 15.5 | FD 15 | 26 | 2800 | 4900 | 38 | 22 | AFD 15 | 26 | 2800 | 4900 | 38 | 21.4 | FA 15 | 26 | 4900 | 38 | 23 |
| 2.2 | M 3LA 4 | 1410 | 14.9 | • | 81.1 | 81.4 | 79.9 | 0.75 | 5.2 | 4.5 | 2.2 | 2.0 | 40 | 17 | FD 15 | 40 | 2600 | 4700 | 44 | 24 | AFD 15 | 40 | 2600 | 4700 | 44 | 23.4 | FA 15 | 40 | 4700 | 44 | 24 |
| 3 | M 3LB 4 | 1410 | 20 | • | 82.6 | 83.8 | 83.7 | 0.77 | 6.8 | 5.0 | 2.3 | 2.2 | 54 | 21 | FD 15 | 40 | 2400 | 4400 | 58 | 27 | AFD 15 | 40 | 2400 | 4400 | 58 | 26 | FA 15 | 40 | 4400 | 58 | 28 |
| 4 | M 3LC 4 | 1400 | 27 | ○ | 82.7 | 83.1 | 80.5 | 0.78 | 9.0 | 4.7 | 2.3 | 2.2 | 61 | 23 | FD 55 | 55 | — | 1300 | 65 | 29 | — | — | — | — | — | — | FA 15 | 40 | 1300 | 65 | 30 |
| 5.5 | M 4SA 4 | 1440 | 36 | • | 84.7 | 84.8 | 82.5 | 0.81 | 11.6 | 5.5 | 2.3 | 2.2 | 213 | 42 | FD 56 | 75 | — | 1050 | 223 | 55 | AFD 06 | 75 | — | 1050 | 223 | 54 | FA 06 | 75 | 1050 | 223 | 56 |
| 7.5 | M 4LA 4 | 1440 | 50 | • | 86.0 | 86.3 | 85.3 | 0.81 | 15.5 | 5.7 | 2.5 | 2.4 | 270 | 51 | FD 06 | 100 | — | 950 | 280 | 64 | AFD 06 | 100 | — | 950 | 280 | 63 | FA 07 | 100 | 950 | 280 | 65 |
| 9.2 | M 4LB 4 | 1440 | 61 | • | 88.4 | 88.6 | 87.5 | 0.81 | 18.8 | 5.9 | 2.7 | 2.5 | 319 | 57 | FD 07 | 150 | — | 900 | 342 | 73 | AFD 07 | 150 | — | 900 | 342 | 71 | FA 07 | 150 | 900 | 342 | 75 |
| 11 | M 4LC 4 | 1440 | 73 | • | 87.6 | 87.8 | 86.0 | 0.81 | 22.4 | 6.0 | 2.7 | 2.5 | 360 | 65 | FD 07 | 150 | — | 850 | 382 | 81 | AFD 07 | 150 | — | 850 | 382 | 79 | FA 07 | 150 | 850 | 382 | 83 |
| 15 | M 5SB 4 | 1460 | 98 | • | 88.7 | 88.5 | 88.4 | 0.81 | 30.1 | 6.0 | 2.3 | 2.1 | 650 | 85 | FD 08 | 200 | — | 750 | 725 | 115 | | | | | | | FA 08 | 200 | 750 | 710 | 114 |
| 18.5 | M 5LA 4 | 1460 | 121 | • | 89.3 | 89.5 | 89.2 | 0.81 | 37 | 6.2 | 2.6 | 2.5 | 790 | 101 | FD 08 | 250 | — | 700 | 865 | 131 | | | | | | | FA 08 | 250 | 700 | 850 | 130 |

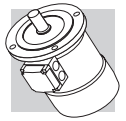
○ = n.a. • = IE1

## 6P — 1000 min$^{-1}$ - S1 — 50 Hz

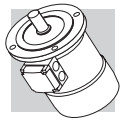
| | | | | | | | | | | | | | | | freno c.c. | | | | | | freno c.c. a entrehierro fijo | | | | | | freno c.a. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | FD | | | | | | AFD | | | | | | FA | | | | |
| $P_n$ | | n | $M_n$ | IE1 | η (100%) | η (75%) | η (50%) | cosφ | In 400V | Is / In | Ms / Mn | Ma / Mn | $J_m$ x $10^{-4}$ | IM B5 | Mod | Mb | $Z_o$ 1/h | | $J_m$ x $10^{-4}$ | IM B5 | Mod | Mb | $Z_o$ 1/h | | $J_m$ x $10^{-4}$ | IM B5 | Mod | Mb | $Z_o$ 1/h | $J_m$ x $10^{-4}$ | IM B5 |
| kW | | min$^{-1}$ | Nm | | % | % | % | | A | | | | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | NB | SB | kgm$^2$ | Kg | | Nm | | kgm$^2$ | Kg |
| 0.09 | **M 05A 6** | 880 | 0.98 | ○ | 41.0 | 41.0 | 32.9 | 0.53 | 0.60 | 2.1 | 2.1 | 1.8 | 3.4 | 4.3 | **FD 02** | 3.5 | 9000 | 14000 | 4.0 | 6.0 | **AFD 02** | 3.5 | 9000 | 14000 | 4.0 | 5.8 | **FA 02** | 3.5 | 14000 | 4.0 | 5.8 |
| 0.12 | **M 05B 6** | 870 | 1.32 | ○ | 45.0 | 44.0 | 41.8 | 0.60 | 0.64 | 2.1 | 1.9 | 1.7 | 3.7 | 4.6 | **FD 02** | 3.5 | 9000 | 14000 | 4.3 | 6.3 | **AFD 02** | 3.5 | 9000 | 14000 | 4.3 | 6.1 | **FA 02** | 3.5 | 14000 | 4.3 | 6.1 |
| 0.18 | **M 1SC 6** | 900 | 1.91 | ○ | 55.0 | 55.5 | 51.0 | 0.69 | 0.68 | 2.6 | 1.9 | 1.7 | 8.4 | 5.1 | **FD 03** | 5 | 8100 | 13500 | 9.5 | 7.8 | **AFD 03** | 5 | 8100 | 13500 | 9.5 | 7.5 | **FA 03** | 5 | 13500 | 9.5 | 7.5 |
| 0.25 | **M 1SD 6** | 900 | 2.7 | ○ | 62.0 | 58.5 | 51.4 | 0.71 | 0.82 | 2.6 | 1.9 | 1.7 | 10.9 | 6.3 | **FD 03** | 5 | 7800 | 13000 | 12 | 9.0 | **AFD 03** | 7.5 | 7800 | 13000 | 12 | 8.7 | **FA 03** | 5 | 13000 | 12 | 8.7 |
| 0.37 | **M 1LA 6** | 910 | 3.9 | ○ | 66.0 | 60.0 | 53.3 | 0.69 | 1.17 | 3.0 | 2.4 | 2.0 | 12.9 | 7.3 | **FD 53** | 7.5 | 5100 | 9500 | 14 | 10.0 | **AFD 03** | 7.5 | 5100 | 9500 | 14 | 9.7 | **FA 03** | 7.5 | 9500 | 14 | 9.7 |
| 0.55 | **M 2SA 6** | 920 | 5.7 | ○ | 70.0 | 69.8 | 64.3 | 0.68 | 1.67 | 3.9 | 2.6 | 2.2 | 25 | 10.6 | **FD 04** | 15 | 4800 | 7200 | 27 | 14.5 | **AFD 04** | 15 | 4800 | 7200 | 27 | 14.1 | **FA 04** | 15 | 7200 | 27 | 14.4 |
| 0.75 | **M 2SB 6** | 920 | 7.8 | • | 70.0 | 70.0 | 64.4 | 0.65 | 2.38 | 3.8 | 2.5 | 2.2 | 28 | 11.5 | **FD 04** | 15 | 3400 | 6400 | 30 | 15.4 | **AFD 04** | 15 | 3400 | 6400 | 30 | 15 | **FA 04** | 15 | 6400 | 30 | 15.3 |
| 1.1 | **M 3SA 6** | 920 | 11.4 | • | 75.0 | 74.0 | 72.0 | 0.72 | 2.9 | 4.3 | 2.0 | 1.8 | 33 | 17 | **FD 15** | 26 | 2700 | 5000 | 37 | 23 | **AFD 15** | 26 | 2700 | 5000 | 37 | 22.4 | **FA 15** | 26 | 5000 | 37 | 24 |
| 1.5 | **M 3LA 6** | 940 | 15.2 | • | 75.2 | 74.2 | 70.3 | 0.72 | 4.0 | 4.1 | 2.1 | 2.0 | 82 | 21 | **FD 15** | 40 | 1900 | 4100 | 86 | 27 | **AFD 15** | 40 | 1900 | 4100 | 86 | 26 | **FA 15** | 40 | 4100 | 86 | 28 |
| 1.85 | **M 3LB 6** | 930 | 19.0 | • | 76.6 | 72.8 | 62.6 | 0.73 | 4.8 | 4.6 | 2.1 | 2.0 | 95 | 23 | **FD 15** | 40 | 1700 | 3600 | 99 | 29 | **AFD 15** | 40 | 1700 | 3600 | 99 | 28 | **FA 15** | 40 | 3600 | 99 | 30 |
| 2.2 | **M 3LC 6** | 930 | 23 | • | 77.7 | 76.8 | 72.4 | 0.71 | 5.8 | 4.7 | 2.3 | 2.1 | 95 | 23 | **FD 55** | 55 | — | 1900 | 99 | 29 | **—** | — | — | — | — | — | **FA 15** | 55 | 1900 | 99 | 30 |
| 3 | **M 4SA 6** | 940 | 30 | • | 79.7 | 77.0 | 75.1 | 0.76 | 7.1 | 5.1 | 1.9 | 1.8 | 216 | 34 | **FD 56** | 75 | — | 1400 | 226 | 47 | **AFD 06** | 75 | — | 1400 | 226 | 46 | **FA 06** | 75 | 1400 | 226 | 48 |
| 4 | **M 4LA 6** | 950 | 40 | • | 81.4 | 81.5 | 79.5 | 0.77 | 9.2 | 5.5 | 2.0 | 1.8 | 295 | 43 | **FD 06** | 100 | — | 1200 | 305 | 56 | **AFD 06** | 100 | — | 1200 | 305 | 55 | **FA 07** | 100 | 1200 | 305 | 57 |
| 5.5 | **M 4LB 6** | 945 | 56 | • | 83.1 | 80.9 | 79.1 | 0.78 | 12.2 | 6.1 | 2.1 | 1.9 | 383 | 54 | **FD 07** | 150 | — | 1050 | 406 | 70 | **AFD 07** | 150 | — | 1050 | 406 | 68 | **FA 07** | 150 | 1050 | 406 | 72 |
| 7.5 | **M 5SA 6** | 955 | 75 | • | 85.0 | 85.0 | 84.8 | 0.81 | 15.7 | 5.9 | 2.2 | 2.0 | 740 | 69 | **FD 08** | 170 | — | 900 | 815 | 98 | | | | | | | **FA 08** | 170 | 900 | 800 | 98 |
| 11 | **M 5SB 6** | 960 | 109 | • | 86.4 | 86.5 | 85.9 | 0.81 | 22.7 | 6.6 | 2.5 | 2.3 | 970 | 89 | **FD 08** | 200 | — | 800 | 1045 | 119 | | | | | | | **FA 08** | 200 | 800 | 1030 | 118 |

○ = n.a. • = IE1





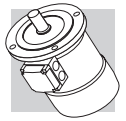
## 2/4P — 3000/1500 min$^{-1}$ - S1 — 50 Hz



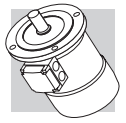
| | | | | | | | | | | | | freno c.c. | | | | | | freno c.c. a entrehierro fijo | | | | | | freno c.a. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | FD | | | | | | AFD | | | | | | FA | | | | |
| $P_n$ kW | | n min$^{-1}$ | $M_n$ Nm | η % | cosφ | In 400V A | Is/In | Ms/Mn | Ma/Mn | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h NB | $Z_o$ 1/h SB | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h NB | $Z_o$ 1/h SB | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg |
| 0.20 | **M 05A 2** | 2700 | 0.71 | 55 | 0.82 | 0.64 | 3.5 | 2.1 | 1.9 | 2.9 | 4.1 | **FD 02** | 3.5 | 2200 | 2600 | 3.5 | 5.8 | **AFD 02** | 3.5 | 2200 | 2600 | 3.5 | 5.6 | **FA 02** | 3.5 | 2600 | 3.5 | 5.6 |
| 0.15 | **4** | 1350 | 1.06 | 49 | 0.67 | 0.66 | 2.6 | 1.8 | 1.7 | | | | | 4000 | 5100 | | | | | 4000 | 5100 | | | | | 5100 | | |
| 0.28 | **M 1SB 2** | 2700 | 0.99 | 56 | 0.82 | 0.88 | 2.9 | 1.9 | 1.7 | 4.7 | 4.0 | **FD 03** | 3.5 | 2100 | 2400 | 5.8 | 6.7 | **AFD 03** | 5 | 2100 | 2400 | 5.8 | 6.4 | **FA 03** | 3.5 | 2400 | 5.8 | 6.4 |
| 0.20 | **4** | 1370 | 1.39 | 59 | 0.68 | 1.02 | 3.1 | 1.8 | 1.7 | | | | | 3800 | 4800 | | | | | 3800 | 4800 | | | | | 4800 | | |
| 0.37 | **M 1SC 2** | 2740 | 1.29 | 56 | 0.82 | 1.16 | 3.5 | 1.8 | 1.8 | 5.8 | 4.7 | **FD 03** | 5 | 1400 | 2100 | 6.9 | 7.4 | **AFD 03** | 5 | 1400 | 2100 | 6.9 | 7.1 | **FA 03** | 5 | 2100 | 6.9 | 7.1 |
| 0.25 | **4** | 1390 | 1.72 | 60 | 0.73 | 0.82 | 3.3 | 2.0 | 1.9 | | | | | 2900 | 4200 | | | | | 2900 | 4200 | | | | | 4200 | | |
| 0.45 | **M 1SD 2** | 2780 | 1.55 | 63 | 0.85 | 1.21 | 3.8 | 1.8 | 1.8 | 6.9 | 5.5 | **FD 03** | 5 | 1400 | 2100 | 8.0 | 8.2 | **AFD 03** | 5 | 1400 | 2100 | 8.0 | 7.9 | **FA 03** | 5 | 2100 | 8.0 | 7.9 |
| 0.30 | **4** | 1400 | 2.0 | 63 | 0.74 | 0.93 | 3.8 | 2.1 | 1.9 | | | | | 2900 | 4200 | | | | | 2900 | 4200 | | | | | 4200 | | |
| 0.55 | **M 1LA 2** | 2800 | 1.9 | 73 | 0.79 | 1.38 | 4.2 | 2.0 | 1.8 | 9.1 | 6.9 | **FD 03** | 5 | 1600 | 2200 | 10.2 | 9.6 | **AFD 03** | 5 | 1600 | 2200 | 10.2 | 9.3 | **FA 03** | 5 | 2200 | 10.2 | 9.3 |
| 0.37 | **4** | 1400 | 2.5 | 68 | 0.72 | 1.09 | 3.9 | 2.2 | 2.0 | | | | | 3300 | 4600 | | | | | 3300 | 4600 | | | | | 4600 | | |
| 0.75 | **M 2SA 2** | 2780 | 2.6 | 65 | 0.85 | 1.96 | 3.8 | 1.9 | 1.8 | 20 | 9.2 | **FD 04** | 10 | 1400 | 1600 | 22 | 13.1 | **AFD 04** | 10 | 1400 | 1600 | 22 | 12.7 | **FA 04** | 10 | 1600 | 22 | 13.0 |
| 0.55 | **4** | 1400 | 3.8 | 68 | 0.81 | 1.44 | 3.9 | 1.7 | 1.7 | | | | | 2700 | 3600 | | | | | 2700 | 3600 | | | | | 3600 | | |
| 1.1 | **M 2SB 2** | 2730 | 3.9 | 65 | 0.86 | 2.84 | 3.9 | 2.0 | 1.9 | 25 | 10.7 | **FD 04** | 10 | 1200 | 1500 | 27 | 14.5 | **AFD 04** | 10 | 1200 | 1500 | 27 | 14.1 | **FA 04** | 10 | 1500 | 27 | 14.5 |
| 0.75 | **4** | 1410 | 5.1 | 75 | 0.81 | 1.78 | 4.5 | 2.1 | 2.0 | | | | | 2300 | 3100 | | | | | 2300 | 3100 | | | | | 3100 | | |
| 1.5 | **M 3SA 2** | 2830 | 5.1 | 74 | 0.83 | 3.5 | 4.7 | 2.1 | 2.0 | 34 | 15.5 | **FD 15** | 26 | 700 | 1000 | 38 | 22 | **AFD 15** | 26 | 700 | 1000 | 38 | 21.4 | **FA 15** | 26 | 1000 | 38 | 23 |
| 1.1 | **4** | 1420 | 7.4 | 77 | 0.78 | 2.6 | 4.3 | 2.1 | 2.0 | | | | | 1600 | 2600 | | | | | 1600 | 2600 | | | | | 2600 | | |
| 2.2 | **M 3LA 2** | 2800 | 7.5 | 72 | 0.85 | 5.2 | 4.5 | 2.0 | 1.9 | 40 | 17 | **FD 15** | 26 | 600 | 900 | 44 | 24 | **AFD 15** | 26 | 600 | 900 | 44 | 23.4 | **FA 15** | 26 | 900 | 44 | 24 |
| 1.5 | **4** | 1410 | 10.2 | 73 | 0.79 | 3.8 | 4.7 | 2.0 | 2.0 | | | | | 1300 | 2300 | | | | | 1300 | 2300 | | | | | 2300 | | |
| 3.5 | **M 3LB 2** | 2850 | 11.7 | 80 | 0.84 | 7.5 | 5.4 | 2.2 | 2.1 | 61 | 23 | **FD 15** | 40 | 500 | 900 | 65 | 29 | **AFD 15** | 40 | 500 | 900 | 65 | 28 | **FA 15** | 40 | 900 | 65 | 30 |
| 2.5 | **4** | 1420 | 16.8 | 82 | 0.80 | 5.5 | 5.2 | 2.2 | 2.2 | | | | | 1000 | 2100 | | | | | 1000 | 2100 | | | | | 2100 | | |
| 4.8 | **M 4 SA 2** | 2900 | 15.8 | 81 | 0.88 | 9.7 | 6.0 | 2.0 | 1.9 | 213 | 42 | **FD 06** | 50 | — | 400 | 233 | 55 | **AFD 06** | 62 | — | 400 | 233 | 54 | **FA 06** | 50 | 400 | 233 | 56 |
| 3.8 | **4** | 1430 | 25.4 | 81 | 0.84 | 8.1 | 5.2 | 2.1 | 2.1 | | | | | — | 950 | | | | | — | 950 | | | | | 950 | | |
| 5.5 | **M 4SB 2** | 2890 | 18.2 | 80 | 0.87 | 11.4 | 5.9 | 2.4 | 2.0 | 213 | 42 | **FD 56** | 75 | — | 350 | 223 | 55 | **AFD 06** | 75 | — | 350 | 223 | 54 | **FA 06** | 75 | 350 | 223 | 56 |
| 4.4 | **4** | 1440 | 29 | 82 | 0.84 | 9.2 | 5.3 | 2.2 | 2.0 | | | | | — | 900 | | | | | — | 900 | | | | | 900 | | |
| 7.5 | **M 4LA 2** | 2900 | 25 | 82 | 0.87 | 15.2 | 6.5 | 2.4 | 2.0 | 270 | 51 | **FD 06** | 100 | — | 350 | 280 | 64 | **AFD 06** | 100 | — | 350 | 280 | 63 | **FA 07** | 100 | 350 | 280 | 65 |
| 6 | **4** | 1430 | 40 | 84 | 0.85 | 12.1 | 5.8 | 2.3 | 2.1 | | | | | — | 950 | | | | | — | 950 | | | | | 950 | | |
| 9.2 | **M 4LB 2** | 2920 | 30 | 83 | 0.86 | 18.6 | 6.0 | 2.6 | 2.2 | 319 | 57 | **FD 07** | 150 | — | 300 | 342 | 73 | **AFD 07** | 150 | — | 300 | 342 | 71 | **FA 07** | 150 | 300 | 342 | 75 |
| 7.3 | **4** | 1440 | 48 | 85 | 0.85 | 14.6 | 5.5 | 2.3 | 2.1 | | | | | — | 800 | | | | | — | 800 | | | | | 800 | | |

## 2/6P — 3000/1000 min$^{-1}$ - S3 60/40% — 50 Hz

| | | | | | | | | | | | | freno c.c. FD | | | | | | freno c.c. a entrehierro fijo AFD | | | | | | freno c.a. FA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $P_n$ kW | | n min$^{-1}$ | $M_n$ Nm | η % | cosφ | In 400V A | Is/In | Ms/Mn | Ma/Mn | $J_m$ x $10^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h NB | $Z_o$ 1/h SB | $J_m$ x $10^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h NB | $Z_o$ 1/h SB | $J_m$ x $10^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h | $J_m$ x $10^{-4}$ kgm$^2$ | IM B5 Kg |
| 0.25 | M 1SA 2 | 2850 | 0.84 | 60 | 0.82 | 0.73 | 4.3 | 1.9 | 1.8 | 6.9 | 5.5 | FD 03 | 1.75 | 1500 | 1700 | 8.0 | 8.2 | AFD 03 | 2.5 | 1500 | 1700 | 8.0 | 7.9 | FA 03 | 1.75 | 1700 | 8.0 | 7.9 |
| 0.08 | 6 | 910 | 0.84 | 43 | 0.70 | 0.38 | 2.1 | 1.4 | 1.5 | | | | | 10000 | 13000 | | | | | 10000 | 13000 | | | | | 13000 | | |
| 0.37 | M 1LA 2 | 2880 | 1.23 | 62 | 0.80 | 1.08 | 4.4 | 1.9 | 1.8 | 9.1 | 6.9 | FD 03 | 3.5 | 1000 | 1300 | 10.2 | 9.6 | AFD 03 | 5 | 1000 | 1300 | 10.2 | 9.3 | FA 03 | 3.5 | 1300 | 10.2 | 9.3 |
| 0.12 | 6 | 900 | 1.27 | 44 | 0.73 | 0.54 | 2.4 | 1.4 | 1.5 | | | | | 9000 | 11000 | | | | | 9000 | 11000 | | | | | 11000 | | |
| 0.55 | M 2SA 2 | 2800 | 1.88 | 63 | 0.86 | 1.47 | 4.5 | 1.9 | 1.7 | 20 | 9.2 | FD 04 | 5 | 1500 | 1800 | 22 | 13.1 | AFD 04 | 5 | 1500 | 1800 | 22 | 12.7 | FA 04 | 5 | 1800 | 22 | 13.0 |
| 0.18 | 6 | 930 | 1.85 | 52 | 0.65 | 0.77 | 3.3 | 2.0 | 1.9 | | | | | 4100 | 6300 | | | | | 4100 | 6300 | | | | | 6300 | | |
| 0.75 | M 2SB 2 | 2800 | 2.6 | 66 | 0.87 | 1.89 | 4.3 | 1.8 | 1.6 | 25 | 10.6 | FD 04 | 5 | 1700 | 1900 | 27 | 14.5 | AFD 04 | 5 | 1700 | 1900 | 27 | 14.1 | FA 04 | 5 | 1900 | 27 | 14.4 |
| 0.25 | 6 | 930 | 2.6 | 54 | 0.67 | 1.00 | 3.2 | 1.7 | 1.8 | | | | | 3800 | 6000 | | | | | 3800 | 6000 | | | | | 6000 | | |
| 1.1 | M 3SA 2 | 2870 | 3.7 | 71 | 0.82 | 2.73 | 4.9 | 1.8 | 1.9 | 34 | 15.5 | FD 15 | 13 | 1000 | 1300 | 38 | 22 | AFD 15 | 13 | 1000 | 1300 | 38 | 21.4 | FA 15 | 13 | 1300 | 38 | 23 |
| 0.37 | 6 | 930 | 3.8 | 63 | 0.70 | 1.21 | 3.1 | 1.5 | 1.8 | | | | | 3500 | 5000 | | | | | 3500 | 5000 | | | | | 5000 | | |
| 1.5 | M 3LA 2 | 2880 | 5.0 | 73 | 0.84 | 3.53 | 5.1 | 1.9 | 2.0 | 40 | 17 | FD 15 | 13 | 1000 | 1200 | 44 | 24 | AFD 15 | 13 | 1000 | 1200 | 44 | 23.4 | FA 15 | 13 | 1200 | 44 | 24 |
| 0.55 | 6 | 940 | 5.6 | 64 | 0.67 | 1.85 | 3.5 | 1.7 | 1.8 | | | | | 2900 | 4000 | | | | | 2900 | 4000 | | | | | 4000 | | |
| 2.2 | M 3LB 2 | 2900 | 7.2 | 77 | 0.85 | 4.9 | 5.9 | 2.0 | 2.0 | 61 | 23 | FD 15 | 26 | 700 | 900 | 65 | 29 | AFD 15 | 26 | 700 | 900 | 65 | 28 | FA 15 | 26 | 900 | 65 | 30 |
| 0.75 | 6 | 950 | 7.5 | 67 | 0.64 | 2.5 | 3.3 | 1.9 | 1.8 | | | | | 2100 | 3000 | | | | | 2100 | 3000 | | | | | 3000 | | |
| 3 | M 4SA 2 | 2910 | 9.9 | 74 | 0.88 | 6.6 | 5.6 | 2.0 | 2.1 | 170 | 36 | FD 56 | 37 | — | 600 | 182 | 48 | AFD 06 | 37 | — | 600 | 182 | 47 | FA 06 | 37 | 600 | 182 | 50 |
| 1.1 | 6 | 960 | 10.9 | 73 | 0.68 | 3.2 | 4.5 | 2.2 | 2.0 | | | | | — | 2200 | | | | | — | 2200 | | | | | 2200 | | |
| 4.5 | M 4SB 2 | 2910 | 14.8 | 78 | 0.84 | 9.9 | 5.8 | 1.9 | 1.8 | 213 | 42 | FD 56 | 37 | — | 500 | 223 | 55 | AFD 06 | 37 | — | 500 | 223 | 54 | FA 06 | 37 | 500 | 223 | 56 |
| 1.5 | 6 | 960 | 14.9 | 74 | 0.67 | 4.4 | 4.2 | 1.9 | 2.0 | | | | | — | 2100 | | | | | — | 2100 | | | | | 2100 | | |
| 5.5 | M 4LA 2 | 2920 | 18.0 | 78 | 0.87 | 11.7 | 6.2 | 2.1 | 1.9 | 270 | 51 | FD 06 | 50 | — | 400 | 280 | 64 | AFD 06 | 62 | — | 400 | 280 | 63 | FA 06 | 50 | 400 | 280 | 65 |
| 2.2 | 6 | 960 | 22 | 77 | 0.71 | 5.8 | 4.3 | 2.1 | 2.0 | | | | | — | 1900 | | | | | — | 1900 | | | | | 1900 | | |



## 2/8P — 3000/750 min$^{-1}$ - S3 60/40% — 50 Hz

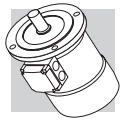


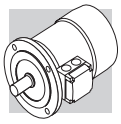
| | | | | | | | | | | | | freno c.c. FD | | | | | | freno c.c. a entrehierro fijo AFD | | | | | | freno c.a. FA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $P_n$ kW | | n min$^{-1}$ | $M_n$ Nm | η % | cosφ | In 400V A | Is/In | Ms/Mn | Ma/Mn | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h NB | $Z_o$ 1/h SB | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h NB | $Z_o$ 1/h SB | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg |
| 0.37 | M 1LA 2 | 2800 | 1.26 | 63 | 0.86 | 0.99 | 3.9 | 1.8 | 1.9 | 12.9 | 7.3 | FD 03 | 3.5 | 1200 | 1300 | 14 | 10.0 | AFD 03 | 5 | 1200 | 1300 | 14 | 9.7 | FA 03 | 3.5 | 1300 | 14 | 9.7 |
| 0.09 | 8 | 670 | 1.28 | 34 | 0.75 | 0.51 | 1.8 | 1.4 | 1.5 | | | | | 9500 | 13000 | | | | | 9500 | 13000 | | | | | 13000 | | |
| 0.55 | M 2SA 2 | 2830 | 1.86 | 66 | 0.86 | 1.40 | 4.4 | 2.1 | 2.0 | 20 | 9.2 | FD 04 | 5 | 1500 | 1800 | 22 | 13.1 | AFD 04 | 5 | 1500 | 1800 | 22 | 12.7 | FA 04 | 5 | 1800 | 22 | 13.0 |
| 0.13 | 8 | 690 | 1.80 | 41 | 0.64 | 0.72 | 2.3 | 1.6 | 1.7 | | | | | 5600 | 8000 | | | | | 5600 | 8000 | | | | | 8000 | | |
| 0.75 | M 2SB 2 | 2800 | 2.6 | 68 | 0.88 | 1.81 | 4.6 | 2.1 | 2.0 | 25 | 10.6 | FD 04 | 10 | 1700 | 1900 | 27 | 14.5 | AFD 04 | 10 | 1700 | 1900 | 27 | 14.1 | FA 04 | 10 | 1900 | 27 | 14.4 |
| 0.18 | 8 | 690 | 2.5 | 43 | 0.66 | 0.92 | 2.3 | 1.6 | 1.7 | | | | | 4800 | 7300 | | | | | 4800 | 7300 | | | | | 7300 | | |
| 1.1 | M 3SA 2 | 2870 | 3.7 | 69 | 0.84 | 2.74 | 4.6 | 1.8 | 1.7 | 34 | 15.5 | FD 15 | 13 | 1000 | 1300 | 38 | 22 | AFD 15 | 13 | 1000 | 1300 | 38 | 21.4 | FA 15 | 13 | 1300 | 38 | 23 |
| 0.28 | 8 | 690 | 3.9 | 44 | 0.56 | 1.64 | 2.3 | 1.4 | 1.7 | | | | | 3400 | 5000 | | | | | 3400 | 5000 | | | | | 5000 | | |
| 1.5 | M 3LA 2 | 2880 | 5.0 | 69 | 0.85 | 3.69 | 4.7 | 1.9 | 1.8 | 40 | 17 | FD 15 | 13 | 1000 | 1200 | 44 | 24 | AFD 15 | 13 | 1000 | 1200 | 44 | 23.4 | FA 15 | 13 | 1200 | 44 | 24 |
| 0.37 | 8 | 690 | 5.1 | 46 | 0.63 | 1.84 | 2.1 | 1.6 | 1.6 | | | | | 3300 | 5000 | | | | | 3300 | 5000 | | | | | 5000 | | |
| 2.4 | M 3LB 2 | 2900 | 7.9 | 75 | 0.82 | 5.6 | 5.4 | 2.1 | 2.0 | 61 | 23 | FD 15 | 26 | 550 | 700 | 65 | 29 | AFD 15 | 26 | 550 | 700 | 65 | 28 | FA 15 | 26 | 700 | 65 | 30 |
| 0.55 | 8 | 700 | 7.5 | 54 | 0.58 | 2.5 | 2.6 | 1.8 | 1.8 | | | | | 2000 | 3500 | | | | | 2000 | 3500 | | | | | 3500 | | |
| 3 | M 4SA 2 | 2920 | 9.8 | 72 | 0.85 | 7.1 | 5.6 | 2.0 | 1.8 | 162 | 36 | FD 56 | 37 | — | 600 | 182 | 48 | AFD 06 | 37 | — | 600 | 182 | 47 | FA 06 | 37 | 600 | 182 | 50 |
| 0.75 | 8 | 710 | 10.1 | 61 | 0.64 | 2.8 | 3.0 | 1.7 | 1.8 | | | | | — | 3400 | | | | | — | 3400 | | | | | 3400 | | |
| 4 | M 4SB 2 | 2870 | 13.3 | 73 | 0.84 | 9.4 | 5.6 | 2.3 | 2.4 | 213 | 42 | FD 56 | 37 | — | 500 | 223 | 55 | AFD 06 | 37 | — | 500 | 223 | 54 | FA 06 | 37 | 500 | 223 | 56 |
| 1 | 8 | 690 | 13.8 | 66 | 0.62 | 3.5 | 2.9 | 1.9 | 1.8 | | | | | — | 3500 | | | | | — | 3500 | | | | | 3500 | | |
| 5.5 | M 4LA 2 | 2870 | 18.3 | 75 | 0.84 | 12.6 | 6.1 | 2.4 | 2.5 | 270 | 51 | FD 06 | 50 | — | 400 | 280 | 64 | AFD 06 | 62 | — | 400 | 280 | 63 | FA 06 | 50 | 400 | 280 | 65 |
| 1.5 | 8 | 690 | 21 | 68 | 0.63 | 5.1 | 2.9 | 1.9 | 1.9 | | | | | — | 2400 | | | | | — | 2400 | | | | | 2400 | | |

## 2/12P — 3000/500 min$^{-1}$ - S3 60/40% — 50 Hz

| | | | | | | | | | | | | freno c.c. FD | | | | | | freno c.c. a entrehierro fijo AFD | | | | | | freno c.a. FA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $P_n$ kW | | n min$^{-1}$ | $M_n$ Nm | η % | cosφ | In 400V A | Is/In | Ms/Mn | Ma/Mn | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h NB | $Z_o$ 1/h SB | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h NB | $Z_o$ 1/h SB | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg | Mod | Mb Nm | $Z_o$ 1/h | $J_m$ x 10$^{-4}$ kgm$^2$ | IM B5 Kg |
| 0.55 | **M 2SA 2** | 2820 | 1.86 | 64 | 0.89 | 1.39 | 4.2 | 1.6 | 1.7 | 25 | 10.6 | **FD 04** | 5 | 1000 | 1300 | 27 | 14.5 | **AFD 04** | 5 | 1000 | 1300 | 27 | 14.1 | **FA 04** | 5 | 1300 | 27 | 14.4 |
| 0.09 | **12** | 430 | 2.0 | 30 | 0.63 | 0.69 | 1.8 | 1.9 | 1.8 | | | | | 8000 | 12000 | | | | | 8000 | 12000 | | | | | 12000 | | |
| 0.75 | **M 3SA 2** | 2900 | 2.5 | 65 | 0.81 | 2.06 | 5.2 | 1.9 | 2.1 | 34 | 15.5 | **FD 15** | 13 | 700 | 900 | 38 | 22 | **AFD 15** | 13 | 700 | 900 | 38 | 21.4 | **FA 15** | 13 | 900 | 38 | 23 |
| 0.12 | **12** | 460 | 2.5 | 33 | 0.43 | 1.22 | 1.9 | 1.3 | 1.6 | | | | | 5000 | 7000 | | | | | 5000 | 7000 | | | | | 7000 | | |
| 1.1 | **M 3LA 2** | 2850 | 3.7 | 65 | 0.85 | 2.87 | 4.5 | 1.6 | 1.8 | 40 | 17 | **FD 15** | 13 | 700 | 900 | 44 | 24 | **AFD 15** | 13 | 700 | 900 | 44 | 23.4 | **FA 15** | 13 | 900 | 44 | 24 |
| 0.18 | **12** | 430 | 4.0 | 26 | 0.54 | 1.85 | 1.5 | 1.3 | 1.5 | | | | | 4000 | 6000 | | | | | 4000 | 6000 | | | | | 6000 | | |
| 1.5 | **M 3LB 2** | 2900 | 4.9 | 67 | 0.86 | 3.76 | 5.6 | 1.9 | 1.9 | 54 | 21 | **FD 15** | 13 | 700 | 900 | 58 | 27 | **AFD 15** | 13 | 700 | 900 | 58 | 26 | **FA 15** | 13 | 900 | 58 | 28 |
| 0.25 | **12** | 440 | 5.4 | 36 | 0.46 | 2.18 | 1.8 | 1.7 | 1.8 | | | | | 3800 | 5000 | | | | | 3800 | 5000 | | | | | 5000 | | |
| 2 | **M 3LC 2** | 2850 | 6.7 | 70 | 0.84 | 4.9 | 4.9 | 1.8 | 1.7 | 61 | 23 | **FD 55** | 18 | — | 700 | 65 | 29 | **AFD 15** | 26 | — | 700 | 65 | 28 | **FA 15** | 18 | 700 | 65 | 30 |
| 0.3 | **12** | 450 | 6.4 | 38 | 0.47 | 2.4 | 1.7 | 1.6 | 1.7 | | | | | — | 3500 | | | | | — | 3500 | | | | | 3500 | | |
| 3 | **M 4SA 2** | 2920 | 9.8 | 74 | 0.87 | 6.7 | 6.8 | 2.3 | 1.9 | 213 | 42 | **FD 56** | 37 | — | 450 | 223 | 55 | **AFD 06** | 37 | — | 450 | 223 | 54 | **FA 06** | 37 | 450 | 223 | 56 |
| 0.5 | **12** | 470 | 10.2 | 51 | 0.43 | 3.3 | 2.0 | 1.7 | 1.6 | | | | | — | 3000 | | | | | — | 3000 | | | | | 3000 | | |
| 4 | **M 4LA 2** | 2920 | 13.1 | 75 | 0.89 | 8.6 | 5.9 | 2.4 | 2.3 | 270 | 51 | **FD 56** | 37 | — | 400 | 280 | 64 | **AFD 06** | 37 | — | 400 | 280 | 63 | **FA 06** | 37 | 400 | 280 | 65 |
| 0.7 | **12** | 460 | 14.5 | 53 | 0.44 | 4.3 | 1.9 | 1.7 | 1.6 | | | | | — | 2800 | | | | | — | 2800 | | | | | 2800 | | |

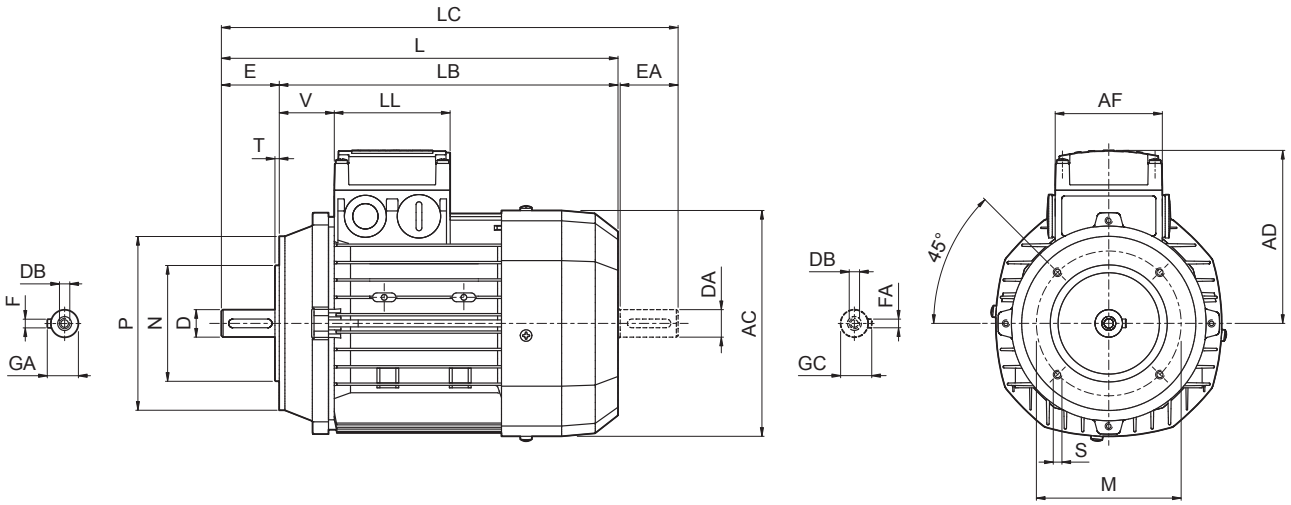






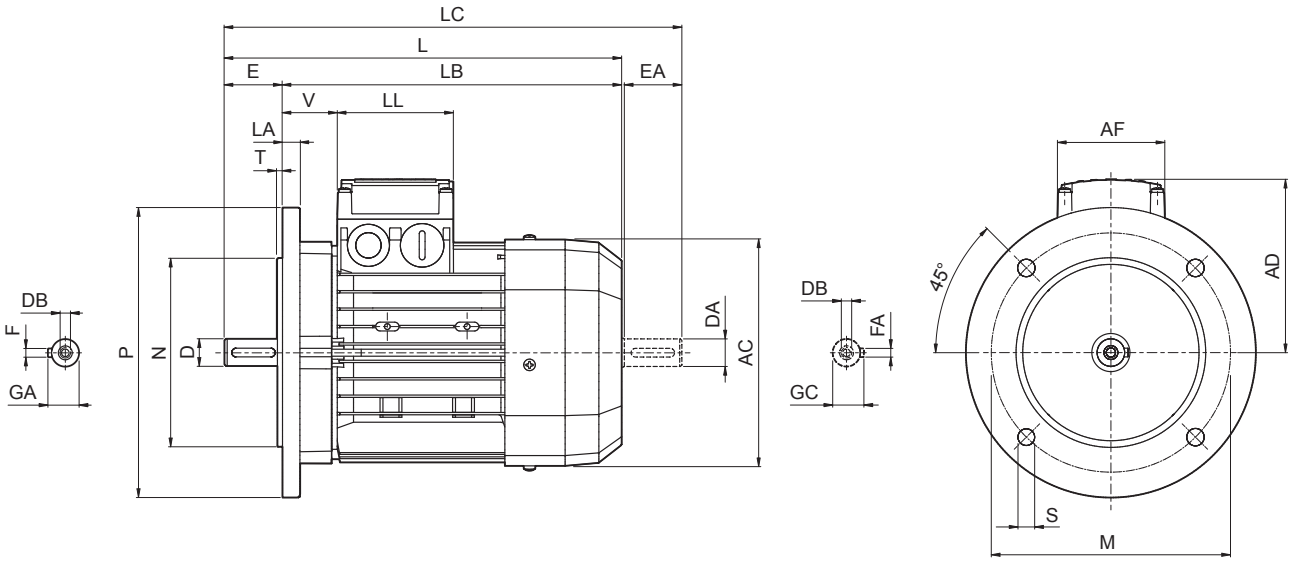
## M2.12 DIMENSIONES MOTORES

# BN - IM B14




| | Eje | | | | | Brida | | | | | Motor | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **D DA** | **E EA** | **DB** | **GA GC** | **F FA** | **M** | **N** | **P** | **S** | **T** | **AC** | **L** | **LB** | **LC** | **AD** | **AF** | **LL** | **V** |
| **BN 56** | 9 | 20 | M3 | 10.2 | 3 | 65 | 50 | 80 | M5 | 2.5 | 110 | 185 | 165 | 207 | 91 | 74 | 80 | 34 |
| **BN 63** | 11 | 23 | M4 | 12.5 | 4 | 75 | 60 | 90 | M5 | 2.5 | 121 | 207 | 184 | 232 | 95 | 74 | 80 | 26 |
| **BN 71** | 14 | 30 | M5 | 16 | 5 | 85 | 70 | 105 | M6 | 2.5 | 138 | 249 | 219 | 281 | 108 | 74 | 80 | 37 |
| **BN 80** | 19 | 40 | M6 | 21.5 | 6 | 100 | 80 | 120 | M6 | 3 | 156 | 274 | 234 | 315 | 119 | 74 | 80 | 38 |
| **BN 90** | 24 | 50 | M8 | 27 | 8 | 115 | 95 | 140 | M8 | 3 | 176 | 326 | 276 | 378 | 133 | 98 | 98 | 44 |
| **BN 100** | 28 | 60 | M10 | 31 | 8 | 130 | 110 | 160 | M8 | 3.5 | 195 | 367 | 307 | 429 | 142 | 98 | 98 | 50 |
| **BN 112** | 28 | 60 | M10 | 31 | 8 | 130 | 110 | 160 | M8 | 3.5 | 219 | 385 | 325 | 448 | 157 | 98 | 98 | 52 |
| **BN 132** | 38 | 80 | M12 | 41 | 10 | 165 | 130 | 200 | M10 | 4 | 258 | 493 | 413 | 576 | 193 | 118 | 118 | 58 |

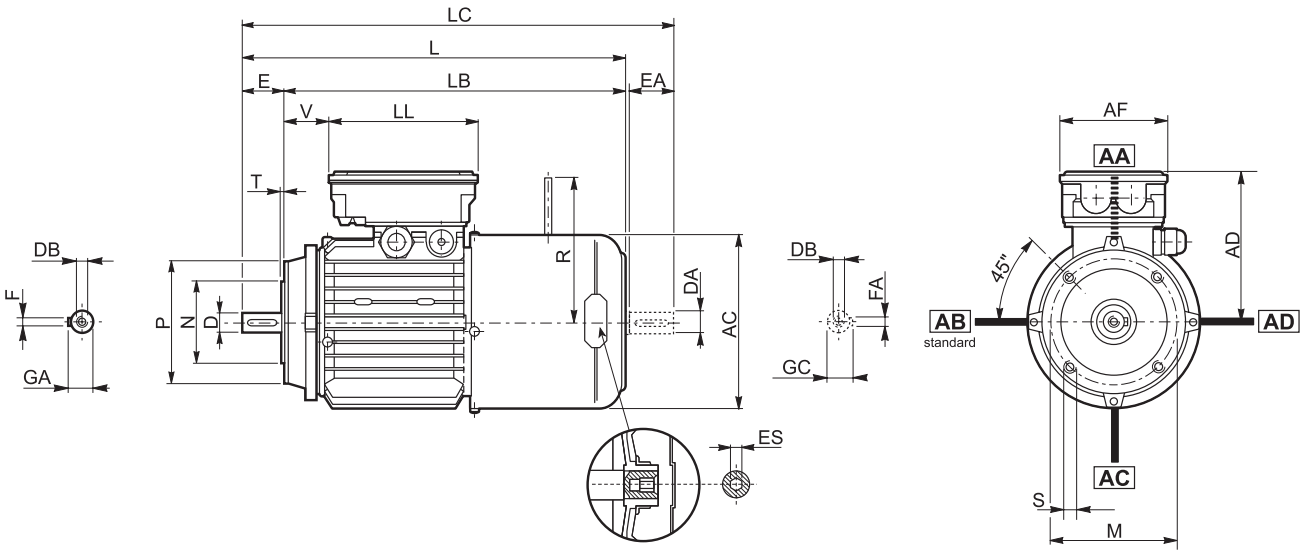
# BN - IM B5




| | Eje | | | | | Brida | | | | | | Motor | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **D<br>DA** | **E<br>EA** | **DB** | **GA<br>GC** | **F<br>FA** | **M** | **N** | **P** | **S** | **T** | **LA** | **AC** | **L** | **LB** | **LC** | **AD** | **AF** | **LL** | **V** |
| **BN 56** | 9 | 20 | M3 | 10.2 | 3 | 100 | 80 | 120 | 7 | 3 | 8 | 110 | 185 | 165 | 207 | 91 | 74 | 80 | 34 |
| **BN 63** | 11 | 23 | M4 | 12.5 | 4 | 115 | 95 | 140 | 9.5 | 3 | 10 | 121 | 207 | 184 | 232 | 95 | 74 | 80 | 26 |
| **BN 71** | 14 | 30 | M5 | 16 | 5 | 130 | 110 | 160 | 9.5 | 3 | 10 | 138 | 249 | 219 | 281 | 108 | 74 | 80 | 37 |
| **BN 80** | 19 | 40 | M6 | 21.5 | 6 | 165 | 130 | 200 | 11.5 | 3.5 | 11.5 | 156 | 274 | 234 | 315 | 119 | 74 | 80 | 38 |
| **BN 90** | 24 | 50 | M8 | 27 | 8 | 165 | 130 | 200 | 11.5 | 3.5 | 11.5 | 176 | 326 | 276 | 378 | 133 | 98 | 98 | 44 |
| **BN 100** | 28 | 60 | M10 | 31 | 8 | 215 | 180 | 250 | 14 | 4 | 14 | 195 | 367 | 307 | 429 | 142 | 98 | 98 | 50 |
| **BN 112** | 28 | 60 | M10 | 31 | 8 | 215 | 180 | 250 | 14 | 4 | 15 | 219 | 385 | 325 | 448 | 157 | 98 | 98 | 52 |
| **BN 132** | 38 | 80 | M12 | 41 | 10 | 265 | 230 | 300 | 14 | 4 | 20 | 258 | 493 | 413 | 576 | 193 | 118 | 118 | 58 |
| **BN 160 MR** | 42<br>38 (1) | 110<br>80 (1) | M16<br>M12 (1) | 45<br>41 (1) | 12<br>10 (1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 258 | 562 | 452 | 645 | 193 | 118 | 118 | 218 |
| **BN 160 M** | 42<br>38 (1) | 110<br>80 (1) | M16<br>M12 (1) | 45<br>41 (1) | 12<br>10 (1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 310 | 596 | 486 | 680 | 245 | 187 | 187 | 51 |
| **BN 160 L** | 42<br>38 (1) | 110<br>80 (1) | M16<br>M12 (1) | 45<br>41 (1) | 12<br>10 (1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 310 | 596 | 486 | 680 | 245 | 187 | 187 | 51 |
| **BN 180 M** | 48<br>38 (1) | 110<br>110 (1) | M16<br>M12 (1) | 51.5<br>41 (1) | 14<br>10 (1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 310 | 640 | 530 | 724 | 245 | 187 | 187 | 51 |
| **BN 180 L** | 48<br>42 (1) | 110<br>110 (1) | M16<br>M16 (1) | 51.5<br>45 (1) | 14<br>12 (1) | 300 | 250 | 350 | 18.5 | 5 | 18 | 348 | 708 | 598 | 823 | 261 | 187 | 187 | 52 |
| **BN 200 L** | 55<br>42 (1) | 110<br>110 (1) | M20<br>M16 (1) | 59<br>45 (1) | 16<br>12 (1) | 350 | 300 | 400 | 18.5 | 5 | 18 | 348 | 722 | 612 | 837 | 261 | 187 | 187 | 66 |

N.B.:
1) Estas dimensiones están referidas a la segunda extremidad del eje.

# BN_FD ; BN_AFD - IM B14

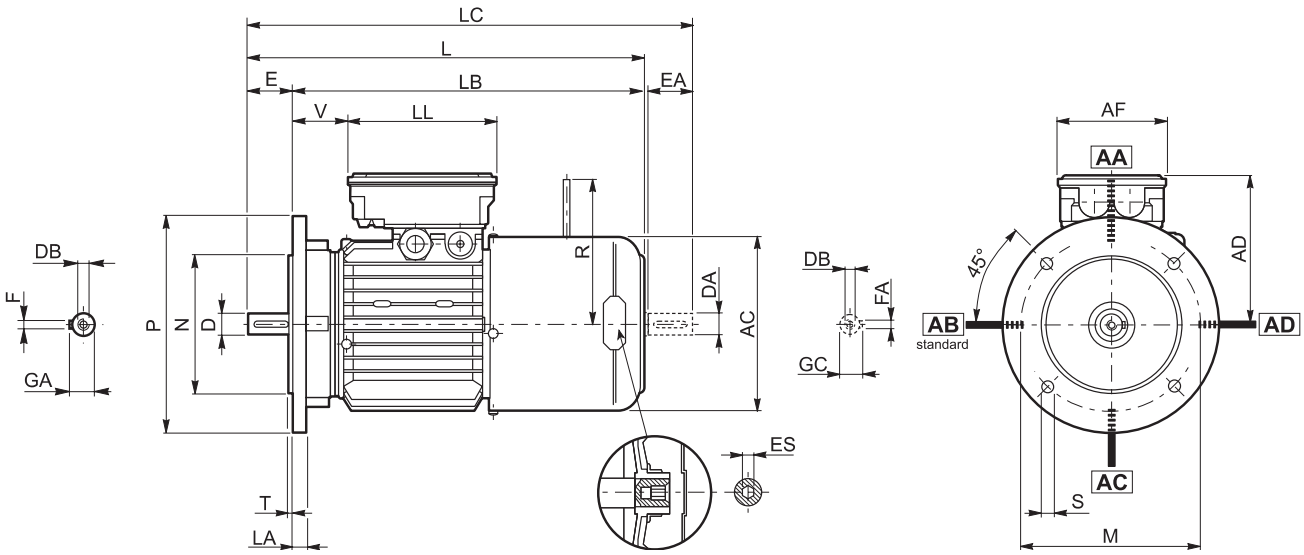



| | Eje | | | | | Brida | | | | | Motor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **D DA** | **E EA** | **DB** | **GA GC** | **F FA** | **M** | **N** | **P** | **S** | **T** | **AC** | **L** | **LB** | **LC** | **AD** | **AF** | **LL** | **V** | **R** | **ES** |
| **BN 63** | 11 | 23 | M4 | 12.5 | 4 | 75 | 60 | 90 | M5 | 2.5 | 121 | 272 | 249 | 297 | 122 | 98 | 133 | 14 | 96 | 5 |
| **BN 71** | 14 | 30 | M5 | 16 | 5 | 85 | 70 | 105 | M6 | 2.5 | 138 | 310 | 280 | 342 | 135 | 98 | 133 | 25 | 103 | 5 |
| **BN 80** | 19 | 40 | M6 | 21.5 | 6 | 100 | 80 | 120 | M6 | 3 | 156 | 346 | 306 | 388 | 146 | 98 | 133 | 41 | 129 | 5 |
| **BN 90 S** | 24 | 50 | M8 | 27 | 8 | 115 | 95 | 140 | M8 | 3 | 176 | 409 | 359 | 461 | 149 | 110 | 165 | 39 | 129 | 6 |
| **BN 90 L** | 24 | 50 | M8 | 27 | 8 | 115 | 95 | 140 | M8 | 3 | 176 | 409 | 359 | 461 | 146 | 110 | 165 | 39 | 160 | 6 |
| **BN 100** | 28 | 60 | M10 | 31 | 8 | 130 | 110 | 160 | M8 | 3.5 | 195 | 458 | 398 | 521 | 158 | 110 | 165 | 62 | 160 | 6 |
| **BN 112** | 28 | 60 | M10 | 31 | 8 | 130 | 110 | 160 | M8 | 3.5 | 219 | 484 | 424 | 547 | 173 | 110 | 165 | 73 | 199 | 6 |
| **BN 132** | 38 | 80 | M12 | 41 | 10 | 165 | 130 | 200 | M10 | 4 | 258 | 603 | 523 | 686 | 210 | 140 | 188 | 122 | 204 (1) | 6 |

N.B.:
1) Para el freno FD07 la cota R = 226

El taladro hexagonal ES no está presente en la opción PS.

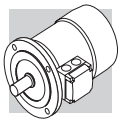
# BN_FD ; BN_AFD - IM B5



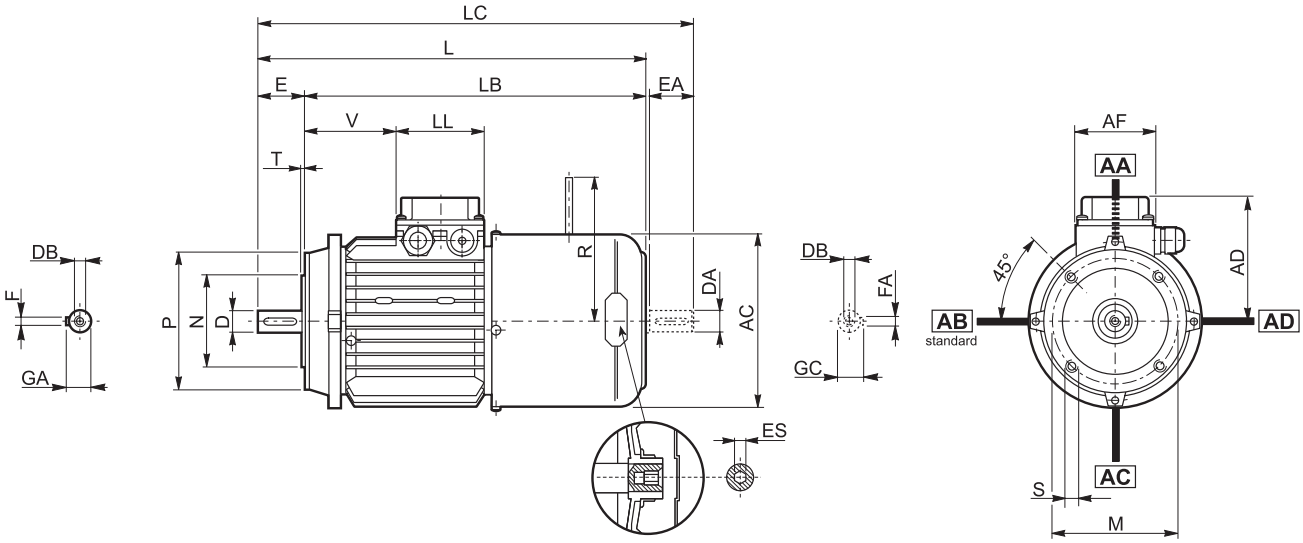

| | Eje | | | | | Brida | | | | | | Motor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **D<br>DA** | **E<br>EA** | **DB** | **GA<br>GC** | **F<br>FA** | **M** | **N** | **P** | **S** | **T** | **LA** | **AC** | **L** | **LB** | **LC** | **AD** | **AF** | **LL** | **V** | **R** | **ES** |
| **BN 63** | 11 | 23 | M4 | 12.5 | 4 | 115 | 95 | 140 | 9.5 | 3 | 10 | 121 | 272 | 249 | 297 | 122 | 98 | 133 | 14 | 96 | 5 |
| **BN 71** | 14 | 30 | M5 | 16 | 5 | 130 | 110 | 160 | 9.5 | 3.5 | 10 | 138 | 310 | 280 | 342 | 135 | 98 | 133 | 25 | 103 | 5 |
| **BN 80** | 19 | 40 | M6 | 21.5 | 6 | 165 | 130 | 200 | 11.5 | 3.5 | 11.5 | 156 | 346 | 306 | 388 | 146 | 98 | 133 | 41 | 129 | 5 |
| **BN 90 S** | 24 | 50 | M8 | 27 | 8 | 165 | 130 | 200 | 11.5 | 3.5 | 11.5 | 176 | 409 | 359 | 461 | 149 | 110 | 165 | 39 | 129 | 6 |
| **BN 90 L** | 24 | 50 | M8 | 27 | 8 | 165 | 130 | 200 | 11.5 | 3.5 | 11.5 | 176 | 409 | 359 | 461 | 146 | 110 | 165 | 39 | 160 | 6 |
| **BN 100** | 28 | 60 | M10 | 31 | 8 | 215 | 180 | 250 | 14 | 4 | 14 | 195 | 458 | 398 | 521 | 158 | 110 | 165 | 62 | 160 | 6 |
| **BN 112** | 28 | 60 | M10 | 31 | 8 | 215 | 180 | 250 | 14 | 4 | 15 | 219 | 484 | 424 | 547 | 173 | 110 | 165 | 73 | 199 | 6 |
| **BN 132** | 38 | 80 | M12 | 41 | 10 | 265 | 230 | 300 | 14 | 4 | 20 | 258 | 603 | 523 | 686 | 210 | 140 | 188 | 122 | 204 (2) | 6 |
| **BN 160 MR** | 42<br>38 (1) | 110<br>80 (1) | M16<br>M12 (1) | 45<br>41 (1) | 12<br>10 (1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 258 | 672 | 562 | 755 | 210 | 140 | 188 | 161 | 226 | 6 |
| **BN 160 M** | 42<br>38 (1) | 110<br>80 (1) | M16<br>M12 (1) | 45<br>41 (1) | 12<br>10 (1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 310 | 736 | 626 | 820 | 245 | 187 | 187 | 51 | 266 | — |
| **BN 160 L** | 42<br>38 (1) | 110<br>80 (1) | M16<br>M12 (1) | 45<br>41 (1) | 12<br>10 (1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 310 | 736 | 626 | 820 | 245 | 187 | 187 | 51 | 266 | — |
| **BN 180 M** | 48<br>38 (1) | 110<br>80 (1) | M16<br>M12 (1) | 51.5<br>41 (1) | 14<br>10 (1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 310 | 780 | 670 | 864 | 245 | 187 | 187 | 51 | 266 | — |
| **BN 180 L** | 48<br>42 (1) | 110<br>110 (1) | M16<br>M16 (1) | 51.5<br>45 (1) | 14<br>12 (1) | 300 | 250 | 350 | 18.5 | 5 | 18 | 348 | 866 | 756 | 981 | 261 | 187 | 187 | 52 | 305 | — |
| **BN 200 L** | 55<br>42 (1) | 110<br>110 (1) | M20<br>M16 (1) | 59<br>45 (1) | 16<br>12 (1) | 350 | 300 | 400 | 18.5 | 5 | 18 | 348 | 878 | 768 | 993 | 261 | 187 | 187 | 64 | 305 | — |

N.B.:
1) Estas dimensiones están referidas a la segunda extremidad del eje
2) Para el freno FD07 la cota R = 226

El taladro hexagonal ES no está presente en la opción PS.



# BN_FA - IM B14



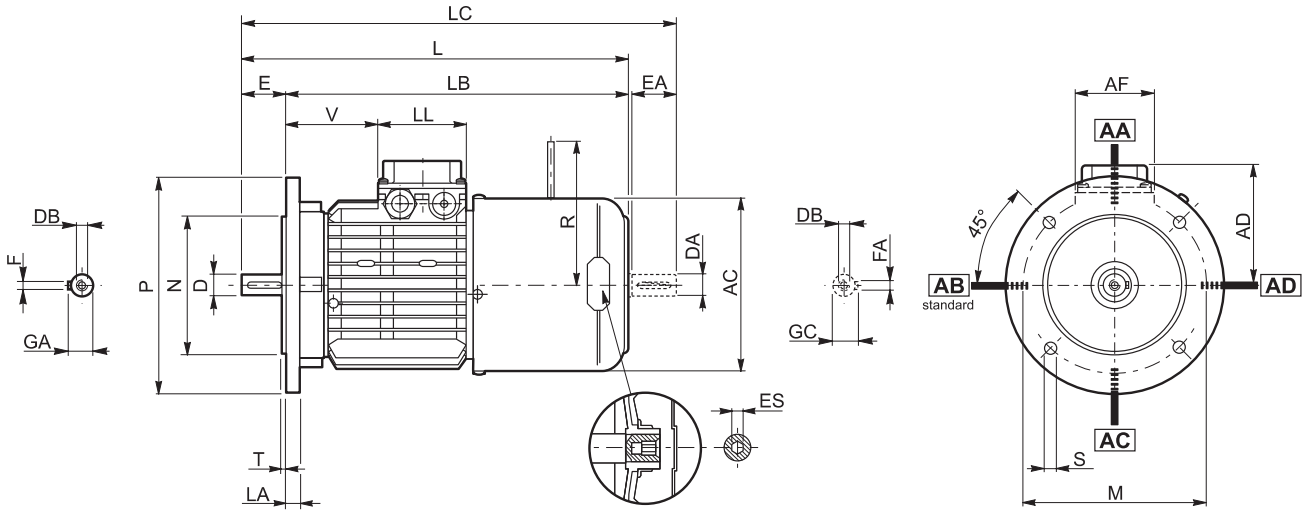

| | Eje | | | | | Brida | | | | | Motor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **D DA** | **E EA** | **DB** | **GA GC** | **F FA** | **M** | **N** | **P** | **S** | **T** | **AC** | **L** | **LB** | **LC** | **AD** | **AF** | **LL** | **V** | **R** | **ES** |
| **BN 63** | 11 | 23 | M4 | 12.5 | 4 | 75 | 60 | 90 | M5 | 2.5 | 121 | 272 | 249 | 119 | 95 | 74 | 80 | 26 | 116 | 5 |
| **BN 71** | 14 | 30 | M5 | 16 | 5 | 85 | 70 | 105 | M6 | 2.5 | 138 | 310 | 280 | 342 | 108 | 74 | 80 | 68 | 124 | 5 |
| **BN 80** | 19 | 40 | M6 | 21.5 | 6 | 100 | 80 | 120 | M6 | 3 | 156 | 346 | 306 | 388 | 119 | 74 | 80 | 83 | 134 | 5 |
| **BN 90** | 24 | 50 | M8 | 27 | 8 | 115 | 95 | 140 | M8 | 3 | 176 | 409 | 359 | 461 | 133 | 98 | 98 | 95 | 160 | 6 |
| **BN 100** | 28 | 60 | M10 | 31 | 8 | 130 | 110 | 160 | M8 | 3.5 | 195 | 458 | 398 | 521 | 142 | 98 | 98 | 119 | 160 | 6 |
| **BN 112** | 28 | 60 | M10 | 31 | 8 | 130 | 110 | 160 | M8 | 3.5 | 219 | 484 | 424 | 547 | 157 | 98 | 98 | 128 | 198 | 6 |
| **BN 132** | 38 | 80 | M12 | 41 | 10 | 165 | 130 | 200 | M10 | 4 | 258 | 603 | 523 | 686 | 193 | 118 | 118 | 180 | 200 (1) | 6 |

N.B.:
1) Para el freno FA07 la cota R = 217

Para las versiones BN...FA, las dimensiones de la caja de bornes AD, AF, LL, V. son iguales a las del tipo BN...FD.

El alojamiento hexagonal no está presente en la opción PS.

# BN_FA - IM B5

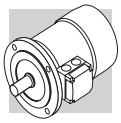



| | Eje | | | | | Brida | | | | | | Motor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | D<br>DA | E<br>EA | DB | GA<br>GC | F<br>FA | M | N | P | S | T | LA | AC | L | LB | LC | AD | AF | LL | V | R | ES |
| **BN 63** | 11 | 23 | M4 | 12.5 | 4 | 115 | 95 | 140 | 9.5 | 3 | 10 | 121 | 272 | 249 | 297 | 95 | 74 | 80 | 26 | 116 | 5 |
| **BN 71** | 14 | 30 | M5 | 16 | 5 | 130 | 110 | 160 | 9.5 | 3.5 | 10 | 138 | 310 | 280 | 342 | 108 | 74 | 80 | 68 | 124 | 5 |
| **BN 80** | 19 | 40 | M6 | 21.5 | 6 | 165 | 130 | 200 | 11.5 | 3.5 | 11.5 | 156 | 346 | 306 | 388 | 119 | 74 | 80 | 83 | 134 | 5 |
| **BN 90** | 24 | 50 | M8 | 27 | 8 | 165 | 130 | 200 | 11.5 | 3.5 | 11.5 | 176 | 409 | 359 | 461 | 133 | 98 | 98 | 95 | 160 | 6 |
| **BN 100** | 28 | 60 | M10 | 31 | 8 | 215 | 180 | 250 | 14 | 4 | 14 | 195 | 458 | 398 | 521 | 142 | 98 | 98 | 119 | 160 | 6 |
| **BN 112** | 28 | 60 | M10 | 31 | 8 | 215 | 180 | 250 | 14 | 4 | 15 | 219 | 484 | 424 | 547 | 157 | 98 | 98 | 128 | 198 | 6 |
| **BN 132** | 38 | 80 | M12 | 41 | 10 | 265 | 230 | 300 | 14 | 4 | 20 | 258 | 603 | 523 | 686 | 193 | 118 | 118 | 180 | 200 (2) | 6 |
| **BN 160 MR** | 42<br>38 (1) | 110<br>80 (1) | M16<br>M12 (1) | 45<br>41 (1) | 12<br>10 (1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 258 | 672 | 562 | 755 | 193 | 118 | 118 | 218 | 217 | 6 |
| **BN 160 M** | 42<br>38 (1) | 110-80<br>(1) | M16<br>M12 (1) | 45<br>41 (1) | 12<br>10 (1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 310 | 736 | 626 | 820 | 245 | 187 | 187 | 51 | 247 | — |
| **BN 160 L** | 42<br>38 (1) | 110<br>80 (1) | M16<br>M12 (1) | 45<br>41 (1) | 12<br>10 (1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 310 | 736 | 626 | 820 | 245 | 187 | 187 | 51 | 247 | — |
| **BN 180 M** | 48<br>38 (1) | 110<br>80 (1) | M16<br>M12 (1) | 51.5<br>41 (1) | 14<br>10 (1) | 300 | 250 | 350 | 18.5 | 5 | 15 | 310 | 780 | 670 | 864 | 245 | 187 | 187 | 51 | 247 | — |

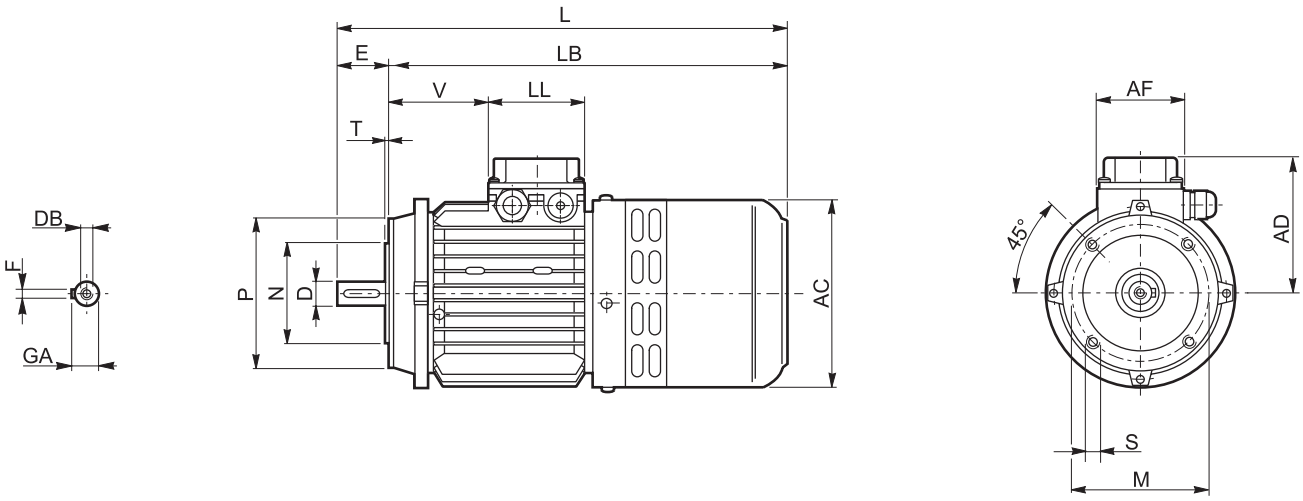
N.B.:
1) Estas dimensiones están referidas a la segunda extremidad del eje
2) Para el freno FA07 la cota R = 217

Las dimensiones AD, AF, LL y V relativas a la caja de bornes de los motores BN..FA con alimentación separada (opción SA) son iguales a las de los motores BN..FD del mismo tamaño.

El alojamiento hexagonal no está presente en la opción PS.



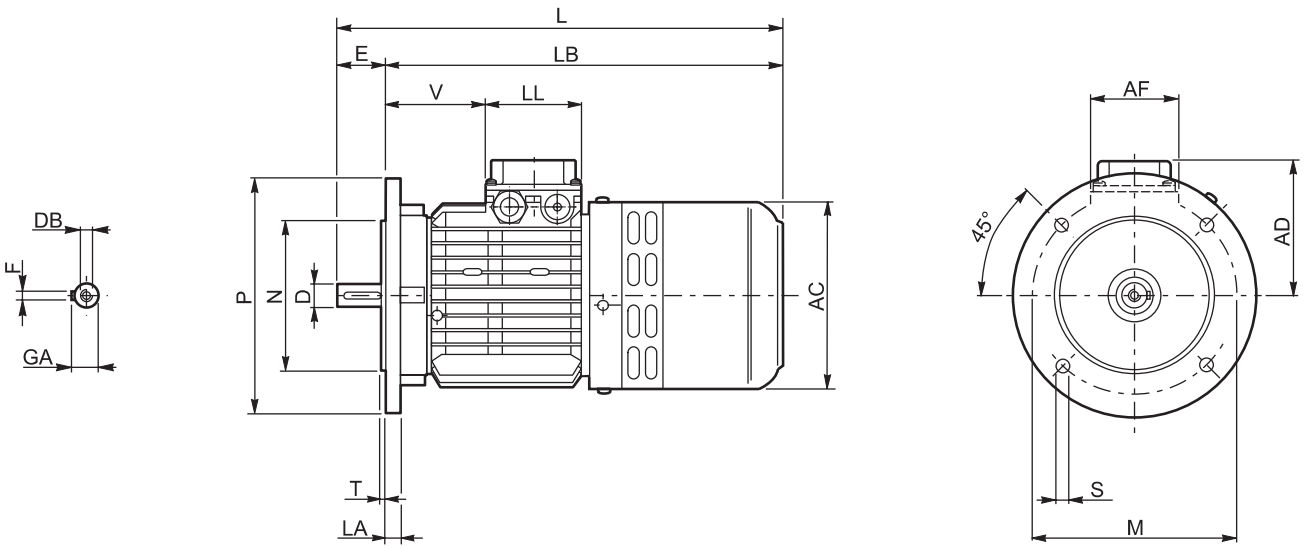
# BN_BA - IM B14




| | Eje | | | | | Brida | | | | | Motor | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **D** | **E** | **DB** | **GA** | **F** | **M** | **N** | **P** | **S** | **T** | **AC** | **L** | **LB** | **LC** | **AD** | **AF** | **LL** | **V** |
| **BN 63** | 11 | 23 | M4 | 12.5 | 4 | 75 | 60 | 90 | M5 | 2.5 | 124 | 298 | 275 | 95 | 74 | 80 | 28 | 34 |
| **BN 71** | 14 | 30 | M5 | 16 | 5 | 85 | 70 | 105 | M6 | 2.5 | 138 | 327 | 297 | 108 | 74 | 80 | 68 | 26 |
| **BN 80** | 19 | 40 | M6 | 21.5 | 6 | 100 | 80 | 120 | M6 | 3 | 156 | 372 | 332 | 119 | 74 | 80 | 83 | 37 |
| **BN 90** | 24 | 50 | M8 | 27 | 8 | 115 | 95 | 140 | M8 | 3 | 176 | 425 | 375 | 133 | 98 | 98 | 95 | 38 |
| **BN 100** | 28 | 60 | M10 | 31 | 8 | 130 | 110 | 160 | M8 | 3.5 | 195 | 477 | 417 | 142 | 98 | 98 | 119 | 44 |
| **BN 112** | 28 | 60 | M10 | 31 | 8 | 130 | 110 | 160 | M8 | 3.5 | 219 | 500 | 440 | 157 | 98 | 98 | 128 | 50 |
| **BN 132** | 38 | 80 | M12 | 41 | 10 | 165 | 130 | 200 | M10 | 4 | 258 | 638 | 558 | 193 | 118 | 118 | 180 | 52 |

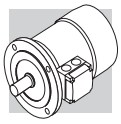
N.B.:
Las dimensiones AD, AF, LL y V relativas a la caja de bornes de los motores BN..FA con alimentación separada (opción SA) son iguales a las de los motores BN...FD del mismo tamaño.

# BN_BA - IM B5

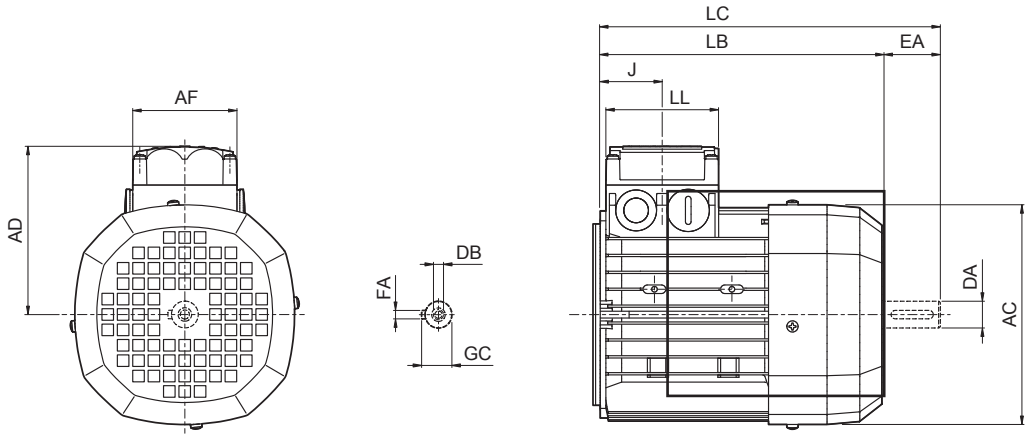



| | Eje | | | | | Brida | | | | | | Motor | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **D** | **E** | **DB** | **GA** | **F** | **M** | **N** | **P** | **S** | **T** | **LA** | **AC** | **L** | **LB** | **LC** | **AD** | **AF** | **LL** | **V** |
| **BN 63** | 11 | 23 | M4 | 12.5 | 4 | 115 | 95 | 140 | 9.5 | 3 | 10 | 124 | 298 | 275 | 95 | 74 | 80 | 28 | 34 |
| **BN 71** | 14 | 30 | M5 | 16 | 5 | 130 | 110 | 160 | 9.5 | 3.5 | 10 | 138 | 327 | 297 | 108 | 74 | 80 | 68 | 26 |
| **BN 80** | 19 | 40 | M6 | 21.5 | 6 | 165 | 130 | 200 | 11.5 | 3.5 | 11.5 | 156 | 372 | 332 | 119 | 74 | 80 | 83 | 37 |
| **BN 90** | 24 | 50 | M8 | 27 | 8 | 165 | 130 | 200 | 11.5 | 3.5 | 11.5 | 176 | 425 | 375 | 133 | 98 | 98 | 95 | 38 |
| **BN 100** | 28 | 60 | M10 | 31 | 8 | 215 | 180 | 250 | 14 | 4 | 14 | 195 | 477 | 417 | 142 | 98 | 98 | 119 | 44 |
| **BN 112** | 28 | 60 | M10 | 31 | 8 | 215 | 180 | 250 | 14 | 4 | 15 | 219 | 500 | 440 | 157 | 98 | 98 | 128 | 50 |
| **BN 132** | 38 | 80 | M12 | 41 | 10 | 265 | 230 | 300 | 14 | 4 | 20 | 258 | 638 | 558 | 193 | 118 | 118 | 180 | 52 |

N.B.:
Las dimensiones AD, AF, LL y V relativas a la caja de bornes de los motores BN..FA con alimentación separada (opción SA) son iguales a las de los motores BN...FD del mismo tamaño.

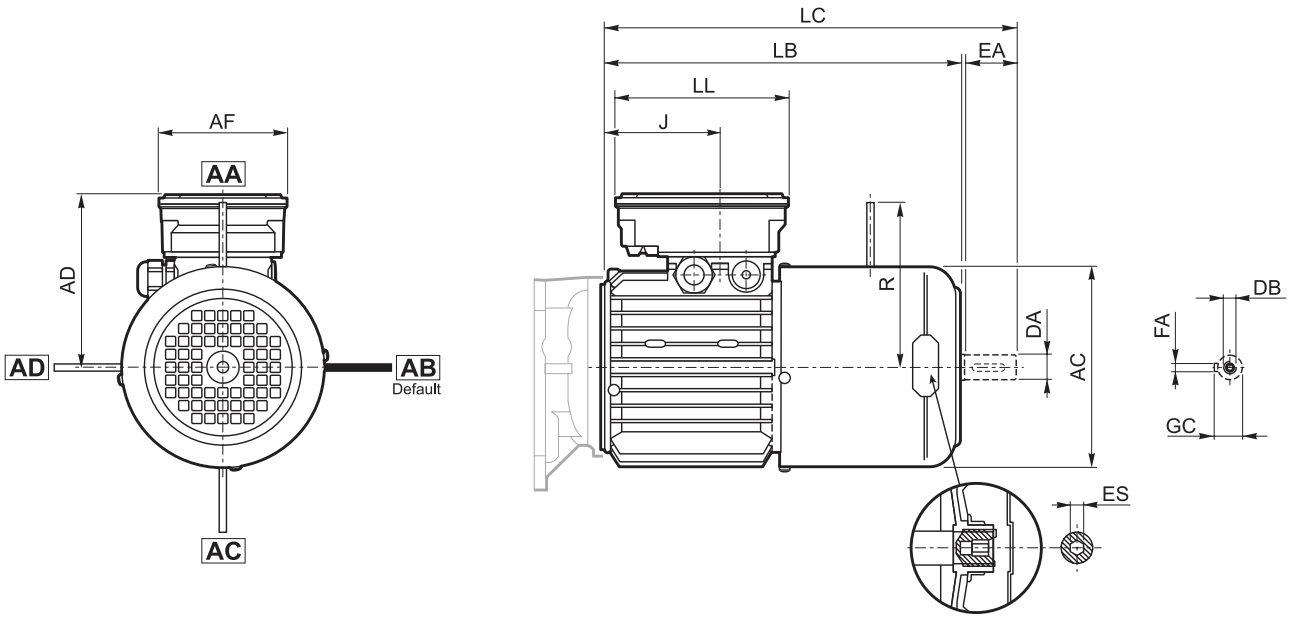


# M




| | Segunda extremidad del eje | | | | | Motor | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **DA** | **EA** | **DB** | **FA** | **GC** | **AC** | **LB** | **LC** | **AF** | **LL** | **J** | **AD** |
| **M 0** | 9 | 20 | M3 | 3 | 10.2 | 110 | 133 | 155 | 74 | 80 | 42 | 91 |
| **M 05** | 11 | 23 | M4 | 4 | 12.5 | 121 | 165 | 191 | 74 | 80 | 48 | 95 |
| **M 1** | 14 | 30 | M5 | 5 | 16 | 138 | 187 | 219 | 74 | 80 | 45 | 108 |
| **M 2 S** | 19 | 40 | M6 | 6 | 21.5 | 156 | 202 | 245 | 74 | 80 | 44 | 119 |
| **M 3 S** | 28 | 60 | M10 | 8 | 31 | 195 | 230 | 293 | 98 | 98 | 53.5 | 142 |
| **M 3 L** | 28 | 60 | M10 | 8 | 31 | 195 | 262 | 325 | 98 | 98 | 53.5 | 142 |
| **M 4** | 38 | 80 | M12 | 10 | 41 | 258 | 361 | 444 | 118 | 118 | 64.5 | 193 |
| **M 4 LC** | 38 | 80 | M12 | 10 | 41 | 258 | 396 | 479 | 118 | 118 | 64.5 | 193 |
| **M 5 S** | 38 | 80 | M12 | 10 | 41 | 310 | 418 | 502 | 187 | 187 | 77 | 245 |
| **M 5 L** | 38 | 80 | M12 | 10 | 41 | 310 | 462 | 546 | 187 | 187 | 77 | 245 |

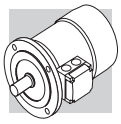
# M_FD ; M_AFD



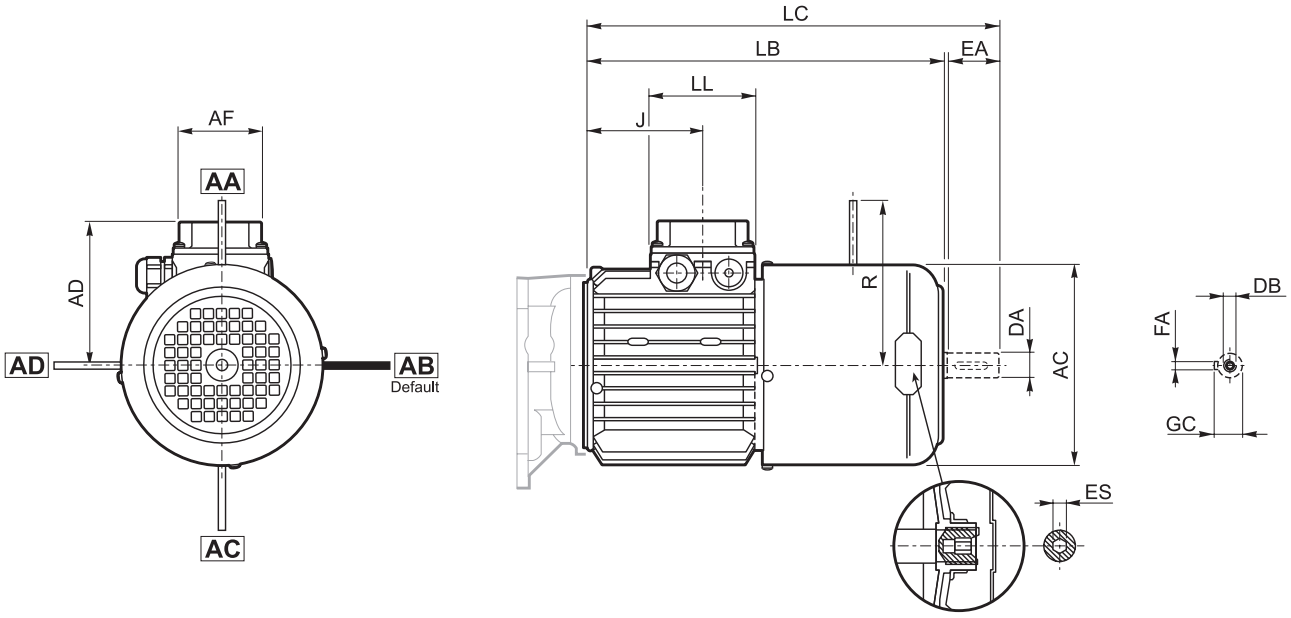

| | Segunda extremidad del eje | | | | | Motor | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **DA** | **EA** | **DB** | **FA** | **GC** | **AC** | **LB** | **LC** | **AF** | **LL** | **J** | **AD** | **R** | **ES** |
| **M 05** | 11 | 23 | M4 | 4 | 12.5 | 121 | 231 | 256 | 98 | 133 | 48 | 122 | 96 | 5 |
| **M 1** | 14 | 30 | M5 | 5 | 16 | 138 | 248 | 280 | 98 | 133 | 73 | 135 | 103 | 5 |
| **M 2 S** | 19 | 40 | M6 | 6 | 21.5 | 156 | 272 | 314 | 98 | 133 | 88 | 146 | 129 | 5 |
| **M 3 S** | 28 | 60 | M10 | 8 | 31 | 195 | 326 | 389 | 110 | 165 | 124.5 | 158 | 160 | 6 |
| **M 3 L** | 28 | 60 | M10 | 8 | 31 | 195 | 353 | 416 | 110 | 165 | 124.5 | 158 | 160 | 6 |
| **M 4** | 38 | 80 | M12 | 10 | 41 | 258 | 470 | 553 | 140 | 188 | 185.5 | 210 | 204 (1) | 6 |
| **M 4 LC** | 38 | 80 | M12 | 10 | 41 | 258 | 495 | 578 | 140 | 188 | 64.5 | 210 | 226 | 6 |
| **M 5 S** | 38 | 80 | M12 | 10 | 41 | 310 | 558 | 642 | 187 | 187 | 77 | 245 | 266 | — |
| **M 5 L** | 38 | 80 | M12 | 10 | 41 | 310 | 602 | 686 | 187 | 187 | 77 | 245 | 266 | — |

N.B.:
1) Para el freno FD07 la cota R = 226

El taladro hexagonal ES no está presente en la opción PS.



# M_FA




| | Segunda extremidad del eje | | | | | Motor | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **DA** | **EA** | **DB** | **FA** | **GC** | **AC** | **LB** | **LC** | **AF** | **LL** | **J** | **AD** | **R** | **ES** |
| **M 05** | 11 | 23 | M4 | 4 | 12.5 | 121 | 231 | 256 | 74 | 80 | 48 | 95 | 116 | 5 |
| **M 1** | 14 | 30 | M5 | 5 | 16 | 138 | 248 | 280 | 74 | 80 | 73 | 108 | 124 | 5 |
| **M 2 S** | 19 | 40 | M6 | 6 | 21.5 | 156 | 272 | 314 | 74 | 80 | 88 | 119 | 134 | 5 |
| **M 3 S** | 28 | 60 | M10 | 8 | 31 | 195 | 326 | 389 | 98 | 98 | 124.5 | 142 | 160 | 6 |
| **M 3 L** | 28 | 60 | M10 | 8 | 31 | 195 | 353 | 416 | 98 | 98 | 124.5 | 142 | 160 | 6 |
| **M 4** | 38 | 80 | M14 | 10 | 41 | 258 | 470 | 553 | 118 | 118 | 185.5 | 193 | 200 (1) | 6 |
| **M 4 LC** | 38 | 80 | M14 | 10 | 41 | 258 | 495 | 578 | 118 | 118 | 64.5 | 193 | 217 | 6 |
| **M 5 S** | 38 | 80 | M12 | 10 | 41 | 310 | 558 | 642 | 187 | 187 | 77 | 245 | 247 | — |
| **M 5 L** | 38 | 80 | M12 | 10 | 41 | 310 | 602 | 686 | 187 | 187 | 77 | 245 | 247 | — |

N.B.:
1) Para el freno FA07 la cota R = 217

Las dimensiones AD, AF, LL y V relativas a la caja de bornes de los motores M..FA con alimentación separada (opción SA) son iguales a las de los motores BN...FD, AFD del mismo tamaño.

El taladro hexagonal ES no está presente en la opción PS.

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