

Product data sheet

Characteristics

XCMD2102L1

Limit switch, Limit switches XC Standard, XCMD, steel roller plunger, 1NC+1 NO, snap, 1 m



Main

| | |
|-------------------------------|--|
| Range of product | Telemecanique Limit switches XC Standard |
| Series name | Standard format |
| Product or component type | Limit switch |
| Device short name | XCMD |
| Sensor design | Miniature |
| Body type | Fixed |
| Head type | Plunger head |
| Material | Metal |
| Body material | Zamak |
| Head material | Zamak |
| Fixing mode | By the body |
| Movement of operating head | Linear |
| Type of operator | Spring return roller plunger metal |
| Type of approach | Lateral approach, 2 directions |
| Number of poles | 2 |
| Contacts type and composition | 1 NC + 1 NO |
| Contact operation | Snap action |

Complementary

| | |
|---|---|
| Switch actuation | By 30° cam |
| Electrical connection | Removable cable connector |
| Cable length | 1 m |
| Cable composition | 5 x 0.75 mm ² |
| Wire insulation material | PvR |
| Contacts insulation form | Zb |
| Positive opening | With |
| Positive opening minimum force | 35 N |
| Minimum force for tripping | 7 N |
| Maximum actuation speed | 0.5 m/s |
| Contact code designation | B300, AC-15 (Ue = 240 V), Ie = 1.5 A conforming to EN/IEC 60947-5-1 appendix A R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to EN/IEC 60947-5-1 appendix A |
| [Ui] rated insulation voltage | 300 V (pollution degree 3) conforming to UL 508 400 V (pollution degree 3) conforming to IEC 60947-5-1 300 V (pollution degree 3) conforming to CSA C22.2 No 14 |
| Maximum resistance across terminals | 25 mOhm conforming to IEC 60255-7 category 3 |
| [Uiimp] rated impulse withstand voltage | 4 kV conforming to IEC 60664 4 kV conforming to IEC 60947-1 |
| Short-circuit protection | 6 A cartridge fuse, type gG |
| Electrical durability | 5000000 Cycles, DC-13, 120 V, 1 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C 5000000 Cycles, DC-13, 24 V, 3 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C 5000000 cycles, DC-13, 48 V, 2 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C |
| Mechanical durability | 10000000 cycles |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither TMSS Holding nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

| | |
|------------|----------|
| Width | 30 mm |
| Height | 50 mm |
| Depth | 16 mm |
| Net weight | 0.185 kg |

Environment

| | |
|---------------------------------------|--|
| Shock resistance | 25 gn for 18 ms conforming to IEC 60068-2-27 |
| Vibration resistance | 5 gn (f= 10...500 Hz) conforming to IEC 60068-2-6 |
| IP degree of protection | IP66 conforming to IEC 60529 IP67 conforming to IEC 60529 IP68 conforming to IEC 60529 |
| IK degree of protection | IK06 conforming to EN 62262 |
| Overvoltage category | Class I conforming to IEC 61140 Class I conforming to NF C 20-030 |
| Ambient air temperature for operation | -25...70 °C |
| Ambient air temperature for storage | -40...70 °C |
| Protective treatment | TC |
| Product certifications | CCC[RETURN]CSA[RETURN]UL |
| Standards | EN/IEC 60204-1 UL 508 EN/IEC 60947-5-1 CSA C22.2 No 14 |

Packing Units

| | |
|------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 1.621 cm |
| Package 1 Width | 16.107 cm |
| Package 1 Length | 17.712 cm |
| Package 1 Weight | 173.7 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 30 |
| Package 2 Height | 15 cm |
| Package 2 Width | 30 cm |
| Package 2 Length | 40 cm |
| Package 2 Weight | 5.739 kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 480 |
| Package 3 Height | 80 cm |
| Package 3 Width | 80 cm |
| Package 3 Length | 60 cm |
| Package 3 Weight | 97.86 kg |

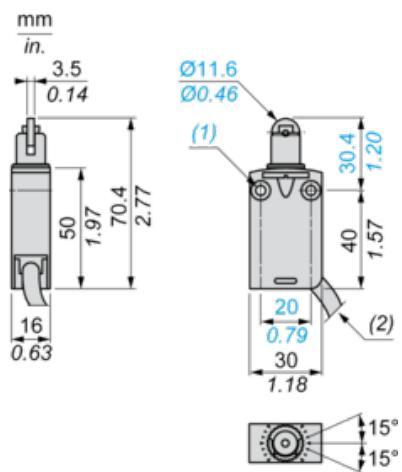
Offer Sustainability

| | |
|--|---|
| Sustainable offer status | Green Premium product |
| Environmental Disclosure |  Product Environmental Profile |
| Circularity Profile |  End of Life Information |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Diisobutyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| For all Reach Rohs enquiries contact us at | sustainability@tesensors.com |

Contractual warranty

| | |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions

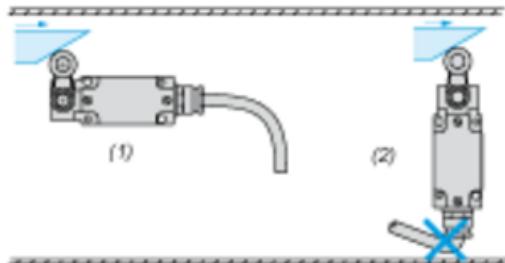


(1) 2 fixing holes Ø 4.2 mm, counterbored Ø 8 mm by 4 mm deep.

(2) External diameter of cable 7.5 mm.

Mounting

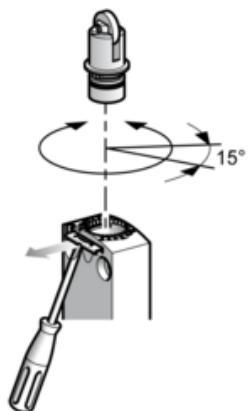
Sweep of Connecting Cable



(1) Recommended
(2) To be avoided

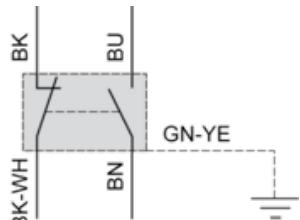
Setting-up

Plunger or Multi-directional Heads



Wiring Diagram

2-pole NC + NO Snap Action



(BK) Black

(BK-WH) Black White

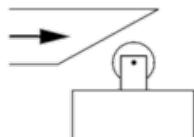
(BU) Blue

(BN) Brown

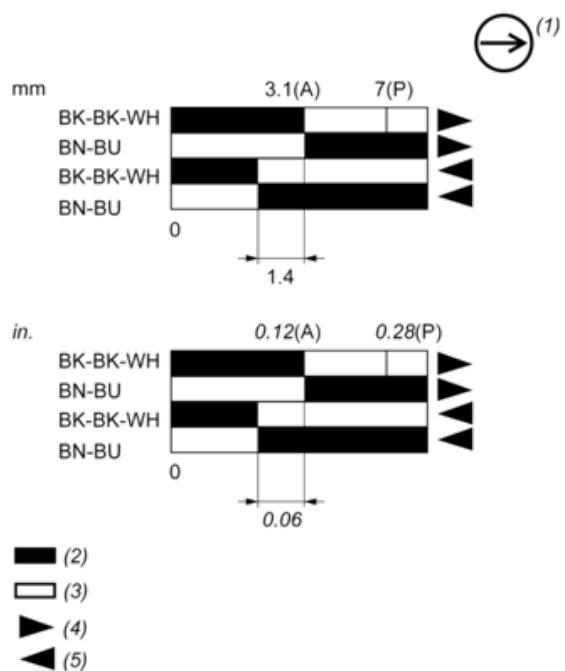
(GN-YE) Green Yellow

Characteristics of Actuation

Switch Actuation by 30° Cam



Functional Diagram



(P) Positive opening point

(A) Cam displacement

(1) NC contact with positive opening operation

(2) Closed

(3) Open

(4) Tripping

(5) Resetting

(BK) Black

(BK-WH) Black White

(BU) Blue

(BN) Brown