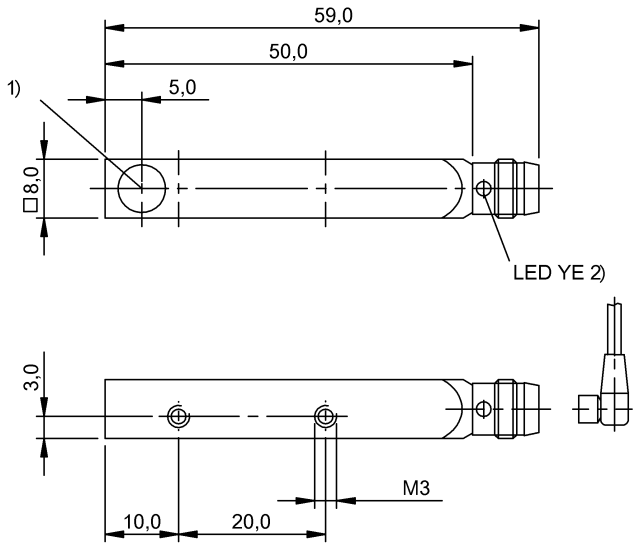
BOS Q08M-PS-RD11-S49
BOS0041



1) Sensing surface 2) Light reception/limit area

LISTED IND. CONT. EQ. 81U2
for use in the secondary of a class 2 source of supply

Electrical connection

Connection	M8x1-Connector, 3-pole
Contact, surface protection	Gold plated
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

Hysteresis H max. (% of Sr)	15.0 %
Load capacitance max. at Ue	0.1 µF
No-load current Io max. at Ue	15 mA
Operating voltage Ub	10…30 VDC
Output resistance Ra	33.0 kOhm
Pollution degree	3
Protected against miswiring	yes
Rated insulation voltage Ui	75 V DC
Rated operating current Ie DC	100 mA
Rated operating voltage Ue DC	24 V
Ready delay tv max.	150 ms
Repeat accuracy max. (% of Sr)	5.0 %
Residual current Ir max.	50 µA
Switching frequency	400 Hz
Turn-off delay toff max.	1.25 ms
Turn-on delay ton max.	1.25 ms
Utilization category	DC -13
Voltage drop Ud max. at Ie	2.5 V

Environmental conditions

Ambient temperature	-10…60 °C
Protection type IEC 60529	IP67

General data

Approval/Conformity	cULus CE
Basic standard	IEC 60947-5-2
Series	Q08M
Style	Square Connection 90°

Material

Housing material	Zinc, Die casting
Material sensing surface	PMMA
Surface protection	nickel plates

Mechanical data

Dimension	8 x 59 x 8 mm
Fastening detail	Screw M3

Optical data

Ambient light max.	5000 Lux
Beam characteristic	Divergent
LED group per IEC 62471	Exempt Group
Light type	LED Red light
Wave length	640 nm

Output/Interface

Switching output	PNP Normally open (NO)

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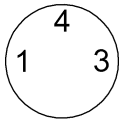
Range/Distance

Measuring range	0…55 mm
Range	0…55 mm
Rated operating distance Sn	55 mm
Ripple max. (% of Ue)	10 %
Temperature drift max. (% of Sr)	10 %

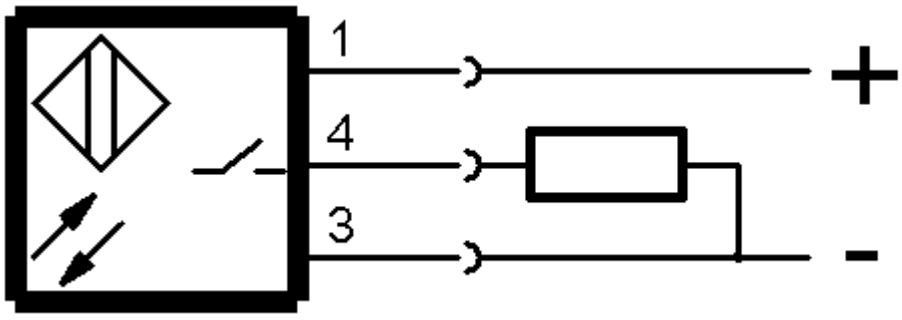
Remarks

For line-transmitted disturbances an external protection circuit is recommended, e.g. capacitors (≥20nF) to ground, (see also Instruction for Protection Circuit Doc.-No.: 864234).
Reference object (target): gray card, 100 x 100 90 % remission, axial approach.
The sensor is functional again after the overload has been eliminated.
For additional information, refer to user's guide.
Order accessories separately.
Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.

Connector view



Wiring Diagram



Symbols for Optoelectronic Sensors