

1) Optical axis emitter, 2) Optical axis receiver, 3) Output function



Basic features

Approval/Conformity	CE cULus EAC WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference reflector	BOS R-2
Series	Q08M
Style	Square Connection 90°

Electrical data

Load capacitance max. at Ue	0.5 µF
No-load current I _o max. at Ue	15 mA
Operating voltage U _b	10...30 VDC
Rated insulation voltage U _i	75 V DC
Rated operating current I _e	100 mA
Rated operating voltage U _e DC	24 V
Ready delay t _v max.	20 ms
Ripple max. (% of U _e)	10 %
Switching frequency	500 Hz
Turn-off delay t _{off} max.	1 ms
Turn-on delay t _{on} max.	1 ms
Utilization category	DC -13
Voltage drop U _d max. at I _e	0.7 V

Display/Operation

Display	Limit range - LED yellow, flashing LED yellow: Light received
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Electrical connection

Cable diameter D	3.00 mm
Cable length L	0.2 m
Connection	Cable with connector, 0.20 m, PUR
Contact, surface protection	Gold plated
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Environmental conditions

Ambient temperature	-5...55 °C
EN 60068-2-27, Shock	Half-sinus, 100 gn, 2 ms, 3x8000 Half-sinus, 30 gn, 11 ms, 3x6
EN 60068-2-6, Vibration	10...2000 Hz, amplitude 1 mm, 30 gn, 3x5 h 10...55 Hz, amplitude 1 mm, 3x30 min
Protection degree	IP67

Material

Housing material	Zinc, Die casting, nickel plated
Material jacket	PUR
Material sensing surface	PMMA
Surface protection	nickel plated

Mechanical data

Dimension	8 x 44 x 8 mm
Mounting	Screw M3

Optical features

Beam characteristic	Divergent
LED group per IEC 62471	Exempt Group
Light spot size	Ø 3.0 mm Light exit
Light type	LED, red light
Polarizing filter	yes
Principle of optical operation	Retroreflective sensor
Switching function, optical	dark-on
Wave length	645 nm

Output/Interface

Switching output	PNP normally open (NO)
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Range/Distance

Range	0...1 m
Rated operating distance Sn	1 m

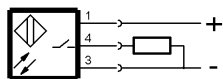
Remarks

Order accessories separately.
 For additional information, refer to user's guide.
 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.
 The sensor is functional again after the overload has been eliminated.

Connector Drawings



Wiring Diagrams



Opto Symbols

