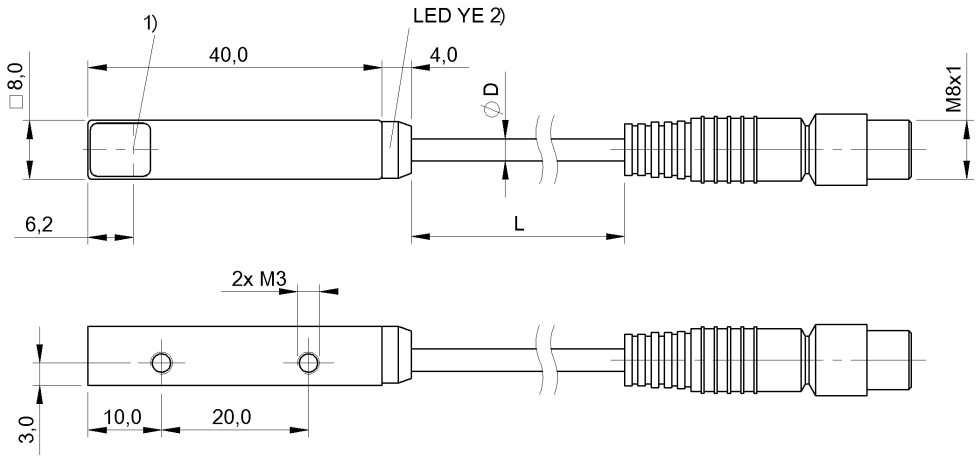
Photoelectric Sensors

BOS Q08M-PO-KE21-00,2-S49
Order Code: BOS01Y9



1) Optical axis receiver, 2) Output function

Basic features

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

Display/Operation

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

Electrical connection

Cable diameter D	3.00 mm
Cable length L	0.2 m
Connection	Cable with connector, M8x1-Male, 3-pin, 0.20 m, PUR
Contact, surface protection	Gold plated
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.05 µF
No-load current Io max. at Ue	10 mA
Operating voltage Ub	10...30 VDC
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	100 mA
Rated operating voltage Ue DC	24 V
Ready delay tv max.	20 ms
Ripple max. (% of Ue)	10 %
Switching frequency	500 Hz
Turn-off delay toff max.	1 ms
Turn-on delay ton max.	1 ms
Utilization category	DC -13
Voltage drop Ud max. at Ie	0.7 V

Environmental conditions

Ambient temperature	-5...55 °C
EN 60068-2-27, Shock	Half-sinus, 30 g_n, 11 ms, 3x6 Half-sinus, 100 gn, 2 ms, 3x8000
EN 60068-2-6, Vibration	10…55 Hz, amplitude 1 mm, 3x30 min $_{10}$…2000 Hz, amplitude 1 mm, 30 gn, 3x5 h
IP rating	IP67

Functional safety

MTTF (40 °C)	972.7 a

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Interface

Switching output	PNP normally closed (NC)

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 part	Screw M3

Optical features

Principle of optical operation	Through-beam sensor (receiver)
Switching function, optical	Light-on

Range/Distance

Range	0...2.2 m
Rated operating distance Sn	2.2 m

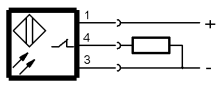
Remarks

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.
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings

Wiring Diagrams



Opto Symbols