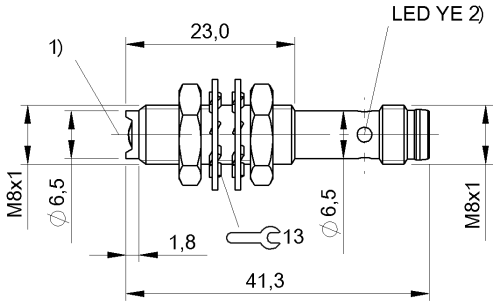
Photoelectric Sensors

BOS 08E-NS-KE20-S49
Order Code: BOS0207



1) Optical axis, 2) Output function

IND. CONT. EQ.
81U2
Class 2 Type 1

Basic features

Approval/Conformity	CE cULus EAC WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Series	08E
Style	Cylinder Straight optics

Display/Operation

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

Electrical connection

Connection	Connector, M8x1-Male, 3-pin
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, 100 gn, 2 ms, 3x8000 Half-sinus, 30 gn, 11 ms, 3x6
EN 60068-2-6, Vibration	10…55 Hz, amplitude 1 mm, 3x30 min 10…2000 Hz, amplitude 1 mm, 30 gn, 3x5 h
Protection degree	IP67

Material

Housing material	Stainless steel
Material sensing surface	PMMA

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Mechanical data

Dimension	Ø 8 x 40 mm
Mounting	Nut M8x1

Optical features

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

Output/Interface

Switching output	NPN normally open (NO)

Range/Distance

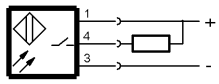
Range	0...2.2 m
Rated operating distance Sn	2.2 m

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.

Connector Drawings

Wiring Diagrams



Opto Symbols