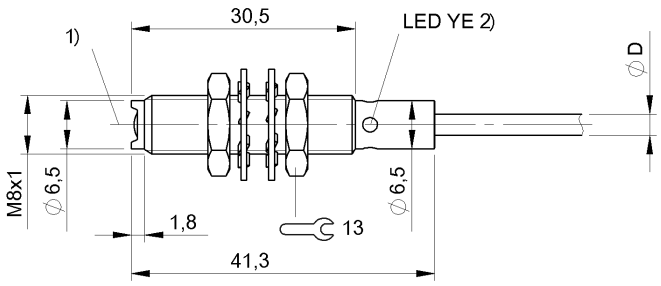
Photoelectric Sensors

BOS 08E-X-KS20-02
Order Code: BOS01Z6



1) Optical axis, 2) Output function

Basic features

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

Electrical connection

Cable diameter D	3.00 mm
Cable length L	2 m
Conductor cross-section	0.14 mm²
Connection	Cable, 2.00 m, PUR
Number of conductors	2
Polarity reversal protected	yes
Protection against device mix-ups	yes

Electrical data

No-load current Io max. at Ue	10 mA
Operating voltage Ub	10...30 VDC
Rated insulation voltage Ui	75 V DC
Rated operating voltage Ue DC	24 V
Ripple max. (% of Ue)	10 %

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	$_{10}$…2000 Hz, amplitude 1 mm, 30 gn, 3x5 h 10…55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Functional safety

MTTF (40 °C)	485.5 a

Material

Housing material	Stainless steel
Material jacket	PUR
Material sensing surface	PMMA

Mechanical data

Dimension	Ø 8 x 40 mm
Mounting part	Nut M8x1

Optical features

Beam characteristic	Divergent
LED group per IEC 62471	Exempt Group
Light type	LED, red light
Principle of optical operation	Through-beam sensor (Emitter)
Wave length	645 nm

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Range/Distance

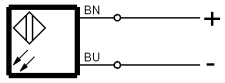
Range	0...2.2 m
Rated operating distance Sn	2.2 m

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.
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.

Wiring Diagrams



Opto Symbols