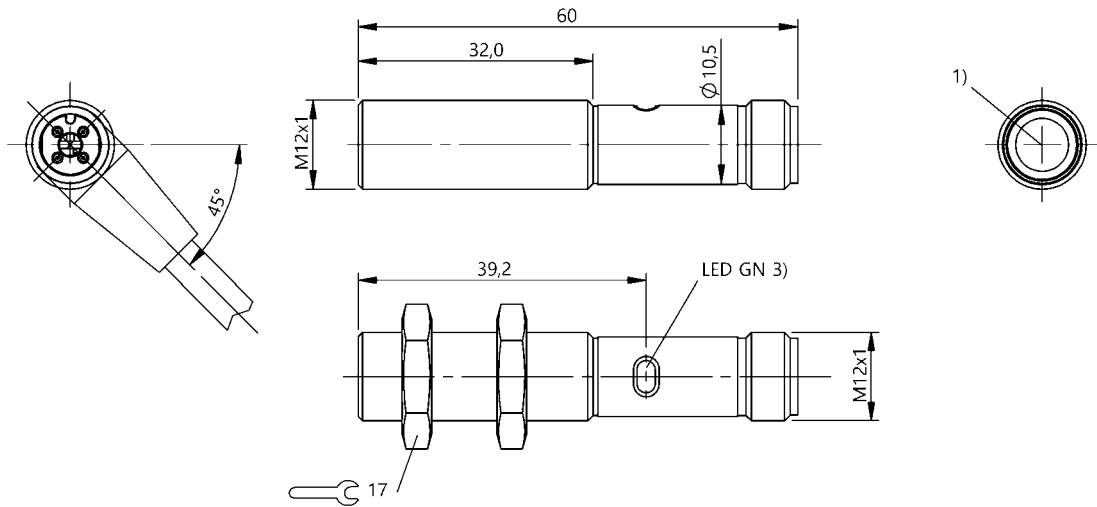


Photoelectric Sensors  
BOS 12M-X-RS10-S4  
Order Code: BOS01TW



1) Optical axis emitter, 3) Operating voltage



Basic features

Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference receiver	BOS 12M-...-RE10-..
Series	12M
Style	Cylinder Straight optics
Trademark	Global

Display/Operation

Adjuster	no
Display	LED green: Power

Electrical connection

Connection	Connector, M12x1-Male, 4-pin
Contact, surface protection	Gold plated
Polarity reversal protected	yes
Protection against device mix-ups	yes

Electrical data

No-load current I <sub>o max.</sub> at U <sub>e</sub>	15 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating voltage U <sub>e</sub> DC	24 V
Ripple max. (% of U <sub>e</sub> )	15 %

Environmental conditions

Ambient temperature	-5...55 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms, 3x6
EN 60068-2-6, Vibration	10...55 Hz, amplitude 0.5 mm, 3x30 min
IP rating	IP67

Functional safety

MTTF (40 °C)	1060 a
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Material

Housing material	Brass, nickel-plated
Material sensing surface	PMMA
Surface protection	nickel-plated

Mechanical data

Dimension	Ø 12 x 60 mm
Mounting part	Nut M12x1
Tightening torque max.	7 Nm 15 Nm

Optical features

LED group per IEC 62471	Exempt Group
Light spot size	Ø 280 mm at 8 m
Light type	LED, red light
Principle of optical operation	Through-beam sensor (Emitter)
Wave length	644 nm

Range/Distance

Range	0...8 m
Rated operating distance Sn	8 m

Remarks

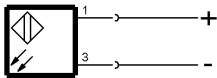
Order accessories separately.  
For additional information, refer to user's guide.  
For more information about MTTF and B10d see MTTF / B10d Certificate

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



1) Emitter

Opto Symbols

