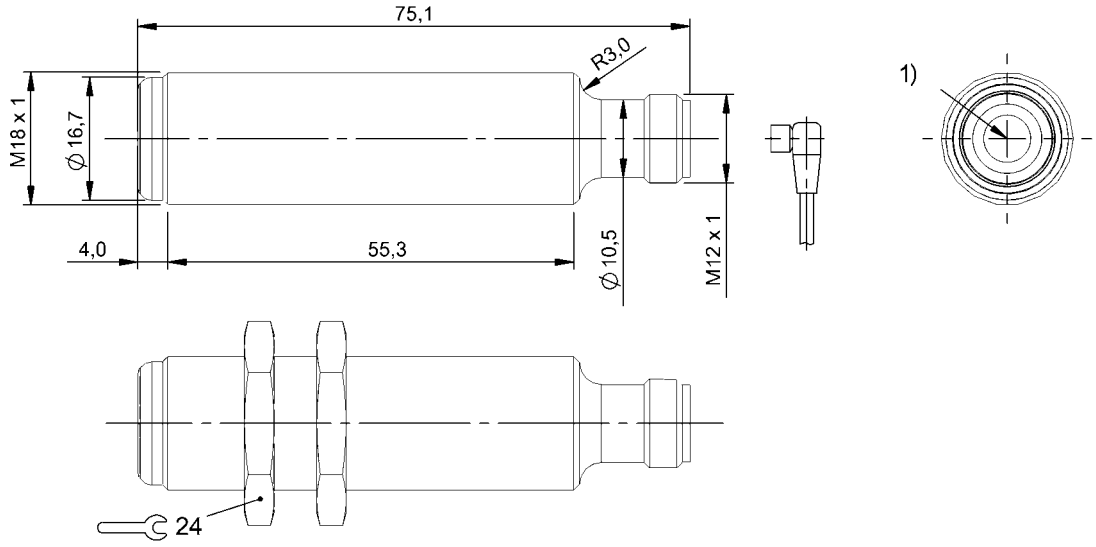
Photoelectric Sensors

BOS 18E-X-RS20-S4
Order Code: BOS01KT



1) Optical axis emitter

Basic features

Approval/Conformity	Ecolab cULus CE UKCA WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference receiver	BOS 18E-PA-RE20-S4
Series	18E
Style	Cylinder Straight optics

Display/Operation

Adjuster	no

Electrical connection

Connection	Connector, M12x1-Male, 4-pin
Contact, surface protection	Gold plated
Polarity reversal protected	yes

Electrical data

No-load current Io max. at Ue	25 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)	15 %

Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 100 gn, 2 ms, 3x8000 Half-sinus, 30 g_n, 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
IP rating	IP68/IP67
IP rating per DIN 40050	IPx9K

Functional safety

MTTF (40 °C)	950 a

Material

Housing material	1.4404 stainless steel
Material sensing surface	Glass

Mechanical data

Dimension	Ø 18 x 75 mm
Mounting part	Nut M18x1
Tightening torque max.	40 Nm

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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	640 nm

Range/Distance

Range	0...20 m
Rated operating distance Sn	20 m

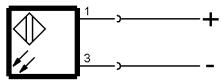
Remarks

For additional information, refer to user's guide.
Order accessories separately.
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