

1) Optical axis, 2) Operating voltage



Basic features

Approval/Conformity	CE cULus EAC WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Series	18MR
Style	Cylinder Optics 90°

Electrical data

Load capacitance max. at Ue	0.2 µF
Operating voltage U_b	10...30 VDC
Protection class	II
Rated insulation voltage U_i	75 V DC
Rated operating current I_e	100 mA
Rated operating voltage U_e DC	24 V
Ripple max. (% of U_e)	15 %
Switching frequency	800 Hz

Display/Operation

Adjuster	no
Display	LED green: Power

Environmental conditions

Ambient temperature	-5...55 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g _n , 11 ms, 3x6
IP rating	IP67

Electrical connection

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

Functional safety

MTTF (40 °C)	950 a
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Material

Housing material	Brass, nickel plated
Housing material, surface protection	nickel plated
Material sensing surface	Glass
Surface protection	nickel plated

Photoelectric Sensors
BOS 18MR-XR-RS20-S4
Order Code: BOS026N

BALLUFF

Mechanical data

Dimension	Ø 18 x 92 mm
Mounting	Nut M18x1
Tightening torque max.	15 Nm

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

Range/Distance

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

Remarks

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

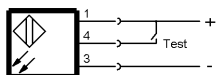
For more information about MTTF and B10d see MTTF / B10d Certificate

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



Opto Symbols

