

1) Optical axis, 2) Operating voltage



Basic features

Approval/Conformity	CE cULus WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference receiver	BOS 18MR-...-LE10-..
Series	18MR
Style	Cylinder Optics 90°

Display/Operation

Display	LED green: Power
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Electrical connection

Connection	Connector, M12x1-Male, 4-pin
Polarity reversal protected	yes

Electrical data

Input function	Test (Emitter off)
No-load current I_o max. at U_e	30 mA
Operating voltage U_b	10...30 VDC
Protection class	II
Rated insulation voltage U_i	75 V DC
Rated operating voltage U_e DC	24 V
Ripple max. (% of U_e)	8 %

Environmental conditions

Ambient temperature	-10...50 °C
EN 60068-2-27, Shock	Half-sinus, 50 gn, 500 ms, 3x3
EN 60068-2-6, Vibration	10...55 Hz, amplitude 0.5 mm, 3x30 min
IP rating	IP67

Functional safety

MTTF (40 °C)	1104 a
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Material

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

Mechanical data

Dimension	Ø 18 x 83.5 mm
Mounting part	Nut M18x1
Tightening torque max.	22 Nm

Optical features

Average power P_o max.	390 µW
Laser class per IEC 60825-1	1
Light type	Laser red light
Principle of optical operation	Through-beam sensor (Emitter)
Pulse duration t max.	6.0 µs
Pulse frequency	25 kHz
Wave length	650 nm

Range/Distance

Range	0...50 m
Rated operating distance Sn	50 m Adjustable

Remarks

For additional information, refer to user's guide.

Order accessories separately.

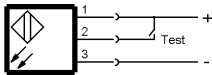
For more information about MTTF and B10d see MTTF / B10d Certificate

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



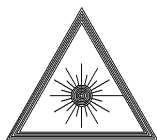
Wiring Diagrams



Opto Symbols



Warning Symbols



LASER CLASS 1 per IEC 60825-1