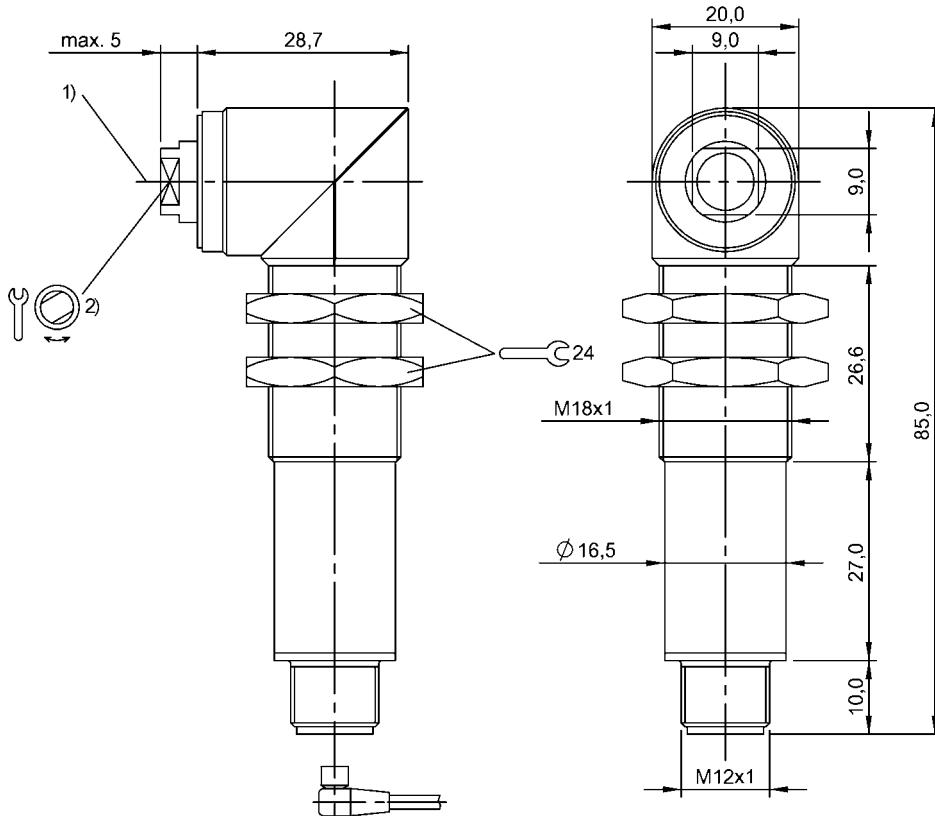


Photoelectric Sensors
BLS 18MR-XX-1LT-S4-C
Order Code: BOS00AU

BALLUFF



1) Optical axis, 2) Focus distance



Basic features

Approval/Conformity	CE cULus WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference receiver	BLE 18MR-..-1LT-..
Series	18MR
Style	Cylinder Optics 90°

Display/Operation

Adjuster	Adjusting nut
Setting	Focusing distance

Electrical connection

Connection	Connector, M12x1-Male, 4-pin
Polarity reversal protected	yes
Protection against device mix-ups	yes

Electrical data

No-load current I_0 max. at U_e	10 mA
Operating voltage U_b	10...30 VDC
Rated insulation voltage U_i	75 V DC
Rated operating voltage U_e DC	24 V
Ripple max. (% of U_e)	15 %

Environmental conditions

Ambient temperature	-10...50 °C
EN 60068-2-27, Shock	Half-sinus, 30 g _n , 11 ms, 3x6
EN 60068-2-6, Vibration	10...55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP65

Functional safety

MTTF (40 °C)	15 a
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Material

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

Mechanical data

Dimension	20 x 85 x 33.7 mm
Mounting part	Nut M18x1

Optical features

Average power Po max.	1 mW
Beam characteristic	Focus adjustable ≥ 0.2 m
Laser class per IEC 60825-1	2
Light type	Laser red light
Principle of optical operation	Through-beam sensor (Emitter)
Wave length	660 nm

Range/Distance

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

Remarks

Focusing tool included, order other 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.

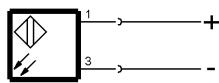
For more information about MTTF and B10d see MTTF / B10d Certificate

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.

Connector Drawings



Wiring Diagrams



1) Emitter

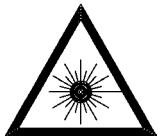
Opto Symbols



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BALLUFF

Warning Symbols



LASER BEAM - DO NOT STARE INTO THE LIGHT BEAM!

LASER CLASS 2 per IEC60825-1: 2003-10