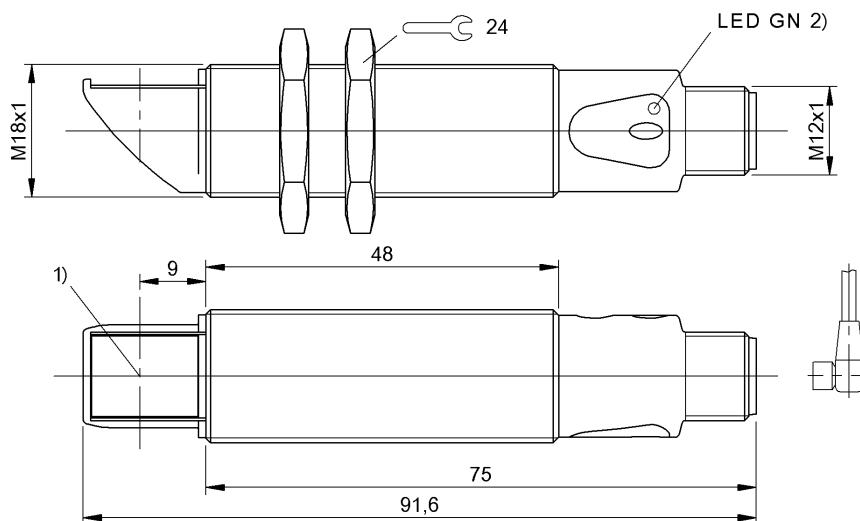


Photoelectric Sensors  
BOS 18MR-XT-RS20-S4  
Order Code: BOS026N

**BALLUFF**



1) Optical axis, 2) Operating voltage

#### Basic features

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

#### 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

Load capacitance max. at Ue	0.2 $\mu$ F
Operating voltage Ub	10...30 VDC
Rated operating current Ie	100 mA
Rated operating voltage Ue DC	24 V
Ripple max. (% of Ue)	15 %
Switching frequency	800 Hz

#### 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
IP rating	IP67

#### 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

#### Mechanical data

Dimension	Ø 18 x 92 mm
Mounting part	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.

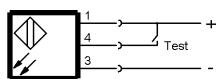
For more information about MTTF and B10d see MTTF / B10d Certificate

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

