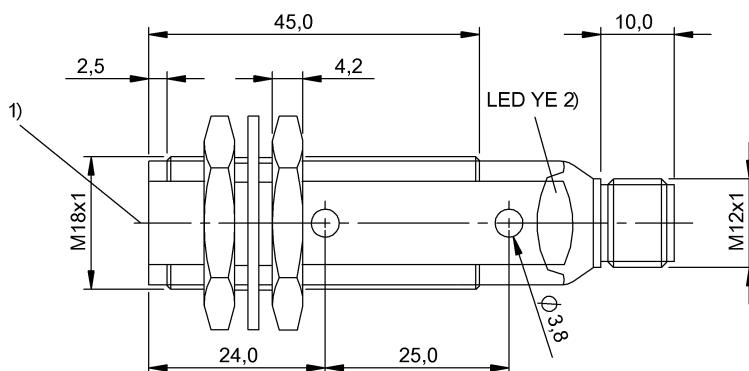
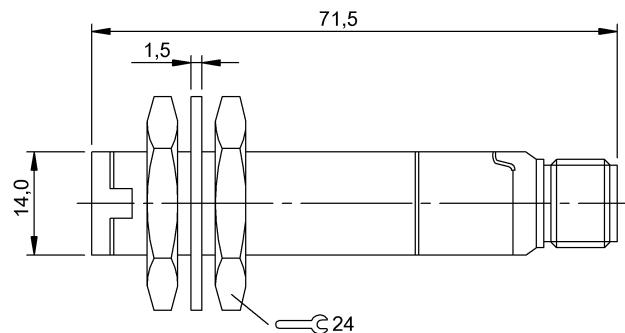


Photoelectric Sensors  
BLS 18KF-XX-1P-S4-L  
Order Code: BOS00EP

**BALLUFF**



1) Optical axis, 2) Operating voltage



#### Basic features

Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference receiver	BLE 18KF-..-1PP-..
Series	18KF
Style	Flat cylinder Straight optics
Trademark	Global

#### 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 $I_0$ max. at $U_e$	35 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 $U_e$ )	8 %

#### Environmental conditions

Ambient temperature	-25...55 °C
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms, 3x6
EN 60068-2-6, Vibration	10...55 Hz, amplitude 0.5 mm, 3x30 min
IP rating	IP67

#### Functional safety

MTTF (40 °C)	991 a
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## Material

Housing material	PBT
Material sensing surface	PMMA

## Mechanical data

Dimension	Ø 18 x 71.5 mm
Mounting part	Nut M18x1 Screw M3
Tightening torque max.	1.5 Nm

## Optical features

Light type	Infrared
Principle of optical operation	Through-beam sensor (Emitter)
Wave length	880 nm

## Range/Distance

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

## Remarks

For additional information, refer to user's guide.

Order accessories separately.

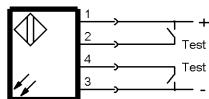
For more information about MTTF and B10d see MTTF / B10d Certificate

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

