

1) Optical axis, 2) Operating voltage



## Basic features

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

## Display/Operation

<b>Display</b>	LED green: Power
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## Electrical connection

<b>Connection</b>	Connector, M12x1-Male, 4-pin
<b>Polarity reversal protected</b>	yes

## Electrical data

<b>Input function</b>	Test (Emitter off)
<b>No-load current <math>I_0</math> max. at <math>U_e</math></b>	35 mA
<b>Operating voltage <math>U_b</math></b>	10...30 VDC
<b>Rated insulation voltage <math>U_i</math></b>	75 V DC
<b>Rated operating voltage <math>U_e</math> DC</b>	24 V
<b>Ripple max. (% of <math>U_e</math>)</b>	8 %

## Environmental conditions

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

## Functional safety

<b>MTTF (40 °C)</b>	991 a
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Photoelectric Sensors  
**BLS 18KF-XX-1P-S4-L**  
Order Code: BOS00EP

# BALLUFF

## 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.

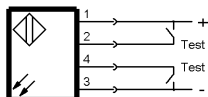
For more information about MTTF and B10d see MTTF / B10d Certificate

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

