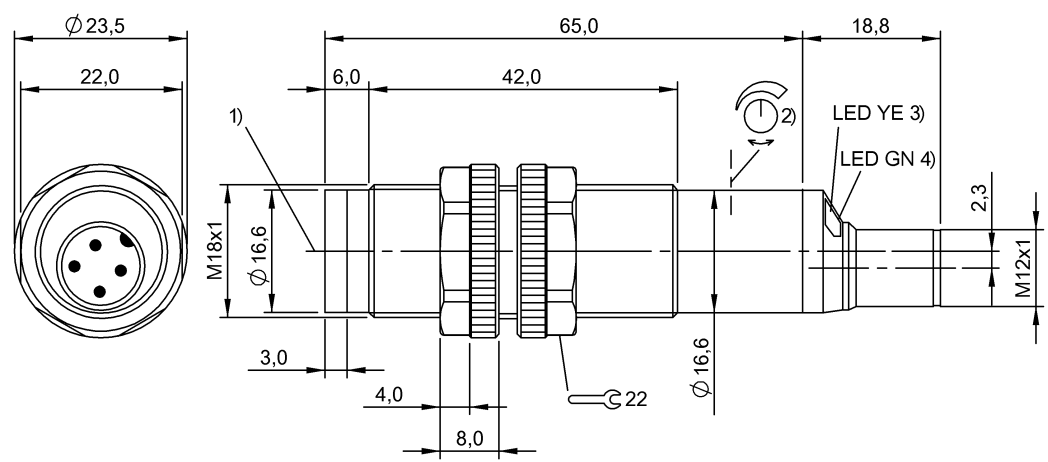


Photoelectric Sensors
BOS 18K-PS-1LOC-E5-C-S4
Order Code: BOS00H7

BALLUFF



1) Optical axis, 2) Sn, 3) Output function, 4) stability



Basic features

Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Series	18K
Style	Cylinder Straight optics

Display/Operation

Adjuster	Potentiometer 270°
Display	Output function- LED yellow Stability - LED green
Setting	Rated switching distance (Sn)

Electrical connection

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

Electrical data

Load capacitance max. at Ue	1 µF
No-load current Io max. at Ue	35 mA
Operating voltage Ub	10...30 VDC
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	100 mA
Rated operating voltage Ue DC	24 V
Residual current Ir max.	50 µA
Ripple max. (% of Ue)	8 %
Switching frequency	1500 Hz
Turn-off delay toff max.	0.33 ms
Turn-on delay ton max.	0.33 ms
Utilization category	DC -13
Voltage drop Ud max. at Ie	2 V

Environmental conditions

Ambient temperature	-10...50 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms, 3x6
EN 60068-2-6, Vibration	10...55 Hz, amplitude 0.5 mm, 3x30 min
IP rating	IP67

Interface

Switching output	PNP normally open (NO) Pin 4
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Material

Housing material	ABS
Material sensing surface	PMMA

Mechanical data

Dimension	Ø 18 x 83.8 mm
Mounting part	Nut M18x1

Optical features

Ambient light max.	5000 Lux
Average power Po max.	390 µW
Laser class per IEC 60825-1	1
Light type	Laser red light
Principle of optical operation	Diffuse sensor, energetic
Switching function, optical	Light-on
Wave length	650 nm

Range/Distance

Range	0...350 mm
Rated operating distance Sn	350 mm, Adjustable
Temperature drift max. (% of Sr)	10 %

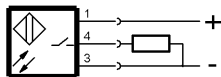
Remarks

Order accessories separately.
For additional information, refer to user's guide.
Reference object (target): gray card, 200 x 200, 90 % remission, axial approach.
The sensor is functional again after the overload has been eliminated.

Connector Drawings



Wiring Diagrams



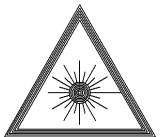
Opto Symbols



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Warning Symbols



LASER CLASS 1 per IEC 60825-1