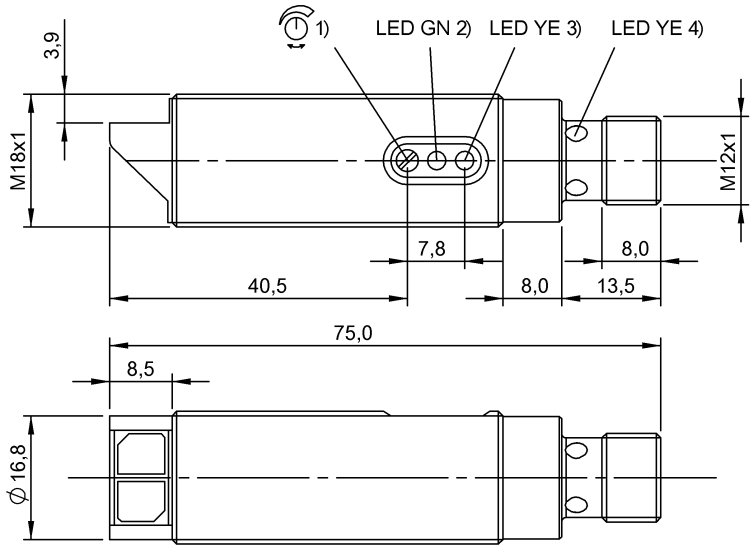
Photoelectric Sensors

BOS 18MR-PS-1HA-E5-C-S4
Order Code: BOS010J



1) Sn, 2) Stability, 3) Output function

Basic features

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

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
Short-circuit protection	yes

Electrical data

No-load current Io max. at Ue	25 mA
Operating voltage Ub	10...30 VDC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Ready delay tv max.	20 ms
Residual current Ir max.	100 µA
Ripple max. (% of Ue)	20 %
Switching frequency	500 Hz
Turn-off delay toff max.	1 ms
Turn-on delay ton max.	1 ms
Utilization category	DC -13
Voltage drop Ud max. at Ie	2 V

Environmental conditions

Ambient temperature	-25...55 °C
Protection degree	IP67

Material

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

Mechanical data

Dimension	Ø 18 x 18 mm
Mounting	Nut M18x1

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Optical features

Ambient light max.	10000 Lux
Beam characteristic	Divergent
Light type	LED, red light
Principle of optical operation	Diffuse sensor, triangulation
Special optical feature	Background suppression
Switching function, optical	Light-on
Wave length	660 nm

Output/Interface

Switching output	PNP normally open (NO) Pin 4

Range/Distance

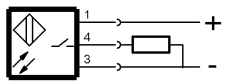
Hysteresis H max. (% of Sr)	10.0 %
Range	10...120 mm
Rated operating distance Sn	120 mm Adjustable
Temperature drift max. (% of Sr)	20 %

Remarks

Order accessories separately.
For additional information, refer to user's guide.
The sensor is functional again after the overload has been eliminated.
Reference object (target): gray card, 100 x 100, 90 % remission, axial approach.

Connector Drawings

Wiring Diagrams



Opto Symbols