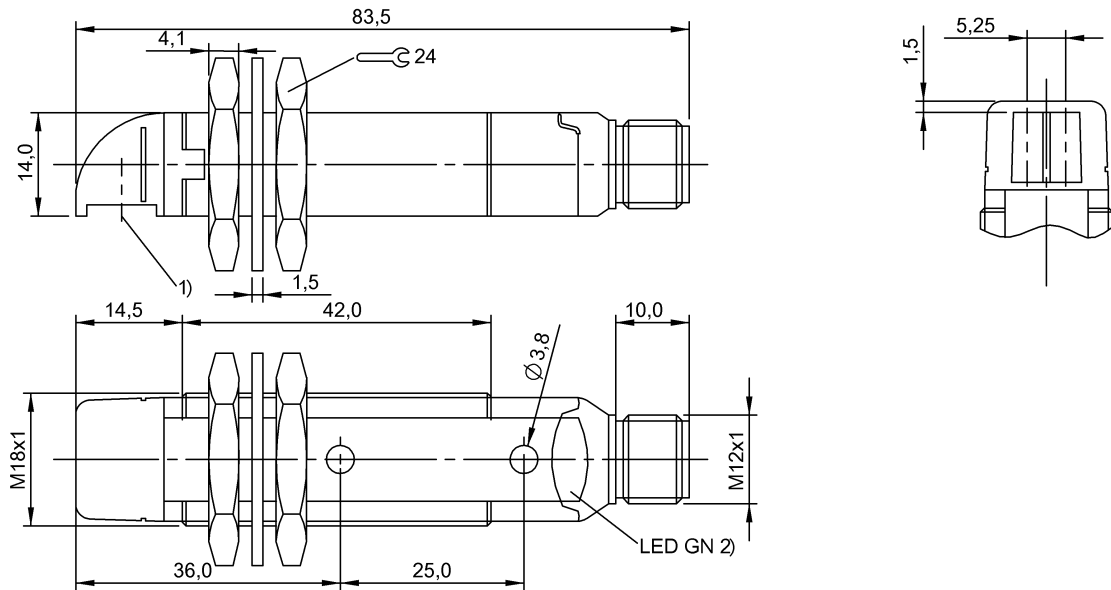




1) Optical axis, 2) Output function



Basic features

Approval/Conformity	CE cULus EAC WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Series	18KW
Style	Flat cylinder Optics 90°
Trademark	Global

Display/Operation

Adjuster	no
Display	Output function- LED yellow

Electrical connection

Connection	Connector, M12x1-Male, 4-pin
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

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 current I_e	100 mA
Rated operating voltage U_e DC	24 V
Ripple max. (% of U_e)	8 %
Switching frequency	1000 Hz
Turn-off delay t_{off} max.	0.5 ms
Turn-on delay t_{on} max.	0.5 ms
Voltage drop U_d max. at I_e	2 V

Environmental conditions

Ambient temperature	-25...55 °C
EN 60068-2-27, Shock	Half-sinus, 30 g_n , 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)	838 a
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Interface

Switching output	PNP normally closed (NC) PNP normally open (NO) Pins 4-2
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Photoelectric Sensors
BOS 18KW-PA-1N1R-S4-C
Order Code: BOS00LP

BALLUFF

Material

Housing material	PBT
Material sensing surface	PMMA

Mechanical data

Dimension	Ø 18 x 83.5 mm
Mounting part	Nut M18x1 Screw M3
Tightening torque max.	1.5 Nm

Optical features

Ambient light max.	5000 Lux
Beam characteristic	Focused
Light type	LED, red light
Principle of optical operation	Diffuse sensor, triangulation
Special optical feature	Fixed background suppression
Switching function, optical	Light-on
Wave length	660 nm

Range/Distance

Range	0...80 mm
Rated operating distance Sn	80 mm

Remarks

The sensor is functional again after the overload has been eliminated.

For additional information, refer to user's guide.

Order accessories separately.

Reference object (target): gray card, 100 x 100, 90 % remission, axial approach.

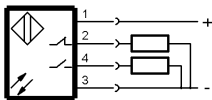
For more information about MTTF and B10d see MTTF / B10d Certificate

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 (Schematic)



Opto Symbols

