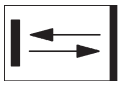
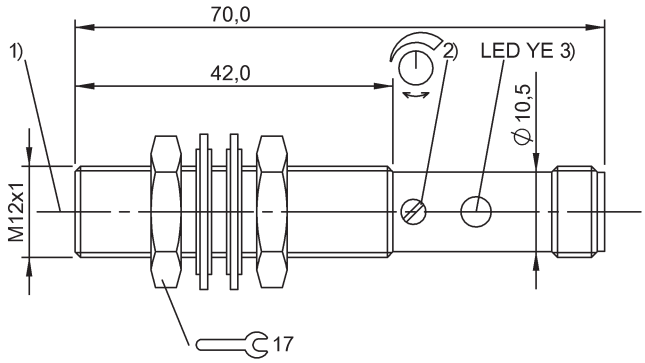
Photoelectric sensor

BOS 12M-PS-1PB-S4-C
BOS000W

BALLUFF
sensors worldwide





1) Optical axis 2) Sn 3) Output function

- **Photoelectric sensor**
- **Series 12M**
- **Infrared**
- **up to 200 mm**

CE cULus LISTED IND. CONT. EQ. 81U2 for use in the secondary of a class 2 source of supply

General attributes

Adjuster	Potentiometer 270° (1x)
Approvals / Conformity	CE cULus
Basic standard	IEC 60947-5-2
Enclosure Type per IEC 60529	IP67
Indicator	Output function - LED YE
Polarity reversal protected	yes
Series	Series 12M
Setting	Switching distance (Sn)
Short circuit protected	yes
Trademark	GLOBAL

Electrical attributes

Connection type	Connector
Eff. operating current Ie	200 mA
Eff. operating voltage Ue DC	24.0 V
Electrical version	DC, direct current
Load capacitance max. (at Ue)	1.00 µF
No-load current max. Io at Ue	20 mA
Operating voltage UB max. DC [V]	30.0 V
Operating voltage UB min. DC [V]	10.0 V
Rated insulation voltage Ui	75 V DC
Ripple max. (% of Ue)	15 %
Switching freq. f max. (at Ue)	200 Hz
Switching function	NO (pin 4)
Switching output	PNP (1x)
Turn on time ton max.	2.50 ms
Voltage drop Ud max. (at Ie)	2.5 V

Mechanical attributes

Ambient temperature Ta max.	55 °C
Ambient temperature Ta min.	-5 °C
Connector type	M12x1-S04
Detection range Sd	0...200 mm
Eff. operating distance Sr	200 mm
Housing material	Brass
Length 1	Ø12.0 mm
Length 2	70.0 mm
Minimum operating distance	0 mm
Mounting type	Nut M12x1
Range Sn	Sn = 200 mm, adjustable
Sensing face material	PMMA
Style	Cylinder, straight optics
Surface protection	Nickel-plated
Tightening torque max.	15 Nm

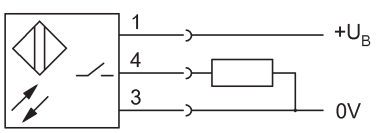
Optical attributes

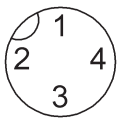
Light type	Infrared
Principle of optical operation	Light scanner, energetic
Switching function, optical	NO: light-on

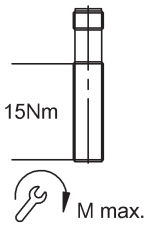
Additional text

The sensor is functional again after the overload has been eliminated.
Order accessories separately.
Reference object (target): Gray card, 100 x 100

90 % remission, axial approach.
Only for NFPA 79 applications (machines with a supply voltage of maximum 600 volts).
Device shall be connected only by using any R/C (CYJV2) cord, having suitable ratings.






15Nm
M max.