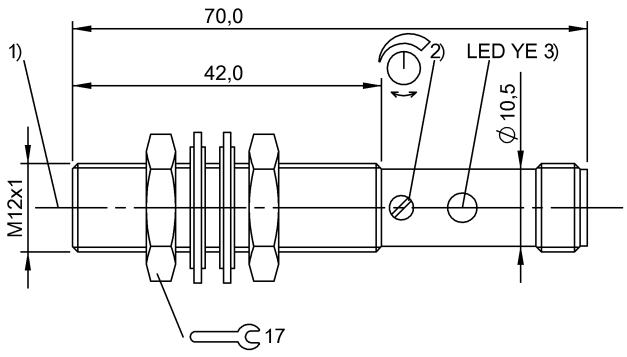
BOS 12M-PS-1QA-S4-C
BOS00RE



1) Optical axis 2) Sn 3) Output function

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

Display/Operation

Adjuster	Potentiometer 270° (1x)
Setting	Sensitivity (Sn)

Electrical connection

Connection	M12x1-Connector, 4-pole, A-coded
Contact, surface protection	Gold plated
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.5 µF
No-load current Io max. at Ue	20 mA
Operating voltage Ub	10…30 VDC
Output resistance Ra	33.0 kOhm
Pollution degree	3
Protected against miswiring	yes
Rated insulation voltage Ui	75 V DC
Rated operating current Ie DC	200 mA
Rated operating voltage Ue DC	24 V
Ready delay tv max.	100 ms
Residual current Ir max.	50 µA
Switching frequency	200 Hz
Turn-off delay toff max.	2.5 ms
Turn-on delay ton max.	2.5 ms
Utilization category	DC -13
Voltage drop Ud max. at Ie	2.5 V

Environmental conditions

Ambient temperature	-5…55 °C
Protection type IEC 60529	IP67

General data

Approval/Conformity	CE cULus
Basic standard	IEC 60947-5-2
Series	12M
Style	Cylinder Straight optics
Trademark	Global

Material

Housing material	Brass
Material sensing surface	PMMA
Surface protection	nickel plates

Mechanical data

Dimension	Ø 12 x 70 mm
Fastening detail	Nut M12x1
Tightening torque max.	15 Nm

Optical data

Ambient light max.	5000 Lux
Beam characteristic	Divergent
Light type	LED Red light
Polarizing filter	yes
Principle of optical operation	Retroreflective sensor

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Wave length	660 nm

Output/Interface

Switching output	PNP Normally open (NO)

Range/Distance

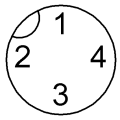
Measuring range	0…1.5 m
Range	0…1.5 m
Rated operating distance Sn	1.5 m, Adjustable
Ripple max. (% of Ue)	15 %

Temperature drift max. (% of Sr)	10 %

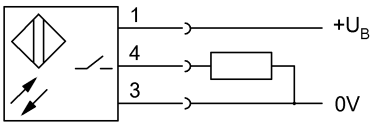
Remarks

Polarizing filters prevent spurious switching due to reflecting and shiny parts.
Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.
The sensor is functional again after the overload has been eliminated.
Order accessories separately.
Actuation object (target): gray card, 200 x 200, 90 % remission, lateral approach, approach direction vertical to lens axis plane.

Connector view



Wiring Diagram



Symbols for Optoelectronic Sensors