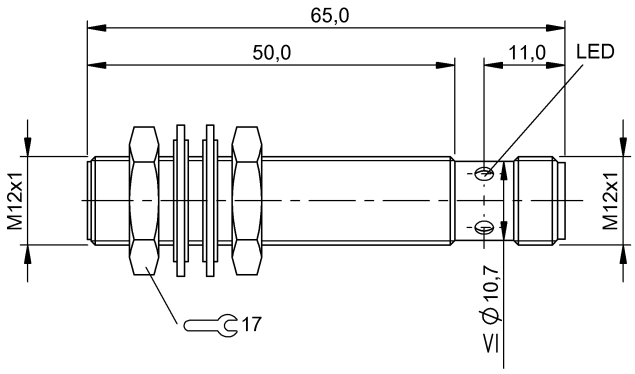
Inductive Sensors

BES M12MI-PSC30B-S04G-W01
Order Code: BES02K2



Basic features

Additional features	Weld immune
Approval/Conformity	CE WEEE cULus
Base type deviation	Ceramic coating
Basic standard	IEC 60947-5-2
Principle of operation	Inductive sensor

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

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

Electrical data

Load capacitance max. at Ue	0.5 µF
Magnetic field strength, interference field	100 kA/m
Min. operating current Im	0 mA
No-load current Io max., damped	9 mA
No-load current Io max., undamped	6 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	33.0 kOhm + D
Protection class	II
Rated insulation voltage Ui	250 V AC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	15 ms
Residual current Ir max.	20 µA
Ripple max. (% of Ue)	10 %
Switching frequency	300 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

Environmental conditions

Ambient temperature	5...60 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g_n, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67
Magnetic field immune	magnetic field immune (AC/DC)

Interface

Switching output	PNP normally open (NO)

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Material

Housing material	Brass, PTFE coated
Material sensing surface	ceramic coated

Mechanical data

Dimension	Ø 12 x 65 mm
Installation	for flush mounting
Mounting length	50.00 mm
Size	M12x1
Tightening torque	10 Nm

Range/Distance

Assured operating distance Sa	2.2 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	3 mm
Real switching distance sr	3 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	■■
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

Remarks

Sn: reduced by the coating thickness of 0.2 mm.
The sensor is functional again after the overload has been eliminated.

Connector Drawings



Wiring Diagrams (Schematic)

