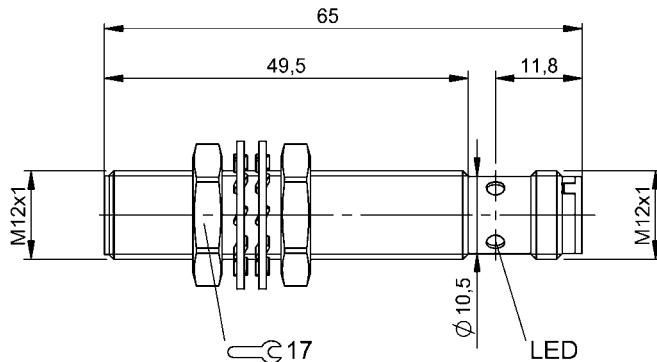


Inductive Sensors  
BES M12MI-PSC40B-S04G  
Order Code: BES0068

**BALLUFF**



#### Basic features

Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Trademark	Global

#### Display/Operation

Function indicator	yes
Power indicator	no

#### Electrical connection

Connection	M12x1-Male, 3-pin, A-coded
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

#### Electrical data

Load capacitance max. at Ue	1 $\mu$ F
Min. operating current I <sub>m</sub>	0 mA
No-load current I <sub>0</sub> max., damped	5 mA
No-load current I <sub>0</sub> max., undamped	2 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Output resistance R <sub>a</sub>	33.0 kOhm + D
Protection class	II
Rated insulation voltage U <sub>i</sub>	250 V AC
Rated operating current I <sub>e</sub>	200 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Rated short circuit current	100 A
Ready delay t <sub>v</sub> max.	21 ms
Residual current I <sub>r</sub> max.	10 $\mu$ A
Ripple max. (% of U <sub>e</sub> )	15 %
Switching frequency	2500 Hz
Utilization category	DC-13
Voltage drop static max.	1.5 V

#### Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP68

#### Functional safety

MTTF (40 °C)	640 a
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#### Interface

Switching output	PNP normally open (NO)
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#### Material

Housing material	Brass, Nickel-free coated
Material sensing surface	PBT

#### Mechanical data

Dimension	Ø 12 x 65 mm
Installation	for flush mounting
Mounting length	49.50 mm
Size	M12x1
Tightening torque	10 Nm

#### Remarks

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

