

**Basic features**

Approval/Conformity	CE
	EAC
Basic standard	WEEE
	IEC 60947-5-2

**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	1 µF
Min. operating current Im	0 mA
No-load current Io max., damped	12 mA
No-load current Io max., undamped	8 mA
Operating voltage Ub	10...55 VDC
Output resistance Ra	100.0 kOhm + 2D
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.	10 ms
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	15 %
Switching frequency	300 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

**Environmental conditions**

Ambient temperature	0...60 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
Protection degree	IP67

**Functional safety**

MTTF (40 °C)	355 a
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Inductive Sensors

**BES M12MI-PSH80B-S04G**

**Order Code: BES01ZN**

**BALLUFF**

**Material**

Housing material	Brass, nickel plated
Material sensing surface	LCP

**Mechanical data**

Dimension	Ø 12 x 65 mm
Installation	quasi-flush
Size	M12x1
Tightening torque	10 Nm

**Output/Interface**

Switching output	PNP normally open (NO)
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**Range/Distance**

Assured operating distance Sa	5.8 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	8 mm
Real switching distance sr	8 mm
Repeat accuracy max. (% of Sr)	10.0 %
Switching distance marking	■■■■
Temperature drift max. (% of Sr)	20 %
Tolerance Sr	±10 %

**Remarks**

Quasi-flushed: See installation instructions for inductive sensors with extended range 825356.

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**

