



Basic features

Approval/Conformity	CE cULus EAC WEEE
Basic standard	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 I _m	0 mA
No-load current I _o max., damped	10 mA
No-load current I _o max., undamped	10 mA
Operating voltage U _b	10...30 VDC
Output resistance R _a	47.0 kOhm
Rated insulation voltage U _i	75 V DC
Rated operating current I _e	200 mA
Rated operating voltage U _e DC	24 V
Rated short circuit current	100 A
Ready delay t _v max.	50 ms
Residual current I _r max.	100 µA
Ripple max. (% of U _e)	15 %
Switching frequency	500 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

Environmental conditions

Ambient temperature	-25...70 °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)	870 a
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Inductive Sensors
BES M18MG1-PSC12B-S04G
 Order Code: BES02Y9



Material

Housing material	Brass
Material sensing surface	PBT
Surface protection	Chrome-plated

Mechanical data

Dimension	Ø 18 x 63.5 mm
Installation	quasi-flush
Size	M18x1
Tightening torque	25 Nm

Output/Interface

Switching output	PNP normally open (NO)
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Range/Distance

Assured operating distance Sa	9.6 mm
Hysteresis H max. (% of Sr)	10.0 %
Rated operating distance Sn	12 mm
Real switching distance sr	12 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	■■■
Temperature drift max. (% of Sr)	10 %
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

