

**Basic features**

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

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Cable diameter D	3.00 mm
Cable length L	0.2 m
Connection	M12x1-Male, 4-pin, A-coded
Connection type	Cable with connector, 0.20 m, PUR
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	10 mA
No-load current Io max., undamped	8 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	33.0 kOhm + 2D
Rated insulation voltage Ui	75 V DC
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	800 Hz
Utilization category	DC -13
Voltage drop static max.	2.8 V

Environmental conditions

Ambient temperature	0...60 °C
Contamination scale	3
EN 60068-2-27, Shock	30 gn, 11 ms, 3x12 shocks
EN 60068-2-6, Vibration	10...2000 Hz, 1 mm, 30 gn, 3x5 h
Protection degree	IP67

Functional safety

MTTF (40 °C)	355 a
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Inductive Sensors
BES M08MI-PSC40B-BP00,2-GS04
Order Code: BES01ZU

BALLUFF

Material

Housing material	Brass
Material jacket	PUR
Material sensing surface	PBT
Surface protection	nickel plated

Mechanical data

Dimension	Ø 8 x 51.5 mm
Installation	quasi-flush
Size	M8x1
Tightening torque	3 Nm

Output/Interface

Switching output	PNP normally open (NO)
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Range/Distance

Assured operating distance Sa	2.9 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	4 mm
Real switching distance sr	4 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	■■■■
Temperature drift max. (% of Sr)	20 %
Tolerance Sr	±10 %

Remarks

The sensor is functional again after the overload has been eliminated.
EMC: Surge resistance
External protection circuit is required. Document 825345, Section 2.
Quasi-flushed: See installation instructions for inductive sensors with extended range 825356.
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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

