



Basic features

Additional features	Factor 1 Weld immune
Approval/Conformity	CE WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Inductive sensor
Trademark	Factor 1

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
Magnetic field strength, interference field	100 kA/m
Min. operating current I _m	0 mA
No-load current I _o max., damped	15 mA
No-load current I _o max., undamped	15 mA
Operating voltage U _b	10...30 VDC
Protection class	II
Rated insulation voltage U _i	250 V AC
Rated operating current I _e	150 mA
Rated operating voltage U _e DC	24 V
Rated short circuit current	100 A
Ready delay t _v max.	15 ms
Residual current I _r max.	80 µA
Ripple max. (% of U _e)	10 %
Switching frequency	2000 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 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)

Functional safety

MTTF (40 °C)	870 a
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Inductive Sensors
BES M08EG1-PSC15A-S04G-W
Order Code: BES02YT

BALLUFF

Interface

Switching output PNP normally open (NO)

Material

Housing material 1.4301 stainless steel, PTFE coated
Material sensing surface PBT/PTFE

Mechanical data

Dimension Ø 8 x 57 mm
Installation for flush mounting
Mounting length 40.00 mm
Size M8x1
Tightening torque 10 Nm

Range/Distance

Assured operating distance Sa 1.2 mm
Hysteresis H max. (% of Sr) 15.0 %
Rated operating distance Sn 1.5 mm
Real switching distance sr 1.5 mm
Repeat accuracy max. (% of Sr) 5.0 %
Temperature drift max. (% of Sr) 10 %
Tolerance Sr ±10 %

Remarks

EMC: For operating conditions with noise sources
External protection circuit is required. Document 825345.
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 (Schematic)

