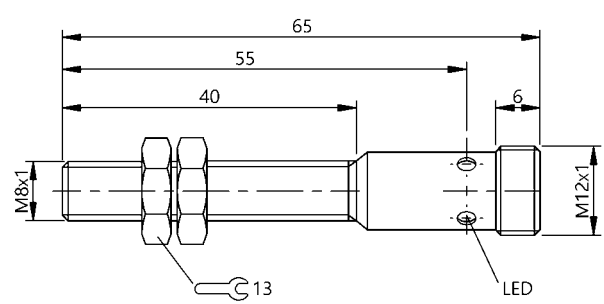


Inductive Sensors
BES M08MG1-PSC20A-S04G-W
Order Code: BES03YP



Basic features

Additional features	Factor 1 Weld immune
Approval/Conformity	CE cULus WEEE
Basic standard	IEC 60947-5-2
Trademark	Factor 1

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 µF
Magnetic field strength, interference field	100 kA/m
Min. operating current Im	0 mA
No-load current Io max., damped	15 mA
No-load current Io max., undamped	15 mA
Operating voltage Ub	10...30 VDC
Rated insulation voltage Ui	60 V DC
Rated operating current Ie	100 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	15 ms
Residual current Ir max.	500 µA
Ripple max. (% of Ue)	10 %
Switching frequency	1000 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
IP rating	IP67
Magnetic field immune	magnetic field immune (AC/DC)
Storage temperature	-40...85 °C

Functional safety

MTTF (40 °C)	1010 a
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Interface

Switching output PNP normally open (NO)

Material

Housing material Brass, PTFE coated
Material sensing surface LCP

Mechanical data

Dimension $\varnothing 8 \times 65$ mm
Installation for flush mounting
Mounting length 40.00 mm
Size M8x1
Tightening torque 3 Nm

Range/Distance

Assured operating distance S_a 1.6 mm
Hysteresis H max. (% of S_r) 15.0 %
Rated operating distance S_n 2 mm
Real switching distance s_r 2 mm
Repeat accuracy max. (% of S_r) 5.0 %
Temperature drift max. (% of S_r) 10 %
Tolerance S_r ± 10 %

Remarks

The sensor is functional again after the overload has been eliminated.
Specify maximum attainable switching frequency (not per IEC 60947-5-2)
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

