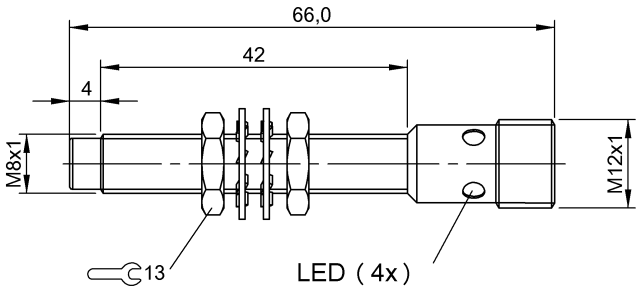
Inductive Sensors

BES M08MG1-NSC60F-S04G
Order Code: BES02W0



Basic features

Approval/Conformity	CE EAC WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Inductive sensor

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	10 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	47.0 kOhm
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.	50 ms
Residual current Ir max.	100 µA
Ripple max. (% of Ue)	20 %
Switching frequency	500 Hz
Utilization category	DC -13
Voltage drop static max.	2 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

Interface

Switching output	NPN normally open (NO)

Material

Housing material	Brass, Chrome-plated
Material sensing surface	PBT

Inductive Sensors

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Mechanical data

Dimension	Ø 8 x 66 mm
Installation	non-flush
Mounting length	42.00 mm
Size	M8x1
Tightening torque	4 Nm

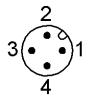
Range/Distance

Assured operating distance Sa	4.8 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	6 mm
Real switching distance sr	6 mm
Repeat accuracy max. (% of Sr)	5.0 %
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

Remarks

Working frequency f oscillator: 320 kHz. In the range of ±15% of the working frequency EMC incompatibilities may occur.
The sensor is functional again after the overload has been eliminated.
With connector, e.g. BCC M425-.. total length is = switch length +19 mm.

Connector Drawings



Wiring Diagrams (Schematic)

