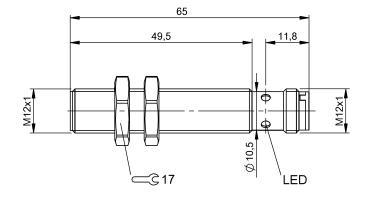
Inductive Sensors BES M12MI-NSC40B-S04G **Order Code: BES0059**

BALLUFF





Basic features

Approval/Conformity	CE UKCA
	cULus WEEE
Basic standard	IEC 60947-5-2
Trademark	Global
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 lo max., damped	5 mA
No-load current lo max., undamped	2 mA
Operating voltage Ub	1030 VDC
Output resistance Ra	33.0 kOhm + D
Protection class	II
Rated insulation voltage Ui	250 V AC
Rated operating current le	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	21 ms
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	15 %
Switching frequency	2500 Hz
Utilization category	DC -13
Voltage drop static max.	1.5 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 IP68 **Functional safety**

MTTF (40 °C)

Interface

Switching output

NPN normally open (NO)

Internet

eCl@ss 9.1: 27-27-01-01 ETIM 6.0: EC002714 BES0059_0.11_2023-06-27

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Inductive Sensors BES M12MI-NSC40B-S04G Order Code: BES0059

BVLLAL

Material

matorial	
Housing material	Brass, Nickel-free coated
Material sensing surface	PBT
Mechanical data	
Dimension	Ø 12 x 65 mm
Installation	for flush mounting
Size	M12x1
Tightening torque	10 Nm

Range/Distance

Assured operating distance Sa	3.2 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)	10 %
Tolerance Sr	±10 %

Remarks

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

