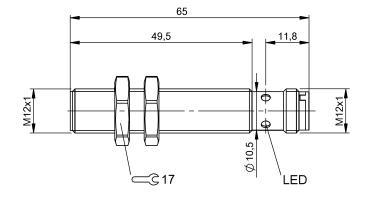
## **Inductive Sensors** BES M12MI-NSC40B-S04G **Order Code: BES0059**

# 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<sub>n</sub>, 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

