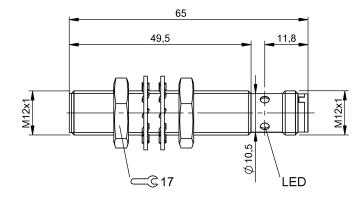
Inductive Sensors BES M12MI-PSC40B-S04G Order Code: BES0068

BALLUFF









Basic features

Approval/Conformity Basic standard Trademark	CE cULus EAC WEEE IEC 60947-5-2 Global
Display/Operation	
Function indicator Power indicator	yes 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
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	-2570 °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	
Protection degree	IP68	

Functional safety

MTTF (40 °C)

640 a

Inductive Sensors BES M12MI-PSC40B-S04G **Order Code: BES0068**



Material

Material		Output/Interface	
Housing material	Brass	Switching output	PNP normally open (NO)
Material sensing surface	PBT		
Surface protection	Nickel-free coated	Range/Distance	
		Assured operating distance Sa	3.2 mm
Mechanical data		Hysteresis H max. (% of Sr)	15.0 %
Dimension	Ø 12 x 65 mm	Rated operating distance Sn	4 mm
Installation	for flush mounting	Real switching distance sr	4 mm
Size	M12x1	Repeat accuracy max. (% of Sr)	5.0 %
Tightening torque	10 Nm	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

