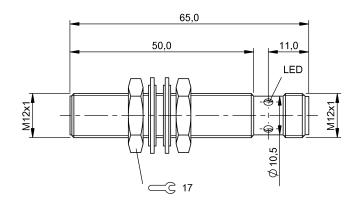
Inductive Sensors BES M12MI-PSC40B-S04G-M01 **Order Code: BES01ZM**

BALLUFF





Display/Operation

Function indicator	yes
Power indicator	no
Electrical connection	
Connection	M12x1-Male, 4-pin, A-coded
Connection Polarity reversal protected	M12x1-Male, 4-pin, A-coded yes
	, I ,
Polarity reversal protected	yes

Electrical data

Load capacitance max. at Ue	0.5 μF
Min. operating current Im	0 mA
with operating current in	UIIIA
No-load current lo max., damped	12 mA
No-load current lo max., undamped	5 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.	10 ms
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	15 %
Switching frequency	1000 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 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
IP rating	IP68
Functional safety	
MTTF (40 °C)	675 a
General data	
Additional features	Function monitoring
Approval/Conformity	CE
	cULus
	EAC
Basic standard	IEC 60947-5-2
Material	
Housing material	Brass
Material sensing surface	LCP
Surface protection	Nickel-free coated
Mechanical data	
Dimension	Ø 12 x 65 mm
Installation	for flush mounting
Size	M12x1
Tightening torque	10 Nm
Output/Interface	
Switching output	PNP normally open (NO)

eCl@ss 9.1: 27-27-01-01 ETIM 6.0: EC002714 BES01ZM_0.14_

Inductive Sensors BES M12MI-PSC40B-S04G-M01 **Order Code: BES01ZM**



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. Monitor output: High level when the sensor is functional. The load capacity is 50 mA. (Ud \leq 5 V) Flush: See installation instructions for inductive sensors with extended range 825357.

For further information about the 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

