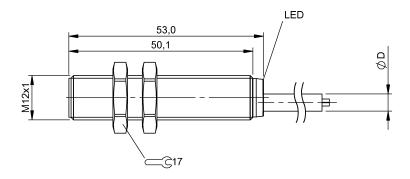
## **Inductive Sensors** BES M12MI-PSC40B-BP05 **Order Code: BES0063**







### **Basic features**

Approval/Conformity	cULus	
	CE	
	UKCA	
	WEEE	
Basic standard	IEC 60947-5-2	
Trademark	Global	

yes no

## **Display/Operation**

Function indicator
Power indicator

## **Electrical connection**

Cable diameter D	4.60 mm
Cable length L	5 m
Conductor cross-section	0.34 mm <sup>2</sup>
Connection type	Cable, 5.00 m, TPU
Number of conductors	3
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	Ш
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 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

PNP normally open (NO)

eCl@ss 9.1: 27-27-01-01 ETIM 6.0: EC002714 BES0063\_0.1\_2023-06-27

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# Inductive Sensors BES M12MI-PSC40B-BP05 Order Code: BES0063

# BALLUFF

#### Material

Housing material	Brass, Nickel-free coated	Assured o
Material jacket	TPU	Hysteresis
Material sensing surface	PBT	Rated ope
		Real switc
Mechanical data		Repeat ac
Dimension	Ø 12 x 53 mm	Switching
Installation	for flush mounting	Temperatu Tolerance
Size	M12x1	Tolerance
Tightening torque	10 Nm	
ngntening torque		

## **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.

## Wiring Diagrams

