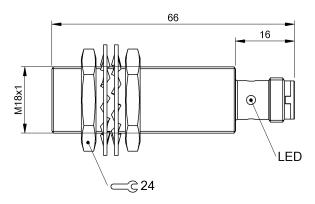
# Inductive Sensors BES M18MI-PSC12B-S04G Order Code: BES05EU







#### **Basic features**

Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Display/Operation	
Function indicator	yes
Power indicator	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	11 mA
No-load current lo max., undamped	7 mA
Operating voltage Ub	1030 VDC
Output resistance Ra	100.0 kOhm
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.	40 ms
Residual current Ir max.	100 µA
Ripple max. (% of Ue)	10 %
Switching frequency	550 Hz
Utilization category	DC -13
Voltage drop static max.	1.2 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, according to BWN Pr 20
Functional safety	
MTTF (40 °C)	621 a
Interface	
Switching output	PNP normally open (NO)

eCl@ss 9.1: 27-27-01-01 ETIM 6.0: EC002714 BES05EU\_0.154\_2023-09-06

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#### Material

Housing material	Brass, Nickel-free coated
Material sensing surface	PBT
Mechanical data	
Dimension	Ø 18 x 66 mm
Size	M18x1
Tightening torgue	25 Nm

## **Range/Distance**

Assured operating distance Sa	9.6 mm
Hysteresis H max. (% of Sr)	15 %
Rated operating distance Sn	12 mm
Real switching distance sr	12 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.

Quasi-flushed: See installation instructions for inductive sensors with extended range 825356. 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

