



## Display/Operation

Function indicator	yes
Power indicator	no

## Electrical connection

Connection	M12x1-Male, 4-pole, A-coded
Protection against device mix-ups	yes
Short-circuit protection	yes

## Electrical data

Contamination scale	3
Hysteresis H max. (% of Sr)	15.0 %
Load capacitance max. at Ue	0.5 µF
No-load current I <sub>o</sub> undamped max.	5 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Output resistance R <sub>a</sub>	33.0 kOhm + D
Polarity reversal protected	yes
Protection class	II
Rated insulation voltage U <sub>i</sub>	250 V AC
Rated operating current I <sub>e</sub>	200 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Rated short circuit current	100 A
Ready delay t <sub>v</sub> max.	15 ms
Repeat accuracy max. (% of Sr)	5.0 %
Residual current I <sub>r</sub> max.	10 µA
Ripple max. (% of U <sub>e</sub> )	15 %
Switching frequency	1000 Hz
Utilization category	DC-13
Voltage drop static max.	2.5 V

## Environmental conditions

Ambient temperature	-25...70 °C
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IP rating per IEC 60529

IP67

## Functional safety

MTTF (40 °C)	830 a
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## General data

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

## Material

Housing material	Brass
Material sensing surface	PBT
Surface protection	nickel-free coated

## Mechanical data

Dimension	Ø 18 x 65 mm
Installation	for flush mounting
Size	M18x1
Tightening torque	25 Nm

## Output/Interface

Switching output	PNP Normally open (NO)
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## Range/Distance

Assured operating distance S <sub>a</sub>	6.4 mm
Effective operating distance S <sub>r</sub>	8 mm
Rated operating distance S <sub>n</sub>	8 mm

Inductive Sensors  
**BES M18MI-PSC80B-S04G**  
Ordercode: BES008L

**BALLUFF**

Switching distance marking ■■  
Temperature drift max. (% of Sr) 10 %

For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.

Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.

### Remarks

The sensor is functional again after the overload has been eliminated.  
Shielded: See installation instructions for inductive sensors with extended range 825357.

### Connector view



### Wiring Diagram

