





#### **Basic features**

Common et in m	M10-1 Mala Ania An
Electrical connection	
Power indicator	no
Function indicator	yes
Display/Operation	
Basic standard	IEC 60947-5-2
Approval/Conformity	CE cULus EAC WEEE

Connection	M12x1-Male, 4-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
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	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.	40 ms
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	10 %
Switching frequency	1200 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)

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# Inductive Sensors BES M08MH1-PSC30B-S04G Order Code: BES02W9



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Housing material		
Material sensing surface		

## Mechanical data

Dimension Installation Size Tightening torque Ø 8 x 63 mm for flush mounting M8x1 3 Nm

PBT

Brass, Nickel-free coated

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Switching output	PNP normally open (N		
Range/Distance			
Assured operating distance Sa	2.4 mm		
Hysteresis H max. (% of Sr)	15.0 %		
Rated operating distance Sn	3 mm		
Real switching distance sr	3 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.

## **Connector Drawings**



# Wiring Diagrams

