



1) Pressure resistant area



### Basic features

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

### Display/Operation

Function indicator	yes
Power indicator	no

### Electrical connection

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
Min. operating current I <sub>m</sub>	0 mA
No-load current I <sub>o</sub> max., damped	16 mA
No-load current I <sub>o</sub> max., undamped	9 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Output resistance R <sub>a</sub>	47.0 kOhm
Rated insulation voltage U <sub>i</sub>	75 V DC
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.	35 ms
Residual current I <sub>r</sub> max.	100 µA
Ripple max. (% of U <sub>e</sub> )	15 %
Switching frequency	200 Hz
Utilization category	DC -13
Voltage drop static max.	2 V

### Environmental conditions

Ambient temperature	-25...70 °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	IP67

### Functional safety

MTTF (40 °C)	375 a
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Inductive Sensors  
**BES M18EG1-PSC10Z-S04G-S11**  
**Order Code: BES02Y3**



**Interface**

Switching output PNP normally open (NO)

**Material**

Housing material Stainless steel  
 Material sensing surface Stainless steel

**Mechanical data**

Dimension Ø 18 x 63.5 mm  
 Installation quasi-flush  
 Pressure rating max. 60 bar  
 Pressure rating, note Pressure-resistant  
 Size M18x1  
 Tightening torque 50 Nm ±10 %

**Range/Distance**

Assured operating distance Sa 8.1 mm  
 Hysteresis H max. (% of Sr) 15.0 %  
 Rated operating distance Sn 10 mm  
 Real switching distance sr 10 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.  
 When installing in metals the switching distance may be reduced by up to 50%. Installation Instructions 841020.  
 Installation permitted only in clamp without positive stop.  
 LED flashes between 100% and approx. 70% of Sr  
 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**

