



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 Im	0 mA
No-load current Io max., damped	16 mA
No-load current Io max., undamped	9 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	47.0 kOhm
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	35 ms
Residual current Ir max.	100 µA
Ripple max. (% of Ue)	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 gn, 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-NSC10Z-S04G-S11  
Order Code: BES02Y2



Interface

Switching output NPN normally open (NO)

Material

Housing material Stainless steel

Material sensing surface Stainless steel

Mechanical data

Dimension Ø 18 x 63.5 mm  
Installation for flush mounting  
Mounting length 42.00 mm  
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.  
LED flashes between 100% and approx. 70% of Sr  
Installation permitted only in clamp without positive stop.  
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

