



Basic features

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

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M8x1-Male, 3-pin
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Min. operating current I_m	0 mA
No-load current I_o max., damped	20 mA
No-load current I_o max., undamped	20 mA
Operating voltage U_b	10...36 VDC
Protection class	II
Rated insulation voltage U_i	60 V DC
Rated operating current I_e	100 mA
Rated operating voltage U_e DC	24 V
Ready delay t_v max.	300 ms
Residual current I_r max.	100 μ A
Ripple max. (% of U_e)	10 %
Switching frequency	100 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g _n , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Functional safety

MTTF (40 °C)	1985 a
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Interface

Switching output	PNP normally open (NO)
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Inductive Sensors
BES M08EE1-PSC20B-S49G-S
Order Code: BES03UY



Material

Housing material	Stainless steel (1.4404)
Material sensing surface	Stainless steel (1.4404)

Mechanical data

Dimension	Ø 8 x 50 mm
Installation	for flush mounting
Pressure rating max.	80 bar
Pressure rating, note	Pressure-resistant
Size	M8x1
Tightening torque	3.5 Nm ±10 %

Range/Distance

Assured operating distance Sa	1.6 mm
Hysteresis H max. (% of Sr)	20.0 %
Rated operating distance Sn	2 mm
Real switching distance sr	2 mm
Repeat accuracy max. (% of Sr)	10.0 %
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 non-ferromagnetic metals, the distance x must be considered. This dimension x is described in the document "BES 2SN STEELFACE". Since the nuts supplied are made of non-ferromagnetic metal, the specified dimension x also applies here. Mounting, where the nuts are close to the active surface, is not intended.

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

