



1) Sensing surface



Basic features

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

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M5x0.5-Male
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.1 μ F
Min. operating current I _m	1 mA
No-load current I _o max., damped	12 mA
No-load current I _o max., undamped	3 mA
Operating voltage U _b	10...30 VDC
Output resistance R _a	Open collector
Rated insulation voltage U _i	75 V DC
Rated operating current I _e	100 mA
Rated operating voltage U _e DC	24 V
Rated short circuit current	100 A
Ready delay t _v max.	25 ms
Residual current I _r max.	80 μ A
Ripple max. (% of U _e)	10 %
Switching frequency	3000 Hz
Utilization category	DC -13
Voltage drop static max.	3 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)	585 a
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Inductive Sensors
BES M05EC-NSC08B-S26G
Order Code: BES012W

BALLUFF

Interface

Switching output NPN normally open (NO)

Material

Housing material Stainless steel
Material sensing surface PBT

Mechanical data

Dimension Ø 5 x 29 mm
Installation for flush mounting
Size M5x0.5
Tightening torque 1 Nm

Range/Distance

Assured operating distance Sa 0.65 mm
Hysteresis H max. (% of Sr) 15.0 %
Rated operating distance Sn 0.8 mm
Real switching distance sr 0.8 mm
Repeat accuracy max. (% of Sr) 5.0 %
Temperature drift max. (% of Sr) 10 %
Tolerance Sr -10 %/+40 %

Remarks

EMC: For operating conditions with noise sources
External protection circuit is required. Document 825345.
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

