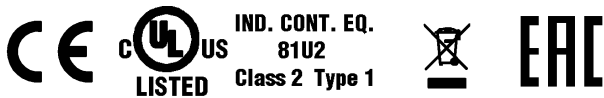


1) Sensing surface



Basic features

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

Display/Operation

Function indicator	no
Power indicator	no

Electrical connection

Cable diameter D	3.00 mm
Cable length L	2 m
Conductor cross-section	0.14 mm ²
Connection type	Cable, 2.00 m, PUR
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.2 µF
Min. operating current I_m	1 mA
No-load current I_o max., damped	10 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 µA
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 gn, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
Protection degree	IP67

Functional safety

MTTF (40 °C)	830 a
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Inductive Sensors
BES M05ED-PSD08B-BP02-R03
Order Code: BES03L7

BALLUFF

Material

Gasket, material	PA
Housing material	Stainless steel
Material jacket	PUR
Material sensing surface	Ceramic

Mechanical data

Dimension	Ø 5 x 27 mm
Installation	for flush mounting
Pressure rating max.	100 bar
Pressure rating, note	oil pressure rated
Sealing ring, part number	178173
Sealing ring, size	10.4 x 3.5 mm
Size	M5x0.5
Tightening torque	1 Nm ±10 %

Output/Interface

Switching output	PNP normally open (NO)
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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

The sensor is functional again after the overload has been eliminated.
Installation Instructions 868058
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.

Wiring Diagrams

