



1) O-Ring with thrust ring



Basic features

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

Display/Operation

Function indicator	no
Power indicator	no

Electrical connection

Cable diameter D	3.50 mm
Cable length L	5 m
Conductor cross-section	0.14 mm ²
Connection type	Cable, 5.00 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	0.5 µF
Min. operating current I_m	0 mA
No-load current I_o max., damped	10 mA
No-load current I_o max., undamped	1 mA
Operating voltage U_b	10...30 VDC
Output resistance R_a	33.0 kOhm + D
Rated insulation voltage U_i	75 V DC
Rated operating current I_e	200 mA
Rated operating voltage U_e DC	24 V
Rated short circuit current	100 A
Ready delay t_v max.	10 ms
Residual current I_r max.	10 µA
Ripple max. (% of U_e)	15 %
Switching frequency	1000 Hz
Utilization category	DC -13
Voltage drop static max.	1.9 V

Environmental conditions

Ambient temperature	-25...80 °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	IP68

Functional safety

MTTF (40 °C)	720 a
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Inductive Sensors
BES 516-300-S135-D-PU-05
Order Code: BHS001F

BALLUFF

Interface

Switching output PNP normally open (NO)

Material

Housing material Stainless steel
Material jacket PUR
Material sensing surface EP
Support ring material PTFE

Mechanical data

Dimension $\varnothing 12 \times 61$ mm
Installation for flush mounting
Mounting part M12x1
Pressure rating max. 500 bar
Pressure rating, note oil pressure rated
Sealing ring, size 5.85×2.4 mm
Size M12x1
Tightening torque 25 Nm ± 10 %

Range/Distance

Assured operating distance Sa 1.2 mm
Hysteresis H max. (% of Sr) 15.0 %
Rated operating distance Sn 1.5 mm
Real switching distance sr 1.5 mm
Repeat accuracy max. (% of Sr) 5.0 %
Temperature drift max. (% of Sr) 10 %
Tolerance Sr ± 10 %

Remarks

The sensor is functional again after the overload has been eliminated.
Pressure rated also for O₂, N₂O, N₂, air.
Installation Instructions 614804
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

