



1) O-Ring with thrust ring



Basic features

Approval/Conformity	CE cULus EAC WEEE
Basic standard	IEC 60947-5-2
Thrust ring, part number	150229

Display/Operation

Function indicator	no
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	0.5 µF
Min. operating current I _m	0 mA
No-load current I _o max., damped	8 mA
No-load current I _o max., undamped	8 mA
Operating voltage U _b	10...30 VDC
Output resistance R _a	33.0 kOhm + 2D
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.	20 ms
Residual current I _r max.	10 µA
Ripple max. (% of U _e)	15 %
Switching frequency	400 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

Environmental conditions

Ambient temperature	-25...120 °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	IP68

Functional safety

MTTF (40 °C)	500 a
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Inductive Sensors
BHS B400V-PSD15-S04
Order Code: BHS0063

BALLUFF

Material

Gasket, material	FPM 80
Housing material	Stainless steel (1.4104)
Material sensing surface	Ceramic
Support ring material	PTFE

Mechanical data

Dimension	Ø 12 x 56 mm
Installation	for flush mounting
Mounting	M12x1
Pressure rating max.	500 bar
Pressure rating, note	oil pressure rated
Sealing ring, part number	149621
Sealing ring, size	6.75 x 1.78 mm
Size	M12x1
Tightening torque	20 Nm ±10 %

Output/Interface

Switching output	PNP normally open (NO)
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Range/Distance

Assured operating distance Sa	1.21 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)	15 %
Tolerance Sr	±10 %

Remarks

The sensor is functional again after the overload has been eliminated.
 Installation Instructions 614804
 $I_e [mA] = 200 - 2.2 \times (T_a - 75)$ at $T_a [^{\circ}C] + 75 \dots + 120$
 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

