



1) O-Ring with thrust ring



Basic features

Approval/Conformity	CE cULus EAC WEEE
Basic standard	IEC 60947-5-2
Thrust ring, part number	705918

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	1 µF
Min. operating current I _m	0 mA
No-load current I _o max., damped	10 mA
No-load current I _o max., undamped	2 mA
Operating voltage U _b	10...30 VDC
Output resistance R _a	33.0 kOhm
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.	80 µA
Ripple max. (% of U _e)	15 %
Switching frequency	1000 Hz
Utilization category	DC -13
Voltage drop static max.	1.5 V

Environmental conditions

Ambient temperature	-25...80 °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)	1120 a
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Inductive Sensors
BES 516-300-S281-S4-D
Order Code: BHS0037



Material

Gasket, material	NBR 70
Housing material	Stainless steel (1.4104)
Material sensing surface	EP
Support ring material	PTFE

Mechanical data

Dimension	Ø 12 x 69 mm
Installation	for flush mounting
Mounting	M12x1
Pressure rating max.	500 bar
Pressure rating, note	oil pressure rated
Sealing ring, part number	631753
Sealing ring, size	5.3 x 2.4 mm
Size	M12x1
Tightening torque	15 Nm ±10 %

Output/Interface

Switching output	NPN normally open (NO)
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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

Installation Instructions 614804
 EMC: Surge resistance
 External protection circuit is required. Document 825345, Section 2.
 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

