



1) O-Ring with thrust ring



## Display/Operation

Function indicator	no
Power indicator	no

## Electrical connection

Cable diameter D	3.50 mm
Cable length	3 m
Conductor cross-section	0.14 mm <sup>2</sup>
Connection type	Cable, 3.00 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 U <sub>e</sub>	1 µF
No-load current I <sub>o</sub> max., undamped	3 mA
No-load current I <sub>o</sub> max., damped	8 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Output resistance R <sub>a</sub>	150.0 kOhm
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub>	200 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Rated short circuit current	100 A
Ready delay t <sub>v</sub> max.	50 ms
Residual current I <sub>r</sub> max.	10 µA
Residual ripple max. (% of U <sub>e</sub> )	15 %
Switching frequency	2000 Hz
Utilization category	DC-13
Voltage drop static max.	2 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
IP rating	IP68

## Functional safety

MTTF (40 °C)	855 a
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## General data

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

## Material

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

## Mechanical data

Dimension	Ø 12 x 37 mm
Fastening detail	M12x1
Installation	for flush mounting
Pressure rating max.	350 bar
Pressure rating, note	oil pressure rated

Sealing ring, part number	631753
Sealing ring, size	5.3 × 2.4 mm
Size	M12x1
Tightening torque	20 Nm ±10 %

Rated operating distance $S_n$	1.5 mm
Repeat accuracy max. (% of $S_r$ )	5.0 %
Temperature drift max. (% of $S_r$ )	10 %
Tolerance $S_r$	±10 %

### Output/Interface

Switching output	PNP Normally open (NO)
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### Range/Distance

Assured operating distance $S_a$	1.2 mm
Effective operating distance $S_r$	1.5 mm
Hysteresis H max. (% of $S_r$ )	15.0 %

### Remarks

Installation Instructions 614804  
 The sensor is functional again after the overload has been eliminated.  
 For further information about the 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 Diagram

