



1) O-Ring with thrust ring



## Display/Operation

Function indicator	no
Power indicator	no

## Electrical connection

Connection	M12x1-Male, 4-pole, 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 Im	0 mA
No-load current Io max., damped	10 mA
No-load current Io max., undamped	1 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	33.0 kOhm + D
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	10 ms
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	15 %
Switching frequency	1000 Hz
Utilization category	DC -13
Voltage drop static max.	1.5 V

## Environmental conditions

Ambient temperature	-25...80 °C
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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)	720 a
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## General data

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

## Material

Gasket, material	FPM 70
Housing material	Stainless steel
Material sensing surface	EP
Support ring material	PTFE

## Mechanical data

Dimension	Ø 12 x 78 mm
Installation	for flush mounting
Mounting	M12x1
Pressure rating max.	500 bar
Pressure rating, note	oil pressure rated
Sealing ring, part number	636594
Sealing ring, size	5.85 x 2.4 mm
Size	M12x1

Tightening torque 15 Nm  $\pm$ 10 %

Repeat accuracy max. (% of Sr) 5.0 %

Temperature drift max. (% of Sr) 10 %

Tolerance Sr  $\pm$ 10 %

### Output/Interface

Switching output PNP normally open (NO)

### Remarks

Installation Instructions 614804

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.

### 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

### Connector view



### Wiring Diagram

