



1) O-Ring with thrust ring



Display/Operation

Function indicator	no
Power indicator	no

Electrical connection

Connection	M12x1-Male, 4-pole, A-coded
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	1 µF
No-load current I _o max., undamped	3 mA
No-load current I _o max., damped	8 mA
Operating voltage U _b	10...30 VDC
Output resistance R _a	150.0 kOhm
Polarity reversal protected	yes
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.	50 ms
Residual current I _r max.	10 µA
Residual ripple max. (% of U _e)	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
 EN 60068-2-6, Vibration

Half-sinus, 30 gn, 11 ms
 55 Hz, amplitude 1 mm, 3x30 min

IP rating IP68

Functional safety

MTTF (40 °C) 855 a

General data

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

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 56 mm
Fastening detail	M12x1
Installation	for flush mounting
Pressure rating max.	500 bar
Pressure rating, note	oil pressure rated
Sealing ring, part number	631753
Sealing ring, size	5.3 × 2.4 mm
Size	M12x1
Tightening torque	15 Nm ±10 %

Tolerance Sr ±10 %

Output/Interface

Switching output PNP Normally open (NO)

Range/Distance

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

Remarks

Installation Instructions 614804
 The sensor is functional again after the overload has been eliminated.

Mounting instructions 614804
 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.

Connector view



Wiring Diagram

