



1) Pressure resistant area



#### Basic features

Approval/Conformity	CE cULus WEEE
Basic standard	IEC 60947-5-2

#### Display/Operation

Function indicator	yes
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 <sub>m</sub>	0 mA
No-load current I <sub>o</sub> max., damped	16 mA
No-load current I <sub>o</sub> max., undamped	9 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Output resistance R <sub>a</sub>	47.0 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.	35 ms
Residual current I <sub>r</sub> max.	100 µA
Ripple max. (% of U <sub>e</sub> )	15 %
Switching frequency	100 Hz
Utilization category	DC-13
Voltage drop static max.	2 V

#### Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

#### Functional safety

MTTF (40 °C)	340 a
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#### Interface

Switching output PNP normally open (NO)

#### Material

Housing material Stainless steel  
Material sensing surface 1.4305 stainless steel

#### Mechanical data

Dimension Ø 30 x 63.5 mm  
Installation for flush mounting  
Mounting length 42.00 mm  
Pressure rating max. 40 bar  
Pressure rating, note Pressure-resistant  
Size M30x1.5  
Tightening torque 80 Nm ±10 %

#### Range/Distance

Assured operating distance Sa	16 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	20 mm
Real switching distance sr	20 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	■■
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

#### Remarks

The sensor is functional again after the overload has been eliminated.  
When installing in metals the switching distance may be reduced by up to 50%. Installation Instructions 841020.  
LED flashes between 100% and approx. 70% of Sr  
Installation permitted only in clamp without positive stop.  
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

