

## Basic features

Approval/Conformity	CE UKCA cULus Ecolab WEEE
Basic standard	IEC 60947-5-2
Trademark	Proxinox®

## 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 Im	0 mA
No-load current Io max., damped	25 mA
No-load current Io max., undamped	12 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	2.2 kOhm + D
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	130 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	50 ms
Residual current Ir max.	80 µA
Ripple max. (% of Ue)	15 %
Switching frequency	800 Hz
Utilization category	DC -13
Voltage drop static max.	3.5 V

## Environmental conditions

Ambient temperature	-40...105 °C
Chemical resistance	6 % H2O2 solution 15 % H2O2 solution 3 % H2O2 solution
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, according to BWN Pr. 27
IP rating per DIN 40050	IP69K

## Functional safety

MTTF (40 °C)	1620 a
--------------	--------

## Interface

Switching output PNP normally open (NO)

## Material

Housing material 1.4571 stainless steel  
 Material sensing surface PEEK

## Mechanical data

Dimension Ø 12 x 50 mm  
 Installation for flush mounting  
 Mounting length 30.00 mm  
 Size M12x1  
 Tightening torque 12 Nm

## Range/Distance

Assured operating distance Sa 1.6 mm  
 Hysteresis H max. (% of Sr) 15.0 %  
 Rated operating distance Sn 2 mm  
 Real switching distance sr 2 mm  
 Repeat accuracy max. (% of Sr) 5.0 %  
 Temperature drift max. (% of Sr) 10 %  
 Tolerance Sr ±10 %

## Remarks

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

\*Current reduction max. 30 min at:  $T_a \geq 70 \text{ °C} \dots \leq 105 \text{ °C}$ :  $I_e = 130 - 2.86 \times (T_a - 70)$ .

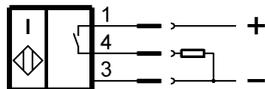
For more information about MTTF and B10d see MTTF / B10d Certificate

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 (Schematic)



## Technical Drawings

