

1) Shrink tube



### Basic features

|                     |                            |
|---------------------|----------------------------|
| Approval/Conformity | cULus<br>CE<br>EAC<br>WEEE |
| Basic standard      | IEC 60947-5-2              |

### Display/Operation

|                    |    |
|--------------------|----|
| Function indicator | no |
| Power indicator    | no |

### Electrical connection

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Cable diameter D                  | 3.20 mm                           |
| Cable length L                    | 0.57 m                            |
| Connection                        | M12x1-Male, 4-pin, A-coded        |
| Connection type                   | Cable with connector, 0.57 m, PUR |
| Polarity reversal protected       | yes                               |
| Protection against device mix-ups | no                                |
| Short-circuit protection          | no                                |

### 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 | 20 mA                     |
| Operating voltage Ub              | 10...30 VDC               |
| Output resistance Ra              | 4.7 kOhm + D/4.7 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.          | 80 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...70 °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 |
| Protection degree       | IP67                            |

### Material

|                          |                 |
|--------------------------|-----------------|
| Housing material         | Stainless steel |
| Material jacket          | PUR             |
| Material sensing surface | PBT             |

## Mechanical data

|                   |                    |
|-------------------|--------------------|
| Dimension         | Ø 8 x 45.5 mm      |
| Installation      | for flush mounting |
| Size              | M8x1               |
| Tightening torque | 5 Nm               |

## Output/Interface

|                  |   |
|------------------|---|
| Switching output | PNP normally open/normally closed (NO/NC) |
|------------------|---|

## 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 |
| Repeat accuracy max. (% of Sr)   | 5.0 %  |
| Temperature drift max. (% of Sr) | 10 %   |
| Tolerance Sr                     | ±10 %  |

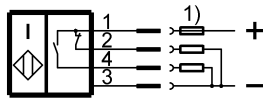
## Remarks

Recommendation: After a short circuit check the device for proper function.

## Connector Drawings



## Wiring Diagrams



1) For SCP see electrical data