

1) Sensing surface



### Display/Operation

Function indicator                      yes

### Electrical connection

Cable diameter D                      2.90 mm  
 Cable length L                          0.2 m  
 Connection                              M8x1-Male, 3-pin  
 Connection type                        Cable with connector, 0.20 m,  
                                                  PUR  
 Polarity reversal protected            yes  
 Protection against device mix-ups    yes  
 Short-circuit protection                yes

### Electrical data

Assured switching field strength  $H_a$     2 kA/m  
 Hysteresis H max. (% of  $H_n$ )        45 %  
 Load capacitance max. at  $U_e$         1  $\mu$ F  
 No-load current  $I_o$  max., undamped    10 mA  
 Operating voltage  $U_b$                     10...30 VDC  
 Output resistance  $R_a$                     Open drain  
 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  
 Rated switch field strength  $H_n$         1.2 kA/m  
 Residual current  $I_r$  max.                80  $\mu$ A  
 Ripple max. (% of  $U_e$ )                  15 %  
 Switching frequency                      10000 Hz  
 Turn-off delay  $t_{off}$  max.                0.05 ms  
 Turn-on delay  $t_{on}$  max.                  0.05 ms  
 Utilization category                        DC -13  
 Voltage drop static max.                 3.1 V

### Environmental conditions

Ambient temperature                      -25...85 °C  
 Contamination scale                        3  
 IP rating                                        IP67

### Functional safety

MTTF (40 °C)                                330 a

**General data**

<b>Approval/Conformity</b>	CE cULus WEEE
<b>Basic standard</b>	IEC 60947-5-2
<b>Scope of delivery</b>	Offset screwdriver DIN 911 size 1.5

**Material**

<b>Housing material</b>	LCP
<b>Material jacket</b>	PUR
<b>Material sensing surface</b>	LCP

**Mechanical data**

<b>Dimension</b>	29 x 6.2 x 4.4 mm
<b>Tightening torque</b>	0.1 Nm

**Output/Interface**

<b>Switching output</b>	PNP normally open (NO)
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**Range/Distance**

<b>Temp. drift max. (% of Hn)</b>	0.3 %
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**Remarks**

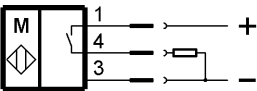
The sensor is functional again after the overload has been eliminated.  
 For further information about the MTTF and B10d see MTTF / B10d certificate

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 Drawings**



**Wiring Diagrams**



Technical Drawings

