

1) Sensing surface, 2) Housing, 3) Cover, 4) Potentiometer, 5) LED function indicator



**Basic features**

<b>Additional features</b>	Electrically conductive media Foam and residue compensation
<b>Approval/Conformity</b>	CE cULus WEEE
<b>Basic standard</b>	IEC 60947-5-2
<b>Scope of delivery</b>	Nut (2x)
<b>Sensitivity</b>	media-dependent, adjustable
<b>Series</b>	M18

**Electrical connection**

<b>Connection</b>	M8x1-Male, 3-pin
<b>Polarity reversal protected</b>	yes
<b>Protection against device mix-ups</b>	yes
<b>Short-circuit protection</b>	yes

**Electrical data**

<b>Operating voltage <math>U_b</math></b>	10...35 VDC
<b>Rated insulation voltage <math>U_i</math></b>	75 V DC
<b>Rated operating current <math>I_e</math></b>	300 mA
<b>Ready delay <math>t_v</math> max.</b>	300 ms
<b>Ripple max. (% of <math>U_e</math>)</b>	10 %
<b>Switching frequency</b>	2 Hz
<b>Utilization category</b>	DC -13
<b>Voltage drop static max.</b>	1.8 V

**Environmental conditions**

<b>Ambient temperature</b>	-10...60 °C
<b>Protection degree</b>	IP66 IP64 at plug exit

**Functional safety**

<b>MTTF (40 °C)</b>	239 a
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**Material**

<b>Cover material</b>	PVC
<b>Housing material</b>	PVC
<b>Material sensing surface</b>	PVC

**Mechanical data**

<b>Dimension</b>	Ø 18 x 70 mm
<b>Installation</b>	non-flush
<b>Size</b>	M18x1
<b>Thread (A)</b>	M18x1
<b>Tightening torque</b>	1 Nm

**Output/Interface**

<b>Switching output</b>	PNP normally open (NO)
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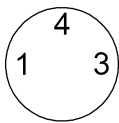
## Remarks

Note for using in standard applications with aqueous media: The Smart Level sensors are factory adjusted for standard applications. With this setting the Smart Level sensors can be used without further adjustment for detecting aqueous media through glass or plastic walls. The factory setting can automatically mask glass or plastic walls (approx. 0.5 mm to 6 mm) and compensate for foam, moisture and dirt buildup inside and outside the container. Special applications: The Smart Level sensors can also be used with aqueous media in previously unsolvable and critical applications such as through glass or plastic walls thicker than 6 mm. Here the user can change the factory setting.

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

