**XL-CP49A36x**

**ExpertSystem XL**  
Safety edge / Contact profile

This datasheet provides technical data about single parts of the ExpertSystem XL safety edge family. Safety edges (also called sensors) are part of pressure-sensitive edge systems according to EN ISO 13856-2. A pressure-sensitive edge system consists of a safety edge and a control unit and its intended use is for pressure-sensitive protection systems.

### Contact profile data

<table>
<thead>
<tr>
<th>Designation / Art. No.</th>
<th>XL-CP49A / 389110</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions in mm (Tolerances acc. to DIN ISO 3302-1 tl. E2)</td>
<td>H 49 x W 42</td>
</tr>
<tr>
<td>Contact profile material</td>
<td>EPDM, non-conductive, black</td>
</tr>
<tr>
<td>Hardness</td>
<td>70 Shore A (+/- 5)</td>
</tr>
<tr>
<td>Switching contact material</td>
<td>EPDM, conductive</td>
</tr>
<tr>
<td>Delivery length</td>
<td>max. 25 m</td>
</tr>
<tr>
<td>Weight per meter</td>
<td>0.64 kg/m</td>
</tr>
</tbody>
</table>

### Mounting profiles data

<table>
<thead>
<tr>
<th>Designation / Art. No.</th>
<th>XL-AP36 / 402163, XL-AP3620 / 409585, XL-AP36Q / 412006, XL-AP3620Q / 412008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material / Finish</td>
<td>Al / nature, Al / anod. black, Al / nature, Al / anod. black</td>
</tr>
<tr>
<td>Weight per meter</td>
<td>0.36 kg/m, 0.45 kg/m, 0.33 kg/m, 0.42 kg/m</td>
</tr>
<tr>
<td>Delivery length</td>
<td>max. 6.1 m</td>
</tr>
</tbody>
</table>

### Safety edge data

<table>
<thead>
<tr>
<th>Designation / Art. No.</th>
<th>XL-CP49A36x / various, see brochure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single sensor length (min. /max.)</td>
<td>0.3 m / 20 m</td>
</tr>
<tr>
<td>Cable length, max.</td>
<td>40 m</td>
</tr>
<tr>
<td>Combined single sensors: max. number / sensor length in total / cable length in total</td>
<td>4 sensors / 20 m / 40 m</td>
</tr>
<tr>
<td>Mounting orientations</td>
<td>All orientations</td>
</tr>
<tr>
<td>Effective sensing surface (Figure A)</td>
<td>X = 24 mm / Z = 25 mm</td>
</tr>
<tr>
<td>Actuating distance / Pre-travel (A / 200mm/s)*</td>
<td>&lt; 3 mm</td>
</tr>
<tr>
<td>Actuating force (A / 200mm/s)**</td>
<td>&lt; 50 N</td>
</tr>
<tr>
<td>Overtravel at 250 N (B1)*</td>
<td>&gt; 23 mm</td>
</tr>
<tr>
<td>Overtravel at 400 N (B2)*</td>
<td>&gt; 24 mm</td>
</tr>
<tr>
<td>Total travel at 600 N (C)*</td>
<td>&gt; 28 mm</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C to 60°C</td>
</tr>
<tr>
<td>Switching cycles</td>
<td>&gt; 10'000</td>
</tr>
<tr>
<td>Degree of protection</td>
<td>IP67</td>
</tr>
<tr>
<td>Max. voltage</td>
<td>24 V AC/DC</td>
</tr>
<tr>
<td>Continuous current load at max. voltage</td>
<td>10 mA</td>
</tr>
<tr>
<td>Actuation resistance (typical / max.)</td>
<td>50 - 150 Ohm / 500 Ohm</td>
</tr>
<tr>
<td>Standards</td>
<td>EN ISO 13856-2 / EN 12978</td>
</tr>
<tr>
<td>EC type examination certificate No.</td>
<td>E 7193 (Suva)</td>
</tr>
</tbody>
</table>

* Acc. to EN ISO 13856-2; Test piece Ø 80 mm; Test location c3; Test speed (A) 200 mm/s; Temp. 20°C  
The actuating force and the deformation travels depend on the response time of the used signal processing unit. If the integrated radio transmitter XRF-TI is used, the overtravel and total travel values are reduced by 8mm, where the XRF-TI is located.

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**Figure A**

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F [N] | Force-Travel Diagram, \( v = 200 \text{mm/s}, (A) \)
---|---
600 | A
400 | B1
250 | B2
150 | C
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*Subject to change without notice*