

XL-CP56B36x

Art No: various

ExpertSystem XL

Sensor for pressure-sensitive edges

A pressure-sensitive edge according to EN ISO 13856-2 consists of a sensor and a safety switching device and its intended use is for pressure-sensitive protection systems. This datasheet provides technical data about parts and sensors of the ExpertSystem XL family.

Contact profile data

| | | | | |
|---|-----------------------------|--|--|--|
| Designation / Art. No. | XL-CP56B / 430672 | | | |
| Dimensions in mm (Tolerances acc. to DIN ISO 3302-1 tl. E2) | H 56 x W 41 (Lip H 13) | | | |
| Contact profile material | EPDM, non-conductive, black | | | |
| Hardness | 75 Shore A (+/- 5) | | | |
| Switching contact material | EPDM, conductive | | | |
| Delivery length | Max. 25 m | | | |
| Weight per meter | 0.770 kg/m | | | |

Mounting profiles data

| Designation | XL-AP36 | XL-AP3620 | XL-AP36Q | XL-AP3620Q |
|-------------------|-------------|------------------|-------------|------------------|
| Art. No. | 402163 | 409585 | 412006 | 412008 |
| Material / Finish | Al / nature | Al / anod. black | Al / nature | Al / anod. black |
| Weight per meter | 0.36 kg/m | 0.45 kg/m | 0.33 kg/m | 0.42 kg/m |
| Delivery length | max. 6.1 m | | | |

Sensor data, determined with an 8.2 kΩ terminal resistor

| | | |
|---|---|--|
| Designation / Art. No. | XL-CP56B36x / various, see brochure | |
| Single sensor, length (min. / max.) | 0.3 m / 20 m | |
| Cable length, max. | 40 m | |
| Combined single sensors: max. number / sensor length in total / cable length in total | 4 sensors / 20 m / 40 m | |
| Mounting orientations | All orientations | |
| Effective sensing surface (Figure A) (related to the profile contour without lip) | X = 36 mm / Z = 20 mm / α = 90° L = L _{tot} - 40 mm (20 mm on each end) | |
| Actuating distance / Pre-travel (A / 200mm/s)* | < 17 mm | |
| Actuating force (A / 200mm/s)* | < 80 N | |
| Overtravel at 250 N (B1)* | > 24 mm | |
| Overtravel at 400 N (B2)* | > 25 mm | |
| Total travel at 600 N (C)* | > 45 mm | |
| Operating temperature | -20°C to 60°C | |
| Switching cycles | > 10'000 | |
| Degree of protection | IP67 (EN 60529) | |
| Endresistor value / type (see datasheet of XL accessory parts) | 8.2 kΩ / XL-RP8 | |
| Max. voltage | 24 V AC/DC | |
| Continuous current load at max. voltage | 10 mA | |
| Actuation resistance (typical / max.) | 50 - 150 Ω / 500 Ω | |
| Standards | EN ISO 13856-2 / EN 12978 | |

No. of EC Type-examination certificate (EC TEC) E 7273
 Notified Body: Suva, Bereich Technik, SCEsp 0008, No: 1246. The EC TEC is valid for this sensor in conjunction with a safety switching device (control unit and output signal switching device) specified by BBC Bircher AG and subjected to the prescribed conformity assessment procedure.

* Acc. to EN ISO 13856-2; Test piece Ø 80 mm; Test location c3; Test speed (A) 200 mm/s; Temp. 20°C.

* The contact of the test piece with the lip is the zero point for the specified force travel relationship.

* The actuating force and the deformation travels depend on the response time of the used safety switching device.

