

XL-CP56B30x

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 36 (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-AP30	XL-AP3020	XL-AP30Q	XL-AP3020Q
Art. No.	402162	409584	412005	412007
Material / Finish	Al / nature	Al / anod. black	Al / nature	Al / anod. black
Weight per meter	0.29 kg/m	0.38 kg/m	0.26 kg/m	0.35 kg/m
Delivery length	max. 6.1 m			

Sensor data, determined with an 8.2 kΩ terminal resistor

Designation / Art. No.	XL-CP56B30x / 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)*	< 13 mm
Actuating force (A / 200mm/s)*	< 90 N
Overtravel at 250 N (B1)*	> 24 mm
Overtravel at 400 N (B2)*	> 27 mm
Total travel at 600 N (C)*	> 41 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.

