

XL-CP80B36x

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-CP80B / 430674			
Dimensions in mm (Tolerances acc. to DIN ISO 3302-1 tl. E2)	H 80 x W 42 (Lip H 10)			
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	1.135 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-CP80B36x / 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 = 60 mm / Z = 20 mm / $\alpha = 90^\circ$ L = L _{tot} - 40 mm (20 mm on each end)	
Actuating distance / Pre-travel (A / 200mm/s)*	< 14 mm	
Actuating force (A / 200mm/s)*	< 70 N	
Overtravel at 250 N (B1)*	> 42 mm	
Overtravel at 400 N (B2)*	> 45 mm	
Total travel at 600 N (C)*	> 68 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.

