

# ExpertSystem XL

Modular pressure-sensitive edge system for gates

## Highly sensitive, economical, responsive

- High sensitivity and short response time
- Fast assembly and easy installation
- Attractive appearance for seamless integration into gate/door design

# ExpertSystem XL

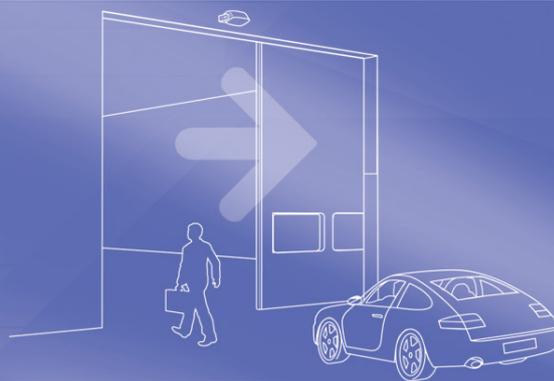
## Safety edges with integrated switching contact

### Safety edges for experts, by experts

Safety edges on automatic gates and doors prevent people from becoming injured and vehicles and goods from sustaining damage. They need to spring into action the instant they are required, yielding and compressing until the gate drive is able to stop and reverse the dangerous movement. With this in mind, ExpertSystem XL delivers quick response times and is designed for maximum overtravel and flexible plasticity. ExpertSystem XL not only meets normative requirements, but also boasts a fully concealed mounting profile that enables it to blend discreetly into every gate design. The material it is made from, EPDM, is highly durable and maintains its mechanical and UV-resistant properties over many years.

### Prefabricated or self-assembly kits and components

ExpertSystem XL pressure-sensitive edges are tailor-made for your requirements: they can be either preassembled as products cut to length, supplied in kits at a standard length, or provided as a modular system for easy self-assembly.



## Benefits

### Highly sensitive

Thanks to the innovative profile cross-section and short contact travel, ExpertSystem XL pressure-sensitive edges respond even at low actuating forces. They have large effective activation areas and angles, which are essential for devices such as folding gates.

### Economical

The plug-in contact end pieces allow ExpertSystem XL safety edges to be assembled in a matter of minutes. The trigger-safe screw-fit plug connections and plug-on profile end caps also ensure very short assembly times on the gate or door.

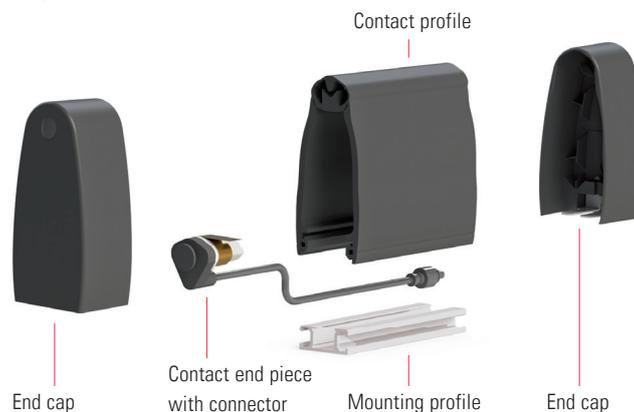
### Responsive

High overtravel compensation makes it possible to choose the smallest available profile height for the application. ExpertSystem XL profiles completely cover the aluminum profile. As a result, ExpertSystem XL can be integrated discreetly into ambitious gate designs.

## System overview

### Sensor edges

- High sensitivity
- Fast assembly
- Attractive appearance



### Plug-in connection system

- Sealing contact end piece
- Fast wiring
- Screw locking for secure connection

### Fast installation system

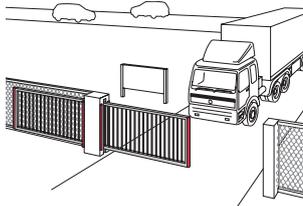
- Even faster installation
- Easy edge change
- Can be preassembled in the workshop



## Applications

### Situation

Sliding gate at site entrance



### Solution

In cases where sliding gates are being used at site entrances, there is the need to safeguard not only the primary closing edge, but also multiple secondary closing edges. This is where ExpertSystem XL's fast, largely tool-free assembly concept and its plug connector-based wiring technique really come into their own, as they make it possible to cut installation times significantly.

### Situation

Swing gate

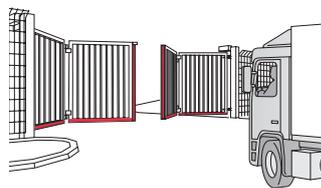


### Solution

An ever increasing number of home owners are choosing swing doors in striking and even extravagant designs for the entrances to their properties. With a concealed aluminum profile, matching end caps and concealable cable routing, ExpertSystem XL is characterized by its clear lines. It will blend in perfectly in any setting and can be relied upon for safety – especially if there are children playing nearby.

### Situation

Bi-folding gate

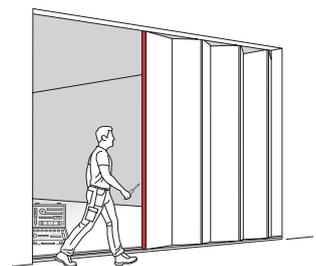


### Solution

Leaves of bi-folding gates do not move in a straight line. They can turn up to 90 degrees along their longitudinal axis while a closing movement is taking place, and this inevitably leads to lateral activation of the safety edges. ExpertSystem XL is ideally placed to deal with this thanks to its large effective activation areas and angles.

### Situation

Servicing



### Solution

When servicing is required, ExpertSystem XL offers decisive advantages when replacing safety edges that vehicles may have run into and damaged. ExpertSystem XL's plug-in cable connections enable quick installation in just a few simple steps.

# ExpertSystem XL

## Safety edges preassembled by experts

### Complete solution made to measure

ExpertSystem XL safety edges are available as a precisely assembled complete solution. Let us know your requirements and we will configure all of the necessary pressure-sensitive edges complete with the required connecting cables and switching devices to suit your specific needs.

For example, you can have all closing edge protections assembled ready-to-use for a gate project. Our highly trained sales and technical support staff will be happy to assist you in gathering all the necessary data. Delivery is made on the desired date, which saves storage space and the need to stockpile individual components.



## ExpertSystem XL profile types

Contact profile	XL-CP42A	XL-CP49A		XL-CP56A		XL-CP56B	
Article no.	411870	389110		430671		430672	
Safety edge	XL-CP42A24x <sup>2)</sup>	XL-CP49A30x	XL-CP49A36x	XL-CP56A30x	XL-CP56A36x	XL-CP56B30x	XL-CP56B36x
Mounting profile	XL-AP24	XL-AP30	XL-AP36	XL-AP30	XL-AP36	XL-AP30	XL-AP36
Actuating force <sup>1)</sup>	< 40 N	< 50 N		< 45 N		< 90 N	< 80 N
Pre-travel <sup>1)</sup>	< 2.5 mm	< 3 mm		< 3 mm		< 13 mm	< 17 mm
Overtravel <sup>1)</sup> (at 400 N)	> 16 mm	> 22 mm		> 28 mm		> 27 mm	> 25 mm

<sup>1)</sup> According to EN ISO 13856-2, test object Ø 80 mm, measuring point C3, test speed 200 mm/s, temp. 20 °C. More detailed information can be found in the product data sheets.

<sup>2)</sup> When operating with the XRF-T1 radio transmitter be mounted externally.

### Maximum efficiency thanks to Quick mount

With preassembled ExpertSystem XL pressure-sensitive edges with the optionally available Quick mount fast installation system, maximum efficiency can be achieved: With Quick mount your installation time is reduced to only a few minutes. Our video "ExpertSystem – Fastest commissioning with pre-assembled safety edges" (see QR code, direct link) shows how easily and quickly a preassembled ExpertSystem XL pressure-sensitive edge with integrated XRF-TI radio transmitter can be mounted on your industrial door and be ready for operation.



<b>Contact profile</b>	XL-CP74A		XL-CP80A	XL-CP80B	XL-CP99A
<b>Article no.</b>	389109		430673	430674	389087
<b>Safety edge</b>	XL-CP74A30x	XL-CP74A36x	XL-CP80A36x	XL-CP80B36x	XL-CP99A36x
<b>Mounting profile</b>	XL-AP30	XL-AP36	XL-AP36	XL-AP36	XL-AP36
<b>Actuating force <sup>1)</sup></b>	< 55 N		< 45 N	< 70 N	< 55 N
<b>Pre-travel <sup>1)</sup></b>	< 4 mm		< 3.5 mm	< 14 mm	< 3 mm
<b>Overtravel <sup>1)</sup> (at 400 N)</b>	> 42 mm		> 49 mm	> 45 mm	> 68 mm

<sup>1)</sup> According to EN ISO 13856-2, test object Ø 80 mm, measuring point C3, test speed 200 mm/s, temp. 20 °C  
More detailed information can be found in the product data sheets.

# ExpertSystem XL

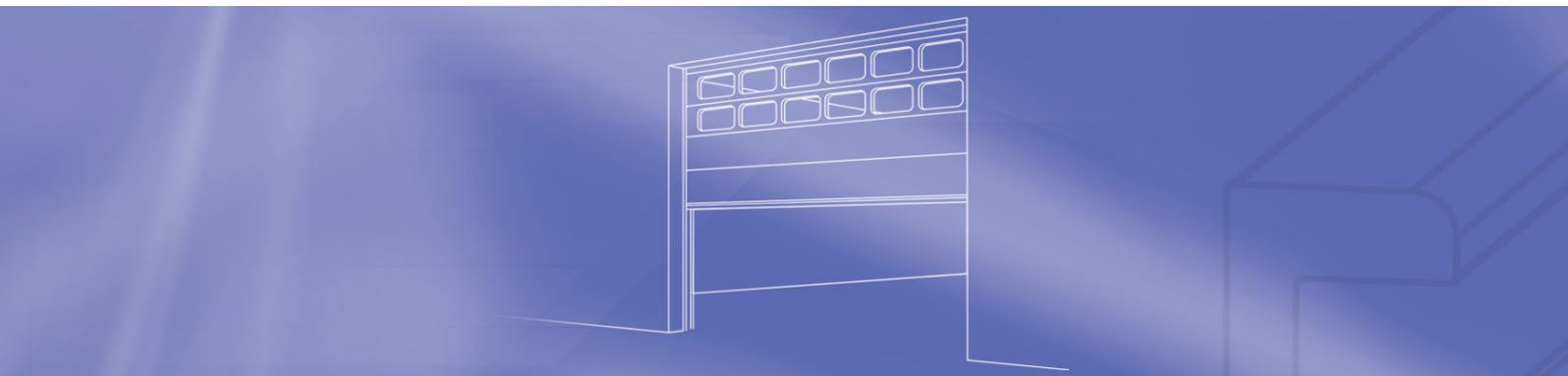
## Self-assembled safety edges

### Self-assembly

It is often necessary to be able to react flexibly and quickly in the event of unforeseen short-term requirements or a replacement. In this case, having your own stock and being able to assemble the pressure-sensitive edges yourself is usually the best approach.

Our practical range of single-edge kits containing all necessary components for easy, yet functionally reliable, assembly provide the best solution for this approach. For individual applications, for example when servicing an existing gate or when there is only an occasional need, these kits are ideal to have ready at any time. They are available in standard lengths.

For more extensive requirements, individual components are available in greater quantity.



### ExpertSystem XL kits

Article no.	Name	Length up to	Height x width
424713	XL-CP42A24/KT/2000/8K/5	2000 mm	42 mm x 29 mm
412009	XL-CP49A30/KT/2000/8k/5	2000 mm	49 mm x 36 mm
415039	XL-CP49A36/KT/2000/8k/5	2000 mm	49 mm x 42 mm
446387	XL-CP56A30/KT/2000/8k/5	2000 mm	56 mm x 36 mm
446390	XL-CP56A36/KT/2000/8K/5	2000 mm	56 mm x 41 mm
412010	XL-CP74A30/KT/2000/8k/5	2000 mm	74 mm x 37 mm
415042	XL-CP74A36/KT/2000/8k/5	2000 mm	74 mm x 43 mm
446391	XL-CP80A36/KT/2000/8K/5	2000 mm	80 mm x 42 mm
415043	XL-CP99A36/KT/2000/8k/5	2000 mm	99 mm x 44 mm

Kits include: 1x contact profile, 1x mounting profile, 2x contact end pieces, 2x end caps, 1x resistor plug 8.2 kΩ and 1x 5 m connection cable.





## ExpertSystem XL components

### Article no. Description

<b>411870</b>	<b>XL-CP42A contact profile</b> , H 42 mm (25 m)	
<b>389110</b>	<b>XL-CP49A contact profile</b> , H 49 mm (25 m)	
<b>430671</b>	<b>XL-CP56A contact profile</b> , H 56 mm (25 m)	
<b>430672</b>	<b>XL-CP56B contact profile</b> , H 56 mm (25 m)	
<b>389109</b>	<b>XL-CP74A contact profile</b> , H 74 mm (25 m)	
<b>430673</b>	<b>XL-CP80A contact profile</b> , H 80 mm (25 m)	
<b>430674</b>	<b>XL-CP80B contact profile</b> , H 80 mm (25 m)	
<b>389087</b>	<b>XL-CP99A contact profile</b> , H 99 mm (25 m)	
<b>412002</b>	<b>XL-AP24 mounting profile</b> , aluminum, W 24 mm 1 × 6.1 m	
<b>470329</b>	10 × 2 m (20 m)	
<b>402162</b>	<b>XL-AP30 mounting profile</b> , aluminum, W 30 mm 1 × 6.1 m	
<b>470317</b>	10 × 2 m (20 m)	
<b>402163</b>	<b>XL-AP36 mounting profile</b> , aluminum, W 36 mm 1 × 6.1 m	
<b>470326</b>	10 × 2 m (20 m)	
<b>409584</b>	<b>XL-AP3020 mounting profile</b> , aluminum, W 30 mm black anodized, 1 × 6.1 m	
<b>470327</b>	black anodized, 10 × 2 m (20 m)	
<b>409585</b>	<b>XL-AP3620 mounting profile</b> , aluminum, W 36 mm black anodized, 1 × 6.1 m	
<b>470328</b>	black anodized, 10 × 2 m (20 m)	
<b>412005</b>	<b>XL-AP30Q mounting profile</b> , aluminum, W 30 mm, punched for quick mount (6.1 m)	
<b>412006</b>	<b>XL-AP36Q mounting profile</b> , aluminum, W 36 mm, punched for quick mount (6.1 m)	
<b>412007</b>	<b>XL-AP3020Q mounting profile</b> , aluminum, W 30 mm, black anodized, punched for quick mount (6.1 m)	
<b>412008</b>	<b>XL-AP3620Q mounting profile</b> , aluminum, W 36 mm, black anodized, punched for quick mount (6.1 m)	
<b>411987</b>	<b>XL-QME quick mount element</b> Stainless steel, brass (75 pcs.)	
<b>413856</b>	<b>XL-QFIX lens drilling screw PH for XL-QME</b> 4.2 x 19 mm, hardened, galvanized (100 pcs.)	

Article no.	Description	to contact profile	on mounting profile
<b>424373</b>	<b>XL-C4224 end cap</b>	XL-CP42A	XL-AP24
<b>409902</b>	<b>XL-C4930 end cap</b>	XL-CP49A	XL-AP30x
<b>409887</b>	<b>XL-C4936 end cap</b>	XL-CP49A	XL-AP36x
<b>436969</b>	<b>XL-C5630 end cap</b>	XL-CP56A & B	XL-AP30x
<b>437000</b>	<b>XL-C5636 end cap</b>	XL-CP56A & B	XL-AP36x
<b>409903</b>	<b>XL-C7430 end cap</b>	XL-CP74A	XL-AP30x
<b>409889</b>	<b>XL-C7436 end cap</b>	XL-CP74A	XL-AP36x
<b>437001</b>	<b>XL-C8036 end cap</b>	XL-CP80A & B	XL-AP36x
<b>409901</b>	<b>XL-C9936 end cap</b> (10 × set of 2)	XL-CP99A	XL-AP36x
<b>411903</b>	<b>XL-EP3020 end plugs</b>		XL-AP3020x
<b>411902</b>	<b>XL-EP3620 end plugs</b> (Set left/right)		XL-AP3620x
<b>389111</b>	<b>XL-CEP contact end piece</b> with cable and connector (f), (set of 2 pcs.)		
<b>389114</b>	<b>XL-RP8 resistor plug 8.2 kΩ</b> with connector (m)		
<b>389312</b>	<b>XL-RPI resistor plug ∞ Ω</b> not for safety applications, cannot be combined with XRF-TI		
	<b>XL-CCx connection cable</b> one connector (m), one open cable end		
<b>389119</b>	<b>XL-CC1</b> , length 1 m		
<b>389121</b>	<b>XL-CC5</b> , length 5 m		
<b>389120</b>	<b>XL-CC2</b> , length 2 m		
<b>389122</b>	<b>XL-CC10</b> , length 10 m		
<b>389123</b>	<b>XL-CC20</b> , length 20 m		
	<b>XL-ICx interconnection cable</b> two connectors (m/m)		
<b>398436</b>	<b>XL-IC0.2</b> , length 0.2 m		
<b>389124</b>	<b>XL-IC1</b> , length 1 m		
<b>389125</b>	<b>XL-IC2</b> , length 2 m		
<b>396456</b>	<b>XL-IC3.5</b> , length 3.5 m		
<b>389126</b>	<b>XL-IC5</b> , length 5 m		
<b>429645</b>	<b>XL-IC17</b> , length 17 m		
	<b>XL-EC1 extension cable</b> two connectors (f/m)		
<b>420769</b>	<b>XL-EC1</b> , length 1 m		
<b>411989</b>	<b>XL-EASE hand tool</b> for easily pressing in the contact profiles		
<b>212876</b>	<b>XL-CUT rubber profile cutters</b> (cut length 75 mm)		

## Technical data

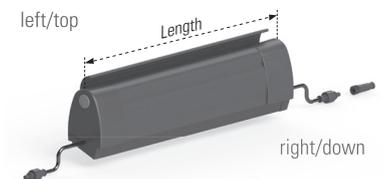
Contact profile material	EPDM, non-conductive, black
Hardness	Approx. 70 Shore A
Switching contact material	EPDM, conductive
Contact resistance	Typ. < 200 Ω, max. < 500 Ω
Resistance per unit length	< 2 Ω/m
Operating temperature range	-20°C to +60°C
Max. voltage	24 V ACDC
Continuous current load at max. voltage	10 mA
Protection class of assembled pressure-sensitive edge	IP67
Connection	2-pin cable
Plug connectors	Coded, with screw locking
Resistor plug	8.2 kΩ (0.6 W)
Storage temperature for components	Permanent 0°C to 40°C recommended, short-term -30°C to 60°C possible
Product standards	EN 12978 and EN ISO 13856-2 (type approval)
RoHS; REACH	Compliant

More detailed information can be found in the product data sheets.

### Note

Technical details and recommendations concerning our products are based on experience and are an aid for the orientation of the user. Details stated in our brochures and data sheets do not guarantee special properties of the products. This does not apply to special product properties confirmed by us in writing or individually. Subject to technical alterations.

## Order details



### Order details for prefabricated safety edges

XL-CP56B3620	PA	1537	RP8	CC5
<b>Type</b> Contact + mounting profile, see tables → p. 4 + 5:	<b>QuickMount</b> PA = without QuickMount FA = with QuickMount	<b>Length</b> Length of edge [mm]	<b>Cable / resistor left / top</b> see page 7:	<b>Cable / resistor right / down</b> see page 7:
<ul style="list-style-type: none"> <li>XL-CP42A24</li> <li>XL-CP49A30, XL-CP49A36</li> <li>XL-CP56A30, XL-CP56A36</li> <li>XL-CP56B30, XL-CP56B36</li> <li>XL-CP74A30, XL-CP74A36</li> <li>XL-CP80A36</li> <li>XL-CP90B36</li> <li>XL-CP99A36</li> </ul>			<ul style="list-style-type: none"> <li>CC1, length 1 m</li> <li>CC2, length 2 m</li> <li>CC5, length 5 m</li> <li>CC10, length 10 m</li> <li>CC20, length 20 m</li> </ul>	<ul style="list-style-type: none"> <li>IC0.2, length 0.2 m</li> <li>IC1, length 1 m</li> <li>IC2, length 2 m</li> <li>IC3.5, length 3.5 m</li> <li>IC5, length 5 m</li> <li>IC17, length 17 m</li> </ul>
			<ul style="list-style-type: none"> <li>XL-RP8 Resistor plug 8.2 kΩ</li> <li>XL-RPI Resistor plug ∞ Ω</li> <li>XRF-TI Transmitter, built-in version</li> </ul>	

## Supplementary products

### ExpertSystem XRF

The ExpertSystem XRF is a wireless signal transmission system for applications with high performance and design requirements.



### ProLoop2

The ProLoop2 loop detector monitors and evaluates induction loops laid in the ground and precisely detects cars, trucks, two-wheelers and industrial trucks.



### ProAccess

ProAccess is a powerful sensor for vehicle detection with combined radar and ultrasonic technology.



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