MAYSER®

Innovative by tradition.

Doors, gates and windows

Mayser makes automatic processes safe.

Convenience and safety at doors, gates and windows.

Ever increasing standards for energy balance, safety and design in building technology have resulted in the increased automation of doors, gates and windows.
Whether for controlled natural ventilation, smoke and heat venting or barrier-free access: centrally controlled or automatically operating façade elements have become an integral part of modern building technology. In addition to user-friendly features, automatically controlled window and façade elements must also guarantee the safety of people in the building. Depending on the installation situation and the particular use, there is a potential danger to people and property during the closing of automatically controlled doors, gates and windows.

Mayser offers pressure-sensitive protection devices that respond quickly to protect dangerous areas reliably and independent of interfering factors such as light, dirt or weather influences. This provides for maximum safety.

Different contact strips can be used depending on the installation situation:

- Sensor profiles
- Safety edges
- Miniature safety edges

However, electrically operated windows and gates are also considered machines in accordance with the Machinery Directive and are therefore subject to special safety requirements.
Safety components from Mayser are tested in accordance with EN 12978 and/or EN ISO 13849 and/or EN ISO 13856 and thus comply with the safety-related requirements of the Machinery Directive.

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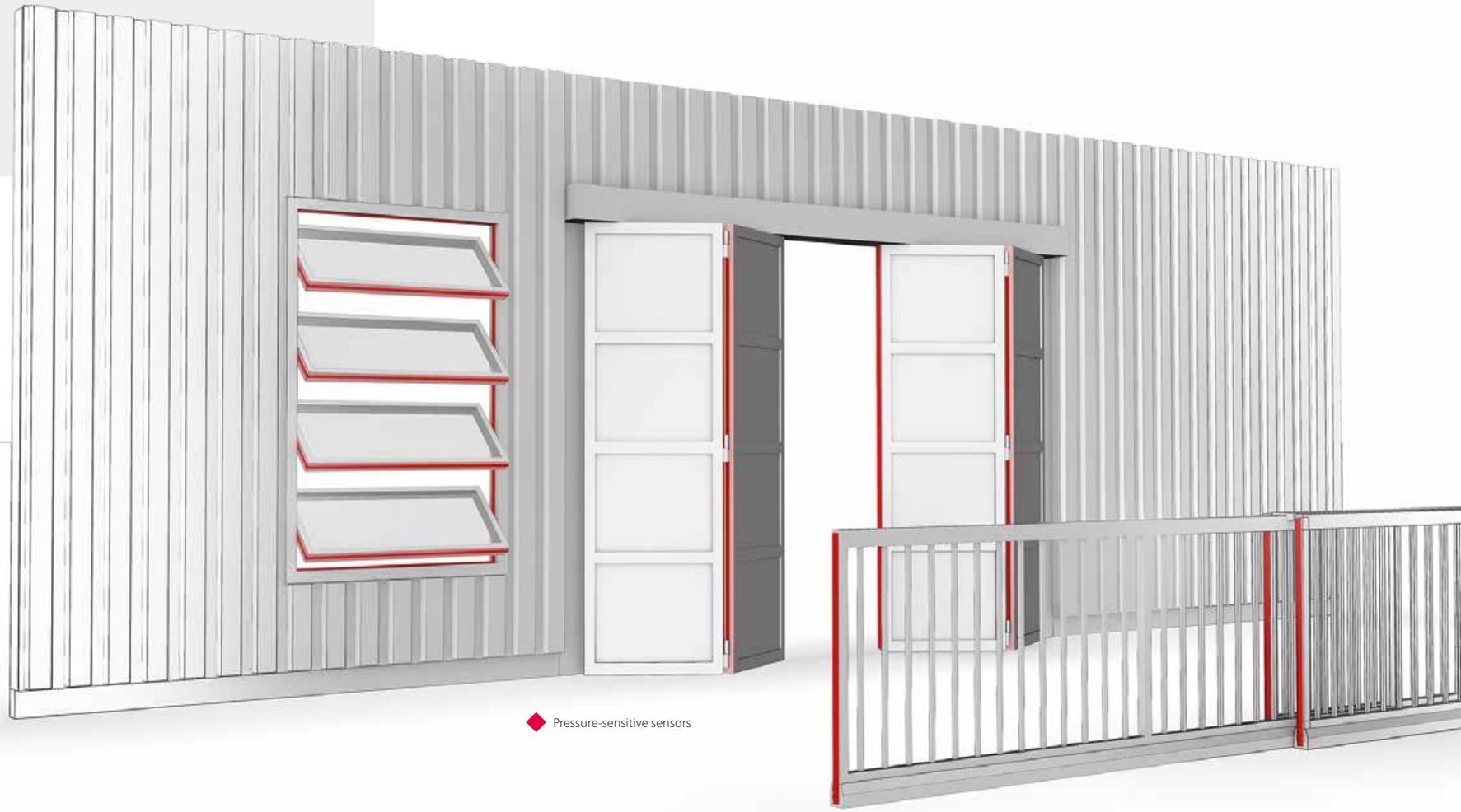
1 Areas of application

Depending on the installation situation and the particular use, there is a potential danger to people and property during the closing of automatically closing doors, gates or windows. Pressure-sensitive protection devices from Mayser provide reliable protection at main and secondary closing edges.

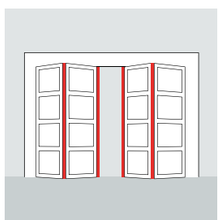
If someone is in the danger zone while the door or gate is closing, a pressure-sensitive sensor is triggered.
The control system stops or reverses the automatic closing motion.

We offer pressure-sensitive protection devices for main and secondary closing edges for

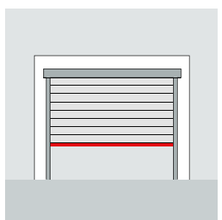
- Folding gates
- Roller gates / sectional gates
- Sliding gates
- Louvred windows / power-operated windows
- Toll gates
- Swing doors



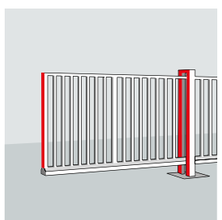
◆ Pressure-sensitive sensors



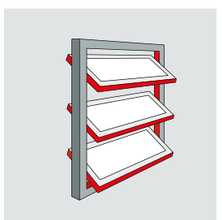
Folding gates



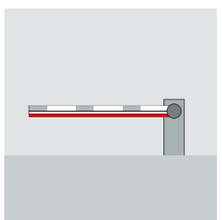
Roller gates



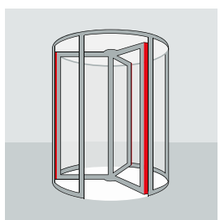
Sliding gates



Louvred windows



Toll gates



Swing doors

2 Our solutions

Sensor profiles

The SP sensor profile series is specially designed for the requirements of the door and gate market and is available as a pre-configured or DIY solution for protection at closing edges.

In combination with variable aluminium profiles and end caps the DIY solution enables fast and easy assembly and installation directly at the gate to create functioning safety edges – without gluing. This also means that the DIY sensor profiles are watertight according to degree of protection IP67.

Safety edges

Safety edges consist of an inner safety element with a rubber envelope profile. This design allows diverse profile geometries, as well as versions with a custom bend radius, angled geometries and active ends.

Miniature safety edges

Miniature safety edges are specially designed for the requirements of power-operated windows. They adapt discreetly to the design of the window geometry.

3 Sensor profiles

The SP sensor profile series is specially designed for the requirements of the door and gate market. The design allows convenience of handling and offers a high degree of flexibility.

In combination with different aluminium profiles and end caps, the DIY sensor profiles can be assembled and installed directly on site with ease to make functioning safety edges.

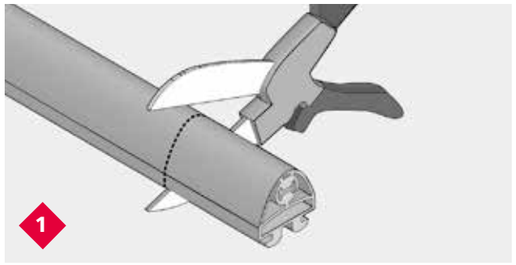
Technical data

	Sensor profiles
Operating principle	Pressure-sensitive
	N/O switch principle
Overall height	20 – 80 mm
Actuation angle	±45° to ±50°
DIY solution	•
Applied standards	EN 12978 ISO 13856-2 ISO 13849-1
Degree of protection	IP67
Operating temperature	min. –25 °C max. +55 °C
Actuating distance	6 – 8 mm
Rubber envelope profile	TPE

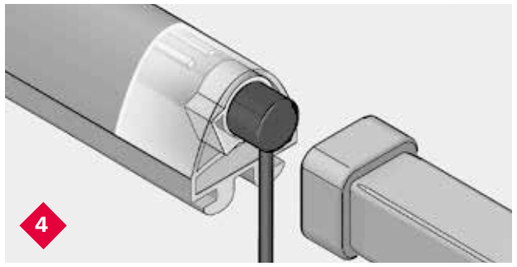
Your benefits

- User-friendly design
- High degree of protection (IP67)
- Fast switching behaviour
- Pre-configured or DIY solution without gluing
- Testing basis: EN 12978, ISO 13849-1, ISO 13856-2
- Different mounting variants: snap-in foot, clip, T-foot

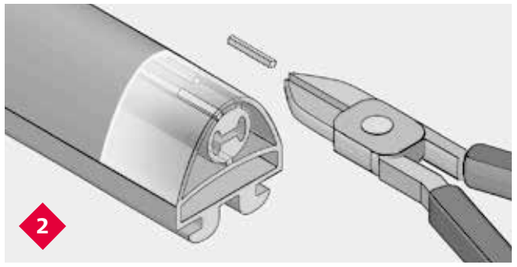
4 DIY sensor profiles



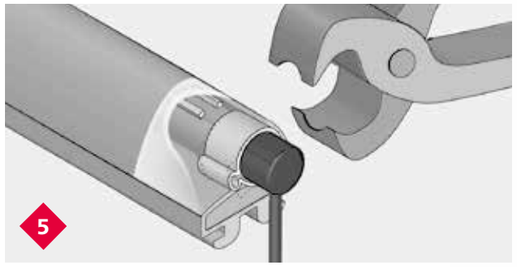
Cut contact strip to length with profile shears.



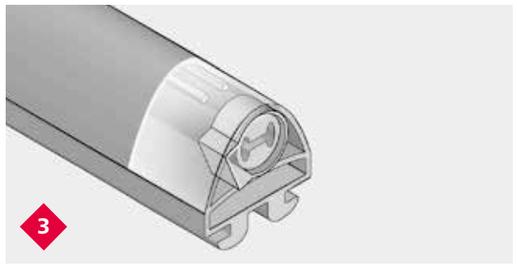
Press sealing plug onto the contact profile with the assembly tool.



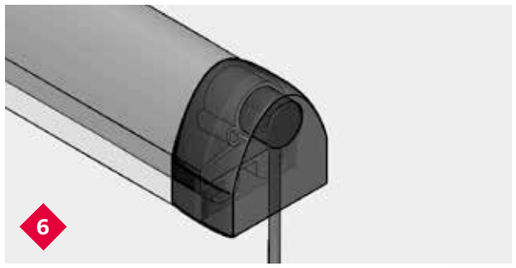
Make cuts in the webs to the outer contour and switching chamber and tear off the cut webs.



Place the vice-grip wrench on the lug and squeeze hard as far as possible.



Place the lug clamp on the switching chamber.



Install the end cap and the aluminium rail.

Degree of protection IP67 despite simple DIY design.

5 Safety edges

Safety edges, which consist of an inner safety element in a rubber envelope profile, are sensors that provide protection at shearing and pinching edges. If the safety edge comes into contact with an obstacle, a signal is sent to the control system, which stops the automatic motion.

Your benefits

- ✓ Tested in accordance with EN 12978, EN ISO 13856-2 and EN ISO 13849-1
- ✓ Numerous profile geometries
- ✓ With or without edge seal
- ✓ Custom solutions possible
- ✓ Optimal solution for different installation heights
- ✓ High degree of protection possible (IP67)

Technical data

	Safety edge	Miniature safety edge / obstacle detection
Operating principle	Pressure-sensitive	Pressure-sensitive
	N/O switch principle	N/O switch principle
Overall height	20 – 137 mm	4 – 16 mm
Actuation angle	±30° to ±45°	up to ±45°
DIY solution	•	•
Applied standards	EN 12978 ISO 13856-2 ISO 13849-1	ISO 13849-1 ISO 13856-2
Degree of protection	IP65	IP65
Operating temperature	min. –20 °C max. +55 °C	min. –25 °C max. +80 °C
Actuating distance	8 – 17 mm	≤ 1.0 mm
Rubber envelope profile	EPDM NBR CR	TPE
Custom adaptation	Bending radii Angled geometries Active ends	Bending radii Angled geometries

6 Miniature safety edges

Miniature safety edges are specially designed for short over-travel distances and minimum installation heights. They are especially suitable for use in window and façade technology to protect fingers from being pinched.
If the sensor comes into contact with an obstacle while a window is closing, the system immediately stops the closing motion and the window opens again.

Your benefits

- ✓ Tested according to EN ISO 13849-1 and ISO 13856-2
- ✓ High sensitivity – short response time
- ✓ Ideal for low installation heights
- ✓ Can be adapted for bend radii and angles

All of our safety edges and miniature safety edges are maintenance-free.

7 Supplementary products

Safety bumpers

The safety bumper is used to detect people at entrances and hangar gates. It is available in lengths up to 4 m, both in a standard and also a special version. The depth ranges from 150 mm in the standard version to 1200 mm for a custom bumper based on drawings. That makes the safety bumper ideal for providing protection at large hangar gates.

Control units

Control units are a component of the pressure-sensitive protection device.They analyse the output signals from the sensors and immediately trigger the required safety measures. They are available in different versions and safety categories for different areas of application.

Ultrasonic sensors

Environment, access and area monitoring via ultrasound is the ideal solution for non-touch detection of persons and objects. The ultrasound product family from Mayser offers different types of evaluation electronics for different applications. With its Ultrasonic safety system, Mayser also offers the only sensor in the world that is certified for passenger safety.

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