

LEONI PinchGuard®
Pinch protection for motor
driven closure systems



The Quality Connection

LEONI

LEONI PinchGuard® – the next generation

The LEONI PinchGuard is the first integrated pinch protection system commercially available which reacts to the slightest touch and completely secures motor driven closure systems.

Securing motor driven closure systems

An increasing number of motor driven closure systems, e. g. powered lift gates, windows and sliding doors, are part of today's vehicles.

In order to avoid injuries, today those systems are equipped with different kinds of anti pinch systems like motor current sensors or resistive pinch strips.

Disadvantages of conventional pinch protection systems:

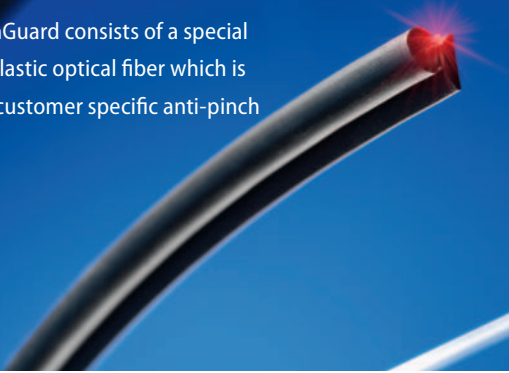
- high actuating forces
- cannot be installed all around
- EMC-incompatibility (tactile sensors)

Advantages of the LEONI PinchGuard® system

- low actuating forces
- can be installed all around
- advanced protection for edge design
- easy adaption on existing chassis design
- easy integration of the PinchGuard control system into existing control systems of drives
- EMC-compatible

Maximum flexibility – holistic safety

The LEONI PinchGuard consists of a special highly flexible plastic optical fiber which is integrated into customer specific anti-pinch profiles.



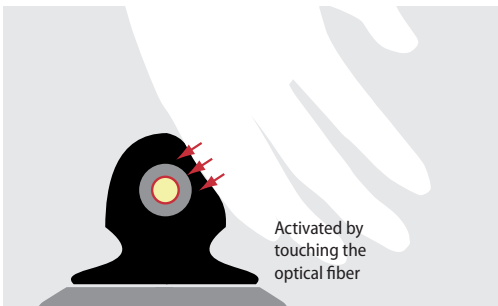
Technological features of the LEONI PinchGuard® system:

- Sensor response time 2 ms
- Actuating force < 10 N
- Sensor length up to appr. 7 m
- Low bending radii appr. 10 mm

Functionality of the LEONI PinchGuard® systems

Fiber/Pinch protection profile

*PinchGuard **optical***



LEONI PinchGuard® in use

The LEONI PinchGuard system can be integrated in security systems applications for the automotive, transportation, aircraft and building technology as well as for medical applications.

Even critical closing areas like shear planes of windows, large-area sliding doors or bent rear flaps can excellently be secured by means of the LEONI PinchGuard.

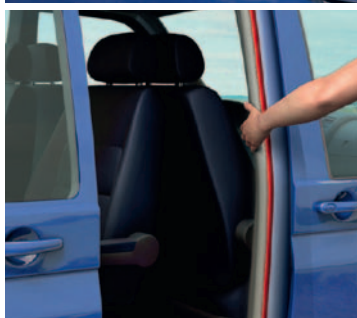
*Rear flap
sensor installation area emphasized*



*Window
sensor installation area emphasized*



*Sliding door
sensor installation area emphasized*



The LEONI Group

LEONI is a successful global company with its headquarters located in Nuremberg, Germany. LEONI employs more than 59,000 people in 33 countries worldwide and with more than 91 subsidiaries generated consolidated sales of about € 2.96 billion in 2010.

The LEONI business is split into 2 divisions:
Wire & Cable Solutions and Wiring Systems.

Wiring Systems Division

- Full vehicle electrical distribution systems development
 - Optimization of conventional / pre-formed wiring harnesses (cars / commercial vehicles)
 - Electrical distribution systems for electric & hybrid vehicles
 - Fuse boxes / junction boxes – including high voltage
 - Wiring system related injection moulded plastic components
 - Electromechanical and electronics based solutions
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- 34 global production sites
 - 12 R&D / customer service centres worldwide
 - 51,000 employees (09 / 2011)



More information available under: www.leoni.com

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