



# LZR®-FLATSCAN SW

Safety sensor for swing doors



## APPLICATIONS



## TECHNOLOGY

Laser

## CONFORMITY



## DESCRIPTION

The **LZR®-FLATSCAN SW** uses laser technology (time of flight measurement) for the safety of swing doors. 170 measurement points provide complete protection for the users.

One **LZR®-FLATSCAN SW** kit (2 modules) is enough, depending on the risk analysis, to cover both the complete width and height of a door wing including the pinch zone.

## VIDEO



Discover the product video on our youtube channel **BEA Sensors Europe**  
<https://bit.ly/2KDPKut>



### Compact design

The **LZR®-FLATSCAN SW** can be used on all swing doors, regardless of their size. Thanks to its compact design (8.5 cm x 14.2 cm) it can be stocked and stored easily.



### Independent of flooring and surroundings

The laser technology guarantees stability above all types of floor surfaces (slatted floors, absorbent carpet, reflective floor, slippery surface etc.). It is also independent of the door's direct environment (handrail, walls, heaters, dustbins etc.).



### Pinch zone safety

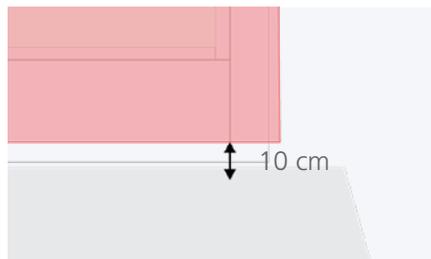
The pinch zone of the **LZR®-FLATSCAN SW** counts 100 measurement points, divided over 18°. They optimise the detection of small body parts (hands and fingers) in the hinge area.



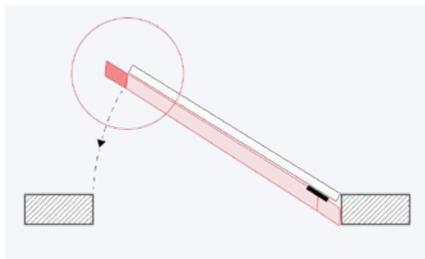
### Fast & intuitive installation

The size of the sensor area is defined by simple hand movements, which leads to installation time savings.

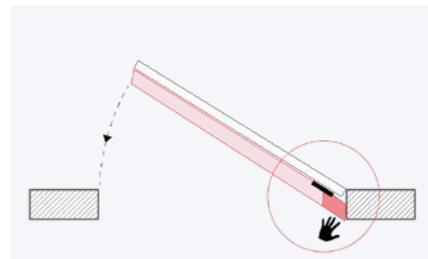
## APPLICATIONS



Uncovered zone



Extended safety area during closing

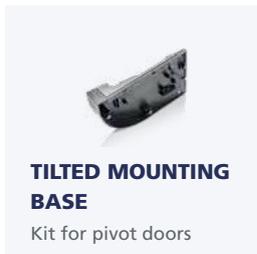


Optimised protection of the pinch zone on hinge side and opposite hinge side

## ACCESSORIES



**GDA**  
Glass door accessory



**TILTED MOUNTING BASE**  
Kit for pivot doors



**RETROFIT INTERFACE**  
Retrofit accessory



**PROTECTIVE COVER**  
Protective accessory for FLATSCAN



**FDA**  
Fire door adapter for FLATSCAN

## INSTALLATION

- One module on each side is enough to secure the whole door, regardless of its size.
- Master-Slave operator compatible with 4SAFE.
- The mechanical angle can be adjusted from 2° to 10° and even further thanks to accessories.
- Automatic teach-in: direct surroundings of the door and the type of floor.

## VERSIONS

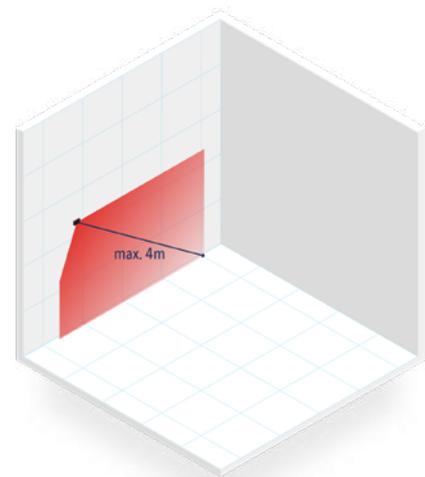
- 2 designs available for installation on the left or right.
- Different colours available (aluminium/black/white). The cover can be fully painted.

## TUTORIAL



Discover the product video on our youtube channel **BEA Sensors Europe**  
<https://bit.ly/2BxHc5e>

## TECHNICAL SPECIFICATIONS



<b>Technology</b>	LASER scanner, time-of-flight measurement
<b>Max. detection range</b>	4m (diagonal) with reflectivity of 2% (i.e.: at W = 1.5 m -> H=3.7 m)
<b>Field of view</b>	Door wing safety : 86° / Hinge area : 18°
<b>Angular resolution</b>	Door wing safety : 1.23° / Hinge area : 0.18°
<b>Typ. min. object size</b>	
Door wing protection	10cm @ 4m
Hinge area	2cm @ 4m
<b>Emission characteristics</b>	IR LASER Wavelength 905 nm; max. output pulse power 25 W; Class1
<b>Supply voltage / Consumption</b>	12-24V DC ± 15% / ≤ 2 W
<b>Response time</b>	Door wing safety : max. 50 ms / Hinge area : max. 90 ms
<b>Output</b>	2 electronic relays (galvanic isolation - polarity free)
Max. switching voltage	42V AC/DC
Max. switching current	100 mA
<b>LED-signals</b>	1 bi-coloured LED : detection/output status
<b>Dimensions</b>	142 mm (L) × 85 mm (D) × 23 mm (H) (mounting bracket + 7 mm)
<b>Tilt angles / Protection degree</b>	+2° to +10° (without mounting bracket) / IP54
<b>Temperature range / Humidity</b>	-30°C to +60°C if powered / 0-95 % non-condensing
<b>Vibrations</b>	< 2 G
<b>Conformity</b>	RoHS 2 2011/65/EU; MD 2006/42/EC; EMC 2014/30/EU; LVD 2014/35/EU EN 12978; EN ISO 13849-1PI "d"/ CAT2; EN 60529; IEC 60825-1; EN 60950-1; EN 61000-6-2; EN 61000-6-3; IEC 61496-1; EN 61496-3 ESPE Type 2; EN 62061 SIL 2; DIN 18650-1 Chapter 5.7.4 (testbody CA);EN 16005 Chapter 4.6.8 (testbody CA)

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