

LZR®-FLATSCAN SW

Safety sensor for swing doors







APPLICATIONS



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 \times 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.).



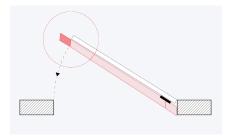
Pinch zone safety

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.



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

Extended safety area during closing

ACCESSORIES











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.

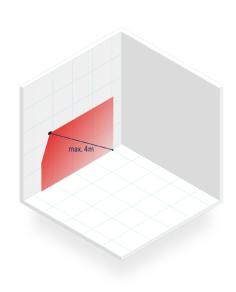
TUTORIAL



Discover the product video on our youtube channel **BEA Sensors Europe**

https://bit.ly/2BxHc5e

TECHNICAL SPECIFICATIONS



Technology	LASER scanner, time-of-flight measurement
Max. detection range	4m (diagonal) with reflectivity of 2% (i.e.: at W = 1.5 m \rightarrow H=3.7 m)
Opening angle	Door wing safety : 86° / Hinge area : 18°
Angular resolution	Door wing safety: 1.23° / Hinge are: 0.18°
Typ. min. object size Door wing protection Hinge area	10cm @ 4m 2cm @ 4m
Emission characteristics	IR LASER Wavelength 905 nm; max. output pulse power 25 W; Class 1
Supply voltage / Consumption	12-24V DC ± 15% / ≤ 2 W
Response time	Door wing safety : max. 50 ms / Hinge area : max. 90 ms
Output Max. switching voltage Max. switching current	2 electronic relays (galvanic isolation - polarity free) 42V AC/DC 100 mA
LED-signals	1 bi-coloured LED : detection/output status
Dimensions	142 mm (L) \times 85 mm (D) \times 23 mm (H) (mounting bracket + 7 mm)
Tilt angles / Protection degree	+2° to +10° (without mounting bracket) / IP54
Temperature range / Humidity	-30°C to +60°C if powered / 0-95 % non-condensing
Vibrations	< 2 G
Conformity	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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