

LZR®-FLATSCAN 3D SW

Safety sensor with intentional opening for swing doors







APPLICATIONS



TECHNOLOGY

Laser



CONFORMITY





DESCRIPTION

The LZR®-FLATSCAN 3D SW is a safety sensor designed for swing doors. Using laser time-of-flight technology, its volumetric detection field covers the complete opening area of the door, guaranteeing more comfort and safety to the users. Completely touchless. It prevents any contact with the user by avoiding sudden movements of door leaves. The coverage of the hinge area and the leading edge area is increased to avoid any risk of contact.

VIDEO



Discover the product video on our youtube channel **BEA Sensors Europe** https://bit.ly/2VVC2Ka



High comfort for all users

If a person or an object is present in the pathway, the door does not make any sudden movements thanks to the 4 laser curtains. Any risk of contact with the door is prevented whatever type of swing door.



Minimizing the risk zones

The high resolution volumetric curtains of the **LZR®-FLATSCAN 3D SW** detect fingers and bodies in the entire defined detection area. The hinge area and the leading edge are secured.



Hygienic contactless opening

Thanks to a third output, the **LZR®-FLATSCAN 3D SW** also has an activation function, ensuring hygienic and on demand opening of the door. You can choose between creating up to 2 push buttons or using the curtains to activate the door, without the inconvenience of wiring new switches.



A bacteria-free safety solution

The **LZR®-FLATSCAN 3D SW** offers a hygienic safety solution by avoiding the use of mechanical finger protection. No maintenance and cleaning is required to fight the spread of bacterias.





Extended safety area during closing



Opening function by approach

INSTALLATION



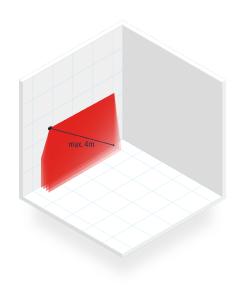
- The size of the detection field is defined by a simple hand movement. The sensor will auto- $\stackrel{\cdot}{\text{matically}}$ launch an opening cycle to learn the environement in a few seconds.
- Fast and automatic learning
- Easy to retrofit or combine with the LZR-FLATSCAN SW*.

ACCESSORIES



Glass door accessory

TECHNICAL SPECIFICATIONS



Technology	LASER scanner, time-of-flight measurement
Detection mode	Presence
Max. detection range	4m (diagonal) with reflectivity of 2% (i.e. : at W = 1.5m -> max. H = 3.7m)
Opening angle	Door wing safety: 80° / Hinge area safety: 20°
Angular resolution	Curtain 1 : 0.2° / Curtain 2 : 1° / Curtain 3 : 1.7° / Curtain 4 : 2.5°
Typ. min. object size	2cm @ 4m in curtain C1
Testbody	700 mm \times 300 mm \times 200 mm (testbody CA according to EN16005 & DIN18650)
Emission characteristics IR LASER	Wavelength 905 nm; max. output pulse power 25 W; Class 1
Supply voltage	12-24V DC ± 15%
Power consumption	≤ 2 W
Response time	Typ. <120 ms / Max. 220 ms (curtain 2)
Output Max. switching voltage Max. switching current	3 electronic relays (galvanic isolation - polarity free) 42 V AC/DC 100 mA
LED-signals	1 RGB LED : detection/output status
Dimensions	145 mm (L) \times 88 mm (H) \times 60 mm (D) (mounting base + 7 mm)
Material - Colour	PC/ASA - Black - Aluminium - White
Tilt angles	0° to +5° (without mounting base)
Protection degree	IP44 (EN 60529)
Temperature range	-25°C to +60°C
Humidity	0-95% non-condensing
Vibrations	< 2 G
Conformity	EN 12978; EN ISO 13849-1 PI "d"/ CAT2; IEC 60825-1; EN 60950-1; EN 61000-6-2; EN 61000-6-3; EN 62061 SIL 2; DIN 18650-1 (testbody CA); EN 16005 (testbody CA)
	Specifications are subject to change without prior notic

Specifications are subject to change without prior notice. All values measured in specific conditions and with a specific temperature of 25°C.

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^{*} All the functions related to the third output are only available with the corresponding cable, if the LZR®-FLATSCAN 3D SW is installed as the master.