



# 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

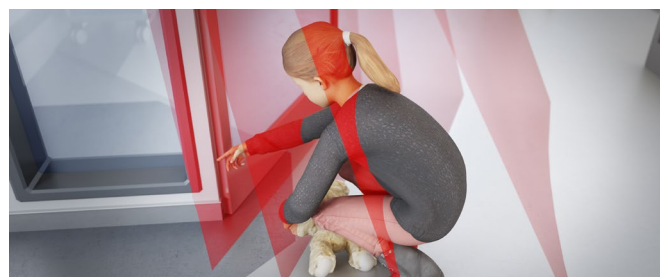


Discover the product video on our youtube channel **BEA Sensors Europe**  
<https://bit.ly/2VVC2Ka>



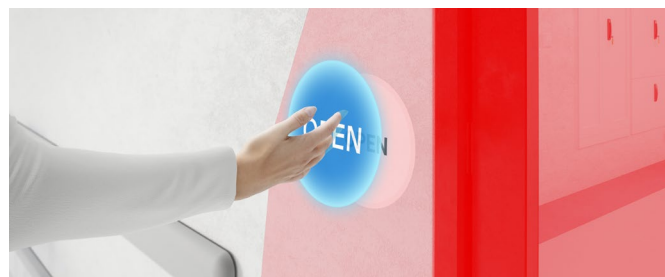
### High comfort for all users

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.



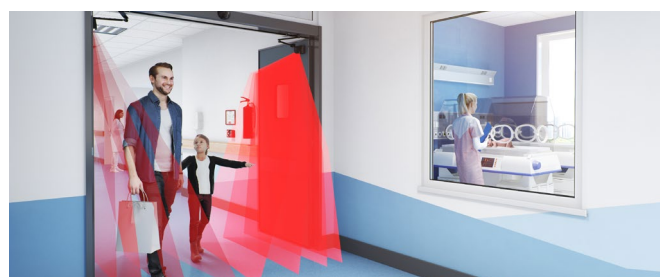
### Minimizing the risk zones

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

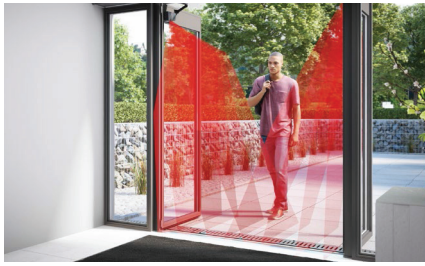
Thanks to a third output, the **LZR®-FLATSCAN 3D SW** also has an activation function, ensuring hygienic and on demand opening of the door. You can choose between creating up to 2 push buttons or using the curtains to activate the door, without the inconvenience of wiring new switches.



### 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.

## APPLICATIONS



Independent from the floor type



Extended safety area during closing



Opening function by approach

## INSTALLATION



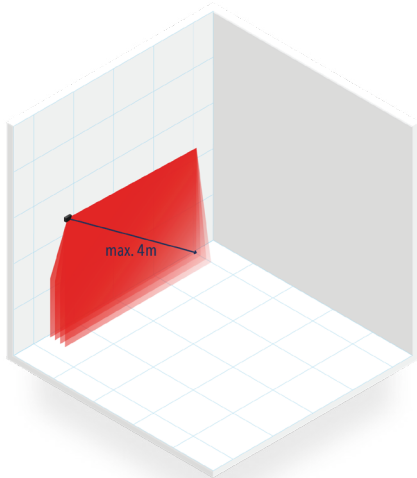
- The size of the detection field is defined by a simple hand movement. The sensor will automatically launch an opening cycle to learn the environment in a few seconds.
- Fast and automatic learning
- Easy to retrofit or combine with the LZR-FLATSCAN SW\*.

## ACCESSORIES



GDA  
Glass door accessory

## TECHNICAL SPECIFICATIONS



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

All values measured in specific conditions and with a specific temperature of 25°C

\* 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.

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