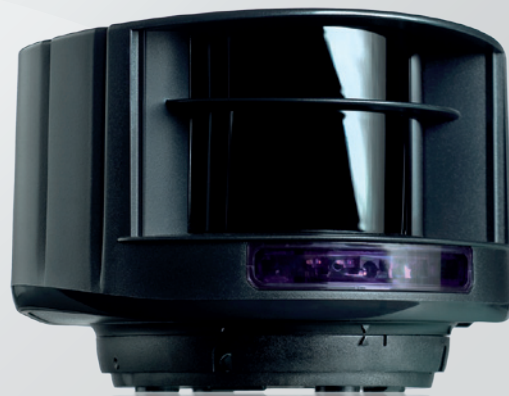


# LZR<sup>®</sup> - i100

## SAFETY SENSOR FOR INDUSTRIAL DOORS

Commercial sheet

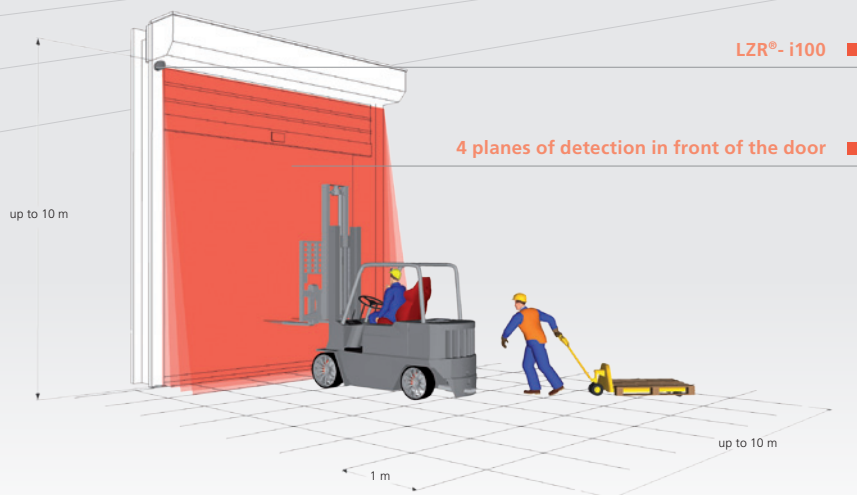


### THE PREMIUM SAFETY SOLUTION

Up to 10 m × 10 m

#### DESCRIPTION

The **LZR<sup>®</sup>-i100** works according to the principle of time of flight. This high-precision technology ensures optimal safety. A dynamic orientation of the LASER beams on 4 planes offers more safety in the door threshold and its proximity.



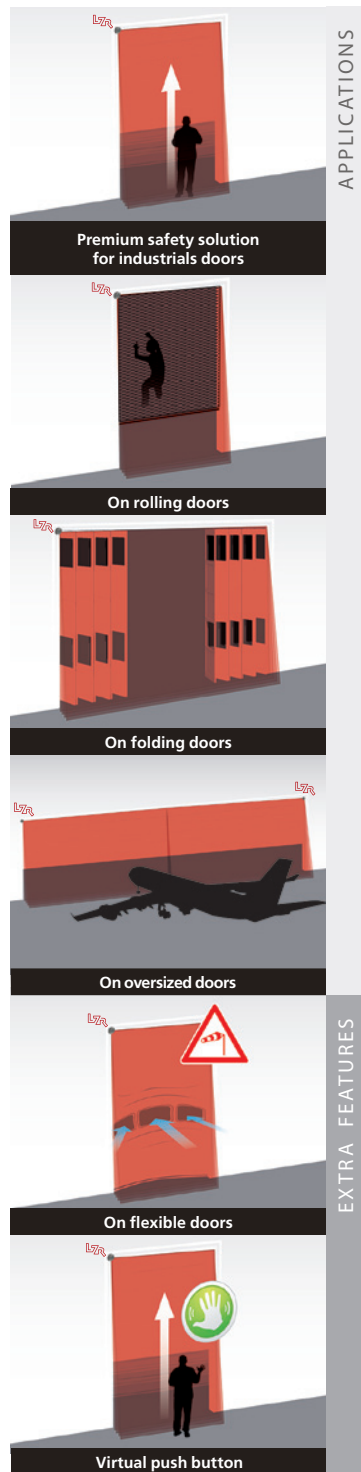
LZR<sup>®</sup>-i100 ■

4 planes of detection in front of the door ■

#### PERFORMANCE

- Maximal detection range : 9.9 m × 9.9 m.
- Variable depth of plane (1 m max.) according to the installation height.
- High performance safety solution for industrial doors certified PL "d"/CAT 2 according to EN ISO 13849-1 and Type E according to EN 12453.
- High level of safety with a complete three-dimensional detection in front of the door.
- Detection of small objects.\*
- Replaces the current solutions such as contact edges, light beams and lightgrids.
- Easy installation and opportunity for the retrofit.

\* up to a few centimeters depending on the application.



APPLICATIONS

EXTRA FEATURES

## APPLICATIONS

- Safety at the opening and the closing of the door thanks to 2 separate detection areas.
- Possibility to create 2 virtual push buttons to open the door.

## DESIGNED FOR INDUSTRIAL ENVIRONMENTS

- Filters door vibrations and environmental interferences.
- Filters door leaf deformation by wind force.
- Degree of protection: IP65.

## EASE OF INSTALLATION

- Easy setting of the detection zone with 3 visible LASER beams.
- Automatic door dimensions teach-in.
- Setting with the universal remote control.
- Cable of 10 m provided.

## TECHNICAL SPECIFICATIONS

<b>Technology</b>	LASER scanner, time-of-flight measurement
<b>Detection mode</b>	Presence (EN 12453 Type E)
<b>Max. detection range</b>	9.9 m x 9.9 m
<b>Remission factor</b>	> 2 %
<b>Angular resolution</b>	0,3516°
<b>Typ. min. object size</b>	2,1 cm @ 3 m / 3,5 cm @ 5 m / 7 cm @ 10 m (in proportion to object distance)
<b>Testbody</b>	700 mm x 300 mm x 200 mm (testbody A according to EN 12445)
<b>Emission characteristics</b>	IR LASER Red visible LASER
	Wavelength 905 nm; max. output pulse power 75 W; Class 1 Wavelength 650 nm; max. output CW power 3 mW; Class 3R
<b>Supply voltage</b>	10-35V DC @ sensor terminal
<b>Power consumption</b>	< 5 W
<b>Response time</b>	Typ. 20 ms; max. 80 ms
<b>Output</b>	2 electronic relays (galvanic isolation - polarity free)
	Max. switching voltage 35V DC / 24V AC
	Max. switching current 80 mA (resistive)
<b>LED-signals</b>	1 blue LED: power-on status 1 orange LED: error status 2 bi-coloured LED: detection/output status
<b>Dimensions</b>	125 mm (L) x 93 mm (D) x 70 mm (H) (mounting bracket + 14 mm)
<b>Material</b>	PC/ASA
<b>Colour</b>	Black
<b>Rotation angles on bracket</b>	-5° to +5° (lockable)
<b>Tilt angles on bracket</b>	-3° to +3°
<b>Protection degree</b>	IP65
<b>Temperature range</b>	-30 °C to +60 °C if powered
<b>Humidity</b>	0-95 % non-condensing
<b>Vibrations</b>	< 2 G
<b>Norm conformity</b>	2006/95/EC: LVD; 2002/95/EC: RoHS; 2004/108/EC: EMC; 2006/42/EC: MD; EN 12453:2000 chapter 5.1.1.6, chapter 5.5.1 Safety device E; EN 12978:2009; EN ISO 13849-1:2008 PL "d"/ CAT2; EN 60529:2001; IEC 60825-1:2007; EN 60950-1:2005; EN 61000-6-2:2005; EN 61000-6-3:2006; IEC 61496-1:2009; EN 61496-3:2008 ESPE Type 2; EN 62061:2005 SIL 2; DIN 18650-1:2010 Chapter 5.7.4

Specifications are subject to change without prior notice.

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