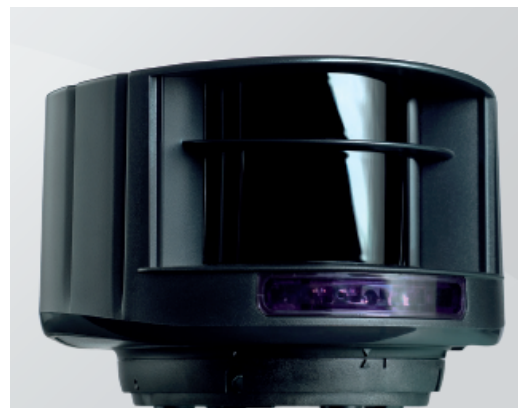# LZR®- i100

SAFETY SENSOR
FOR INDUSTRIAL DOORS

Commercial sheet
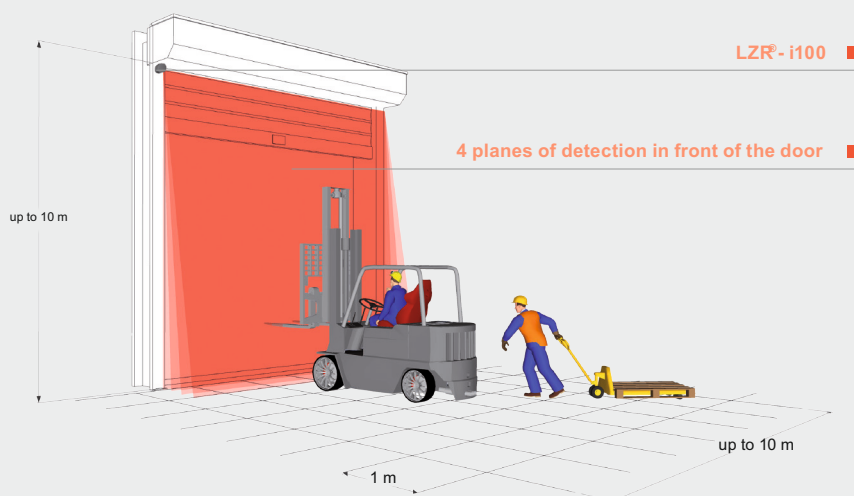
◣ THE PREMIUM SAFETY SOLUTION

DESCRIPTION
LZR®-i100

Up to 10 m × 10 m

LZR®- i100 ■

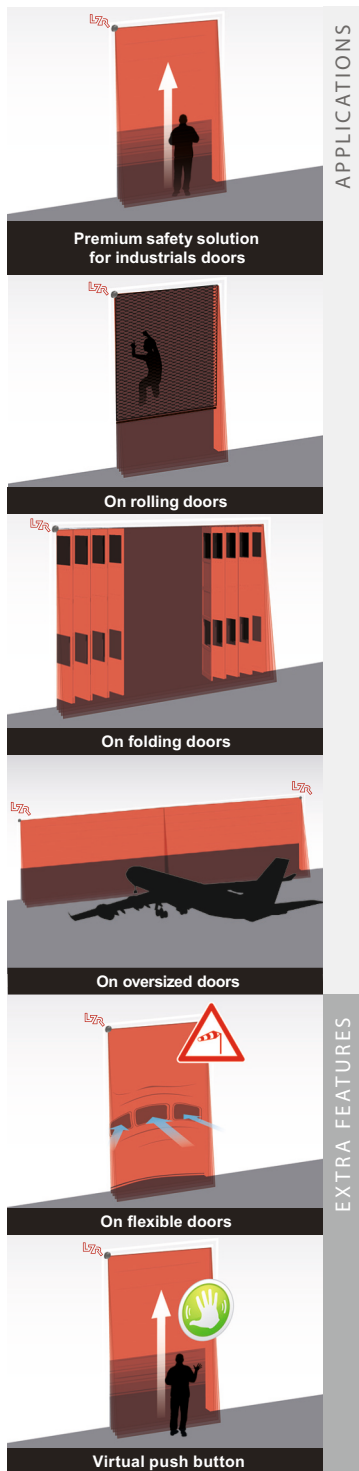4 planes of detection in front of the door ■

up to 10 m

up to 10 m

1 m

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.

BEA
OPEN UP NEW HORIZONS

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

Technology	LASER scanner, time-of-flight measurement
Detection mode	Presence (EN 12453 Type E)
Max. detection range	9.9 m × 9.9 m
Remission factor	> 2 %
Angular resolution	0,3516°
Typ. min. object size	2,1 cm @ 3 m / 3,5 cm @ 5 m / 7 cm @ 10 m (in proportion to object distance)
Testbody	700 mm × 300 mm × 200 mm (testbody A according to EN 12445)
Emission characteristics 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
Supply voltage	10-35V DC @ sensor terminal
Power consumption	< 5 W
Response time	Typ. 20 ms; max. 80 ms
Output Max. switching voltage Max. switching current	2 electronic relays (galvanic isolation - polarity free) 35V DC / 24V AC 80 mA (resistive)
LED-signals	1 blue LED: power-on status 1 orange LED: error status 2 bi-coloured LED: detection/output status
Dimensions	125 mm (L) × 93 mm (D) × 70 mm (H) (mounting bracket + 14 mm)
Material	PC/ASA
Colour	Black
Rotation angles on bracket	-5° to +5° (lockable)
Tilt angles on bracket	-3° to +3°
Protection degree	IP65
Temperature range	-30 °C to +60 °C if powered
Humidity	0-95 % non-condensing
Vibrations	< 2 G
Norm conformity	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 ; EN 12978: 2009 ; EN ISO 13849-1 2008 PI "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.

Premium safety solution for industrials doors

On rolling doors

On folding doors

On oversized doors

On flexible doors

Virtual push button

LZR®-i100 SAFETY SENSOR FOR INDUSTRIAL DOORS