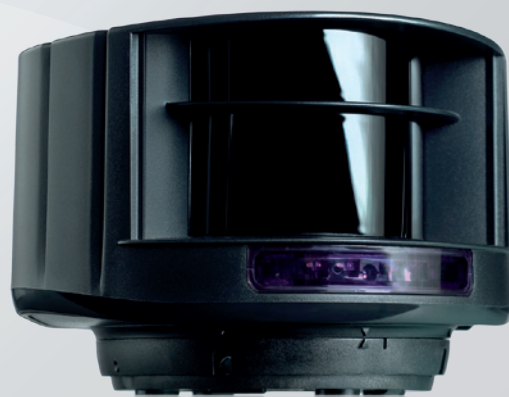


# LZR<sup>®</sup>-P110

## SAFETY SENSOR FOR AUTOMATIC DOORS

Commercial sheet

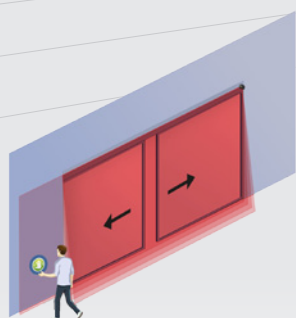


### THE PREMIUM SAFETY SOLUTION

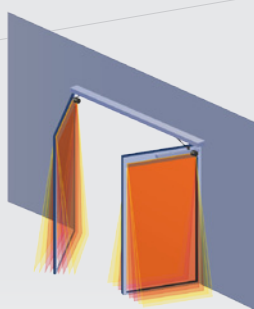
#### DESCRIPTION

The Laser Scanner **LZR<sup>®</sup>-P110** is a safety solution for sliding doors and revolving doors designed in conformity with the DIN 18650 and EN 16005 standards.

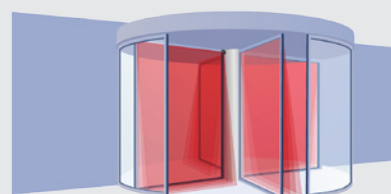
COMPLIANT WITH  
**EN 16005/DIN 18650**



Sliding doors



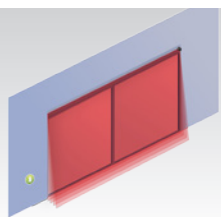
Swinging doors



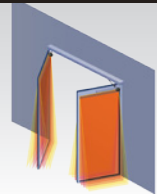
Revolving doors

#### FEATURES

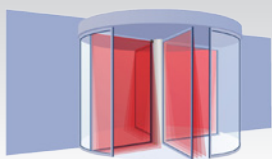
- Maximum dimensions: 5 m × 5 m
- Background reflectivity independent thanks to time-of-flight measurement.
- Free positioning of two push-buttons to activate the door opening.
- Three-dimensional safety on the door threshold and close to the closing area with 4 high-resolution laser curtains (274 measurements per 66 ms at angles of 0°, 2°, 4°, 6°).
- Best outdoor operation thanks to the integrated heating system and the rain and snow filter.
- Bi-functional usability thanks to flexible and easy-to-use signal outputs (e.g. slow-mode and stop-mode for revolving doors, virtual push-buttons, and safety sensors for sliding doors)



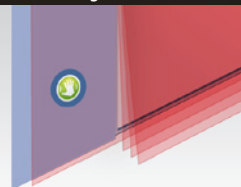
Sliding doors



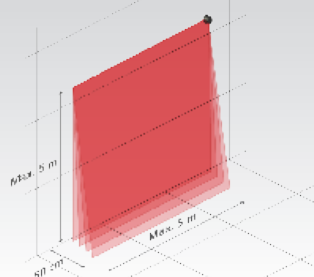
Swinging doors



Revolving doors



Virtual push button



Detection area max. 5 m x max. 5 m



Mounting accessory : LBA

## APPLICATIONS

- Safety of the main closing edge of sliding doors
- Virtual push-buttons for sliding doors
- Secure slow-mode and stop-mode for sliding and revolving doors to prevent dangerous situations such as 'doors closing on a person'

## EASE OF INSTALLATION

- 3 visible laser points to align the sensor
- Pre-programmed detection field
- Universal BEA remote control to set parameters

## TECHNICAL SPECIFICATIONS

<b>Technology</b>	Laser scanner, time-of-flight measurement
<b>Detection mode</b>	Presence
<b>Max. detection range</b>	5.0 m x 5.0 m
<b>Uncovered zone</b>	5 - 25 cm (adjustable)
<b>Remission factor</b>	> 2 %
<b>Angular resolution</b>	0,3516 °
<b>Min. detected object size (typ.)</b>	2.1 cm @ 3 m ; 3.5 cm @ 5 m (in proportion to object distance)
<b>Testbody</b>	700 mm x 300 mm x 200 mm (Testbody CA according to EN16005/DIN18650)
<b>Emission characteristics</b>	
IR Laser	Wavelength 905nm; max. output pulse power 75W (Class 1)
Red visible Laser	Wavelength 650nm; max. output CW power 3mW (Class 3R)
<b>Supply voltage</b>	10-35 V DC @ sensor side
<b>Power consumption</b>	< 5 W
<b>Peak current at power-on</b>	1.8 A (max. 80 ms @ 35 V)
<b>Response time</b>	typ 20 ms; max. 80 ms (+ output activation delay)
<b>Output</b>	2 electronic relays (galvanic isolated - polarity free)
Max. switching voltage	35 V DC / 24 V AC
Max. switching current	80 mA (resistiv)
<b>Input</b>	2 optocouplers (galvanic isolated - polarity free)
Max. contact voltage	30 V DC (over-voltage protected)
Voltage threshold	Log. H: >8 V DC; Log. L: <3 V DC
<b>Dimensions</b>	125 mm (D) x 93 mm (W) x 70 mm (H) (Montagesockel + 14 mm)
<b>Material</b>	PC/ASA
<b>Colour</b>	Black or white
<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; -10°C to +60°C unpowered
<b>Humidity</b>	0-95% non-condensing
<b>Vibrations</b>	< 2 G
<b>Expected lifetime</b>	20 years
<b>Nom conformity</b>	2006/95/EC: LVD; 2002/95/EC: RoHS; 2004/108/EC: EMC; 2006/42/EC: MD; EN 12978:2009; EN ISO 13849-1:2008 CAT2, Pl "d"; 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; EN 16005:2012 Chapter 4.6.8; DIN 18650-1:2010 Chapter 5.7.4; BS 7036-1:1996 Chapter 8.1

Specifications are subject to change without prior notice.

**DISCLAIMER** This document as well as all other enclosed documents (quotation / specification / other) are provided «as is» without warranties of any kind, either expressed or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. / Information is supplied upon the condition that the persons receiving it will make their own determination as to its suitability for their purposes prior to use. In no event will BEA be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information from this document or the products to which the information refers. / BEA has the right without liability to change descriptions and specifications at any time. / Prices, shipping and availability are subject to change without prior notice.

