



## LZR®-FLATSCAN SW

STAND-ALONE, DOOR MOUNTED  
SAFETY SENSOR FOR SWING DOORS



### VIDEO



[Watch the product video](#)

### TECHNOLOGY



### CERTIFICATIONS



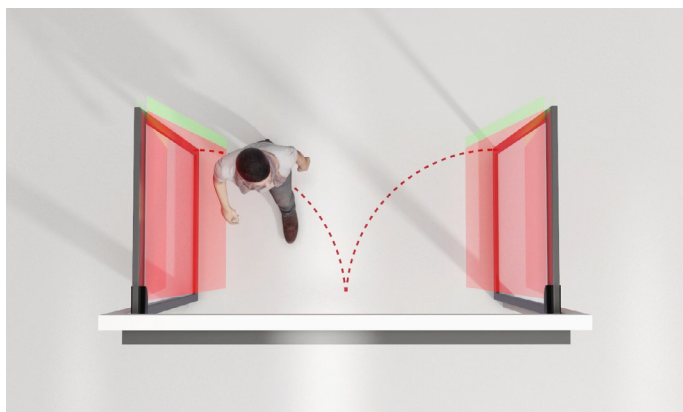
### DESCRIPTION

BEA's **LZR®-FLATSCAN SW** is a LASER-based Time-of-Flight presence sensor for use as a stand-alone safety sensor on automatic pedestrian swing doors. This solution can also be used as a reactivation sensor on the approach side of low energy doors.

This superior technology generates 170 detection points across a single curtain, which allows **LZR®-FLATSCAN SW** to cover the entire face of a single door leaf including the hinge area.

Finger Detection Technology™ utilizes 100 detection points within the hinge area of the door, protecting hands and fingers while the door is in motion.

The **LZR®-FLATSCAN SW** is capable of exceeding the 156.10 section 8.2.2.3 standard for detection area and meets section 8.1.4 for monitoring.



### Background Independence

LASER technology ensures independence of all types of flooring (pedi-mats, carpet, reflective flooring, wet surfaces, etc.) and the surrounding environment of the door (guiderails, walls, weather)

### Leading Edge Safety

Leading edge safety extends the detection area beyond the leading edge of the door for enhanced safety

### Hand Gesture Setup™

Easy door width programming using Hand Gesture Setup™ reduces configuration time

### Reduced Components

Hub-less system offers fewer components for easier setup and installation

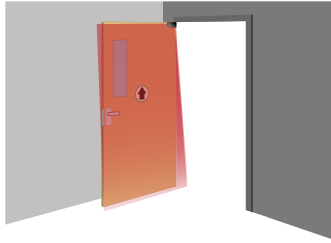
### Reduced Uncovered Zone

LASER technology provides a reduced uncovered zone of down to 3/4 inch

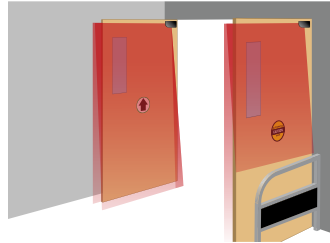
\*This sensor is powered by DC voltage only. If only VAC power is available, a 12V transformer paired with a rectifier must be used. Do not use a 24V transformer and rectifier as this will cause damage to the product.



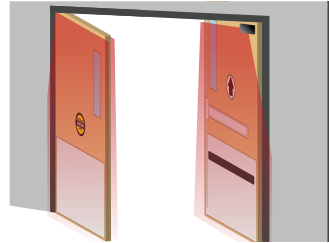
## APPLICATIONS



Low Energy



Simultaneous Pair



Dual Egress

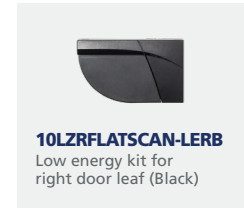
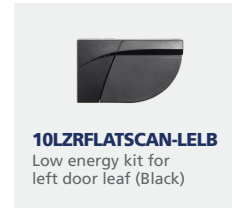
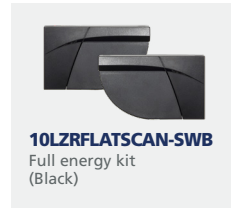


Single Swing

## TECHNICAL SPECIFICATIONS

<b>Technology</b>	LASER scanner, Time-of-Flight measurement
<b>Detection Mode</b>	Presence
<b>Max. Detection Range</b>	13' (diagonal) with reflectivity of 2% (e.g. at (W) × 5' > max. (H) × 12'), see Page 15 of Users Guide
<b>Detection Area</b>	
Door Leaf Safety	90°
Pinch Zone Safety	16°
<b>Angular Resolution</b>	
Door Leaf Safety	1.3°
Pinch Zone Safety	0.2°
<b>Typ. Min. Object Size</b>	
Door Leaf Safety	4" @ 13' (in proportion to object distance, DIP 2 = ON)
Pinch Zone Safety	¾" @ 13' (in proportion to object distance, DIP 2 = ON)
<b>Emission Characteristics</b>	
IR LASER	Wavelength 905 nm; max. output pulse power 25 W; Class 1
<b>Supply Voltage</b>	12 – 24 VDC ±15%
<b>Power Consumption</b>	≤ 2 W
<b>Response Time</b>	
Door Leaf Safety	max. 50 ms
Pinch Zone Safety	max. 90 ms
<b>Test Input</b>	30 VDC (max. switching voltage) low < 1 V high > 10 V (voltage threshold)
<b>Output</b>	2 electronic relays (galvanic isolation - polarity free)
Max. Switching Voltage	42 VAC / VDC
Max. Switching Current	100 mA
<b>LED Signals</b>	
Red	Swing side detection
Green	Approach side detection
Yellow	Error
<b>Dimensions</b>	5 ½" (W) × 3 ⅓" (H) × 1" (D) (mounting bracket adds ¼")
<b>Material / Color</b>	PC / ASA / Black, White or Silver
<b>Tilt Angles</b>	2 – 10° (without mounting bracket)
<b>Degree of Protection</b>	IP54 (EN 60529)
<b>Temperature Range</b>	-22 – 140 °F (if powered)
<b>Humidity</b>	0 – 95% non-condensing
<b>Vibrations</b>	< 2 G
<b>Min. Door Leaf Speed</b>	2° / s
<b>Norm Conformity</b>	ISO 13849-1 PI "d"/ CAT2; IEC 60825-1; IEC 60950-1; IEC 61000-6-2; IEC 61000-6-3; IEC 62061 SIL 2

## PRODUCT SERIES



**NOTE: Kits and replacement sensors are available in black, white or silver.**

<b>10LZRFLATSCAN-LB</b>	Left sensor, Black
<b>10LZRFLATSCAN-LELB</b>	Low energy safety system for left door mount, Black
<b>10LZRFLATSCAN-LELS</b>	Low energy safety system for left door mount, Silver
<b>10LZRFLATSCAN-LELW</b>	Low energy safety system for left door mount, White
<b>10LZRFLATSCAN-LERB</b>	Low energy safety system for right door mount, Black
<b>10LZRFLATSCAN-LERS</b>	Low energy safety system for right door mount, Silver
<b>10LZRFLATSCAN-LERW</b>	Low energy safety system for right door mount, White
<b>10LZRFLATSCAN-LS</b>	Left sensor, Silver
<b>10LZRFLATSCAN-LW</b>	Left sensor, White
<b>10LZRFLATSCAN-RB</b>	Right sensor, Black
<b>10LZRFLATSCAN-RS</b>	Right sensor, Silver
<b>10LZRFLATSCAN-RW</b>	Right sensor, White
<b>10LZRFLATSCAN-SWB</b>	Full energy swing door safety system, Black
<b>10LZRFLATSCAN-SWS</b>	Full energy swing door safety system, Silver
<b>10LZRFLATSCAN-SWW</b>	Full energy swing door safety system, White
<b>10LZRFLATSCAN-GDA</b>	Glass door accessory
<b>20.5433</b>	Control harness
<b>35.0213</b>	Replacement cover, Black, Left
<b>35.0214</b>	Replacement cover, Black, Right
<b>35.0220</b>	Replacement cover, White, Left
<b>35.0221</b>	Replacement cover, White, Right
<b>35.0242</b>	Replacement cover, Silver, Left
<b>35.0243</b>	Replacement cover, Silver, Right
<b>35.1329</b>	Primary / secondary harness
<b>70.5745</b>	Sentrex retrofit accessory
<b>70.5751</b>	Spacer, White
<b>70.5752</b>	Spacer, Silver
<b>70.5753</b>	Spacer, Black

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