



# LZR®-FLATSCAN SW

STAND ALONE, DOOR MOUNTED  
SAFETY SENSOR FOR SWING DOORS



## 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.

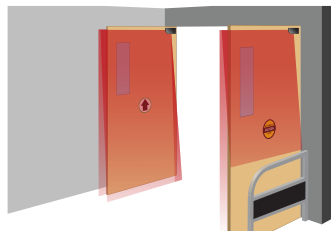
Finger Detection Technology™ utilizes 100 detection points within the hinge area of the door, protecting hands and fingers while the door is in motion.

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.

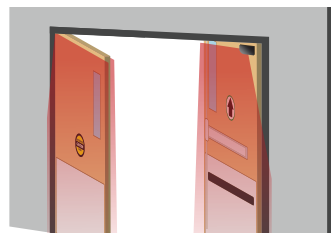
## APPLICATIONS



Low Energy



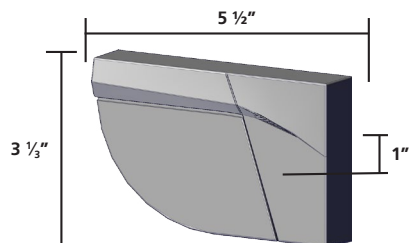
Simultaneous Pair



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 PL "d"/ CAT2; IEC 60825-1; IEC 60950-1; IEC 61000-6-2; IEC 61000-6-3; IEC 62061 SIL 2

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