



LZR®-FLATSCAN SW

STAND-ALONE, DOOR MOUNTED
SAFETY SENSOR FOR SWING DOORS



VIDEO



[Watch the product video](#)

TECHNOLOGY



CERTIFICATIONS



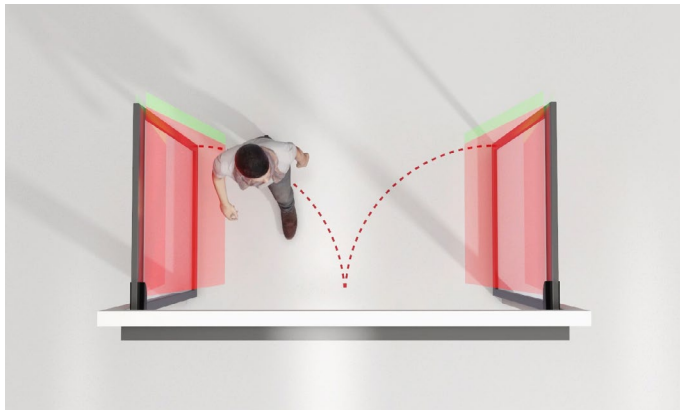
DESCRIPTION

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

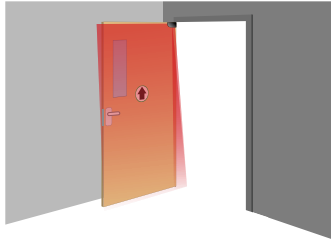
Reduced Uncovered Zone

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

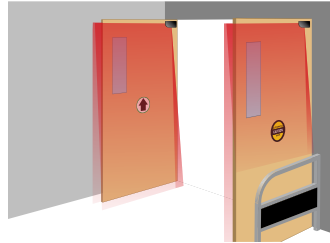
*This sensor is powered by DC voltage only. If only VAC power is available, a 12V transformer paired with a rectifier must be used. Do not use a 24V transformer and rectifier as this will cause damage to the product.



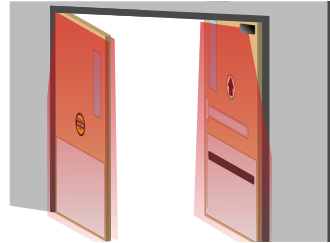
APPLICATIONS



Low Energy



Double Swing



Dual Egress

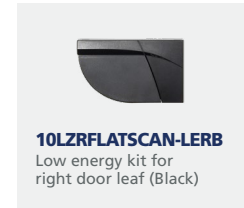
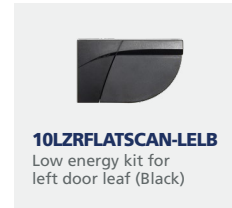
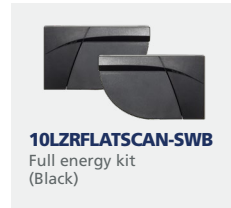


Single Swing

TECHNICAL SPECIFICATIONS

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

| | |
|---------------------------|---|
| 10LZRFLATSCAN-LB | Left sensor, Black |
| 10LZRFLATSCAN-LELB | Low energy safety system for left door mount, Black |
| 10LZRFLATSCAN-LELS | Low energy safety system for left door mount, Silver |
| 10LZRFLATSCAN-LELW | Low energy safety system for left door mount, White |
| 10LZRFLATSCAN-LERB | Low energy safety system for right door mount, Black |
| 10LZRFLATSCAN-LERS | Low energy safety system for right door mount, Silver |
| 10LZRFLATSCAN-LERW | Low energy safety system for right door mount, White |
| 10LZRFLATSCAN-LS | Left sensor, Silver |
| 10LZRFLATSCAN-LW | Left sensor, White |
| 10LZRFLATSCAN-RB | Right sensor, Black |
| 10LZRFLATSCAN-RS | Right sensor, Silver |
| 10LZRFLATSCAN-RW | Right sensor, White |
| 10LZRFLATSCAN-SWB | Full energy swing door safety system, Black |
| 10LZRFLATSCAN-SWS | Full energy swing door safety system, Silver |
| 10LZRFLATSCAN-SWW | Full energy swing door safety system, White |
| 10LZRFLATSCANGDA | Glass door accessory |
| 20.5416 | Control harness |
| 35.0213 | Replacement cover, Black, Left |
| 35.0214 | Replacement cover, Black, Right |
| 35.0220 | Replacement cover, White, Left |
| 35.0221 | Replacement cover, White, Right |
| 35.0242 | Replacement cover, Silver, Left |
| 35.0243 | Replacement cover, Silver, Right |
| 35.1329 | Master / slave harness |
| 70.5745 | Sentrex retrofit accessory |
| 70.5751 | Spacer, White |
| 70.5752 | Spacer, Silver |
| 70.5753 | Spacer, Black |

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