LZR®-WIDESCAN
MOTION, PRESENCE & SAFETY SENSOR FOR INDUSTRIAL DOORS

DESCRIPTION
BEA’s LZR-WIDESCAN is a LASER-based, time-of-flight sensor used for motion, safety and presence detection in a variety of industrial door applications. This all-in-one solution offers the benefits of activation and safety, while reducing installation time.

This NEMA 4 rated sensor creates a volumetric detection area by generating seven angled LASER curtains. It has the ability to detect objects based on direction, speed, object size and height.

The LZR-WIDESCAN detection field operates independent of ground conditions, allowing for superior functionality in harsh environments.

FEATURES & BENEFITS
- Precise activation zones allows for installers to walk the desired detection area
- Promotes energy savings by reducing false detections / unnecessary door cycling, helping to regulate HVAC
- Virtual pull-cord function can differentiate between pedestrian and vehicle traffic and can provide pulse-on-stop activation
- Ideal for replacing costly / labor-intensive induction loop and pull-cord solutions
- Two visible LASER alignment spots ensure accurate pattern placement
## TECHNICAL SPECIFICATIONS

### Technology
- LASER scanner, Time-of-Flight measurement (7 LASER curtains)

### Detection Mode
- Motion and Presence

### Max. Detection Field
- Width: 1.2 x mounting height
- Depth: 1.2 x mounting height
- (adjustable depending on user settings)

### Thickness of First Curtain
- $\frac{3}{4}$ inch per 3 feet of mounting height

### Typ. Mounting Height
- 6'6" – 19'6"

### Typ. Minimum Object Size
- 6" @ 19'6" (in proportion to object distance)

### Test Body Dimensions
- $27 \frac{1}{2}” \times 11 \frac{3}{4}” \times 7 \frac{3}{4}”$

### Min. Reflectivity Factor
- > 2 % (of floor and object) (measured at max. 19’6” in safety field)

### Emission Characteristics
- **IR LASER**
  - Wavelength 905 nm; maximum output pulse power 75 W, Class 1
- **Visible LASER**
  - Wavelength 650 nm; maximum output CW power 3 mW, Class 3R

### Supply Voltage
- 12 – 24 VAC ±10%
- 12 – 30 VDC ±10% @ sensor terminal

### Power Consumption
- < 2.5 W (heating: off)
- < 15 W (heating: eco or auto)

### Response Time
- Typ. 100 ms (max. 500 ms)

### Output
- 2 solid-state relays (galvanic isolation, polarity free)
- 30 VDC (max. switching voltage) – 100 mA (max. switching current)
  - in switching mode: NO/NC
  - in frequency mode: pulsed signal (f= 100 Hz ±10%)
- 1 electro-mechanic relay (galvanic isolation, polarity free)
- 42 VAC (max. switching voltage) – 500 mA (max. switching current)

### Input
- 30 VDC (max. switching voltage)
- low < 1 V
- high > 10 V (voltage threshold)

### LED-Signal
- 2 tri-colored LEDs: Output status / Remote Control Response / Error Signals

### Dimensions
- 7 3⁄4” (H) x 6” (W) x 4” (D) (approx.)

### Material / Color
- PC/ASA / Black

### Rotation Angles on Bracket
- 45° to the right, 15° to the left (lockable)

### Tilt Angles on Bracket
- –10° – 5°

### Degree of Protection
- NEMA 4 / IP65

### Temperature Range
- –22 ºF – 140 ºF (−30 ºC – 60 ºC)

### Vibrations
- < 2 G

### Cable Length
- 360 in (30 ft)

### Norm Conformance
- EN 61000-6-2, EN 61000-6-3, EN 60950-1, EN 60825-1, EN ISO 13849-1 Pl “d”/ CAT2, EN 62061 SIL 2, EN 61496-1 ESPE Type 2, EN 12976, EN 50581

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## RELATED PRODUCTS

- **10LZRWIDESCAN**
  - MOTION, PRESENCE & SAFETY SENSOR
- **10.1311**
  - WIDESCAN ADAPTER KIT
- **20.5402**
  - 50 FT CABLE
- **20.5399**
  - 30 FT CABLE