OsiSense™ XXV18
Ultrasonic Sensors

Cost-effective ultrasonic sensing technology for proximity detection

The OsiSense™ XXV18 ultrasonic sensor from Schneider Electric provides similar proximity sensing capabilities as most inductive sensors, but delivers greater sensing capabilities with respect to target color, shape or composition. These sensors are self-contained, pulse echo, ultrasonic sensing devices that both transmit and receive sonic energy in an 18 mm cylindrical housing.

Ideal for packaging, material handling and metal working assembly machine applications, these sensors are unaffected by changing light conditions, colors or environmental noise. The OsiSense™ XXV18 ultrasonic sensor is designed to perform reliably in harsh industrial environments where other sensing technologies are challenged (e.g., changing light conditions, dust, dirt, powder, humidity, etc.). The OsiSense™ XXV18 sensors have a sensing range from 2.0 mm (0.08 in.) to 50.0 mm (1.97 in) which is a 25 percent to 200 percent increased sensing range compared to traditional inductive sensors.

Offering great value at low costs, this OsiSense™ ultrasonic sensor provides a versatile and powerful ultrasonic sensing solution as an alternative to using inductive sensors in proximity sensing applications.

Key Features

- **Sensing range** – from 2.0 mm (0.08") up to 50.0 mm (1.97") with virtually no deadband allows for use in multiple proximity detection applications.
- **Senses all materials and colors** – able to sense most types of objects without any sensitivity adjustments, whether glass or plastic, clear or opaque. And, they are unaffected by changing color or light conditions.
- **Cost-effective ultrasonic sensing solution** – introduces ultrasonic technology at a price comparable with less capable inductive sensors.
- **Plug and play alternative** – common 18 mm diameter body style makes for an easy alternative to existing inductive sensors.
- **LED status indicator** – illuminated LED indicates output mode with 4-quadrant visibility (essentially 360°).
- **Fully compliant** – RoHS compliant, UL approved, CE Certified, and rated IP67 and NEMA Type 4 and 13.
OsiSense™ XXV18 Ultrasonic Sensor

Up to 200% increase in range over leading competitive inductive sensors

Product Specifications
- Supply Voltage: 12 to 24 VDC
- Sensing Range: 2.0 mm up to 50.0 mm (0.08” to 1.97”)
- Temperature Ratings: Operational 0°C to +60°C (32°F to +140°F)
- Output: Discrete, 200mA
- Housing Style: 18 mm diameter threaded barrel, nickel-plated brass
- Housing Dimensions: 50.5 mm (2.22”) – cable model
- Protection Ratings: NEMA Type 4 and 13, and IP67
- Certifications: UL, CE, RoHS Compliant
- Max. Switching Frequency: 80 Hz

Pre-Wired Connectors (female)

<table>
<thead>
<tr>
<th>M12 Connection</th>
<th>Straight</th>
<th>Elbowed</th>
<th>Elbowed PNP LED</th>
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</thead>
<tbody>
<tr>
<td>4-pin</td>
<td>XZCP1141L2</td>
<td>XZCP1241L2</td>
<td>XZCP1340L2</td>
</tr>
<tr>
<td>5 m</td>
<td>XZCP1141L5</td>
<td>XZCP1241L5</td>
<td>XZCP1340L5</td>
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<tr>
<td>10 m</td>
<td>XZCP1141L10</td>
<td>XZCP1241L10</td>
<td>XZCP1340L10</td>
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</table>

Format

<table>
<thead>
<tr>
<th>Format</th>
<th>Output</th>
<th>Function</th>
<th>Supply Voltage</th>
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<tbody>
<tr>
<td>M18 x1</td>
<td>PNP</td>
<td>NO</td>
<td>12-24 VDC</td>
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<td></td>
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<td>NC</td>
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  - 5 m: XZCP1141L5 XZCP1241L5 XZCP1340L5
  - 10 m: XZCP1141L10 XZCP1241L10 XZCP1340L10

Put our sensing experience to work for you.

For application assistance or more information about Schneider Electric sensing solutions, please contact the Schneider Electric Sensor Competency Center at 1-800-435-2121 or visit www.SESensors.com.

Schneider Electric USA, Inc.
Schneider Electric Sensor Competency Center
1875 Founders Dr.
Dayton, OH 45420-4017
Tel: 937-252-2121
www.SESensors.com

Schneider Electric Canada, Inc.
5985 McLaughlin Road
Mississauga, Ontario LSR 1B8
Tel: 800-435-2121

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