Photo-electric sensors for precise measuring and positioning

In industry, monitoring of distance is required for positioning and stopping machine movements.

In the hoisting and material handling industry precise measuring is an indispensable feature for protecting your installations.

The OsiSense XUE photo-electric sensor enables very precise positioning of movements in an automated warehouse. It also enables detection of the proximity of another overhead travelling crane and immediately stops it if there is a risk of collision. This sensor can also monitor the radius of paper or metal strip rolls.

The measuring repeat accuracy is to within a few millimetres throughout its sensing distance. The sensing distance is 6 or 30 metres, depending on the detection mode selected.
### Benefits

**Reliable measuring and precise monitoring**
For consistent information, the sensor has a high repeat accuracy factor (to within a few millimetres).
It also enables:
- Detection of objects with background suppression at a distance of 6m.
- Monitoring and measuring (at 30m or 6m) using a single product due to its 3 programmable outputs (2 digital outputs and 1 analog output).
- Usage without risk due to laser class 1 transmission in operation
- Assured operation in difficult environments with an IP67 product.

**Ease of selection, mounting and adjustment**
- Simple selection between 2 references, depending on your application (Monitoring distance of object or monitoring distance of reflector).
- Simplified alignment using visible red laser pointer for viewing the measuring point.
- Intuitive adjustment interface, integrated in product, for configuring your application using 2 “teach” buttons.

### Characteristics

**OsiSense XUE photo-electric sensors**
Sensing distance:
- Diffuse mode with background suppression 6m.
- Reflex mode 30m.
- Repeat accuracy:
  - Diffuse mode ±5mm
  - Reflex mode ±10mm
- Laser class 1 transmission during operation, visible red laser class 2 pointer
- Adjustment using 2 electronic “teach” buttons and 4 LED indicators.
- Connection by M12, 5-pin connector
- Supply: 18...30V DC
- Outputs:
  - 2 x PNP 100mA outputs
  - 1 x 4-20 mA analog output (0% and 100% adjustable)
- ABS case, resistant to mechanical shocks
- Degree of protection: IP67
- Operating temperature: -10 to 50°C
- Adjustable sampling frequencies (2 modes)

### References

<table>
<thead>
<tr>
<th>Photo-electric sensors</th>
<th>Measurement to object (diffuse)</th>
<th>XUE5AA2NM12</th>
<th>Measurement to reflector (reflex)</th>
<th>XUE1AA2NM12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osisense XUE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessories</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M12 female connector</td>
<td>elbowed</td>
<td>XZCC12FCM50B</td>
<td>Reflector 25 x 25cm (adhesive)</td>
<td>XUZC250</td>
</tr>
<tr>
<td></td>
<td>straight</td>
<td>XZCC12FDM50B</td>
<td>Fixing bracket</td>
<td>XUZA618</td>
</tr>
</tbody>
</table>

**Schneider Electric Industries SAS**

Siège social
35, rue Joseph Monier – CS 30323
92506 Rueil-Malmaison Cedex
FRANCE
www.schneider-electric.com

ART. 838290
1998-4395

Due to the constant evolution of standards and equipment, the specifications indicated in the text and images of this document can only be guaranteed after confirmation by our departments.

Design: BlueLoft
Print: Schneider Electric
Photo: Schneider Electric