To ensure smooth and steady flow of your packaging and handling process, you need to accurately measure and control the proximity of objects moving down the conveyor belt. The OsiSense™ XUK8T compact photoelectric laser sensors offer reliable detection with high accuracy background suppression. Ultra-precise distance measurement is enabled by the time of flight (TOF) method using light velocity.

**Compact size**

OsiSense XUK8T is one of the most compact sensors on the market (50x50mm). A rotating connector allows it to be easily integrated into the machine from a mechanical point of view. Standard accessories apply.

**Easy to use**

Intuitive 2-click operation, with remote teach-in and no complex parametering.

**Reliable detection**

High accuracy background suppression regardless of the object’s colour, position, shape, angle, etc.

Now, the solution you need to detect objects against all backgrounds

Simply easy™
Benefits:

Compact and robust
- Standard 50x50mm body
- M12 connector with two cable positions
- Resistant against chemical agents and high pressure cleaning
- Remote teach-in available if space is limited and pushbutton not accessible

Easy to use
- Adaptable to your application need: distance sensor or background suppression
- Simple fixing in standard holes or sliding dovetail (rear or underneath)
- Autodetect binary output for connection to PNP or NPN
- Easy configuration menu: only two pushbutton clicks and it’s done!

Reliable detection
- Accurate visible red laser light for small object detection
- Tilt angle detection
- Efficient background suppression even against highly reflective surfaces (high visibility vests, etc.)
- High detection rate (500hz) for fast-moving applications

Characteristics

Osisense XUK8T photoelectric sensors
- Time of flight (TOF) technology
- 2 detection modes
  - Distance measurement sensor 5m
  - Background suppression sensor 5m
- Several output possibilities:
  - Analog 4...20mA + binary outputs (2 window modes)
  - Analog 0...10V + binary outputs (2 window modes)
  - 1 or 2 binary outputs (threshold mode)
- Compact case, 50x50x23mm (ABS)
- Laser beam with visible red spot (class 1)
- Adjustable detection points using 'Teach-in' (button or external cabling)
- High switching frequency: 250Hz or 500Hz
- High repeatability: e.g. 1mm at 3m, white object, 1sigma
- Supply voltage: 18 ... 30VDC
- Autodetect binary output (PNP, NPN)
- Connection by M12 (5 and 4 pins) connector

Distance sensors

<table>
<thead>
<tr>
<th>Outputs</th>
<th>Sensing distance</th>
<th>Background suppression sensor</th>
<th>Autodetect outputs</th>
<th>Pre-wired connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 analog 4...20mA, 1 PNP/NPN</td>
<td>0,1 ... 5m</td>
<td>1 binary PNP/NPN</td>
<td>0 ... 5m</td>
<td>M12 5 wires</td>
</tr>
<tr>
<td>1 analog 0...10V, 1 PNP/NPN</td>
<td>XUK8TAE2MM12</td>
<td>XUK8TAKSM12</td>
<td>XUK8TAKOM12</td>
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</table>

Sensing distance

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<tr>
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</thead>
<tbody>
<tr>
<td>0,1 ... 5m</td>
<td>1 binary PNP/NPN</td>
<td>2 binary PNP/NPN</td>
<td>0 ... 5m</td>
<td>M12 5 wires</td>
</tr>
<tr>
<td>XUK8TAKSM12</td>
<td>XUK8TAKOM12</td>
<td>XUK8TAE2MM12</td>
<td>XUK8TAE1MM12</td>
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</tr>
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</table>

Pre-wired connector

<table>
<thead>
<tr>
<th>Type of connector</th>
<th>Cable length</th>
<th>Outputs</th>
<th>Sensing distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight</td>
<td>2 m</td>
<td>XZCPV11V12L2</td>
<td>XUK8TAE2MM12</td>
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<tr>
<td>Elbowed</td>
<td>XZCPV12V12L2</td>
<td>XUK8TAE1MM12</td>
<td></td>
</tr>
<tr>
<td>Elbowed</td>
<td>5 m</td>
<td>XZCPV11V12L5</td>
<td>XUK8TAKSM12</td>
</tr>
<tr>
<td>Elbowed</td>
<td>XZCPV12V12L5</td>
<td>XUK8TAKOM12</td>
<td></td>
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</tbody>
</table>

Accessories

<table>
<thead>
<tr>
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<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective metal angle bracket</td>
<td>XUZASK001</td>
</tr>
<tr>
<td>Fine adjustment angle bracket</td>
<td>XUZASK004</td>
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<tr>
<td>Dovetail fixing bracket</td>
<td>XUZASK002</td>
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<tr>
<td>Simple angle bracket</td>
<td>XUZA51S</td>
</tr>
</tbody>
</table>

References

Scan the QR code for more information or visit http://www.tesensors.com/products/osisense-xu