### Specifications

**Model**
- **OA-AXIS T**

**Cover color**
- Silver/Black

**Mounting height**
- 2.5 to 3.0 m (8'3" to 10'0")

**Weight of the sensor**
- 10 kg

**Power supply**
- 12 to 24 VAC 50/60 Hz (90% to 110%)

**Power consumption**
- 2.5 W (< 4 VA at AC)

**Performance level**
- 1 (EN ISO 13849-1:2015)

**Category**
- 12 to 24 VAC ±10 % (50/60 Hz)

**Sensitivity**
- Middle

**Wavelength**
- 8-11 μm

**Operating temperature**
- -20 to +50°C (+4°F to +122°F)

**Operating humidity**
- < 30% (non-condensing)

**Detection area**
- 3rd row: 0.25 (10")
- 4th row: 0.06 (2")
- 5th row: 0.25 (10")

**Depth angle adjustment settings**
- 1st to 3rd rows: +6°
- 4th and 5th rows: +44°

**Power ON**
- Turn OFF/ON the power for 2 s.

**Alert**
- Red/Cyan blinking

**Function switch**
- Can be used as a test input.

**Motion detection**
- Sensitivity: Middle

**Detection area**
- 3rd row: 0.25 (10")
- 4th row: 0.06 (2")
- 5th row: 0.25 (10")

**Motion detection level**
- 1 (EN ISO 13849-1:2015)

**Stand-by (Operation mode)**
- Stand-by (Service mode)
- 2nd row detection

**Operation indicator**
- Stand-by (Installation mode)
- Test input: Opto coupler

**Opto coupler**
- Voltage: 5 to 30 VDC

**NOTE**
- Failure to read this operation manual may cause improper operation and may result in serious injury or death of a person.
- The meanings of the symbols are as follows:
- Form A relay 50 V 0.3 A Max.
- Orange
- Green

### Installation

1. **Mounting**
   - Place the mounting template at the desired mounting position.
   - Drill two mounting holes of ø3.4 mm (ø1/8").
   - Make sure not to mount the sensor lower than the bottom of header.

2. **Wiring**
   - Wire the cable to the sensor.
   - Connect the power supply.
   - Connect the signal to the power supply.
   - Connect the sensor to the control panel.

3. **Turn ON the power**
   - Plug the connector.
   - Supply power to the sensor.
   - Adjust the detection area and set the dipswitches.

4. **Mounting the housing cover**
   - Place the housing cover.
   - If wiring is to be exposed, break the knockouts.

### Warranty

- The actual detection area may become smaller depending on the ambient light, the color/material of the object or the floor as well as the entry speed of the object.
- The sensor may not be activated when the entry speed of the object or a person is slower than 50 mm/s or higher than 1500 mm/s.

### Detection area

*NOTE*)

<table>
<thead>
<tr>
<th>Emission type</th>
<th>Emission area</th>
<th>Detection area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st row</td>
<td>2.00 (79&quot;)</td>
<td>2.00 (79&quot;)</td>
</tr>
<tr>
<td>2nd row</td>
<td>2.00 (79&quot;)</td>
<td>2.00 (79&quot;)</td>
</tr>
<tr>
<td>3rd row</td>
<td>2.00 (79&quot;)</td>
<td>2.00 (79&quot;)</td>
</tr>
<tr>
<td>4th row</td>
<td>2.00 (79&quot;)</td>
<td>2.00 (79&quot;)</td>
</tr>
<tr>
<td>5th row</td>
<td>2.00 (79&quot;)</td>
<td>2.00 (79&quot;)</td>
</tr>
</tbody>
</table>

### Operation indicator table

<table>
<thead>
<tr>
<th>Status</th>
<th>Operation indicator color</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm-up</td>
<td>Yellow blinking</td>
<td>Power ON/OFF</td>
</tr>
<tr>
<td>Stand-by (Installation mode)</td>
<td>Yellow</td>
<td>Ready to operate</td>
</tr>
<tr>
<td>Stand-by (Service mode)</td>
<td>Yellow &amp; Green blinking</td>
<td>Ready to operate</td>
</tr>
<tr>
<td>Stand-by (Operation mode)</td>
<td>Green</td>
<td>Ready to operate</td>
</tr>
<tr>
<td>1st row detection</td>
<td>Red</td>
<td>Ready to operate</td>
</tr>
<tr>
<td>2nd row detection</td>
<td>Red</td>
<td>Ready to operate</td>
</tr>
<tr>
<td>3rd, 4th, or 5th row detection</td>
<td>Red</td>
<td>Ready to operate</td>
</tr>
<tr>
<td>Communication Test output</td>
<td>Turn off 500 ms (*4)</td>
<td>Test input</td>
</tr>
<tr>
<td>Setting error</td>
<td>Red &amp; Green blinking</td>
<td>Test input</td>
</tr>
<tr>
<td>Signal saturation</td>
<td>Black</td>
<td>Test input</td>
</tr>
<tr>
<td>Sensitivity too low (Sensor function)</td>
<td>Test input</td>
<td>Test input</td>
</tr>
</tbody>
</table>

### Note

- The specifications herein are subject to change without prior notice due to improvements.
- *1* The 1st and 2nd rows have presence detection function.
- *2* When using this sensor, the sensor must be connected to a door system which has the SELV circuit.
- *3* Overcurrent protection with less than 2A.
- *4* LED will be turned off approx. 500 ms when the sensor Test output signal works well.
**Adjustments**

### 1. Area depth angle adjustment

**Depth angle adjustment screw**

- **Red**
- **Blue**
- **Green**
- **Shallow**
- **Deep**

When adjusting the 1st row close to the door, use the area adjustment tool (A) as shown above to change the area depth angle for the 1st to 3rd rows.

**Depth angle adjustment screw**

- **Red**
- **Blue**
- **Green**
- **Shallow**
- **Deep**

When adjusting the 4th and 5th rows, use the area adjustment tool (B) as shown above to change the area depth angle for the 4th and 5th rows.

**NOTE**

- Make sure that the detection area does not overlap with the doorframe. If there is a highly reflective object near the detection area, reduce the sensitivity setting.

**4th and 5th rows**

- **Depth angle adjustment screw**
- **Shallow**
- **Deep**

- **Front view**
- **Back view**

**NOTE**

- When adjusting the 4th and 5th rows, make sure that the detection area does not overlap with the doorframe.

### 2. Area width adjustment

**Area width adjustment**

- **1st to 3rd rows**
- **4th and 5th rows**

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### 3. Dipswitch settings

After changing the dipswitch settings, make sure to push the function switch for 2 s.

**Table 1**

<table>
<thead>
<tr>
<th>Entry</th>
<th>Dipswitch 11 to 15</th>
<th>Dipswitch 16</th>
<th>Dipswitch 17</th>
<th>Dipswitch 18</th>
<th>Dipswitch 19 to 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>None</td>
<td>ON</td>
<td>ON</td>
<td>OFF</td>
<td>OFF</td>
</tr>
<tr>
<td>Output</td>
<td>N.O.</td>
<td>N.C.</td>
<td>N.C.</td>
<td>N.C.</td>
<td>N.C.</td>
</tr>
<tr>
<td>Setting</td>
<td>OFF</td>
<td>ON</td>
<td>ON</td>
<td>OFF</td>
<td>OFF</td>
</tr>
<tr>
<td>Comment</td>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
</tr>
</tbody>
</table>

**Push 2 s**

- **Sensitivity**
- **Flow condition**

**Changing the dipswitch settings, make sure to push the function switch for 2 s.**

**Table 2**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Function</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>On</td>
<td>-</td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>-</td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>-</td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
<td>-</td>
</tr>
</tbody>
</table>

**Changing the dipswitch settings, make sure to push the function switch for 2 s.**

- **Safety setting**
- **Activation setting**
- **Factory default settings**

**Service mode**

- During the “Service mode”, 1st row and 3rd to 5th row are transmitting. The operation indicator shows Yellow & Green blinking.
- After installation, be sure to turn to the “Operation mode” because it cannot comply with EN 16050.
- The sensor automatically returns to “Operation mode” after 15 min from the transition.

**Checking**

Check the operation in the operation mode according to the chart below.

**Troubleshooting**

- Door operation
- Activation indicator
- Possible cause
- Proper measure/countermeasure

**Checking**

Check the operation in the operation mode according to the chart below.

**Troubleshooting**

- Door operation
- Activation indicator
- Possible cause
- Proper measure/countermeasure

**Inform building owner/operator of the following items**

**WARNING**

- Always keep the detection window clean. If dirty, wipe the window with a damp cloth.
- Do not use any cleaner/solvent.
- Do not wash the sensor with water.
- Do not disassemble, rebuild or repair the sensor yourself, otherwise an electric shock may occur.
- Always contact your installer or service engineer when changing the settings.
- Do not paint the detection window.

1. When turning the power ON, always-look-first the detection area to ensure the proper operation.
2. Do not place any objects that move out/on light in the detection area. (e.g. plant, illumination, etc.)

**NOTE**

- The sensor automatically returns to “Operation mode” after 15 min from the transition.
- Do not overlap with the door/header, (9″10″)
- 2.0 to 2.5 m 2.5 to 3.0 m 2.5 to 3.0 m
- The detection area never overlaps with that of another sensor.
- During warm-up, Safety output is constantly active.