Entrematic PAS024AS(W)

Opening & safety sensor for automatic sliding doors

PAS024ASW: energy-saving unidirectional sensor
PAS024AS: bidirectional sensor

TECHNICAL SPECIFICATIONS

| Supply voltage: | 12 V - 30 V DC, -5%/+10% (to be operated from SELV compatible power supplies only) |
| Power consumption: | < 2.2 W |
| Mounting height: | 1.8 m to 3 m |
| Temperature range: | -25 °C to +55 °C |
| Degree of protection: | IP54 |
| Noise: | < 70 dB |
| Expected lifetime: | 20 years |
| Norm conformity: | EN 16005; EN 12978; EN IEC 62061SIL2, EN 61496-1 ESPE Type 2; EN ISO 13849-1; Pl «c» CAT.2 (under the condition that the door control system monitors the sensor at least once per door cycle) |

Detection mode:
- Motion
  - Min. detection speed: 5 cm/s
- Presence
  - Typical response time: <256 ms

Technology:
- Microwave doppler radar
  - Transmitter frequency: 24.150 GHz
  - Transmitter radiated power: < 20 dBm EIRP
  - Transmitter power density: < 5 mW/cm²
- Active infrared with background analysis
  - Spot diameter: 0.1 m (typ)
  - Number of spots: 24
  - Number of curtains: 2

Angle:
- From 15 ° to 50 ° vertical (adjustable)
- From -4 ° to +4 ° (adjustable)

Output:
- Solid-state-relay
  - (free of potential, free of polarity)
  - Max. contact current: 100 mA
  - Max. contact voltage: 42 V AC/DC
- Solid-state-relay
  - (free of potential, free of polarity)
  - Max. contact current: 100 mA
  - Max. contact voltage: 42 V AC/DC

Hold time output signal:
- 0.5 s
- 0.3 s to 1 s (not adjustable)

Response time on test request:
- Typical: < 5 ms

Specifications are subject to changes without prior notice. All values measured in specific conditions.
1 MOUNTING & WIRING

The door control unit and the door cover profile must be correctly earthed.

1. Output status when sensor is operational
2. For compliance with EN 16005, connection to door controller test output is required.

2 RADAR FIELD - OPENING IMPULSE

The size of the detection field varies according to the mounting height of the sensor.

3 INFRARED FIELD - SAFETY

Detection field width indicated according to conditions defined in EN 16005 and including dimension of test body CA.

Check position of IR-curtains with Spotfinder and adjust if necessary.

* in standard presetting
- Test the good functioning of the installation before leaving the premises.
- The device cannot be used for purposes other than its intended use. All other uses cannot be guaranteed by the manufacturer of the sensor.
- The manufacturer of the door system is responsible for carrying out a risk assessment and installing the sensor and the door system in compliance with applicable national and international regulations and standards on door safety.
- The manufacturer of the sensor cannot be held responsible for incorrect installations or inappropriate adjustments of the sensor.
- Only trained and qualified personnel may install and setup the sensor.
- The warranty is void if unauthorized repairs are made or attempted by unauthorized personnel.
- Avoid touching any electronic and optical components, avoid vibrations, do not cover the sensor and avoid proximity to neon lamps or moving objects.
- It is recommended to clean the optical parts at least once a year or more often if required due to environmental conditions.
### LED-SIGNALS

<table>
<thead>
<tr>
<th>LED Signal</th>
<th>Description</th>
<th>Troubleshooting Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ORANGE LED flashes quickly.</td>
<td>A DIP-switch was changed without confirmation.</td>
<td>1 Confirm the DIP-settings by a long push on the push button.</td>
</tr>
<tr>
<td>The ORANGE LED flashes 1 x.</td>
<td>The sensor signals an internal fault.</td>
<td>1 Cut and restore power supply. If orange LED flashes again, replace sensor.</td>
</tr>
<tr>
<td>The ORANGE LED flashes 2 x.</td>
<td>Irregularities in the power supply</td>
<td>1 Check power supply. 2 Check wiring.</td>
</tr>
<tr>
<td>The ORANGE LED flashes 4 x.</td>
<td>The sensor receives too much IR-energy.</td>
<td>1 Use the 1 m prism if possible (accessory). 2 Check the angle of the IR-curtains.</td>
</tr>
<tr>
<td>The ORANGE LED flashes 5 x.</td>
<td>The sensor encounters a memory problem.</td>
<td>1 Use a low energy prism if possible (accessory). 2 Check the angle of the IR-curtains.</td>
</tr>
<tr>
<td>The ORANGE LED is on.</td>
<td>The sensor sees the door during the assisted setup.</td>
<td>1 Cut and restore power supply. If orange LED lights up again, replace sensor.</td>
</tr>
<tr>
<td>The RED LED flashes quickly after an assisted setup.</td>
<td>The sensor vibrates.</td>
<td>1 Check if the sensor is fastened firmly. 2 Check position of prism and cover.</td>
</tr>
<tr>
<td>The RED LED lights up sporadically.</td>
<td>The sensor sees the door.</td>
<td>1 Launch an assisted setup and adjust the IR angle.</td>
</tr>
<tr>
<td>The GREEN LED lights up sporadically.</td>
<td>The sensor is disturbed by lamps or another sensor.</td>
<td>1 Choose the critical environment presetting (DIP 1+2).</td>
</tr>
<tr>
<td>The LED is off.</td>
<td>The sensor is disturbed by the rain.</td>
<td>1 Choose the critical environment presetting (DIP 1+2).</td>
</tr>
<tr>
<td>The reaction of the door does not correspond to the LED-signal.</td>
<td>The sensor vibrates.</td>
<td>1 Check if the sensor is fastened firmly. 2 Check position of cable and cover.</td>
</tr>
<tr>
<td></td>
<td>The sensor sees the door or other moving objects.</td>
<td>1 Remove the objects if possible. 2 Change radar field size.</td>
</tr>
<tr>
<td></td>
<td>Ghosting</td>
<td>1 Check connections to test output.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 If your door controller is not able to test the sensor, connect the red and blue cable to the power supply.*</td>
</tr>
</tbody>
</table>

*excludes EN 16005-conformity of the door system

---


Entrematic Group AB, Lodjursgatan 10, SE-261 44 Landskrona, Sweden, hereby declares that the Entrematic PAS024ASW & PAS024AS is in conformity with the basic requirements and the other relevant provisions of the directives 2014/53/EU, 2011/65/EU and 2006/42/EC. Notified Body for EC-type inspection: 0044 - TÜV NORD CERT GmbH, Langemarckstr. 20, D-45141 Essen

EC-type examination certificate number: 44 205 13 089601-001

Landskrona, September 2016 - Marco Pietro Zini, authorized representative and responsible for technical documentation

The complete declaration of conformity is available on our website.

Only for EC countries: According to the European Guideline 2012/19/EU for Waste Electrical and Electronic Equipment (WEEE)