PE24
Through Beam Photoelectric Beam Sensor

Features
- 12-24V AC/DC Input Voltage
- 30 metres indoor and 10 metres outdoor range
- Rugged all weather design (IP-66)
- N.C./ N.O./ Common Relay Output
- Terminal block wiring connection
- Outstanding reliability and false alarm immunity
- PC Resin cover (Anti-UV)

Application
- Sliding Gates, Swing Gates or Garage Doors
- Overhead Doors, Conveyors or Door Entrance
- Boom Gates, Alarm System or Warehouse Monitoring

Description
The photoelectric beam works with any Elsema type automatic gate or door controller cards used on sliding, swing or roller doors. It is usually used as a safety device to control automatic gates and doors.

The PE24 works on infrared technology and is capable of switching loads of 1 Amp on 30 volts. Its low standby current consumption makes it ideal for automatic gates and doors operating on solar power.

Technical Data

<table>
<thead>
<tr>
<th>Power Source</th>
<th>12 to 24 Volts AC or DC</th>
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<tbody>
<tr>
<td>Current Consumption</td>
<td>Receiver: 15mA when beam is broken, 30mA when beam is aligned properly.</td>
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<tr>
<td></td>
<td>Transmitter: 37mA</td>
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<tr>
<td>Response Time</td>
<td>100 millisecond</td>
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<tr>
<td>Operation Indicator</td>
<td>Red LED (RX): On (when beam is broken), Green LED (Tx): ON</td>
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<tr>
<td>Illumination</td>
<td>Lamplight&lt;10,000lux; Sunlight &lt;30,000lux</td>
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<tr>
<td>Noise Resistance</td>
<td>1500Vp-p/1us</td>
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<tr>
<td>Surge Resistance</td>
<td>2KV/1us</td>
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<tr>
<td>Vibration Resistance</td>
<td>10-55Hz/1.5mm, 2 Hour in X.Y.Z. Phase</td>
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<tr>
<td>Connection</td>
<td>Terminal Block</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20°C to 60°C</td>
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<tr>
<td>Relay Output</td>
<td>Common, Normally open or normally close.1A/120VAC</td>
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<tr>
<td>Useable Operating Range</td>
<td>30 metres indoor and 10 metres outdoor range. Range will be reduced in bad weather, fog, dust etc.</td>
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<tr>
<td>Dimensions</td>
<td>87 x 59 x 38mm.</td>
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</tbody>
</table>
Internal View

Transmitter

Power LED: Green

Receiver

Vertical Adjustment
Horizontal Adjustment
LED: Red (Beam Alignment)

Wiring Diagram

CA
CC
⊕ ⊹ NA NC C
1 2 3 4 5
⊕ ORIZ

NA: Normally Open
NC: Normally Close
⊕: DC(+) Input Voltage
⊹: DC(−) Input Voltage
C: Common
CA: AC(12~24)
CC: DC(12~24)
VERT: Vertical
ORIZ: Horizontal
Standard Installation

Dimension

UNIT:mm
PE24 Application
Trouble shooting

Use and stick the black round sticker onto the Receiver lens when more than one pair of PE24 photo sensors are used next to each other, in order to prevent intervention between the pairs.

It is also recommended to use stickers, when the distance between Rx and Tx is less than 3 metres to achieve better and effective sensitivity.