

PHOTOCELLS P5103



1. Use

Photocells are used for signaling of foreign object presence on optical axis between photocell transmitter (TX) and receiver (RX).

2. Distribution

- Transmitter (TX) 1pc.
- Receiver (RX) 1pc.
- Manual 1pc.
- Mounting template 2pcs.
- Fastening screw 2pcs.
- rawplug anchor 6pcs.



3. Technical characteristics

- Supply voltage 12V ... 24V AC/DC
- Consumption (not more than) 30ma (TX), 15ma (RX)
- Coverage Not less than 12m (will reduce 30% in bad weather: fog, rain, snow, dust and etc.)
- Positioning angle $\pm 5^\circ$
- Relay output contacts load 1A / max. 30V
- Output contacts type NC/NO
- Infrared modulation rate 38kHz
- Infrared wavelength 940nm
- IP degree of protection IP54
- Operating temperature range $-20^\circ\text{C} \dots +60^\circ\text{C}$
- Plugged wire section max. $1,5\text{mm}^2$ (AWG16-26)
- Overall dimensions $127 \times 50 \times 28\text{mm}$



The company preserves the right to make changes in the given manual and product technical characteristics without any prior notice. The given manual contents may not be basis for legal claims.

4. Installation and connection



Installation and connection should be carried out by qualified specialists according to effective regulatory document observing all safety measures.



Before making any connections make sure that the automation the photocells are connected to is powered off feeder line and accumulator battery if any.

Before photocell installation choose the places where transmitter and receiver will be installed. They should be place on one level at a height not less than 20cm and should be turned to each other in a straight line. The distance between the transmitter and the receiver should be not less than 2 meters. Make sure the places under installation are well protected from impact loads and the surfaces for installation are solid enough. Preliminarily lay cables to the places of transmitter and receiver installation.

The installation should start with transmitter fixing and carrying out electric connections. Then carry out receiver leveling (centre adjustment). Photocells are connected and centered correctly if the transmitter led is off and when passing optical beam it turns on and relay switching is heard. Check photocell functioning several times. After that fix the receiver and make final electric connections and assembly.



Taking into account possible reflections of infrared rays from the floor, the walls, different objects and etc. check and use the photocells only with covers on that are filters that cut the visible light and possess lenses, focusing the beams. Avoid direct sunlight penetration on photocell receiver.

