PD86 - Photoelectric sensor

Sensors
PD86
Photoelectric sensor

The Carlo Gavazzi photoelectric PD86 unit is a stylish and versatile polarized retro-reflective sensor. It has been developed for automatic door systems on the basis of the tried and tested, popular and widespread PMP12 sensor series. PD86 can be set to detect in one of three different directions by orienting the PCB inside the housing, which makes it highly flexible and adaptable to any door or gate installation. In order to avoid corrosion and tampering issues, the housing is made of glass reinforced polycarbonate in a watertight construction with no screws visible. The long sensing distance of 12 m ensures a large operational margin and makes PD86 very well suited even when installed in a dusty environment or exposed to harsh weather conditions. The polarized retro-reflective function filters out unwanted reflections from shiny objects such as metallic cars ensuring a reliable detection.

PD86’s elegant housing design combined with a potent sensing technology, makes it the ideal choice where aesthetics and functionality are equally important.

Test input
A dipswitch for setting the test input to active high or active low enables PD86 to work with any door controller.

LED indication
Two LEDs combined with four selectable settings make diagnostics fast and easy. Green LED ON indicates power ON and signal stability and yellow LED ON indicates operation.

Detection
PD86 has a detection angle of +/-1,5°. Furthermore, a sensing distance of 12 m ensures a large operational margin if the sensor or reflector get dirty. The sensor can be oriented in three directions: 0°, 90° or -90°.

Harsh environment
Encapsulated in a robust polycarbonate housing with no screws visible, the sensor is preserved and protected against mechanical impact, tampering issues and splashing water (IP66).

Standards/Certifications
The Carlo Gavazzi PD86 photoelectric sensor complies with the safety standards EN12445, EN12453, EN12978, EN60947-1, UL325 and UL508.

Sensors
CARLO GAVAZZI Automation Components. Specifications are subject to change without notice. Illustrations are for example only.
Industrial doors

In surroundings that call for smooth and stylish door applications, a reliable and highly efficient sensor solution meeting applicable standards will still be required.

Our solution

Featuring a protective PC cover around its transparent red PMMA housing, Carlo Gavazzi’s photoelectric PD86 sensor offers a well-tried technology coupled with a refined and neat design.

Applications

Detection in 3 directions

PD86 enables detection in three directions from its mounting position. The sensing direction is determined by the position of the PCB inside the housing.

Specifications

- Size: 44 x 86 x 39 mm
- Power supply: 12 - 24 V AC/DC
- 12 m sensing distance on a Ø 80 mm reflector.
- Detection angle: +/- 1,5 degree.
- Polarized retro-reflective sensing.
- Housing in grey PC, Front-glass in red PMMA.
- Cable connection on 6 terminals, two for power, two for sensor test, and two for relay output.
- Dipswitch for inverting the relay.
- Dipswitch for setting the test input to a normally high or normally low position.
- Temperature range: -25°C to +60°C (-13°F to +140°F).
- Reflectors to be ordered separately.
- Carlo Gavazzi offers a wide range of reflectors to meet your specific needs.