

CARLO GAVAZZI
Automation Components



Small but Powerful *15 m sensing range*

- *Most compact sensor on the market*
- *Made for industrial applications*
- *Self Contained, no external amplifier needed*
- *LED Indication*
- *IP67 sealed*
- *High Neighbour Immunity, codes sensors*



Sense



The new compact through-beam sensor series from Carlo Gavazzi has been designed on the basis of customer demands as well as our own experience in industrial sensor applications during the last 25 years. Our goal has been to make the smallest and most powerful stand alone sensor on the market with focus on easy installation safe detection.

The sensors have been developed specifically for industrial applications, including Lift & Escalators – Industrial Doors & Gates – Entrance control etc.



Latest Technology

The sensor is based on the latest 8-bit microprocessor technology (compact 4 x 4 mm housing). This microprocessor has made it possible to implement several new detection principles, including the 3-code neighbour immunity system to avoid crosstalk. We have kept our focus on the proven high immunity towards harsh environment influence and easy installation.

PE12 CNT.. snap in version

- Focus on Fast mounting optimized for 0,6 – 2,25 mm wall thickness
- Four strong built-in retaining springs
- Adjustable sensitivity
- Ø 12 x 26 mm housing
- ± 5 degree viewing angle

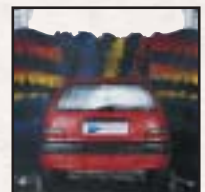
PB18 CNT.. for safety edges on automatic doors

- Fits in a standard 18 mm rubber profile
- Two built-in sealing lips
- Adjustable sensitivity
- Ø 18 x 30 mm housing
- ± 5 degree viewing angle
- Size has been kept small as the length must be maximum 30 mm according to EN 2433

PB10 CNT.. harsh environments

Based on the well known MOFTR housing used in Car-wash, Wood Industry and Industrial Door Market.

- Ø10 x 42 mm
- Fixet distance
- ± 5 degree viewing angle



Neighbour immunity

As machinery is gradually becoming more compact and sensors are mounted closer to each other, a need for high neighbour immunity has arisen.

We have implemented 3 different emitter codes allowing three sets of sensors to be mounted close together without interfering with each other (crosstalk).



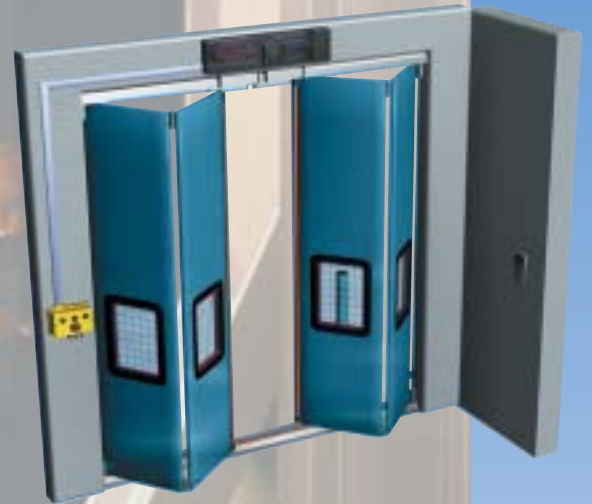
Distance setup

The sensors are normally used without distance settings, just on full power which gives a high excess gain in the applications. However in some cases semi transparent objects require a need for a reduction in the emitted power. The distance can be set up via an analogue voltage input or via an external potentiometer.

Mute function

In applications such as Industrial Automatic Doors. European and North American standards require a function for muting the emitter in order to test the sensor operation.

We have implemented this function to fulfill the requirements from these markets.



Common technical data

Power supply	10 – 30 VDC
Degree of protection	IP67
Protection	Short-circuit, Transient and Reverse Polarity
LED indication	
Emitter	Green LED for power-supply
Receiver	Yellow LED for detection
High neighbour immunity	3-coded system for PE12.. and PB10..
Output	100 mA DC, NPN or PNP, NO or NC
Sensitivity	
Adjustable	PE12.. and PB18..
Fixed	PB10, PE12.. and PB18..
Mute function	Emitter disable according to EN12978
Power consumption	< 25 mA DC
Maximum Operating frequency	30 times per second