



Dimensions



CE

Model Number

FLT-8-HW-2800-CLS

Area scanner

with connector, Binder series 581, 5-pin

Features

- Counting function with direction • monitoring
- Each motion direction has an output
- Counts approx. 3 persons per • seconds
- Version with Background evaluation

Product information

The FLT-8-CLS series active infra-red area scanners detect people and objects within their sensing field, as well as their direction of movement. The sensors emit signals, such as those required to control revolving doors, depending on the direction in which the person traveling through the door is moving. Thanks to their clearly defined sensing field, the sensors can easily count in narrow passageways where people can only pass through one at a time. In contrast to microwave sensors, the person is detected whether they are stationary or moving; however, the signal is evaluated dynamically. The benefit of this system is that it ensures people who move very slowly or remain still during the detection process can be reliably counted.



Electrical connection

Indicators/operating means



1	Functional display	red
2	Emitter	
3	Receiver	
4	Detection range adjuster	

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information" USA: +1 330 486 0001

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Technical data

General specifications Detection field 500 mm x 500 mm at 2000 mm sensor range Detection range min. 0 ... 1200 mm 0 ... 2800 mm Detection range max 4 IRED Light source modulated infrared light Light type Marking CE Operating mode Background evaluation Functional safety related parameters MTTF_d 470 a Mission Time (T_M) 20 a Diagnostic Coverage (DC) 0% Indicators/operating means Function indicator 2 LEDs red, light up in case of detection Control elements Sensing range adjuster **Electrical specifications** Operating voltage 15 ... 48 V DC UB 10 % Ripple No-load supply current I_0 60 mA Output Switching type liaht on Signal output 2 pulse outputs PNP, short-circuit protected, open collectors \leq 48 V DC Switching voltage ≤ 200 mA Switching current Switching frequency f 3 Hz Response time 40 ms at at a remission level of 6 % 10 ms at a remission level of 18 % De-energized delay 150 ms toff Ambient conditions -20 ... 60 °C (-4 ... 140 °F) Ambient temperature Storage temperature -20 ... 75 °C (-4 ... 167 °F) **Mechanical specifications** max. 2800 mm Mounting height Degree of protection IP65 Connector, Binder series 581, 5-pin Connection Material Makrolon GV30 black Housing Optical face Glass, red Mass 350 g General information Scope of delivery 2 m Connecting cable Compliance with standards and directives Standard conformity Product standard IEC 60947-5-2 Emitted interference EN 61000-6-3 Standards EN 61000-6-2 without EN 61000-4-5, EN 61000-4-11

Typical applications

Counts people in small passageway areas with a counting accuracy of up to 95%

Detection area

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Accessories

Montageplatte FLT Mounting plate for FLT-8 series sensors

Other suitable accessories can be found at www.pepperl-fuchs.com

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Curves/Diagrams



Functional specifications

The FLT-8-HW-2800-CLS counting sensor is able to detect persons and objects and their direction of motion within its scanning area. On the scanned level which can be set by the operator and should be optimal at 20 cm above ground, it generates a clearly defined three-dimensional scanning area. For this, the light is focused from four transmitter diodes into the scanned level. Two light bundles each are united to form one light line. At the moment a person enters the scanning area, one or two of a total of four light bundles are first reflected by the person. Before leaving the scanning area, the person reflects again at least on light bundle. The motion signal is determined from the order in which the person cuts the light lines. So in contrast to radar motion detectors, the persons are captured statically; the signal evaluation, however, is effected dynamically. Only in case both light lines are cut, one counting operation is completed and a 40 ms pulse is issued. This method offers the advantage that even persons who move very slowly or stop during the detection are counted safely. Depending on the direction of motion, the counts are issued at two PNP outputs.

The scanner function is displayed by two red LED which can be observed through the front disc. Each of the LED is assigned to one light line.

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