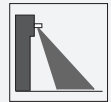




Active infrared scanner AIR20-8-H-2200/25/38a



- Single-beam diffuse mode sensor with background suppression
- Can be used to secure closing edges or as an opening impulse sensor on automatic doors
- Can also be used as door handle monitor on revolving doors
- Narrow, precise long range light beam
- Suitable for moving or stationary mounting
- Not sensitive to ambient light

Single-beam active infrared scanner, background suppression, max. installation height 2.2 m, black housing, relay contact output, terminal block

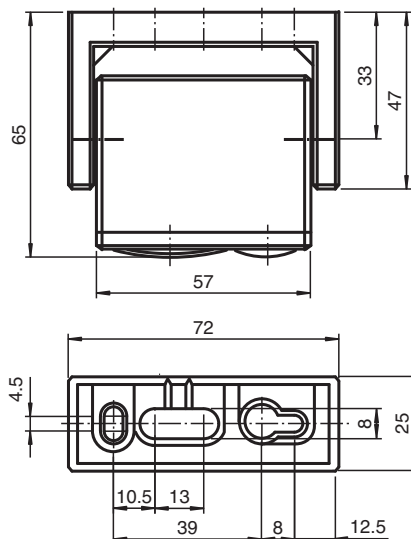


Function

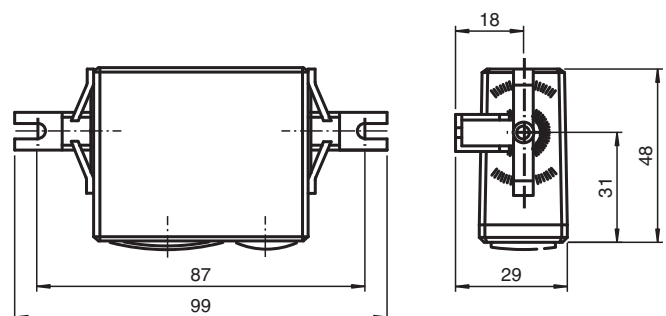
The AIR20 is an infrared diffuse mode sensor with background suppression that is specially designed for monitoring the closing edges on revolving doors. Its background suppression ensures reliable recognition of the objects to be detected. Due to its compact dimensions, the sensor can be installed in virtually all door drives.

Dimensions

Dimension with swivel bracket



Dimensions with mounting angle



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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PF PEPPERL+FUCHS

Technical Data

General specifications

Detection range	factory setting: 1300 mm (adjustable)	
Detection range min.	200 ... 1300 mm	
Detection range max.	200 ... 2200 mm	
Light source	IRED	
Light type	modulated infrared light	
Black/White difference (6 %/90 %)	≤ 400 mm at Tw 1300 mm	
Operating mode	Background suppression	
Diameter of the light spot	60 mm at Tw 1300 mm	
Angle of divergence	approx. 2.6 °	
Accessories provided	Swivel bracket, Mounting angle, Connecting cable	

Functional safety related parameters

MTTF _d	1420 a	
Mission Time (T _M)	20 a	
Diagnostic Coverage (DC)	0 %	

Indicators/operating means

Function indicator	LED red: lights up when output is active	
Control elements	Sensing range adjuster	

Electrical specifications

Operating voltage	U _B	12 ... 30 V DC / 18 ... 28 V AC
No-load supply current	I ₀	< 50 mA

Output

Switching type	light on	
Signal output	Relay, 1 alternator	
Switching voltage	≤ 48 V AC / DC	
Switching current	≤ 0.5 A AC / 1 A DC	
Response time	approx. 50 ms	
De-energized delay	t _{off}	approx. 250 ms

Conformity

Product standard	EN 60947-5-2	
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Compliance with standards and directives

Standard conformity		
Standards	EN 60947-5-2 EN 61000-6-2 without EN 61000-4-5, EN 61000-4-11 EN 61000-6-3	

Approvals and certificates

CE conformity	yes	
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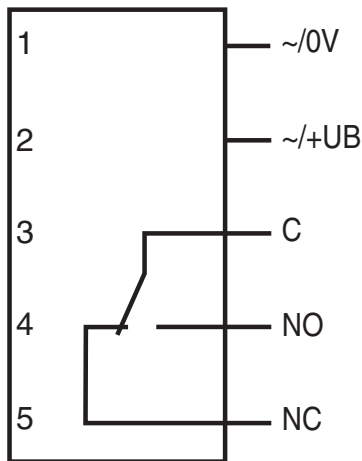
Ambient conditions

Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)	
Storage temperature	-20 ... 75 °C (-4 ... 167 °F)	

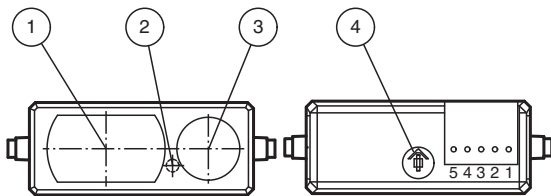
Mechanical specifications

Degree of protection	IP52	
Connection	plug-in screw terminals (5 m connecting cable in delivery package)	
Material		
Housing	ABS	
Optical face	PMMA	
Mass	50 g	
Note	Safety fuse ≤ 315 mA (slow-blow) according to IEC 60127-2 Sheet 1	

Connection Assignment

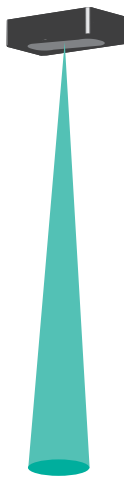


Assembly



1	Receiver
2	Indication-LED
3	Transmitter
4	Detection range adjuster

Application



Accessories

	Flush Mounting AIR20	Flush-mounted frame for sensors in the AIR20
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Accessories

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

Function Principle

Active infrared scanners detect people and objects using short-wave infrared radiation according to the triangulation principle. A switch signal is tripped if the infrared beam emitted is reflected by an object within the specified sensing range. Where background suppression is activated, the background (e.g. ground) is detected but not evaluated. This allows an precise detection area to be set and ensures reliable detection of people.

Application

- Closing edge monitoring on revolving doors
- Opening impulse sensor and closing-edge monitoring on automatic doors
- Presence check for turnstiles and safety checkpoints