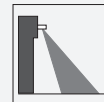




Active infrared scanner AIR20-8-H-2200/25/38a



- 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

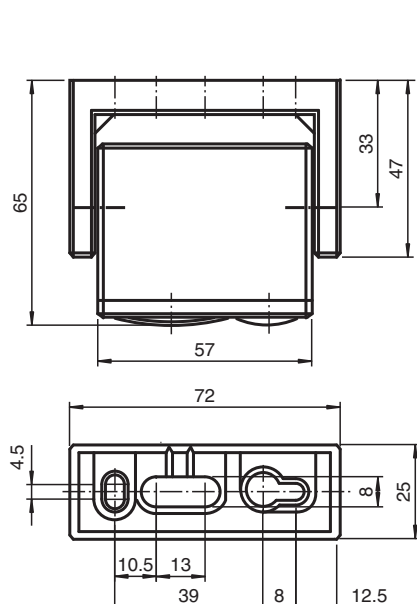
The AIR20 is an infrared diffuse mode sensor with background suppression that is specially designed for monitoring the closing edges on revolving doors. Its background suppression ensures reliable recognition of the objects to be detected. Due to its compact dimensions, the sensor can be installed in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

Application

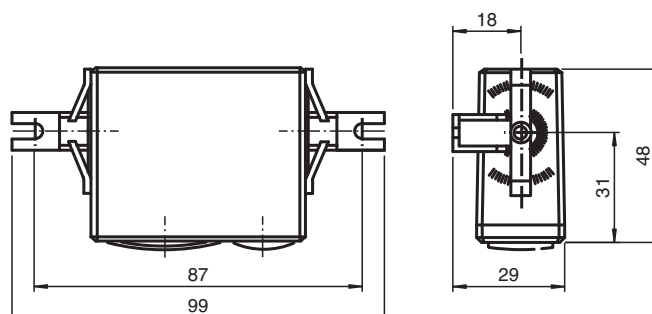
- Closing edge monitoring on revolving doors
- Opening impulse sensor and closing-edge monitoring on automatic doors
- Presence check for turnstiles and safety checkpoints

Dimensions

Dimension with swivel bracket



Dimensions with mounting angle



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	IRET
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
Opening angle	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

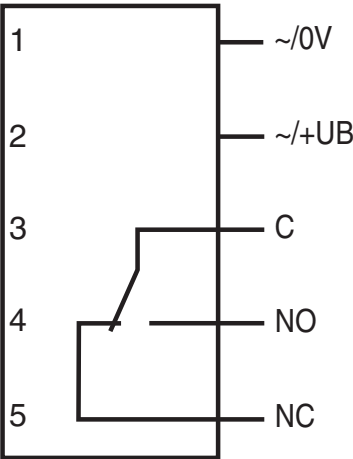
Operating voltage	U _B	12 ... 30 V DC / 18 ... 28 V AC
No-load supply current	I ₀	< 50 mA

Output

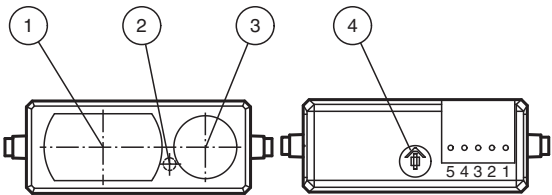
Technical Data

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
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
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



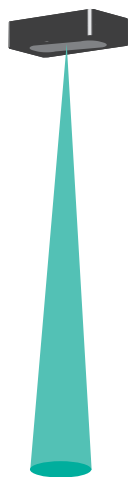
Assembly



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

Release date: 2023-03-28 Date of issue: 2023-03-28 Filename: 126268_eng.pdf

Application



Function Principle

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

Accessories

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