



Model Number

AIR30-8-H-2542/38a

Active infrared scanner
with 2.5 m fixed cable

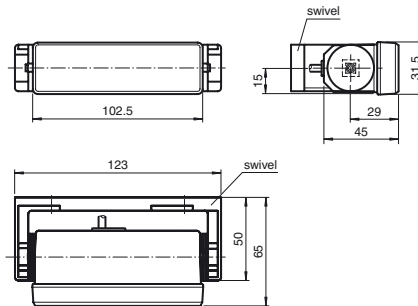
Features

- Single-beam light scanner
- Can be used to monitor both main and ancillary closing edges
- Closing edge safety on revolving doors and carousel doors
- Accurate beam alignment thanks to finely bundled light beam
- Background suppression operating mode: ignores objects outside the sensing range
- Version for universal voltages

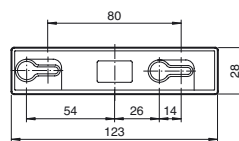
Product information

AIR30 is a series of active infrared scanners with excellent optical properties for monitoring closing edges in a wide range of door systems. The diverse range of housings and mounting options allow the devices to be adapted to suit a whole host of mounting conditions.

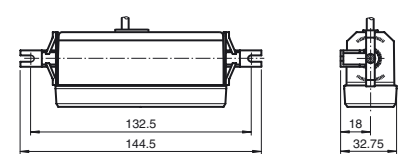
Dimensions



Mounting dimensions for swivel

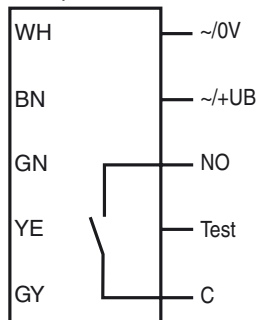


Mounting dimensions with mounting bracket set AIR30

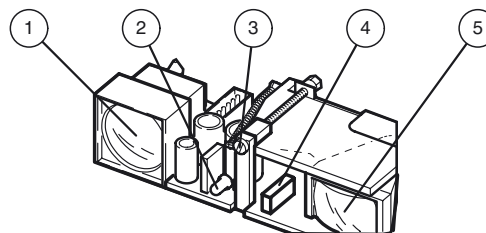


Electrical connection

Option:



Indicators/operating means



1	Transmitter
2	Indication-LED
3	Detection range adjuster
4	Light / Dark switch
5	Receiver

Technical data**General specifications**

Detection range min.	550 ... 1000 mm
Detection range max.	550 ... 2500 mm
Light source	IREL
Light type	modulated infrared light
Black/White difference (6%/90%)	≤ 400 mm at a distance of 2000 mm
Transmitter frequency	1800 Hz
Operating mode	Background suppression
Diameter of the light spot	50 mm at 2000 mm sensor range
Angle of divergence	approx. 1.4 °
Accessories provided	Swivel bracket, Mounting bracket

Functional safety related parameters

MTTF _d	1050 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	90 %

Indicators/operating means

Function indicator	LED red: lights up when output is active
Control elements	Sensing range adjuster, light-on/dark-on changeover switch
Factory setting	light on

Electrical specifications

Operating voltage	U _B	10 ... 48 V DC / 11 ... 36 V AC
No-load supply current	I ₀	100 mA

Input

Test input	emitter deactivation at +U _B
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Output

Switching type	light/dark on, switchable	
Signal output	relay, 1 NO	
Switching voltage	≤ 50 V AC / 24 V DC	
Switching current	≤ 200 mA AC / 1 A DC	
Response time	70 ms	
De-energized delay	t _{off}	approx. 200 ms

Standard conformity

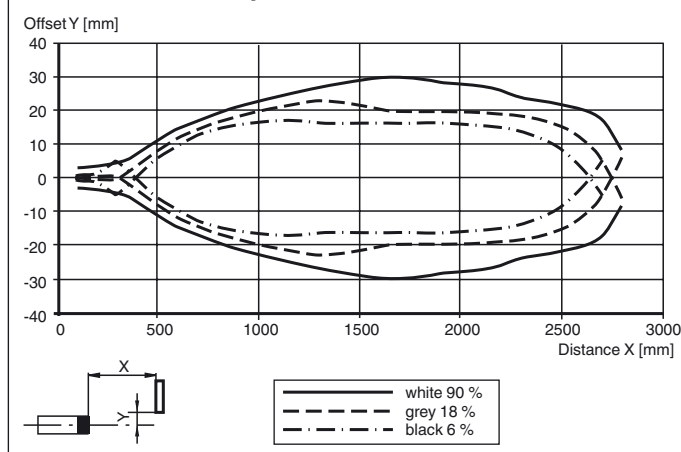
Standards	EN 60947-5-2
Standards 2	EN 61000-6-2 without EN 61000-4-5, EN 61000-4-11
Standards 3	EN 61000-6-3

Ambient conditions

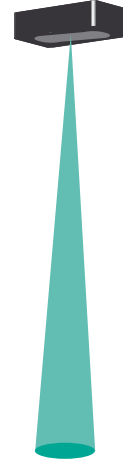
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-20 ... 75 °C (-4 ... 167 °F)

Mechanical specifications

Degree of protection	IP52
Connection	fixed cable high flexibility 2.5 m
Material	
Housing	plastic
Optical face	Luran®
Mass	50 g

Curves/Diagrams**Characteristic response curve****Typical applications**

- Monitoring closing edges and crushing points on revolving doors and carousel doors
- Door monitoring system in local public transportation

Detection area**Accessories****UP-Einbaurahmen**

Mounting frame for sensors in the AIR30 and PROSCAN series

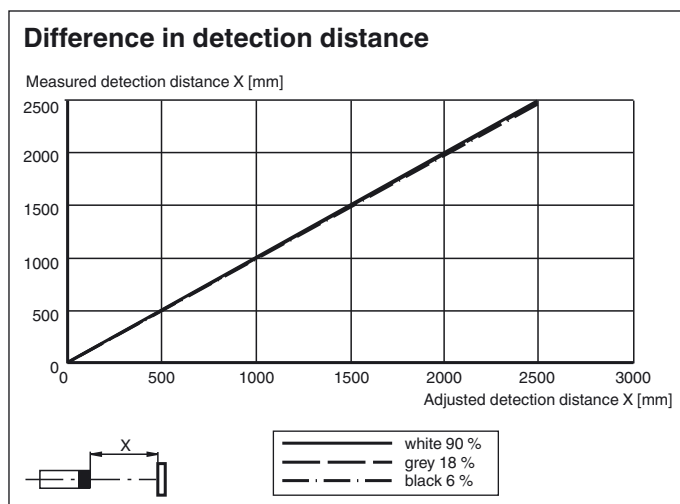
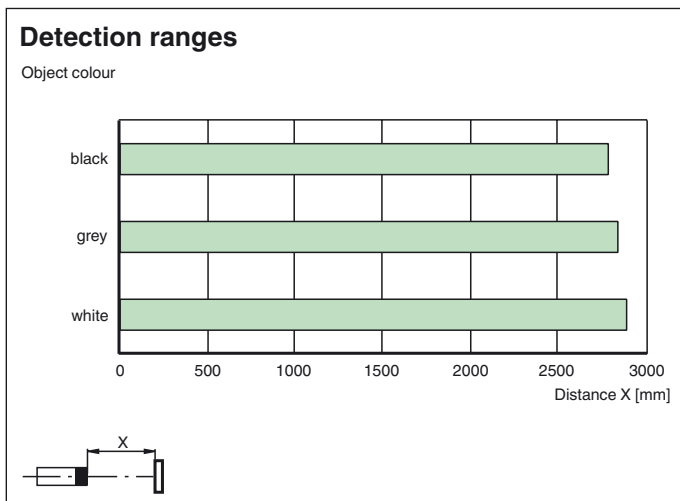
Flush Mounting AIR30

Installation cover for AIR30 series sensors

Wetterhaube AIR30

Weather hood for series AIR30

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



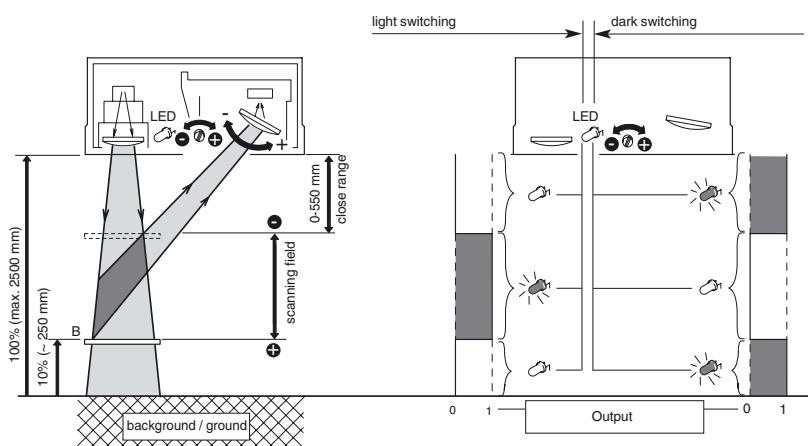
Operating principle

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 extremely precise detection area to be set and ensures reliable detection of people, vehicles and other objects.

Function principle background suppression

Object in scanning field:



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

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