



**Model Number**

**AIR30/32-UP-2493**

Active infrared scanner  
Flush-mounted version

**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
- Flush-mounted version with front cover, black
- DC voltage version

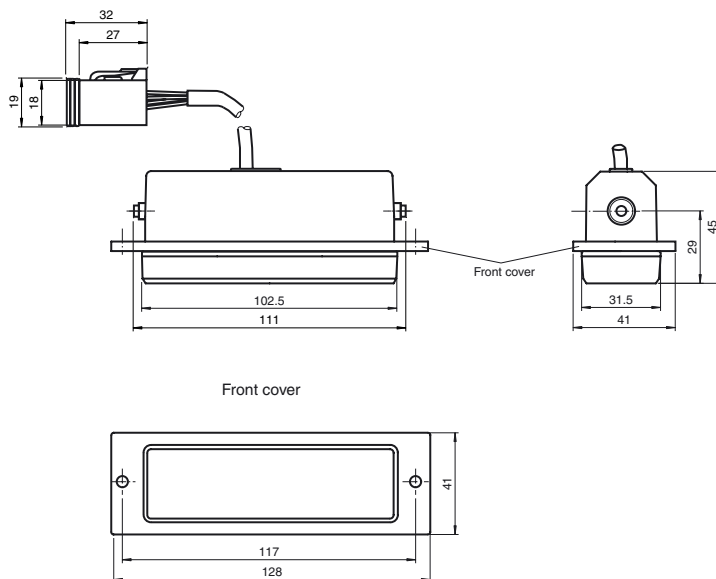
**Product information**

The sensor is used as an opening impulse sensor for train doors. The fact that it is fitted to the side means that the detection beam crosses the entrance area. The detection range is optimized for doors that are 935 mm to 955 mm wide. The detection range is pre-set and cannot be modified. This creates a background area above 885 mm in which no detection takes place.

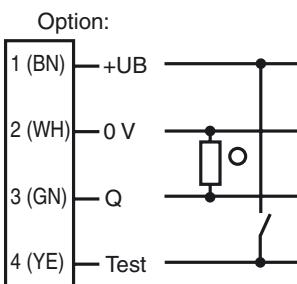
**Caution!**

The sensor must point towards a background or a wall, otherwise it will not work.

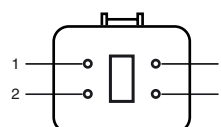
**Dimensions**



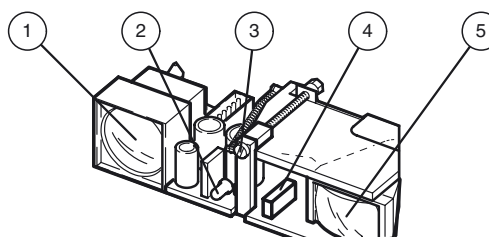
**Electrical connection**



**Pinout**



**Indicators/operating means**



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

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Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776-4411  
fa-info@pepperl-fuchs.com

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Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

## Technical data

### General specifications

Detection range min.	0 ... 885 mm preset
Reference target	material with reflection factor > 6%
Light source	IREL
Light type	modulated infrared light
Transmitter frequency	1800 Hz
Operating mode	Background evaluation
Diameter of the light spot	22 x 22 mm at sensor range 885 mm
Angle of divergence	approx. 1.4 °
Accessories provided	Swivel bracket, Mounting bracket

### Functional safety related parameters

MTTF <sub>d</sub>	1050 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	90 %

### Electrical specifications

Operating voltage	U <sub>B</sub>	24 V DC
No-load supply current	I <sub>0</sub>	100 mA

### Input

Test input	emitter deactivation at +U <sub>B</sub>
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### Output

Switching type	light on (output is active, when background exists and no person in the detection field)
Signal output	1 PNP output, short-circuit protected, reverse polarity protected, open collector
Switching voltage	max: 31.2 V DC
Switching current	≤ 0.2 A
Response time	50 ms

### Ambient conditions

Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-30 ... 70 °C (-22 ... 158 °F)

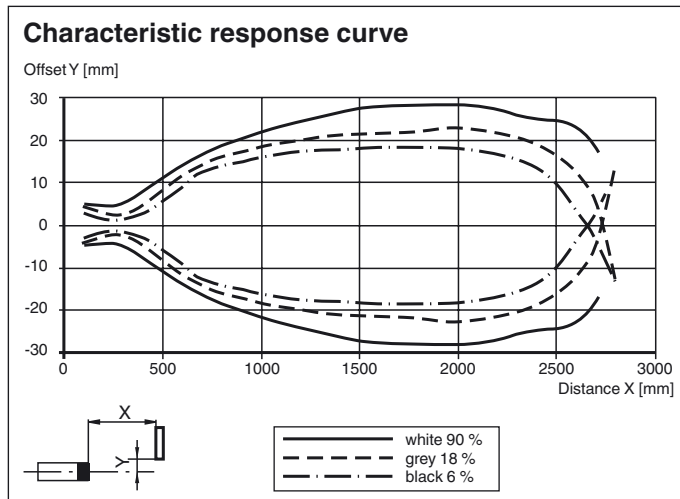
### Mechanical specifications

Protection degree	IP52
Connection	Connecting cable 500 mm with socket connector (Deutsch), 4-pin
Material	
Housing	plastic
Optical face	Luran
Mass	50 g

### Approvals and certificates

CE conformity	yes
CCC approval	Products with a maximum operating voltage of ≤ 36 V do not bear a CCC marking because they do not require approval.

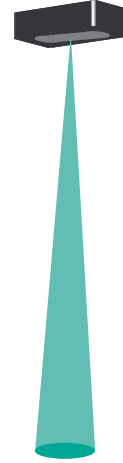
## Curves/Diagrams



## 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

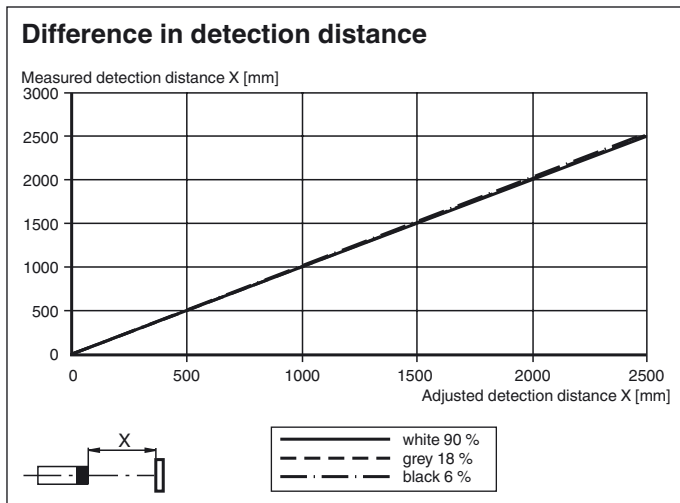
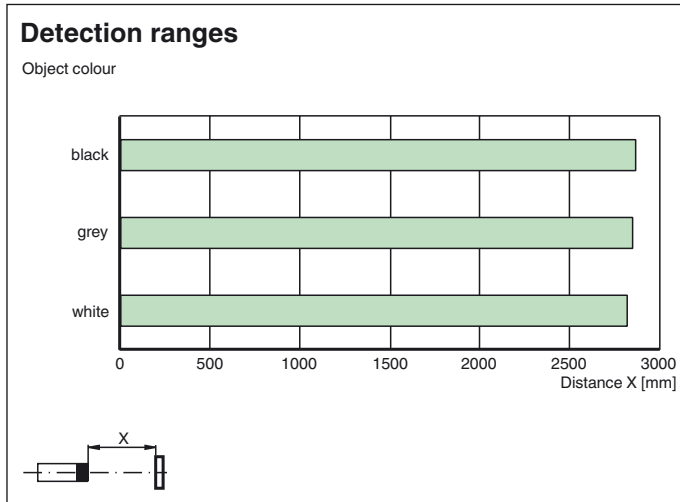
### Flush Mounting AIR30

Installation cover for AIR30 series sensors

### Wetterhaube AIR30

Weather hood for series AIR30

Other suitable accessories can be found at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)



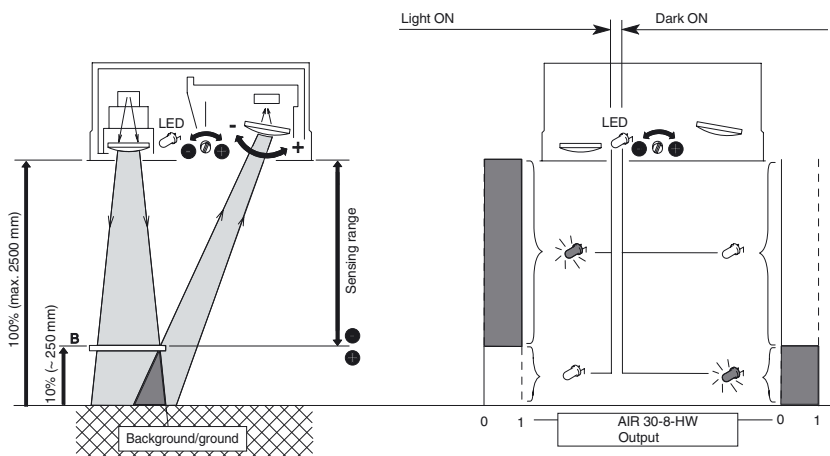
## Operating principle

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 evaluation is activated, the background (e.g. ground) is used as a reflector.

This allows reflective or shiny objects, such as vehicles and objects located close to the surface, to be detected reliably and in full.

### Operating principle Background evaluation

Object in sensing field:



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