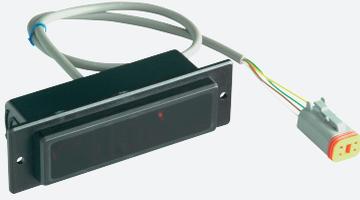


Active infrared scanner

AIR30/32-UP-2493



- 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

Single-beam light scanners with finely bundled light beam for monitoring main and ancillary closing edges



Function

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 preset and cannot be modified. This creates a background area above 885 mm in which no detection takes place.

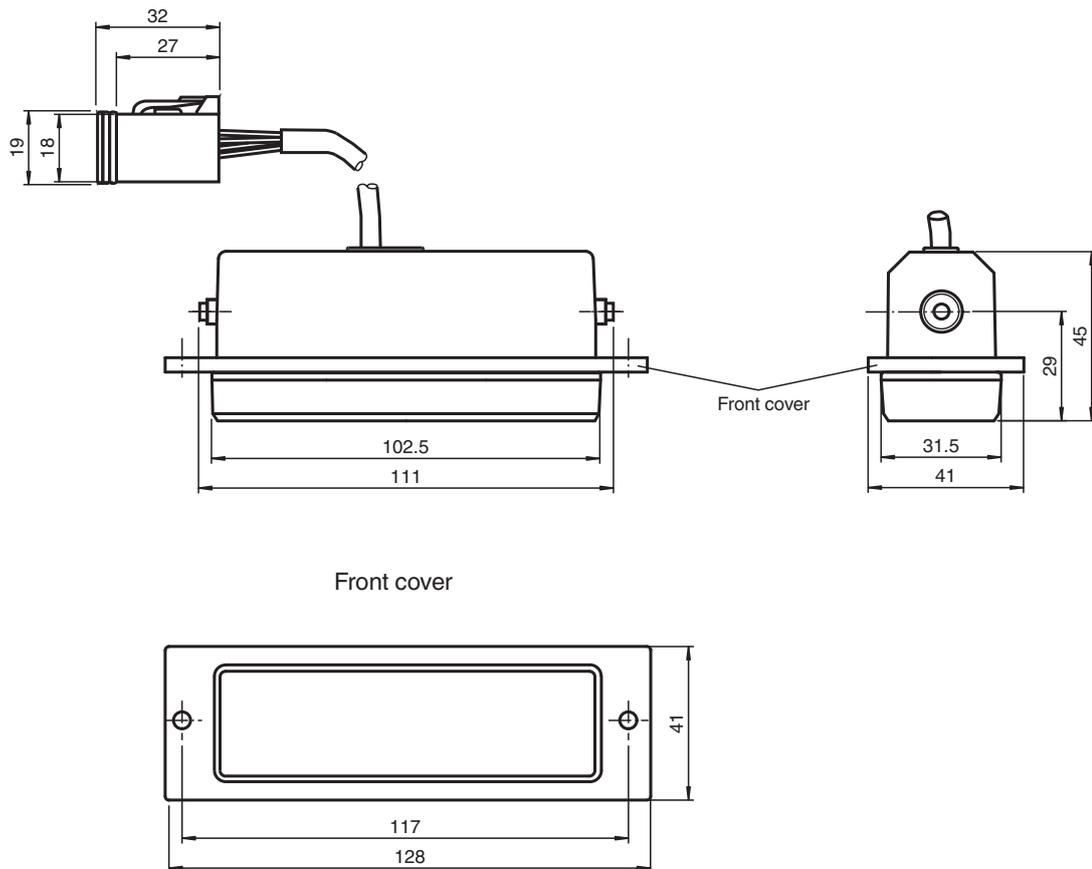
Caution!

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

Application

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

Dimensions



Technical Data

General specifications

Detection range min.	0 ... 885 mm preset
Reference target	material with reflection factor > 6%
Light source	IRED
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
Opening angle	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 %

Electrical specifications

Operating voltage	U _B	24 V DC
No-load supply current	I ₀	100 mA

Input

Test input	emitter deactivation at +U _B
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Output

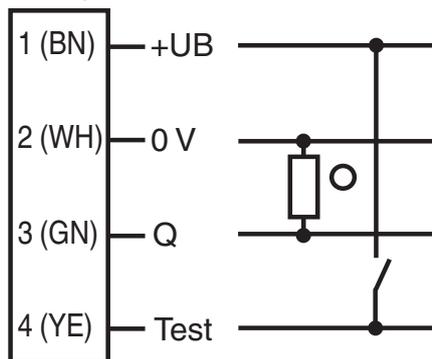
Switching type	light-on (output is active, when background exists and no person in the detection field)
Signal output	1 PNP output, short-circuit protected, reverse polarity protected, open collector

Technical Data

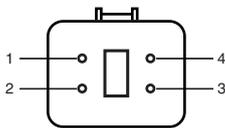
Switching voltage	max: 31.2 V DC
Switching current	≤ 0.2 A
Response time	50 ms
Standard conformity	
Standards	EN 60947-5-2
Standards 2	EN 61000-6-2 without EN 61000-4-5, EN 61000-4-11
Standards 3	EN 61000-6-3
Approvals and certificates	
CCC approval	CCC approval / marking not required for products rated ≤36 V
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-30 ... 70 °C (-22 ... 158 °F)
Mechanical specifications	
Degree of protection	IP52
Connection	Connecting cable 500 mm with socket connector (Deutsch), 4-pin
Material	
Housing	plastic
Optical face	Luran®
Mass	50 g

Connection Assignment

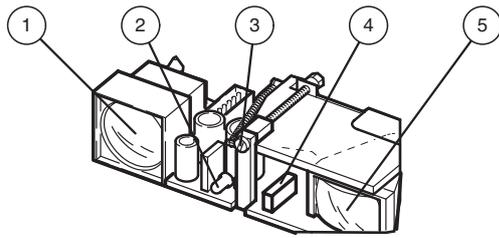
Option:



Connection Assignment

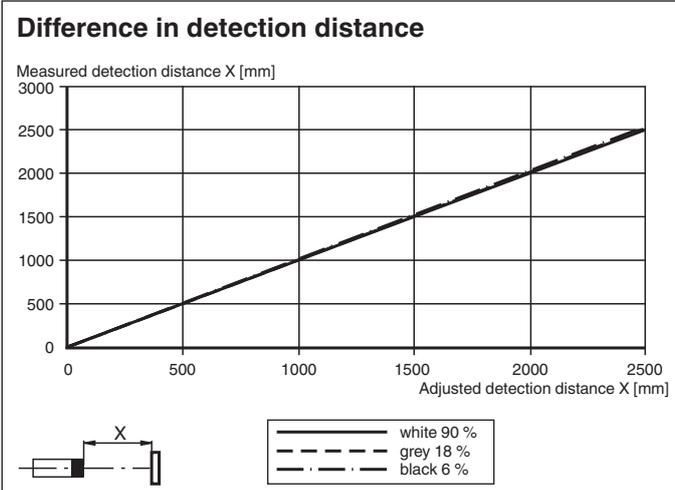
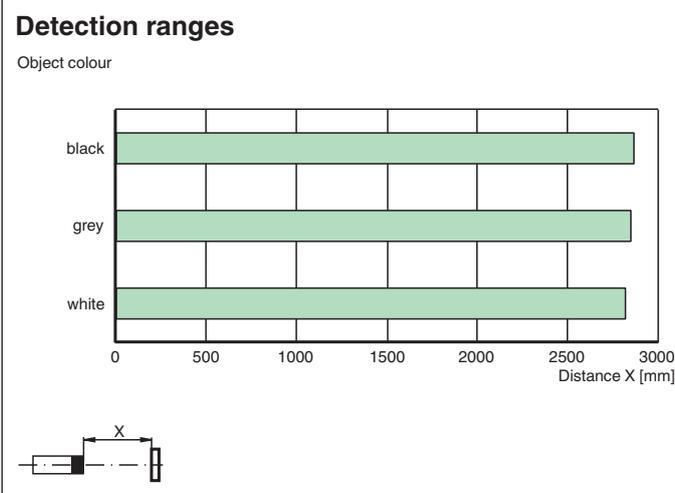
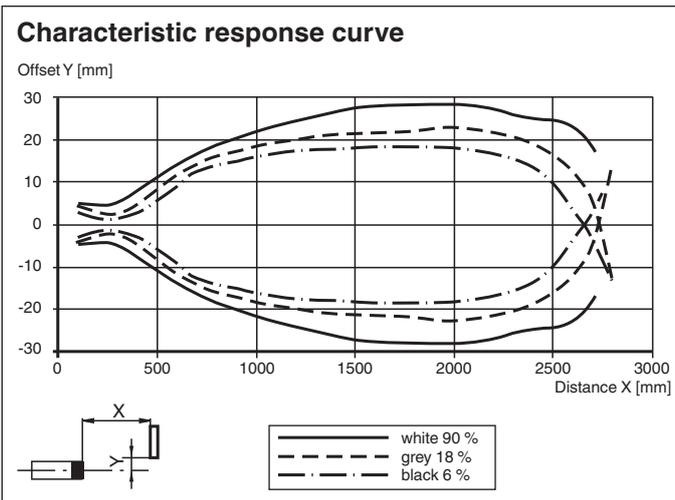


Assembly



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

Characteristic Curve



Release date: 2023-03-28 Date of issue: 2023-03-28 Filename: 418014_eng.pdf

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

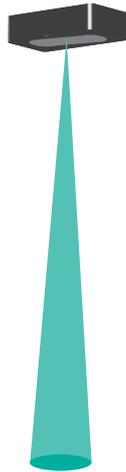
Pepperl+Fuchs Group
www.pepperl-fuchs.com

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

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

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

Application



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

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 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

