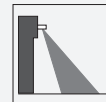




Active infrared scanner

AIR30/32-UP-2483/B



- 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



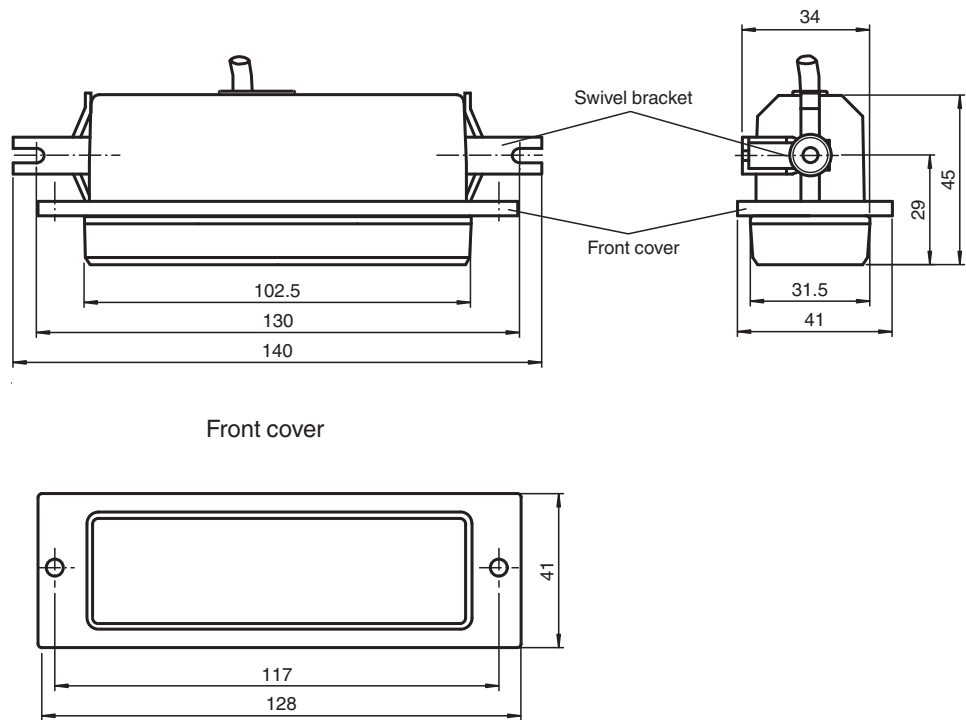
Function

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.

Application

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

Dimensions



Technical Data

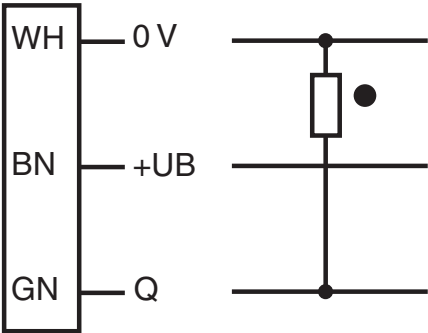
General specifications		
Detection range min.		0 ... 1870 mm preset
Light source		IRED
Light type		modulated infrared light
Black-white difference (6 %/90 %)		≤ 400 mm at a distance of 2000 mm
Transmitter frequency		1800 Hz
Operating mode		Background evaluation
Diameter of the light spot		50 mm at 2000 mm sensor range
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 %
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		dark-on
Electrical specifications		
Operating voltage	U _B	10 ... 30 V DC
No-load supply current	I ₀	100 mA
Output		

Technical Data

Switching type		light/dark on, switchable
Signal output		1 PNP output, short-circuit protected, reverse polarity protected, open collector
Switching voltage		30 V DC
Switching current		≤ 200 mA
Response time		50 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
Approvals and certificates		
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-20 ... 70 °C (-4 ... 158 °F)
Storage temperature		-40 ... 70 °C (-40 ... 158 °F)
Mechanical specifications		
Degree of protection		IP52
Connection		2 m fixed cable
Material		
Housing		plastic
Optical face		Luran®
Mass		40 g

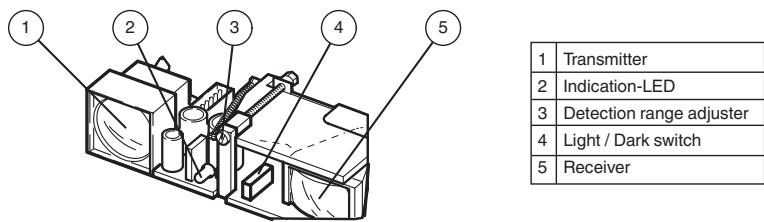
Connection Assignment

Option:



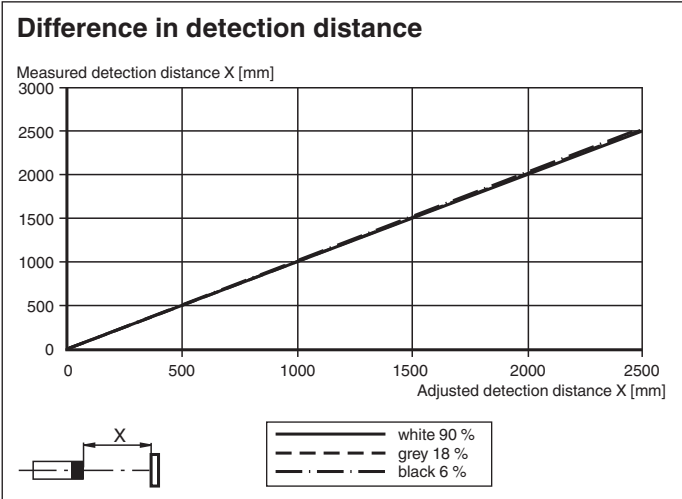
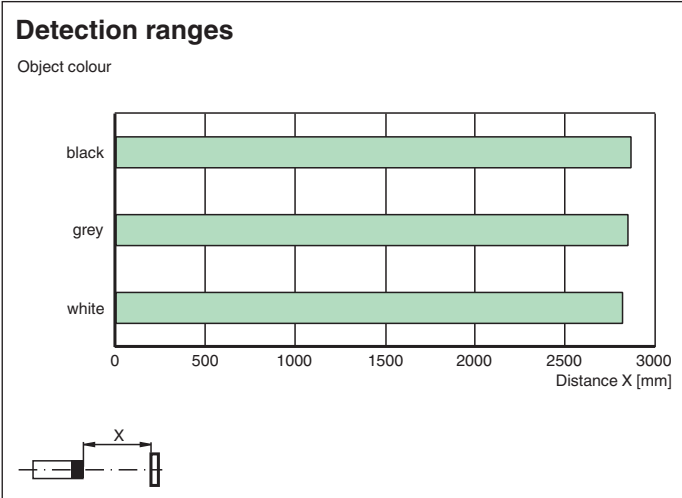
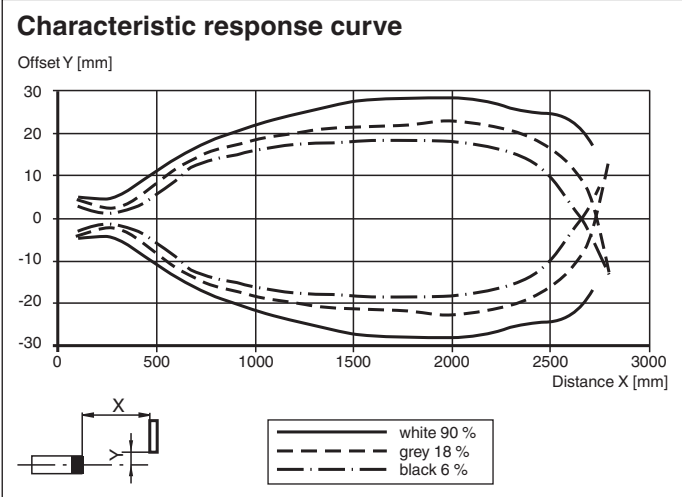
○ = Light on
● = Dark on

Assembly



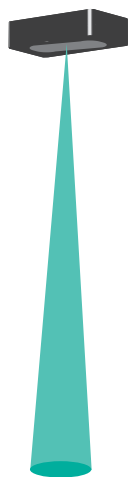
1	Transmitter
2	Indication-LED
3	Detection range adjuster
4	Light / Dark switch
5	Receiver

Characteristic Curve



Release date: 2023-04-04 Date of issue: 2023-04-04 Filename: 418018_eng.pdf

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

Release date: 2023-04-04 Date of issue: 2023-04-04 Filename: 418018_eng.pdf

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

