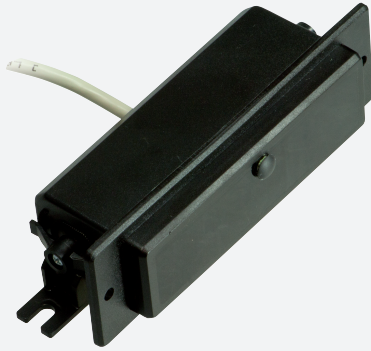




Active infrared scanner

AIR30-8-HW-2500-5299/38a/76a



- Single-beam light scanner
- Can be used to monitor both main and ancillary closing edges
- Accurate beam alignment thanks to finely bundled light beam
- Detection range directly adjustable without removing front panel
- Version with pre-assembled flush-mounted installation frame
- Version for universal voltages

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



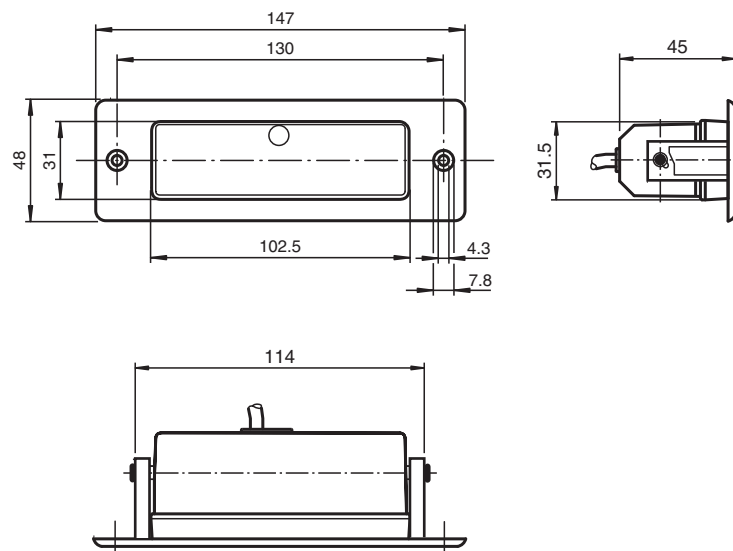
Function

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.	100 ... 1000 mm
Detection range max.	100 ... 2500 mm
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	Mounting frame for sensors in the AIR30 and PROSCAN series (pre-mounted)

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	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	Certified by China Compulsory Certification (CCC)
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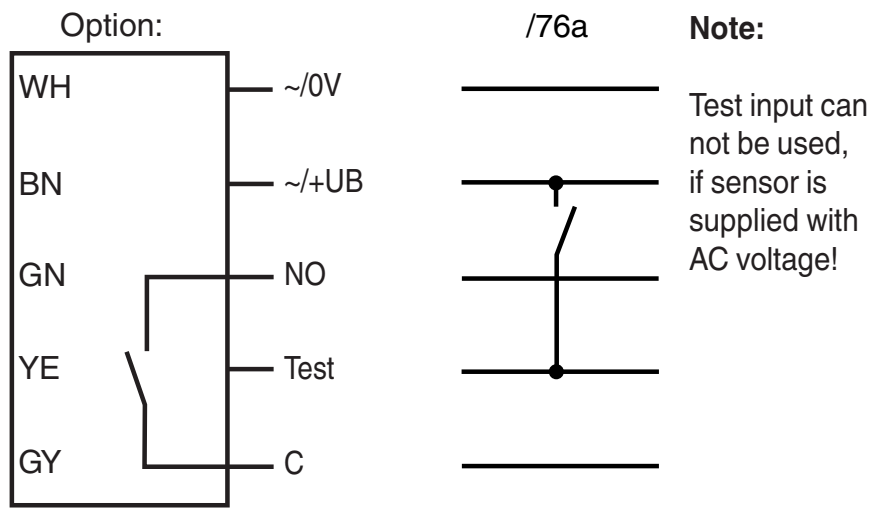
Ambient conditions

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

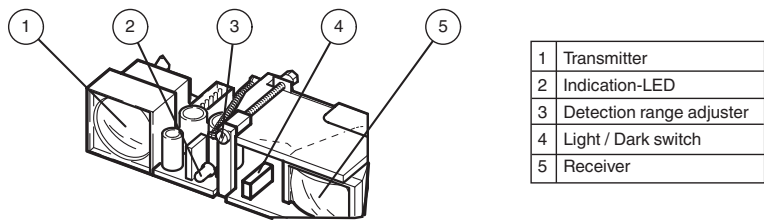
Mechanical specifications

Degree of protection	IP52
Connection	5 m fixed cable
Material	
Housing	plastic
Optical face	Luran®
Mass	50 g

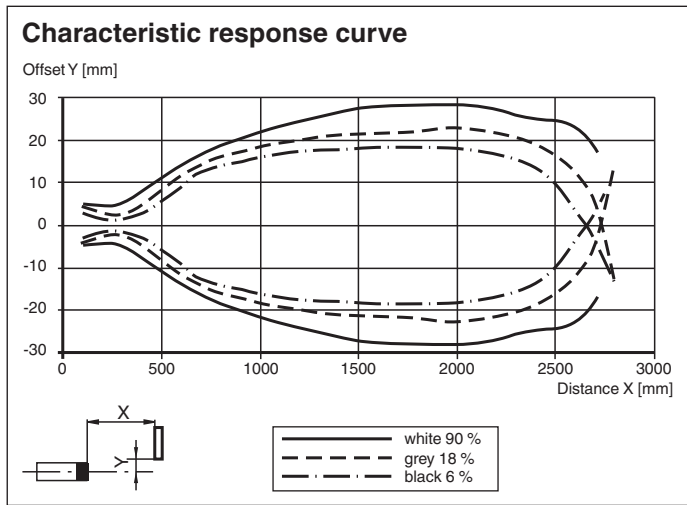
Connection Assignment



Assembly

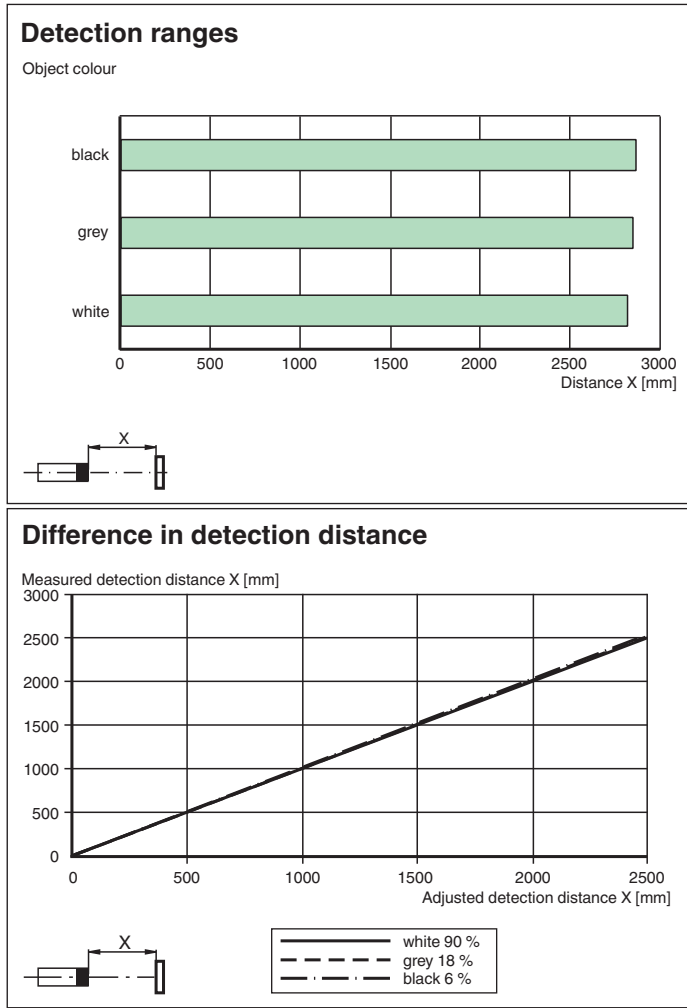


Characteristic Curve

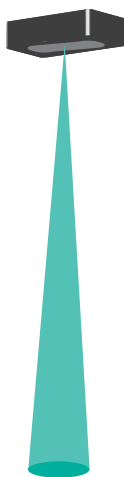


Release date: 2023-04-04 Date of issue: 2023-04-04 Filename: 240709_eng.pdf

Characteristic Curve



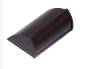
Application



Accessories

	UP-Einbaurahmen	Mounting frame for sensors in the AIR30 and PROSCAN series
	Flush Mounting AIR30	Installation cover for AIR30 series sensors

Accessories

	Wetterhaube AIR30	Weather hood for series AIR30
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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

