

# Active infrared Door Sensor

OA-Axis series



Reliable  
Easy installation  
Quality  
Infinity  
Safety  
Advanced  
Active infrared  
presence  
detection  
Threshold safety  
Flexible  
Certified  
Monitored  
Sensitivity

The Optex OA-Axis series is the new active infrared door sensor standard for use on automatic sliding doors. The OA-Axis series is developed as a combination sensor for threshold safety and activation. The OA-Axis T is in compliance with the latest European and local regulations as prEN12650 and DIN18650, tested and approved by the German test organisation TÜV. Due to its variety in output options the OA-Axis series meets the requirements in various markets.



## Combination

The Optex OA-Axis series is purely based on active infrared technique, combining activation and safety into one sensor. By using the unique Optex presence detection technique the OA-Axis series provides maximum safety around the threshold and offers at the same time a large motion detection area for door activation.

## Safety

The active infrared presence detection of the OA-Axis series can be set very accurately and can be moved 6° towards or away from the door. The installation of safety beams is no longer mandatory. The sensor detects a person or object and holds the door open as long as they are in or near the threshold area, even if they stop or pause. The Optex OA-Axis T is tested and approved by the German test organization TÜV and in compliance with the German DIN 18650 and the preliminary European Norm prEn 12650.

## Motion detection

The large detection area provides fast detection for any traffic, including trolleys, approaching from any angle. The sensor's enhanced pattern depth enables it to detect people and objects farther away and allows the door to open conveniently for them. The presence and motion detection area's can be adjusted independently.

## Variety

By offering different types of output contacts the OA-Axis series meets the requirements and local standards in many different markets.

OA-Axis I: relay output for activation and safety.

OA-Axis II: one relay for safety and a second relay for motion/activation

OA-Axis T: one relay for motion/activation and an Opto coupler (NPN) in/output for safety.

## Easy adjustment

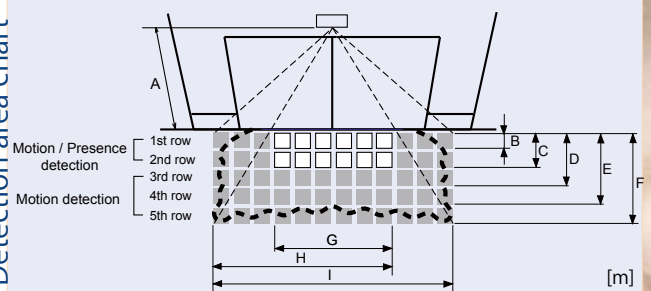
Installation time can be reduced to a minimum by using easily set switches and trimmers, therefore the sensor can be quickly adjusted for many different applications. To adjust the presence detection area the use of an Optex Infra-red finder is recommended.

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### Specifications

Model	OA-Axis I* / OA-Axis II* / OA-Axis T
Mounting height	up to 3.5m (I/II) / 3.0m (T)
Detection angle adjustments	1st - 3rd rows -6° / +6° 4th and 5th rows +26° / +44°
Detection method	Active infrared reflection
Power supply	12 - 24V AC ±10% (50/60Hz) 12 - 30V DC ±10%
Power consumption	OA-Axis I: < 3VA OA-Axis II: < 4VA OA-Axis T: < 4VA
LED Operating indicator	See installation manuals
Test input (T-version)	Opto coupler, Voltage 5 to 30 VDC Current 6mA Max. (30VDC)
Activation output (T-version)	Form A relay 50V 0.3A max.
Safety/Test output (T-version)	Opto coupler (NPN),
Voltage	5 to 50VDC, Current 100 mA max.
Dark current	600 nA max.
Output (OA-Axis I)	Form C relay, 50V, 0.3A max.
Output (OA-Axis II)	1st-3rd row Form C relay 50V 0.3A max. (resistance load) 3rd-5th row Form C relay 50V 0.3A max. (resistance load)
Output hold time	Approx. 0.5s
Response time	<0.3s
Operating temperature	-20° C - +55° C
Weight	320g
Accessories	3 m Connection cable 2 Mounting screws 1 Mounting template 1 Area adjustment tool
Recommended accessory	Optex Infrared finder
Available colours	Black and silver

### Detection area chart



	2.20	2.50	3.00	3.50*
Mounting height A				
Area Depth B	0.14	0.16	0.20	0.23
Area Depth C	0.42	0.48	0.58	0.67
Area Depth D	0.82	0.93	1.10	1.30
Area Depth E	1.35	1.54	1.85	2.16
Area Depth F	1.90	2.17	2.60	3.03
Area Width G	1.33	1.51	1.81	2.11
Area Width H	2.05	2.32	2.79	3.26
Area Width I	2.78	3.15	3.79	4.42

The actual detection area may differ according to the size/material/entry speed of the object and the installation environment.

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