

IP55

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1. USE

This is a passive infrared (PIR) device adapted to detecting presence and measuring the level of natural light. It can be installed directly on a wall, flush-mounted in a wiring accessory box and installed in internal or external corners with fixing accessory Cat. No. 048971. It is suitable for indoor or outdoor passageways such as atriums, corridors, car parks, cellars, etc.

Main possible functions:

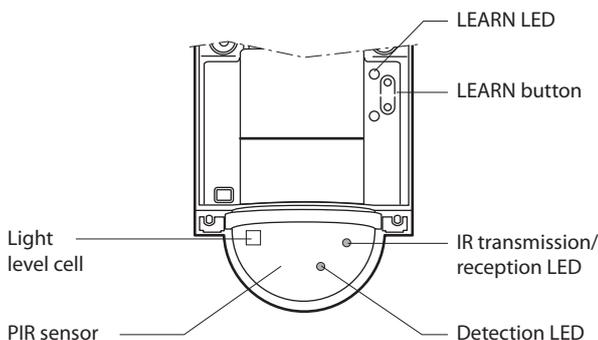
- Switching/Dimming: in automatic mode, or manual mode in association with a control unit
- Configuring the operating mode: Auto ON/OFF, Manual ON/Auto OFF, Walk-through
- Defining a light level threshold to be maintained
- Triggering scenarios according to presence/absence

The mode and settings are configured using configurators, with MHSuite and mobile configurators Cat. Nos. 088230 or 088235.

2. TECHNICAL CHARACTERISTICS

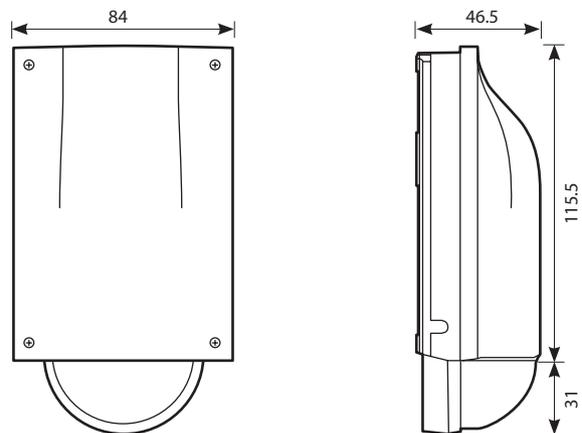
- Voltage: 27 V_{DC}
- No-load power consumption: 20 mA max.
- Connection between the sensor and controller: BUS/SCS cable
- Flush-mounting diameter: 65 mm without a flush-mounting box, 68 mm with a flush-mounting box
- Weight: 180 g
- Impact resistance: IK04
- Penetration by solid and liquid matter: IP55
- Operating temperature: -5°C to +45°C
- Storage temperature: -20°C to +70°C

Cover removed

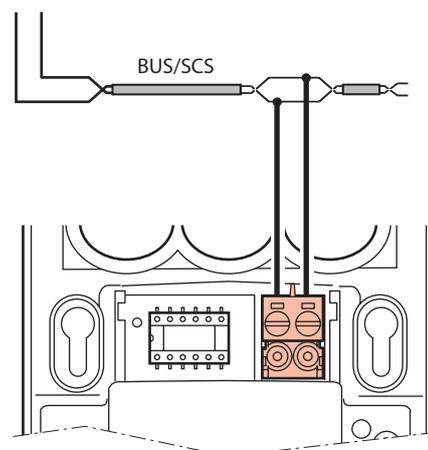


3. DIMENSIONS

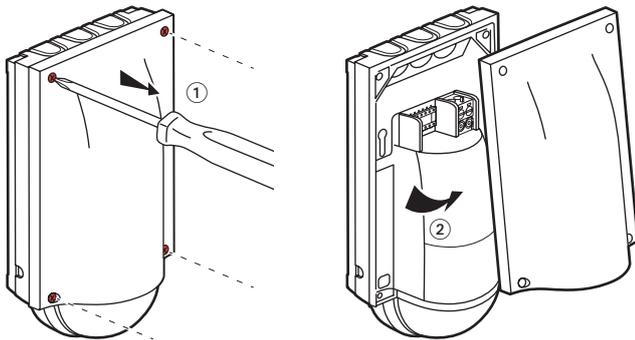
With protective cover



4. CONNECTION

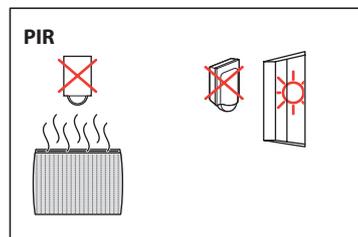
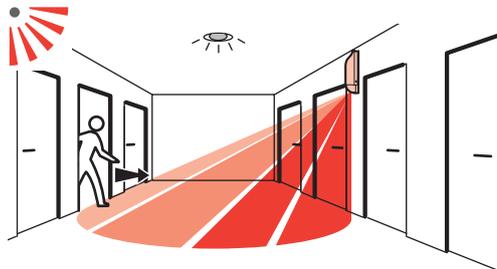


5. REMOVAL

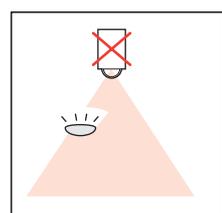
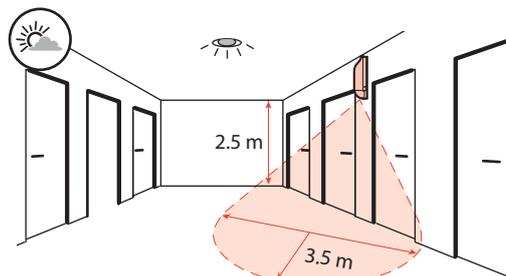


6. INSTALLATION

■ **6.1 Sensor positioning**

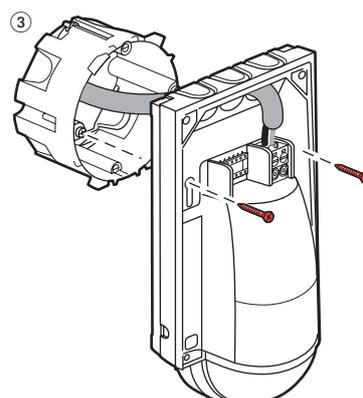
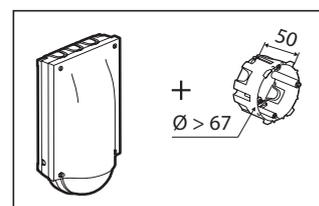
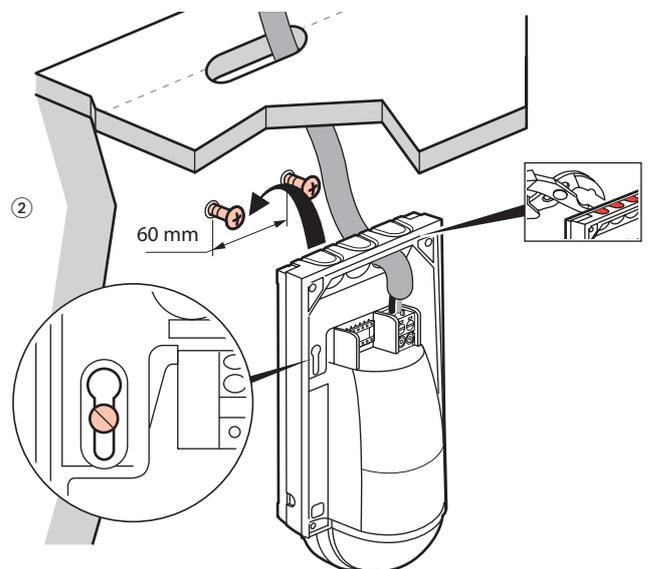
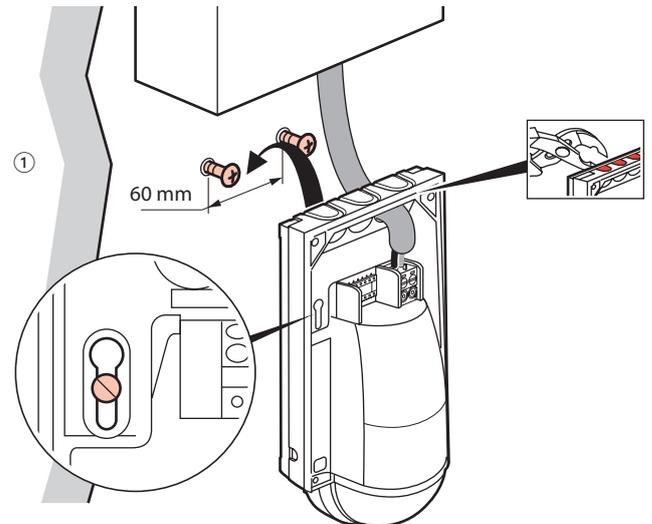


■ **6.2 Recommended light exposure**



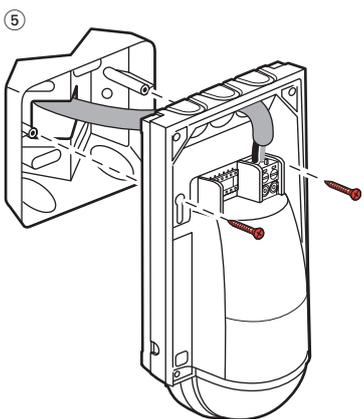
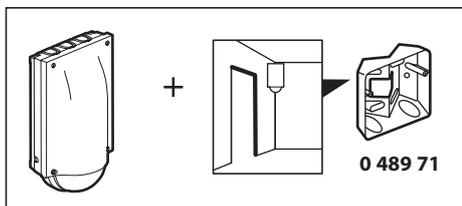
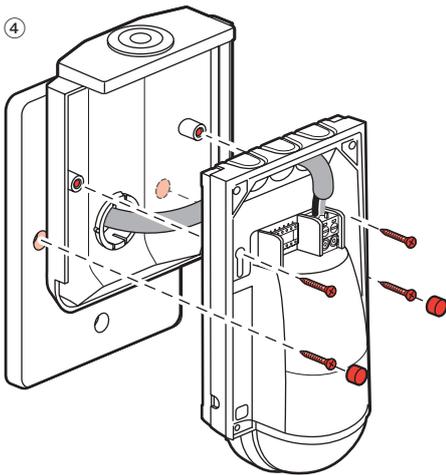
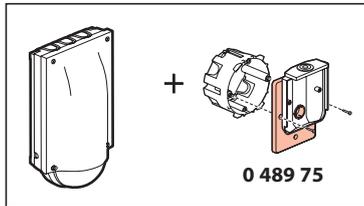
6. INSTALLATION (continued)

■ **6.3 Positioning**



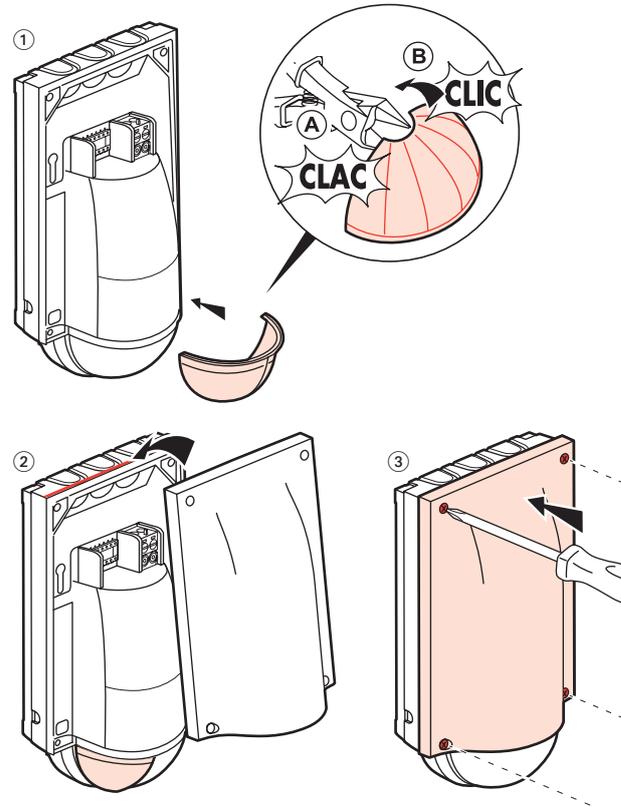
6. INSTALLATION (continued)

■ 6.3 Positioning (continued)



6. INSTALLATION (continued)

■ 6.4 Choice of detection zone



7. SETTINGS

■ 7.1 Detection parameters

Sensor parameters		Default value	Modifiable parameters	Configuration tools	
				0 882 30	0 882 35
Time delay		15 min	3,5,10,15,20 min	-	✓
			30 sec - 255 hrs - 59 min - 59 s	✓	-
Sensitivity		PIR (very high)	Low, medium, high, very high	✓	✓
Modes	Auto ON/ Auto OFF	Inactive	Activated/ Deactivated	✓	✓
	Walk-through mode	Active	Activated/ Deactivated	✓	✓
	Manual ON/ Auto OFF	Inactive	Activated/ Deactivated	✓	✓
	Partial ON/ Group OFF	Inactive	Activated/ Deactivated	✓	-
Detection scheme	Initial	PIR	Non-modifiable	✓	-
	Maintain	PIR	Non-modifiable	✓	-
	Restart	PIR	PIR/Deactivate	✓	-
Alarm		Inactive	Activated/ Deactivated	✓	-

- 🕒 **Time delay:** Length of time the load is on after detection occurs
- 🔊 **Sensitivity:** Detection range setting

7. SETTINGS (continued)

7.1 Detection parameters (continued)

Modes:

Auto ON/Auto OFF mode:

The lighting switches on automatically:
- When presence is detected and there is insufficient natural light.
The lighting switches off automatically:
- If no presence is detected at the end of the set time delay.
- Or if there is an adequate level of natural light (regulation function activated).
Any new detection triggers an automatic switch-on if there is insufficient light.

Walk-through mode:

- If no presence is detected in the 20 seconds following an initial detection, the device will cut off the load after 3 minutes.
- If another presence is detected in the 3 minutes following initial detection, the device will cut off the load at the end of the set time delay.

Manual ON/Auto OFF mode:

The lighting is switched on manually and switched off automatically:
- When no presence is detected at the end of the set time delay.
After switch-off, if presence is detected again within a 30-second period, the lighting switches on automatically. The Restart function must be activated.
After 30 seconds the lighting is switched on via a manual control.

Partial ON/Group OFF mode:

Possibility of controlling one or more lighting points individually.
In this mode it is essential that a lighting group is created:
- either by a manual teach phase
- or from the advanced configuration tool Cat. No. 0 882 30 using the "Sensor PnL" function
The sensor switches on the loads that are linked to it via the actuator.
When there is no detection at the end of the time delay, it switches off all loads in the group to which it belongs.

Detection scheme:

Initial detection: The load is switched on as soon as the first detection occurs if the natural light level is below the light level threshold.

Maintain: The load remains active if another presence is detected.

Restart: In manual mode. After switch-off, if presence is detected again within a 30-second period, the lighting switches on automatically.
After 30 seconds the device must be switched on manually.
Possible in Manual ON/Auto OFF mode only.

Alarm: An audible signal is emitted before switch-off. (1 minute before, then 30 seconds, then 10 seconds).

7. SETTINGS (continued)

7.2 Light parameters

Sensor parameters		Default value	Modifiable parameters	Configuration tools	
				0 882 30	0 882 35
Daylight setpoint		500 lux	20, 100, 300, 500, 1000 lux	-	✓
			5 - 1275 lux	✓	-
Advanced mode	Calibration	-	0 - 99995 lux	✓	-
	Light regulation	Inactive	Activated/Deactivated	✓	-
	Provision of light	Auto	Auto - 1275 lux	✓	-
	Loop type	Close loop	Open - Close	✓	-

 **Daylight setpoint:** Value at which the load switches on if the natural light level is less than the setting.

 **Eye function:** Value 0 (eye on configuration tool 0 882 30) is used to save the ambient light level in the room as a light level threshold.

Advanced mode:

 **Calibration:** The ambient light level measured with a luxmeter must then be transmitted to the sensor.

 **Regulation:** Automatic switch-off of the load 10 minutes after the light level threshold is exceeded with an additional safety threshold (to avoid lights switching off at the wrong moment).

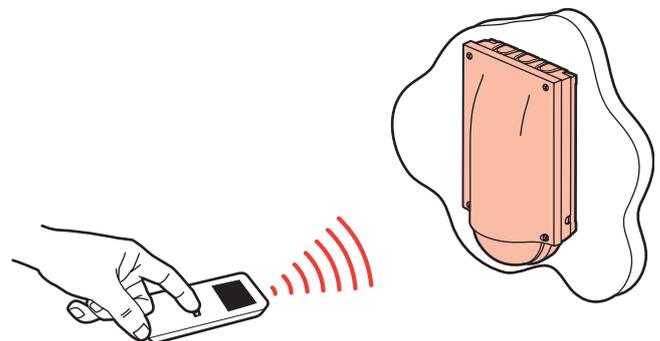
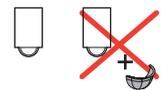
Provision of light: Quantity of additional lux brought in by the load being switched on.
When the light contribution parameter is set to "Auto" (value 0) on the configuration tool Cat. No. 0 882 30, the sensor automatically calculates the light contribution.

Loop type: -Close loop: the sensor reads the value of its own lighting cell for light measurement.
-Open loop: the sensor reads the value of an external lighting cell for light measurement.

7.3 Modifying the parameters using the configuration tools

Caution:

Make sure blanking plate is removed before modifying parameters with a configuration tool.



- 0 882 35: Simplified configuration tool
- 0 882 30: Advanced configuration tool

When the sensor receives an IR command via a configuration tool, it emits a beep confirming that the modification has been taken into account.

For more information about setting parameters, refer to the data sheet for the configuration tool Cat. No. 0 882 30.

- Restore to factory settings:

- 1st press: Short press on LEARN; the LED flashes slowly.
- 2nd press: Hold down LEARN for 10 seconds until the LED flashes quickly.

8. CONFIGURATION

There are two types of configuration:

- the physical configuration
- the virtual configuration

■ 8.1 Physical configuration

SCS BUS sensor Physical Configuration

The physical configuration only authorises point-to-point addressing: only one actuator can be controlled via the sensor.

A: Area (0 – A)

PL: Point light (0 – F)

M: Mode (0 – 4)

S: Sensitivity of the motion sensor (0 – 3)

T: Time delay (0 – 9)

D: Light level threshold or daylight set point (0 – 5)

The A and PL configurators: addressing

The A and PL configurators provide the address of the actuator to be controlled.

NB:

- If the product does not have the A and PL configurators positioned, it is not configured.
- The configuration A=0 and PL=0 does not exist

The M configurator: modes

The M configurator allows the user to choose the product's operating modes:

M configurator	Mode
No configurator	Automatic ON/OFF mode & without setting range & with presence detection
1	Automatic ON/OFF mode & light level measure & without presence detection
2	Supervision mode
3	Automatic ON/OFF mode & setting range & with detection
4	Automatic ON/OFF mode & setting range & without detection

The S configurator: sensor sensitivity

The sensor's sensitivity can be set using the S configurator:

If the sensor is a Dual-Tech then the sensitivity selected is applied to all technologies.

S configurator	Sensor sensitivity
No configurator	Low
1	Medium
2	High
3	Very high

The T configurator: time delay

Time that the load is switched ON:

T configurator	Time delay (in min)
No configurator	15
1	0.5
2	1
3	2
4	5
5	10
6	15
7	20
8	30
9	40

8. CONFIGURATION (continued)

■ 8.1 Physical configuration (continued)

The D configurator: light level threshold

The value of the light level threshold in lux (or set point) is set via the D configurator:

D configurator	Lux
No configurator	Wall surface-mount: 300 Suspended ceiling: 500
1	20
2	100
3	300
4	500
5	1000

■ 8.2 Virtual configuration (MYHOME_Suite software)

Module enabling	Yes - No			
Function type	Stand alone presence sensor Scenarios daylight and presence sensor Scenarios daylight sensor Scenarios presence sensor Stand alone daylight sensor Stand alone daylight and presence sensor			
Addressing type	Point to point	Area	0 - 10	
		Light point	0 - 15	
	Group	Group number	0 - 255	
		Referent area address	0 - 10	
		Referent light point add	0 - 15	1 address of the group
		Enable secondary group	Yes - No	
		Group sensor 1	0 - 255	
		Group sensor 2	0 - 255	
		Enable load control	Enabled - Disabled	
Operating mode	See Chapter 7 SETTINGS (Parameters)			
PIR sensitivity				
US sensitivity				
Initial detection				
Maintain detection				
Retrigger				
Alert				
Loop type				
Daylight setpoint (lux)				
Provision of light (lux)				
Lighting regulation				

Stand alone presence sensor: the sensor send «ON» command to its associated load or group of load according to presence detection.

Stand alone daylight sensor: the sensor send «ON» command to its associated load or group of load according to light parameters.

Stand alone daylight and presence sensor: the sensor send «ON» command to its associated load or group of load according to presence detection and light parameters.

Scenarios presence sensor: the sensor send «CEN» command to the MH202 (scenario programmer) according to presence detection.

Scenarios daylight sensor: the sensor send «CEN» command to the MH202 (scenario programmer) according to light parameters.

8. CONFIGURATION (continued)

■ **8.2 Virtual configuration (MYHOME_Suite software) (continued)**

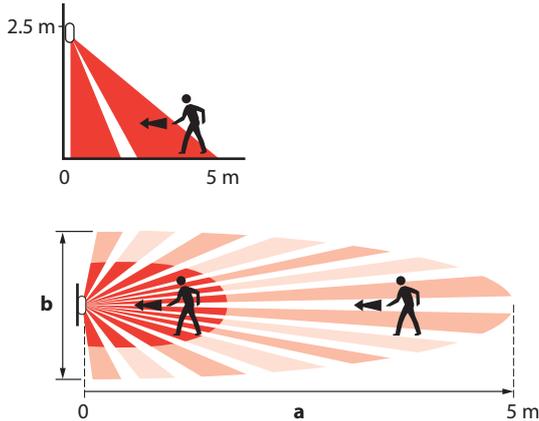
Scenarios daylight and presence sensor: the sensor send «CEN» command to the MH202 (scenario programmer) according to presence detection and light parameters.

Enable secondary group: Activate a group managed by another sensor.

Enable load control: Manage/Don't manage its associated group of loads.

9. PERFORMANCE

■ **9.1 Radial movement**

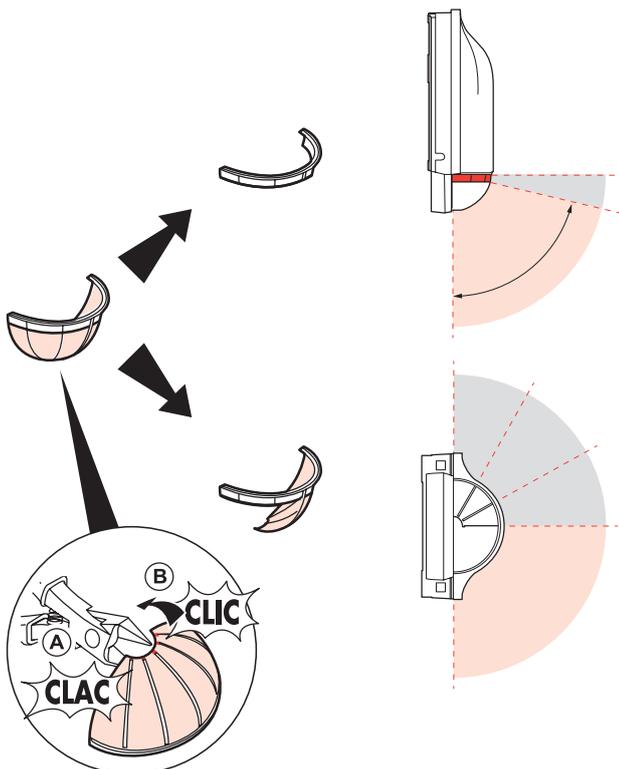


Height 2.5 m

Low Sensitivity (25%)		Medium Sensitivity (50%)		High Sensitivity (75%)		Very high Sensitivity (100%)	
a (m)	b (m)	a (m)	b (m)	a (m)	b (m)	a (m)	b (m)
2	4	3	6	4	6	5	6

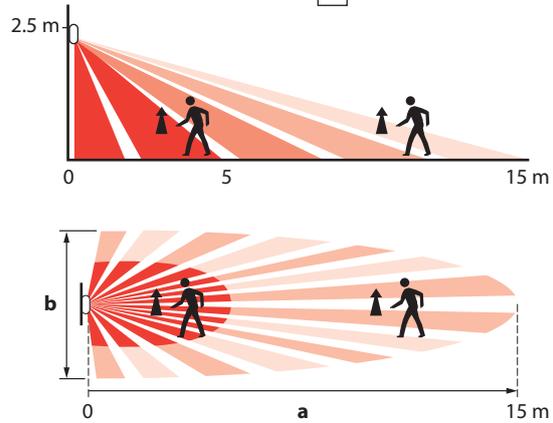
Maximum installation height: 3 m

■ **9.3 Performance with blanking plate**



9. PERFORMANCE (continued)

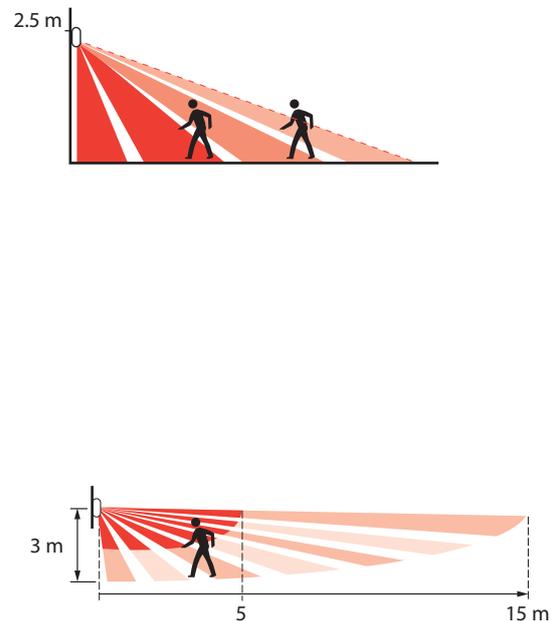
■ **9.2 Tangential movement**



Height 2.5 m

Low Sensitivity (25%)		Medium Sensitivity (50%)		High Sensitivity (75%)		Very high Sensitivity (100%)	
a (m)	b (m)	a (m)	b (m)	a (m)	b (m)	a (m)	b (m)
8	4	10	6	12	6	15	6

Maximum installation height: 3 m



10. CARE

Keep the lens clean.
 Clean the surface with a cloth.
 Do not use: acetone, tar-removing cleaning agents or trichloroethylene.
 Resistant to the following products: - Hexane (En 60669-1)
 - Methylated spirit
 - Soapy water
 - Diluted ammonia
 - Bleach diluted to 10%
 - Window-cleaning products

Caution:

Always test before using other special cleaning products.

11. STANDARDS

Directive: CE
 Installation standards: NFC 15-100
 Product standards: EN 50428
 Environmental standards:
 - European Directive 2002/96/EC:
 WEEE (Waste Electrical and Electronic Equipment).

 - European Directive 2002/95/EC:
 RoHS (Restriction of Hazardous Substances).

 - Regulations: Public buildings
 Workplace buildings
 High-rise buildings

Note:

All technical information is available online at



12. TROUBLESHOOTING

PROBLEMS	CAUSES	SOLUTIONS
The lighting stays on when there is no-one present	Sources of interference such as draughts, vibration or radiators may cause nuisance tripping	1- Reduce the sensitivity level 2- If the interference continues, using the configuration tool, go into the Detection system parameters, select Maintain and then choose PIR 3- If the interference still continues, move the sensor away from sources of interference
The lighting does not switch off during the day when there is an adequate natural light level	Regulation function not active Light level threshold set too high Light contribution is too high	Activate the regulation function Reduce the light level threshold Check that the sensor is positioned correctly in relation to the window Decrease the power of the luminaires
The lighting switches off when there are people present and the natural light level is not adequate (darkness)	Time delay too short Detection sensitivity too low Light level threshold too low	Increase the time delay 10 to 1 minutes is advised for work areas (10 minutes is recommended) Increase the sensitivity Move the sensor closer to the work area Increase the threshold