ARGUS Presence

ARGUS Presence (art. no. 550590)
ARGUS Presence with IR receiver and for extension unit operation (art. no. 550591)
INSTABUS ARGUS Presence (art. no. 630590)
INSTABUS ARGUS Presence with IR receiver, (art. no. 6305 91)
INSTABUS ARGUS Presence with constant lighting control (art. no. 630592)

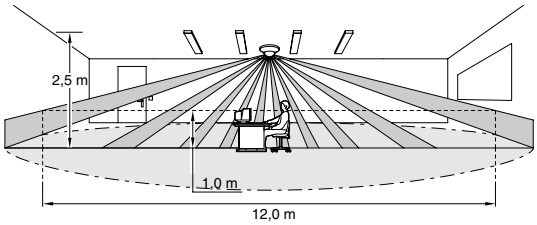
Installed on the ceiling of a room, the ARGUS Presence registers the presence of persons within a radius of approx. 7 m while simultaneously measuring the intensity of the natural light. If brightness has fallen below a preselected value (10 - 1000 lux), the smallest movements in the room are sufficient to switch on the lighting via channel 1 (presence channel). However, if the brightness of the surroundings is adequate or if the ARGUS does not detect anyone in the room, the lights are switched back off again to save energy.
Example: A room has a daylight value of 200 lux. The ARGUS Presence is set to a brightness value of 500 lux. If movement is detected and the artificial light is switched on with 400 lux, the room now has 600 lux. Normally, it would switch the light back off again. Because however the ARGUS Presence “thinks”, the artificial light remains switched on. If daylight brightness increases by another 300 lux (900 lux are registered in the room), the device switches off the 400 lux artificial light.
The device can be used, for example, in offices, schools, public buildings or at home. The area of detection is divided into 6 planes with 136 zones and 544 switching segments.
The ARGUS Presence (art. no. 550599 and art. no. 550591) has a second relay channel. It controls all connected systems efficiently and independent of brightness, such as heating or ventilation. Example: Someone enters the office and the light is switched on automatically, as well as the heating/ventilation. If there is sufficient external brightness, the presence channel switches the light off, but the heating/ventilation remains switched on.

INSTABUS EIB devices have up to two channels, depending on the application.

Movement and presence detection in combination with alarm systems: see Chapter “Movement detectors - Functional principle”

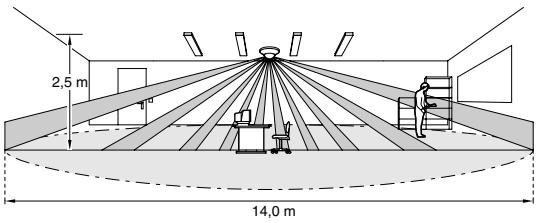
Area of detection/Mounting heights

Indoor area of detection:



The smaller the distance between the person to be registered and the ARGUS Presence, the better the smallest of movements are detected.

Outdoor area of detection:



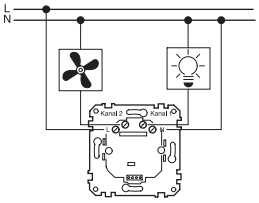
When a person is walking, this means there is a larger area of detection. The reference level for detection is the ground.

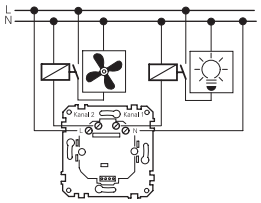
Mounting heights:
Increased mounting height results in reduced sensitivity. Depending on requirements, high sensitivity may not be required (e.g. storerooms, gymnasiums...).

Mounting height	Seated person	Walking person
2.0 m	10 m	11 m
2.5 m	12 m	14 m
3.0 m	14.5 m	17 m

Connection example for the ARGUS Presence

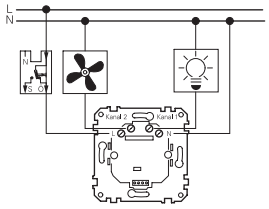
If the device’s switching capacity is insufficient, a relay or contactor must be connected in series.





Starting behaviour of the ARGUS Presence (art. no. 550590):
When the mains voltage is connected, the device checks its function within a minute and switches both channels on for the initialisation period (if there is sufficient ambient brightness, channel 1 is switched off after approx. 20 s). Then the ARGUS is ready for operation.

Starting behaviour: ARGUS Presence with IR receiver, art. no. 550591:
When connected to mains voltage or if the power supply is interrupted briefly (> 1 s, e.g. when switched with a push-button as break contact), the outputs are switched on immediately. Within the first minute, the device checks all of its set functions. Then, the set overshoot time for channel 1 is started and the brightness threshold value reduced, so that the ARGUS is not immediately switched back off again. When the overshoot time is over, channel 1 switches off its output. Now the device records brightness and reacts again to movement.



ARGUS Presence with IR receiver and for extension unit operation (art. no. 550591)

IR receiver
The ARGUS Presence reacts automatically to button no. 10 on the IR remote control Distance (art. no. 570222, 570722). You only need button no. 10 to activate the ARGUS Presence IR functions. No learning procedure is necessary. Channel 1 switches between three functions, when button 10 is used.

Permanent ON	(red LED lights up)
Permanent OFF	(red LED flashes slowly)
Automatic	(red LED is off)

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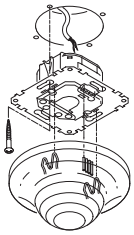
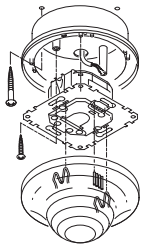
Installation of the ARGUS Presence

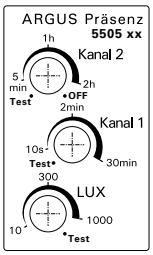
The switch insert is attached to a size 60 installation box with the claws or two screws. For surface mounting, the insert is mounted in the surface-mounted housing available as an accessory (art. no. 550619).

Flush-mounted installation:



Surface-mounted installation:



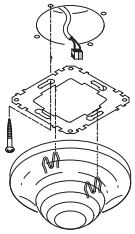


Operating elements:
The operating units for both overshoot times and the brightness threshold are at the back of the sensor head.
The overshoot time for channel 1 is 1 s in the test position and the brightness-dependence is switched off. The overshoot time for channel 2 is 3 s in test position.

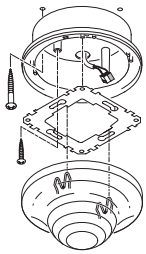
Installation of the INSTABUS ARGUS Presence

For flush-mounted installation, the retaining ring supplied is attached to a size 60 installation box with two screws. For surface mounting, the retaining ring is mounted in the surface-mounted housing available as an accessory (art. no. 550619).

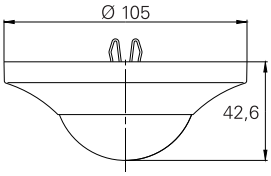
Flush-mounted installation:



Surface-mounted installation:



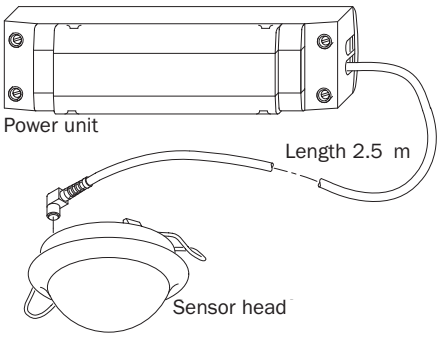
Dimensions



ARGUS Presence system

ARGUS Presence system (art. no. 550499)
ARGUS Presence system sensor (art. no. 550419)

ARGUS Presence system (art. no. 550499)

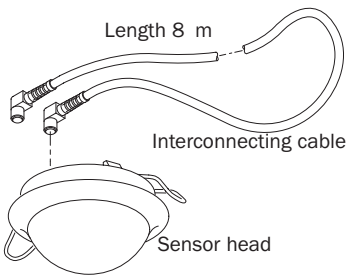


The system consists of the sensor head and a power unit with a permanently attached interconnecting cable (length 2.5 m) plugged into the sensor head. The sensor head has two sockets to enable through-wiring. In such a way, a maximum of 8 sensor heads (art. no. 550419) can be connected to one power unit (master-slave principle). Installing several sensor heads makes it possible to seamlessly monitor long corridors and large rooms for example. Make sure that the sensors' beam paths overlap, so that there are no gaps in the area to be monitored

The sensor head that registered the last movement determines the overshoot time. Can also be controlled via an extension input. The sensor heads are installed in 68 mm ceiling openings (box drill) with retaining springs.

Installed on the ceiling of a room, every sensor head registers the presence of persons within its area of detection while simultaneously measuring the intensity of natural light. If the brightness threshold set in the sensor head (10 - 1000 lux) is not reached, the smallest movements in the room will be sufficient to automatically activate the lighting's power unit via channel 1 (presence channel). The switch function of the presence channel at the power unit is passed on to all sensor heads linked via the interconnecting cable. Each sensor head can thereby determine its own share of artificial light. If there is sufficient ambient brightness, the light is switched off via the power unit to save energy, even if movement is detected.
The power unit has a second relay channel with a floating contact. Channel 2 only reacts with increased protection against false alarms to movement, independent of ambient brightness. With this output, the ARGUS Presence system can be used to control the heating, air conditioning, ventilation or for room monitoring purposes.

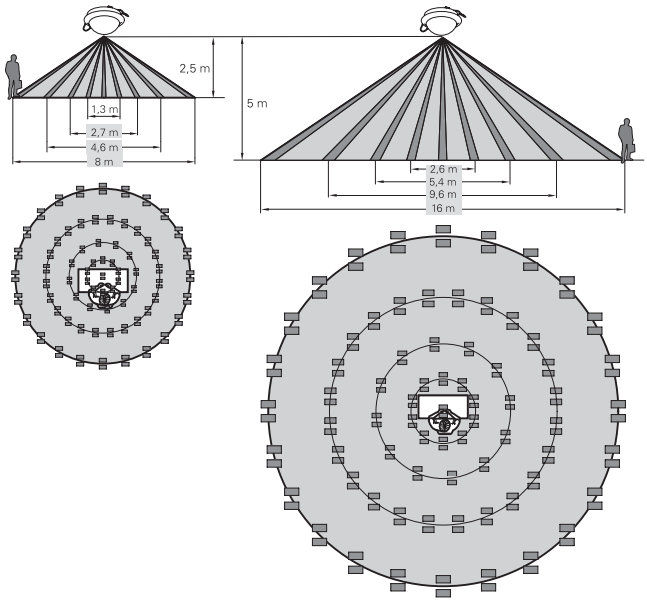
ARGUS Presence system sensor (art. no. 550419)



The sensor head with pre-assembled interconnecting cable is used for extending the ARGUS Presence system (art. no. 550499). Each sensor head has two sockets allowing through-wiring to other sensor heads. The 8 m long interconnecting cable has angled connectors at both ends. The sensor head is mounted in a 68 mm ceiling cutout with retaining springs.

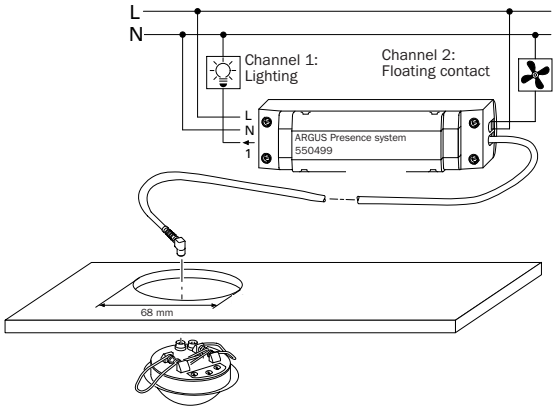
Area of detection

The mounting height has a direct influence on the range and sensitivity of the movement detector. The optimum mounting height is 2.50 m. The minimum mounting height is 1.7 m.

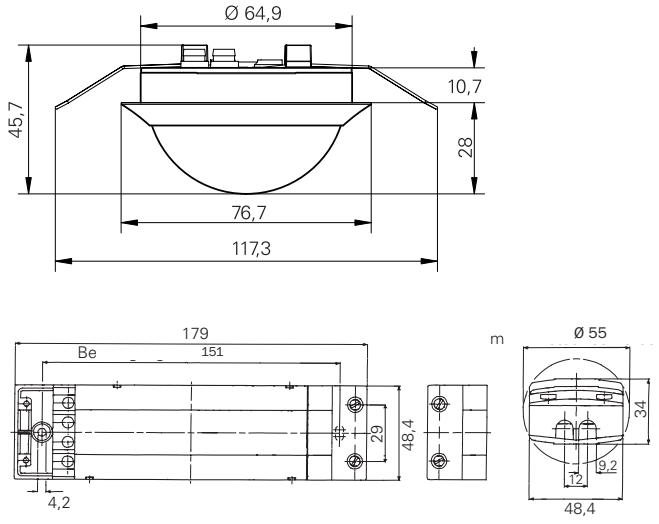


Installation of the ARGUS Presence system

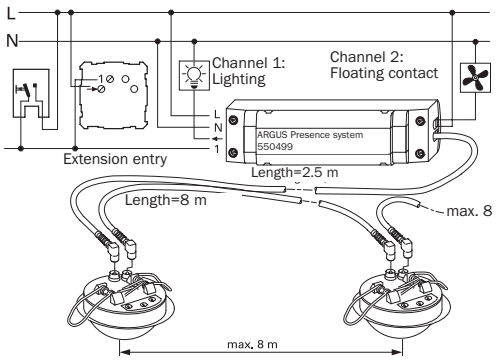
The sensor head is mounted in a 68 mm ceiling cutout (box drill) with retaining springs.



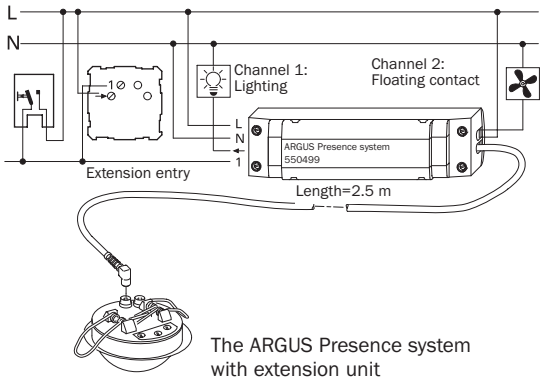
Dimensions



Connection examples



ARGUS Presence system and an ARGUS Presence system sensor



The ARGUS Presence system with extension unit

If ARGUS Presence system is to be operated at several operating units and/or with a Distance IR remote control, then the extension input of the power unit is used. To operate, any number of conventional push-buttons (make contact, art. no. 315000), maximum 10 extension inserts (art. no. 573999) or maximum 10 extension TELE inserts (art. no. 573998, with Distance IR remote control) can be used, in combination as well, if required. The operating units and the power unit must be connected in phase. The maximum length of the control cable at the extension input must not exceed 20 m.

Switching on the system via extension input:

If the extension unit is used, channel 1 is put into operation. If the system is switched on using the extension input, the lighting is switched on for the longest period set at the sensor heads and retriggered by movement, when brightness measured at the sensor head has fallen below the threshold value.

Switching off the system via extension input:

If the presence channel is switched on (channel 1 contact is closed), the relay is switched off, when the extension unit is used. The time for switching the system off is determined by the longest time set at the sensor heads and retriggered by movement, when the brightness measured at the sensor head has fallen below the threshold value. If no movement is detected within 8 minutes after the switching off time has elapsed, automatic mode is re-activated.

The status when the extension unit push-button is being used always depends on the position of the relay:

1) Light off => extension unit activated => light on

- Movement => extends ON mode (only when dark)
- After longest sensor period => light off
- Dark => movement => light on
- Light => movement => light remains off

2) Light on => extension unit activated => light off

- OFF mode => light remains off for longest sensor period
- Movement => extends OFF mode (only when dark)
- No movement => after 8 min. => automatic mode
- Automatic mode:
  dark => movement => light on
  light => movement => light remains off

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