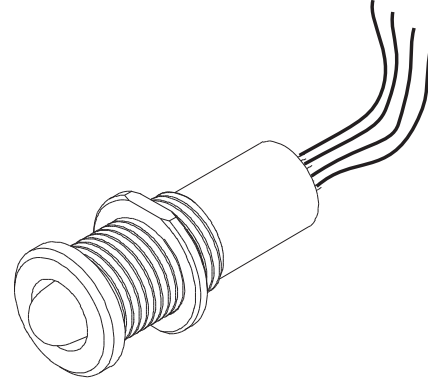


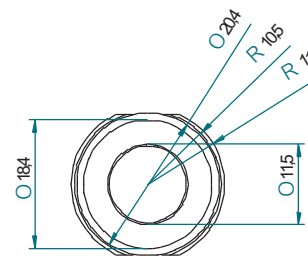
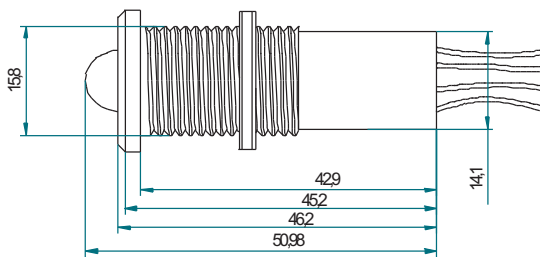
## DESCRIPTION

SM.001 is a volumetric motion sensor, provided with a pyrometric sensor equipped with a miniature optical lens which amplifies the vision of motion. It has been specially designed to be combined with electrical mechanisms. This feature makes possible the aesthetic integration of the sensor with the design line of the rest of the mechanisms located in the room. The objective is to fit the motion sensor SM.001 discreetly in with any family of common market mechanisms, especially blind covers.

Technically, the power supply voltage required by the SM.001 presence sensor varies between 9 and 16Vcc.



## DIMENSIONS



## TECHNICAL FEATURES

Power supply voltage	10-19V
Consumption	<1mA
Temperature range	from 0 to 50°C
Output	relay FotoMos NC

+ Power supply voltage 10-18V

Output

GND

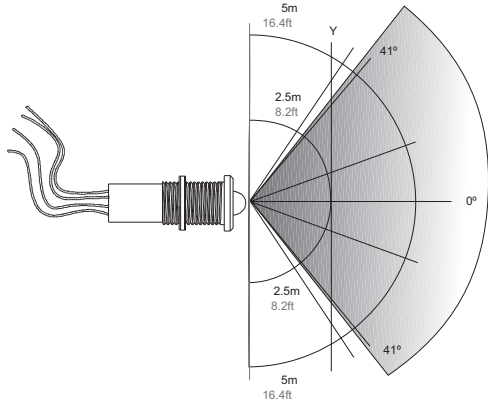
CONNEXION WIRES

BODY

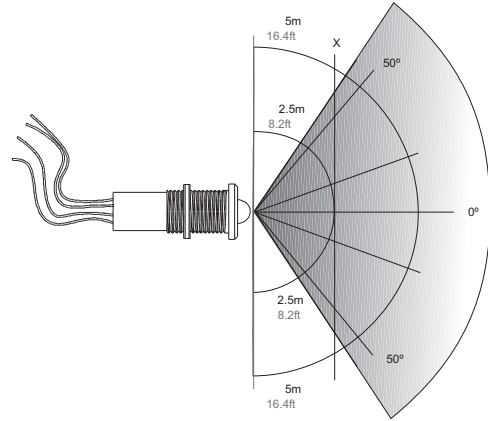
LOCKING NUTS

SENSOR

### MOTION SENSOR DETECTION



Vertical viewing area

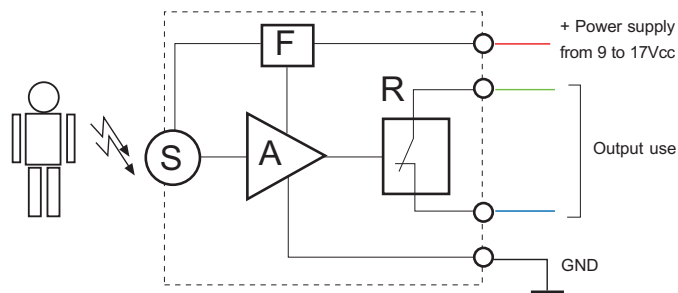


Horizontal viewing area

### OPERATION MODE

One of the great advantages of the SM.001 sensor is, is without any doubt, its integration with the design line of the rest of mechanisms located in the room. The sensor comes into operation when it detects the movement of a heat source, for instance the temperature of a human body.

In view of its small size, the secret of this sensor lies in its lens equipped with 64 detection zones, distributed in vertical and horizontal opening angles of 82° and 100° respectively with a range of 5 meters. These features are more than enough to enable the system to offer for example the provision of a simple and effective intrusion detection. The characteristics of the range of the sensor are represented in the images above.



- S Pyrometric sensor
- A Signal amplifier
- F Power supply regulator
- R Relay FotoMos normally closed 12 ohms

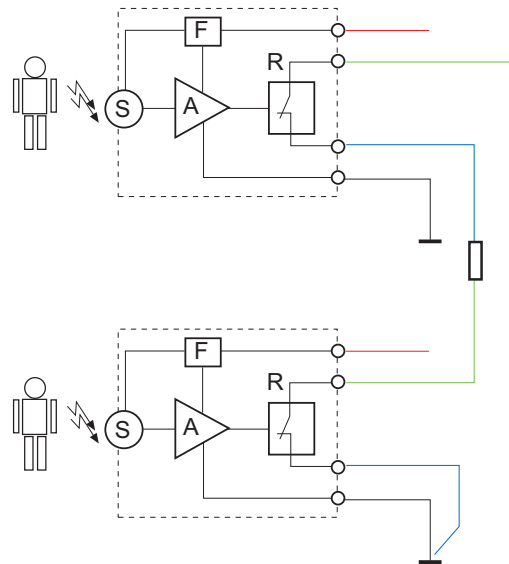
Concept schema

### CONNECTION IDEAS

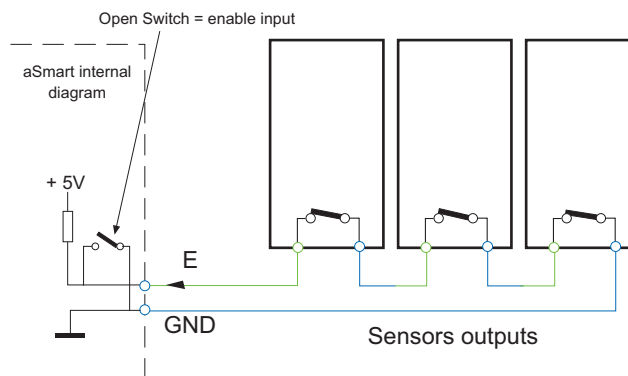
The sensor connection will be made using its colored wires. The red wire will be connected to the positive terminal of the power supply voltage coming from the home automation system or any other external source. The black wire will be connected to the negative terminal of this power supply voltage.

The green and blue wire are the terminal of a solid state relay, which is normally closed in the relaxed state. When it detects any type of presence between these two wires there is high resistance of megohms. In the relaxed state the resistance between these terminal is less than 12 ohms.

More than one sensor can be connected setting the contacts in series creating a closed loop with GND. So that, when a sensor circuit opens the closed loop opens too causing level changes. You should take into account that the low resistance in the relaxed state is also included in the closed loop. We recommend to read the operational specifications of the input where this closed loop is connected.



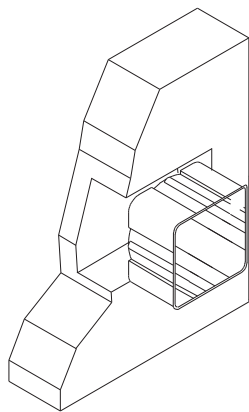
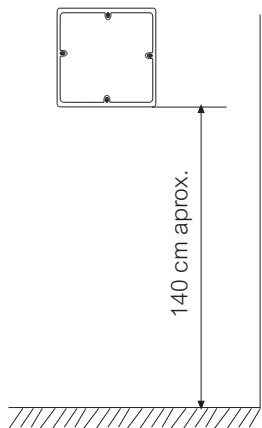
In the image are shown some installation ideas when there are more than one motion sensor to be wired up. Power supply should be driven from aSmart to each of the sensors. aSmart is able to manage several sensors from one single input. On this purpose it will be necessary the serialization of the normally closed potential-free contacts outputs, available in sensors, so that one of the ending terminals will be connected to the the GND negative and the other ending terminals will be connected to the aSmart E corresponding enabled input.



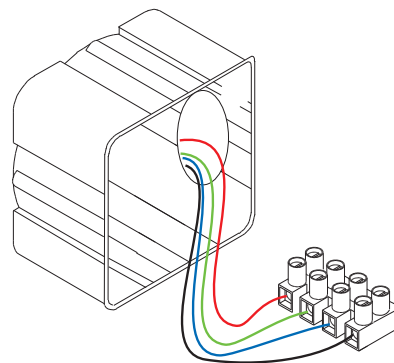
Concept schema

### INSTALLATION

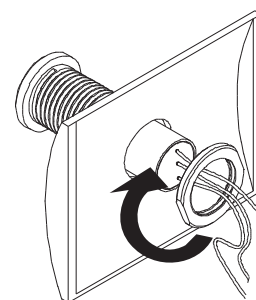
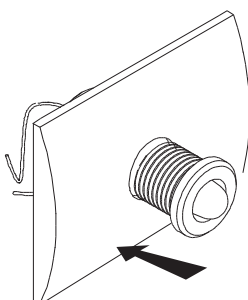
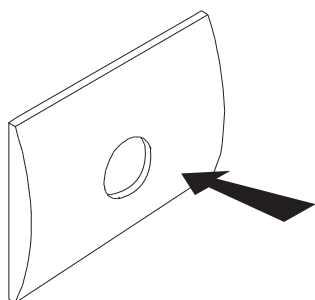
- 1 Hold the universal box for the mechanisms on the wall.



- 2 Introduce a round 4-conductor cable of 0,25 mm. from aSmart to the universal box for mechanisms where you will locate the motion sensor.



- 3 Prepare the mechanism drilling the blind cover using a 16 mm electric drill. Then place the sensor within the box and screw it into the box.



- 4 Connect cables and bending cables correctly assemble cover to the rest of the mechanism.

