



F&F Filipowski sp. j.
Konstantynowska 79/81 95-200 Pabianice
phone/fax: (+48 42) 215 23 83 / 227 09 71 POLAND
http://www.fif.com.pl e-mail: biuro@fif.com.pl

MOTION SENSOR (PIR)
with presence sensor function

DR-09

WARRANTY. The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase. Contact your dealer or directly with us. More information how to make a complaint can be found on the website: www.fif.com.pl/reklamacje



Do not dispose of this device in the trash along with other waste! According to the Law on Waste, electro coming from households free of charge and can give any amount to up to that end point of collection, as well as to store the occasion of the purchase of new equipment (in accordance with the principle of old-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature, pose a threat to the environment and human health.

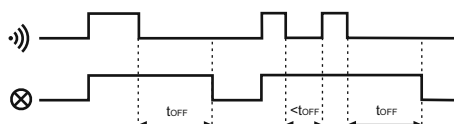
Purpose

The motion sensor is designed for automatic, scheduled lighting activation if a person or other object appears in places such as corridors, courtyards, approaches and driveways, garages, etc. Suitable for use in narrow corridors.



- 1 -

Diagram



Note!

The minimum sensor distance from the light source is 60 cm. If the motion sensor is installed too close to the light source it switches, the system may activate, i.e. the sensor will spontaneously turn the light source on and off. It is necessary to move the sensor to an appropriate distance away from the light source it activates.

Settings

Switch-on time



The time of the receiver switch-on can be adjusted within the range of 10 sec to 30 min. Turning the control knob right [+] increases the switching-on time, turning left [-] reduces the switching-on time.

The sensitivity of twilight sensor



The sensitivity of twilight sensor can be adjusted within the range of 3Lx do 2000Lx. Turning the control knob in the direction of the value "moon" - will switch the light later, turning in the direction "sun" - will switch earlier. For the sensor to be active throughout the day, the control knob should be maximally turned in the direction of "sun".

- 3 -

Functioning

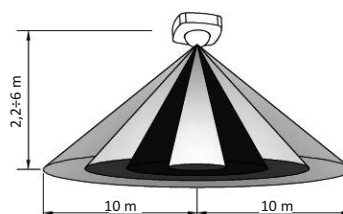
The sensor detects the infrared radiation sources. It analyzes the parameters such as the size of the object, the amount of heat emitted and the speed of movement between sectors of detection. The sensor detects axis movement and own radius. Movement in the detection area will automatically switch on the lighting. From this moment the light will stay on, as long as the sensor detects continuous movement. Only the lack of movement in the detection area triggers the lighting support time. Another movement in the detection area and its subsequent disappearance during the measured time resets the support time to the beginning. **The specific of operation allows to use the DR-09 as a presence sensor. Detection area parameters: for presence up to 6 m diameter, and for motion range up to 20 m diameter.** The motion sensor is equipped with a twilight sensor to prevent switching the lighting on during the day. Detection status and standby to switch on the lighting are activated only after dark. The activation time of the sensor can be. In addition, user can adjust the switching time of the receiver within a range of 10 sec to 30 min.

Changes in temperature can affect the motion detection.

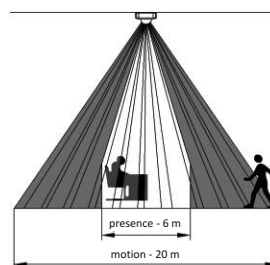
The motion sensor can work indoors and outdoors in places not directly exposed to rain or snow and where there is no risk of splashing the sensor casing and its electrical terminals with water or other liquid.

- 2 -

Detection area



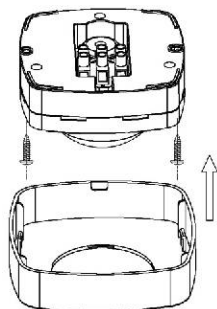
Motion direction in detection area



- 4 -

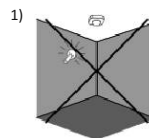
Assembly

1. Remove the outer cover of the sensor - squeeze the cover on both sides and gently remove from the inner body.
2. Disconnect the power supply.
3. Connect according to the diagram.
4. Place the body and tighten the 2 mounting screws.
6. Set the sensitivity of the twilight sensor and time of switching.
7. Assemble the outer casing of the sensor.
8. Connect the power supply.

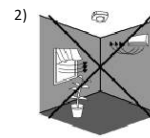


- 5 -

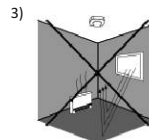
Note!



Do not mount
near light sources
(distance min. 60 cm)



Do not mount
near the moving objects

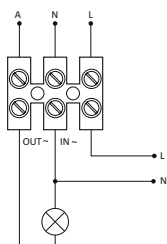


Do not mount
near other sources of heat

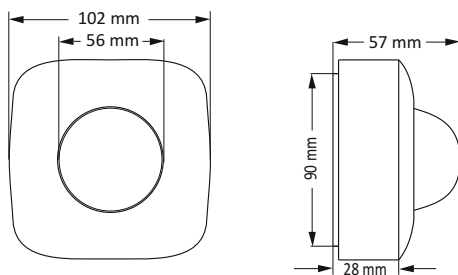
- 6 -

Wiring diagram

A - red, N - blue, L - brown



Dimensions



- 7 -

Technical data

power supply	230V AC
current load	<10A
twilight activation threshold	3÷2000Lx
motion detection	0.6÷1.5m/s
switch-off time	10sec±3sec ÷ 30min±2min
vertical detection area	360°
detection diameter max (for h=2,0÷2,6m; T<24°C)	20m
sensor mounting height	h=2.2÷6.0m
power consumption	0.5W
terminal	1.5mm ² screw terminals
working temperature	-20÷40°C
dimensions	102×102mm, h=55mm
mounting	two screws to the ground
protection level	IP20

Table of power

incandescent	halogen	fluorescent	energy-saving	LED
2000W	2000W	300W	300W	300W

The above data are indicative and will heavily depend on the design of a specific receiver (that is especially important for LED bulbs, energy-saving lamps, electronic transformers and pulse power supply units), switching frequency and operating conditions.

D161014

- 8 -