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DR-05B 24 V
Motion sensor (PIR),
black



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 used for automatic and temporary switching on of lighting if a person or other object appears in places such as hallways, courtyards, driveways, garages, etc.

Functioning

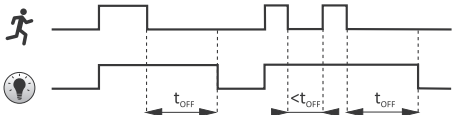
The sensor detects the infrared radiation sources. It analyzes the parameters such as the size of the object, the amount of heat emitted and the speed of movement between sectors of detection. Movement in the detection area will automatically switch on the lighting. From this moment the light will stay on, as long as the sensor detects continuous movement. Only if there is no movement in the detection area triggers the lighting support time. Another movement in the detection area and its subsequent disappearance in the course of time measurement starts the support time from the beginning. **The specific of operation allows using the DR-05 as a presence sensor.** The motion sensor is equipped with a twilight sensor to prevent switching on the lighting during the day. The brightness sensor activation

level can be adjusted by the user. In addition, user can adjust the area of detection within a range of 5÷12 m (for h= 2.5 m) and the switching time of the receiver within a range of 10 s÷7 min.



Changes in temperature can affect the motion detection.

Diagram



Settings

The detection area (range)



The radius of sensor detection can be adjusted within the range of 5 m to 12 m (parameters specified for the sensor mounted at a height of 1,8÷2,5 m).

Turning the control knob right [+] increases the area of the detection, turning left [-] reduces the area of the detector.

Switch-on time



The time of the receiver switching on can be adjusted within the range of 10 s to 12 min. Turning the control knob right [+] increases the switching on time, turning left [-] reduces the switching on time.

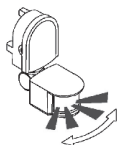
The sensitivity of the twilight sensor



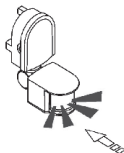
The sensitivity of the twilight sensor can be adjusted within the range of 3 lx to 2000 lx. Turning the control knob in the direction of the "moon" icon will switch the light later, turning it in the direction of the "sun" – will switch the light earlier.

For the sensor to be active throughout the whole day, the control knob should be maximally turned in the direction of the "sun".

Detection area



Good sensitivity



Poor sensitivity

Mounting

1. Disconnect the power supply.
2. Open the junction box cover.
3. Pull the connection wires through the rubber grommets on the back of the sensor junction box.
4. Connect the wires according to the wiring diagram.
5. Mount the sensor on the wall with two screws.
6. Position the sensor head on the desired detection area.
7. Set the sensitivity of the motion sensor and the activation time.
8. Switch on the sensor power supply.



If the motion sensor is installed too close to the switched light source, the system may be activated, which means that the sensor will automatically switch on and off the light source. It is necessary to move the sensor to an appropriate distance away from the light source.



The sensor is inactive for the first 30 seconds after the power supply is switched on. During this time, the PIR system warms up.



The motion sensor can work indoors and outdoors in places where it is not exposed to direct rain or snowfall and to the possibility of splashing the sensor housing and its electrical connection points with water or other liquid.



Avoid locations with large objects in the detection area such as trees that can be moved by the wind.

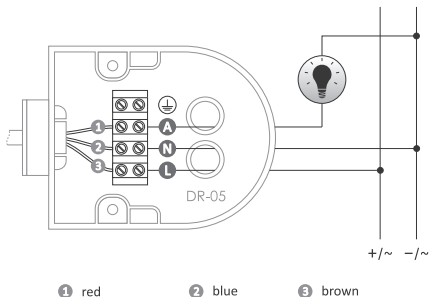


Do not install the sensor in close proximity to heating, air conditioning, and lighting equipment.

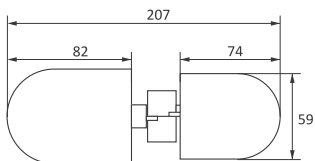


The sensor head can move in 2 planes, allowing for precise adjustment of the detection field depending on the individual requirements of the user.

Wiring diagram



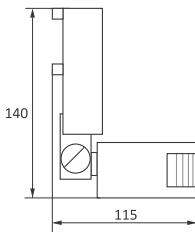
Dimensions



view from above



head spread
horizontally



head spread
vertically

Technical data

power supply	24 V AC/DC
maximum load current (AC-1)	5 A*
twilight activation threshold	3÷2000 lx
motion detection	0,6÷1,5 m/s
switch-on time	10 s ÷ 7 min.
horizontal detection area	0÷180°
vertical detection area	0÷90°
maximum detection radius (T<24°C)	5÷12 m
head rotation range (horizontal)	180°
head rotation range (vertical)	90°
sensor mounting height	1.8÷2.5 m
power consumption	
standby	0.15 W
on	0.5 W
terminal	1.5 mm ² screw terminals
tightening torque	0.3 Nm
working temperature	-20÷40°C
dimensions	
head spread horizontally	70×205×45 mm
head spread vertically	70×140×110 mm
mounting	surface
ingress protection	IP44

* Load of a resistive nature [AC-1].

For loads of a different nature (e.g. LED lighting), the maximum load current may be significantly lower.

More information:

www.fif.com.pl/en/content/24-wskazowki



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.

CE declaration

F&F Filipowski L.P. declares that the device is in conformity with the essential requirements of The Low Voltage Directive (LVD) 2014/35/EU and the Electromagnetic Compatibility (EMC) Directive 2014/30/UE.

The CE Declaration of Conformity, along with the references to the standards in relation to which conformity is declared, can be found at www.fif.com.pl on the product page.