

# BEGA 24570 Wall Luminaire with PIR Motion and Light Sensor Instruction Manual

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# BEGA

**BEGA 24570 Wall Luminaire with PIR Motion and Light Sensor**

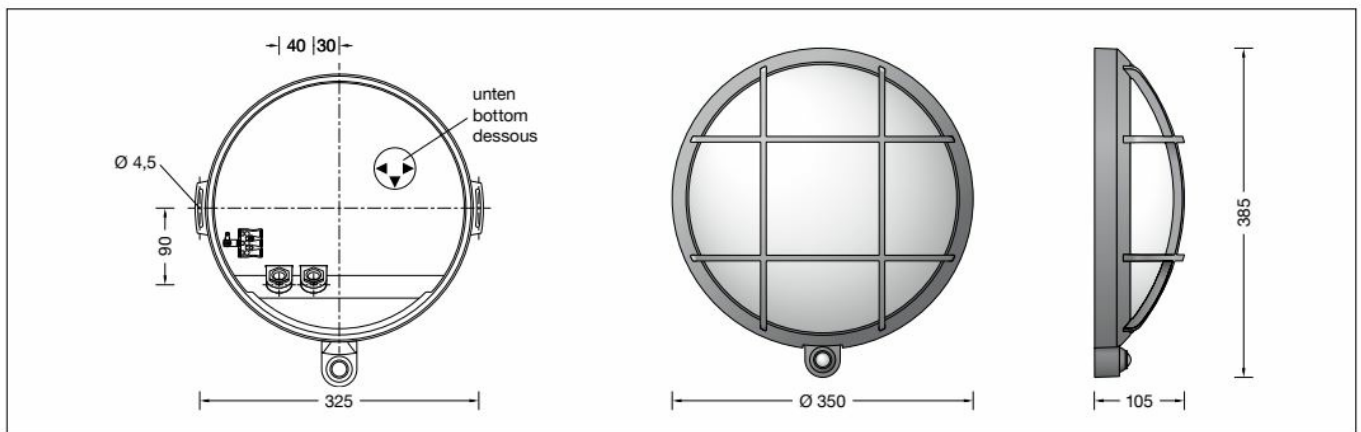


## DIMENSION

Projekt · Project · Projet

Standort · Location · Lieu

QR-Code  
QR Code  
Code QR



## Instructions for use

### Application

Unshielded wall luminaire with crystal glass. The integrated passive infrared motion and light sensor responds to heat emission in the dark and therefore activates in case of human or animal movement in the vicinity of the luminaire. Configuration is done via Bluetooth and the free BEGA Tool app.

### Lamp

- Module connected wattage 23.9 W
- Luminaire connected wattage 27.5 W
- Rated temperature  $t_a = 25\text{ °C}$
- Ambient temperature  $t_a \text{ max} = 40\text{ °C}$

**24 570 K3**

- Module designation LED-0993/830
- Colour temperature 3000 K
- Colour rendering index CRI > 80
- Module luminous flux 3975 lm
- Luminaire luminous flux 2131 lm
- Luminaire luminous efficiency 77,5 lm / W

## **24 570 K4**

- Module designation LED-0993/840
- Colour temperature 4000 K
- Colour rendering index CRI > 80
- Module luminous flux 4180 lm
- Luminaire luminous flux 2241 lm
- Luminaire luminous efficiency 81,5 lm / W

### **Safety**

The installation and operation of this luminaire are subject to national safety regulations. Installation and commissioning may only be carried out by a qualified electrician. The manufacturer accepts no liability for damage caused by improper use or installation. If subsequent modifications are made to the luminaire, the person responsible for these modifications shall be considered the manufacturer.

### **Product description**

Luminaire made of aluminium alloy, aluminium and stainless steel BEGA Unidure® coating technology Crystal glass, white inside 2 mounting holes ø 4.5 mm Distance apart 325 mm 2 screw cable glands with strain relief for through-wiring power connecting cable ø 7–12 mm 1 screw cable gland closed at the factory with a dummy plug Connection terminal 0,5 – 2,5@ Earth conductor connection Passive infrared motion sensor (PIR) Range up to 10 m Horizontal opening angle 110° Vertical opening angle 93° Minimum temperature difference between moving object and environment 4 °C Object speed ideally 1 m/s Adjustable sensitivity of the motion sensor(inertia) Shut-down delay adjustable between 5 s and 240 min Light sensor: adjustable value range from darkness to approaching dusk (approx. 150 lx) Fixed pre-set time hysteresis for suppression of undesired switching operations in luminaires during rapid brightness fluctuations Luminaire dimmable (0 to 100 %) Adjustable basic brightness Luminaire can be switched on and off with a non-adjustable soft start function (1 s) or directly to the set brightness value Transmission frequency range: 2400-2483.5 MHz Maximum transmission output: 10 mW LED power supply unit 220-240 V y 50-60 Hz BEGA Thermal Switch® Temporary thermal shutdown to protect temperature-sensitive components Safety class I Protection class IP 65 Dust-tight and protection against water jets Impact strength IK05 Protection against mechanical impacts < 0.7 joule r – Safety mark c – Conformity mark Weight: 5.0 kg This product contains light sources of energy efficiency class(es) C, D

### **Overvoltage protection**

The electronic components installed in the luminaire are protected against overvoltage in accordance with DIN EN 61547. To achieve an additional protection against e. g. transients, etc. we recommend separate overvoltage protection components. You can find them on our website at [www.bega.com](http://www.bega.com).

### **EU Declaration of Conformity**

BEGA Gantenbrink-Leuchten KG hereby declares that the radio system type 24 570 complies with Directive 2014/53/EU (RED). The complete text of the EU Declaration of Conformity is available at the following Internet address:

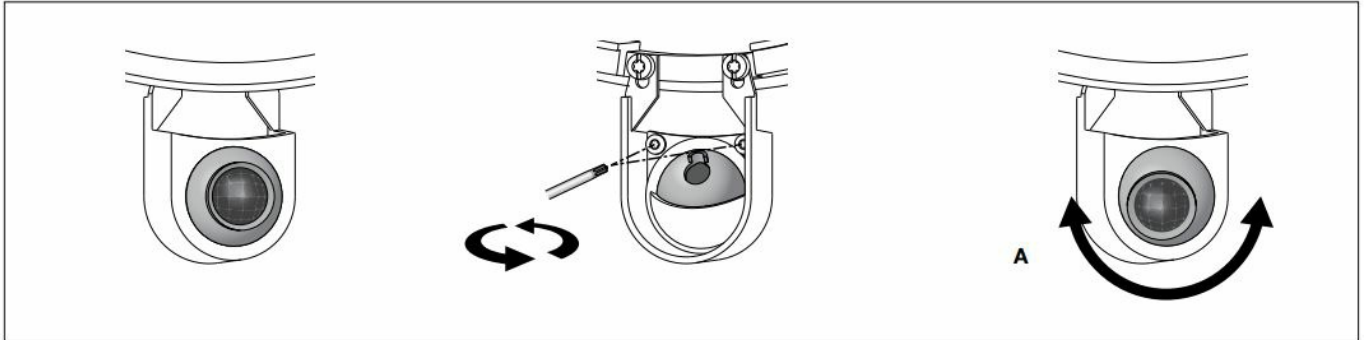
<https://www.bega.com/conf/de/24570>

## Installation

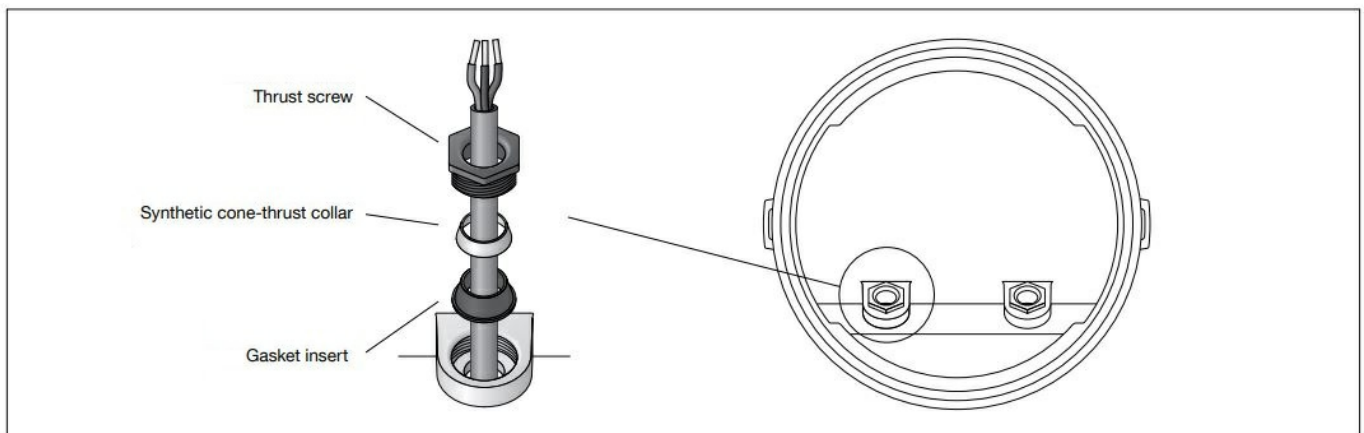
Undo hexagon socket head screw (wrench size 3 mm) through the opening in the luminaire housing up to the stop and lift luminaire top. Disconnect the earth conductor connection from the plug connection. Disconnect plug-connection of the LED connecting cable.

### Orientation of the sensor

The sensor is factory-configured for the maximum detection area. In order to avoid the unintentional adjustment of the sensor in public areas, the alteration of the factory setting must be made before the luminaire base is mounted. To do so, loosen the two rear screws (Torx driver T10) slightly and rotate the sensor ball to the desired position (see Fig. A). Tighten the mounting screws evenly.



Lead the mains supply cable through the screw cable gland into the luminaire back housing. Notice position of use “arrow down” of the luminaire back plate. The installed black gasket insert is intended for cables  $\varnothing < 10$  mm. For cables  $\varnothing 10-12$  mm the enclosed grey gasket insert must be used. In case of through-wiring replace the factory installed dummy plug with the enclosed corresponding gasket insert. At the same time, use the enclosed synthetic cone-thrust collar between gasket insert and thrust screw (wrench size 22 mm) (see sketch).



Notice position of use the “arrow down” of the luminaire back plate. Fix the luminaire base with enclosed or any other suitable fixing material onto the mounting surface. Tighten screw cable gland. Make the earth conductor connection and the electrical connection. In order to guarantee the maximum service life of the electrical components, the enclosed desiccant pouch must be placed in the luminaire. Remove the desiccant pouch from the foil packaging and place it in the position marked by the red information label immediately before finally closing the luminaire. Connect the LED connection cable by means of a plug connector. Make earth conductor connection between luminaire top and luminaire base. Push plug into coupler as far as it will go. Make sure that gasket is positioned correctly. Install luminaire top and tighten.

## Commissioning

The power supply must be connected for the commissioning of the luminaire. The brightness sensor will need up to 10 minutes after activation of the power supply to correctly calibrate the brightness value. Once installed, the luminaire can be operated immediately in its factory settings; configuration via smartphone will not be required. The factory settings as are follows: Mode: PIR and light PIR sensitivity: 100 % (high sensitivity) Shut-down delay: 5 minutes Brightness threshold: 40 (approx. 50 lx) Dimming level luminaire: 100 % Basic brightness: 20 %

Softstart (1s): active Alternatively, the integrated PIR motion and light sensor can be configured via smartphone using the free BEGA Tool app. The default values can be reinstated at any time via the BEGA Tool app.



Download the app for Android or iOS. Create a project and add the luminaire as your starting point. The individual QR code required for commissioning is enclosed with the luminaire. Please retain the other enclosed QR codes in your on-site documentation (e.g. Instructions for use at top of Page 1). You will also find an additional QR code on the LED module in the luminaire. The luminaire can only be controlled with the smartphone that was used to configure the sensor. The “Share access” function in the BEGA Tool app grants other smartphones configuration and control rights. The luminaire can be reset to factory settings in the app, if required. Follow the in-app instructions.

#### **Please note:**

The integrated light sensor operates with a time delay to prevent responses to short-term brightness fluctuations in the environment of the luminaire. The time delay is around 1 to 3 minutes. A manual darkening of the sensor will therefore not result in an immediate response. Once commissioned successfully, you can choose between three operating modes and one manual control mode.

#### **Operating modes:**

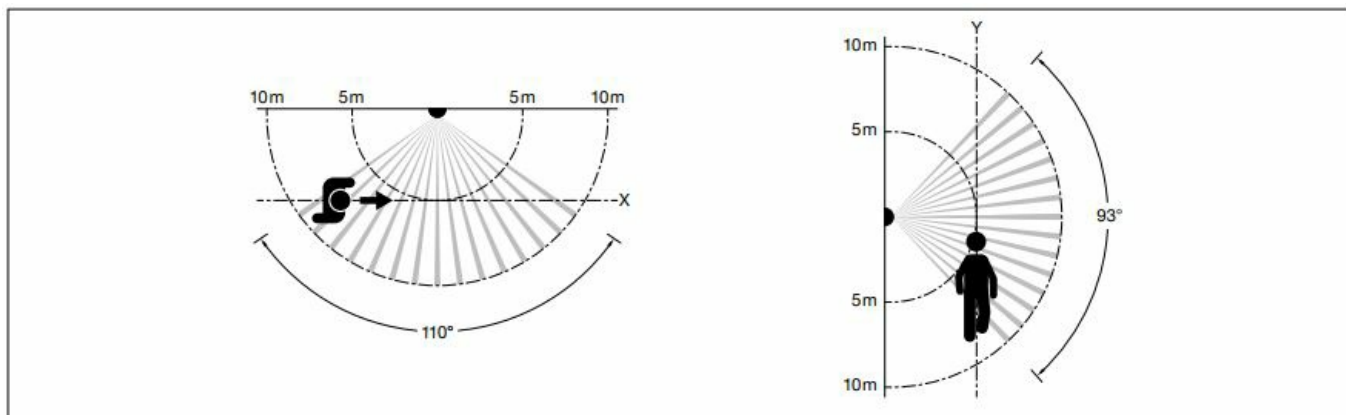
- PIR motion and light sensor
- PIR motion sensor only
- Light sensor only

#### **Manual switching:**

- Sensor deactivation and manual control of the luminaire (on/off)

#### **Range / Detection area**

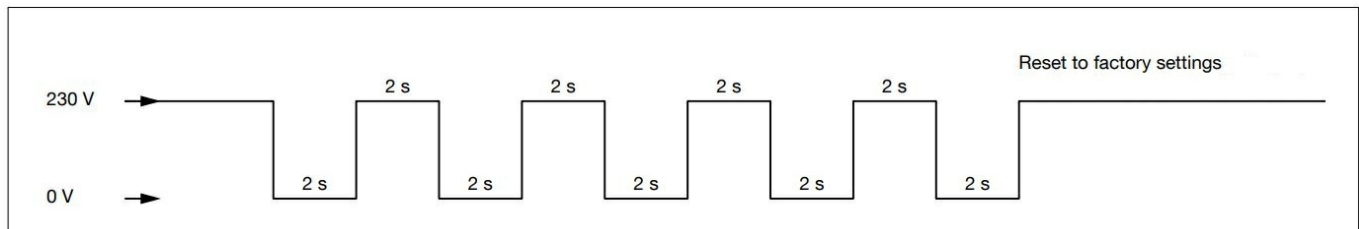
The specifications for the range and detection area of the PIR motion sensor are reference values. The detection area is up to 110° horizontally and 93° vertically, with a depth of max. 10 m depending on the direction of motion (see sketch). Too minor temperature difference between the moving object and the ambient temperature can influence the detection range. Local conditions and external heat sources may affect both the range and the detection area.



#### **Reset to factory settings**

The luminaire must be switched off five times within 30 seconds for at least 2 seconds each time to manually reset

it to factory settings (see sketch). The luminaire can furthermore be reset to the factory settings via the BEGA Tool app. The reset is confirmed with five flashes of the luminaire. The smartphone will be disconnected.



### Replacing the LED module

The designation of the LED module is noted on a label in the luminaire. The light color and light output of BEGA replacement modules correspond to those of the modules originally fitted. The module can be replaced by qualified persons using standard tools. Disconnect the system and open the luminaire. Please follow the installation instructions for the LED module. Inspect and, if necessary, replace the luminaire gaskets. The defective glass must be replaced. Close the luminaire.

### Please note:

After replacing the LED module, the PIR motion and light sensor of the luminaire must be reconfigured (see section Commissioning). To do so, you must use the QR code enclosed with the replacement module. Please paste the additional enclosed QR codes over the QR codes in the documentation provided by the customer.

### Cleaning · Maintenance

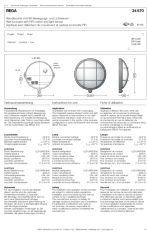
Clean the luminaire regularly with solvent-free cleansers from dirt and deposits. Do not use high-pressure cleaners.

### Spares

- Spare glass 11 003 519
- LED power supply unit DEV-0424/48V
- Control board BT 61 001 950
- PIR and light sensor 61 001 951
- LED module 3000 K LED-0993/830
- LED module 4000 K LED-0993/840
- Gasket glass 83 001 927
- Gasket housing 83 002 166 B1

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### Documents / Resources



[BEGA 24570 Wall Luminaire with PIR Motion and Light Sensor](#) [pdf] Instruction Manual 24570K3, 24570K4, 24570 Wall Luminaire with PIR Motion and Light Sensor, 24570, Wall Luminaire with PIR Motion and Light Sensor, 24570 Wall Luminaire, Wall Luminaire, Luminaire

## References

- BEGA [BEGA Tool - Apps on Google Play](#)
- BEGA [BEGA Tool on the App Store](#)
- BEGA [BEGA · Das gute Licht.](#)