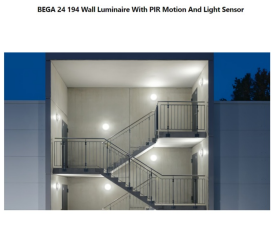


BEGA 24 194 Wall Luminaire With PIR Motion And Light Sensor Instruction Manual

Contents

BEGA

BEGA 24 194 Wall Luminaire With PIR Motion And Light Sensor

Specifications

- Material: Aluminium alloy
- Color: Graphite or silver
- Impact-resistant synthetic cover
- Distance between luminaires: 325 mm
- 2 screw cable glands with strain relief
- Connection terminal: 2.5@
- Passive infrared motion sensor (PIR) with range up to 10 m
- Minimum temperature difference between objects: 1 m/s
- Light sensor: Sensor – 3.5 mA, Power supply – 2 mA
- Number of DALI addresses: 1
- IP rating: IP 65 (dust-tight and protection against water jets)
- Impact resistance: IK05

Product Usage Instructions

Installation

1. Ensure the luminaire is installed by a qualified electrician following national safety regulations.
2. Connect the luminaire to the power supply using the provided cable glands and strain relief.
3. Adjust the motion sensor and light sensor settings as needed for your application.

Operation

1. The luminaire will automatically detect motion and ambient light levels to control its operation.

2. Ensure the power supply to the luminaire is stable for consistent performance.

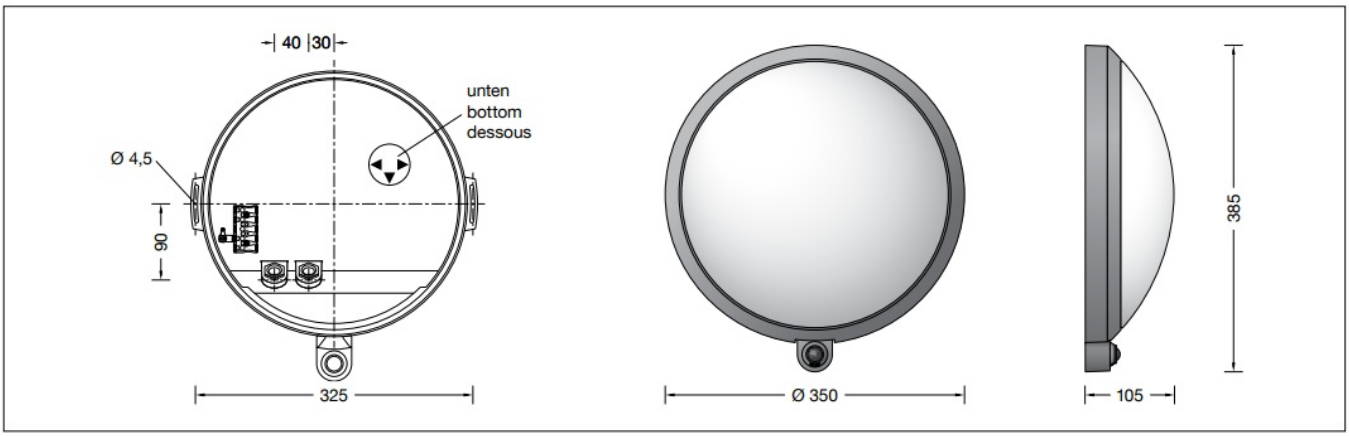
Maintenance

1. Regularly clean the synthetic cover to maintain optimal light output.
2. Check the sensor calibration periodically for accurate detection.

FAQ

- **Q: What is the maximum range of the motion sensor?**
  A: The motion sensor has a range of up to 10 meters.
- **Q: Can the luminaire be used in wet environments?**
  A: Yes, the luminaire has an IP rating of IP65, making it suitable for outdoor use with protection against water jets.
- **Q: How many DALI addresses does the luminaire support?**
  A: The luminaire supports one DALI address for control and integration into a DALI system.

Wall luminaire with PIR motion and light sensor



Instructions for use

Application
Unshielded wall luminaire with integral passive infrared motion and light sensor for use in an existing DALI system. A luminaire made of die-cast aluminium and an impact-resistant synthetic cover.

Lamp

- Module connected wattage 23.9 W
- Luminaire connected wattage 27.2 W
- Rated temperature $t_a = 25\ °C$
- Ambient temperature $t_{a\,max} = 35\ °C$

24 194 K3

- Module designation LED-0993/830
- Colour temperature 3000 K
- Colour rendering index CRI > 80
- Module luminous flux 3975 lm
- Luminaire luminous flux 3083 lm
- Luminaire luminous efficiency 113,3 lm / W

24 194 K4

- Module designation LED-0993/840
- Colour temperature 4000 K
- Colour rendering index CRI > 80
- Module luminous flux 4180 lm
- Luminaire luminous flux 3242 lm
- Luminaire luminous efficiency 119,2 lm / W

Safety

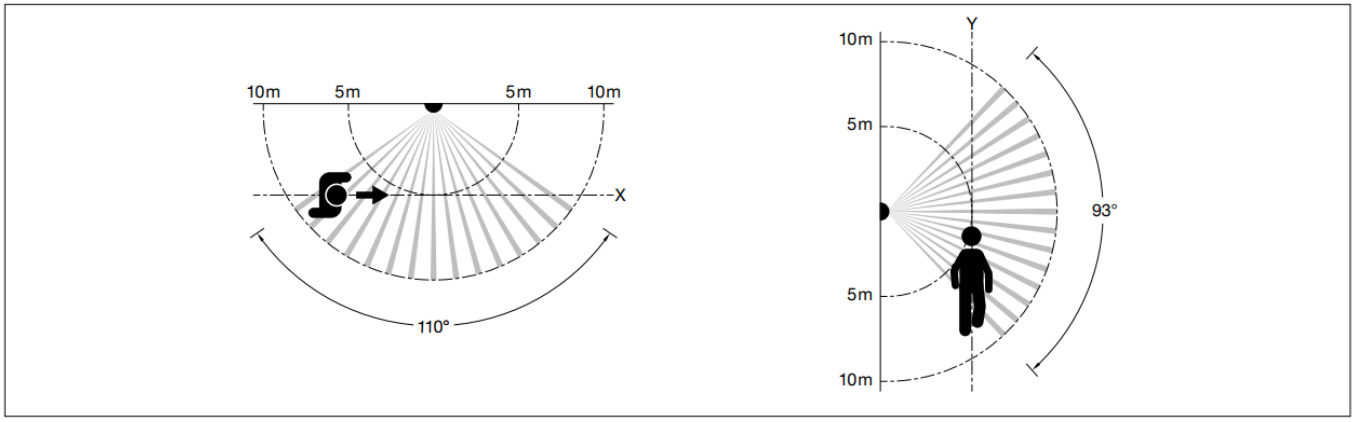
The installation and operation of this luminaire are subject to national safety regulations. Installation and commissioning may only be carried out by a qualified electrician.
The manufacturer accepts no liability for damage caused by improper use or installation. If subsequent modifications are made 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
- Colour graphite or silver
- Impact-resistant synthetic cover
- 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 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 1 m/s
- Light sensor
- Measuring range adjustable using
- DALI Cockpit 0-2500 lx, Resolution 1 lx
- Power consumption on the DALI bus:
- Sensor: 3.5 mA
- Power supply unit: 2 mA
- Time hysteresis for suppressing rapid
- fluctuations in brightness
- Complies with flicker requirements in
- accordance with IEEE 1789,
- DIN IEC/TR 63158, DIN IEC/TR 61547-1
- LED power supply unit
- 220-240 V x 0/50-60 Hz
- DC 170-280 V
- DALI-controllable
- Number of DALI addresses: 1
- Basic insulation is provided between the mains and control cables
- 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
-  c – Conformity mark
- Weight: 3.4 kg
- This product contains light sources of energy efficiency class(es) C, D

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.



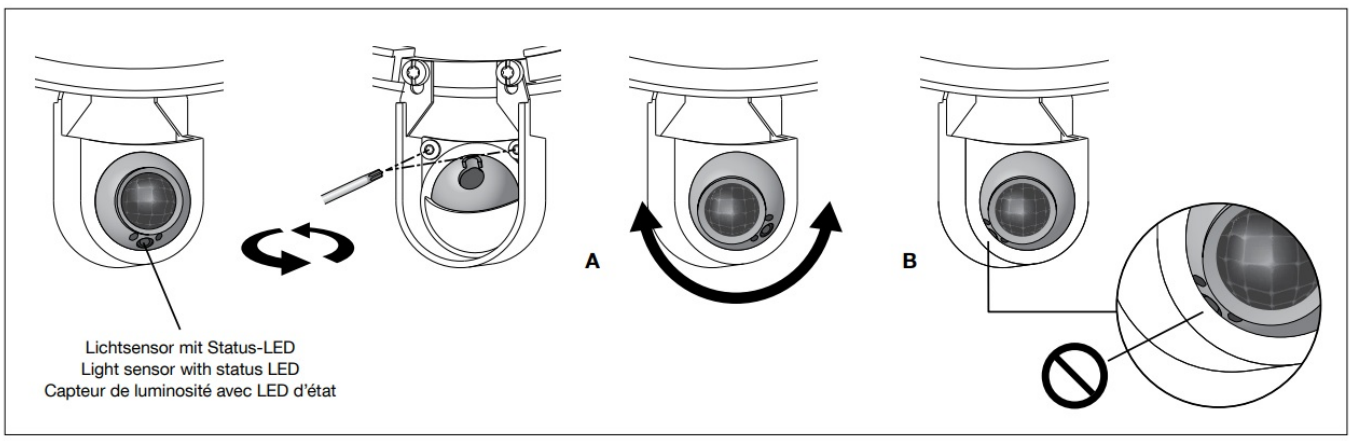
Installation

Please note

- A separate DALI power supply is required to operate the luminaire.
- If this is not provided by the customer, we recommend using DALI power supply 71 094 or 70 866 (see accessories).
- Undo hexagon socket head screws (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.

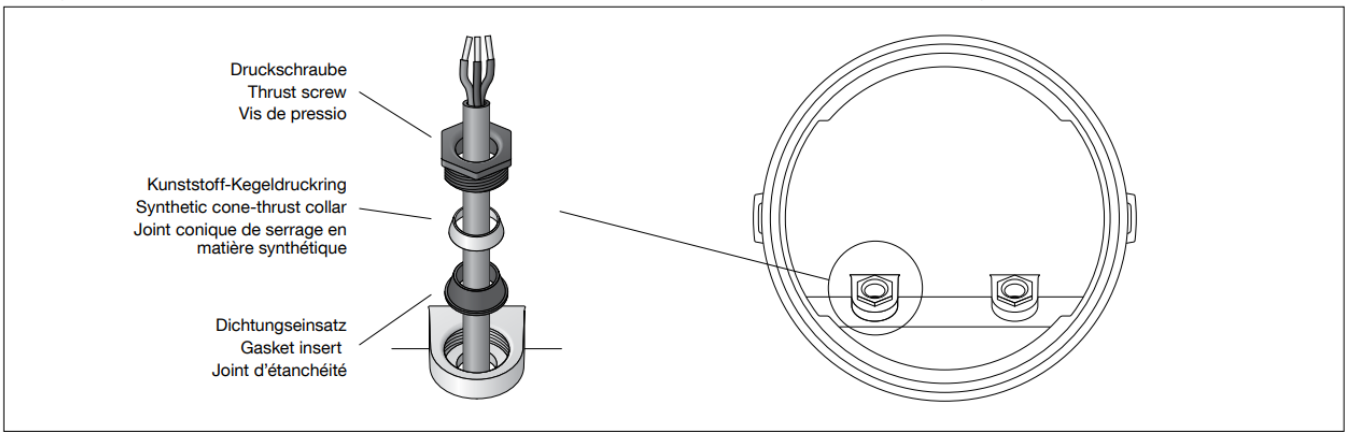
Orientation of the sensor

- 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). In the process, make sure that the light sensor embedded in the sensor ball is not directed upwards or covered by the edge of the surrounding housing! (see Fig. B)
- Tighten the mounting screws evenly.



Lead the mains supply cable through the screw cable gland into the luminaire back housing.

- The installed black gasket insert is intended for cables ø < 10 mm.
- For cables ø 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 “arrow down” of the luminaire back plate.
- Fix 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.
- For digital control please use the connecting terminal DA, DA.
- In case this terminal is not used the luminaire will be operated at full light output.
- 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.

Functions and settings
A combination of several DALI motion and light sensors in one DALI line is possible. Following installation, the PIR motion and light sensor can be immediately operated in its factory settings; configuration is not required in this case.
The factory settings as are follows:

- Holding time: 5 min
- Brightness threshold: almost dark /100 lx
- Target address: broadcast
- Constant light control: off
- Status display: Green LED off (can be activated and deactivated using the DALI Cockpit software)
- Time hysteresis: 1 min

- Threshold hysteresis: 0 lx

Function testing:

- After the power supply and the DALI power supply have been switched on, the luminaire is switched on for the duration of hysteresis (factory setting 1 min).
- After this period has expired, the lighting switches off automatically.
- If the lighting does not switch on again automatically (after the end of hysteresis) during commissioning or on the return of power, the light sensor must be darkened for the duration of hysteresis.
- If the brightness threshold is exceeded (factory setting “almost dark /100 lx“), a movement in the detection area does not cause the lighting to switch itself on.
- For function testing, the light sensor must be darkened.
- Brightness must be below the threshold for the duration of hysteresis; only then does a movement in the detection area cause the lighting to switch itself on.
- The lighting now remains switched on for the duration of the holding time (factory setting 5 min).
- If there are any more movements in the detection area, the holding time starts over again.
- Movement in the detection area does not cause the lighting to switch itself on when the holding time has expired and the brightness threshold has been exceeded for the duration of hysteresis.

DALI configuration

- To adjust the settings and for additional functions such as basic brightness (luminaire switches to adjustable dimming value 1 if the brightness threshold is not reached and to adjustable dimming value 2 if movement is detected), a DALI USB interface (71 024 or 71 054) and the DALI Cockpit software are additionally required. DALI Cockpit is available as a free download from our website at **www.bega.com**.
- Configuration is also possible via smartphone and tablet using the BEGA Tool app in conjunction with Bluetooth DALI gateway 71 075 or 71 151.
  Resetting to factory settings is done via DALI reset in the DALI Cockpit software or in the BEGA Tool app.

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**.
- The ideal protection of all electronic components installed in the luminaires is achieved by using bounce-free switching contacts such as an electronic relay (solid-state relay), e.g. BEGA 71 320.

Cleaning · Maintenance

- Clean dirt and debris from the luminaire regularly with a clean, soft, lint-free cloth that is kept damp throughout the cleaning.
- If possible, please use water for this, adding a little commercial dishwashing detergent.

- For lacquered surfaces we recommend the use of BEGA Lacquer Care Set 71 179.
- Cleaning agents containing solvents and high-pressure cleaners are unsuitable for cleaning and maintenance.

Replacing the LED module

- The designation of the LED module is noted on a label in the luminaire.
- The light colour 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.
- Defective glass must be replaced.
- Close the luminaire.

Accessories

- 71 094 DALI Power supply 30 mA in device boxes or installed cable connection box
  70 866 DALI Power supply 240 mA for DIN rail mounting
- 71 024 DALI USB interface for installations in device boxes or preexisting connection boxes
- 71 054 DALI USB interface for DIN rail mounting
- 71 075 Bluetooth DALI gateway for DIN rail mounting
- 71 151 Bluetooth DALI gateway for installation in device boxes

A separate instructions for use can be provided upon request.

Spares

- Synthetic cover 15 000 585
- PIR Light sensor 61 001 632
- LED power supply unit DEV-0365/700
- LED module 3000 K LED-0993/830
- LED module 4000 K LED-0993/840
- Gasket glass 83 001 927
- Gasket wall plate 83 002 166 B1

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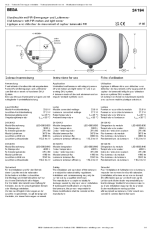
Documents / Resources

	**BEGA 24 194 Wall Luminaire With PIR Motion And Light Sensor** [pdf] Instruction Manual 24194K3, 24194K4, 24 194 Wall Luminaire With PIR Motion And Light Sensor, 24 194, Wall Luminaire With PIR Motion And Light Sensor, Luminaire With PIR Motion And Light Sensor, PIR Motion And Light Sensor, Motion And Light Sensor, Light Sensor, Sensor

References

- BEGA **BEGA · Das gute Licht.**
- **User Manual**