

# B.E.G. LUXOMAT® PD9-1C(-GH)-FC

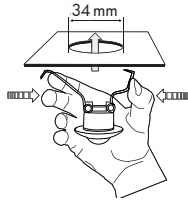
## Installation and Operating Instruction for B.E.G.-Occupancy detectors PD9-1C(-GH)-FC

### 1. Mounting preparations

Work on the 230V mains supply may only be carried out by qualified professionals or by instructed persons under the direction and supervision of qualified skilled electrical personnel in accordance with electrotechnical regulations.

Disconnect supply before installing!

### 2a. Installation

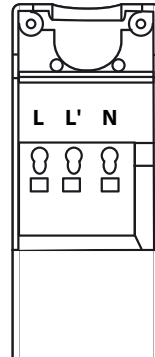


The detector has been designed and developed specifically for installation in suspended ceilings.

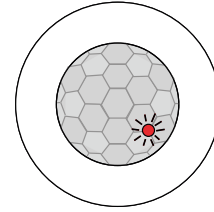
A circular opening of diameter min. 34 mm must be produced in the ceiling.

Having connected the cables in accordance with the regulations, connect the power supply via the RJ11 plug. Therefore, open the power supply with the help of the screws and close it afterwards. After that, put the power supply through the opening in the ceiling and mount the sensor onto the ceiling according to figure.

### 2b. Connecting terminals

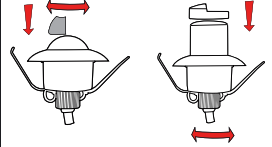


### 2c. Self test cycle



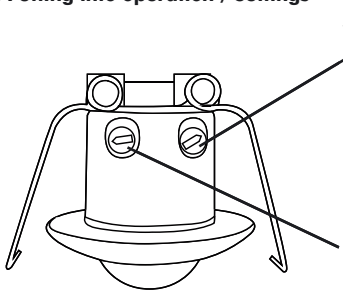
The LUXOMAT® PD9-1C(-GH) enters an initial 60-second self-test cycle, when the supply is first connected. The occupancy detector is ready for operation.

### 3. Exclude sources of interference



In case the sensing area of the LUXOMAT® PD9-1C(-GH)-FC is too large or areas are being covered that should not be monitored, the range can be reduced or limited through use of the enclosed masking clips.

### 4. Putting into operation / Settings



#### Follow-up time for light control

The time can be set infinitely variably at between 30 seconds and 30 minutes.

Symbol  $\square$ : Impulse < 1 sec.

Symbol TEST: Test mode

(Every movement switches on the light for a period of 1 second, switching it off for a period of 2 seconds after that regardless of the level of brightness)

#### Twilight-switch for light control

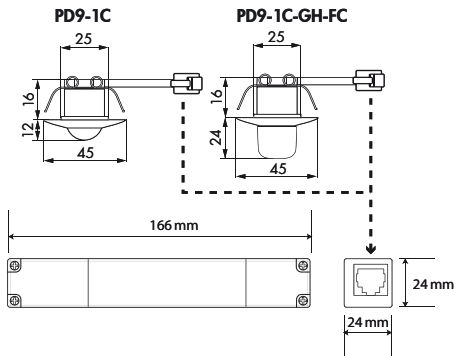
The switch-on value for the light can be set at between 10 and 2000 Lux. Using the rotary control, the luminance set points can be set as desired.

Symbol  $\text{☾}$ : Night-time operation

Symbol  $\text{☀}$ : Daytime/Night-time operation



### 5. Dimensions



### 6. Article / Part-Nr. / Accessory

| Type         | RAL9010 | RAL9006 |
|--------------|---------|---------|
| PD9-1C-FC    | 92902   | 92903   |
| PD9-1C-GH-FC | 92934   | 92935   |

#### Accessory:

|                  |            |       |
|------------------|------------|-------|
| Wire basket BSK  |            | 92199 |
| Covering for PD9 | white      | 92238 |
| Covering for PD9 | silver     | 92237 |
| Covering for PD9 | anthracite | 92235 |
| Blind GH         | white      | 33207 |

### 7. Technical data

Connection of sensor and power supply by means of telephone plug RJ11

|   |  |
|---|--|
| <b>Power supply:</b>                      | 230V ~ ±10%                                  |
| <b>Power consumption:</b>                 | < 1W   |
| <b>Ambient temperature:</b>               | -25°C - +50°C                                |
| <b>Degree of protection/class:</b>        | IP20 / II / CE                               |
| <b>Settings:</b>                          | Settings made manually using potentiometer   |
| <b>Light values:</b>                      | 10 - 2000 Lux                                |
| <b>Area of coverage:</b>                  | circular 360°                                |
| <b>Range Ø H 2.50 m / T = 18° C:</b>      |  |
| PD9-1C-FC                                 | seated 2.50 m / tangential 10 m / radial 6 m |
| PD9-1C-GH-FC                              | max. Ø 5.40 m                                |
| <b>Recommended height for mounting:</b>   |  |
| PD9-1C-FC                                 | 2 - 3 m                                      |
| PD9-1C-GH-FC                              | 5 - 10 m                                     |
| <b>Light measurement:</b>                 | daylight and artificial light                |
| <b>One channel to switch the lighting</b> |  |
| <b>Type of contact:</b>                   | NOC/with pretravel tungsten contact          |
| <b>Contact load:</b>                      | 1000 W, cos φ = 1 / 500 W, cos φ = 0,5       |
| <b>Time-settings:</b>                     | 30 sec. - 30 min. / Test                     |
| <b>Dimensions</b>                         |  |
| PD9-1C-FC                                 | Ø 45 x H 12 mm                               |
| PD9-1C-GH-FC                              | Ø 45 x H 40 mm                               |
| Power supply                              | L 165 x W 24 x H 24 mm                       |

### 8. Trouble shooting

#### 1. Lamp does not light up

Lamp may be defect:

Replace lamps

No mains connection/power:

Check connection and mains fuse by qualified electrician

Incorrect setting of CDS twilight threshold:

Correct setting of CDS threshold

Lens of sensor unit obstructed by dirt or other objects:

Clean lens, remove objects

#### 2. Lamp turns ON too late or detection range too small

LUXOMAT® PD9-1C-GH-FC is mounted too high:

See table of mounting heights.

Correct mounting if required.

#### 3. Lamp stays ON continuously

Continuous thermal activity detected in fan, central heating ducts, animals within detection area:

Remove heat source. Check proper function of LUXOMAT® PD9-1C-GH-FC by covering the fresnel lens.

After expiry of delay timer, has to turn OFF lighting.

LUXOMAT® PD9-1C-GH-FC connected in parallel to a manual override switch:

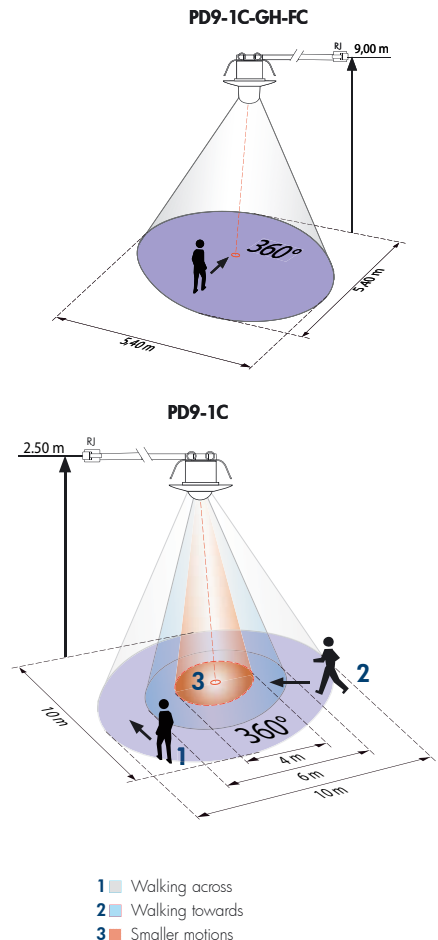
Connect switch correctly

#### 4. Unintended switching of light

Movement of heat source within detection area:

Check on presence of animals, fans or heaters

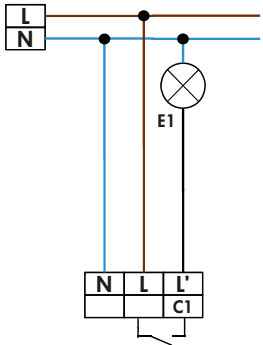
### 9. Range of Coverage



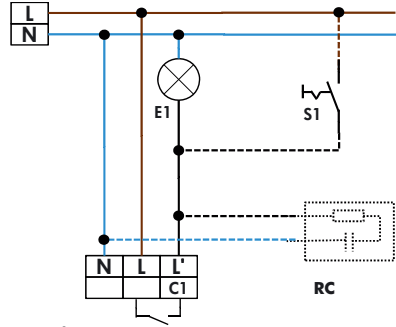
- 1 Walking across
- 2 Walking towards
- 3 Smaller motions

## 10. Wiring diagrams

### Standard mode with 1-channel motion detector

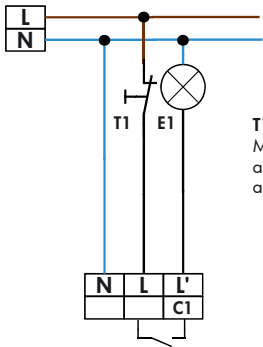


### Standard mode with 1-channel motion detector with permanent light function



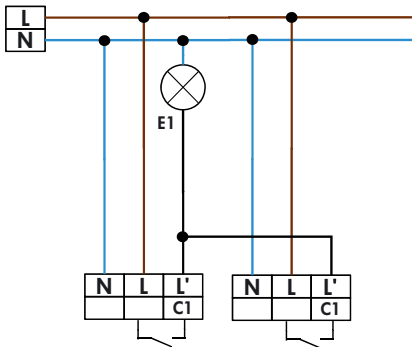
optional:  
S1 = switch for permanent light  
RC = RC-suppression kit if required

### Standard mode with 1-channel motion detector with NC pushbutton



T1 = NC button  
Manual switching additionally possible (press opener approx. 2 sec.).

### Parallel connection with 1-channel motion detectors (max. 8 parallel)



### Standard mode with 1-channel motion detector (f.ex. stairs)

