

# BF rail (48 Vdc) with control gear box for mounting with rope suspension

BF rail (48 Vdc) / length 200 cm with control gear box  
Control gear box incl. control gear (100 W / 220-240 Vac / 48 Vdc)  
For mounting with BF rope suspension set (3-piece)

Mounting instructions





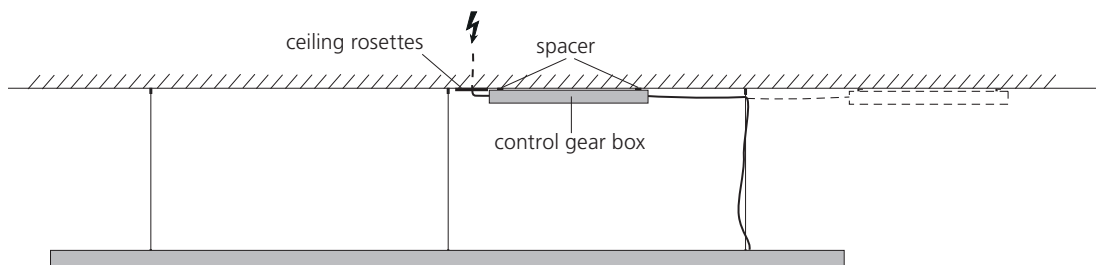
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 The electrical connection may only be performed by a qualified specialist. The luminaire may only be used with a mains voltage of 220-240 V 50/60 Hz. For mounting, observe the statutory installation and safety regulations. Always disconnect the power supply when carrying out installation, cleaning or maintenance tasks. Repairs may only be carried out by the manufacturer or by a qualified specialist in accordance with the applicable standards. In the event of incorrect installation or that the luminaire has been tampered with, all warranty claims shall be rendered invalid, as will the manufacturer's product liability obligation in accordance with the European Directive concerning Liability for Defective Products (85/374/EEC) and the Swiss Federal Law on Product Liability (PrHG). BALTENSWEILER shall assume no liability for any loss or damage to persons or property caused by improper handling or non-adherence to the safety regulations!


 Small magnetic components are installed in the luminaire. Magnets may affect the function of pacemakers or implanted defibrillators. Recommended safety distance from the magnet:  
85 mm for new versions with a max. permitted magnetic field of 1 mT = 10 G.  
105 mm for old versions with a max. permitted magnetic field of 0.5 mT = 5 G.  
You will find further information on: [www.baltensweiler.ch/service/faq/](http://www.baltensweiler.ch/service/faq/)


 External dimmers including wall-mounted dimmers are not permitted and can destroy the LED and the control gear!

 Care instructions: Disconnect the power supply. Wipe with a damp cloth. Do not use abrasive, alcoholic or electrostatically charged cleaning utensils.

 The rail system may only be installed in dry interior spaces.

 Correct disposal / rail system must not be disposed of with the normal household waste.

 For the control gear box (incl. control gear 220-240 Vac / 48 Vdc), protection class II applies:  
Equipment with protection class II has reinforced or double insulation between the active and accessible parts equal to the rated insulation voltage.

 For the rail (48 Vdc), protection class III applies:  
Protection class III equipment operates on safety extra-low voltage (SELF/PELFF), for example 12, 24, or 48 volts.

**IP20** For the rail system, ingress protection rating IP20 applies:  
Protection against contact with fingers and medium-sized solid foreign bodies  $\varnothing \geq 12$  mm.

**CE** Technical conformity in accordance with EN directives.



Scope of delivery in the package:

- (A) BF rail (48 Vdc)
  - (B) Control gear box (incl. control gear 220-240 Vac / 48 Vdc)
  - (C) Art. no 7300-81 – BF mounting accessories for control gear box
  - (D) Art. no 7200-65 – BF Wire suspension set (3-piece)
  - (E) Mounting instructions for rail / control gear box (inkl. control gear)
- (The mounting and operating instructions for the corresponding lighting elements can be found in the package of the lighting elements)



(C) Content:



2x Control gear box holder including fastening screws (M3)



2x Spacer



2x Cable holder including plastic threaded pin



4x Ferrule, grey (for primary cable 220-240 Vac / control gear box)



4x Ferrule, white (for secondary cable 48 Vdc / rail)



2x Screw  $\varnothing$  4 x 40 (for fastening the control gear box)



2x Dowel  $\varnothing$  6 x 30 (for fastening the control gear box)



1x Allen key (for fastening the control gear box holders)

(D) Content:



3x BF Wire suspension



3x Screw  $\varnothing$  4 x 45 mm











3x Dowel  $\varnothing$  6 x 35 mm

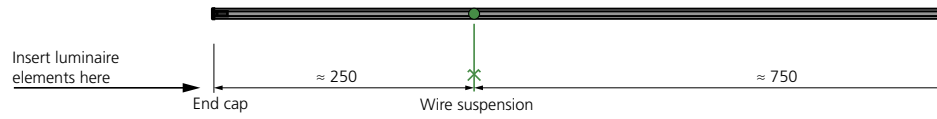
**Necessary tools:**

- Phillips and flathead screwdrivers
- Drill including  $\varnothing$  6 drill bit
- Crimping tool
- Wire stripper
- Side cutters
- Marking tool e.g. (line laser)
- Spirit level

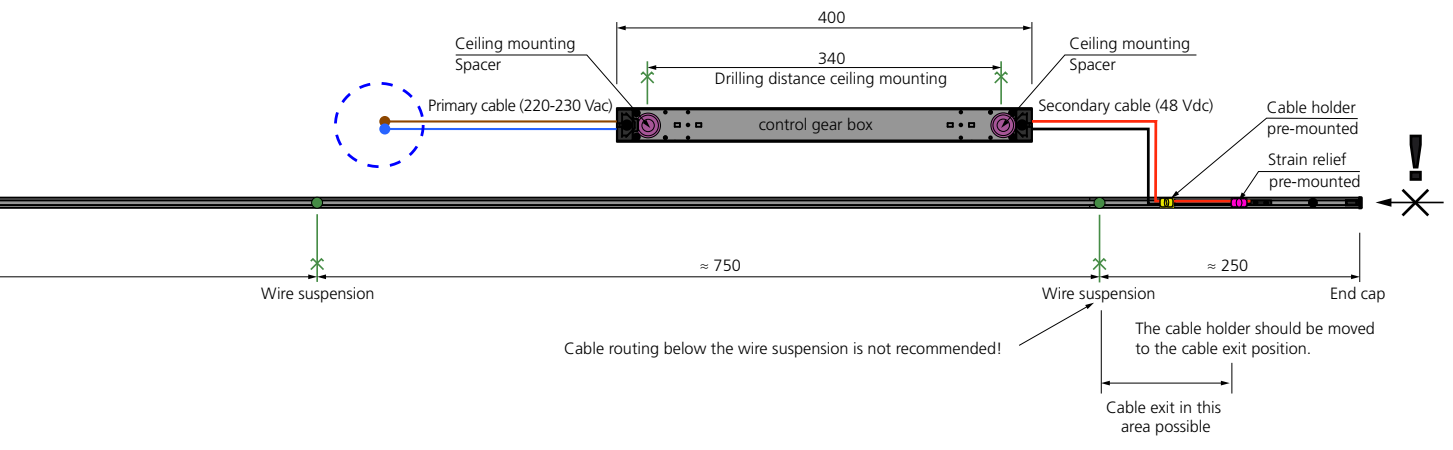
—► **Two people are required for the installation.**


-  Wire suspension
-  Primary cable (220-230 Vac)
-  Secondary cable (48 Vdc)
-  Spacer
-  Strain relief (pre-installed / must not be adjusted!)
-  Cable holder
-  Primary connection on-site / ceiling rosette
-  Lighting elements cannot be **not** be retracted here!

### Rail with wire suspension / control gear box positioned externally

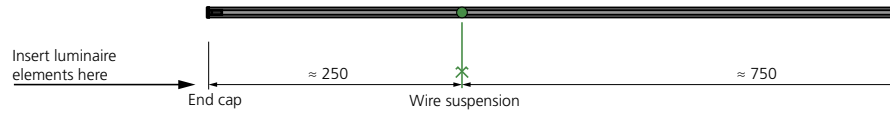






**Important:** Connection to the power supply may only be performed by a qualified specialist.  
 Disconnect the power supply during installation (remove the fuse). 

The rail system consists of a rail with a pre-installed secondary cable (48 Vdc, length 3.5 m), an control gear box with a pre-installed primary cable (220-240 Vac, length 3.5 m), and the mounting materials.  
 Placement of the control gear box on the secondary side directly in front of the rail is possible. The secondary cable must be routed above the rail.  
 The rope suspension must only be mounted on horizontally aligned surfaces.



**Cable routing**

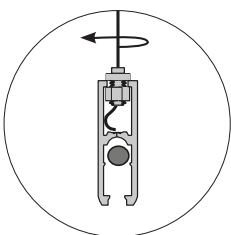
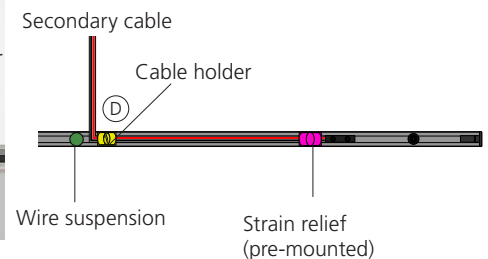
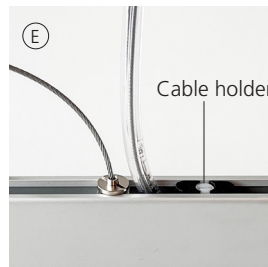
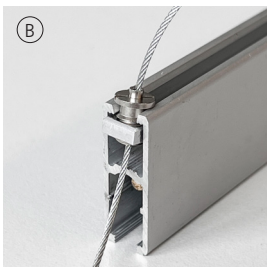
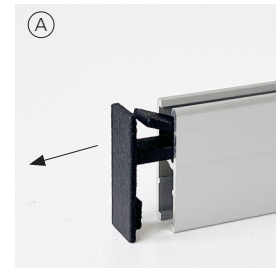
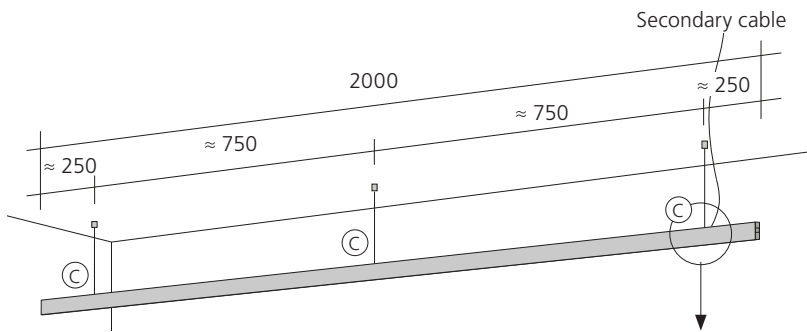
The secondary cable can be routed within the rail up to the first rope suspension (on the secondary side).  
 No cables can be routed in the area of the rail's power feed. At the position where the cable exits the rail, a cable holder must be used.

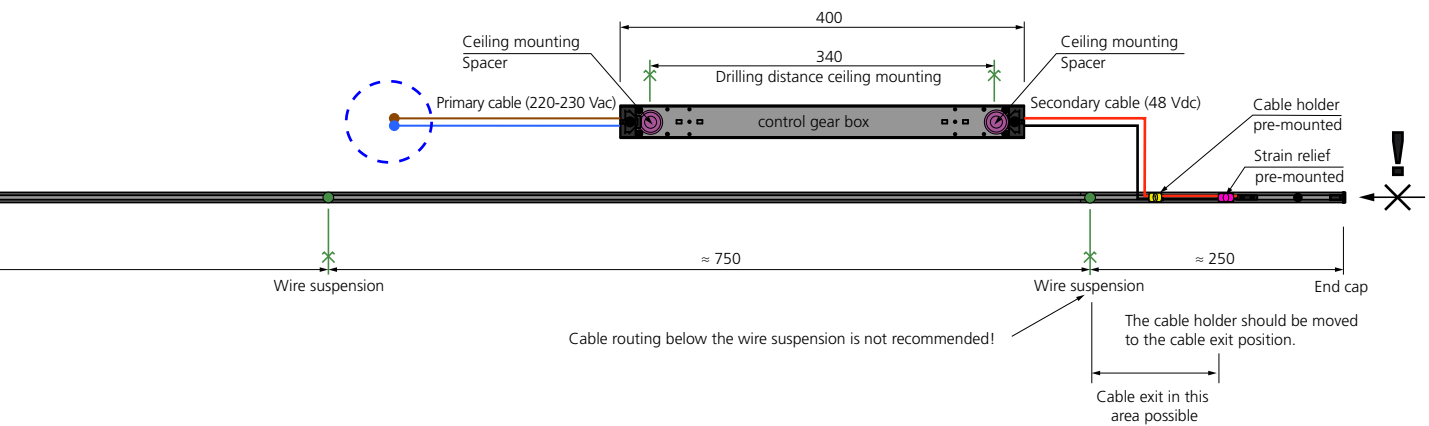
**Preparing the rail and control gear box**

- Loosen the Velcro strap on the rail and lay the secondary cable alongside the rail. (The secondary cable is pre-installed on the rail – do not disconnect it!)
- Prepare the rail, control gear box, and mounting materials on a clean, scratch-free work surface – check materials against the material list (page 4) for completeness.
- Remove the cover from the control gear box – store the cover safely.

**Preparing the rail and control gear box**

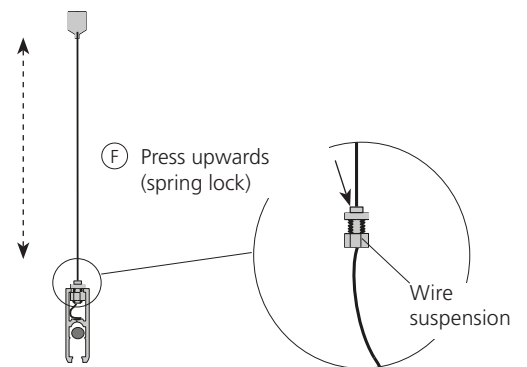
- On the opposite side of the rail's power feed, remove the end cap. (A)
- Insert the rope suspensions (3 in total) into the rail on the opposite side of the power feed (B) and position them (C) according to the diagram.
- Loosen the pre-installed cable holder enough so that it can be moved (flathead screwdriver No. 0).
- The strain relief (with black marking) at the secondary connection to the rail must NOT be loosened or moved! (D)
- Route the cable exit of the secondary cable to the rope suspension and secure it with the cable holder (flathead screwdriver No. 0). (E)





### Adjusting the rope lengths of the rope suspension.

Adjust the rope length (the ropes can be readjusted once mounted). (F)

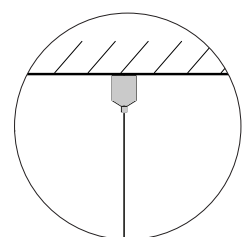
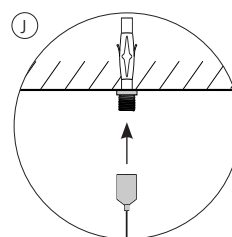
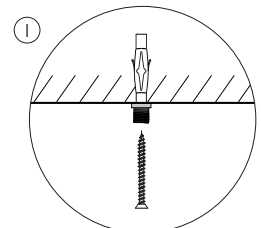
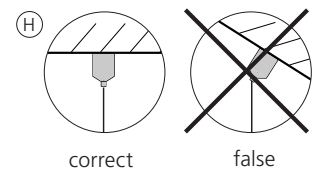
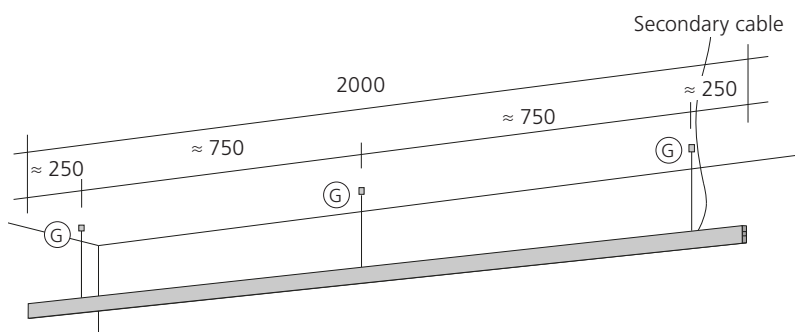


### Mounting the adapter for the rope suspension to the ceiling

- Mark the mounting holes (3 in total) for the rope suspension according to the recommendation (see dimensions). (G)
- The rope suspension must only be mounted on horizontally aligned surfaces. (H)


**Important:** The length of the secondary cable is 3.5 m.

- Drill three holes and insert the dowels (drill hole  $\varnothing 6 \times 45$  mm). (I)
  - Align the ceiling adapters of the rope suspensions with the screws. (G)
- Check the load-bearing capacity of the fixture and, if necessary, adapt it to the respective ceiling construction or replace it.

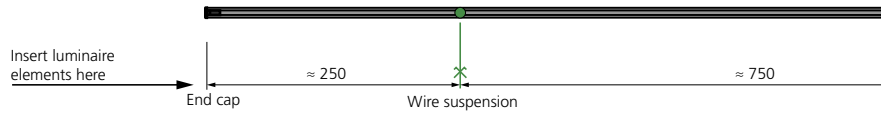


### Mounting the rail to the ceiling

- Attach the rail with rope suspensions to the ceiling sleeve by screwing the cover counter-clockwise onto the ceiling sleeve. (J)
- If necessary, adjust the height of the rail (spirit level). Cut off excess ropes.

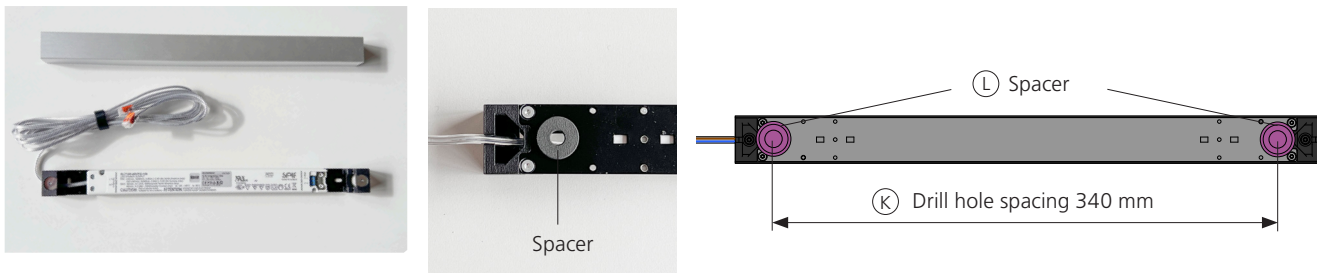
**Important:** Connection to the power supply may only be performed by a qualified specialist.  
 Disconnect the power supply during installation (remove the fuse). 

The rail system consists of a rail with a pre-installed secondary cable (48 Vdc, length 3.5 m), an control gear box with a pre-installed primary cable (220-240 Vac, length 3.5 m), and the mounting materials.  
 Placement of the control gear box on the secondary side directly in front of the rail is possible. The secondary cable must be routed above the rail.  
 The rope suspension must only be mounted on horizontally aligned surfaces.



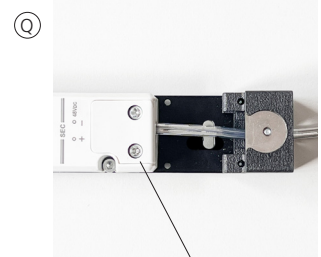
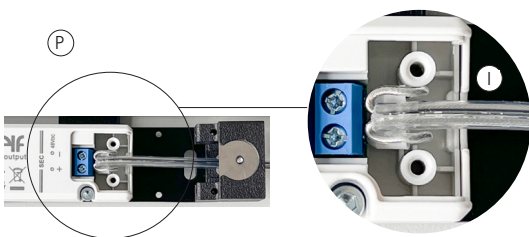
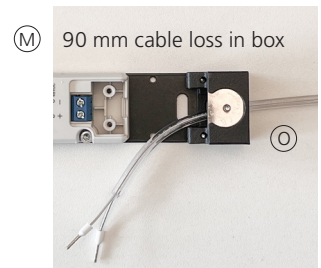
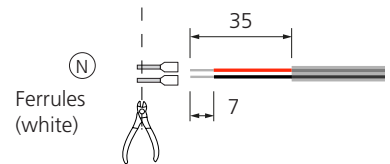
**Mounting the control gear box to the ceiling**

- Pay attention to the position of the primary and secondary connections, and determine the position of the control gear box (length: 400 mm).
- Mark the two mounting holes for the control gear box (drill hole spacing: 340 mm). (K)
- Drill holes and insert the dowels (drill hole  $\varnothing$  6 x 45 mm).
- Carefully remove the cover from the control gear box (holds magnetically).
- Mount the control gear box to the ceiling using screws and one spacer per side. (L)

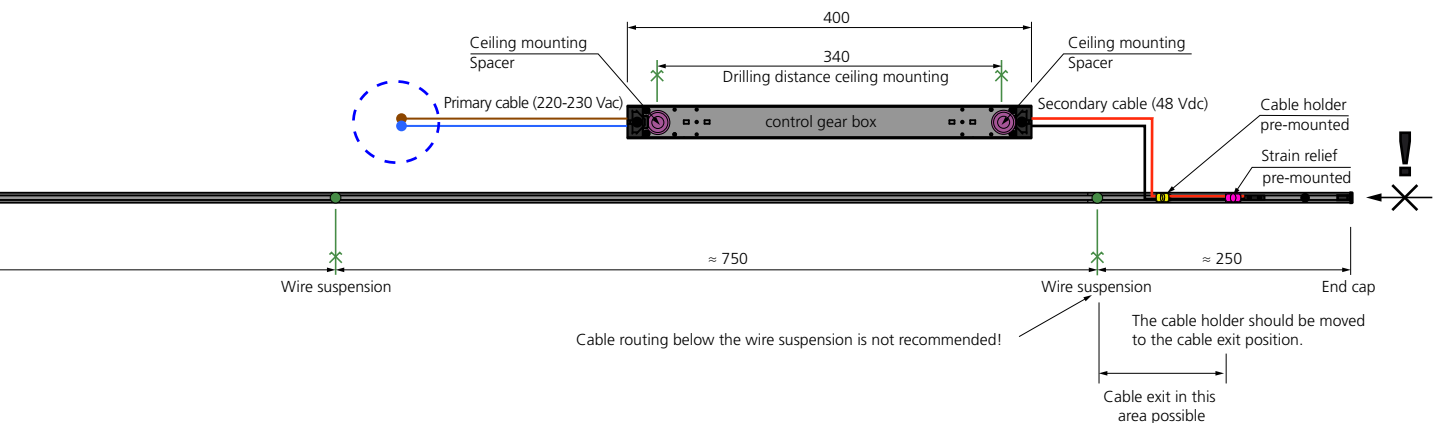


**Connecting the secondary cable to the control gear box**

- Shorten the secondary cable from the rail according to the position of the control gear box.  
**Important:** There is a 90 mm cable loss inside the box. (M)
- Strip the cable and crimp the cores with ferrules (white) using crimping tool and shorten the ferrules if necessary. (N)  
 (With screw contacts, wire end ferrules are prescribed for stranded cables and must be used!)
- Please note:** Strip just enough to maintain double insulation. (O)
- Feed the prepared secondary cable through the end cap of the control gear box.  
**Important:** Depending on the situation, the secondary cable may need to be fixed in advance in a building-installed cable duct or with clips to the ceiling.
- Remove the end cap of the control gear on the secondary side and connect the rail's secondary cable to the 48 Vdc terminal (The negative terminal (P) is marked with a black thread).
- Reattach the end cap (strain relief) on the secondary side of the control gear. (Q)  
**Please note:** The single-insulated wires must be inside the control gear housing, and the cable must be securely fixed with the end cap (strain relief).  
 Pull on the cable and check the strain relief.

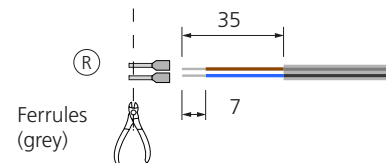


The single-insulated wires must be inside the control gear housing – the cable sheath must be brought into the housing to ensure proper strain relief!



### Primary connection in ceiling box / final assembly

- There must be sufficient space on site for the electrical connection (flush-mounted connection) – no additional terminal blocks, strain reliefs, or similar can be stored inside the control gear box.
- It is recommended to use the supplied connection terminals for the connection. For on-site terminals with screw contacts, wire end ferrules are prescribed for stranded cables and must be used!  
(No wire end ferrules may be used for on-site power supply connections made from solid wires!)
- Shorten the primary cable to the desired length and strip it and if needed crimp the wire end ferrules (grey) using crimping tool and shorten the ferrules if necessary. (R)
- Connect the primary cable of the control gear box to the ceiling box.
- Important:** Depending on the situation, the primary cable may need to be routed through a ceiling rosette and/or a strain relief must be installed – if the cable is not routed through a conduit to the ceiling box, strain relief in the ceiling box is mandatory (ensure strain relief is provided on site).
- **See the overview of ceiling rosettes on page 12** (the rosette can be ordered optionally / not included with the luminaire).  
The rosette must be mounted according to the separate instructions.
- Carefully mount the cover on the control gear box (holds magnetically).



Once the rail, including the control gear box, is mounted and the primary connection is correctly made to the ceiling box, the corresponding light elements can be mounted according to the separate instructions.

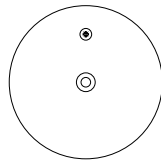
EN Overview ceiling rosettes – Rosette can be ordered optionally / not included with the luminaire

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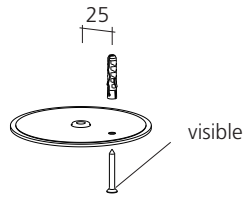
Choose the ceiling rosette according to the selected rail mounting and the existing electrical connection:

**Rosette, for mounting flush with the ceiling / Art. 7200-66**

A ceiling rosette with vertical cable routing – not suitable for electrical connection in the area of the rail or control gear box.  
This ceiling rosette must be mounted on the primary cable of the luminaire before the electrical connection to the building's power supply cable (at the luminaire connection point)!  
(The mounting of the ceiling rose must be carried out according to the separate instructions – instructions are included with the rose.)



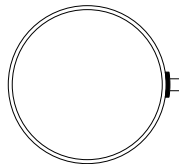
ø 80 mm



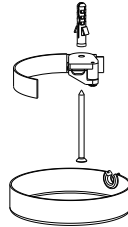
**Surface-mounted rosette / Art. 5050-60**

Surface-mounted rosette with lateral cable routing.

The mounting of this surface-mounted rosette is not possible below the rail or control gear box.  
(The surface-mounted rosette must be mounted according to the separate instructions – instructions are included with the rosette.)



ø 80 mm  
(h = 18 mm)





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