

## Mounting instructions

Date: 02.26.2020

### SLIM DIRECT, INDIRECT, OUT, IN ELLIPSE, DELTA

#### General remarks on safety

Read all of these instructions before installing fixtures.

- Keep all of the instructions for future reference.
- Turn off power before installing fixture.
- Installation is to be performed by a qualified electrician.
- All installations are to conform to the standards of National Electrical Code as well as all local jurisdictional codes and regulations.
- Any modification of the luminaire will void any and all written or implied warranties.
- Do not open the luminaire - this will void the IP rating
- The manufacturer accepts no responsibility for damage to persons or property arising through improper use or installation.

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED



#### Dangers

- Verify power is off at installation time.
- Injuries caused by electricity are possible

#### BOM

	Part	Quantity
<b>Package 1</b>		
<input checked="" type="checkbox"/>	Aluminium profil with integrated acrylic and 4, respectively 6 steel cables	① 1 unit
<b>Package 2</b>		
<input type="checkbox"/>	Canopy incl. power supply unit	② 1 unit
<input type="checkbox"/>	External power supply unit	③ 1 unit
<input checked="" type="checkbox"/>	White gloves	④ 1 pair
<input checked="" type="checkbox"/>	Screwdriver	1 unit
<input checked="" type="checkbox"/>	Assembly instructions	1 unit

#### Dimmer

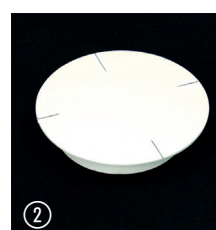
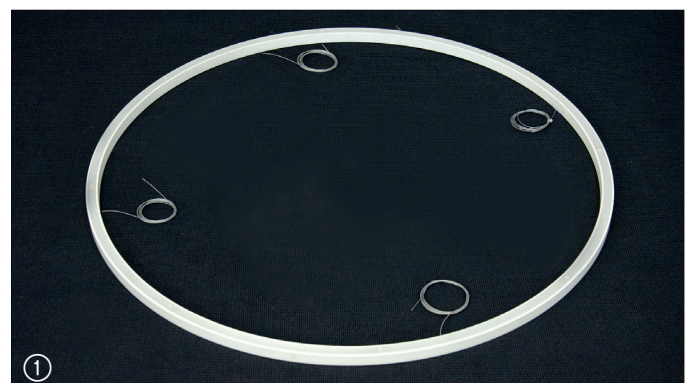
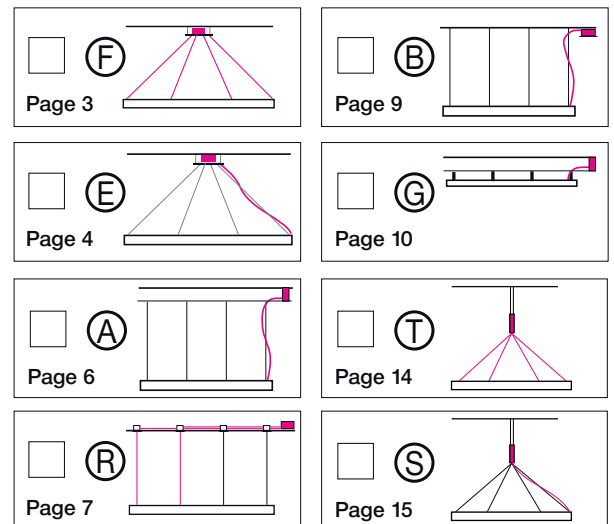
- ☐ Not dimmable
- ☐ DMX interface
- ☐ Dimmer interface 0-10V
- ☐ Dimmer interface 1-10V
- ☐ DALI interface
- ☐ LUTRON interface
- ☐ Bluetooth interface
- ☐ EnOcean interface

#### Technical Data:

Device sticker

#### Mounting Version

Supply line 24 V



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#### Warranty

Use the enclosed assembly instructions for the installation of the lighting fixture. Non-compliance with the assembly instruction will automatically void the warranty.

The persons assigned with the installation of the product are instructed to handle it with the utmost care and safety in order to avoid damages to third parties.

The present light fixture has been tested and is fully operational.

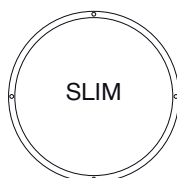


CIRCOLO SLIM DIRECT, assembly version (F)



CIRCOLO SLIM DIRECT, detail

#### SLIM - Variations



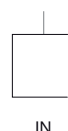
DIRECT



INDIRECT



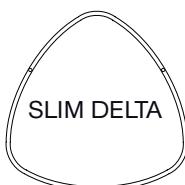
OUT



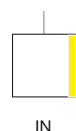
IN



DIRECT



DIRECT



IN

#### 2 Packages



#### Consignment consists of 2 packages

Unpack light fixture and check the parts list to make sure it is complete. Use the provided gloves for fitting the light fixture in order to keep polished surfaces and the acrylic glass clean.

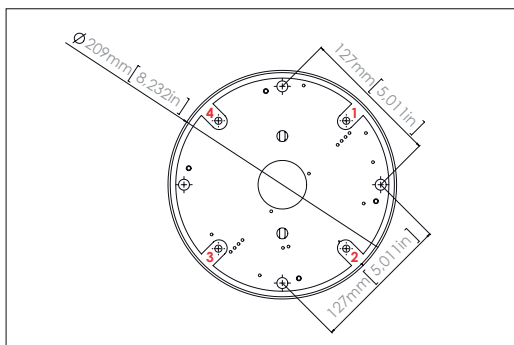
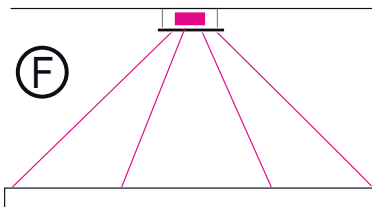
Do not remove the protective foil until after assembly.

## Mounting instructions

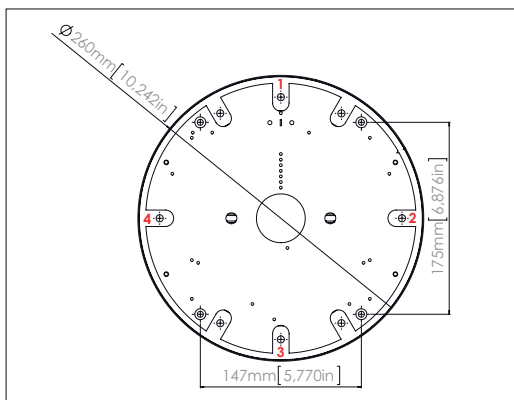
Date: 02.26.2020

### SLIM DIRECT, INDIRECT, OUT, IN ELLIPSE, DELTA

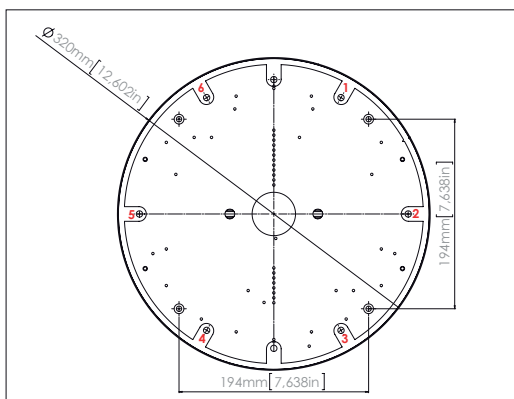
### Light fixture with canopy – Connection of the light fixture with current-carrying steel cables



Canopy Ø 230 mm / 9,5" with 4 steel cables



Canopy Ø 290 mm / 11,4" with 4 steel cables



Canopy Ø 350 mm / 13,7" with 6 steel cables

### Mounting of the canopy



**Make sure the ceiling has sufficient load-carrying capacity!**

1. Fit the base of the canopy to the ceiling with the 3/4/6 mounting points. Ø Drill 6mm / 1/4" holes and anchor to fasten canopy to ceiling (see scale sketch on the left).
2. Connect the power supply and the control signal to the terminal block of the ceiling plate (see wiring diagram page 16-22).

### Connection of the light fixture

3. Fix light fixtures with 3,4,6 steel cables (depending on light fixture) to the canopy with the provided cable grippers and align by applying light pressure on the cable grippers. Observe minimum / maximum suspension height on page 5, 6.



**Consider the polarity of the current-carrying cables in accordance with the markings on the light fixture and the canopy.**



**Never adjust the suspension under pressure. The steel cables might get damaged.**

4. Lock the cable grippers in place by use of the insulated knurled screw.
5. Shorten excessive steel cables in order to prevent short circuits.



**Shortened cables can only be replaced by the factory!**

- 6a. (optional) Canopy cover including light spot: Connect spot with canopy.
  - 6b. Mount the canopy cover and fasten it with screws from the side.
7. Check whether the light fixture is functioning.



Canopy with mounted cover



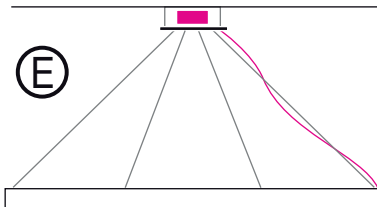
Canopy with spot

## Mounting instructions

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### SLIM DIRECT, INDIRECT, OUT, IN ELLIPSE, DELTA

### Light fixture with canopy – Connection of the light fixture with separate power supply cable



#### Mounting of the canopy



**Make sure the ceiling has sufficient load-carrying capacity!**

1. Fit the base of the canopy to the ceiling with the 3/4/6 mounting points. Ø Drill 6mm / 1/4" holes and anchor to fasten canopy to ceiling (see scale sketch on the left).
2. Connect the power supply and the control signal to the terminal block of the canopy (see wiring diagram page 16-22).

#### Connection of the light fixture

3. Fix light fixtures with 3,4,6 cables (depending on light fixture) to the canopy at the provided cable grippers and align by applying light pressure on the steel cable grippers. Observe minimum / maximum suspension height on page 5, 6.



**Consider the polarity of the current-carrying cables in accordance with the markings on the light fixture and the canopy.**



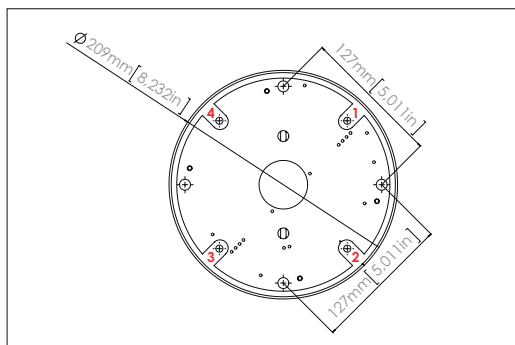
**Never adjust the suspension under pressure. The steel cables might get damaged.**

4. Lock the cable grippers in place by use of the insulated knurled screw.
5. Shorten excessive steel cables in order to prevent short circuits.

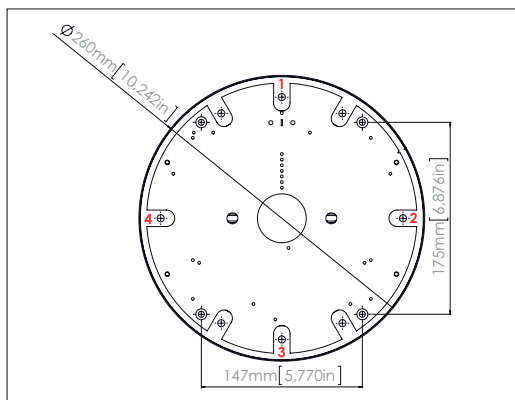


**Shortened cables can only be replaced by the factory!**

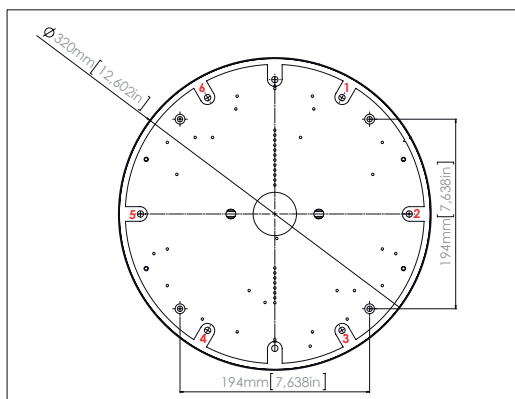
- 6a. Insert the power supply line through the side of the ceiling plate and connect it to the terminal block in accordance with the wiring diagram (p.16-22)
  - 6b (optional) Canopy including light spot: connect pre-assembled connector to canopy.
7. Mount the canopy cover and fasten it with screws from the side.
  8. Check whether the light fixture is functioning.



Canopy Ø 230 mm / 9,5" with 4 steel cables



Canopy Ø 290 mm / 11,4" with 4 steel cables



Canopy Ø 350 mm / 13,7" with 6 steel cables



Canopy with mounted cover



Canopy with spot

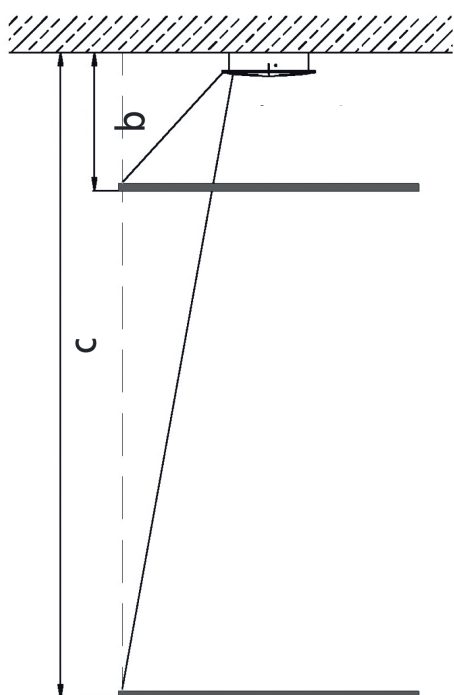
## Mounting instructions

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**SLIM** DIRECT, INDIRECT, OUT, IN  
ELLIPSE, DELTA



**Light fixture with canopy**  
**minimum (b) respectively maximum (c) ceiling suspension**



<b>SLIM</b>	min.	max
<b>DIRECT, INDIRECT, OUT, IN</b>		
Ø 900 mm / 35.4"	416 mm / 16.37"	1939 mm / 76.33"
Ø 1240 mm / 48.8"	602 mm / 23.07"	2883 mm / 113.50"
Ø 1550 mm / 61.0"	772 mm / 30.39"	3743 mm / 147.36"
Ø 1900 mm / 74.8"	963 mm / 37.91"	4714 mm / 185.59"
<b>ELLIPSE</b>		
1550 x 775 mm / 61.0 x 30.5"	375 mm / 14.76"	1750 mm / 68.89"
<b>DELTA</b>		
1344 x 1313 mm / 52.9 x 51.6"	600 mm / 23.6"	2800 mm / 110.23"
1344 x 1313 mm / 52.9 x 51.6"	600 mm / 23.6"	2800 mm / 110.23"

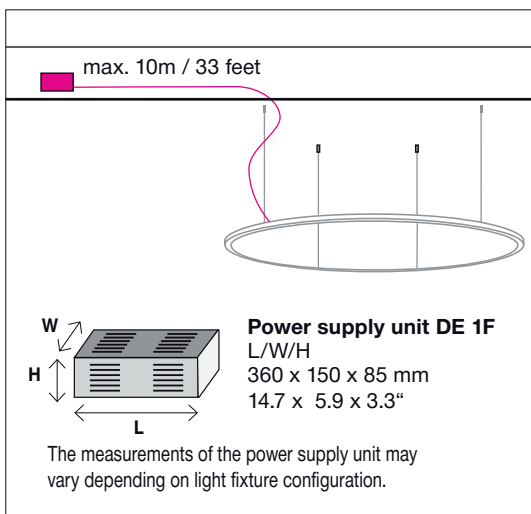
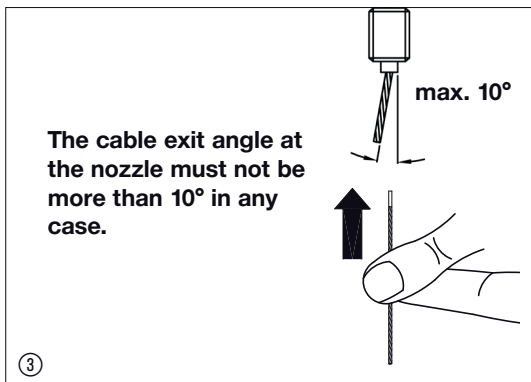
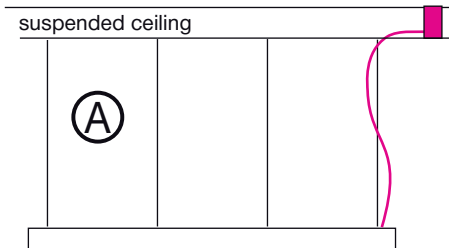


## Assembly instruction

Date: 02.26.2020

### SLIM DIRECT, INDIRECT, OUT, IN ELLIPSE, DELTA

INTER-LUX ceiling external power supply unit



### Light fixture with steel cable suspension – Connection of the light fixture with external power supply unit

Phone: (410)381-1497

Web: [www.inter-lux.com](http://www.inter-lux.com)



### Mounting of the cable grippers, installation of the light fixture



**Make sure the ceiling has sufficient load-carrying capacity!**

1. Mark the 3/4/6 anchor positions of the light fixture on the ceiling according to the drilling template on page 11-13 (observe different measurements).
2. Drill Ø 6mm / 1/4 holes, insert anchors and fasten steel cable holders, see pictures ① + ②.



**The steel cable grippers cannot be used for outdoor areas. Make sure cables are not damaged. Prior to mounting, the nozzle of the steel cable bracket has to have noticeable spring pressure. In order to ensure full suspension, the steel cables have to be clean and free from grease, oil and rust. The steel cable grippers can only be used in connection with the provided fixation cables for stationary and static loads, see picture ③.**

3. Insert the cables which have been pre-attached to the light fixture in the steel cable grippers.
4. Lift the light fixture in the requested position and adjust by applying light pressure on the steel cable grippers.
5. If provided, lock the steel cable grippers in place by use of the insulated knurled screw.
6. Shorten excessive steel cables.



**Shortened cables can only be replaced by the factory!**

### Assembly of the operating unit, connection to light fixture



**Mount external power supply unit only in a dry and aerated place!**

Power supply cable from the operating unit to the light fixture max. 10m / 33 feet

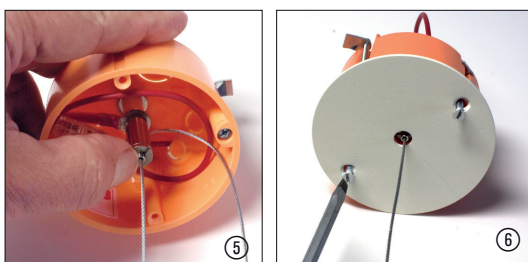
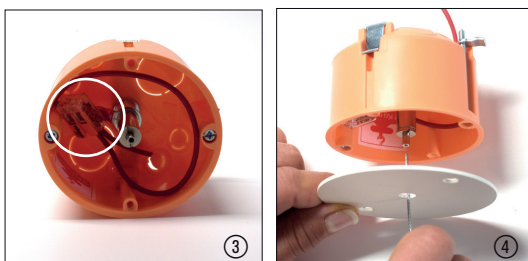
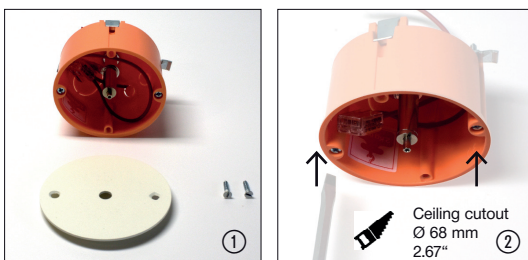
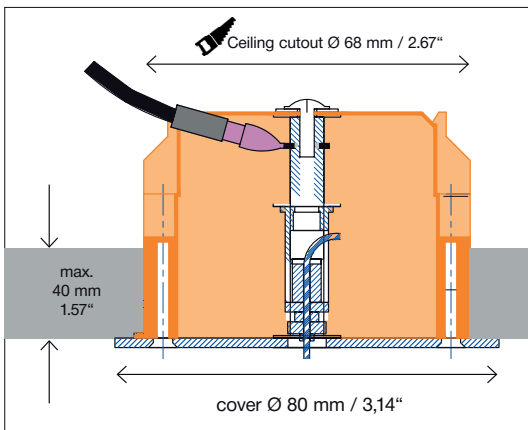
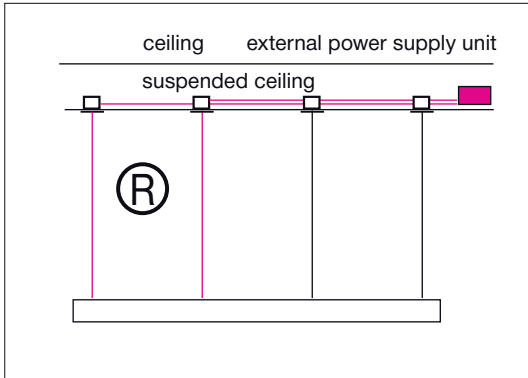
**Assembly of external power supply vertically or horizontally (see sketch)**

7. Open the housing of the operating unit by loosening the 4 screws.
8. Fasten operating unit sufficiently.
9. Connect primary connection and power supply cable of the light fixture according to the wiring diagram (p.16-22), then fasten the housing of the operating unit again.
10. Check whether the light fixture is functioning.

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### SLIM DIRECT, INDIRECT, OUT, IN ELLIPSE, DELTA



### Light fixture with current-carrying steel cables, cavity boxes and external power supply unit.



### Mounting of the cavity boxes with integrated steel cable grippers.



**Make sure the ceiling has sufficient load-carrying capacity!**

1. Mark the 4 or 6 positions of the cavity boxes on the ceiling according to the drilling template on page 11-13 (observe different measurements).
2. Cut out a ceiling cavity with  $\varnothing 68 \text{ mm} / 2.67''$  ②. Attach the cavity box to the ceiling with 2 cross-recessed screws (the thickness of the ceiling must be max.  $40 \text{ mm} / 1.57''$ ).
3. Connect the power supply cable to the cavity box ③ and with the technical unit (see pos.10).
4. Insert the steel cables (which are already mounted on the fixture) through the hole in the cover plate in the cable grippers ④.
5. Lift the light fixture in the requested position and adjust by applying slight pressure on the steel cable grippers ⑤.
6. Shorten excessive steel cables.
7. Fix cover with two screws ⑥.



**Shortened cables can only be replaced by the factory!**



**The steel cable grippers cannot be used for outdoor areas. Make sure cables are not damaged. Prior to mounting, the nozzle of the steel cable bracket has to have noticeable spring pressure. In order to ensure full suspension, the steel cables have to be clean and free from grease, oil and rust. The steel cable grippers can only be used in connection with the provided fixation cables for stationary and static loads.**

## Mounting instructions

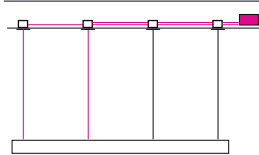
Date: 02.26.2020

**SLIM** DIRECT, INDIRECT, OUT, IN  
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**Light fixture with current-carrying  
steel cables, cavity boxes and  
external power supply unit.**



Distance between external power supply unit and  
Cavity box max. 10m / 33 feet

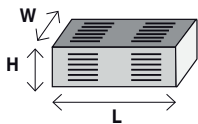


### Power supply unit DE 1F

L/W/H

360 x 150 x 85 mm  
4.7 x 5.9 x 3.3"

The measurements of the power  
supply unit may vary depending  
on light fixture configuration.



### Assembly of the power supply unit, connection to cavity boxes

Mount external power supply unit only in a dry and well-ventilated place!  
Power supply cable from the power supply unit to the light fixture max.  
10m / 33 feet

### Assembly of external power supply vertically or horizontally (see sketch)

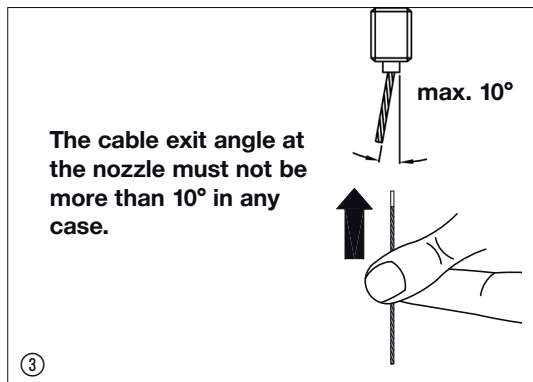
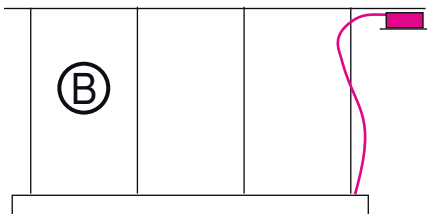
8. Open the housing of the power supply unit by loosening the 4 screws.
9. Fasten power supply unit properly.
10. Connect primary connection and power supply cable of the cavity boxes according to the wiring diagram (p.16-22), then fasten the housing of the power supply unit again.
11. Check whether the light fixture is functioning.



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max. 10m / 33 feet		
Typ Canopy	Maße mm / inch	Ø Deckel / Gehäuse
DB 230	Ø 230 / 210 mm / 9.5 x 8.3"	(Ø 900mm)
DB 290	Ø 290 / 260 mm / 11.4 x 10.2"	(Ø 1240mm) (Ø 1550mm) (ELLIPSE, DELTA)
DB 350	Ø 350 / 320 mm / 13.7 x 12.5"	(Ø 1900mm)

### Light fixture with steel cable suspension – Connection of the light fixture with separate canopy



#### Mounting of the cable grippers, installation of the light fixture



**Make sure the ceiling has sufficient load-carrying capacity!**

1. Mark the 4/6 anchor positions of the light fixture on the ceiling according to the drilling template page 11-13 (observe different measurements).
2. Drill Ø 6mm / 1/4 holes, insert anchors and fasten steel cable holders, see pictures ① + ②.



**The steel cable grippers cannot be used for outdoor areas. Make sure cables are not damaged. Prior to mounting, the nozzle of the steel cable gripper has to have noticeable spring pressure. In order to ensure full suspension, the steel cables have to be clean and free from grease, oil and rust. The steel cable gripper can only be used in connection with the provided fixation cables for stationary and static loads, see picture ③.**

3. Insert the cables which have been pre-attached to the light fixture in the steel cable grippers.
4. Lift the light fixture in its desired position and adjust by applying light pressure on the steel cable grippers.
5. If provided, lock the steel cable grippers in place by use of the insulated knurled screw.
6. Shorten excessive steel cables.



**Shortened cables can only be replaced by the factory!**

#### Assembly of the canopy, connection to light fixture



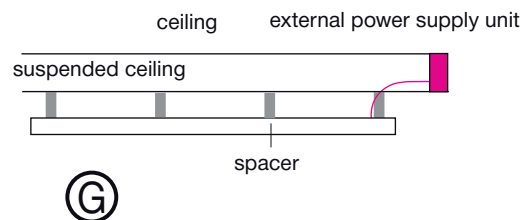
**Power supply cable from the operating unit to the light fixture max. 10m / 33 feet**

7. Mark the 4 anchor positions of the canopy on the ceiling according to the scale sketch (page 4) – different measurements depending on size. Drill Ø 6mm / 1/4 holes, insert anchors and fasten canopy.
8. Connect primary connection in accordance with the wiring diagram.
9. Insert the power supply cable that has been pre-attached to the light ring in the side of the canopy and connect to the terminal block according to wiring diagram (p.16-22).
10. Mount canopy cover and fasten with screws from the side.
11. Check whether the light fixture is functioning.

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### Direct ceiling mounting – Connection of the light fixture with external power supply unit



#### Mounting of the ceiling support



**Make sure the ceiling has sufficient load-carrying capacity!**

1. Mark the 4/6 anchor positions of the light fixture on the ceiling according to the drilling template page 11-13 (observe different measurements).
2. Drill Ø 6mm / 1/4 holes, insert anchors and fasten ceiling spacers (50 mm), see pictures ① + ② .
3. Insert the bolts which have been pre-attached to the light fixture, in the ceiling spacer.
4. Fasten with the locking screw on the side.

#### Assembly of the operating unit, connection to light fixture

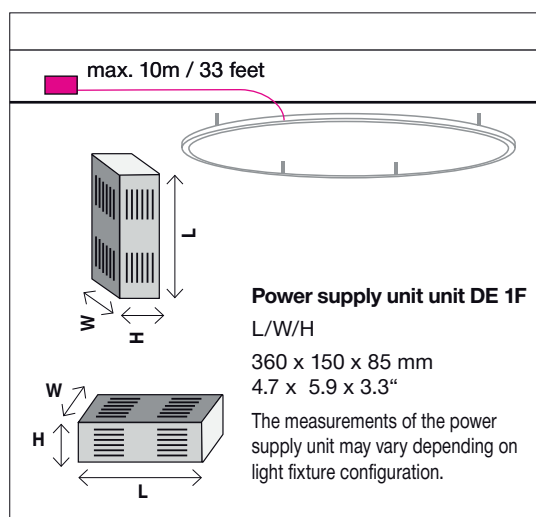
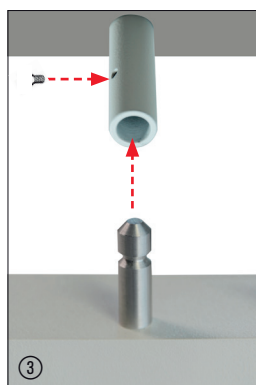


Mount operating unit only in a dry and aerated place!

Power supply cable from the operating unit to the light fixture max. 10m / 33 feet

**Fixation of power supply unit unit vertically or horizontally (see sketch)**

5. Open the housing of the operating unit by loosening the 4 screws.
6. Fasten power supply unit sufficiently.
7. Connect primary connection and power supply cable of the light fixture according to the wiring diagram (p.16-22), then fasten the housing of the operating unit again.
8. Check whether the light fixture is functioning.



## Mounting instructions

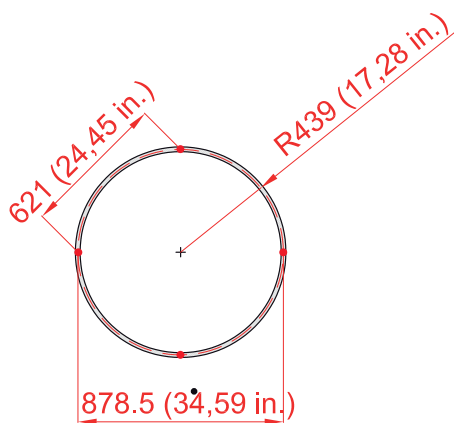
Date: 02.26.2020

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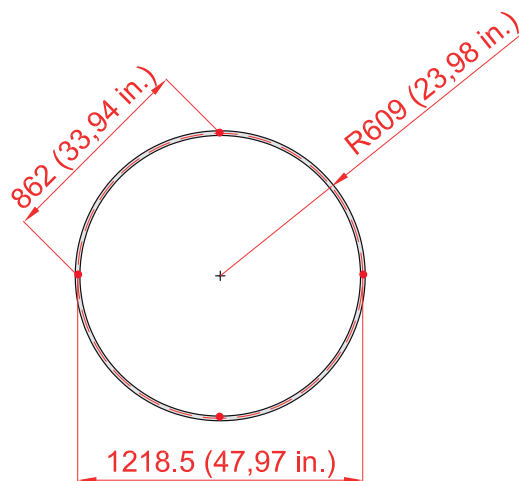


#### Light fixtures with steel cable suspension or ceiling spacers

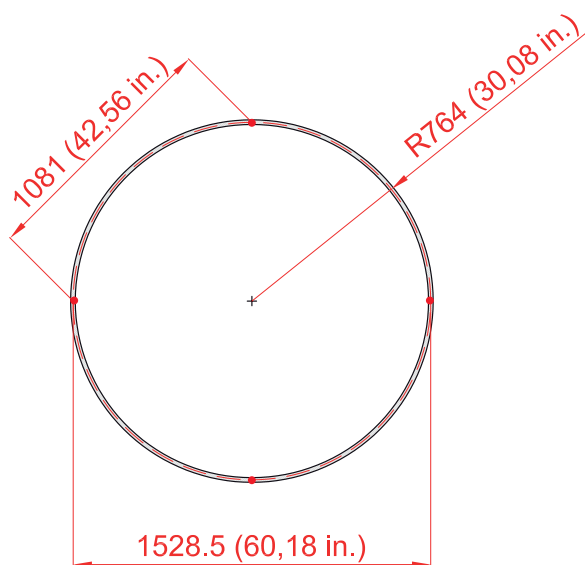
Depending on the size of light fixture:  
4, respectively 6 anchor points for suspension.



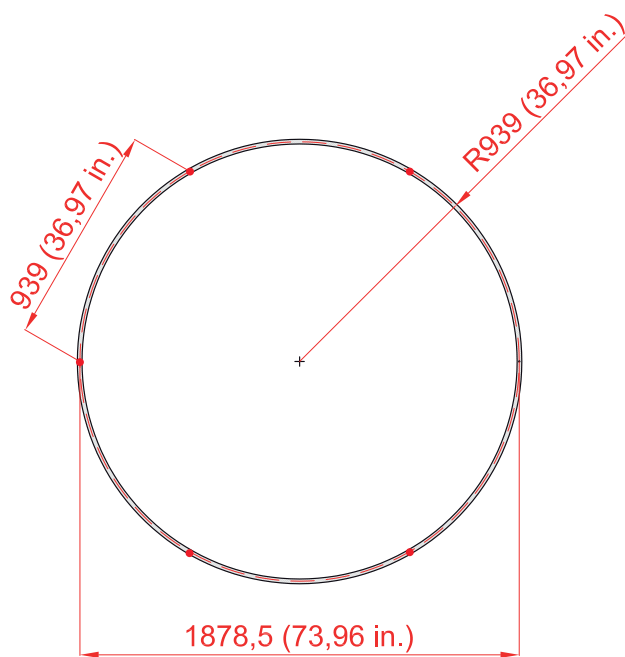
SLIM Ø 900 mm / 35.4"  
4 anchor points



SLIM Ø 1240 mm / 48.8"  
4 anchor points



SLIM Ø 1550 mm / 61.0"  
4 anchor points

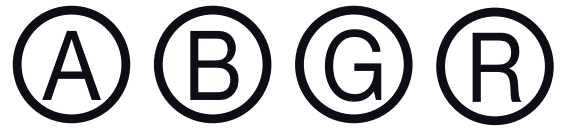


SLIM Ø 1900 mm / 74.8"  
6 anchor points

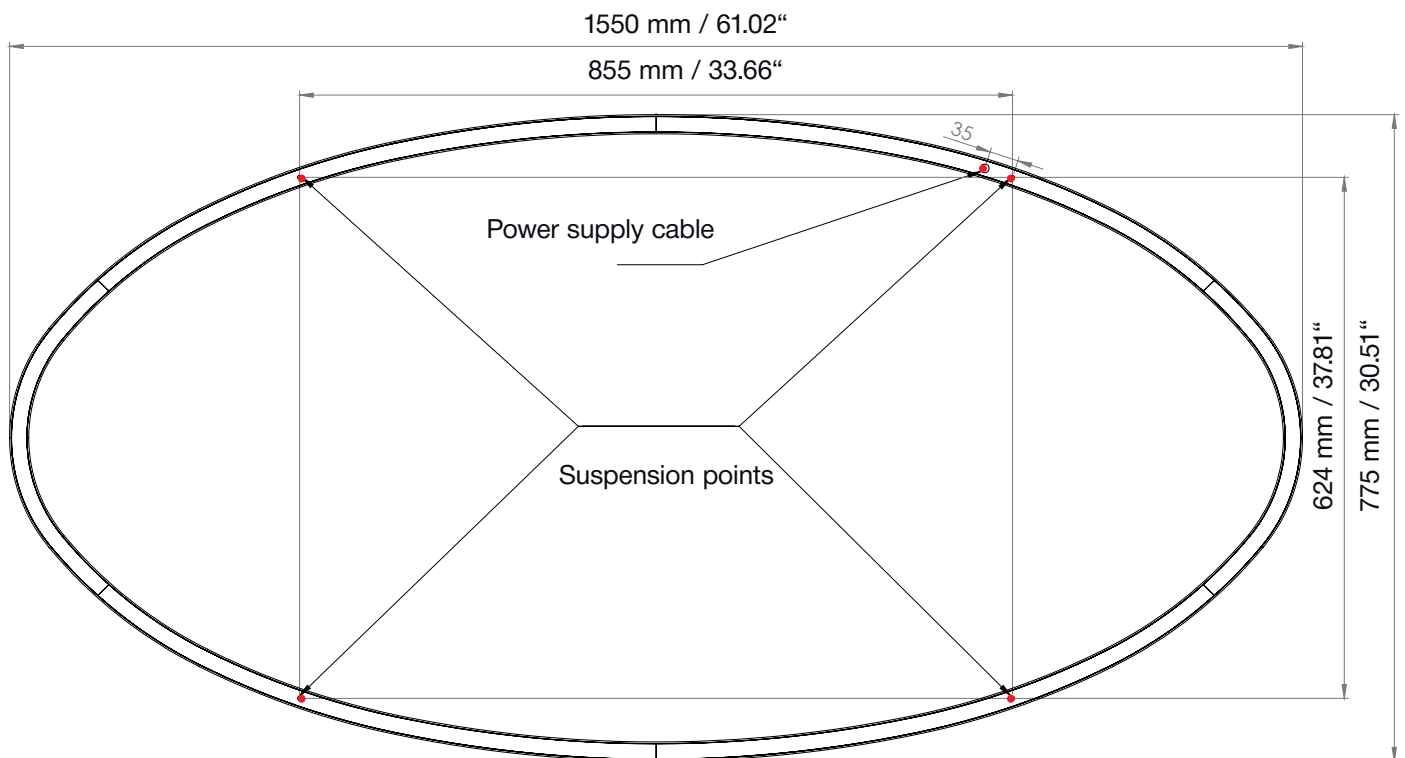
## Mounting instructions

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**SLIM** DIRECT, INDIRECT, OUT, IN  
**ELLIPSE**, DELTA

**Light fixtures with steel cable suspension or ceiling spacers**

Depending on the size of light fixture:  
4 anchor points for suspension.



## Mounting instructions

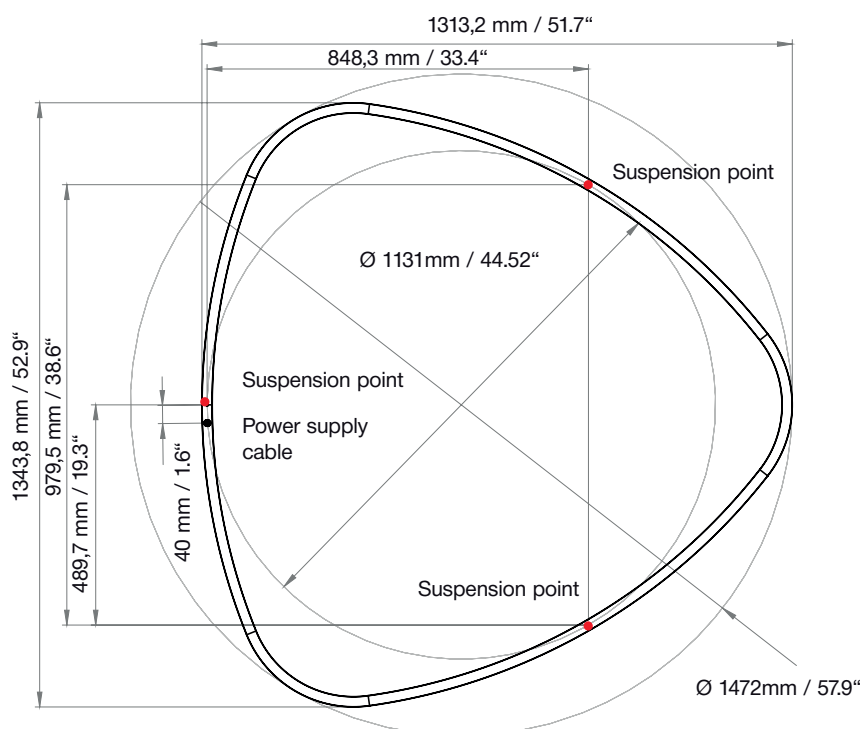
Date: 02.26.2020

**SLIM** DIRECT, INDIRECT, OUT, IN  
ELLIPSE, **DELTA**

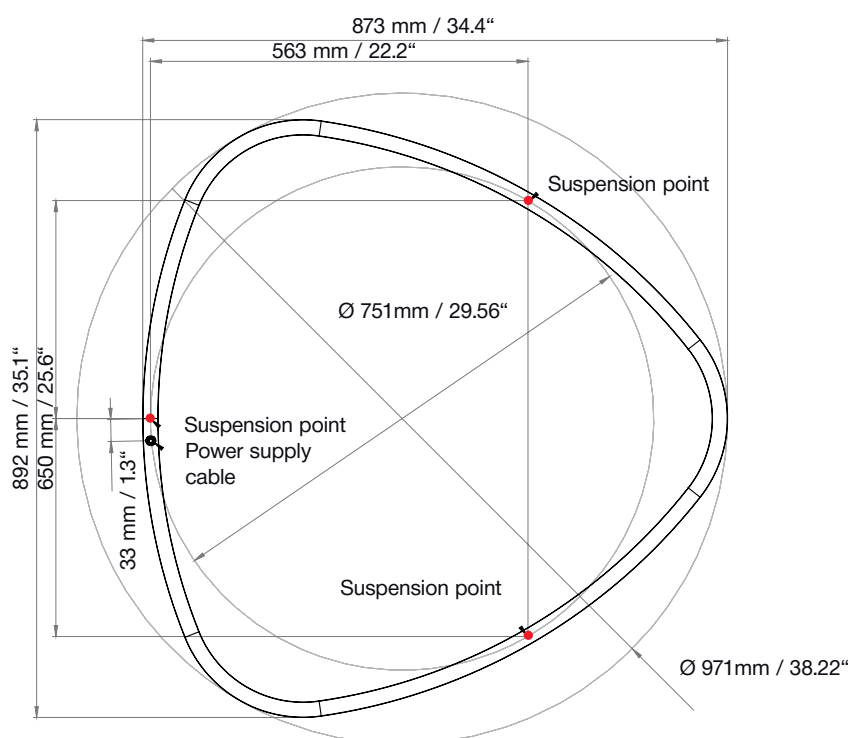


### Light fixtures with steel cable suspension or ceiling spacers

Depending on the size of light fixture:  
3 anchor points for suspension.



minimum suspension height  
600 mm / 23.6"

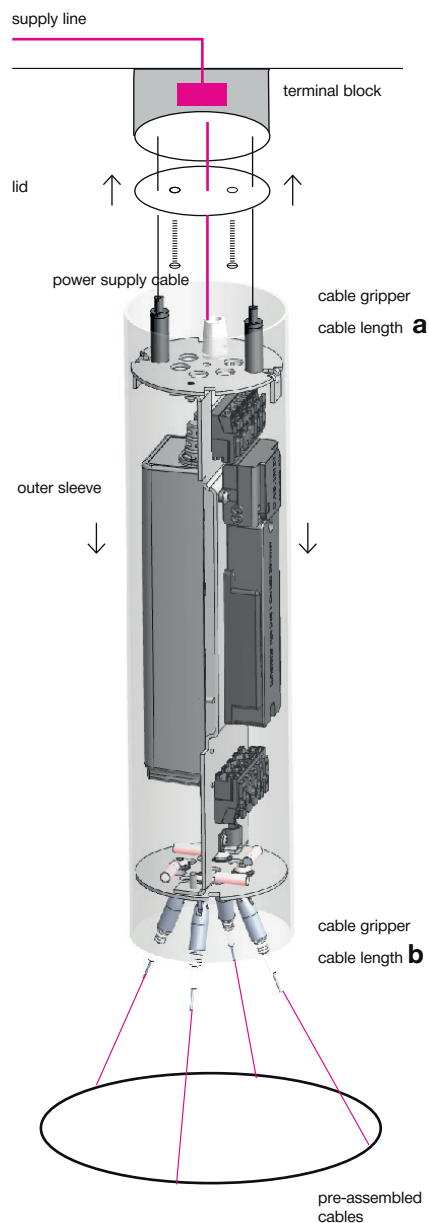
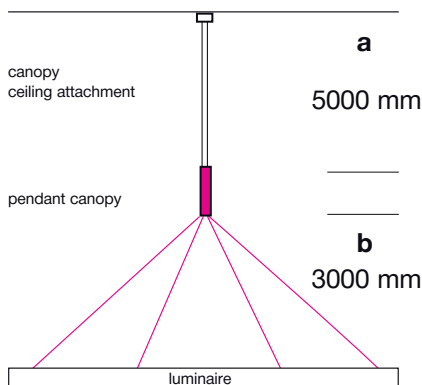


minimum suspension height  
400 mm / 15.7"



# Mounting instructions

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## Luminaire with pendant canopy – Connecting the light fixture with current-carrying steel cables



### Mounting the Canopy Ceiling Attachment



**Verify sufficient load-bearing capacity of the ceiling!**

1. Fasten the canopy ceiling attachment to the ceiling at the 2 mounting points. Ø 6mm / 1/4" drill and wall plugs
2. Connect the power supply and the control signal to the terminal block of the canopy. For this, dismount the terminal block, connect the cables and mount the terminal block again. Insert the two pre-assembled steel cables (5000mm) and the power supply cable through the canopy lid, fasten cable anchorage and lid with magnets.

### Mounting the Pendant Canopy

3. Move the outer sleeve of the pendant canopy up, turn and then move it down.
4. Insert both steel cables (cable length a) in the cable gripper of the pendant canopy and adjust to desired length by applying slight pressure to the cable gripper.



**Never adjust the suspension under load to avoid damage to the steel cables.**

5. Lock the cable grippers on the canopy by use of the insulated knurled nut.
6. Protruding steel cables may be shortened, if necessary.



**Shortened cables may only be replaced by the manufacturer.**

7. Connect the power supply cable to the terminal block of the pendant canopy, lock cable anchorage. Move the outer sleeve back up.

### Connecting the Luminaire

8. Fasten the luminaire body to the bottom part of the pendant canopy at the cable anchors provided with the pre-assembled cables (cable length b) and adjust by applying slight pressure to the cable hold.

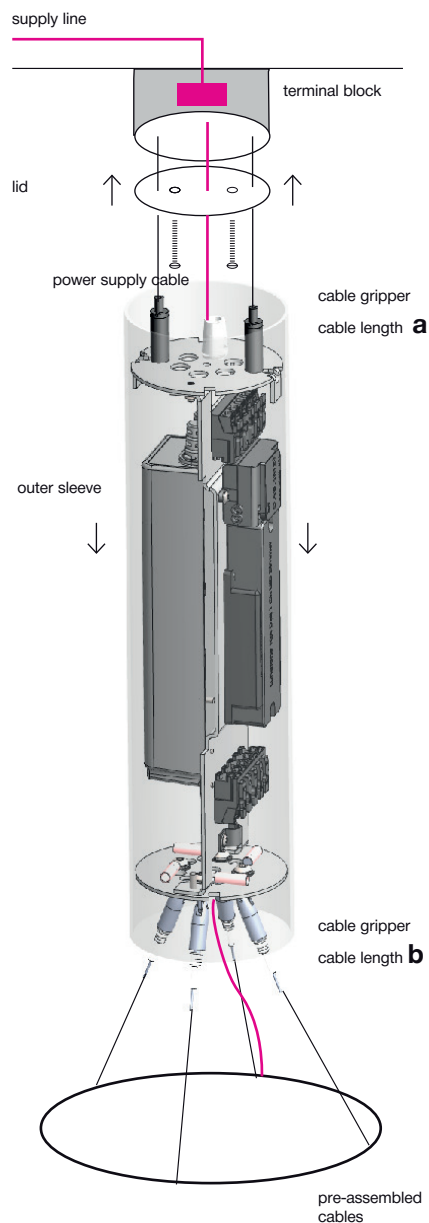
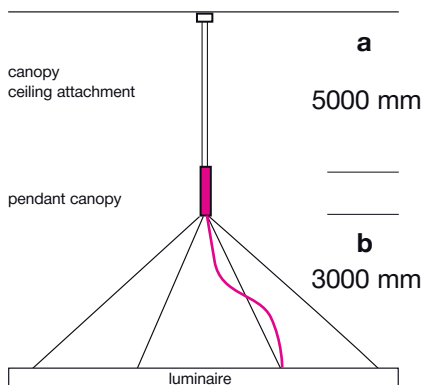


**Observe the polarity of the live cables according to the markings on the luminaire and the canopy.**

9. Lock the cable holds by use of the insulated knurled nut.
10. Shorten protruding current-carrying steel cables to avoid short circuits.
11. Put the sleeve of the pendant canopy back in position and fasten it.
12. Check the luminaire functions.

# Mounting instructions

Date: 02.26.2020



## Luminaire with pendant canopy – Connecting the light fixture with separate supply line



### Mounting the Canopy Ceiling Attachment



**Verify sufficient load-bearing capacity of the ceiling!**

1. Fasten the canopy ceiling attachment to the ceiling at the 2 mounting points. Ø 6mm / 1/4" drill and wall plugs
2. Connect the power supply and the control signal to the terminal block of the canopy. For this, dismount the terminal block, connect the cables and mount the terminal block again. Insert the two pre-assembled steel cables (5000mm) and the power supply cable through the canopy lid, fasten cable anchorage and lid with magnets.

### Mounting the Pendant Canopy

3. Move the outer sleeve of the pendant canopy up, turn and then move it down.
4. Insert both steel cables (cable length a) in the cable gripper of the pendant canopy and adjust to desired length by applying slight pressure to the cable gripper.



**Never adjust the suspension under load to avoid damage to the steel cables.**

5. Lock the cable grippers on the canopy by use of the insulated knurled nut.
6. Protruding steel cables may be shortened, if necessary.



**Shortened cables may only be replaced by the manufacturer.**

7. Connect the supply line to the terminal block of the pendant canopy, lock cable anchorage. Move the outer sleeve back up.

### Connecting the Luminaire

8. Fasten the luminaire body to the bottom part of the pendant canopy at the cable anchors provided with the pre-assembled cables (cable length b) and adjust by applying slight pressure to the cable hold.
9. Lock the cable holds by use of the insulated knurled nut.
10. Connect the pre-assembled supply line to the terminal block at the bottom of the pendant canopy. Lock cable anchorage.
11. Put the sleeve of the pendant canopy back in position and fasten it.
12. Check the luminaire functions.

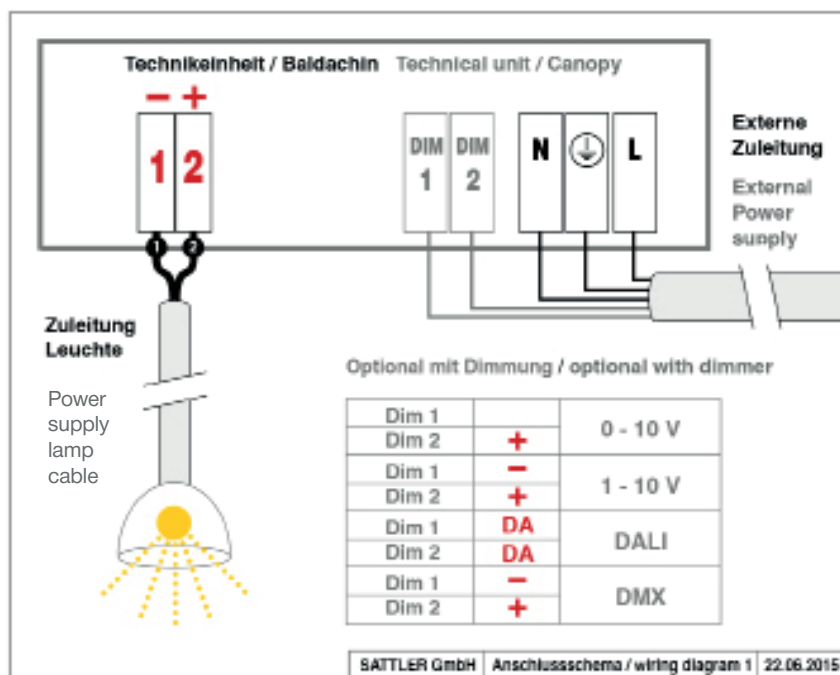
# Mounting instructions

Date: 02.26.2020

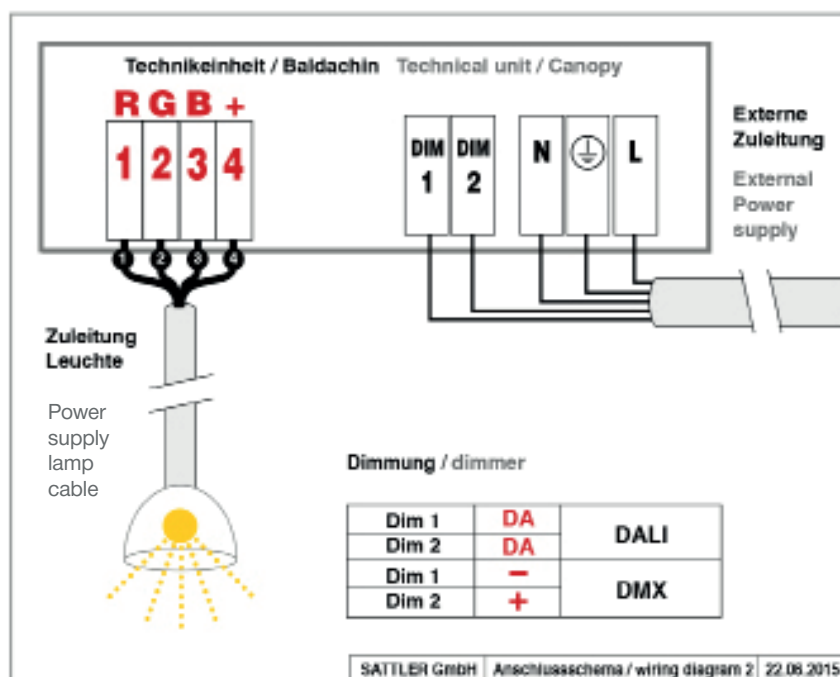
## CIRCOLO SLIM



### Wiring Diagram LED white



### Wiring Diagram LED RGB



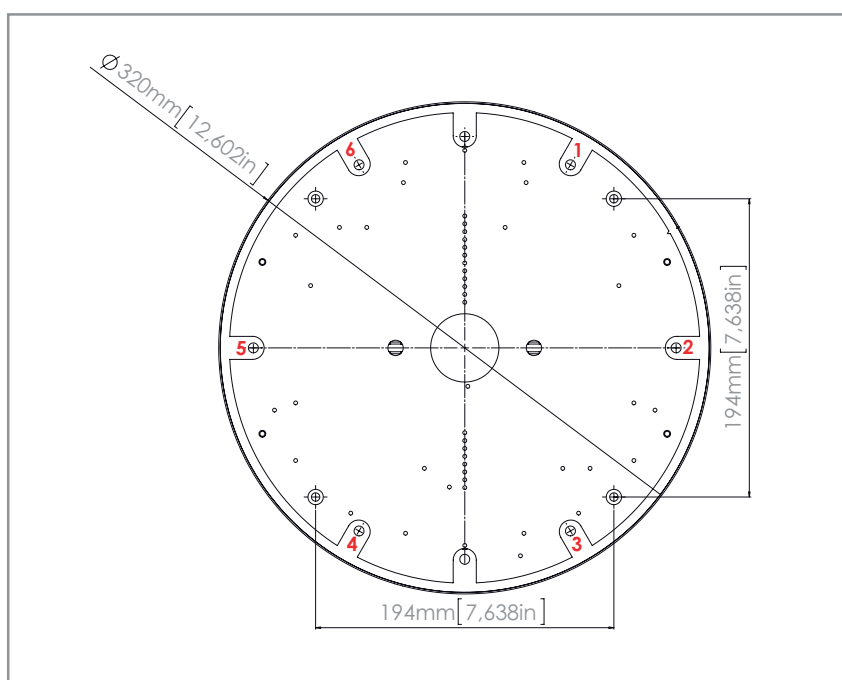
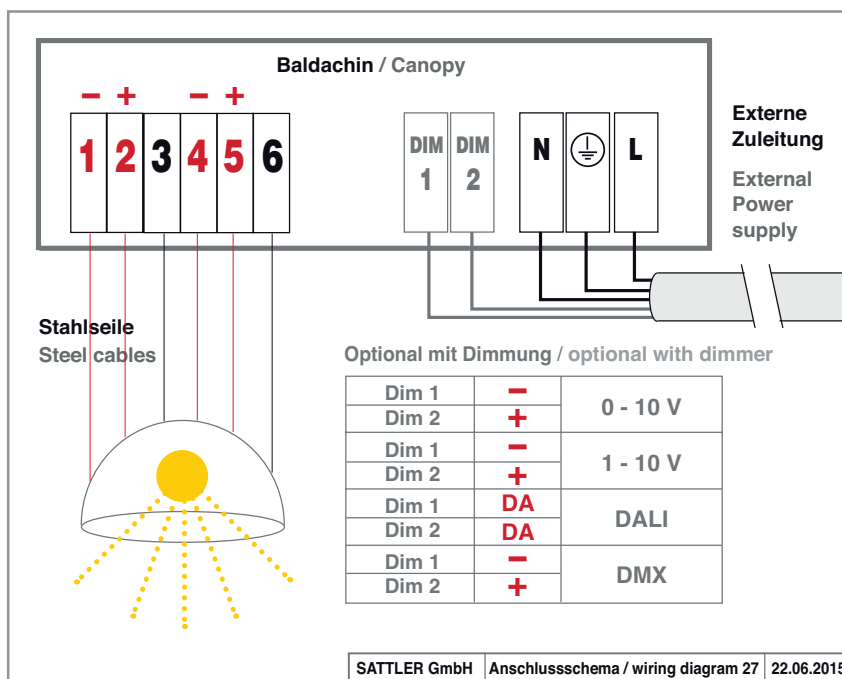
## Mounting instructions

Date: 02.26.2020

### CIRCOLO SLIM



#### Wiring Diagram LED white / Canopy Ø350



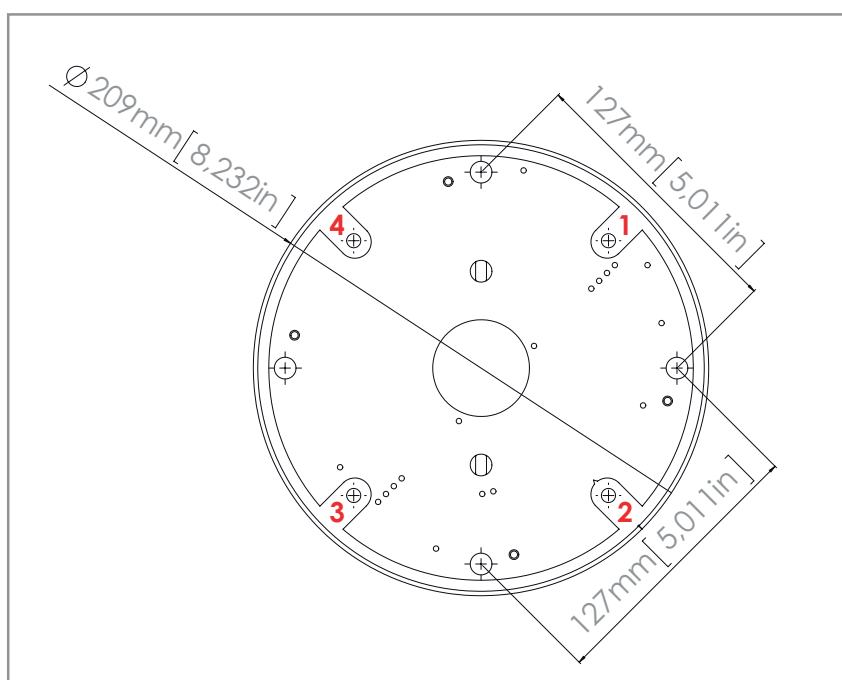
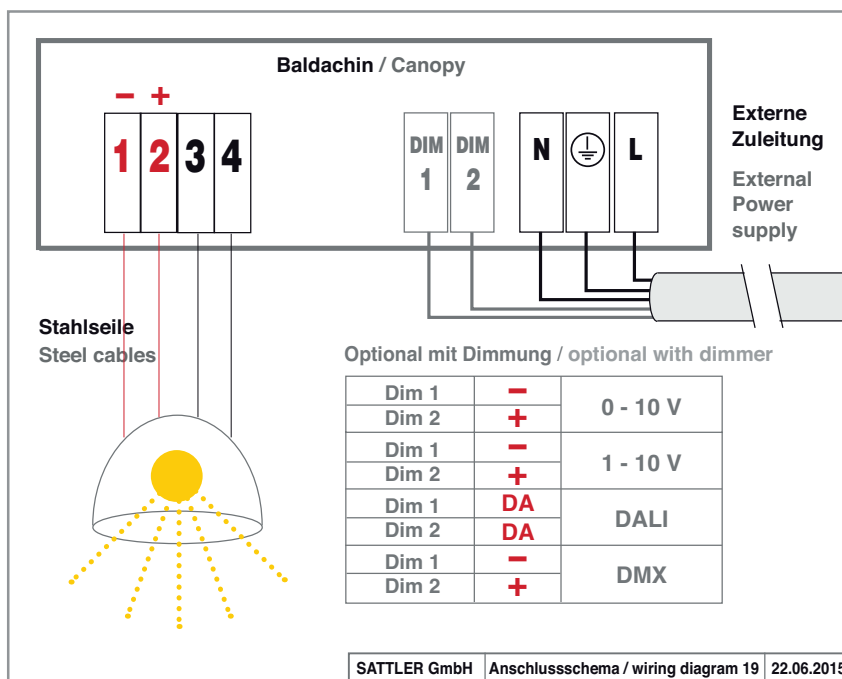
## Mounting instructions

Date: 02.26.2020

## CIRCOLO SLIM



### Wiring Diagram LED white / Canopy Ø230





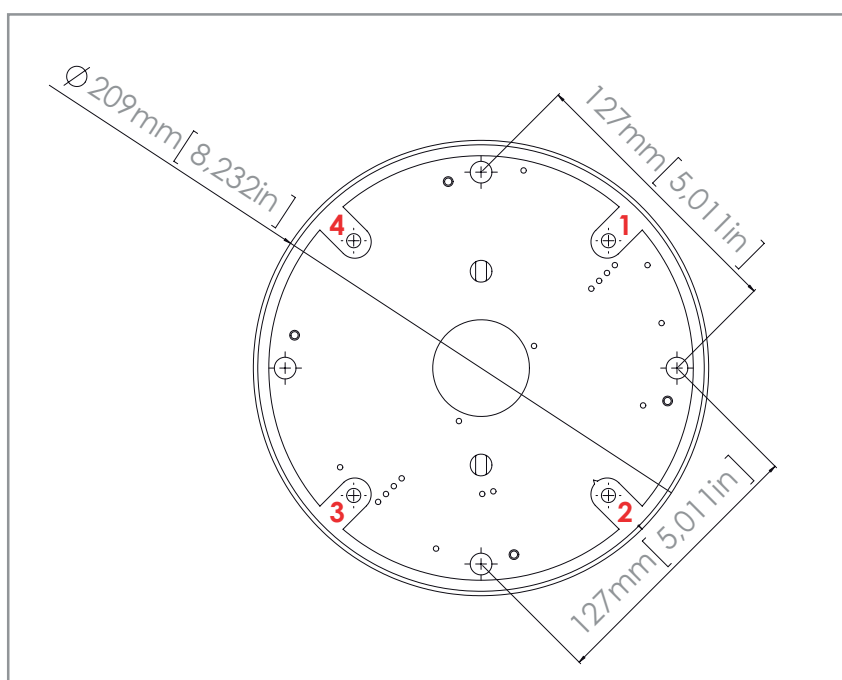
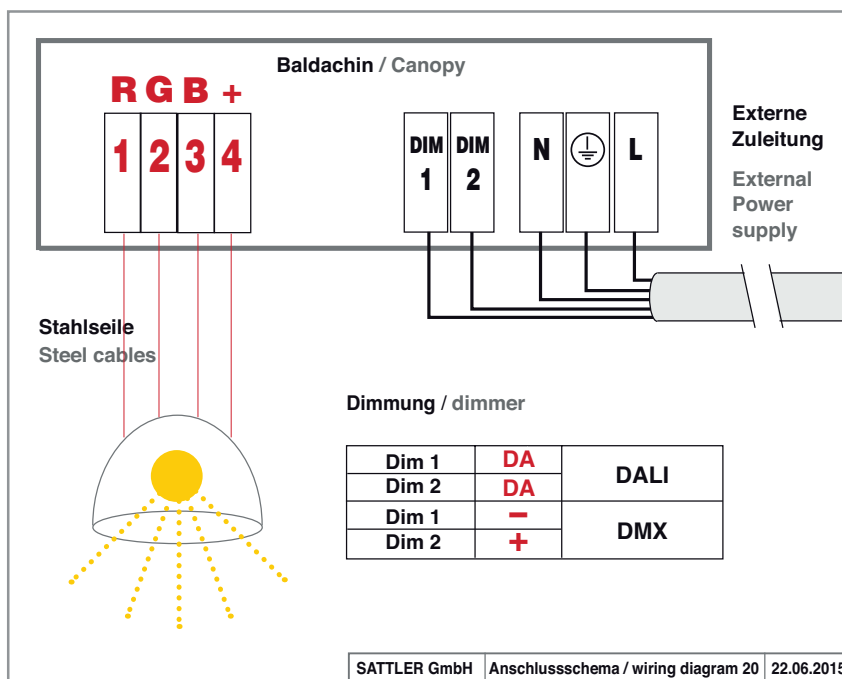
## Mounting instructions

Date: 02.26.2020

## CIRCOLO SLIM



### Wiring Diagram LED RGB / Canopy Ø230



® ®

**Baldachin / Canopy**

Terminal block connections:

- Power:** Terminals 1 (-), 2 (+), 3 (N), 4 (L).
- Dimming:** DIM 1, DIM 2.
- Control:** N (Neutral), Ground symbol, L (Line).

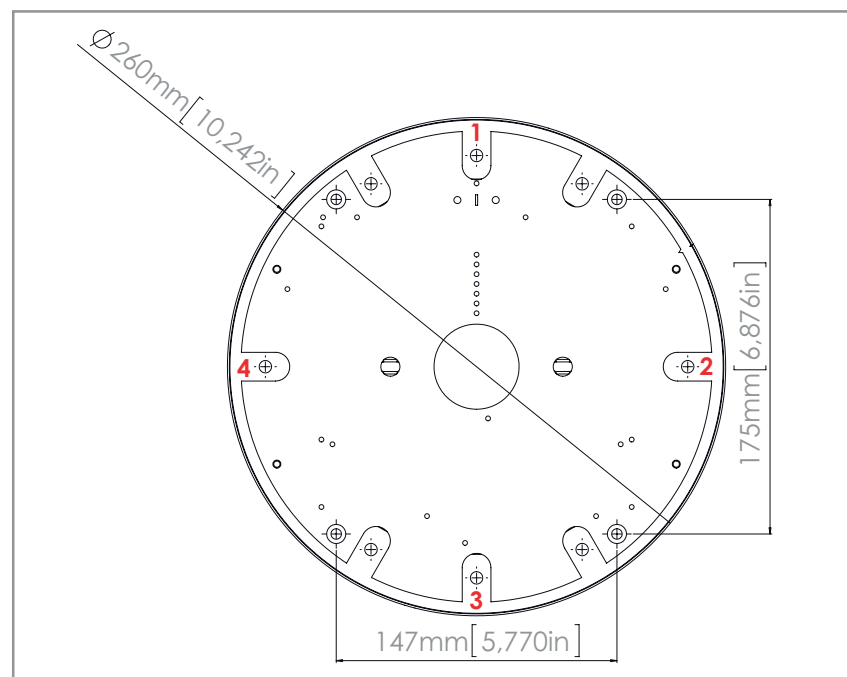
**Externe Zuleitung / External Power supply**

**Stahlseile / Steel cables**

**Optional mit Dimmung / optional with dimmer**

Dim 1	-	0 - 10 V
Dim 2	+	
Dim 1	-	1 - 10 V
Dim 2	+	
Dim 1	DA	DALI
Dim 2	DA	
Dim 1	-	DMX
Dim 2	+	

**SATTLER GmbH** | Anschlusschema / wiring diagram 21 | 22.06.2015



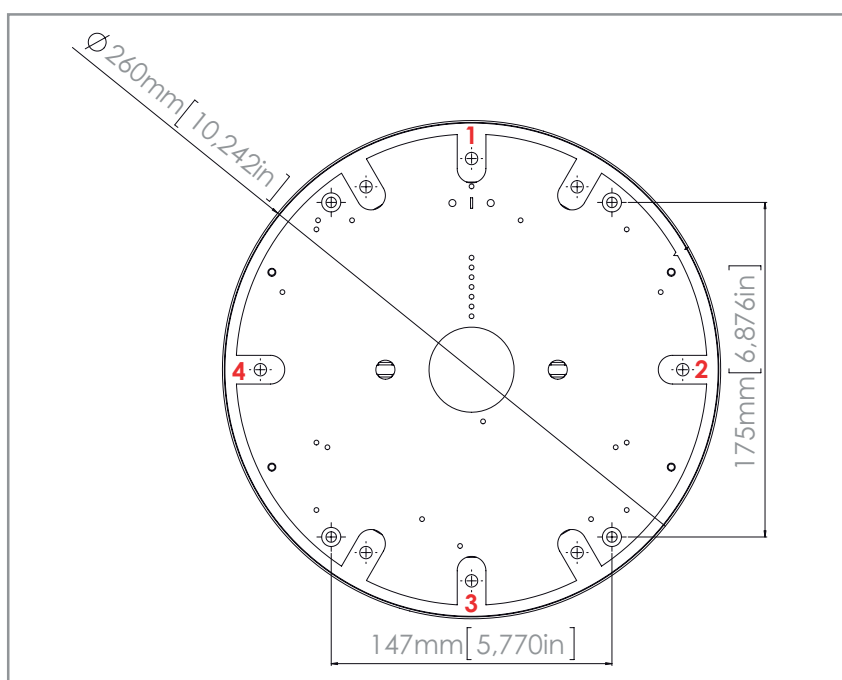
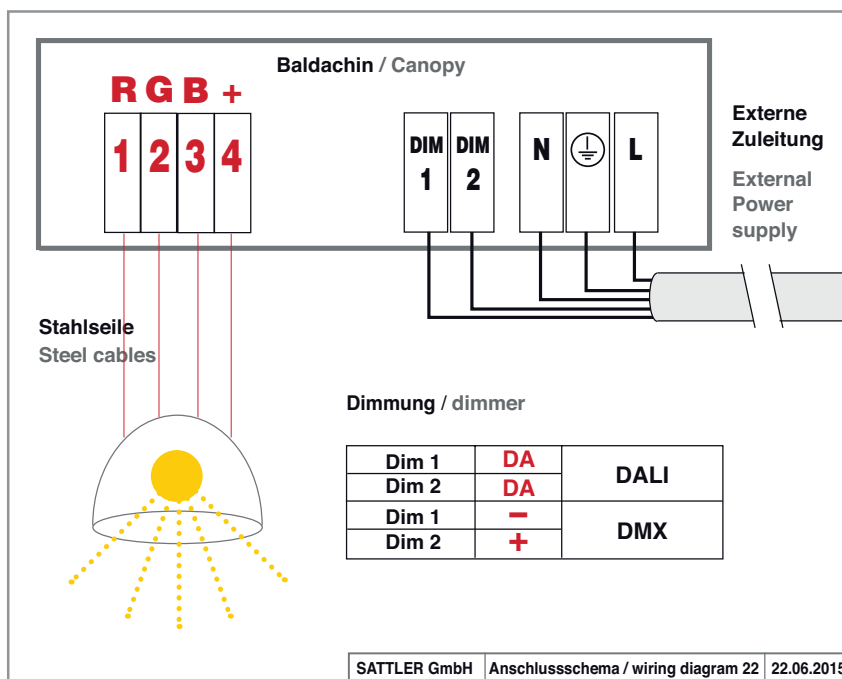
# Mounting instructions

Date: 02.26.2020

## CIRCOLO SLIM



### Wiring Diagram LED RGB / Canopy Ø290



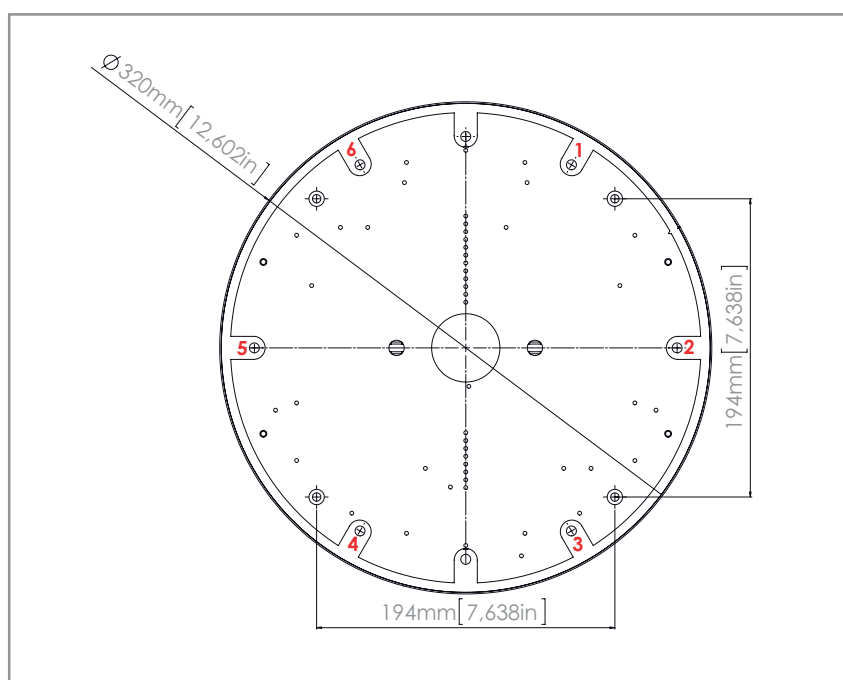
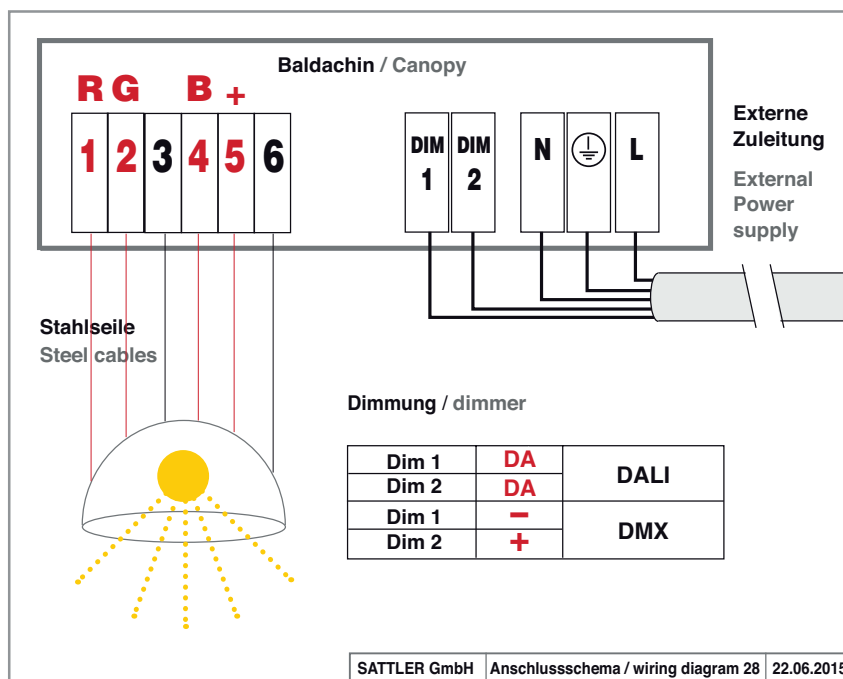
## Mounting instructions

Date: 02.26.2020

## CIRCOLO SLIM



### Wiring Diagram LED RGB / Canopy Ø350



We will be glad to assist you with any further questions regarding the assembly of our light fixtures.

**Contact: Inter-lux, 3741 Commerce Dr. #306-308, Baltimore, MD 21227. 410.381.1497 [inter-lux.com](http://inter-lux.com)**

Legal disclaimer: Please make sure to adhere to all safety instructions. Every single assembly step is crucial in order to ensure the safety of the light fixture and the technician. Inter-lux and SATTLER GmbH cannot be held liable for any damages or injuries in case of negligence of safety instructions.