

OUTLINER 30, 40, 50 SEAMLESS / SEAMLESS IP67

I n s t a l l a t i o n G u i d e

OUTLINER 30 SEAMLESS



OUTLINER 30 SEAMLESS IP67



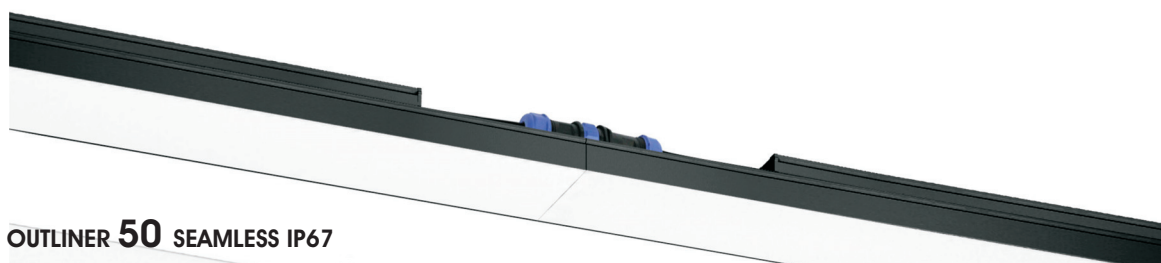
OUTLINER 40 SEAMLESS



OUTLINER 40 SEAMLESS IP67



OUTLINER 50 SEAMLESS



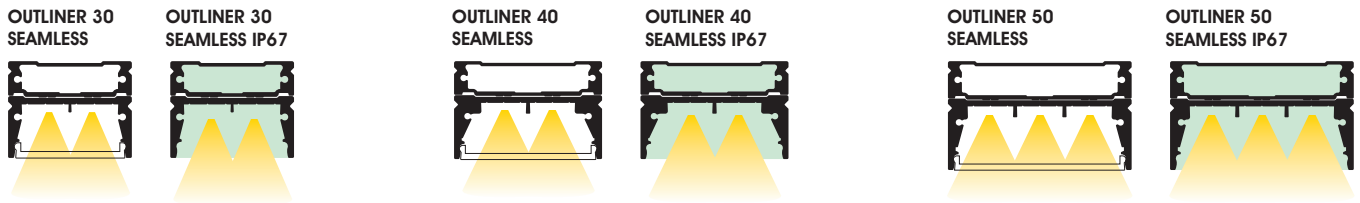
OUTLINER 50 SEAMLESS IP67



OUTLINER 30, 40, 50 SEAMLESS / SEAMLESS IP67

Mounting Types Installation Guide

The installation guide refer to the following models:



For simplicity reasons only OUTLINER 50 SEAMLESS is presented in this document as an example. Use the same installation methode for OUTLINER 30/40 SEAMLESS

Select the mounting type of the luminaire, according to the illustration below and follow the steps for each type.

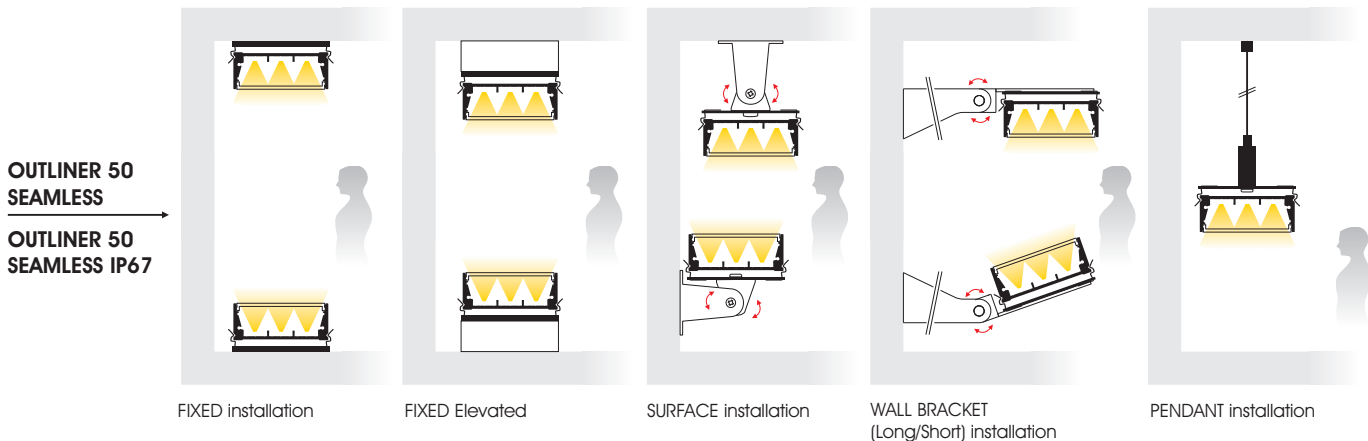


Table 1
Quantity of **mounting components** for OUTLINER 30,40,50 (Fixed, Fixed Elevated, Surface, Wall Bracket installations)

Length (m)	up tp 1.03	1.04-1.53	1.54-2.03	2.04-2.53	2.54-3.03	3.04-3.53	3.54-4.03
Quantity	2	3	4	5	6	7	8

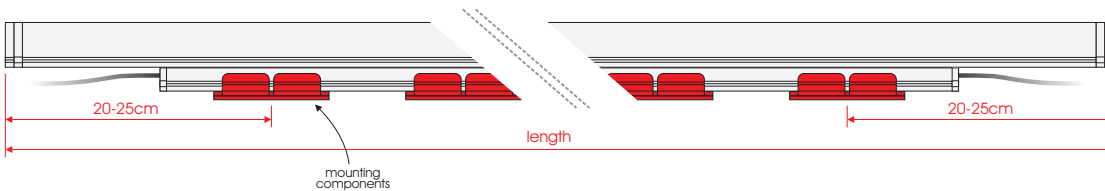
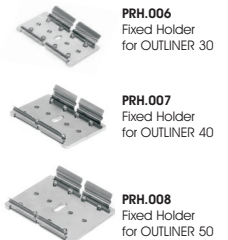


Table 2
Quantity of **antislippers (PRH.018)** for OUTLINER 30 SEAMLESS (Fixed, Fixed Elevated, Surface, Wall Bracket installations)

Length (m)	up tp 3	3.01-4.03
Quantity	1	2

Table 3
Quantity of **antislippers (PRH.018)** for OUTLINER 30 SEAMLESS IP67 (Fixed, Fixed Elevated, Surface, Wall Bracket installations)

Length (m)	up tp 1.03	1.04-1.53	1.54-2.03	2.04-2.53	2.54-3.03	3.04-3.53	3.54-4.03
Quantity	2	3	4	5	6	7	8

Table 4
Quantity of **antislippers (PRH.019 / PRH.020)** for OUTLINER 40/50 SEAMLESS (Fixed, Fixed Elevated, Surface, Wall Bracket installations)

Length (m)	up tp 1.03	1.04-1.53	1.54-2.03	2.04-2.53	2.54-3.03	3.04-3.53	3.54-4.03
Quantity	2	3	4	5	6	7	8

Table 5
Quantity of **antislippers (PRH.019 / PRH.020)** for OUTLINER 40/50 SEAMLESS IP67 (Fixed, Fixed Elevated, Surface, Wall Bracket installations)

Length (m)	up tp 1.03	1.04-1.53	1.54-2.03	2.04-2.53	2.54-3.03	3.04-3.53	3.54-4.03
Quantity	4	6	8	10	12	14	16

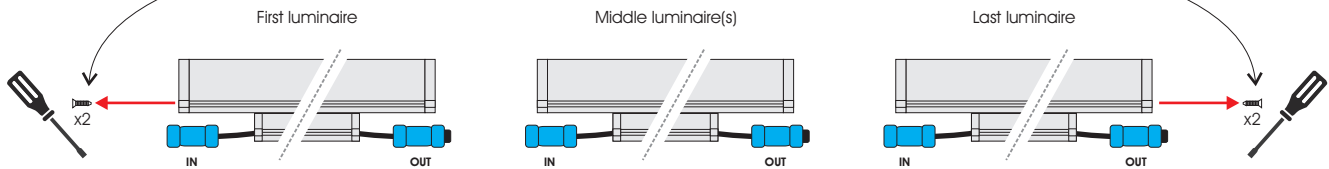
OUTLINER 30, 40, 50 SEAMLESS / SEAMLESS IP67

Mounting Types Installation Guide

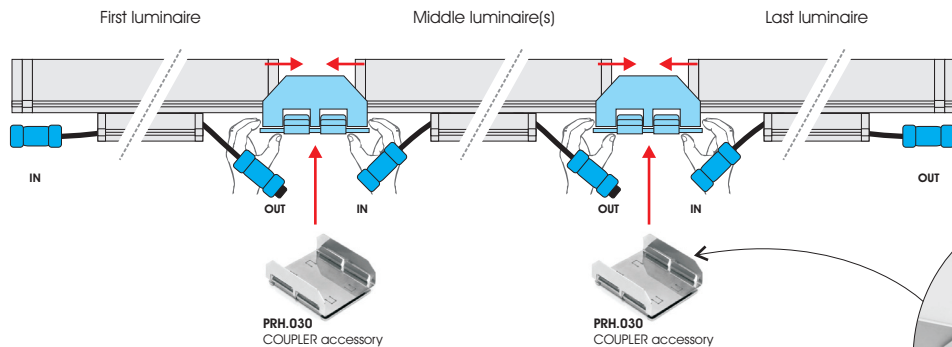
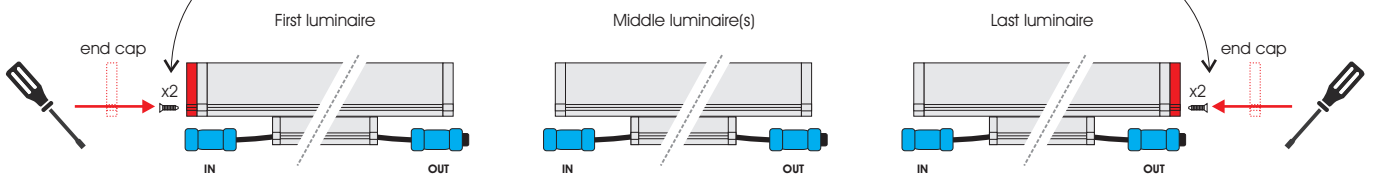
OUTLINER 50 SEAMLESS is presented as an example below.

Prepare each luminaire according to the illustration below:

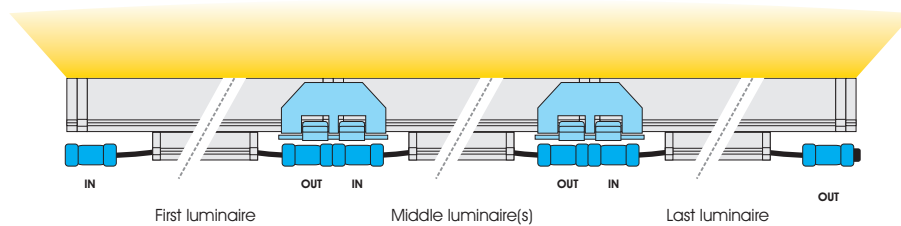
Remove the screws only from the first luminaire (left side) and last luminaire (right side) as the illustration shows.



Place an end cap on each side and screw the two screws as the illustration shows.



Attention
Seamless luminaires using coupler accessory must not exceed a total length of 10m

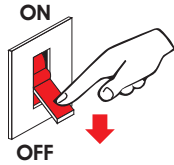


OUTLINER 30, 40, 50 SEAMLESS / SEAMLESS IP67

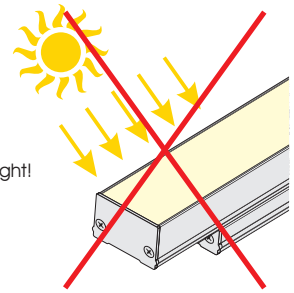
Mounting Types Installation Guide



Attention
Before any maintenance
switch off the main power



Attention
Luminaires must not
operate in direct sunlight!



OUTLINER 50 SEAMLESS is presented as an example below:

FIXED Installation

<p>A</p> <p>Holder PRH.008*</p> <p>Attention When placing the holders on the surface, make sure to be in line.</p> <p>* For quantity refer to Table 1</p>	<p>B</p> <p>Push</p> <p>clip</p>	<p>C</p> <p>Connect to the power supply</p>	<p>OUTLINER</p> <p>OUTLINER IP67</p> <p>Attention For attaching the IP connectors refer to the page 7 of the IP connectors preparation guide.</p>
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FIXED Elevated

<p>A</p> <p>* For quantity refer to Table 1</p>	<p>B</p> <p>Push</p> <p>clip</p>	<p>C</p> <p>Connect to the power supply</p>	<p>OUTLINER</p> <p>OUTLINER IP67</p> <p>Attention For attaching the IP connectors refer to the page 7 of the IP connectors preparation guide.</p>
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SURFACE Installation

<p>A</p> <p>Bracket PRH.011*</p> <p>* For quantity refer to Table 1</p>	<p>B</p> <p>Push</p> <p>clip</p>	<p>C</p> <p>Connect to the power supply</p>	<p>OUTLINER</p> <p>OUTLINER IP67</p> <p>Attention For attaching the IP connectors refer to the page 7 of the IP connectors preparation guide.</p>
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WALL BRACKET Installation

<p>A</p> <p>Wall Bracket PRH.017* (Short 65mm) PRH.016* (Long 115mm)</p> <p>* For quantity refer to Table 1</p>	<p>B</p> <p>Push</p> <p>clip</p>	<p>C</p> <p>Connect to the power supply</p>	<p>OUTLINER</p> <p>OUTLINER IP67</p> <p>Attention For attaching the IP connectors refer to the page 7 of the IP connectors preparation guide.</p>
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ELECTRON

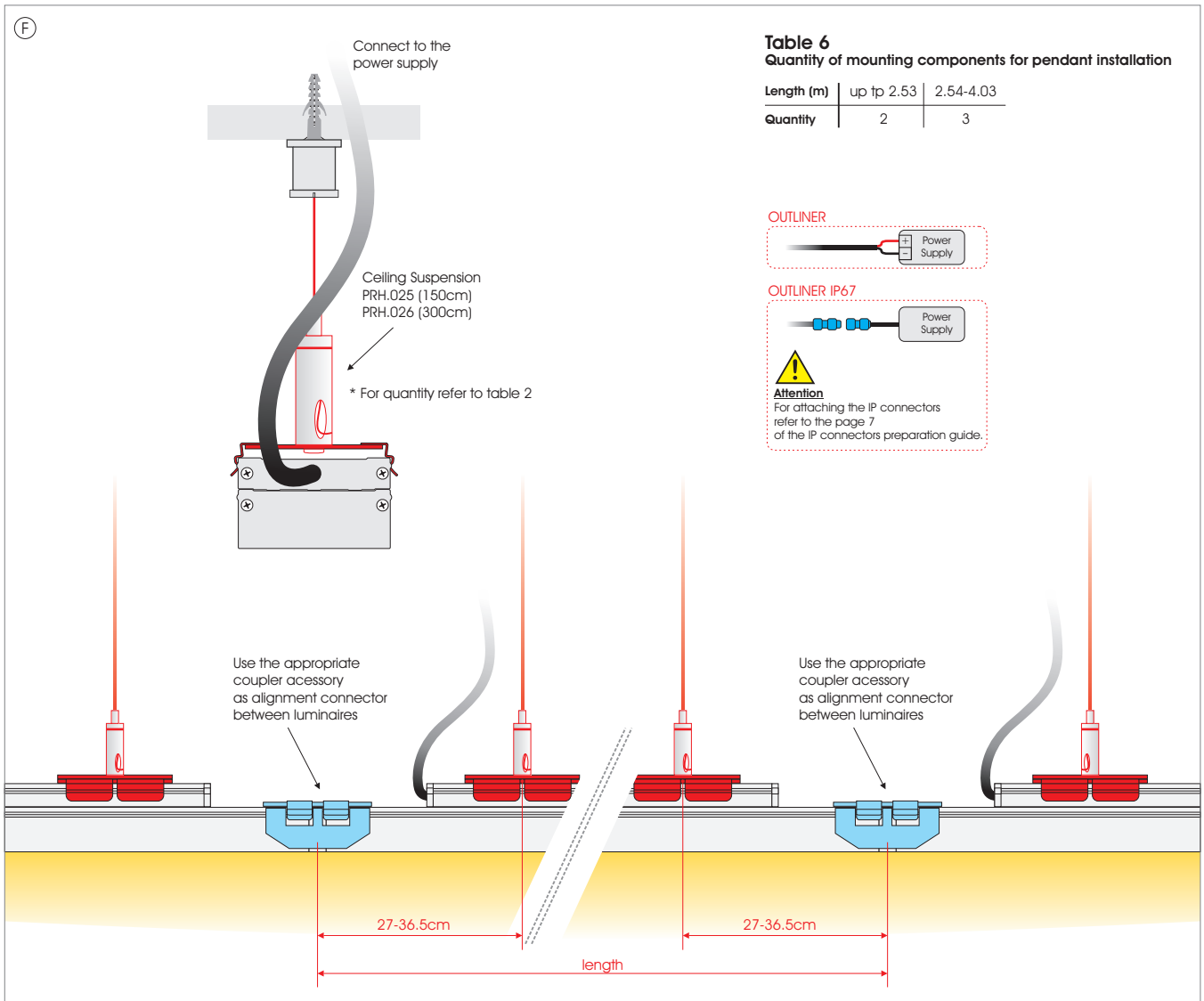
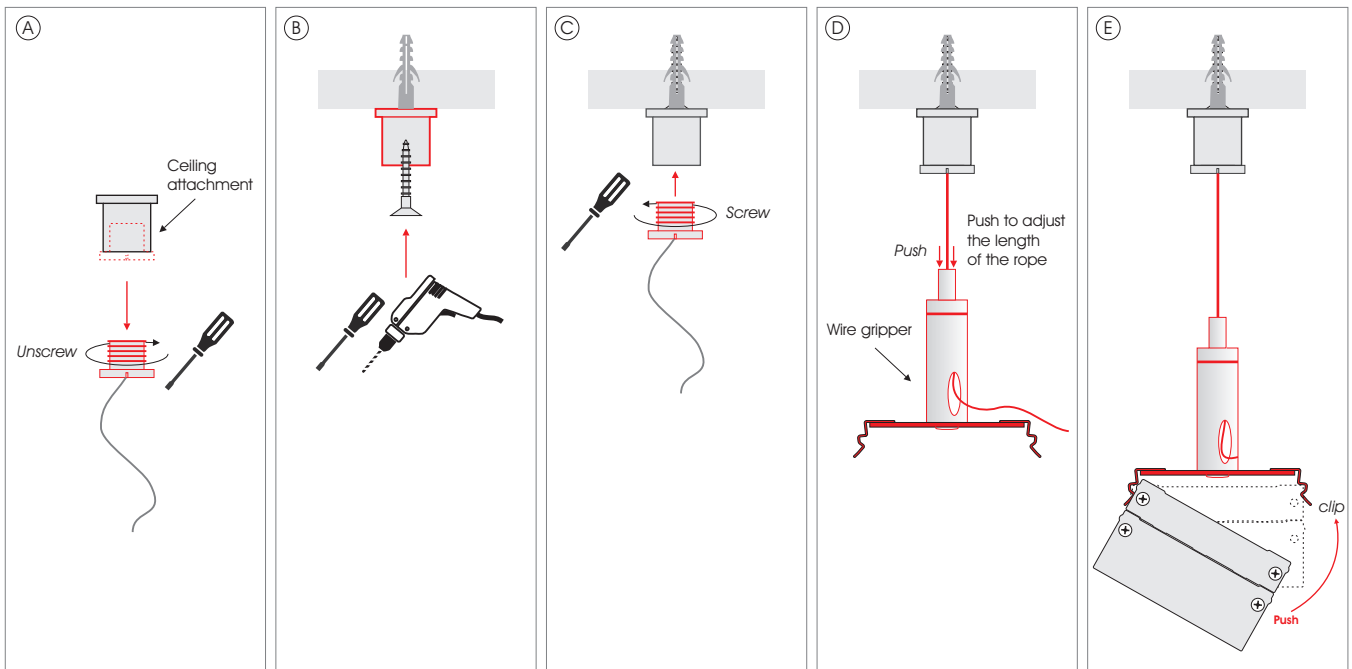
ELECTRON SA, PROFESSIONAL LIGHTING SYSTEMS
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OUTLINER 30, 40, 50 SEAMLESS / SEAMLESS IP67

Mounting Types Installation Guide

OUTLINER 50 SEAMLESS is presented as an example below:

PENDANT Installation

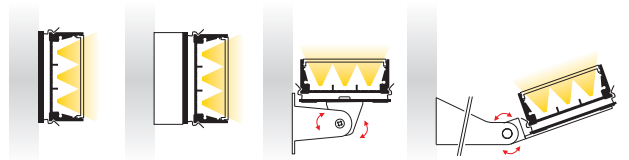


OUTLINER 30, 40, 50 SEAMLESS / SEAMLESS IP67

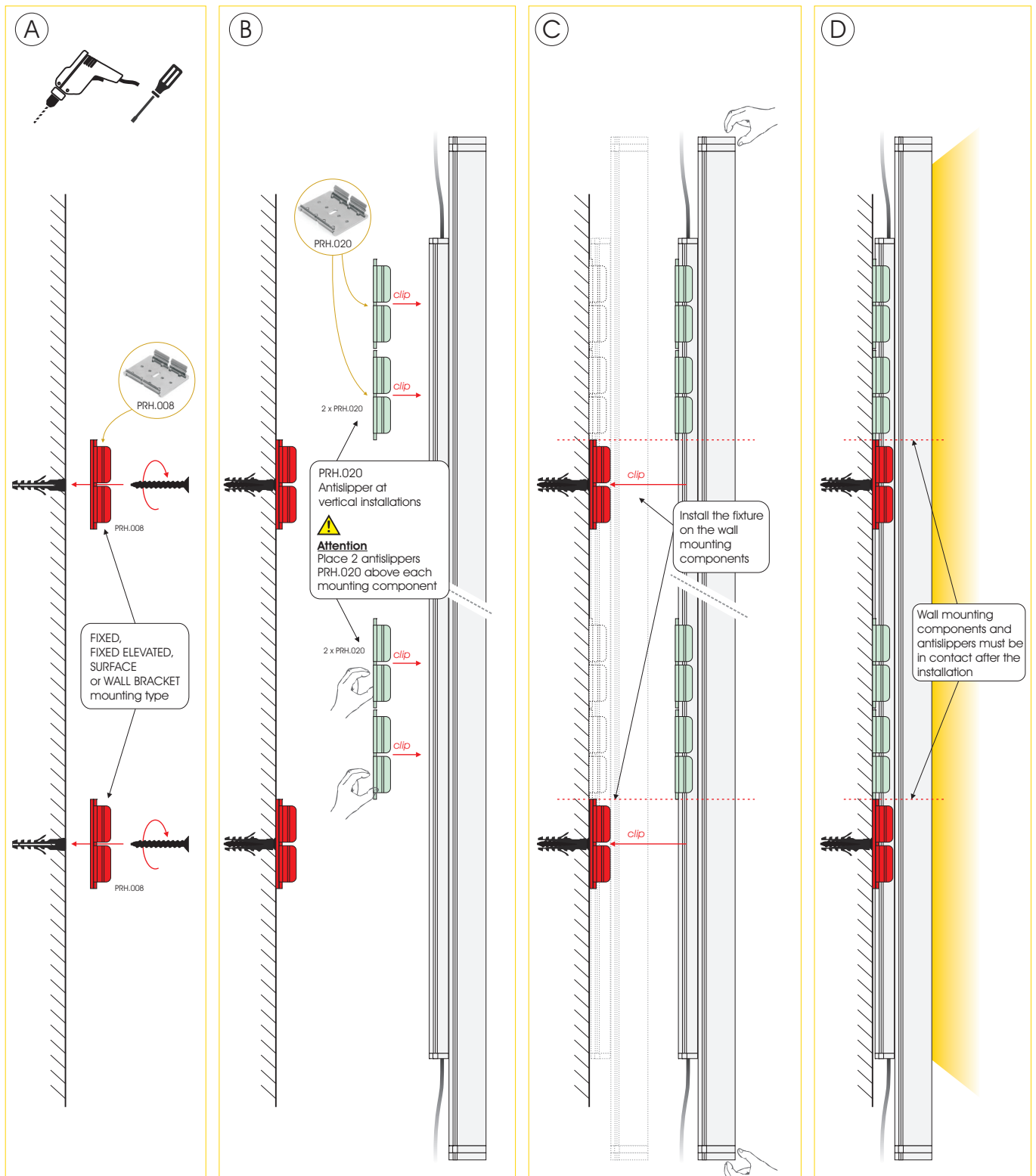
Antislipping at Vertical Installation

FIXED, FIXED ELEVATED, SURFACE and WALL BRACKET (Long/Short) mounting types

The following illustrates the antislipping procedure for fixed vertical installation.
The same method can be applied for fixed elevated, surface & wall bracket installations.



OUTLINER 50 SEAMLESS IP67 is presented as an example below:
For finding the exact quality of antislipping components refer to tables 2-5



OUTLINER SEAMLESS / SEAMLESS IP67 Series

IP Connectors Preparation Guide

Waterproof

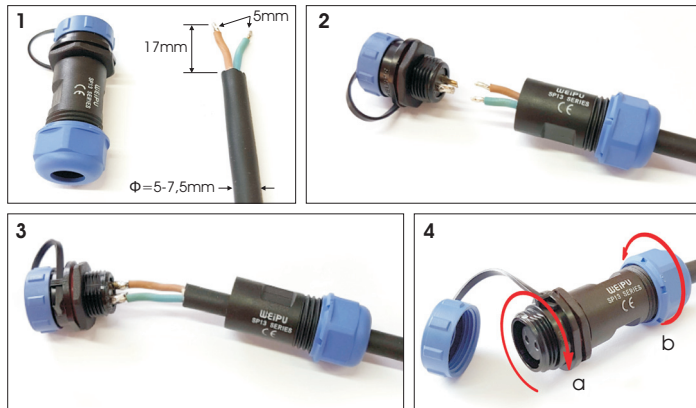
Assembling and soldering process for the power plugs.

For assembling and soldering the 2 poles power plugs to the proper cable (same for 3p 4p and 5p cable), the following procedure must be followed in order to be ensured the correct soldering of the cables and the impermeability of the plugs to water.



Attention

This procedure is very important. Thus, if it is not completed correctly, there is chance of water leakage through the plugs inside luminaire.



Picture 1. The cable that will be used need to have outer diameter 5-7,5mm. Remove the outer cable insulation by 17mm (maximum) and then remove the two inner insulations from the cables by exact 5mm.

Picture 2. Unscrew the front side from the plug. Insert the cable to the main body of the plug from cable gland's side. Galvanize cable's copper and terminals inside the plug.

Picture 3. Solder the cables to the plug's terminals.

Picture 4a. Screw and well tighten the side of the terminals to the main body. In order for strong tightening to be achieved, connect the plug to its corresponding male or female pair and repeat the previous procedure.

Picture 4b. Cable's gland has to be strongly tightened.

Cables and power connectors description.

Luminaire is delivered with or without power connectors. When connectors are not available the cables will have color coding as mentioned in the parentheses. When connectors are available each pole has a numeric description. In the brackets below you can find the number as it is marked on each cable.

Monochromatic Models.

Male 2p. Female 2p.



Terminal 1: +24V. (Color: Red) [Cable No1]
Terminal 2: 0V. (Color: Black) [Cable No2]

Tunable white (Warm-Cool) Models.

Male 3p. Female 3p.



Terminal 1: +24V. (Color: Black) [Cable No1]
Terminal 2: Warm. (Color: Yellow) [Cable No 2]
Terminal 3: Cool. (Color: Blue) [Cable No3]

Tunable white (Warm-Neutral-Cool) Models.

Male 4p. Female 4p.



Terminal 1: +24V. (Color: Black) [Cable No1]
Terminal 2: Warm. (Color: Yellow) [Cable No2]
Terminal 3: Neutral. (Color: White) [Cable No3]
Terminal 4: Cool. (Color: Blue) [Cable No4]

RGB Models.

Male 4p. Female 4p.



Terminal 1: +24V. (Color: Black) [Cable No1]
Terminal 2: Red. (Color: Red) [Cable No2]
Terminal 3: Green. (Color: Green) [Cable No3]
Terminal 4: Blue. (Color: Blue) [Cable No4]

RGBW Models.

Male 5p. Female 5p.



Terminal 1: +24V. (Color: Black) [Cable No1]
Terminal 2: Red. (Color: Red) [Cable No2]
Terminal 3: Green. (Color: Green) [Cable No3]
Terminal 4: Blue. (Color: Blue) [Cable No4]
Terminal 5: White. (Color: White) [Cable No5]

OUTLINER 20/30/40/50 IP40/IP67 Seamless	Maximum power of OUTLINER daisy chain.
Monochromatic.	280 W
RGB.	160 W
RGBW.	160 W

Note:

In daisy chains it is possible for the luminosity of the first OUTLINER to be different with luminosity of the last one. This might happen because of the voltage drop due to the resistance from the supply cable. In order to avoid this you can also supply the output of the last OUTLINER from the same power supply.

Please also make sure that the cross section of the cable from the power supply or controller to the two ends of the connected OUTLINER daisy chain is the same.

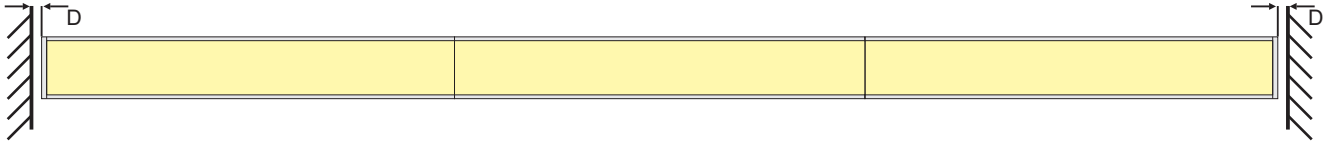


OUTLINER SEAMLESS / SEAMLESS IP67 Series

Distance (gap) between OUTLINER SEAMLESS

OUTLINER Seamless does not require any gap between luminaires for total length up to 10m.

The distance (D) must be 0.75mm / 1m of seamless luminaire array.



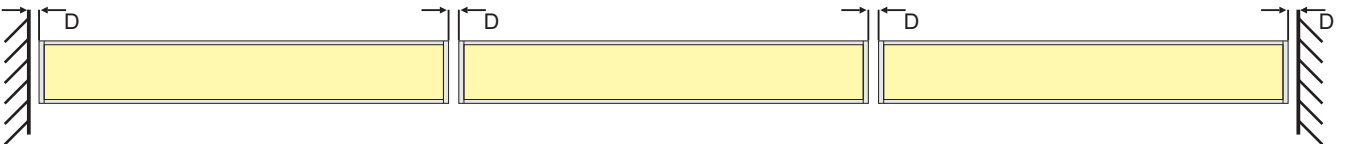
For total length above 10m, refer to "Distance (gap) between OUTLINER" paragraph.

OUTLINER / OUTLINER IP67 SERIES

Distance (gap) between OUTLINER

There must be a minimum distance (D) between OUTLINER fixtures, as shown in the picture below, which is necessary for the expansion that occurs due to temperature changes.

The distance (D) between luminaries must be 1.5mm / 1m of luminaire's length.



As an example, if we want to install luminaries with 2m length next to each other a gap of 3mm must be maintained at the start, between & at the end of the luminaries.