

OUTLINER / OUTLINER IP67 SERIES

Installation Guide

150720



OUTLINER 20
OUTLINER 20 IP67



OUTLINER 30
OUTLINER 30 IP67



OUTLINER 40
OUTLINER 40 IP67



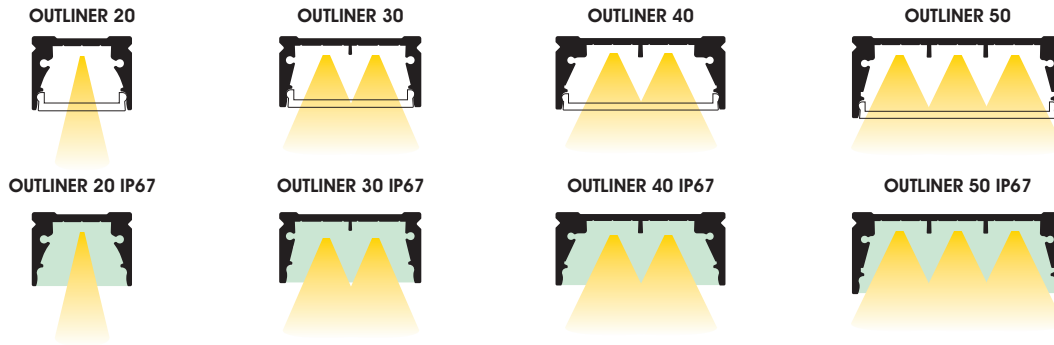
OUTLINER 50
OUTLINER 50 IP67



OUTLINER / OUTLINER IP67 SERIES

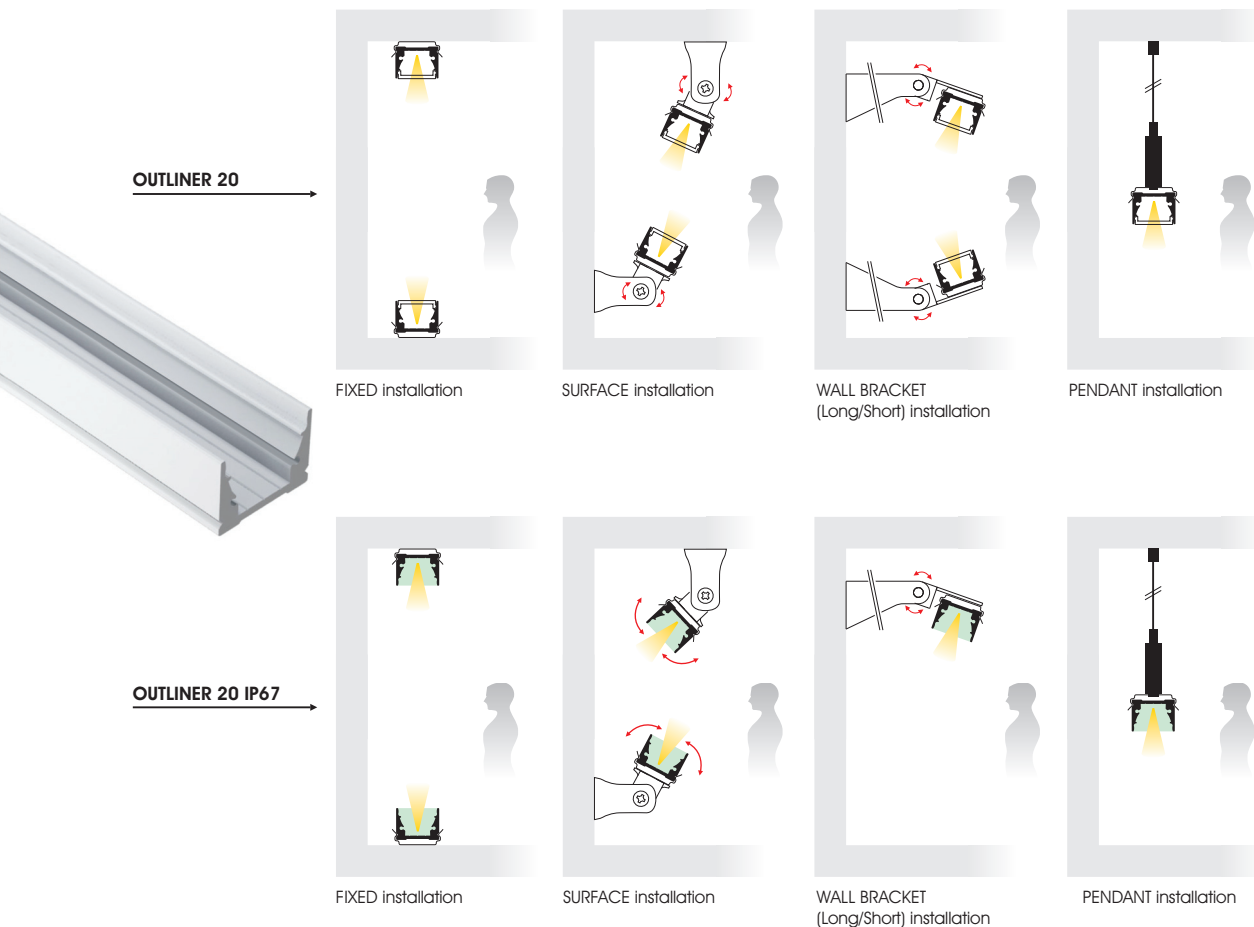
Mounting Types Installation Guide

The installation guide refer to the following models:



OUTLINER 20 is presented below as an example.

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



OUTLINER / OUTLINER IP67 SERIES

Quantity of Mounting Components & Antislippers Installation Guide

Table 1

Quantity of mounting components for **OUTLINER 20 / OUTLINER 20 IP67**
Fixed, 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 mounting components for **OUTLINER 30, 40 & 50**
Fixed, Surface, Wall Bracket Installations

Length (m)	up tp 1.33	1.34-2.03	2.04-2.66	2.67-3.33	3.34-4.03
Quantity	2	3	4	5	6

Table 3

Quantity of mounting components for **OUTLINER 30, 40 & 50 IP67**
Fixed, 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 for each mounting component for **OUTLINER 20 / OUTLINER 20 IP67**
Fixed, Surface, Wall Bracket Installations

Type / Length (m)	0-4.03
OUTLINER 20	2
OUTLINER 20 IP67	3

Table 5

Quantity of antislippers for each luminaire for **OUTLINER 30 / OUTLINER 30 IP67**
Fixed, Surface, Wall Bracket Installations

Type / Length (m)	0-4.03
OUTLINER 30	0
OUTLINER 30 IP67	1

Table 6

Quantity of antislippers for each luminaire for **OUTLINER 40**
Fixed, Surface, Wall Bracket Installations

Type / Length (m)	0-2	>2
OUTLINER 40	1	2

Table 7

Quantity of antislippers for each mounting component for **OUTLINER 40 IP67**
Fixed, Surface, Wall Bracket Installations

Type / Length (m)	0-4.03
OUTLINER 40 IP67	1

Table 8

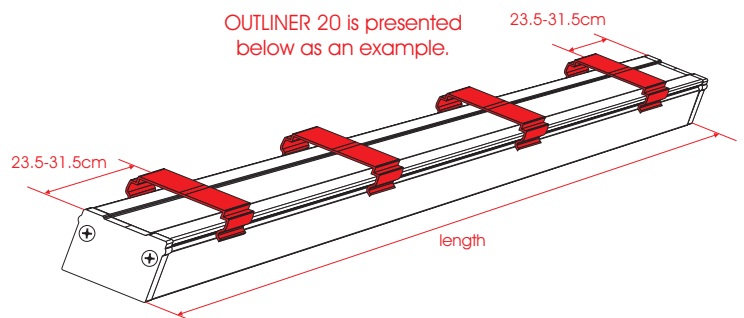
Quantity of antislippers for each luminaire for **OUTLINER 50**
Fixed, Surface, Wall Bracket Installations

Type / Length (m)	0-2.66	>2.66
OUTLINER 50	2	3

Table 9

Quantity of antislippers for each mounting component for **OUTLINER 50 IP67**
Fixed, Surface, Wall Bracket Installations

Type / Length (m)	0-4.03
OUTLINER 50 IP67	1



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Mounting Types Installation Guide

OUTLINER 20 is presented below as an example.

FIXED Installation

(A)

Holder ELA.008*

Attention
Placing the holders on the surface, make sure to be in line.

* For quantity refer to Tables 1, 2, 3

(B)

Push

clip

(C)

Connect to the power supply

OUTLINER

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Attention
For attaching the IP connectors refer to the page 7 of the IP connectors preparation guide.

SURFACE Installation

(A)

Bracket ACC.048*

* For quantity refer to Tables 1, 2, 3

(B)

Push

clip

(C)

Connect to the power supply

OUTLINER

OUTLINER IP67

Attention
For attaching the IP connectors refer to the page 7 of the IP connectors preparation guide.

WALL BRACKET Installation

(A)

Wall Bracket
ACC.284* (Short 65mm)
ACC.285* (Long 115mm)

* For quantity refer to Tables 1, 2, 3

(B)

Push

clip

(C)

Connect to the power supply

OUTLINER

OUTLINER IP67

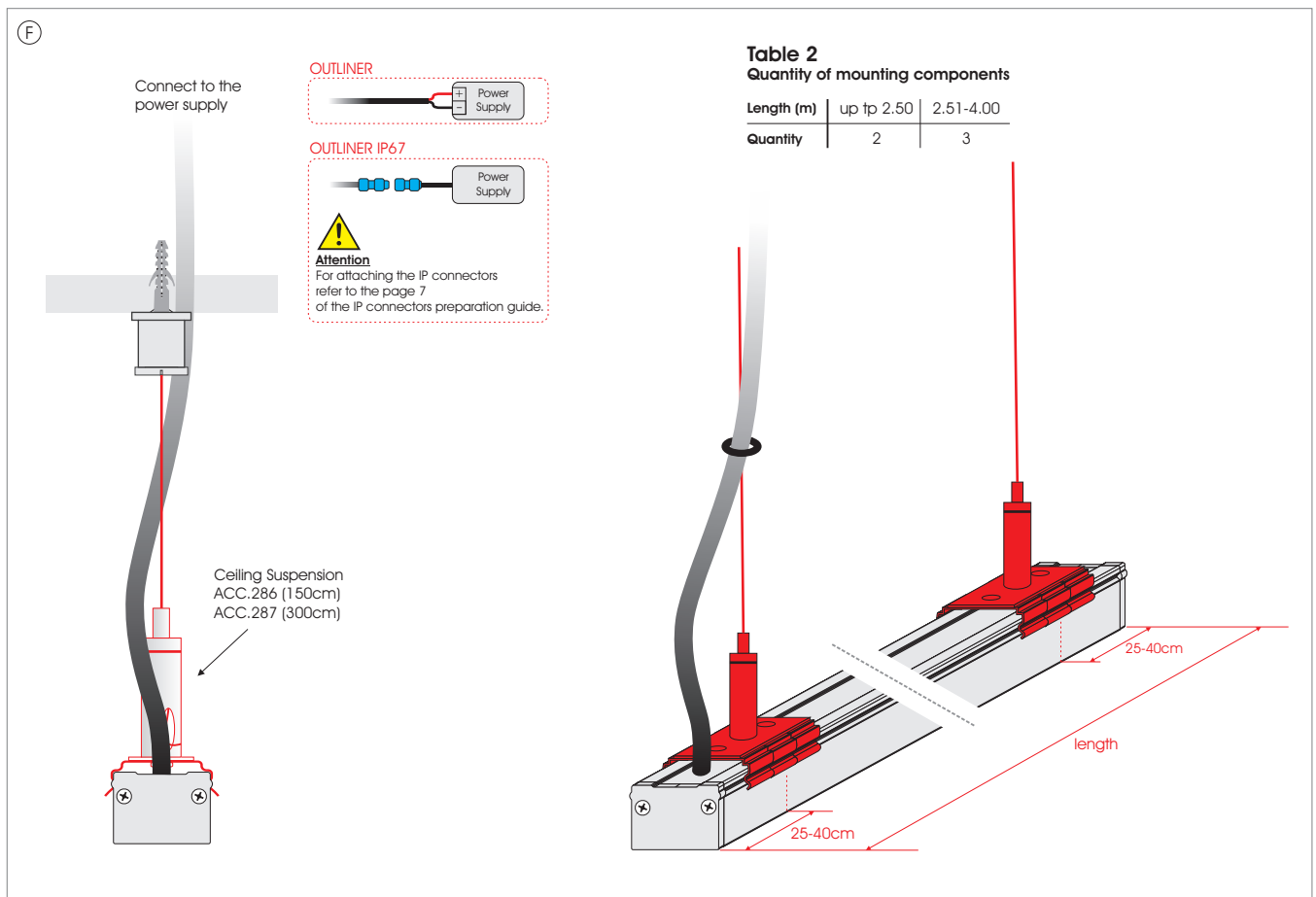
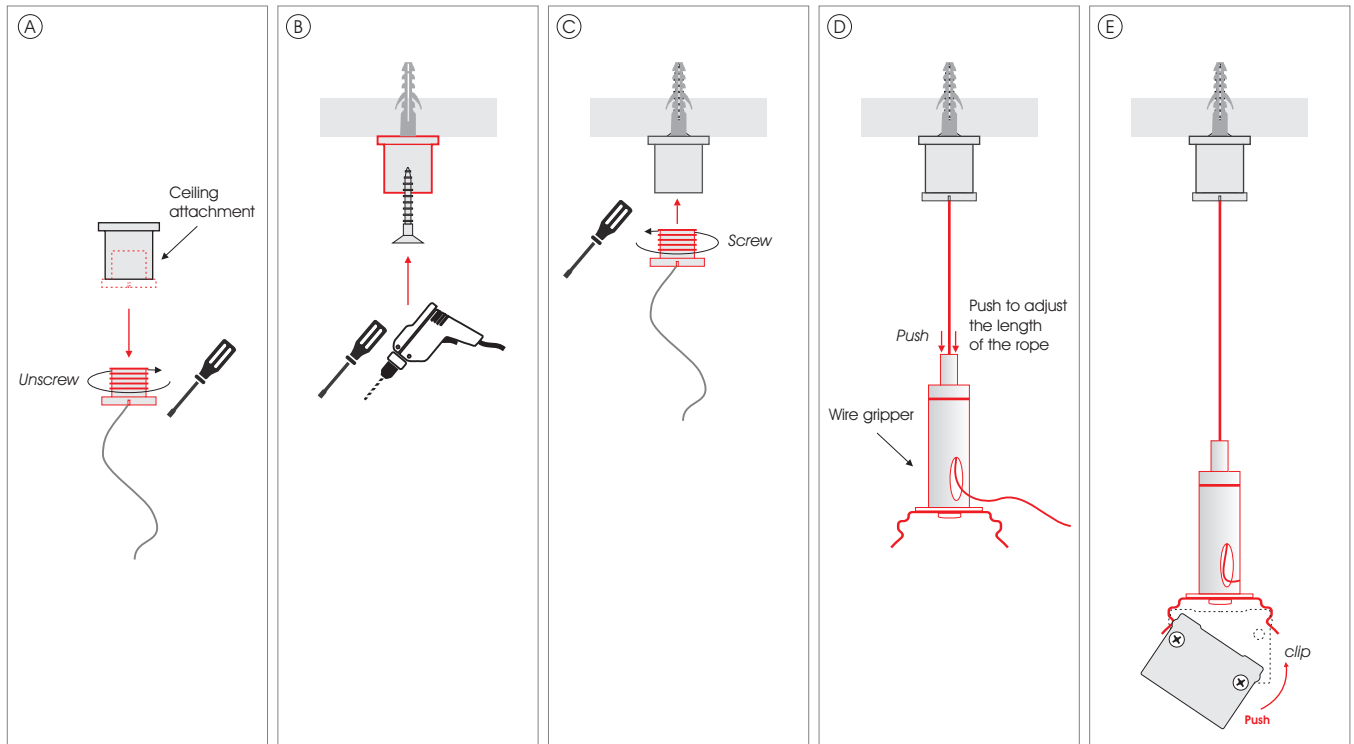
Attention
For attaching the IP connectors refer to the page 7 of the IP connectors preparation guide.

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Mounting Types Installation Guide

OUTLINER 20 is presented below as an example.

PENDANT Installation

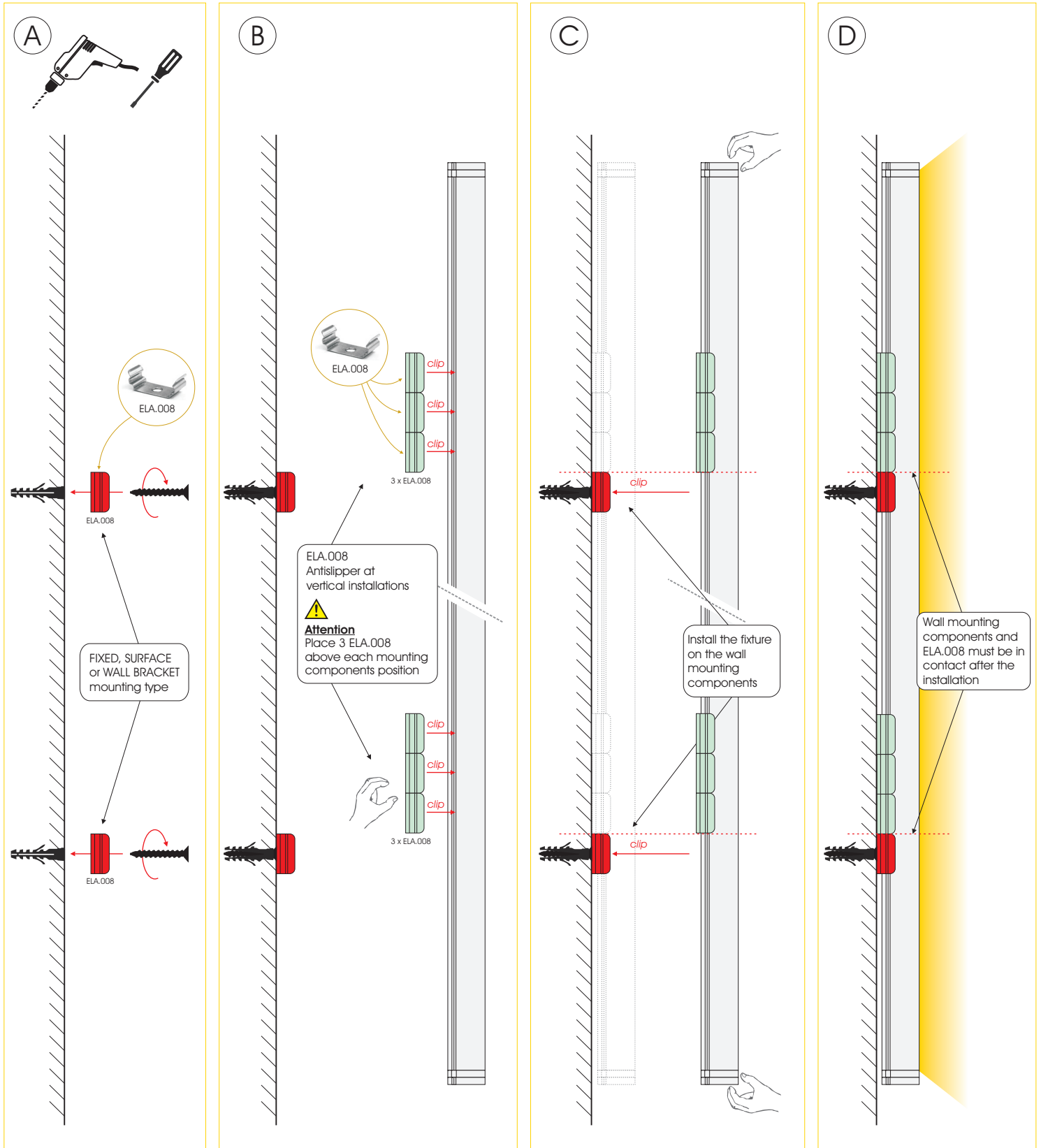
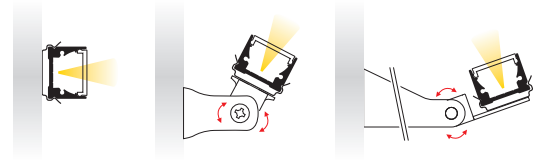


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Antislipping at Vertical Installation

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

The following example illustrates the antislipping procedure for fixed vertical installation for **OUTLINER 20 IP67**. The same method can be applied for surface & wall bracket installations.



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IP Connectors Preparation Guide

Waterproof

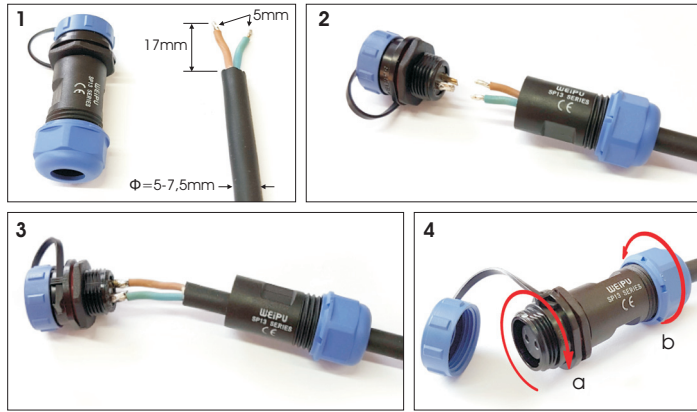
Assembling and soldering process for the power plugs.

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 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	Maximum length of OUTLINER daisy chain.
Monochromatic.	5m
RGB.	5m
RGBW.	5m

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.

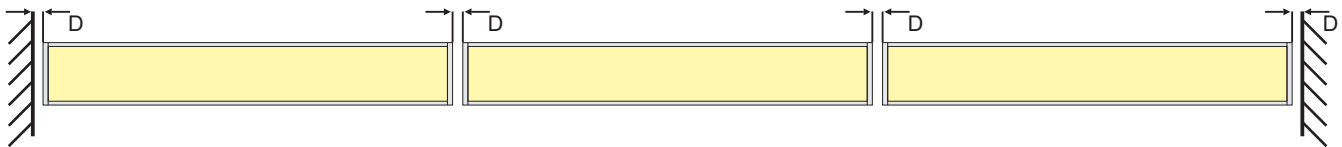
Please also make sure that the cross section of the cable from the power supply or controller to the two ends of the connected OUTLINER daisy chain is the same.

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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.