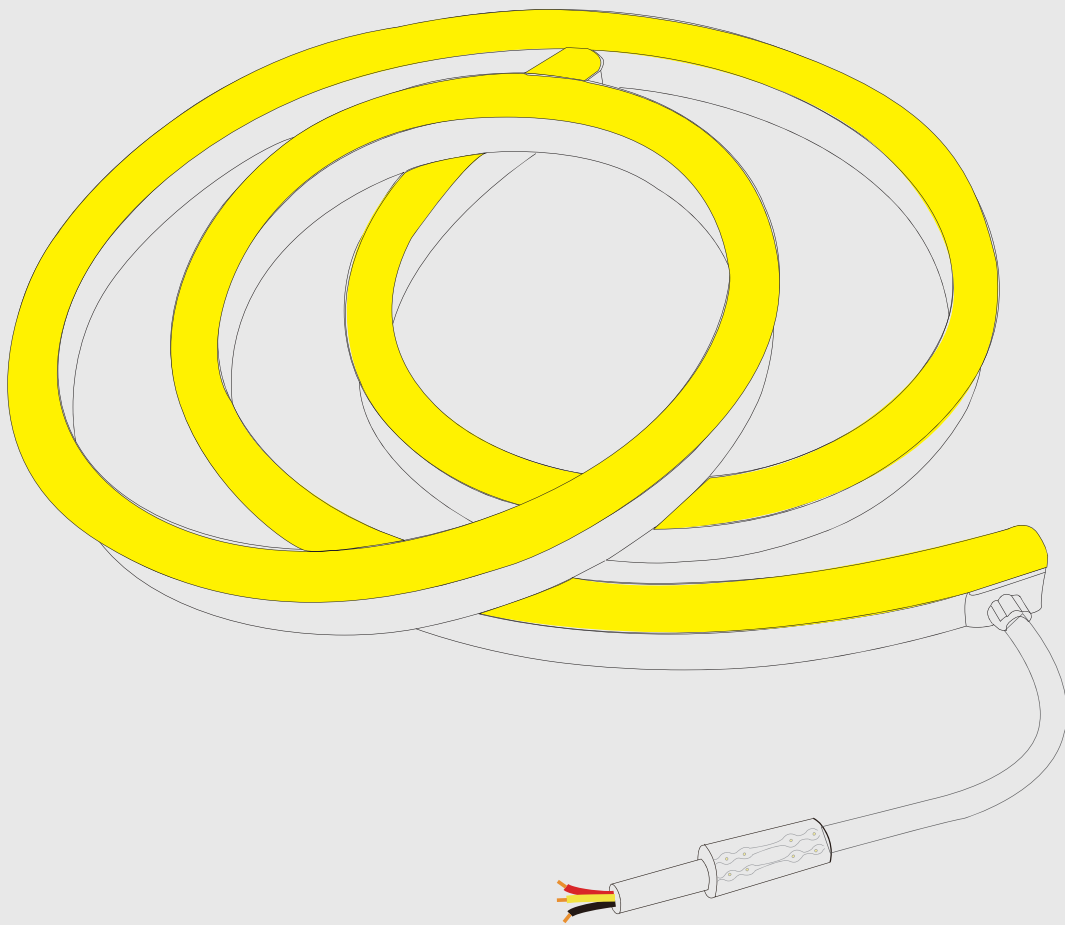




## **F21 Turnable white Neon flex**

### **Specification**

### Dimension



Gross weight:  
0.52kg/m



Dimmable:  
DALI, 0-10V, DMX, Triac



Installation Temp.:  
0°C to +55°C



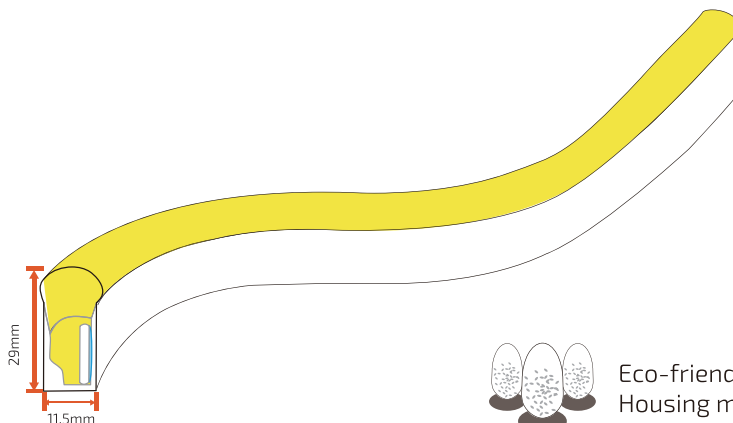
Ambient Temp.:  
-25°C to +55°C



Min. Bending :  
120mm



Beam Angle :  
270 degree



Eco-friendly PVC  
Housing material

### Features

Uniform and even light output

Dome surface with 270 degree beam angle

Dimmable with Dali, 0/1-10, DMX,PWM

Available color both warm white and cold white

Full encapsulated with IP68 Level

High Reliability

3 or 5 Years warranty

### Applications

Building facade, outline

Cove lighting

Sign and advertising lighting

Linear lighting

Additional lighting

Decorative lighting



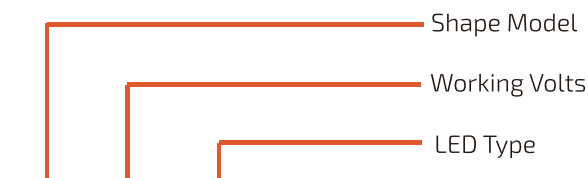
outdoor use



indoor use



### Model Encoding

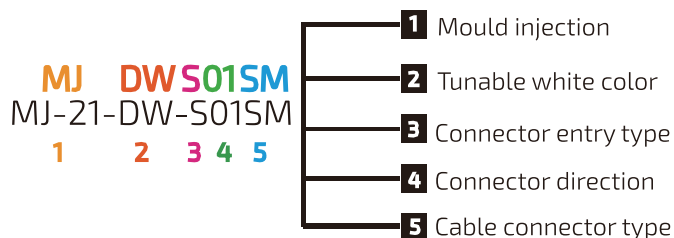


F21-24V-2835-120-15W-DW

LED Quantity

Power Consumption

Color or CCT



01----- right

02-----left

03-----double

SM----- male connector cable

SF-----female connector cable

SMF-----male & female connector cable

Blank-----bare wire

S----- Side entry

D-----Direct entry

B-----Bottom entry

## Technical Specification

|                          |                                               |
|--------------------------|-----------------------------------------------|
| Model                    | F15-24V-2835-120-DW                           |
| Operating voltage        | 24V                                           |
| Power consumption        | 15W/M                                         |
| Working Mode             | PWM CV                                        |
| LED type                 | SMD2835                                       |
| LED Quantity             | 120 pcs/m                                     |
| Available Color          | 2200K/2700K/3000K+5700K                       |
| Min. cutting Unit        | 12 LEDs                                       |
| Min. cutting length      | 10cm                                          |
| Max. length single feed  | 10m                                           |
| Max. length double feed  | 20m                                           |
| Bending direction        | Horizontally                                  |
| Lumen maintenance        | 70 000 Hours L70 25°C , 50 000 Hours L70 50°C |
| Housing material         | Eco PVC                                       |
| Installation temperature | 0°C to -55°C                                  |
| Ambient temperature      | -25°C to +55°C                                |
| Ingress protection       | IP68 wet location submersible* to 2m          |
| Warranty                 | 3 years as standard, 5 years warranty maximum |

## Color Combination

warm white

cold white



+



.....

2200K+5700K



+



.....

2700K+5700K



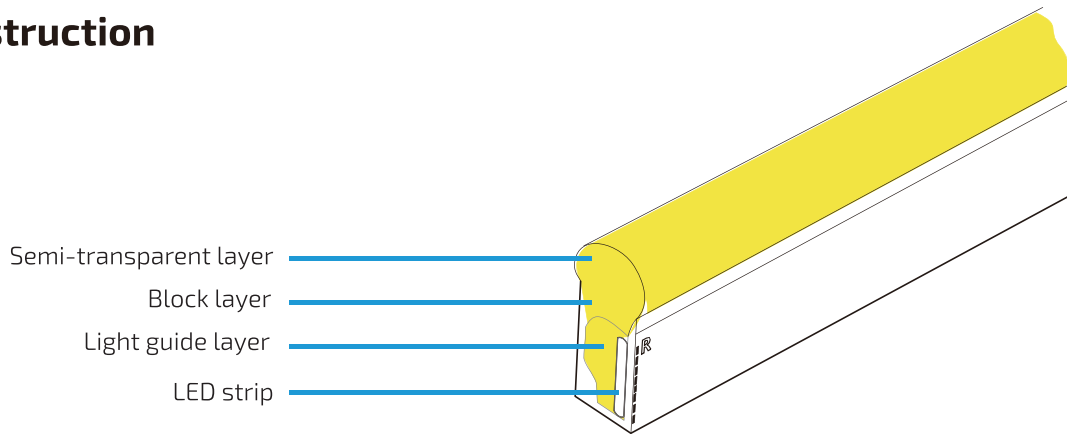
+



.....

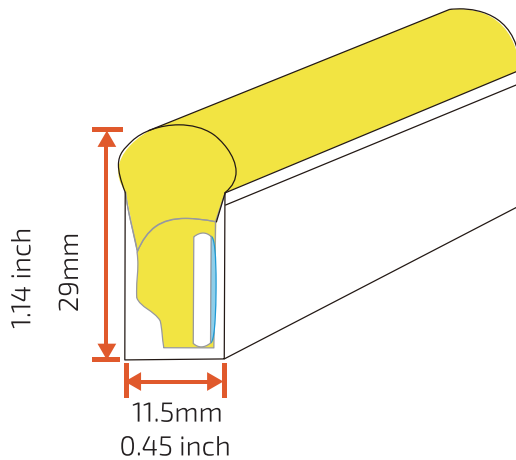
3000K+5700K

### Construction

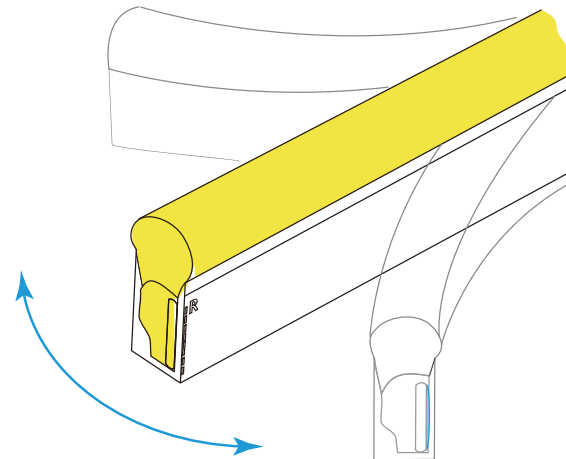


### Physical Specification

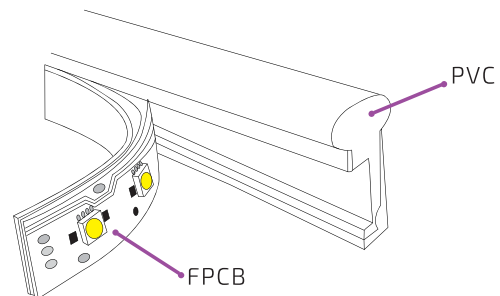
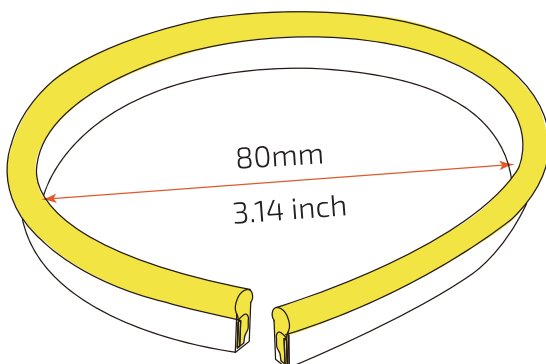
Light profile



Bending direction

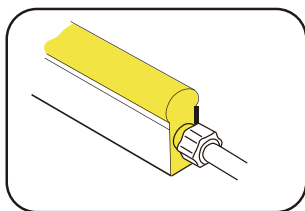


Min. bending diameter

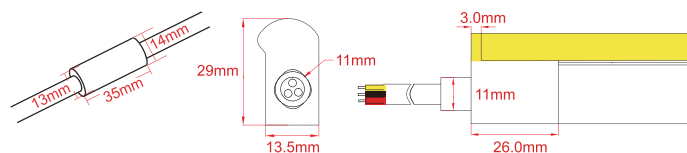


### Mold injection connector

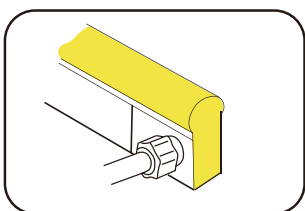
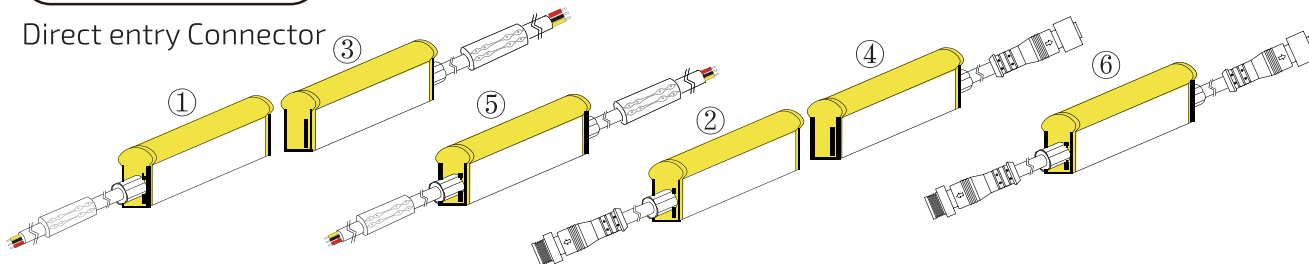
(IP68 Factory Assembly only)



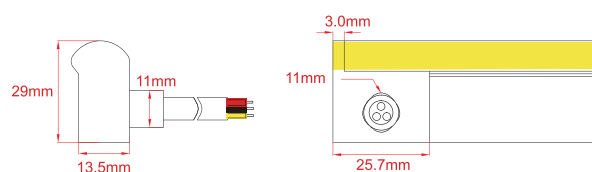
- ① MJ-Z1-A-D01
- ② MJ-Z1-A-D01SM
- ③ MJ-Z1-A-D02
- ④ MJ-Z1-A-D02SF
- ⑤ MJ-Z1-A-D03
- ⑥ MJ-Z1-A-D03SFM



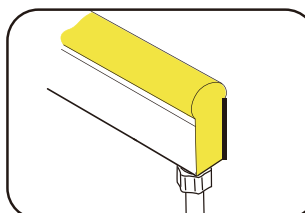
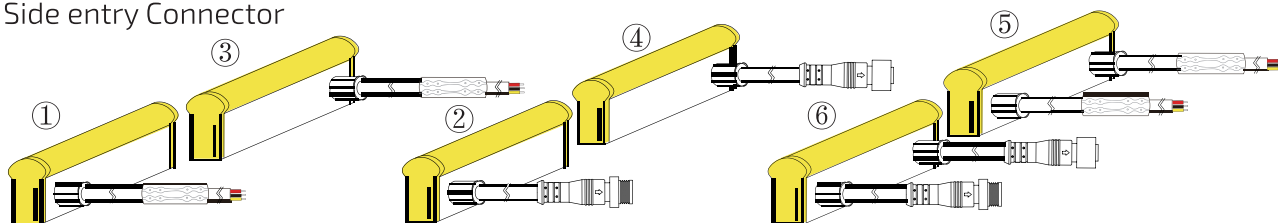
Direct entry Connector



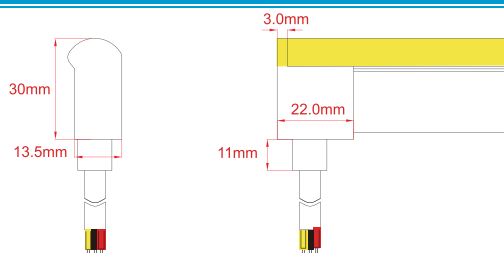
- ① MJ-Z1-A-S01
- ② MJ-Z1-A-S01SM
- ③ MJ-Z1-A-S02
- ④ MJ-Z1-A-S02SF
- ⑤ MJ-Z1-A-S03
- ⑥ MJ-Z1-A-S03SFM



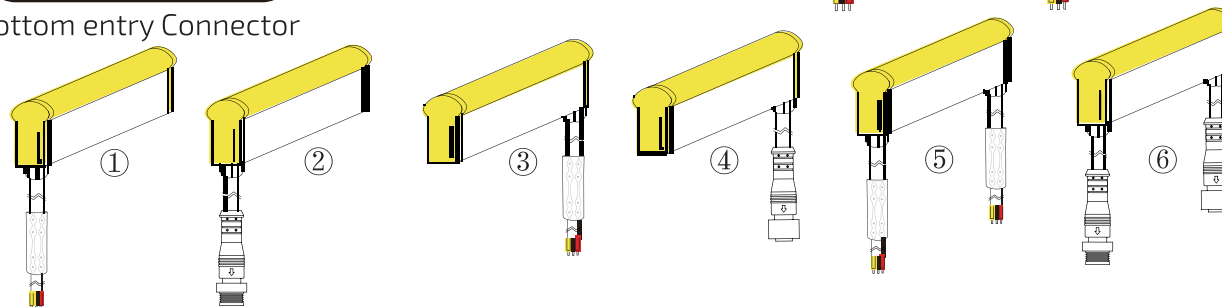
Side entry Connector



- ① MJ-Z1-A-B01
- ② MJ-Z1-A-B01SM
- ③ MJ-Z1-A-B02
- ④ MJ-Z1-A-B02SF
- ⑤ MJ-Z1-A-B03
- ⑥ MJ-Z1-A-B03SFM



Bottom entry Connector

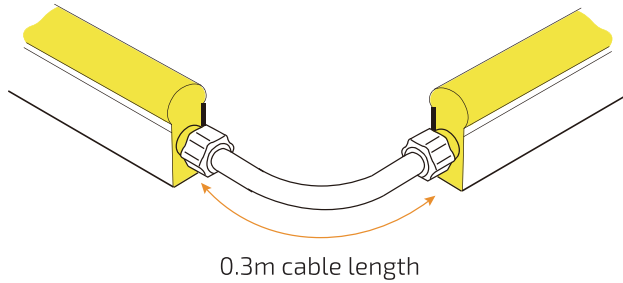


For more information

Email: [info@neonled.sk](mailto:info@neonled.sk)

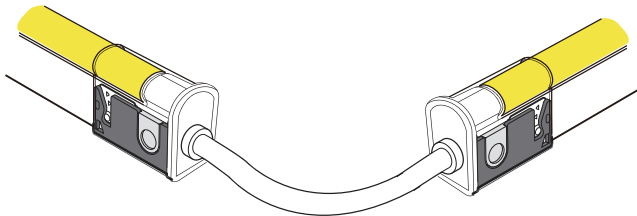
Or visit [www.neonled.sk](http://www.neonled.sk)

Mold injection Jumper  
(IP68 Factory Assembly only)

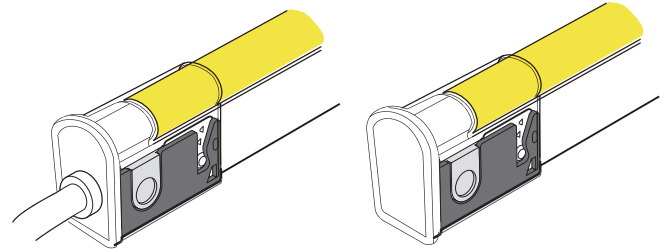


DIY Snap Connector & End Cap Kit (IP67 Only)

DIY snap splice connector kit



DIY snap connector kit



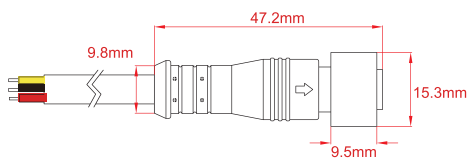
DIY snap front connector

DIY snap end cap

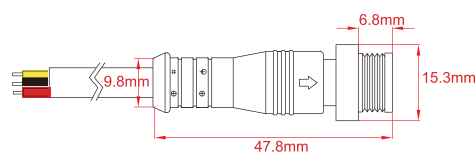
| Type                         | Model                  |
|------------------------------|------------------------|
| Middle injection Connector   | MJ-21-DW-M01-06        |
| DIY snap front connector kit | DIY-SN-FR-21-D-01/2-D3 |
| DIY snap end cap kit         | DIY-SN-END-01/02-21    |

Noted:  
01- Right direction  
02- Left direction

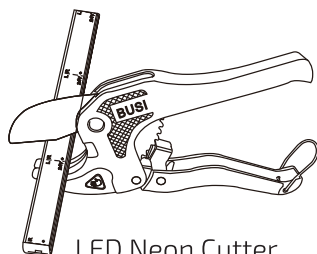
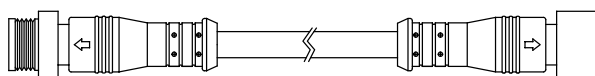
### Other Accessories



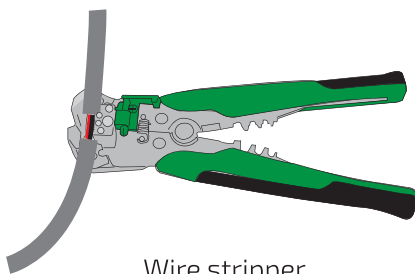
Female connector wire  
SYZ-M12-F-3C-05-W



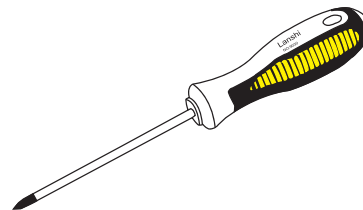
Male connector wire  
SYZ-M12-M-3C-05-W



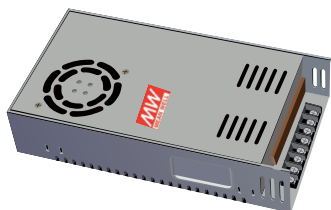
LED Neon Cutter  
ACC-TOOL-C1



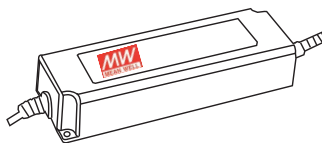
Wire stripper  
ACC-TOOL-WS01



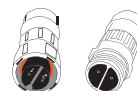
Screwdriver  
ACC-TOOL-C2



Mean Well Transformer  
Non-waterproof Series



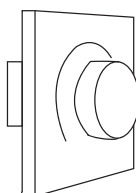
Mean Well Transformer  
Waterproof Series



Female & male wire connector  
KJ-M12-3P-F/ KJ-M12-3P-M



Silicone Rubber  
K-5905



Dimmer



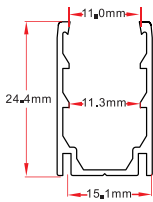
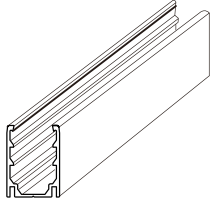
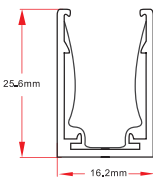
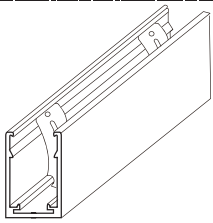
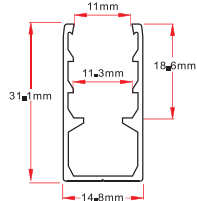
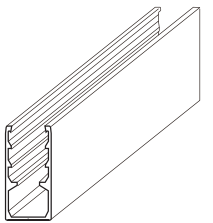
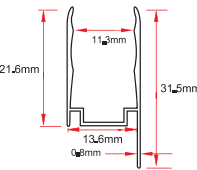
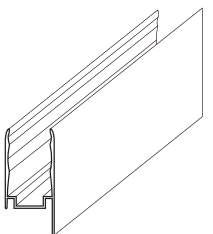
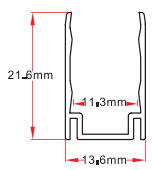
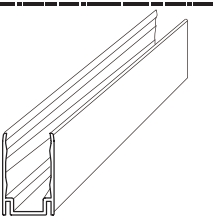
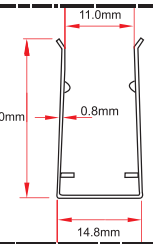
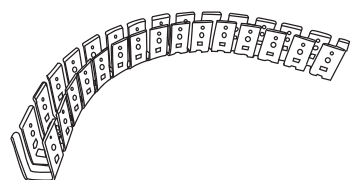
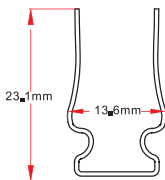
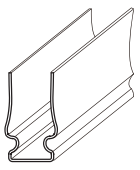
Assistant Tool  
ACC-TOOL-C3

For more information

Email: [info@neonled.sk](mailto:info@neonled.sk)

Or visit [www.neonled.sk](http://www.neonled.sk)

### Mounting Channel

| Model    | Description                                                                                                                                                | Dimension                                                                           | Drawing                                                                               |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| ALC15S01 | Use for : F15 & F21<br>Length option: 1m, 2m, 35mm<br>Material: Aluminum alloy<br>Optional color: AS/AB/PW<br>Type: Standard                               |    |    |
| ALC15S02 | Use for : F15 & F21<br>Length option: 1m, 2m, 35mm<br>Material: Aluminum alloy<br>Optional color: AS/AB/PW<br>Type: Anti-drop for upside down installation |    |    |
| ALC15H01 | Use for : F15 & F21<br>Length option: 1m, 2m, 35mm<br>Material: Aluminum alloy<br>Optional color: AS/AB/PW<br>Type: Cable hiding                           |   |   |
| ALC15V01 | Use for : F15 & F21<br>Length option: 1m, 2m, 35mm<br>Material: Aluminum alloy<br>Optional color: AS/AB/PW<br>Type: Vertical installation                  |  |  |
| ALC21S01 | Use for : F15 & F21<br>Length option: 1m, 2m, 35mm<br>Material: Aluminum alloy<br>Optional color: AS/AB/PW<br>Type: Standard                               |  |  |
| SSC15FLX | Use for : F15 & F21<br>Length option: 10cm, 30cm, 50cm, 100cm<br>Material: Stainless steel<br>Optional color: Polished<br>Type: Flexible                   |  |  |
| SSC15S01 | Use for : F15 & F21<br>Length option: 5cm<br>Material: Stainless steel<br>Optional color: Natural color<br>Type: 316 stainless steel                       |  |  |

For more information

Email: [info@olympialed.com](mailto:info@olympialed.com)

Or visit [www.olympialed.com](http://www.olympialed.com)

## Packing

Standard: Carton ( Paper reel inside)



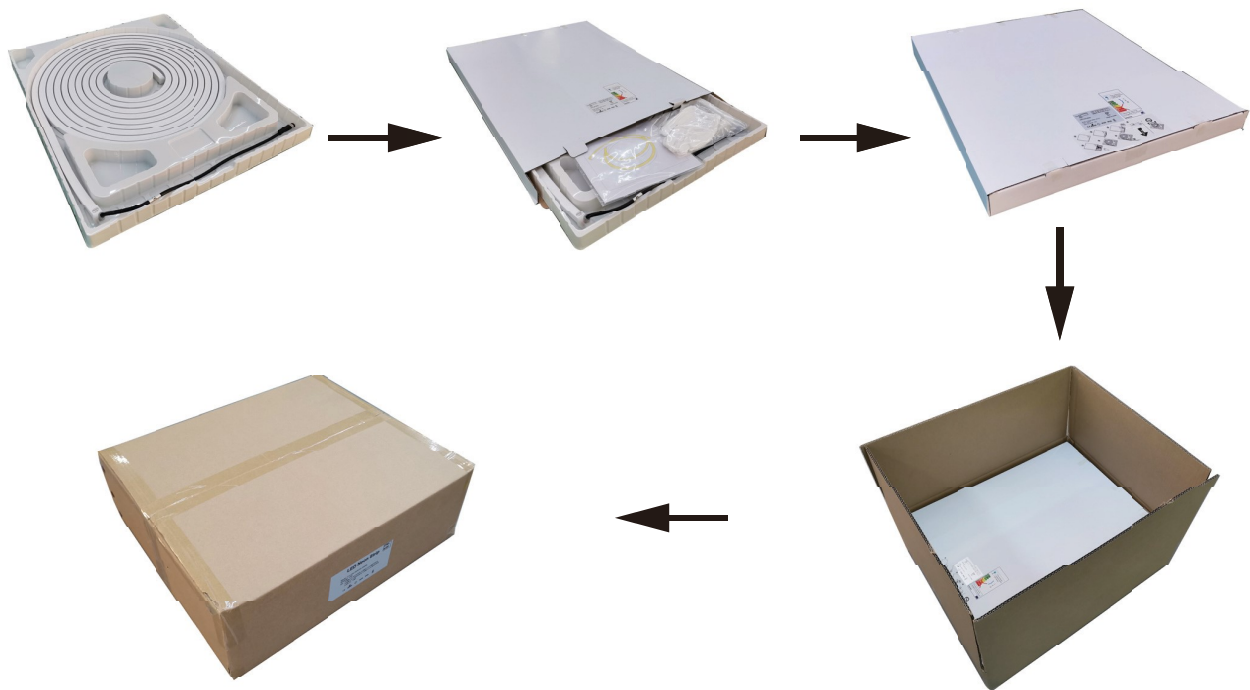
Fixture Length  
787.4in(20m)

Paper Reel  
D12.99\*H6.18in(33\*15.7cm)

Carton Dimension  
33\*33\*18cm

Gross Weight  
17.63 lbs ( 10.4 kg )

Custom: Carton ( White box+plastic plate inside)



Fixture Length  
393.7in(10m)

White box Dimension  
21.6\*1.38\*18.9in(55\*3.5\*48cm)

Carton Dimension  
57\*49\*19cm

White box Quantity  
Max 5pcs

Gross Weight  
57.32 lbs ( 26 kg )

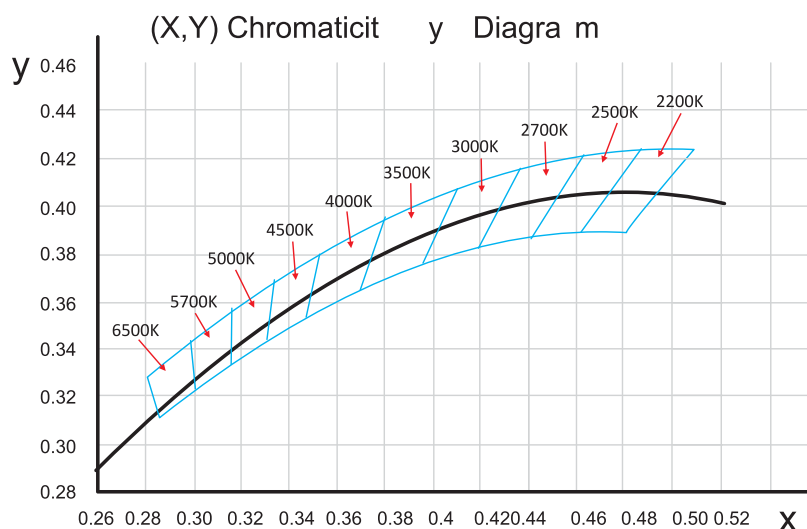
## Testing

ANSI Standard

Nominal CCT Categories (2200-6500K)

| Nominal CCT  | Target CCT & tolerance(K)      | Target $D_{uv}$    | $D_{uv}$ Tolerance Range                                       |
|--------------|--------------------------------|--------------------|----------------------------------------------------------------|
| 2200K        | 2238±102                       | 0.0000             | $T_x$ : CCT of the source                                      |
| 2500K        | 2460±120                       | 0.0000             | for $T_x < 2870K$                                              |
| 2700K        | 2725±145                       | 0.0000             | $0.000 \pm 0.0060$                                             |
| 3000K        | 3045±175                       | 0.0001             | For $T_x \geq 2870K$                                           |
| 3500K        | 3465±245                       | 0.0005             | $D_{uv}(T_x) \pm 0.0060$                                       |
| 4000K        | 3985±275                       | 0.0010             | where                                                          |
| 4500K        | 4503±243                       | 0.0015             | $D_{uv}(T_x) = 57700x(1/T_x)^2$                                |
| 5000K        | 5029±283                       | 0.0020             | $-44.6x(1/T_x)$                                                |
| 5700K        | 5667±355                       | 0.0025             | $+0.00854$                                                     |
| 6500K        | 6532±510                       | 0.0031             | Remark:                                                        |
|              |                                |                    | 1) $T_F$ is chosen to be at 100K steps (2300,2400.....6400K)   |
|              |                                |                    | the ten nominal CCTs listed in table 1.                        |
|              |                                |                    | 2) $\Delta T = 1.1900 \times 10^8 \times T^{-3}$               |
|              |                                |                    | $1.5434 \times 10^4 \times T^{-2} + 0.71648 \times T - 902.55$ |
|              |                                |                    | 3) Same as in the DUV tolerance range                          |
| Flexible CCT | $T_F^{(1)} \pm \Delta T^{(2)}$ | $D_{uv} T_F^{(3)}$ |                                                                |

## White Color Charts



1. Please note it is under normal range if there is 20-30% yellowing of PVC housing material when the product is used under direct sunlight or long-term high temperature & wet environment in 3 years.

2. About the tolerance range of optical parameters (luminance, CCT, Watt, RA) for all product, the volume is plus and minus 10% fluctuation referring to IEC Standard.

3. It's normal for the tolerance range in total length, it occurs from the different production technology, environmental temperature and installation. the volume would be 0.1-5M±7mm, 5.1-10M±15mm, 10.1-20M±30mm.

[For more information](#)

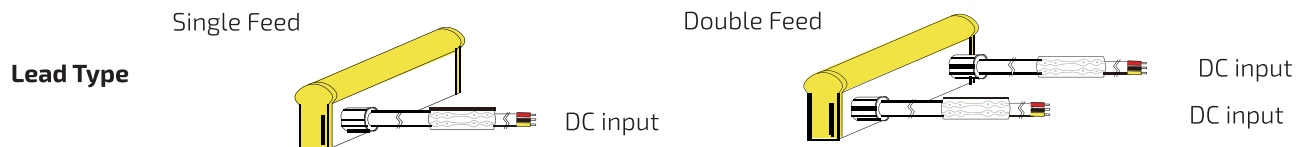
Email: [info@neonled.sk](mailto:info@neonled.sk)

Or visit [www.neonled.sk](http://www.neonled.sk)

## Loading Chart

### Power supply

| Rated power | 35W  | 60W | 75W | 80W  | 100W | 120W | 150W | 185W | 240W  | 320W |
|-------------|------|-----|-----|------|------|------|------|------|-------|------|
| 15W         | 1.5m | 3m  | 4m  | 4.2m | 5m   | 6m   | 8m   | 9.8m | 12.5m | 17m  |



Note: These are the max recommended run lengths based on power supply  
For example: It is recommended to use one 80W power supply for a single-feed run of 4.2m at 15W/m.

## Recommendation of extension wire

### Maximum extension wire length according to Light power

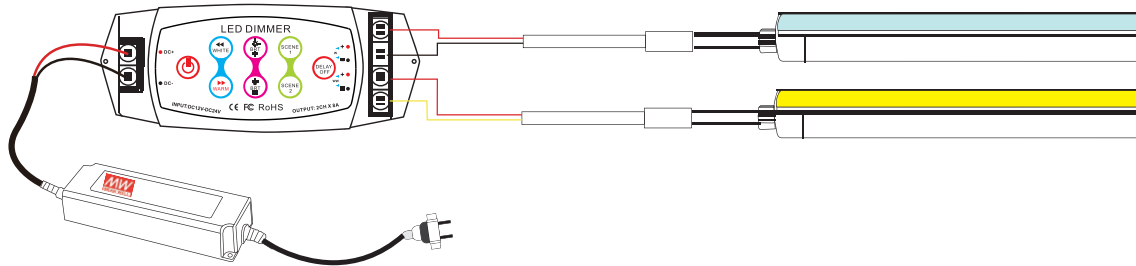
| Watts of light | 22AWG<br>0.34mm <sup>2</sup> | 20AWG<br>0.53mm <sup>2</sup> | 18AWG<br>0.82mm <sup>2</sup> | 17AWG<br>1.04mm <sup>2</sup> | 16AWG<br>1.38mm <sup>2</sup> | 14AWG<br>2.07mm <sup>2</sup> | 12AWG<br>3.29mm <sup>2</sup> | 10AWG<br>5.62mm <sup>2</sup> |
|----------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| 10W            | 36m                          | 60m                          | 100m                         | 120m                         | 140m                         | 240m                         | 400m                         | 600m                         |
| 20W            | 18m                          | 30m                          | 50m                          | 60m                          | 70m                          | 120m                         | 200m                         | 300m                         |
| 30W            | 12m                          | 20m                          | 30m                          | 38m                          | 45m                          | 80m                          | 130m                         | 200m                         |
| 40W            | 8m                           | 15m                          | 22m                          | 28m                          | 35m                          | 60m                          | 95m                          | 140m                         |
| 50W            | 6m                           | 12m                          | 18m                          | 22m                          | 28m                          | 48m                          | 75m                          | 105m                         |
| 60W            | 5m                           | 10m                          | 15m                          | 18m                          | 22m                          | 36m                          | 60m                          | 88m                          |
| 70W            | /                            | 8m                           | 12m                          | 14m                          | 18m                          | 30m                          | 50m                          | 72m                          |
| 80W            | /                            | 6m                           | 10m                          | 11m                          | 14m                          | 24m                          | 40m                          | 58m                          |
| 90W            | /                            | 4m                           | 7m                           | 8m                           | 10m                          | 18m                          | 30m                          | 45m                          |
| 100W           | /                            | /                            | 5m                           | 6m                           | 7m                           | 12m                          | 22m                          | 32m                          |
| 110W           | /                            | /                            | 3m                           | 4m                           | 5m                           | 8m                           | 15m                          | 22m                          |
| 120W           | /                            | /                            | 2m                           | 2.5m                         | 3m                           | 0m                           | 8m                           | 12m                          |

Note:

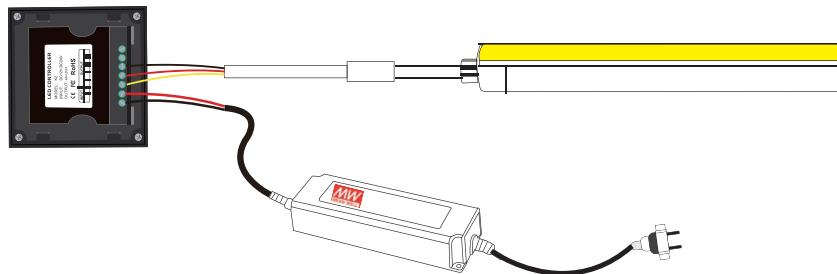
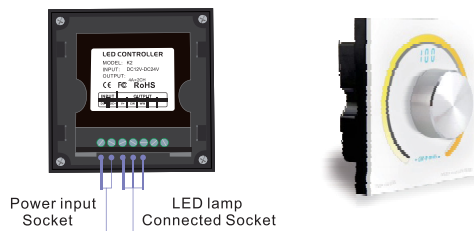
- 1.The values doesn't include the 0.6m cable connected to the front connector.
- 2.To ensure the reliability of wire connection and avoid problem of voltage drop, the extension wire length should be smaller than the above recommended values.

### Controller Diagram

#### BC-310 LED CCT Controller



#### K2 CCT Rotary Controller



#### BC-422 Constant Voltage CCT Controller

