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Neon Specification

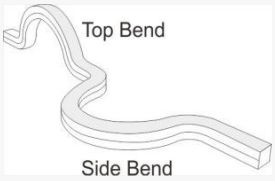
ANF3D1616

Neon Specification

ANF3D1616

Feature

1. Top & side bend integrated design, meet different installation requirements, provide an excellent user experience
2. Silicone integrated extrusion technology, IP67 rate.
3. Multiple CCT choices, and ensure batch color consistency.
4. Using high quality gas silica gel, yellowing resistance, UV resistance, salt and alkali resistance, high temperature resistance, flame retardant.



Min. Bending Radius
60mm / 2.36in

Ambient Working Temperature -40 ~ 55°C

Storage Temperature -40 ~ 60°C

Min. Cutting Length
16.66mm @White 12+15Watt

Min. Cutting Length
33.33mm @RGB

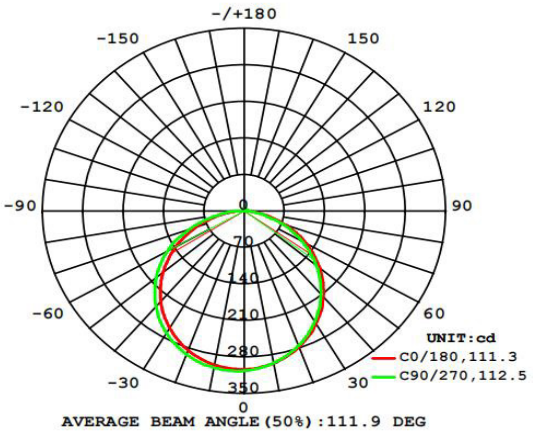
Min. Cutting Length
125mm @SPI-RGBW

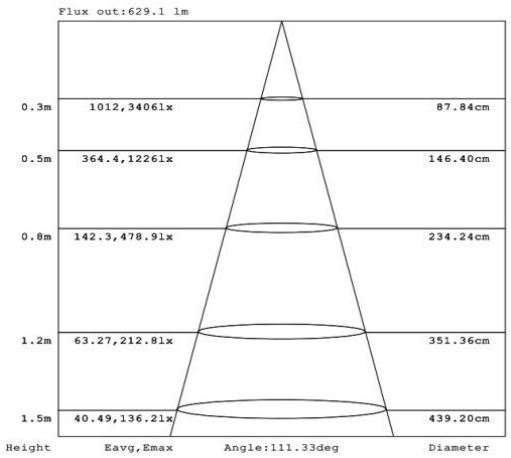
Electrical & Output Data

Model No.	ANF3D1616
Step length (mm)	16.66mm (@white 12+15W) 33.33mm(@RGB) 125mm(@SPI-RGBW)
Voltage (v)	24V
Color	2100K 2700K 3000K 3500K 4000K 6000K RGB SPI-RGBW
Ra	90
Beam Angle(°)	110
Power (w/m)	12W(@white @RGB @SPI-RGBW) 15W(@white)
Lumen(lm/m)	696 @12Watt @ Ra90 @ 4000K 1245 @15Watt @ Ra90 @ 4000K 312 @12Watt @ RGB 252 @12Watt @ Ra90 @ SPI-RGBW
IP rate	67
Installation	Mounting Clips / Aluminum Profiles

The electrical data provided on the each product pages are for reference only; the data values are not guaranteed. Specification may be subject to change without announcement.

Illuminance Distribution

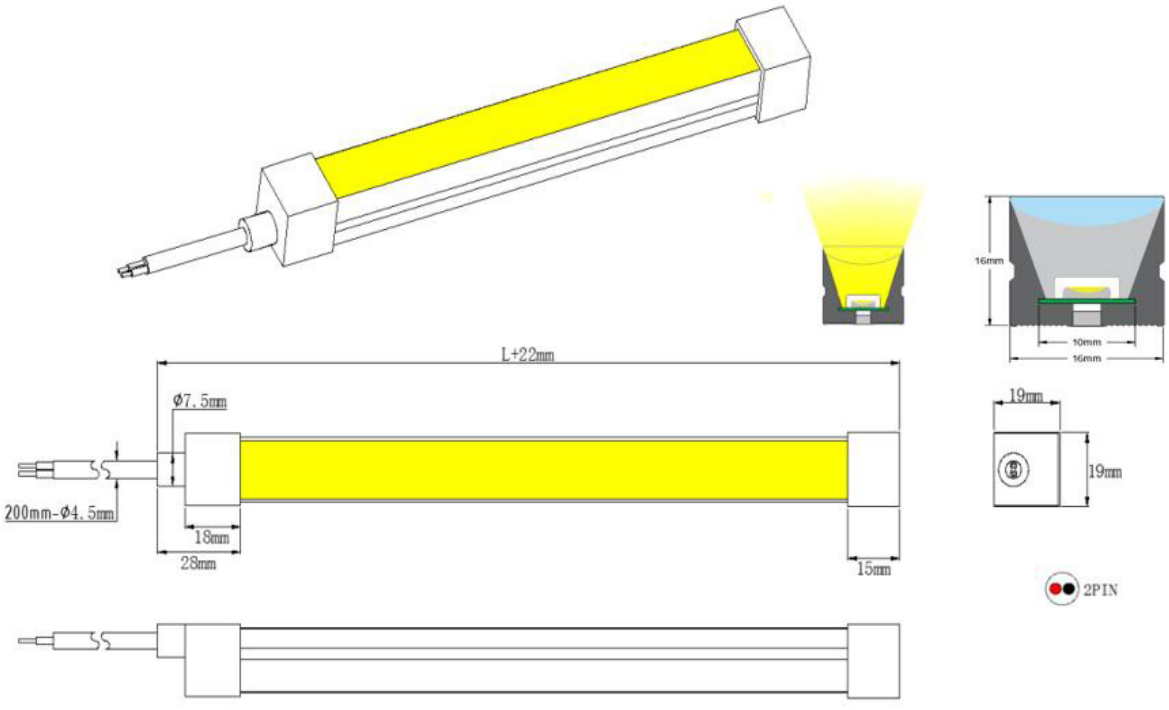




Light effciency & Lumen Output

Item No.	Color temperature	Ra	Beam angle	Luminous flux (lm/m)	Luminaire efficacy (lm/W)	Power (W/M)
ANF3D161612W46	2100K	90	110°	564	47	12W/M
ANF3D161612W24	2700K	90	110°	624	52	12W/M
ANF3D161612W06	3000K	90	110°	660	55	12W/M
ANF3D161612W08	4000K	90	110°	696	58	12W/M
ANF3D161612W04	6000K	90	110°	720	60	12W/M
ANF3D161615W24	2700K	90	110°	1140	76	15W/M
ANF3D161615W06	3000K	90	110°	1185	79	15W/M
ANF3D161615W08	4000K	90	110°	1245	83	15W/M
ANF3D161615W04	6000K	90	110°	1215	81	15W/M
ANF3D1616RGB	RGB	-	110°	72(@R) 200(@G) 40(@B) 312(@RGB)	18(@R) 50(@G) 10(@B) 26(@RGB)	12W/M
ANF3D1616SPIRRGBWXX	SPI-RGBW	90	110°	30(@R) 84(@G) 27(@B) 123(@W3000K) 141(@RGB) 252(@RGBW)	8.5(@R) 24(@G) 7.7(@B) 35(@W3000K) 37(@RGB) 21(@RGBW)	12W/M

Dimensions & available lengths



Note:The length of "L" is the length of the light strip, which is an integer multiple of the minimum cutting length.

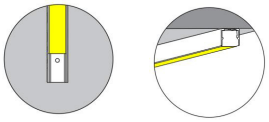
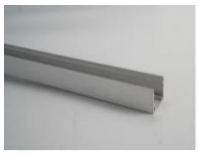
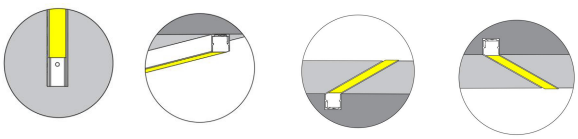
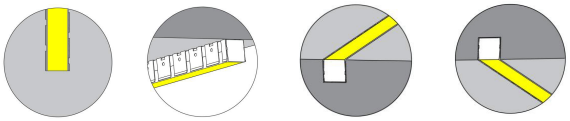
Max. Running Length

Type IP Rate	White 67 12Watt	White 67 15Watt	RGB 67	SPI-RGBW 67
Item Code	Single-end	Single-end	Single-end	Single-end
max.length (m)	16.2%@5M 29.8% @10M	14% @5M 31% @9M	26%@10M	--%@--M

Note:

1. Above conclusion is based on voltage drop testing result of the light with 200mm cable only.
2. The maximum running length is based on the light in static full loading status.
3. Above running length is only the light length excluding lengths of connectors.
4. The delivery length might be subject to the maximum packing length.

ANF3D1616 Mounting Profile

Name/Item Code	Picture	Installation Way
Install aluminum clips ANFZ1616A04 L30*W17.5*H18.9mm		
Install aluminum clips kit ANFZ1616A02 L30*W18.8*H19.2mm		
Aluminum Profile ANFZ1616A03 L1000*W17.5*18.9mm		
Aluminum Profile Kit ANFZ1616A01 L1000*W18.8*19.2mm		
Aluminum bottom cable Profile ANFZ1616A05 Kit L1000*W19.4*43mm		
Bendable Serrated Profile ANFZ1616A06 L1000*W17.85*H16.45mm		

ANF3D1616 Wiring Diagram

Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;

1. This w ring diagram is using the mains of AC 220-240V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
2. Dimming frequency ranges from 100Hz to 2000Hz, and 500Hz is recommended.

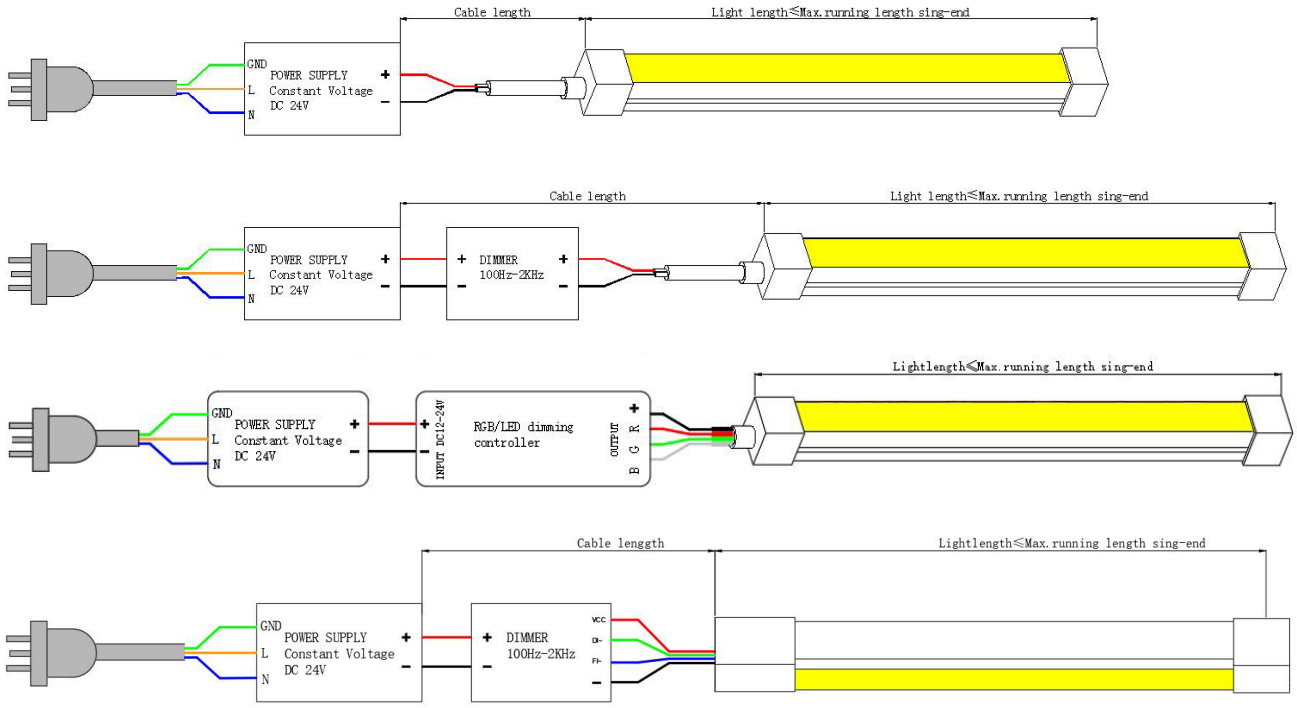
Light Length:
The length of the longest single light in parallel connection or sum of lights in series connection.

Cable Length:
The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

How to Minimize Voltage Drop:

1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".

Single-end Feed



Double-end Feed

The following wiring diagram with double-end feed to run length that is longer than max. running length for single-end feed but less than twice the value.

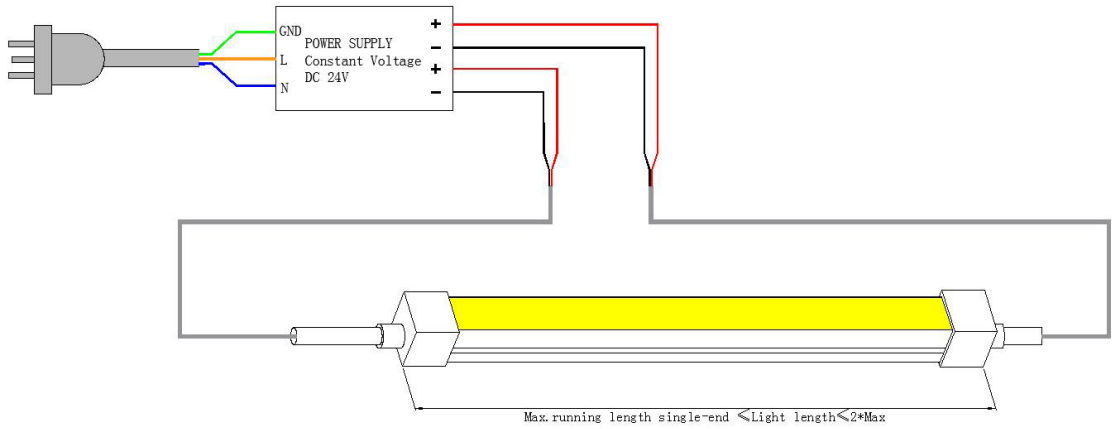
WARNING
Please ensure the polarity connection is correct on both ends, and short circuit might occur if powering the light from both ends with reverse polarity. It is not recommended to feed both ends of light with two separated power supplies, which would lead to overloading and overheating problem if either power supply is failed.

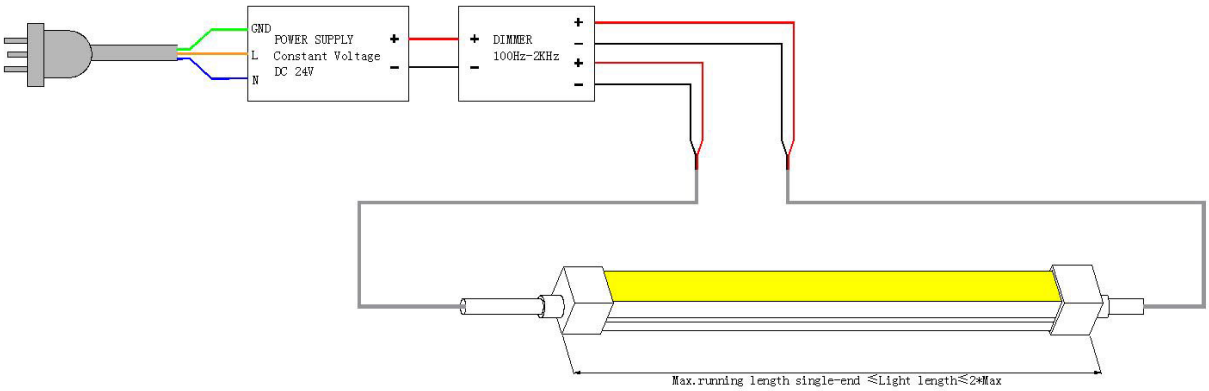
Light Length:
The length of the longest single light in parallel connection or sum of lights in series connection.

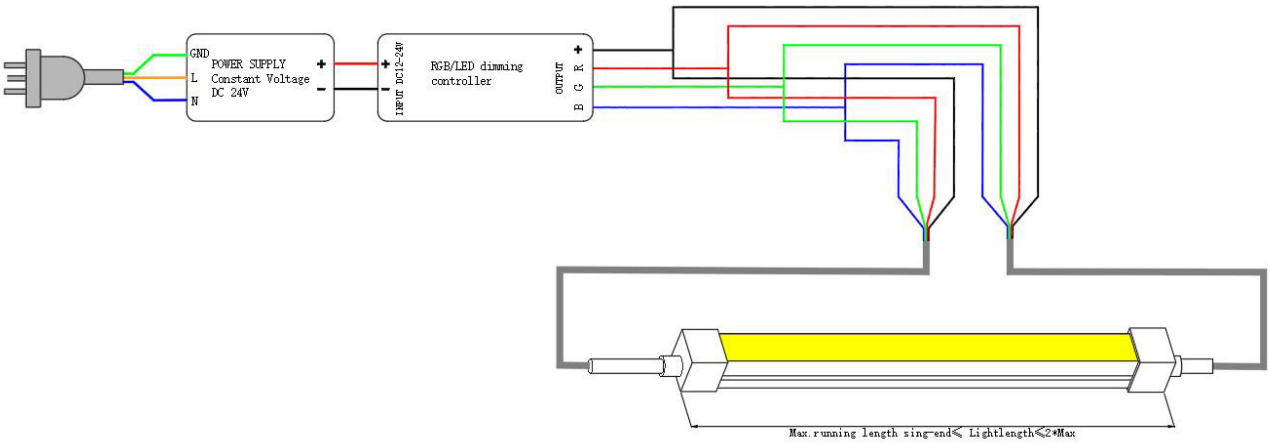
Cable Length:
The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

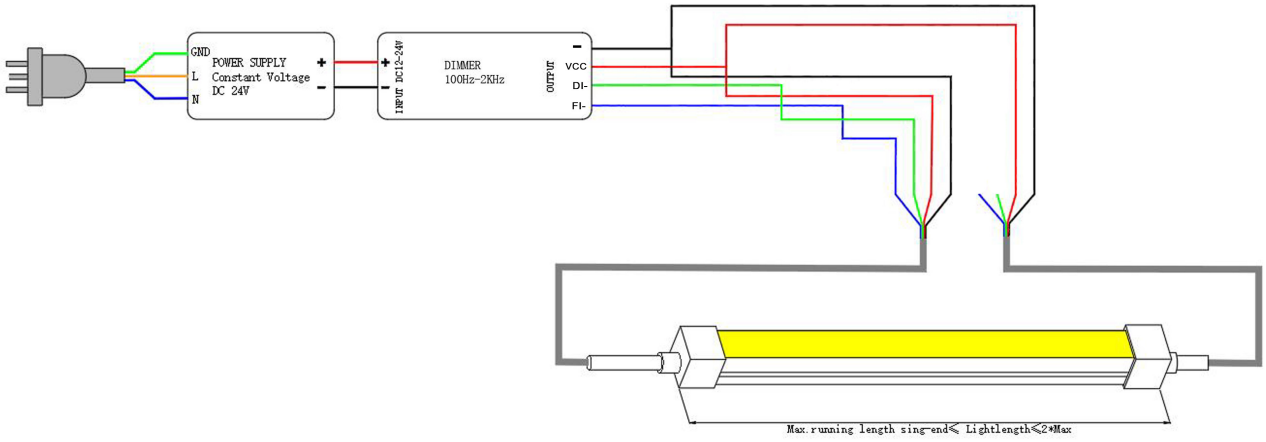
How to MinimizeVoltage Drop:

1. It is optimal to position the power supply in the middle of a single light or multiple lines in daisy chain to keep the equivalent cable length on both ends for double-end feed.
2. Please ensure the cable length is not more than the table "Max. Cable Length" according to the half of light length and its wire gauge.
3. Please ensure the light length is less than the table "Max. Running Length Double-end Feed".

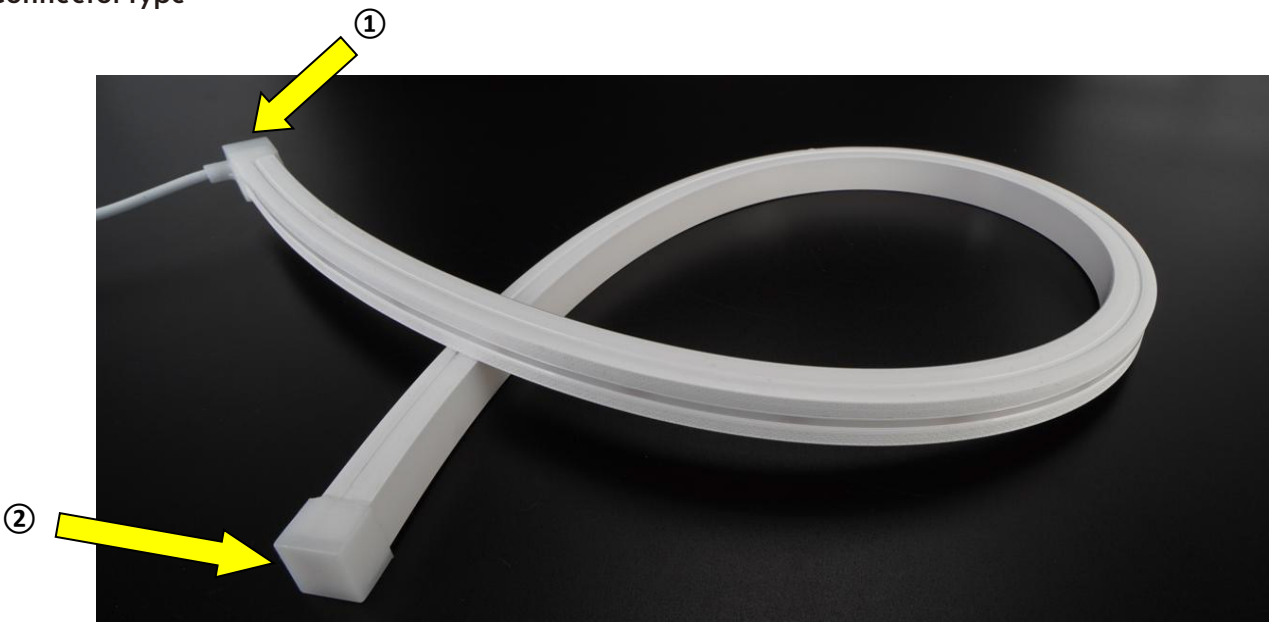

GND
L
N
POWER SUPPLY
Constant Voltage
DC 24V
+
−
+
−
Max.running length single-end ≤Light length≤2*Max


GND
L
N
POWER SUPPLY
Constant Voltage
DC 24V
DIMMER
100Hz-2KHz
Max.running length single-end ≤Light length≤2*Max


GND
L
N
POWER SUPPLY
Constant Voltage
DC 24V
INPUT DC12-24V
RGB/LED dimming
controller
OUTPUT
R
G
B
Max.running length sing-end≤ Lightlength≤2*Max


GND
L
N
POWER SUPPLY
Constant Voltage
DC 24V
INPUT DC12-24V
DIMMER
100Hz-2KHz
OUTPUT
VCC
DI-
FI-
Max.running length sing-end≤ Lightlength≤2*Max

ConnectorType



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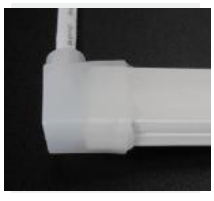
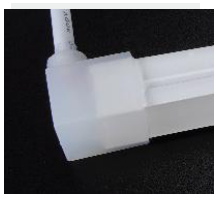
1 Outlet waterproof End Cap

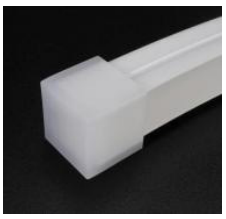

Top


Right


Bottom


Injection-moulded

2 No outlet waterproof End Cap



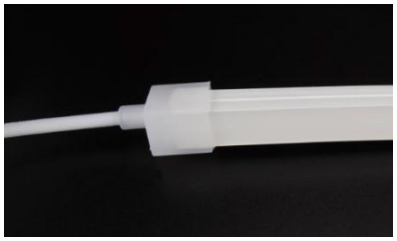
End cap
ANFZ1616A13

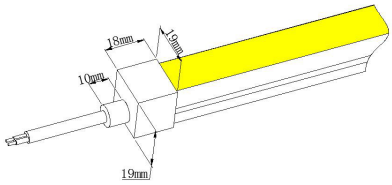
Injection-moulded

Dimension: mm

Waterproof End Cap-Top

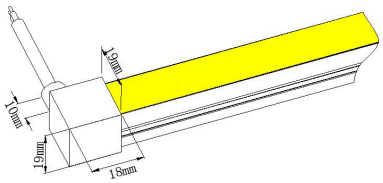
ANFZ1616A10





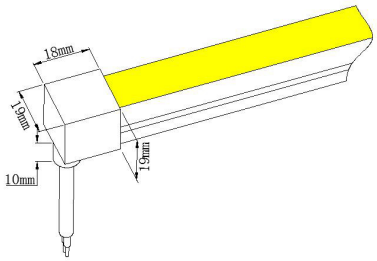
Waterproof End Cap-Right

ANFZ1616A13

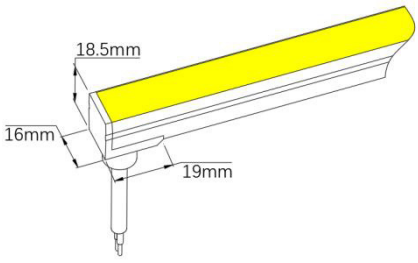


Waterproof End Cap-Bottom

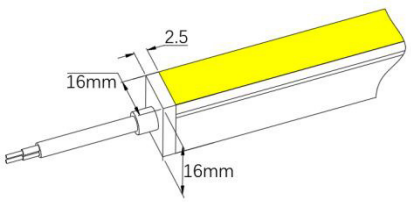
ANFZ1616A13



Waterproof End Cap
-Injection-moulded

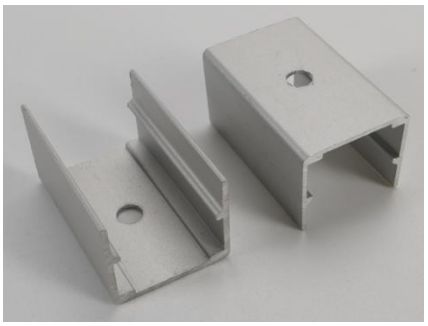


Waterproof End Cap
-Injection-moulded



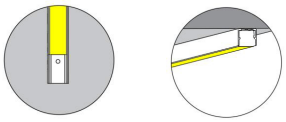
Note: To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

Install aluminum clips

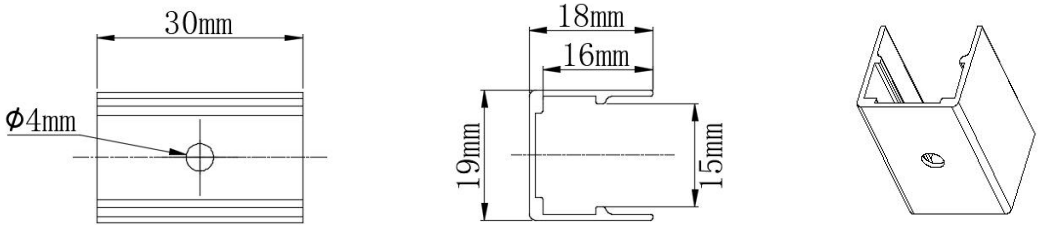


Ituses high-quality 6063 aluminum with thin-wall, lightweight design to fit tightly the light body. It is deformation and rust resistant, and cost-effective.

Please refer to the applicable installation ways.



Dimension: mm

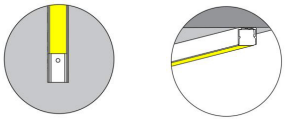


Item Code	Standard Length	Slotted Hole	Hole Number
ANFZ1616A04	30mm/1.18in	Ø4mm/Ø0.16in	1

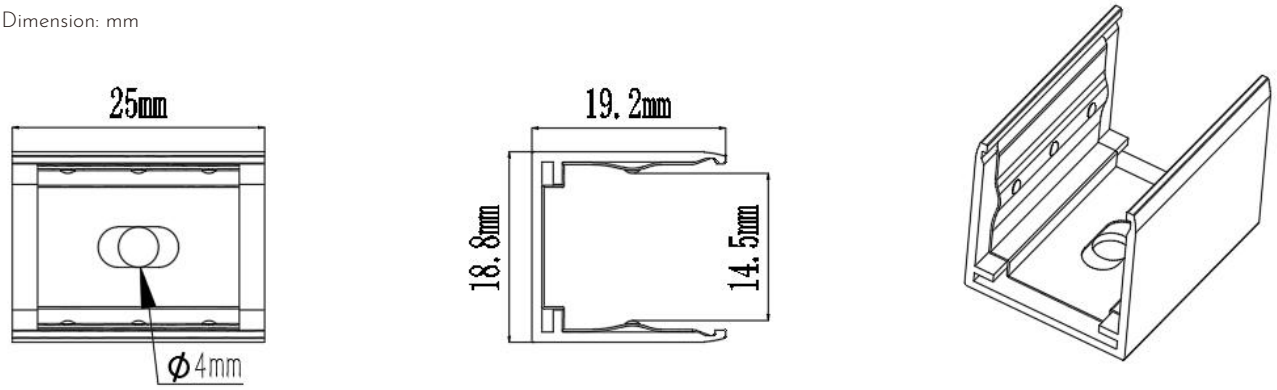
Install aluminum clips kit

It uses high-quality 6063 aluminum with thin-wall, which can make the neon evenly stressed, has good compatibility, does not shift, does not fall off, is easy to install and disassemble. It is deformation and rust resistant, and cost-effective.

Please refer to the applicable installation ways.



Dimension: mm



Item Code	Standard Length	Slotted Hole	Hole Number
ANFZ1616A02	25mm/0.98in	Ø3.5mm/Ø0.14in	1

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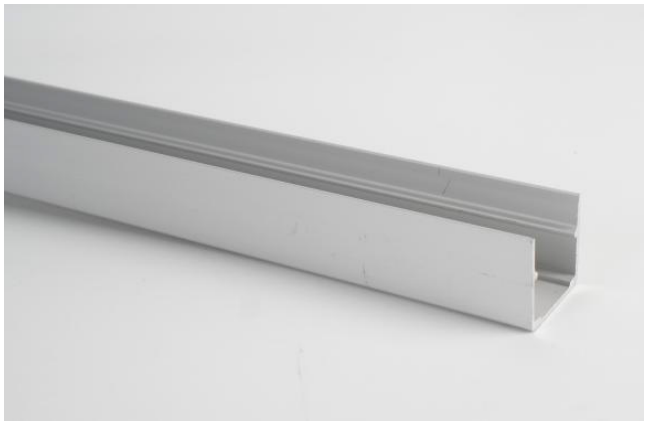
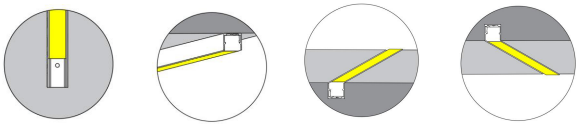
Aluminum Profile

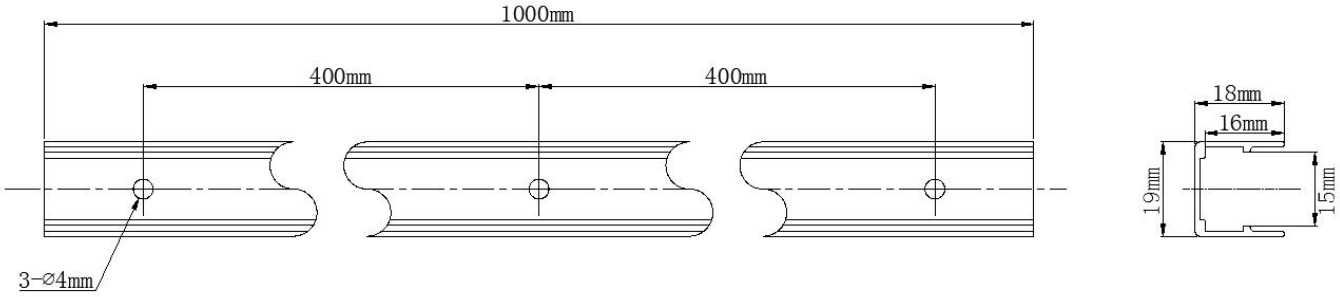


It uses high-quality 6063 aluminum with thin-wall, light-weight design to fit tightly the light body. It is deformation and rust resistant, and cost-effective.

Please refer to the applicable installation ways.



Dimension: mm

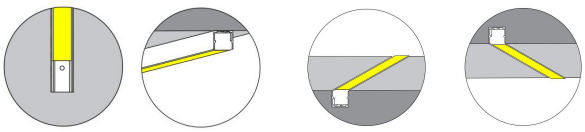


Item Code	Standard Length	Slotted Hole	Hole Number
ANFZ1616A03	1000mm/39.4in	Ø4mm/Ø0.16in	3

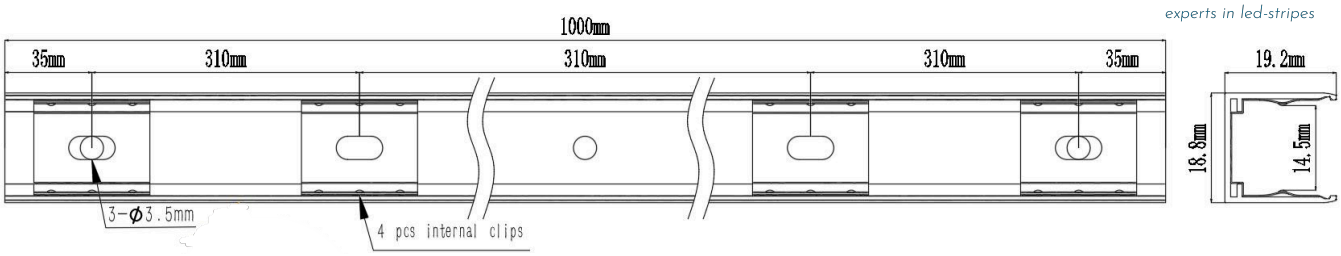
Aluminum Profile Kit

It uses high-quality 6063 aluminum with thin-wall, which can make the neon evenly stressed, has good compatibility, does not shift, does not fall off, is easy to install and disassemble. It is deformation and rust resistant, and cost-effective.

Please refer to the applicable installation ways.



Dimension: mm



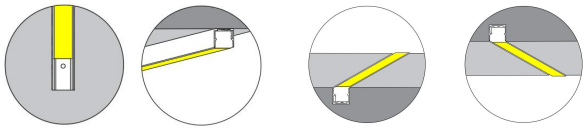
Special precautions: The Installation profile has four internal clips. The profile has three installation holes equipped with three installation screws. The four internal clips are evenly distributed inside the installation profile (as shown in the figure). At both ends, screws are used to fix the internal clips and the profile together on the installation surface. For the middle hole, only a screw needs to fixed. The two internal clips in the middle no need to be fixed with screws. If the internal clips are displaced, they can be moved to their correct positions.

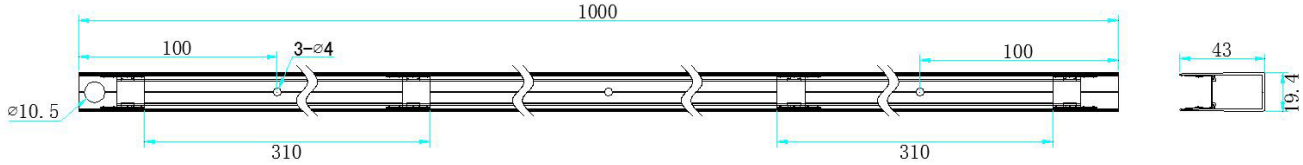
Item Code	Standard Length	Slotted Hole	Hole Number
ANFZ1616A01	1000mm/39.4in	Ø3.5mm/Ø0.14in	3

Aluminum bottom cable Profile Kit

It uses high-quality 6063 aluminum with thin-wall, which can make the neon evenly stressed, has good compatibility, does not shift, does not fall off, is easy to install and disassemble. It is deformation and rust resistant, and cost-effective.

Please refer to the applicable installation ways.





Item Code	Standard Length	Slotted Hole	Hole Number
ANFZ1616A05	1000mm/39.4in	Ø4mm/Ø0.16in	3

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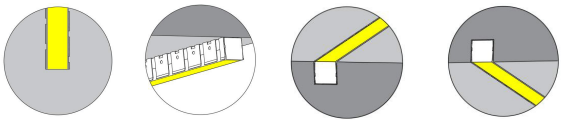
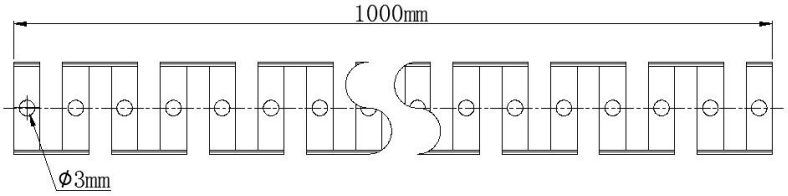
Bendable Serrated Profile

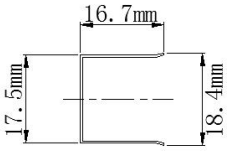
It is an expanded design of the serrated profile, and caters for the continuously streamlined aesthetics of curve shape. The secondary precision cutting process, not only maintains the advantage of clamping force, but also enables the two-way horizontal bending directions with super shape memory.

Please refer to the applicable installation ways.



Dimension: mm





Item Code	Standard Length	Slotted Hole	Hole Number
ANFZ1616A06	1000mm/39.4in	Ø3mm/Ø0.12in	103

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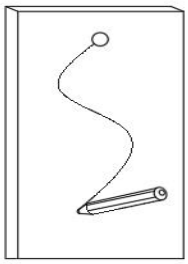
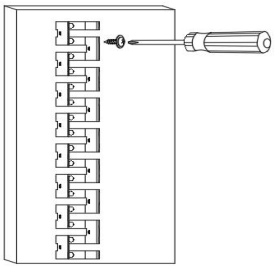
Installation Instructions

Friendly Reminder: please read instructions carefully before operation.

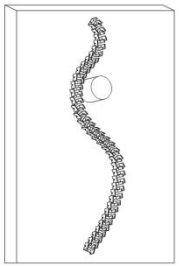
Installation



Mark the required shape on the mounting surface or print the sketch in the scale of 1:1 if complicated.



Get the front connector outside of profile and keep at least 10mm more apart. Fix the screw starting from the power input end.



Use cylinder or disc-like object you have to assist with shaping.

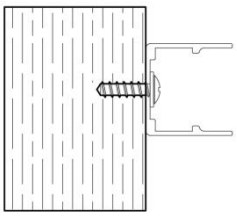
Bending Diameter

Fix the rest in sequence along with the marks.

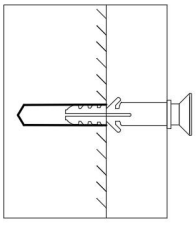
Adjust the serrate silicone tape and remove the redundant lengths at both ends

Finish and fix the light in.

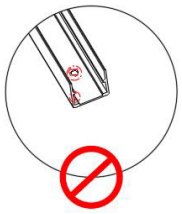
Profile Installation



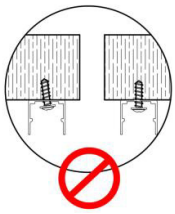
Install the screw into position and ensure the screw head is in line with or lower than the base of aluminum profile.



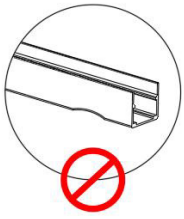
Place the rubber expansion bolt to assist with the screw fixation if the mounting surface is rigid.



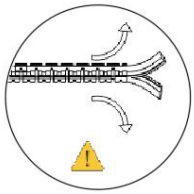
Make sure no debris in the profile before installation to avoid the light housing being impaled and cause water ingression.



Make sure no bulges on the slot to avoid the damage on the light and cause water ingression.

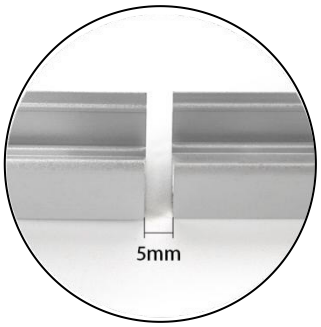


Do not use the profile deformed seriously.

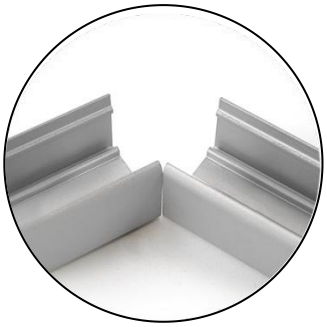


It's recommended to mount in place at a time when using the bendable aluminum profile in case of any break due to the frequent repeated shaping.

Profile Jointing



1.Please reserve at least 5mm for profile jointing to enable enough space for contraction and expansion.



2.The profile can be jointed to a right angle only if there are two pieces of lights connected to be a right angle.

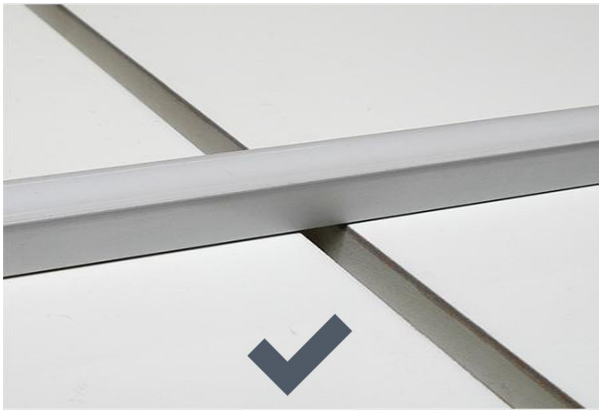
3.For the curve shaping of light, make sure to leave enough space to separate profiles in between or use the bendable profile instead.

4.Splice Structure on Mounting Surface

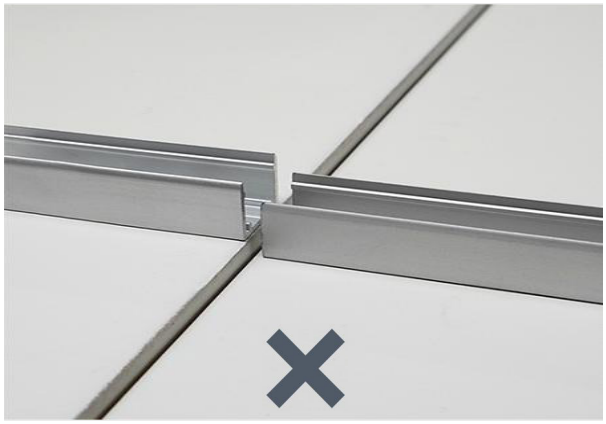
Angular Misalignment

Parallel Vertical Misalignment

Parallel Horizontal Misalignment



In the case of an outdoor mounting surface with the splice structure, please make sure the mounting profile goes across the gap or separate the light and profile as per the splice structure.

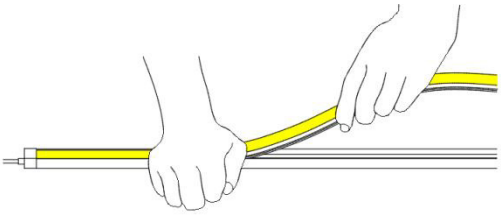


When the profile jointing lies where the mounting surface splices, contraction and expansion of the mounting surface in the long term will cause the misalignment of profiles and lights, and lead to the damage of inside PCB.

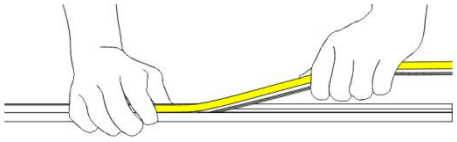
Above wrong misalignments will make the light improperly bent, and lead to the wrinkle or fracture on PCB.

Light Installation

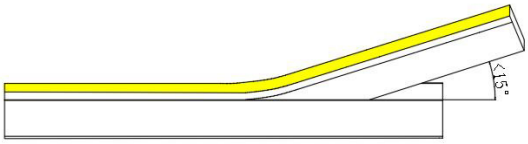
It's not recommended to install the light repeatedly, otherwise the light inside might be damaged.



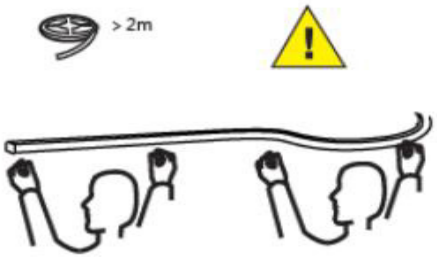
Make sure the light is fitted in vertically.



Press the light into the profile by the palm instead of the finger, otherwise it might damage inside electronic components due to the overpressure caused.

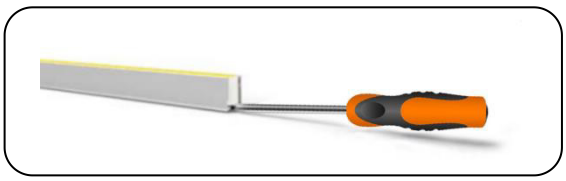


Make sure the angle between the light and profile is not bigger than 15°, otherwise inside PCB might be damaged.



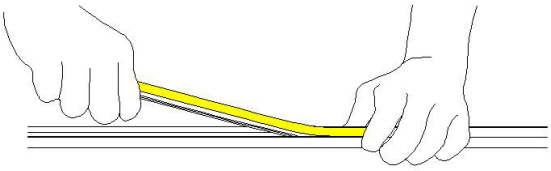
When light length>2m, make sure somebody helps to lift the light, in case the heavy weight of light itself generates too small bending angle or twisting, which may damage inside PCB.

Light Uninstallation

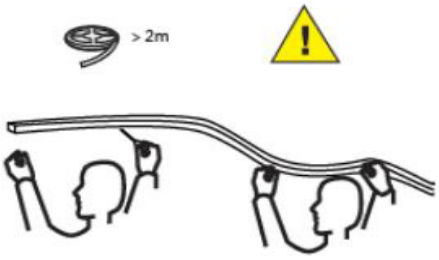


Prepare a screwdriver, and put the screwdriver at the bottom of light.

Move the screwdriver and unclench the light upwardly. Be careful the angle between the light and profile should not be bigger than 15°.



Once the end of light is out, hold both sides of light by hand and pull it out along the profile slowly and orderly. Make sure the angle between the light and profile is not bigger than 15°, otherwise inside PCB might be damaged.



When light length>2m, make sure somebody helps to lift the light, in case the heavy weight of light itself generates too small bending angle or twisting, which may damage inside PCB.