

# LED

## NEON FLEX

### NSF0612

green





Features

- Color options: Single color, WN.
- Adopt high quality components with stable and reliable performance.
- Side bending, suitable for many shapes and good weather resistance.
- Warranty: 5 years indoor, 3 years outdoor.
- Customization: multiple spec options, can be customized upon requirements.
- Single color supports PWM, 0-10V, DALI and DMX dimming.

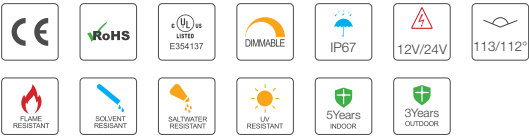


Photo-electric Parameters

| Model No.            | Voltage | Beam Angle | Ra  | Color  | Lm/m | Lm/W | (W/m) |
|----------------------|---------|------------|-----|--------|------|------|-------|
| NSF0612-Single color | 12V DC  | 113°       | >90 | 2200K  | 123  | 10.7 | 12.0  |
|                      |         |            |     | 2700K  | 178  | 16.2 |       |
|                      |         |            |     | 2900K  | 214  | 18.8 |       |
|                      |         |            |     | 3900K  | 218  | 19.3 |       |
|                      |         |            |     | 4500K  | 211  | 18.8 |       |
|                      |         |            |     | 4700K  | 198  | 18.7 |       |
|                      |         |            |     | 5400K  | 224  | 19.9 |       |
|                      |         |            |     | 5800K  | 234  | 21.1 |       |
|                      |         |            | /   | Red    | 86   | 7.2  | 12.0  |
|                      |         |            |     | Green  | 114  | 9.5  |       |
|                      |         |            |     | Blue   | 39   | 3.3  |       |
|                      |         |            |     | Yellow | 201  | 16.8 |       |
| NSF0612-Single color | 24V DC  | 113°       | >90 | 2200K  | 374  | 38   | 9.84  |
|                      |         |            |     | 2700K  | 383  | 39   |       |
|                      |         |            |     | 2900K  | 393  | 40   |       |
|                      |         |            |     | 3900K  | 393  | 40   |       |
|                      |         |            |     | 4500K  | 433  | 44   |       |
|                      |         |            |     | 4700K  | 423  | 43   |       |
|                      |         |            |     | 5400K  | 413  | 42   |       |
|                      |         |            | /   | Red    | 128  | 13   | 9.84  |
|                      |         |            |     | Green  | 383  | 39   |       |
|                      |         |            |     | Blue   | 88   | 9    |       |
|                      |         |            |     | Yellow | 69   | 7    |       |
| NSF0612-WN-12V       | 12V DC  | 112°       | >80 | 2900K  | 206  | 31   | 7.2   |
|                      |         |            |     | 5200K  | 220  | 33   | 7.2   |
|                      |         |            |     | W+N    | 405  | 32   | 14.4  |
| NSF0612-WN-24V       | 24V DC  | 112°       | >80 | 2700K  | 229  | 31   | 7.2   |
|                      |         |            |     | 5100K  | 233  | 32   | 7.2   |
|                      |         |            |     | W+N    | 459  | 31   | 14.4  |

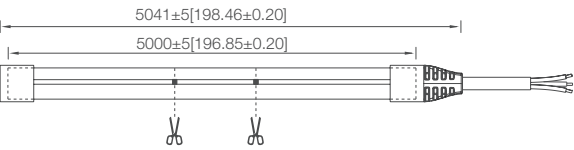
Other Parameters

| Model No.                | LED QTY (pcs/m) | Standard Run | Min. Cuttable Length | Working Temperature | Storage Temperature |
|--------------------------|-----------------|--------------|----------------------|---------------------|---------------------|
| NSF0612-Single color-12V | 120             | 5m           | 25.0mm               | -20~+60°C           | -20~+70°C           |
| NSF0612-Single color-24V | 140             | 13m          | 50.0mm               |                     |                     |
| NSF0612-WN-12V           | 240             | 5m           | 25.0mm               |                     |                     |
| NSF0612-WN-24V           | 240             | 10m          | 50.0mm               |                     |                     |

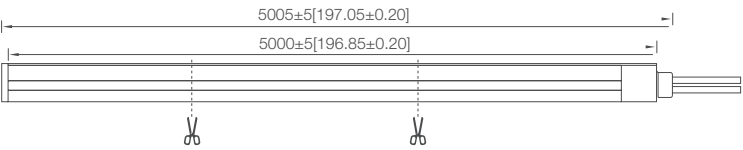
Profile Drawings

Unit:mm[inch]

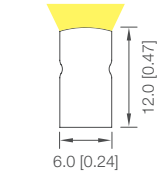
Glue Process (IP67)



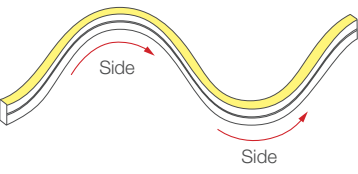
Molding Pressed (IP67)



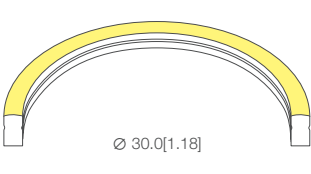
Sectional view



Bend direction

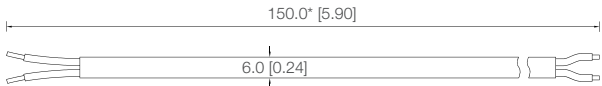


Bending Diameter

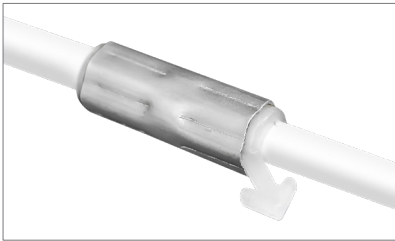
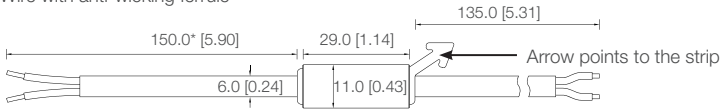


Wire Spec

General Wire



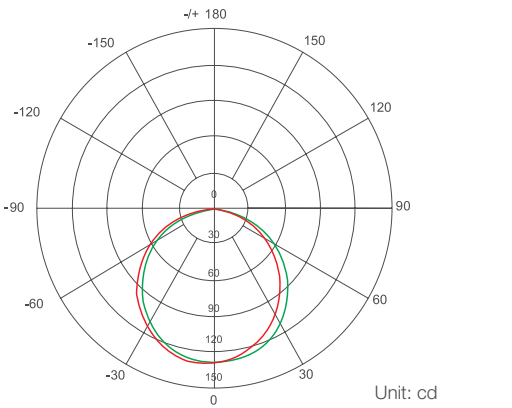
Wire with anti-wicking ferrule



- Notes:
- You can choose one of the above two wires.
  - 2/3/4/5 cores are available.
  - The wire length marked with "\*" supports customization.
  - Don't suggest ferrule in the water avoiding Oxidation.
  - Do not disassemble or reprocess the ferrule; otherwise, we will not be responsible for the consequences.

Luminous Intensity Distribution Diagram

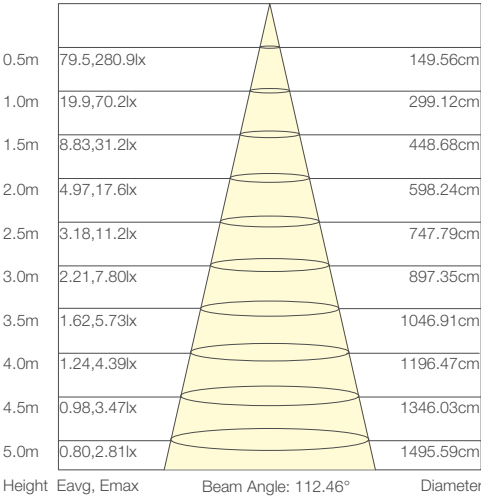
Average Illumination



AVERAGE BEAM ANGLE (50%): 113.3°

Note: for other data, please consult sales rep.

Flux Out: 148.1lm (CCT=5200K)



Recommended power supply upon working length

NSF0612-Single color

| Working Length | Current | Rated Voltage | Measured Power | Recommended Power Supply | Power Supply Mode |
|----------------|---------|---------------|----------------|--------------------------|-------------------|
| 1m             | 1.0A    | 12DC V        | 12.0W          | 18W                      | Single Feed       |
| 5m             | 3.6A    | 12DC V        | 43.2W          | 60W                      | Single Feed       |

NSF0612-WN-12V

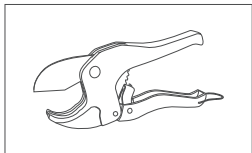
| Working Length | Current | Rated Voltage | Measured Power | Recommended Power Supply | Power Supply Mode |
|----------------|---------|---------------|----------------|--------------------------|-------------------|
| 1m             | 1.2A    | 12DC V        | 14.4W          | 18W                      | Single Feed       |
| 5m             | 4.0A    | 12DC V        | 48.0W          | 60W                      | Single Feed       |

NSF0612-WN-24V

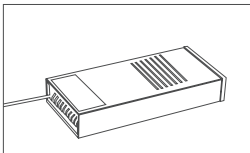
| Working Length | Current | Rated Voltage | Measured Power | Recommended Power Supply | Power Supply Mode |
|----------------|---------|---------------|----------------|--------------------------|-------------------|
| 1m             | 0.6A    | 24DC V        | 14.4W          | 24W                      | Single Feed       |
| 10m            | 6.0A    | 24DC V        | 144W           | 200W                     | Single Feed       |

Note: Test the strip and external power together

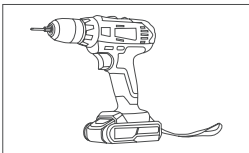
Products and Tools



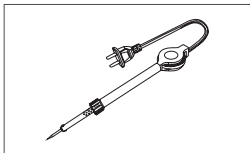
Cutter



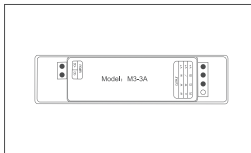
LED power supply



Electric drill

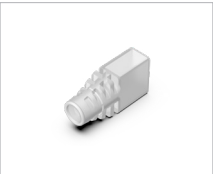


Electric iron



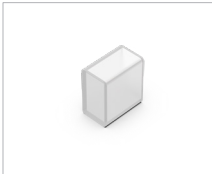
Controller (optional)

Product accessories



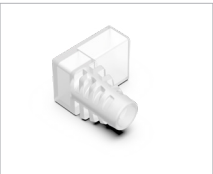
ASY-NSF0612-N00NNH-EC

Item: Front cap  
Dimensions L\*W\*H: 28\*14\*9.23mm  
Part No.: 01.06.KL17120321  
Quantity (5m): 3pcs  
Free/Optional: Free



ASY-NSF0612-N00NNX-EC

Item: Closing End-cap  
Dimensions L\*W\*H: 13\*14\*8mm  
Part No.: 01.06.KL17120331  
Quantity (5m): 3pcs  
Free/Optional: Free



ASY-NSF0612-N00NNS-EC

Item: Front cap (Side)  
Dimensions L\*W\*H: 23\*20\*14mm  
Part No.: 01.06.KL18092912  
Free/Optional: Optional



ASY-NSF0612-N00NNB-EC

Item: Front cap (bottom)  
Dimensions L\*W\*H: 2.5\*4\*10mm  
Part No.: 01.06.KL18092911  
Free/Optional: Optional



ASY-NSF0612-A3NN0035-MT

Item: Aluminum track  
Dimensions L\*W\*H: 35\*7.80\*13.5mm  
Part No.: 01.08.04201218110035  
Free/Optional: Optional



ASY-NSF0612-A1NN1000-MT

Item: Aluminum channel  
Dimensions L\*W\*H: 1000\*7.80\*13.5mm  
Part No.: 01.08.04201218111000  
Free/Optional: Optional



ASY-NSF0612-P1NN0014-MT

Item: Plastic Clip  
Dimensions L\*W\*H: 12\*10\*12mm  
Part No.: 01.06.KL17120311  
Quantity (5m): 12pcs  
Free/Optional: Optional



WR-7516

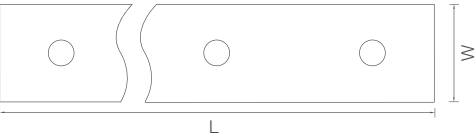
Item: Silicone Glue  
Dimensions: 45g/pc  
Part No.: 01.10.0220000187  
Quantity: 1pc  
Free/Optional: Optional



**PA3**

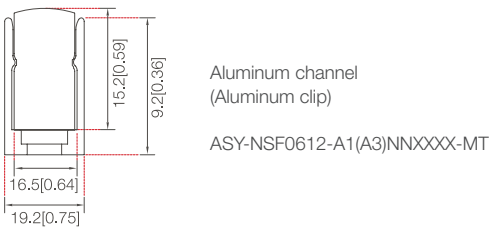
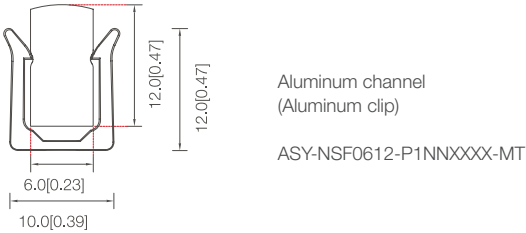
Item: Screws  
Dimensions L\*W\*H: PA3\*10mm  
Quantity: 12pcs  
Free/Optional: Optional

Accessories diagram



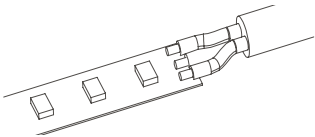
| Name               | L(mm) | W(mm) | Type       |
|--------------------|-------|-------|------------|
| Aluminum channel   | 1000  | 7.8   | Optional   |
| Aluminum channel X | X     | --    | Customized |

Profile Drawings (neon + aluminum channel)

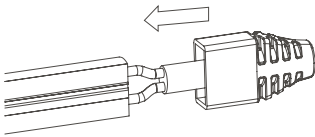


Installation

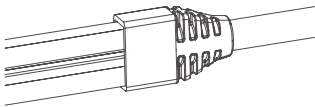
Front cap installation



Weld the wire to the PCB board.

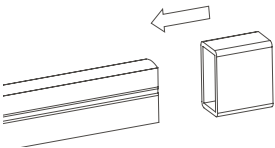


Apply waterproof glue to the front cap, then push the cap into the strip.

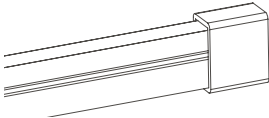


Wipe off the excess glue and wait for the glue to solidify.

Closing-end cap installation

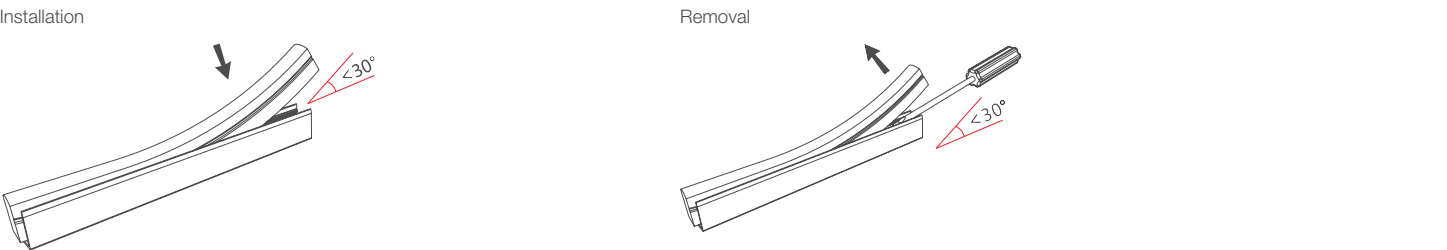
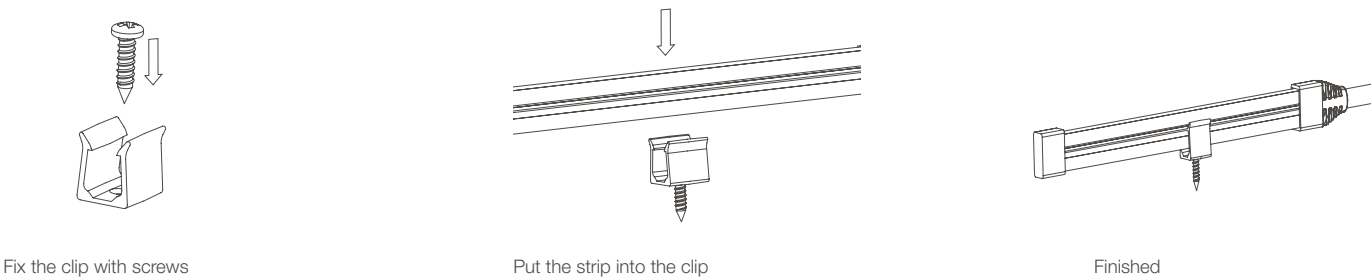


Apply waterproof glue to the end cap, then push the cap into the strip.



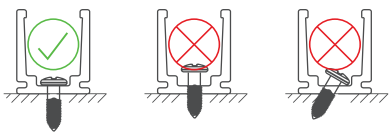
Wipe off the excess glue and wait for the glue to solidify.

Plastic clip installation

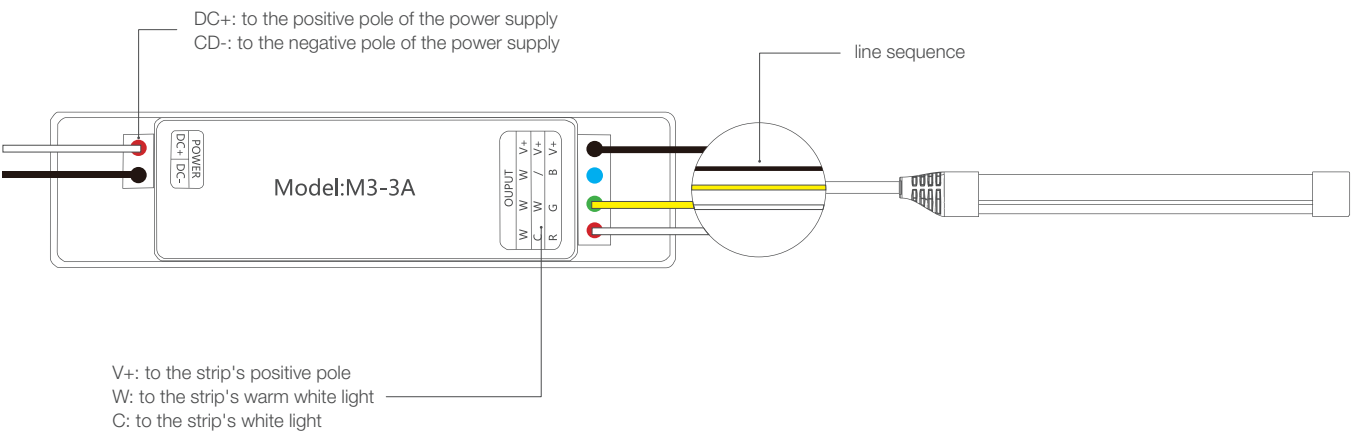


Press in/out gently; avoid excessive force; ensure one-time, smooth installation/removal.

- Notes:
- During welding, please pay attention to the positive and negative poles of the wire and the strip;
  - Each connection must use 10g silica gel for waterproof and insulating treatment;
  - The screws must be vertical to the mounting surface and be fastened, as shown in the figure on the right;
  - Please choose suitable operation steps according to the actual needs;
  - During mounting, please pay attention to the min bending diameter, and best to use original factory accessories;
  - More information, please feel free to consult us;

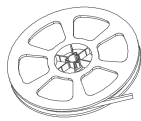


Controller wiring diagram

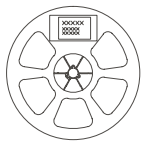


- Notes:
1. The case uses M3-3A CCT controller;
  2. This product supports remote M2 control;
  3. The remote control distance is 30 meters;
  4. M3-3A WN maximum driving power 72W(12V)/144W(24V);
  5. M3-3A controller's working voltage: DC12-24V

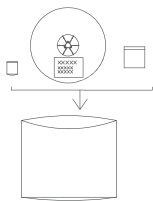
Packaging Information



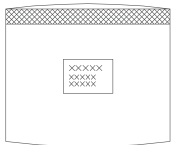
Roll the product to a reel



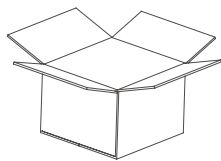
Label the reel;



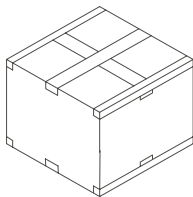
Put reel, accessory bag and desiccant together into a foil bag;



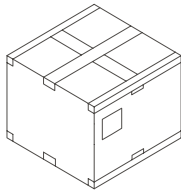
Label the foil bag;



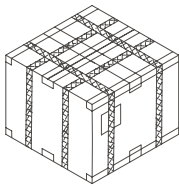
Put the foil bags into a carton box;



Seal the carton box;



Label the carton box;



Use packing belt to pack. Add edge protectors if necessary

Packaging information

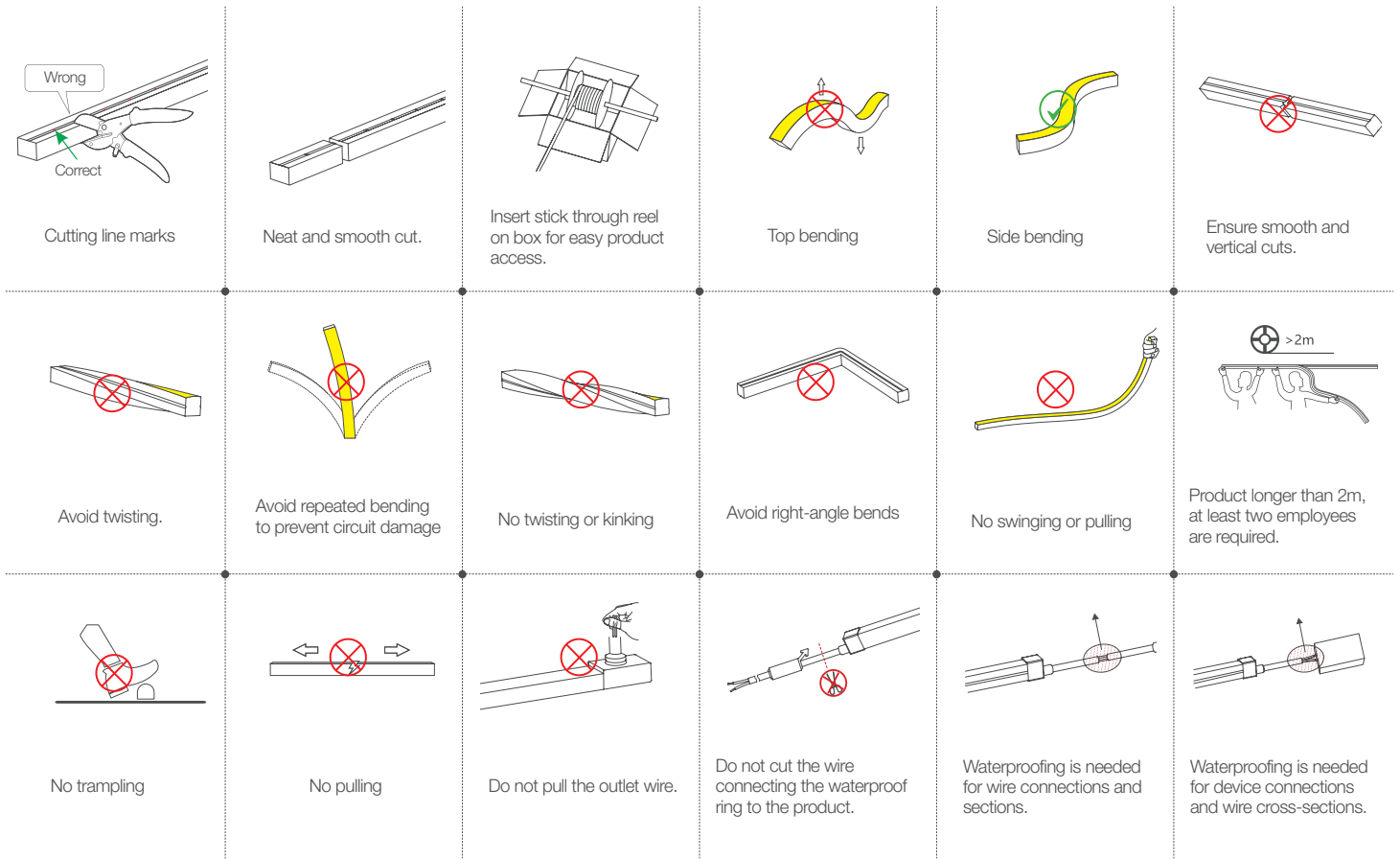
| Model No.      | Product Size L*W*H (mm) | Carton Size (mm) | Meter/Reel | Reel/Carton | Gross Weight (kg) |
|----------------|-------------------------|------------------|------------|-------------|-------------------|
| NSF0612        | 5000*6*12               | 390*390*325      | 5          | 20          | 14.30(1± 10%)     |
| NSF0612-WN-24V | 10000*6*12              | 390*390*325      | 10         | 15          | 17.55(1± 10%)     |

- One piece product(5/10m) per reel, and the reel is packed in an aluminum foil bag, and finally in an carton box.
- For other customized length packaging, please ask our sales rep.
- The above-mentioned packaging quantity and weight are only for the illustrated packaging method. For other packaging methods, the packaging quantity and weight will be different. The actual weight is subject to the actual product.

Reliability test

| Project                     | Reference standards | Category                         | Test conditions                                                                                                                 | Outcome |
|-----------------------------|---------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------|
| Environmental test          | Blueview standard   | PTC test                         | Test temperature -40°C to 60°C, cycle once every 2h (temperature holding time 15min, heating and cooling time 45min)            | Pass    |
|                             |                     | Room temperature aging test      | TH=25°C, continuous power on                                                                                                    |         |
|                             |                     | Temperature cycling test         | Th = 60°C/4h, Ta =20°C/1H, TL=- 40°C/4h,continuous cycle lighting                                                               |         |
|                             |                     | High temperature resistance test | Simulated TH=60 °C, continuous power on                                                                                         |         |
| Mechanical strength testing | Blueview standard   | Room temperature bending test    | Bending diameter 10cm, T=25°C, continuous power on                                                                              | Pass    |
|                             |                     | Tensile test                     | Fix the ends of the sample on the tension machine, then power on and record the tension value when the sample is turned off.    |         |
|                             |                     | Twisting test                    | 24V light on; rotate 360° forward and reverse, if the sample still OK, increase the degree of rotation until the sample broken. |         |

## Warning Mark

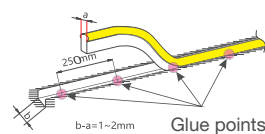
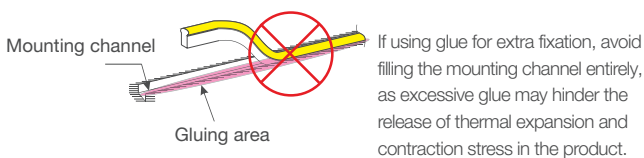


## Note:

1. There are cutting marks on the FPCB;
2. Please pay attention to the above warnings during transportation and mounting;

## Attentions Before Installation

- Before installation, check that the product parameters are consistent with the requirements (Seeing product specifications or product labels)
- Load voltage, current, power and power supply should be matched with the product.
- Follow the instructions of wiring diagram (first connect the load and then the power supply) to avoid short circuit.
- Make sure the correct connection of positive and negative poles between products and power supply. Otherwise, the light will not be on.
- Make sure the power cord firmly screwed into the terminal and it should not be pulled out by hands.
- The terminal should have waterproof and anti-corrosive treatment.
- During installation, if components are used, please refer to the relevant parts description and installation methods in the corresponding specification sheet.
- Ensure that there are channels or clips on the installation carrier to provide fixation.
- For IP68 product, it is not recommended for customers to cut it themselves; for IP67 product, customers may cut it themselves and seal it with adhesive to achieve IP65 rating
- It is not recommended to rely solely on glue for fixing the product; gluing serves only as auxiliary fixation.
- Considering the thermal expansion and contraction of the product, sufficient space must be reserved. It is recommended to have a maximum of four glue points per meter of product.



Apply glue only as auxiliary fixation. If gluing is necessary, it is recommended to have a maximum of four glue points per meter of product; the amount of glue should be controlled appropriately to ensure secure fixation.



Warning

- Do not disassemble or retrofit the light. Do not touch the surface of the light with a sharp object.
- Do not do live-line working during installation,especially for high voltage product.
- Do not use any organic chemical solvents.
- Use neutral glass adhesive to fix this product and it needs to be dried 4 hours in the open environment after operation.
- Treat the ends and the circuit connection points that are not connected to the main line with insulation,waterproof, and anti-corrosion in the installation.
- Use 18AWG (0.75mm2 cross-sectional area) or thicker core wire to avoid adverse consequences caused by overheating, if the power cable need to lengthen.
- Make sure the input voltage meets the requirements and lines are connected correctly before lighting on
- This product is for signage, and do not use as general lighting.
- Series connection within the max run.
- The length of the power cable between the power supply and the led strip should not exceed 2 meters.Otherwise, large circuit loss will lead to inconsistent brightness.
- Installation, maintenance and repair should be operated by a qualified technician.

Statements And Recycling

Statements

- Repair should be operated by a qualified technician or supplier, if the external circuit or main line of this product is damaged.
- The parameters given in this manual are typical values and for reference only
- All illustrations and drawings in this manual are for reference.
- This product is subject to change without notice.

Recycling

- LED lighting products belongs to electronic products, please do recycling treatment according to the relevant WEEE directives.

| Version | Content                  | Date      |
|---------|--------------------------|-----------|
| A2.5    | Update: Basic Parameters | 2025-4-28 |