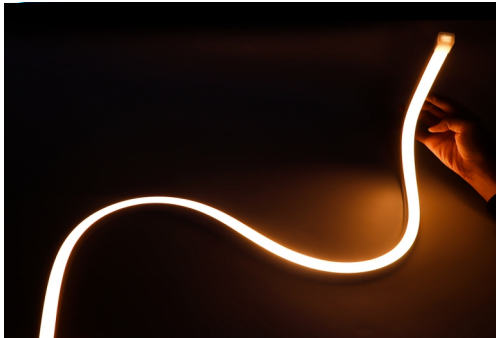


2020 Free Bend Neon Strip Data Sheet

Free Bend



- Using silicone extrusion process, 20*20Mini size design
- Uniform light emission, good appearance consistency
- Anti-yellowing, high temperature resistance, corrosion resistance, weak acid and alkali resistance
- Good flexibility, small size, light weight, easy installation
- Food-grade environmentally friendly silicone material.
- Waterproof grade IP67
- 5 years warranty

Technologies

- ON/OFF, RGBW, DMX

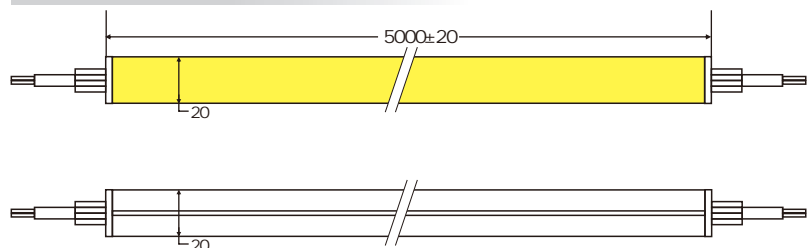
Application

- This product is suitable for any use in engineering projects, signage and architectural modeling, home decoration, office decoration lighting, etc

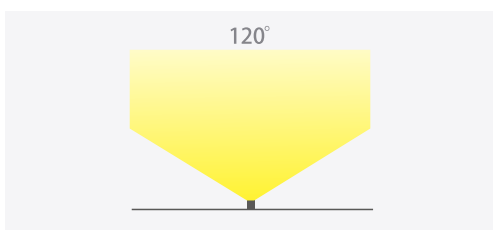
Color Options



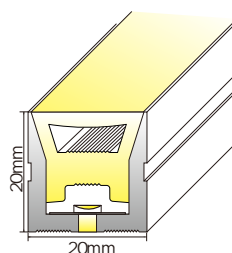
Dimensions



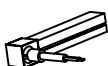
Beam Angle



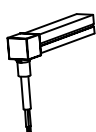
Sectional drawing



Recommended Accessories



Side exit end cap



Bottom Exit end cap



Direct Exit End cap



End cap



Bendable Profile



Clip



cable

Product Specifications

| P/N | LED Quantity | CCT (K) | CRI | LEDS (M) | LUMENS (lm/m) | V.F. (V.V.) | Current (mA/M) | Power (W/M) | Out Length (MM) | Max Run (M) |
|---|--------------|-------------|-------|----------|---------------|-------------|----------------|-------------|-----------------|-------------|
| RL-FV2414108283512-8XX-FWD2020 | 2835 | 2700 | 80/90 | 108 | 550 | 24 | 500 | 12 | 50 | 5 |
| | | 3000 | | | 550 | | | | | |
| | | 4000 | | | 600 | | | | | |
| | | 6500 | | | 600 | | | | | |
| RL-FV2414108283512-8CW-FWD2020 | 2835 | 2700+6500 | 80/90 | 108 | 580 | 24 | 500 | 12 | 100 | 5 |
| RL-FV2414070505012-RGB-FWD2020 | 5050 | R:620-625 | 80/90 | 70 | 150 | 24 | 500 | 12 | 100 | 5 |
| | | G:520-525 | | | | | | | | |
| | | B:465-470 | | | | | | | | |
| RL-FV2414070505012-RGB-FWD2020 | 5050 | R:620-625 | 80/90 | 70 | 200 | 24 | 500 | 12 | 100 | 5 |
| | | G:520-525 | | | | | | | | |
| | | B:465-470 | | | | | | | | |
| | | W:2700+6500 | | | | | | | | |
| RL-FV2414070505012-SPI-FWD2020 (10pixels) | 5050 | R:620-625 | / | 70 | 160 | 24 | 542 | 13 | 100 | 5 |
| | | G:520-525 | | | | | | | | |
| | | B:465-470 | | | | | | | | |
| RL-FV2414070505012-DMX-FWD2020 (10pixels) | 5050 | R:620-625 | 80/90 | 70 | 200 | 24 | 500 | 12 | 100 | 5 |
| | | G:520-525 | | | | | | | | |
| | | B:465-470 | | | | | | | | |
| | | W:2700+6500 | | | | | | | | |

Other Specifications

| | |
|----------------------------|---------|
| Protection grade | IP67 |
| Working temperature (°C) | -25~+60 |
| Standard length (°C) | -25~+70 |
| Maximum cascade length(m) | 5 |
| Maximum cascade length (m) | 5 |
| weight | / |

Remark

- The test environment temperature is 25±2°C;
- The above data are typical values, the actual parameters of the product may be different from the typical data; the data is subject to change without notice;
- The above "/" means that this parameter is not required for the time being.

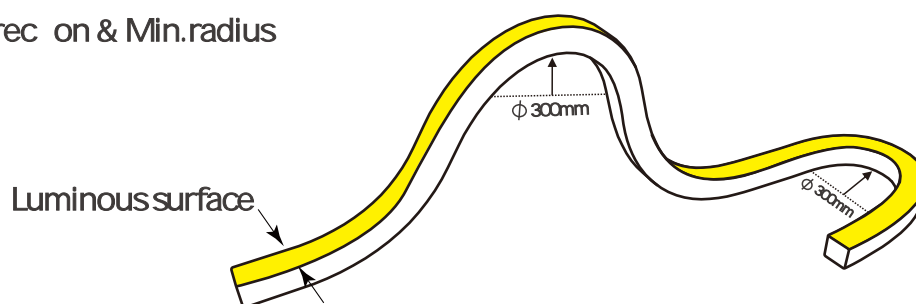
Applied Standards



Installation

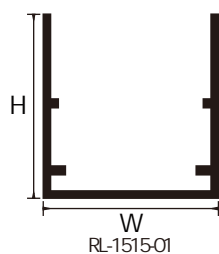
Note: Due to the different types and attributes of neon lights, please refer to the line marks for the bending radius.

Bending Direction & Min. radius

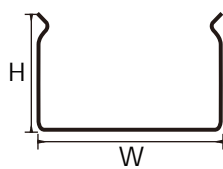


Mounting with aluminium profiles

Install with the screws provided. Do not use screws of other types or sizes that do not meet requirements.

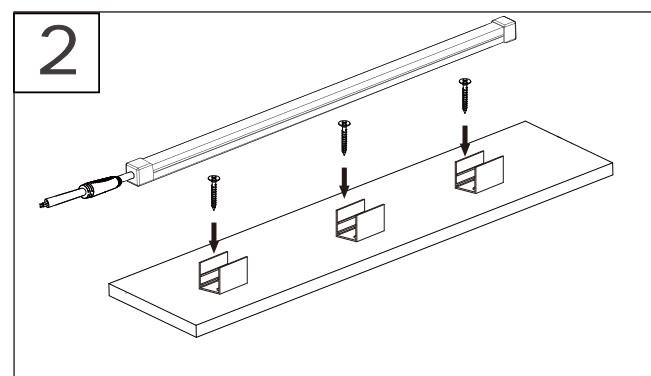
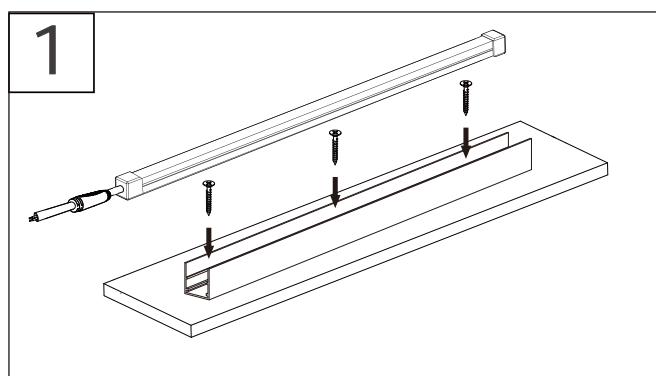
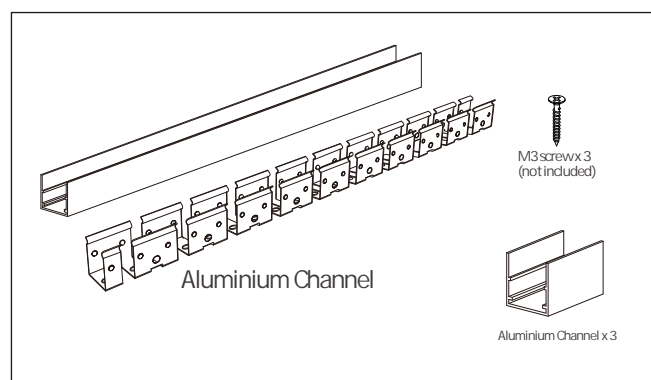


RL-1515-01



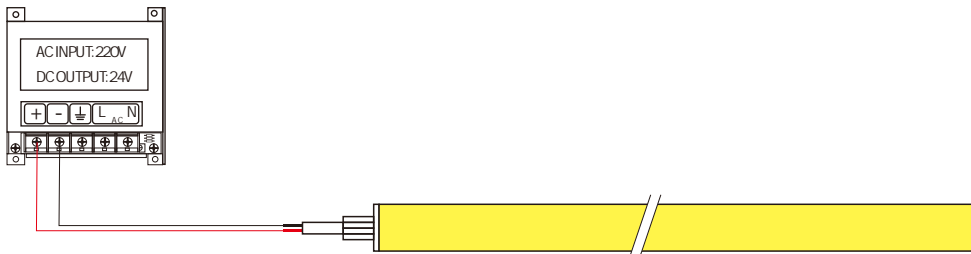
RL-1515-03

| Description | W (mm) | H (mm) | Item Code |
|-------------|--------|--------|-----------|
| RL-1515-01 | 22 | 24 | / |
| RL-1515-03 | 23 | 13 | / |

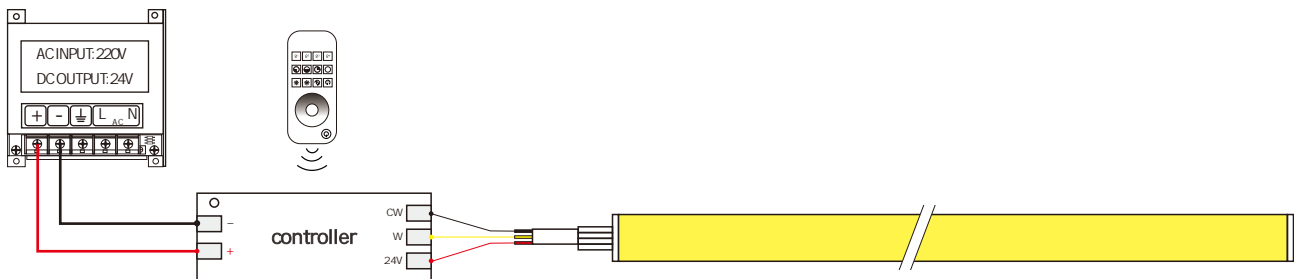


Schematic diagram of electrical connection

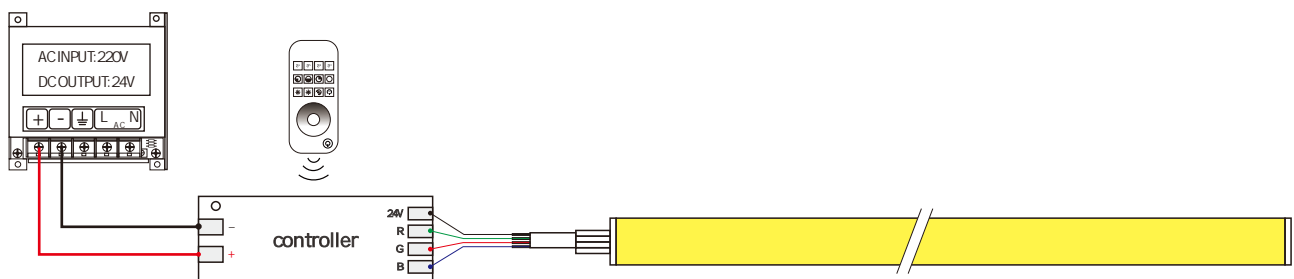
1. Monochrome temperature wiring diagram : Power + lamp belt connec on mode



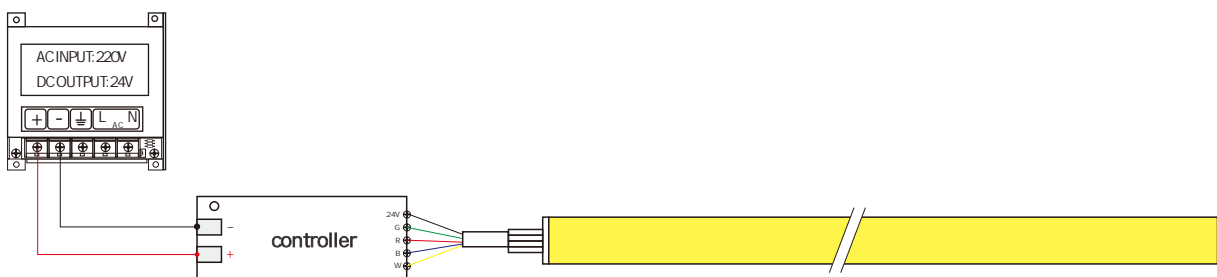
2. Two-color temperature wiring diagram: power + controller + lamp belt connec on



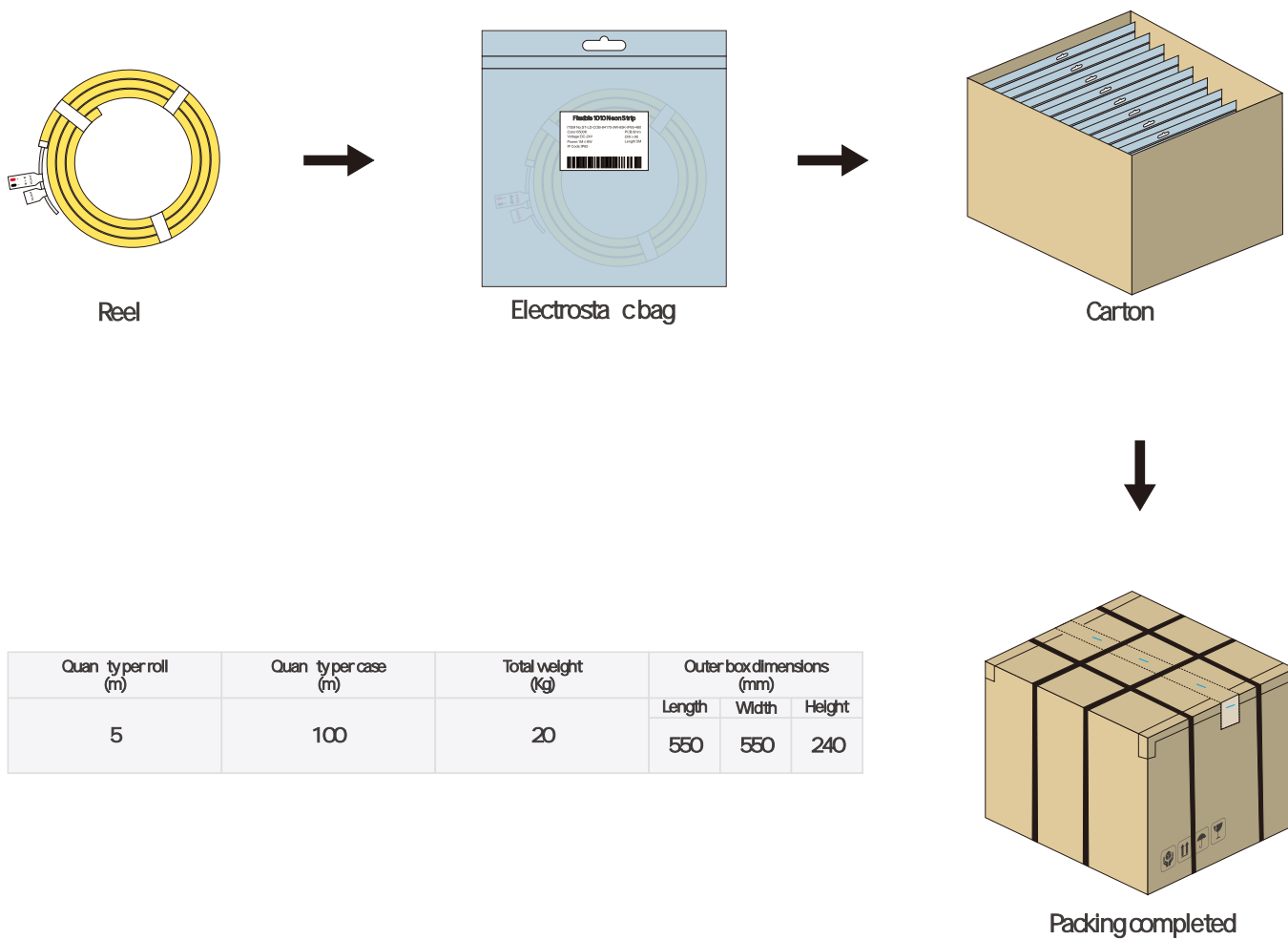
3. RGB wiring diagram: Power + controller + light belt connec on mode



4. RGBW wiring diagram: Power supply + controller + lamp belt connec on

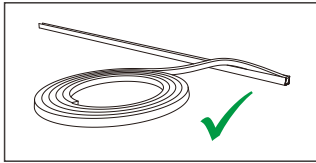


Package

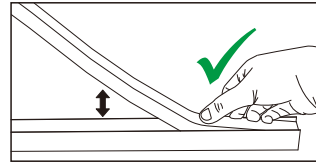
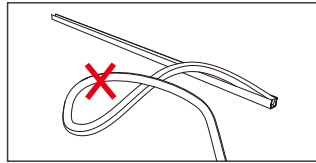


Note: The above-mentioned packaging quantity and weight are only for the packaging method shown in the figure. There will be differences in the number and weight of packaging for other packaging methods, and the actual product shall prevail.

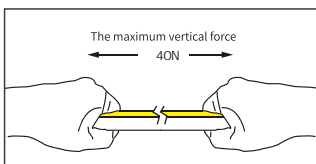
Installation Guidelines for LED Light Strips



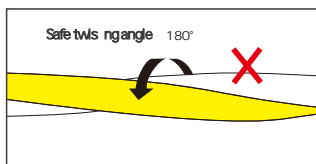
1. During LED strip installation, ensure to unroll the strip loop by loop and maintain perpendicular alignment with the mounting profile. Avoid twisting or kinking of the strip at all times.



2. Align the LED strip with the opening of the profile, gently insert and press the strip into the profile, and strictly avoid excessive bending or kinking of the strip.

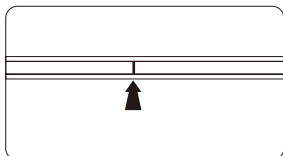


The safe tensile force for the LED strip shall be 40N. Excessive force may damage the internal circuitry.

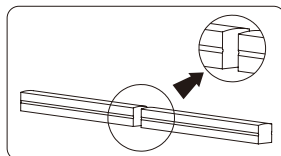


The safe twisting angle for the LED strip shall not exceed 180°.

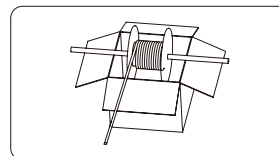
Warning sign



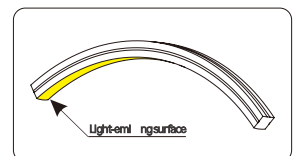
Cuttable Marking Area
(on the bottom or side of the product)



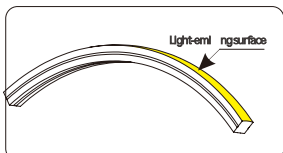
Neat and smooth cut



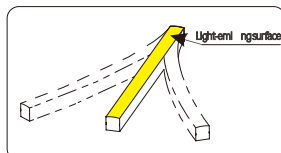
Mount the roll on a rod over the box and rotate to use



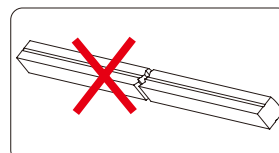
Top Bend



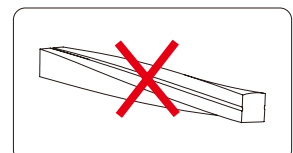
Side Bend



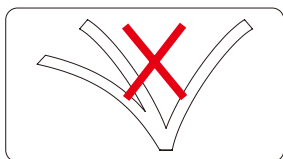
Do not bend left or right



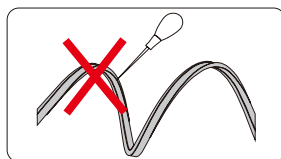
Do not leave uneven cuts



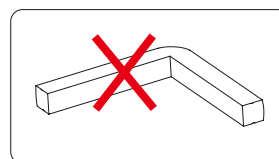
Do not twist during use



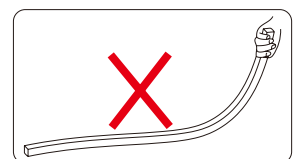
Repeated bending may damage electronic circuits



Do not puncture or scratch with sharp objects



Do not bend at sharp angles



Do not jerk or yank when using the product

1. The cutting marks are located on the PCB. Refer to the product cutting line window or laser markings on the surface to identify the trimming position.

2. During transportation and application, please observe the above warning labels. Proper handling ensures optimal performance and user satisfaction.

Common product faults and their troubleshooting methods

| Fault Phenomena | Possible Causes | Troubleshooting Methods |
|--|--|--|
| All lights o | 1. Mains power failure | Power on |
| | 2. Open circuit or short circuit at switching power supply output triggering auto-protection | Troubleshoot and restore power |
| | 3. Reverse polarity at LED strip power input | Check wire connection status to ensure correct polarity |
| Paral lights o | 1. Parallel switching power supply failure | Inspect power supply system and resolve faults |
| | 2. Wiring error in parallel LED strip circuits | |
| | 3. Reverse polarity in parallel LED strips | Correct wiring |
| LED uneven brightness or insufficient brightness | 1. Power supply overload | Replace with higher-power supply according to load |
| | 2. Excessive line loss in switching power circuits or significant line loss discrepancies | Maintain LED strip operating voltage within $\pm 5\%$ of rated voltage 1. Shorten power cable length between power supply and LED strip or use larger gauge wires 2. Ensure number of LED strips per circuit (max allowed cascading quantity and keep cascading quantity similar per circuit). |
| | 3. Excessive serial connection of LED strips | Adjust LED strip quantity per power branch to meet max allowed cascading requirements per circuit |
| LED flickering | 1. Poor contact at connection points | Identify and resolve poor contact points |
| | 2. Switching power supply malfunction | Replace switching power supply |



- If the external flexible cable of this product is damaged, the cable must be replaced by the manufacturer or similarly qualified personnel to prevent hazards.
- For specific installation arrangements and precautions, refer to the product user manual.
- Data in this specification is based on standard products. Actual delivered products may vary, subject to physical measurements.
- All product diagrams in this specification are schematic diagrams. Actual delivered products may differ, subject to physical objects.
- Technical modifications may be implemented without prior notice.
- Shenzhen Meishang Lighting Co., Ltd. reserves the final interpretation rights of this manual.



Specialized
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