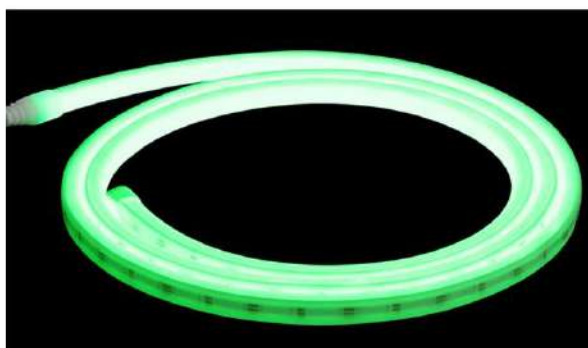
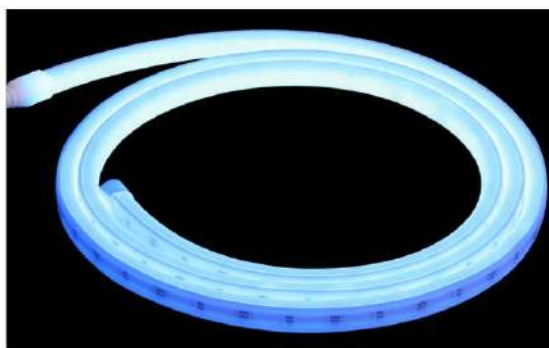
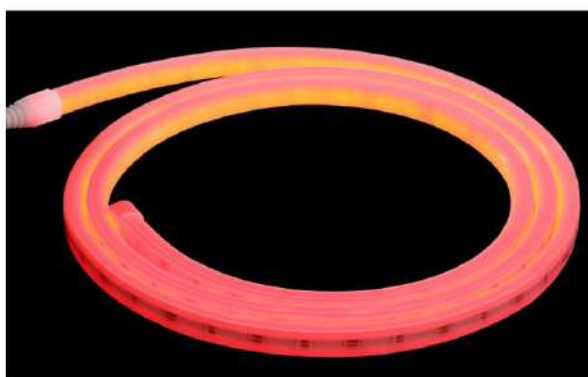


## AB-FB Rope Light Series

IP68 flexible, top-emitting, diffused rope light in 12V/24V DC - Single color, RGB, and RGBW options.



### Features:

- UL listed
- IP68 waterproof rating
- Top emitting, wide viewing angle 120°
- Storage temperature -40°C~+70°C
- Operating temperature -20°C~+50°C
- Environment humidity 40-90%RH

### Applications:

- Conference/meeting rooms
- Hospitals
- Commercial/ residential buildings
- Entertainment lighting
- Hotels



## AB-FB Rope Light Series

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## Part number naming system:

**A B – F B V V V K K – L L L W L – X A 1**

**V V V** – Voltage (volt) of the light strip (012=12V, 024=24V)

**K K** – Color/CCT (27 – 2700K, 30 – 3000K, 40 – 4000K, 50 – 5000K, 63 – 6300K, 65 – 6500K CCT, RD – Red, GR – Green, BL – Blue, AM – Amber, 06 – RGB, 08 – RGBW)

**L L L** – Light strip length (unit: inch);

Length selection of the strip:

|              | <u>12V</u>       | <u>24V</u>        |
|--------------|------------------|-------------------|
| Single Color | Multiple of 25mm | Multiple of 50mm  |
| RGB/RGBW     | Multiple of 50mm | Multiple of 100mm |

**W L** – Lead length (unit: inch); standard length is 12 inches.

**X** – CRI (8 – 80, 9 – 90, X – not applicable)

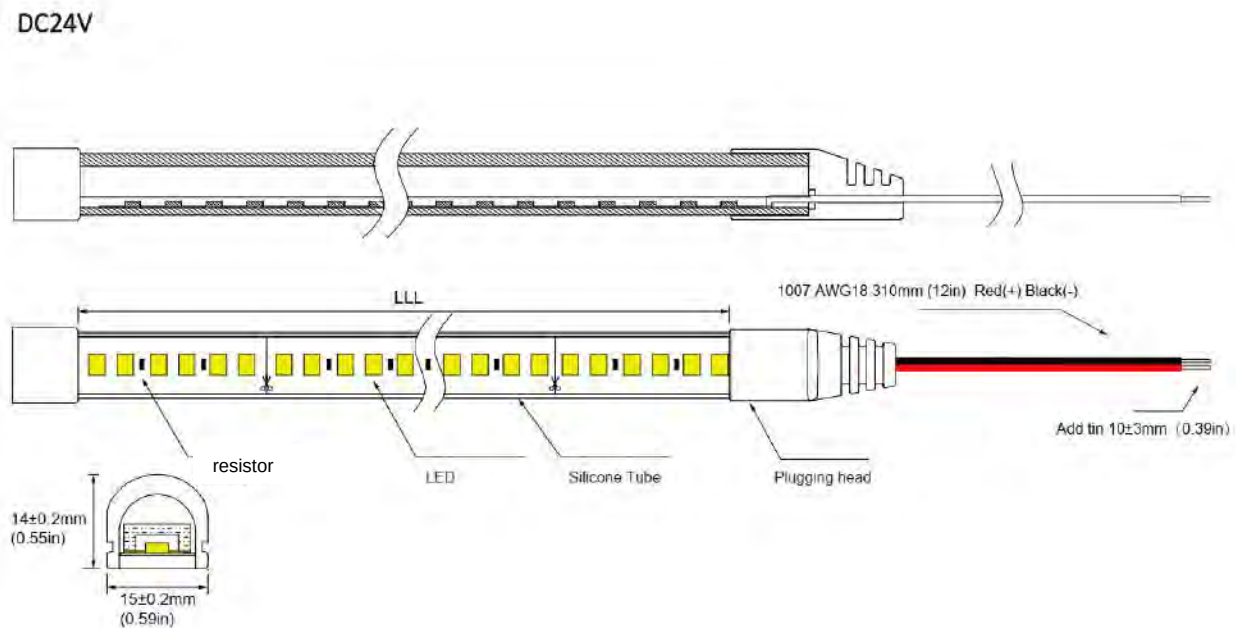
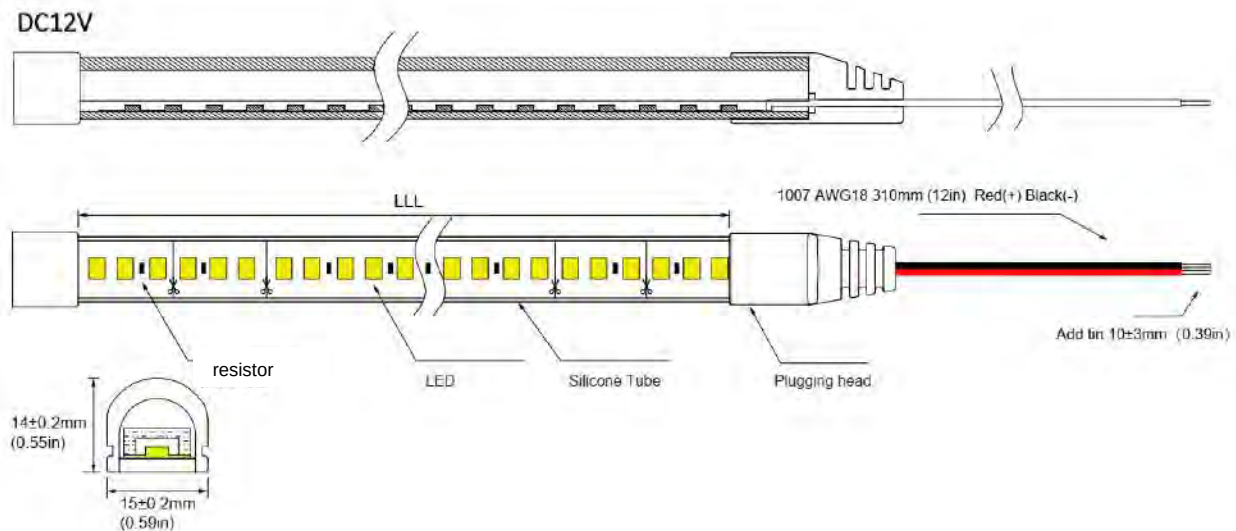
**Ax** – Version (Internal Code)

For example, part number below calls out a flexible rope light with IP68 rating, 24V DC in 3000K CCT, CRI80, 197 inches long with 12 inches wire lead.

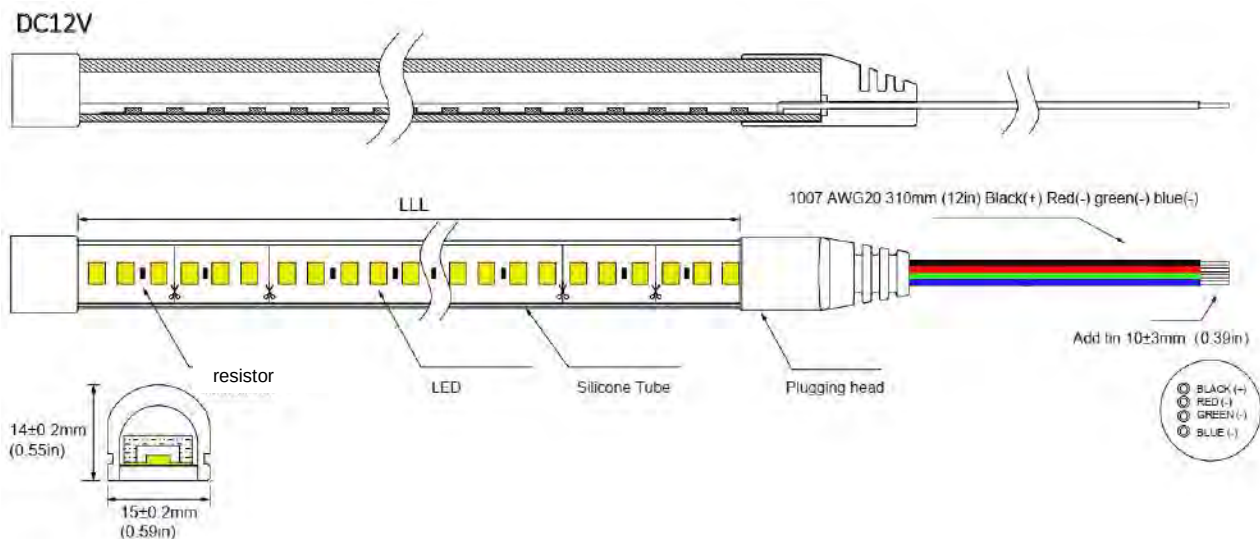
**A B – F B 0 2 4 3 0 – 1 9 7 1 2 – 8 A 1**

## Outline Dimension:

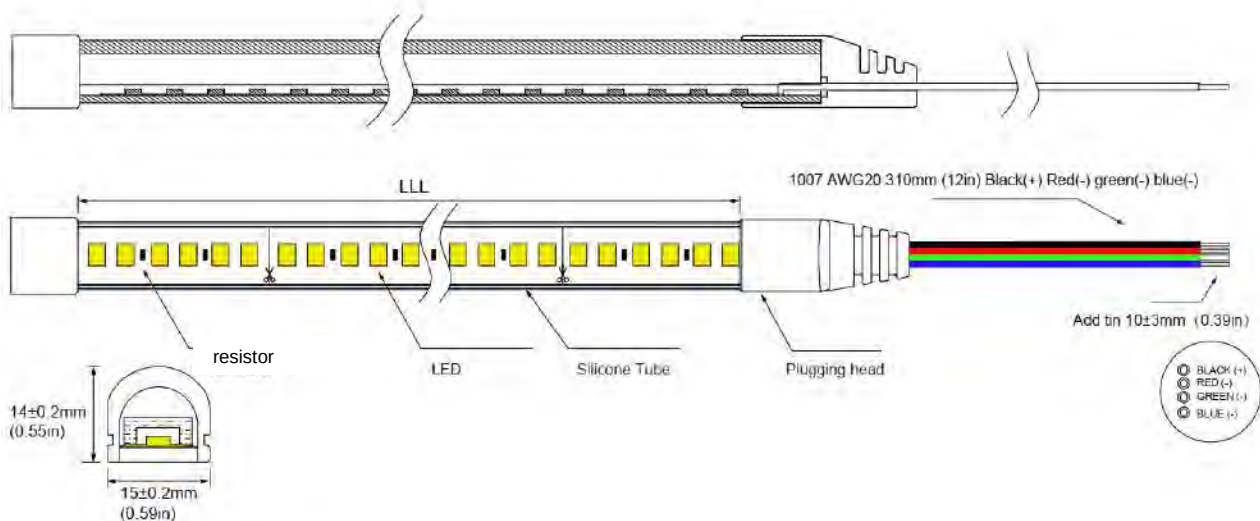
### Single Color:



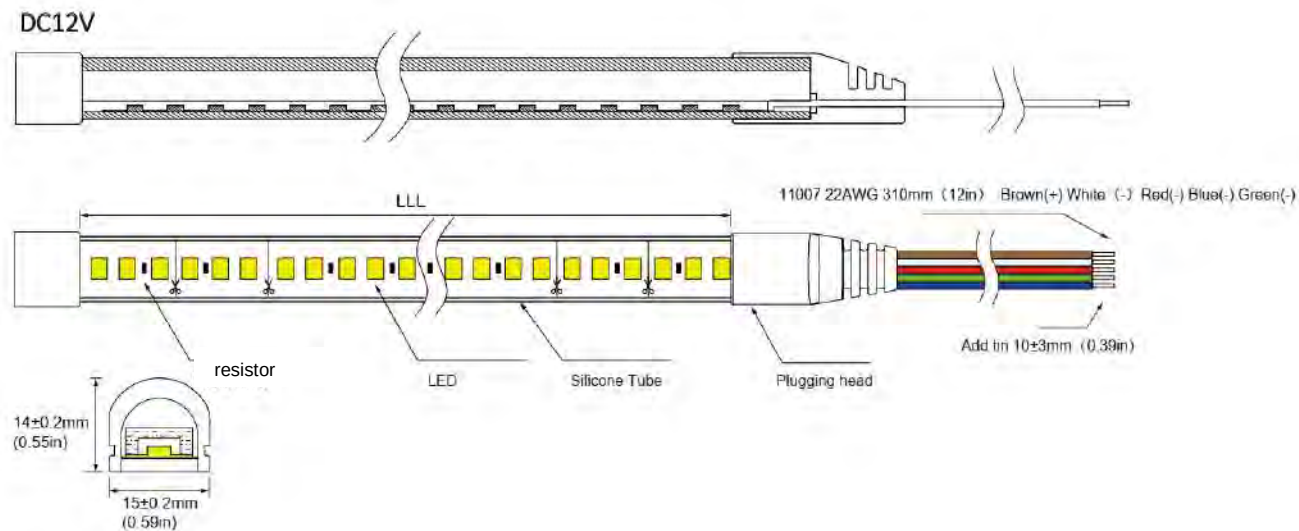
RGB Color:



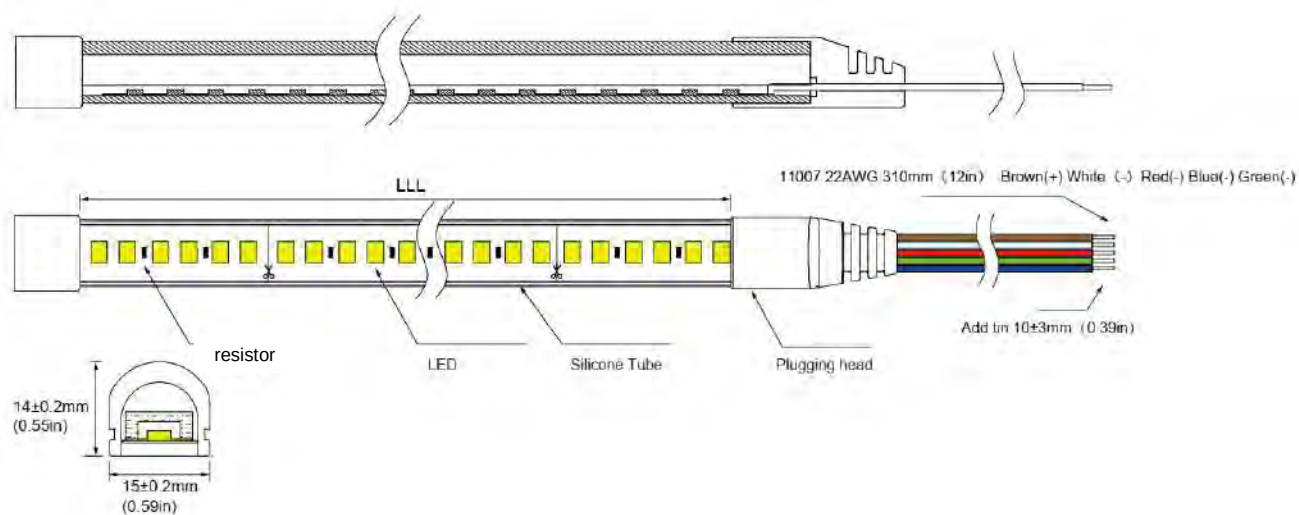
DC24V



RGBW Color:



DC24V



1

Cutting Mark is imprinted on the strip:

|              | <u>12V</u> | <u>24V</u>  |
|--------------|------------|-------------|
| Single Color | Every 25mm | Every 50mm  |
| RGB/RGBW     | Every 50mm | Every 100mm |

<sup>1</sup> Silicon tube: durometer, shore A 60~65 or equivalent. Color: White

## AB-FB Rope Light Series

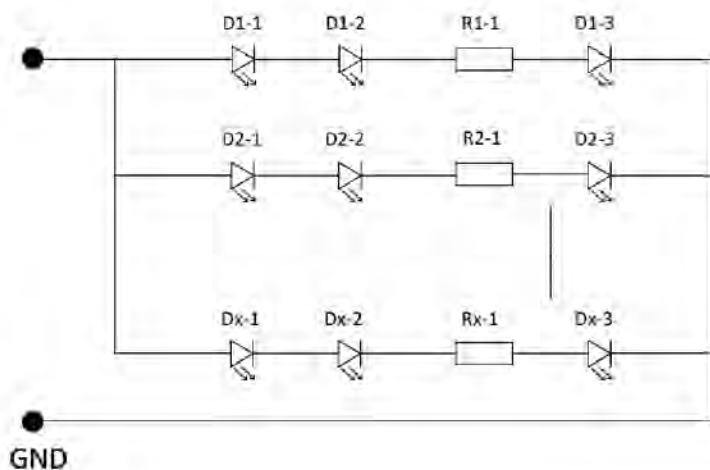
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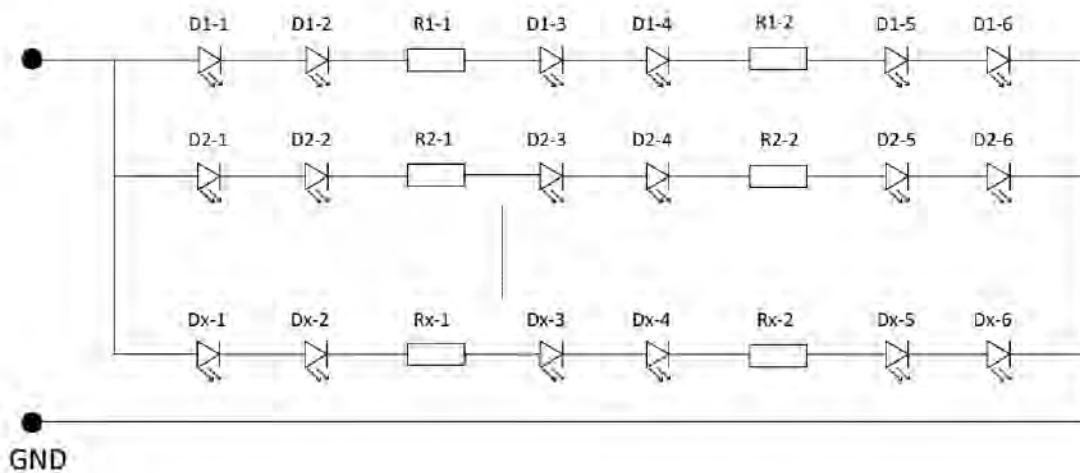
## Schematic Diagram:

Single Color:

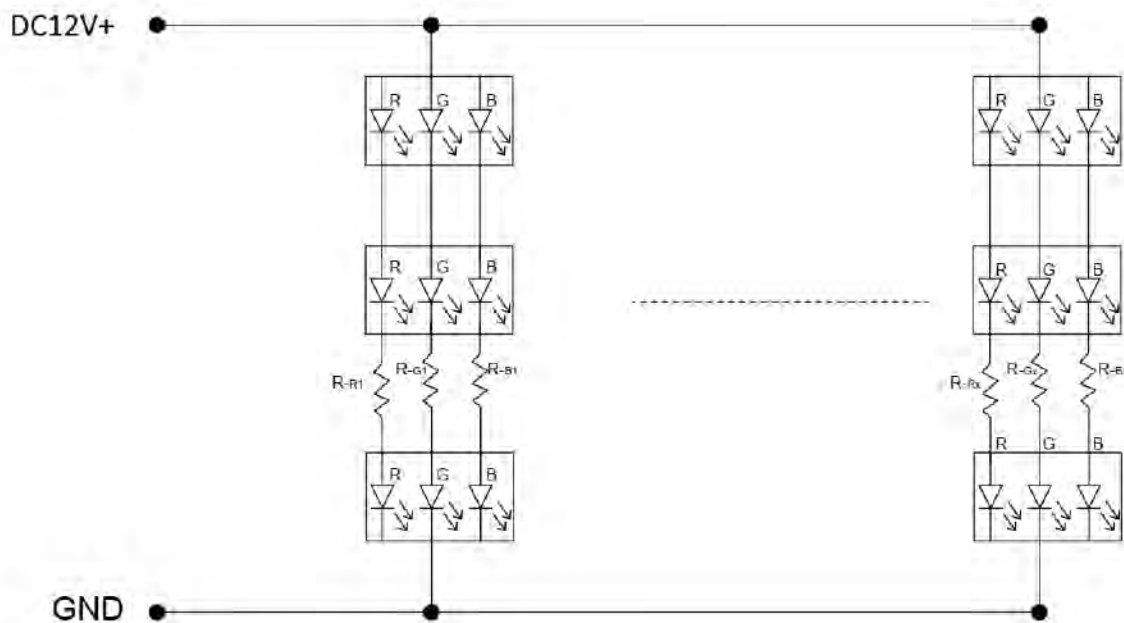
DC12V+



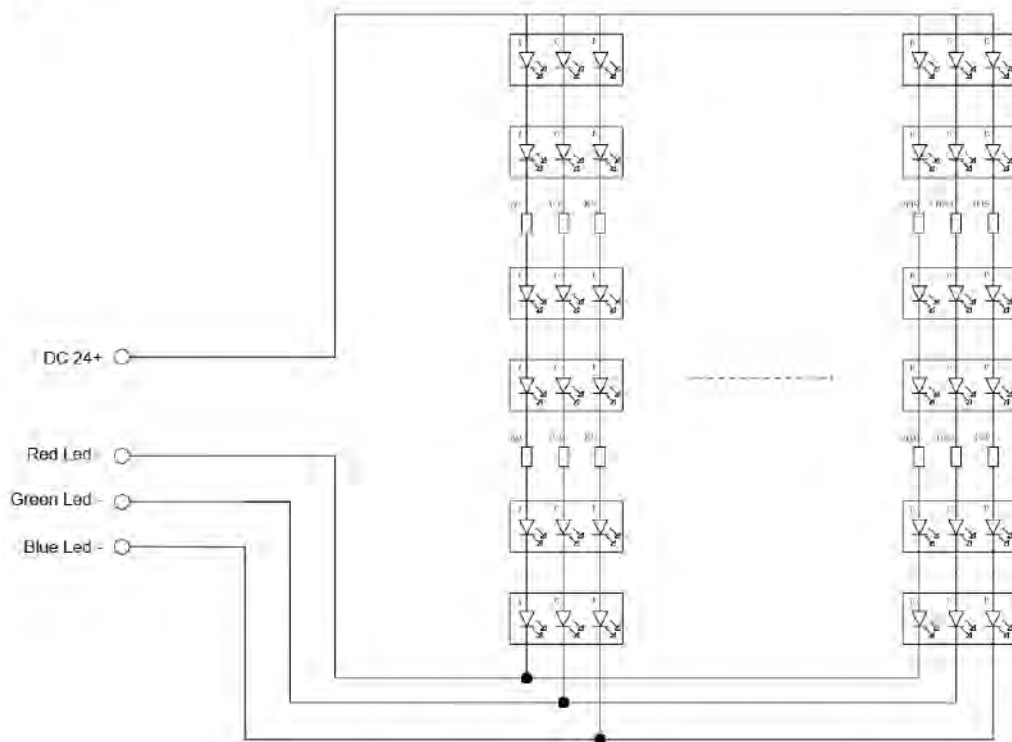
DC24V



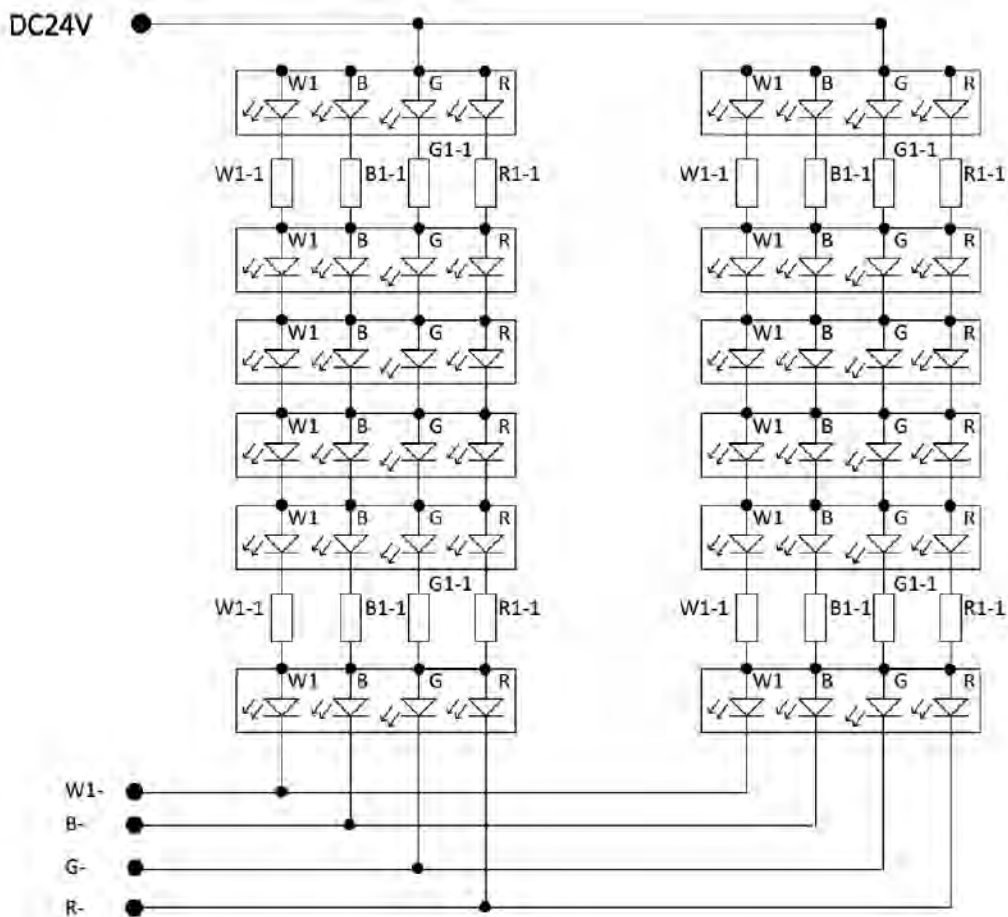
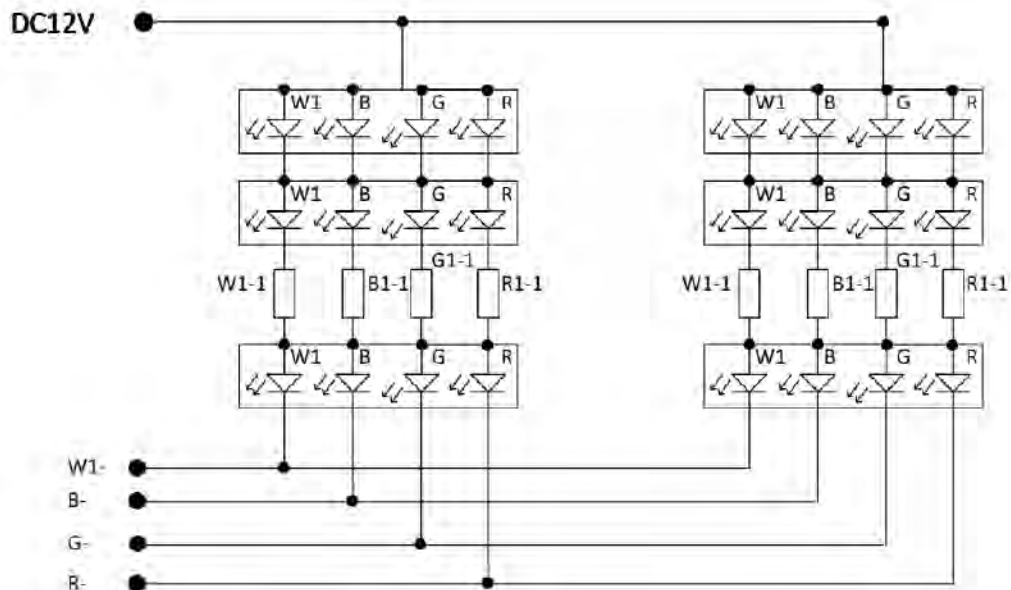
RGB Color:



DC24V



RGBW Color:





## Characteristics:

Table 1. Configurations for AB-FB Rope Light Series.

| OPERATING VOLTAGE (V) | CURRENT (A/m)           | POWER (W/m) | LENGTH <sup>2</sup> m (inch) | LED COUNT/m |
|-----------------------|-------------------------|-------------|------------------------------|-------------|
| 12                    | White/Green/Blue: 0.87  | 10          | 5 (197)                      | 120         |
|                       | Red/Amber: 1.0          | 12          |                              |             |
|                       | RGB: 1.3                | 16          |                              |             |
|                       | RGBW: 1.5               | 18          |                              |             |
| 24                    | White/Green/Blue: 0.435 | 10          | 5 (197)                      | 120         |
|                       | Red/Amber: 0.5          | 12          |                              |             |
|                       | RGB: 0.65               | 16          |                              |             |
|                       | RGBW: 0.75              | 18          |                              |             |

Table 2. Product performance of AB-FB Rope Light Series at T=25 degree C.

| PART NUMBER                                               | CCT/<br>WAVELENGTH  | LUMINOUS FLUX <sup>3</sup><br>(lm/m) | LUMINOUS EFFICACY (lm/W) | CRI |
|-----------------------------------------------------------|---------------------|--------------------------------------|--------------------------|-----|
| AB-FB012KK-19712-XA1 <sup>4</sup><br>AB-FB024KK-19712-XA1 | 30: 3000K           | 630                                  | 63                       | >80 |
|                                                           | 40: 4000K           | 660                                  | 66                       |     |
|                                                           | 63: 6300K           | 680                                  | 68                       |     |
|                                                           | RD: Red 620-625nm   | 180                                  | 18                       | /   |
|                                                           | GR: Green 518-522nm | 580                                  | 58                       | /   |
|                                                           | BL: Blue 440-450nm  | 120                                  | 14                       | /   |
| AB-FB01206-19712-XA1<br>AB-FB02406-19712-XA1              | AM: Amber 558-592nm | 240                                  | 20                       | /   |
|                                                           | RD: Red 620-630nm   | 108                                  | 18                       | /   |
|                                                           | GR: Green 520-535nm | 290                                  | 58                       | /   |
|                                                           | BL: Blue 465-475nm  | 70                                   | 14                       | /   |
| AB-FB01208-19712-8Ax <sup>5</sup><br>AB-FB02408-19712-8Ax | RD: Red 620-625nm   | 108                                  | 18                       | /   |
|                                                           | GR: Green 518-522nm | 290                                  | 58                       | /   |
|                                                           | BL: Blue 440-450nm  | 70                                   | 14                       | /   |
|                                                           | 27: 2700K           | 492                                  | 60                       | >80 |
|                                                           | 30: 3000K           |                                      |                          |     |
|                                                           | 40: 4000K           |                                      |                          |     |
|                                                           | 50: 5000K           |                                      |                          |     |
|                                                           | 65: 6500K           |                                      |                          |     |

<sup>2</sup> Standard unit length: 5m or 10m/roll, for custom length, please contact [aboc@americanbrightled.com](mailto:aboc@americanbrightled.com).

<sup>3</sup> Luminous flux  $\pm 10\%$  is allowed.

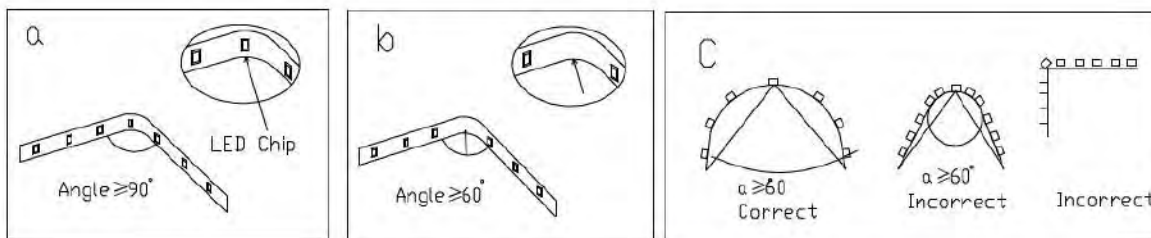
<sup>4</sup> KK - Color/CCT (30 – 3000K, 40 – 4000K, 63 – 6300K CCT, 06 – RGB, 08 – RGBW)

<sup>5</sup> x – 1- 3000K CCT, 2 - 4000K CCT, for other color temperature, please contact [aboc@americanbrightled.com](mailto:aboc@americanbrightled.com).

## Optional Mounting Accessories:

Please refer to spec "[Accessories For Flexible Light.](#)"

## Installation Instructions:

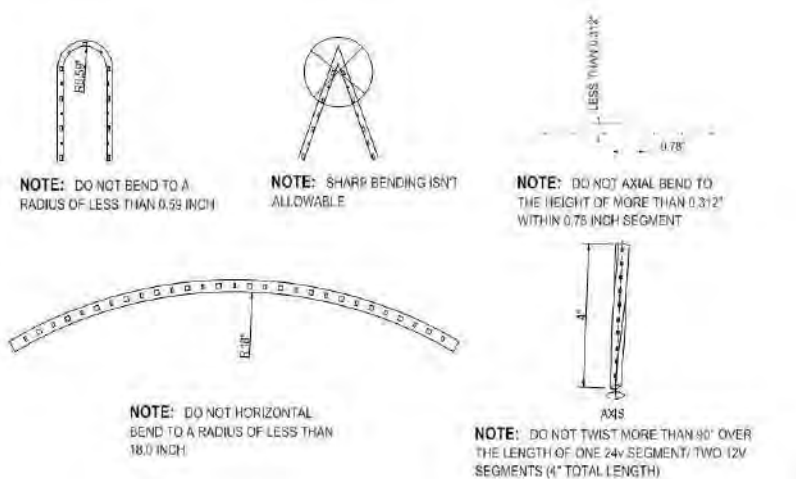


a: use an angle greater or equal to 90 degrees when there is an LED chip on the corner while placing, the strip in a concave position ( $\text{Angle} \geq 90^\circ$ )

b: use an angle greater or equal to 60 degrees when there is an LED chip on the corner while placing, the strip in a concave position ( $\text{Angle} \geq 60^\circ$ )

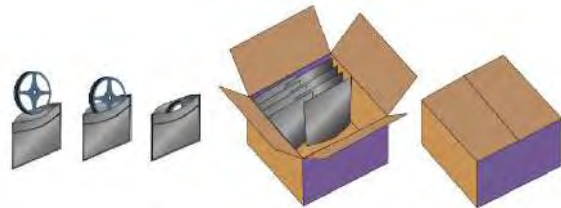
c: use an angle greater or equal to 60 degrees when there is an LED chip on the corner while placing the strip in a concave position ( $\text{Angle} \geq 60^\circ$ ) In the convex position the angle should not reach 90 degrees. See above diagram.

## Maximum flexibility precaution:



## Packaging:

Table 3. Packaging information

| Model                                        | QTY <sup>6</sup>                     | Image                                                                              |
|----------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------|
| AB-FA series<br>AB-FC series<br>AB-FD series | 1 roll/per ESD bag<br>10 bags/carton |  |
| AB-FB series<br>AB-FF series<br>AB-FH series | 1 roll/per tray<br>10 trays/carton   |  |

<sup>6</sup> Standard unit length: 5m or 10m/roll, 1 roll/bag. QTY/bag varies per different unit lengths.

## AB-FB Rope Light Series