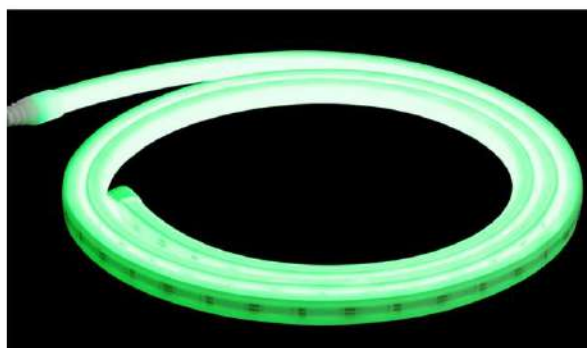
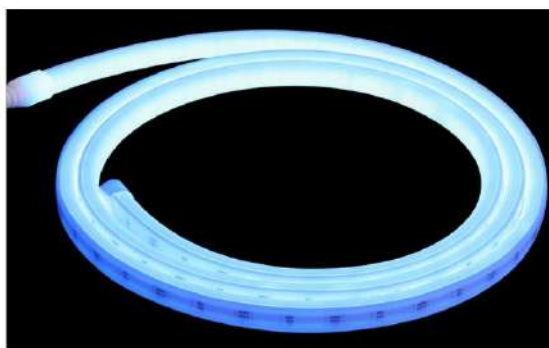
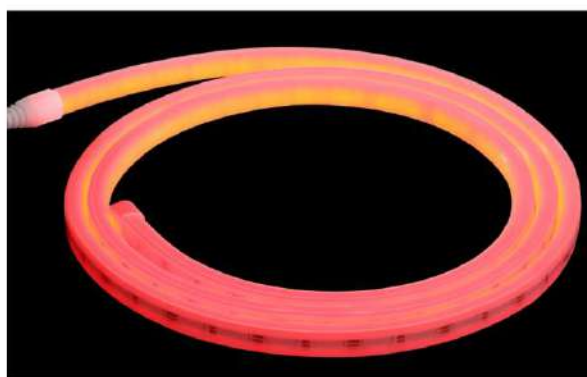


AB-FB Rope Light Series

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)

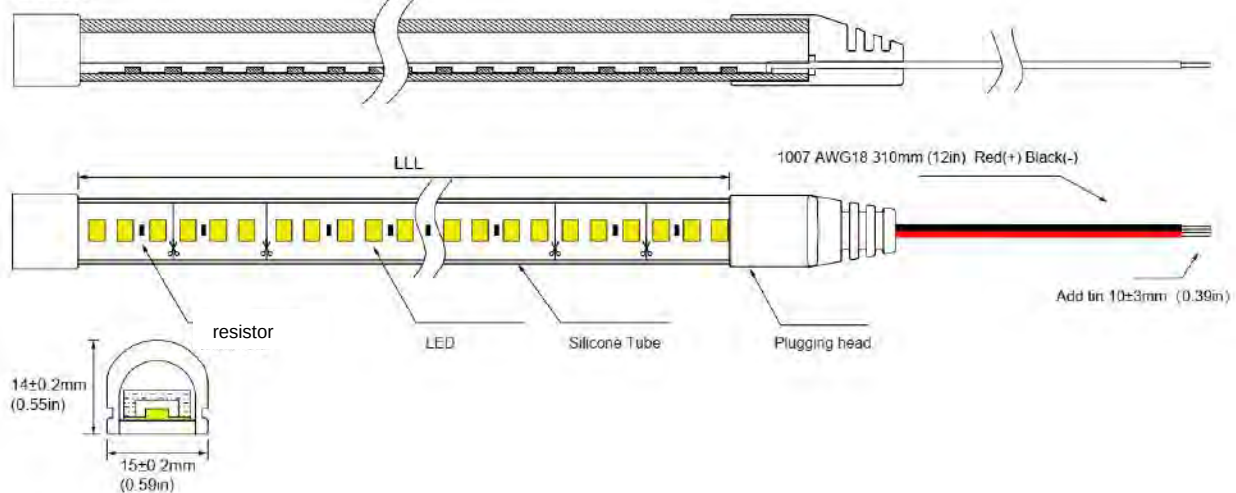
For example, part number below calls out a flexible rope light with IP68 rating, 24V DC in 3000K CCT, CRI80, 197 inches long with 12 inches wire lead.

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

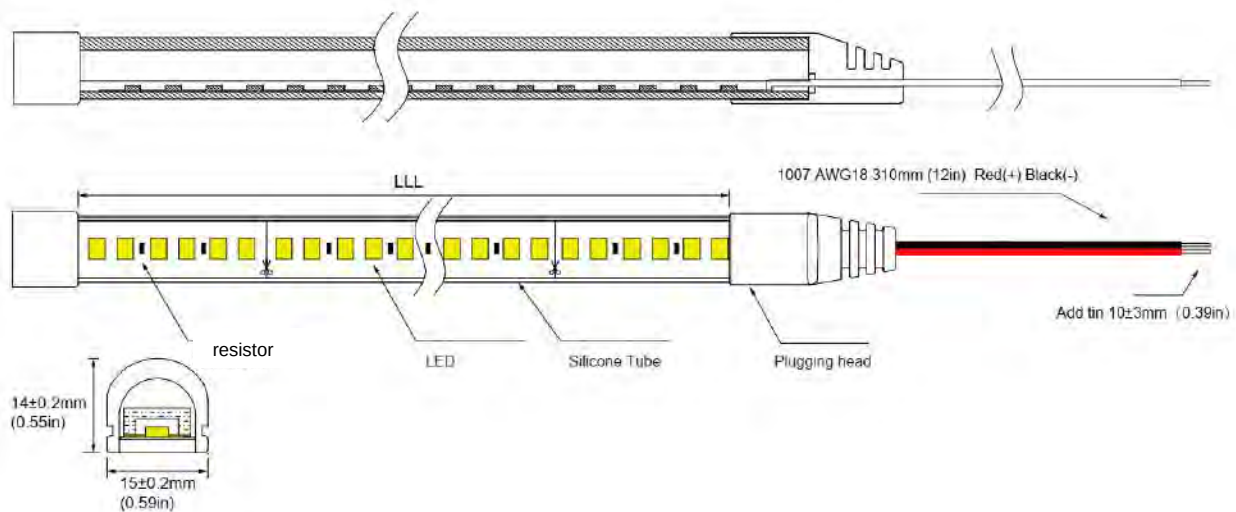
Outline Dimension:

Single Color:

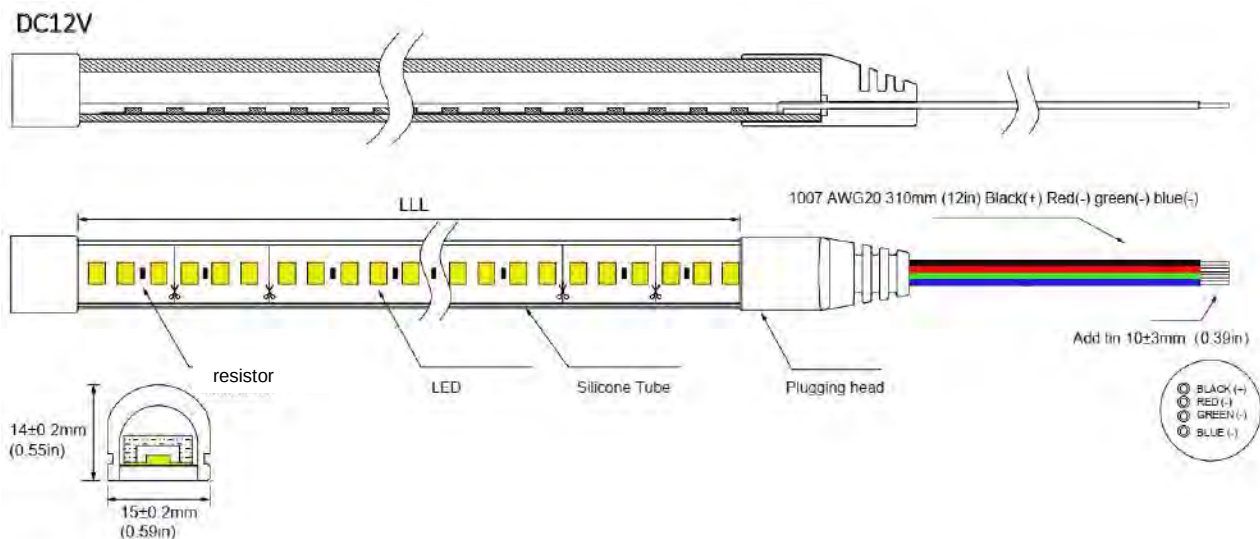
DC12V



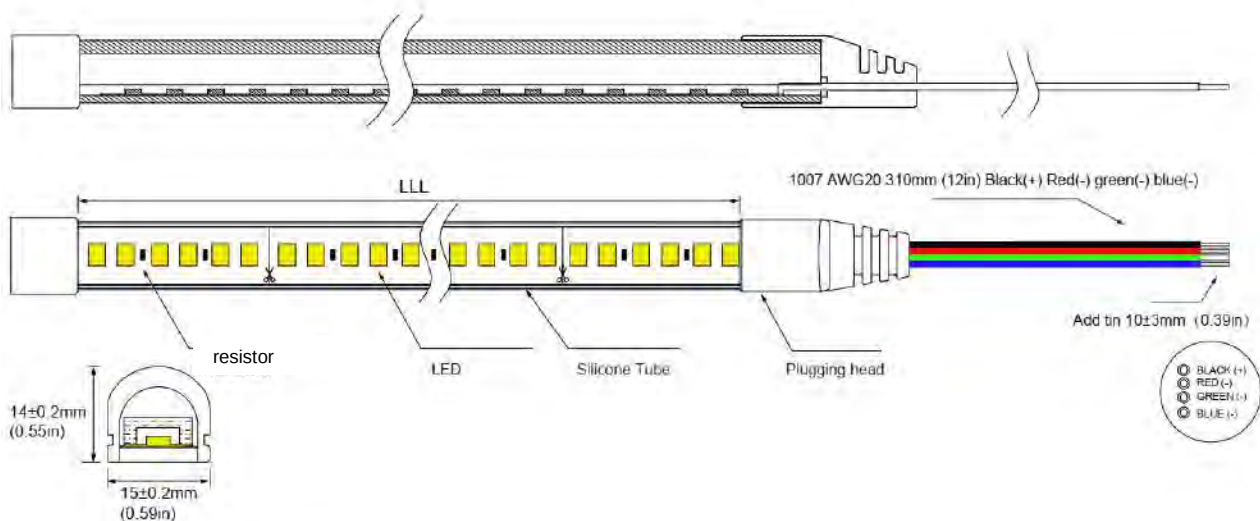
DC24V



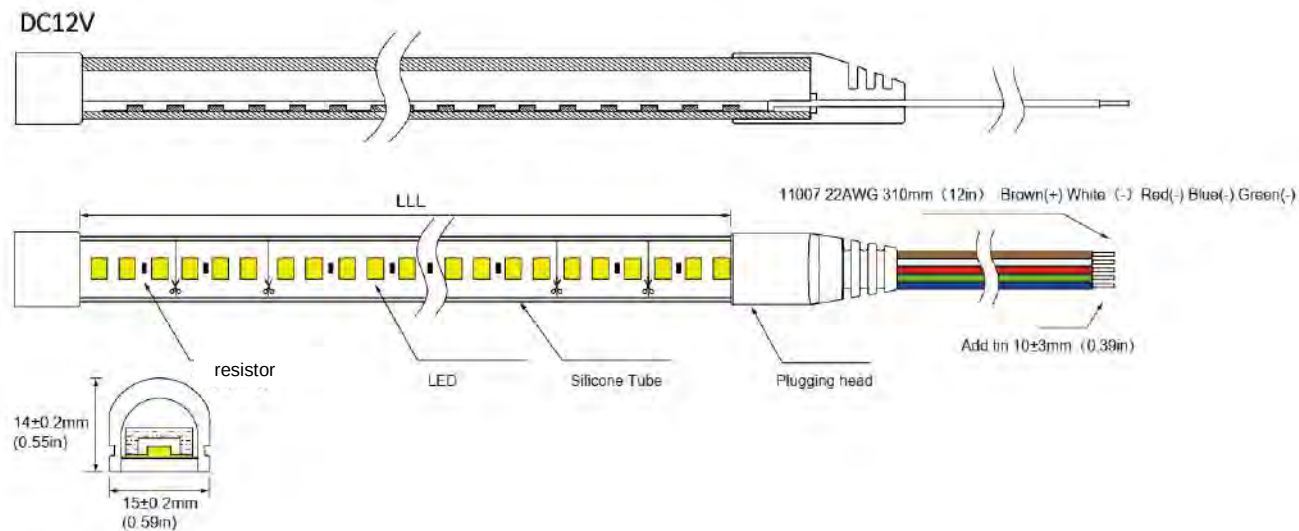
RGB Color:



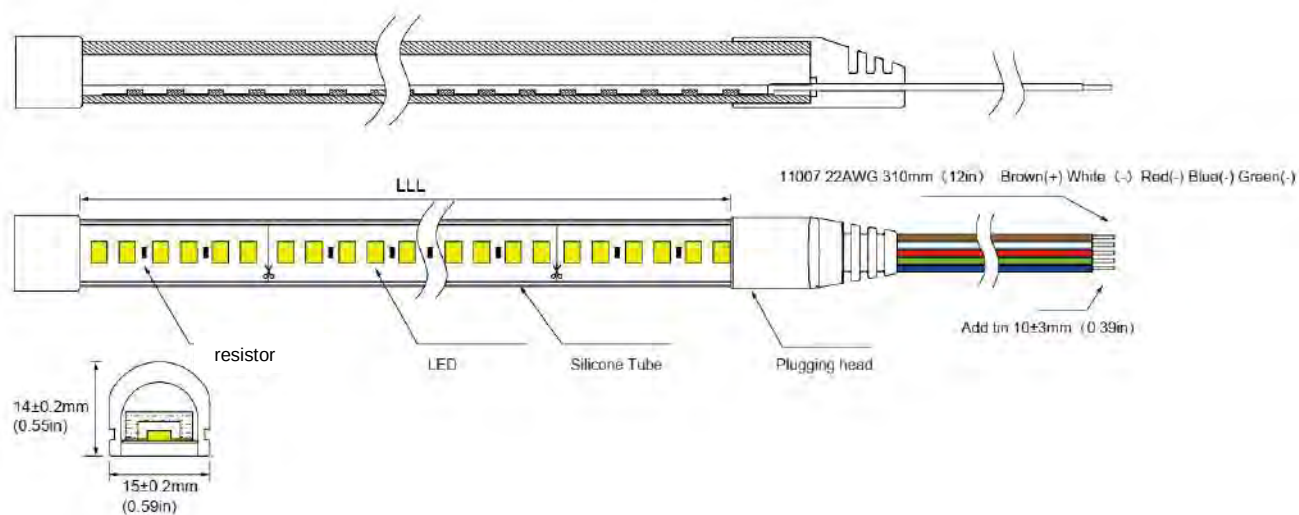
DC24V



RGBW Color:



DC24V



1

Cutting Mark is imprinted on the strip:

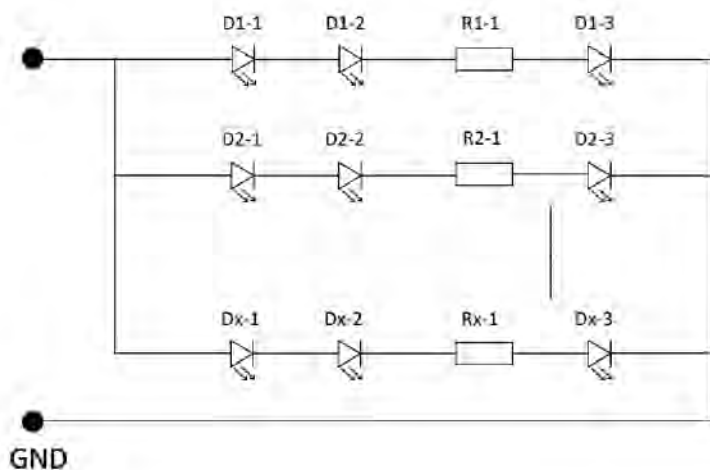
	<u>12V</u>	<u>24V</u>
Single Color	Every 25mm	Every 50mm
RGB/RGBW	Every 50mm	Every 100mm

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

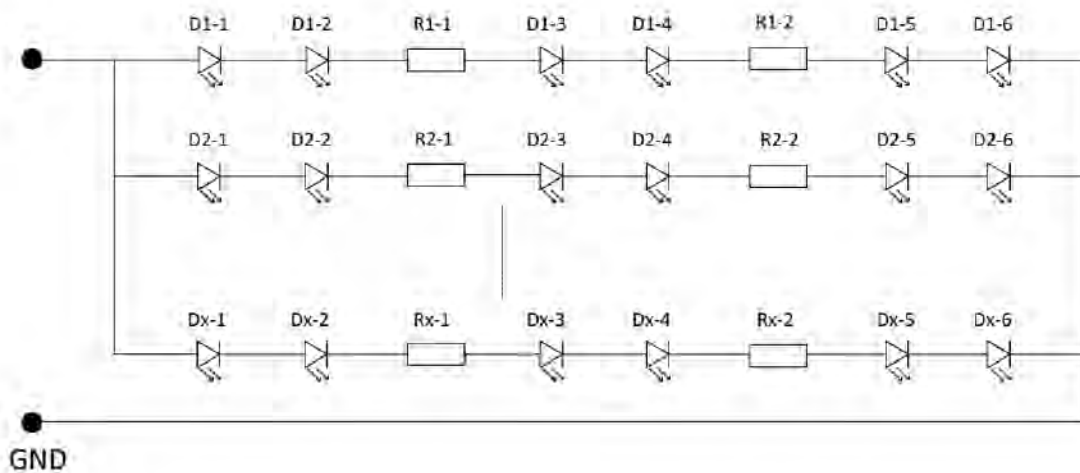
Schematic Diagram:

Single Color:

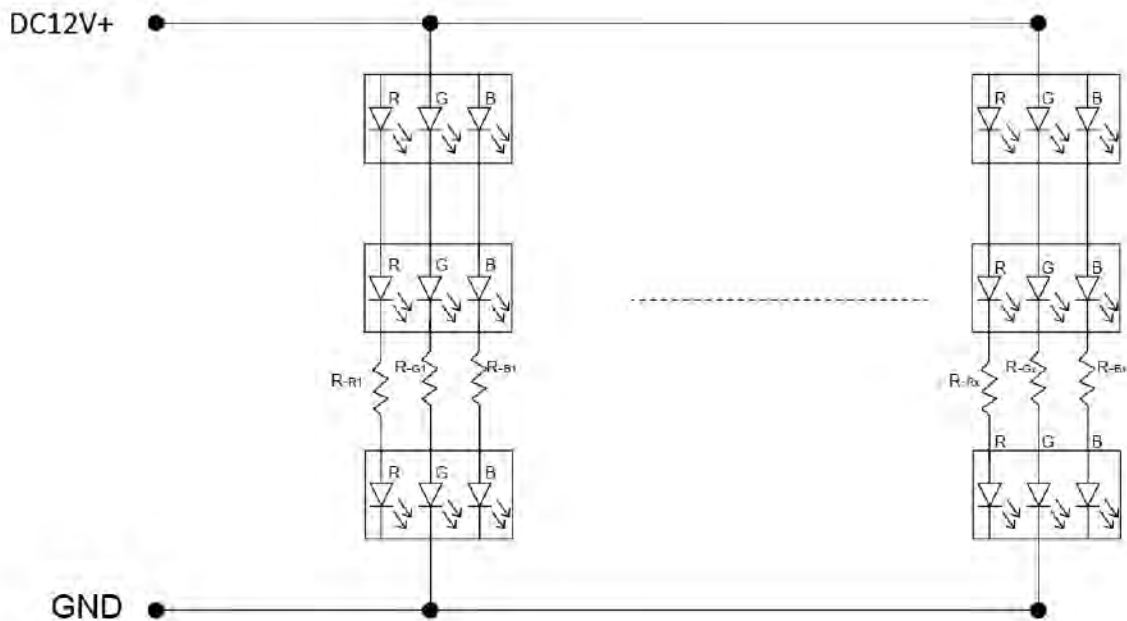
DC12V+



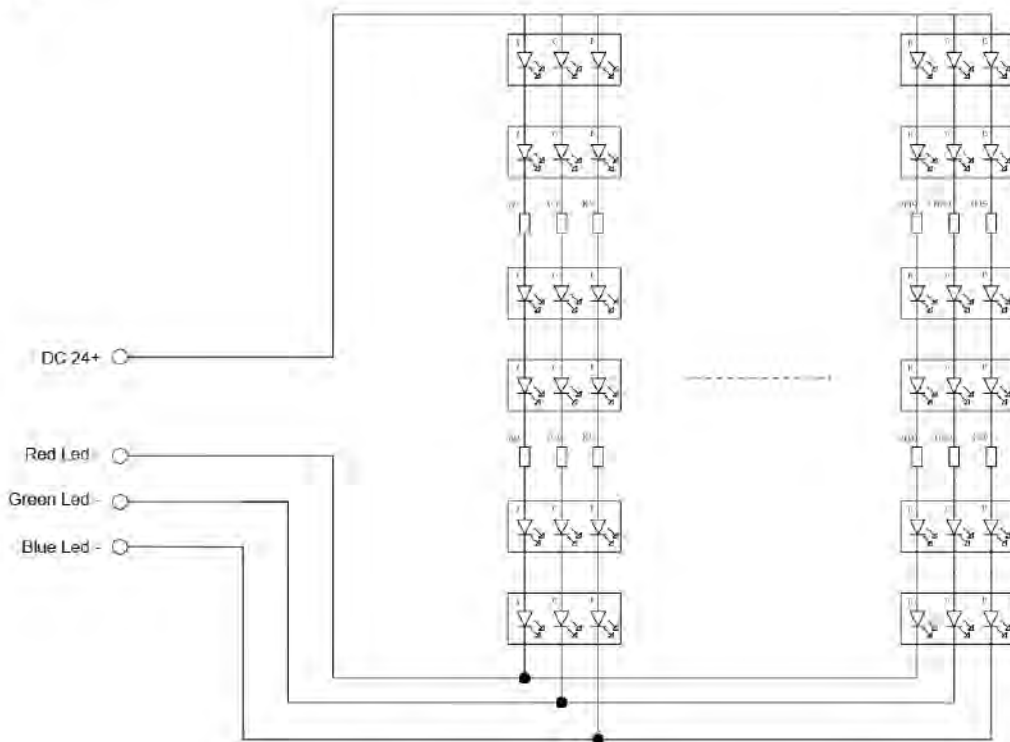
DC24V



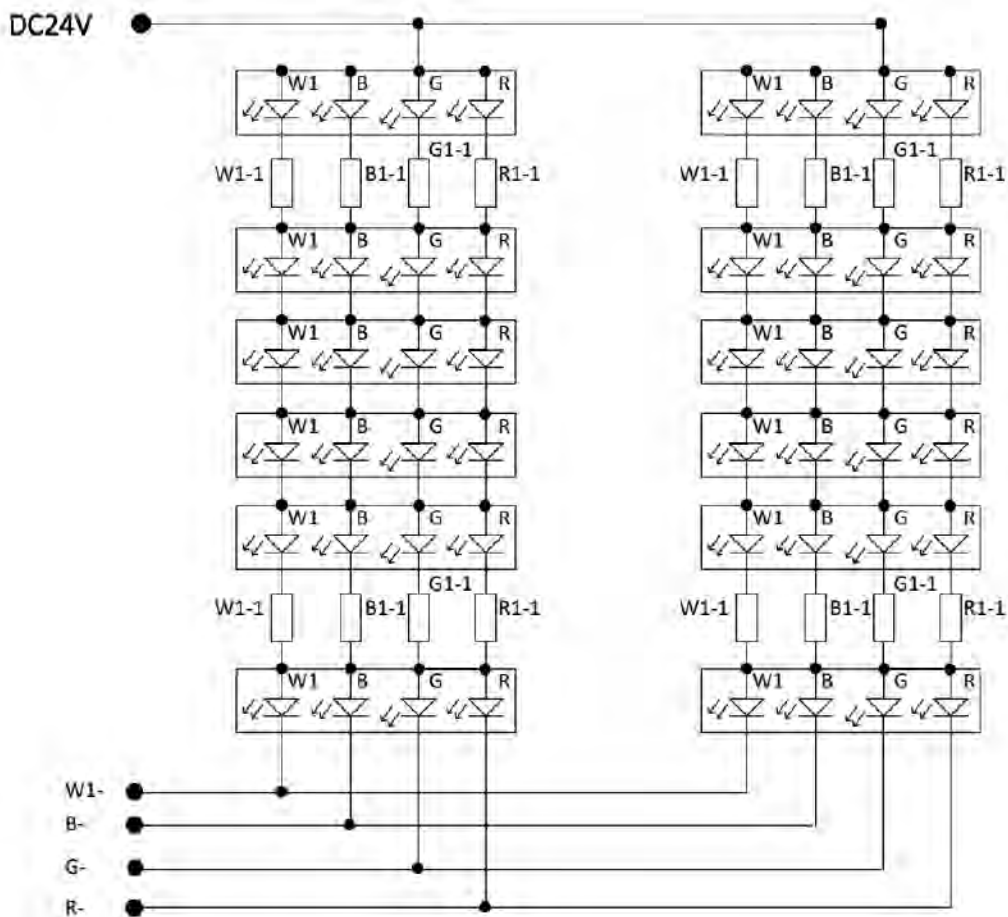
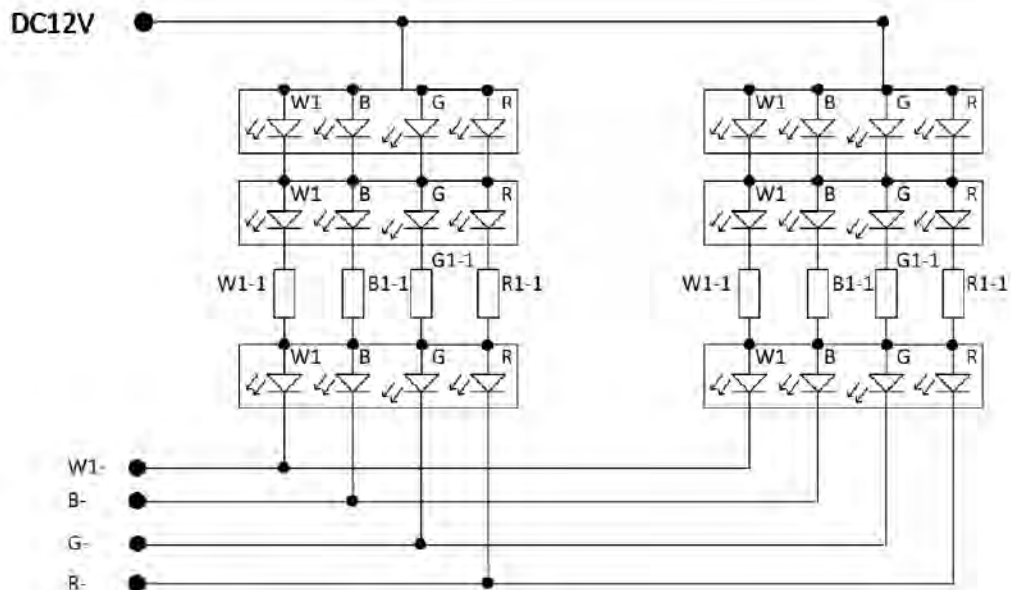
RGB Color:



DC24V



RGBW Color:



Characteristics:

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

OPERATING VOLTAGE (V)	CURRENT (A/m)	POWER (W/m)	LENGTH ² 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/ WAVELENGTH	LUMINOUS FLUX ³ (lm/m)	LUMINOUS EFFICACY (lm/W)	CRI
AB-FB012KK-19712-XA1 ⁴ 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 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 ⁵ 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			

² Standard unit length: 5m or 10m/roll, for custom length, please contact aboc@americanbrightled.com.

³ Luminous flux $\pm 10\%$ is allowed.

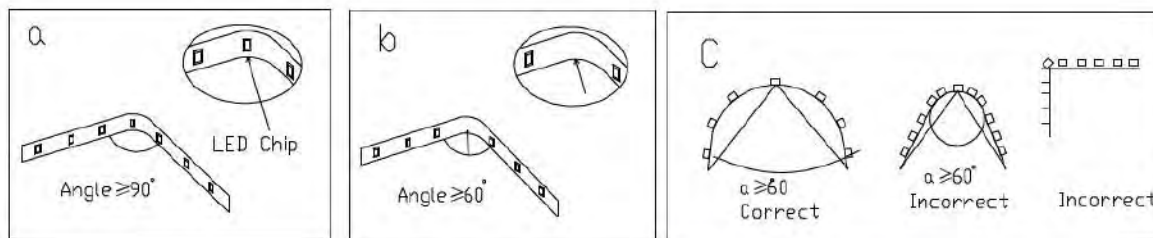
⁴ KK - Color/CCT (30 – 3000K, 40 – 4000K, 63 – 6300K CCT, 06 – RGB, 08 – RGBW)

⁵ x – 1- 3000K CCT, 2 - 4000K CCT, for other color temperature, please contact aboc@americanbrightled.com.

Optional Mounting Accessories:

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

Installation Instructions:

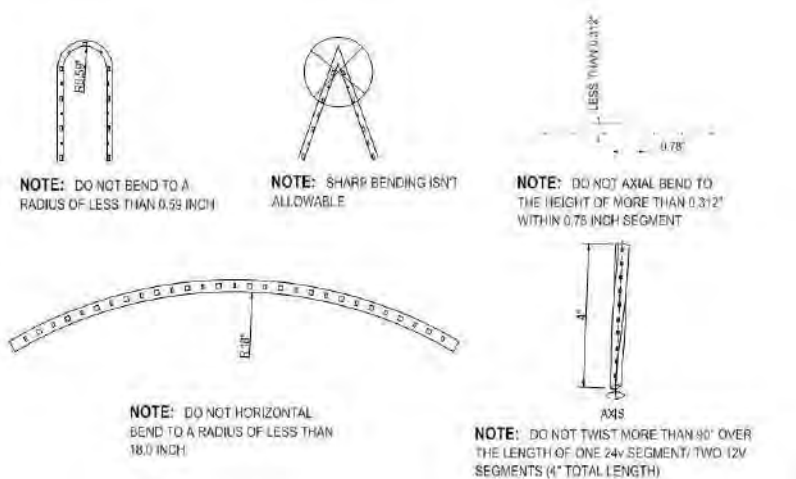


a: use an angle greater or equal to 90 degrees when there is an LED chip on the corner while placing, the strip in a concave position ($\text{Angle} \geq 90^\circ$)

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 ($\text{Angle} \geq 60^\circ$)

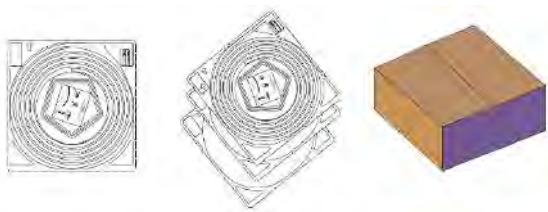
c: use an angle greater or equal to 60 degrees when there is an LED chip on the corner while placing the strip in a concave position ($\text{Angle} \geq 60^\circ$) In the convex position the angle should not reach, 90 degrees. See above diagram.

Maximum flexibility precaution:



Packaging:

Table 3. Packaging information

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

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

AB-FB Rope Light Series

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[American Bright LED:](#)

[AB-FB01206-19712-XA1](#) [AB-FB01208-19700-8A1](#) [AB-FB01208-19712-8A1](#) [AB-FB01230-19700-8A1](#) [AB-FB01230-19712-8A1](#) [AB-FB01240-19700-8A1](#) [AB-FB01240-19712-8A1](#) [AB-FB01250-19700-8A1](#) [AB-FB01250-19712-8A1](#) [AB-FB01265-19700-8A1](#) [AB-FB01265-19712-8A1](#) [AB-FB012BL-19700-XA1](#) [AB-FB012BL-19712-XA1](#) [AB-FB02406-19700-XA1](#) [AB-FB02406-19712-XA1](#) [AB-FB02408-19700-8A1](#) [AB-FB02408-19712-8A1](#) [AB-FB02430-19700-8A1](#) [AB-FB02430-19712-8A1](#) [AB-FB02440-19700-8A1](#) [AB-FB02440-19712-8A1](#) [AB-FB02450-19700-8A1](#) [AB-FB02450-19712-8A1](#) [AB-FB02465-19700-8A1](#) [AB-FB02465-19712-8A1](#) [AB-FB024BL-19700-XA1](#) [AB-FB024BL-19712-XA1](#) [AB-FB01206-19700-XA1](#) [AB-FB01206-19712-XA1-12S](#) [AB-FB01208-19712-8A1-12S](#) [AB-FB02406-19712-XA1-12S](#) [AB-FB02408-19712-8A1-12S](#)