

AB-FH Ultra Slim Rope Light Series

12V/24V DC, ultra slim 5mm, IP68 flexible, diffused rope light, available in single color and RGB.



Features:

- UL listed (#E353753)
- IP68 waterproof rating
- Top emitting, wide viewing angle 90°
- Environment temperature :-40°C~45°C
- Operating temperature -40°C~85°C
- Storage temperature -40°C~85°C
- Environment humidity 40-70%RH

Application:

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



AB-FH Flexible Light Series



Part number naming system:

Part numbers for AB-FH Ultra Slim Rope Light Series follow the convention below:

AB – FH 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 (30 – 3000K, 40 – 4000K, 63 – 6300K CCT, RD – Red, GR – Green, BL – Blue, AM – Amber, 06 – RGB, 08 – RGBW)

L L L – Light strip length or splice site (unit: inch);

	DC12V	DC24V
Single Color	1 inches (25mm)	2 inches (50mm)
RGB/RGBW	1.2 inches (31.2mm)	2.4 inches (62.5mm)
Maxlength	472in	551in

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

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

Ax - Version (Internal Code)

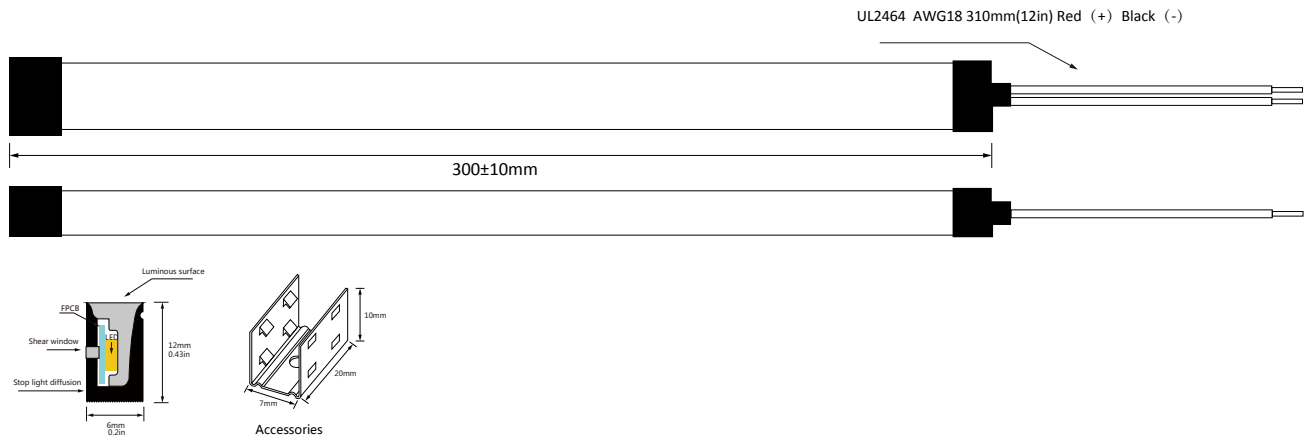
For example, the below part number of AB-FH Ultra Slim Rope Light Series stands for 24V, IP67, 5mm rope light 197 inches length, and lead 12 inches length, 3000K CCT:

AB – FH 0 2 4 3 0 – 1 9 7 1 2 – X A 1

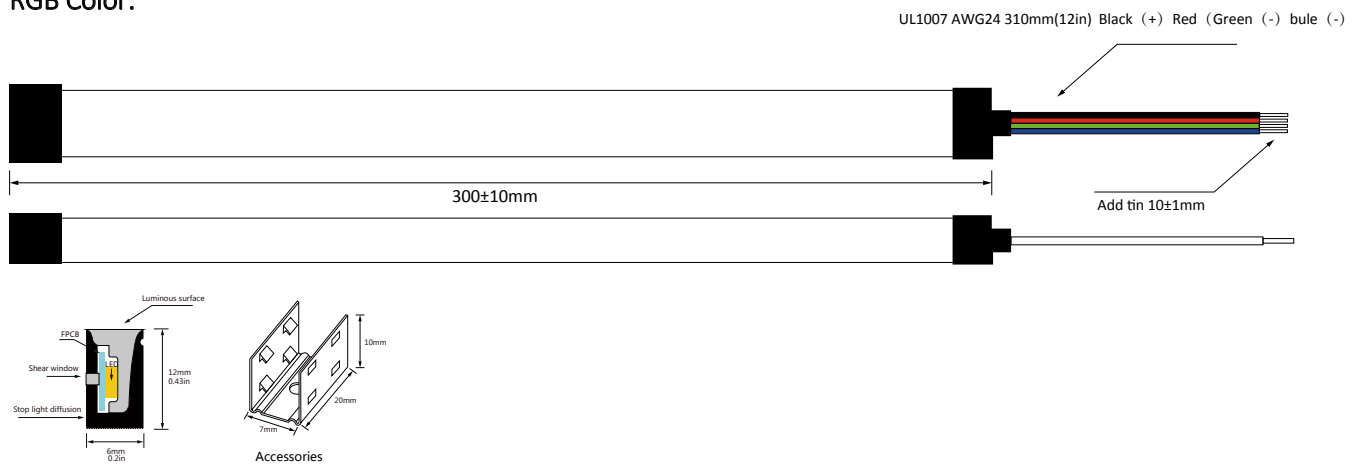


Outline Dimension:

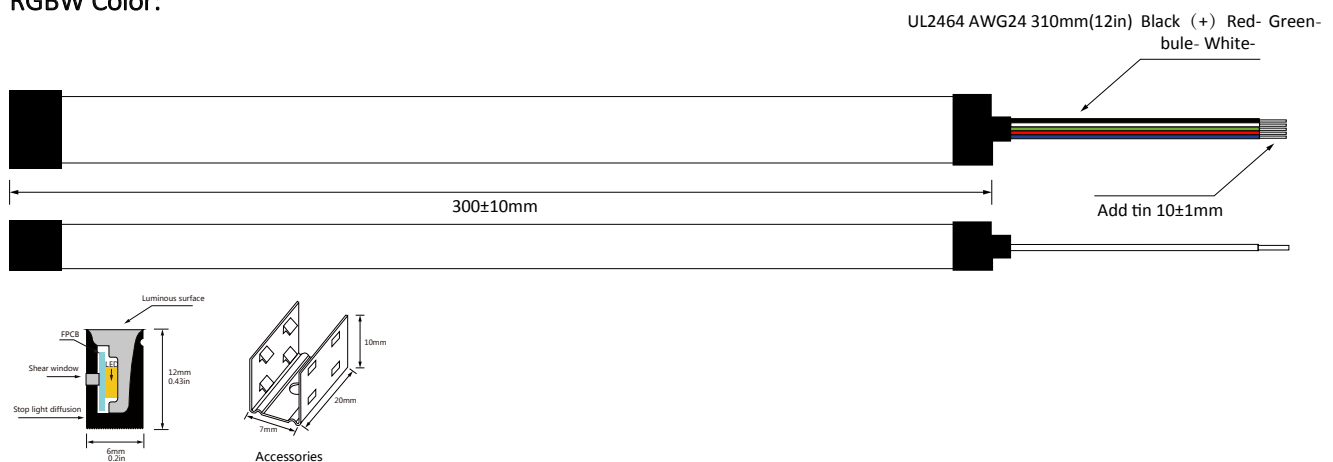
Single Color:



RGB Color:



RGBW Color:

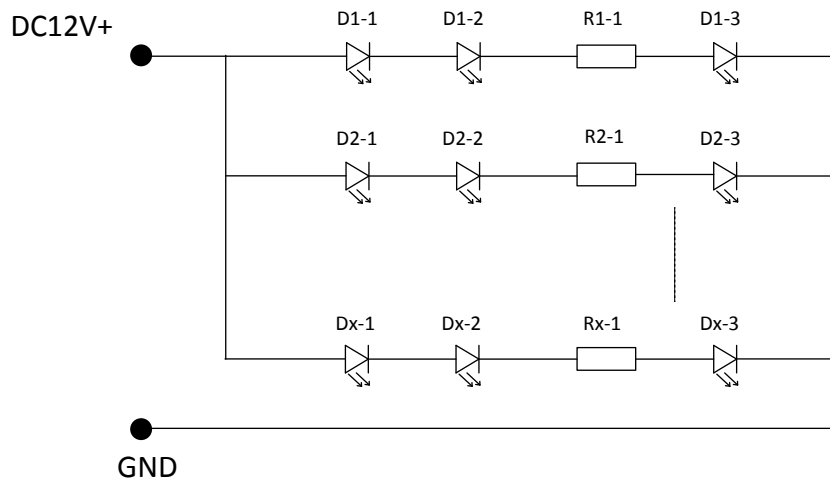


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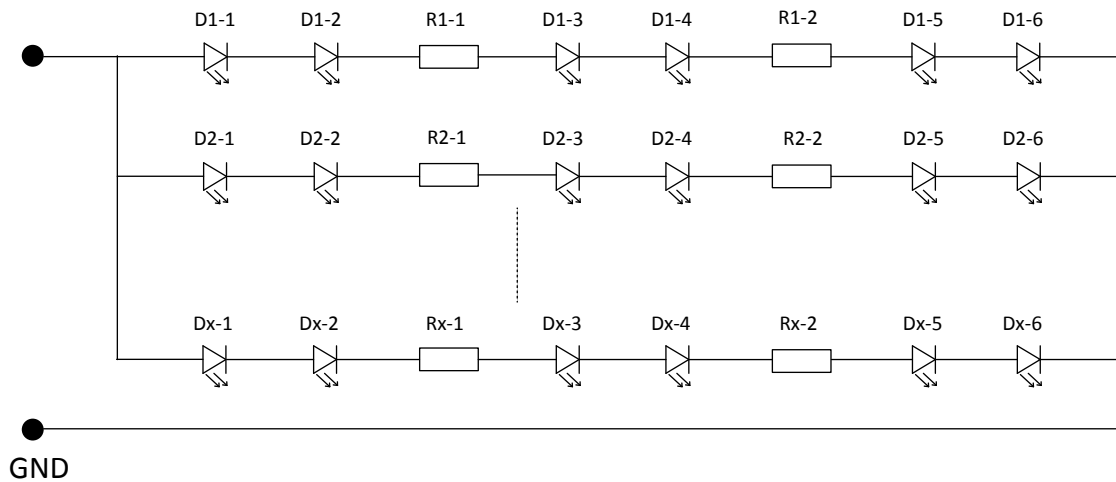


Schematic Diagram :

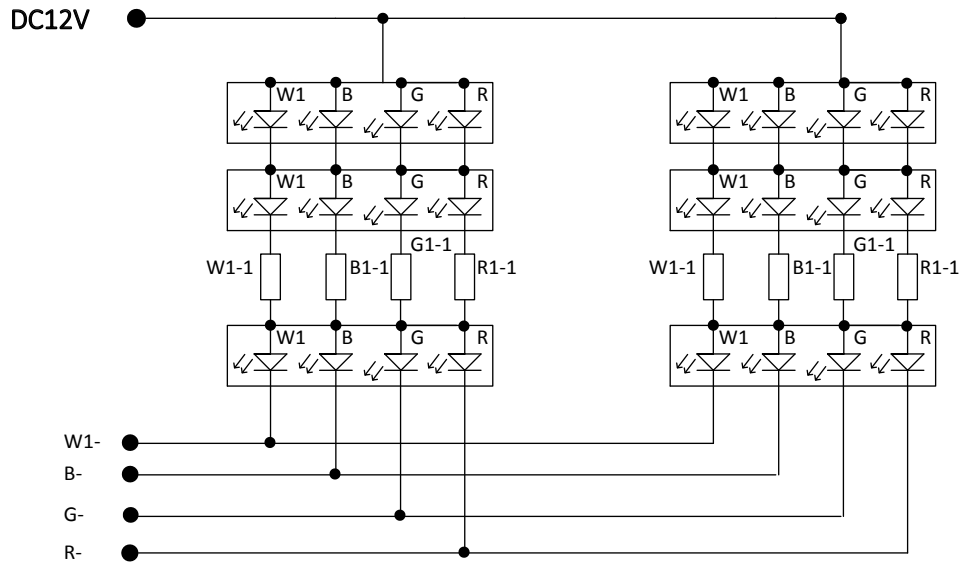
Single Color:



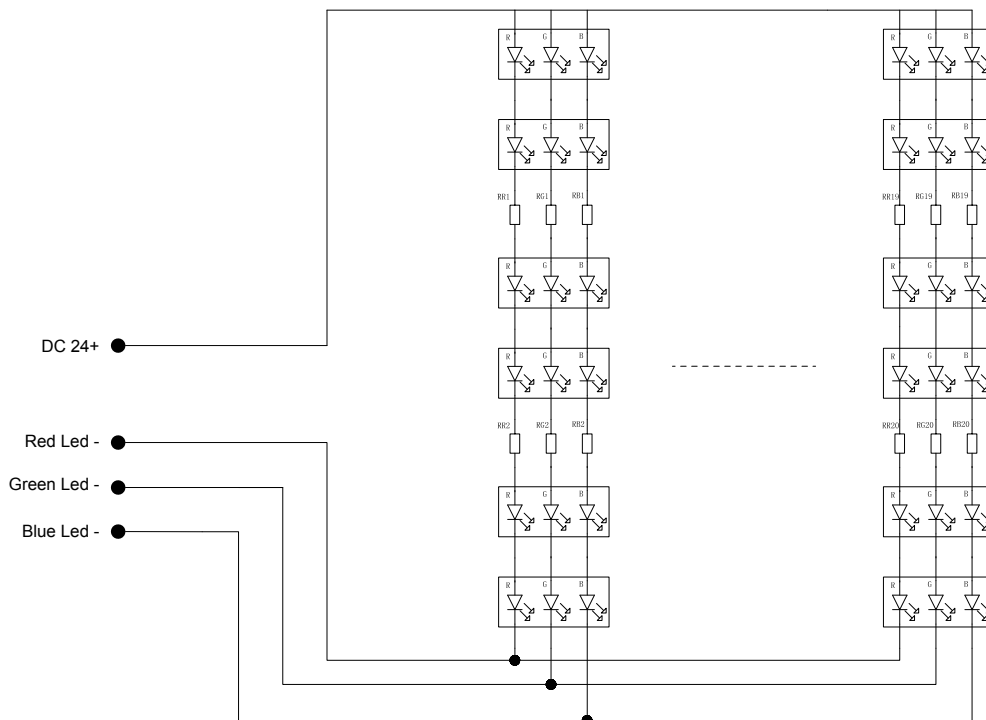
DC24V



RGB Color:



DC24V



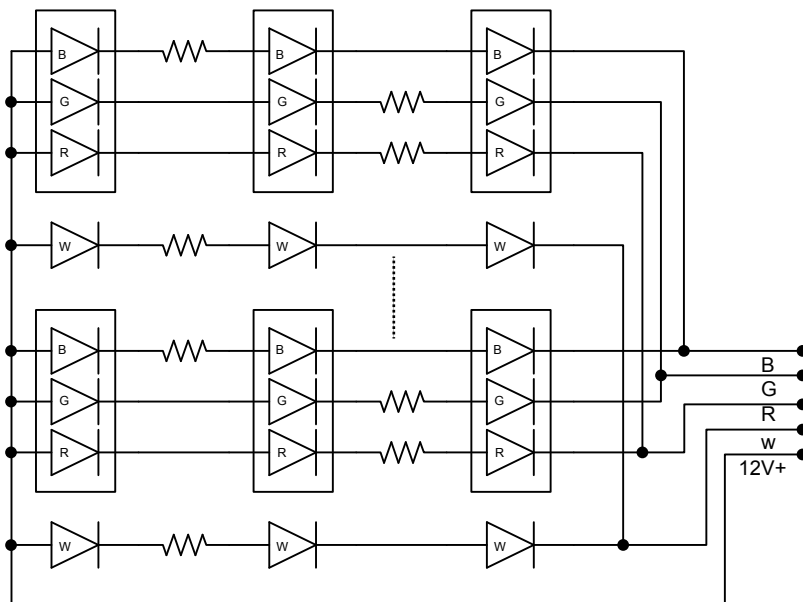
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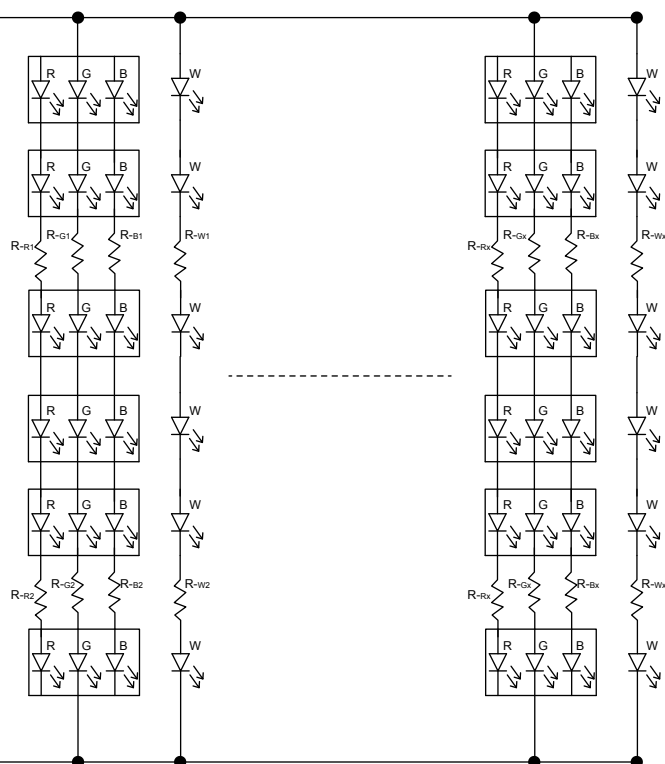
RGBW Color:

DC12V+



DC 24V +

GND





Characteristics:

Table 1. Configurations for AB-FH Flexible Tape Light Series.

OPERATING VOLTAGE(V)	CURRENT(A/12in)	POWER (W/12in)	LENGTH (inch)	LEDcount/in
12	White/Green/Blue:0.25	3	12	36/12in
	Red/Amber:0.25	3		
	RGB:0.25	3		
	RGBW:0.37	4.5		
24	White/Green/Blue:0.13	3	12	36/12in
	Red/Amber:0.13	3		
	RGB:0.13	3		
	RGBW:0.19	4.5		

Table 2. Product performance of AB-FH Ultra Slim Rope Light Series at T=25℃

PART NUMBER	CCT/ WAVELENGTH	LUMINOUS FLUX** (lm/m)	LUMINOUS EFFICACY (lm/W)	CRI
AB-FH012KK-19712-8A1S AB-FH024KK-19712-8A1S	30:3000-3300K	135	45	>80
	40:3800-4200K	135	45	
	63:6000-6700K	135	45	
	RD: Red 620-625nm	51	17	X
	GR: Green 520-525nm	105	35	X
	BL: Blue 440-450nm	30	10	X
AB-FH01206-19712-XA1S AB-FH02406-19712-XA1S	AM: Amber 558-592nm	27	9	X
	RD: Red 620-635nm	--	17	X
	GR: Green 520-525nm	--	35	X
	BL: Blue 440-450nm	--	10	X
AB-FH01208-19712-8A1S AB-FH02408-19712-8A1S	RD: Red 620-635nm	--	17	X
	GR: Green 520-525nm	--	35	X
	BL: Blue 440-450nm	--	10	X
	27:2600-2850K	--	45	>80
	30:2900-3300K			
	40:3800-4200K			
	50:4700-5300K			
	65:6000-7000K			

Note:

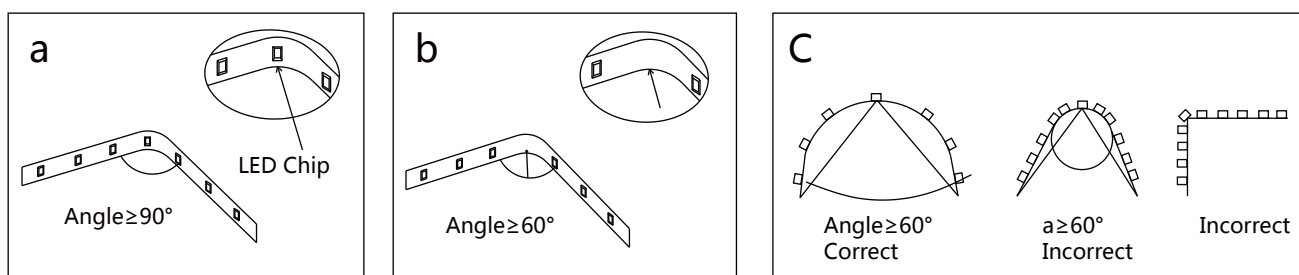
- Standard unit length: 5m , for custom length, please contact aboc@americanbrightled.com
- KK – Color/CCT (27 – 2700K, 30 – 3000K, 40 – 4000K, 50 – 5000K, 65 – 6500K CCT, 06 – RGB,08-RGB/W)
- Luminous flux ±10% is allowed.

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Table 3. Accessory list

Item	Size (mm)	Description	Compatible to	Image
AB-M-SS-10-12-L20	20x10x13	Silicon mounting bracket	AB-FF series	
AB-M-SI-RBLL-06	18.3x6x6	Silicon mounting bracket	AB-FA series AB-FC series AB-FD series	
AB-M-AL-20-09-1000	5000x15x10	Aluminum groove	AB-FB series	
AB-M-SS-18-08-L20	20x18x10	Stainless mounting bracket	AB-FB series	
AB-M-S-7-9-L7	7x6x12	Stainless mounting bracket	AB-FH series	

Installation Instructions:



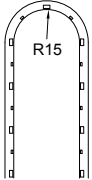
a: use an angle greater or equal to 90 degrees when there is an LED chip on the corner while placing the strip in a concave position (Angle $\geq 90^\circ$)

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 (Angle $\geq 60^\circ$)

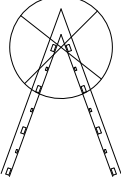
c: use an angle greater or equal to 60 degrees when there is an LED chip on the corner while placing the strip in a concave position (Angle $\geq 60^\circ$) In the convex position the angle should not reach 90 degrees. See above diagram.



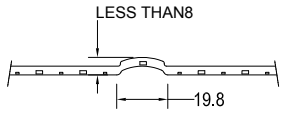
Maximum Flexibility Precaution



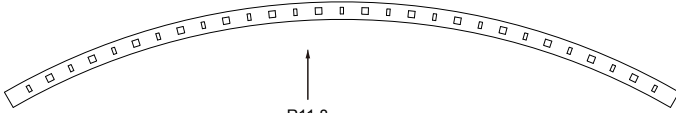
NOTE: DO NOT BEND TO A RADIUS OF LESS THAN 0.59 INCH



NOTE: SHARP BENDING ISN'T ALLOWABLE



NOTE: DO NOT AXIAL BEND TO THE HEIGHT OF MORE THAN 19.8mm WITHIN 0.78 INCH SEGMENT



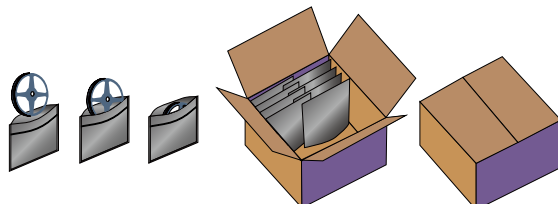
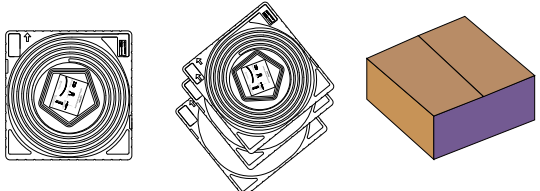
NOTE: DO NOT HORIZONTAL BEND TO A RADIUS OF LESS THAN 18 INCH



NOTE: DO NOT TWIST MORE THAN 90° OVER THE LENGTH OF ONE 24V SEGMENT/ TWO 12V SEGMENTS (4" TOTAL LENGTH)

Product Packaging

Table 4. Packaging information

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

Note:

- 1.10 bags or tray/carton; QTY/bag varies per different unit lengths.
- 2.Standard unit length: 5m/roll, 1 roll/bag.

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