

# Product Specification

## Flexible LED Strip

### COB Series

10mm FPC COB 528LEDs/M IP20 Flexible LED Strip

WW-FLS102T88XW528X-24(WCP)-UR

&

WW-FLS102T88XW528X-24(WCP)-UR-EP



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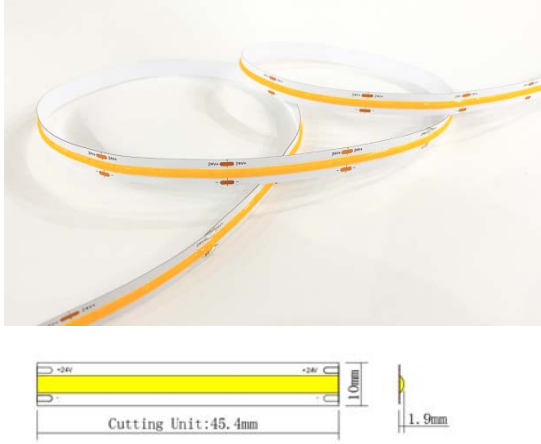
Fax : (852) 3152 3039









Tel : (86) 755 8601 9190



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<p><b>Product Features</b></p> <ul style="list-style-type: none"> <li>● High quality FPC, authentic 3M tape;</li> <li>● 2700/3000/4000/6000K four color temperature are available for selection;</li> <li>● Dot free</li> <li>● Warranty: 5 Years;</li> <li>● Min. Bending Diameter: <math>\Phi 60\text{mm}</math>;</li> <li>● Meet (EU) 2019/2020 ErP regulations</li> <li>● Max.length(M):5M</li> </ul>	
<p><b>Technology info</b></p> <ul style="list-style-type: none"> <li>● Lighting Technology: LED</li> <li>● DLS or NDLS: NDLS</li> <li>● MLS or NMLS: NMLS</li> </ul>	<p><b>Certification Standards</b></p> <p>EN55015:2019  EN61547:2009  EN60598-1:2015  EN60598-2-20:2015  EN62493:2015  EN62471:2008</p>

<b>Non-ErP Waterproof Type</b>	 <b>B 20</b>	 <b>F 65</b>	 <b>R 67</b>
	Naked Strip	Silicone Tube	Silicone Extrusion
	5 Years Warranty	5 Years Warranty	5 Years Warranty
<b>ErP Waterproof Type</b>	 <b>B 20</b>	 <b>F 55</b>	 <b>R 67</b>
	Naked Strip	Silicone Tube	Silicone Extrusion
	5 Years Warranty	5 Years Warranty	5 Years Warranty

## WW-FLS102T88XW528X-24(WCP)-UR

### Parameters for non-erp

IP Grade	Model NO.	CRI (Ra)	Rf	Rg	Typical Power (W/M)	Max. Power (W/M)	Color	LED Color Temp.(K) Wavelength(nm) *	Typ. Luminous Flux LM/M(39.37in)	Beam Angle (°,1/2 θ)	Rated voltage
E 20	WW-FLS102T88WW528B-24(WCP)-UR	90	90	100	10	11	Warm White	2700K	950	140	DC 24V
	Warm White						3000K	1000			
	Natural White						4000K	1080			
	Standard White						6000K	1150			
E 65	WW-FLS102T88WW528F-24(WCP)-UR	90	90	100	10	11	Warm White	2700K	920	140	DC 24V
	Warm White						3000K	970			
	Natural White						4000K	1050			
	Standard White						6000K	1120			
E 67	WW-FLS102T88WW528R-24(WCP)-UR	90	90	100	10	11	Warm White	2700K	920	140	DC 24V
	Warm White						3000K	970			
	Natural White						4000K	1050			
	Standard White						6000K	1120			

#### Remarks:

- The typ.Luminous flux tolerance range is ±10%(subject to the manufacturer's instrument test).
- \* Indicates that SDCM3 is optional in the B type strip, and the suffix "-3S" needs to be added at the end of the product model No.

#### Test condition of above technical data:

- Surrounding temperature: 26 °C.
- Test while turned on.

WW-FLS102T88XW528X-24(WCP)-UR-EP

Parameters for Erp

IP Grade	Model NO.	CRI (Ra)	Rf	Rg	Typical Power (W/M)	Max. Power (W/M)	Color	LED Color Temp.(K) Wavelength(nm)*	Typ. Luminous Flux LM/M(39.37in)	Lumen/watt	Energy Efficiency class	Beam Angle (°,1/2 θ)	Chromaticity Coordinate (X,Y)	Rated voltage
B 20	WW-FLS102T88WW528B-24(WCP)-UR-EP	90	90	100	11	12.1	Warm White	2700K	980	89.1	F	140	0.4578,0.4101	DC 24V
	Warm White						3000K	1030	93.6	F	0.4339,0.4033			
	Natural White						4000K	1120	101.8	F	0.3818,0.3797			
	Standard White						6000K	1200	109.1	F	0.3214,0.3360			
F 65	WW-FLS102T88WW528F-24(WCP)-UR-EP	90	90	100	11	12.1	Warm White	2700K	940	85.5	F	140	0.4578,0.4101	DC 24V
	Warm White						3000K	980	89.1	F	0.4339,0.4033			
	Natural White						4000K	1080	98.2	F	0.3818,0.3797			
	Standard White						6000K	1150	104.5	F	0.3214,0.3360			
R 67	WW-FLS102T88WW528R-24(WCP)-UR-EP	90	90	100	11	12.1	Warm White	2700K	940	85.5	G	140	0.4578,0.4101	DC 24V
	Warm White						3000K	980	89.1	F	0.4339,0.4033			
	Natural White						4000K	1080	98.2	F	0.3818,0.3797			
	Standard White						6000K	1150	104.5	F	0.3214,0.3360			

Remarks:

- \* Indicates that SDCM3 is optional in the B type strip, and the suffix "-3S" needs to be added at the end of the product model No.

Test condition of above technical data:

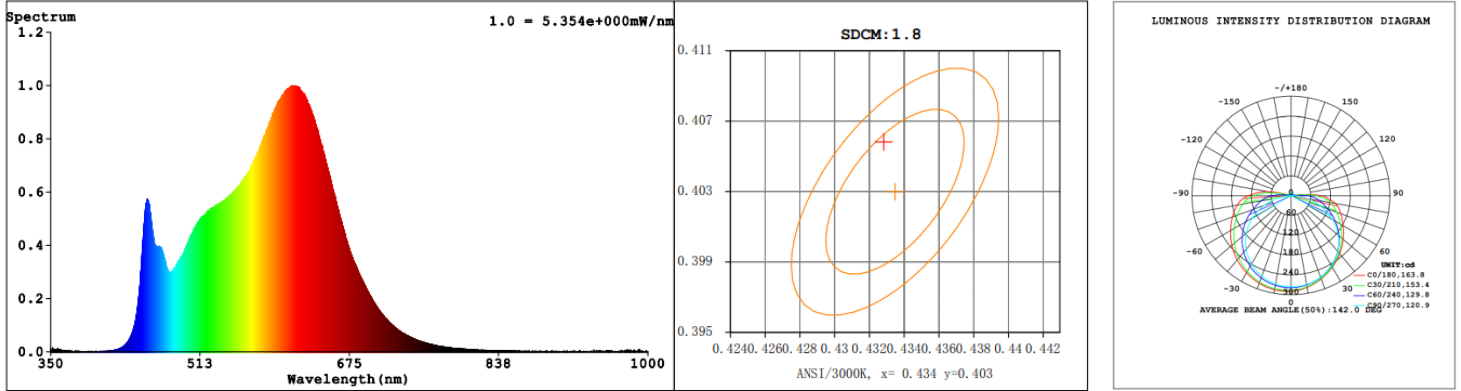
- Surrounding temperature: 26 °C.
- Test after 10 mins turned on.

Note:

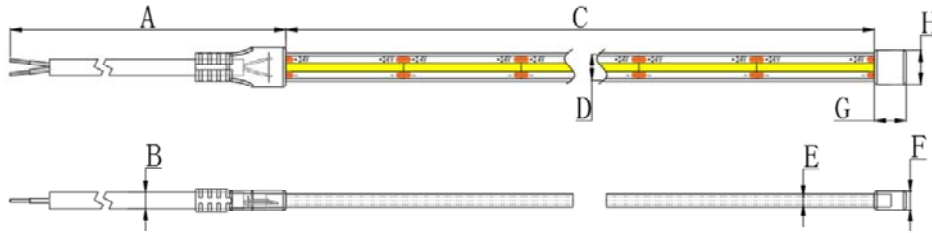
- According to the new ErP 2019/2020 regulation for each 0.5m or nearest 0.5m strip, the following requirements must be met:
  - Measured power ≤ P<sub>on</sub> + 5%;
  - Measured lumen ≥ Useful luminous flux - 10%;
  - Measured CRI ≥ Declared CRI-2
- The above technical data, including typical power are based on the test of 0.5m.

Optical Test Diagram

Spectrum



Dimension Drawing

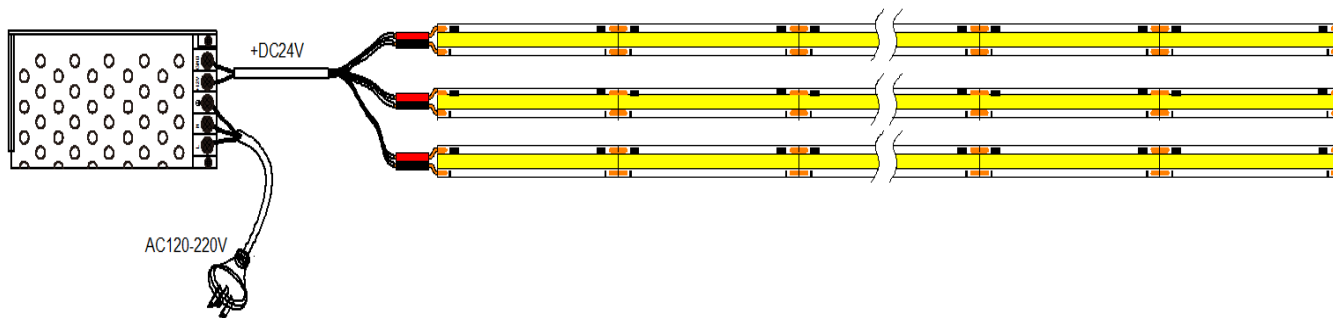


IP Grade	A. cable length	B. cable diameter	C. Strip length	D. Strip width	E. Strip thickness	E. Strip thickness	G. End cap length	H. End cap width
E 20	300±10mm	1.8±0.2mm	5000±50mm	10±0.5mm	1.9±0.5mm	/	/	/
	11.81±0.39in	0.07±0.008in	196.85±1.97in	0.394±0.02in	0.075±0.02in	/	/	/
F 65	300±10mm	φ4±0.2mm	5020±50mm	12±0.5mm	4±0.5mm	6±0.5mm	12±0.5mm	14±0.5mm
	11.81±0.39in	φ0.157±0.008in	197.6±1.97in	0.47±0.02in	0.157±0.02in	0.236±0.02in	0.472±0.02in	0.55±0.02in
R 67	315±10mm	φ6±0.2mm	5020±50mm	12±0.5mm	4.5±0.5mm	6.5±0.5mm	12±0.5mm	14±0.5mm
	12.4±0.39in	φ0.236±0.008in	197.6±1.97in	0.47±0.02in	0.177±0.02in	0.256±0.02in	0.472±0.02in	0.55±0.02in

Remarks :

- If you need further information, please contact our sales account manager..

## Circuit Diagram



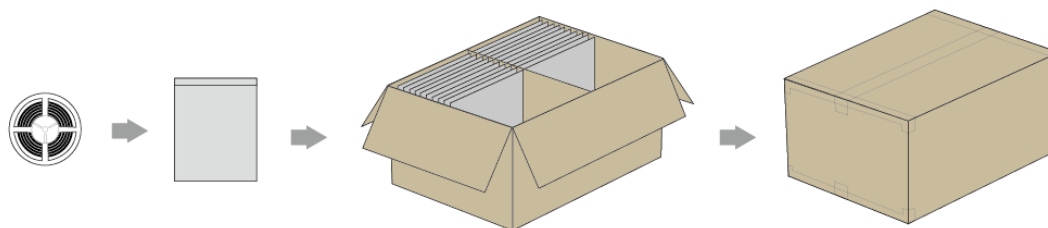
## Standard Accessories

IP Grade	Category	Description	Picture	Part No.	Application
B 20	/	/	/	/	/
	/	/	/	/	/
F 65	Connection Accessories	Front cap+End cap+Cable		WW-FLS102F-CW (10mm)	10mm Type F Waterproof strip
	Installation Accessories	Installation Buckle+Screws		WW-FLS102JJA-MC	
R 67	Connection Accessories	Front cap+End cap+Cable		WW-FLS102F-CW (10mm)	10mm Type F Waterproof strip
	Installation Accessories	Installation Buckle+Screws		WW-FLS102JJA-MC	

## Optional Accessories

IP Grade	Category	Description	Picture	Part No.	Density
B 20	Quick Connector	2PIN Quick Connector		WW-F2B-P0P2T-10(COB)	/
	Strip to wire Connector	2PIN Strip to wire Connector		WW-F2B-0WP2T-10(COB)	/
	Strip to strip Connector	2PIN Strip to strip Connector		WW-F2B-PWP2T-10(COB)	/

## Packaging Diagram

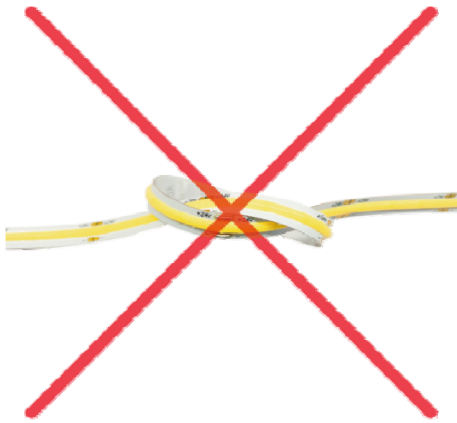


## Packaging Information

IP Grade	Bag size	Inner carton		Outer carton		N.W	G.W	Outer carton volume
		Size	Reel/ctn	Size	Reel/ctn			
E 20	250*270*0.14mm	/	/	440*400*260mm	50	4.05 KG ±10%	7.95 KG ±10%	0.04576 m <sup>3</sup>
	9.84*10.63*0.0055in	/	/	17.32*15.75 *10.24in	50	8.93 Lbs ±10%	17.53Lbs ±10%	1.616 ft <sup>3</sup>
F 65	250*270*0.14mm	/	/	440*400*260mm	40	8.44KG ±10%	13.75KG ±10%	0.04576 m <sup>3</sup>
	9.84*10.63*0.0055in	/	/	17.32*15.75 *10.24in	40	18.61 Lbs ±10%	30.31Lbs ±10%	1.616 ft <sup>3</sup>
R 67	270*300*0.14mm	/	/	520*370 *300mm	36	10.08KG ±10%	15.87KG ±10%	0.05772m <sup>3</sup>
	10.63*11.81*0.0056 in	/	/	20.47*14.57 *11.81 in	36	22.22KG ±10%	35.0KG ±10%	2.038ft <sup>3</sup>

**Remarks :**

- Please contact our sales account manager for customized package (color box, blister etc.)



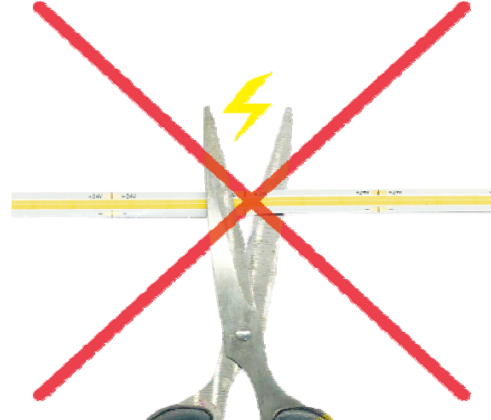
In the process of product installation and use, it is forbidden to knot



In the process of product installation and use, it is forbidden to wind



In the process of product installation and use, it is forbidden to twist





























In the process of product installation and use, it is forbidden to cut


1. In the process of product installation and use, it is forbidden to reinstall and use.
2. It is forbidden to put the product back into the reel after removed from it.





 **Cautions**

IP20	IP54	IP65	IP67	IP68
				
Do not press the surface of LED	Pay attention to high temperature environment	Do not use in strong water waves environment	Resist strong water waves impact	Can apply to underwater do not deeper than 1m
				
Pay attention to damp proof and dustproof	Do not apply to rainy environment	Can be applied to rainy environment	Do not apply to underwater environment for a long time	No direct sunlight

							
Do not tie a knot	Do not winding	Do not twist	Do not cut when it is working	Recommended the continuous working time do not exceed 12 hours daily	-20°C ~ +45°C (4°F ~ 113°F)	0°C ~ +60°C (32°F ~ 140°F)	Operated by professionals
							
Pay attention to the application environment	IP Level will change after cutting	Do not pull and crash	Connected to power supply every 5 meters	Power supply must be connected to ground(GND)	The minimum bending diameter > 60mm	Power supply retain > 20%	Note the positive and negative poles

 For cutting LED strip operation, it is necessary to use the standard accessories provided by Dilux (e.g. DC wire, end-cap, front-cap, adhesive, etc.), and according to the correct cutting and connecting method for the installation.

 For avoiding LED get vulcanized, LED strip should be installed in the environment where does not has oil and corrosive substances. Such as these substances which contain Sulphur, Bromine, Iodine and Chlorine. Some other chemical elements which will cause Aromatic hydrocarbons releasing(such as: methylbenzene, xylene, methyl acetoacetate Ethyl acetate etc.),The environment in which includes strong acid and strong base.

 During the warranty period, only defective products are acceptable to be replaced by the factory. Factory is not responsible for other expenses because of replacement, such as transportation fee, installation fee, etc..

**\*\* If you do not follow the above "Cautions" to operate and result in damaging the product, the factory will not accept maintenance and return.**  
**\*\*The right of final interpretation is owned by Dilux.**