

## Product Specification

### COB LV Strip POP COB 24V 320 LEDs/M Single color

WW-FLS102T89XW320X-24(WCP)-UR-LD-RTR(SS)  
&  
WW-FLS102T89XW320X-24(WCP)-UR-EP-LD-RTR(SS)

Apply to ERP Regulation (EU) 2019/2020



HK Office :

Unit 1901, 19th Floor, NanYang Plaza, No. 57 Hung To Road  
Kwun Tong, Kowloon, Hong Kong

China Factory :

Zhiyang Science and Technology Park, 10 Zhiyang Road, Zhangge,  
Fucheng Street, Longhua District, Shenzhen, Guangdong, China

Tel : (852) 3152 3059 (10 lines)

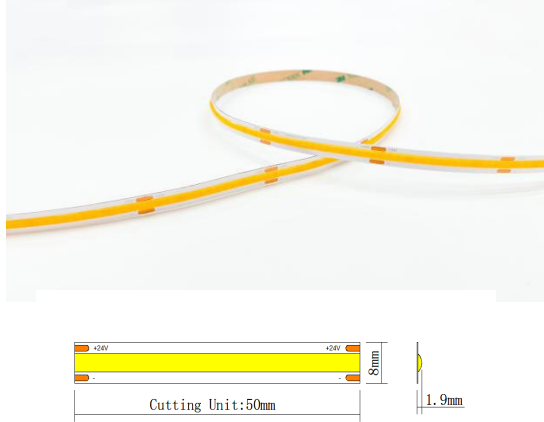
Fax : (852) 3152 3039









Tel : (86) 755 8601 9190



Fax : (86) 755 8601 9197

<p><b>Product Features</b></p> <ul style="list-style-type: none"> <li>• High quality FPC, authentic 3M tape;</li> <li>• 2700/3000/4000/6500K four color temperature are available for selection;</li> <li>• Reel to Reel process</li> <li>• Warranty: 3 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> <ul style="list-style-type: none"> <li>• EN55015</li> <li>• EN61547</li> <li>• EN60598-1</li> <li>• EN60598-2-20</li> <li>• EN62493</li> <li>• EN62471</li> </ul>

<b>Non-ErP Waterproof Type</b>	 <b>B 20</b>	 <b>F 65</b>	 <b>R 67</b>
	Naked Strip	Silicone Tube	Silicone Extrusion
	3 Years Warranty	3 Years Warranty	3 Years Warranty

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## WW-FLS102T89XW320X-24(WCP)-UR-LD-RTR(SS)

### Parameters

IP Grade	Model NO.	CRI (Ra)	Rf	Rg	Typical Power (W/M)	Max. Power (W/M)	Color	Color Temp. Of Light source (K) /Wavelength(nm)*	Typ. Luminous Flux L/M/M(39.37in)	Rated voltage
B 20	WW-FLS102T899WW320B-24(WCP)-UR-LD-RTR(SS)	90	92	100	8.0	8.8	Warm White	2700K	760	DC 24V
	Warm White						3000K	770		
	Natural White						4000K	830		
	Standard White						6000K	840		
F 65	WW-FLS102T899WW320F-24(WCP)-UR-LD-RTR(SS)	90	92	100	8.0	8.8	Warm White	2700K	750	DC 24V
	Warm White						3000K	760		
	Natural White						4000K	790		
	Standard White						6000K	830		
R 67	WW-FLS102T899WW320R-24(WCP)-UR-LD-RTR(SS)	90	92	100	8.0	8.8	Warm White	2700K	740	DC 24V
	Warm White						3000K	750		
	Natural White						4000K	780		
	Standard White						6000K	810		

Remarks:

- The typ. Luminous flux tolerance range is  $\pm 10\%$  (subject to the manufacturer's instrument test).

Test condition of above technical data:

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

## WW-FLS102T89XW320X-24(WCP)-UR-EP-LD-RTR(SS)

### Parameters for ErP

IP Grade	Model NO.	CRI (Ra)	Rf	Rg	Typical Power (W/M)	Max. Power (W/M)	Color	Color Temp.(K) of Finished Product	Typ. Luminous Flux LM/M(39.37in)	Efficiency (Lm/W)	Energy Efficiency class	Chromaticity Coordinate (X,Y)	Rated voltage
E 20	WW-FLS102T89WW320B-24(WCP)-UR-EP-LD-RTR(SS)	90	90	100	8.7	9.57	Warm White	2700K	790	91	F	0.4630,0.4200	DC 24V
	Warm White						3000K	800	92	F	0.4400,0.4030		
	Natural White						4000K	870	100	F	0.3800,0.3800		
	Standard White						6000K	880	101	F	0.3130,0.3370		
E 65	WW-FLS102T89WW320F-24(WCP)-UR-EP-LD-RTR(SS)	90	90	100	8.7	9.57	Warm White	2700K	780	90	F	0.4689,0.4204	DC 24V
	Warm White						3000K	790	91	F	0.4430,0.4033		
	Natural White						4000K	830	95	F	0.3849,0.3819		
	Standard White						6000K	860	99	F	0.3201,0.3408		
R 67	WW-FLS102T89WW320R-24(WCP)-UR-EP-LD-RTR(SS)	90	90	100	8.7	9.57	Warm White	2700K	770	89	F	0.4689,0.4204	DC 24V
	Warm White						3000K	780	90	F	0.4430,0.4033		
	Natural White						4000K	820	94	F	0.3849,0.3819		
	Standard White						6000K	850	98	F	0.3201,0.3408		

Remarks:

Test condition of above technical data:

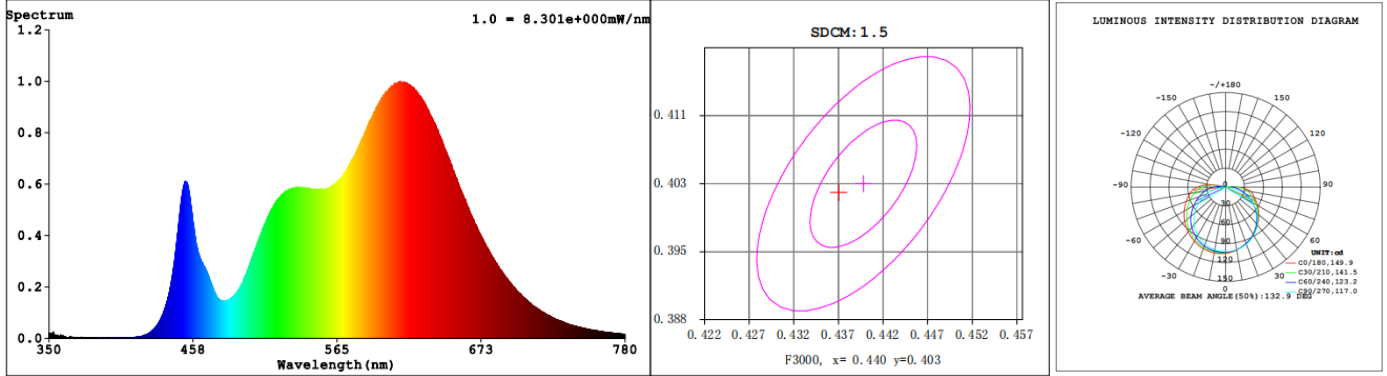
- Surrounding temperature: 26 °C.
- Test after 15 mins turned on.

ErP Note:

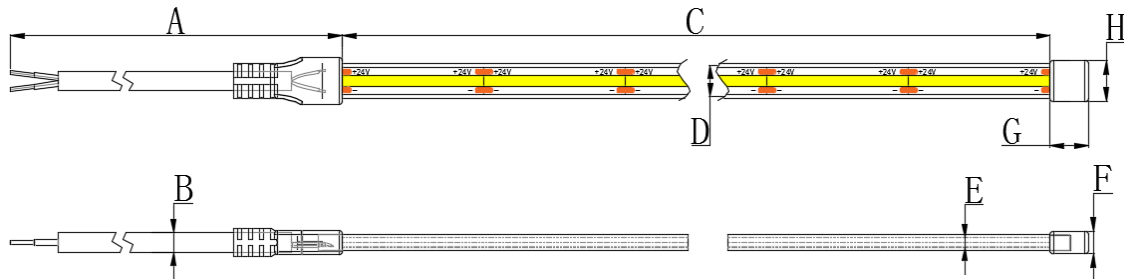
- According to the new ErP 2019/2020 regulation for each 0.5m or nearest 0.5m strip, the following requirements must be met:
- Measured power  $\leq$  Pon +5% ;
- Measured lumen  $\geq$  Useful luminous flux -10%;
- Measured CRI  $\geq$  Declared CRI-2
- The above technical data, including typical power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

Optical Test Diagram

Spectrum

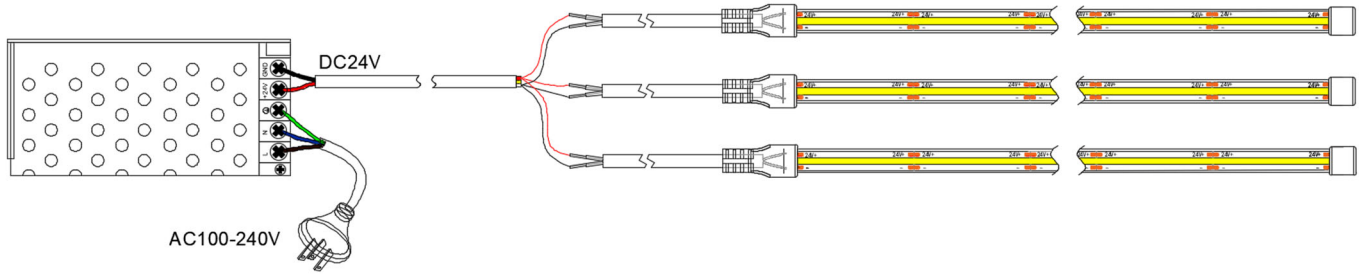


Dimension Drawing



IP Grade	A. cable length	B. cable diameter	C. Strip length	D. Strip width	E. Strip thickness	F. Front cap length	G. End cap length	H. End cap width
<b>B 20</b>	150±10mm	φ1.8±0.2mm	5000±50mm	8±0.5mm	1.9mm±0.5mm	/	/	/
	5.91±0.39in	φ0.07±0.008in	196.85±1.97in	0.31±0.02in	0.075±0.02in	/	/	/
<b>F 65</b>	300±10mm	φ4±0.2mm	5020±50mm	10±0.5mm	4±0.5mm	6±1mm	10±0.5mm	12±0.5mm
	11.81±0.39in	φ0.157±0.008in	197.6±1.97in	0.394±0.02in	0.157±0.02in	0.236±0.04in	0.39±0.02in	0.472±0.02in
<b>R 67</b>	315±10mm	φ6±0.2mm	5020±50mm	10±0.5mm	4.5±0.5mm	6.5±1mm	11±0.5mm	12±0.5mm
	12.4±0.39in	φ0.236±0.008in	197.6±1.97in	0.394±0.02in	0.177±0.02in	0.256±0.04in	0.43±0.02in	0.472±0.02in






## Circuit Diagram



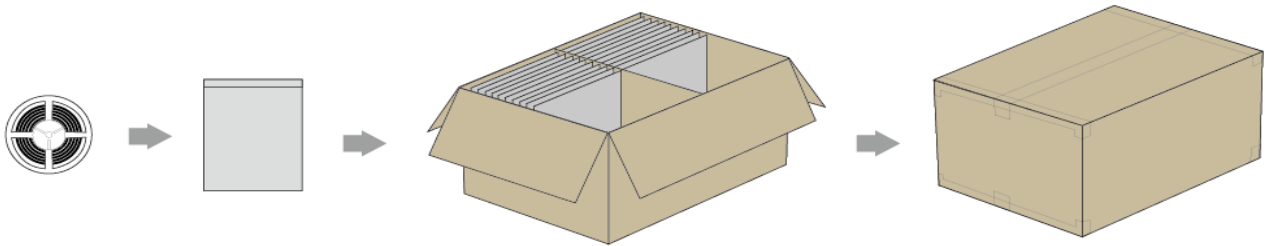
## Standard Accessories

IP Grade	Category	Description	Picture	Part No.	Density
E 20	/	/	/	/	/
	/	/	/	/	/
F 65	Connection Accessories	Front cap+End cap+Cable		WW-FLS102F-CW (8mm)	8mm Type F Waterproof strip
	Installation Accessories	Installation Buckle+Screws		WW-FLS102JJA-MC	
R 67	Connection Accessories	Front cap+End cap+Cable		WW-FLS102R-CW (8mm)	8mm Type R Waterproof strip
	Installation Accessories	Installation Buckle+Screws		WW-FLS102JJA-MC	

Optional Accessories

IP Grade	Category	Description	Picture	Part No.	Density
E 20	Quick Connector	2PIN Quick Connector		WW-F2B-P0P2T-08(COB)	/
	Strip to wire Connector	2PIN Strip to wire Connector		WW-F2B-0WP2T-08(COB)	/
	Strip to strip Connector	2PIN Strip to strip Connector		WW-F2B-PWP2T-08(COB)	/
E 20	Quick connector	2PIN Multifunction Connector		WW-FLS102B-MUCN-08	/
E 20	Quick Connector	2PIN Quick Connector		WW-F2B-P0P2T-08(COB)-C	/
	Strip to wire Connector	2PIN Strip to wire Connector		WW-F2B-0WP2T-08(COB)-C	/
	Strip to strip Connector	2PIN Strip to strip Connector		WW-F2B-PWP2T-08(COB)-C	/
F 65	Quick Connector	2PIN Quick Connector		WW-F2R-P0P2T-08(COB)	/
	Strip to wire Connector	2PIN Strip to wire Connector		WW-F2R-0WP2T-08(COB)	/
	Strip to strip Connector	2PIN Strip to strip Connector		WW-F2R-PWP2T-08(COB)	/
R 67	Quick Connector	2PIN Quick Connector		WW-F2R-P0P2T-08(COB)	/
	Strip to wire Connector	2PIN Strip to wire Connector		WW-F2R-0WP2T-08(COB)	/
	Strip to strip Connector	2PIN Strip to strip Connector		WW-F2R-PWP2T-08(COB)	/

## Packaging Diagram





























## Packaging Information


Ingress protection rating	Bag size	Inner carton		Outer carton		N.W	G.W	Outer carton volume
		Size	Reel/ctn	Size	Reel/ctn			
<b>B 20</b>	160*190*0.14mm	/	/	410*410*260mm	100	6.0KG ±10%	9.18KG ±10%	0.0437m <sup>3</sup>
	6.30*7.48*0.006in	/	/	16.14*16.14 *10.24in	100	13.23Lbs ±10%	20.24Lbs ±10%	1.543ft <sup>3</sup>
<b>F 65</b>	250*270*0.14mm	/	/	440*400*260mm	40	7.48KG ±10%	11.67KG ±10%	0.04576 m <sup>3</sup>
	9.84*10.63*0.0056 in	/	/	17.32*15.75 *10.24in	40	16.49 Lbs ±10%	25.73Lbs ±10%	1.616 ft <sup>3</sup>
<b>R 67</b>	270*300*0.14mm	/	/	520*370 *300mm	36	8.86KG ±10%	13.07KG ±10%	0.0577m <sup>3</sup>
	10.63*11.81*0.0056 in	/	/	20.47*14.57 *11.81 in	36	19.53Lbs ±10%	28.81Lbs ±10%	2.038ft <sup>3</sup>





 **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.**