

# Product Specification

## DC Flexible LED Strip

### Ultra Long 2835 Series

2835 Top LED 12mm FPC 084LEDs/M

WW-FLS102T23XW084X-48(WCP)-60M-XR-TR  
&  
WW-FLS102T23XW084X-48(WCP)-60M-XR-TR-EP



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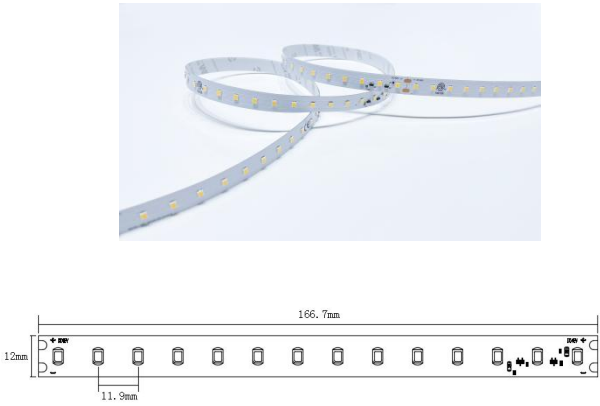
Fax : (852) 3152 3039







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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>• Self-encapsulated design 2835 LED;</li> <li>• Light source lifetime:50K hours(L70);</li> <li>• Meet (EU)2019/2020 ErP regulations.</li> <li>• Min. Bending Diameter: Φ60mm</li> <li>• Max. length(M): 60M</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>• EN55015:2019</li> <li>• EN61547:2009</li> <li>• EN60598-1:2015</li> <li>• EN60598-2-20:2015</li> <li>• EN62493:2015</li> <li>• EN62471:2008</li> </ul>

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

<b>ErP Waterproof Type</b>	 <b>B 20</b>	 <b>R 67</b>
	Naked Strip	Silicone Extrusion
	5 Years Warranty	5 Years Warranty

WW-FLS102T23XW084X-48(WCP)-60M-XR-TR

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)*	3SDCM LED Color Temp.(K) Wavelength(nm)**	Typ. Luminous Flux LM/M(39.37in)	Rated voltage
E 20	WW-FLS102T23XW084B-48(WCP)-60M-HR-TR	80	82	96	4.20	4.40	Warm White	2700K	/	330	DC 48V
							Warm White	3000K	/	370	
							Natural White	4000K	/	390	
							Standard White	6000K	/	376	
E 20	WW-FLS102T23XW084B-48(WCP)-60M-UR-TR	90	90	100	4.20	4.40	Warm White	2700K	/	290	DC 48V
							Warm White	3000K	/	300	
							Natural White	4000K	/	320	
							Standard White	6000K	/	340	
R 67	WW-FLS102T23XW084R-48(WCP)-60M-HR-TR	80	82	96	4.20	4.40	Warm White	2700K	/	330	DC 48V
							Warm White	3000K	/	364	
							Natural White	4000K	/	390	
							Standard White	6000K	/	370	
R 67	WW-FLS102T23XW084R-48(WCP)-60M-UR-TR	90	90	100	4.20	4.40	Warm White	2700K	/	280	DC 48V
							Warm White	3000K	/	290	
							Natural White	4000K	/	310	
							Standard White	6000K	/	330	

Remarks:

- \*The above color temperature is the color temperature of LED source.
- \*\*Indicates SDCM<3 model is available, part number will add the suffix "-3S".
- The typ. Luminous flux tolerance range is ±10% (subject to the manufacturer's instrument test).

Test condition of above technical data:

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

**WW-FLS102T23XW084X-48(WCP)-60M-XR-TR-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)*	Luminous Flux LM/M(39.37')	Lumen/watt	Energy Efficiency class	Rated voltage
E 20	WW-FLS102T23XW084B-48(WCP)-60M-HR-TR-EP	80	82	96	4.20	4.40	Warm White	2700K	360	86	F	DC 48V
							Warm White	3000K	400	95	F	
							Natural White	4000K	430	102	F	
							Standard White	6000K	410	98	F	
	WW-FLS102T23XW084B-48(WCP)-60M-UR-TR-EP	90	90	100	4.20	4.40	Warm White	2700K	310	74	G	DC 48V
							Warm White	3000K	320	76	G	
							Natural White	4000K	350	83	G	
							Standard White	6000K	370	88	F	
R 67	WW-FLS102T23XW084R-48(WCP)-60M-HR-TR-EP	80	82	96	4.20	4.40	Warm White	2700K	350	83	G	DC 48V
							Warm White	3000K	390	93	F	
							Natural White	4000K	420	100	F	
							Standard White	6000K	400	95	F	
	WW-FLS102T23XW084R-48(WCP)-60M-UR-TR-EP	90	90	100	4.20	4.40	Warm White	2700K	304	72	G	DC 48V
							Warm White	3000K	314	75	G	
							Natural White	4000K	340	81	G	
							Standard White	6000K	360	86	F	

Remarks:

- \*The above color temperature is the color temperature of LED source.
- While SDCM<3 model is available, part number will add the suffix "-3S".

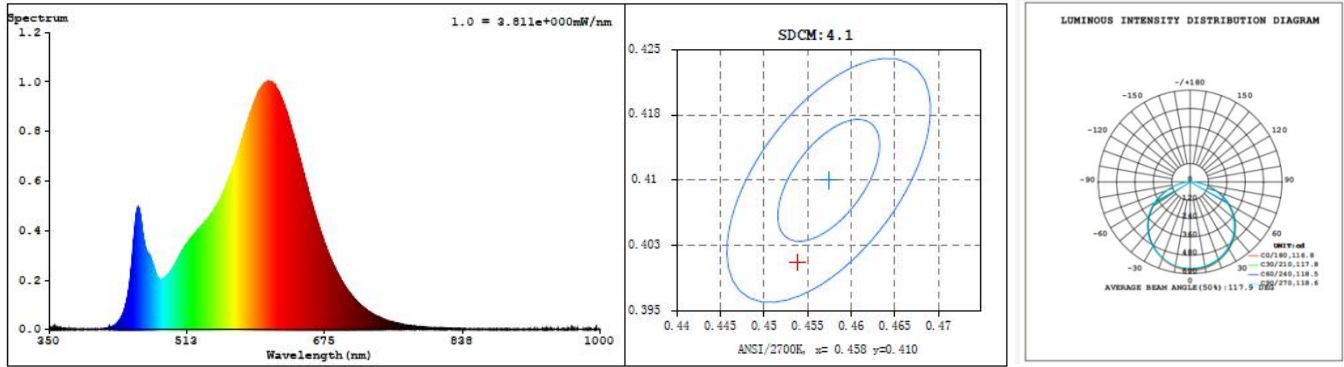
Test condition of above technical data:

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

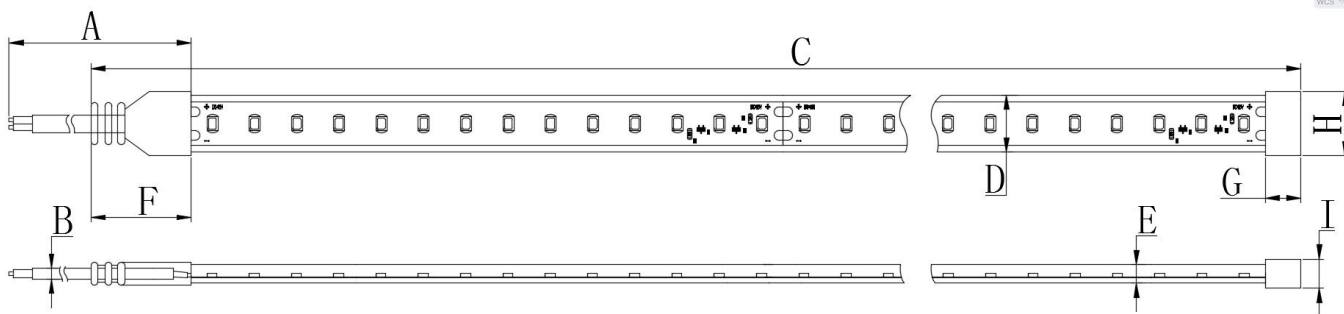
ErP Note:

- 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 ≤ Pon +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



## Dimension Drawing

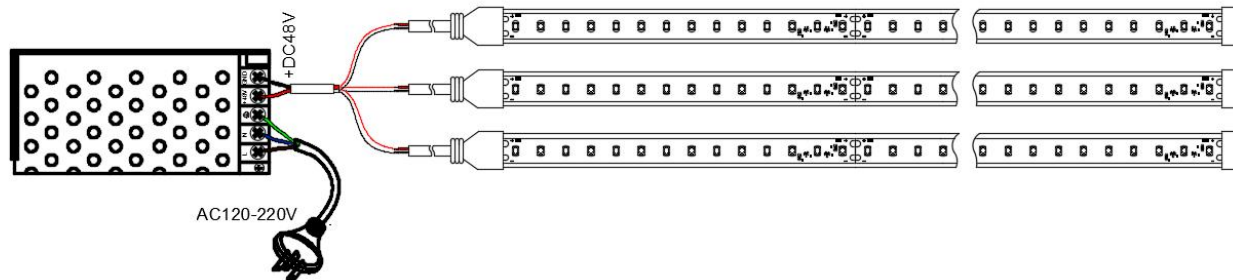


IP Grade	A	B	C	D	E	F	G	H	I
	Cable Length	cable diameter	Strip length	Strip width	Strip thickness	Front cap length	End cap length	Cap width	Cap thickness
<b>B 20</b>	300±10mm	Φ6.0±0.2mm	60000±50mm	12±0.5mm	1.6±0.5mm	/	/	/	/
	11.81±0.39in	0.24±0.01in	2362.20±1.97in	0.47±0.02in	0.063±0.02in	/	/	/	/
<b>R 67</b>	300±10mm	Φ6.0±0.2mm	60020±50mm	14±0.5mm	5.0±0.5mm	30±0.5mm	11±0.5mm	14±0.5mm	7.0±0.5mm
	11.81±0.39in	0.24±0.01in	2362.99±1.97in	0.55±0.02in	0.20±0.02in	1.18±0.02in	0.43±0.02in	0.62±0.02in	0.28±0.02in



**Remarks:**

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






## Circuit Diagram



## Standard Accessories

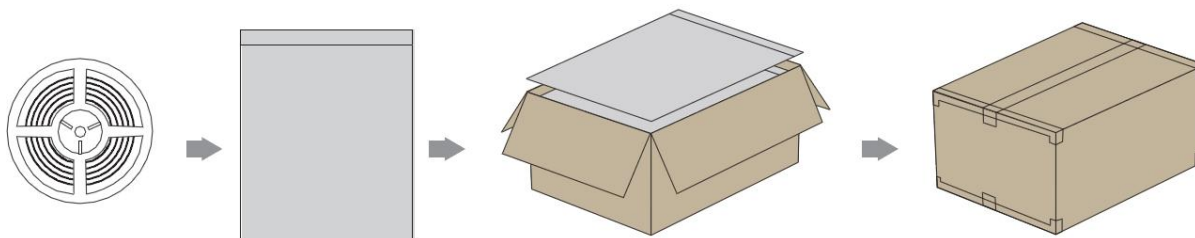
IP Grade	Category	Description	Picture	Part No.	Application
B 20	/	/	/	/	/
	/	/	/	/	/
R 67	Connection Accessories	Front cap+End cap+Cable		WW-FLS102F-CW(14mm)	12mm Type R
	Installation Accessories	Installation Buckle+Screws		WW-FLS102JJA-MC	Waterproof strip

## Optional Accessories

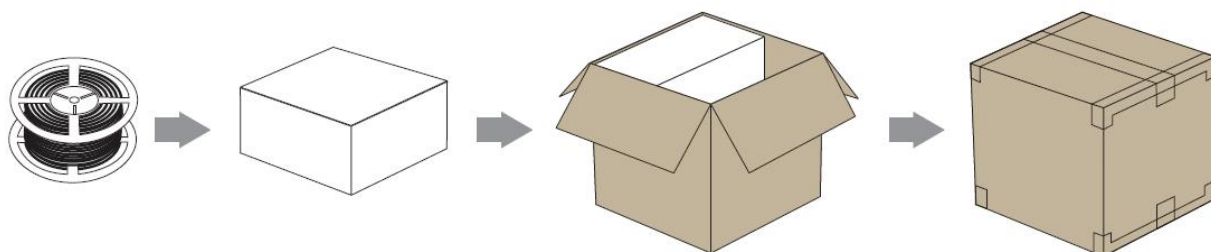
IP Grade	Category	Description	Picture	Part No.	Application
B 20	Strip to wire Connector	2PIN Strip to wire Connector		WW-FLS102B-2FS4(12MM)	≤224LEDs/M
	Strip to strip Connector	2PIN Strip to strip Connector		WW-FLS102B-2DD4(12MM)	≤224LEDs/M
	Strip to strip Connector	2PIN Strip to strip Connector		WW-FLS102B-2FD4(12MM)	≤224LEDs/M
R 67	Strip to wire Connector	2PIN Strip to wire Connector		WW-F2R-SW02T-12	≤128LEDs/M
	Strip to strip Connector	2PIN Strip to strip Connector		WW-F2R-SOP2T-12	≤128LEDs/M

## Packaging Diagram

### IP20 Series Strip



### IP67 Series Strip



## 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>IP20</b>	470*440*0.14 mm	/	/	440*400*260 mm	14	18.9 KG ±10%	24.29 KG ±10%	0.04576 m3
	18.5*17.32*0.0056 in	/	/	17.32*15.75*10.24 in	14	41.67 Lbs ±10%	53.55 Lbs ±10%	1.616 ft3
<b>IP67</b>	/	345*330*122 mm	1	362*265*350mm	2	8.5 KG ±10%	10.8 KG ±10%	0.0335 m3
	/	13.58*12.99*4.80 in	1	14.25*10.43*13.77in	2	18.74 Lbs ±10%	23.81 Lbs ±10%	1.18 ft3

#### Remarks :

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



 **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	 Operating temperature -20°C ~ +45°C (-4°F ~ +113°F)	 Storage temperature 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	 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.