

# Product Specification

## DC Flexible LED Strip

## Multi color RGB+W Series

5050RGB+3528W Top LED 12mm FPC 120LEDs/M

WW-FLS103T53FX120X-24(WCP)-XR

&

WW-FLS103T53FX120X-24(WCP)-XR-EP



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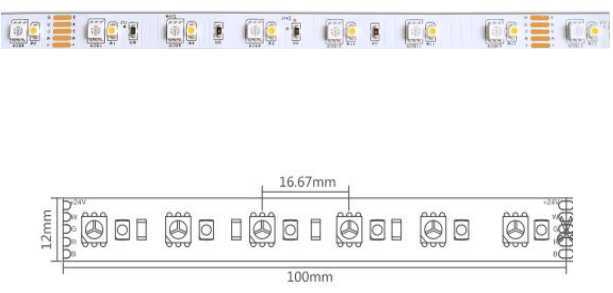
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

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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 5050RGB+3528W 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): 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>• EN55015:2019</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>E 20</b>	 <b>F 65</b>
	Naked Strip	Silicone Tube
	3 Years Warranty	3 Years Warranty

<b>ErP Waterproof Type</b>	 <b>E 20</b>	 <b>F 65</b>
	Naked Strip	Silicone Tube
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## WW-FLS103T53FX120X-24(WCP)-XR

### 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-FLS103T53FW120B-(WCP)-HR	80	80	96	16.32	19.60	RGB+ Warm White	RGB+ 2300-2600K	RGB+ 2300-2600K	825	DC 24V
	RGB+ War White						RGB+ 2600-2900K	RGB+ 2650-2770K	825		
	RGB+ Warm White						RGB+ 2900-3200K	RGB+ 2960-3110K	825		
	RGB+ Natural White						RGB+ 3700-4250K	RGB+ 3840-4080K	855		
	RGB+ Standard White						RGB+ 5700-6500K	RGB+ 5800-6250K	855		
	WW-FLS103T53FW120B-(WCP)-UR	90	90	100	16.32	19.60	RGB+ Warm White	RGB+ 2300-2600K	RGB+ 2300-2600K	740	DC 24V
	RGB+ Warm White						RGB+ 2600-2900K	RGB+ 2650-2770K	740		
	RGB+ Warm White						RGB+ 2900-3200K	RGB+ 2960-3110K	740		
	RGB+ Natural White						RGB+ 3700-4250K	RGB+ 3840-4080K	800		
	RGB+ Standard White						RGB+ 5700-6500K	RGB+ 5800-6250K	800		
F 65	WW-FLS103T53FW120F-(WCP)-HR	80	80	96	16.32	19.60	RGB+ Warm White	RGB+ 2300-2600K	RGB+ 2300-2600K	792	DC 24V
	RGB+ Warm White						RGB+ 2600-2900K	RGB+ 2650-2770K	792		
	RGB+ Warm White						RGB+ 2900-3200K	RGB+ 2960-3110K	792		
	RGB+ Natural White						RGB+ 3700-4250K	RGB+ 3840-4080K	821		
	RGB+ Standard White						RGB+ 5700-6500K	RGB+ 5800-6250K	821		
	WW-FLS103T53FW120F-(WCP)-UR	90	90	100	16.32	19.60	RGB+ Warm White	RGB+ 2300-2600K	RGB+ 2300-2600K	710	DC 24V
	RGB+ Warm White						RGB+ 2600-2900K	RGB+ 2650-2770K	710		
	RGB+ Warm White						RGB+ 2900-3200K	RGB+ 2960-3110K	710		
	RGB+ Natural White						RGB+ 3700-4250K	RGB+ 3840-4080K	768		
	RGB+ Standard White						RGB+ 5700-6500K	RGB+ 5800-6250K	768		

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  $\pm 20\%$  (subject to the manufacturer's instrument test).

Test condition of above technical data:

- Surrounding temperature: 26°C.
- Test while turning on.
- The above technical data, including typical power are based on the test of 0.5m.

# WW-FLS103T53FX120X-24(WCP)-XR-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-FLS103T53FX120B-(WCP)-HR-EP	/	/	/	4.08	4.89	RED	625-635nm	106	26	/	DC 24V
	WW-FLS103T53FX120B-(WCP)-HR-EP	/	/	/	4.58	5.49	GREEN	515-525nm	320	70	/	
	WW-FLS103T53FX120B-(WCP)-HR-EP	/	/	/	4.48	5.37	BLUE	465-475nm	86	19	/	
	WW-FLS103T53FW120B-(WCP)-HR-EP	80	82	96	4.74	5.21	Warm White	2500K	380	80	G	
	WW-FLS103T53FW120B-(WCP)-HR-EP						Warm White	2700K	380	80	G	
	WW-FLS103T53FW120B-(WCP)-HR-EP						Warm White	3000K	380	80	G	
	WW-FLS103T53FN120B-(WCP)-HR-EP						Natural White	4000K	438	92	F	
WW-FLS103T53FS120B-(WCP)-HR-EP	Standard White	6000K	438	92	F							
E 20	WW-FLS103T53FX120B-(WCP)-UR-EP	/	/	/	4.08	4.89	RED	625-635nm	106	26	/	DC 24V
	WW-FLS103T53FX120B-(WCP)-UR-EP	/	/	/	4.58	5.49	GREEN	515-525nm	320	70	/	
	WW-FLS103T53FX120B-(WCP)-UR-EP	/	/	/	4.48	5.37	BLUE	465-475nm	86	19	/	
	WW-FLS103T53FW120B-(WCP)-UR-EP	90	90	100	4.74	5.21	Warm White	2500K	310	65	G	
	WW-FLS103T53FW120B-(WCP)-UR-EP						Warm White	2700K	320	68	G	
	WW-FLS103T53FW120B-(WCP)-UR-EP						Warm White	3000K	330	70	G	
	WW-FLS103T53FN120B-(WCP)-UR-EP						Natural White	4000K	360	76	G	
WW-FLS103T53FS120B-(WCP)-UR-EP	Standard White	6000K	360	76	G							
E 65	WW-FLS103T53FX120F-(WCP)-HR-EP	/	/	/	4.08	4.89	RED	625-635nm	102	26	/	DC 24V
	WW-FLS103T53FX120F-(WCP)-HR-EP	/	/	/	4.58	5.49	GREEN	515-525nm	310	68	/	
	WW-FLS103T53FX120F-(WCP)-HR-EP	/	/	/	4.48	5.37	BLUE	465-475nm	84	19	/	
	WW-FLS103T53FW120F-(WCP)-HR-EP	80	82	96	4.74	5.21	Warm White	2500K	366	77.2	G	
	WW-FLS103T53FW120F-(WCP)-HR-EP						Warm White	2700K	376	79.3	G	
	WW-FLS103T53FW120F-(WCP)-HR-EP						Warm White	3000K	376	79.3	G	
	WW-FLS103T53FN120F-(WCP)-HR-EP						Natural White	4000K	416	87.8	F	
WW-FLS103T53FS120F-(WCP)-HR-EP	Standard White	6000K	422	89.0	F							
E 65	WW-FLS103T53FX120F-(WCP)-UR-EP	/	/	/	4.08	4.89	RED	625-635nm	102	26	/	DC 24V
	WW-FLS103T53FX120F-(WCP)-UR-EP	/	/	/	4.58	5.49	GREEN	515-525nm	310	68	/	
	WW-FLS103T53FX120F-(WCP)-UR-EP	/	/	/	4.48	5.37	BLUE	465-475nm	84	19	/	
	WW-FLS103T53FW120F-(WCP)-UR-EP	90	90	100	4.74	5.21	Warm White	2500K	304	64.1	G	
	WW-FLS103T53FW120F-(WCP)-UR-EP						Warm White	2700K	316	66.7	G	
	WW-FLS103T53FW120F-(WCP)-UR-EP						Warm White	3000K	324	68.4	G	
	WW-FLS103T53FN120F-(WCP)-UR-EP						Natural White	4000K	348	73.4	G	
WW-FLS103T53FS120F-(WCP)-UR-EP	Standard White	6000K	348	73.4	G							

## Remarks:

- \*The above color temperature is the color temperature of LED source.

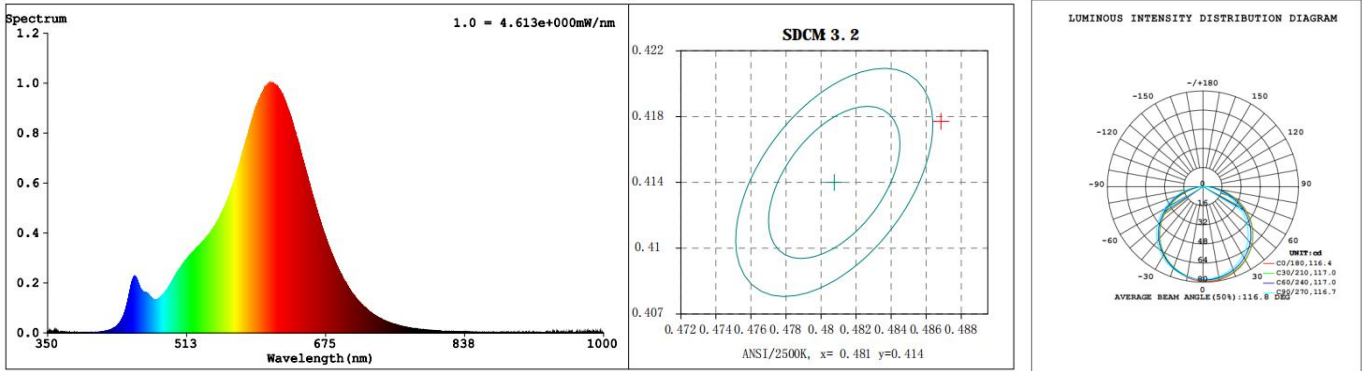
## Test condition of above technical data:

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

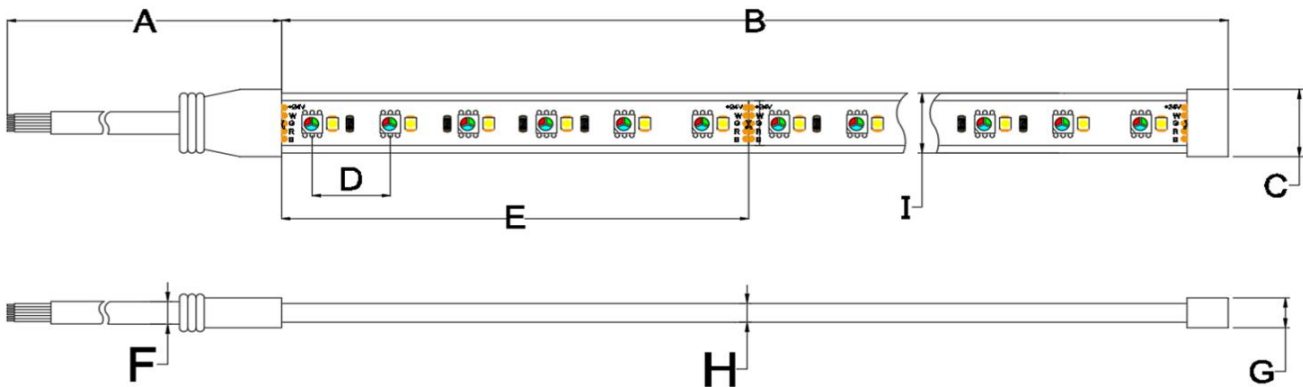
## ErP Note:

- 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.
- The tolerance range of Power and Luminous Flux is  $\pm 20\%$  ( RGB Light ) (subject to the manufacturer's instrument test).

### Optical Test Diagram



### Dimension Drawing

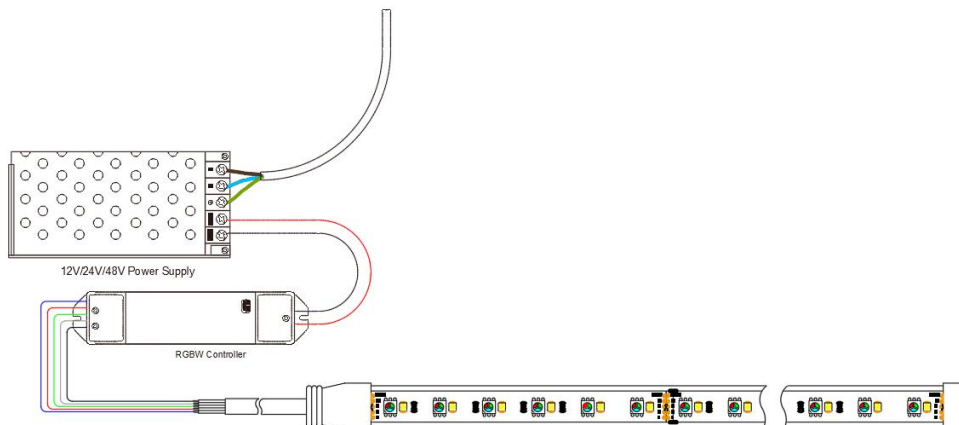


IP Grade	A Cable Length	B Strip length	C Cap width	D Distance of LEDs	E Cutting unit length	F cable diameter	G Cap thickness	H Strip thickness	I Strip width
B 20	300±10mm	5000±50mm	/	27.78±0.2mm	166.67±0.2mm	6±0.2mm	/	2.1±0.5mm	12±0.5mm
	11.81±0.39in	196.85±1.97in	/	1.09±0.01in	6.56±0.01in	0.24±0.01in	/	0.083±0.02in	0.47±0.02in
F 65	300±10mm	5020±50mm	16.5±0.5mm	27.78±0.2mm	166.67±0.2mm	6±0.2mm	6±0.5mm	4.0±0.5mm	14±0.5mm
	11.81±0.39in	197.64±1.97in	0.65±0.02in	1.09±0.01in	6.56±0.01in	0.24±0.01in	0.24±0.02in	0.16±0.02in	0.55±0.02in


**Remarks:**

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




## Circuit Diagram



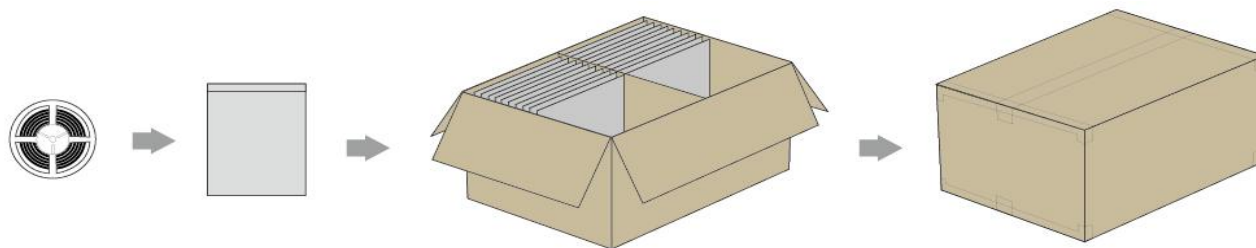
## Standard Accessories

IP Grade	Category	Description	Picture	Part No.	Application
B 20	/	/	/	/	/
F 65	Installation Accessories	Installation Buckle+Screws		WW-FLS102JJA-MC	Waterproof strip

## Optional Accessories

IP Grade	Category	Description	Picture	Part No.	Application
B 20	Strip to strip Connector	2PIN Strip to strip Connector		WW-FLS201B-2FS5(12MM)	≤84LEDs/M
	Strip to strip Connector	2PIN Strip to strip Connector		WW-FLS201B-2DD5(12MM)	≤84LEDs/M
	Strip to strip Connector	2PIN Strip to strip Connector		WW-FLS201B-2FD5(12MM)	≤84LEDs/M

## 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			
<b>B 20</b>	250*270*0.14mm	/	/	440*400 *260mm	50	5.2 KG ±10%	9.15 KG ±10%	0.045m³
	9.84*10.63*0.0055 in	/	/	17.32*15.75 *10.24 in	50	11.45 Lbs ±10%	20.15 Lbs ±10%	1.62ft³
<b>F 65</b>	250*270*0.14mm	/	/	440*400 *260mm	36	9.14 KG ±10%	12.35 KG ±10%	0.045m³
	9.84*10.63*0.0055 in	/	/	17.32*15.75 *10.24 in	36	20.13 Lbs ±10%	27.2 Lbs ±10%	1.62ft³

















**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	-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.**