

# Product Specification

## SMD LV Strip

### PRO 2835 24V 160LEDs/M

### Single color

WW-FLS102T23XW160X-24(WCP)-XR-HQ6-CV-HE  
&  
WW-FLS102T23XW160X-24(WCP)-XR-HQ6-CV-HE-EP

Apply to ERP Regulation (EU) 2019/2020



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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 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): 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>• EN61547:2023</li> <li>• EN60598-1:2021</li> <li>• EN60598-2-21</li> <li>• EN62493:2015</li> <li>• EN62471:2008</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
	5 Years Warranty	5 Years Warranty	5 Years Warranty

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WW-FLS102T23XW160X-24(WCP)-XR-HQ6-CV-HE

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-FLS102T23XW160B-24(WCP)-HR-HQ6-CV-HE	80	82	96	13.09	14.4	Warm White	2600-2900K	/	1910	DC24V
							Warm White	2900-3200K	/	1960	
							Natural White	3700-4250K	/	2120	
							Standard White	5700-6500K	/	2000	
	WW-FLS102T23XW160B-24(WCP)-UR-HQ6-CV-HE	90	90	100	13.09	14.4	Warm White	2600-2900K	/	1610	DC24V
							Warm White	2900-3200K	/	1670	
							Natural White	3700-4250K	/	1730	
							Standard White	5700-6500K	/	1800	
F 65	WW-FLS102T23XW160F-24(WCP)-HR-HQ6-CV-HE	80	82	96	13.09	14.4	Warm White	2600-2900K	/	1830	DC24V
							Warm White	2900-3200K	/	1880	
							Natural White	3700-4250K	/	2030	
							Standard White	5700-6500K	/	1920	
	WW-FLS102T23XW160F-24(WCP)-UR-HQ6-CV-HE	90	90	100	13.09	14.4	Warm White	2600-2900K	/	1540	DC24V
							Warm White	2900-3200K	/	1600	
							Natural White	3700-4250K	/	1660	
							Standard White	5700-6500K	/	1720	
R 67	WW-FLS102T23XW160R-24(WCP)-HR-HQ6-CV-HE	80	82	96	13.09	14.4	Warm White	2600-2900K	/	1810	DC24V
							Warm White	2900-3200K	/	1860	
							Natural White	3700-4250K	/	2010	
							Standard White	5700-6500K	/	1900	
	WW-FLS102T23XW160R-24(WCP)-UR-HQ6-CV-HE	90	90	100	13.09	14.4	Warm White	2600-2900K	/	1530	DC24V
							Warm White	2900-3200K	/	1580	
							Natural White	3700-4250K	/	1640	
							Standard White	5700-6500K	/	1710	

Remarks:

- \*The above color temperature is the color temperature of LED source.
- 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-FLS102T23XW160X-24(WCP)-XR-HQ6-CV-HE-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-FLS102T23XW160B-24(WCP)-HR-HQ6-CV-HE-EP	80	82	96	13.8	15.18	Warm White	2700K	2081	151	D	DC 24V
							Warm White	3000K	2178	158	D	
							Natural White	4000K	2318	168	C	
							Standard White	6000K	2221	161	C	
E 20	WW-FLS102T23XW160B-24(WCP)-UR-HQ6-CV-HE-EP	90	90	100	13.8	15.18	Warm White	2700K	1768	128	E	DC 24V
							Warm White	3000K	1854	134	E	
							Natural White	4000K	1908	138	D	
							Standard White	6000K	1962	142	D	
F 65	WW-FLS102T23XW160F-24(WCP)-HR-HQ6-CV-HE-EP	80	82	96	13.8	15.18	Warm White	2700K	1994	145	D	DC 24V
							Warm White	3000K	2091	152	D	
							Natural White	4000K	2221	161	C	
							Standard White	6000K	2124	154	D	
F 65	WW-FLS102T23XW160F-24(WCP)-UR-HQ6-CV-HE-EP	90	90	100	13.8	15.18	Warm White	2700K	1692	123	E	DC 24V
							Warm White	3000K	1779	129	E	
							Natural White	4000K	1833	133	E	
							Standard White	6000K	1876	136	D	
R 67	WW-FLS102T23XW160R-24(WCP)-HR-HQ6-CV-HE-EP	80	82	96	13.8	15.18	Warm White	2700K	1973	143	D	DC 24V
							Warm White	3000K	2070	150	D	
							Natural White	4000K	2199	159	D	
							Standard White	6000K	2102	152	D	
R 67	WW-FLS102T23XW160R-24(WCP)-UR-HQ6-CV-HE-EP	90	90	100	13.8	15.18	Warm White	2700K	1682	122	E	DC 24V
							Warm White	3000K	1757	127	E	
							Natural White	4000K	1811	131	E	
							Standard White	6000K	1865	135	D	

Remarks:

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

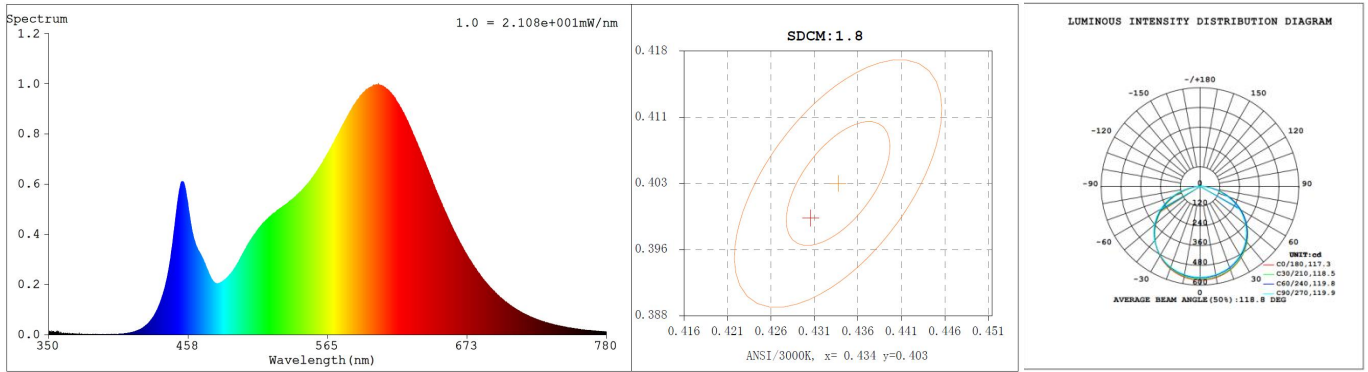
Test condition of above technical data:

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

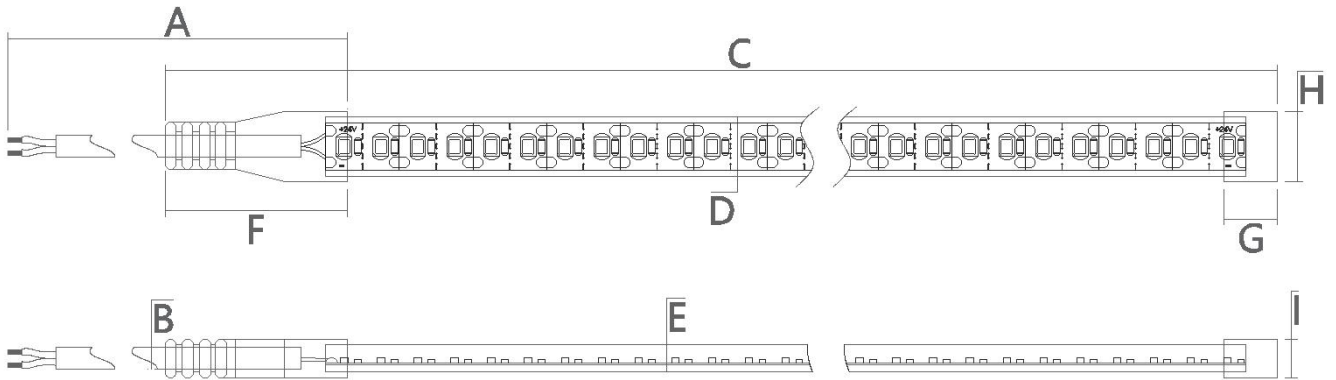
ErP Note:

- 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 ≤ 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

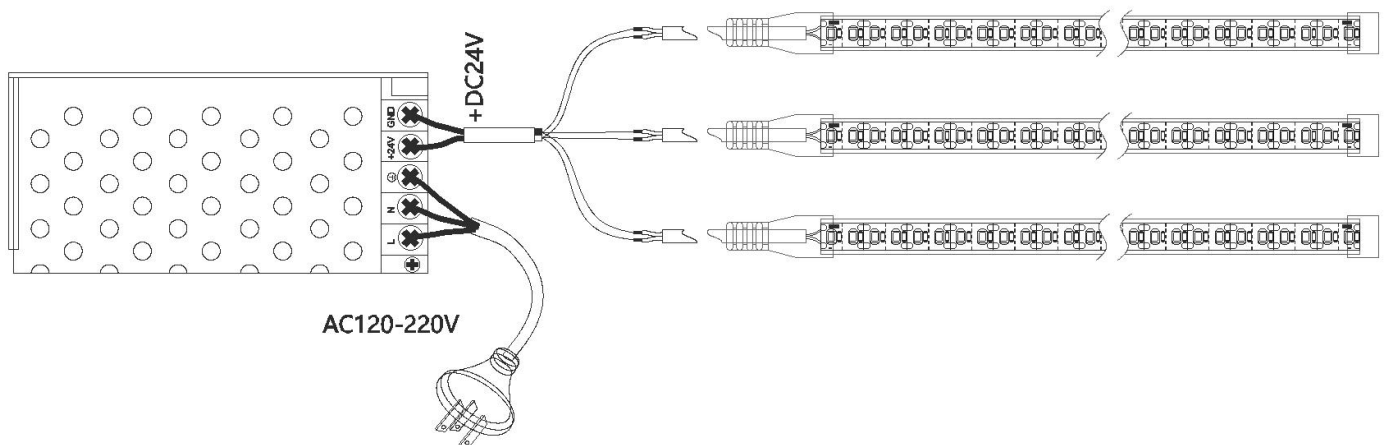


IP Grade	A Cable Length	B cable diameter	C Strip length	D Strip width	E Strip thickness	F Front cap length	G End cap length	H Cap width	I Cap thickness
<b>B 20</b>	300±10mm	Φ4.0±0.2mm	5000±50mm	8±0.5mm	1.2±0.5mm	/	/	/	/
	11.81±0.39in	0.16±0.01in	196.85±1.97in	0.32±0.02in	0.047±0.02in	/	/	/	/
<b>F 65</b>	300±10mm	Φ4.0±0.5mm	5020±50mm	10±0.5mm	4.0±0.5mm	22.5±0.5mm	10±0.5mm	12.5±0.5mm	6.0±0.5mm
	11.81±0.39in	0.16±0.02in	197.64±1.97in	0.39±0.02in	0.16±0.02in	0.89±0.02in	0.39±0.02in	0.49±0.02in	0.24±0.02in
<b>R 67</b>	300±10mm	Φ6.0±0.5mm	5020±50mm	10±0.5mm	5±0.25mm	30±2mm	11±0.5mm	12±0.5mm	7.0±0.5mm
	11.81±0.39in	0.236±0.02 in	197.64±1.97in	0.39±0.02in	0.20±0.01in	1.18±0.08in	0.43±0.02in	0.47±0.02in	0.28±0.02in





**Remarks:**

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

## Circuit Diagram



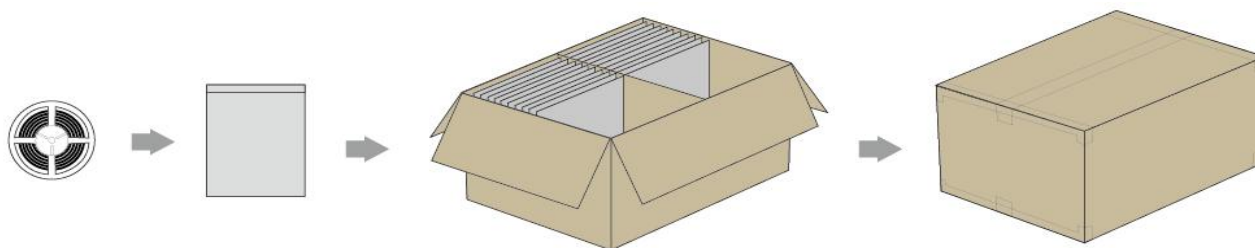
## Standard Accessories

IP Level	Category	Description	Picture	Part No.	Application
E 20	/	/	/	/	/
	/	/	/	/	/
F 65	Connection Accessories	Front cap+End cap+Cable		WW-FLS102F-CW (10mm)	8mm Type R
	Installation Accessories	Installation Buckle+Screws		WW-FLS102JJA-MC	Waterproof strip
R 67	Connection Accessories	Front cap+End cap+Cable		WW-FLS102F-CW (10mm)	8mm Type R
	Installation Accessories	Installation Buckle+Screws		WW-FLS102JJA-MC	Waterproof strip

## Optional Accessories

IP Level	Category	Description	Picture	Part No.	Density
E 20	Strip to Strip Connector	2PIN Strip to Strip Connector		WW-FLS102B-MUCN-08	COB
	Strip to Strip Connector	2PIN Strip to Strip Connector		WW-F2B-POP2T-08(COB)	COB
	Strip to Wire Connector	2PIN Strip to Wire Connector		WW-F2B-OWP2T-08(COB)	COB
	Strip to Wire Connector	2PIN Strip to Wire Connector		WW-F2B-PWP2T-08(COB)	COB
	L-shape Strip to strip Connector	2PIN L-shape Strip to strip Connector		WW-FLS102B-3DD2G-L(8MM)	COB
	T-shape Strip to wire Connector	2PIN T-shape Strip to wire Connector		WW-FLS102B-3DD2G-T(8MM)	COB
	T-shape Strip to strip Connector	2PIN T-shape Strip to strip Connector		WW-FLS102B-3FS2G-T(8MM)	COB
	+ -shape Strip to strip Connector	2PIN + -shape Strip to strip Connector		WW-FLS102B-3DD2G-X(8MM)	COB
F 65	/	/	/	/	/
	/	/	/	/	/
R 67	/	/	/	/	/
	/	/	/	/	/

## 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>E 20</b>	220*250*0.14mm	/	/	440*400 *260mm	60	4.20 KG ±10%	7.89 KG ±10%	0.04576 m³
	8.66*9.84*0.0056 in	/	/	17.32*15.75 *10.24 in	60	9.26 Lbs ±10%	17.39 Lbs±10%	1.616 ft³
<b>F 65</b>	250*270*0.14mm	/	/	440*400 *260mm	40	8.68 KG ±10%	11.71 KG±10%	0.04576 m³
	9.84*10.63*0.0056 in	/	/	17.32*15.75 *10.24 in	40	19.14 Lbs ±10%	25.82 Lbs±10%	1.616 ft³
<b>R 67</b>	270*300*0.14mm	/	/	520*370*300mm	36	10.12 KG ±10%	15.41 KG ±10%	0.05772 m³
	10.63*11.81*0.0055 in	/	/	20.47*14.57*11.81in	36	22.31 Lbs ±10%	33.97 Lbs ±10%	0.04576 m³


### 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.**