

# Product Specification

## SMD LV Strip

### PRO 2835 24V 140LEDs/M

### Single color

WW-FLS102T28XW140X-24(WCP)-XR-ME-RTR  
&  
WW-FLS102T28XW140X-24(WCP)-XR-ME-EP-RTR

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>• PCB board connection without soldering</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: <math>\Phi</math>60mm</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-FLS102T28XW140X-24(WCP)-XR-ME-RTR**

**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
<b>B 20</b>	WW-FLS102T28XW140B-24(WCP)-HR-ME-RTR	80	82	96	13.6	14.96	Warm White	2600-2900K	/	1650	DC24V
							Warm White	2900-3200K	/	1700	
							Natural White	3700-4250K	/	1790	
							Standard White	5700-6500K	/	1720	
	WW-FLS102T28XW140B-24(WCP)-UR-ME-RTR	93	90	100	13.6	14.96	Warm White	2600-2900K	/	1370	DC24V
							Warm White	2900-3200K	/	1440	
							Natural White	3700-4250K	/	1480	
							Standard White	5700-6500K	/	1520	
<b>F 65</b>	WW-FLS102T28XW140F-24(WCP)-HR-ME-RTR	80	82	96	13.6	14.96	Warm White	2600-2900K	/	1580	DC24V
							Warm White	2900-3200K	/	1630	
							Natural White	3700-4250K	/	1710	
							Standard White	5700-6500K	/	1650	
	WW-FLS102T28XW140F-24(WCP)-UR-ME-RTR	93	90	100	13.6	14.96	Warm White	2600-2900K	/	1310	DC24V
							Warm White	2900-3200K	/	1380	
							Natural White	3700-4250K	/	1420	
							Standard White	5700-6500K	/	1450	
<b>R 67</b>	WW-FLS102T28XW140R-24(WCP)-HR-ME-RTR	80	82	96	13.6	14.96	Warm White	2600-2900K	/	1560	DC24V
							Warm White	2900-3200K	/	1610	
							Natural White	3700-4250K	/	1700	
							Standard White	5700-6500K	/	1630	
	WW-FLS102T28XW140R-24(WCP)-UR-ME-RTR	93	90	100	13.6	14.96	Warm White	2600-2900K	/	1300	DC24V
							Warm White	2900-3200K	/	1360	
							Natural White	3700-4250K	/	1400	
							Standard White	5700-6500K	/	1440	

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-FLS102T28XW140X-24(WCP)-XR-ME-EP-RTR

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-FLS102T28XW140B-24(WCP)-HR-ME-EP-RTR	80	82	96	14	15.4	Warm White	2700K	1670	119	E	DC 24V
							Warm White	3000K	1720	123	E	
							Natural White	4000K	1810	129	E	
							Standard White	6000K	1740	124	E	
E 20	WW-FLS102T28XW140B-24(WCP)-UR-ME-EP-RTR	93	90	100	14	15.4	Warm White	2700K	1390	99	F	DC 24V
							Warm White	3000K	1460	104	F	
							Natural White	4000K	1500	107	F	
							Standard White	6000K	1540	110	E	
F 65	WW-FLS102T28XW140F-24(WCP)-HR-ME-EP-RTR	80	82	96	14	15.4	Warm White	2700K	1600	114	E	DC 24V
							Warm White	3000K	1650	118	E	
							Natural White	4000K	1730	124	E	
							Standard White	6000K	1670	119	E	
F 65	WW-FLS102T28XW140F-24(WCP)-UR-ME-EP-RTR	93	90	100	14	15.4	Warm White	2700K	1330	95	F	DC 24V
							Warm White	3000K	1400	100	F	
							Natural White	4000K	1440	103	F	
							Standard White	6000K	1470	105	F	
R 67	WW-FLS102T28XW140R-24(WCP)-HR-ME-EP-RTR	80	82	96	14	15.4	Warm White	2700K	1580	113	E	DC 24V
							Warm White	3000K	1630	116	E	
							Natural White	4000K	1710	122	E	
							Standard White	6000K	1650	118	E	
R 67	WW-FLS102T28XW140R-24(WCP)-UR-ME-EP-RTR	93	90	100	14	15.4	Warm White	2700K	1320	94	F	DC 24V
							Warm White	3000K	1380	99	F	
							Natural White	4000K	1420	101	F	
							Standard White	6000K	1460	104	F	

Remarks:

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

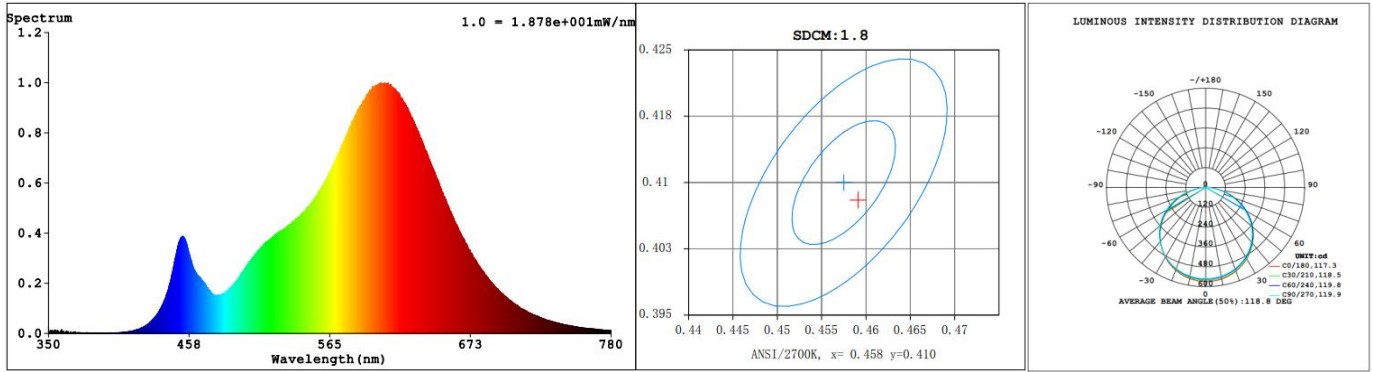
Test condition of above technical data:

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

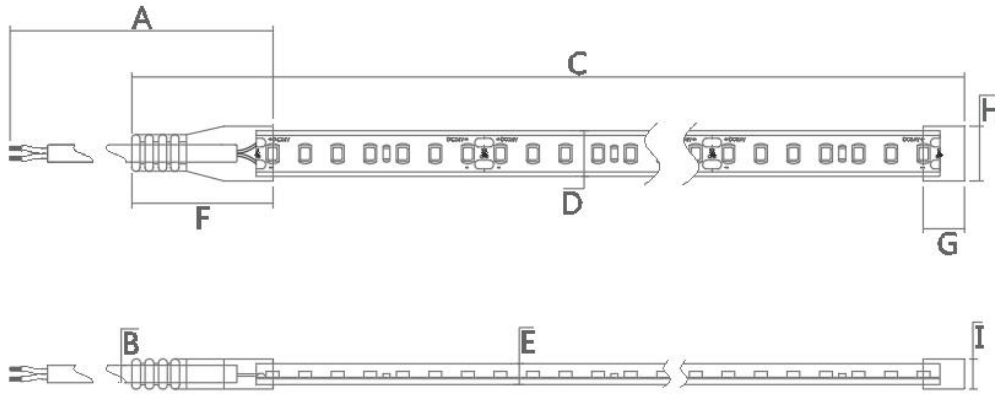
ErP Note:

- 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.

Optical Test Diagram



## Dimension Drawing

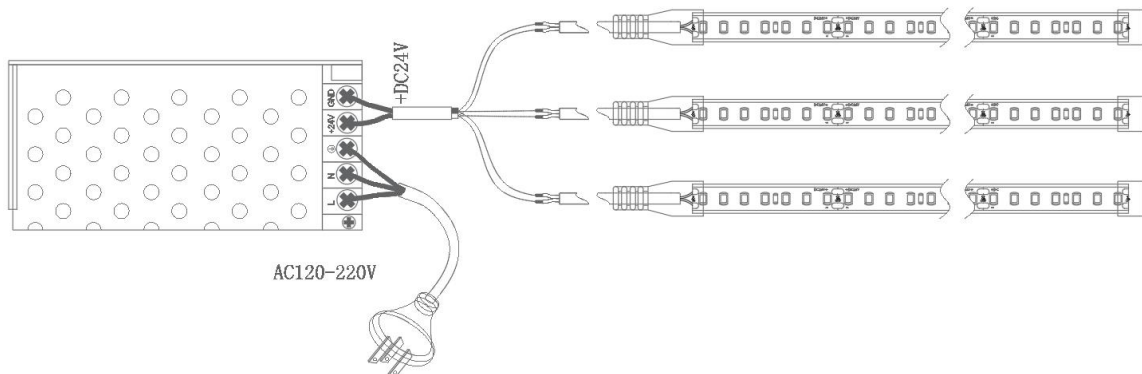


IP Grade	A	B	C	D	E	F	G	H	I
	Cable Length	cable diameter	Strip length	Strip width	Strip thickness	Front cap length	End cap length	Cap width	Cap thickness
B 20	300±10mm	Φ4.0±0.2mm	5000±50mm	8±0.5mm	1.2±0.5mm	/	/	/	/
	11.81±0.39in	0.16±0.01in	196.85±1.97in	0.32±0.02in	0.047±0.02in	/	/	/	/
E 65	300±10mm	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
R 67	300±10mm	Φ6±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**

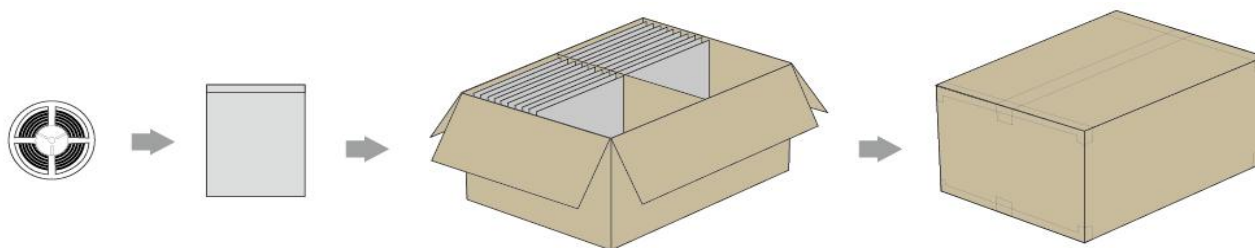
IP Level	Category	Description	Picture	Part No.	Application
E 20	/	/	/	/	/
	/	/	/	/	/
F 65	Connection Accessories	Front cap+End cap+Cable		WW-FLS102F-CW (10mm)	8mm Type R
	Installation Accessories	Installation Buckle+Screws		WW-FLS102JJA-MC	Waterproof strip
R 67	Connection Accessories	Front cap+End cap+Cable		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
B 20	Strip to Strip Connector	2PIN Strip to Strip Connector		WW-F2B-POP20-08	COB
	Strip to Wire Connector	2PIN Strip to Wire Connector		WW-F2B-POW20-08	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			
E 20	220*250*0.14mm	/	/	440*400 *260mm	60	3.48KG ±10%	7.28KG ±10%	0.05m³
	8.66*9.84*0.0055 in	/	/	17.32*15.75 *10.24 in	60	7.67Lbs ±10%	16.054Lbs±10%	1.62ft³
F 65	250*270*0.14mm	/	/	440*400 *260mm	40	6.72KG ±10%	10.45KG±10%	0.05m³
	9.84*10.63*0.0056 in	/	/	17.32*15.75 *10.24 in	40	14.82Lbs ±10%	23.04Lbs±10%	1.62ft³
R 67	270*300*0.14mm	/	/	520*370*300mm	36	8.35KG ±10%	14.16KG±10%	0.06m³
	10.63*11.81*0.0055 in	/	/	20.47*14.57*11.81in	36	18.41Lbs ±10%	31.22Lbs±10%	2.04ft³


### 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.**