

# **Product Specification**

# **Neon Flex Vertical Bending Single Color Series** (Type TC)

WW-FLS102T28XX140TC-24(WCP)-1000-XR-100-TH-IC















HK Office:

Unit 1901, 19th Floor, NanYang Plaza, No. 57 Hung To Road

Innovate the world . Light up your imagination

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



#### **Product Features**

- High quality FPC
- Dilux self-encapsulated LED
- Light source lifetime:50K hours
- Vertical bending
- High quality silicone material
- IP67&IP65 waterproof
- Min.Bending Diameter:Φ140mm















Lighting Technology: LED

DLS or NDLS: NDLS MLS or NMLS: NMLS

Type of light source: SMD2835

Energy consumption KW/1000h/0.5M:4.8

Beam angle: 120°

Survival factor ( Annex V/EU2019-2020 ) :90%



EMC

- EN55015:2013+A1
- EN61547:2009
- EN60598-1:2015
- EN60598-2-20:2015
- EN62493:2015
- EN62471:2008





## **Parameters**

#### Test condition:

- Surrounding temperature: 26℃.
- Test while turning on.

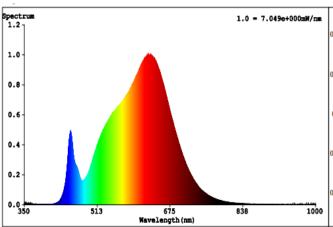
Neon Flex									
Neon Flex Model No.	CRI (Ra)	Rf	Rg	Typ. Power (W/M)	Max. Power (W/M)	Color	Neon Flex Color Temp.(K) Wavelength(nm)	Typ. Luminou s Flux LM/M(39. 37in)	Rated voltage
WW-FLS102T28WW140TC-24(WCP)-HR-SE-100-TH-IC						Warm White	2500K	870	DC24V
WW-FLS102T28WW140TC-24(WCP)-HR-SE-100-TH-IC						Warm White	2700K	870	DC24V
WW-FLS102T28WW140TC-24(WCP)-HR-SE-100-TH-IC	≥80	82	96	9.6	10.5	Warm White	3000K	900	DC24V
WW-FLS102T28NW140TC-24(WCP)-HR-SE-100-TH-IC						Natural White	4000K	900	DC24V
WW-FLS102T28SW140TC-24(WCP)-HR-SE-100-TH-IC						Standard White	6000K	900	DC24V
WW-FLS102T28WW140TC-24(WCP)-UR-SE-100-TH-IC						Warm White	2500K	740	DC24V
WW-FLS102T28WW140TC-24(WCP)-UR-SE-100-TH-IC					10.5	Warm White	2700K	740	DC24V
WW-FLS102T28WW140TC-24(WCP)-UR-SE-100-TH-IC	≥90	90	100	9.6		Warm White	3000K	765	DC24V
WW-FLS102T28NW140TC-24(WCP)-UR-SE-100-TH-IC						Natural White	4000K	765	DC24V
WW-FLS102T28SW140TC-24(WCP)-UR-SE-100-TH-IC						Standard White	6000K	765	DC24V
WW-FLS102T28SR140TC-24(WCP)-SE-100-TH-IC						Red	620-630nm	200	DC24V
WW-FLS102T28SG140TC-24(WCP)-SE-100-TH-IC	\	00	06		10.5	Green	515-525nm	780	DC24V
WW-FLS102T28SB140TC-24(WCP)-SE-100-TH-IC	- ≥80	82	96	9.6	10.5	Blue	465-475nm	155	DC24V
WW-FLS102T28AY140TC-24(WCP)-SE-100-TH-IC						Yellow	585-595nm	175	DC24V

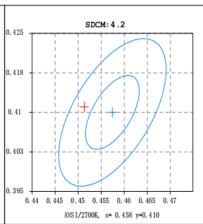
- SDCM for light source: ≤6 (alternative ≤3).
- $\bullet$  The typ. Luminous flux tolerance range is  $\pm 10\%$  (subject to the manufacturer's instrument test).

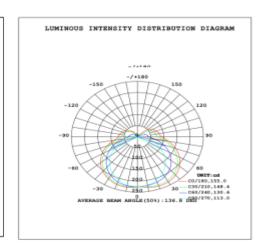


## Optical Test Diagram

## **Neon Flex**

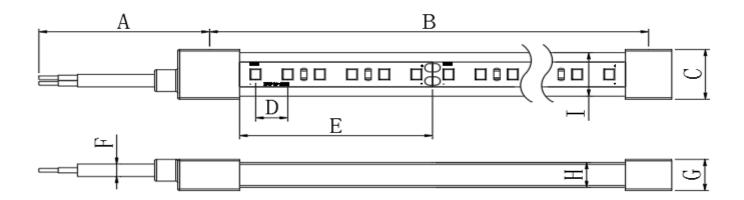








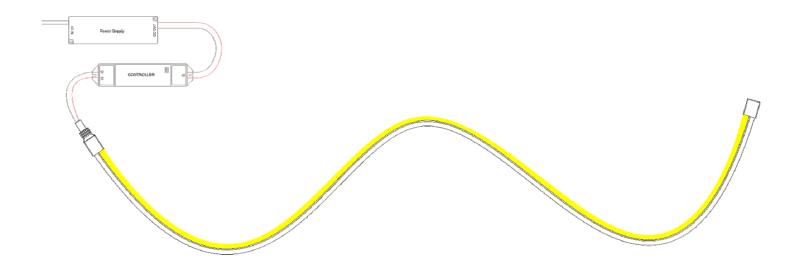
## **Dimension Drawing**



A	B	C	<b>D</b> Distance of LEDS	E	F	G	H	l
Cable Length	Strip length	Cap width		Cutting unit	Cable diameter	Cap thickness	Strip thickness	Strip width
300±10mm	10000±50mm	17±0.5mm	7.14±0.2mm	50±0.2mm	6.0±0.2mm	12±0.5mm	10±0.5mm	10±0.5mm



# Circuit Diagram





# Front & end caps dimensions

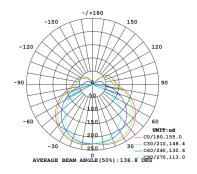
Cable Types	Model No.	Image	Dimension	IP Rating
			31 - 31 - 27 - 27 - 30 - 1 - 27 - 27 - 27 - 27 - 27 - 27 - 27	- IP65
Double Injection	WW-FLS102T28XX140TC-24(WCP)-XX-SE-100-TH		30 - 1.2. 1.2. 1.2. 1.2. 1.2. 1.2. 1.2. 1.	



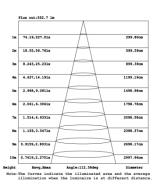


## Optical Parameters

#### Distribution Curve Flux

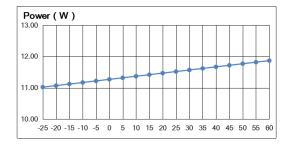


#### Illuminance

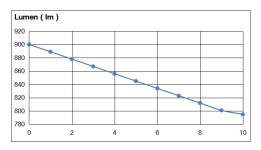


## Figures of typical characteristics

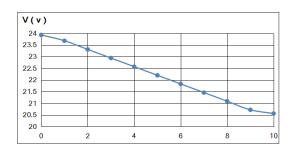
#### Relation of Working Temperature and Power



#### Relation of luminous flux and strip length (Only suitable for white series)



#### Relation of operating voltage and strip length





## **Standard Accessories**

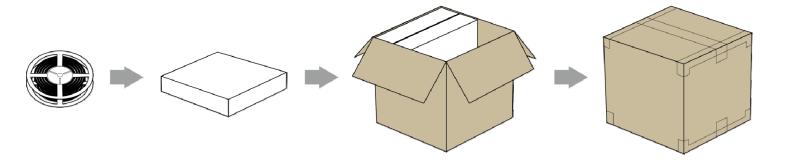
Image	Part No.	Description
	WW-PC1212-0025	Installation accessories set (PC mounting clips, screws)

## **Optional Accessories**

Image	Part No.	Description
	WW-AP1211-200	L2000*W11.7*H10.5mm
	WW-LG1110-500	TC-type 10mm moldable profile



## **Packaging Diagram**



## Packaging Information

Ingress		Inner carton		Outer carton			0.111	Outer carton
protection rating	White box size	Size	Reel/ctn	Size	Reel/ctn	N.W	G.W	volume
	345*330*61MM	1	1	362*265*350MM	4	5.94kg	7.757kg	0.05366m³
IP65	13.58*12.99*2.4 in	1	/	14.25*10.43*13.78 in	4	13.1Lb	17.1Lb	1.185ft3

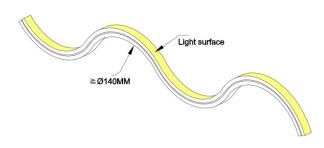
#### Remarks :

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

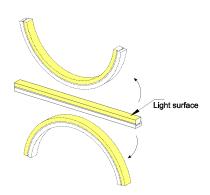


## **Instruction of Removal Light Source**

1.Do not bend smaller than allowed minimum bending diameter

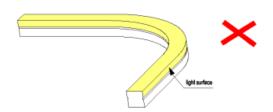


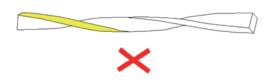
2. The neon strip can only be bent laterally (Along the FPC inside).



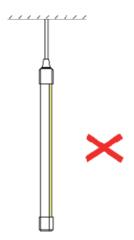
3.Don't bend the LED strip Horizontal, it will damage the circuit inside and cause product function failure.

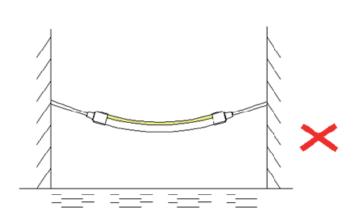
4.Don't twist the LED strip, it will damage the circuit inside and cause product function failure.





5 Do not hang or suspend the Neon strip in the air.







6、 Press the neon flex into mounted aluminum profile in one direction (Angle between strip and aluminum<15 degrees).



7. Incorrect installation like below pictures could lead to product function failure.





### **Cutting Instruction**

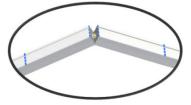
- The cutting line logo on the Neon strip marked by calculated dimension, it has a little bit deviation between internal cutting line marked on the PCB surface;
- Please follow the cutting guidance as below:

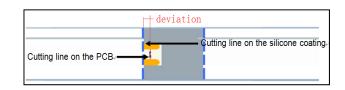
Step 1: Fine the cutting line on the silicone coating, slice the silicone coating vertically by knife along the cutting line, but do not hurt the PCB





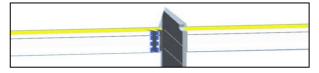
Step 2: Split the broken silicone coating and observe the deviation between "Cutting line on the PCB" and "Cutting line on the silicone coating side"





Step 3: Find the cutting line on the PCB, adjust to the exact cutting location and slice the silicone coating again.





Step 4: Finally, use scissor to separate the Neon Flex along the cutting line on the PC





## **A** Cautions

















Do not winding





it is working



Do not cut when 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





IP Level will change



and crash



Connected to power supply every 5 meters



Power supply must be connected to ground(GND)



The minumum bending





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..

<sup>\*\*</sup> If you do not follow the above "Cautions" to operate and result in damaging the product, the factory will not accept maintenance and return.

<sup>\*\*</sup>The right of final interpretation is owned by Dilux.

<sup>\*</sup>Copyright@2021 Dilux Lighting Ltd. All Rights Reserved.