

Data Sheet
LED NEON FLEX
Outdoor Flex LED
(FN9/R65/220-FN9/Y65/22-
FN9/6565/220-FN9/2765/220
FN9/B65/220-FN9/G65/220)



General Informations:

Features:

- AC 220V
- High brightness low power consumption
- LED type: 2835 SMD LED
- LED quantity: 120 Led /m
- Power: 12.6 W
- Size: 8.5*16*9 mm
- Packing: 50m/roll 16kg/ctn
- 1m/cut
- Max link 50meters with one power cord

Application :

- Business premises lighting
- Exhibition lighting
- Home Lighting
- Office lighting
- Courtyard lamp, Landscape lamp, Decoration lamp for outdoor lighting

Product Features:

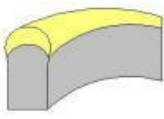
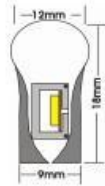


1. Milky ,Crystal and Colored PVC jacket design as customer ordered.
2. Dome,continuous and uniform illumination,no LED dot or dark spot
3. Extremely flexible
4. 100% waterproof,100% breakage free,Durability,Impact Resistance ,Weather Resistance
5. Low voltage or line voltage options
6. Minimal heat output(safe to the touch)
7. Longer Life
8. Easy to install (cuttable n location),Extremely low maintenance costs
9. 70% less energy consumption of glass neon.
10. Available in 7 fixed colors,RGB and digital RGB colors

Electrical and Flux Characteristics

Table 1: Flux Characteristics

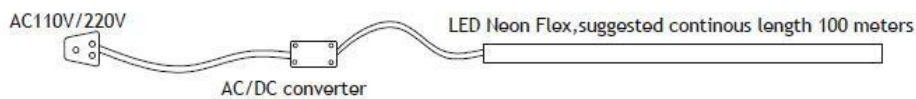
Code	Number of LEDs (M)	Case	Color	Wavelength	Flux	Power
FN9/R65/220	120	SMD 2835	Red	621,8 nm	89,84 lm/m	9,8W
FN9/Y65/220	120	SMD 2835	Yellow	589,6 nm	220,71 lm/m	10,4W
FN9/B65/220	120	SMD 2835	Blue	462,6 nm	45,71 lm/m	9,9W
FN9/G65/220	120	SMD 2835	Green	519,1 nm	147,91 lm/m	10,2W
FN9/6565/220	120	SMD 2835	Cold White	6045 K	244,5 lm/m	10,6 W
FN9/2765/220	120	SMD 2835	Warm White	2828 K	242,2 lm/m	10,4W

Lamp Structurer

Structurer		Pic for ref.,	
3D 	2D 		

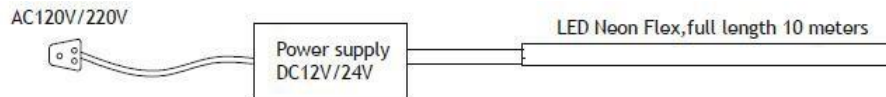
Wiring Diagram

a. high voltage of 110V/220V



(*Suggest 50meter in one line as max in real project)

b. low voltage of 12V/24V











(*As considering Voltage drop,suuggest 5meter in one line for DC12V,10meters should give current from two size;10meter in one line for DC24V,20meters should give current from two size).

Cutting & Installation

A simple assembly process applied to all of LED Neon Flex. These instructions work for both interior and exterior applications. All you will need are a few basic tools and the LED Neon Flex of your choice

1:Basic Tools

Having a few basic tools readily available will enable you to quickly and easily assemble Flex Neon. We suggest using a set of anvil or pruning shears to ensure a straight clean cut, a pair of blunt or flat jaw pliers, and a heat gun to shrink wrap the ends and connectors

	
Pruning shear	Heat gun
	
Tape Measure	Screw Driver
	
Silicone sealant glue	Cutter
	
Plier	Pick/awl tool

2. Making the cut and installing the power cord



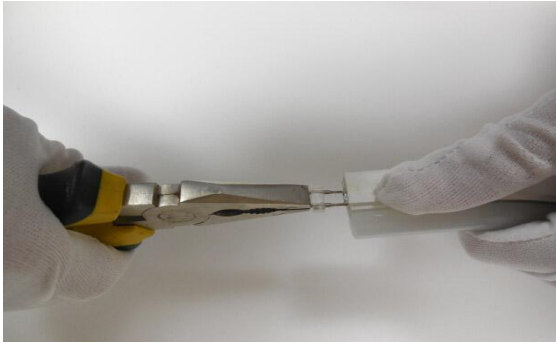
1. Following the cutting mark showed in picture



2. Cut at cutting mark using heavy scissors (Recommended using garden pruning shears, hose cutters or box cutter). Be sure to cut the line square and not on an angle



3. Trim loose wires. Don't forget to trim any loose wires hanging out, flush to the PVC with sharp side cutters or scissors.



4. Using a pliers hold connecting pin and insert the pointed end of the electrical pin into the end of neon flex. The pin must be installed on the right side or it will not line up with the end cap on the power cord.



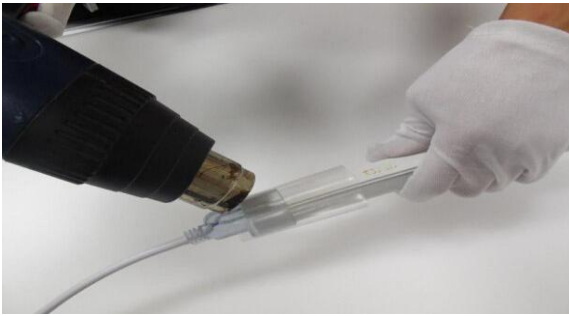
5. Using silicone sealant glue, seal the power cord cap



6. Aligning the pins with the receptacle holes in the power cord cap, gently push the power cord into place



7. Locate the heat shrink tube

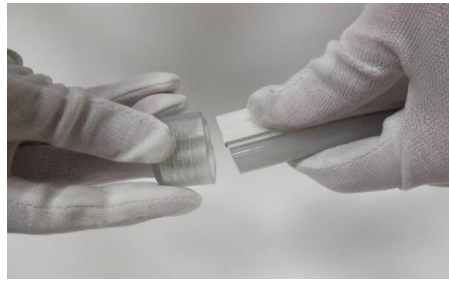


8. Using the heat gun, gently warm the heat shrink tube until it shrinks into its final resting place, after completed, seal around both ends of the shrink tube with silicone sealant glue.

3.Installing the end cap



1.Using silicone sealant glue,seal the end cap



2.Gently push the end cap onto the end of LED neon flex.Slide the end cap all the way into position where the LED neon flex touches the back portion of the end cap.



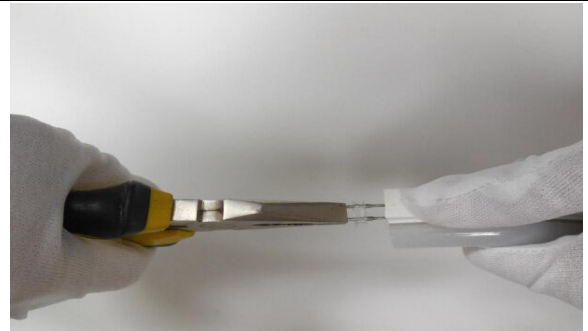
3.Locate the heat shrink tube and slide it onto the LED neon flex.Allow the heat shrink tube to extend past the free end of the end cap approximately 1/4 to 3/8 inch



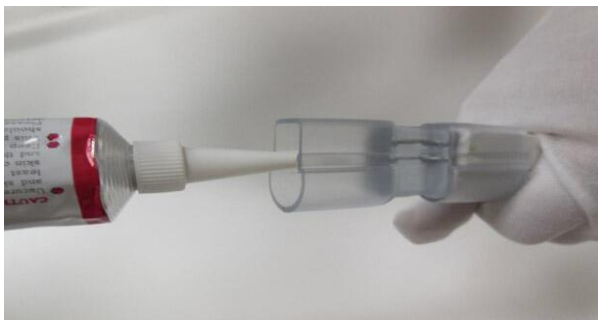
4.Usng the heat gun,gently heat the heat shrink tube until it is sealed into place.Seal both ends of the heat shrink tube with silicone sealant glue.This will ensure that the end cap is securely attached and the connection is impermeable to moisture.

4.Installing the splice

1.Using the pick/awl tool,gently spread both wires in the exposed end of the LED neon flex.This will allow for ease of inserting the connecting pin and ensures good contact between the pin and the wire,making for a solid electrical connection



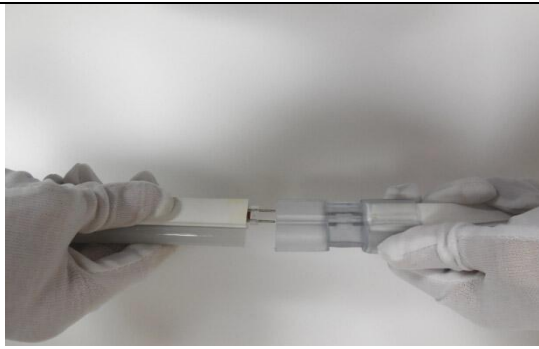
2.Position the connecting pin so as to insert into one selection of LED neon flex with pick/awl tool.Gently push the pin into the wires



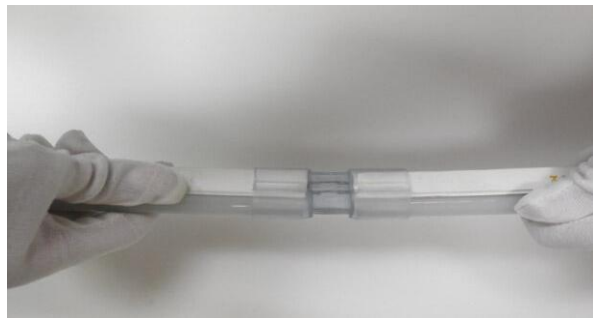
3. Using silicone sealant glue,seal the both ends of straight connector



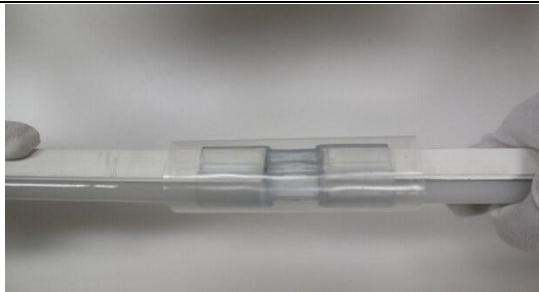
4. Gently push the straight connector onto the end of one selection of LED neon flex.Slide the straight connector all the way into position where the LED neon flex touches the back portion of the straight connector.



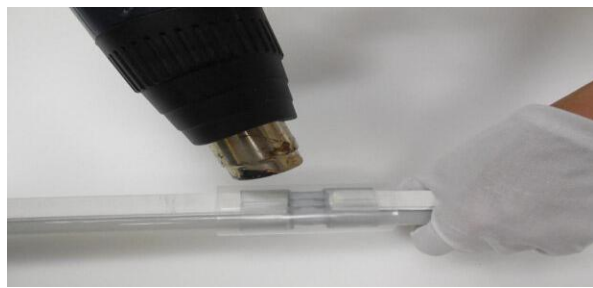
5. Same handling of connecting pin and straight connector for the other selection of LED neon flex



6. Illustration for completed connection of two selections of LED neon flex



7. Location the heat shrink tube to the joint, Allow the heat shrink tube to extend past the free two ends of the straight connector approximately 1/4 to 3/8 inch



8. Using the heat gun, gently heat the heat shrink tube until it is sealed into place. Seal both ends of the heat shrink tube with silicone sealant glue. This will ensure that the end cap is securely attached and the connection is impermeable to moisture.

Note: Allow time for silicone sealant glue to cure. It should be ready to handle after 30 minutes, and will cure completely within 24 hours depending upon the manufacturer

Safety Precautions

1. Do not over extend the min. & max. bend radius. See illustrations for bending
2. Although LED Neon Flex does not generate a great amount of heat, it is recommended that you do not cover or conceal it.
3. Do not puncture, cut, shorten or splice LED Neon Flex outside of the designated cutting marks.
4. Do not route LED Neon Flex through walls, doors, windows, or building structures.
5. Do not roll out LED Neon Flex on rough surfaces and over sharp corners. This will scratch the PVC optic
6. Do not use LED Neon Flex if outer PVC jacket is damaged, loose connections, or if the wire is visible without insulation
7. Do not secure LED Neon Flex with staples, nails, or like means that might damage the insulation or PVC material
8. Do not install LED Neon Flex on/in places where it is subject to continuous flexing
9. Do not operate/run LED Neon Flex in temperatures exceeding 45°C or 115F
10. Do not operate LED Neon Flex over the specified voltage or LED life degradation will be greatly increased
11. Do not leave any part of LED Neon Flex unsecured. Movement over time from weather can cause damage from continuous movement
12. All LED Neon Flex IP68 Rated connectors must be assembled properly to obtain rating
13. Do not reverse polarity when connecting from both ends. This will damage the internal PCB board. Always test connections with your multi-meter.
14. Do not energize LED Neon Flex in the reel package
15. LED Neon Flex can be cut only where marked. Look for “Indent marking” or “Dotted line” or “Scissor mark”. Cutting outside of the specified mark will damage the light
16. Do not cut while fixture is energized