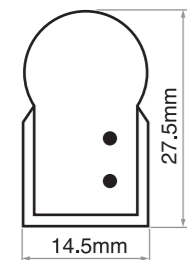


LED Neon Flex™ (Economical)

WARNING!
Serious legal action will be taken to protect our Intellectual Property and Patents against any and all infringing parties.

Cross Section



LED Neon Flex™ (Economical) is the latest version in its family developed by Neo-Neon to meet low cost requirements for specific market. Most of factors remain the same, such as cover material, copper wire, craftwork. Compared with Professional, it is much lower in cost, but accordingly it sacrifices in certain degree of brightness, quality assurance, illumination evenness and so on. Please contact us for details.

Comparison between Professional and Economical

Features	Professional	Economical	Notes
LED Type	Special Ultra Bright LED	Standard Brightness LED	Professional LED Neon Flex™ uses Superior Grade Ultra Bright LED's while the Economical offers quality Standard Brightness LED's
LED Spacing	1.27CM	1.5CM	
LED's /Uhit	See Unit Chart	See Unit Chart	
Unit Measurement	See Unit Chart	See Unit Chart	
LED Spec	(+/- 5nm)	+/- 10nm	Neo-Neon uses state of the art equipment to test each LED which enables us to ensure consistency of color (wavelength) and to offer multi-tier grades of products based upon the ability to select chips according to their tolerance to our standards.
PVC	Two Layer	Single Layer	The outer jacket if the LED Neon Flex is constructed of PVC and based on the two grades Professional and Economical either a double or single layer of PVC is applied. This has an effect on the optical enhancement of the LED color and light transmission efficiency.
Base Jacket	White PVC	None	The function of the White Base Jacket in the Professional Professional is to reflect "shape" the light that is emitting from the LED to redirect the light upward and outward to the surface of the product. Thus enhancing the actual and perceived brightness of the Professional.
Stability	High Stability	Average Stability	Stability of each grade is directly corresponding to the quality of the LED applied within each Grade. The Professional which uses the highest quality LED would therefore have enhanced stability over the Economical. However the quality of the Economical LED still conforms to Neo-Neon's minimum stability standards which are considered still higher than the general market standard.
MTBF (Lifetime)	Longer MTBF	Shorter MTBF	Lifetime is termed by the lighting industry as MTBF (Mean Time Between Failure) which is when 50% of tradition lamps fail. For LED we use Lumens Depreciaiton as it is relative to SSL (Solid State Lighting)
Lumens Depreciation	50,000 to 80,000 hours	40,000 to 60,000 hours	See LED Lifetime information below for a more indepth explanation of Lumens Depreciation
Color Consistency	Consistant	Some inconsistency's can occur	The consistency of the Economical can fluctuate due to the LED Spec standard of +/- 10nm and the single PVC layer process. The Professional offers the maximum consistency which is relative to its high standard.
Chromatic Aberrations	None	Yes	Chromatic Aberrations are inconsistencies in the color consistency that occur when wavelengths are not matched coupled with less diffusive materials such as in single layer PVC processing of the exterior jacket.
Percieved Brightness	High	Lower	Professional LED Neon-Flex has the highest perceived brightness due to all the factors listed in this chart. However, Economical has been engineered to provide a high brightness for the value. UV treatment effects cost very little and is incorporated into both to enhance both Professional and Economical's ability to be used in high UV areas such as areas exposed to direct sunlight.
UV Treatment	Yes	Yes	
Warranty	12 Months	6 Months	
AC Power Supply	Same	Same	See individual product data sheets for the specific load requirements.
Low Voltage		Different	The cut length of Economical has been adjusted so that the quantity of LEDs per unit and the power consumption matches so that the same power supplies can be used.
Available Colors	*Same	Same	* Warm White and Ultra Warm White are available only in Professional
Cost to Manufacture	Higher	Lower	
Pricing	Standard Market Value	Lower Prices	Based on the information provided in this table there is a clear and distinct difference between grades thus different price structures apply.



LED Neon Flex™ Professional and Economical

Specification	Professional	Economical	Color
Qty LED / Unit	120	100	Red
Unit (Meter)	1.52	1.5	Red
	120	100	Yellow
	1.52	1.5	Yellow
	120	100	Orange
	1.52	1.5	Orange
	72	60	Blue
	0.91	0.91	Blue
	72	60	Green
	0.91	0.91	Green
	72	50	White
	0.91	0.91	White
	72	Not Available	Pink
	0.91	Not Available	Pink
	72	Not Available	Warm
	0.91	Not Available	Warm