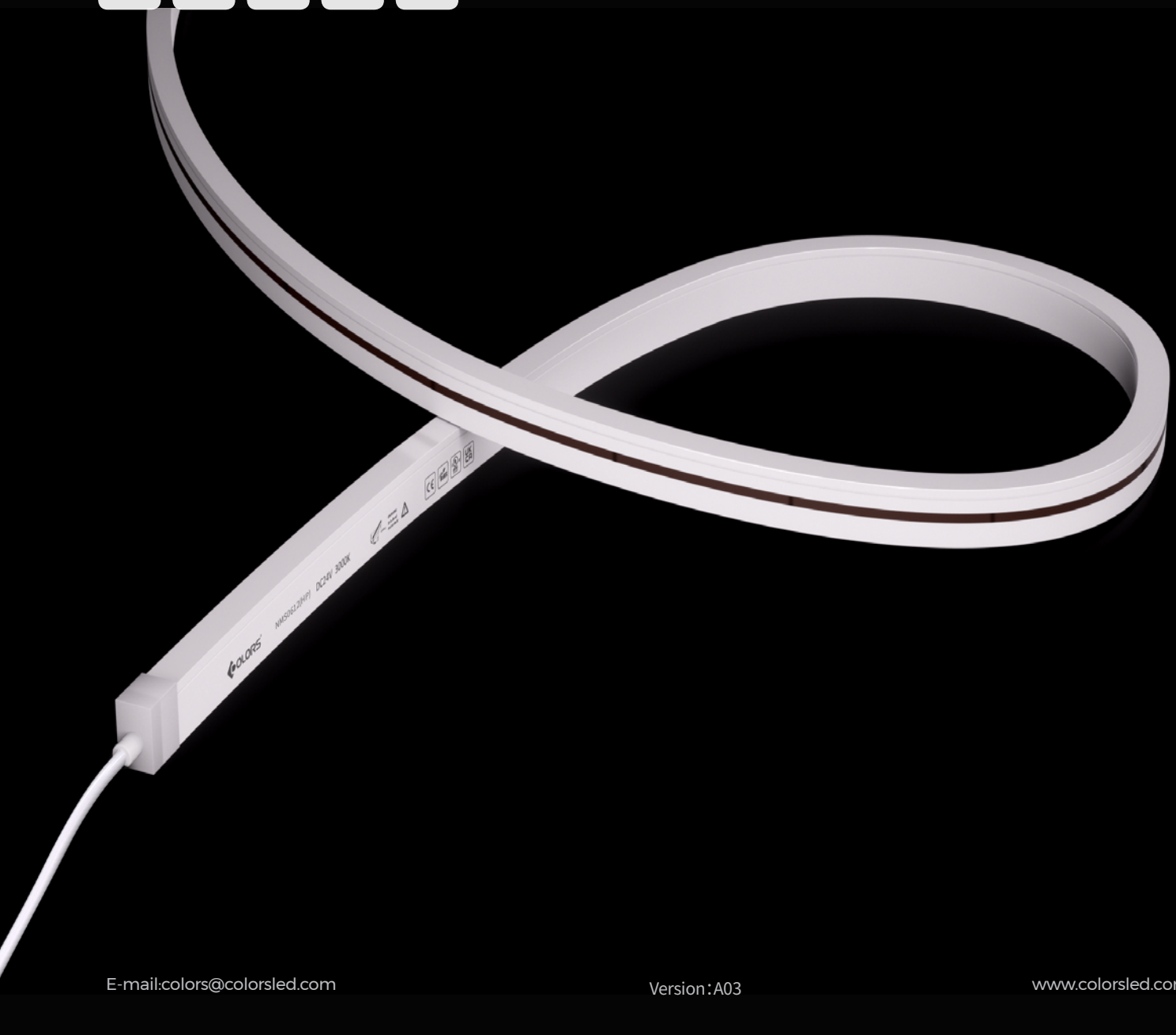
COLORS®

Neon Specification

NMS0612(HP)

outdoor | Indoor | IP67 | IK08 | FLAME RESISTANT | SALTWATER RESISTANT | SOLVENT RESISTANT | UV RESISTANT

CE | UK CA | Reach | RoHS | III



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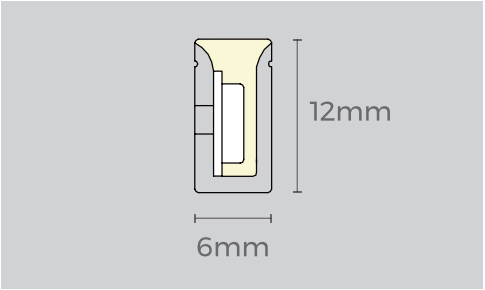
Version：A03

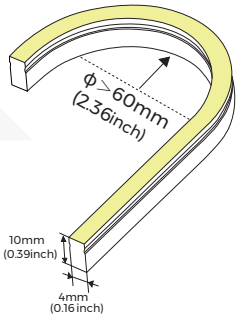
www.colorsled.com

【Features】

- **Light source:** High luminous efficiency.
- **Process & Material:** High light transmittance, environmental silicone material, integrated extrusion molding technology, IP67.
- **Optical Design:** Unique optical light distribution structure design, uniform lighting surface and no shadow.
- **Appearance Design:** Compared with the traditional neon tube or PVC guardrail tube,the silicone material has good flexibility, the simple and stylish appearance, which is exquisite and unique.
- **Product Certification:** CE、ROHS、UKCA.
- **Environmental Features:** Resistance to saline solutions, acids & alkali, corrosive gases and UV.
- **Working/Storage Temperature:** Ta:-25~55℃ / 0℃～60℃.
- **Application:** Signage lighting,indoor lighting
- **Warranty: Indoor:** 5 years warranty or working life =60000H,whichever comes first;



2700 K 3000 K 4000 K



【Basic Parameters】

Model	CCT/colors	CRI	Input voltage (V)	Rated current (A/m)	Rated power (W/m)	MAX power (W/m)	Lumens (LM/m)	Length	Remark
NHS0612(HP)-9XX24CSN050XCXXXX-ESD	2700K	≥90	24V	0.15 (0.045A/ft)	3.6 (1.09W/ft)	4 (1.2W/ft)	125 (38.1LM/ft)	5000mm (16.4ft)	1LED/8.33mm Free Cutting
	3000K						150 (45.7LM/ft)		
	4000K						170 (51.8LM/ft)		
NHS0612(HP)-9XX24CSN050XCXXXX-ESD	2700K	≥90	24V	0.3 (0.09A/ft)	7.2 (2.19W/ft)	7.9 (2.31W/ft)	280 (85.3LM/ft)	5000mm (16.4ft)	1LED/8.33mm Free Cutting
	3000K						295 (89.9LM/ft)		
	4000K						320 (97.5LM/ft)		

Note:

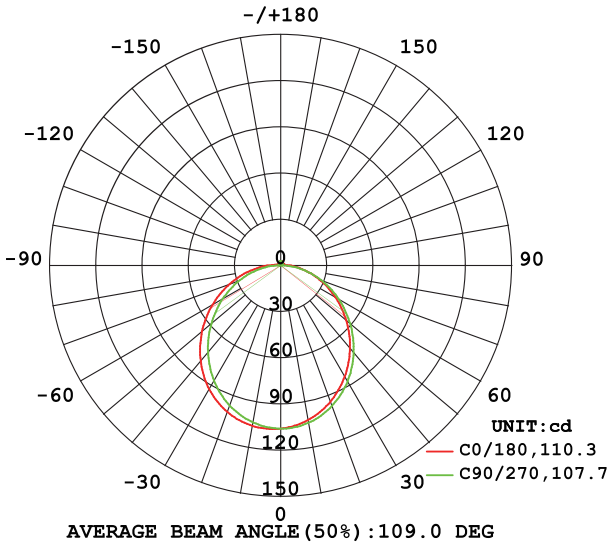
1、The above data is the testing result of 1M standard product;

2、The lumens of output data can be vary up to ±15%;

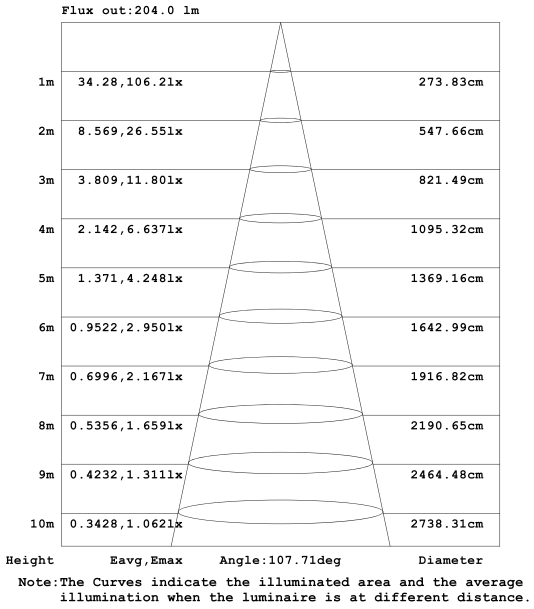
3、The above parameters are all typical values.

4、The range of operating voltage is DC24V.

【Light Distribution】



Light distribution

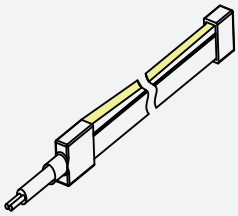


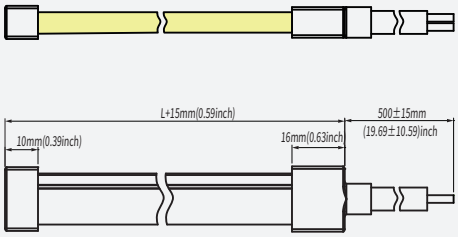
Effective average illuminance

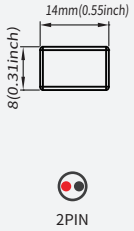
Note: The above data is based on 24V monochrome 4000K color temperature. If you need other models of IES files, please download the corresponding models from the IES database.

【Product Mechanical Parameters】

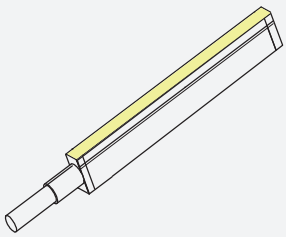
·IP65 Glued cap-top outlet

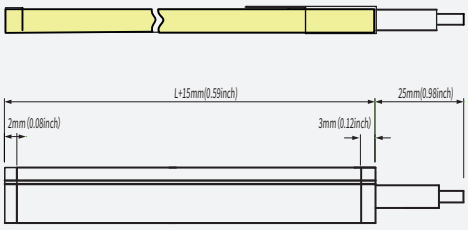


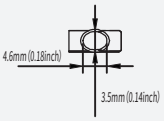




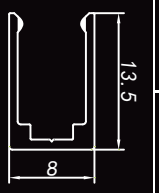
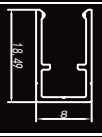
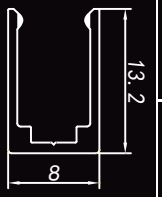
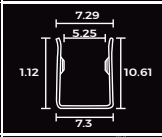
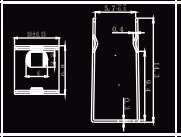
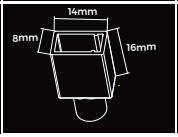
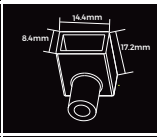
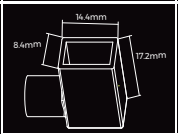
· IP67 No dark cap (ENP) -top outlet

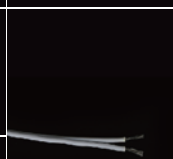






【Accessory information】

Name	Description	Imgae	Sectional size	Ordering code	Quantity case (PCS)	net weight (kg)	Per box net weight (kg)	Gross weight (kg)	Packing (mm)	Remark
Alumina carrier	Flat mounting aluminum groove			AS-NMS0612A -1000	120	0.082	9.84	11	1180*125*115	Size: L1000*W8*H13.5mm with screws
Alumina carrier	Flat mounting of clip			AS-NMS0612A -20	800	0.0017	1.68	1.83	250*250*150	Size: L20*W8*H13.5mm with screws
Alumina carrier	Aluminum groove reserved outlet position			AS-NMS0612A1 -1000	100	0.01015	10.15	11.2	1180*125*115	Size: L1000*W8*H18.5mm with screws
PC carrier	Flat mounting PC groove			AS-NMS0612P -1000	120	0.0355	4.26	5.3	1180*125*115	Size: L1000*W8*H13.2mm with screws
PC carrier	Flat mounting of PC clip			AS-NMS0612P -20	800	0.0009	1.04	1.19	250*250*150	Size: L20*W8*H13.2mm with screws
Moldable carrier	Moldable groove			AS-NMS0612M -500	100	0.035	3.5	3.85	500*290*290	Size: L500*W7.5*H11mm with screws Cannot be used upside down
Metal end cap kit	Metal end cap kit			AS-NMS0612SH0 -EC	2000	0.0015	1.2	1.5	250*250*150	/
End cap set	End cap set, including end cap and plug (outlet from the top direction)			AS-NMS0612GH0 -EC	800	0.0035	1.44	1.7	250*250*150	
End cap set	End cap set, including end cap and plug (outlet from the left direction)			AS-NMS0612GS0 -EC	800	0.0035	1.44	1.7	250*250*150	
End cap set	End cap set, including end cap and plug outlet from the bottom direction			AS-NMS0612GD0 -EC	800	0.0035	1.44	1.7	250*250*150	
Glue	588G acidic glue		/	AS-PG-0002	800	0.0035	1.44	1.7	250*250*150	10ml/pcs

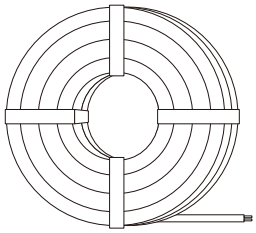
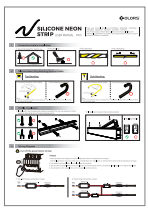
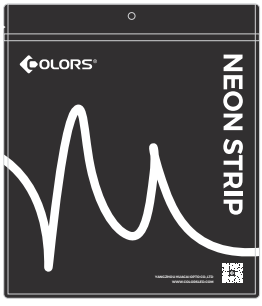
Name	Description	Imgae	Sectional size	Ordering code	Quantity case (PCS)	net weight (kg)	Per box net weight (kg)	Gross weight (kg)	Packing (mm)	Remark
Wire	2P PVC Wire (0.5M)		/	AS-WS-0005	150	0.0128	1.92	2.22	250*250*150	Suitable for single color strip
Wire	2P PVC Wire (2M)			AS-WS-0006	125	0.0512	6.4	6.7		
Gray wire	2PIN Gray wire (0.5M)		/	AS-WS-0009	200	0.0077	1.54	1.84		
Gray wire	2PIN Gray wire (2M)			AS-WS-0010	100	0.031	3.1	3.4		
Connector	2PIN IP68 waterproof connector		/	AS-FC-0001	512	0.016	8.192	9.5		Suitable for single color strip

【Product control system solutions】

Product Image	product name	Product number	Order code	Product specifications	Applicable Products
	Monochrome remote	CK1-GBA	402-02-000000-00001	output signal：RF Working voltage：3VDC(CR2032) Remote control distance：30m Working temperature:Ta:0-30 °C~0+55 °C	Monochrome light strip (Use with CR1-GBA)
	Monotone light controller	CR1-GBA	402-01-000000-00001	Input voltage：DC12-48V Output current：15A@12V/24V,10A@36V/48V Output Power：Max 180W@12V/Max 360W @24V/Max 360W@36V/Max 480W@48V Working temperature：-30°C— +55°C	Monochrome light strip (Use with CR1-GBA)

【Packaging Solutions】

- **Standard Packaging**

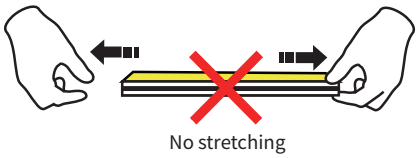




Model	Size	Product Quantity (bax)	Product Quantity (case)	Net weight (kg)	Net weight per box (kg)	Gross weight (kg)	Carton size(m)
NMS0612(HP)-XXXXXCSN050CC0500	L5000x6x12mm	5Mx1	130M	0.45	11.7	12.7	0.4*0.31*0.36

【Reliability test】

test item	Classification	Reference	Test method or condition
Safety test	Mechanical strength	IEC 60598-1； IEC 60598-2-21	The hammer spring Impact energy 0.7J
	IP	IEC 60598-1； IEC 60598-2-21	IP65
	Winding Test	IEC 60598-1； IEC 60598-2-21	ϕ150mm cylinder, 60N pull, winding 10 times at（-25°C ±2°C）, and 10 times after(-15°C±2°C, 16h).
	Cold Bend Test	IEC 60598-1； IEC 60598-2-21	wound on mandrel, low-temperature (-15°C±2°C, 16h)，around the mandrel for two turns
	Cold Impact test	IEC 60598-1； IEC 60598-2-21	Low-temperature (-15°C±5°C, 16h), hammer falls from a height of 100mm.
	Insulation Resistance	IEC 60598-1； IEC 60598-2-21	≦ 2MΩ
	Electrical strength	IEC 60598-1； IEC 60598-2-21	500V
Mechanical reliability testing	Bending test	Colors	Each 200mm，bending up and down 100 times
	Bending test	Colors	Each 200mm, bending left and right 100 times
	Torsion test	Colors	Twist clockwise 5 times and then release, repeat 200 times
	Disassembly and assembly test	Colors	Repeat disassembly and assembly, 10 times
Environment Reliability testing	High temperature storing test	IEC 60068-2-2	80°C, 168h
	Low temperature storing test	IEC 60068-2-1	-40°C, 168h
	High temperature and Humidity impact	IEC 60068-2-78	60°C, 85%RH
	Salt Spray test	IEC 60068-2-11	5% salt solution concentration, 24h
	IK	IEC 62262	5 times of impact on each exposed surface
	Lifetime aging test	Colors	35°C, 6000h
	switch test	Colors	10s On, 10s Off, 10000 times

【Precautions】



· Use a 24V DC isolated power supply to drive the neon lamp strip and the ripple wave of constant voltage source shall be less than 5%. It is not allowed to use RC voltage reduction or non-isolated power supply to drive the neon lamp strip.

· In actual applications, 20% of the power supply shall be kept (only 80% of the power is used) to guarantee that sufficient voltage is available to drive the product.

· Attention shall be paid to safe operation. After powering on, it is not allowed to touch the AC power supply to avoid an electric shock.

· Attention shall be paid to the positive and negative poles of the wires during installation and whether the power supply conforms to required voltages to avoid damages.

· Avoid scratching, distortion and irregular bending of the product during installation; otherwise it may cause irreparable damage to the product.

· Please do not bend the strip into an arc with a diameter less than 30mm to ensure the longevity and reliability, the bending diameter too small will damage the product itself.

· If the actual length of application exceeds the specified using length, it will lead to overload heating and uneven brightness.

· To keep the eyes from being harmed, try to avoid staring at the glowing side of the LED strip for a long time.

· Non-professionals are prohibited from installing, disassembling and repairing the product.

· Do not use any acid or alkaline adhesive to fix products (including not limited to glass cement, etc.)

· Products with different IP grade shoulde be used in different environments, the product with IP65 is not suitable for use in water-immersed environment .

· The final color of products with different sizes and specifications is slightly deviated due to structural differences under the same color temperature, which should be confirmed before use.

· Use an isolated power supply of 48VDC to drive the LED strip, and the ripple of the constant voltage source is less than 5%,, and you cannot use a resistive capacitive buck, non-isolated and other types of power supply to drive the LED strip.

· Engineering packaging neon strip (20 ~ 50m), please use the cable shed during construction to avoid damage caused by the tensile force of the product.

· Please use professional cutting tools when cutting.

· Due to the characteristics of the silicone material, it is normal for the color of the colloid to change slightly after the neon product is used for a long time.

· It is strictly forbidden to use 502/705 and other adhesives that are prone to chemical reactions with silica gel during construction and installation. It is recommended to use silicone sealant for bonding.

· Long-term storage and the remaining products after cutting and use must be sealed to avoid exposure to organic environments such as aldehydes/benzenes.

· When the product is installed and used, it is recommended that the product as a whole be in the same environment conditions to avoid inconsistent color changes of the product colloid due to differences in product exposure and environmental conditions.

· When using dimmer and dimming power supplies like Triac, etc, conduct compatibility tests on the product, dimmers and power supplies to ensure full compatibility. If any issues arise, contact COLORS for technical support.