

10x10mm Dual Bend Neon Flex

Single-colour | 24V and 48V DC | 3D top and side bending

24V / 48V

Voltage

10x10mm

Cross-section

41.7 / 83.3mm

Cut interval

12m / 25m

Maximum run

Dual

Bending

SPECIFICATIONS

Light colour	2700 / 3000 / 4000 / 6000K
Supply	24V / 48V DC
Order length	Custom cut at marked units
Cross-section	10x10mm
Cut: 24V / 48V	41.7mm / 83.3mm
Max run: 24V / 48V	12m / 25m
Bending	3D top and side
Light surface	Flat / nominal 120°
Material	Solid-silicone extrusion
IP rating	IP67*
Power	11 W/m
Lumens per metre	See page 2**
Measured CRI Ra	See page 2**
LED type	SMD2835
LEDs per metre	To be confirmed
Warranty	4 Years
Average lifetime	50,000 hours
Operating temperature	-30°C to 50°C

24V PRODUCT SKUs

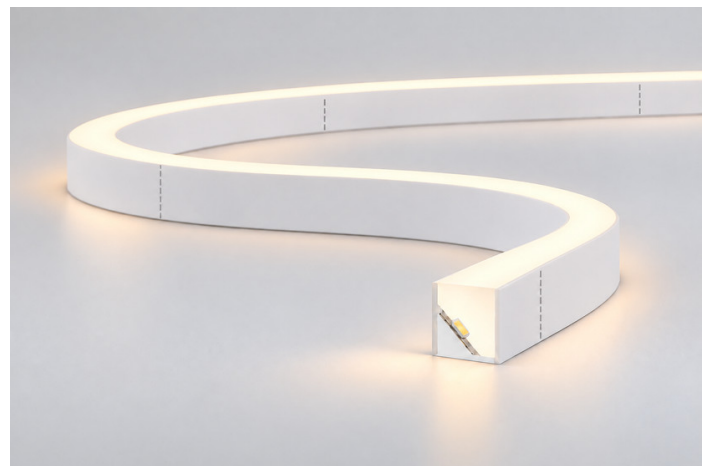
NF24-DB1010-27K

NF24-DB1010-40K

1-12m lengths

NF24-DB1010-30K

NF24-DB1010-60K



Silicone construction illustration

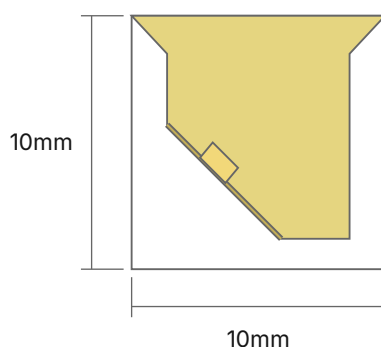
3D Dual Bend

A white solid-silicone body with a continuous diffused light surface. The internal PCB follows the supplied dual-bend section. Smooth top and side curves are supported.

* Neon body rating; the finished assembly depends on its connections. ** Supplier sample optical results are on page 2. The source lists "144 LEDs" without a verified length basis; LEDs per metre remains unconfirmed.

These lights are custom cut and made to order. Use the cut marks for the selected voltage.

DIMENSIONS



10mm wide. 10mm high.

Flat emitting surface with a nominal 120° beam. Dual-bend construction supports top and side curves; the cross-section shows the angled PCB and white backing.

Dimensions refer to the neon body. Allow separate space for connectors and mounting channels. The hero is illustrative, not a cut-pitch drawing.

Dimensions in mm. Not to scale.

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PERFORMANCE & INSTALLATION OVERVIEW

24V and 48V dual-bend white-light comparison

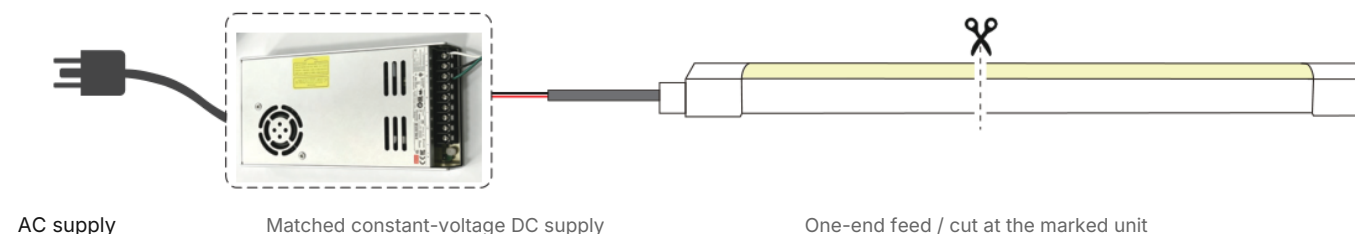
Nominal CCT	24V product SKU	24V: lm/m	24V: CRI Ra	48V: lm/m	48V: CRI Ra
2700K	NF24-DB1010-27K	548.13	91.3	546.02	91.3
3000K	NF24-DB1010-30K	561.06	92.1	565.71	91.8
4000K	NF24-DB1010-40K	594.58	90.6	594.58	90.6
6000K	NF24-DB1010-60K	547.47	93.7	546.47	93.5

Supplier-reported output and individual sample CRI for the 3D dual-bend variants. These are typical sample values, not guaranteed production minima. Supply conditions and temperature affect actual output.

24V data: supplier page 12, bottom spectral row. 48V data: page 13, bottom spectral row. The dedicated dual-bend rows are used, not the horizontal- or vertical-only figures.

Nominal load = length (m) x 11W/m. Maximum one-end runs: 24V, 12m = 132W / 5.50A; 48V, 25m = 275W / 5.73A. Allow for the supply's stated derating and cable voltage drop.

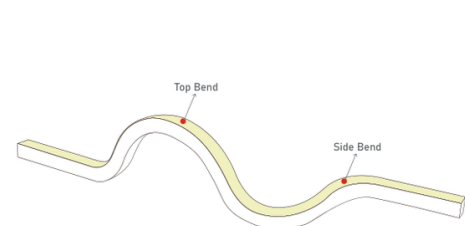
SINGLE-END POWER CONNECTION



24V: 41.7mm cut / 12m maximum | 48V: 83.3mm cut / 25m maximum

WARNING: Match the light with the marked 24V or 48V DC constant-voltage equipment; never connect directly to 220-240V AC mains. Incorrect voltage can damage it. Isolate power and fully unroll before use. Check load capacity, cable size, voltage drop and polarity; keep non-weatherproof equipment dry. Do not parallel independent supply outputs.

DUAL BENDING



Form broad, smooth curves in both top and side planes. Gentle 3D forming is permitted; avoid tight kinks or concentrated torsion. Keep the first and last full cut units straight beside connectors.

Minimum bending diameter: to be confirmed before forming. Do not infer a safe bend radius from the illustration. Longer or alternative feed arrangements require a verified electrical design.

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CONNECTION ACCESSORIES

Choose the cable-entry direction and connector family for the exact 10x10mm neon and environment. Fitting ratings are separate from the IP67 neon body rating; select and seal the complete system accordingly.

IP67 connector options



Front

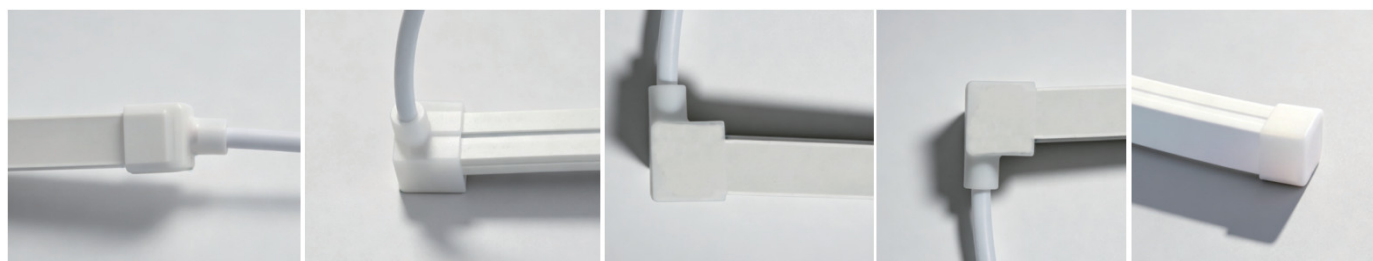
Bottom

Side left

Side right

End cap

IP65 connector options



Front

Bottom

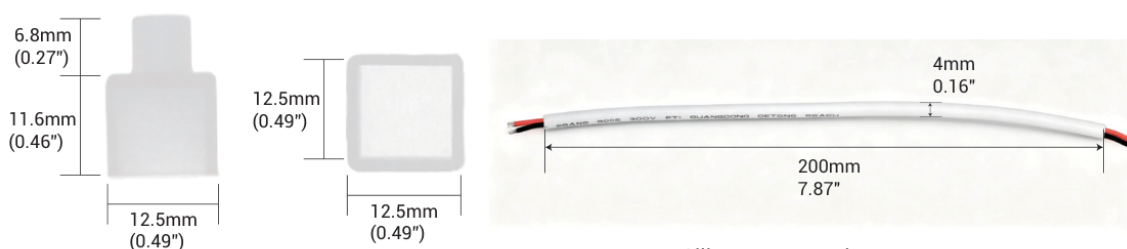
Side left

Side right

End cap

Accessories are selected separately. Illustrations do not confirm included parts or certify a field-assembled joint. Use a compatible termination kit, specified sealing method and full cure.

FITTING & LEAD REFERENCE



Silicone power wire

The supplier shows a 200mm example lead with a 4mm external callout. These are accessory references, not confirmation of the included lead length, conductor cross-section or current capacity. Connector dimensions are not neon-body dimensions.

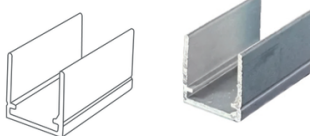
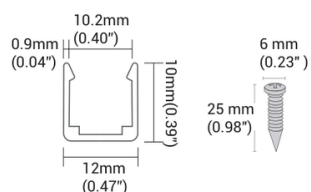
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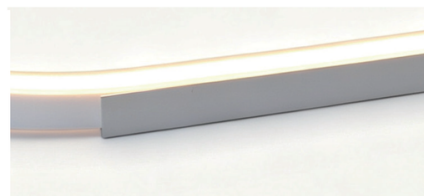
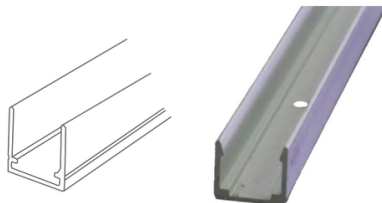
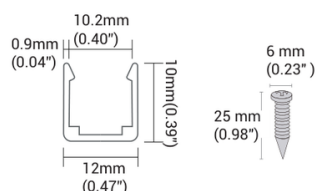
CHANNELS & MOUNTING

20mm clip and 1m aluminium channel

2cm Aluminum Profile

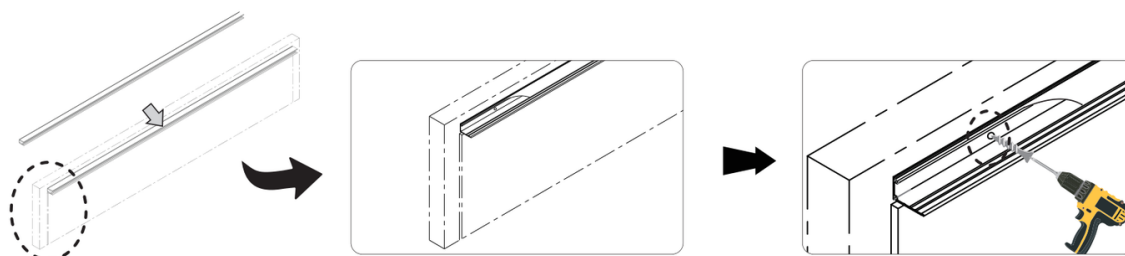


1m Aluminum Channel

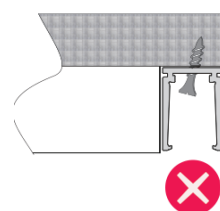
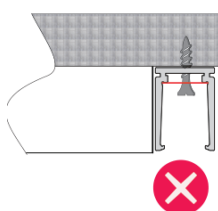
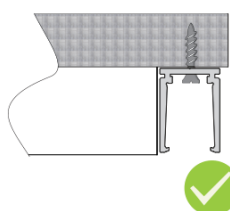


Supplier mounting reference: 12mm outside width, 10.2mm clear width, 10mm height and 0.9mm wall. Clip length 20mm; channel length 1m. Confirm the supplied channel and connector fit before fixing.

SECURE THE CHANNEL FIRST



Fix into a suitable substrate. Screw heads must sit flush with or below the channel base, with screws straight and clear of the neon. Remove sharp edges and debris. Insert progressively without forcing or trapping the light.



Flush or recessed screw: correct. Protruding or angled screw: incorrect.

For illustrated cutting, connection, sealing, curing, commissioning and troubleshooting, read [Install-1010-DB.pdf](#). Follow the matching termination-kit instructions and keep each end unit straight.

Incorrect-power damage: Damage caused by incorrect voltage or direct mains connection is not covered by warranty where ATOM LED is not at fault. ATOM LED Lighting Ltd accepts no liability for loss or damage caused by such connection where it is not at fault. This does not exclude liability for our negligence or breach of statutory duty, or affect your statutory rights.