

10x10mm Side Bend Neon Flex

Single-colour | 48V DC | horizontal bending only

48V DC

Voltage

10x10mm

Cross-section

83.3mm

Cut interval

25m

Maximum run

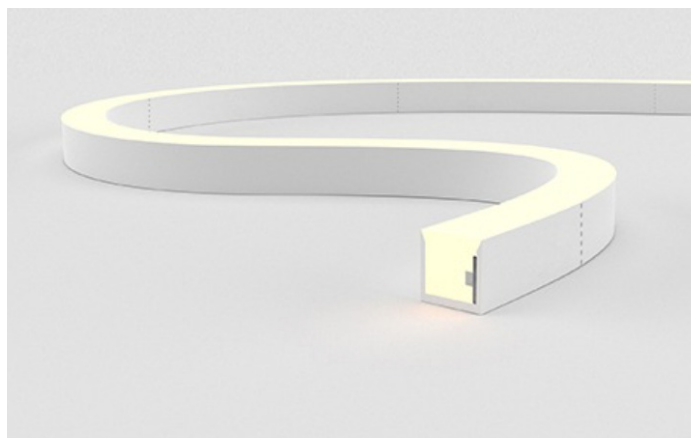
Side

Bending

SPECIFICATIONS

Light colour	2700 / 3000 / 4000 / 6000K
Supply	48V DC
Order length	Custom cut at marked units
Cross-section	10x10mm
Cut interval	83.3mm
Maximum run	25m / one-end feed
Bending	Horizontal only
Light surface	Flat / nominal 120°
Material	Solid-silicone extrusion
IP rating	IP67*
Power	11 W/m
Lumens per metre	470.74 - 516.16 lm/m**
CRI (Ra)	>90 (samples)**
LED type	SMD2835
LEDs per metre	To be confirmed
Warranty	4 Years
Average lifetime	50,000 hours
Operating temperature	-30°C to 50°C

A white solid-silicone body with a continuous diffused light surface. Bend only in the horizontal plane. Illustration shows the bend style; it is not to scale or a measured colour reference.



Side bend construction illustration

PRODUCT SKUs

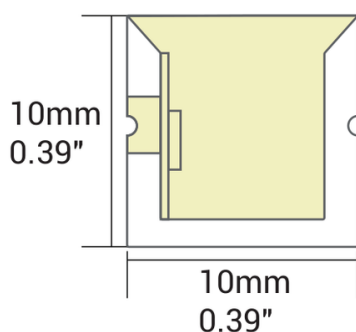
Applies to all listed 1-25 metre order lengths.

Colour	Product SKU
2700K	NF48-HB1010-27K
3000K	NF48-HB1010-30K
4000K	NF48-HB1010-40K
6000K	NF48-HB1010-60K

* Neon body rating; the finished assembly depends on its connections. ** Lumens and CRI are colour-specific supplier samples, not guaranteed minima. See page 2.

These lights are custom cut and made to order. Use the marked 83.3mm cutting units.

DIMENSIONS



10mm wide. 10mm high.

Flat emitting surface with a nominal 120° beam. The section shows the vertical PCB beside the sidewall and white silicone backing. Do not twist or bend in the vertical plane.

Original supplier dimension drawing for the 48V horizontal-bend model. Allow separate space for connectors and channels; the hero illustration is not a cut-pitch drawing.

Dimensions in mm. Not to scale.

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PERFORMANCE & INSTALLATION OVERVIEW

Product SKUs and colour performance

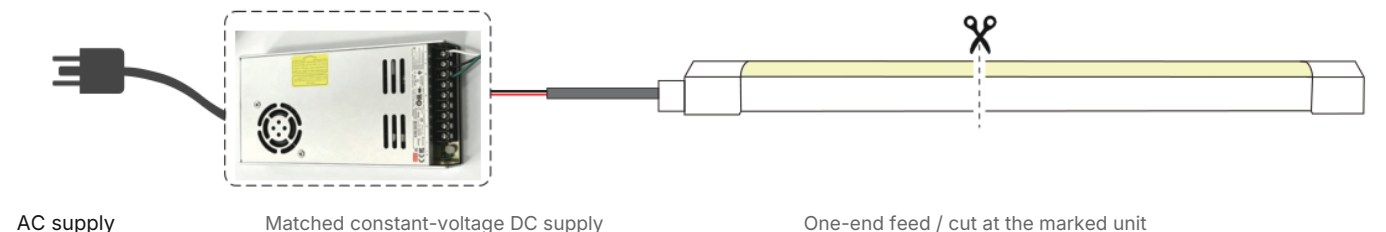
Colour	Product SKU	Lumens per metre	Measured CRI Ra
2700K	NF48-HB1010-27K	470.74	92.2
3000K	NF48-HB1010-30K	498.82	92.1
4000K	NF48-HB1010-40K	516.16	90.7
6000K	NF48-HB1010-60K	475.74	94.0

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

Source: supplier page 13, top spectral row. Values are specific to 48V horizontal bend; do not substitute another voltage or bend type.

Calculated nominal load = length (m) x 11W/m. At the maximum 25m one-end run: 275W / 5.73A at 48V DC. Allow for the supply's stated derating and cable voltage drop.

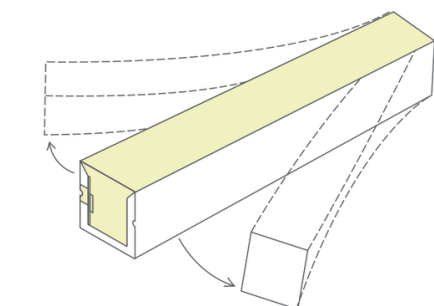
SINGLE-END POWER CONNECTION



48V DC | 83.3mm cut interval | 25m maximum one-end run

WARNING: Use a matched 48V constant-voltage DC supply. Never connect directly to 220-240V AC mains; incorrect voltage can damage the lights. Isolate power and fully unroll before use. Check load, cable size, voltage drop and polarity. Keep non-weatherproof equipment dry. Do not parallel independent supply outputs.

HORIZONTAL BENDING



Form broad, smooth curves in the horizontal plane only. Do not twist, kink or bend in the vertical plane. 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

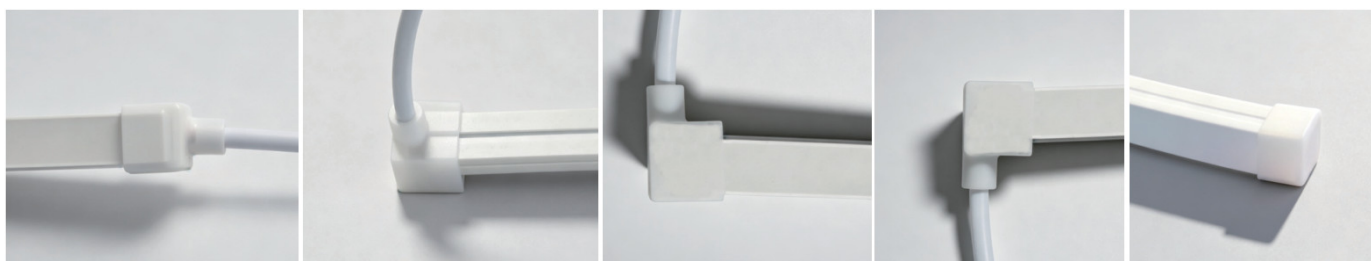
Bottom

Side left

Side right

End cap

IP65 connector options



Front

Bottom

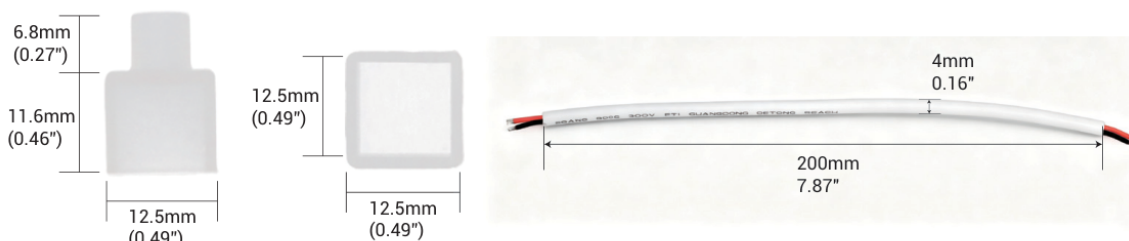
Side left

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.

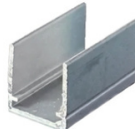
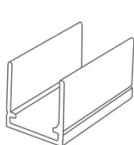
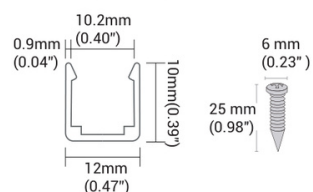
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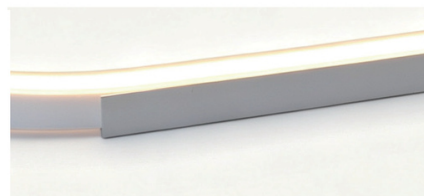
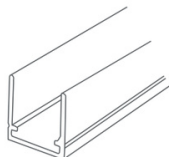
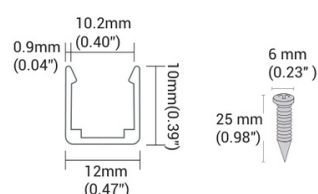
CHANNELS & MOUNTING

20mm clip and 1m aluminium channel

2cm Aluminum Profile

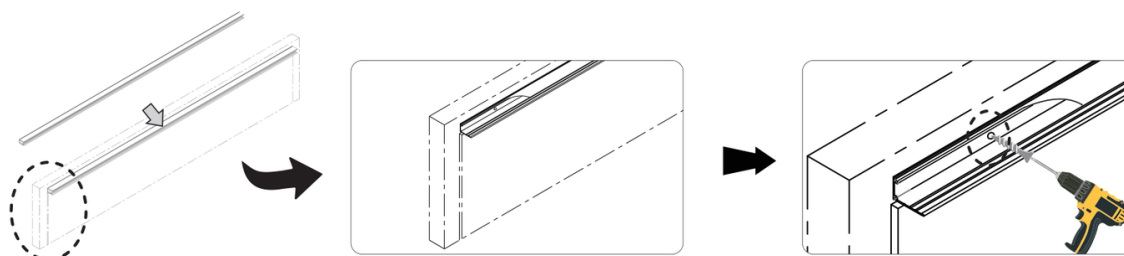


1m Aluminum Channel

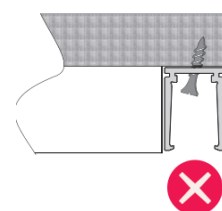
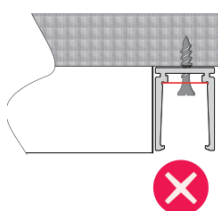
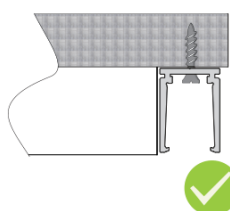


Supplier mounting reference: 12mm outside width, 10.2mm clear width, 10mm height and 0.9mm wall. Clip length 20mm; channel length 1m. Confirm the supplied channel and connector fit before fixing.

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.

Companion: Install-HB1010-48V.pdf. Follow the matching kit instructions for cutting, connections, sealing, full cure and commissioning.

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.

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INSTALLATION STEPS

Isolate power before work. These source photos illustrate soldered terminations. Use the exact compatible kit and the actual two-wire + / - pads on this 48V single-colour neon.

1. Plan & measure

Measure the route and required length before cutting. Respect the 25m one-end maximum and marked 83.3mm cut units.



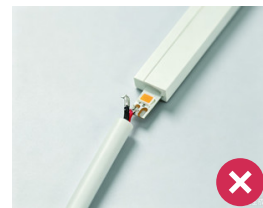
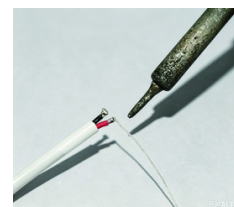
2. Cut at the mark

Cut squarely at the scissors mark. Keep the PCB flat; do not crush, tear or leave an uneven end.



3. Tin pads & wires

Tin the correct solder pads and conductors. Avoid loose strands, poor joints, solder burrs and bridges; these can cause a short circuit or damage.



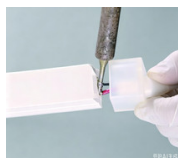
4. Solder & check

Fit the accessories in the correct order. Solder the two wires to the matching + / - pads. Inspect both joints.



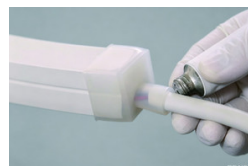
5. Seal feed fitting

Use the kit-approved sealant to cover the exposed end and PCB fully. Seat the fitting tightly, without trapping or pulling the wires.



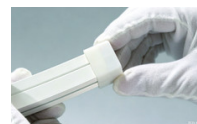
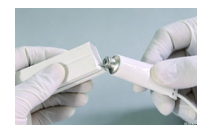
6. Seal cable entry

Seal the cable entry and fitting perimeter. Support the cable so it cannot pull on the joint or the seal.



7. Seal the tail

Apply sealant to the rear end, fit the closed tail cap and seal its perimeter. Inspect the finished end.



Allow the full cure time specified for the kit before power or exposure. Check polarity, sealed interfaces, cable support and the matched 48V DC supply. The neon body rating alone does not certify a field-made joint. Full procedures: Install-HB1010-48V.pdf.