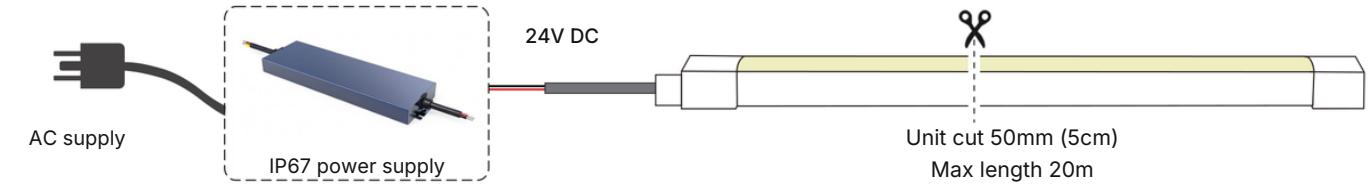
6x12mm Horizontal Bend Neon Flex

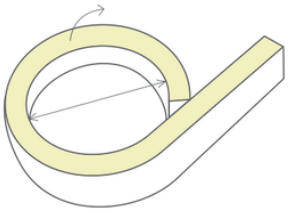
24V DC | 50mm (5cm) cut | 20m single-end feed | All white colours

POWER, BENDING & ESSENTIAL CAUTIONS



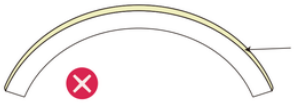
24V DC constant voltage | 50mm cut | 20m maximum single-end feed

Select a compatible IP67 supply rated for 24V DC and the actual load. Rated power is 9.4W/m: a 20m run is 188W before the supply manufacturer's allowance. Match the single-colour controller, dimmer and cable capacity to the installation.



Horizontal / Side Bend only

Do not twist the neon



Do not bend vertically

6x12mm IP67 neon with a solid silicone-extruded body. Use a minimum bending diameter of 120mm. Keep the first and last full 50mm cut unit straight beside each connector.

01 Isolate mains power before cutting, installation, maintenance or making any connection.

02 Connect and seal every joint correctly. An IP68 connection requires a verified IP68 connector system, assembled and sealed to its specified instructions. The neon body remains IP67.

03 Confirm the product requires 24V DC before connecting the supply. Follow the exact model limits and installation instructions.

04 Check positive (+) and negative (-) polarity before connecting the front cable.

05 Cut and connect only at marked 50mm (5cm) scissors positions. An incorrect cut or joint can damage the light.

06 Use a suitable constant-voltage DC supply and load-rated cables. Do not exceed its output. Never join independent power-supply outputs together.

07 Bend horizontally only, with a minimum 120mm diameter. Keep the first and last full 50mm unit straight. Do not twist, kink, crush or pull the light.

08 Operate only within the specified -30°C to 50°C ambient-temperature range.

09 Fully unroll before power; do not operate in the packaging coil. The manufacturer warns never to exceed 30 minutes energised in a coil; normal installation and operation must be fully unrolled.

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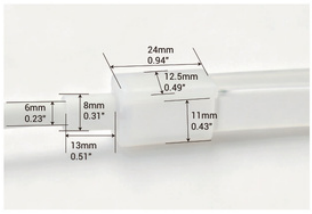
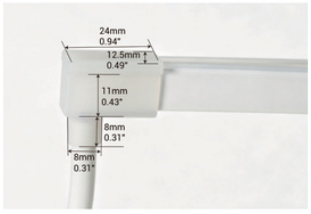
CONNECTION ACCESSORIES & CONSTRUCTION

IP67 silicone fitting options. All dimensions below are separate source-drawing callouts in millimetres, not one nominal connector size. Select a matching fitting and sealing system.



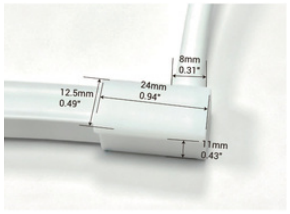
Front

24 / 12.5 / 11 / 8 / 6 / 13mm



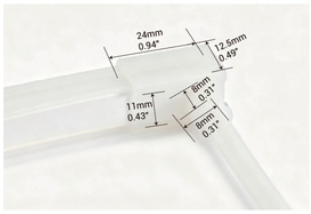
Bottom

24 / 12.5 / 11mm; two 8mm callouts



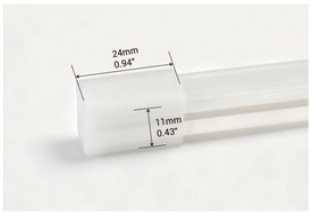
Left

24 / 12.5 / 11 / 8mm



Right

24 / 12.5 / 11mm; two 8mm callouts

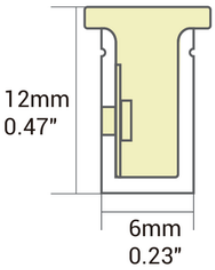


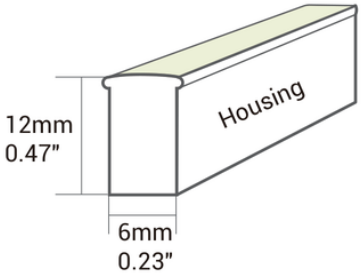
End cap

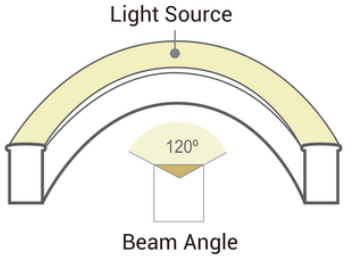
24mm length / 11mm height

Closed-cap width is not specified in the source drawing. Use two conductors (+ / -), support the cable and seal all fittings correctly.

BODY DIMENSIONS, HOUSING & BEAM

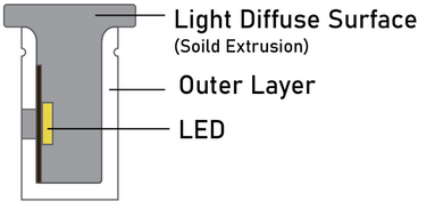






Body: 6mm wide / 12mm high. Emitting face: 10.5mm. Beam: 120°. Body and fitting dimensions are separate.

SILICONE CROSS-SECTION



Solid silicone extrusion surrounds the LED. Example lead: 200mm with a separate 6mm callout; these do not specify cable gauge, capacity or included length.

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CHANNELS, TOOLS & MOUNTING

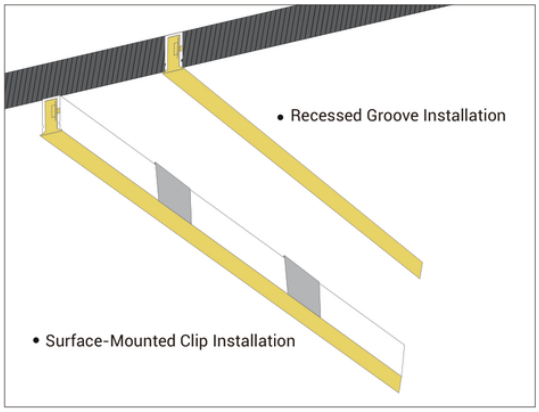
Optional 1m aluminium channel

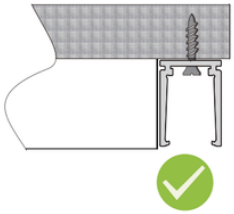
20mm clip

Channel callouts
8mm outside / 6.2mm clear width
13.6mm height / 0.9mm wall

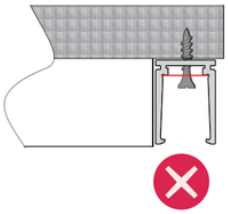
Mounting dimensions are separate from the 6x12mm body. Choose straight fixings for the substrate; the illustrated screw callouts are 6mm and 25mm. No universal fixing spacing is specified.

INSTALLATION METHODS

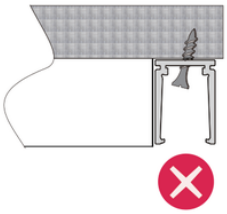




Correct: flush or recessed



Incorrect: proud head



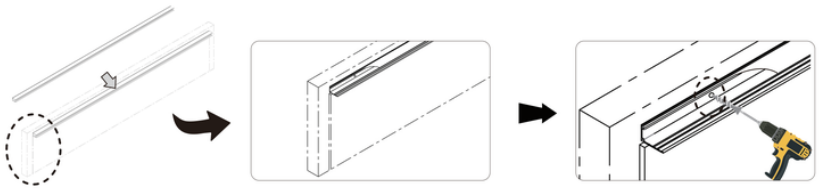
Incorrect: angled screw

Recessed groove or surface-mounted clips. Screw heads must remain flush or below the channel base, clear of the neon. Never force the light over a protruding or angled fixing.

TOOLS & PROGRESSIVE INSERTION

Or

Manual or electric screwdriver. Secure the channel first. Deburr cut edges and remove all swarf. Keep screws and tools away from the light.



Fix the non-locking channel, then insert progressively by hand from one end. Keep the profile straight and support the silicone body evenly; do not trap a hump or force in the connectors.

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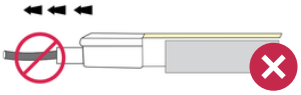
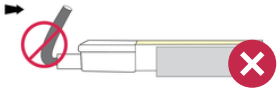
CONNECTOR CLEARANCES & CABLE CARE

Single feed-end mount: keep a 9.91-20.07mm gap at the connector.

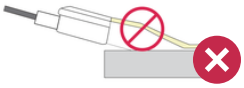
Both ends: keep the same 9.91-20.07mm gap at each connector mount.



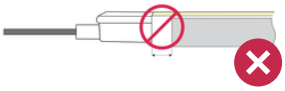
Do not pull the cable axially.



Do not sharply fold or curl the cable.



Do not overlap mounting pieces.

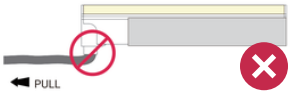


Do not leave a gap below 9.91mm.

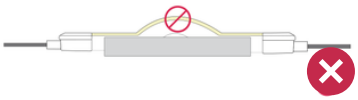
Bottom entry: no downward cable load.

Keep the bottom fitting clear of the channel.

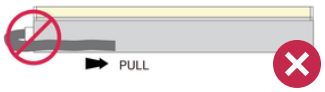
Do not fold or tightly curl a bottom lead.



Support the cable in its exit direction.



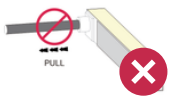
Insert from one end; do not trap a hump.



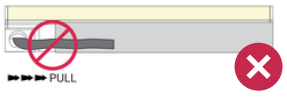
Moulded feed: do not fold the cable back.

Moulded feed: gap at least 9.91mm.

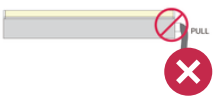
Never force an end fitting into the channel.



No axial pull on the moulded connector.



No sideways pull or sharp cable fold.



Support a downward cable independently.

Moulded feed: avoid a trapped middle hump.

Clasp/sleeve and moulded fittings must remain unstressed. Use cable strain relief; no seal should carry cable weight or pulling force. Clearance callouts describe the illustrated fitting arrangement, not universal fixing spacing.

6x12mm Horizontal Bend Neon Flex

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INSTALLATION STEPS 1-3: PLAN, CUT & TIN

Isolate power. Use the matching termination kit and its instructions. This sequence is for a soldered connection.

Supplier process examples are not product pinout drawings: follow the actual two-wire + / - pads. Use matching components; examples do not establish which parts are included.

01 Plan the route and length

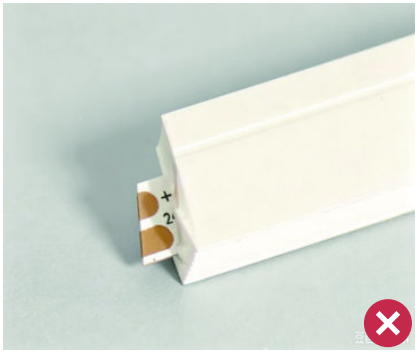
Determine the installation location, route and length. Measure and mark 50mm (5cm) cut intervals.

02 Cut squarely at the mark

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

Measure before cutting.

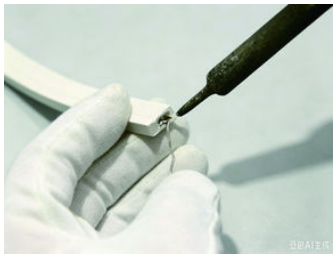
Cut at the marked position.



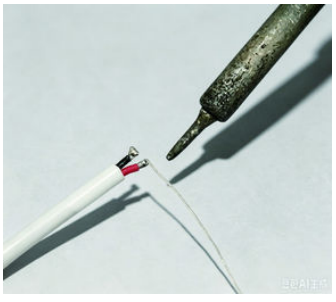
Incorrect: uneven cut. Keep the PCB flat.

03 Tin both pads and conductors

Tin the solder pads and both power conductors before joining. Untinned joints can come loose. Avoid loose strands, solder burrs and bridges: they can short-circuit and damage the neon.

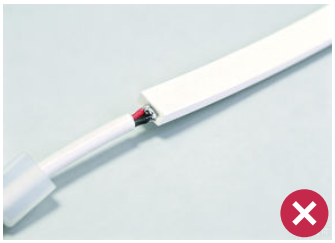


Tin the solder pads.



Tin both conductors.

Incorrect: poor joint. Inspect joint strength.



Incorrect: solder burr. Avoid shorts and bridges.

Lay out the feed fitting, tail cap, cable and compatible sealing compound before assembly. Restore full sealing before energising.

6x12mm Horizontal Bend Neon Flex

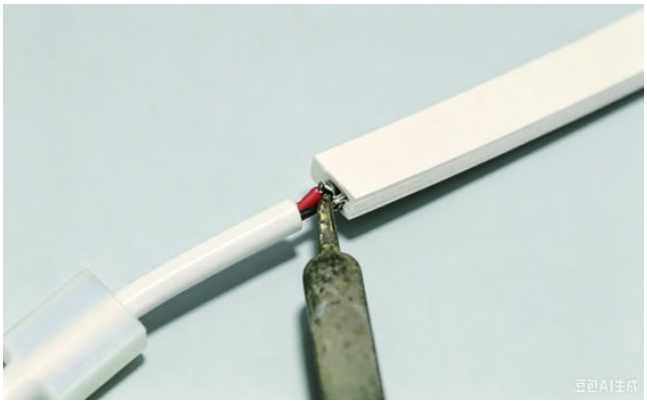
24V DC | 50mm (5cm) cut | 20m single-end feed | All white colours

INSTALLATION STEPS 4-7: CONNECT, SEAL & CURE

Use the manufacturer-specified sealing compound and the instructions for the matching termination kit. Inspect each connection before sealing.

04 Solder and check polarity

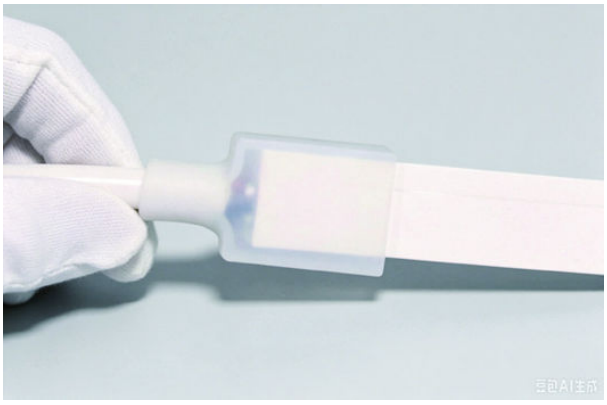
Position the fitting first, then solder each wire to its matching + / - pad. Inspect both joints and check that they are secure. The photo shows the soldering action only.



Match the actual two-wire + / - connections.

05 Seal the feed and seat fitting

Cover the exposed strip and PCB end fully with the specified sealant, then push the correct fitting fully home for a tight joint.



Seat the fitting fully after sealing the exposed end.

06 Seal cable entry and perimeter

Seal around the cable entry and fitting perimeter as specified. Add strain relief: the seal must not carry a pulling load or cable weight.

Seal around the entry.

Seal the fitting perimeter.

Use cable support so no pull or sideways load reaches the sealed fitting.

07 Seal the tail and allow cure

Seal the rear end, fit the tail cap, then seal its perimeter. Allow the specified full cure before powering or exposing the assembly to moisture.

Seal the rear end.

Fit the tail cap.

Seal the perimeter.

Check the finished tail.

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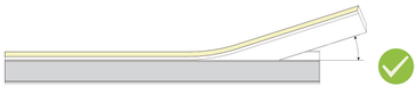
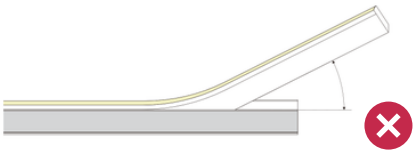
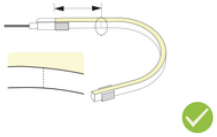
BENDING, COMMISSIONING & TROUBLESHOOTING



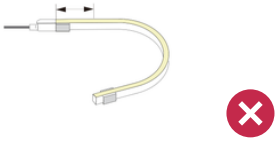
Correct: insert by hand below 15°.



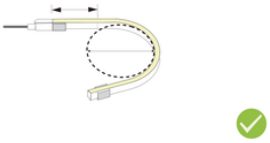
Incorrect: insertion above 15°.



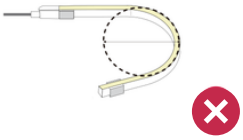
Keep the first unit straight.



Do not bend the first or last units.



Use a bending diameter of at least 120mm.



Never bend below 120mm diameter.

Bend only in the horizontal plane. The 120mm limit is a diameter, not a radius. Keep the first and last full 50mm cut unit straight to protect the connector and seal.

Before switching on

Confirm 24V DC, + / - polarity, supply capacity, 20m run limit and 50mm cuts. Check straight end units, horizontal curves, flush screws, connector gaps, supported cables, sealed ends and completed cure. Operate within -30°C to 50°C and fully unroll before testing.

TROUBLESHOOTING

No light	Check the supply is plugged in, switched on and delivering 24V DC. Check polarity, supply-to-light/controller/dimmer joints and correct front-connector assembly.
Dim far end	Check for output below 24V DC, voltage drop, cable length and load; test the dimmer setting. Shorten the run or obtain a confirmed feed redesign.
Too bright	Check output is not above 24V DC and input is stable. Isolate power before correction.
First section off	Check wrong or uneven cuts, LED damage from connector insertion, PCB damage or water ingress. Replace the damaged marked section, reseal and insert by hand.
Flickering	Check supply capacity/stability, front contact and dimmer/controller compatibility. Confirm any additional-feed design.

Typical uses: architecture, landscape, cove/edge lighting, retail, restaurants and events. Confirm the finished system suits its environment. Isolate power before maintenance; replace damaged or poorly sealed sections.

4 Years warranty · 50,000 hours average lifetime · 377lm/m · CRI Ra >90 · 120 LEDs per metre.