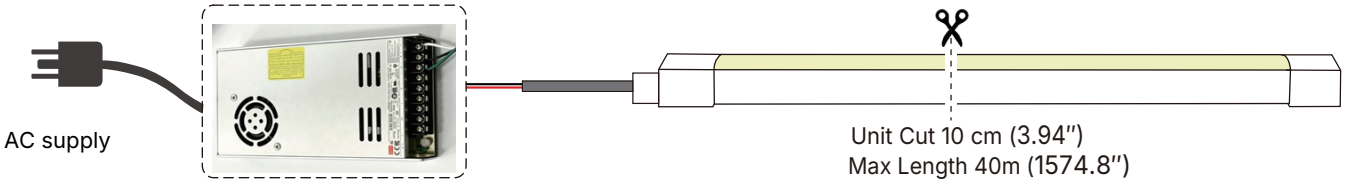
15 x 15mm (W x D) Horizontal Bend Neon Flex

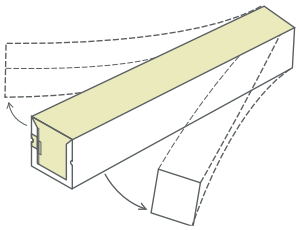
48V DC | 100mm (10cm) cut | 40m single-end feed | All white colours

POWER, HORIZONTAL BENDING & ESSENTIAL CAUTIONS

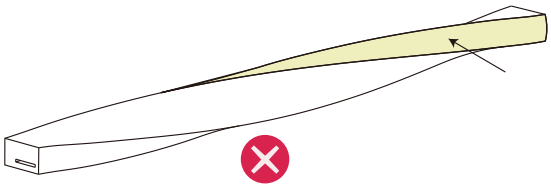


48V DC constant voltage | 100mm cut | 40m maximum single-end feed

Match the supply, any controller and cables to 48V DC and the confirmed connected load. Check cable size, voltage drop and driver allowance before installation. The supply drawing is illustrative; non-weatherproof equipment needs a dry, protected location.



Horizontal / side bend only



Do not twist or bend vertically

Keep the first and last units straight beside connectors. Use broad, smooth horizontal curves. Confirm the minimum bend radius and straight-end length before planning tight curves; no numerical values are established here.

01 Isolate mains power before cutting, installing, maintaining or making connections.

02 Use matching sealed connections. A component IP rating alone does not establish the finished assembly rating.

03 Confirm 48V DC and the actual + / - pad markings before connecting the feed cable.

04 Cut only at the marked 100mm (10cm) scissors positions. Do not cut between marks.

05 Have the supply, controller and cables selected for the actual load by a competent electrical installer.

06 Do not twist, kink, crush, pull or force the light or connectors. Support the strip while handling.

07 Operate within -30°C to 50°C. Confirm the complete system suits the installation environment.

08 Fully unroll before powering. Never leave the light operating in its packaging coil.

09 Keep each single-end-fed run within 40m. Obtain a confirmed design for additional or altered feeds.

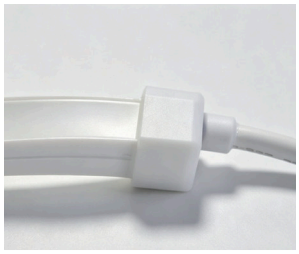
15 x 15mm (W x D) Horizontal Bend Neon Flex

48V DC | 100mm (10cm) cut | 40m single-end feed | All white colours

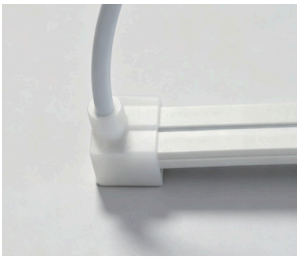
CONNECTION ACCESSORIES

Two supplier connector arrangements are illustrated. Confirm the entry direction, exact 15x15mm horizontal-bend compatibility and sealing method for your order. The images are not an included-parts list.

Connector options



Front



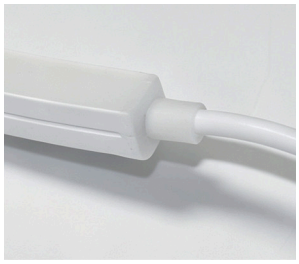
Bottom

Side left

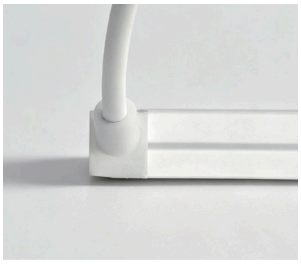
Side right

End cap

Alternative connector options



Front



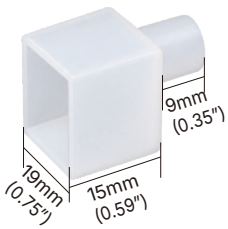
Bottom

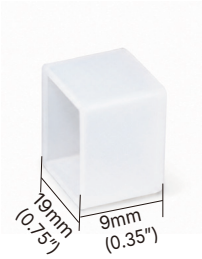
Side left

Side right

End cap

FITTING & LEAD REFERENCE





Silicone power wire

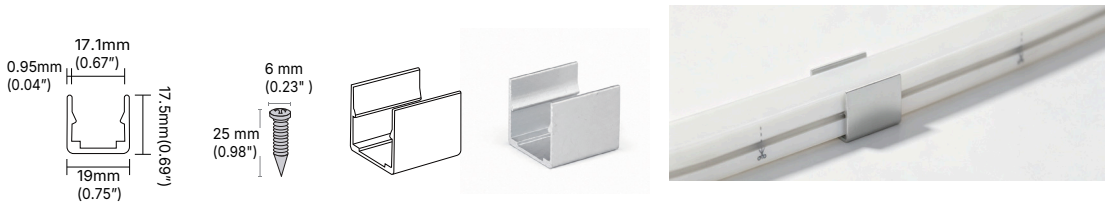
The supplier lead example is 200mm long with a 6mm callout. These are accessory-reference dimensions, not confirmation of the ordered lead length, conductor cross-section or current capacity.

Specify the matching connector, lead, sealant and required finished-system protection when ordering. Do not infer a higher IP rating from the connector image.

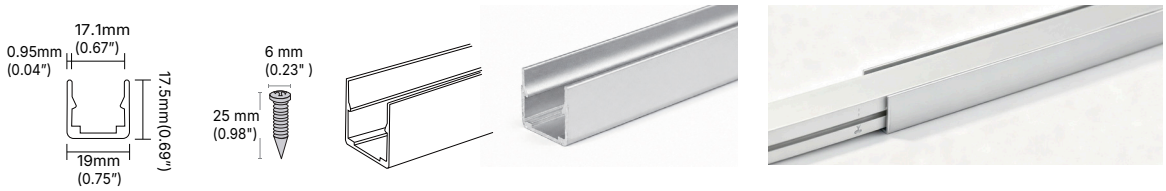
15 x 15mm (W x D) Horizontal Bend Neon Flex

48V DC | 100mm (10cm) cut | 40m single-end feed | All white colours

CHANNELS, TOOLS & MOUNTING

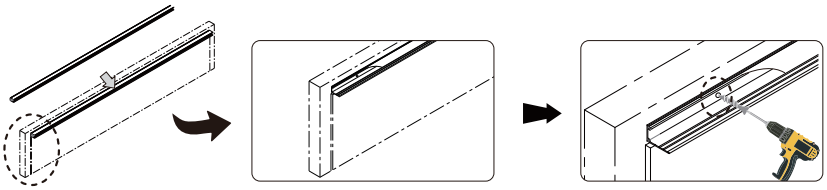


1 m Aluminum Channel

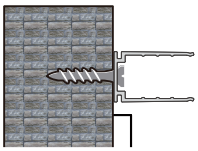


Supplier mounting reference: 20mm clip / 1m aluminium channel; 19mm outside width, 17.1mm clear width, 17.5mm height and 0.95mm wall. Confirm the actual profile and connector fit before fixing.

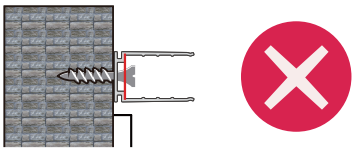
Fix the channel before inserting the neon. Keep every fixing straight and its head flush or recessed. Select fixings for the substrate; remove sharp edges and drilling debris.



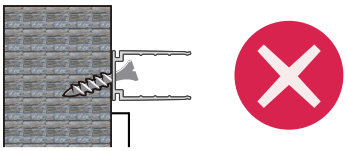
Secure the channel, then insert by hand progressively from one end. Screws and tools must not contact or puncture the light. Check head clearance from every direction.



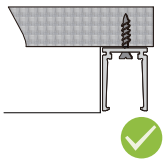
Correct: flush / recessed.



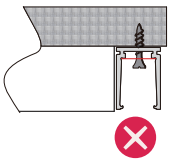
Incorrect: proud screw head.



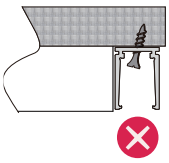
Incorrect: angled screw.



Correct: head clears neon.



Incorrect: head presses neon.



Incorrect: raised screw edge.

Do not force the neon over a fixing or into an unsuitable channel. Protect the silicone surface and avoid trapping extra length.

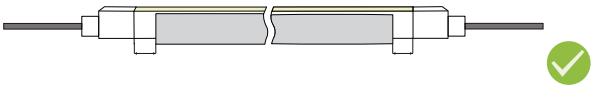
15 x 15mm (W x D) Horizontal Bend Neon Flex

48V DC | 100mm (10cm) cut | 40m single-end feed | All white colours

CONNECTOR CLEARANCES & CABLE CARE

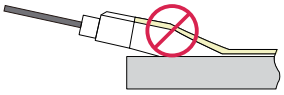
Supplier reference for the illustrated mounting pieces only: the 9.91-20.07mm gap is not a universal setback. Confirm clearances for the exact connector system before installation.

Illustrated feed-end mounting clearance: 9.91-20.07mm (0.39-0.79in).

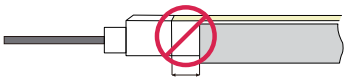


Where mounting pieces are used at both ends, keep the illustrated clearance at each end.

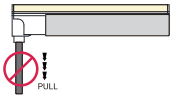
Do not pull or sharply fold the cable.



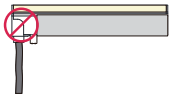
Do not overlap mounting pieces.



Shown arrangement: not below 9.91mm.

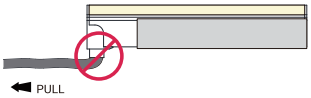


Bottom entry: no downward cable load.

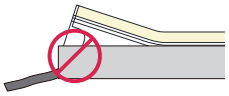


Shown bottom-entry gap: at least 9.91mm.

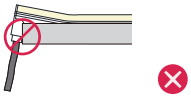
Do not pull or sharply fold the cable.



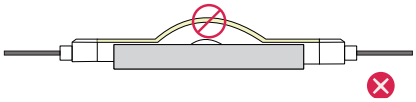
Support the cable in either exit direction.



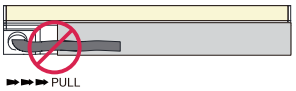
Never force an end fitting into a channel.



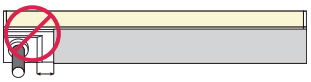
Do not deform the end of the neon.



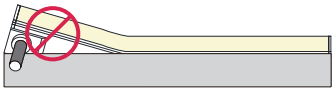
Insert from one end; do not trap a hump.



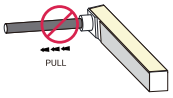
Moulded feed: do not fold the cable back.



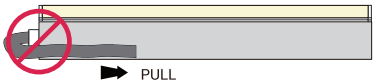
Shown moulded-feed gap: at least 9.91mm.



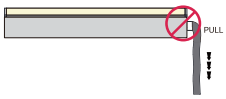
Do not force or bend the moulded end.



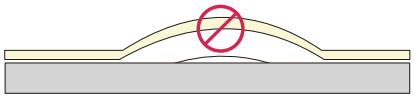
No axial pull on the moulded connector.



No sideways pull or sharp cable fold.



Support a downward cable independently.



Avoid a trapped middle hump.

Support the cable independently and insert progressively from one end. No fitting or seal should carry cable weight, tension or sideways load.

15 x 15mm (W x D) Horizontal Bend Neon Flex

48V DC | 100mm (10cm) cut | 40m single-end feed | All white colours

INSTALLATION STEPS 1-3: PLAN, CUT & TIN

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

Supplier process illustrations - not product pinout drawings. Follow the actual two-wire + / - pads and matching components; the examples do not establish included parts.

01 Plan the route and length

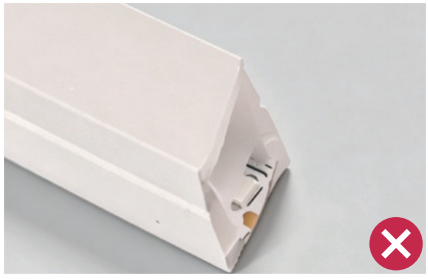
Determine the route and length. Measure and mark the 100mm (10cm) cut intervals.

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.

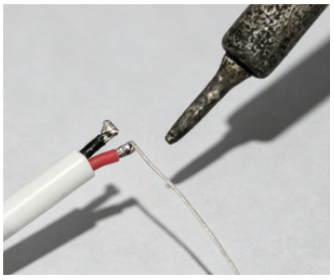


Incorrect: uneven cut. Keep the PCB flat.

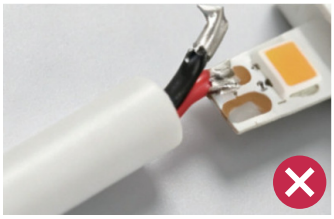
03 Tin both pads and conductors

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.

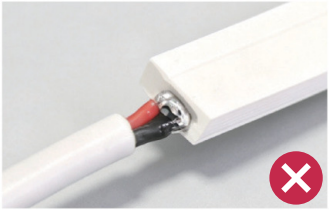
Tin the solder pads.



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.

15 x 15mm (W x D) Horizontal Bend Neon Flex

48V DC | 100mm (10cm) cut | 40m single-end feed | All white colours

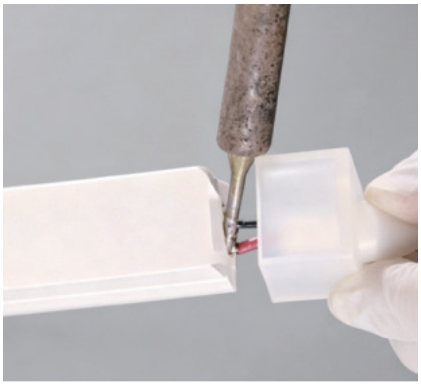
INSTALLATION STEPS 4-7: CONNECT, SEAL & CURE

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

Supplier process illustrations - follow the actual two-wire connections and fitting supplied.

04 Solder and check polarity

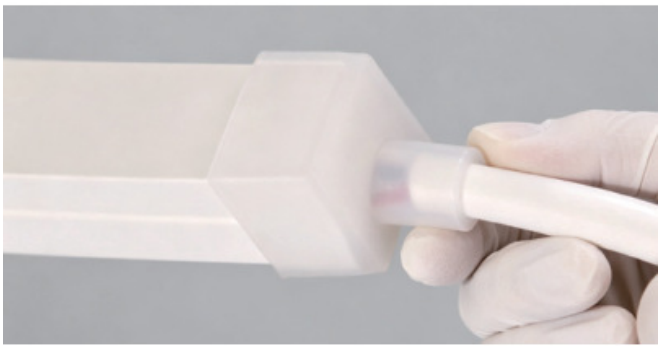
Solder each wire to its matching + / - pad. Inspect both joints and check they are secure. The illustration shows the soldering action only.



Match the actual two-wire + / - pads.

05 Seal the feed and seat fitting

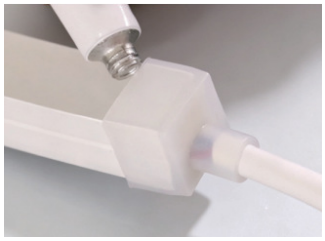
Cover the exposed strip and PCB end fully with the specified sealant. Push the correct fitting fully home to make a tight joint.



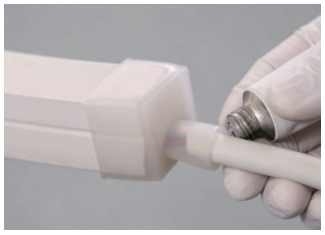
Seal the exposed end and seat the fitting fully.

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.

Support the cable so no pulling or sideways load reaches the sealed fitting.

07 Seal the tail and allow cure

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

Seal the rear end.

Fit the tail cap.

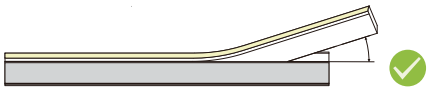
Seal the perimeter.

Check the finished tail.

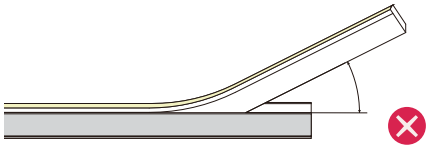
15 x 15mm (W x D) Horizontal Bend Neon Flex

48V DC | 100mm (10cm) cut | 40m single-end feed | All white colours

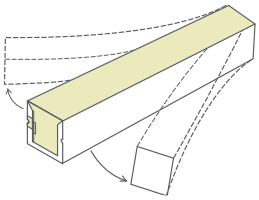
BENDING, COMMISSIONING & TROUBLESHOOTING



Correct: insert by hand below 15 degrees.



Incorrect: steep channel insertion.



Bend horizontally only. Do not twist.

The 15-degree figure is a channel-insertion angle, not a minimum bend radius. Use broad horizontal curves and keep the first and last units straight beside connectors. Confirm the numerical bend limit and straight-end length before planning tight curves; do not turn one unit into an assumed millimetre setback.

Before switching on

Confirm 48V DC, actual + / - polarity, supply capacity, 40m run limit and 100mm cuts. Check horizontal curves, straight end units, flush screws, connector clearances, supported cables, sealed ends and completed cure. Fully unroll before testing; operate within -30°C to 50°C.

TROUBLESHOOTING

No light	Check incoming power and 48V DC output. Check polarity, all supply/controller/dimmer joints and correct front-connector assembly.
Dim far end	Check for output below 48V DC, voltage drop, cable length and load. Check dimmer setting; shorten the run or obtain a confirmed feed redesign.
Too bright	Check output is not above 48V DC and input is stable. Isolate power before correction.
First section off	Check incorrect or uneven cuts, connector insertion damage, other PCB damage and water ingress. Replace the damaged marked section and reseal.
Flickering	Check supply capacity/stability, front contact and dimmer/controller compatibility. Do not improvise additional feeds.

CARE & WARRANTY

Warranty: 4 Years. Isolate power before maintenance. Replace damaged or poorly sealed sections. Confirm the complete system suits the environment; these illustrations do not establish pool, salt-water or continuous-submersion suitability.