LED NEON FLEX · DMX512 PIXEL CONTROL

# NEON-1615T-DMX

16 × 15 mm cross section · 24 VDC · IP67 · DMX512 · RGB and RGBW




| | |
|---|---|
| CROSS SECTION | 16 × 15 mm |
| INPUT | 24 VDC |
| CONTROL | DMX512 |
| PROTECTION | IP67 |
| PIXEL PITCH | 8 px/m |
| CUT LENGTH | 125 mm |

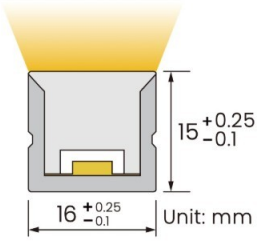
## Overview

NEON-1615T-DMX is the DMX512-controlled version of the NEON-1615T top-bend silicone LED neon profile. Each 125 mm segment is an individually addressable pixel (8 px/m), allowing colour chases, gradients and synchronised scenes from any DMX512 controller. The one-piece extruded silicone housing is rated IP67 and is built for marine and yacht installations, resisting salt water, UV, acids and alkalis, while the optical diffusion structure gives a continuous, dot-free line of light.

## Specifications

| | |
|---|---|
| Model | **NEON-1615T-DMX** |
| Cross section (W × H) | **$16\,^{+0.25/-0.1} \times 15\,^{+0.25/-0.1}$ mm** |
| Bend direction | **Top bend (vertical plane)** |
| Min. bend diameter | **200 mm** |
| Standard length | **5005 ± 7 mm + 300 ± 15 mm cable** |
| Input voltage | **24 VDC** |
| Power | **RGB 12 W/m · RGBW 15 W/m (5 W/m per channel)** |
| Control | **DMX512 · IC UCS512C1L** |
| Pixel | **8 px/m · 125 mm per pixel** |
| Light colour | **RGB / RGBW (white channel 4000K, CRI 80)** |
| IP rating | **IP67** |
| Housing | **One-piece extruded silicone, milky white** |
| Cut length | **125 mm** |
| Max. run length | **7 m** |
| Storage temperature | **–25 … +60 °C** |
| LED solder-point temp. | **max. 65 °C** |
| Operating temperature | **–25 … +35 °C** |

## Cross Section




Cross section

ORDERING INFORMATION

## Product Code

**NEON-1615T-DMX**
MODEL

**RGBW**
LIGHT COLOUR
RGB · RGBW

**RGB** Red, green, blue · **RGBW** RGB + 4000K white  Examples: **NEON-1615T-DMX-RGB** · **NEON-1615T-DMX-RGBW**

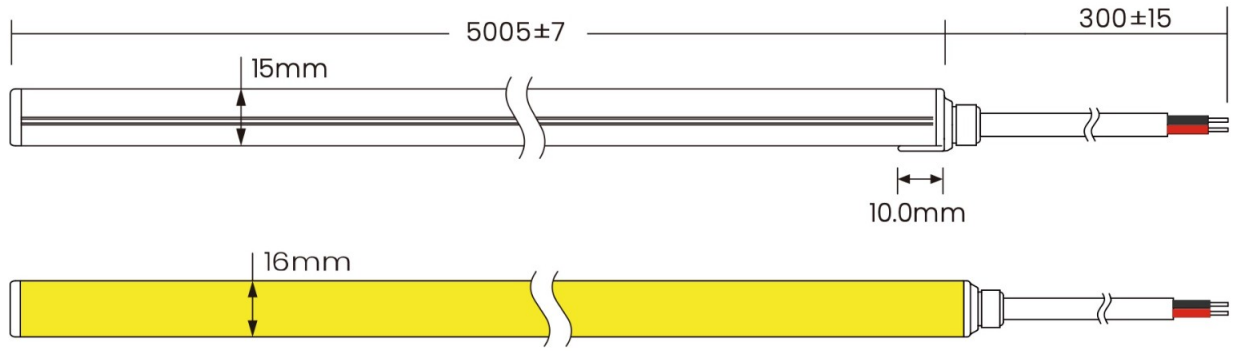
## Photometric Data

| PRODUCT CODE | CHANNEL | POWER | LM/M | LM/W | CUT MM | MAX. RUN M | PIXELS/M | MAX. AMB. °C |
|---|---|---|---|---|---|---|---|---|
| **NEON-1615T-DMX-RGB** | Red | 5 W/m | 42 | 8.3 | 125 | 7 | 8 | 35 |
| **NEON-1615T-DMX-RGB** | Green | 5 W/m | 156 | 31.2 | 125 | 7 | 8 | 35 |
| **NEON-1615T-DMX-RGB** | Blue | 5 W/m | 27 | 5.4 | 125 | 7 | 8 | 35 |
| **NEON-1615T-DMX-RGB** | Full output | 12 W/m | 224 | 18.7 | 125 | 7 | 8 | 35 |
| **NEON-1615T-DMX-RGBW** | Red | 5 W/m | 41 | 8.2 | 125 | 7 | 8 | 35 |
| **NEON-1615T-DMX-RGBW** | Green | 5 W/m | 102 | 20.3 | 125 | 7 | 8 | 35 |
| **NEON-1615T-DMX-RGBW** | Blue | 5 W/m | 30 | 5.9 | 125 | 7 | 8 | 35 |
| **NEON-1615T-DMX-RGBW** | White 4000K | 5 W/m | 123 | 24.6 | 125 | 7 | 8 | 35 |
| **NEON-1615T-DMX-RGBW** | Full output | 15 W/m | 291 | 19.4 | 125 | 7 | 8 | 35 |

lm/m: luminous flux per metre · Max. run: recommended maximum length from a single feed point · Max. amb.: maximum permitted ambient temperature. Single-channel values: one channel at full output; full output: all channels on. RGB values are based on the identical LED strip used in this profile. Control via any DMX512 controller; address mapping on request.

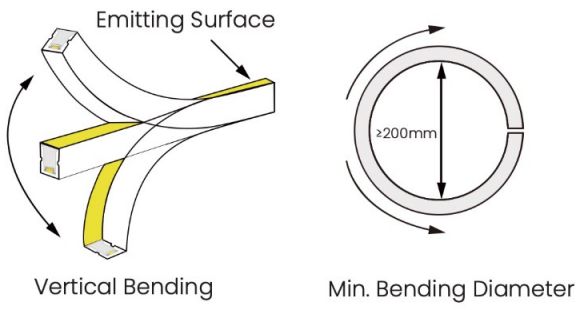
DIMENSIONS & INSTALLATION

## Dimensions (unit: mm)



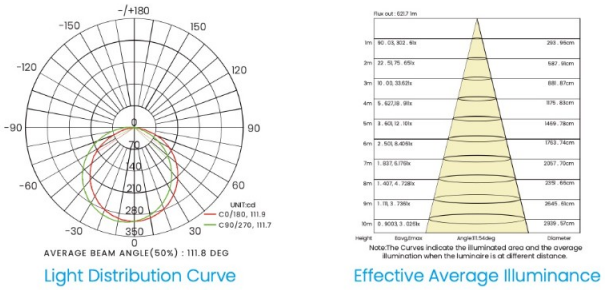

Standard piece: 5005 ± 7 mm neon length with 300 ± 15 mm lead cable. Cross section 16 $^{+0.25/-0.1}$ × 15 $^{+0.25/-0.1}$ mm.

## Bending




Bends in the vertical plane only (emitting surface outward). Minimum bend diameter Ø200 mm.

## Light Distribution




Reference: 24 V, 10 W/m, single colour, 4000K. IES files for other versions on request.

## Length Standard

| NEON LENGTH L (M) | INTEGRAL END CAP | SOLDER-FREE END CAP | SILICONE END CAP | TOLERANCE (MM) |
|---|---|---|---|---|
| 0 < L ≤ 5 | L + 5 | L + 32 | L + 5.5 | ±7 |
| 5 < L ≤ 10 | L + 5 | L + 32 | L + 5.5 | ±10 |
| 10 < L ≤ 15 | L + 5 | L + 32 | L + 5.5 | ±13 |
| 15 < L ≤ 20 | L + 5 | L + 32 | L + 5.5 | ±16 |
| 20 < L ≤ 25 | L + 5 | L + 32 | L + 5.5 | ±19 |
| 25 < L ≤ 30 | L + 5 | L + 32 | L + 5.5 | ±22 |
| 30 < L ≤ 35 | L + 5 | L + 32 | L + 5.5 | ±25 |

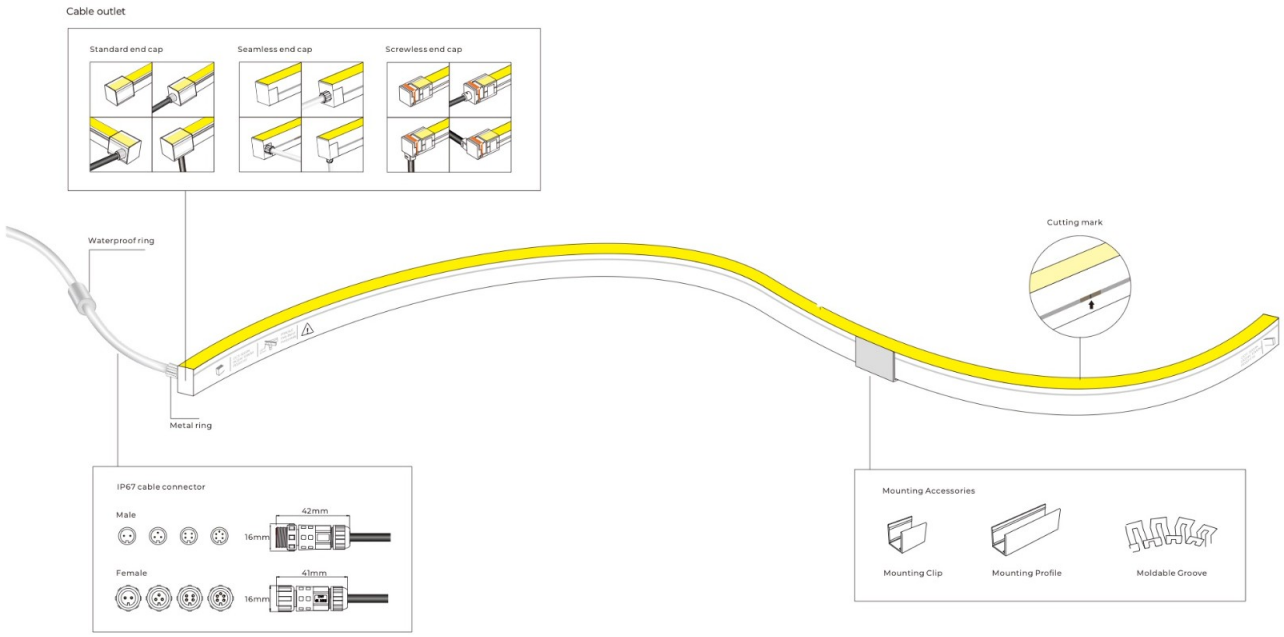
Final length in mm by end-cap type. Light output and power may vary by up to ±10% due to production and component tolerances.

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# Cable Outlet & Mounting

End caps, cable entry, connectors and mounting accessories for MareLuce silicone neon.

## System Overview



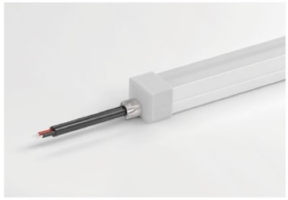

Each piece is supplied sealed: cable outlet at the feed end, closed end cap at the far end. Cut only at the marked cutting points; the maximum run length per feed point is given in the product datasheet.

## End Cap Types

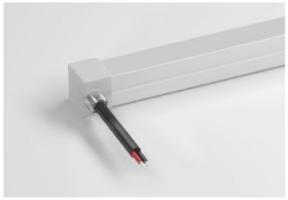
| TYPE | CONSTRUCTION | BEST FOR |
|---|---|---|
| **Standard silicone end cap** | Moulded silicone cap, IP67 sealed | General use; the default option |
| **Seamless end cap** | Light runs to the very end, no dark area | Corners, butted joints and closed shapes |
| **Screwless end cap** | Mechanical quick-connect cap with gasket, IP67 (see next page) | On-site cutting and fast replacement |

## Cable Entry Direction

Silicone End Cap (IP67)



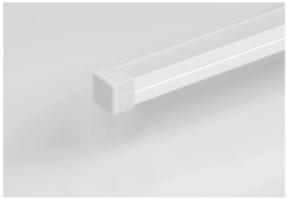
Front Cable Entry



Side Cable Entry



Bottom Cable Entry



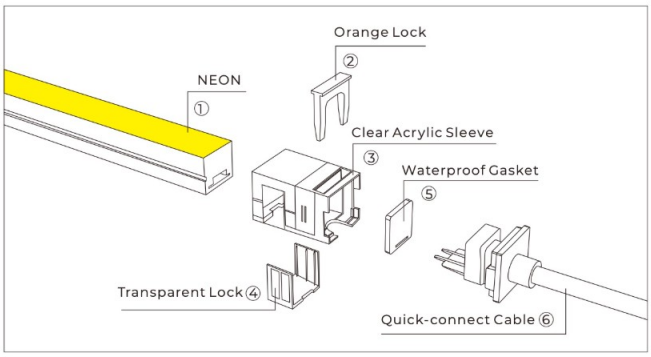
Closed end cap

**Front:** cable exits in line with the neon. **Side:** cable leaves at 90° for runs that end against a wall. **Bottom:** cable passes straight down through the mounting surface for hidden wiring. **Closed end cap:** blind end without cable. Specify end cap and cable entry for each end when ordering; availability varies by model.

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## Screwless End Cap

IP67 screwless end cap deconstruction diagram



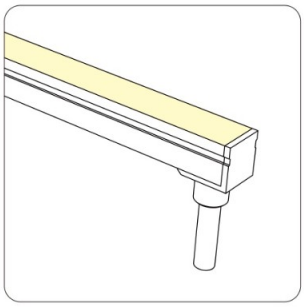

The screwless end cap seals a cut end to IP67 without glue or soldering, so pieces can be cut to length and connected on site.

1. Neon
2. Orange lock
3. Clear acrylic sleeve
4. Transparent lock
5. Waterproof gasket
6. Quick-connect cable

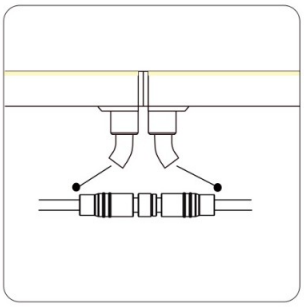
Follow the assembly instructions supplied with the cap.

## Joints & Corners

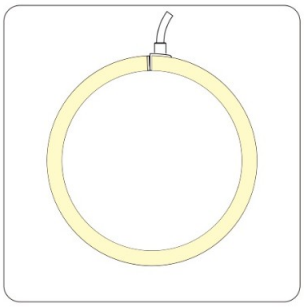
IP67 seamless end cap without dark area



Linear interconnection without dark area



Curve interconnection of lighting outward without dark area



Curve interconnection of lighting outward without dark area



Seamless end caps let two pieces meet without a dark gap, in straight lines and in closed curves. Join pieces with IP67 cable connectors (Ø16 mm, 41–42 mm long, 2 to 5 pins) and place connectors where they stay dry and accessible.

## Mounting

| ACCESSORY | USE |
|---|---|
| **Mounting clips** | Fixed at regular intervals along straight and curved runs; quick to install. |
| **Mounting profile** | Aluminium or PC channel for continuous support and a clean, straight line; recommended on exterior and overhead runs. |
| **Moldable groove** | Flexible channel that follows curves, letters and logos. |
| **Recessed (wing) neon** | Pressed into a routed groove, no profile needed; groove size in the product datasheet. |

## Installation Notes

- Respect the **bending direction** and **minimum bend diameter** in the product datasheet; do not bend at end caps or cable outlets.
- Do not twist the neon, and never pull or carry it by the cable.
- Cut only at the marked cutting points and reseal every cut end with an end cap to keep the IP rating.
- Use the power supply type and voltage given in the datasheet and do not exceed the maximum run length; feed longer lines from several points.
- On deck and exterior areas keep connections and power supplies protected from standing water; rinse salt deposits with fresh water.
- Switch off the power before installation or maintenance; installation should be carried out by a qualified electrician.

Drawings are for illustration; details may vary by model. Contact MareLuce for project-specific advice.