



The Marquee, Sydney NEON X application suggestion



# NEON

THE RANGE NEON X NEONXM NEON Y NEONYMI NEON Y3

ACCESSORIES CONNECTORS \_\_\_\_ NEON DYNAMIC

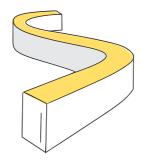
light**culture** 

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CHASING	28

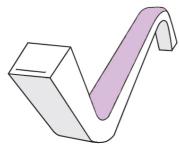


NEON is a broad range of PVC encapsulated LED ribbons with a variety of light emissions and casings that closely reference glass neon tube. Modern LED technology offers a durability that surpasses the traditional glass product and the PVC casing provides UV and flame-resistant protection while distributing uniform light.

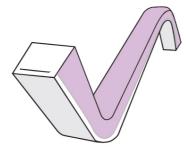
The range of connectors and mounting accessories allow for a multitude of applications. Add in your choice of a range of colours, both static and dynamic and you'll get a perfect product for any imagined project.



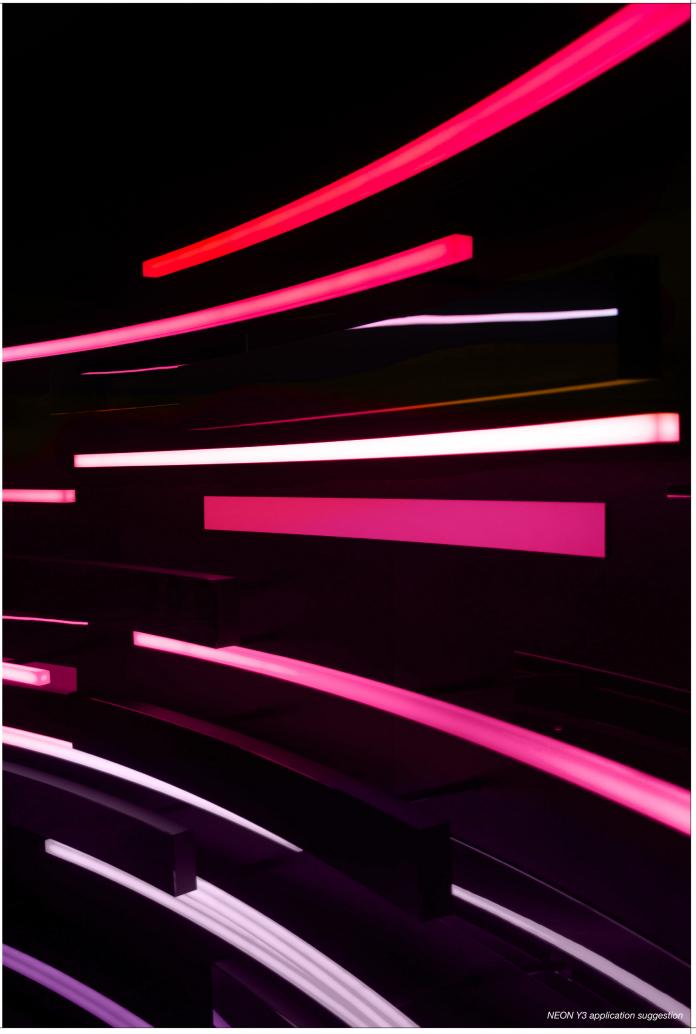
One Sided | Horizontal bend NEON X **NEON MICRO X** 



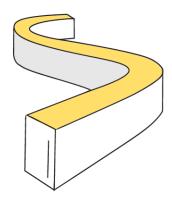
One Sided | Vertical bend **NEON Y NEON MICRO Y** 

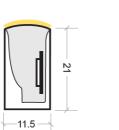


Three Sided | Vertical bend **NEON Y3** 

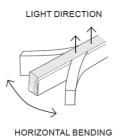


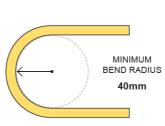
## $\square \Xi \bigcirc X$





NEON





#### APPLICATIONS

- Theatres, bars, restaurants, & retail
- Cove lighting
- Architectural features
- Exterior or interior installations
- Swimming or feature pools

#### FEATURES

- Horizontal bending
- UV & flame resistant
- Suitable for use around salt or chlorinated water

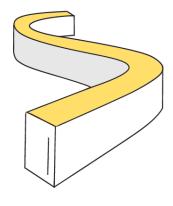
LED WATTS	10W/m	13W/m	13W/m
COLOUR & LUMENS*	2700K 248lm/m 3000K 235lm/m 4000K 272lm/m 6500K 301lm/m Green 260lm/m Blue 301lm/m Pink 150lm/m	2700K 395lm/m 3000K 364lm/m 4000K 414lm/m 6500K 342lm/m Green 366lm/m Blue 341lm/m Pink 180lm/m	Red 451lm/m Green 133lm/m Blue 281lm/m RGB 196lm/m (White)
INPUT VOLTS	24V DC	24V DC	24V DC
OPERATING TEMP.	-25°C ~ +50°C	-25°C ~ +50°C	-25°C ~ +50°C
MAX RUN PER POWER FEED	15m using one feed 30m using two feeds	8m using one feed 16m using two feeds	10m using one feed 20m using two feeds
CRI	≥80	≥80	
BEAM ANGLE	120°	120°	120°
LED QTY	72 LED/m	72 LED/m	72 LED/m
SOURCE LIFE	50,000hr	50,000hr	50,000hr
CUTTING LENGTH	83.3mm	83.3mm	83.3mm
MIN BEND RADIUS	40mm	40mm	40mm
CONTROL	DImmable by PWM signal	DImmable by PWM signal	Requires 3-channel controller
INGRESS PROTECTION	IP67 Snap Connector or IP68 Injection Moulding Protection established by use of connection type	IP67 Snap Connector or IP68 Injection Moulding Protection established by use of connection type	IP67 Snap Connector or IP68 Injection Moulding Protection established by use of connection type

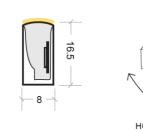
RGBW	DYNAMIC RGB CHASING	DYNAMIC RGBW CHASING	TUNABLE WHITE
17W/m	15W/m	18W/m	15W/m
Red 115lm/m Green 124lm/m Blue 261lm/m 3000K White 144lm/m RGBW (White) 302lm/m	Red 36lm/m Green 97lm/m Blue 19lm/m RGB (White) 141lm/m	Red 35lm/m Green 119lm/m Blue 25lm/m 3000K White 122lm/m	2200K + 5700K 210lm/m + 240lm/m
24V DC	24V DC	24V DC	24V DC
-25°C ~ +50°C	-25°C ~ +50°C	-25°C ~ +50°C	-25°C ~ +50°C
8m using one feed 16m using two feeds	8m using one feed 16m using two feeds	8m using one feed 16m using two feeds	10m using one feed 20m using two feeds
≥80 (white chip only)		≥80 (white chip only)	≥80 (white chip only)
120°	120°	120°	120°
72 LED/m	70 LED/m (10 pixels/m)	70 LED/m (10 pixels/m)	120 LED/m (10 pixels/m)
50,000hr	50,000hr	50,000hr	50,000hr
83.3mm	100mm	100mm	100mm
40mm	40mm	40mm	40mm
Requires 4-channel controller	DMX512 (RS485). Requires controller.	DMX512 (RS485). Requires controller.	Requires 2-channel controller
IP68 Injection Moulding	IP68 Injection Moulding	IP68 Injection Moulding	IP68 Injection Moulding
(connector cable plugs recommended)	(connector cable plugs recommended)	(connector cable plugs recommended)	(connector cable plugs recommended)
IP67 DIY Snap connector end cap available for shortening length on-site	IP67 DIY Snap connector end cap available for shortening length on-site	IP67 DIY Snap connector end cap available for shortening length on-site	IP67 DIY Snap connector end cap available for shortening length on-site

Actual product characteristics may vary. \*See product data sheet for more options

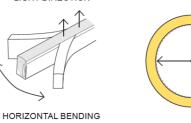


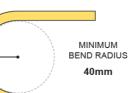
### NEON K





#### LIGHT DIRECTION





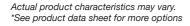


- Theatres, bars, restaurants, & retail
- Cove lighting
- Architectural features
- Exterior or interior installations
- Swimming or feature pools

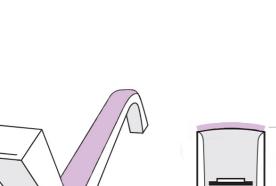
### FEATURES

- Horizontal bending
- UV & flame resistant
- Suitable for use around salt or chlorinated water
- Single colour

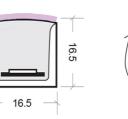
LED WATTS	5W/m	10W/m
COLOUR & LUMENS*	2700K 115lm/m 3000K 155lm/m 4000K 120lm/m 6500K 150lm/m Green 140lm/m Blue 171lm/m	2700K 205lm/m 3000K 210lm/m 4000K 225lm/m 6500K 245lm/m Green 200lm/m Blue 251lm/m
	Red 45lm/m	Red 501lm/m
OPERATING TEMP.	-25°C ~ +50°C	-25°C ~ +50°C
MAX RUN PER POWER FEED	10m using one feed 20m using two feeds	10m using one feed 20m using two feeds
CRI	≥80	≥80
BEAM ANGLE	120°	120°
LED TYPE	Epistar SMD LED 2835	Epistar SMD LED 2835
LED QTY	70 LED/m	120 LED/m
SOURCE LIFE	50,000hr	50,000hr
CUTTING LENGTH	100mm	100mm
MINIMUM BEND RADIUS	40mm	40mm
CONTROL	Dimmable by PWM signal	Dimmable by PWM signal
INGRESS PROTECTION	IP67 Snap Connector or IP68 Injection Moulding Protection established by	IP67 Snap Connector or IP68 Injection Moulding Protection established by

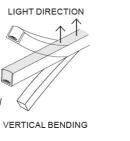




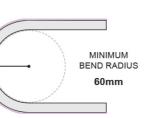


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SINGLE COLOUR



RGB

#### APPLICATIONS

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- Swimming or feature pools

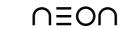
#### FEATURES

- Horizontal bending
- UV & flame resistant
- Suitable for use around salt or chlorinated water

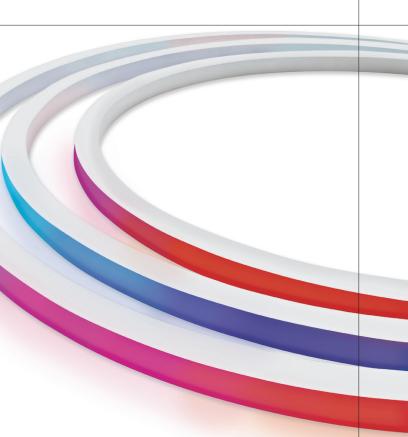
	SINGLE COLOUR	NOD
LED WATTS	10W/m	13W/m
COLOUR & LUMENS*	2700K 380lm/m 3000K 400lm/m 4000K 454lm/m 6500K 400lm/m Green 360lm/m Blue 4311m/m Pink 150lm/m	Red 80lm/m Green 205lm/m Blue 541lm/m RGB (White) 300lm/m
INPUT VOLTS	24V DC	24V DC
OPERATING TEMP.	-25°C ~ +50°C	-25°C ~ +50°C
MAX RUN PER POWER FEED	15m using one feed 30m using two feeds	10m using one feed 20m using two feeds
CRI	≥80	
BEAM ANGLE	120°	120°
LED QTY	120 LED/m	72 LED/m
SOURCE LIFE	50,000hr	50,000hr
CUTTING LENGTH	50mm	83.3mm
MIN BEND RADIUS	60mm	60mm
CONTROL	Dimmable by PWM signal	Requires 3-channel controller
INGRESS PROTECTION	IP67 Snap Connector or IP68 Injection Moulding Protection established by use of connection type	IP67 Snap Connector or IP68 Injection Moulding Protection established by use of connection type

RGBW	DYNAMIC RGB CHASING	DYNAMIC RGBW CHASING	TUNABLE WHITE
17W/m	15W/m	18W/m	15W/m
Red 49lm/m Green 196lm/m Blue 42lm/m 3000K White 253lm/m RGBW (White) 514lm/m	Red 49lm/m Green 127lm/m Blue 24lm/m RGB (White) 194lm/m	Red 50lm/m Green 166lm/m Blue 34lm/m 3000K White 177lm/m RGBW (White) 402lm/m	2200K + 5700K 372lm/m + 410lm/m
24V DC	24V DC	24V DC	24V DC
-25°C ~ +50°C	-25°C ~ +50°C	-25°C ~ +50°C	-25°C ~ +50°C
8m using one feed 16m using two feeds	8m using one feed 16m using two feeds	8m using one feed 16m using two feeds	10m using one feed 20m using two feeds
≥80 (white chip only)		≥80 (white chip only)	≥80 (white chip only)
120°	120°	120°	120°
72 LED/m	70 LED/m (10 pixels/m)	70 LED/m (10 pixels/m)	120 LED/m (10 pixels/m)
50,000hr	50,000hr	50,000hr	50,000hr
83.3mm	100mm	100mm	100mm
60mm	60mm	60mm	60mm
Requires 4-channel controller	DMX512 (RS485). Requires controller.	DMX512 (RS485). Requires controller.	Requires 2-channel controller
IP68 Injection Moulding	IP68 Injection Moulding	IP68 Injection Moulding	IP68 Injection Moulding
(connector cable plugs recommended)	(connector cable plugs recommended)	(connector cable plugs recommended)	(connector cable plugs recommended)
IP67 DIY Snap connector end cap available for shortening length on-site	IP67 DIY Snap connector end cap available for shortening length on-site	IP67 DIY Snap connector end cap available for shortening length on-site	IP67 DIY Snap connector end cap available for shortening length on-site

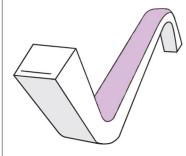
Actual product characteristics may vary. \*See product data sheet for more options

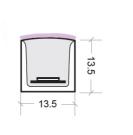


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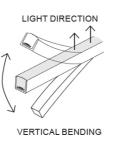


## NEON Y



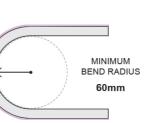


LED WATTS



SINGLE COLOUR

10W/m



### APPLICATIONS

- Theatres, bars, restaurants, & retail
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- Swimming or feature pools

### FEATURES

- Vertical bending
- UV & flame resistant
- Suitable for use around salt or chlorinated water
- Single colour

COLOUR & LUMENS*	2700K 435lm/m	
	3000K 450lm/m	
	4000K 440lm/m	
	6500K 442lm/m	
	Green 526lm/m	
	Blue 271lm/m	
	Red 175lm/m	
INPUT VOLTS	24V DC	
OPERATING TEMP.	-25°C ~ +50°C	
MAX RUN PER POWER	15m using one feed	
FEED	30m using two feeds	
CRI	≥80	
BEAM ANGLE	120°	
LED QTY	120 LED/m	
SOURCE LIFE	50,000hr	
CUTTING LENGTH	50mm	
MIN BEND RADIUS	60mm	
CONTROL	Dimmable by PWM	
	signal	
INGRESS	IP67 Snap Connector or	
PROTECTION	IP68 Injection Moulding	
	Protection established by use of connection type	

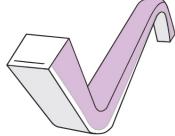
Actual product characteristics may vary. \*See product data sheet for more options

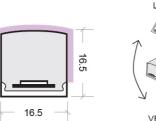


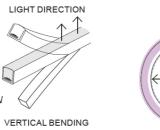


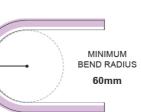
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#### APPLICATIONS

- Theatres, bars, restaurants, & retail
- Cove lighting
- Architectural features
- Exterior or interior installations
- Swimming or feature pools

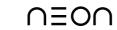
#### FEATURES

- Horizontal bending
- UV & flame resistant
- Suitable for use around salt or chlorinated water

	SINGLE COLOUR	RGB	
LED WATTS	10W/m	13W/m	
COLOUR & LUMENS*	2700K 554lm/m 3000K 561lm/m 4000K 553lm/m 6500K 585lm/m Green 500lm/m Blue 621lm/m Pink 170lm/m	Red 83lm/m Green 245lm/m Blue 461lm/m RGB (White) 350lm/m	
INPUT VOLTS	24V DC	24V DC	
OPERATING TEMP.	-25°C ~ +50°C	-25°C ~ +50°C	
MAX RUN PER POWER FEED	15m using one feed 30m using two feeds	10m using one feed 20m using two feeds	
CRI	≥80		
BEAM ANGLE	210°	210°	
LED QTY	120 LED/m	72 LED/m	
SOURCE LIFE	50,000hr	50,000hr	
CUTTING LENGTH	50mm	83.3mm	
MIN BEND RADIUS	60mm	60mm	
CONTROL	Dimmable by PWM signal	Requires 3-channel controller	
INGRESS PROTECTION	IP67 Snap Connector or IP68 Injection Moulding Protection established by	IP67 Snap Connector or IP68 Injection Moulding Protection established by	

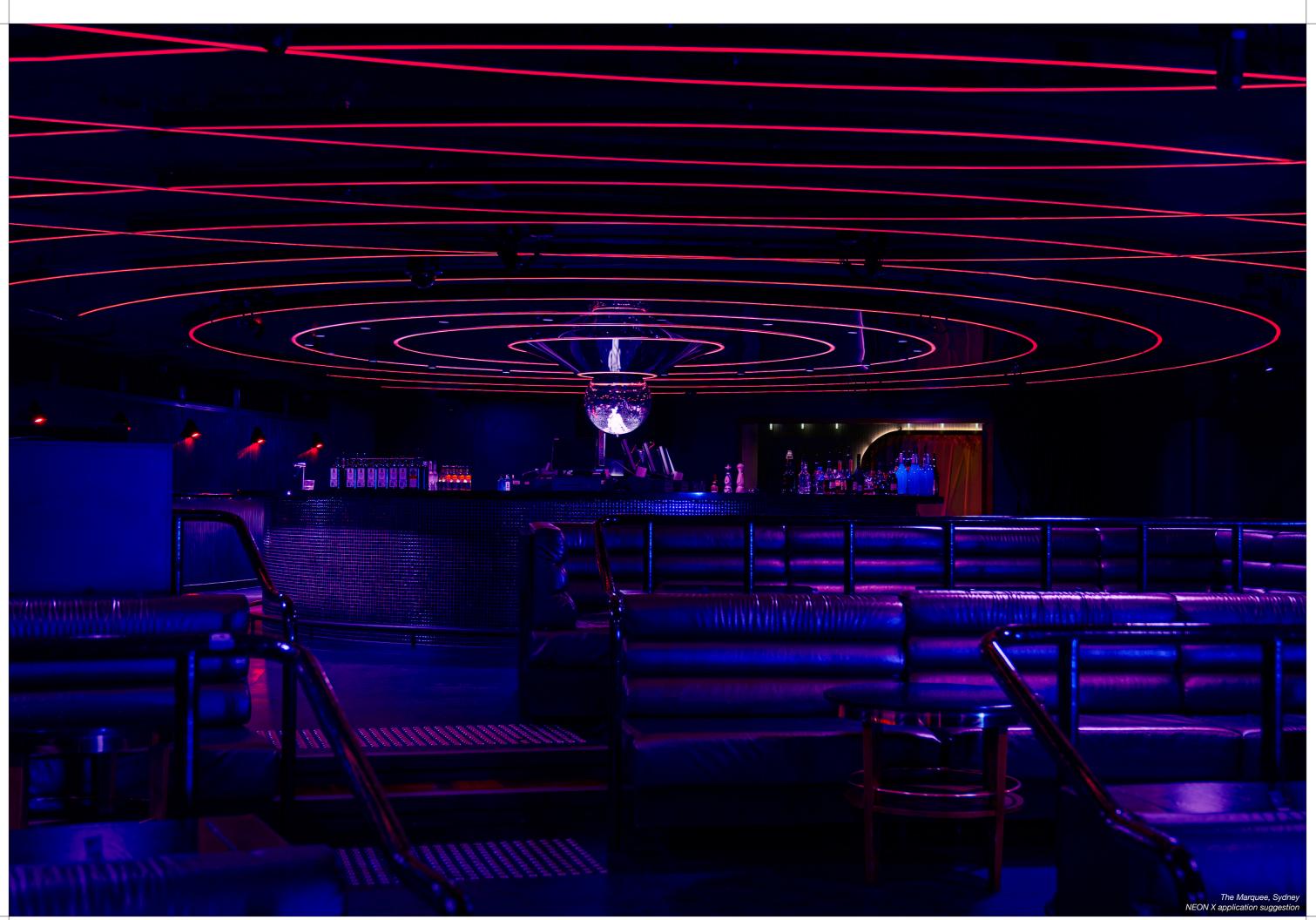
RGBW	DYNAMIC RGB CHASING	DYNAMIC RGBW CHASING	TUNABLE WHITE
17W/m	15W/m	18W/m	15W/m
Red 71lm/m Green 270lm/m Blue 52lm/m 3000K White 315lm/m RGBW (White) 642lm/m	Red 74lm/m Green 184lm/m Blue 32lm/m RGB (White) 258lm/m	Red 79lm/m Green 253lm/m Blue 51lm/m 3000K White 274lm/m RGBW (White) 606lm/m	2200K + 5700K 418lm/m + 470lm/m
24V DC	24V DC	24V DC	24V DC
-25°C ~ +50°C	-25°C ~ +50°C	-25°C ~ +50°C	-25°C ~ +50°C
8m using one feed 16m using two feeds	8m using one feed 16m using two feeds	8m using one feed 16m using two feeds	10m using one feed 20m using two feeds
≥80 (white chip only)		≥80 (white chip only)	≥80 (white chip only)
210°	210°	210°	210°
72 LED/m	70 LED/m (10 pixels/m)	70 LED/m (10 pixels/m)	120 LED/m (10 pixels/m)
50,000hr	50,000hr	50,000hr	50,000hr
83.3mm	100mm	100mm	100mm
60mm	60mm	60mm	60mm
Requires 4-channel controller	DMX512 (RS485). Requires controller.	DMX512 (RS485). Requires controller.	Requires 2-channel controller
IP68 Injection Moulding (connector cable plugs recommended)	IP68 Injection Moulding (connector cable plugs recommended)	IP68 Injection Moulding (connector cable plugs recommended)	IP68 Injection Moulding (connector cable plugs recommended)
IP67 DIY Snap connector end cap available for shortening length on-site	IP67 DIY Snap connector end cap available for shortening length on-site	IP67 DIY Snap connector end cap available for shortening length on-site	IP67 DIY Snap connector end cap available for shortening length on-site

Actual product characteristics may vary. \*See product data sheet for more options

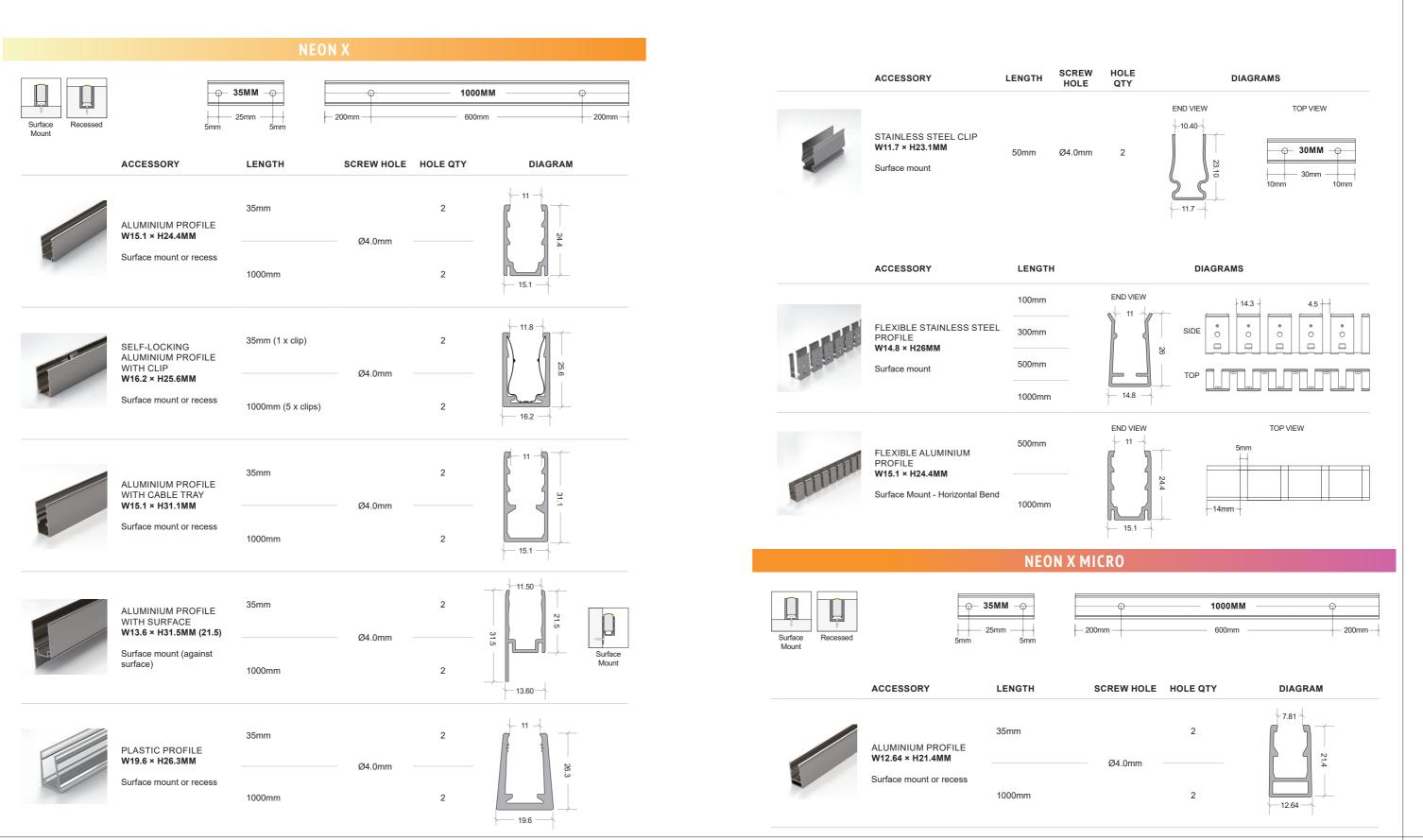


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### ACCESSORIES





#### **NEON Y**

Surface Mount	Recessed	

5mm 25mm	5mm

(	1000MM	)
- 200mm	600mm	— 200mm —

	ACCESSORY	LENGTH	SCREW HOLE	HOLE QTY	DIAGRAM
	ALUMINIUM PROFILE W20.4 × H19.6MM Surface mount or recess	35mm	Ø4.0mm	2	16.2
		1000mm	£4.0mm	2	20.4
	SELF-LOCKING ALUMINIUM PROFILE WITH CLIP	35mm (1 clip)	- Ø4.0mm	2	
	W21.2 × H19.6MM Surface mount or recess	1000mm (5 clips)	- Ø4.0mm	2	©
	ALUMINIUM PROFILE WITH CABLE TRAY <b>W20.4 × H27.9MM</b> Surface mount or recess	35mm	Ø4.0mm	2	16.2
		1000mm		2	20.4
	ANTI-DROP ALUMINIUM PROFILE WITH PLASTIC GRIPS	35mm	- Ø4.0mm	2	18.2
	W26 × H20.2MM Surface mount or recess	1000mm	<u>0</u> 4.011111	2	
	PLASTIC AND ALUMINIUM PROFILE W22.2 × H22.85MM	35mm	- Ø4.0mm	2	22.85
	Surface mount	1000mm	Ø4.0mm	2	





STAINLESS STEEL CLIP W20 × H19.6MM Surface mount

50mm



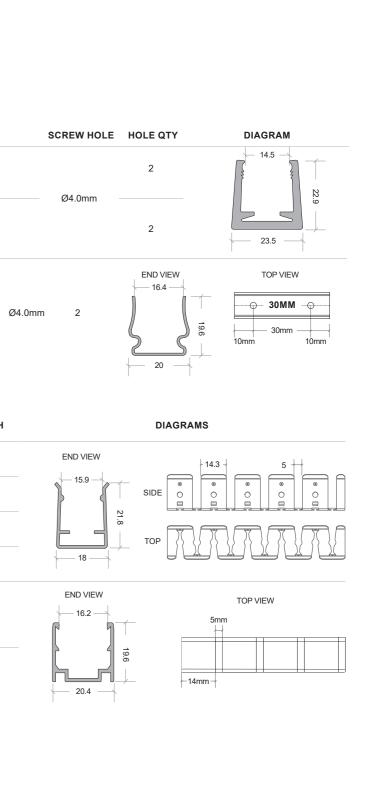


FLEXIBLE ALUMINIUM PROFILE W20.4 × H19.6MM

Surface Mount - Vertical Bend

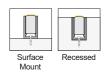
1000mm

500mm





#### **NEON Y MICRO**



ACCESSORY

ALUMINIUM PROFILE

Surface mount or recess

W15.3 × H16.88MM

	)— 35MM	(	2
 5mn	25mm · n	5	

LENGTH

35mm

1000mm

	) 1000MM	)
- 200mm	600mm	— 200mm —

DIAGRAM

12.9 -

\_\_\_\_\_15.3\_\_\_

SCREW HOLE HOLE QTY

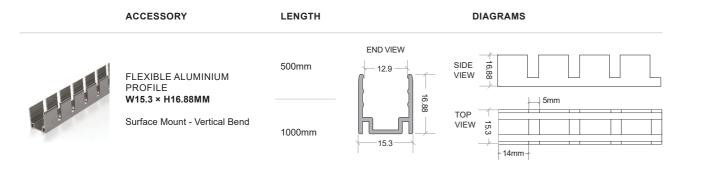
Ø4.0mm

2

2

5mm 5mm			⊨  - 2
	ACCESSORY	LENGTH	SCR HOI
	PLASTIC AND ALUMINIUM PROFILE	35mm	<i></i>
	W22.2 × H22.85MM Surface mount	1000mm	Ø4.0
	PLASTIC PROFILE W23.5 × H22.9MM	35mm	Ø4.0

1



ACCESSORY	LENGTH
FLEXIBLE STAINLESS STEEL PROFILE W18 × H22MM Surface mount	100mm
	300mm
	500mm
	1000mm

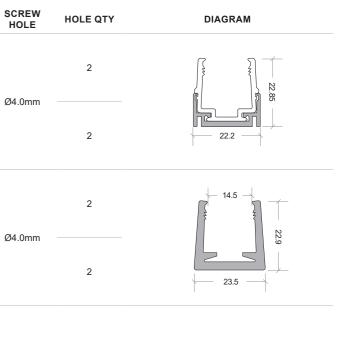
Surface mount or recess

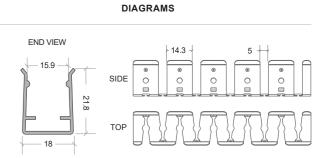
1000mm

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	) 1000MM (	P
- 200mm	600mm	— 200mm —





NOTE: NEON Y3 IS 3-SIDED, WHILE USEFUL FOR BENDING FLEXIBLE STAINLESS STEEL PROFILE WILL REDUCE LIGHT OUTPUT.

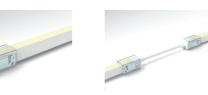


## **CONNECTOR OVERVIEW**

#### **NEON | IP67 DIY SNAP CONNECTORS**

DIY SNAP CONNECTORS CAN BE PRE-FITTED AT FACTORY OR FITTED ON-SITE (SEE NEON INSTALLATION GUIDE FOR SNAP CONNECTOR INSTRUCTIONS). SUITABLE FOR OUTDOOR APPLICATIONS. FOR UNDERWATER APPLICATIONS, USE IP68 INJECTION INJECTION CONNECTIONS ONLY. CABLE LENGTHS GIVEN ARE STANDARD, CAN BE MADE LONGER BY REQUEST.





END CAP

DIRECT ENTRY

FLEXIBLE CONNECTOR

SINGLE COLOUR	✓	~	~
TUNEABLE	✓	✓	✓
RGB	✓	✓	~
RGBW	×	✓	×
DMX RGB CHASING	×	~	×
DMX RGBW CHASING	×	✓	×

RGBW, DMX RGB CHASING AND DM RGBW CHASING: ONLY END CAPS ARE AVAILABLE, WHICH CAN ALLOW FOR THE SHORTENING OF LENGTHS ON-SITE (END CAP SIDE) IF REQUIRED. NOTE: THAT THIS WILL REDUCE ANY EISTING IP RATING TO IP67.

#### **NEON | IP68 INJECTION MOULDING**

REQUIRES FITTING AT FACTORY. LEAD TIMES APPLY. SUITABLE FOR OUTDOOR & SUBMERGED APPLICATIONS (UP TO 2M). CABLE LENGTHS GIVEN ARE STANDARD, CAN BE MADE LONGER BY REQUEST.

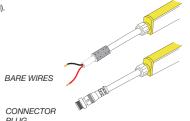
For IP68 injection moulding there are two cable options available - bare wires or plugs. The below chart shows the injection moulding dimensions for both types.

Bare end cables come with a standard cable length of 600mm. It is recommended to ensure the feeder cable is long enough to reach to where connections can be made (cables can be made longer upon request).

IP68 Connector cable plugs are designed for "plug-and-play" type installations (see 'Connector Plug' page for information about the plug connectors).

	ACCESSORY	CABLE LENGTH
3-	DIRECT ENTRY	600mm with waterproof interrupter, ending in bare wires
0		300mm with IP68 male connector plug*
a		600mm with waterproof interrupter, ending in bare wires
	SIDE ENTRY Side Injection moulding increases product width at connection. If using profile, connection end will not fit and will need to extend out of profile.	300mm with IP68 male connector plug* (male or female depending on left or right side)
	BOTTOM ENTRY	600mm with waterproof interrupter, ending in bare wires
1		300mm with IP68 male connector plug*
	L SHAPE ENTRY	600mm with waterproof interrupter, ending in bare wires
4		300mm with IP68 male connector plug*

\*See 'Connector Plug' page for information about IP68 injection moulding cable connector plugs



CONNECTOR PLUG

#### DIMENSION DIAGRAM

#### SEE MODEL SPECIFIC ACCESSORIES PDF FOR DIMENSIONS

are wires

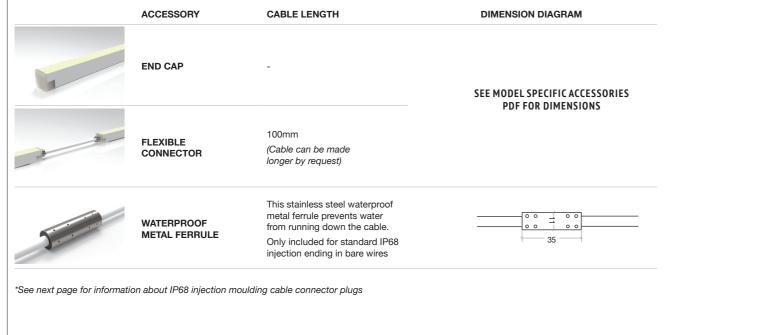
**NEON Y ONLY** 

SEE MODEL SPECIFIC ACCESSORIES PDF FOR DIMENSIONS



#### **NEON | IP68 INJECTION MOULDING**

REQUIRES FITTING AT FACTORY, LEAD TIMES APPLY. SUITABLE FOR OUTDOOR & SUBMERGED APPLICATIONS (UP TO 2M). CABLE LENGTHS GIVEN ARE STANDARD, CAN BE MADE LONGER BY REQUEST.



#### SINGLE / DOUBLE FEED

THE MAXIMUM RUN LENGTH PER POWER FEED CAN BE DOUBLED BY POWERING FROM BOTH ENDS.

SINGLE FEED

DOUBLE FEED



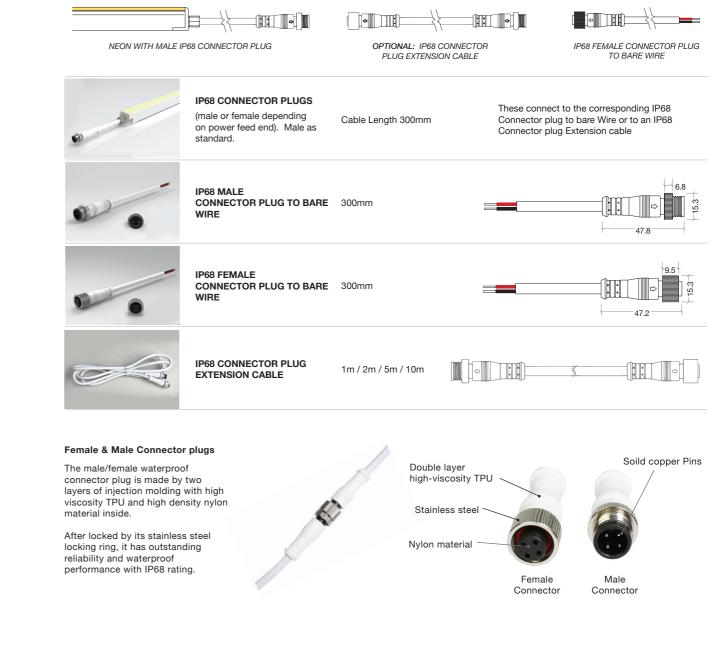
DC input

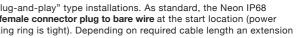


#### **NEON | IP68 INJECTION MOULDING - CONNECTOR PLUG**

CABLE LENGTHS GIVEN ARE STANDARD, CAN BE MADE LONGER BY REQUEST.

Connector plugs have an IP68 rating (when fastened) and are designed for "plug-and-play" type installations. As standard, the Neon IP68 injection moulded connector plugs are male. The installer can wire in an IP68 female connector plug to bare wire at the start location (power supply/control centre) then plug the two together (ensuring stainless steel locking ring is tight). Depending on required cable length an extension cable may be required.







CHASING CAN PROVIDE A BEAUTIFUL, FLUID, **BLENDING EFFECT WHERE COLOURS TRANSITION SEAMLESSLY INTO ONE ANOTHER.** 

ON THE FLIP SIDE CHASING CAN ALSO CREATE FAST-PACED, DYNAMIC MOTION EFFECTS, WHERE COLOURS **FLASH & SKIP IN A FLURRY OF ACTIVITY** 

NEON

### $\square \Box \Box \square$ DYNAMIC **CHASING**

Dynamic Neon is pixel addressable, which means that every LED chip can be controlled independently by Digital Multiplex (DMX) protocol, allowing for a variety of dynamic effects to be created both manually (using a control panel) and for lighting automation (using a PC).

Create installations that chase, blend, flow, flash, skip, or fade. Perfect for theatres, bars, restaurants, and retail where you want to create atmosphere or draw attention.

Dynamic Neon is available for Neon X, Neon Y and Neon Y3.

DYNAMIC NEON

TIMBER AURORA, SYDNEY VIVID - AUSTRALIA PHOTO CREDIT: VICTOR CARINGAL FROM ARUP

28



# $\square \equiv \bigcirc \square$



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For IES files, installation instructions, images or technical and other information, visit our website lightculture.com.au or contact us directly.