INSTALLATION AND SERVICE MANUAL

LIGMAN

For Installation of NEON CLASSIC Continuous LED Solution IP67 (24VDC)

Product drawing (dimensions)   IP67

16.5 | 29 | MINIMUM BEND RADIUS 60mm | HORIZONTAL BENDING
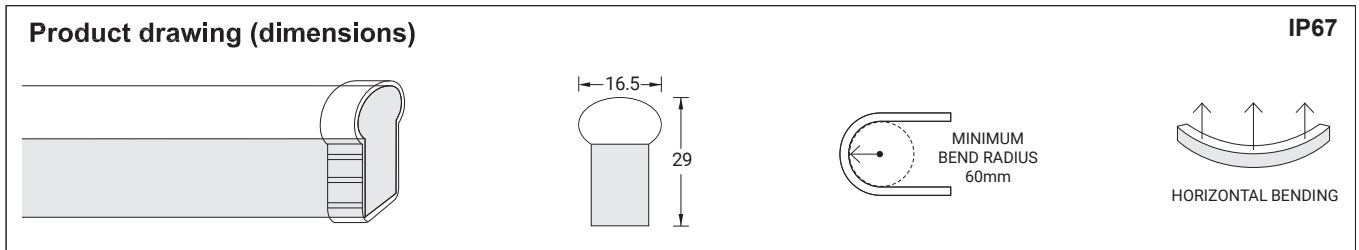
NEON CLASSIC │ELECTRICAL AND PHYSICAL INSTALLTION GUIDE
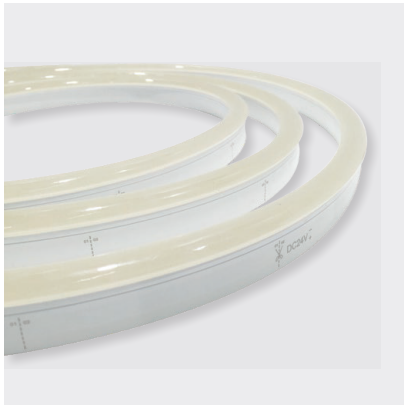
COLOUR	NEON SERIES	VARIANT CODE
WARM WHITE 3000K *+/- 175K*	NEON 7	ITNO1230001067-CL-HB
NATURAL WHITE 4000K *+/- 275K*	NEON 7	ITNO1240001067-CL-HB
2500 - 5000K TUNEABLE WHITE	NEON 8	ITNO12TUW01067-CL-HB
RED 615–625mm	NEON 9	ITNO12R0001067-CL-HB
GREEN 520–530mm	NEON 9	ITNO12G0001067-CL-HB
BLUE 465–475mm	NEON 9	ITNO12B0001067-CL-HB
YELLOW 580mm	NEON 9	ITNO12Y0001067-CL-HB
RGB	NEON 10	ITNO12RGB01067-CL-HB
RGBW	NEON 11	ITNO15RGBW0567-CL-HB
RGB DYNAMIC	NEON 19	ITNO12RGBC1067-CL-HB

ELECTRICAL & OPTICAL DATA VARIANCE +/- 10%
SOLD BY THE METRE
IES FILES AVAILABLE

Please note drawings are an installation guide only. Each LED tape application may have variable factors. Cable size may need to be specified to limit the voltage drop throughout the circuit.

Actual product characteristics may vary. Ligman Lighting reserves the right to improve, modify or update the product designs without prior notice.

ALWAYS UNCOIL BEFORE USE

■ **LIGMAN standard products are supplied with the control gear 24VDC**
  The control gear for other voltages and frequencies is available upon request, please consult us for more details.

■ **LIGMAN luminaires are designed to conform IEC 60598 2-2 standard.**

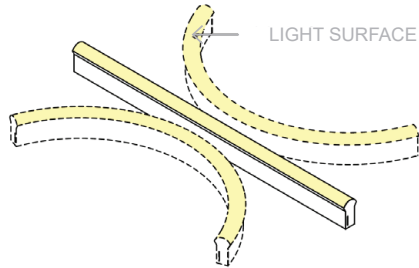 **Technical amendments and modifications techniques reserved.**

Ligman Lighting

THAILAND
LIGMAN Lighting Co.,Ltd.
17/2 Moo 4, Monthong, Bang Nam Priao,
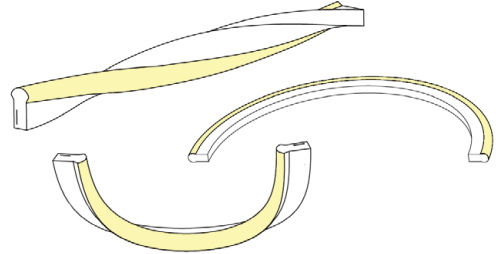24150 Chachoengsao - Thailand
info@ligman.com

LiGMAN

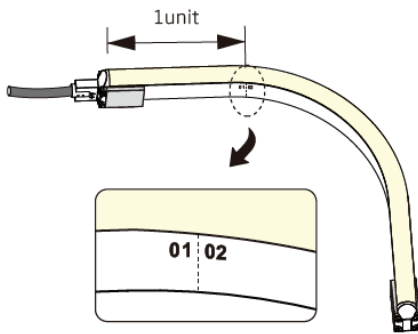## BENDING PARAMETERS

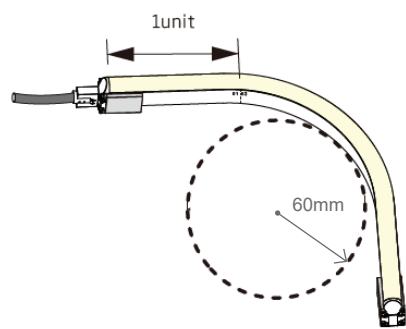✅ *NEON CLASSIC CAN BE CURVED AS SHOWN BELOW*

LIGHT SURFACE

❌ *DO NOT TWIST THE LIGHT OR BEND AGAINST THE LIGHT SURFACE*

– Avoid bending LED Neon within the first unit *(units are clearly marked with dashed lines on the sides of the product)*
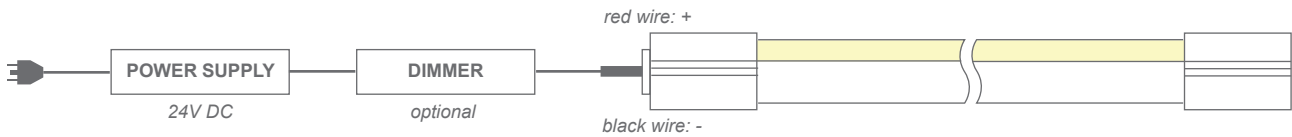
1unit

01 02

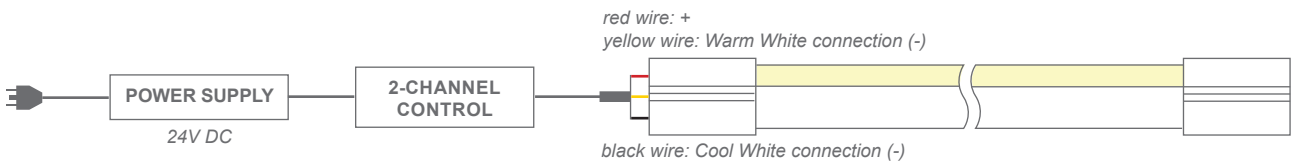– LED Neon can be bent up to the defined "minimum bend radius" *(60mm for Neon Classic)*
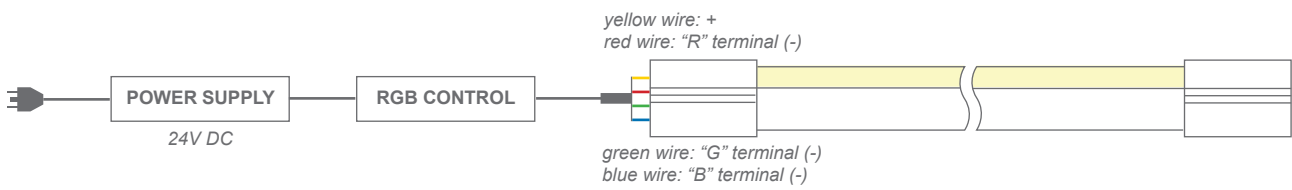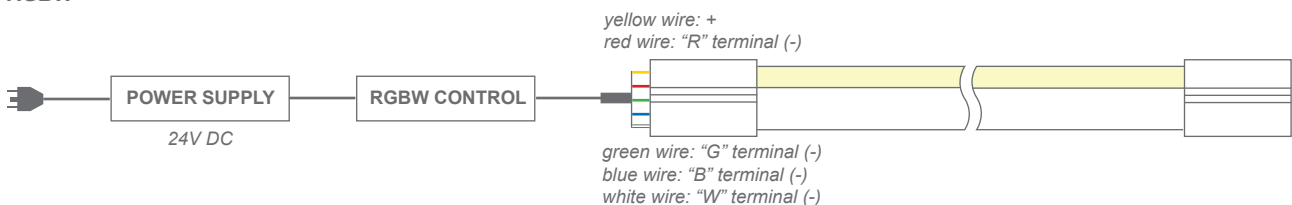
1unit

60mm

WIRING DIAGRAMS

WHITE / SINGLE COLOUR

red wire: +

| POWER SUPPLY | DIMMER |
| 24V DC | optional |

black wire: -

TUNEABLE WHITE

red wire: +
yellow wire: Warm White connection (-)

| POWER SUPPLY | 2-CHANNEL CONTROL |
| 24V DC | |

black wire: Cool White connection (-)

RGB

yellow wire: +
red wire: "R" terminal (-)

| POWER SUPPLY | RGB CONTROL |
| 24V DC | |

green wire: "G" terminal (-)
blue wire: "B" terminal (-)

RGBW

yellow wire: +
red wire: "R" terminal (-)

| POWER SUPPLY | RGBW CONTROL |
| 24V DC | |

green wire: "G" terminal (-)
blue wire: "B" terminal (-)
white wire: "W" terminal (-)

DYNAMIC RGB 'CHASING' / RGBW 'CHASING'

red wire: "VCC", Anode (+) terminal
yellow wire: "Signal" terminal

| POWER SUPPLY | INDEPENDENT SPI CONTROL |
| 24V DC | |

black wire: "GND", Cathode (-) terminal
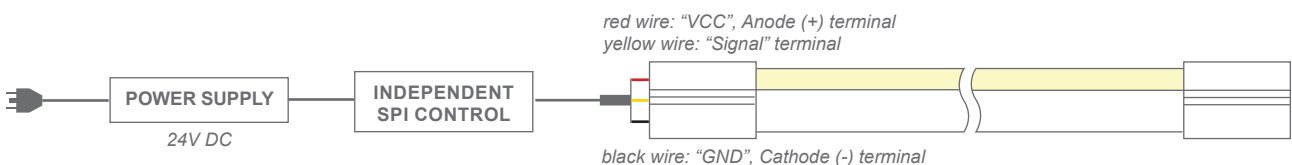
DMX OPTION AVAILABLE

- LED Neon must always be used in conjunction with a certified Bright Light 24V DC power supply.
- Check the polarity of the connector before inserting the front connector and switching on the mains power.
- To minimise voltage drop and ensure consistent light output, position the power supply near to the power feed end of the LED Neon, and keep the line as short as possible
- Ensure your maximum run per power feed adheres to the guidelines; see specification sheet.

- Ensure to add 20% buffer when selecting a power supply
- Before making any cuts, installation, maintenance, or connection, be sure the mains power is disconnected.
- If essential; cut and connect LED Neon correctly. Any incorrect operation can cause damage.
- All connector joints must be connected correctly to achieve connector IP rating.
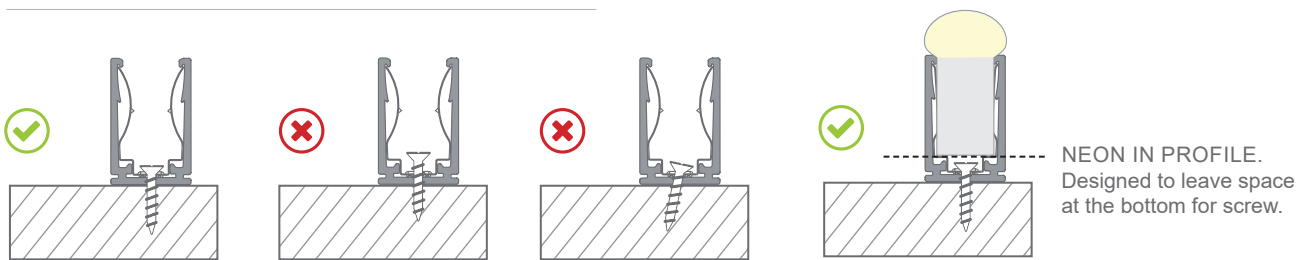
PROFILE INSTALLATION REQUIREMENTS

ACCESSORY

A80104-001
SELF-LOCKING ALUMINIUM V2 PROFILE 2m

A80105-001
SELF-LOCKING ALUMINIUM V2 MOUNTING CLIP 35mm

A80106-001
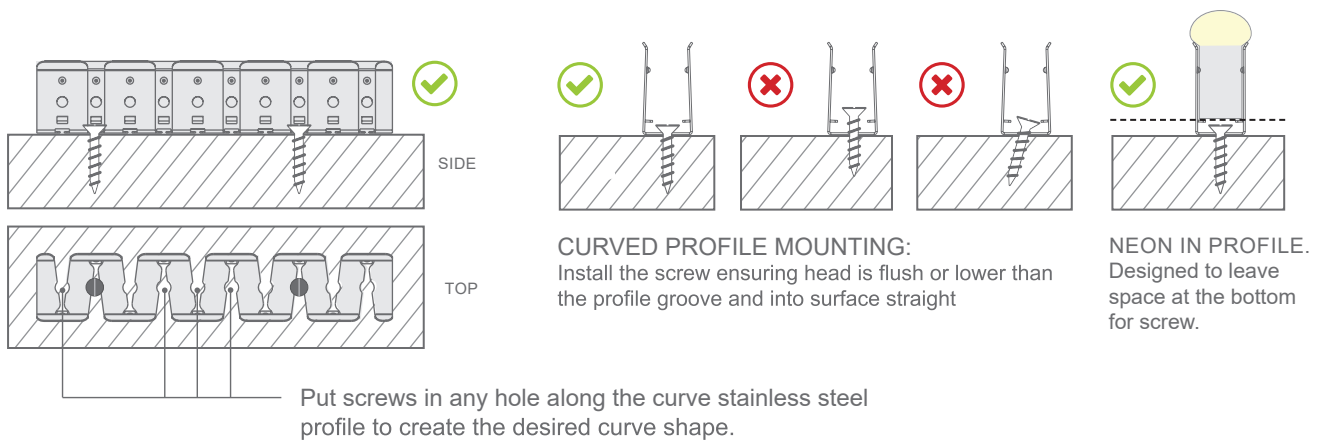PLASTIC PROFILE 2m

A80106-002
PLASTIC PROFILE 1m

REFER TO
MOUNTING ACCESSORIES PDF
FOR PROFILE DETAILS
& DIMENSIONS

NEON IN PROFILE.
Designed to leave space
at the bottom for screw.

PROFILE MOUNTING: Install the screw ensuring head is flush or lower than the profile groove and into surface straight

ACCESSORY

A80107-001
CURVE STAINLESS STEEL PROFILE 900MM
MULTIPLE FIXING LOCATIONS

SIDE

TOP

CURVED PROFILE MOUNTING:
Install the screw ensuring head is flush or lower than
the profile groove and into surface straight

NEON IN PROFILE.
Designed to leave
space at the bottom
for screw.

Put screws in any hole along the curve stainless steel
profile to create the desired curve shape.

Curve stainless steel profile is flexible and can stretch or condense as the design requires.

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PROFILE INSTALLATION REQUIREMENTS
>> FOR SLEEVE / SNAP / DUAL INJECTION MOULDING CONNECTORS

– Ensure the supply cord is not subject to mechanical stress
– Keep 10–20mm distance between the end of the profile and the end mounting piece
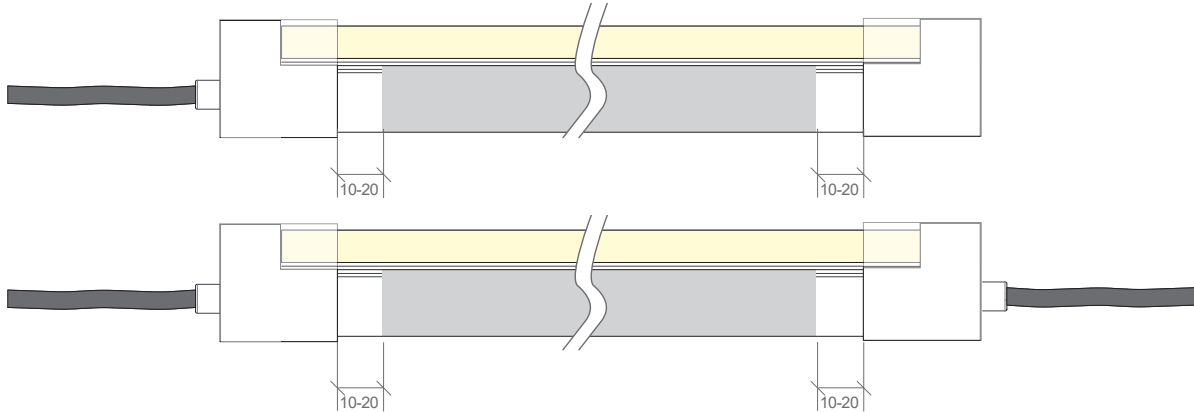
– The bend angle should be less than 15 degrees when installing LED Neon into the profile by hand
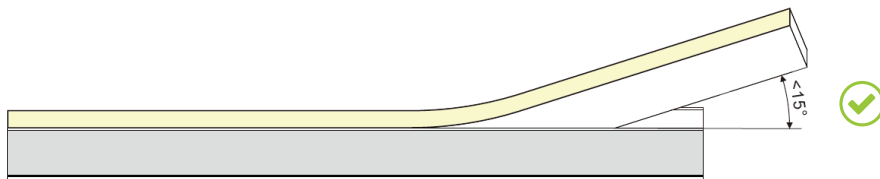
– Avoid placing mechanical stress on the front connector cable
– Do not curl or bend the front connector cable with excessive force
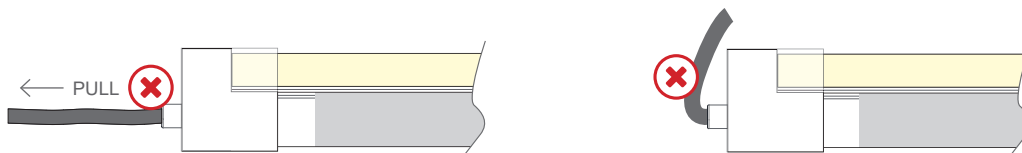
– Avoid installing the profile less than 10mm from the end mounting piece
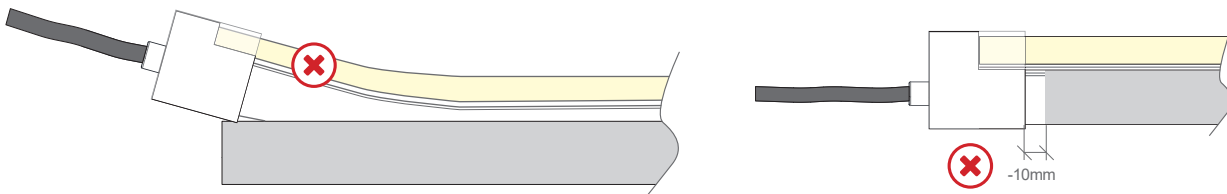
– Install the LED Neon into the profile in one direction, don't let it bow in the middle

INSTALLATION AND SERVICE MANUAL

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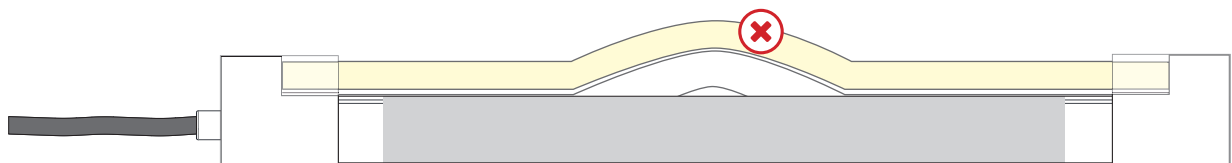
PROFILE INSTALLATION REQUIREMENTS
>> FOR SLIMLINE INJECTION MOULDING CONNECTOR

TOP END FEED

Top end feed is within profile   End cap is within the profile
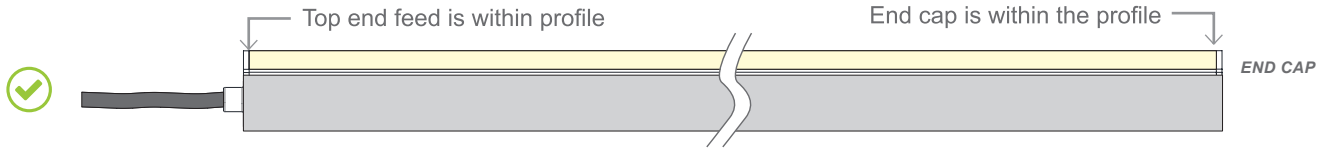
END CAP

–   Top End Feed (Slimline injection moulding only) & end cap are both fitted within the profile

BOTTOM FEED / SIDE FEED

END CAP

End cap is within the profile

End cap is within the profile

END CAP

10-20

Keep 10–20mm distance between the end of the profile and the botton or side feed
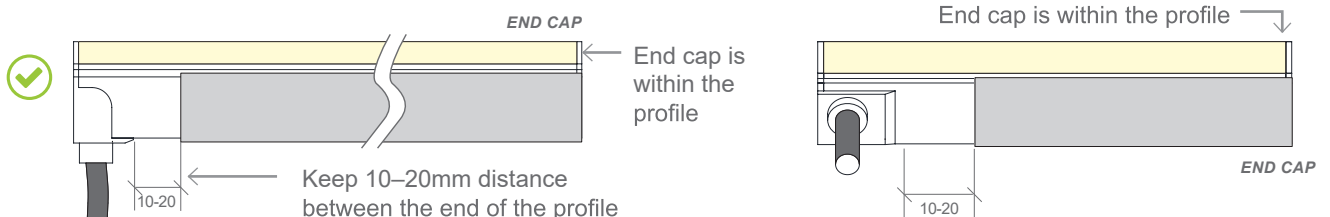
10-20

–   Bottom feed / side feed are keep outside the profile with 10-20mm space
–   End cap is within the profile

Do not use profile closer than 10mm from connector to avoid bending Neon and damaging LEDs.
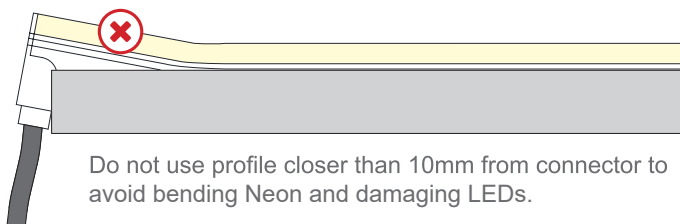
– Avoid placing mechanical stress on the connector cable
– Do not curl or bend the connector cable with excessive force

⟵ PULL ⟶

⟵ PULL ⟶

MIDDLE FEED

End cap is within the profile

End cap is within the profile

10-20   10-20
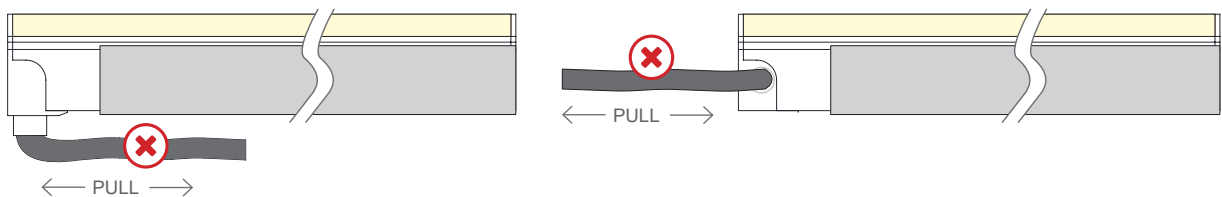
Keep 10–20mm distance between both ends of the profile and the middle feed
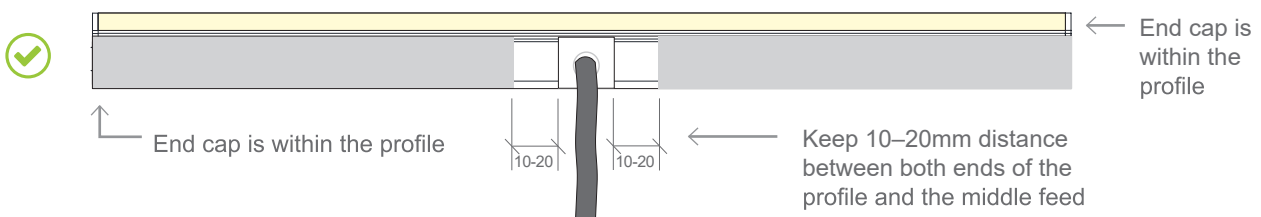
SNAP CONNECTIONS - IP67

SUITABLE FOR OUTDOOR APPLICATIONS
MUST BE FITTED CORRECTLY FOR IP67 RATING
FEED CONNECTORS SUPPLIED AS 1M CABLE.
STANDARD INSTALLATION WITH SINGLE POWER FEED:
FEED 01 + END CAP 02
DOUBLE POWER FEED: *FEED 01 + FEED 02*

	TOP END FEED		END CAP	FLEXIBLE CONNECTOR
	01	02	02	
WHITE	A80083-003	A80083-004		A80085-002
TUNEABLE	A80083-005	A80083-006		A80085-003
SINGLE COLOUR	A80083-003	A80083-004	A80084-002	A80085-002
RGB	A80083-007	A80083-008		A80085-004
RGB CHASING	A80083-009	A80083-010		A80085-005
RGBW	–		–	–
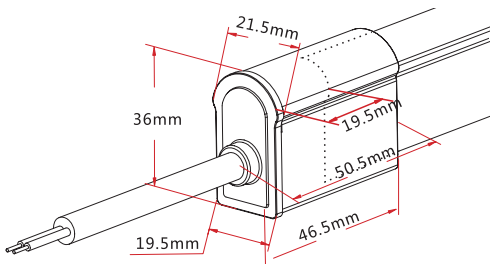
TOP END FEED
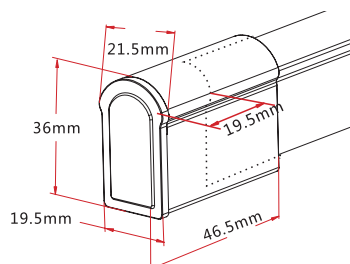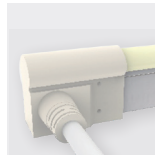

END CAP
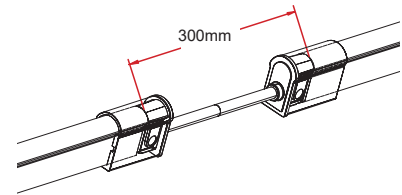
FLEXIBLE CONNECTOR

## SLIMLINE INJECTION MOULDING CONNECTIONS - IP67

REQUIRES FITTING AT FACTORY. LEAD TIMES APPLY

SUITABLE FOR OUTDOOR APPLICATIONS

FEED CONNECTORS SUPPLIED AS 1M CABLE
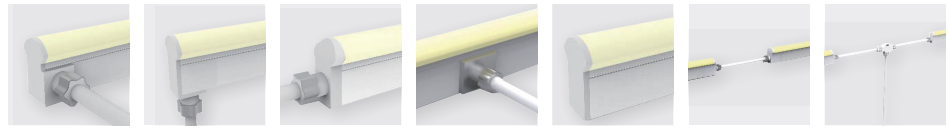
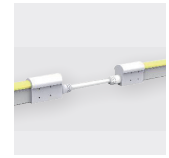|	SIDE FEED	BOTTOM FEED	TOP END FEED	MIDDLE FEED	END CAP	FLEXIBLE CONNECTOR	T FEED
WHITE / TUNEABLE / SINGLE COLOUR / RGB	A80086	A80087	A80088	A80089	A80090	A80091	A80092
RGB CHASING / RGBW	A80086	A80087	A80088	-	A80090	A80091	A80092
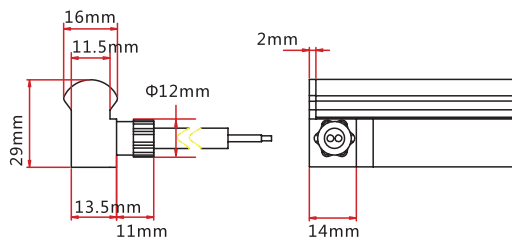
SIDE FEED

BOTTOM FEED

TOP END FEED

MIDDLE FEED

END CAP

FLEXIBLE CONNECTOR

T-FEED

LIGMAN
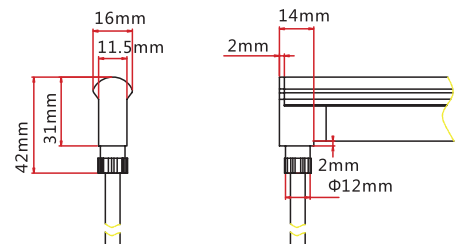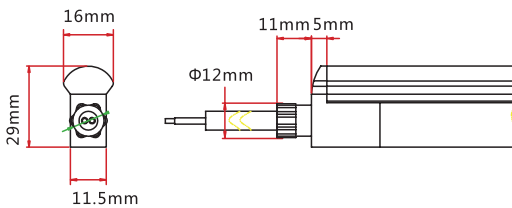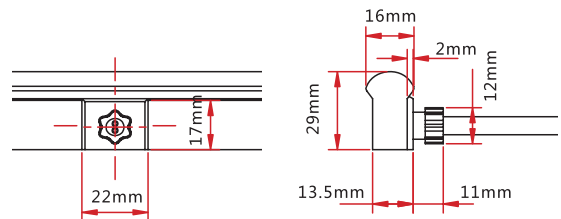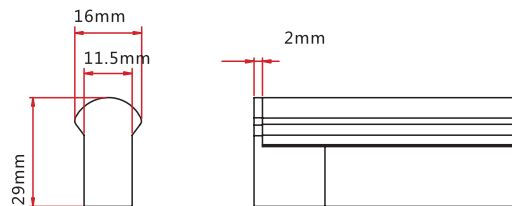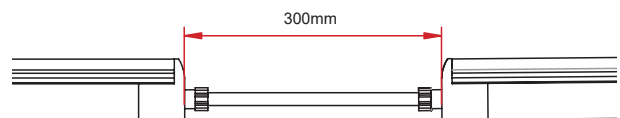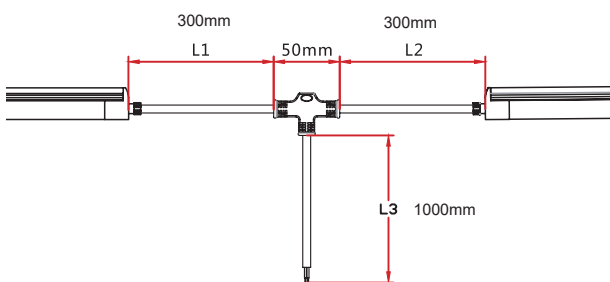
CAPPED DUAL INJECTION MOULDING - IP68

REQUIRES FITTING AT FACTORY. LEAD TIMES APPLY

SUITABLE FOR OUTDOOR APPLICATIONS

FEED CONNECTORS SUPPLIED AS 1M CABLE

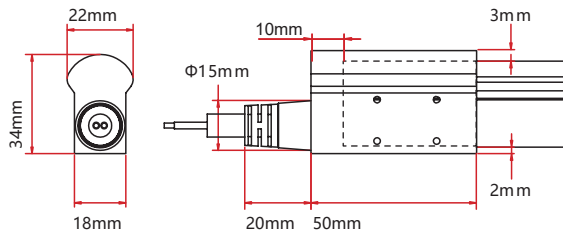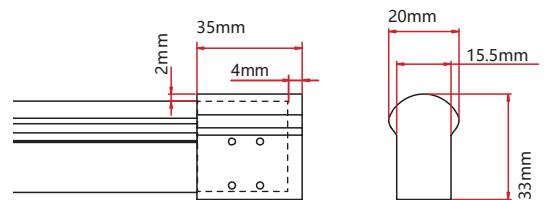| SIDE FEED	BOTTOM FEED	TOP END FEED	END CAP	FLEXIBLE CONNECTOR
A80093	A80094	A80095	A80096	A80097
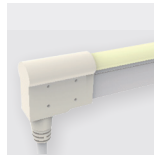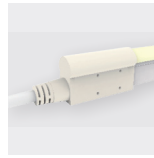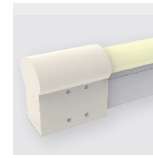
WHITE / TUNEABLE / SINGLE COLOUR /
RGB / RGB CHASING / RGBW

SIDE FEED

BOTTOM FEED

TOP END FEED

END CAP

FLEXIBLE CONNECTOR

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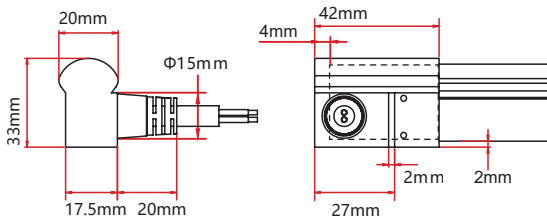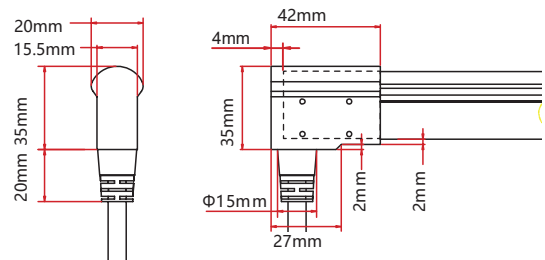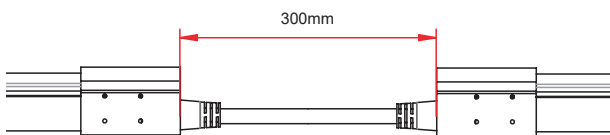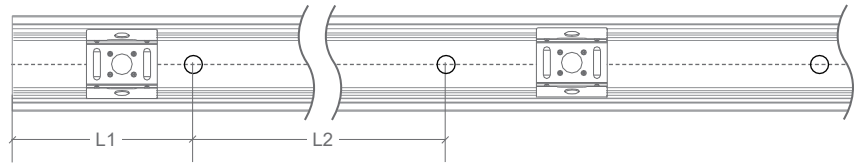
CODE	ACCESSORY	L1	L2	HOLE DIMENSIONS	HOLE NUMBER	CLIP NUMBER
A80104-001	SELF-LOCKING ALUMINIUM V2 PROFILE 2M	100mm	200mm	Ø3.5mm	10	9
A80105-001	SELF-LOCKING ALUMINIUM V2 MOUNTING CLIP 35MM	5mm	25mm	Ø3.5mm	2	1
A80106-001	PLASTIC PROFILE 2M	100mm	200mm	Ø3.5mm	10	-
A80106-002	PLASTIC PROFILE 1M	100mm	200mm	Ø3.5mm	5	-
A80107-001	CURVE STAINLESS STEEL PROFILE 900MM *MULTIPLE FIXING LOCATIONS*	-	-	-	-	-
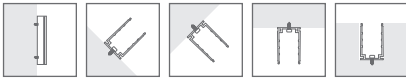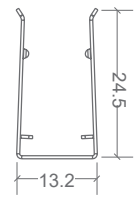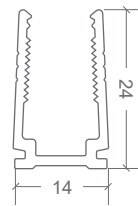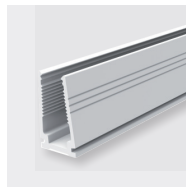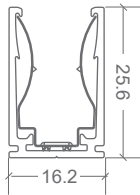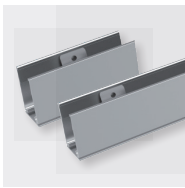
SELF-LOCKING ALUMINIUM V2 PROFILE 2M / MOUNTING CLIP
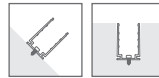
PLASTIC PROFILE

CURVE STAINLESS STEEL PROFILE 900MM