DATA & SPECIFICATIONS

FloppyFlex® **F15** A/E/D

RGB / RGBW / DYNAMIC WHITE
VARIABLE COLOUR LED NEON

FIREFLY LIGHTING
Phone : +61 7 3254 4333
Email : sales@fireflylighting.com.au
Address : 9/29 Links Ave North, Eagle Farm.
Brisbane QLD 4009 Australia
www.fireflylighting.com.au

24V EXTRA LOW VOLTAGE	INDOOR OUTDOOR	UV STABILISED	OUTDOOR IP RATED	COMMERCIAL GRADE	VANDAL RESISTANT	GREEN FRIENDLY	**PVC** 3 YEAR WARRANTY	**SILICONE** 5 YEAR WARRANTY

11.5 mm

21 mm

Light Surface

Horizontal Bend
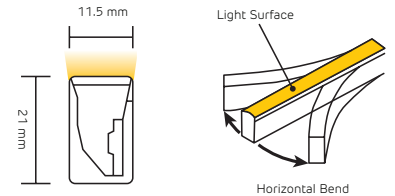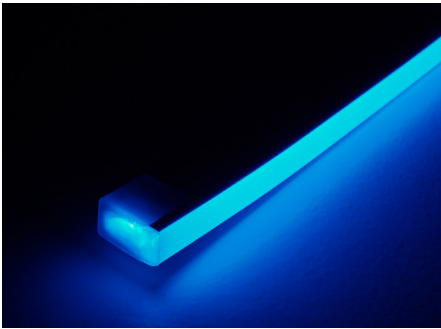
FloppyFlex F15 variable colour is flexible 24V LED neon with variable colour or dynamic white controlled via DMX decoder.

It features a rich, vibrant variable colour palette with RGB / RGBW or Dynamic White LEDs. A choice of either housings in PVC or longer lasting Silicone. The minimum horizontal bend diameter is 120 mm. The homogenous LED surface is continuous without a "skittles" effect.

CONTENTS

FEATURES

RGB and RGBW in 100 mm cuttable units

Dynamic White in 83.34 mm cuttable units

Super bright with homogenous lighting surface

Seamless colour mixing, beautiful dimming via FloppyDrive or DMX decoder

Wide range of accessories for joining, terminating, mounting, powering

Easy to use and install

Tight 120 mm horizontal bend

Unlimited and unprecedented possibilities

APPLICATIONS

Installation, architectural, digital signage, gameshows, arcades, signs, film and television sets, theme parks, bars and clubs, cruise ships, creating words, indirect applications, and scenic elements

AVAILABLE CONNECTORS

Injection Molded Power Feed and End cap connectors, fully customizable for no-hassle installations. PVC IP67, Silicone IP68.

Double Molded IP68 Power Feed and End cap connectors, suitable for submersible applications. PVC only - not available for silicone versions.

Snap Connect Power Feeds and End caps allow for easy onsite terminations with IP67 ratings, and allow for the End, Side, Middle, or Bottom power feed entry. RGB and Dynamic White only - not available for RGBW versions.

RESISTANCE AND PROTECTIONS

Flame Resistant

UV Resistant

Solvents Resistant

Saltwater Resistant

IP67 Protection

IK08 Protection

CERTIFICATIONS

With factory-installed connectors. cULus Listed, CE, TUV and RoHS compliant and passes rigorous environmental, optical, mechanical, and electrical testing.
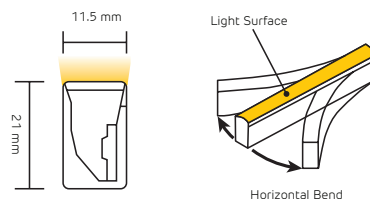
FloppyFlex® F15 A

RGB
VARIABLE COLOUR LED NEON

	PVC Specifications				**Silicone** Specifications			
Part Number	**LN-F15A**				**SLN-F15A**			
Type	Dimmable Variable Colour							
Colour	RGB							
Colour/CCT	**Red**	**Green**	**Blue**	**R+G+B**	**Red**	**Green**	**Blue**	**R+G+B**
Wavelength	618-624nm	522-528nm	468-474nm	-	618-624nm	522-528nm	468-474nm	-
Lumen/m	40	100	15	155	50	120	25	195
Beam Angle, Average (50%)	111.9°				151.1°			
Number of Units Per Metre	10							
LED Quantity Per Unit	6							
LED Quantity Per Metre	60							
Base Color	Black base standard Other colours available on request				White base standard Other colours available on request			
Housing	PVC				Silicone			
Cut & Connect Joints	Located Every 100 mm							
Minimum Bend Diameter	120 mm							
Bending Direction	Horizontal Bend							
Connectors & Hardware	Factory molded connectors / Field attachable connectors / Aluminium mounting channels							
Operating Voltage	24V DC							
Wiring	4-Wire							
Power Consumption	12 W/m							
Max Run Lengths	Single end feed	10 m Dynamic Operation			Single end feed	15 m Dynamic Operation		
		7 m Full Static Load				10 m Full Static Load		
	Double end feed	20 m Dynamic Operation			Double end feed	30 m Dynamic Operation		
		14 m Full Static Load				20 m Full Static Load		
Control	DMX-512/Ethernet via ProPlex BuckBoost System, DMX-512 via FloppyDrive 4X2 or DMX decoder							
Installation Temperature	0 to 45 °C				-40 to 50 °C			
Operating Temperature	-20 to 45 °C				-40 to 55 °C			
Mounting Surface Temperature	60 °C Max.				85 °C Max.			
Storage Temperature	-20 to 60 °C				-40 to 60 °C			
Dimensions (WxHxL)	11.5 mm x 29 mm x variable							
Ingress Protection	IP67 - Molded connectors IP68 - Double Factory Molded connectors IP67 - Snap Connect connectors				IP68 - Molded connectors IP67 - Snap Connect connectors			
Listing	UL2108 Class 2, CE-EMC, IS 10322							
Warranty	3 Years				5 Years			
Wire Legend								

Red
Green
Blue
Yellow Positive (+)

11.5 mm

21 mm

Light Surface

Horizontal Bend

c UL us LISTED   CE   TÜV SÜD   RoHS COMPLIANT

FIREFLY LIGHTING reserves the right to change this product and the specifications at any time without prior notice. Visit **www.fireflylighting.com.au** for the latest information.

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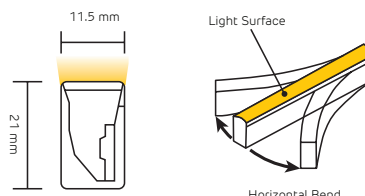# FloppyFlex® **F15** E

RGBW
VARIABLE COLOUR LED NEON

FIREFLY LIGHTING
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Address : 9/29 Links Ave North, Eagle Farm.
Brisbane QLD 4009 Australia
www.fireflylighting.com.au

	PVC Specifications				**Silicone** Specifications			
Part Number	**LN-F15E**				**SLN-F15E**			
Type	Dimmable Variable Colour							
Colour	RGBW							
Colour/CCT	**Red**	**Green**	**Blue**	**White**	**Red**	**Green**	**Blue**	**White**
Wavelength	618-624nm	522-528nm	468-474nm	2725±145K	618-624nm	522-528nm	468-474nm	2725 ± 85K
Lumen/m	40	100	15	100	50	120	25	120
Beam Angle, Average (50%)	113.9°				111.4°			
Number of Units Per Metre	10							
LED Quantity Per Unit	6							
LED Quantity Per Metre	60							
Base Color	Black base standard Other colours available on request				White base standard Other colours available on request			
Housing	PVC				Silicone			
Cut & Connect Joints	Located Every 100 mm							
Minimum Bend Diameter	120 mm							
Bending Direction	Horizontal Bend							
Connectors & Hardware	Factory molded connectors / Aluminium mounting channels							
Operating Voltage	24V DC							
Wiring	5-Wire							
Power Consumption	15 W/m							
Max Fixture Runs	Single end feed	8 m Dynamic Operation			Single end feed	12 m Dynamic Operation		
		5 m Full Static Load				8 m Full Static Load		
	Double end feed	16 m Dynamic Operation			Double end feed	24 m Dynamic Operation		
		10 m Full Static Load				16 m Full Static Load		
Control	DMX-512/Ethernet via ProPlex BuckBoost System, DMX-512 via FloppyDrive 5X2 or DMX decoder							
Installation Temperature	0 to 45 °C				-40 to 50°C			
Operating Temperature	-20 to 35 °C				-40 to 45 °C			
Mounting Surface Temperature	60 °C Max.				85 °C Max.			
Storage Temperature	-20 to 60 °C				-40 to 60 °C			
Dimensions (WxHxL)	11.5 mm x 29 mm x variable							
Ingress Protection	IP67 with Factory Molded connectors IP68 with Double Factory Molded connectors Snap Connectors not available				IP68 with Factory Molded connectors Double Molded and Snap Connectors not available			
Listing	UL2108 Class 2, CE-EMC							
Warranty	3 Years				5 Years			
Wire Legend								

Grey
Red
Green
Blue
Yellow Positive (+)

11.5 mm

21 mm

Light Surface

Horizontal Bend

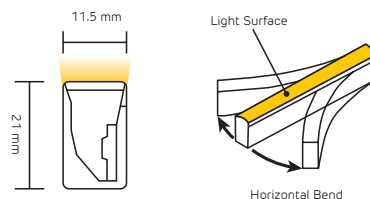c(UL)us LISTED   CE   TÜV SÜD   RoHS COMPLIANT

FloppyFlex® **F15** D

## **DYNAMIC WHITE**
VARIABLE WHITE LED NEON

FIREFLY LIGHTING
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Address : 9/29 Links Ave North, Eagle Farm.
Brisbane QLD 4009 Australia
www.fireflylighting.com.au

	PVC Specifications		**Silicone** Specifications	
Part Number	**LN-F15D**		**SLN-F15D**	
Type	Dimmable Variable White			
Colour	Dynamic White 2200K-5700K			
Colour/CCT	**Warm White 2200K**	**Cool White 5700K**	**Warm White 2200K**	**Cool White 5700K**
CCT Tolerance	2238±102K	5669±355K	2238±102K	5669±355K
CRI	80	80	80	80
Lumen/m	110	110	140	170
Beam Angle, Average (50%)	113.7°		112.2°	
Number of Units Per Metre	12			
LED Quantity Per Unit	12			
LED Quantity Per Metre	144			
Base Color	White base standard, other colours available on request			
Housing	PVC		Silicone	
Cut & Connect Joints	Located Every 83.34 mm			
Minimum Bend Diameter	120 mm			
Bending Direction	Horizontal Bend			
Connectors & Hardware	Factory molded connectors / Field attachable connectors / Aluminium mounting channels			
Operating Voltage	24V DC			
Wiring	3-Wire			
Power Consumption	12 W/m			
Max Fixture Runs	Single end feed	20 m Dynamic Operation	Single end feed	30 m Dynamic Operation
		10 m Full Static Load		15 m Full Static Load
	Double end feed	40 m Dynamic Operation	Double end feed	60 m Dynamic Operation
		20 m Full Static Load		30 m Full Static Load
Control	DMX-512/Ethernet via ProPlex BuckBoost System, DMX-512 via FloppyDrive 3X2 or DMX decoder			
Installation Temperature	0 to 45 °C		-40 to 50 °C	
Operating Temperature	-20 to 45 °C		-40 to 55 °C	
Mounting Surface Temperature	60 °C Max.		85 °C Max.	
Storage Temperature	-20 to 60 °C		-40 to 60 °C	
Dimensions (WxHxL)	11.5 mm x 29 mm x variable			
Ingress Protection	IP67 with Factory Molded connectors IP68 with Double Factory Molded connectors IP67 with Snap Connectors		IP68 with Factory Molded connectors IP67 with Snap Connectors	
Listing	UL2108 Class 2, CE-EMC			
Warranty	3 Years		5 Years	
Wire Legend				

Black
Yellow Positive (+)
Red

11.5 mm
21 mm
Light Surface
Horizontal Bend

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FloppyFlex® F15 A/E/D

FACTORY MOLDED F15 CONNECTORS
IP67 PVC OR IP68 SILICONE

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Email : sales@fireflylighting.com.au
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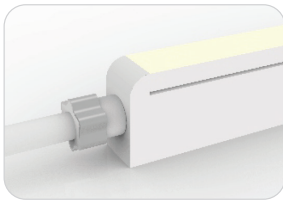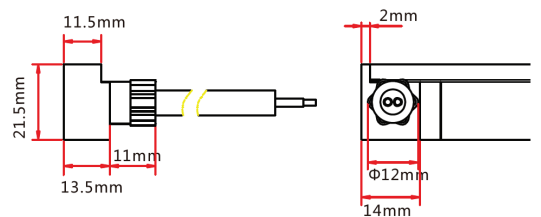**www.fireflylighting.com.au**

Molded Bottom Entry Connection

Connects FloppyFlex F15 to power supply with pre-installed bottom feed cable, IP67.
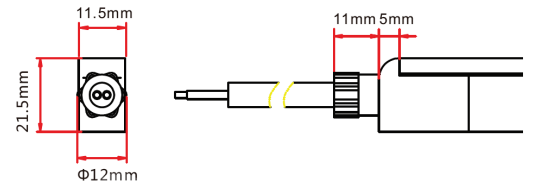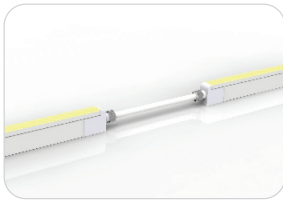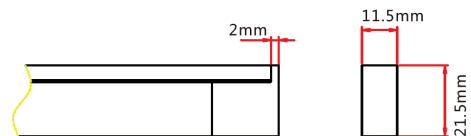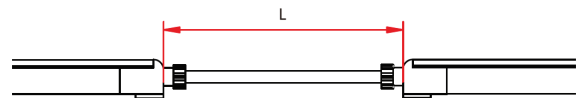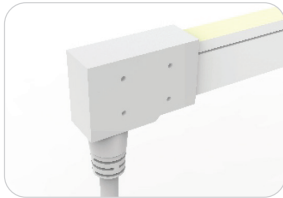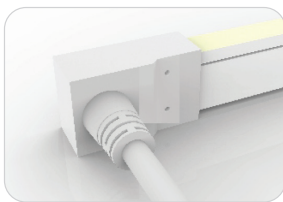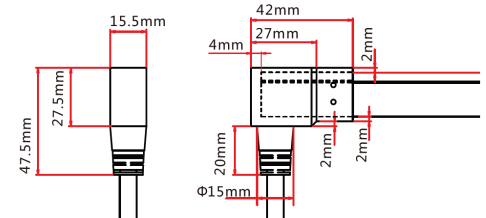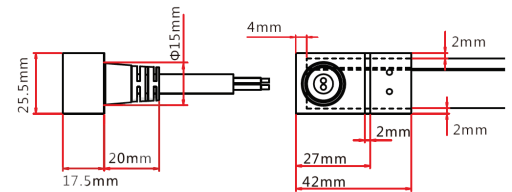Cable length available in 0.3 m, 1 m, 3 m, 5 m, 10 m.
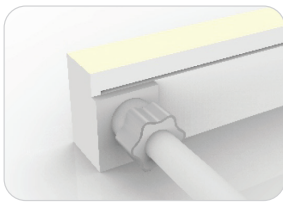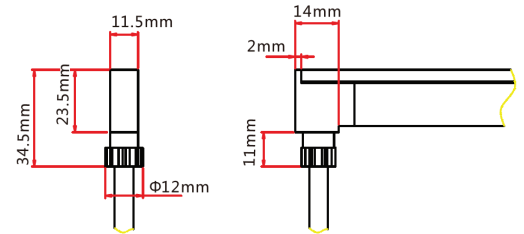
Molded Side Entry Connection

Connects FloppyFlex F15 to power supply with pre-installed side feed cable, IP67.
Cable length available in 0.3 m, 1 m, 3 m, 5 m, 10 m.

Molded End Entry Connection

Connects FloppyFlex F15 to power supply with pre-installed end feed cable, IP67.
Cable length available in 0.3 m, 1 m, 3 m, 5 m, 10 m.

Molded End Cap

Pre-installed termination protection of FloppyFlex F15, IP67.

Molded End Entry Connection

Connects two pieces of FloppyFlex F15 together with a flexible cable, IP67.
Cable length available in 0.3 - 1 m.
Maximum 8 jumpers per 20 m
Maximum 4 jumpers per 10 m

Molded T-Feed Connection

Connects two pieces of FloppyFlex F15 together with powered T-joint, IP67.
L1 and L2 length available in 0.15-0.5 m.
L3 length available in 0.3 - 1 m
Maximum 8 T-Feeds per 20 m
Maximum 4 T-Feeds per 10 m

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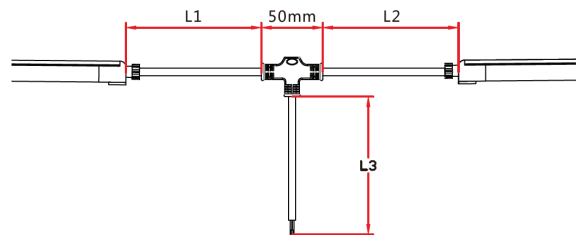
FloppyFlex® F15 A/E/D

DOUBLE FACTORY MOLDED F15 CONNECTORS
IP68 PVC ONLY

Double-Molded Bottom Entry Connection

Connects FloppyFlex F15 to power supply with pre-installed end feed cable, IP68.

Cable length available in 0.3 m, 1 m, 3 m, 5 m, 10 m.

Double-Molded Side Entry Connection

Connects FloppyFlex F15 to power supply with pre-installed side feed cable, IP68.
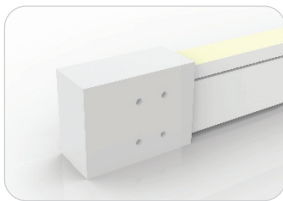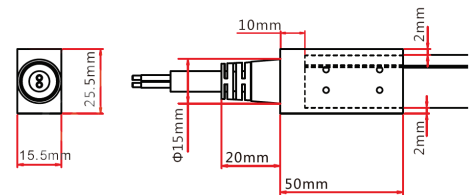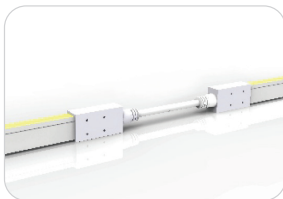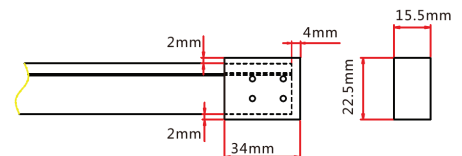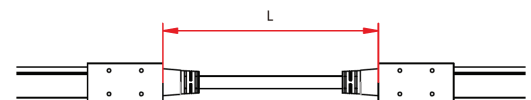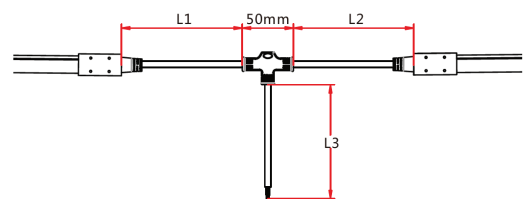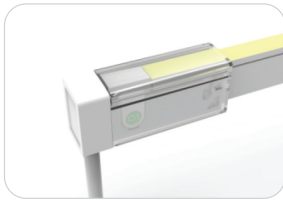
Cable length available in 0.3 m, 1 m, 3 m, 5 m, 10 m.

Double-Molded End Entry Connection

Connects FloppyFlex F15 to power supply with pre-installed end feed cable, IP68.

Cable length available in 0.3 m, 1 m, 3 m, 5 m, 10 m.

Double-Molded End Cap

Pre-installed termination protection of FloppyFlex F15, IP68.

Double-Molded End Entry Connection

Connects two pieces of FloppyFlex F15 together with a flexible cable, IP68.

Cable length available in 0.3 - 1 m.

Maximum 8 jumpers per 20 m
Maximum 4 jumpers per 10 m

Double-Molded T-Feed Connection

Connects two pieces of FloppyFlex F15 together with powered T-joint, IP68.

L1 and L2 length available in 0.15-0.5 m.
L3 length available in 0.3 - 1 m

Maximum 8 T-Feeds per 20 m
Maximum 4 T-Feeds per 10 m

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FloppyFlex® **F15** A/E/D

SNAP CONNECT F15 CONNECTORS
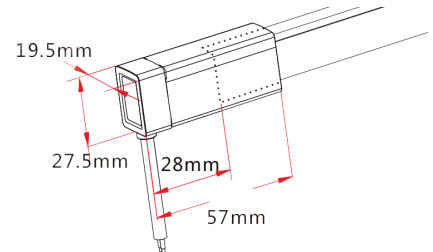IP67 | RGB AND DYNAMIC WHITE ONLY

FIREFLY LIGHTING
Phone : +61 7 3254 4333
Email : sales@fireflylighting.com.au
Address : 9/29 Links Ave North, Eagle Farm.
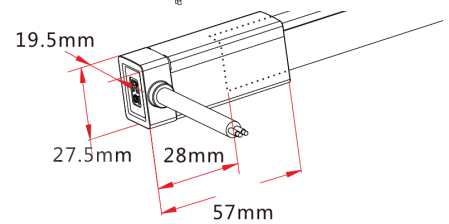Brisbane QLD 4009 Australia
www.fireflylighting.com.au

Snap Connect Bottom Entry

Connects FloppyFlex F15 to power supply with user-installable end feed cable, IP67.
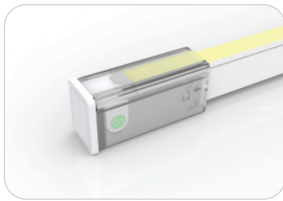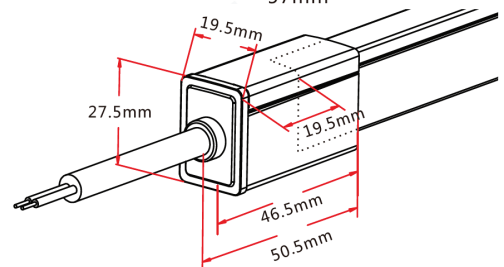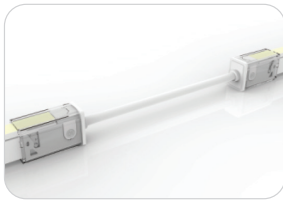Cable length available in 0.3 m, 1 m, 3 m, 5 m, 10 m.

Snap Connect Side Entry

Connects FloppyFlex F15 to power supply with user-installable side feed cable, IP67.
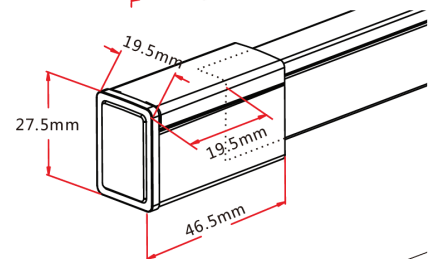Cable length available in 0.3 m, 1 m, 3 m, 5 m, 10 m.

Snap Connect End Entry

Connects FloppyFlex F15 to power supply with user-installable end feed cable, IP67.
Cable length available in 0.3 m, 1 m, 3 m, 5 m, 10 m.
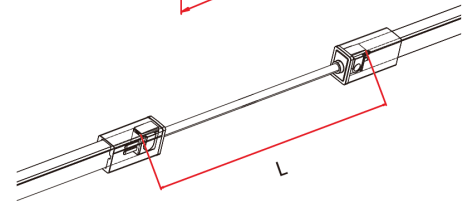
Snap Connect End Cap

User-installable termination protection of FloppyFlex F15, IP67.
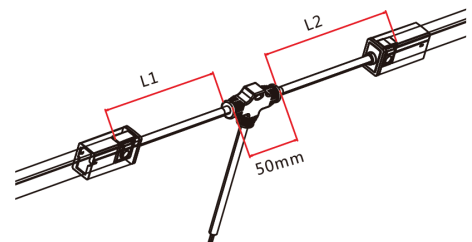
Snap Connect End Entry

Connects two pieces of FloppyFlex F15 together with a flexible cable, user-installable IP67.
Cable length available in 0.3 m, 1 m, and 3 m.

Snap Connect T-Feed

Connects two pieces of FloppyFlex F15 together with powered T-joint, user-installable, IP67.
L1 and L2 length available in 0.3 m.
L3 length available in 1 m

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FloppyFlex® **F15** A/E/D

MINI TOOL KIT
ASSEMBLY TOOLS

Mini Tool Kit

The FloppyFlex Mini Tool Kit includes the tools needed to properly cut and terminate FloppyFlex LED Neon with Snap Connect field-installable connectors. Correct installation ensures proper electrical contact, IP rating integrity, and warranty compliance.

Includes cutter, insertion spreader and grippers.

We recommend using these tools for optimum installation results and reduced risk of damage to the product.

Lockable Aluminium Case

Grippers

Cutter

Insertion Spreaders

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FloppyFlex® **F15** A/E/D

DRIVERS

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Mean Well 24 VDC LED Drivers

- High efficiency 24VDC LED drivers in DIN Rail and stand-alone with multiple wattage configurations
- IP-rated units available
- Fixed or dimmable output. Dimming available via 1-10VDC, 10V PWM signal, resistance, or built-in potentiometer

L-TECH 4 channel DMX Decoder

- DMX dimming for 24V LED Tapes, Neons, and other low voltage systems of all types. Perfect for FloppyFlex
- One 24V 5-wire output
- Addressing via RDM or built in DIP switches
- Pluggable Terminal Block (PTB) screw terminals for bare-wire, installation flexibility
- Realises 0-100% dimming or different lighting effects.
- Works with DIM, CT, RGB, RGBW LEDs

FloppyDrive DIN Rail Mount

- DMX dimming for 24V LED Tapes, Neons, and other low voltage systems of all types. Perfect for FloppyFlex.
- Two 24V 2-, 3-, 4-, or 5-wire outputs
- Addressing, monitoring and reporting of all functions, via RDM
- 1200Hz flicker-free refresh rate
- Pluggable Terminal Block (PTB) screw terminals for bare-wire, installation flexibility
- More information and full specification sheets at https://tmb.com/proplex-floppydrives
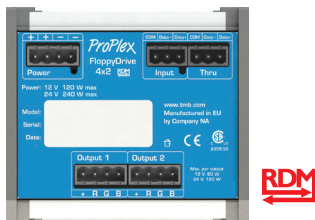
L-TECH 3 channel DMX Decoder

- DMX dimming for 24V LED Tapes, Neons, and other low voltage systems of all types. Perfect for FloppyFlex
- One 24V 4-wire output
- Addressing via RDM or built in DIP switches
- Pluggable Terminal Block (PTB) screw terminals for bare-wire, installation flexibility
- Realises 0-100% dimming or different lighting effects.
- Works with DIM, CT, RGB LEDs

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FloppyFlex® **F15** A/E/D

ALUMINIUM CHANNEL

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Address : 9/29 Links Ave North, Eagle Farm.
Brisbane QLD 4009 Australia
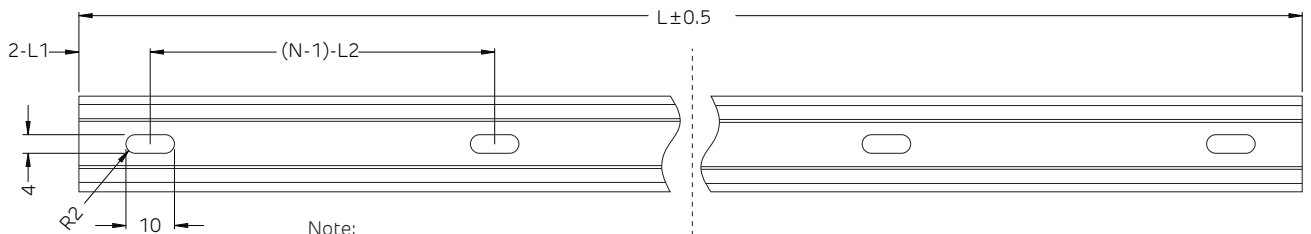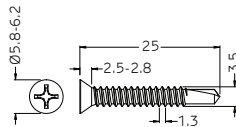**www.fireflylighting.com.au**

Versatile self-locking profile can be used to mount FloppyFlex F21 or F15 LED neon in any orientation including overhead at any angle. Extruded 6063 aluminium construction with elastic serrated grip tape hold the FloppyFlex neon firmly through varying temperatures of -20 to +70 °C.
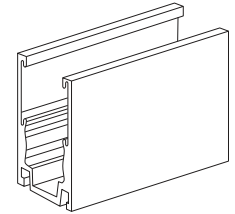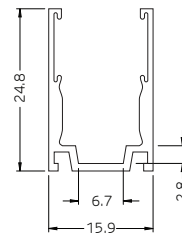
Tolerance: ±0.2 mm

Dimensions in millimeters

Note:
1. 2-L1 refers to two of symmetric L1 in each piece of profile.
2. (N-1)-L2 refers to (N minus one) of symmetric L2 in each piece of profile.
"N" hereby stands for its corresponding "Hole Number" in the table below.

Part Number	Length	L1	L2	Slotted Hole	Number of Holes
LNCH-F21-AC	20 mm	10 mm	N/A	4x10 mm	1
LNCH-F21-A1-05	500 mm	50 mm	200 mm	4x10 mm	3
LNCH-F21-A1-1	1000 mm	100 mm	200 mm	4x10 mm	5
LNCH-F21-A1-2	2000 mm	100 mm	200 mm	4x10 mm	10

FloppyFlex® **F15** A/E/D

FLANGE ALUMINIUM PROFILE V3

FIREFLY LIGHTING
Phone : +61 7 3254 4333
Email : sales@fireflylighting.com.au
Address : 9/29 Links Ave North, Eagle Farm.
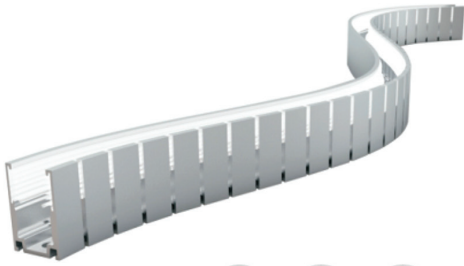Brisbane QLD 4009 Australia
www.fireflylighting.com.au

Versatile self-locking profile can be used to mount recessed FloppyFlex F21 or F15 LED neon in any orientation including overhead at any angle. Extruded 6063 aluminum construction with elastic serrated grip tape hold the FloppyFlex neon firmly through varying temperatures of -20 to +70°C.
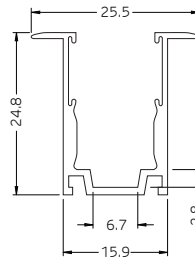
Tolerance: ±0.2 mm
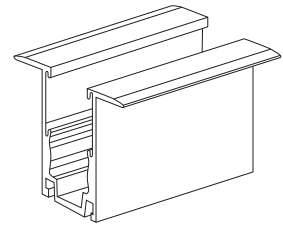
Dimensions in millimeters
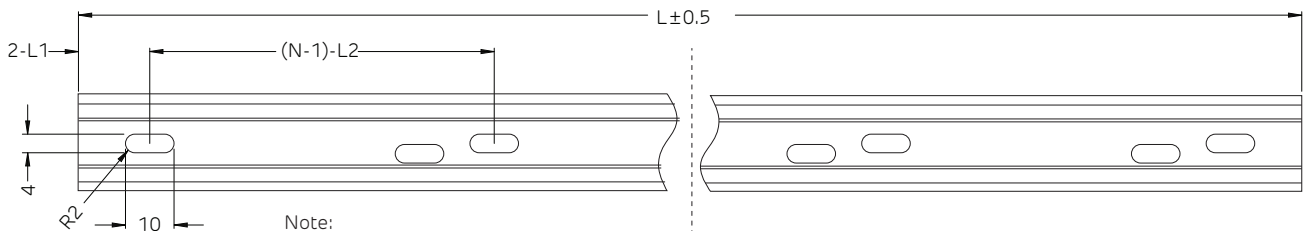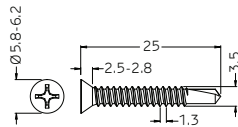
Note:
1. 2-L1 refers to two of symmetric L1 in each piece of profile.
2. (N-1)-L2 refers to (N minus one) of symmetric L2 in each piece of profile.
"N" hereby stands for its corresponding "Hole Number" in the table below.

Part Number	Length	L1	L2	Slotted Hole	Number of Holes
LNCH-F21-A3-20	20 mm	10 mm	N/A	4x10 mm	1
LNCH-F21-A3-05	500 mm	50 mm	200 mm	4x10 mm	3
LNCH-F21-A3-1	1000 mm	100 mm	200 mm	4x10 mm	5

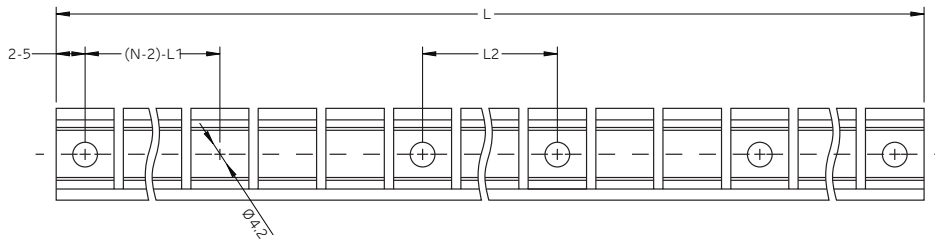# FloppyFlex® **F15** A/E/D
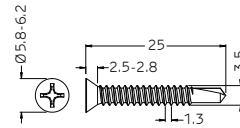
BENDABLE ALUMINIUM PROFILE

Flexible self-locking profile can be used to mount FloppyFlex F21 or F15 LED neon in custom freeform curves while maintaining clamping force. May be mounted in any orientation including overhead at any angle.
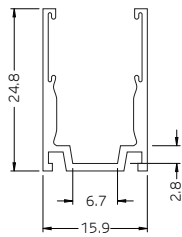
Tolerance: ±0.2 mm
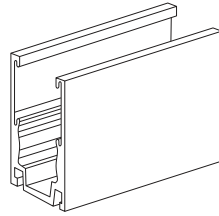
Dimensions in millimeters

Note:

1. 2-5 refers to two of symmetric 5mm in each piece of profile.
2. (N-2)-L1 refers to)N minus two) of symmetric L1 in each piece of profile.

"N" hereby stands for its corresponding "Hole Number" in the table below.

Part Number	Length	L1	L2	Screw Hole	Number of Holes
LNCH-F21-A2-05	500 mm	116.5 mm	23.3 mm	Ø4.2 mm	6
LNCH-F21-A2-1	1000 mm	116.5 mm	58.2 mm	Ø4.2 mm	10