

Neon Flex - Datasheet

Horizontal/Vertical bendable weatherproof Neon Flex LED strip



Illuminate Your Space with ENTTEC Neon Flex: The ultimate lighting solution that combines flexibility, durability, and ease of installation.

Crafted from high-quality silicone, this weatherproof LED strip thrives in any environment. Its malleable design allows effortless vertical or horizontal shaping, enabling you to create stunning lighting designs.

With comprehensive connector options and versatile mounting accessories, Neon Flex ensures a sleek and professional finish.

Discover the diversity of ENTTEC Neon Flex, where cutting-edge LED technology meets artistic expression. From Auto Addressing DMX and SPI options to non-Addressable single-color, tuneable white, and RGBW variations, Neon Flex offers a wide array of lighting possibilities.

With its expansive range of colour temperatures and dynamic mixing capabilities, Neon Flex elevate your designs effortlessly and transform any space into a captivating visual spectacle.

FEATURES

- **Variety of strip shapes and control options from auto Addressable DMX, SPI to non-Addressable single colour, tuneable white and RGBW variants.**
- **Premium FPC with 4OZ thick copper for good conductivity and folding resistance.**
- **Horizontal or vertical bendable for effortless shaping and contouring.**
- **Flexible LED strip made with high-quality anti-yellowing silicone material resistant to UV, corrosion, solvents and salt water.**
- **IP68/IK08-rated durable weatherproof design.**
- **Easy installation with a range of connector styles and installation accessories.**
- **Customisable length tailored to unique needs.**
- **This product does not include the necessary external DC power supply and data source required for operation.**

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ORDER CODE

Example: 73060-S6-DMX-24V-RGBW40-70-1200-D-SFM-300-300

Description: Neon Flex, Silicone Style 6, DMX Protocol, 24V, RGBW (4000K), 70 LEDs/m, 1200mm Length, Direct Connector style, Male Lead In & Female Lead Out, 300mm Lead In, 300mm Lead Out

- NA1 = Non-Addressable Single Colour
- NA2 = Non-Addressable Tuneable White
- NA3 = Non-Addressable RGBW



PN	Variant	Protocol	Voltage	LED Colour	LED Density [LEDs/m]	Neon Flex Length [mm]	Connector Style	Connector Configuration	Lead in Length [mm]	Lead Out Length [mm]
73060	4 Options S6 S7 S8 S9	DMX	24V	5 Options RGBW27 (2700K) RGBW30 (3000K) RGBW40 (4000K) RGBW50 (5000K) RGBW65 (6500K)	70	Custom Min: 100 Increment Step: 100 Max. by power feed: Single: 7,000/Double: 13,000 ¹	3 Options D - Direct S - Side B - Bottom ²	2 Options SM (Male Connector In, sealed end cap) SFM (Male connector In, Female Connector Out.)	Custom Min: 150 Increment: 10 Max: 8,000	Custom Min: 150 Increment: 10 Max: 8,000
		SPI	12V	5 Options RGBW27 (2700K) RGBW30 (3000K) RGBW40 (4000K) RGBW50 (5000K) RGBW65 (6500K)	84	Custom Min: 35.7 Increment Step: 35.7 Max. by power feed: Single: 5,000/Double: 10,000				
		NA1	24V	8 Options W27 (2700K) W30 (3000K) W40 (4000K) W50 (5000K) W65 (6500K) R (Red) G (Green) B (Blue)	140	Custom Min: 50 Increment Step: 50 Max. by power feed: Single: 13,000 ³				
		NA2	24V	4 Options WW27 (2700K-6500K) WW30 (3000K-6500K) WW40 (4000K-6500K) WW50 (5000K-6500K)	240	Custom Min: 50 Increment Step: 50 Max. by power feed: Single: 13,000 ³				
		NA3	24V	5 Options RGBW27 (2700K) RGBW30 (3000K) RGBW40 (4000K) RGBW50 (5000K) RGBW65 (6500K)	196	Custom Min: 71.4 Increment Step: 71.4 Max. by power feed: Single: 6,000 ³				

1 The DMX Neon Flex maximum run length is 12.8M, following the DMX512-A standard of one DMX universe data per port.

2 Side Connection is not available for S8.

3 To ensure proper dimming performance, single power feed is recommended for NA1, NA2, and NA3.

GENERAL PROPERTIES

Connector Type	IP68 Twist lock connector
Available Bending	• Horizontal • Vertical
Available Beam Angle	• 120° • 270°
Available shape	S6, S7, S8, S9
Available Protocol	Auto-Addressing • DMX (SM18512PS) • SPI (UCS8904B) Non-Addressable • NA1: Single Colour • NA2: Tuneable White • NA3: RGBW
LED Lifetime (L70)	>36,000hours
Body Material	Silicone
IK Rating	IK08
IP Rating	IP68
Temperature Range	Installation: 0°C to 50°C Operating: -25°C to 55°C
Warranty	3 Year Return to Base Manufacturer Warranty

CERTIFICATION



INSTALLATION

Install Neon Flex within the specified temperature range to ensure proper bending and flexibility. Operating outside this range may compromise performance.

Prior to handling or specifying this product, ensure you refer to its installation guide and the safety instructions. If you have any uncertainties, don't hesitate to consult ENTTEC for guidance.

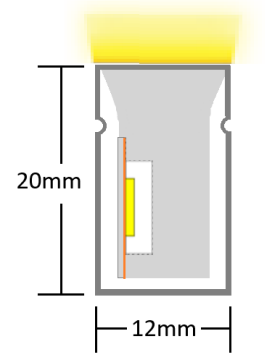
Note: Your Neon Flex will be cut to order for you. DIY cutting on the product will void warranty.

All length tolerance: ±5%

NEON FLEX VARIANT

Variant	Bending	Shape	Beam Angle (degree)	Height (mm)	Width (mm)	Bending Diameter (mm)
S6	Horizontal		120°	20	12	200
S7			120°	16	16	200
S8			270°	25	12	200
S9	Vertical		120°	16	16	200

S6 Variant Customisation (Horizontal – 20mmx12mm - 120°)



S6 - DMX (Auto-Addressing DMX)

Protocol	Colour/CCT	Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m				Max Length*
								R	G	B	W	
DMX	RGBW (2700K)	24V	18W/m	SMD5050	70	7 LEDs	100mm	42	92	21	70	Single: 7m Double: 13m
	RGBW (3000K)							34	87	20	84	
	RGBW (4000K)							50	111	24	87	
	RGBW (5000K)							49	112	25	101	
	RGBW (6500K)							44	88	22	88	

*Single: power feeding from single end. / Double: power feeding from both ends.

S6 - SPI (Auto-Addressing SPI)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m				Max Length
								R	G	B	W	
SPI	RGBW (2700K)	12V	24W/m	SMD5050	84	3 LEDs	35.7mm	49	109	19	134	Single: 5m Double: 10m
	RGBW (3000K)							40	100	18	142	
	RGBW (4000K)							50	116	24	132	
	RGBW (5000K)							52	121	27	157	
	RGBW (6500K)							54	106	27	154	

S6 - NA1 (Non-Addressable Single-Colour)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m	Max Length
NA1	W (2700K)	24V	12W/m	SMD2835	140	7 LEDs	50mm	503	Single: 13m
	W (3000K)							483	
	W (4000K)							508	
	W (5000K)							497	
	W (6500K)							484	
	R							88	
	G							466	
	B							72	

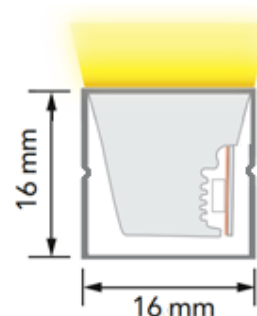
S6 - NA2 (Non-Addressable Tuneable White)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m	Max Length
NA2	2700K – 6500K	24V	12W/m	SMD2835	240	12 LEDs	50mm	458 (2700K) / 454 (6500K)	Single: 13m
	3000K – 6500K							422 (3000K) / 421 (6500K)	
	4000K – 6500K							491 (4000K) / 471 (6500K)	
	5000K – 6500K							438 (5000K) / 448 (6500K)	

S6 - NA3 (Non-Addressable RGBW)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m				Max Length
								R	G	B	W	
NA3	RGBW (2700K)	24V	17W/m	SMD5050	196	14 LEDs	71.4mm	36	75	15	341	Single: 6m
	RGBW (3000K)							36	71	16	346	
	RGBW (4000K)							37	79	16	369	
	RGBW (5000K)							35	72	14	322	
	RGBW (6500K)							44	89	20	413	

S7 Variant Customisation (Horizontal – 16mmx16mm - 120°)



S7 - DMX (Auto-Addressing DMX)

Protocol	Colour/CCT	Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m				Max Length
								R	G	B	W	
DMX	RGBW (2700K)	24V	18W/m	SMD5050	70	7 LEDs	100mm	71	162	37	134	Single: 7m Double: 13m
	RGBW (3000K)							53	141	33	132	
	RGBW (4000K)							74	166	36	130	
	RGBW (5000K)							79	183	42	167	
	RGBW (6500K)							74	151	39	153	

*Single: power feeding from single end. / Double: power feeding from both ends.

S7 - SPI (Auto-Addressing SPI)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m				Max Length
								R	G	B	W	
SPI	RGBW (2700K)	12V	24W/m	SMD5050	84	3 LEDs	35.7mm	80	184	32	224	Single: 5m Double: 10m
	RGBW (3000K)							63	164	29	228	
	RGBW (4000K)							84	193	30	220	
	RGBW (5000K)							81	195	34	257	
	RGBW (6500K)							84	171	44	248	

S7 - NA1 (Non-Addressable Single-Colour)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m	Max Length
NA1	W (2700K)	24V	12W/m	SMD2835	140	7 LEDs	50mm	780	Single: 13m
	W (3000K)							785	
	W (4000K)							838	
	W (5000K)							762	
	W (6500K)							774	
	R							88	
	G							766	
	B							124	

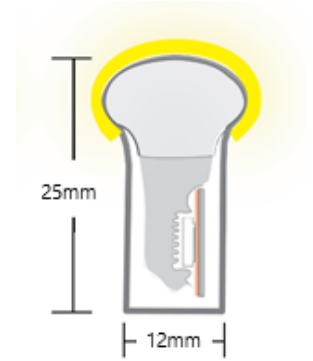
S7 - NA2 (Non-Addressable Tuneable White)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m	Max Length
NA2	2700K – 6500K	24V	12W/m	SMD2835	240	12 LEDs	50mm	688 (2700K) / 729 (6500K)	Single: 13m
	3000K – 6500K							699 (3000K) / 705 (6500K)	
	4000K – 6500K							737 (4000K) / 714 (6500K)	
	5000K – 6500K							806 (5000K) / 859 (6500K)	

S7 - NA3 (Non-Addressable RGBW)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m	Max Length
NA3	RGBW (2700K)	24V	17W/m	SMD5050	196	14 LEDs	71.4mm	58	Single: 6m
	RGBW (3000K)							57	
	RGBW (4000K)							57	
	RGBW (5000K)							53	
	RGBW (6500K)							57	

S8 Variant Customisation (Horizontal – 5mmx12mm - 270°)



S8 - DMX (Auto-Addressing DMX)

Protocol	Colour/CCT	Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m				Max Length
								R	G	B	W	
DMX	RGBW (2700K)	24V	18W/m	SMD5050	70	7 LEDs	100mm	46	103	23	86	Single: 7m Double: 13m
	RGBW (3000K)							32	81	18	77	
	RGBW (4000K)							47	103	22	81	
	RGBW (5000K)							42	95	21	87	
	RGBW (6500K)							46	92	23	94	

*Single: power feeding from single end. / Double: power feeding from both ends.

S8 - SPI (Auto-Addressing SPI)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m				Max Length
								R	G	B	W	
SPI	RGBW (2700K)	12V	24W/m	SMD5050	84	3 LEDs	35.7mm	50	110	25	135	Single: 5m Double: 10m
	RGBW (3000K)							39	99	17	141	
	RGBW (4000K)							46	103	17	121	
	RGBW (5000K)							53	118	20	160	
	RGBW (6500K)							47	93	18	138	

S8 - NA1 (Non-Addressable Single-Colour)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m	Max Length
NA1	W (2700K)	24V	12W/m	SMD2835	140	7 LEDs	50mm	552	Single: 13m
	W (3000K)							515	
	W (4000K)							560	
	W (5000K)							521	
	W (6500K)							500	
	R							90	
	G							422	
	B							75	

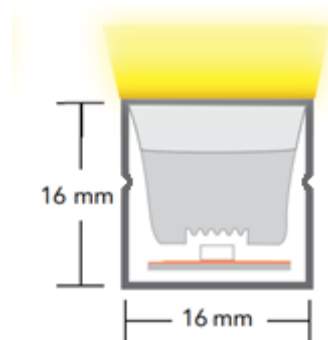
S8 - NA2 (Non-Addressable Tuneable White)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m	Max Length
NA2	2700K – 6500K	24V	12W/m	SMD2835	240	12 LEDs	50mm	448 (2700K) / 451 (6500K)	Single: 13m
	3000K – 6500K							455 (3000K) / 457 (6500K)	
	4000K – 6500K							493 (4000K) / 472 (6500K)	
	5000K – 6500K							401 (5000K) / 411 (6500K)	

S8 - NA3 (Non-Addressable RGBW)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m				Max Length
								R	G	B	W	
NA3	RGBW (2700K)	24V	17W/m	SMD5050	196	14 LEDs	71.4mm	32	67	13	312	Single: 6m
	RGBW (3000K)							33	64	14	306	
	RGBW (4000K)							36	75	15	353	
	RGBW (5000K)							37	77	15	345	
	RGBW (6500K)							32	67	13	312	

S9 Variant Customisation (Vertical – 16mmx16mm - 120°)



S9 - DMX (Auto-Addressing DMX)

Protocol	Colour/CCT	Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m				Max Length
								R	G	B	W	
DMX	RGBW (2700K)	24V	18W/m	SMD5050	70	7 LEDs	100mm	77	170	39	145	Single: 7m Double: 13m
	RGBW (3000K)							64	155	35	154	
	RGBW (4000K)							82	171	36	137	
	RGBW (5000K)							84	186	42	171	
	RGBW (6500K)							84	162	41	164	

*Single: power feeding from single end. / Double: power feeding from both ends.

S9 - SPI (Auto-Addressing SPI)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m				Max Length
								R	G	B	W	
SPI	RGBW (2700K)	12V	24W/m	SMD5050	84	3 LEDs	35.7mm	91	207	36	256	Single: 5m Double: 10m
	RGBW (3000K)							71	180	42	258	
	RGBW (4000K)							90	204	44	346	
	RGBW (5000K)							94	215	36	287	
	RGBW (6500K)							95	185	53	268	

S9 - NA1 (Non-Addressable Single-Colour)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m	Max Length
NA1	W (2700K)	24V	12W/m	SMD2835	140	7 LEDs	50mm	855	Single: 13m
	W (3000K)							846	
	W (4000K)							897	
	W (5000K)							805	
	W (6500K)							791	
	R							154	
	G							778	
	B							127	

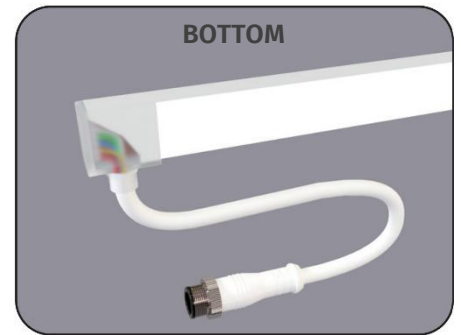
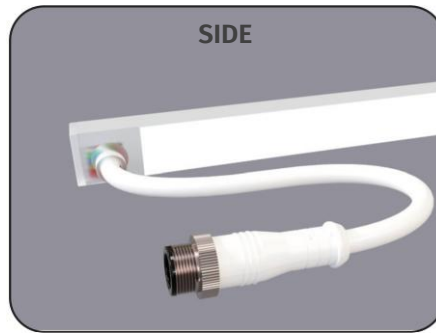
S9 - NA2 (Non-Addressable Tuneable White)

Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m	Max Length
NA2	2700K – 6500K	24V	12W/m	SMD2835	240	12 LEDs	50mm	734 (2700K) / 726 (6500K)	Single: 13m
	3000K – 6500K							762 (3000K) / 766 (6500K)	
	4000K – 6500K							838 (4000K) / 811 (6500K)	
	5000K – 6500K							753 (5000K) / 776 (6500K)	

S9 - NA3 (Non-Addressable RGBW)

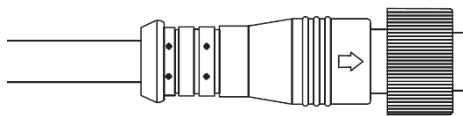
Protocol	Colour/CCT	Input Voltage	Power	LED Type	LEDs/m	Cutting Unit	Cutting Length	Lumens/m				Max Length
								R	G	B	W	
NA3	RGBW (2700K)	24V	17W/m	SMD5050	196	14 LEDs	71.4mm	58	120	23	558	Single: 6m
	RGBW (3000K)							60	119	25	574	
	RGBW (4000K)							61	127	25	594	
	RGBW (5000K)							63	132	26	592	
	RGBW (6500K)							64	129	28	605	

CONNECTOR STYLE

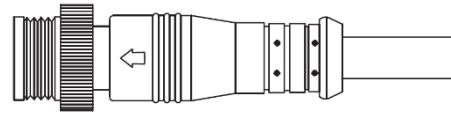


CONNECTOR CONFIGURATION

When the connectors are securely fastened, it offers outstanding reliability and waterproof performance, achieving an IP67 rating.



Female Connector



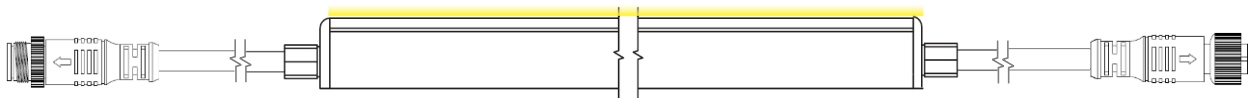
Male Connector

Choose between the 2 options for the Connector Configuration:

- **SM:** Male connector in and end cap sealed in the other end.

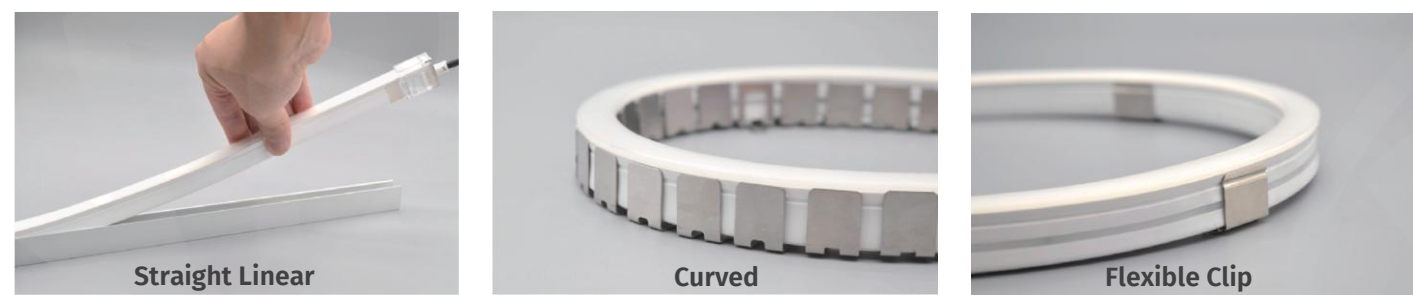


- **SFM:** Male connector in and female connector out.



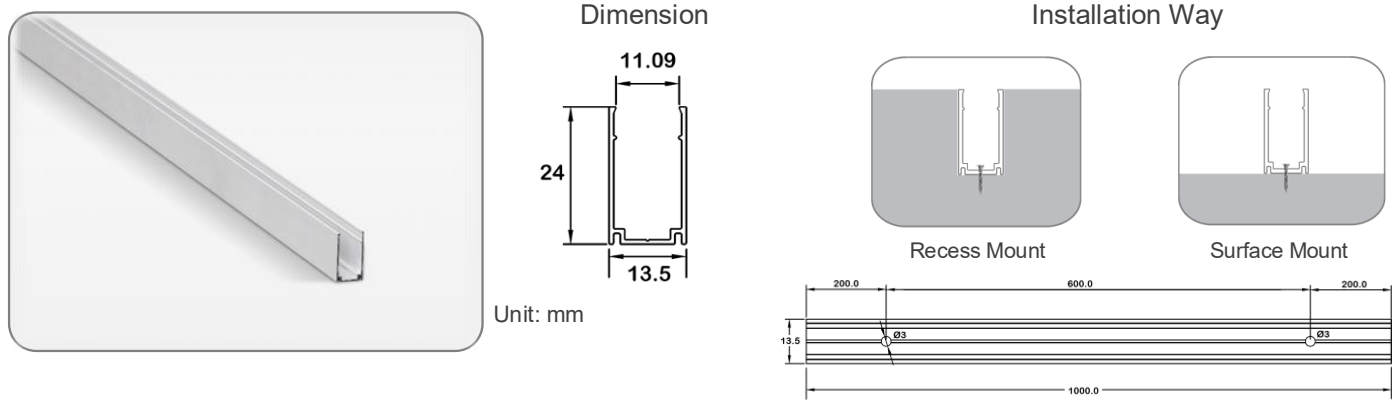
MOUNTING OPTIONS

ENTTEC offers multiple mounting options to accommodate different installation needs, whether for straight lines, curved surfaces, or flexible applications. Each mounting method is designed to provide secure attachment while maintaining the intended lighting effect.

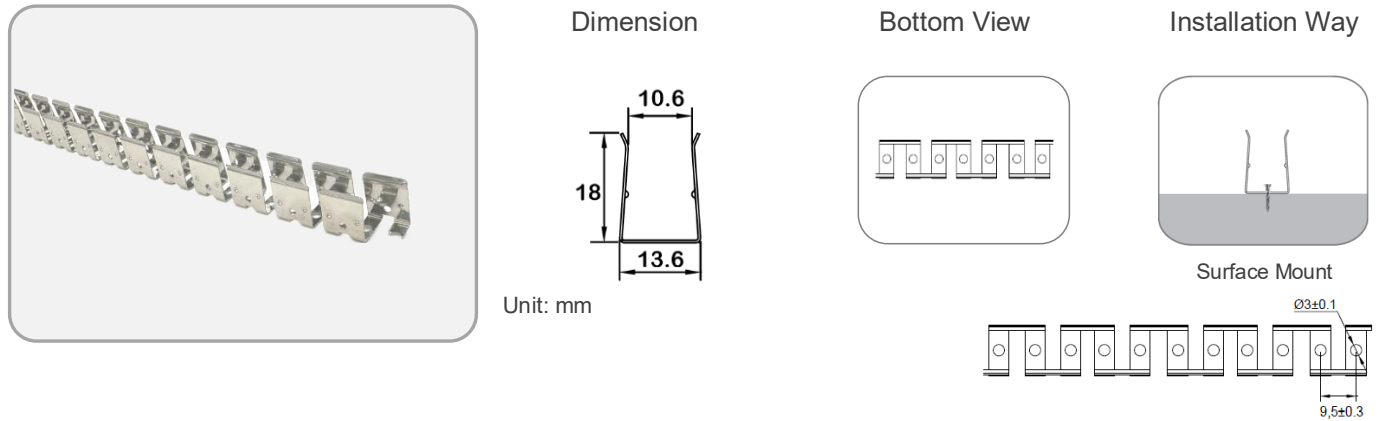


Order Code	Suitable Variant	Mounting Style	W x H (mm)	Standard Length (mm)
73083	S6 & S8	Straight Linear	13.50 x 24.00	1000
73084		Horizontal Curved	13.60 x 18.00	1000
73085		Flexible Clip	13.50 x 24.00	30
73097	S7 & S9	Straight Linear	19.00 x 17.70	1000
73098		Curved	17.60 x 16.50	1000
73099		Flexible Clip	19.00 x 17.70	30

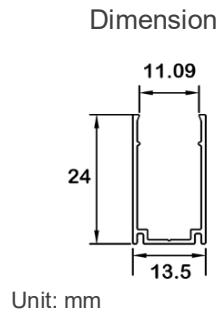
73083 – Aluminium Straight Linear for S6 & S8



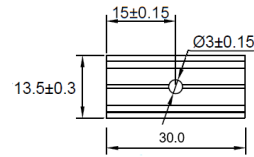
73084 – Stainless Steel Curved for S6 & S8



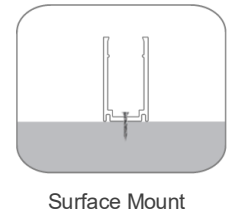
73085 – Aluminium Mounting Clip for S6 & S8



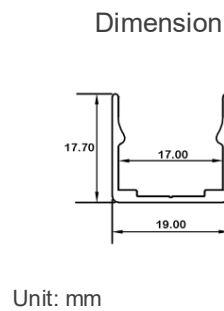
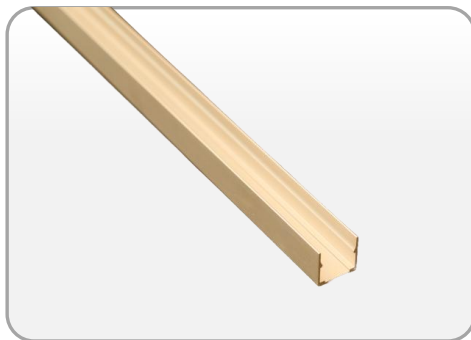
Bottom View



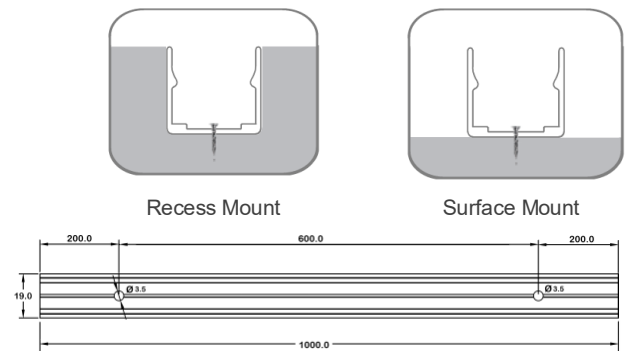
Installation Way



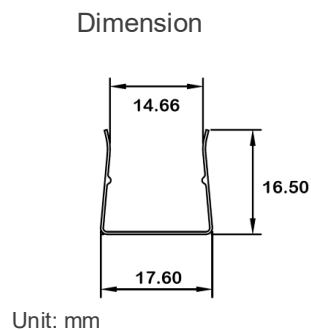
73097 – Aluminium Straight Linear for S7 & S9



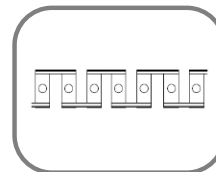
Installation Way



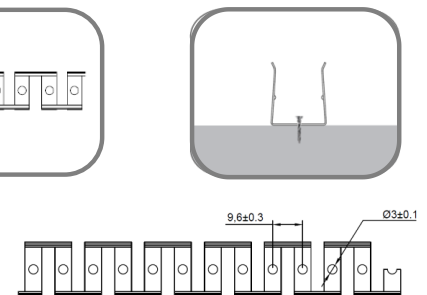
73098 – Stainless Steel Curved for S7 & S9



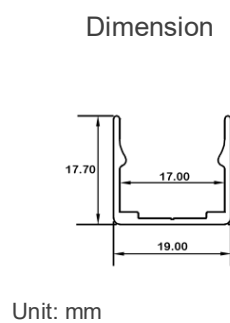
Bottom View



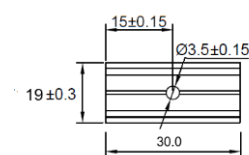
Installation Way



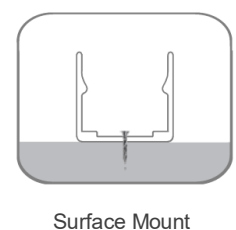
73099 – Aluminium Mounting Clip for S7 & S9



Bottom View



Installation Way



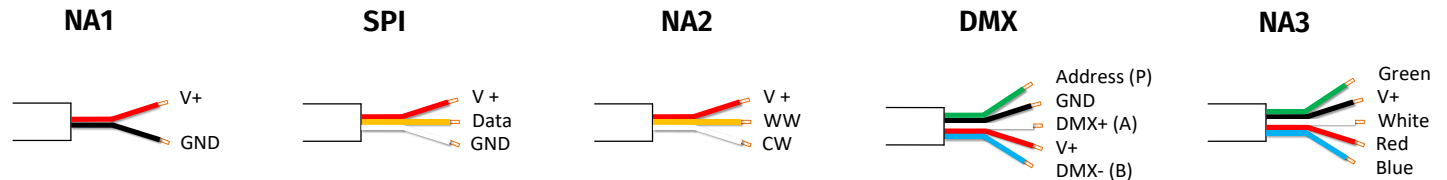
ACCESSORIES for S6-S9

Order Code	Description	Applicable Protocol	Standard Length (mm)
73094	2Pin Male connector cable	NA1	2000mm
73095	2Pin Female connector cable		
73096	2Pin Extension Cable		
73086	3Pin Power Injector, Single Feed	SPI	300mm
73100	3Pin Power Injector, Double Feed		
73087-SPI	3Pin Male connector cable (SPI)		2000mm
73088-SPI	3Pin Female connector cable (SPI)		
73087-NA2	3Pin Male connector cable (NA2)		
73088-NA2	3Pin Female connector cable (NA2)		
73089	3Pin Extension Cable	SPI & NA2	
73090	5Pin Power Injector, Single Feed	DMX	300mm
73101	5Pin Power Injector, Double Feed		
73091-DMX	5Pin Male connector cable (DMX)		2000mm
73092-DMX	5Pin Female connector cable (DMX)		
73091-NA3	5Pin Male connector cable (NA3)		
73092-NA3	5Pin Female connector cable (NA3)		
73093	5-Pin Extension Cable	DMX & NA3	



- Note:**
- Connectors for ENTTEC Neon Flex variants S1–S5 and S6–S9 are not cross-compatible.
 - For non-addressable Neon Flex models, use the ENTTEC CVC4 LED dimmer. Do not apply power double feed or back feed power to the CVC4, as this may result in malfunction.

S6-S9 Wiring Cable



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Due to constant innovation, information within this document is subject to change.