REQUEST QUOTE NOW

Customer: Date:

Project:

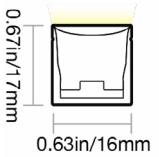


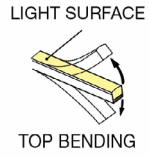
AQUA NEON HIGH OUTPUT WAVE: PVC - 24V

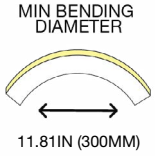
Submersible Pool Rated Linear Flex Profile - Static Whites

RoHS COMPLIANT | Class 2 | UL | CE

PROFILE CAPABILITIES







CERTIFICATIONS & FEATURES*

IP68 | IK10 | DMX | 24 DC | 5 YEAR WARRANTY | 3G VIBRATION | 16.4FT (5M) SUBMERSIBLE DEPTH | RESISTANT

FLAME
UV
SOLVENT
SALT WATER

TEMPERATURES

AMBIENT OPERATING TEMPERATURE:
Above Water: -4°F to 113°F (-20°C to 45°C)
Underwater ≤16.5W/m: -4°F to 95°F (-20°C to 35°C)

AMBIENT INSTALLATION TEMPERATURE:
≥-32°F (0°C)

FIXTURE STORAGE TEMPERATURE:
-4°F to 140°F (-20°C to 60°C)

MAX MOUNTING SURFACE TEMPERATURE:
140°F (60°C)

HUMIDITY (NON-CONDENSING):
0–95%

THERMAL MANAGEMENT:
Free Air Convection

FIXTURE ORDER CODE

E							A						B					
F	2						A	2	F	2	W		1					2
INPUT CONNECTORS							SERIES	MATERIAL	PROFILE	BENDING	JACKET/BASE + LENS COLOR		LED FUNCTION	LED COLOR				CHIP + CRI
See Page 5 to select input connector							A = Aqua Neon	2 = PVC	F = Wave	2 = Top	W = White + Diffused		1 = Static	H = 2200K J = 2700K L = 3000K M = 3500K N = 4000K Q = 5700K				2 = Epistar SMD LED Chip + CRI80

C		D	E							F					
	2C	D	F	2							F	4			
POWER	VOLTAGE + CIRCUIT TYPE**	ORDER UNIT LENGTH	OUTPUT CONNECTOR							MOUNTING PROFILE					POWER SUPPLIES & CONTROLS:
G = 3.66W/ft (12W/m) I = 4.57W/ft (15W/m)	2C = 24V DC CR	D = 2.19in (55.6mm)	See Page 5 to select output connector							See Page 8 to select mounting profile					By Others By GLLS

*Maximum IP and IK ratings achievable with appropriate accessories, and cable diameter: PVC static = 0.24in (6mm). **The Current Regulated (CR) Integrated Circuit extends max run length. Do not use a CC or CR power supply, as it may cause damage.

AQUA NEON HIGH OUTPUT WAVE: PVC - 24V

Submersible Pool Rated Linear Flex Profile - Static Whites

COMPLEXITY, SIMPLIFIED.

A

MECHANICAL

ASSEMBLY

Fixtures are carefully assembled using high-quality components to ensure durability and performance. Each unit is built to meet strict specifications, with attention to electrical safety, thermal management, and optical alignment.

OVERALL & CUTTING LENGTHS

Fixtures feature defined overall lengths and specific cutting increments for easy customization. Cutting must be done at marked points to maintain proper function and consistent light output.

JACKET COLOR

The white jacket with diffused white lens covers provide a clean, uniform appearance while softening light output for reduced glare. It enhances visual comfort and delivers smooth, even illumination ideal for architectural and display applications.

BENDING RADIUS

Do not bend smaller than allowed minimum bend diameter, or may cause damage to the light & void warranty.

OPERATION

LIGHT ENGINE

Static Pulse Width Modulation (PWM) light engines deliver stable, flicker-free light at a fixed brightness. They offer consistent color and reliable performance for long-term applications.

ELECTRICAL

Designed to meet UL, CE, and RoHS standards, they feature overload, overvoltage, and short-circuit protection, along with low EMI and efficient thermal management for safe, reliable operation.

DIMMING

Dimming controls for 24V Static PWM systems include 0-10V, RDM DMX, and DALI protocols. These options allow smooth, flicker-free dimming while maintaining consistent color and performance across fixtures.

GENERAL

WARRANTY

Limited 5-Year Warranty against defects in materials and manufacturing. Coverage applies to properly installed and maintained products. Damage from misuse or improper installation is not covered. GLLS may repair, replace, or issue credit for eligible claims.

LUMEN MAINTENANCE

GLLS static lighting fixtures are tested to IES LM-84 and projected with IES TM-28 to ensure consistent lumen maintenance. Fixtures are designed to retain at least 70% of their initial brightness (L70) over a 10-year lifespan when properly installed and operated.

CERTIFICATION

Tested to UL676 by Underwriters Laboratory for use in the USA and Canada. Exceeds CSA C22.2, CE, and RoHS standards. Must be used under Class 2 ratings to maintain certification.

UL Certificate #: E509134

Report Referance #: E509134-20190918

TESTING

OPTICAL TESTING

TEST	RESULTS
Spectrum Analysis	IES LM 79 (Lumen, CCT, CRI, XY, SDCM, Wavelength)
Photometric Distribution	IES LM 79
Lumen Maintenance & Lifetime	IES LM 84 & IES TM28

TEMPERATURE TESTING

TEST	RESULTS
Normal Temperature Test	UL1598 & UL2388 & IEC60598-1 & IEC60598-2-21
Abnormal Operation Test	UL1598 & UL2388 & IEC60598-1 & IEC60598-2-21

ENVIRONMENTAL TESTING

TEST	RESULTS
Salt Water Immersion	IEC60598-1, Sailinity 4%
Salt Spray Test	IEC60068-2-11
Outdoor Exposure	Manufacturer-defined
Flame Resistance	UL94
UV Exposure	ASTMG 154, ISO 4892-3, UVA @ 340nm & 55
IPX8	EN 60598-1: 2015+A1:2018 Clause 9.2.2 & 9.2.8
Temperature Shock(Silicone)	Manufacturer-defined, -40°C - 60°C (typical temperature range)
Constant Temperature	Manufacturer-defined
12mm Needle Flame Test (Silicone)	IEC60695-11-5
650 Glow-wire Test (Silicone)	IEC60695-2-10

DURABILITY TESTING

TEST	RESULTS
Bending Test	Manufacturer-defined, 500 cycles
Tensile Test	Manufacturer-defined, > The weight of light in max.
Twist Test	Manufacturer-defined, >200 cycles
Ball Impact	UL1598 & UL2388 & IEC60598-1 & IEC60598-2-21
IK	IEC62262

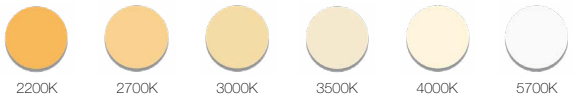
AQUA NEON HIGH OUTPUT WAVE: PVC - 24V

Submersible Pool Rated Linear Flex Profile - Static Whites

COMPLEXITY, SIMPLIFIED.

B

LED COLORS



FIXTURE SPECIFICATIONS & OPTICAL PARAMETERS - WHITE JACKET + DIFFUSED LENS - TOP BENDING - 3.66W/FT (12W/M)

COLOR	LED COUNT	1 CONNECTOR FULL/DYNAMIC*	2 CONNECTORS FULL/DYNAMIC**	UL CLASS 2 MAX RUN***	FIXTURE COLOR TOLERANCE****	WAVELENGTH/ CCT	LED CRI	LED COLOR TOLERANCE	LUMEN COUNT
2200K	33 LEDs/ft (108 LEDs/m)	19.52ft (6m) / NA	N/A / N/A	26ft (8m)	3 SDCM	2238¬±102K	82-87	<2.3SDCM	168lm/ft (550lm/m)
2700K	33 LEDs/ft (108 LEDs/m)	19.52ft (6m) / NA	N/A / N/A	26ft (8m)	3 SDCM	2725¬±145K	82-87	<2.3SDCM	198lm/ft (650lm/m)
3000K	33 LEDs/ft (108 LEDs/m)	19.52ft (6m) / NA	N/A / N/A	26ft (8m)	3 SDCM	3045¬±175K	82-87	<2.3SDCM	198lm/ft (650lm/m)
3500K	33 LEDs/ft (108 LEDs/m)	19.52ft (6m) / NA	N/A / N/A	26ft (8m)	3 SDCM	3465¬±245K	82-87	<2.3SDCM	229lm/ft (750lm/m)
4000K	33 LEDs/ft (108 LEDs/m)	19.52ft (6m) / NA	N/A / N/A	26ft (8m)	3 SDCM	3985¬±275K	82-87	<2.3SDCM	229lm/ft (750lm/m)
5700K	33 LEDs/ft (108 LEDs/m)	19.52ft (6m) / NA	N/A / N/A	26ft (8m)	3 SDCM	5669¬±355K	82-87	<2.3SDCM	213lm/ft (700lm/m)

FIXTURE SPECIFICATIONS & OPTICAL PARAMETERS - WHITE JACKET + DIFFUSED LENS - TOP BENDING - 4.57W/FT (15W/M)

COLOR	LED COUNT	1 CONNECTOR FULL/DYNAMIC*	2 CONNECTORS FULL/DYNAMIC**	UL CLASS 2 MAX RUN***	FIXTURE COLOR TOLERANCE****	WAVELENGTH/ CCT	LED CRI	LED COLOR TOLERANCE	LUMEN COUNT
2200K	33 LEDs/ft (108 LEDs/m)	15.75ft(4.8m) / NA	N/A / N/A	21ft (6m)	3 SDCM	2238¬±102K	82-87	<2.3SDCM	213lm/ft (700lm/m)
2700K	33 LEDs/ft (108 LEDs/m)	15.75ft(4.8m) / NA	N/A / N/A	21ft (6m)	3 SDCM	2725¬±145K	82-87	<2.3SDCM	244lm/ft (800lm/m)
3000K	33 LEDs/ft (108 LEDs/m)	15.75ft(4.8m) / NA	N/A / N/A	21ft (6m)	3 SDCM	3045¬±175K	82-87	<2.3SDCM	244lm/ft (800lm/m)
3500K	33 LEDs/ft (108 LEDs/m)	15.75ft(4.8m) / NA	N/A / N/A	21ft (6m)	3 SDCM	3465¬±245K	82-87	<2.3SDCM	274lm/ft (900lm/m)
4000K	33 LEDs/ft (108 LEDs/m)	15.75ft(4.8m) / NA	N/A / N/A	21ft (6m)	3 SDCM	3985¬±275K	82-87	<2.3SDCM	274lm/ft (900lm/m)
5700K	33 LEDs/ft (108 LEDs/m)	15.75ft(4.8m) / NA	N/A / N/A	21ft (6m)	3 SDCM	5669¬±355K	82-87	<2.3SDCM	259lm/ft (850lm/m)

*Run length is based on a static full load. **As per CLASS 2 power supply standards, the maximum allowable fixture power is limited to a single 100W supply. Double Feeding is Prohibited. ***For UL Class 2 calculations, GLLS uses a maximum output of 96 W / 96 VA for 24 V circuits, unless otherwise confirmed by the listed driver. All runs are assumed to be single-feed from one Class 2 output. Dual-feeding from separate drivers does not qualify as Class 2 unless the run is electrically split into isolated sections. ****PVC products maintain ≤3 SDCM within a production run and <6 SDCM between production runs.

AQUA NEON HIGH OUTPUT WAVE: PVC - 24V

Submersible Pool Rated Linear Flex Profile - Static Whites

COMPLEXITY, SIMPLIFIED.

C

POWER & VOLTAGE

COLOR	VOLTAGE + CIRCUIT TYPE*	POWER CONSUMPTION
2200K	24V DC CR	3.66W/ft (12W/m)
2200K		4.57W/ft (15W/m)
2700K		3.66W/ft (12W/m)
2700K		4.57W/ft (15W/m)
3000K		3.66W/ft (12W/m)
3000K		4.57W/ft (15W/m)
3500K		3.66W/ft (12W/m)
3500K		4.57W/ft (15W/m)
4000K		3.66W/ft (12W/m)
4000K		4.57W/ft (15W/m)
5700K		3.66W/ft (12W/m)
5700K		4.57W/ft (15W/m)

*The Current Regulated (CR) Integrated Circuit extends max run length. Do not use a CC or CR power supply, as it may cause damage.

D

CUTTING INSTRUCTIONS

COLOR	ORDER UNIT (CUTTING UNIT)
2200K	2.19in (55.6mm)
2700K	
3000K	
3500K	
4000K	
5700K	

AQUA NEON HIGH OUTPUT WAVE: PVC - 24V

Submersible Pool Rated Linear Flex Profile - Static Whites

COMPLEXITY, SIMPLIFIED.

E

COMPATIBLE CONNECTORS

INPUT - 01

F	2				
PROFILE	BEND	WIRING	INPUT CONNECTOR TYPE	INPUT ORIENTATION + TYPE	INPUT CABLE LENGTH (LEAD WIRE)

OUTPUT - 02

F	2				
PROFILE	BEND	WIRING	OUTPUT CONNECTOR TYPE	OUTPUT ORIENTATION + TYPE	OUTPUT CABLE LENGTH (LEAD WIRE)
F = Wave	2 = Top	1 = 2 Wire (Static/Dim to Warm) 0 = N/A (End Cap)	3 = PVC Submersible	A = End Exit B = Bottom Exit C = Side Left Exit D = Side Right Exit I = End Cap	4 = 16ft (5m) 5 = 32.81ft (10m) 8 = N/A
			0 = PVC Compact Submersible	A = End Exit I = End Cap	3 = 9.84ft (3m) 4 = 16ft (5m) 8 = N/A

LEGACY CONNECTOR ORDER CODE

FA	16E	2	00	2W	PO	X	XX	XXX	X
PRODUCT TYPE	PROFILE	BENDING	LIGHT EMITTING	FUNCTIONALITY	CONNECTOR TYPE	FIXTURE END	EXIT TYPE	LENGTH	
FA = Factory Accessories	16E = Wave	2 = Top	00 = 16E	2W = Static/DTW	PO = Submersible	1 = Input Side 2 = Output Side 0 = Jumpers/T-feeds/ Seamless Bottom/ Seamless End 3 = Input/Output	EN = End BO = Bottom SL = Side Left SR = Side Right EC = End Cap	05M = 16ft (5m) 10M = 32.81ft (10m) 000 = For End Cap	P = Power or For End Cap S = Signal & Power

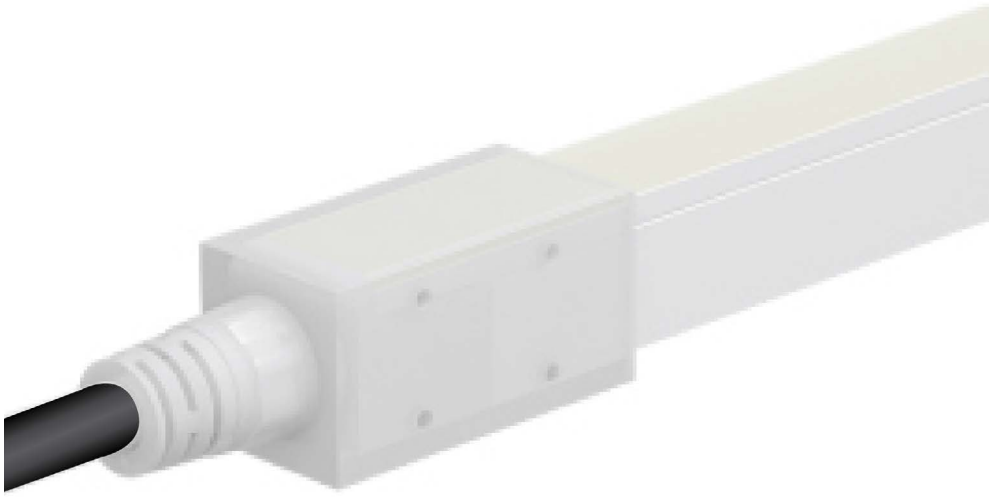
AQUA NEON HIGH OUTPUT WAVE: PVC - 24V

Submersible Pool Rated Linear Flex Profile - Static Whites

COMPLEXITY, SIMPLIFIED.

E

PVC SUBMERSIBLE CONNECTOR



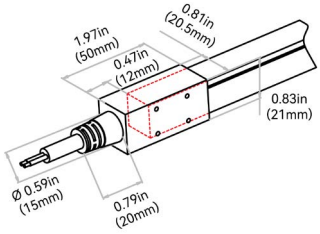


NOTES:
1. Connector Tolerance ±0.02in (0.5mm)
2. Cable diameter: Static, Tunable & SPI PVC = 0.24in (6mm)
3. Do not apply force to the feed cable
4. Ensure Max. Cable Lengths are followed according to wire gage to avoid voltage drop

IP68; extremely durable, underwater, UL676 rated. Recommended for; long-term submersed in wet environments up to the depth of 16.40ft (5m) (water is skin safe for extended periods); high temperature and humidity environments (mounting surface temperature <140°F(60°C); custom predetermined lengths and larger connector; harsh working conditions & increased handling forces during installation. Custom factory assembly.

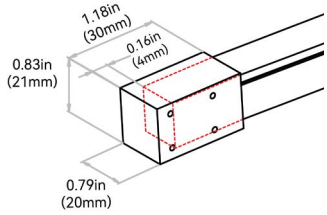
END EXIT: F213A#





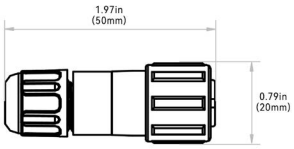
END CAP: F203I8





SCREW LOCK CONNECTOR ACCESSORY - IP67

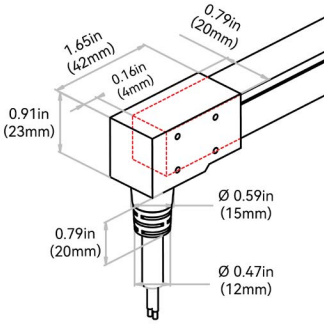




NOTE: The tolerance is ±0.08in (2mm).

BOTTOM EXIT: F213B#





AQUA NEON HIGH OUTPUT WAVE: PVC - 24V

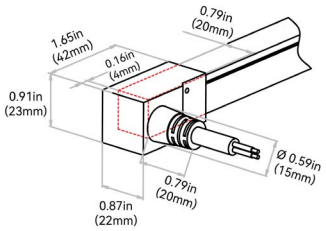
Submersible Pool Rated Linear Flex Profile - Static Whites

COMPLEXITY, SIMPLIFIED.

E

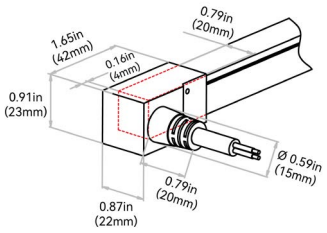
SIDE LEFT EXIT: F213C#





SIDE RIGHT EXIT: F213D#





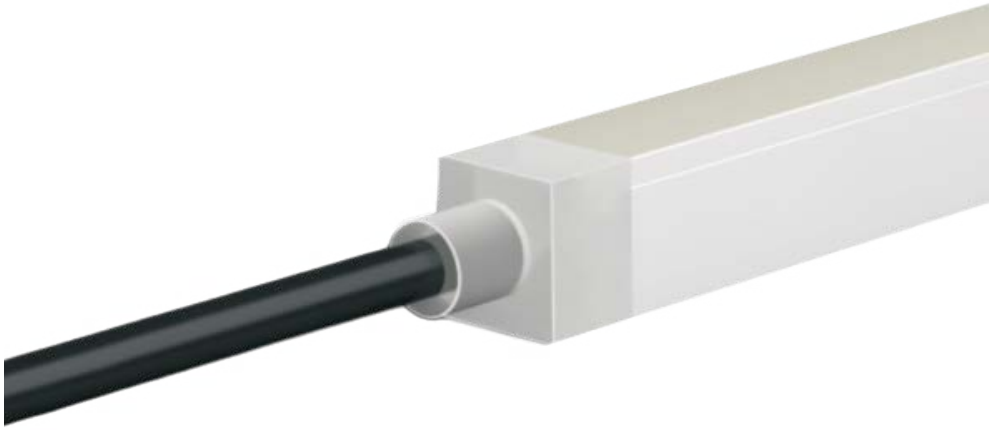
AQUA NEON HIGH OUTPUT WAVE: PVC - 24V

Submersible Pool Rated Linear Flex Profile - Static Whites

COMPLEXITY, SIMPLIFIED.

E

PVC COMPACT SUBMERSIBLE CONNECTOR

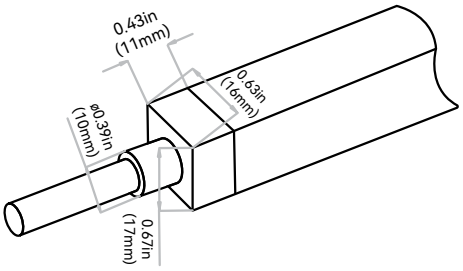




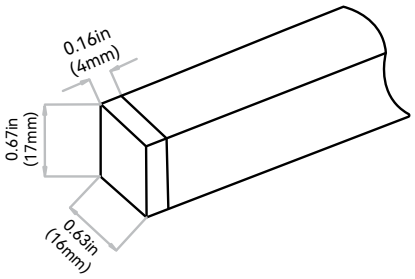
NOTES:
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2. Cable diameter: Static, Tunable & SPI PVC = 0.24in (6mm)
3. Do not apply force to the feed cable
4. Ensure Max. Cable Lengths are followed according to wire gage to avoid voltage drop

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END EXIT: F#20A#



END CAP: F400I8



AQUA NEON HIGH OUTPUT WAVE: PVC - 24V

Submersible Pool Rated Linear Flex Profile - Static Whites

COMPLEXITY, SIMPLIFIED.

F

MOUNTING PROFILES

		F		4
MOUNTING PROFILE TYPE	**STANDARD LENGTH**	**PROFILE**	**COLOR**	**BEND**
P1 = Plastic Reinforced	2 = 1.38in (35mm) 3 = 19.68in (500mm) 5 = 39.37in (1000mm) 6 = 78.74in (2000mm)	F = Wave	1 = Standard	4 = N/A
C1 = Silicone Flexible	F = 2.16in (55mm) B = 4.33in (110mm) C = 7.87in (200mm) 3 = 19.68in (500mm) 5 = 39.37in (1000mm)		2 = Black 3 = White 0 = Custom	

AQUA NEON HIGH OUTPUT WAVE: PVC - 24V

Submersible Pool Rated Linear Flex Profile - Static Whites

COMPLEXITY, SIMPLIFIED.

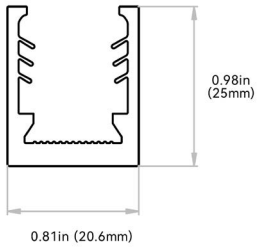
F

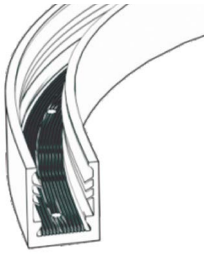
SILICONE PROFILE - FLEXIBLE

An all-in-one mounting profile designed to unleash your creativity. This profile not only provides flexibility in installation methods, but also overcomes bending limitations by offering both top and side bending in a single profile. Fully encapsulated in UL-certified silicone, it excels in UV, weather, and corrosion resistance, making it suitable for underwater, high and low temperature enviroments. Elegant and square in appearance, it is available in black or white standard colors, or bespoke colors to blend in with the background. Supported by innovative serrated silicone fins, its clamping strength is strong enough to secure any installation method. Please refer to install manual for proper installation practices. Side and top bending.

NOTES: With this mounting profile, bend fixtures only along their designated axis — side-bending fixtures sideways, top-bending fixtures topways.



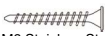




APPLICABLE AUXILIARY MATERIALS



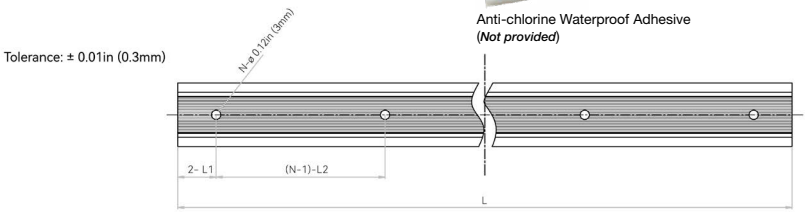
Rubber Expansion Anchor



M3 Stainless Steel
Self-tapping Screw



Anti-chlorine Waterproof Adhesive
(*Not provided*)





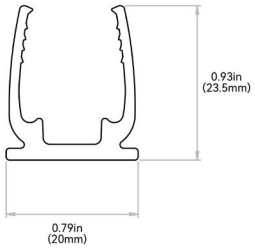
NOTES: 1. 2-L1 refers to two of symmetric L1 in each piece of profile.
2. (N-1)-L2 refers to (N minus one) of symmetric L2 in each piece of profile.
"N" hereby stands for its corresponding "Hole Number" in the below table

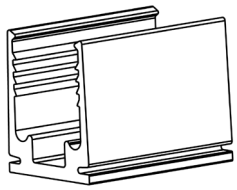
ORDER CODE	LEGACY ORDER CODE: WHITE	LEGACY ORDER CODE: BLACK	STANDARD LENGTH	L1	L2	SLOTTED HOLE	HOLE #
C1FF#4	CH16FAN5C5SEW	CH16FAN5C5SEB	2.16in (55mm)	0.49in (12.5mm)	1.18in (30mm)	Ø 0.12in (3mm)	2
C1BF#4	CH16FAN1C1SEW	CH16FAN1C1SEB	4.33in (110mm)	0.46in (11.6mm)	3.48in (88.4mm)	Ø 0.12in (3mm)	2
C1CF#4	CH16FAN0M2SEW	CH16FAN0M2SEB	7.87in (200mm)	0.46in (11.6mm)	3.48in (88.4mm)	Ø 0.12in (3mm)	3
C13F#4	CH16FAN0M5SEW	CH16FAN0M5SEB	19.68in (500mm)	1.14in (29mm)	3.48in (88.4mm)	Ø 0.12in (3mm)	6
C15F#4	CH16FAN01MSEW	CH16FAN01MSEB	39.37in (1000mm)	0.54in (13.8mm)	3.48in (88.4mm)	Ø 0.12in (3mm)	12

PLASTIC PROFILE - REINFORCED

High quality rigid plastic designed to securely hold fixtures. Recommended for use in extreme environments susceptible to increased water/humidity (SPA's and pools). Please refer to install manual for proper installation practices.



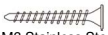




APPLICABLE AUXILIARY MATERIALS



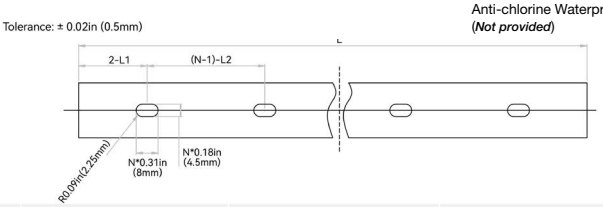
Rubber Expansion Anchor



M3 Stainless Steel
Self-tapping Screw



Anti-chlorine Waterproof Adhesive
(*Not provided*)





NOTES: 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 below table

ORDER CODE	LEGACY ORDER CODE	STANDARD LENGTH	L1	L2	SLOTTED HOLE	HOLE #
P12F14	CL16RTP3C5SD	1.38in (35mm)	0.69in (17.5mm)	N/A	0.18*0.31in (4.5*8mm)	1
P13F14	CH16RTP0M5SD	19.68in (500mm)	1.97in (50mm)	7.87in (200mm)	0.18*0.31in (4.5*8mm)	3
P15F14	CH16RTP01MSD	39.37in (1000mm)	3.93in (100mm)	7.87in (200mm)	0.18*0.31in (4.5*8mm)	5
P16F14	CH16RTP02MSD	78.74in (2000mm)	3.93in (100mm)	7.87in (200mm)	0.18*0.31in (4.5*8mm)	10