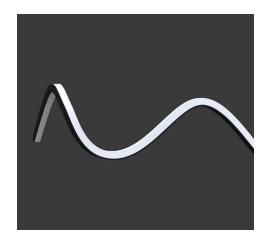


Customer:	Date:	
Project:		



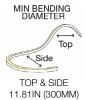
Indoor & Outdoor Rated Linear Flex Profile - Tunable White



#### **PROFILE CAPABILITIES**







#### **CERTIFICATIONS & FEATURES**















#### **TEMPERATURES**

AMBIENT OPERATING TEMPERATURE: -40°F to 140°F (-40°C to 60°C)

AMBIENT INSTALLATION TEMPERATURE: ≥ 40°F (-40°C)

FIXTURE STORAGE TEMPERATURE: -40°F to 140°F (-40°C to 60°C)

MAX MOUNTING SURFACE TEMPERATURE:

185°F (85°C)

**HUMIDITY (NON-CONDENSING):** 

THERMAL MANAGEMENT:

Free Air Convection

#### **FIXTURE ORDER CODE**

E			В					
INPUT CONNECTORS	SERIES	MATERIAL	PROFILE	BENDING	JACKET/BASE + LENS COLOR	LED FUNCTION	LED COLOR	CHIP + CRI
See Page 4 to select input connector	M = Multiflex	1 = Silicone	L = Orbit	3 - Multi	E = White Jacket/ Black Base + Diffused	2 = Tunable White	4 = 2700-5700K	A = Pro LED Chip + CRI90

(		D		E	F	G	
POWER	VOLTAGE + CIRCUIT TYPE	ORDER UNIT LENGTH*	PROFILE SPECIFIC	OUTPUT CONNECTOR	MOUNTING PROFILE	MOUNTING ACCESSORIES	POWER SUP- PLIES & CON- TROLS:
G = 3.66w/ft (12w/m)	3V = 24V DC CV	S = 1.78in (45.4mm)	H = Eco	See Page 4 to select output connector	See Page 7 to select mounting profile	See Page 11 to select accessory	By Others By GLLS

Note: Maximum IP and IK ratings achievable with appropriate accessories, and cable diameter: Silicone Tunable White = 0.26in (6.5mm).



Indoor & Outdoor Rated Linear Flex Profile - Tunable White



#### Α

#### **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, black base with diffused lens cover provides 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

Tunable White 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 DC Tunable White 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 7-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 tunable white 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 UL2108 Class 2 by Underwriters Laboratory for use in the USA and Canada. Exceeds ANSI C78.377A, CE, and RoHS standards. Must be used under Class 2 ratings to maintain certification.

UL Certificate + Report #: E347880-20130503

#### **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

#### **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

### TEMPERATURE TESTING

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

#### **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



Indoor & Outdoor Rated Linear Flex Profile - Tunable White



В

#### **LED COLORS**



#### **FIXTURE SPECIFICATIONS & OPTICAL PARAMETERS**

COLOR	LED CHIP + CRI	LED COUNT	1 CONNECTOR FULL/DYNAMIC	2 CONNECTORS FULL/DYNAMIC	FIXTURE COLOR TOLERANCE	WAVELENGTH/ CCT	LED CRI	LED COLOR TOLERANCE	LUMEN COUNT	LEGACY ORDER CODE
2700- 5700K	Pro LED Chip + CRI90	93 LEDs/ft (308 LEDs/m)	19.6ft (6m) / 26.2ft (8m)	32.8ft (10m) / N/A	N/A	2725±145K; 5665±355K	N/A	N/A	>91lm/ft (300lm/m); >96lm/ft (310lm/m)	MF23K3013WDWR24DV

Note: Run length is based on a voltage drop calculated using a 0.3 m (0.98 ft) cable with silicone seamless connectors, excluding connector length—refer to specifications for details. Silicone products maintain ≤3 SDCM within a single production run and <5 SDCM between production runs.

C

#### **POWER & VOLTAGE**

COLOR	VOLTAGE + CIRCUIT TYPE	POWER CONSUMPTION
2700-5700K	24V DC CV	3.66W/ft (12W/m)



# MULTIFLEX ORBIT: SILICONE - 24V Indoor & Outdoor Rated Linear Flex Profile - Tunable White



D

#### **CUTTING INSTRUCTIONS**

COLOR	ORDER UNIT (CUTTING UNIT)
2700-5700K	1.78in (45.4mm)

#### **COMPATIBLE CONNECTORS**

INPUT - 01

INPUT CONNECTOR TYPE INPUT ORIENTATION + TYPE INPUT CABLE LENGTH (LEAD WIRE)

OUTPUT - 02

OUTPUT CONNECTOR TYPE	OUTPUT ORIENTATION + TYPE	OUTPUT CABLE LENGTH (LEAD WIRE)
2 = Silicone Seamless	A = End Exit B = Bottom Exit C = Side Left Exit D = Side Right Exit I = End Cap	1 = 0.98ft (0.3m) 2 = 3.28ft (1m) 3 = 9.84ft (3m) 4 = 16ft (5m) 5 = 32.81ft (10m) 6 = 49.21ft (15m) 7 = 65.62ft (20m) 8 = N/A

#### LEGACY CONNECTOR ORDER CODE

FA	23K	2	2	XX	SE	X	XX	XXX	X
PRODUCT TYPE	PROFILE	BENDING	LIGHT EMITTING	FUNCTIONALITY	CONNECTOR TYPE	FIXTURE END	EXIT TYPE	LENGTH	
FA = Factory Accessories	23K = Orbit	2 = Multi	2 = 23K	3W = Tunable White 0W = For End Cap	SE = Seamless	1 = Input Side 2 = Output Side 0 = Jumpers/T-feeds/ Seamless Bottom/ Seamless End	EN = End BO = Bottom SL = Side Left SR = Side Right TF = Power Feed EC = End Cap	0M3 = 0.98ft (30cm) 01M = 3.28ft (1m) 03M = 9.84ft (3m) 05M = 16ft (5m) 10M = 32.81ft (10m) 000 = For End Cap	P = Power or For End Cap S = Signal & Power

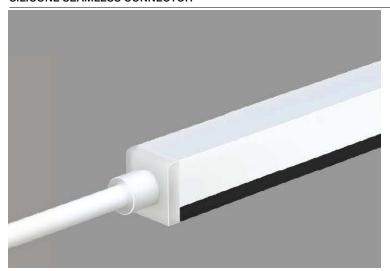


Indoor & Outdoor Rated Linear Flex Profile - Tunable White



Ε

#### SILICONE SEAMLESS CONNECTOR



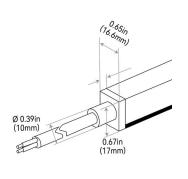


- 1. Connector tolerance ±0.02in (0.5mm)
- 2. Cable diameter: silicone Static = 0.26in (6.5mm):
- 3. Do not apply force to the feed cable
- 4. Ensure max. cable lengths are followed according to wire gage to avoid voltage drop

IP68; seamless; precise low profile dimension; high grade quality silicone & anti-wicking ferrule. Recommended for; wet environments; custom predetermined lengths; high/ low temperatures; increased humidity; direct UV exposure; harsh working conditions & increased handling forces during installation. Precision milling and special glue Silicone liquid injection-moulded workmanship enables an almost consistent size between connectors and light body, and the transparent terminal of the connector allows the seamless effects spliced end by end. DryWire technology applied on the cable eliminates the capillary phenomenon through wires, which secured the long-term reliability in outdoor or any wet environments. Custom factory assembly.

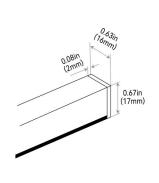
#### END EXIT: 2-A-#





**END CAP: 2-I-8** 

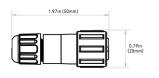




SCREW LOCK CONNECTOR ACCESSORY - IP67

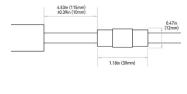


NOTE: The tolerance is ±0.08in (2mm).



ANTI-WICKING FERRULE:





- 1. The anti-wicking ferrule is located at 4.53in (115mm) ( $\pm$ 0.39in [ $\pm$ 10mm] tolerance) from the connector on the cable. For protection against water ingress.

  2. The removal of anti-wicking ferrule will void the warranty if any water ingression caused by it.

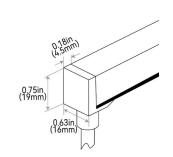


# MULTIFLEX ORBIT: SILICONE - 24V Indoor & Outdoor Rated Linear Flex Profile - Tunable White



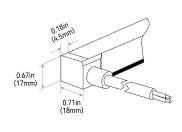
#### BOTTOM EXIT: 2-B-#





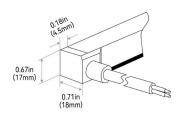
#### SIDE LEFT EXIT: 2-C-#





SIDE RIGHT EXIT: 2-D-#





Indoor & Outdoor Rated Linear Flex Profile - Tunable White



F

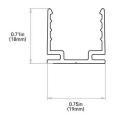
#### **MOUNTING PROFILES**

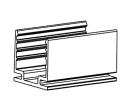
MOUNTING PROFILE TYPE	STANDARD LENGTH	PROFILE	COLOR		
A1 = Aluminum Basic	2 = 1.38in (35mm) 3 = 19.68in (500mm) 5 = 39.37in (1000mm) 6 = 78.74in (2000mm)				
A2 = Aluminum Recessed	2 = 1.38in (35mm) 3 = 19.68in (500mm) 5 = 39.37in (1000mm) 6 = 78.74in (2000mm)				
A4 = Aluminum Silicone Grip	1 = 0.79in (20mm) 3 = 19.68in (500mm) 5 = 39.37in (1000mm) 6 = 78.74in (2000mm)	L = Orbit	1 = Standard		
A3 = Aluminum Recessed Silicone Grip	1 = 0.79in (20mm) 3 = 19.68in (500mm) 5 = 39.37in (1000mm) 6 = 78.74in (2000mm)				
A5 = Aluminum Flexible	3 = 19.68in (500mm) 5 = 39.37in (1000mm)				
C1 = Silicone Flexible	F = 2.17in (55mm) B = 4.33in (110mm) C = 7.87in (200mm) 3 = 19.68in (500mm) 5 = 39.37in (1000mm)		2 = Black 3 = White 0 = Custom		

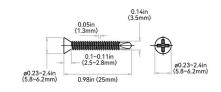
#### **ALUMINUM PROFILE - BASIC**

High-quality 6063 aluminum with thin-wall, light-weight design to fit the fixture tightly. It is deformation and rust resistant, and cost-effective. Please refer to install manual for proper installation practices.



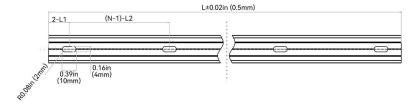






Tolerance: ± 0.01in (0.3mm)

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	STANDARD LENGTH	L1	L2	SLOTTED HOLE	HOLE #
A1-2-L-1	1.38in (35mm)	0.69in (17.5mm)	N/A	0.16*0.39in (4*10mm)	1
A1-3-L-1	19.68in (500mm)	1.97in (50mm)	7.87in (200mm)	0.16*0.39in (4*10mm)	3
A1-5-L-1	39.37in (1000mm)	3.93in (100mm)	7.87in (200mm)	0.16*0.39in (4*10mm)	5
A1-6-L-1	78.74in (2000mm)	3.93in (100mm)	7.87in (200mm)	0.16*0.39in (4*10mm)	10

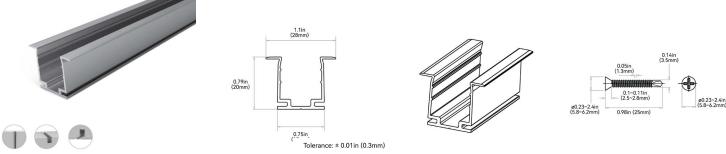


Indoor & Outdoor Rated Linear Flex Profile - Tunable White

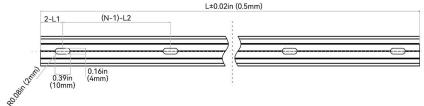


#### **ALUMINUM PROFILE - RECESSED**

High-quality 6063 aluminum with thin-wall, light-weight design to fit the fixture tightly. Recommended on projects with lighting mounted recessed in a cavity so only the lens is shown. It is deformation and rust resistant, and cost-effective. Please refer to install manual for proper installation practices.



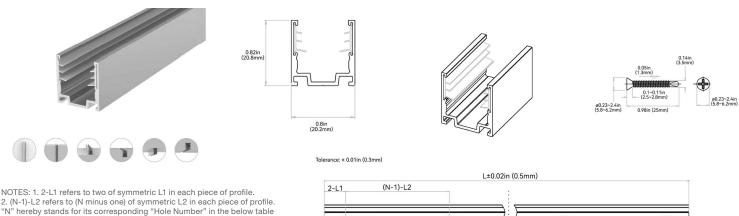
NOTES: 1, 2-L1 refers to two of symmetric L1 in each piece of profile. 2. (N-1)-L2 refers to (N minus one) of symmetric L2 in each piece of profile. "N" hereby stands for its corresponding "Hole Number" in the below table



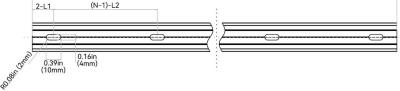
ORDER CODE	STANDARD LENGTH	L1	L2	SLOTTED HOLE	HOLE #
A2-2-L-1	1.38in (35mm)	0.69in (17.5mm)	N/A	0.16*0.39in (4*10mm)	1
A2-3-L-1	19.68in (500mm)	1.97in (50mm)	7.87in (200mm)	0.16*0.39in (4*10mm)	3
A2-5-L-1	39.37in (1000mm)	3.93in (100mm)	7.87in (200mm)	0.16*0.39in (4*10mm)	5
A2-6-L-1	78.74in (2000mm)	3.93in (100mm)	7.87in (200mm)	0.16*0.39in (4*10mm)	10

### ALUMINUM PROFILE - SILICONE GRIP

High-quality 6063 aluminum with thin-wall, light-weight design. Includes a serated silicone grip insert designed to hold fixture with additional force. Recommended on projects mounted upside down. It is deformation and rust resistant, and cost-effective. Please refer to install manual for proper installation practices.



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	STANDARD LENGTH	L1	L2	SLOTTED HOLE	HOLE #
A4-1-L-1	0.79in (20mm)	0.39in (10mm)	N/A	0.16*0.39in (4*10mm)	1
A4-3-L-1	19.68in (500mm)	1.97in (50mm)	7.87in (200mm)	0.16*0.39in (4*10mm)	3
A4-5-L-1	39.37in (1000mm)	3.93in (100mm)	7.87in (200mm)	0.16*0.39in (4*10mm)	5
A4-6-L-1	78.74in (2000mm)	3.93in (100mm)	7.87in (200mm)	0.16*0.39in (4*10mm)	10

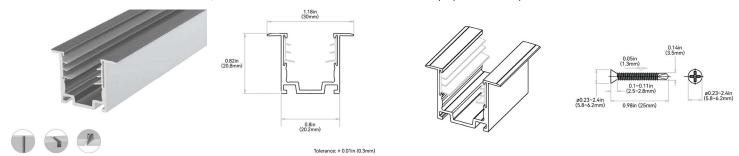


Indoor & Outdoor Rated Linear Flex Profile - Tunable White

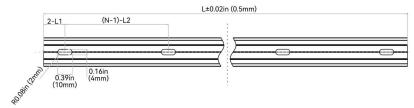


#### ALUMINUM PROFILE - RECESSED - SILICONE GRIP

High-quality 6063 aluminum with thin-wall, light-weight design to fit the fixture tightly. Recommended on projects with lighting mounted recessed in a cavity so only the lens is shown. It is deformation and rust resistant, and cost-effective. Please refer to install manual for proper installation practices.



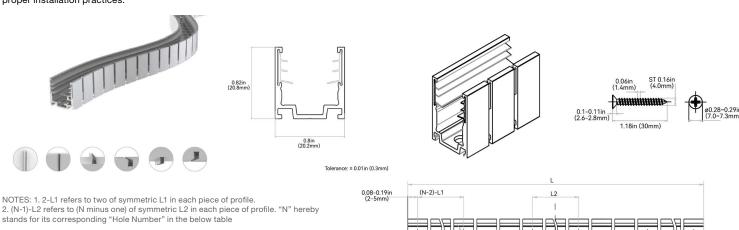
NOTES: 1. 2-L1 refers to two of symmetric L1 in each piece of profile. 2. (N-1)-L2 refers to (N minus one) of symmetric L2 in each piece of profile. "N" hereby stands for its corresponding "Hole Number" in the below table



ORDER CODE	STANDARD LENGTH	L1	L2	SLOTTED HOLE	HOLE #
A3-1-L-1	0.79in (20mm)	0.39in (10mm)	N/A	0.16*0.39in (4*10mm)	1
A3-3-L-1	19.68in (500mm)	1.97in (50mm)	7.87in (200mm)	0.16*0.39in (4*10mm)	3
A3-5-L-1	39.37in (1000mm)	3.93in (100mm)	7.87in (200mm)	0.16*0.39in (4*10mm)	5
A3-6-L-1	78.74in (2000mm)	3.93in (100mm)	7.87in (200mm)	0.16*0.39in (4*10mm)	10

### **ALUMINUM PROFILE - FLEXIBLE**

High-quality 6063 aluminum with thin-wall, light-weight design to fit the fixture tightly. It is deformation and rust resistant, and cost-effective. Please refer to install manual for proper installation practices.



stands for its corresponding "Hole Number" in the below table

39.37in (1000mm)



3.89in (98.8mm)

ø 0.17in (4.2mm)

10



A5-5-L-1

4.39in (114.6mm)

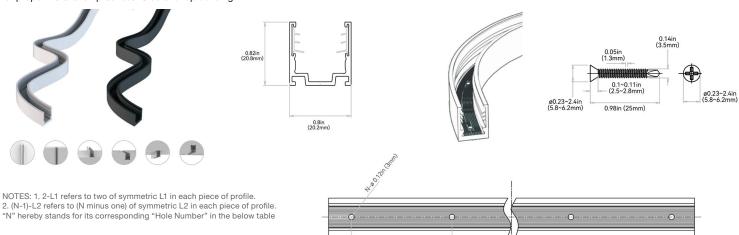
Indoor & Outdoor Rated Linear Flex Profile - Tunable White



E

#### 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 environments. Elegant and square in appearance, it is available in black or white standard colors, or custom 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.



(N-1)-L2

			HE				
ORDER CODE	LEGACY ORDER CODE WHITE	LEGACY ORDER CODE BLACK	STANDARD LENGTH	L1	L2	SLOTTED HOLE	HOLE #
C1-F-L-X	CH23FAN5C5SEW	CH23FAN5C5SEB	2.17in (55mm)	0.49in (12.5mm)	1.18in (30mm)	0.12in (3mm)	2
C1-B-L-X	CH23FAN1C1SEW	CH23FAN1C1SEB	4.33in (110mm)	0.46in (11.6mm)	3.48in (88.4mm)	0.12in (3mm)	2
C1-C-L-X	CH23FAN0M2SEW	CH23FAN0M2SEB	7.87in (200mm)	0.46in (11.6mm)	3.48in (88.4mm)	0.12in (3mm)	3
C1-3-L-X	CH23FAN0M5SEW	CH23FAN0M5SEB	19.68in (500mm)	1.14in (29mm)	3.48in (88.4mm)	0.12in (3mm)	6
C1-5-L-X	CH23FAN01MSEW	CH23FAN01MSEB	39.37in (1000mm)	0.54in (13.8mm)	3.48in (88.4mm)	0.12in (3mm)	12



Indoor & Outdoor Rated Linear Flex Profile - Tunable White



G

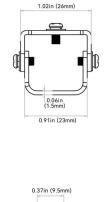
#### **MOUNTING ACCESSORIES**

MOUNTING ACCESSORY TYPE	PROFILE
MA1 = Pivot Bracket	
MA2 = Rotary Bracket	L = Orbit
MA3 = Side Bracket	
MA6 = Suspended Wire Kit	

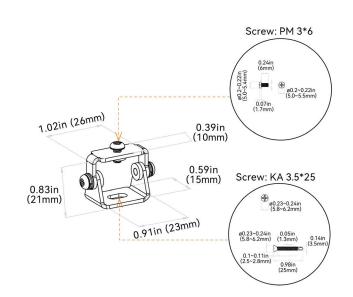
#### PIVOT BRACKET

Applicable to all mounting profiles.











Indoor & Outdoor Rated Linear Flex Profile - Tunable White



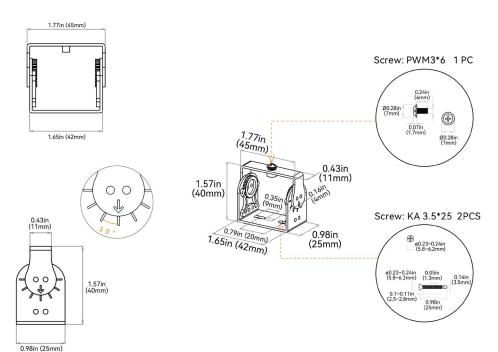
G

#### **ROTARY BRACKET**

Applicable to all mounting profiles.



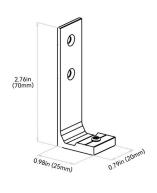


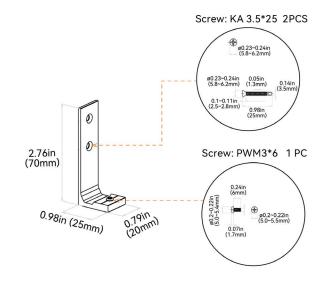


#### SIDE MOUNTING BRACKET

Applicable to all mounting profiles.









# MULTIFLEX ORBIT: SILICONE - 24V Indoor & Outdoor Rated Linear Flex Profile - Tunable White



G

#### SUSPENDED WIRE

Applicable to Aluminum Profile - Silicone Grip. 2 kits of stainless steel wires/39.37in (1000mm) for Aluminum Profile - Silicone Grip. 3 kits of stainless steel wires/78.74in (2000mm) for Aluminum Profile - Silicone Grip

