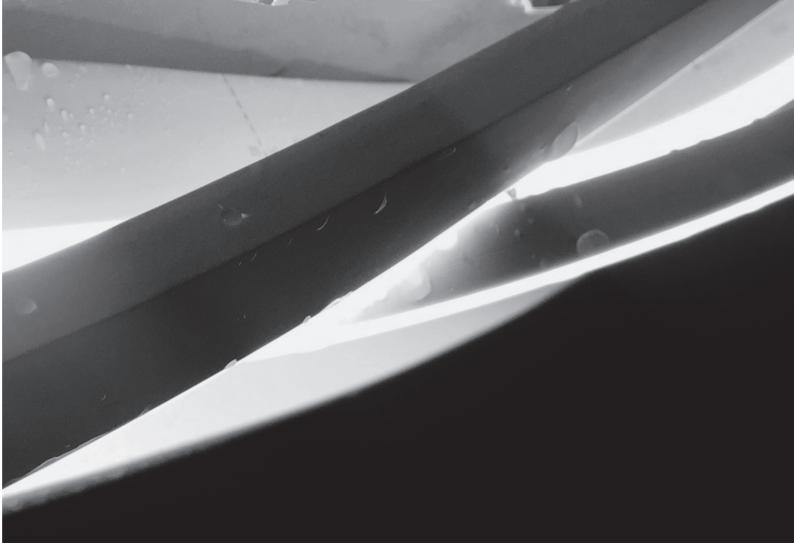


# Simply brighter.



# Flexglo<sup>TM</sup> F15 SERIES



Ρ	003	Portfolio	
Ρ	005	Technology Checklist	
Ρ	006	Parameter Summary	
Ρ	011	Monochrome	(PVC & Silicone)
Ρ	069	Dynamic Light	(PVC & Silicone)
Ρ	083	RGB	(PVC & Silicone)
Ρ	095	RGBW	(PVC & Silicone)
Ρ	107	Pixel Addressable	(PVC & Silicone)

# Flexglo<sup>™</sup> <sup>—</sup> F15 Series

Technical developments had pushed forward our LED flex neon light progress. SMD three-in-one RGB LED and FPCB technology meet the requirements of high brightness and color changing for flat lighting surface type. Our second generation of flat lighting surface of LED flex neon, F15B was launched in 2012, subsequently extended to Pixel Addressable, Dynamic light and RGBW series from 2013 to 2017, and silicone series of DMX Flexglo F15 in 2019.

Our technical innovations have brought Insulfit<sup>™</sup> to ClearTech<sup>™</sup>, which is pioneering mechanical design enabling field-assembled connector up to IP67 protection for Flexglo F15.

# Flexglo<sup>™</sup> F15 Portfolio

		Flexglo <sup>™</sup> F15 PV0	C/Silic	one l	Flexglo <sup>™</sup> F15 PVC/Silicone High Voltage													
Product Series	Voltage	Category	Bending Direction	PVC/ Silicone	Page													
		F15B Monochrome-Colorful Light	HB	PVC														
	AC120V	F15B Monochrome-White Light	HB	PVC	22 27 30 35 40 57													
		Wire Diagram	HB	/														
		F15B Monochrome-Colorful Light	HB	PVC														
F15B		F15B Monochrome-White Light	HB	PVC	22 27 30 35 40 57													
	AC230V	F15B Monochrome-Short Cut Colorful Light	HB	Silicone														
		F15B Monochrome-Short Cut White Light	HB	Silicone	22 27 30 35 40 57													
		Wire Diagram	HB	/														

		Flexglo <sup>™</sup> F15	PVC						C	onn	ector		
Product Series	Voltage	Category	Bending Direction			Page	Swivel	Sleeve	Snap	Socket	Injection -Moulded	Dual Injection -Moulded	Page
		F15B Monochrome-Colorful Light & Jacket	HB			F15 011							
		F15B Monochrome-Colorful Light	HB			F15 013					IP67 IP67 IP68		
F15B	DC24V	F15B Monochrome-White Light & Black Jacket	HB	22 30	40	F15 015	IP20	IP40	IP67				
LIOD	DC24V	F15B Monochrome-White Light & Gray Jacket	HB	22 30	40	F15 017	IP20	1240	IP07	1201	IP07	Injection         Injection           Injection         Injection           67         IP68           67         IP68           67         IP68           67         IP68           67         IP68	
		F15B Monochrome-White Light (CRI80, 90, 95)	HB	22 27 30 35	40 57	F15 019							
		F15B Monochrome-White Light With Brand LED	HB	25 27 30 35	40 45 50	F15 023							
F15D	DC24V	F15D Dynamic Light	HB	22	57	F15 069	N/A	IP40	IP67			Dual Injection -Moulded         P           ided          P             P             P	F15127
FIDD	DC24V	F15D Dynamic Light With Brand LED	HB	25	50	F15 071		1240	IP07	1201	IP07		113127
F15A	DC24V	F15A RGB Light	HB	٠		F15 083	N/A	IP40	IP67	IP67	IP67	IP68	
F15E	DC24V	F15E RGBW Light	HB	•		F15 095	N/A	N/A	IP67	N/A	IP67	IP68	
		F15S SPI Pixel Light-Monochrome Light	HB	22 27 30 35	40 57							7 IP68 F 7 IP68	
F15S	DC24V	F15S SPI Pixel Light-Dynamic Light	HB	22	57	F15107	N/A	IP40	IP67	IP67	IP67		
F102	DC24V	F15S SPI Pixel Light-Colorful Light	HB			FI3 107	N/A	1240	IP07	1201	IP07	IPOO	
		F15S SPI Pixel Light-RGB Light, RGBW Light	HB	•								Dual Injection       -Moulded       IP68       IP68       IP68       IP68       IP68       IP68	

			Wiring Diag	Iram		
Lighting Effect	Monochrome	Dynamic Light	RGB	RGBW	SPI Pixel Addressable	DMX Pixel Addressable
Wires	F15B	F15D	F15A	F15E	F15S <sub>(SPI)</sub>	F15S <sub>(DMX)</sub>
Page	F15 035	F15 065	F15 091	F15103	F15 113	F15 117

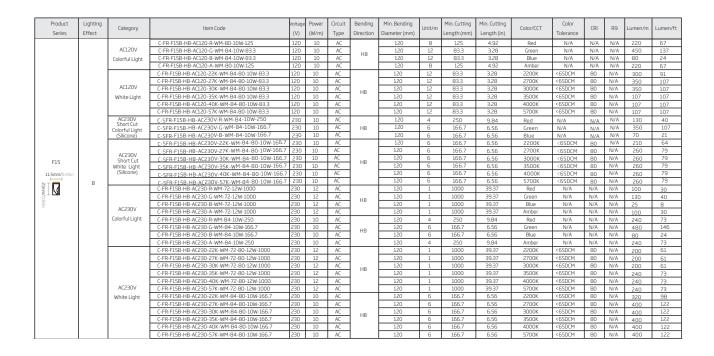
		Flexglo <sup>™</sup> F15 Sil	licone	2			(	Conn	ecto	r	
Product Series	Voltage	Category	Bending Direction		Page	Swivel	Sleeve	Snap	Socket	Silicone Injection -Moulded	Page
5150	DC24V	F15B Monochrome-Colorful Light	HB		F15 027	IP20	IP40	IP67	IP67		
F15B	DC24V	F15B Monochrome-White Light (CRI80, 90, 95)	НВ	22 27 30 35 40 57	F15 029	IP20	IP40	IP07	IP07	Silicone Injection -Moulded IP68 IP68 IP68	
F15B	DC24V	F15B Monochrome-Colorful Light & Jacket	HB		F15 027	IP20	IP40	IP67	IP67	Silicone Injection -Moulded IP68 IP68 IP68 IP68 IP68	
LIDD	DC24V	F15B Monochrome-White Light & full black jacket	HB	26 32 42	F15 029	IP20	IP40	IP07	IP07		
F15D	DC24V ·	F15D Dim To Warm	HB	18 30	F15 061	N/A	IP40	IP67	IP67		
LID	DC24V	F15D Dynamic Light	HB	<b>22</b> 57	F15 075	N/A	1640	1607	1607	IFUB	
F15A	DC24V	F15A RGB Light	HB	•	F15 087	N/A	IP40	IP67	IP67	IP68	F15 127
F15E	DC24V	F15E RGBW Light	HB	•	F15 099	N/A	N/A	IP67	N/A	IP68	
		F15S DMX Pixel Light-White Light	HB	22 27 30 35 40 57							
F15S	DC24V	F15S DMX Pixel Light-Dynamic Light	HB	57	F15117	N/A	IP40	IP67	N/A	IP68	
		F15S DMX Pixel Light-RGB Light, RGBW Light	HB	••							

		Mou	nting profile		
Name	Aluminum Profile	Flange Aluminum Profile	Serrated Aluminum Profile	Flange Serrated Aluminum Profile	Bendable Serrated Aluminum Profile
Item Code	A/PL	FA/PL	SA/PL	FSA/PL	BSA/PL
Length (mm)	35,500, 1000, 2000	35,500, 1000, 2000	20, 500, 1000, 2000	20, 500, 1000, 2000	500, 1000
Page	F15 159	F15160	F15 161	F15 162	F15 165
		Ē		<b>L</b> in	
Name	Surface-mounted Raceway Aluminum Profile	Suspended Raceway Aluminum Profile	Thickened Plastic Profile	Stainless Steel Profile	
Item Code	SMR/PL	SR/PL	TP/PL	SS/PL	
Length (mm)	500, 1000, 2000	500, 1000, 2000	35,500, 1000, 2000	35	
Page	F15 167	F15171	F15 163	F15164	

# Flexglo<sup>™</sup> F15 Technology Checklist

								Tec	hno	logy	,					
C	ategory	V-Optic™	Color-matching Algorithm	Brand LED	CRI95	High Lumen Output	Built-in Constant Current IC	Bielectrode Packaging	1+3oz PCB	Interstitial Via Hole	Decentifier <sup>tm</sup>	PinBoost <sup>™</sup>	TwinFlex <sup>TM</sup>	DryWire™	Insulfit <sup>™</sup>	C-Mask <sup>TM</sup>
	AC120V Colorful Light	V						V	V	V	V	V				V
	AC120V White Light	V	V					V	V	V	V	V				V
	AC230V Colorful Light	V						V	V	V	V	V				V
	AC230V White Light	V	V					V	V	V	V	V				V
	Colorful Light & Jacket	V					V	V	V	V		V		V	V	V
	Colorful Light	V					V	V	V	V		V		V	V	V
	White Light & Black Jacket	V	V				V	V	V	V		V		V	V	V
F15-PVC	White Light & Gray Jacket	V	V				V	V	V	V		V		V	V	V
	White Light	V	V		V		V	V	V	V		V		V	V	V
	White Light with Brand LED	V		V			V	V	V	V		V		V	V	V
	Dynamic Light	V						V	V	V		V		V	V	V
	Dynamic Light with Brand LED	V		V				V	V	V		V		V	V	V
	RGB Light	V						V	V	V				V	V	V
	RGBW Light	V						V	V	V				V		V
	SPI Pixel Light	V					V	V	V	V		V		V	V	V
	Colorful Light	V					V	V	V	V		V	V	V	V	V
	White Light	V	V		V		V	V	V	V		V	V	V	V	V
F15-Silicone	Dynamic Light	V						V	V	V		V	V	V	V	V
	RGB Light	V						V	V	V			V	V	V	V
	RGBW Light	V						V	V	V			V	V		V
	DMX Pixel Light	V					V	V	V	V		V	V	V		V

# Flexglo<sup>™</sup> F15 Parameter Summary (PVC)



# Flexglo<sup>™</sup> F15 Parameter Summary (PVC)

Product	Lighting			Voltage	Power	Circuit	Bending	Min. Bending		Min. Cutting	Min. Cuttina		Color				
Series	Effect	Category	Item Code	(V)	(W/m)	Туре	Direction	Diameter (mm)	Unit/m	Length (mm)	Length (in)	Color/CCT	Tolerance	CRI	R9	Lumen/m	Lumen/ft
			C-FR-F15B-HB-24CC-R-RR-72-8W-125	24	8	CC		120	8	125	4.92	Red	N/A	N/A	N/A	50	15
			C-FR-F15B-HB-24CC-G-GG-72-12W-83.3	24	12	CC	1	120	12	83.3	3.28	Green	N/A	N/A	N/A	135	41
		Colorful Light	C-FR-F15B-HB-24CC-B-BB-72-12W-83.3	24	12	CC	НВ	120	12	83.3	3.28	Blue	N/A	N/A	N/A	20	6
		& Jacket	C-FR-F15B-HB-24CC-Y-YY-72-12W-83.3	24	12	CC		120	12	83.3	3.28	Yellow	N/A	N/A	N/A	200	61
			C-FR-F15B-HB-24CC-0-00-72-12W-83.3	24	12	CC	1	120	12	83.3	3.28	Orange	N/A	N/A	N/A	150	46
			C-FR-F15B-HB-24CC-R-WM-72-8W-125	24	8	CC		120	8	125	4.92	Red	N/A	N/A	N/A	110	34
			C-FR-F15B-HB-24CC-G-WM-72-12W-83.3	24	12	CC	1	120	12	83.3	3.28	Green	N/A	N/A	N/A	220	67
		Colorful Light	C-FR-F15B-HB-24CC-B-WM-72-12W-83.3	24	12	CC	HB	120	12	83.3	3.28	Blue	N/A	N/A	N/A	35	11
			C-FR-F15B-HB-24CC-A-WM-72-8W-125	24	8	CC	1	120	8	125	4.92	Amber	N/A	N/A	N/A	110	34
			C-FR-F15B-HB-24CC-22K-DM-72-80-12W-83.3	24	12	CC		120	12	83.3	3.28	2200K	<6SDCM	80	N/A	240	73
		White Light	C-FR-F15B-HB-24CC-30K-DM-72-80-12W-83.3	24	12	CC	НВ	120	12	83.3	3.28	3000K	<6SDCM	80	N/A	280	85
		& Black Jacket	C-FR-F15B-HB-24CC-40K-DM-72-80-12W-83-3	24	12	CC	110	120	12	83.3	3.28	4000K	<6SDCM	80	N/A	280	85
			C-FR-F15B-HB-24CC-22K-GYM-72-80-12W-83.3	24	12	CC		120	12	83.3	3.28	2200K	<6SDCM	80	N/A	240	73
		White Light	C-FR-F15B-HB-24CC-30K-GYM-72-80-12W-83.3	24	12	CC	НВ	120	12	83.3	3.28	3000K	<6SDCM	80	N/A	240	85
		& Gray Jacket	C-FR-F15B-HB-24CC-40K-GYM-72-80-12W-83.3	24	12	CC	1	120	12	83.3	3.28	4000K	<6SDCM	80	N/A	280	85
			C-FR-F15B-HB-24CC-22K-WM-72-80-6W-83.3	24	6	CC		120	12	83.3	3.28	2200K	<6SDCM	80	N/A	150	46
			C-FR-F15B-HB-24CC-27K-WM-72-80-6W-83.3	24	6	CC	1	120	12	83.3	3.28	2700K	<6SDCM	80	N/A	175	53
			C-FR-F15B-HB-24CC-30K-WM-72-80-6W-83.3	24	6	CC	1	120	12	83.3	3.28	3000K	<6SDCM	80	N/A	175	53
			C-FR-F15B-HB-24CC-35K-WM-72-80-6W-83.3	24	6	CC	1	120	12	83.3	3.28	3500K	<6SDCM	80	N/A	175	53
			C-FR-F15B-HB-24CC-40K-WM-72-80-6W-83.3	24	6	CC	1	120	12	83.3	3.28	4000K	<6SDCM	80	N/A	175	53
			C-FR-F15B-HB-24CC-57K-WM-72-80-6W-83.3	24	6	CC	1	120	12	83.3	3.28	5700K	<6SDCM	80	N/A	175	53
			C-FR-F15B-HB-24CC-22K-WM-72-80-9W-83.3	24	9	CC	1	120	12	83.3	3.28	2200K	<6SDCM	80	N/A	225	69
F15			C-FR-F15B-HB-24CC-27K-WM-72-80-9W-83.3	24	9	CC	1	120	12	83.3	3.28	2700K	<6SDCM	80	N/A	260	79
			C-FR-F15B-HB-24CC-30K-WM-72-80-9W-83.3	24	9	CC	1	120	12	83.3	3.28	3000K	<6SDCM	80	N/A	260	79
11.5mm/0.45in	в		C-FR-F15B-HB-24CC-35K-WM-72-80-9W-83.3	24	9	CC	1	120	12	83.3	3.28	3500K	<6SDCM	80	N/A	260	79
Z1mm/0.	D		C-FR-F15B-HB-24CC-40K-WM-72-80-9W-83.3	24	9	CC	1	120	12	83.3	3.28	4000K	<6SDCM	80	N/A	260	79
S I M		White Light	C-FR-F15B-HB-24CC-57K-WM-72-80-9W-83.3	24	9	CC	НВ	120	12	83.3	3.28	5700K	<6SDCM	80	N/A	260	79
Bin			C-FR-F15B-HB-24CC-22K-WM-72-80-12W-83.3	24	12	CC		120	12	83.3	3.28	2200K	<6SDCM	80	N/A	300	91
_			C-FR-F15B-HB-24CC-27K-WM-72-80-12W-83.3	24	12	CC	1	120	12	83.3	3.28	2700K	<6SDCM	80	N/A	350	107
			C-FR-F15B-HB-24CC-30K-WM-72-80-12W-83.3	24	12	CC	1	120	12	83.3	3.28	3000K	<6SDCM	80	N/A	350	107
			C-FR-F15B-HB-24CC-35K-WM-72-80-12W-83.3	24	12	CC	1	120	12	83.3	3.28	3500K	<6SDCM	80	N/A	350	107
			C-FR-F15B-HB-24CC-40K-WM-72-80-12W-83.3	24	12	CC	1	120	12	83.3	3.28	4000K	<6SDCM	80	N/A	350	107
			C-FR-F15B-HB-24CC-57K-WM-72-80-12W-83.3	24	12	CC	1	120	12	83.3	3.28	5700K	<6SDCM	80	N/A	350	107
			C-FR-F15B-HB-24CC-27K-WM-72-90-12W-83.3	24	12	CC	1	120	12	83.3	3.28	2700K	<6SDCM	90	35~80	250	76
			C-FR-F15B-HB-24CC-30K-WM-72-90-12W-83.3	24	12	CC	1	120	12	83.3	3.28	3000K	<6SDCM	90	35~80	295	90
			C-FR-F15B-HB-24CC-35K-WM-72-90-12W-83.3	24	12	CC	1	120	12	83.3	3.28	3500K	<6SDCM	90	35~80	295	90
			C-FR-F15B-HB-24CC-40K-WM-72-90-12W-83.3	24	12	CC	1	120	12	83.3	3.28	4000K	<6SDCM	90	35~80	295	90
			C-FR-F15B-HB-24CC-30K-WM-72-95-12W-83.3	24	12	CC	1	120	12	83.3	3.28	3000K	<6SDCM	95	80~99	250	76
			C-FR-ProF15B-HB-24CC-25K-WM-60-80-12W-100	24	12	CC		120	10	100	3.94	2500K	<6SDCM	80	N/A	280	85
			C-FR-ProF15B-HB-24CC-27K-WM-60-80-12W-100	24	12	CC	1	120	10	100	3.94	2700K	<6SDCM	80	N/A	280	85
		White Light	C-FR-ProF15B-HB-24CC-30K-WM-60-80-12W-100	24	12	CC	]	120	10	100	3.94	3000K	<6SDCM	80	N/A	320	98
			C-FR-ProF15B-HB-24CC-35K-WM-60-80-12W-100	24	12	CC	HB	120	10	100	3.94	3500K	<6SDCM	80	N/A	320	98
		With Brand LED	C-FR-ProF15B-HB-24CC-40K-WM-60-80-12W-100	24	12	CC	]	120	10	100	3.94	4000K	<6SDCM	80	N/A	320	98
			C-FR-ProF15B-HB-24CC-45K-WM-60-80-12W-100	24	12	CC	]	120	10	100	3.94	4500K	<6SDCM	80	N/A	320	98
			C-FR-ProF15B-HB-24CC-50K-WM-60-80-12W-100	24	12	CC		120	10	100	3.94	5000K	<6SDCM	80	N/A	320	98
		Dynamic Light	C-FR-F15D-HB-24CV-22~57K-WM-144-12W-83.3	24	12	cv	НВ	120	12	83.3	3.28	2200K	<6SDCM	80	N/A	110	34
	D	Dynamic Light	C-11-11-10-110-24-CV-22-37K-WH-144-12W-03.3	24	16		110	120	16	03.5	5.20	5700K	<6SDCM	80	N/A	110	34
	0	Dynamic Light	C-FR-ProF15D-HB-24CV-25~50K-WM-144-12W-83.3	24	12	cv	НВ	120	12	83.3	3.28	2500K	<6SDCM	80	N/A	110	34
		With Brand LED	CTRTTGT10F10F24C4-E0_00K-WH-1444-12W-00.0	24	16		110	10	16	05.5	5.20	5000K	<6SDCM	80	N/A	110	34

# Flexglo<sup>™</sup> F15 Parameter Summary (PVC)

Product	Lighting	Category	Item Code	Voltage	Power	Circuit	Bending	Min. Bending	Unit/m	Min. Cutting	Min. Cutting	Color/CCT	Color	CRI	R9	Lumen/m	Lumen/ft
Series	Effect	category	item code	(∀)	(W/m)	Туре	Direction	Diameter (mm)	Gilloin	Length (mm)	Length (in)	color/cc1	Tolerance	citi	10	comervin	Comentit
												Red	N/A	N/A	N/A	40	12
	A	RGB Light	C-FR-F15A-HB-24CV-RGB-WM-60-12W-100	24	12	N	НВ	120	10	100	3.94	Green	N/A	N/A	N/A	100	30
	~	Nob Light	C-FR-F15A-FIB-24CV-R0B-WFI-00-12W-100	24	12	CV.	пь	120	10	100	5.54	Blue	N/A	N/A	N/A	15	5
												R+G+B	N/A	N/A	N/A	155	47
												Red	N/A	N/A	N/A	40	12
			C-FR-F15E-HB-24CV-RGBW(27K)-WM-60-15W-100	24	15	N	HB	120	10	100	3.94	Green	N/A	N/A	N/A	100	30
												Blue	N/A	N/A	N/A	15	5
												White	<6SDCM	80	N/A	100	30
												Red	N/A	N/A	N/A	40	12
	E	RGBW Light	C-FR-F15E-HB-24CV-RGBW(30K)-WM-60-15W-100	24	15	CV	HB	120	10	100	3.94	Green	N/A	N/A	N/A	100	30
												Blue	N/A	N/A	N/A	15	5
					<u> </u>							White Red	<6SDCM N/A	80 N/A	N/A N/A	100	30
												Green	N/A N/A	N/A N/A	N/A N/A	40 100	12 30
			C-FR-F15E-HB-24CV-RGBW(40K)-WM-60-15W-100	24	15	CV	HB	120	10	100	3.94	Blue	N/A N/A	N/A N/A	N/A N/A	100	5
												White	<6SDCM	N/A 80	N/A	100	30
			C-FR-F1558-HB-24CC-R-WM-56-12W-125	24	12	CC		120	8	125	4.92	Red	N/A	N/A	N/A	100	30
F15			C-FR-F1558-HB-24CC-G-WM-56-12W-125	24	12			120	8	125	4.92	Green	N/A	N/A	N/A	220	34 67
11.5mm/0.45in			C-FR-F1558-HB-24CC-B-WM-56-12W-125	24	12	CC		120	8	125	4.92	Blue	N/A	N/A	N/A	35	11
			C-FR-F15S8-HB-24CC-A-WM-56-12W-125	24	12	CC	1	120	8	125	4.92	Amber	N/A	N/A	N/A	110	34
21m]			C-FR-F15S8-HB-24CC-22K-WM-56-80-12W-125	24	12	CC		120	8	125	4.92	2200K	<6SDCM	80	N/A	300	91
STM			C-FR-F15S8-HB-24CC-27K-WM-56-80-12W-125	24	12	сс (С	1	120	8	125	4.92	2700K	<6SDCM	80	N/A	350	107
8			C-FR-F15S8-HB-24CC-30K-WM-56-80-12W-125	24	12	CC		120	8	125	4.92	3000K	<6SDCM	80	N/A	350	107
-			C-FR-F15S8-HB-24CC-35K-WM-56-80-12W-125	24	12	CC	1	120	8	125	4.92	3500K	<6SDCM	80	N/A	350	107
			C-FR-F15S8-HB-24CC-40K-WM-56-80-12W-125	24	12	CC	1	120	8	125	4.92	4000K	<6SDCM	80	N/A	350	107
			C-FR-F15S8-HB-24CC-57K-WM-56-80-12W-125	24	12	CC	1	120	8	125	4.92	5700K	<6SDCM	80	N/A	350	107
			C-FR-F15S10-HB-24CC-22~57K-WM-120-10W-100	24	10	CC	1	120	10	100	3.94	2200K	<6SDCM	80	N/A	110	34
	s	SPI Pixel Light	C-FR-F15510-FIB-24CC-22~57K-WM-120-10W-100	24	10	LL L	НВ	120	10	100	3.94	5700K	<6SDCM	80	N/A	110	34
	2	SFIFIXEILIGIIL					пь					Red	N/A	N/A	N/A	40	12
			C-FR-F15S8-HB-24CC-RGB-WM-56-12W-125	24	12	cc		120	8	125	4.92	Green	N/A	N/A	N/A	100	30
			CHINE 1550-HB-24CC-NB-WH-50-12W-125	24	12			120		125	4.JL	Blue	N/A	N/A	N/A	15	5
												R+G+B	N/A	N/A	N/A	155	47
												Red	N/A	N/A	N/A	40	12
			C-FR-F15S8-HB-24CC-RGBW(27K)-WM-56-15W-125	24	15	cc		120	8	125	4.92	Green	N/A	N/A	N/A	100	30
									-			Blue	N/A	N/A	N/A	15	5
												White	<6SDCM	80	N/A	100	30
												Red	N/A	N/A	N/A	40	12
			C-FR-F15S8-HB-24CC-RGBW(30K)-WM-56-15W-125	24	15	cc		120	8	125	4.92	Green	N/A	N/A	N/A	100	30
											~	Blue	N/A	N/A	N/A	15	5
					L		4		L			White	<6SDCM	80	N/A	100	30
												Red	N/A	N/A	N/A	40	12
			C-FR-F15S8-HB-24CC-RGBW(40K)-WM-56-15W-125	24	15	CC		120	8	125	4.92	Green	N/A	N/A	N/A	100	30
												Blue	N/A	N/A	N/A	15	5
								1				White	<6SDCM	80	N/A	100	30

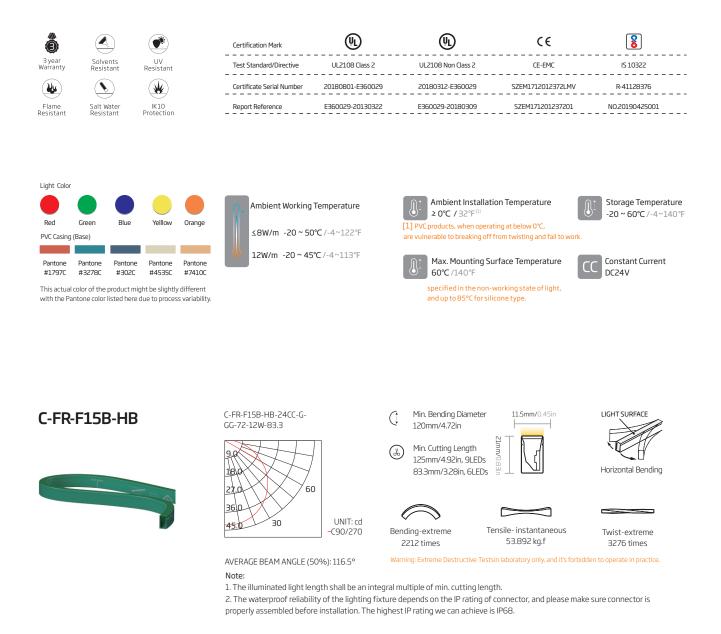
# Flexglo<sup>™</sup> F15 Parameter Summary (Silicone)

Product	Lighting	Category	Item Code	Voltage	Power	Circuit	Bending	Min. Bending	Unit/	Min. Cutting	Min. Cutting	Color/CCT	Color	CRI	R9	Lumen/m	Lumen/ft
Series	Effect	category	item code	(V)	(W/m)	Type	Direction	Diameter (mm)	m	Length (mm)	Length (in)	color/cer	Tolerance	Cru	105	Lumentin	cument
			C-SFR-F15B-HB-24CC-R-WM-72-8W-125	24	8	CC		120	8	125	4.92	Red	N/A	N/A	N/A	130	40
		Colorful Light	C-SFR-F15B-HB-24CC-G-WM-72-12W-83.3	24	12	CC	]	120	12	83.3	3.28	Green	N/A	N/A	N/A	350	107
		Color fur Light	C-SFR-F15B-HB-24CC-B-WM-72-12W-83.3	24	12	CC	]	120	12	83.3	3.28	Blue	N/A	N/A	N/A	70	21
			C-SFR-F15B-HB-24CC-A-WM-72-8W-125	24	8	CC	HB	120	8	125	4.92	Amber	N/A	N/A	N/A	130	40
		Colorful Light	C-SFR-F15B-HB-24CC-R-RR-72-8W-125	24	8	CC	1	120	8	125	4.92	Red	N/A	N/A	N/A	115	35
		& lacket	C-SFR-F15B-HB-24CC-G-GG-72-12W-83.3	24	12	CC	1	120	12	83.3	3.28	Green	N/A	N/A	N/A	290	88
		& Jacker	C-SFR-F15B-HB-24CC-B-BB-72-12W-83.3	24	12	CC	1	120	12	83.3	3.28	Blue	N/A	N/A	N/A	70	21
F15			C-SFR-F15B-HB-24CC-26K-DD-108-80-12W-55.6	24	12	CC		120	18	55.6	2.19	2600K	<6SDCM	80	N/A	70	21
115		White light &	C-SFR-F15B-HB-24CC-32K-DD-108-80-12W-55.6	24	12	CC	HB	120	18	55.6	2.19	3200K	<6SDCM	80	N/A	70	21
11.5mm/0.45in		full black jacket	C-SFR-F15B-HB-24CC-42K-DD-108-80-12W-55.6	24	12	CC	1	120	18	55.6	2.19	4200K	<6SDCM	80	N/A	65	20
			C-SFR-F15B-HB-24CC-22K-WM-72-80-6W-83.3	24	6	CC	1	120	12	83.3	3.28	2200K	<5SDCM	80	N/A	160	49
			C-SFR-F15B-HB-24CC-27K-WM-72-80-6W-83.3	24	6	CC	1	120	12	83.3	3.28	2700K	<5SDCM	80	N/A	180	55
ST 🕅	в		C-SFR-F15B-HB-24CC-30K-WM-72-80-6W-83.3	24	6	CC	НВ	120	12	83.3	3.28	3000K	<5SDCM	80	N/A	200	61
8	R		C-SFR-F15B-HB-24CC-35K-WM-72-80-6W-83.3	24	6	CC	пв	120	12	83.3	3.28	3500K	<5SDCM	80	N/A	200	61
2			C-SFR-F15B-HB-24CC-40K-WM-72-80-6W-83.3	24	6	CC	1	120	12	83.3	3.28	4000K	<5SDCM	80	N/A	200	61
			C-SFR-F15B-HB-24CC-57K-WM-72-80-6W-83.3	24	6	CC		120	12	83.3	3.28	5700K	<5SDCM	80	N/A	200	61
			C-SFR-F15B-HB-24CC-22K-WM-72-80-9W-83.3	24	9	CC		120	12	83.3	3.28	2200K	<5SDCM	80	N/A	240	73
			C-SFR-F15B-HB-24CC-27K-WM-72-80-9W-83.3	24	9	CC	]	120	12	83.3	3.28	2700K	<5SDCM	80	N/A	270	82
			C-SFR-F15B-HB-24CC-30K-WM-72-80-9W-83.3	24	9	CC	HB	120	12	83.3	3.28	3000K	<5SDCM	80	N/A	300	91
			C-SFR-F15B-HB-24CC-35K-WM-72-80-9W-83.3	24	9	CC	110	120	12	83.3	3.28	3500K	<5SDCM	80	N/A	300	91
			C-SFR-F15B-HB-24CC-40K-WM-72-80-9W-83.3	24	9	CC	]	120	12	83.3	3.28	4000K	<5SDCM	80	N/A	300	91
		White Light	C-SFR-F15B-HB-24CC-57K-WM-72-80-9W-83.3	24	9	CC		120	12	83.3	3.28	5700K	<5SDCM	80	N/A	300	91
			C-SFR-F15B-HB-24CC-22K-WM-72-80-12W-83.3	24	12	CC		120	12	83.3	3.28	2200K	<5SDCM	80	N/A	320	98
			C-SFR-F15B-HB-24CC-27K-WM-72-80-12W-83.3	24	12	CC		120	12	83.3	3.28	2700K	<5SDCM	80	N/A	360	110
			C-SFR-F15B-HB-24CC-30K-WM-72-80-12W-83.3	24	12	CC	HB	120	12	83.3	3.28	3000K	<5SDCM	80	N/A	400	122
			C-SFR-F15B-HB-24CC-35K-WM-72-80-12W-83.3	24	12	CC		120	12	83.3	3.28	3500K	<5SDCM	80	N/A	400	122
			C-SFR-F15B-HB-24CC-40K-WM-72-80-12W-83.3	24	12	CC		120	12	83.3	3.28	4000K	<5SDCM	80	N/A	400	122
			C-SFR-F15B-HB-24CC-57K-WM-72-80-12W-83.3	24	12	CC		120	12	83.3	3.28	5700K	<5SDCM	80	N/A	400	122
			C-SFR-F15B-HB-24CC-27K-WM-72-90-12W-83.3	24	12	CC		120	12	83.3	3.28	2700K	<5SDCM	90	35~80	280	85
			C-SFR-F15B-HB-24CC-30K-WM-72-90-12W-83.3	24	12	CC		120	12	83.3	3.28	3000K	<5SDCM	90	35~80	320	98
			C-SFR-F15B-HB-24CC-35K-WM-72-90-12W-83.3	24	12	CC	HB	120	12	83.3	3.28	3500K	<5SDCM	90	35~80	320	98
			C-SFR-F15B-HB-24CC-40K-WM-72-90-12W-83.3	24	12	CC		120	12	83.3	3.28	4000K	<5SDCM	90	35~80	320	98
			C-SFR-F15B-HB-24CC-30K-WM-72-95-12W-83.3	24	12	CC		120	12	83.3	3.28	3000K	<5SDCM	95	80~99	270	82

# Flexglo<sup>™</sup> F15 Parameter Summary (Silicone)

Product Series	Lighting Effect	Category	Item Code	Voltage (V)	Power (W/m)	Circuit Type	Bending Direction	Min. Bending Diameter (mm)	Unit/ m	Min. Cutting Length (mm)	Min. Cutting Length (in)	Color/CCT	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft
		Dim To Warm	C-SFR-F15DTW-HB-24CV-18~30K-WM-144-12W-83.3	24	12	CV		120	12	83.3	3.28	1800K 3000K	<5SDCM <5SDCM	80 90	N/A 35~80	2	0.6
	D	Dynamic	C-SFR-F15D-HB-24CV-22~57K-WM-144-12W-83.3	24	12	cv	HB	120	12	83.3	3.28	2200K	<5SDCM	80	N/A	140	43
	D	Light	L-SFR-F15D-HB-24UV-22~5/R-WM-144-12W-83.3	24	12	LV		120	12	83.3	3.28	5700K	<5SDCM	80	N/A	170	52
												Red	N/A	N/A	N/A	50	15
	A	RGB Light	C-SFR-F15A-HB-24CV-RGB-WM-60-12W-100	24	12	CV	HB	120	10	100	3.94	Green Blue	N/A N/A	N/A N/A	N/A N/A	120 25	37
												R+G+B	N/A	N/A	N/A	195	59
												Red	N/A	N/A	N/A	50	15
			C-SFR-F15E-HB-24CV-RGBW(27K)-WM-60-15W-100	24	15	cv		120	10	100	3.94	Green	N/A	N/A	N/A	120	37
								120	10	100	5.5 1	Blue	N/A	N/A	N/A	25	8
												White Red	<5SDCM N/A	80	N/A	120	37
												Green	N/A N/A	N/A N/A	N/A N/A	120	37
	E	RGBW Light	C-SFR-F15E-HB-24CV-RGBW(30K)-WM-60-15W-100	24	15	CV		120	10	100	3.94	Blue	N/A	N/A	N/A	25	8
												White	<5SDCM	80	N/A	120	37
							HB					Red	N/A	N/A	N/A	50	15
F15			C-SFR-F15E-HB-24CV-RGBW(40K)-WM-60-15W-100	24	15	cv		120	10	100	3.94	Green	N/A	N/A	N/A	120	37
11.5mm/0.45in												Blue	N/A	N/A	N/A	25	8
												White	<5SDCM	80	N/A	120	37
			C-SFR-F15S6-HB-24CC-22K-WM-60-80-15W-166.7 C-SFR-F15S6-HB-24CC-27K-WM-60-80-15W-166.7	24	15	CC		120	6	166.7 166.7	6.56 6.56	2200K	<5SDCM	80 80	N/A	210 250	64 76
			C-SFR-F1556-HB-24CC-27K-WM-60-80-15W-166.7	24	15	CC		120	6	166.7	6.56	2700K 3000K	<5SDCM	80	N/A N/A	250	76
Bin			C-SFR-F15S6-HB-24CC-35K-WM-60-80-15W-166.7	24	15	CC		120	6	166.7	6.56	3500K	<5SDCM	80	N/A	250	76
			C-SFR-F15S6-HB-24CC-40K-WM-60-80-15W-166.7	24	15	CC	1	120	6	166.7	6.56	4000K	<5SDCM	80	N/A	250	76
			C-SFR-F15S6-HB-24CC-57K-WM-60-80-15W-166.7	24	15	CC	1	120	6	166.7	6.56	5700K	<5SDCM	80	N/A	250	76
			C-SFR-F15S6-HB-24CC-22~57K-WM-120-12W-166.7	24	12	CC	]	120	6	166.7	6.56	2200K	<5SDCM	80	N/A	120	37
									-			5700K	<5SDCM	80	N/A	150	46
												Red Green	N/A N/A	N/A N/A	N/A N/A	30 75	9 23
			C-SFR-F15S6-HB-24CC-RGB-WM-60-12W-166.7	24	12	CC		120	6	166.7	6.56	Blue	N/A N/A	N/A N/A	N/A N/A	15	5
							HB					R+G+B	N/A	N/A	N/A	120	37
		DMX Pixel					1					Red	N/A	N/A	N/A	30	9
	S		C-SFR-F15S6-HB-24CC-RGBW(27K)-WM-60-15W-166.7	24	15	CC		120	6	166.7	6.56	Green	N/A	N/A	N/A	75	23
		Light	C-3FR-F1330-HB-24CC-R0BW(27K)-WH-00-13W-100.7	24	1.5	UL		120	0	100.7	0.30	Blue	N/A	N/A	N/A	15	5
												White	<5SDCM	80	N/A	80	24
						1						Red	N/A	N/A	N/A	30 75	9 23
			C-SFR-F15S6-HB-24CC-RGBW(30K)-WM-60-15W-166.7	24	15	CC		120	6	166.7	6.56	Green Blue	N/A N/A	N/A N/A	N/A N/A	15	5
						1						White	<5SDCM	N/A 80	N/A N/A	80	24
							1					Red	N/A	N/A	N/A	30	9
			C-SFR-F15S6-HB-24CC-RGBW(40K)-WM-60-15W-166.7	24	15	CC		120	6	166.7	6.56	Green	N/A	N/A	N/A	75	23
			L-2FK-F1220-FB-24LL-RUBW(4UK)-WM-6U-15W-166./	24	15			120	0	100./	0.50	Blue	N/A	N/A	N/A	15	5
												White	<5SDCM	80	N/A	80	24

# Flexglo<sup>™</sup> F15B Monochrome - Colorful Light & Jacket (PVC)



С	FR	F15B	HB	24CC	G	GG	72	12W	83.3
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	Color	Base & Lighting Surface	LEDs Qty/m	Power/m	Min. Cutting Length (mm)
					R=Red	RR= Red & Red		8W	125
Clear	FR= (PVC) Flex Ribbon	F15B= Monochrome	HB= Horizontal Bending	DC24V & Constant Current	G=Green B=Blue Y=Yellow O=Orange	GG= Green & Green BB= Blue & Blue YY= Yellow & Yellow OO= Orange & Orange	72	12W	83.3

#### Feature

Flexglo™ F15B Monochrome - Colorful Light & Jacket (PVC), with colorful PVC casing, it is a perfect solution for scenes that require outstanding visual effect not only in nighttime but also in daytime, and for projects where the light fixture color and mounting surface color need to be matched. Besides, standard colors of red, green, blue and yellow, bespoke Pantone colors are optional.

Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology, \*The IP67 Injection-moulded Connector is engineered for outdoor use.

\*The P68 Dual Injection-moulded Connector is specially designed for long-term submersible applications.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit<sup>™</sup> technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology enhancing physical reliability of light engine, the C-Mask™ technology retarding PVC discoloration and enabling lasting colorful jacket and consistent illumination.

### **Electrical Parameter**

Category	C-FR-F15B-HB	C-FR-F15B-HB
Voltage (V)	24	24
Current (mA/m)	333.3	500.0
Power (W/m)	8	12
Circuit Type	СС	СС
LED Type	2835	2835
LEDs Qty/m	72	72
LEDs Qty/unit	9	6
Unit/m	8	12
Min. Cutting Length (mm)	125	83.3
Min. Cutting Length (in)	4.92	3.28

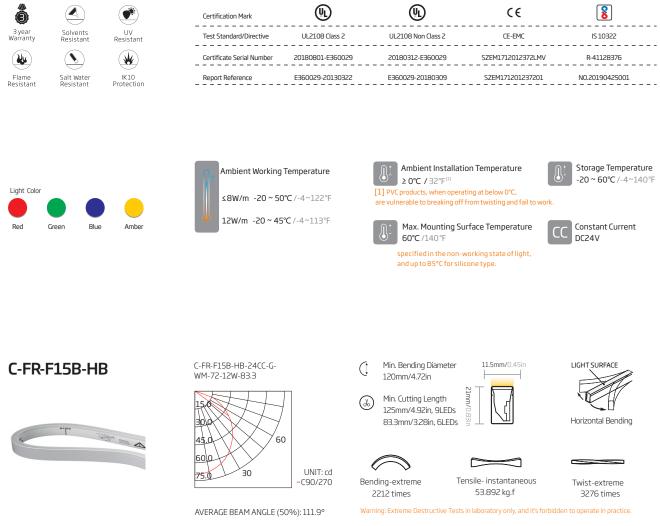
### **Optical Parameter**

Item Code		Finished	LED		
	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
C-FR-F15B-HB-24CC-R-RR-72-8W-125	Red	618-624nm	50lm	15lm	<3nm
C-FR-F15B-HB-24CC-G-GG-72-12W-83.3	Green	522-528nm	135lm	41lm	<3nm
C-FR-F15B-HB-24CC-B-BB-72-12W-83.3	Blue	468-474nm	20Im	6lm	<3nm
C-FR-F15B-HB-24CC-Y-YY-72-12W-83.3	🥚 Yellow	578-582nm	200lm	61lm	N/A
C-FR-F15B-HB-24CC-0-00-72-12W-83.3	🛑 Orange	600-606nm	150lm	46lm	N/A

### Max. Running Length Input: DC24V

		1: 1						
Туре	Swivel	Connector	Sleeve	Connector	Snap C	onnector	Socket C	onnector
IP Rating	1	P20	IP	40	IF	67	IP	67
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed
C-FR-F15B-8W	7.5m/24.6ft	15m/49.2ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft
C-FR-F15B-12W	5m/16.4ft	10m/32.8ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft
Dimension of Connector	Page F	15128	Page F	15131	Page F15 135 Page F15 140			15 140
Max.Packing Length				Page F	15 198			
	E.							
Туре	Injection-mou	Injection-moulded Connector		oulded Connector	Note:			
IP Rating	IP	67	IP	68	1. Above conclus	ion is based on voltag	je drop testing result	of the light with
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	0.3m (0.98ft) ca	2		
C-FR-F15B-8W	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	<ul> <li>2. The maximum running length is based on the light in static full loading status.</li> <li>3. Above running length is only the light length excluding lengths of</li> </ul>			
C-FR-F15B-12W	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft				
Dimension of Connector	Page F	15 143	Page F	15 155		se refer to the specif		
Max.Packing Length		Page F	15 198			ength might be subject		

# Flexglo<sup>™</sup> F15B Monochrome - Colorful Light (PVC)



Note:

 The illuminated light length shall be an integral multiple of min. cutting length.
 The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.



#### Feature

Flexglo™ F15B Monochrome - Colorful Light (PVC), rich color options make it suitable for commercial decoration and auxiliary lighting.Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology, \*The IP67 Injection-moulded Connector is engineered for outdoor use.

\*The IP68 Dual Injection-moulded Connector is specially designed for long-term submersible applications.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit<sup>™</sup> technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology enhancing physical reliability of light engine, the C-Mask™ technology retarding PVC discoloration and enabling consistent illumination.

### **Electrical Parameter**

Category	C-FR-F15B-HB	C-FR-F15B-HB
Voltage (V)	24	24
Current (mA/m)	333.3	500.0
Power (W/m)	8	12
Circuit Type	СС	СС
LED Type	2835	2835
LEDs Qty/m	72	72
LEDs Qty/unit	9	6
Unit/m	8	12
Min. Cutting Length (mm)	125	83.3
Min. Cutting Length (in)	4.92	3.28

### **Optical Parameter**

Item Code		Finished	LED		
	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
C-FR-F15B-HB-24CC-R-WM-72-8W-125	e Red	618-624nm	110lm	34lm	<3nm
C-FR-F15B-HB-24CC-G-WM-72-12W-83.3	Green	522-528nm	2201m	67lm	<3nm
C-FR-F15B-HB-24CC-B-WM-72-12W-83.3	Blue	468-474nm	35lm	 11lm	<3nm
C-FR-F15B-HB-24CC-A-WM-72-8W-125	😑 Amber	588-594nm	110lm	34lm	< 3nm

### Max. Running Length Input: DC24V

		1. 1			203		2	
Туре	Swivel	Connector	Sleeve	Connector	Snap C	onnector	Socket Connector	
IP Rating	I	P20	IP	40	IP67		IP67	
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed
C-FR-F15B-8W	7.5m/24.6ft	15m/49.2ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft
C-FR-F15B-12W	5m/16.4ft	10m/32.8ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft
Dimension of Connector	Page F	Page F15 128		Page F15 131		-15 135	Page F	15 140
Max.Packing Length				Page F	15198			
				r ug r i				

	E		-	1	
Туре	Injection-mou	Ided Connector	Dual Injection-m	oulded Connector	
IP Rating	IF	267	IP68		
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	
C-FR-F15B-8W	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	
C-FR-F15B-12W	10m/32.8ft 20m/65.6ft		10m/32.8ft	20m/65.6ft	
Dimension of Connector	Page F	15 143	Page F	15 155	
Max.Packing Length		15 198			

Note:

2. The maximum running length is based on the light in static full loading status.

 Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.
 The delivery length might be subject to the maximum packing length.

<sup>1.</sup> Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

# Flexglo<sup>™</sup> F15B Monochrome - White Light & Black Jacket (PVC)

	Certification Mark	(UL)	(UL)	CE	8
3 year Solvents UV Warranty Resistant Resistant	Test Standard/Directive	UL2108 Class 2	UL2108 Non Class 2	CE-EMC	IS 10322
	Certificate Serial Number	20180801-E360029	20180312-E360029	SZEM1712012372LMV	R-41128376
Flame Salt Water IK10 Resistant Resistant Protection	Report Reference	E360029-20130322	E360029-20180309	SZEM171201237201	N0.20190425001
ССТ 2200К 3000К 4000К	60℃ /140°F	45℃ /-4~113°F Surface Temperature	2 °C / 32°F <sup>II</sup> [1] PVC products, when of are vulnerable to breaking CCC Constant Curre DC24V	perating at below 0°C, off from twisting and fail to work.	Storage Temperature -20 ~ 60°C /-4~140°F
C-FR-F15B-HB	C-FR-F15B-HB-24CC-30k DM-72-80-12W-83.3	<- -	<ul> <li>Min. Bending Diamete 120mm/4.72in</li> <li>Min. Cutting Length 83.3mm/3.28in</li> <li>ED-</li> </ul>	2r 11.5mm/0.45in	LIGHT SURFACE Horizontal Bending
arge Ref and A	57.0 60 760 95.0 30 AVERAGE BEAM ANGLE (5	UNIT: cd -C90/270	6LEDs Bending-extreme 2212 times Warning: Extreme Destructive T	Tensile-instantaneous 53.892 kg.f	Twist-extreme 3276 times
	Note:				

1. The illuminated light length shall be an integral multiple of min. cutting length.

2. The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

### Feature

Flexglo™ F15B Monochrome - White Light & Black Jacket (PVC), the black PVC casing helps it hidden well in black and dark environments when the light is off.

Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology,

\*The IP67 Injection-moulded Connector is engineered for outdoor use.

- \*The IP68 Dual Injection-moulded Connector is specially designed for long-term submersible applications.
- \*The IP67 Field Assembly Connector, which is underpinned by the Insulfit<sup>™</sup> technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology enhancing physical reliability of light engine, the C-Mask™ technology retarding PVC discoloration and enabling consistent illumination.



### **Electrical Parameter**

Category	C-FR-F15B-HB
Voltage (V)	24
Current (mA/m)	500.0
Power (W/m)	12
Circuit Type	СС
LED Type	2835
LEDs Qty/m	72
LEDs Qty/unit	6
Unit/m	12
Min. Cutting Length (mm)	83.3
Min. Cutting Length (in)	3.28

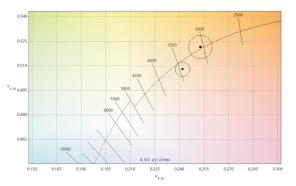
### **Optical Parameter**

Item Code	Finished Product						LED	
	ССТ	CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-FR-F15B-HB-24CC-22K-DM-72-80-12W-83.3	_ 2200К	2238±102K	<6SDCM	80	240Im	73lm	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-30K-DM-72-80-12W-83.3	_ зооок	3045±175K	<6SDCM	80	280lm	85lm	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-40K-DM-72-80-12W-83.3	_ 4000К	3985±275K	<6SDCM	80	280lm	85lm	<2.3SDCM	82~87

#### Note:

1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

2. The color tolerance of finished products is kept <6SDCM from batch to batch and narrowed to <3SDCM at the same batch.



#### Color Matching

Color temperature value stated on all CLEAR's documents refers to finished products. LED's color temperature would be shifted by the light diffuser made of PVC or silicone material. CLEAR calibrates color temperature and color coordinate of tailor-made LEDs with proprietary color-matching algorithms to produce a precise color temperature and color coordinate close to black body locus for finished products. All LEDs would be strictly tested and tightly controlled to ensure finished products can meet ANSI standard.

### Max. Running Length Input: DC24V

		1.1	~	1				
Туре	Swivel	Connector	Sleeve	Connector	Snap Connector		Socket Connector	
IP Rating	IP	20	IP4	IP40 IP67		57	IP67	
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed
C-FR-F15B-12W	5m/16.4ft	10m/32.8ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft
Dimension of Connector	Page F	15 128	Page F15 131		Page F15 135 Page F15 140		15 140	
Max.Packing Length				Page F	15 198			

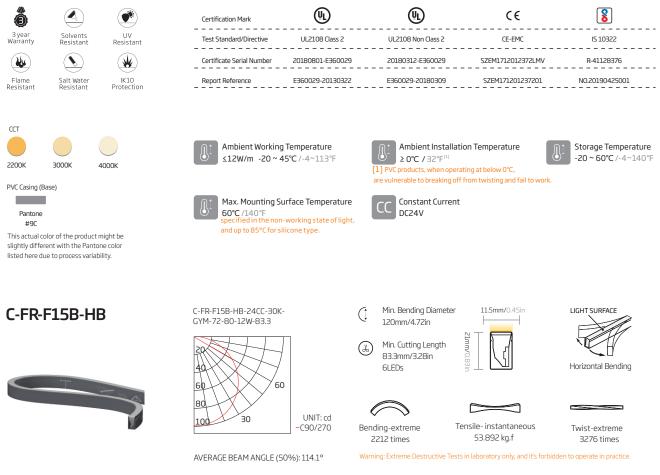
	-		7				
Туре	Injection-mou	Ided Connector	Dual Injection-moulded Connector				
IP Rating	IPE	57 IP68					
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed			
C-FR-F15B-12W	10m/32.8ft 20m/65.6ft		10m/32.8ft	20m/65.6ft			
Dimension of Connector	Page F	15143	Page F	15155			
Max.Packing Length		Page F15 198					

Note: 1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

2. The maximum running length is based on the light in static full loading status.

Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.
 The delivery length might be subject to the maximum packing length.

## Flexglo<sup>™</sup> F15B Monochrome - White Light & Gray Jacket (PVC)



Note:

1. The illuminated light length shall be an integral multiple of min. cutting length.

 The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

### Feature

 $\label{eq:Flexglot} \begin{array}{l} \mathsf{Fl5B} \mbox{ Monochrome - White Light $\&$ Gray Jacket (PVC), the gray PVC casing helps it hidden well in gray and dark environments when the light is off. \end{array}$ 

Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology,

\*The IP67 Injection-moulded Connector is engineered for outdoor use.

\*The UL676 listed IP68 Dual Injection-moulded Connector is specially designed for long-term submersible applications.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit™ technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech<sup>™</sup> such as the PinBoost<sup>™</sup> technology enhancing physical reliability of light engine, the C-Mask<sup>™</sup> technology retarding PVC discoloration and enabling consistent illumination.



### **Electrical Parameter**

Category	C-FR-F15B-HB
Voltage (V)	24
Current (mA/m)	500.0
Power (W/m)	12
Circuit Type	СС
LED Type	2835
LEDs Qty/m	72
LEDs Qty/unit	6
Unit/m	12
Min. Cutting Length (mm)	83.3
Min. Cutting Length (in)	3.28

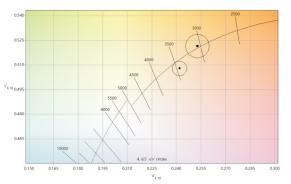
### **Optical Parameter**

Item Code			Finished Pro	oduct			LED		
item Code	ССТ	CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI	
C-FR-F15B-HB-24CC-22K-GYM-72-80-12W-83.3	_ 2200К	2238±102K	<6SDCM	80	240lm	73lm	<2.3SDCM	82~87	
C-FR-F15B-HB-24CC-30K-GYM-72-80-12W-83.3	_ зооок	3045±175K	<6SDCM	80	280lm	85lm	<2.3SDCM	82~87	
C-FR-F15B-HB-24CC-40K-GYM-72-80-12W-83.3	4000K	3985±275K	<6SDCM	80	280lm	85lm	<2.3SDCM	82~87	

#### Note:

1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

2. The color tolerance of finished products is kept < 6SDCM from batch to batch and narrowed to < 3SDCM at the same batch.



#### Color Matching

Color temperature value stated on all CLEAR's documents refers to finished products. LED's color temperature would be shifted by the light diffuser made of PVC or silicone material. CLEAR calibrates color temperature and color coordinate of tailor-made LEDs with proprietary color-matching algorithms to produce a precise color temperature and color coordinate close to black body locus for finished products. All LEDs would be strictly tested and tightly controlled to ensure finished products can meet ANSI standard.

### Max. Running Length Input: DC24V

		1. 1	20		50	7					
Туре	Swivel	Connector	Sleeve Connector		Snap Connector		Socket Connector				
IP Rating	IP	20	IP4	10	IP67		IP67				
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed			
C-FR-F15B-12W	5m/16.4ft	10m/32.8ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft			
Dimension of Connector	Page F1	15 128	Page F15 131		Page F15 135		Page F15 140				
Max.Packing Length		Page F15 198									

	and the second s		7				
Туре	Injection-mou	Ided Connector	Dual Injection-moulded Connector				
IP Rating	IPE	7	IP68				
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed			
C-FR-F15B-12W	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft			
Dimension of Connector	Page F	15143	Page F15 155				
Max.Packing Length		Page F15 198					

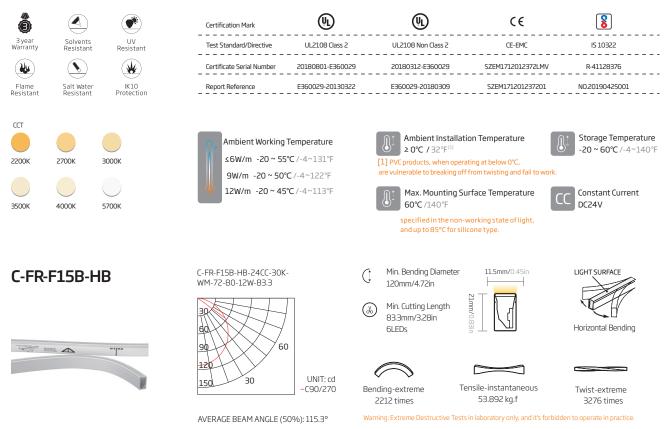
#### Note:

 Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.
 The maximum running length is based on the light in static full loading

2. The maximum running length is based on the light in static full loading status.

 Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.
 The delivery length might be subject to the maximum packing length.

## Flexglo<sup>™</sup> F15B Monochrome - White Light (PVC)



Note:

1. The illuminated light length shall be an integral multiple of min. cutting length.

2. The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

### Feature

Flexglo<sup>™</sup> F15B Monochrome - White Light (PVC) is a popular item for architectural market with rated power options of 6W/m, 9W/m, and 12W/m. Its CRI value can reach 95Ra and maximum luminous flux is up to 350lm/m.

#### Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology,

\*The IP67 Injection-moulded Connector is engineered for outdoor use.

\*The IP68 Dual Injection-moulded Connector is specially designed for long-term submersible applications.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit<sup>™</sup> technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology enhancing physical reliability of light engine, the C-Mask™ technology retarding PVC discoloration and enabling consistent illumination.



### **Electrical Parameter**

Category	C-FR-F15B-HB	C-FR-F15B-HB	C-FR-F15B-HB	
Voltage (V)	24	24	24	
Current (mA/m)	250.0	375.0	500.0	
Power (W/m)	6	9	12	
Circuit Type	СС	СС	CC	
LED Type	2835	2835	2835	
LEDs Qty/m	72	72	72	
LEDs Qty/unit	6	6	6	
Unit/m	12	12	12	
Min. Cutting Length (mm)	83.3	83.3	83.3	
Min. Cutting Length (in)	3.28	3.28	3.28	

# Optical Parameter CRI 80

			Finish	ed Produ	ct			LED	
Item Code	ССТ	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-FR-F15B-HB-24CC-22K-WM-72-80-6W-83.3	_ 2200К	2238±102K	<6SDCM	80		150lm	46lm	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-27K-WM-72-80-6W-83.3	_ 2700К	2725±145K	<6SDCM	80		175lm	53lm	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-30K-WM-72-80-6W-83.3	_ 3000К	3045±175K	<6SDCM	80		175lm	53lm	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-35K-WM-72-80-6W-83.3	_ 3500К	3465±245K	<6SDCM	80		175lm	53lm	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-40K-WM-72-80-6W-83.3	_4000К	3985±275K	<6SDCM	80		175lm	53lm	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-57K-WM-72-80-6W-83.3	_ 5700К	5669±355K	<6SDCM	80		175lm	53lm	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-22K-WM-72-80-9W-83.3	_ 2200К	2238±102K	<6SDCM	80		225lm	691m	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-27K-WM-72-80-9W-83.3	_ 2700К	2725±145K	<6SDCM	80		260lm	79Im	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-30K-WM-72-80-9W-83.3	9000к	3045±175K	<6SDCM	80		260lm	79Im	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-35K-WM-72-80-9W-83.3	_ 3500К	3465±245K	<6SDCM	80		2601m	79Im	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-40K-WM-72-80-9W-83.3	_4000К	3985±275K	<6SDCM	80		260lm	79Im	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-57K-WM-72-80-9W-83.3	_ 5700К	5669±355K	<6SDCM	80		2601m	79Im	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-22K-WM-72-80-12W-83.3	_ 2200К	2238±102K	<6SDCM	80		300lm	91lm	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-27K-WM-72-80-12W-83.3	<b>2700</b> K	2725±145K	<6SDCM	80		350lm	107lm	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-30K-WM-72-80-12W-83.3	_ 3000К	3045±175K	<6SDCM	80		350lm	107lm	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-35K-WM-72-80-12W-83.3	_ 3500К	3465±245K	<6SDCM	80		350lm	107lm	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-40K-WM-72-80-12W-83.3	_4000К	3985±275K	<6SDCM	80		350lm	107lm	<2.3SDCM	82~87
C-FR-F15B-HB-24CC-57K-WM-72-80-12W-83.3	_ 5700К	5669±355K	<6SDCM	80		350lm	107lm	<2.3SDCM	82~87

#### CRI 90

Item Code			Finishe	ed Produ	uct			LED	
	ССТ	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-FR-F15B-HB-24CC-27K-WM-72-90-12W-83.3	_ 2700К	2725±145K	<6SDCM	90	35~80	250lm	76lm	<2.3SDCM	91~97
C-FR-F15B-HB-24CC-30K-WM-72-90-12W-83.3	🔵 зооок	3045±175K	<6SDCM	90	35~80	295lm	901m	<2.3SDCM	91~97
C-FR-F15B-HB-24CC-35K-WM-72-90-12W-83.3	_ 3500к	3465±245K	<6SDCM	90	35~80	295Im	901m	<2.3SDCM	91~97
C-FR-F15B-HB-24CC-40K-WM-72-90-12W-83.3	_ 4000К	3985±275K	<6SDCM	90	35~80	295lm	901m	<2.3SDCM	91~97

# Flexglo<sup>™</sup> F15B Monochrome - White Light (PVC)

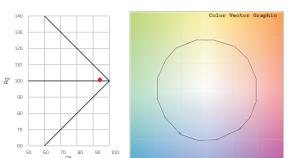
CRI 95									
Item Code	Finished Product							LED	
	CCT	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-FR-F15B-HB-24CC-30K-WM-72-95-12W-83.3	_ 3000к	3045±175K	<6SDCM	95	80~99	250lm	76lm	<2.3SDCM	96~99

Note:

1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

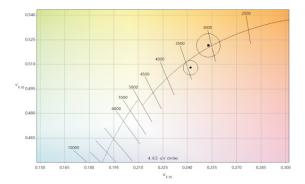
2. The color tolerance of finished products is kept < 6SDCM from batch to batch and narrowed to < 3SDCM at the same batch.

TM-30



IES TM-30-15 is a new system of several related measures and graphics that can be used together to effectively evaluate and communicate a light source's color rendering properties. The development of the method involved synthesizing multiple related research efforts and combining ideas into a single, cohesive system of objective information that can be used to aid decision-making processes, such as finding the preferred light source for a given application or evaluating the tradeoffs between efficacy and color rendering.

Measure	Abbreviation	Description
Fidelity Index	Rf	Analogous to CIE Ra (CRI): Characterizes the average color shift of the 99 CES to characterize the overall level of similarity between the test source and reference illuminant. Values range from 0 to 100.
Gamut Index	Rg	Compares the area enclosed by the average chromaticity coordinates in each of 16 hue bins to characterize the average saturation level of the test source compared to the reference illuminant. A neutral score is 100, with values greater than 100 indicating an increase in saturation and values less than 100 indicating a decrease in saturation. The range in values grows as fidelity decreases.



#### Color Matching

Color temperature value stated on all CLEAR's documents refers to finished products. LED's color temperature would be shifted by the light diffuser made of PVC or silicone material. CLEAR calibrates color temperature and color coordinate of tailor-made LEDs with proprietary color-matching algorithms to produce a precise color temperature and color coordinate close to black body locus for finished products. All LEDs would be strictly tested and tightly controlled to ensure finished products can meet ANSI standard.

#### Max. Running Length

		CI: I			50	1			
Туре	Swivel C	onnector	Sleeve Connector		Snap Connector		Socket Connector		
IP Rating	IP	20	IP40		IP67		IP67		
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	
C-FR-F15B-6W	10m/32.8ft	20m/65.6ft	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft	
C-FR-F15B-9W	6m/19.68ft	12m/39.36ft	13m/42.64ft	26m/85.28ft	13m/42.64ft	26m/85.28ft	13m/42.64ft	26m/85.28ft	
C-FR-F15B-12W	5m/16.4ft	10m/32.8ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	
Dimension of Connector	Page f	-15 128	Page	F15 131	Page I	-15 135	Page I	15 140	
Max.Packing Length				Page F1	15 198				

	E					
Туре	Injection-mou	ded Connector	Dual Injection-moulded Connector			
IP Rating	IP	67	IP68			
Item Code	Single-end Feed	Single-end Feed Double-end Feed		Double-end Feed		
C-FR-F15B-6W	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft		
C-FR-F15B-9W	13m/42.64ft	26m/85.28ft	13m/42.64ft	26m/85.28ft		
C-FR-F15B-12W	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft		
Dimension of Connector	Page F	15 143	Page	F15 155		
Max.Packing Length		Page F	15 198			

Note: 1. Above conclusion is based on voltage drop testing result of the light with

0.3m (0.98ft) cable only.
2. The maximum running length is based on the light in static full loading

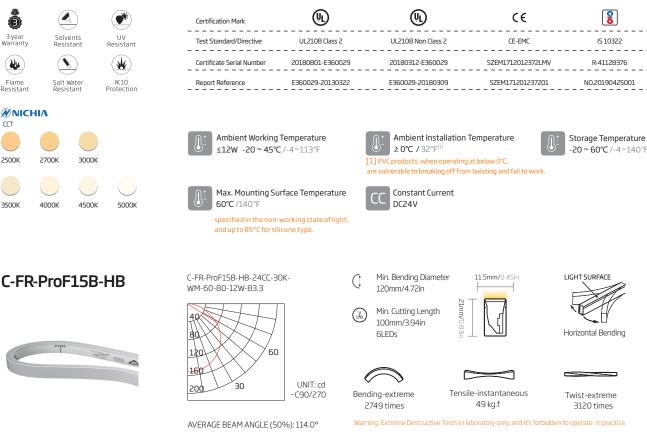
 The instantion of mining length is based of the light in static full basing status.
 Above running length is only the light length excluding lengths of

connectors. Please refer to Please refer to the specific dimension of each connector.

4. The delivery length might be subject to the maximum packing length.



### Flexglo<sup>™</sup> F15B Monochrome - White Light With Brand LED (PVC)



Note:

1. The illuminated light length shall be an integral multiple of min. cutting length.

2. The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

### Feature

Nr.

CCT

2500K

3500K

Flexalo™ F15B Monochrome - White Light With Brand LED (PVC), with Nichia LED inside, it is an ideal product for the project where premium LED is required.

Multiple connector options are available for different applications. Combined with the adoption of the DryWire<sup>™</sup> technology,

\*The IP67 Injection-moulded Connector is engineered for outdoor use.

\*The IP68 Dual Injection-moulded Connector is specially designed for long-term submersible applications.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit™ technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology enhancing physical reliability of light engine, the C-Mask™ technology retarding PVC discoloration and enabling consistent illumination.

С	FR	ProF15B	HB	24CC	ЗОК	WM	60	80	12W	100
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	ССТ	Base & Lighting Surface	LEDs Qty/m	CRI	Power/m	Min. Cutting Length (mm)
Clear	FR= (PVC) Flex Ribbon	Pro= Brand LED F158= Monochrome	HB= Horizontal Bending	DC24V & Constant Current	25k=2500K 27k=2700K 30K=3000K 35k=3500K 40k=4000K 45k=4500K 50K=5000K	WM= White & Milky	60	80	12W	100

### **Electrical Parameter**

Category	C-FR-ProF15B-HB					
Voltage (V)	24					
Current (mA/m)	500.0					
Power (W/m)	12					
Circuit Type	СС					
LED Type	3030					
LEDs Qty/m	<sub>60</sub> <i>Ж</i> мсніл					
LEDs Qty/unit	6					
Unit/m	10					
Min. Cutting Length (mm)	100					
Min. Cutting Length (in)	3.94					

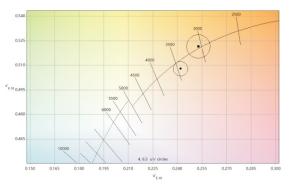
### **Optical Parameter**

				LED				
Item Code	CCT	CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-FR-ProF15B-HB-24CC-25K-WM-60-80-12W-100	_ 2500К	2460±120K	<6SDCM	80	280lm	85lm	< 3.8SDCM	81~88
C-FR-ProF15B-HB-24CC-27K-WM-60-80-12W-100	_ 2700К	2725±145K	<6SDCM	80	280lm	85lm	< 3.8SDCM	81~88
C-FR-ProF15B-HB-24CC-30K-WM-60-80-12W-100	_ 3000к	3045±175K	<6SDCM	80	320lm	98lm	< 3.8SDCM	81~88
C-FR-ProF15B-HB-24CC-35K-WM-60-80-12W-100	_ 3500К	3465±245K	<6SDCM	80	320lm	98lm	< 3.8SDCM	81~88
C-FR-ProF15B-HB-24CC-40K-WM-60-80-12W-100	_4000К	3985±275K	<6SDCM	80	320lm	98lm	< 3.8SDCM	81~88
C-FR-ProF15B-HB-24CC-45K-WM-60-80-12W-100	_4500К	4503±243K	<6SDCM	80	320lm	98lm	< 3.8SDCM	81~88
C-FR-ProF15B-HB-24CC-50K-WM-60-80-12W-100	5000к	5029±283K	<6SDCM	80	320lm	98lm	< 3.8SDCM	81~88

#### Note:

1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

2. The color tolerance of finished products is kept <6SDCM from batch to batch and narrowed to <3SDCM at the same batch.



#### Color Matching

Color temperature value stated on all CLEAR's documents refers to finished products. LED's color temperature would be shifted by the light diffuser made of PVC or silicone material. CLEAR calibrates color temperature and color coordinate of tailor-made LEDs with proprietary color-matching algorithms to produce a precise color temperature and color coordinate close to black body locus for finished products. All LEDs would be strictly tested and tightly controlled to ensure finished products can meet ANSI standard.

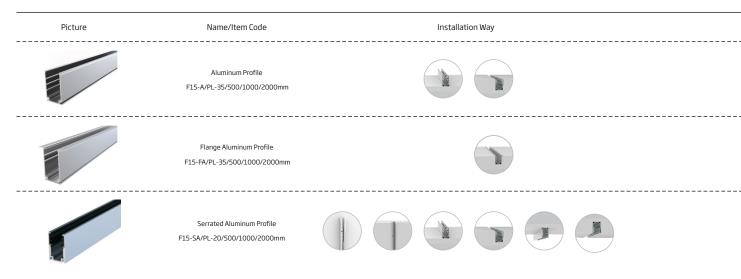
### Max. Running Length Input: DC24V

		1. 1	10			3			
Туре	Swivel	Connector	Sleeve	Connector	Snap Co	onnector	Socket C	onnector	
IP Rating	IP20		IP4	0	IPE	57	IPE	57	
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	
C-FR-F15B-12W	5m/16.4ft	10m/32.8ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	
Dimension of Connector	Page F	15 128	Page F15 131		Page F	15 135	Page F	15 140	
Max.Packing Length				Page F	15 198				
	and the second s		1		Note:				
Туре	Injection-mou	lded Connector	Dual Injection-m	oulded Connector		sion is based on volta	ge drop testing resu	It of the light with	
IP Rating	IPG	7	IPE	8	0.3m (0.98ft) ca	2	cod on the light in st	atic full loading	
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	2. The maximum status.	n running length is ba	iseu on the light in si	aucrunioading	
C-FR-F15B-12W	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft		a lenath is only the li	aht lenath excludina	lengths of	
Dimension of Connector	Page F	15143	Page	F15 155	3. Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.				
Max.Packing Length		Page F	15198		4. The delivery length might be subject to the maximum packing length.				

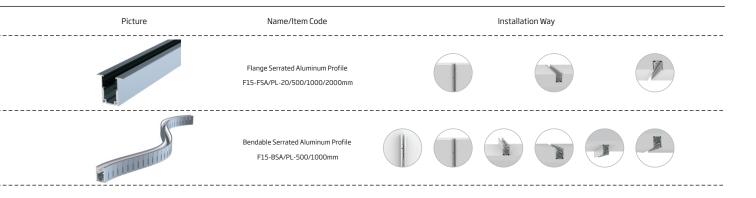
### F15B Connector (PVC)

Type/IP Rating	Bending Direction	Front Connector End	Front Connector Side from Left	Front Connector Side from Right	Front Connector Bottom	
Swivel		61.1	N/A	N/A	N/A	
Connector IP20	HB	F15B-HB-SW/FC- 01/02-E-0.3m/1m 22AWG*2	N/A	N/A	N/A	
Sleeve Connector	НВ	T	N/A	N/A	N/A	
IP40		F15B-HB-SL/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	N/A	N/A	N/A	
Snap Connector	НВ	20-3	U &	al a	1.3	
IP67		F15B-HB-SN/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15B-HB-SN/FC- 01/02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15B-HB-SN/FC- 01/02-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15B-HB-SN/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	
Socket Connector	НВ		N/A	N/A	N/A	
IP67		F15B-HB-SO/FC- 01/02-E- 0.3m/1m/3m/5m 18AWG*2	N/A	N/A	N/A	
Injection- moulded	НВ	8		R.		
Connector IP67		F15B-HB-IM/FC- 01/02-E- 0.3m/1m/3m//5m/ 10m/15m/20m 18AWG*2	F15B-HB-IM/FC- 02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15B-HB-IM/FC- 01-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15B-HB-IM/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	
Dual Injection - moulded	НВ					
Connector IP68		F15B-HB-DIM/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15B-HB-DIM/FC- 02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15B-HB-DIM/FC- 01-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15B-HB-DIM/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	

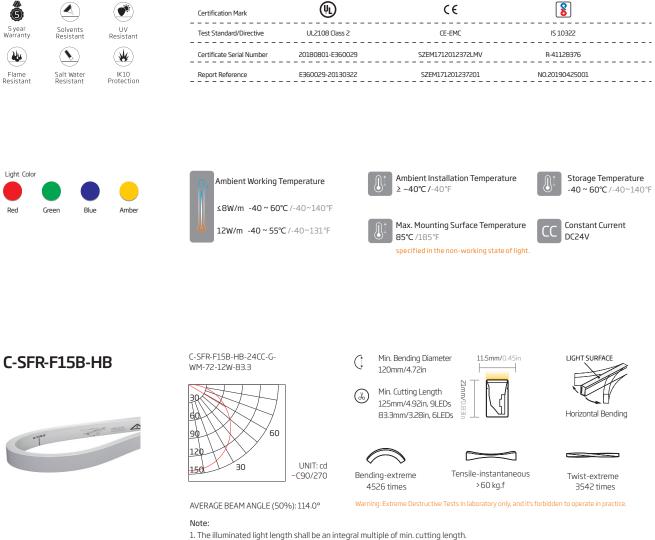
### F15 Mounting Profile



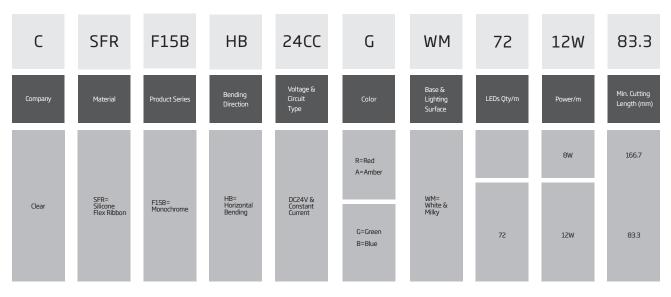
Type/IP Rating	Seamless Middle Connector & Power Feed	Middle Connector & Power T-feed	Middle Connector	Jumper	End Cap
Swivel Connector	N/A	N/A	N/A	N/A	(1-1
IP20	N/A	N/A	N/A	N/A	F15-SW/EC
Sleeve Connector	N/A	1-1-1	10	1	Ē
IP40	N/A	F15B-HB-SL/MC- PTF-01/02- 0.3m/1m/3m 18AWG*2	F15B-HB-SL/MC	F15B-HB-SL/JU- 01/02- 0.3m/1m 18AWG*2	F15-SL/EC
Snap Connector	N/A	e and	N/A		T
IP67	N/A	F15B-HB-SN/MC- PTF-01/02- 0.3m/1m/3m 18AWG*2	N/A	F15B-HB-SN/JU- 01/02- 0.3m/1m 18AWG*2	F15-SN/EC-01/02
Socket Connector	N/A	N/A	N/A	N/A	
IP67	N/A	N/A	N/A	N/A	F15-S0/EC
Injection- moulded			N/A		
Connector IP67	F15B-HB-IM/SEMC- PF-S- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15B-HB-IM/MC- PTF-0.3m/1m/3m 18AWG*2	N/A	F15B-HB-IM/JU- 0.3m/1m 18AWG*2	F15-IM/EC
Dual Injection - moulded	N/A	Property and	N/A		
Connector IP68	N/A	F15B-HB-DIM/MC- PTF-0.3m/1m/3m 18AWG*2	N/A	F15B-HB-DIM/JU- 0.3m/1m 18AWG*2	F15-DIM/EC



# Flexglo<sup>™</sup> F15B Monochrome - Colorful Light (Silicone)



2. The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.



#### Feature

Flexglo™ F15B Monochrome - Colorful Light (Silicone), thanks to the excellent weatherproof and UV-resistant performance of silicone material, it features a wide ambient working temperature range of -40-55  $^{\circ}\mathrm{C}$  , especially suitable for harsh environment application.

Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology,

\*The IP68 Injection-moulded Connector is engineered for outdoor use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit™ technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech<sup>™</sup> such as the PinBoost<sup>™</sup> technology enhancing physical reliability of light engine, the TwinFlex™ technology improving the conductivity and optimizing heat dissipation performance, the C-Mask<sup>™</sup> technology making the light body self-cleaning and anti-UV and enabling consistent illumination.

### **Electrical Parameter**

Category	C-SFR-F15B-HB	C-SFR-F15B-HB
Voltage (V)	24	24
Current (mA/m)	333.3	500.0
Power (W/m)	8	12
Circuit Type	СС	СС
LED Туре	2835	2835
LEDs Qty/m	72	72
LEDs Qty/unit	9	6
Unit/m	8	12
Min. Cutting Length (mm)	125	83.3
Min. Cutting Length (in)	4.92	3.28

### **Optical Parameter**

Item Code		Finished	LED		
item code	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
C-SFR-F15B-HB-24CC-R-WM-72-8W-125	e Red	618-624nm	130lm	40lm	<3nm
C-SFR-F15B-HB-24CC-G-WM-72-12W-83.3	Green	522-528nm	350lm	107lm	<3nm
C-SFR-F15B-HB-24CC-B-WM-72-12W-83.3	Blue	468-474nm	701m	21lm	<3nm
C-SFR-F15B-HB-24CC-A-WM-72-8W-125	e Amber	588-594nm	130lm	40lm	<3nm

### Max. Running Length Input: DC24V

	(e	1.1							3		
Туре	Swivel 0	onnector	Sleeve	Connector	Snap Connector		Socket Connector		Silicone Injection-moulded Connector		
IP Rating	IF	20	IP	IP40		IP67		IP67		IP68	
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	
C-SFR-F15B-8W	7.5m/24.6ft	15m/49.2ft	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft	
C-SFR-F15B-12W	5m/16.4ft	10m/32.8ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	
Dimension of Connector	Page F	15 128	Page F	15 131	Page F15 135		Page F15 140		Page F15 149		
Max.Packing Length					Page F15 19	18					

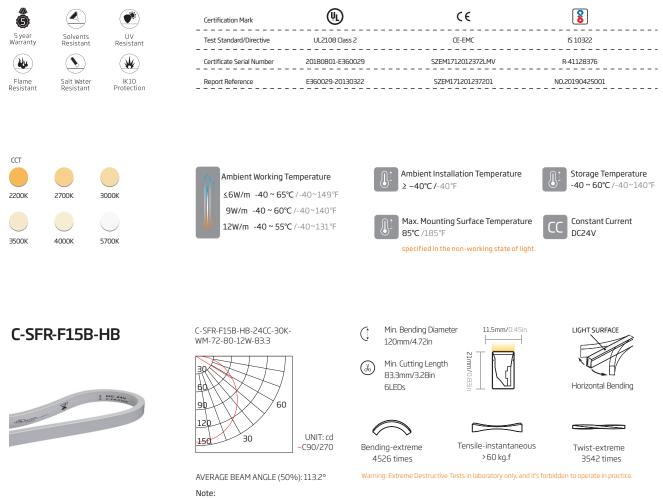
Note:

<sup>1.</sup> Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

The maximum running length is based on the light in static full loading status.
 Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.

<sup>4.</sup> The delivery length might be subject to the maximum packing length.

## Flexglo<sup>™</sup> F15B Monochrome - White Light (Silicone)



1. The illuminated light length shall be an integral multiple of min. cutting length.

2. The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is

properly assembled before installation. The highest IP rating we can achieve is IP68.

С	SFR	F15B	HB	24CC	ЗОК	WM	72	80	12W	83.3
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	ССТ	Base & Lighting Surface	LEDs Qty/m	CRI	Power/m	Min. Cutting Length (mm)
					22K=2200K 27K=2700K 30K=3000K 35K=3500K 40K=4000K 57K=5700K			80	6W 9W 12W	
Clear	SFR= Silicone Flex Ribbon	F15B= Monochrome	HB= Horizontal Bending	DC24V & Constant Current	27K=2700K 30K=3000K 35K=3500K 40K=4000K	WM= White & Milky	72	90	12W	83.3
					30K=3000K			95		

#### Feature

Flexglo<sup>™</sup> F15B Monochrome - White Light (Silicone) is a popular item for architectural market with rated power options of 6W/m, 9W/m, 12W/m. Its CRI value can reach 95Ra and maximum luminous flux is up to 400Im/m. Thanks to the excellent weatherproof and UVresistant performance of silicone material, it features a wide ambient working temperature range of -40-55 °C, especially suitable for harsh environment application. Multiple connector options are available for different applications. Combined with the adoption of the DryWire<sup>TM</sup> technology, \*The IP68 Injection-moulded Connector is engineered for outdoor use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit<sup>™</sup> technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech<sup>™</sup> such as the PinBoost<sup>™</sup> technology enhancing physical reliability of light engine, the TwinFlex<sup>™</sup> technology improving the conductivity and optimizing heat dissipation performance, the C-Mask<sup>™</sup> technology making the light body self-cleaning and anti-UV and enabling consistent illumination.

### **Electrical Parameter**

Category	C-SFR-F15B-HB	C-SFR-F15B-HB	C-SFR-F15B-HB
Voltage (V)	24	24	24
Current (mA/m)	250.0	375.0	500.0
Power (W/m)	6	9	12
Circuit Type	CC	CC	CC
LED Type	2835	2835	2835
LEDs Qty/m	72	72	72
LEDs Qty/unit	6	6	6
Unit/m	12	12	12
Min. Cutting Length (mm)	83.3	83.3	83.3
Min. Cutting Length (in)	3.28	3.28	3.28

### **Optical Parameter**

CRI 80

them Code			Finish	ned Prod	uct			LED		
ltem Code	ССТ	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI	
C-SFR-F15B-HB-24CC-22K-WM-72-80-6W-83.3	_ 2200К	2238±66K	<5SDCM	80		160lm	49lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-27K-WM-72-80-6W-83.3	_ 2700К	2725±85K	<5SDCM	80		180lm	55lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-30K-WM-72-80-6W-83.3	_ ЗОООК	3045±105K	<5SDCM	80		200lm	61lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-35K-WM-72-80-6W-83.3	_ 3500К	3465±245K	<5SDCM	80		200lm	61lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-40K-WM-72-80-6W-83.3	<u>4000</u> K	3985±150K	<5SDCM	80		200Im	61lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-57K-WM-72-80-6W-83.3	_ 5700К	5669±305K	<5SDCM	80		200Im	61lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-22K-WM-72-80-9W-83.3	_ 2200К	2238±66K	<5SDCM	80		240Im	73lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-27K-WM-72-80-9W-83.3	_ 2700К	2725±85K	<5SDCM	80		270Im	82lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-30K-WM-72-80-9W-83.3	_ зооок	3045±105K	<5SDCM	80		300lm	91lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-35K-WM-72-80-9W-83.3	_ 3500К	3465±245K	<5SDCM	80		300lm	91lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-40K-WM-72-80-9W-83.3	_ 4000К	3985±150K	<5SDCM	80		300lm	91lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-57K-WM-72-80-9W-83.3	_ 5700К	5669±305K	<5SDCM	80		300lm	91lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-22K-WM-72-80-12W-83.3	_ 2200К	2238±66K	<5SDCM	80		320lm	98lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-27K-WM-72-80-12W-83.3	_ 2700К	2725±85K	<5SDCM	80		360lm	110lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-30K-WM-72-80-12W-83.3	_ ЗОООК	3045±105K	<5SDCM	80		400lm	122lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-35K-WM-72-80-12W-83.3	_ 3500К	3465±245K	<5SDCM	80		400lm	122Im	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-40K-WM-72-80-12W-83.3	<u>4000</u> K	3985±150K	<5SDCM	80		400lm	122lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-57K-WM-72-80-12W-83.3	_ 5700к	5669±305K	<5SDCM	80		400lm	1221m	<2.3SDCM	82~87	

# Flexglo<sup>™</sup> F15B Monochrome - White Light (Silicone)

CRI 90

Item Code		Finished Product							LED	
	ССТ	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI	
C-SFR-F15B-HB-24CC-27K-WM-72-90-12W-83.3	_ 2700К	2725±85K	<5SDCM	90	35~80	280Im	85lm	<2.3SDCM	91~97	
C-SFR-F15B-HB-24CC-30K-WM-72-90-12W-83.3	🔵 зооок	3045±105K	<5SDCM	90	35~80	320lm	98Im	<2.3SDCM	91~97	
C-SFR-F15B-HB-24CC-35K-WM-72-90-12W-83.3	🔵 3500К	3465±245K	<5SDCM	90	35~80	320Im	98lm	<2.3SDCM	91~97	
C-SFR-F15B-HB-24CC-40K-WM-72-90-12W-83.3	_ 4000К	3985±150K	<5SDCM	90	35~80	320lm	98lm	<2.3SDCM	91~97	
сыа2										

CRI 95

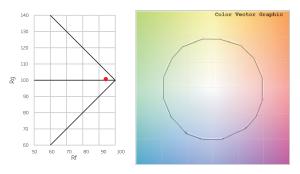
Item Code	Finished Product						LED		
	ССТ	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F15B-HB-24CC-30K-WM-72-95-12W-83.3	_ зооок	3045±105K	<5SDCM	95	80~99	2701m	821m	<2.3SDCM	96~99

Note:

1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

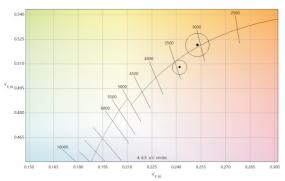
2. The color tolerance of finished products is kept < 5SDCM from batch to batch and narrowed to < 3SDCM at the same batch.

#### TM-30



IES TM-30-15 is a new system of several related measures and graphics that can be used together to effectively evaluate and communicate a light source's color rendering properties. The development of the method involved synthesizing multiple related research efforts and combining ideas into a single, cohesive system of objective information that can be used to aid decision-making processes, such as finding the preferred light source for a given application or evaluating the tradeoffs between efficacy and color rendering.

Measure	Abbreviation	Description
Fidelity Index	Rf	Analogous to CIE Ra (CRI). Characterizes the average color shift of the 99 CES to characterize the overall level of similarity between the test source and reference illuminant. Values range from 0 to 100.
Gamut Index	Rg	Compares the area enclosed by the average chromaticity coordinates in each of 16 hue bins to characterize the average saturation level of the test source compared to the reference illuminant. A neutral score is 100, with values greater than 100 indicating an increase in saturation and values less than 100 indicating a decrease in saturation. The range in values grows as fidelity decreases.



#### Color Matching

Color temperature value stated on all CLEAR's documents refers to finished products. LED's color temperature would be shifted by the light diffuser made of PVC or silicone material. CLEAR calibrates color temperature and color coordinate of tailor-made LEDs with proprietary color-matching algorithms to produce a precise color temperature and color coordinate close to black body locus for finished products. All LEDs would be strictly tested and tightly controlled to ensure finished products can meet ANSI standard.

### Max. Running Length Input: DC24V

	lé	1:1	1					1	30	
Туре	Swivel C	Connector	Sleeve (	Sleeve Connector		onnector	Socket Connector		Silicone Injection-moulded Connector	
IP Rating	IP	20	IP	40	IF	67	IP67		IP68	
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed
C-SFR-F15B-6W	10m/32.8ft	20m/65.6ft	30m/98. 4ft	60m/196. 8Fft	30m/98. 4ft	60m/196. 8Fft	30m/98. 4ft	60m/196. 8Fft	30m/98. 4ft	60m/196. 8Fft
C-SFR-F15B-9W	6m/19.68ft	12m/39.36ft	18m/59. 04ft	36m/118.08ft	18m/59. 04ft	36m/118.08ft	18m/59. 04ft	36m/118. 08ft	18m/59. 04ft	36m/118. 08ft
C-SFR-F15B-12W	5m/16.4ft	10m/32.8ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft
Dimension of Connector	Page F	15 128	5128 Page F15131			Page F15 135 Page F15 140		F15 140	Page I	-15149
Max.Packing Length					Page F	15 198				

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

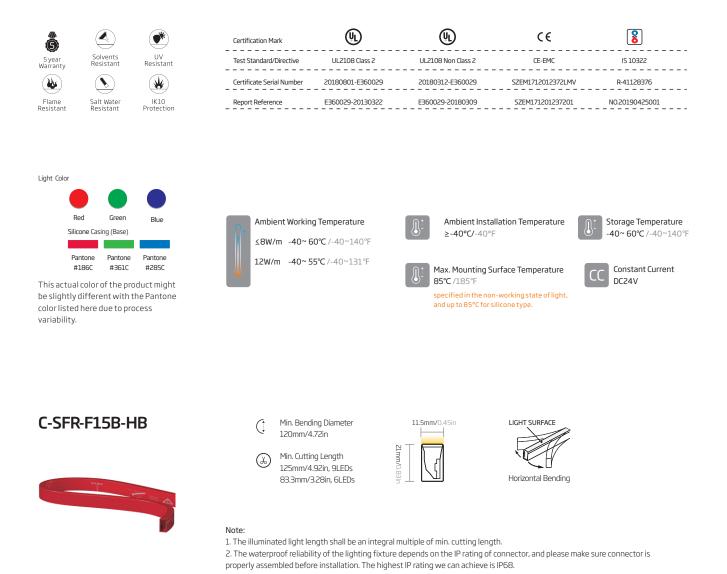
2. The maximum running length is based on the light in static full loading status.

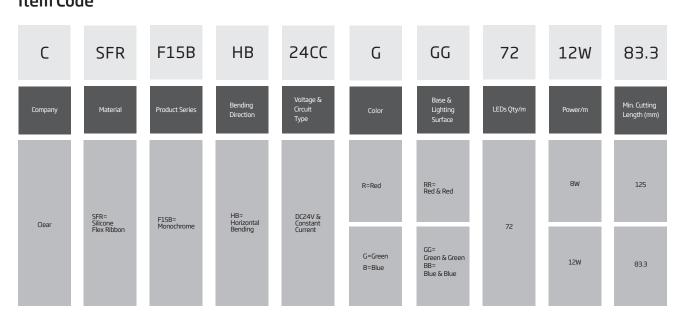
3. Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.

4. The delivery length might be subject to the maximum packing length.



# Flexglo<sup>™</sup> F15B Monochrome - Colorful Light & Jacket (Silicone)





#### Feature

Flexglo<sup>™</sup> F15B Monochrome - Colorful Light & Jacket (Silicone), with a colorful silicone casing, it is a perfect solution for scenes that require outstanding visual effect not only in nighttime but also in daytime, and for projects where the light fixture color and mounting surface color need to be matched. Standard jacket colors of red, green, blue are available, as well as custom Pantone colors.

Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology, \*The IP68 Injection-moulded Connector is engineered for outdoor use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit<sup>™</sup> technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features an ultra-long lifespan in outdoor application by leveraging other ClearTech<sup>™</sup> such as the PinBoost<sup>™</sup> technology enhancing physical reliability of light engine, the TwinFlex<sup>™</sup> technology improving the conductivity and optimizing heat dissipation performance, the C-Mask<sup>™</sup> technology making the light body self-cleaning and anti-UV and enabling consistent illumination.

### **Electrical Parameter**

Category	C-SFR-F15B-HB	C-SFR-F15B-HB		
Voltage (V)	24	24		
	333.3	500.0		
Power (W/m)	8	12		
Circuit Type	СС	СС		
LED Type	2835	2835		
LEDs Qty/m	72	72		
LEDs Qty/unit	9	6		
Unit/m	8	12		
Min. Cutting Length (mm)	125	83.3		
Min. Cutting Length (in)	4.92	3.28		

### **Optical Parameter**

Туре

IP Rating

Item Code

C-SFR-F15B-8W

C-SFR-F15B-12W

Dimension of Connector

Max.Packing Length

Item Code		Finished	LED		
	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
C-SFR-F15B-HB-24CC-R-RR-72-8W-125	e Red	618-624nm	115lm	35Im	<3nm
C-SFR-F15B-HB-24CC-G-GG-72-12W-83.3	Green	522-530nm	290lm	88Im	<3nm
C-SFR-F15B-HB-24CC-B-BB-72-12W-83.3	Blue	468-474nm	70lm	21lm	<3nm

### Max. Running Length Input: DC24V

Silicone Injection-moulded Connector

IP68

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Double-end Feed

40m/131.2ft

30m/98.4ft

Single-end Feed

15m/49.2ft

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Туре	Swivel Connector		Sleeve	Connector	Snap Connector		Socket Connector	
IP Rating	IP20		IP40		IF	67	IP67	
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed
C-SFR-F15B-8W	7.5m/24.6ft	15m/49.2ft	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft
C-SFR-F15B-12W	5m/16.4ft	10m/32.8ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft
Dimension of Connector	Page F1	15 128	Page F	15 131	Page F	15 135	Page F	15140
Max.Packing Length				Page F	15 198			

#### Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

2. The maximum running length is based on the light in static full loading status.

3. Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.

4. The delivery length might be subject to the maximum packing length.

### Flexglo<sup>™</sup> F15B Monochrome - White Light & Black Jacket (Silicone)



make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

### Feature

Flexglo<sup>™</sup> F15B Monochrome - White Light & Black Jacket (Silicone), with its black silicone casing, especially the black emitting surface, it can blend seamlessly into dark environments throughout the day while providing the adequate lumen output to the surroundings. Multiple connector options are available for different applications. Combined with the adoption of the DryWire<sup>™</sup> technology, \*The IP68 Injection-moulded Connector is engineered for outdoor use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit™ technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features an ultra-long lifespan in outdoor application by leveraging other ClearTech<sup>™</sup> such as the PinBoost<sup>™</sup> technology enhancing physical reliability of light engine, the TwinFlex<sup>™</sup> technology improving the conductivity and optimizing heat dissipation performance, the C-Mask<sup>™</sup> technology making the light body self-cleaning and anti-UV and enabling consistent illumination.

С	SFR	F15B	HB	24CC	26K	DD	108	80	12W	55.6
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	ССТ	Base & Lighting Surface	LEDs Qty/m	CRI	Power/m	Min. Cutting Length (mm)
Clear	SFR= Silicone Flex Ribbon	F158= Monochrome	HB= Horizontal Bending	DC24V & Constant Current	26K=2600K 32K=3200K 42K=4200K	DD= Dark & Dark	108	80	12W	55.6

### **Electrical Parameter**

Category	C-SFR-F15B-HB
Voltage (V)	24
Current (mA/m)	500.0
Power (W/m)	12
Circuit Type	СС
LED Type	2835
LEDs Qty/m	108
LEDs Qty/unit	6
Unit/m	18
Min. Cutting Length (mm)	55.6
Min. Cutting Length (in)	2.19

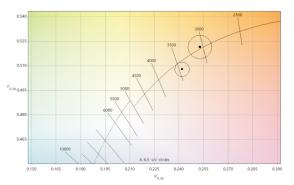
### **Optical Parameter**

			Finished Product					LED	
Item Code	ССТ	CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI	
C-SFR-F15B-HB-24CC-26K-DD-108-80-12W-55.6	_ 2600К	2605±145K	<6SDCM	80	70lm	21Im	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-32K-DD-108-80-12W-55.6	_ 3200К	3185±175K	<6SDCM	80	70lm	21lm	<2.3SDCM	82~87	
C-SFR-F15B-HB-24CC-42K-DD-108-80-12W-55.6	_4200К	4200±275K	<6SDCM	80	65lm	20lm	<2.3SDCM	82~87	

#### Note:

1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

2. The color tolerance of finished products is kept < 5SDCM from batch to batch and narrowed to < 3SDCM at the same batch.



#### Color Matching

Color temperature value stated on all CLEAR's documents refers to finished products. LED's color temperature would be shifted by the light diffuser made of PVC or silicone material. CLEAR calibrates color temperature and color coordinate of tailor-made LEDs with proprietary color-matching algorithms to produce a precise color temperature and color coordinate close to black body locus for finished products. All LEDs would be strictly tested and tightly controlled to ensure finished products can meet ANSI standard.

### Max. Running Length Input: DC24V

		1.1				41	2		
Туре	Swivel	Connector	Sleeve	Connector	Snap Co	onnector	Socket C	onnector	
IP Rating	IP	20	IP4	0	IPE	7	IPE	57	
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	
C-SFR-F15B-12W	5m/16.4ft	10m/32.8ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	
Dimension of Connector	Page F:	5 1 2 8	Page F15 131		Page F15 135		Page F15 140		
Max.Packing Length	Page F15 198								
Туре	Silicone Injection-m	oulded Connector	Note:						
IP Rating	IP6	8		Iclusion is based on v	oltane dron testinn r	esult of the light with	h 0.3m (0.98ft) cable	only	
Item Code	Single-end Feed	Double-end Feed		num running length i				2 01.1.3.	
C-SFR-F15B-12W	15m/49.2ft	30m/98.4ft		ining length is only th				o the specific	
Dimension of Connector	Page F	15 143	dimension o	f each connector.					
Max.Packing Length	Page F	15 198	<ol> <li>The delivery length might be subject to the maximum packing length.</li> </ol>						

### F15B Connector (Silicone)

Type/IP Rating	Bending Direction	Front Connector End	Front Connector Side from Left	Front Connector Side from Right	Front Connector Bottom	
Swivel Connector	НВ	61.1	N/A	N/A	N/A	
IP20	пв	F15B-HB-SW/FC- 01/02-E-0.3m/1m 22AWG*2	N/A	N/A	N/A	
Sleeve Connector	НВ	Ī	N/A	N/A	N/A	
IP40		F15B-HB-SL/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	N/A	N/A	N/A	
Snap Connector IP67	НВ	F15B-HB-SN/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m	F15B-HB-SN/FC- 01/02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m	F15B-HB-SN/FC- 01/02-SR- 0.3m/1m/3m/5m/ 10m/15m/20m	F15B-HB-SN/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m	
		18AWG*2	18AWG*2	18AWG*2	18AWG*2	
Socket Connector	НВ	1	N/A	N/A	N/A	
IP67		F15B-HB-SO/FC- 01/02-E- 0.3m/1m/3m/5m 18AWG*2	N/A	N/A	N/A	
Silicone Injection-	НВ	51		E		
moulded Connector IP68		F15B-HB-SIM/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15B-HB-SIM/FC- 02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15B-HB-SIM/FC- 01-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15B-HB-SIM/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	

### F15 Mounting Profile

Picture	Name/Item Code	Installation Way
	Aluminum Profile F15-A/PL-35/500/1000/2000mm	
	Flange Aluminum Profile F15-FA/PL-35/500/1000/2000mm	
	Serrated Aluminum Profile F15-SA/PL-20/500/1000/2000mm	

Type/IP Rating	Seamless Middle Connector & Power Feed	Middle Connector & Power T-feed	Middle Connector	Jumper	End Cap
Swivel Connector	N/A	N/A	N/A	N/A	61-71
IP20	N/A	N/A	N/A	N/A	F15-SW/EC
Sleeve Connector	N/A	1	DÓ	al a	Ū
IP40	N/A	F15B-HB-SL/MC- PTF-01/02- 0.3m/1m/3m 18AWG*2	F15B-HB-SL/MC	F15B-HB-SL/JU- 01/02-0.3m/1m 18AWG*2	F15-SL/EC
Snap Connector	N/A		N/A	E E	17 2
IP67	N/A	F158-HB-SN/MC- PTF-01/02- 0.3m/1m/3m 18AWG*2	N/A	F15B-HB-SN/JU- 01/02-0.3m/1m 18AWG*2	F15-SN/EC-01/02
Socket Connector	N/A	N/A	N/A	N/A	ŀ
IP67	N/A	N/A	N/A	N/A	F15-S0/EC
Silicone Injection-	N/A	P-P-W	N/A	-5	
moulded Connector IP68	N/A	F15B-HB-SIM/MC- PTF-0.3m/1m/3m 18AWG*2	N/A	F15B-HB-SIM/JU- 0.3m/1m 18AWG*2	F15-SIM/EC

Picture	Name/Item Code	stallation Way	
	Flange Serrated Aluminum Profile F15-FSA/PL-20/500/1000/2000mm		Ø
	Bendable Serrated Aluminum Profile F15-BSA/PL-500/1000mm		

# Flexglo<sup>™</sup> F15B Wiring Diagram

- Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 3. Dimming frequency ranges from 100Hz to 2000Hz, and 500Hz is recommended.

Input AC100~240V

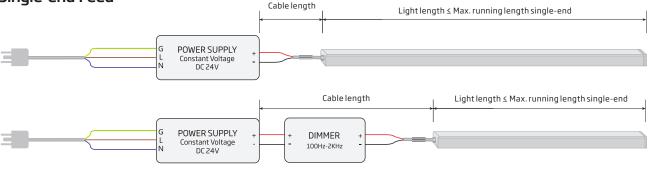
Australia

United Kingdom

4. Types of standard plugs are optional if power cord is purchased from CLEAR.

Europe

### Single-end Feed



#### Light Length:

The length of the longest single light in parallel connection or

#### Cable Length:

USA

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

#### How to Minimize Voltage Drop

sum of lights in series connection.

1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.

2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".

### Max. Running Length Single-end Feed

Input: DC24V

Connector Type	Swivel Connector	Sleeve Connector	Snap Connector	Socket Connector	Injection-moulded Connector	Dual Injection-moulded Connector
Wire Gauge	22AWG*2	18AWG*2	18AWG*2	18AWG*2	18AWG*2	18AWG*2
C-FR-F15B-6W	10m/32.8ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft
C-FR-F15B-8W	7.5m/24.6ft	15m/49.2ft	15m/49.2ft	15m/49.2ft	15m/49.2ft	15m/49.2ft
C-FR-F15B-9W	6m/19.68ft	13m/42.64ft	13m/42.64ft	13m/42.64ft	13m/42.64ft	13m/42.64ft
C-FR-F15B-12W	5m/16.4ft	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft
C-FR-ProF15B-12W	5m/16.4ft	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft
C-SFR-F15B-6W	10m/32.8ft	30m/98.4ft	30m/98.4ft	30m/98.4ft	30m/98.4ft	/
C-SFR-F15B-8W	7.5m/24.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	/
C-SFR-F15B-9W	6m/19.68ft	18m/59.04ft	18m/59.04ft	18m/59.04ft	18m/59.04ft	/
C-SFR-F15B-12W	5m/16.4ft	15m/49.2ft	15m/49.2ft	15m/49.2ft	15m/49.2ft	/

#### Note:

 $1.\,Above\,conclusion\,is\,based\,on\,voltage\,drop\,testing\,result\,of\,the\,light\,with\,0.3m\,(0.98ft)\,cable\,only.$ 

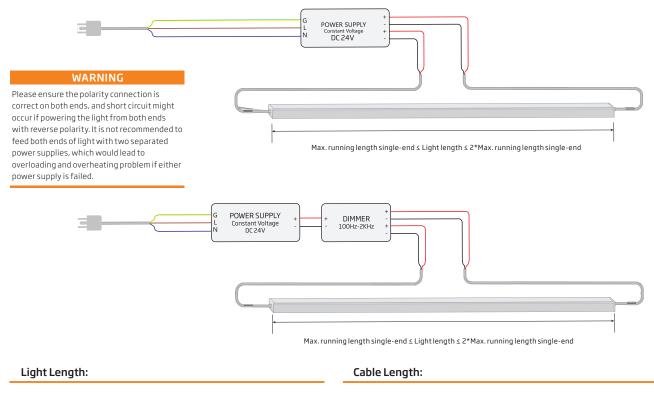
2. The maximum running length is based on the designated light in static full loading status.

4. The delivered length might be subject to the maximum packing length.

<sup>3.</sup> Above running length is only the light length excluding lengths of connectors.

### **Double-end Feed**

The following wiring diagram with double-end feed to run length that is longer than max. running length for single-end feed but less than twice the value.



The length of the longest single light in parallel connection or sum of lights in series connection.

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

#### How to Minimize Voltage Drop

1.It is optimal to position the power supply in the middle of a single light or multiple lines in daisy chain to keep the equivalent cable length on both ends for double-end feed.

2. Please ensure the cable length is not more than the table "Max. Cable Length" according to the half of light length and its wire gauge.

3. Please ensure the light length is less than the table "Max. Running Length Double-end Feed".

### Max. Running Length Double-end Feed

Input: DC24V

Connector Type	Swivel Connector	Sleeve Connector	Snap Connector	Socket Connector	Injection-moulded Connector	Dual Injection-moulded Connector
Wire Gauge	22AWG*2	18AWG*2	18AWG*2	18AWG*2	18AWG*2	18AWG*2
C-FR-F15B-6W	20m/65.6ft	40m/131.2ft	40m/131.2ft	40m/131.2ft	40m/131.2ft	40m/131.2ft
C-FR-F15B-8W	15m/49.2ft	30m/98.4ft	30m/98.4ft	30m/98.4ft	30m/98.4ft	30m/98.4ft
C-FR-F15B-9W	12m/39.36ft	26m/85.28ft	26m/85.28ft	26m/85.28ft	26m/85.28ft	26m/85.28ft
C-FR-F15B-12W	10m/32.8ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft
C-FR-ProF15B-12W	10m/32.8ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft
C-SFR-F15B-6W	20m/65.6ft	60m/196.8ft	60m/196.8ft	60m/196.8ft	60m/196.8ft	/
C-SFR-F15B-8W	15m/49.2ft	40m/131.2ft	40m/131.2ft	40m/131.2ft	40m/131.2ft	/
C-SFR-F15B-9W	12m/39.36ft	36m/118.08ft	36m/118.08ft	36m/118.08ft	36m/118.08ft	/
C-SFR-F15B-12W	10m/32.8ft	30m/98.4ft	30m/98.4ft	30m/98.4ft	30m/98.4ft	/

Note:

 $1.\,Above\,conclusion\,is\,based\,on\,voltage\,drop\,testing\,result\,of\,the\,light\,with\,0.3m\,(0.98ft)\,cable\,only.$ 

4. The delivered length might be subject to the maximum packing length.

 $<sup>{\</sup>it 2. The maximum running length is based on the designated \ light in static full loading status.}$ 

 $<sup>{\</sup>tt 3. Above running length is only the light length excluding lengths of connectors.}$ 

## F15B Max. Cable Length (PVC)

Input: DC24V

						Cable	Length				
Item Code	Light Length	0.3	2 mm <sup>2</sup>	0.52	2 mm <sup>2</sup>	0.81	L mm <sup>2</sup>	1.32	2 mm <sup>2</sup>	2.0	7 mm <sup>2</sup>
item Code	(M)	22	AWG	20	AWG	18	AWG	16	AWG	14	AWG
		m	ft	m	ft	m	ft	m	ft	m	ft
	1	76.1	249.7	123.7	405.8	192.7	632.1	314.0	1030.0	492.3	1615.3
	2	38.1	124.9	61.8	202.9	96.3	316.0	157.0	515.0	246.2	807.6
	З	25.0	82.0	40.6	133.2	63.3	207.5	103.1	338.2	161.7	530.4
	4	19.0	62.4	30.9	101.4	48.2	158.0	78.5	257.5	123.1	403.8
	5	15.2	49.9	24.7	81.2	38.5	126.4	62.8	206.0	98.5	323.1
	6	12.6	41.3	20.5	67.1	31.9	104.6	51.9	170.4	81.4	267.2
	7	10.8	35.4	17.6	57.6	27.3	89.7	44.6	146.2	69.9	229.3
	8	9.5	31.0	17.0	50.4	23.9	78.6	39.0	128.0	61.2	200.8
	9	8.4	27.5	13.6	44.6	21.2	69.5	34.5	113.3	54.2	177.7
C-FR-F15B-6W ·	10	7.6	24.9	12.3	40.4	19.2	62.9	31.3	102.5	49.0	160.8
	11	6.9	22.6	11.2	36.7	17.4	57.2	28.4	93.3	44.6	146.2
	12	6.3	20.7	10.3	33.7	16.0	52.5	26.1	85.5	40.9	134.1
	13	5.8	19.1	9.5	31.1	14.8	48.5	24.1	79.0	37.7	123.8
	14	5.4	17.7	8.8	28.8	13.7	44.9	22.3	73.1	34.9	114.6
	15			8.2	27.0	12.8	42.0	20.9	68.5	32.7	107.4
	16			7.7	25.4	12.0	39.5	19.6	64.4	30.8	101.0
	17			7.3	23.9	11.3	37.2	18.5	60.6	29.0	95.0
	18			6.9	22.6	10.7	35.2	17.5	57.4	27.4	90.0
	19			6.5	21.4	10.2	33.3	16.6	54.3	26.0	85.2
	20			6.2	20.4	9.7	31.7	15.8	51.7	24.7	81.1
	1	45.3	148.5	73.5	241.3	114.6	375.8	186.7	612.5	292.7	960.4
	2	22.6	74.2	36.8	120.6	57.3	187.9	93.3	306.2	146.4	480.2
	з	15.1	49.5	24.5	80.4	38.2	125.3	62.2	204.2	97.6	320.1
	4	11.4	37.4	18.5	60.7	28.8	94.6	47.0	154.2	73.7	241.7
		9.1	29.9	14.8	48.5	23.0	75.6	37.5	123.2	58.9	193.1
		7.6	24.9	12.3	40.4	19.2	62.9	31.3	102.5	49.0	160.8
	7	6.5		10.6		16.5	54.1		88.2	42.1	138.3
C-FR-F15B-8W/9W			21.4		34.7			26.9			
		5.7	18.7	9.3	30.4	14.4	47.3	23.5	77.1	36.8	120.9
	9			8.2	26.9	12.8	41.9	20.8	68.3	32.6	107.0
	10			7.4	24.2	11.5	37.7	18.7	61.4	29.4	96.3
				6.8	22.2	10.5	34.6	17.2	56.4	26.9	88.4
	12			6.2	20.3	9.6	31.6	15.7	51.5	24.6	80.8
	13			5.7	18.8	8.9	29.2	14.5	47.6	22.8	74.7
	1	37.2	122.1	60.5	198.4	94.2	309.0	153.5	503.6	240.7	789.7
	2	18.6	61.0	30.2	99.2	47.1	154.5	76.7	251.8	120.3	394.8
	З	12.4	40.7	20.2	66.1	31.4	103.0	51.2	167.9	80.2	263.2
	4	9.3	30.5	15.1	49.6	23.5	77.3	38.4	125.9	60.2	197.4
-FR-F15B-12W	5	7.4	24.3	12.0	39.5	18.8	61.5	30.6	100.3	47.9	157.2
C-FR-ProF15B-12W	6	6.2	20.3	10.0	32.9	15.6	51.3	25.5	83.6	40.0	131.1
	7	1		8.6	28.3	13.5	44.1	21.9	71.9	34.4	112.8
	8	-		7.5	24.7	11.7	38.4	19.1	62.6	29.9	98.2
	9			6.7	22.0	10.5	34.3	17.1	56.0	26.7	87.7
				6.0	19.8	9.4	30.9	15.3	50.4	24.1	79.0

Note:

1. Please check the wire gauge of your connector in the table "Max. Running Length".

E.g., Single-end feed, C-FR-F15B-12W, 5m light length when with 18AWG wire, max. cable length should refer to the corresponding value 18.8m for 5m light length; Double-end feed, C-FR-F15B-12W, 10m light length when with 18AWG wire, max. cable length of each end should refer to the corresponding value 18.8m for half of light length

2. The above cable lengths are calculated based on minimum working voltage of 20.5V to activate the built-in constant current IC on circuitry, which enables input voltage range of 22-26V.

# F15B Max. Cable Length (Silicone)

Input: DC24V

						Cable	Length					
Item Code	Light Length (M)	0.3	2 mm <sup>2</sup>	0.52	2 mm <sup>2</sup>	0.81	L mm <sup>2</sup>	1.3	2 mm <sup>2</sup>	2.07 mm <sup>2</sup>		
item code		22AWG		20	AWG	18	AWG	16	AWG	14	AWG	
		m	ft	m	ft	m	ft	m	ft	m	ft	
	1	76.1	249.7	123.7	405.8	192.7	632.1	314.0	1030.0	492.3	1615.3	
	2	38.1	124.9	61.8	202.9	96.3	316.0	157.0	515.0	246.2	807.6	
	З	25.0	82.0	40.6	133.2	63.3	207.5	103.1	338.2	161.7	530.4	
	4	18.6	61.0	30.2	99.2	47.1	154.5	76.7	251.8	120.3	394.8	
	5	15.0	49.0	24.3	79.7	37.8	124.2	61.7	202.3	96.7	317.3	
	6	12.5	41.0	20.3	66.6	31.6	103.8	51.5	169.1	80.8	265.2	
	7	10.7	35.2	17.4	57.2	27.2	89.1	44.3	145.3	69.4	227.8	
	8	9.4	30.7	15.2	49.9	23.7	77.7	38.6	126.6	60.5	198.5	
	9	8.3	27.3	13.5	44.4	21.1	69.2	34.4	112.7	53.9	176.8	
	10	7.5	24.6	12.2	40.0	19.0	62.4	31.0	101.6	48.6	159.4	
	11	6.8	22.4	11.1	36.4	17.3	56.8	28.2	92.5	44.2	145.0	
	12	6.3	20.6	10.2	33.4	15.9	52.1	25.9	84.9	40.6	133.1	
	13	5.8	19.0	9.4	30.9	14.7	48.1	23.9	78.4	37.5	123.0	
	14	5.4	17.7	8.7	28.7	13.6	44.7	22.2	72.9	34.8	114.3	
C-SFR-F15B-6W	15			8.2	26.8	12.7	41.8	20.7	68.1	32.5	106.7	
	16			7.7	25.1	11.9	39.2	19.5	63.8	30.5	100.1	
	17			7.2	23.7	11.2	36.9	18.3	60.1	28.7	94.3	
	18	•		6.8	22.4	10.6	34.9	17.3	56.8	27.1	89.1	
	19	•   • • • • • • • • • • • • • • • • • •		6.5	21.2	10.1	33.0	16.4	53.8	25.7	84.4	
	20	•   • • • • • • • • • • • • •		6.1	20.2	9.6	31.4	15.6	51.2	24.5	80.2	
	21	• • • • • • • • • • • • • • • • • • • •		5.9	19.2	9.1	29.9	14.9	48.7	23.3	76.4	
	22			5.6	18.3	8.7	28.4	14.1	46.3	22.2	72.7	
				5.3	17.5	8.3	27.2	13.5	44.3	21.2	69.5	
	23 24					7.9	26.0	12.9	42.4	20.3	66.5	
						7.7	25.3	12.6	41.3	19.7	64.7	
	25					7.4	24.3	12.0	39.6	18.9	62.1	
	26 27											
						7.1	23.4	11.6	38.2	18.3	59.9	
	28					6.9	22.6	11.2	36.9	17.6	57.9	
	29					6.7	21.9	10.9	35.6	17.0	55.9	
	30	45.2				6.5	21.3	10.6	34.6	16.6	54.3	
	1	45.3	148.5	73.5	241.3	114.6	375.8	186.7	612.5	292.7	960.4	
	2	22.6	74.2	36.8	120.6	57.3	187.9	93.3	306.2	146.4	480.2	
	Э	15.0	49.0	24.3	79.7	37.8	124.2	61.7	202.3	96.7	317.3	
	4	11.2	36.9	18.3	59.9	28.4	93.3	46.4	152.1	72.7	238.5	
	5	9.0	29.5	14.6	48.0	22.8	74.8	37.1	121.8	58.2	191.1	
	6	7.5	24.7	12.3	40.2	19.1	62.6	31.1	102.1	48.8	160.1	
	7	6.5	21.5	10.6	34.9	16.6	54.3	27.0	88.5	42.3	138.8	
	8	5.7	18.6	9.2	30.2	14.3	47.0	23.3	76.6	36.6	120.1	
SFR-F15B-8W/9W	9			8.2	26.8	12.7	41.8	20.7	68.1	32.5	106.7	
	10			7.4	24.2	11.5	37.7	18.7	61.4	29.4	96.3	
	11			6.7	22.0	10.4	34.2	17.0	55.8	26.7	87.5	
	12			6.2	20.2	9.6	31.5	15.6	51.3	24.5	80.4	
	13			5.7	18.7	8.9	29.1	14.4	47.4	22.7	74.3	
	14					8.2	27.0	13.4	44.0	21.0	69.0	
	15					7.7	25.3	12.6	41.2	19.7	64.6	
	16	-				7.2	23.7	11.8	38.6	18.5	60.5	
	17					6.8	22.3	11.1	36.3	17.4	56.9	
	18	-+		+		6.4	21.1	10.5	34.3	16.4	53.8	

#### Input: DC24V

			Cable Length								
Item Code	Light Length	0.32 mm <sup>2</sup> 22AWG			mm²	0.81 mm <sup>2</sup>		1.32 mm <sup>2</sup>		2.07 mm <sup>2</sup> 14AWG	
	(M)			20/	20AWG		18AWG		AWG		
		m	ft	m	ft	m	ft	m	ft	m	ft
	1	36.4	119.4	59.2	194.1	92.1	302.3	150.2	492.6	235.5	772.5
	2	18.0	59.1	29.3	96.0	45.6	149.5	74.3	243.7	116.5	382.1
	З	12.0	39.2	19.4	63.8	30.3	99.3	49.3	161.9	77.4	253.8
	4	9.0	29.5	14.6	48.0	22.8	74.8	37.1	121.8	58.2	191.1
	5	7.2	23.6	11.7	38.3	18.2	59.7	29.6	97.3	46.5	152.5
	6	6.0	19.7	9.8	32.0	15.2	49.8	24.8	81.2	38.8	127.4
C-SFR-F15B-12W	7			8.4	27.5	13.0	42.8	21.3	69.7	33.3	109.3
	8			7.4	24.1	11.5	37.6	18.7	61.2	29.3	96.0
	9			6.7	22.0	10.4	34.2	17.0	55.8	26.7	87.5
	10			5.9	19.3	9.2	ЗО.1	15.0	49.0	23.4	76.9
	11			5.4	17.6	8.4	27.4	13.6	44.7	21.4	70.1
	12			[		7.7	25.1	12.5	40.9	19.6	64.1
	13			[		7.1	23.2	11.5	37.8	18.1	59.3
	14			[		6.6	21.5	10.7	35.1	16.8	55.0
	15			[		6.1	20.1	10.0	32.7	15.7	51.4

Note:

1. Please check the wire gauge of your connector in the table "Max. Running Length".

E.g., Single-end feed, C-SFR-F15B-12W, 5m light length when with 18AWG wire, max. cable length should refer to the corresponding value 18.2m for 5m light length; Double-end feed, C-SFR-F15B-12W, 10m light length when with 18AWG wire, max. cable length of each end should refer to the corresponding value 18.2m for 5m light length; In the state of the corresponding value 18.2m for 5m light length when with 18AWG wire, max. cable length of each end should refer to the corresponding value 18.2m for 5m light length; In the state of the corresponding value 18.2m for 5m light length when with 18AWG wire, max. cable length of each end should refer to the corresponding value 18.2m for 5m light length; In the state of the corresponding value 18.2m for 5m light length when with 18AWG wire, max. cable length of each end should refer to the corresponding value 18.2m for half of light length 5m;

2. The above cable lengths are calculated based on minimum working voltage of 20.5V to activate the built-in constant current IC on circuitry, which enables input voltage range of 22-26V.



# Flexglo<sup>™</sup> F15B Monochrome - AC120V Colorful Light (PVC)

Byear Warranty     Solvents Resistant     UV Resistant       Image: Resistant     Image: Resistant     Image: Resistant       Image: Resistant     Salt Water Resistant     Image: Resistant	Certification Mark Test Standard/Directive Certificate Serial Number Report Reference	UL1598 CSAC22.2 No.250.0 1910012675HA-001 1910012675HA-001	UL 2388 <u>CSA (22.2 No.37</u> 191001268SHA-001 191001268SHA-001
Light Color Red Green Blue Amber	Ambient Working Temperature \$10W/m -20 ~ 35°C /-4~95°C Max. Mounting Surface Temper 60°C /140°F specified in the non-working state of and up to 85°C for silicone type.	F (1) PVC products, when operating at below are vulnerable to breaking off from twisting rature AC High Voltage AC120V	-20 ~ 60°C /-4~140°F
C-FR-F15B-HB	C-FR-F15B-HB-AC120-G- WM-84-6W-500		ral multiple of min. cutting length. d in compliance with the required certificate

### Feature

Flexglo™ F15B Monochrome - AC120V Colorful Light (PVC) is ETL certificated, and maximum length for each individual piece is up to 20m. The IP65 High Voltage Injection-moulded Connector with SJTW cable is designed for outdoor use. Customized lengths with the Waterproof Male and Female Connectors improve the convenience of installation and maintenance. This product features a ultra long lifespan in outdoor application by leveraging ClearTech™ such as the Decentifier™ technology eliminating the failure risks of the whole electric circuit brought by the traditional external rectifier, the C-Mask™ technology retarding PVC discoloration and enabling consistent illumination.

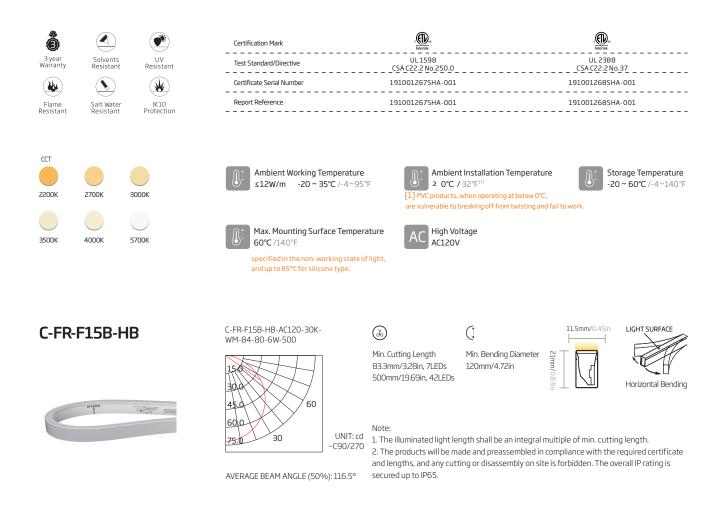


Category	C-FR-F15B-HB ETL-UL2388/1598	C-FR-F15B-HB ETL-UL2380/5598
Voltage (V)	120	120
Current (mA/m)	83.3	83.3
Power (W/m)	10	10
Circuit Type	AC	AC
LED Type	5050	5050
LEDs Qty/m	80	84
LEDs Qty/unit	10	7
Unit/m	8	12
Min. Cutting Length (mm)	125	83.3
Min. Cutting Length (in)	4.92	3.28

# **Optical Parameter**

literar Carda		Finished	LED		
Item Code	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
C-FR-F15B-HB-AC120-R-WM-80-10W-125	Red	618-624nm	220Im	67lm	< 3nm
C-FR-F15B-HB-AC120-G-WM-84-10W-83.3	Green	522-528nm	450lm	137lm	<3nm
C-FR-F15B-HB-AC120-B-WM-84-10W-83.3	Blue	468-474nm	80lm	24lm	<3nm
C-FR-F15B-HB-AC120-A-WM-80-10W-125	Amber	588-594nm	2201m	67lm	< 3nm

# Flexglo<sup>™</sup> F15B Monochrome - AC120V White Light (PVC)



### Feature

The IP65 High Voltage Injection-moulded Connector with SJTW cable is designed for outdoor use. Customized lengths with the Waterproof Male and Female Connectors improve the convenience of installation and maintenance. This product features a ultra long lifespan in outdoor application by leveraging ClearTech™ such as the Decentifier™ technology eliminating the failure risks of the whole electric circuit brought by the traditional external rectifier, the C-Mask™ technology retarding PVC discoloration and enabling consistent illumination.

С	FR	F15B	НВ	AC120	30K	WM	84	80	10W	83.3
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	сст	Base & Lighting Surface	LEDs Qty/m	CRI	Power/m	Min. Cutting Length (mm)
Clear	FR= (PVC) Flex Ribbon	F158= Monochrome	HB= Horizontal Bending	AC120V & High Voltage	22K=2200K 27K=2700K 30K=3000K 35K=3500K 40K=4000K 57K=5700K	WM= White & Milky	84	80	10W (ETL- UL2388/1598)	83.3

Category	C-FR-F15B-HB ETL-UL2388/1598
Voltage (V)	120
Current (mA/m)	83.3
Power (W/m)	10
Circuit Type	AC
LED Type	5050
LEDsQty/m	84
LEDs Qty/unit	7
Unit/m	12
Min. Cutting Length (mm)	83.3
Min. Cutting Length (in)	3.28

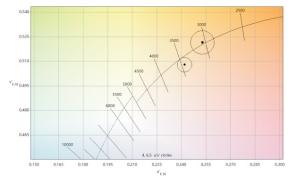
## **Optical Parameter**

		Finished Product						LED	
Item Code	CCT	CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI	
C-FR-F15B-HB-AC120-22K-WM-84-80-10W-83.3	_ 2200К	2238±102K	<6SDCM	80	300lm	91lm	<2.3SDCM	82~87	
C-FR-F15B-HB-AC120-27K-WM-84-80-10W-83.3	_ 2700К	2725±145K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87	
C-FR-F15B-HB-AC120-30K-WM-84-80-10W-83.3	_ зооок	3045±175K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87	
C-FR-F15B-HB-AC120-35K-WM-84-80-10W-83.3	_ 3500К	3465±245K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87	
C-FR-F15B-HB-AC120-40K-WM-84-80-10W-83.3	_ 4000К	3985±275K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87	
C-FR-F15B-HB-AC120-57K-WM-84-80-10W-83.3	_ 5700К	5669±355K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87	

Note:

1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

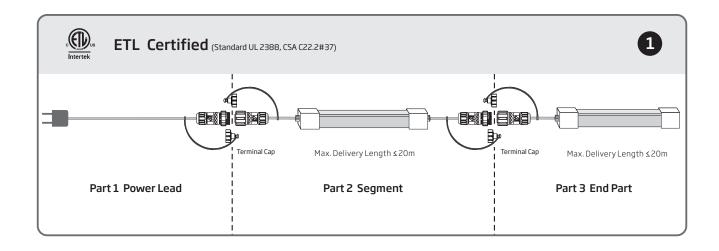
2. The color tolerance of finished products is kept <6SDCM from batch to batch and narrowed to <3SDCM at the same batch.

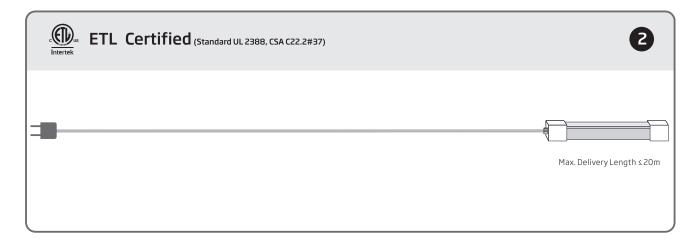


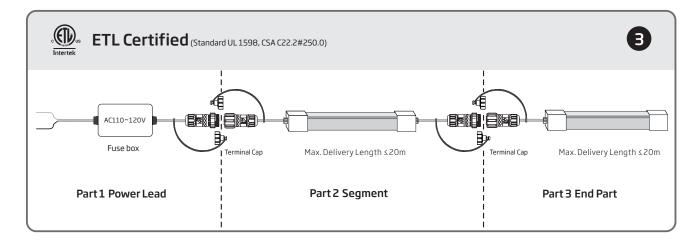
#### Color Matching

Color temperature value stated on all CLEAR's documents refers to finished products. LED's color temperature would be shifted by the light diffuser made of PVC or silicone material. CLEAR calibrates color temperature and color coordinate of tailor-made LEDs with proprietary color-matching algorithms to produce a precise color temperature and color coordinate close to black body locus for finished products. All LEDs would be strictly tested and tightly controlled to ensure finished products can meet ANSI standard.

# Flexglo<sup>™</sup> F15B-AC120V Wiring Diagram







#### • Part1

Three types of certifications are optional. Please connect this part with Part 2 or Part 3 according to the specific certification of the product.

#### Part2

The both ends are attached with high voltage injection-moulded front connectors and respectively equipped with male and female connectors, which can be used as an extension for Part 1.

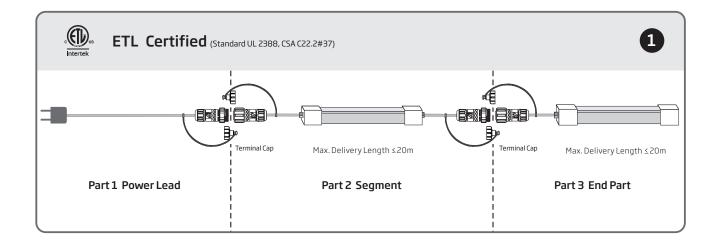
#### • Part3

The both ends are attached with high voltage injection-moulded front connector (same cable entry as Part 2) equipped with female connector and end cap respectively. The overall IP rating is secured up to IP65 after the assembly is finished.

#### Note:

1. The products will be made and preassembled in compliance with the required certificate and lengths, and any cutting or disassembly on site is forbidden.

2. Attention should be paid that all unconnected female connectors shall be sealed with terminal caps.



#### Part 1 Power Lead



1. This detachable power plug contains a backup 5A fuse wire which is replaceable when failure.

 ${\small 2. Please choose \, US \, or \, Canada \, type \, of \, power \, plug \, accordingly.}$ 

 $3.1t^{\prime}s$  SJTW cable with 18AWG\*2 wires inside. 1.8m standard or custom cable length is optional, while total length of cable and light shall be within 42m considering the voltage drop.

#### Item Code

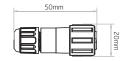
PL-AC120-US-Plug-ETL-1800MM For USA PL-AC120-CAN-Plug-ETL-1800MM For Canada

Female Connector



Male Connector





Tolerance: ±2mm For plug and play cable junction, IP65



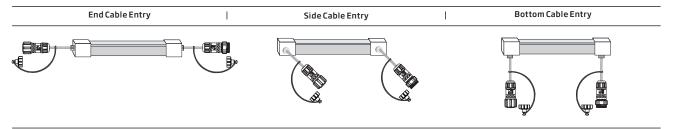


1. Out of the convenience of installation and maintenance, max. delivery length is 20m each light, and up to 40m in series connection.

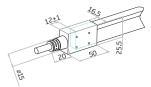
2. It's SJTW cable with 18AWG\*2wires inside. 0.3m standard or custom cable length is optional, while total length of cable and light shall be within 42m considering the voltage drop.

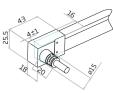
3. Please seal the last connector by the terminal cap to make it waterproof.

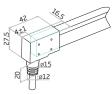
 $4.\,3$  types of cable entry including End, Side, and Bottom are available.



Item code	Item code	ltem code
F15B-IM/MC-HV-CE&ETL-E-300mm	F15B-IM/MC-HV-CE&ETL-S-300mm	F15B-IM/MC-HV-CE&ETL-B-300mm







Note: unless otherwise stated, the tolerance is ±0.5mm, To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

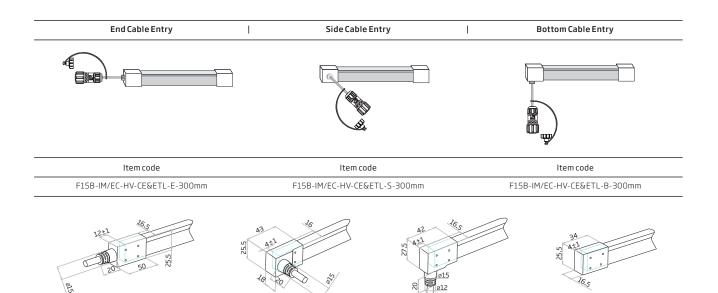
#### Part 3 End Part



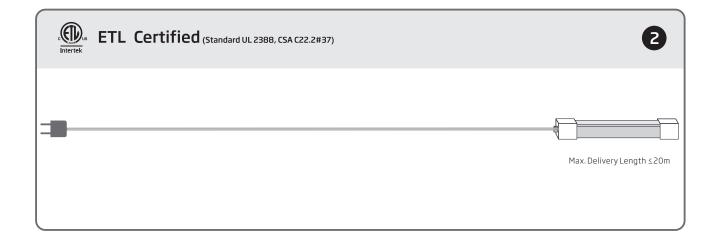
1. Out of the convenience of installation and maintenance, max. delivery length is 20m each light. .

2. It's SJTW cable with 18AWG\*2wires inside. 0.3m standard or custom cable length is optional, while total length of cable and light shall be within 42m considering the voltage drop.

3. 3 types of cable entry including End, Side, and Bottom are available.



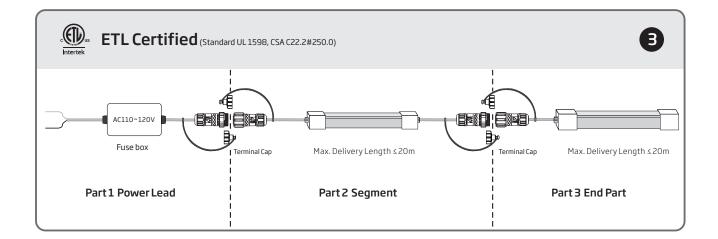
Note: Unless otherwise stated, the tolerance is ±0.5mm, To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.



Part 1 Power Lead  $1.\,This\,non-detachable\,power\,plug\,contains\,a\,backup\,5A\,fuse\,wire\,which\,is\,replaceable\,when$ failure. 2. Please choose US or Canada type of plug accordingly. 3. Out of the convenience of installation and maintenance, max. delivery length is 20m each light. 4. It's SJTW cable with 18AWG\*2wires inside. 1.8m standard or custom cable length is optional, while total length of cable and light shall be within 42m considering the voltage drop. L I End Cable Entry Side Cable Entry Bottom Cable Entry Item code Item code Item code F15B-IM/SET-HV-ETL-US-Plug-E-1800mm F15B-IM/SET-HV-ETL-US-Plug-S-1800mm F15B-IM/SET-HV-ETL-US-Plug-B-1800mm F15B-IM/SET-HV-ETL-CAN-Plug-S-1800mm F15B-IM/SET-HV-ETL-CAN-Plug-B-1800mm F15B-IM/SET-HV-ETL-CAN-Plug-E-1800mm 12=

Note: Unless otherwise stated, the tolerance is ±0.5mm, To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

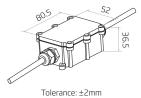
P15



Part 1 Power Lead



1.It's SJTW cable with 18AWG\*2wires inside. 1.4m and 0.3m standard cable lengths before and after the fuse box correspondingly, and custom cable length is optional, while total length of cable and light shall be within 42m considering the voltage drop. 2.Fuse box is connected with junction box and light at both ends. 3.It's forbidden to open the fuse box in the process of installation and use.



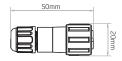
Item Code PL-AC120-FBox-ETL-1800MM

Female Connector



Male Connector



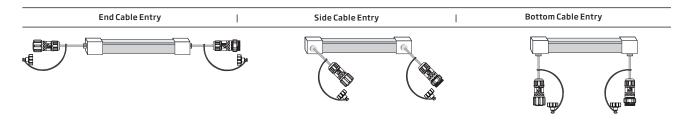


Tolerance: ±2mm For plug and play cable junction, IP65

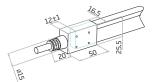
1. Out of the convenience of installation and maintenance, max. delivery length is 20m each light , and up to 40m in series connection.

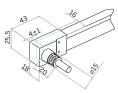
2. It's SJTW cable with 18AWG\*2wires inside. 0.3m standard or custom cable length is optional, while total length of cable and light shall be within 42m considering the voltage drop.

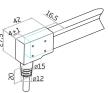
3. Please seal the last connector by the terminal cap to make it waterproof. 4. 3 types of cable entry including End, Side, and Bottom are available.



ltem code	Item code	Item code		
F15B-IM/MC-HV-CE&ETL-E-300mm	F15B-IM/MC-HV-CE&ETL-S-300mm	F15B-IM/MC-HV-CE&ETL-B-300mm		







Note: Unless otherwise stated, the tolerance is ±0.5mm, To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

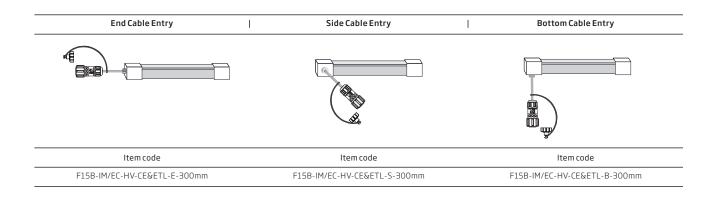
Part 3 End Part

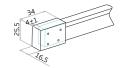


1. Out of the convenience of installation and maintenance, max. delivery length is 20m each light.

2. It's SJTW cable with 18AWG\*2 wires inside. 0.3m standard or custom cable length is optional, while total length of cable and light shall be within 42m considering the voltage drop.

3. 3 types of cable entry including End, Side, and Bottom are available.





Note: Unless otherwise stated, the tolerance is  $\pm 0.5 \text{mm},$ 

To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

# Flexglo<sup>™</sup> F15B Monochrome - AC230V Colorful Light (PVC)

	Certification Mark	CE	CE	CE	CE	СВ	SAA
3 year Solvents UV Warranty Resistant Resistant	Test Standard/Directive	CE-LVD	CE-EMC	CE-LVD	CE-EMC	IEC 60598-1 IEC 60598-2-20	AS/NZS 60598.1 AS/NZS 60598.2.20
	Certificate Serial Number Al	N 50275368 0001	AE 50274407 0001	LCS191008146BS	LCS191008145BE	DE 2-018301	TUV017540EA
Flame Salt Water IK10 Resistant Resistant Protection	Report Reference	17036967 001	17037105 001	LCS191008146BS	LCS191008145BE	14713952 001 	
Light Color	Ambient Working T ≤12W/m -20 ~ 35		(1) PVC proc	nbient Installation 0°C / 32°F <sup>[1]</sup> ducts, when operating ole to breaking off fro	j at below 0℃,	-20	age Temperature ~ 60°C /-4~140°F
Red Green Blue Amber	Max. Mounting Sur 60°C /140°F specified in the non- and up to 85°C for sill	working state of l	ALAC	gh Voltage 230V			
C-FR-F15B-HB	C-FR-F15B-HB-AC230-G- WM-72-12W-1000	(	<b>&amp;</b>	()		11.5mm/0.45in	LIGHT SURFACE
Service State	40 80 120 160 200 30	UNIT: cd 1 	Min. Cutting Length 250mm/9.84in, 21LE 166.7mm/6.56in, 14L 1000mm/39.37, 72LE Note: 1. The illuminated lig 2. The products will and lengths, and any	EDs EDs jht length shall be be made and preas	an integral multipl	iance with the re	quired certificate
	AVERAGE BEAM ANGLE (50	%): 116.0°	secured up to IP65.				

### Feature

Flexglo™ F15B Monochrome - AC230V Colorful Light (PVC) is CE certificated, and maximum length for each individual piece is up to 20m. The IP65 High Voltage Injection-moulded Connector with SJTW cable is designed for outdoor use. Customized lengths with the Waterproof Male and Female Connectors improve the convenience of installation and maintenance. This product features a ultra long lifespan in outdoor application by leveraging ClearTech™ such as the Decentifier™ technology eliminating the failure risks of the whole electric circuit brought by the traditional external rectifier, the C-Mask™ technology retarding PVC discoloration and enabling consistent illumination.

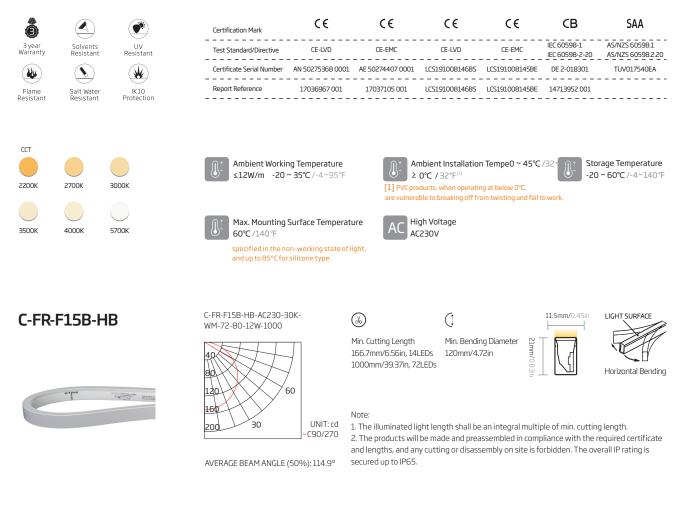


Category	C-FR-F15B-HB	C-FR-F15B-HB	C-FR-F15B-HB
Voltage (V)	230	230	230
Current (mA/m)	52.2	43.5	43.5
Power (W/m)	12	10	10
Circuit Type	AC	AC	AC
LED Type	2835	5050	5050
LEDs Qty/m	72	84	84
LEDs Qty/unit	72	21	14
Unit/m	1	4	6
Min. Cutting Length (mm)	1000	250	166.7
Min. Cutting Length (in)	39.37	9.84	6.56

# **Optical Parameter**

		Finished	LED		
Item Code	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
C-FR-F15B-HB-AC230-R-WM-72-12W-1000	e Red	618-624nm	100lm	30Im	<3nm
C-FR-F15B-HB-AC230-G-WM-72-12W-1000	Green	522-528nm	130lm	40Im	<3nm
C-FR-F15B-HB-AC230-B-WM-72-12W-1000	Blue	468-474nm	25lm	8lm	<3nm
C-FR-F15B-HB-AC230-A-WM-72-12W-1000	e Amber	588-594nm	100lm	30Im	<3nm
C-FR-F15B-HB-AC230-R-WM-84-10W-250	Red	618-624nm	240lm	73lm	<3nm
C-FR-F15B-HB-AC230-G-WM-84-10W-166.7	Green	522-528nm	480lm	146lm	<3nm
C-FR-F15B-HB-AC230-B-WM-84-10W-166.7	Blue	468-474nm	80lm	24Im	<3nm
C-FR-F15B-HB-AC230-A-WM-84-10W-250	Amber	588-594nm	240lm	73lm	<3nm

# Flexglo<sup>™</sup> F15B Monochrome - AC230V White Light (PVC)



### Feature

Flexglo™ F15B Monochrome - AC230V White Light (PVC) is CE certificated, and maximum length for each individual piece is up to 20m. The IP65 High Voltage Injection-moulded Connector with SJTW cable is designed for outdoor use. Customized lengths with the Waterproof Male and Female Connectors improve the convenience of installation and maintenance.

This product features a ultra long lifespan in outdoor application by leveraging ClearTech™ such as the Decentifier™ technology eliminating the failure risks of the whole electric circuit brought by the traditional external rectifier, the C-Mask™ technology retarding PVC discoloration and enabling consistent illumination.

С	FR	F15B	HB	AC230	30K	WM	72	80	12W	1000
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	ССТ	Base & Lighting Surface	LEDs Qty/m	CRI	Power/m	Min. Cutting Length (mm)
Clear	FR= (PVC) Flex Ribbon	F158= Monochrome	HB= Horizontal	AC230V & High Voltage	22K=2200K 27K=2700K 30K=3000K 35K=3500K	WM= White &	72	80	12W	1000
	Flex Ribbon	Monochiome	Bending	Voltage	40K=4000K 57K=5700K	Milky	84	80	10W	166.7

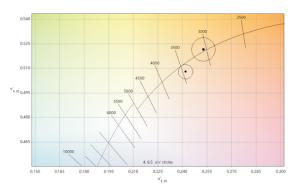
Category	C-FR-F15B-HB	C-FR-F15B-HB
Voltage	230	230
Current (mA/m)	52.2	43.5
Power (W/m)	12	10
Circuit Type	AC	AC
LED Type	2835	5050
LEDs Qty/m	72	84
LEDs Qty/unit	72	14
Unit/m	1	6
Min. Cutting Length (mm)	1000	166.7
Min. Cutting Length (in)	39.37	6.56

## **Optical Parameter**

	Finished Product						LED		
Item Code	ССТ	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-FR-F15B-HB-AC230-22K-WM-84-80-10W-166.7	_2200к	2238±102K	<6SDCM	80		320lm	98lm	<2.3SDCM	82~87
C-FR-F15B-HB-AC230-27K-WM-84-80-10W-166.7	_2700к	2725±145K	<6SDCM	80		400lm	122Im	<2.3SDCM	82~87
C-FR-F15B-HB-AC230-30K-WM-84-80-10W-166.7	_ 3000к	3045±175K	<6SDCM	80		400lm	122lm	<2.3SDCM	82~87
C-FR-F15B-HB-AC230-35K-WM-84-80-10W-166.7	_ 3500к	3465±245K	<6SDCM	80		400lm	122lm	<2.3SDCM	82~87
C-FR-F15B-HB-AC230-40K-WM-84-80-10W-166.7	_4000K	3985±275K	<6SDCM	80		400lm	122lm	<2.3SDCM	82~87
C-FR-F15B-HB-AC230-57K-WM-84-80-10W-166.7	_5700к	5669±355K	<6SDCM	80		400lm	122lm	<2.3SDCM	82~87
C-FR-F15B-HB-AC230-22K-WM-72-80-12W-1000	_2200К	2238±102K	<6SDCM	80		200lm	61lm	<2.3SDCM	82~87
C-FR-F15B-HB-AC230-27K-WM-72-80-12W-1000	_ 2700К	2725±145K	<6SDCM	80		200lm	61lm	<2.3SDCM	82~87
C-FR-F15B-HB-AC230-30K-WM-72-80-12W-1000	_ 3000к	3045±175K	<6SDCM	80		200lm	61lm	<2.3SDCM	82~87
C-FR-F15B-HB-AC230-35K-WM-72-80-12W-1000	_ 3500к	3465±245K	<6SDCM	80		240Im	73lm	<2.3SDCM	82~87
C-FR-F15B-HB-AC230-40K-WM-72-80-12W-1000	_4000к	3985±275K	<6SDCM	80		240Im	73lm	<2.3SDCM	82~87
C-FR-F15B-HB-AC230-57K-WM-72-80-12W-1000	_5700к	5669±355K	<6SDCM	80		240lm	73lm	<2.3SDCM	82~87

Note:

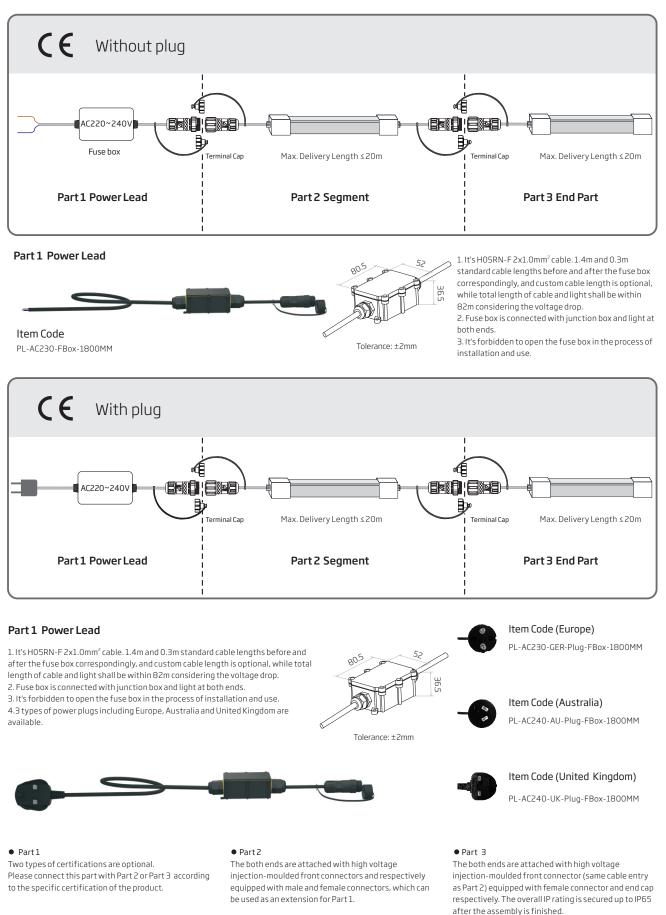
CCT tolerance and color tolerance both refer to ANSI C78.377 standard.
 The color tolerance of finished products is kept <6SDCM from batch to batch and narrowed to <3SDCM at the same batch.</li>



#### Color Matching

Color temperature value stated on all CLEAR's documents refers to finished products. LED's color temperature would be shifted by the light diffuser made of PVC or silicone material. CLEAR calibrates color temperature and color coordinate of tailor-made LEDs with proprietary color-matching algorithms to produce a precise color temperature and color coordinate close to black body locus for finished products. All LEDs would be strictly tested and tightly controlled to ensure finished products can meet ANSI standard.

# Flexglo<sup>™</sup> F15B-AC230V Wiring Diagram (PVC)



#### Note:

1. The products will be made and preassembled in compliance with the required certificate and lengths, and any cutting or disassembly on site is forbidden.

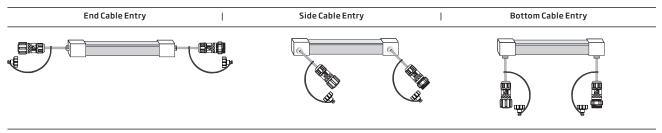
2. Attention should be paid that all unconnected female connectors shall be sealed with terminal caps.



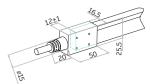


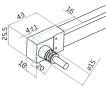
1. Out of the convenience of installation and maintenance, max. delivery length is 20m each light, and up to 80m in series connection.

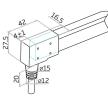
2. It's HO5RN-F 2x1.0mm<sup>2</sup> cable. 0.3m standard or custom cable length is optional, while total length of cable and light shall be within 82m considering the voltage drop.
3. Please seal the last connector by the terminal cap to make it waterproof.
4. 3 types of cable entry including End, Side, and Bottom are available.



ltem code	Item code	Item code
F15B-IM/MC-HV-CE&ETL-E-300MM	F15B-IM/MC-HV-CE&ETL-S-300MM	F15B-IM/MC-HV-CE&ETL-B-300MM





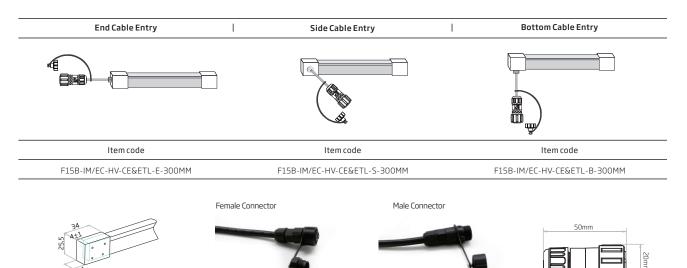


Note: unless otherwise stated, the tolerance is ±0.5mm, To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

#### Part 3 End Part



1. It's HO5RN-F 2x1.0mm<sup>2</sup> cable. 0.3m standard or custom cable length is optional, while total length of cable and light shall be within 82m considering the voltage drop. 2. 3 types of cable entry including End, Side, and Bottom are available.



2.5

Note: unless otherwise stated, the tolerance is ±0.5mm

For plug and play cable junction, IP65

Tolerance: ±2mm

# Flexglo<sup>™</sup> F15B Monochrome - AC230V Short Cut Colorful Light (Silicone)

ð 🔇 💌	Certification Mark	CE	CE	CE	СВ	SAA
5 year Solvents UV Warranty Resistant Resistant	Test Standard/Directive CE	= = = = = = = = = = = = = = = = = = =	CE-EMC	CE-LVD		
	Certificate Serial Number LCS1910	008146BE	LCS191008145BE	N8A 105886 0008 Rev.00	SG PSB-LE-02769	GMA-507965-EZ
Flame Salt Water IK10 Resistant Resistant Protection	Report Reference LCS1910	008146BE	LCS191008145BE	6814020024201	211-14200242-000	
Light Color	Ambient Working Tempe ≤10W/m -40~45°C/-4		Ambient 2 -40°C	Installation Temperature / -40°F <sup>(1)</sup>		je Temperature 60℃ /-40~140°F
Red Green Blue	Max. Mounting Surface T 85°C /185°F specified in the non-workin		AC High Volt AC230V	age		
C-SFR-F15B-HB	C-SFR-F15B-HB-AC230V-G-WM -84-10W-166.7	$(\mathcal{A})$		()	11.5mm/0.45in L	IGHT SURFACE
a that the second	40 80 120 60 160 200 30	250mn 166.7m NIT: cd 1. The i 2. The and ler	n/9.84in, 21LEDs 1m/6.56in, 14LEDs illuminated light leng products will be mad	Min. Bending Diameter 120mm/4.72in gth shall be an integral mult de and preassembled in com ng or disassembly on site is	tiple of min. cutting le	uired certificate

### Feature

Flexglo™ F15B Monochrome - AC230V Colorful Light (silicone) is CE certificated, and maximum length for each individual piece is up to 20m. The IP65 High Voltage Injection-moulded Connector with SJTW cable is designed for outdoor use. Customized lengths with the Waterproof Male and Female Connectors improve the convenience of installation and maintenance. This product features a ultra long lifespan in outdoor application by leveraging ClearTech™ such as the Decentifier™ technology eliminating the failure risks of the whole electric circuit brought by the traditional external rectifier, the C-Mask™ technology retarding Silicone discoloration and enabling consistent illumination.

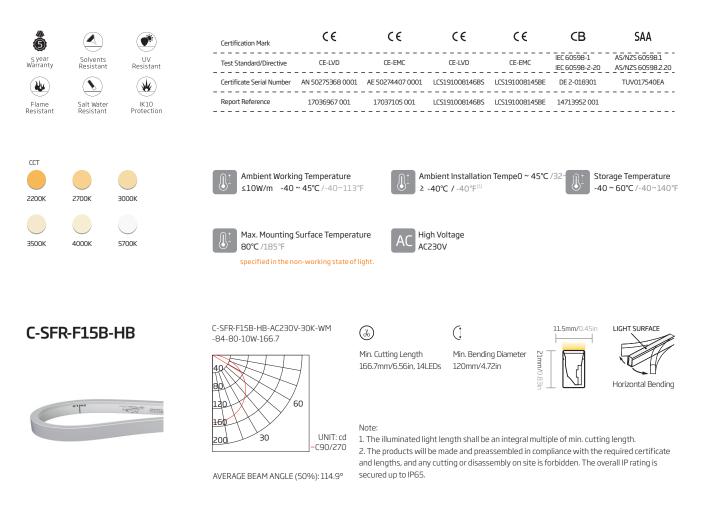


Category	C-SFR-F15B-HB	C-SFR-F15B-HB
Voltage (V)	230	230
	43.5	43.5
Power (W/m)	10	10
Circuit Type	AC	AC
LED Туре	5050	5050
LEDs Qty/m	84	84
LEDs Qty/unit	21	14
Unit/m	4	6
Min. Cutting Length (mm)	250	166.7
Min. Cutting Length (in)	9.84	6.56

# **Optical Parameter**

la su Code		Finished	LED		
Item Code	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
C-SFR-F15B-HB-AC230V-R-WM-84-10W-250	e Red	618-624nm	130lm	40Im	<3nm
C-SFR-F15B-HB-AC230V-G-WM-84-10W-166.7	Green	522-530nm	350lm	107lm	<3nm
C-SFR-F15B-HB-AC230V-B-WM-84-10W-166.7	Blue	468-474nm	70lm	21lm	<3nm

# Flexglo<sup>™</sup> F15B Monochrome - AC230V Short Cut White Light (Silicone)



### Feature

Flexglo™ F15B Monochrome - AC230V White Light (Silicone) is CE certificated, and maximum length for each individual piece is up to 20m. The IP65 High Voltage Injection-moulded Connector with SJTW cable is designed for outdoor use. Customized lengths with the Waterproof Male and Female Connectors improve the convenience of installation and maintenance.

This product features a ultra long lifespan in outdoor application by leveraging ClearTech™ such as the Decentifier™ technology eliminating the failure risks of the whole electric circuit brought by the traditional external rectifier, the C-Mask™ technology retarding Silicone discoloration and enabling consistent illumination.

С	SFR	F15B	HB	AC230	30K	WM	84	80	10W	166.7
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	ССТ	Base & Lighting Surface	LEDs Qty/m	CRI	Power/m	Min. Cutting Length (mm)
Clear	SFR= (Silicone) Flex Ribbon	F15B= Monochrome	HB≈ Horizontal Bending	AC230V & High Voltage	22K=2200K 27K=2700K 30K=3000K 35K=3500K 40K=4000K 57K=5700K	WM= White & Milky	84	80	10W	166.7

Category	C-SFR-F15B-HB
Voltage	230
Current (mA/m)	43.5
Power (W/m)	10
Circuit Type	AC
LED Type	5050
LEDs Qty/m	84
LEDs Qty/unit	14
Unit/m	6
Min. Cutting Length (mm)	166.7
Min. Cutting Length (in)	6.56

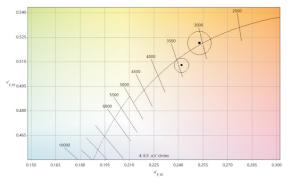
## **Optical Parameter**

	Finished Product							LED	
Item Code	ССТ	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F15B-HB-AC230V-22K-WM-84-80-10W-166.7	2200К	2238±102K	<6SDCM	80	N/A	210Im	64lm	<2.3SDCM	82~87
C-SFR-F15B-HB-AC230V-27K-WM-84-80-10W-166.7	2700к	2725±145K	<6SDCM	80	N/A	260lm	79lm	<2.3SDCM	82~87
C-SFR-F15B-HB-AC230V-30K-WM-84-80-10W-166.7	зооок	3045±175K	<6SDCM	80	N/A	260lm	79lm	<2.3SDCM	82~87
C-SFR-F15B-HB-AC230V-35K-WM-84-80-10W-166.7	_ 3500К	3465±245K	<6SDCM	80	N/A	260lm	79lm	<2.3SDCM	82~87
C-SFR-F15B-HB-AC230V-40K-WM-84-80-10W-166.7	_4000K	3985±275K	<6SDCM	80	N/A	260lm	79 lm	<2.3SDCM	82~87
C-SFR-F15B-HB-AC230V-57K-WM-84-80-10W-166.7	_5700К	5669±355K	<6SDCM	80	N/A	260lm	79 lm	<2.3SDCM	82~87

Note:

1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

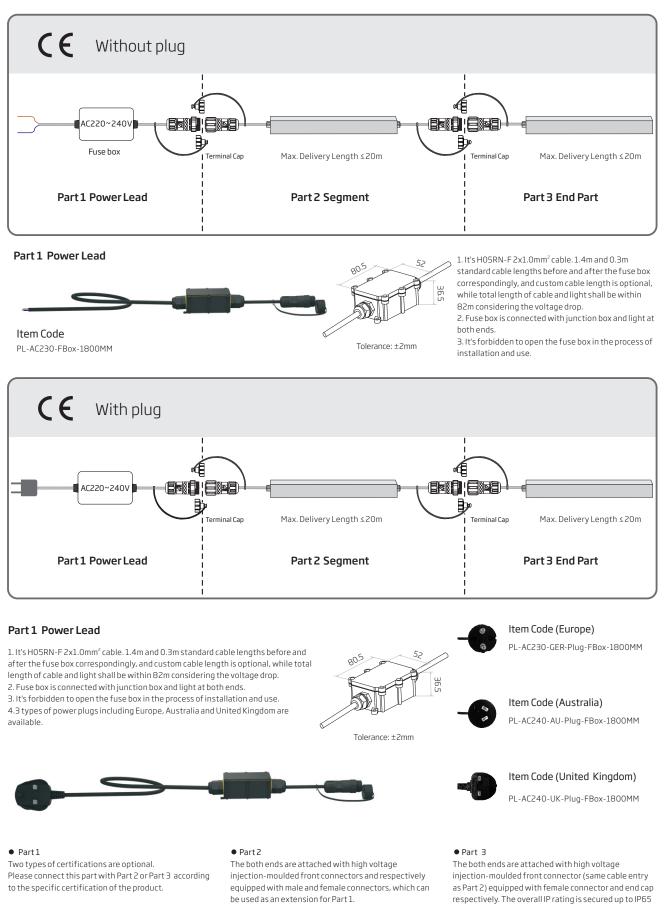
2. The color tolerance of finished products is kept < 5SDCM from batch to batch and narrowed to < 3SDCM at the same batch.



#### Color Matching

Color temperature value stated on all CLEAR's documents refers to finished products. LED's color temperature would be shifted by the light diffuser made of PVC or silicone material. CLEAR calibrates color temperature and color coordinate of tailor-made LEDs with proprietary color-matching algorithms to produce a precise color temperature and color coordinate close to black body locus for finished products. All LEDs would be strictly tested and tightly controlled to ensure finished products can meet ANSI standard.

# Flexglo<sup>™</sup> F15B-AC230V Wiring Diagram (Silicone)



#### Note:

1. The products will be made and preassembled in compliance with the required certificate and lengths, and any cutting or disassembly on site is forbidden.

after the assembly is finished.

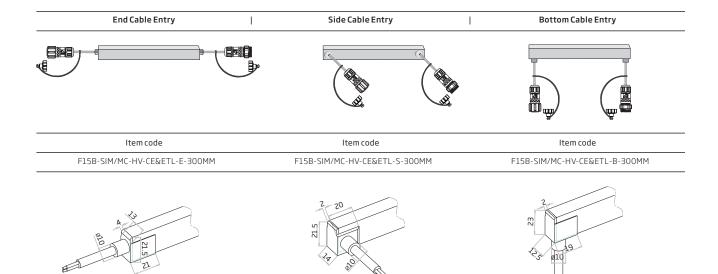
2. Attention should be paid that all unconnected female connectors shall be sealed with terminal caps.

#### Part 2 Segment



1. Out of the convenience of installation and maintenance, max. delivery length is 20m each light, and up to 80m in series connection.

2. It's HO5RN-F 2x1.0mm<sup>2</sup> cable. 0.3m standard or custom cable length is optional, while total length of cable and light shall be within 82m considering the voltage drop.
3. Please seal the last connector by the terminal cap to make it waterproof.
4. 3 types of cable entry including End, Side, and Bottom are available.



Note: unless otherwise stated, the tolerance is ±0.5mm, To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

#### Part 3 End Part



1. It's HO5RN-F 2x1.0mm<sup>2</sup> cable. 0.3m standard or custom cable length is optional, while total length of cable and light shall be within 82m considering the voltage drop. 2. 3 types of cable entry including End, Side, and Bottom are available.

End Cable Entry	Side Cal	ble Entry	Bottom Cable Entry
		2 2	
Item code	Item	code	Item code
F15B-SIM/EC-HV-CE&ETL-E-300MM	F15B-SIM/EC-HV	-CE&ETL-S-300MM	F15B-SIM/EC-HV-CE&ETL-B-300MM
STR 19	male Connector	Male Connector	

Note: unless otherwise stated, the tolerance is  $\pm 0.5$ mm

For plug and play cable junction, IP65

Tolerance: ±2mm

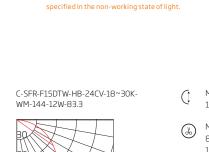
# Flexglo<sup>™</sup> F15DTW - Dim To Warm (Silicone)

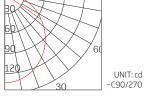


1800K~3000K

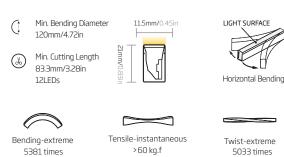
. Contraction







AVERAGE BEAM ANGLE (50%): 111.4°



Ambient Installation Temperature

≥ -40°C/-40°F

Constant Current

DC24V

C

Storage Temperature

-40~60°C/-40~140°F

Warning: Extreme Destructive Tests in laboratory only, and it's forbidden to operate in practice

#### Note:

1. The illuminated light length shall be an integral multiple of min. cutting length. 2. The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

### Feature

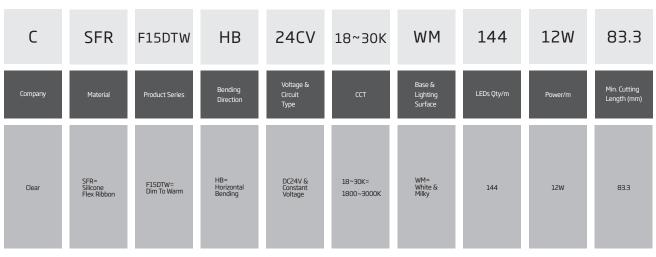
Flexglo<sup>™</sup> F15DTW - Dim To Warm (Silicone) is suitable for the residence and hospitality industry with a rated power of 12W/m, synchronized with CCT change during dimming to create the cozy a 90Ra Thanks to the excellent weatherproof and UV resistant performance of silicone material, it features a wide ambient working temperature range of -40-55  $^{\circ}\!C$  , especially suitable for harsh environment application.

Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology,

\*The IP68 Silicone Injection-moulded Connector is engineered for underwater use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit<sup>™</sup> technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech<sup>™</sup> such as the PinBoost<sup>™</sup> technology enhancing physical reliability of light engine, the TwinFlex™ technology improving the conductivity and optimizing heat dissipation performance, the C-Mask™ technology making the light body self-cleaning and anti-UV and enabling consistent illumination.



Category	C-SFR-F15DTW-HB
Voltage	24
Current (mA/m)	500
Power (W/m)	12
Circuit Type	CV
LED Type	3015
LEDs Qty/m	144
LEDs Qty/unit	12
Unit/m	12
Min. Cutting Length (mm)	83.3
Min. Cutting Length (in)	3.28

## **Optical Parameter**

litera Carla	Finished Product							LED	
Item Code	ССТ	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F15DTW-HB-24CV-18~30K-WM-144-12W-83.3	1800K	1800±100K	<5SDCM	80	/	2	0.6	<2.3SDCM	80
	3000K	3045±175K	<5SDCM	90	35~80	340lm	104lm	<2.3SDCM	80

#### Note:

1. The above value of 1800K is tested by setting the brightness down to 5%.

2. The above value of 3000K is tested by setting the brightness up to 100%.

3. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

4. The color tolerance of finished products is kept < 5SDCM from batch to batch and narrowed to < 3SDCM at the same batch.

## Max. Running Length Input: DC24V

	-6	. 1			R	1	A	8	1		
Туре	Swivel 0	Connector	Sleeve	Sleeve Connector		Snap Connector		Socket Connector		Silicone Injection-moulded Connector	
IP Rating	IP	20	IP	40	IP67		IP	67	IP68		
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	
C-SFR-F15DTW-12W	5m/16.4ft	10m/32.8ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	
Dimension of Connector	Page	F15128	Page F	15 131	Page F15 135		Page F	15 140	Page	F15 149	
Max.Packing Length		Page F15 198									

Note:

2. The maximum running length is based on the light in static full loading status exceptionally stated dynamic operating.

Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.
 The delivery length might be subject to the maximum packing length.

<sup>1.</sup> Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

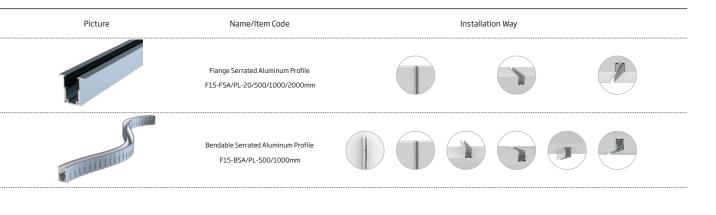
# F15DTW Connector (Silicone)

Type/IP Rating	Bending Direction	Front Connector End	Front Connector Side from Left	Front Connector Side from Right	Front Connector Bottom	
Swivel Connector		(1.1	N/A	N/A	N/A	
IP20	HB	F15DTW-HB-SW/FC- 01/02-E-0.3m/1m 22AWG*2	N/A	N/A	N/A	
Sleeve Connector	НВ	D	N/A	N/A	N/A	
IP40		F15DTW-HB-SL/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	N/A	N/A	N/A	
Snap Connector IP67	НВ	F15DTW-HB-SN/FC- 01/02-E- 0.3m/1m/3m// 10m/15m/20m 18AWG*2	F15DTW-HB-SN/FC- 01/02-SL- 0.3m/1m/3m//Sm/ 10m/15m/20m 18AWG*2	F15DTW-HB-SN/FC- 01/02-SR- 0.3m/1m/3m//Sm/ 10m/15m/20m 18AWG*2	F15DTW-HB-SN/FC- 01/02-8- 0.3m/1m/3m// 10m/15m/20m 18AWG*2	
Socket Connector IP67	НВ	F15DTW-HB-SO/FC- 01/02-E-	N/A	N/A	N/A	
		0.3m/1m/3m/5m 18AWG*2	N/A	N/A	N/A	
Silicone Injection- moulded Connector IP68	НВ	F15DTW-HB-SIM/FC- 01/02-E- 0.3m/1m/3m//5m/ 10m/15m/20m 18AWG*2	F15DTW-HB-SIM/FC- 02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15DTW-HB-SIM/FC- 01-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	F15DTW-HB-SIM/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*2	

# F15 Mounting Profile

Picture	Name/Item Code	Installation Way
	Aluminum Profile F15-A/PL-35/500/1000/2000mm	
	Flange Aluminum Profile F15-FA/PL-35/500/1000/2000mm	
	Serrated Aluminum Profile F15-SA/PL-20/500/1000/2000mm	

Type/IP Rating	Seamless Middle Connector & Power Feed	Middle Connector & Power T-feed	Middle Connector	jumper	End Cap
Swivel	N/A	N/A	N/A	N/A	61.1
Connector IP20	N/A	N/A	N/A	N/A	F15-SW/EC
Sleeve Connector	N/A	1-9-11	11 d	al a	Ū
IP40	N/A	F15DTW-HB-SL/MC- PTF-01/02- 0.3m/1m/3m 18AWG*2	F15DTW-HB-SL/MC	F15DTW-HB-SL/JU- 01/02-0.3m/1m 18AWG*2	F15-SL/EC
Snap Connector	N/A	DYS	N/A	E.	
IP67	N/A	F15DTW-HB-SN/MC- PTF-01/02- 0.3m/1m/3m 18AWG*2	N/A	F15DTW-HB-SN/JU- 01/02-0.3m/1m 18AWG*2	F15-SN/EC-01/02
Socket Connector	N/A	N/A	N/A	N/A	
IP67	N/A	N/A	N/A	N/A	F15-S0/EC
Silicone Injection-	N/A	R - F	N/A		
moulded Connector IP68	N/A	F15DTW-HB-SIM/MC- PTF-0.3m/1m/3m 18AWG*2	N/A	F15DTW-HB-SIM/JU- 0.3m/1m 18AWG*2	F15-SIM/EC



# Flexglo<sup>™</sup> F15DTW Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 3. Dimming frequency ranges from 100Hz to 2000Hz, and 500Hz is recommended.

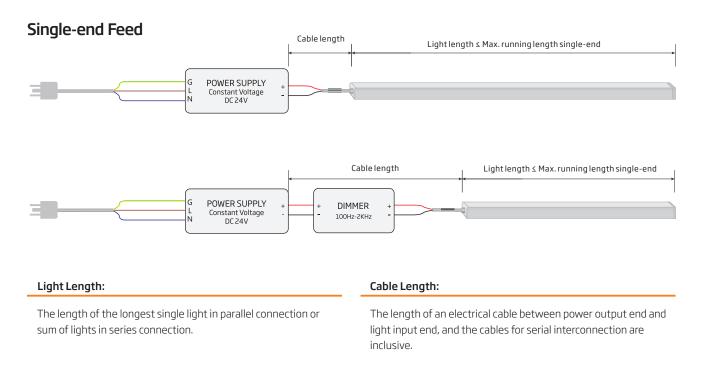
Input AC100~240V

Australia

United Kingdom

4. Types of standard plugs are optional if power cord is purchased from CLEAR.

Europe



USA

#### How to Minimize Voltage Drop

1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.

2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".

## Max. Running Length Single-end Feed

Input: DC24V		
Connector Type	Socket Connector	Silicone Injection-moulded Connector
Wire Gauge	18AWG*2	18AWG*2
C-SFR-F15DTW-12W	15m/49.2ft	15m/49.2ft

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

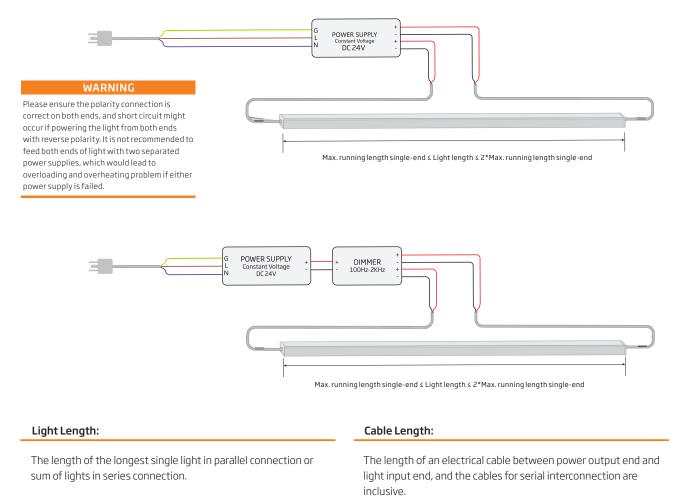
2. The maximum running length is based on the designated light in static full loading status.

3. Above running length is only the light length excluding lengths of connectors.

4. The delivered length might be subject to the maximum packing length.

### **Double-end Feed**

The following wiring diagram with double-end feed to run length that is longer than max. running length for single-end feed but less than twice the value.



#### How to Minimize Voltage Drop

1.It is optimal to position the power supply in the middle of a single light or multiple lines in daisy chain to keep the equivalent cable length on both ends for double-end feed.

2. Please ensure the cable length is not more than the table "Max. Cable Length" according to the half of light length and its wire gauge.

3. Please ensure the light length is less than the table "Max. Running Length Double-end Feed".

## Max. Running Length Double-end Feed

Input: DC24V					
Connector Type	Socket Connector	Silicone Injection-moulded Connector			
Wire Gauge	18AWG*2	18AWG*2			
C-SFR-F15DTW-12W					

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

 ${\it 2. The maximum running length is based on the designated light in static full loading status.}$ 

 ${\tt 3.}\,{\tt Above\,running\,length\,is\,only\,the\,light\,length\,excluding\,lengths\,of\,connectors.}$ 

4. The delivered length might be subject to the maximum packing length.

## F15DTW Max. Cable Length (Silicone)

Input: DC24V

	Light Length (M)	Cable Length									
Item Code		0.32 mm <sup>2</sup> 22AWG		0.52 mm <sup>2</sup> 20AWG		0.81 mm <sup>2</sup> 18AWG		1.32 mm <sup>2</sup> 16AWG		2.07 mm <sup>2</sup> 14AWG	
		- - - - - - - - - - - - - - - - - - -	1	19.0	62.3	31.0	101.7	48.5	159.1	79.5	260.8
2	9.5		31.2	15.5	50.8	24.0	78.7	39.5	129.6	63.5	208.3
З	6.5		21.3	10.5	34.4	16.5	54.1	27.0	88.6	42.0	137.8
4	5.0		16.4	8.0	26.2	12.5	41.0	20.0	65.6	32.0	105.0
5	4.0		13.1	6.5	21.3	10.0	32.8	16.0	52.5	25.0	82.0
6	З.О		9.8	5.5	18.0	8.5	27.9	14.0	45.9	21.0	68.9
7				5.0	16.4	7.5	24.6	12.0	39.4	19.5	64.0
8				4.0	13.1	6.5	21.3	11.0	36.1	17.0	55.8
9				4.0	13.1	6.0	19.7	10.0	32.8	16.0	52.5
10				3.5	11.5	6.0	19.7	9.0	29.5	14.5	47.6
11				3.0	9.8	5.0	16.4	7.5	24.6	12.0	39.4
12						4.0	13.1	7.0	23.0	11.0	36.1
13						4.0	13.1	6.5	21.3	10.5	34.4
14						3.5	11.5	6.0	19.7	10.0	32.8
	15					3.5	11.5	6.0	19.7	9.5	31.2

Note:

1. Please check the wire gauge of your connector in the table "Max. Running Length".

E.g.,

Single-end feed, C-SFR-F15DTW-12W, 5m light length with 18AWG wire, max. cable length should refer to the corresponding value 10m for 5m light length; Double-end feed, C-SFR-F15DTW-12W, 10m light length with 18AWG wire, max. cable length of each end should refer to the corresponding value 10m for half of light length 5m; 2. The above cable lengths are calculated based on 10% allowable voltage drop maximum.



# Flexglo<sup>™</sup> F15D Dynamic Light (PVC)

ð <	Certification Mark	(UL)	CE
3 year Solvents UV Warranty Resistant Resistant	Test Standard/Directive	UL2108 Class 2	CE-EMC
	Certificate Serial Number	20180801-E360029	SZEM1712012372LMV
Flame Salt Water IK10 Resistant Resistant Protection	Report Reference	E360029-20130322	SZEM171201237201
2200K~5700K	Ambient Working Temperature $\le 12W/m - 20 \sim 45^{\circ}C/-4 \sim 113^{\circ}F$ Max. Mounting Surface Temperatur $60^{\circ}C/140^{\circ}F$ specified in the non-working state of light, and up to 85^{\circ}C for silicone type.	<ul> <li>2 0°C / 32°F<sup>[1]</sup></li> <li>PVC products, when opera are vulnerable to breaking off</li> </ul>	from twisting and fail to work.
C-FR-F15D-HB	C-FR-F15D-HB-24CV-22~57K- WM-144-80-12W-83.3	Min. Bending Diameter 120mm/4.72in	11.5mm/0.45in LIGHT SURFACE
T	UNIT: cd -C90/270 AVERAGE BEAM ANGLE (50%): 113.7°	2417 times	Image: Description of the second s
	Note:		

1. The illuminated light length shall be an integral multiple of min. cutting length.

2. The waterproof reliability of the lighting fixture depends on the IP rating of connector, and

please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

### Feature

Flexglo™ F15D Dynamic Light (PVC) is tunable from 2200K to 5700K or other colors, and dim to warm are optional, setting the harmonious tone for the surrounding space.

Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology,

### Item Code



\*The IP68 Dual Injection-moulded Connector is specially designed for long-term submersible applications.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit<sup>™</sup> technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology enhancing physical reliability of light engine, the C-Mask™ technology retarding PVC discoloration and enabling consistent illumination.

С	FR	F15D	HB	24CV	22~57K	WM	144	80	12W	83.3
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	ССТ	Base & Lighting Surface	LEDs Qty/m	CRI	Power/m	Min. Cutting Length (mm)
Clear	FR= (PVC) Flex Ribbon	F15D= Dynamic	HB= Horizontal Bending	DC24V & Constant Voltage	22~57K= 2200~5700K	WM= White & Milky	144	80	12W	83.3

### **Electrical Parameter**

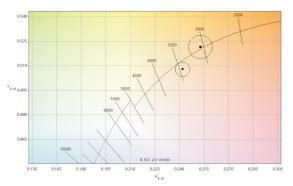
Category	C-FR-F15D-HB
Voltage	24
Current (mA/m)	500.0
Power (W/m)	12
Circuit Type	CV
LED Type	3015
LEDs Qty/m	144
LEDs Qty/unit	12(6+6)
Unit/m	12
Min. Cutting Length (mm)	83.3
Min. Cutting Length (in)	3.28

### **Optical Parameter**

Item Code						
CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
2200K 2238±102	< <6SDCM	80	110lm	34lm	<2.3SDCM	82~87
C-FR-F15D-HB-24CV-22~57K-WM-144-12W-83.35700K 5669±355	K <6SDCM	80	110lm	34lm	<2.3SDCM	82~87

Note: 1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

2. The color tolerance of finished products is kept < 6SDCM from batch to batch and narrowed to < 3SDCM at the same batch.



### Color Matching

Color temperature value stated on all CLEAR's documents refers to finished products. LED's color temperature would be shifted by the light diffuser made of PVC or silicone material. CLEAR calibrates color temperature and color coordinate of tailor-made LEDs with proprietary color-matching algorithms to produce a precise color temperature and color coordinate close to black body locus for finished products. All LEDs would be strictly tested and tightly controlled to ensure finished products can meet ANSI standard.

### Max. Running Length Input: DC24V

	20		2 6 3		4	1	
Туре	Sleeve	Connector	Snap C	onnector	Socket	Connector	
IP Rating	IP	40	IF	P67	IP67		
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	
C-FR-F15D-12W-Static full loading	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	
C-FR-F15D-12W-Dynamic operating	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft	
Dimension of Connector	Page F	15131	Page	F15135	Page F15 140		
Max.Packing Length			Page	F15198			
Ter			Dual Injection of	noulded Connector	Note: 1. Above conclusion is b testing result of the light cable only.	nt with 0.3m (0.98ft)	
Туре	Injection-moul				<ol> <li>The maximum runnir light in static full loadin</li> </ol>		
IP Rating		67		268	stated dynamic operati		
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	<ul> <li>3. Above running length</li> </ul>		
C-FR-F15D-12W-Static full loading	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	excluding lengths of co		
C-FR-F15D-12W-Dynamic operating	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft	the specific dimension		
Dimension of Connector	Page F	15143	Page	F15155	4. The delivery length n		
	acking Length Page F1				maximum packing length.		

# Flexglo<sup>™</sup> F15D Dynamic Light With Brand LED (PVC)

<b>6 (</b>	Certification Mark	(UL)	CE
3 year Solvents UV Warranty Resistant Resistant	Test Standard/Directive	UL2108 Class 2	CE-EMC
	Certificate Serial Number	20180801-E360029	SZEM1712012372LMV
Flame Salt Water IK10 Resistant Protection	Report Reference	E360029-20130322	SZEM171201237201
	Ambient Working Temperature s12W/m -20 ~ 45°C/-4~113°F	≥ 0°C / 32°F <sup>[1]</sup> [1] PVC products, when operation	tion Temperature ating at below 0°C, f from twisting and fail to work.
2500K~5000K	Max. Mounting Surface Temperat 60°C /140°F specified in the non-working state of light, and up to 85°C for silicone type.	ure CV Constant Voltag	ge
C-FR-ProF15D-HB	C-FR-F15D-HB-24CV-25~50K- WM-144-80-12W-83.3	<ul> <li>Min. Bending Diameter 120mm/4.72in</li> <li>Min. Cutting Length 83.3mm/3.28in 6+6LEDs</li> </ul>	LIGHT SURFACE LIGHT SURFACE Horizontal Bending
	540 720 900 30 UNIT: cd -C90/270 AVERAGE BEAM ANGLE (50%): 111.5°	2987 times	ensile-instantaneous 47 kg.f 5760 times s in laboratory only, and it's forbidden to operate in practice.
	Note: 1. The illuminated light length shall be an int	oaral multiplo of min-cutting long	th

 The illuminated light length shall be an integral multiple of min. cutting length.
 The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

### Feature

Flexglo™ F15D Dynamic Light With Brand LED (PVC) is tunable from 2500K to 5000K or other colors, and dim to warm are optional, setting the harmonious tone for the surrounding space, and it's ideal for the project where premium LED is required since inside is Nichia LED. Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology,

\*The IP67 Injection-moulded Connector is engineered for outdoor use.

\*The IP68 Dual Injection-moulded Connector is specially designed for long-term submersible applications.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit<sup>™</sup> technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech<sup>TM</sup> such as the PinBoost<sup>TM</sup> technology enhancing physical reliability of light engine, the C-Mask<sup>TM</sup> technology retarding PVC discoloration and enabling consistent illumination.

С	FR	ProF15D	HB	24CV	25~50K	WM	144	80	12W	83.3
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	сст	Base & Lighting Surface	LEDs Qty/m	CRI	Power/m	Min. Cutting Length (mm)
Clear	FR= (PVC) Flex Ribbon	Pro= Brand LED F15D= Dynamic	HB= Horizontal Bending	DC24V & Constant Voltage	25~50K= 2500~5000K	WM= White & Milky	144	80	12W	83.3

### **Electrical Parameter**

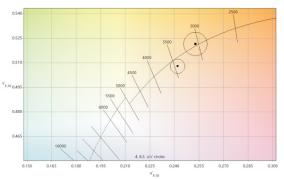
Category	C-FR-ProF15D-HB
Voltage	24
Current (mA/m)	500.0
Power (W/m)	12
Circuit Type	CV
LEDType	3014 🖉 NIСНІЛ
LEDs Qty/m	144
LEDs Qty/unit	12(6+6)
Unit/m	12
Min. Cutting Length (mm)	83.3
Min. Cutting Length (in)	3.28

### **Optical Parameter**

Finished Product						LED	
CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI	
	<6SDCM	80	110lm	34lm	<2.3SDCM	81~88	
	<6SDCM	80	110lm	34lm	<2.3SDCM	81~88	
	Tolerance K 2460±120K	ToleranceToleranceK2460±120K<6SDCM	Tolerance Tolerance <sup>LRI</sup> K 2460±120K <6SDCM 80	Tolerance Tolerance CRI Lumen/m K 2460±120K <6SDCM 80 1101m	Tolerance Tolerance CRI Lumen/m Lumen/H K 2460±120K <6SDCM 80 110lm 34lm	Tolerance     CRI     Lumen/m     Lumen/ft     Tolerance       K     2460±120K     <6SDCM	

Note:

CCT tolerance and color tolerance both refer to ANSI C78.377 standard.
 The color tolerance of finished products is kept < 6SDCM from batch to batch and narrowed to < 3SDCM at the same batch.</li>



### Color Matching

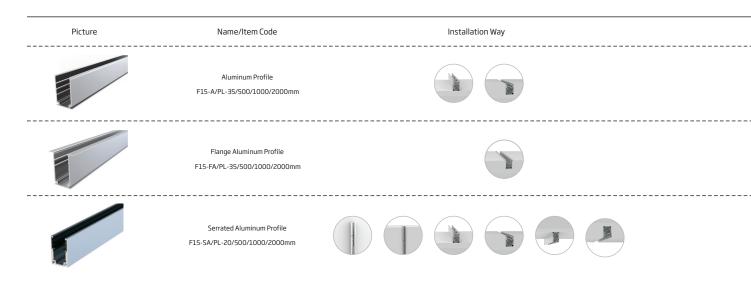
Color temperature value stated on all CLEAR's documents refers to finished products. LED's color temperature would be shifted by the light diffuser made of PVC or silicone material. CLEAR calibrates color temperature and color coordinate of tailor-made LEDs with proprietary color-matching algorithms to produce a precise color temperature and color coordinate close to black body locus for finished products. All LEDs would be strictly tested and tightly controlled to ensure finished products can meet ANSI standard.

### Max. Running Length Input: DC24V

			56	a't	4	1	
Туре	Sleeve	Connector	Snap C	onnector	Socket	Connector	
IP Rating	IF	40	IF	967	IF	67	
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	
C-FR-F15D-12W-Static full loading	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	
C-FR-F15D-12W-Dynamic operating	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft	
Dimension of Connector	Page	-15131	Page	F15135	Page F15 140		
Max.Packing Length	ngth Page F15198						
Туре	Injection-mou	Ided Connector	Dual Injection-m	oulded Connector	Note: 1. Above conclusion is b testing result of the ligh cable only. 2. The maximum runnir	nt with 0.3m (0.98ft)	
IP Rating	,	67	,	268	light in static full loadin		
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	stated dynamic operating.		
C-FR-F15D-12W-Static full loading	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	- 3. Above running length		
c i i i i i i i i i i i i i i i i i i i	20m/65.6ft	40m/131.2ft	20m/65.6ft	40m/131.2ft	<ul> <li>excluding lengths of co the specific dimension</li> </ul>		
C-FR-F15D-12W-Dynamic operating	Page F15143		Page F15155		the specific dimension of each connector.		
C-FR-F15D-12W-Dynamic operating Dimension of Connector		15143	Page	F15155	4. The delivery length n		

# F15D Connector (PVC)

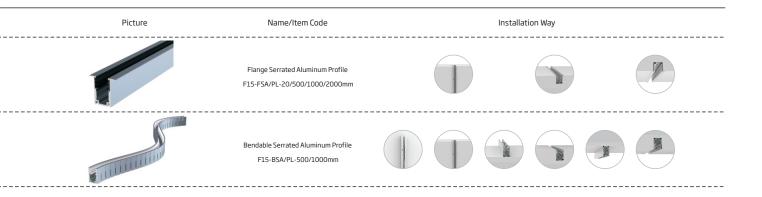
Type/IP Rating	Bending Direction	Front Connector End	Front Connector Side from Left	Front Connector Side from Right	Front Connector Bottom	
Sleeve Connector	НВ	10	N/A	N/A	N/A	
IP40		F15D-HB-SL/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	N/A	N/A	N/A	
Snap Connector	НВ		U.A.	L.	U A	
IP67		F15D-HB-SN/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-SN/FC- 01/02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-SN/FC- 01/02-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-SN/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	
Socket Connector	НВ		N/A	N/A	N/A	
IP67		F15D-HB-SO/FC- 01/02-E- 0.3m/1m/3m/5m 18AWG*3	N/A	N/A	N/A	
Injection- moulded	НВ	4		R		
Connector IP67		F15D-HB-IM/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-IM/FC- 02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-IM/FC- 01-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-IM/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	
Dual Injection - moulded	НВ					
Connector IP68		F15D-HB-DIM/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-DIM/FC- 02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-DIM/FC- 01-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-DIM/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	



Type/IP Rating	Seamless Middle Connector & Power Feed	Middle Connector & Power T-feed	Middle Connector	Jumper	End Cap
 Sleeve Connector	N/A	B-P-B	1 a	0	Ū
IP40	N/A	F15D-HB-SL/MC- PTF-01/02- 0.3m/1m/3m 18AWG*3	F15D-HB-SL/MC	F15D-HB-SL/JU- 01/02- 0.3m/1m 18AWG*3	F15-SL/EC
Snap Connector	N/A	D	N/A		11
IP67	N/A	F15D-HB-SN/MC- PTF-01/02- 0.3m/1m/3m 18AWG*3	N/A	F15D-HB-SN/JU- 01/02- 0.3m/1m 18AWG*3	F15-SN/EC-01/02
Socket Connector	N/A	N/A	N/A	N/A	
IP67	N/A	N/A	N/A	N/A	F15-S0/EC
Injection- moulded		-	N/A	1	
Connector IP67	F15D-HB-IM/SEMC- PF-S- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-IM/MC- PTF-0.3m/1m/3m 18AWG*3	N/A	F15D-HB-IM/JU- 0.3m/1m 18AWG*3	F15-IM/EC
Dual Injection - moulded	N/A	and the second	N/A	and the second s	
Connector IP68	N/A	F15D-HB-DIM/MC- PTF-0.3m/1m/3m 18AWG*3	N/A	F15D-HB-DIM/JU- 0.3m/1m 18AWG*3	F15-DIM/EC

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# Flexglo<sup>™</sup> F15D Dynamic Light (Silicone)

<b>6</b> ( )	Certification Mark	U	CE
5 year Solvents UV Warranty Resistant Resistant	Test Standard/Directive	UL2108 Class 2	CE-EMC
	Certificate Serial Number	20180801-E360029	SZEM1712012372LMV
Flame Salt Water IK10 Resistant Protection	Report Reference	E360029-20130322	SZEM171201237201
2200K~5700K	Ambient Working Temperature £12W/m -40 ~ 55°C /-40~131°F Max. Mounting Surface Temperat 85°C /185°F specified in the non-working state of live	ure CV Constant Voltag	-40~60°C/-40~140°F
C-SFR-F15D-HB	C-SFR-F15D-HB-24CV-22~57K- WM-144-80-12W-83.3	<ul> <li>Min. Bending Diameter 120mm/4.72in</li> <li>Min. Cutting Length 83.3mm/3.28in 6+6LEDs</li> </ul>	LIGHT SURFACE LIGHT SURFACE Horizontal Bending
	120 150 30 UNIT: cd -C90/270 AVERAGE BEAM ANGLE (50%): 112.2°	5381 times	ensile-instantaneous >60 kg.f 5033.5 times in laboratory only, and it's forbidden to operate in practice.
	Note: 1. The illuminated light length shall be an int 2. The waterproof reliability of the lighting fi properly assembled before installation. The l	ixture depends on the IP rating of	connector, and please make sure connector is
Item Code			

С	SFR	F15D	НВ	24CV	22~57K	WM	144	80	12W	83.3
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	ССТ	Base & Lighting Surface	LEDs Qty/m	CRI	Power/m	Min. Cutting Length (mm)
Clear	SFR= Silicone Flex Ribbon	F15D= Dynamic	HB= Horizontal Bending	Dr24V & Constant Voltage	22~57К= 2200~5700К	WM= White & Milky	144	80	12W	83.3

### Feature

Flexglo™ F15D Dynamic Light (Silicone) is tunable from 2200K to 5700K or other colors, and dim to warm are optional, setting the harmonious tone for the surrounding space. Thanks to the excellent weatherproof and UVresistant performance of silicone material, it features a wide ambient working temperature range of -40-55  $^{\circ}\text{C},$  especially suitable for harsh environment application.

Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology,

\*The IP68 Injection-moulded Connector is engineered for outdoor use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit<sup>™</sup> technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology enhancing physical reliability of light engine, the TwinFlex™ technology improving the conductivity and optimizing heat dissipation performance, the C-Mask™ technology making the light body self-cleaning and anti-UV and enabling consistent illumination.

### **Electrical Parameter**

Category	C-SFR-F15D-HB
Voltage	24
Current (mA/m)	500.0
Power (W/m)	12
Circuit Type	CV
LED Туре	3015
LEDsQty/m	144
LEDs Qty/unit	12(6+6)
Unit/m	12
Min. Cutting Length (mm)	83.3
Min. Cutting Length (in)	3.28

### **Optical Parameter**

Item Code			LED					
	CCT	CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F15D-HB-24CV-22~57K-WM-144-80-12W-83.3	2200K	2238±66K	<5SDCM	80	140Im	43lm	<2.3SDCM	82~87
C-31 K-1 130-110-24C V-22C -37K-WI-144-00-12W-03.3	5700K	5669±305K	<5SDCM	80	170lm	52lm	<2.3SDCM	82~87

Note:

1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

2. The color tolerance of finished products is kept < 5SDCM from batch to batch and narrowed to < 3SDCM at the same batch.

### Max. Running Length Input: DC24V

							-36		
Туре	Sleeve Connector		Snap Connector		Socket Connector		Silicone Injection-moulded Connector		
IP Rating	IP	40	IP67		IP67		IP68		
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	
C-SFR-F15D-12W-Static full loading	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	
C-SFR-F15D-12W-Dynamic operating	30m/98.4ft 60m/196.8ft		30m/98.4ft	60m/196.8ft	30m/98.4ft	60m/196.8ft	30m/98.4ft	60m/196.8ft	
Dimension of Connector	Page F15 131		Page F15 135		Page F15140		Page F15 149		
Max.Packing Length		Page F15 198							

Note:

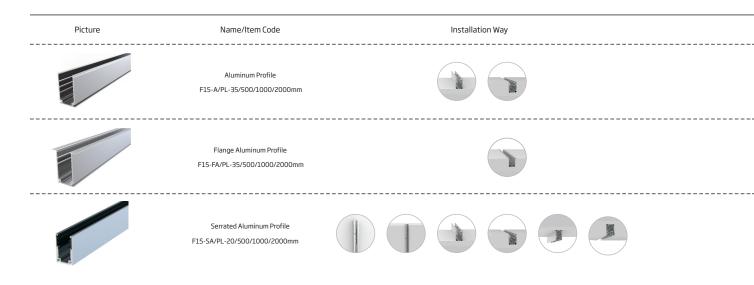
2. The maximum running length is based on the light in static full loading status exceptionally stated dynamic operating.

<sup>1.</sup> Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

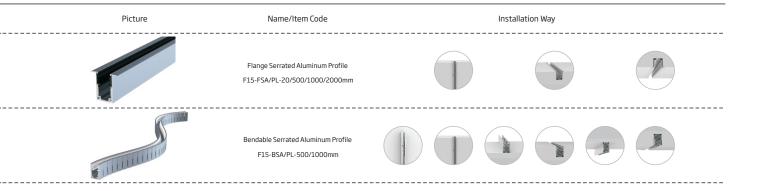
<sup>3.</sup> Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector. 4. The delivery length might be subject to the maximum packing length.

# F15D Connector (Silicone)

Type/IP Rating	Bending Direction	Front Connector End	Front Connector Side from Left	Front Connector Side from Right	Front Connector Bottom	
Sleeve Connector	НВ	10	N/A	N/A	N/A	
IP40		F15D-HB-SL/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	N/A	N/A	N/A	
Snap Connector	НВ		10.4		112	
IP67		F15D-HB-SN/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-SN/FC- 01/02-L- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-SN/FC- 01/02-R- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-SN/FC- 01/02-8- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	
			N/A	N/A	N/A	
Socket Connector IP67	НВ	F15D-HB-S0/FC- 01/02-E- 0.3m/1m/3m/5m 18AWG*3	N/A	N/A	N/A	
Silicone Injection-	НВ	5				
moulded Connector IP68		F15D-HB-SIM/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-SIM/FC- 02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-SIM/FC- 01-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	F15D-HB-SIM/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	

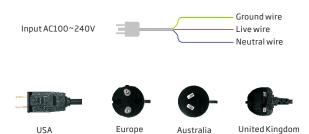


Type/IP Rating	Seamless Middle Connector & Power Feed	Middle Connector & Power T-feed	Middle Connector	Jumper	End Cap
 Sleeve Connector	N/A	8-9-18	i i i	1	D
IP40	N/A	F15D-HB-SL/MC- PTF-01/02- 0.3m/1m/3m 18AWG*3	F15D-HB-SL/MC	F15D-HB-SL/JU- 01/02- 0.3m/1m 18AWG*3	F15-SL/EC
Snap Connector	N/A		N/A		15-21
IP67	N/A	F15D-HB-SN/MC- PTF-01/02- 0.3m/1m/3m 18AWG*3	N/A	F15D-HB-SN/JU- 01/02- 0.3m/Im 18AWG*3	F15-SN/EC-01/02
Socket Connector	N/A	N/A	N/A	N/A	
IP67	N/A	N/A	N/A	N/A	F15-S0/EC
Silicone Injection-	N/A	B-1-A	N/A	10-51	
moulded Connector IP68	N/A	F15D-HB-SIM/MC- PTF-0.3m/1m/3m 18AWG*3	N/A	F15D-HB-SIM/JU- 0.3m/1m 18AWG*3	F15-SIM/EC



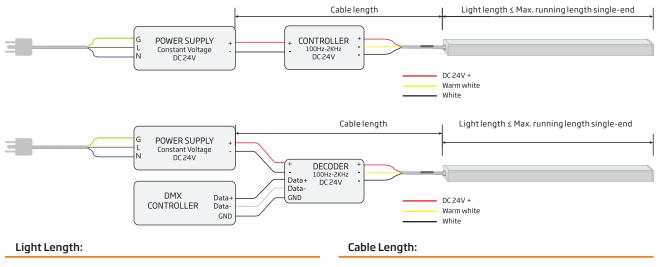
# Flexglo<sup>™</sup> F15D Wiring Diagram

- Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- A compatible controller is required to achieve various light changing effects;
- 2. The rated power of controller/decoder shall be higher than the actual power consumption of light; its frequency range shall be 100~2000Hz, and 500Hz is recommended;
- 3. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;



 Types of standard plugs are optional if power cord is purchased from CLEAR.

### Single-end Feed



The length of the longest single light in parallel connection or sum of lights in series connection.

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

### How to Minimize Voltage Drop and Signal Transmission Attenuation

Ways to minimize voltage drop and signal transmission attenuation,

1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.

2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".

3.. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

### Max. Running Length Single-end Feed

Input: DC24V					
Connector Type	Sleeve Connector	Snap Connector	Socket Connector	Injection-moulded Connector	Dual Injection-moulded Connector
Wire Gauge	18AWG*3	18AWG*3	18AWG*3	18AWG*3	18AWG*3
C-FR-F15D-12W-Static full loading	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft
C-FR-F15D-12W-Dynamic operating	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft
C-FR-ProF15D-12W-Static full loading	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft
C-FR-ProF15D-12W-Dynamic operating	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft
C-SFR-F15D-12W-Static full loading	15m/49.2ft	15m/49.2ft	15m/49.2ft	15m/49.2ft	/
C-SFR-F15D-12W-Dynamic operating	30m/98.4ft	30m/98.4ft	30m/98.4ft	30m/98.4ft	/

Note:

 $1.\,Above\,conclusion\,is\,based\,on\,voltage\,drop\,testing\,result\,of\,the\,light\,with\,0.3m\,(0.98ft)\,cable\,only.$ 

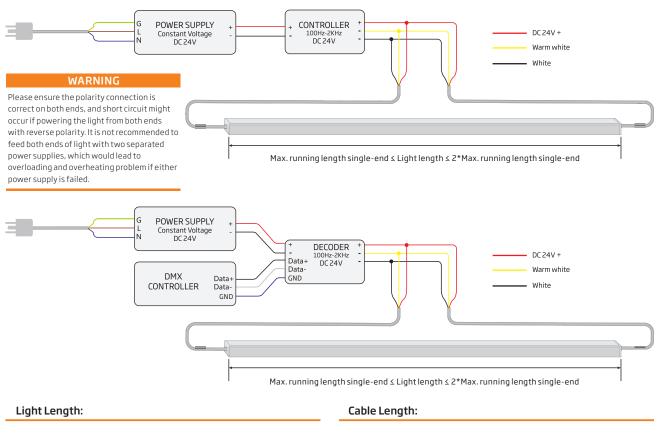
2. The maximum running length is based on the designated light in static full loading status exceptionally stated dynamic operating.

3. Above running length is only the light length excluding lengths of connectors.

4. The delivered length might be subject to the maximum packing length.

### **Double-end Feed**

Please refer to the following wiring diagram with double-end feed to run length that is longer than max. running length for single-end feed but less than twice the value.



The length of the longest single light in parallel connection or sum of lights in series connection.

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

#### How to Minimize Voltage Drop and Signal Transmission Attenuation

1. It is optimal to position the power supply in the middle of a single light or multiple lines in daisy chain to keep the equivalent cable length on both ends for double-end feed.

2. Please ensure the cable length is not more than the table "Max. Cable Length" according to the half of light length and its wire gauge.

3. Please ensure the light length is less than the table "Max. Running Length Double-end Feed".

4. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

### Max. Running Length Double-end Feed

Connector Type	Sleeve Connector	Snap Connector	Socket Connector	Injection-moulded Connector	Dual Injection-moulded Connector
Wire Gauge	18AWG*3	18AWG*3	18AWG*3	18AWG*3	18AWG*3
C-FR-F15D-12W-Static full loading	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft
C-FR-F15D-12W-Dynamic operating	40m/131.2ft	40m/131.2ft	40m/131.2ft	40m/131.2ft	40m/131.2ft
C-FR-ProF15D-12W-Static full loading	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft
C-FR-ProF15D-12W-Dynamic operating	40m/131.2ft	40m/131.2ft	40m/131.2ft	40m/131.2ft	40m/131.2ft
C-SFR-F15D-12W-Static full loading	30m/98.4ft	30m/98.4ft	30m/98.4ft	30m/98.4ft	/
C-SFR-F15D-12W-Dynamic operating	60m/196.8ft	60m/196.8ft	60m/196.8ft	60m/196.8ft	/

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

2. The maximum running length is based on the designated light in static full loading status exceptionally stated dynamic operating.

3. Above running length is only the light length excluding lengths of connectors.

4. The delivered length might be subject to the maximum packing length.

### F15D Max. Cable Length (PVC)

Input: DC24V

			Cable Length										
Item Code	Light Length (M)	0.32 mm <sup>2</sup> 22AWG		0.52 mm <sup>2</sup> 20AWG		0.81 mm <sup>2</sup> 18AWG		1.32 16A		2.07 mm <sup>2</sup> 14AWG			
		m	ft	m	ft	m	ft	m	ft	m	ft		
	1	57.0	187.0	92.6	303.9	144.3	473.4	235.1	771.4	368.7	1209.7		
-	2	28.5	93.5	46.3	151.9	72.1	236.7	117.6	385.7	184.4	604.9		
-	З	18.3	60.2	29.8	97.8	46.4	152.3	75.6	248.2	118.6	389.2		
	4	12.9	42.3	20.9	68.7	32.6	107.0	53.1	174.3	83.3	273.4		
C-FR-F15D-12W	5	9.1	30.0	14.9	48.7	23.1	75.9	37.7	123.7	59.1	194.0		
C-FR-ProF15D-12W	6	7.0	22.9	11.3	37.2	17.7	57.9	28.8	94.4	45.1	148.1		
	7	5.4	17.8	8.8	29.0	13.8	45.1	22.4	73.6	35.2	115.4		
-	8			6.8	22.4	10.6	34.9	17.4	56.9	27.2	89.3		
	9			4.8	15.8	7.5	24.6	12.2	40.1	19.2	62.8		
-	10			З.1	10.3	4.9	16.0	7.9	26.0	12.4	40.8		

# F15D Max. Cable Length (Silicone)

Input: DC24V

						Cable	Length					
Item Code	Light Length	0.3	2 mm <sup>2</sup>	0.52	mm <sup>2</sup>	0.81	1 mm <sup>2</sup>	1.32	mm²	2.07 mm <sup>2</sup>		
item code	(M)	22AWG		20/	20AWG		18AWG		16AWG		14AWG	
		m	ft	m	ft	m	ft	m	ft	m	ft	
	1	55.8	183.1	90.7	297.6	141.3	463.5	230.2	755.4	361.0	1184.5	
	2	28.2	92.5	45.8	150.3	71.4	234.2	116.3	381.7	182.4	598.5	
	З	18.9	61.9	30.7	100.6	47.8	156.7	77.8	255.3	122.0	400.4	
	4	13.5	44.3	22.0	72.0	34.2	112.2	55.7	182.9	87.4	286.8	
-	5	10.4	34.1	16.9	55.5	26.3	86.4	42.9	140.8	67.3	220.8	
	6	8.3	27.4	13.6	44.5	21.1	69.3	34.4	112.9	54.0	177.0	
C-SFR-F15D-12W	7			11.1	36.5	17.3	56.9	28.2	92.7	44.3	145.3	
	8			9.3	30.6	14.5	47.6	23.6	77.6	37.1	121.7	
	9			7.9	26.0	12.3	40.5	20.1	66.0	31.5	103.5	
	10			6.8	22.4	10.6	34.9	17.3	56.8	27.2	89.1	
	11			5.2	16.9	8.0	26.3	13.1	42.9	20.5	67.3	
	12					7.0	22.8	11.3	37.2	17.8	58.3	
-	13	]		[		5.0	16.4	8.2	26.8	12.8	42.0	
	14					З.8	12.5	6.2	20.3	9.7	31.9	
	15			[		2.7	8.9	4.4	14.5	6.9	22.7	

Note:

1. Please check the wire gauge of your connector in the table "Max. Running Length".

E.g.,

Single-end feed, C-FR-F15D-12W, 5m light length with 18AWG wire, max. cable length should refer to the corresponding value 23.1m for 5m light length;

Double-end feed, C-FR-F15D-12W, 10m light length with 18AWG wire, max. cable length of each end should refer to the corresponding value 23.1m for half of light length 5m; 2. The above cable lengths are calculated based on 10% allowable voltage drop maximum.



# Flexglo<sup>™</sup> F15A RGB Light (PVC)

8		۲	Certification Mark	(h)		CE	8
3 year Warranty	Solvents Resistant	UV Resistant	Test Standard/Directive	UL2108 Class 2	C		IS 10322
2	$\mathbf{N}$	¥	Certificate Serial Number	20180801-E360029	SZEM171	L2012372LMV	R-41128376
Flame Resistant	Salt Water Resistant	IK10 Protection	Report Reference	E360029-20130322	SZEM17	1201237201	N0.20190425001
	RGB		Ambient Working Te $\leq 12W/m - 20 \sim 45^{\circ}t$ Max. Mounting Surfa $60^{\circ}C / 140^{\circ}F$ specified in the non-w light, and up to 85°C fo	ice Temperature orking state of	≥ 0°C / 32°F <sup>[1]</sup> ] PVC products, when op	perating at below 0°C, off from twisting and fail to w	Storage Temperature -20 ~ 60°C /-4~140°F work
C-FR-	F15A-H	В	C-FR-F15A-HB-24CV-RGB- WM-60-12W-100		Min. Bending Diamete 120mm/4.72in	r 11.5mm/0.45in	LIGHT SURFACE
	0102		AVERAGE BEAM ANGLE (50%)	UNIT: cd C90/270 Bendir 13:	Min. Cutting Length 100mm/3.94in 6LEDs ng-extreme 31 times g: Extreme Destructive Te	Tensile-instantaneous 47.924 kg.f	Horizontal Bending Twist-extreme 4897 times orbidden to operate in practice.
			Note: 1. The illuminated light length	ale all le a ser facto avail availé		+-	

1. The illuminated light length shall be an integral multiple of min. cutting length. 2. The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is

properly assembled before installation. The highest IP rating we can achieve is IP68.



### Feature

Flexglo™ F15A RGB Light (PVC) is a color changing product with tri-chip SMD5050 RGB LEDs as light source, RGB color changing is achievable via a 3 channel PWM controller or any compatible DMX-512 controller. Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology, \*The IP67 Injection-moulded Connector is engineered for outdoor use.

\*The IP68 Dual Injection-moulded Connector is specially designed for long-term submersible applications.

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology enhancing physical reliability of light engine, the C-Mask™ technology retarding PVC discoloration and enabling consistent illumination.

### **Electrical Parameter**

Category	C-FR-F15A-HB
Voltage	24
Current (mA/m)	500.0
Power (W/m)	12
Circuit Type	CV
LED Type	5050
LEDs Qty/m	60
LEDs Qty/unit	6
Unit/m	10
Min. Cutting Length (mm)	100
Min. Cutting Length (in)	3.94

### **Optical Parameter**

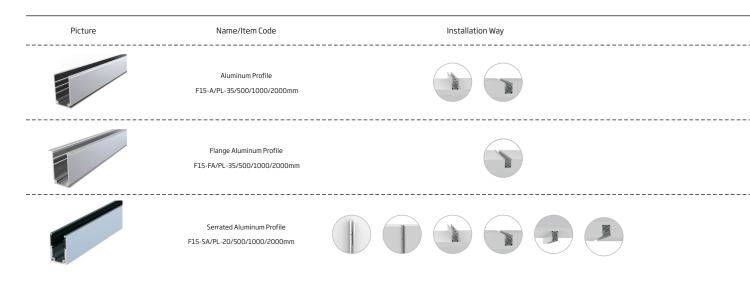
Item Code		Finished	LED		
	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
	Red	618-624nm	40lm	12Im	<3nm
	Green	522-528nm	100lm	30Im	< 3nm
C-FR-F15A-HB-24CV-RGB-WM-60-12W-100	Blue	468-474nm	15lm	5lm	<3nm
	R+G+B	R+G+B	155lm	47lm	

### Max. Running Length Input: DC24V

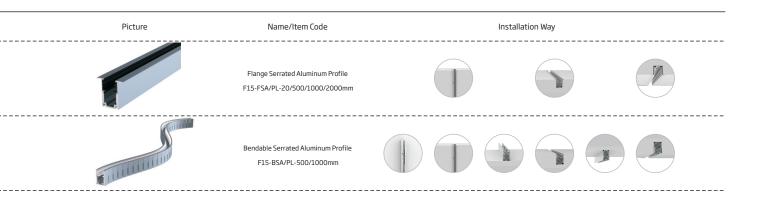
				31		a
Туре	Sleeve	Connector	Snap C	onnector	Socket	Connector
IP Rating	IP	40		967	IF	267
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed
C-FR-F15A-12W-Static full loading	7m/22.96ft	14m/45.9ft	7m/22.96ft	14m/45.9ft	7m/22.96ft	14m/45.9ft
C-FR-F15A-12W-Dynamic operating	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft
Dimension of Connector	Page	F15131	Page	F15 135	Page F15140	
Max.Packing Length			Pagel	-15198		
Туре	Injection-moulded Connector		Dual Injection-n	noulded Connector	Note: 1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only. 2. The maximum running length is based on th	
IP Rating	,	267	,	268		ng status exceptionally
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	stated dynamic operat	
C-FR-F15A-12W-Static full loading	7m/22.96ft	14m/45.9ft	7m22.96ft	14m/45.9ft		h is only the light length Innectors. Please refer t
C-FR-F15A-12W-Dynamic operating	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	the specific dimension	
Dimension of Connector	Page	F15143	Page	F15155		might be subject to the
Max.Packing Length		Page	F15198		maximum packing length.	

# F15A Connector (PVC)

Type/IP Rating	Bending Direction	Front Connector End	Front Connector Side from Left	Front Connector Side from Right	Front Connector Bottom	
Sleeve Connector	НВ	Ē	N/A	N/A	N/A	
IP40		F15A-HB-SL/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*4	N/A	N/A	N/A	
Snap Connector	НВ	111	UA	L.C.	113	
IP67		F15A-HB-SN/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*4	F15A-HB-SN/FC- 01/02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*4	F15A-HB-SN/FC- 01/02-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*4	F15A-HB-SN/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*4	
Socket Connector	НВ		N/A	N/A	N/A	
IP67		F15A-HB-SO/FC- 01/02-E- 0.3m/1m/3m/5m 20AWG*1+22AWG*3	N/A	N/A	N/A	
Injection- moulded	НВ	2		R.		
Connector IP67		F15A-HB-IM/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*3	F15A-HB-IM/FC- 02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*3	F15A-HB-IM/FC- 01-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*3	F15A-HB-IM/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*3	
Dual Injection - moulded	НВ	-				
Connector IP68		F15A-HB-DIM/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*3	F15A-HB-DIM/FC- 02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*3	F15A-HB-DIM/FC- 01-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*3	F15A-HB-DIM/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*3	



Type/IP Rating	Seamless Middle Connector & Power Feed	Middle Connector & Power T-feed	Middle Connector	Jumper	End Cap
Sleeve Connector	N/A	0-9-0	<b>D</b> D	0-0	Ū
IP40	N/A	F15A-HB-SL/MC- PTF-01/02- 0.3m/1m/3m 18AWG*4	F15A-HB-SL/MC	F15A-HB-SL/JU- 01/02-0.3m/1m 18AWG*4	F15-SL/EC
Snap Connector	N/A		N/A	0-0	
IP67	N/A	F15A-HB-SN/MC- PTF-01/02- 0.3m/1m/3m 18AWG*4	N/A	F15A-HB-SN/JU- 01/02-0.3m/1m 18AWG*4	F15-SN/EC-01/02
Socket Connector	N/A	N/A	N/A	N/A	U
IP67	N/A	N/A	N/A	N/A	F15-S0/EC
Injection- moulded		and the second	N/A		
Connector IP67	F15A-HB-IM/SEMC- PF-S- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*3	F15A-HB-IM/MC- PTF-0.3m/1m/3m 20AWG*1+22AWG*3	N/A	F15A-HB-IM/JU- 0.3m/1m 20AWG*1+22AWG*3	F15-IM/EC
Dual Injection - moulded	N/A	Provide and	N/A	10-50	
Connector IP68	N/A	F15A-HB-DIM/MC- PTF-0.3m/1m/3m 20AWG*1+22AWG*3	N/A	F15A-HB-DIM/JU- 0.3m/1m 20AWG*1+22AWG*3	F15-DIM/EC



# Flexglo<sup>™</sup> F15A RGB Light (Silicone)

6		Certification Mark	(H)	CE		8
5 year Solvent: Warranty Resistan	s UV nt Resistant	Test Standard/Directive	UL2108 Class 2	CE-EMC		IS 10322
	¥	Certificate Serial Number	20180801-E360029	SZEM1712012372L	MV	R-41128376
Flame Salt Wate Resistant Resistan	er IK10 It Protection	Report Reference	E360029-20130322	SZEM1712012372	01NO	20190425001
RGB		Ambient Working Tem ≤12W/m -40 ~ 55°C / Max. Mounting Surface 85°C /185°F specified in the non-work	e Temperature	Ambient Installation T ≥ -40°C /-40°F Constant Voltage DC24V	emperature	Storage Temperature -40 ~ 60°C /-40~140°F
C-SFR-F15	4	C-SFR-F15A-HB-24CV-RGB- WM-60-12W-100	120r	nm/4.72in Cutting Length mm/3.94in &	11.5mm/0.45in	LIGHT SURFACE Horizontal Bending
1 Contraction of the second se	0	70.0	NIT: cd Bending-e: 1524 ti 109.4° Warning: Ext		-instantaneous > 60 kg.f rratory only, and it's forbidde	Twist-extreme 1678 times n to operate in practice.

Note:

 The illuminated light length shall be an integral multiple of min. cutting length.
 The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.



### Feature

Flexglo<sup>™</sup> F15A RGB Light (Silicone) is a color changing product with tri-chip SMD5050 RGB LEDs as light source, RGB color changing is achievable via a 3 channel PWM controller or any compatible DMX-512 controller. Thanks to the excellent weatherproof and UV-resistant performance of silicone material, it features a wide ambient working temperature range of -40-55  $^{\circ}\!C$  , especially suitable for harsh environment application.

Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology,

\*The IP68 Injection-moulded Connector is engineered for outdoor use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit™ technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech<sup>™</sup> such as the PinBoost<sup>™</sup> technology enhancing physical reliability of light engine, the TwinFlex™ technology improving the conductivity and optimizing heat dissipation performance, the C-Mask™ technology making the light body self-cleaning and anti-UV and enabling consistent illumination.

### **Electrical Parameter**

Category	C-SFR-F15A-HB
Voltage	24
Current (mA/m)	500.0
Power (W/m)	12
Circuit Type	CV
LED Type	5050
LEDsQty/m	60
LEDs Qty/unit	6
Unit/m	10
Min. Cutting Length (mm)	100
Min. Cutting Length (in)	3.94

### **Optical Parameter**

	ltem Code		Finished	LED		
		Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
		Red	618-624nm	50lm	15lm	<3nm
		Green	522-528nm	120lm	37lm	<3nm
	C-2FK-F128-HR-24CA-K0R-MM-20-15M-100	Blue	468-474nm	25Im	8lm	<3nm
_		R+G+B	R+G+B	195lm	59m	N/A
_	C-SFR-F15A-HB-24CV-RGB-WM-60-12W-100	Green Blue	522-528nm 468-474nm	120lm 25lm	371m 81m	<3nm <3nm

### Max. Running Length Input: DC24V

	25		20	31			550	
Туре	Sleeve	Connector	Snap Connector		Socket Connector		Silicone Injection-moulded Connector	
IP Rating	IP	40	IP67		IP67		IP68	
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed
C-SFR-F15A-12W- Static full loading	10m/32.8ft	20m/65.4ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft
C-SFR-F15A-12W- Dynamic operating	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft
Dimension of Connector	Page F15 131 Page F15 135			15135	Page F	15140	Page F15 149	
Max.Packing Length				Page F	15198			

Note:

Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.
 The maximum running length is based on the light in static full loading status exceptionally stated dynamic operating.

<sup>3.</sup> Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.

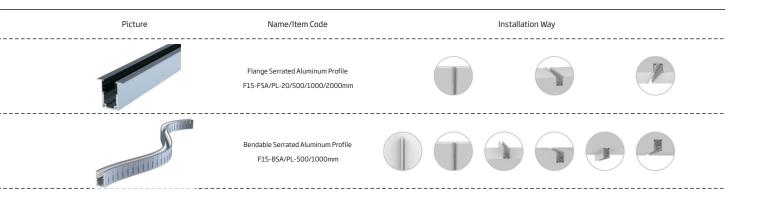
<sup>4.</sup> The delivery length might be subject to the maximum packing length.

# F15A Connector (Silicone)

Type/IP Rating	Bending Direction	Front Connector End	Front Connector Side from Left	Front Connector Side from Right	Front Connector Bottom	
Sleeve Connector IP40	НВ	F15A-HB-SL/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*4	N/A N/A	N/A N/A	N/A N/A	
Snap Connector IP67	НВ	F15A-HB-SN/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*4	F15A-HB-SN/FC- 01/02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*4	F15A-HB-SN/FC- 01/02-SR- 0.3m/1m/3m//5m/ 10m/15m/20m 18AWG*4	F15A-HB-SN/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*4	
Socket Connector IP67	НВ	F15A-HB-S0/FC- 01/02-E- 0.3m/1m/3m/5m 20AWG*1+22AWG*3	N/A N/A	N/A N/A	N/A N/A	
Silicone Injection- moulded Connector IP68	HB	F15A-HB-SIM/FC- 01/02-E- 0.3m/Jm/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*3	F15A-HB-SIM/FC- 02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*3	F15A-HB-SIM/FC- 01-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*3	F15A-HB-SIM/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*3	

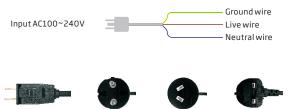
Picture	Name/Item Code	Installation Way
	Aluminum Profile F15-A/PL-35/500/1000/2000mm	
	Flange Aluminum Profile F15-FA/PL-35/500/1000/2000mm	
	Serrated Aluminum Profile F15-SA/PL-20/500/1000/2000mm	

Type/IP Rating	Seamless Middle Connector & Power Feed	Middle Connector & Power T-feed	Middle Connector	Jumper	End Cap
Sleeve Connector	N/A	8-9-18	11	A A	Ū
IP40	N/A	F15A-HB-SL/MC- PTF-01/02- 0.3m/1m/3m 18AWG*4	F15A-HB-SL/MC	F15A-HB-SL/JU- 01/02-0.3m/1m 18AWG*4	F15-SL/EC
Snap Connector	N/A		N/A		10-2
IP67	N/A	F15A-HB-SN/MC- PTF-01/02- 0.3m/1m/3m 18AWG*4	N/A	F15A-HB-SN/JU- 01/02-0.3m/1m 18AWG*4	F15-SN/EC-01/02
Socket Connector	N/A	N/A	N/A	N/A	
IP67	N/A	N/A	N/A	N/A	F15-S0/EC
Silicone Injection-	N/A	P-P-W	N/A		
moulded Connector IP68	N/A	F15A-HB-SIM/MC- PTF-0.3m/1m/3m 20AWG*1+22AWG*3	N/A	F15A-HB-SIM/JU- 0.3m/1m 20AWG*1+22AWG*3	F15-SIM/EC



# Flexglo<sup>™</sup> F15A Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- 2. A compatible controller is required to achieve various light changing effects;
- 3. The rated power of controller/decoder shall be higher than the actual power consumption of light; its frequency range shall be 100~2000Hz, and 500Hz is recommended;
- 4. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;



Australia

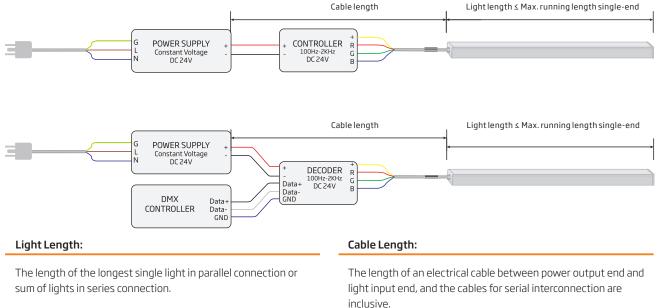
Europe

USA



5. Types of standard plugs are optional if power cord is purchased from CLEAR.

### Single-end Feed



### How to Minimize Voltage Drop and Signal Transmission Attenuation

1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.

2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".

3. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

### Max. Running Length Single-end Feed

Input: DC24V

Connector Type	Sleeve Connector	Snap Connector	SocketConnector	Injection-moulded Connector	Dual Injection-moulded Connector
Wire Gauge	18AWG*4	18AWG*4	20AWG*1+22AWG*3	20AWG*1+22AWG*3	20AWG*1+22AWG*3
C-FR-F15A-12W-Static full loading	7m/22.96ft	7m/22.96ft	7m/22.96ft	7m/22.96ft	7m/22.96ft
C-FR-F15A-12W-Dynamic operating	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft
C-SFR-F15A-12W-Static full loading	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft	/
C-SFR-F15A-12W-Dynamic operating	15m/49.2ft	15m/49.2ft	15m/49.2ft	15m/49.2ft	/

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

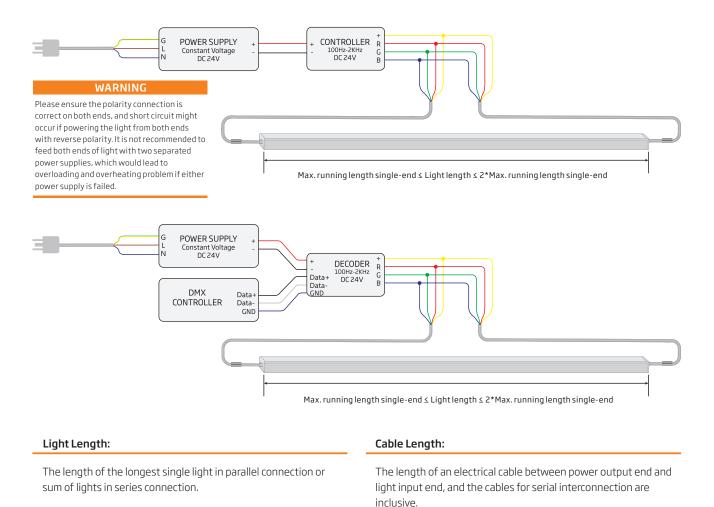
2. The maximum running length is based on the designated light in static full loading status exceptionally stated dynamic operating.

3. Above running length is only the light length excluding lengths of connectors.

4. The delivered length might be subject to the maximum packing length.

### **Double-end Feed**

Please refer to the following wiring diagram with double-end feed to run length that is longer than max. running length for single-end feed but less than twice the value.



How to Minimize Voltage Drop and Signal Transmission Attenuation

1. It is optimal to position the power supply in the middle of a single light or multiple lines in daisy chain to keep the equivalent cable length on both ends for double-end feed.

2. Please ensure the cable length is not more than the table "Max. Cable Length" according to the half of light length and its wire gauge.

3. Please ensure the light length is less than the table "Max. Running Length Double-end Feed".

4. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

### Max. Running Length Double-end Feed

Input: DC24V

Connector Type	Sleeve Connector	Snap Connector	Socket Connector	Injection-moulded Connector	Dual Injection-moulded Connector
Wire Gauge	18AWG*4	18AWG*4	20AWG*1+22AWG*3	20AWG*1+22AWG*3	20AWG*1+22AWG*3
C-FR-F15A-12W-Static full loading	14m/45.92ft	14m/45.92ft	14m/45.92ft	14m/45.92ft	14m/45.92ft
C-FR-F15A-12W-Dynamic operating	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft
C-SFR-F15A-12W-Static full loading	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	/
C-SFR-F15A-12W-Dynamic operating	30m/98.4ft	30m/98.4ft	30m/98.4ft	30m/98.4ft	/

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

2. The maximum running length is based on the designated light in static full loading status exceptionally stated dynamic operating.

 ${\tt 3.\,Above\,running\,length\,is\,only\,the\,light\,length\,excluding\,lengths\,of\,connectors.}$ 

4. The delivered length might be subject to the maximum packing length.

### F15A Max. Cable Length (PVC)

Input: DC24V

			Cable Length									
Item Code	Light Length (M)	0.32 mm <sup>2</sup> 22AWG		0.52	mm <sup>2</sup>	0.81 mm <sup>2</sup>		1.32	mm²	2.07 mm <sup>2</sup>		
				20AWG		18AWG		16AWG		14AWG		
		m	ft	m	ft	m	ft	m	ft	m	ft	
	1	62.8	206.0	102.0	334.8	158.9	521.5	259.0	849.8	406.2	1332.6	
	2	30.1	98.7	48.9	160.4	76.2	249.9	124.1	407.2	194.6	638.5	
	З	19.1	62.6	31.0	101.7	48.3	158.5	78.7	258.2	123.4	405.0	
C-FR-F15A-CV-12W	4	13.4	44.1	21.8	71.6	34.0	111.5	55.4	181.8	86.9	285.0	
	5	9.8	32.2	16.0	52.4	24.9	81.6	40.5	133.0	63.6	208.6	
	6	7.4	24.1	12.0	39.2	18.6	61.1	30.4	99.6	47.6	156.2	
	7			8.6	28.1	13.3	43.7	21.7	71.3	34.1	111.8	
	8			5.9	19.3	9.2	30.1	14.9	49.0	23.4	76.8	
	9			3.5	11.4	5.4	17.7	8.8	28.9	13.8	45.4	
	10			1.5	4.8	2.3	7.5	3.7	12.2	5.8	19.2	

### F15A Max. Cable Length (Silicone)

Input: DC24V

	Light Length (M)					Cable	Length				
Item Code		0.32 mm <sup>2</sup>		0.52	mm <sup>2</sup>	0.81 mm <sup>2</sup>		1.32	mm²	2.07 mm <sup>2</sup>	
item code		22AWG		20 <i>A</i>	WG	18A	WG	16A	WG	14AWG	
		m	ft	m	ft	m	ft	m	ft	m	ft
	1	111.6	366.2	102.0	334.8	158.9	521.5	259.0	849.8	406.2	1332.6
	2	56.4	185.0	51.6	169.1	80.3	263.5	130.9	429.4	205.2	673.3
	З	37.7	123.8	34.5	113.2	53.7	176.3	87.6	287.2	137.3	450.5
	4	27.0	88.7	24.7	81.0	38.5	126.2	62.7	205.7	98.3	322.6
- C-SFR-F15A-CV-12W	5	20.8	68.3	19.0	62.4	29.6	97.2	48.3	158.4	75.7	248.5
C-21 K-1 12X-CV-12VV	6	16.7	54.7	15.3	50.0	23.8	77.9	38.7	127.0	60.7	199.2
	7			12.5	41.1	19.5	64.0	31.8	104.3	49.8	163.5
-	8			10.5	34.4	16.3	53.6	26.6	87.3	41.7	136.9
	9			8.9	29.3	13.9	45.6	22.6	74.3	35.5	116.4
	10			7.7	25.2	12.0	39.2	19.5	63.9	30.6	100.2

Note:

1. Please check the wire gauge of your connector in the table "Max. Running Length".

E.g., Single-end feed, C-FR-F15A-12W, 5m light length when with 20AWG wire, max. cable length should refer to the corresponding value 16m for 5m light length; Double-end feed, C-FR-F15A-12W, 10m light length when with 20AWG wire, max. cable length of each end should refer to the corresponding value 16m for half of light length

2. The above cable lengths are calculated based on 10% allowable voltage drop maximum.



# Flexglo<sup>™</sup> F15E RGBW Light (PVC)

ô < 💌	Certification Mark	(UL)	CE
3 year Solvents UV Warranty Resistant Resistant	Test Standard/Directive	UL2108 Class 2	CE-EMC
	Certificate Serial Number	20180801-E360029	SZEM1712012372LMV
Flame Salt Water IK10 Resistant Resistant Protection	Report Reference	E360029-20130322	SZEM171201237201
RGBW	Ambient Working Temperature $\leq 15W/m$ -20 ~ 35°C /-4~95°F Max. Mounting Surface Temperatur 60°C / 140°F specified in the non-working state of light, and up to 85°C for silicone type.	Ambient Installation Temper 2 0°C / 32°F <sup>(1)</sup> [1] PVC products, when operating at below are vulnerable to breaking off from twisting Constant Voltage DC24V	-20 ~ 60°C /-4~140°F
C-FR-F15E-HB	C-FR-F15E-HB-24CV-RGBW(27K)- WM-60-15W-100	C Min. Bending Diameter 11.5mm 120mm/4.72in	V0.45in LIGHT SURFACE
	UNIT: cd -C90/270 AVERAGE BEAM ANGLE (50%): 113.9°	Min. Cutting Length 100mm/3.94in GLEDs Bending-extreme 1649 times Tensile-instar 59.014 f Warning: Extreme Destructive Tests in laboratory	kg.f 9783 times

Note:

 The illuminated light length shall be an integral multiple of min. cutting length.
 The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

### Feature

Flexglo<sup>™</sup> F15E RGBW Light (PVC) is a color changing product with qua-chip SMD5050 RGBW LEDs as light source, RGBW color changing is achievable via a 4 channel PWM controller or any compatible DMX-512 controller, and 2700K and 4000K in white color are optional. Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology,

\*The IP67 Injection-moulded Connector is engineered for outdoor use.

\*The IP68 Dual Injection-moulded Connector is specially designed for long-term submersible applications. This product features a ultra long lifespan in outdoor application by leveraging other ClearTech<sup>™</sup> such as the PinBoost<sup>™</sup> technology enhancing physical reliability of light engine, the C-Mask<sup>™</sup> technology retarding PVC discoloration and enabling consistent illumination.

С	FR	F15E	HB	24CV	RGBW (27K)	WM	60	15W	100
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	Color	Base & Lighting Surface	LEDs Qty/m	Power/m	Min. Cutting Length (mm)
Clear	FR= (PVC) Flex Ribbon	F15E= RGBW	HB= Horizontal Bending	DC24V & Constant Voltage	RGBW(27K)= RGB& 2700K RGBW(30K)= RGB & 3000K RGBW(40K)= RGB & 4000K	WM= White & Milky	60	15W	100

### **Electrical Parameter**

Category	C-FR-F15E-HB
Voltage	24
Current (mA/m)	625.0
Power (W/m)	15
Circuit Type	CV
LED Type	5050
LEDs Qty/m	60
LEDs Qty/unit	6
Unit/m	10
Min. Cutting Length (mm)	100
Min. Cutting Length (in)	3.94

### **Optical Parameter**

Finished Product						LED	
Color	Wavelength/ CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
Red	618-624nm			40lm	12lm	<3nm	
Green	522-530nm			100lm	30lm	<3nm	
Blue	468-474nm			15lm	5lm	<3nm	
White	2725±145K	<6SDCM	80	100lm	30lm	<2.3SDCM	82~87
Red	618-624nm			40lm	12lm	<3nm	
Green	522-530nm			100lm	30Im	<3nm	
Blue	468-474nm			15lm	5lm	<3nm	
White	3045±175K	<6SDCM	80	100lm	301m	<2.3SDCM	82~87
Red	618-624nm			40lm	12lm	<3nm	
Green	522-530nm			100lm	30lm	<3nm	
Blue	468-474nm			15lm	5lm	<3nm	
White	3985±275K	<6SDCM	80	100lm	30lm	<2.3SDCM	82~87
-	Red Green White Red Green Blue White Red Green Blue	CCT Tolerance           Red         618-624nm           Green         522-530nm           Blue         468-474nm           White         2725±145K           Red         618-624nm           Green         522-530nm           Blue         468-474nm           White         3045±175K           Red         618-624nm           Green         522-530nm           Blue         468-474nm           White         3045±175K           Red         618-624nm           Green         522-530nm           Blue         468-474nm	Color         Wavelength         Tolerance           CCT Tolerance         Tolerance           Red         618-624nm           Green         522-530nm           Blue         468-474nm           White         2725±145K           Red         618-624nm           Green         522-530nm           Blue         468-474nm           White         3045±175K           Ked         618-624nm           Green         522-530nm           Blue         468-474nm           White         3045±175K           Red         618-624nm           Green         522-530nm           Blue         468-474nm           Blue         468-474nm	Color         Wavelengting         Tolerance         CRI           Red         618-624nm         618-624nm         618-624nm         618-624nm         618-624nm         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80         80	Color         Wavelengting         Tolerance         CKI         Lumen/m           Red         618-624nm         40lm	Color         Wavelength         Tolerance         CRI         Lumen/m         Lumen/m           Red         618-624nm         40lm         12lm           Green         522-530nm         100lm         30lm           Blue         468-474nm         15lm         5lm           White         2725±145K         <65DCM	Color         Wavelengtriv CCT Tolerance         Tolerance         CNI         Lumen/m         Lumen/m         Tolerance           Red         618-624nm         40lm         12lm         <3nm

Note:

1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

2. The color tolerance of finished products is kept < 6SDCM from batch to batch and narrowed to < 3SDCM at the same batch.

### Max. Running Length Input: DC24V

Туре	Snap Connector		Injection-moulded Connector		Dual Injection-moulded Connector		
IP Rating	IP	67	IP67		IP68		
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	
C-FR-F15E-15W-Static full loading	5m/16.4ft	10m/32.8ft	5m/16.4ft	10m/32.8ft	5m/16.4ft	10m/32.8ft	
C-FR-F15E-15W-Dynamic operating	8m/26.24ft	16m/52.48t	8m/26.24ft	16m/52.48ft	8m/26.24ft	16m/52.48ft	
Dimension of Connector	Page F15 135		Page F15 143		Page F15 155		
Max.Packing Length		Page F15 198					

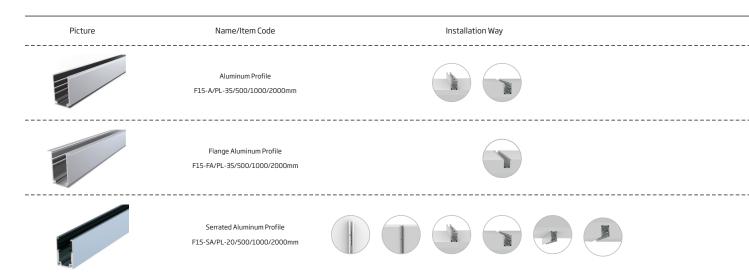
Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

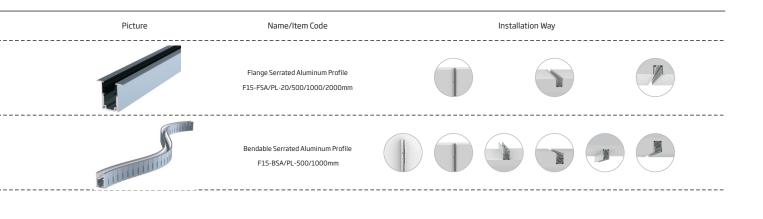
The maximum running length is based on the light in static full loading status exceptionally stated dynamic operating.
 Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.
 The delivery length might be subject to the maximum packing length.

# F15E Connector (PVC)

Type/IP Rating	Bending Direction	Front Connector End	Front Connector Side from Left	Front Connector Side from Right	Front Connector Bottom	
Snap Connector IP67	НВ	F15E-HB-SN/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m	N/A N/A	N/A N/A	N/A N/A	
Injection- moulded Connector IP67	НВ	20AWG*1+22AWG*4 F15E-HB-IM/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*4	F15E-HB-IM/FC- 02-SL- 0.3m/1m/3m//5m/ 10m/15m/20m 20AWG*1+22AWG*4	F15E-HB-IM/FC- 01-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*4	F15E-HB-IM/FC- 01/02-B- 0.3m/1m/3m//5m/ 10m/15m/20m 20AWG*1+22AWG*4	
Dual Injection - moulded Connector IP68	HB	F15E-HB-DIM/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*4	F15E-HB-DIM/FC- 02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*4	F15E-HB-DIM/FC- 01-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*4	F15E-HB-DIM/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*4	



Type/IP Rating	Seamless Middle Connector & Power Feed	Middle Connector & Power T-feed	Middle Connector	Jumper	End Cap
Snap Connector IP67	N/A N/A	F15E-HB-SN/MC- PTF-01/02- 0.3m/1m/3m 20AWG*1+22AWC*4	N/A N/A	F15E-HB-SN/JU- 01/02-0.3m/Im 20AWG*1+22AWG*4	F15-SN/EC-01/02
Injection- moulded Connector IP67	N/A N/A	F15E-HB-IM/MC- PTF-0.3m/1m/3m 20AWG*1+22AWG*4	N/A N/A	F15E-HB-IM/JU- 0.3m/1m 20AWG*1+22AWG*4	F15-IM/EC
Dual Injection - moulded Connector IP68	N/A N/A	F15E-HB-DIM/MC- PTF-0.3m/1m/3m 20AWG*1+22AWG*4	N/A N/A	F15E-HB-DIM/JU- 0.3m/Jm 20AWG*1+22AWG*4	F15-DIM/EC



# Flexglo<sup>™</sup> F15E RGBW Light (Silicone)

ő		۲	Certification Mark	(UL)	CE	
5 year Warranty	Solvents Resistant	UV Resistant	Test Standard/Directive	UL2108 Class 2	CE-EMC	
<b>W</b>	$(\mathbf{N})$	W	Certificate Serial Number	20180801-E360029	SZEM17120123	i72LMV
Flame Resistant	Salt Water Resistant	IK10 Protection	Report Reference	E360029-20130322	SZEM1712012	37201
		•	Ambient Working Temperature <15W/m -40 ~ 45°C/-40~113°f		allation Temperature	Storage Temperature -40 ~ 60°C /-40~140°F
	RG	BW	Max. Mounting Surface Tempera 85°C /185°F specified in the non-working state of	CV DC24V	age	
C-SFR	-F15E-H	ΙB	C-SFR-F158-HB-24CV-RGBW(27K)- WM-60-15W-100	Min. Bending Diamete 120mm/4.72in		
	<b>*</b>		<b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b>	Min. Cutting Length 100mm/3.94in 6LEDs Bending-extreme 4557 times Warning: Extreme Destructive Ter	Tensile-instantaneous >60 kg.f	Horizontal Bending Twist-extreme 4679 times
			Note: 1. The illuminated light length shall be an in	tearal multiple of min.cutting le	nath	

The illuminated light length shall be an integral multiple of min. cutting length.
 The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please

make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

### Feature

Flexglo<sup>™</sup> F15E RGBW Light (Silicone) is a color changing product with qua-chip SMD5050 RGBW LEDs as light source, an ideal product for project where premium LED is required. RGBW color changing is achievable via a 4 channel PWM controller or any compatible DMX-512 controller, and 2700K and 4000K in white color are optional. Thanks to the excellent weatherproof and UV-resistant performance of silicone material, it features a wide ambient working temperature range of -40-55 °C, especially suitable for harsh environment application.

Combined with the adoption of the DryWire™ technology, the IP68 Injection-moulded Connector is engineered for outdoor use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship. This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology ophasing a physical eliphibits of light agains the TwipElev™ technology improving the conductivity and actimizing host discipation.

enhancing physical reliability of light engine, the TwinFlex™ technology improving the conductivity and optimizing heat dissipation performance, the C-Mask™ technology making the light body self-cleaning and anti-UV and enabling consistent illumination.



### **Electrical Parameter**

Category	C-SFR-F15E-HB
Voltage	24
Current (mA/m)	625.0
Power (W/m)	15
Circuit Type	CV
LED Type	5050
LEDsQty/m	60
LEDs Qty/unit	6
Unit/m	10
Min. Cutting Length (mm)	100
Min. Cutting Length (in)	3.94

### **Optical Parameter**

	Finished Product					LED		
Item Code	Color	Wavelength/ CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
	Red	618-624nm			50lm	15lm	<3nm	
C-SFR-F15E-HB-24CV-RGBW(27K)-WM-60-15W-100	Green	522-530nm			120lm	37lm	<3nm	
C-3FK-FIJE-HB-24CV-KUBW(27K)-WH-00-IJW-100-	Blue	468-474nm			25lm	8lm	<3nm	
	White	2725±85K	<5SDCM	80	120Im	37lm	<2.3SDCM	82~87
C-SFR-F15E-HB-24CV-RGBW(30K)-WM-60-15W-100-	Red	618-624nm			50lm	15lm	<3nm	
	Green	522-530nm			120Im	37lm	<3nm	
	Blue	468-474nm			25lm	8lm	<3nm	
	White	3045±175K	<5SDCM	80	120Im	37lm	<2.3SDCM	82~87
C-SFR-F15E-HB-24CV-RGBW(40K)-WM-60-15W-100	Red	618-624nm			50lm	15lm	<3nm	
	Green	522-530nm			120Im	37lm	<3nm	
	Blue	468-474nm			25lm	8lm	<3nm	
·	White	3985±150K	<5SDCM	80	120lm	37lm	<2.3SDCM	82~87

Note:

1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

2. The color tolerance of finished products is kept < 5SDCM from batch to batch and narrowed to < 3SDCM at the same batch.

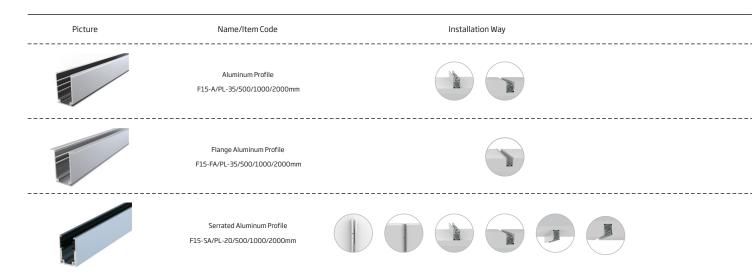
### Max. Running Length Input: DC24V

	503		50		
Туре	Snap Connector		Silicone Injection-moulded Connector		
IP Rating	IF	IP67		IP68	
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	
C-SFR-F15E-15W-Static full loading	8m/26.24ft	16m/52.48ft	8m/26.24ft	16m/52.48ft	
C-SFR-F15E-15W-Dynamic operating	12m/39.36ft	24m/78.72ft	12m/39.36ft	24m/78.72ft	
Dimension of Connector	Page F15 135		Page F	15149	
Max.Packing Length	Page F15 198				

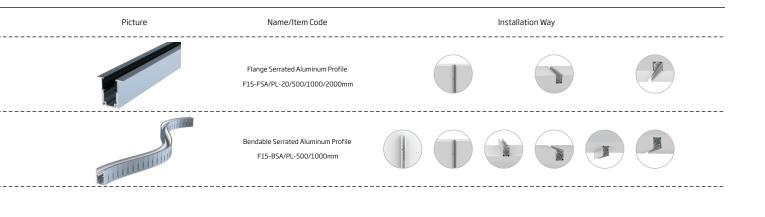
Note: 1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only. 2. The maximum running length is based on the light in static full loading status exceptionally stated dynamic operating. 3. Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector. 4. The delivery length might be subject to the maximum packing length.

# F15E Connector (Silicone)

Type/IP Rating	Bending Direction	Front Connector End	Front Connector Side from Left	Front Connector Side from Right	Front Connector Bottom	
Snap Connector	нв	173	N/A	N/A	N/A	
IP67		F15E-HB-SN/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*4	N/A	N/A	N/A	
Silicone Injection-	НВ	5				
moulded Connector IP68		F15E-HB-SIM/FC- 01/02-E- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*4	F15E-HB-SIM/FC- 02-SL- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*4	F15E-HB-SIM/FC- 01-SR- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*4	F15E-HB-SIM/FC- 01/02-B- 0.3m/1m/3m/5m/ 10m/15m/20m 20AWG*1+22AWG*4	

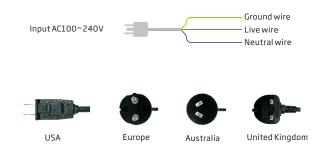


Type/IP Rating	Seamless Middle Connector & Power Feed	Middle Connector & Power T-feed	Middle Connector	Jumper	End Cap
Snap Connector IP67	N/A N/A	F15E-HB-SN/MC- PTF-01/02- 0.3m/1m/3m 20AWG*1+22AWG*4	N/A N/A	F15E-HB-SN/JU- 01/02-0.3m/Im 20AWG*1+22AWG*4	F15-SN/EC-01/02
Silicone Injection- moulded Connector IP68	N/A N/A	F15E-HB-SIM/MC- PTF-0.3m/1m/3m 20AWG*1+22AWG*4	N/A N/A	F15E-HB-SIM/JU- 0.3m/Jm 20AWG*1+22AWG*4	F15-SIM/EC



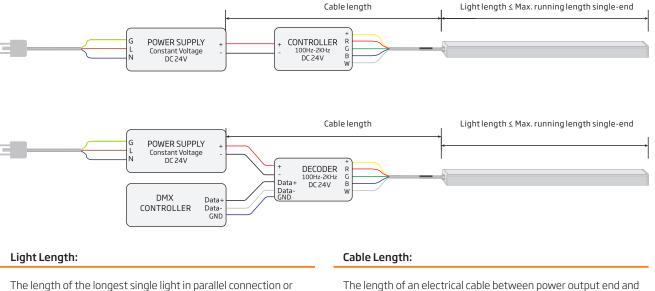
# Flexglo<sup>™</sup> F15E Wiring Diagram

- Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- A compatible controller is required to achieve various light changing effects;
- 3. The rated power of controller/decoder shall be higher than the actual power consumption of light; its frequency range shall be 100~2000Hz, and 500Hz is recommended;
- 4. Full loading in RGBW is not recommended to avoid the overheating of light.5. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;



5. Types of standard plugs are optional if power cord is purchased from CLEAR.

### Single-end Feed



The length of an electrical cable between power output enc light input end, and the cables for serial interconnection are inclusive.

#### How to Minimize Voltage Drop and Signal Transmission Attenuation

1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.

- 2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".
- 3. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

### Max. Running Length Single-end Feed

sum of lights in series connection.

Input: DC24V

Connector Type	Snap Connector	Injection-moulded Connector	Dual Injection-moulded Connector
Wire Gauge	20AWG*1+22AWG*4	20AWG*1+22AWG*4	20AWG*1+22AWG*4
C-FR-F15E-15W-Static full loading	5m/16.4ft	5m/16.4ft	5m/16.4ft
C-FR-F15E-15W-Dynamic operating	8m/26.24ft	8m/26.24ft	8m/26.24ft
C-SFR-F15E-15W-Static full loading	8m/26.24ft	8m/26.24ft	/
C-SFR-F15E-15W-Dynamic operating	12m/39.36ft	12m/39.36ft	/

Note:

2. The maximum running length is based on the designated light in static full loading status exceptionally stated dynamic operating.

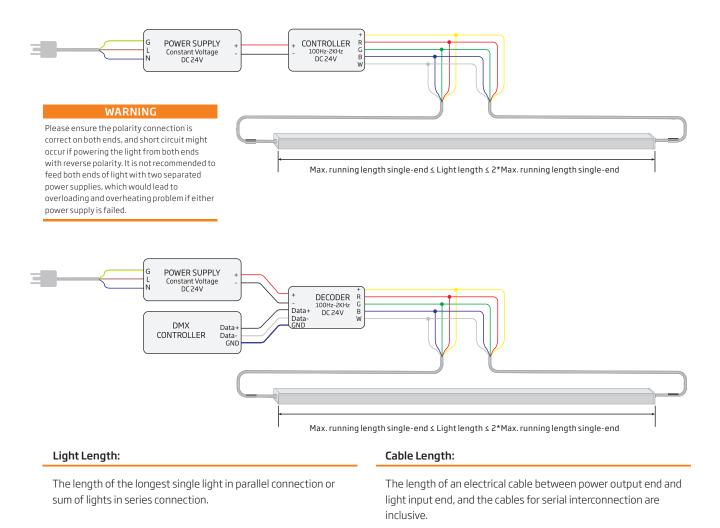
4. The delivered length might be subject to the maximum packing length.

<sup>1.</sup> Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

 $<sup>{\</sup>tt 3.\,Above\,running\,length\,is\,only\,the\,light\,length\,excluding\,lengths\,of\,connectors.}$ 

### **Double-end Feed**

Please refer to the following wiring diagram with double-end feed to run length that is longer than max. running length for singleend feed but less than twice the value.



#### How to Minimize Voltage Drop and Signal Transmission Attenuation

1. It is optimal to position the power supply in the middle of a single light or multiple lines in daisy chain to keep the equivalent cable length on both ends for double-end feed.

2. Please ensure the cable length is not more than the table "Max. Cable Length" according to the half of light length and its wire gauge.

3. Please ensure the light length is less than the table "Max. Running Length Double-end Feed".

4. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

### Max. Running Length Double-end Feed

#### Input: DC24V

Connector Type	Snap Connector	Injection-moulded Connector	Dual Injection-moulded Connector
Wire Gauge	20AWG*1+22AWG*4	20AWG*1+22AWG*4	20AWG*1+22AWG*4
C-FR-F15E-15W-Static full loading	10m/32.8ft	10m/32.8ft	10m/32.8ft
C-FR-F15E-15W-Dynamic operating	16m/52.48ft	16m/52.48ft	16m/52.48ft
C-SFR-F15E-15W-Static full loading	16m/52.48ft	16m/52.48ft	/
C-SFR-F15E-15W-Dynamic operating	24m/78.72ft	24m/78.72ft	/

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

2. The maximum running length is based on the designated light in static full loading status exceptionally stated dynamic operating.

3. Above running length is only the light length excluding lengths of connectors.

4. The delivered length might be subject to the maximum packing length.

## F15E Max. Cable Length (PVC)

Input: DC24V

		Cable Length									
Item Code Lig	Light Length	0.32	mm²	0.52	mm <sup>2</sup>	0.81	mm <sup>2</sup>	1.32	mm²	2.07	7 mm <sup>2</sup>
	(M)	22AWG		20AWG		18AWG		16AWG		14AWG	
		m	ft	m	ft	m	ft	m	ft	m	ft
	1	47.3	155.1	76.8	252.1	119.7	392.6	195.0	639.8	305.8	1003.4
	2	22.0	72.2	35.7	117.2	55.7	182.6	90.7	297.6	142.3	466.7
C-FR-F15E-15W	З	13.7	44.8	22.2	72.9	34.6	113.5	56.4	185.0	88.4	290.1
-	4	9.5	31.0	15.4	50.4	23.9	78.5	39.0	128.0	61.2	200.7
	5			9.6	31.6	15.0	49.3	24.5	80.3	38.4	126.0

## F15E Max. Cable Length (Silicone)

Input: DC24V

		Cable Length										
Item Code	Light Length	0.32	mm²	0.52	mm <sup>2</sup>	0.81 mm <sup>2</sup>		1.32	mm²	2.07 mm <sup>2</sup>		
	(M)	22/	AWG	20/	AWG	18/	AWG	16A	WG	14AWG		
		m	ft	m	ft	m	ft	m	ft	m	ft	
	1	48.0	157.4	78.0	255.8	121.5	398.5	197.9	649.4	310.4	1018.3	
	2	23.8	78.1	38.7	127.0	60.3	197.8	98.2	322.3	154.0	505.4	
	З	15.3	50.0	24.8	81.3	38.6	126.7	62.9	206.4	98.7	323.7	
C-SFR-F15E-15W	4	11.0	36.2	17.9	58.8	27.9	91.7	45.5	149.4	71.4	234.2	
C-21 K-1 12C-12W	5			13.9	45.4	21.6	70.8	35.2	115.4	55.1	180.9	
	6			11.1	36.4	17.3	56.8	28.2	92.5	44.2	145.0	
	7			8.7	28.4	13.5	44.3	22.0	72.2	34.5	113.2	
	8			7.2	23.7	11.3	36.9	18.3	60.2	28.8	94.4	
	9					9.6	31.6	15.7	51.5	24.6	80.7	

Note:

1. Please check the wire gauge of your connector in the table "Max. Running Length".

E.g.,

Single-end feed, C-FR-F15E-15W, 5m light length with 20AWG wire, max. cable length should refer to the corresponding value 9.6m for 5m light length;

Double-end feed, C-FR-F15E-15W, 10m light length with 20AWG wire, max. cable length of each end should refer to the corresponding value 9.6m for half of light length 5m; 2. The above cable lengths are calculated based on 10% allowable voltage drop maximum.



# Flexglo<sup>™</sup> F15S SPI Pixel Light (PVC)



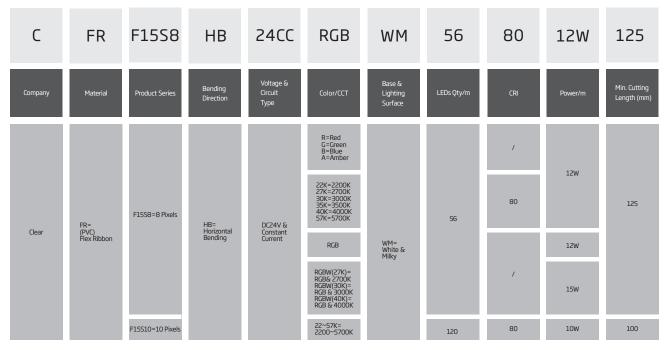
Note:

1. The illuminated light length shall be an integral multiple of min. cutting length.

2. The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is

properly assembled before installation. The highest IP rating we can achieve is IP68.

## Item Code



#### Feature

Flexglo<sup>™</sup> F15S SPI Pixel Light (PVC) is a product that each segment is individually addressable so that you can achieve myriad color changing or animation effects via compatible controller. It is a SPI protocol product with builtin IC chip of UCS2903 or UCS2904, available in monochrome, dynamic light, RGB and RGBW. Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology, \*The IP67 Injection-moulded Connector is engineered for outdoor use.

\*The IP68 Dual Injection-moulded Connector is specially designed for long-term submersible applications.

\*The IP67 Field Assembly Connector, which is underpinned by the Insulfit™ technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology enhancing physical reliability of light engine, the C-Mask™ technology retarding PVC discoloration and enabling consistent illumination.

### **Electrical Parameter**

Category	C-FR-F15S8-HB	C-FR-F15S10-HB	C-FR-F15S8-HB	C-FR-F15S8-HB
Voltage (V)	24	24	24	24
Current (mA/m)	500.0	416.7	500.0	625.0
Power (W/m)	12	10	12	15
Circuit Type	СС	CC	СС	СС
LED Туре	2835	3015	5050	5050
LEDsQty/m	56	120	56	56
LEDs Qty/unit	7	12(6+6)	7	7
Unit/m (Pixel Qty/m)	8(UCS2903)	10(UCS2903)	8(UCS2903)	8(UCS2904)
Min. Cutting Length (mm)	125	100	125	125
Min. Cutting Length (in)	4.92	3.94	4.92	4.92

## **Optical Parameter**

			Finished Produ	ct			LED	
Item Code	Color/CCT	Wavelength/ CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-FR-F15S8-HB-24CC-R-WM-56-12W-125	Red	618-624nm			110lm	34Im	< 3nm	
C-FR-F15S8-HB-24CC-G-WM-56-12W-125	Green	522-530nm			220Im	67lm	<3nm	
C-FR-F15S8-HB-24CC-B-WM-56-12W-125	Blue	468-474nm			351m	11lm	<3nm	
C-FR-F15S8-HB-24CC-A-WM-56-12W-125	Amber	588-594nm			110Im	34Im	<3nm	
C-FR-F15S8-HB-24CC-22K-WM-56-80-12W-125	2200K	2238±102K	<6SDCM	80	300lm	91lm	<2.3SDCM	82~87
C-FR-F15S8-HB-24CC-27K-WM-56-80-12W-125	2700K	2725±145K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87
C-FR-F15S8-HB-24CC-30K-WM-56-80-12W-125	3000К	3045±175K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87
C-FR-F15S8-HB-24CC-35K-WM-56-80-12W-125	3500K	3465±245K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87
C-FR-F15S8-HB-24CC-40K-WM-56-80-12W-125	4000K	3985±275K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87
C-FR-F15S8-HB-24CC-57K-WM-56-80-12W-125	5700K	5669±355K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87
C-FR-F15S10-HB-24CC-22~57K-WM-120-80-10W-100	2200K	2238±102K	<6SDCM	80	110lm	34Im	<2.3SDCM	82~87
C-FK-F13310-HD-24CC-22., 37K-WH-150-60-10W-100	5700K	5669±355K	<6SDCM	80	110lm	34Im	<2.3SDCM	82~87
	Red	618-624nm			40lm	12lm	< 3nm	82~87
	Green	522-530nm			100lm	30Im	<3nm	82~87
C-FR-F15S8-HB-24CC-RGB-WM-56-12W-125	Blue	468-474nm			15lm	5lm	<3nm	82~87
	R+G+B	R+G+B			155lm	47lm	N/A	82~87

# Flexglo<sup>™</sup> F15S SPI Pixel Light (PVC)

### **Optical Parameter**

			Finished Proc	luct			LED	
Item Code	Color/CCT	Wavelength/ CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
	Red	618-624nm			40lm	12lm	< 3nm	
C-FR-F15S8-HB-24CC-RGBW(27K)-WM-56-15W-125	Green	522-530nm			100lm	30lm	<3nm	
	Blue	468-474nm			15lm	51m	<3nm	
	White	2725±145K	<6SDCM	80	100lm	30lm	<2.3SDCM	82~87
C-FR-F15S8-HB-24CC-RGBW(30K)-WM-56-15W-125	Red	618-624nm			40lm	12lm	<3nm	
	Green	522-530nm			100lm	30lm	< 3nm	
	Blue	468-474nm			15lm	5lm	< 3nm	
	White	3045±175K	<6SDCM	80	100lm	30lm	<2.3SDCM	82~87
	Red	618-624nm			40lm	12lm	< 3nm	
C-FR-F15S8-HB-24CC-RGBW(40K)-WM-56-15W-125	Green	522-530nm			100lm	30lm	<3nm	
	Blue	468-474nm			15lm	5lm	< 3nm	
	White	3985±275K	<6SDCM	80	100lm	30lm	<2.3SDCM	82~87

Note:

1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

2. The color tolerance of finished products is kept < 6SDCM from batch to batch and narrowed to < 3SDCM at the same batch.

### Max. Running Length Input: DC24V

	56	a'	SE				Injection-moulded Connector					
Туре	Snap Co	onnector	Sleeve	Connector	Socket	Connector	Injection-mou	lded Connector	Dual Injection-moulded Connector			
IP Rating	IP	67	IF	40	IP67		IP67		IP67		IP	68
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed		
C-FR-F15S10-10W-Static full load	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft		
C-FR-F15S10-10W-Dynamic state	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft		
C-FR-F15S8-12W Static full load	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft		
C-FR-F15S8-12W-Dynamic state	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft		
C-FR-F15S8-15W-Static full load	5m/16.4ft	10m/32.8ft	5m/16.4ft	10m/32.8ft	5m/16.4ft	10m/32.8ft	5m/16.4ft	10m/32.8ft	5m/16.4ft	10m/32.8ft		
C-FR-F15S8-15W-Dynamic state	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft	10m/32.8ft	20m/65.6ft		
Dimension of Connector	Page	F15135	Page	F15131	Page F15140 Page F15143 F		Page F	15155				
Max.Packing Length		Page F15198										

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

The maximum running length is based on the light in static full loading status exceptionally stated dynamic operating.
 Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.
 The delivery length might be subject to the maximum packing length.



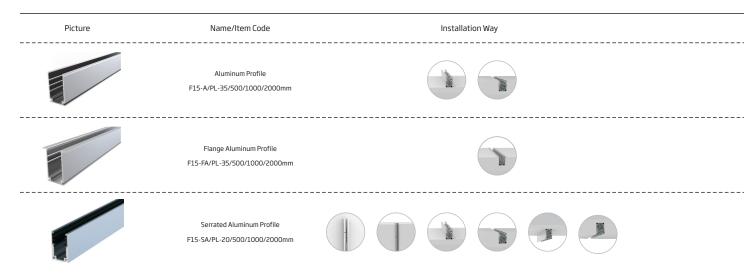
## F15S Connector (PVC)

Type/IP Rating	Bending Direction	Front Connector End	Front Connector Side from Left	Front Connector Side from Right	Front Connector Bottom	
Sleeve Connector	НВ	10	N/A	N/A	N/A	
IP40		F15S-HB-SL/FC- 01/02-E- 0.3m/1m/3m/ 5m/10m 18AWG*3	N/A	N/A	N/A	
Snap Connector	НВ	11	U M		UR	
IP67		F15S-HB-SN/FC- 01/02-E- 0.3m/1m/3m/ 5m/10m 18AWG*3	F15S-HB-SN/FC- 01/02-SL- 0.3m/1m/3m/ 5m/10m 18AWG*3	F155-HB-SN/FC- 01/02-SR- 0.3m/1m/3m/ 5m/10m 18AWG*3	F15S-HB-SN/FC- 01/02-B- 0.3m/1m/3m/ 5m/10m 18AWG*3	
Socket Connector	НВ		N/A	N/A	N/A	
IP67		F15S-HB-SO/FC- 01/02-E- 0.3m/1m/3m/5m 18AWG*3	N/A	N/A	N/A	
Injection- moulded	НВ	4		R	a de la dela dela dela dela dela dela de	
Connector IP67		F15S-HB-IM/FC- 01/02-E- 0.3m/1m/3m/ 5m/10m 18AWG*3	F155-HB-IM/FC- 02-SL- 0.3m/1m/3m/ 5m/10m 18AWG*3	F15S-HB-IM/FC- 01-SR- 0.3m/1m/3m/ 5m/10m 18AWG*3	F15S-HB-IM/FC- 01/02-B- 0.3m/1m/3m/ 5m/10m 18AWG*3	
Dual Injection - moulded	НВ	1				
Connector IP68		F15S-HB-DIM/FC- 01/02-E- 0.3m/1m/3m/ 5m/10m 18AWG*3	F15S-HB-DIM/FC- 02-SL- 0.3m/1m/3m/ 5m/10m 18AWG*3	F15S-HB-DIM/FC- 01-SR- 0.3m/1m/3m/ 5m/10m 18AWG*3	F15S-HB-DIM/FC- 01/02-B- 0.3m/1m/3m/ 5m/10m 18AWG*3	

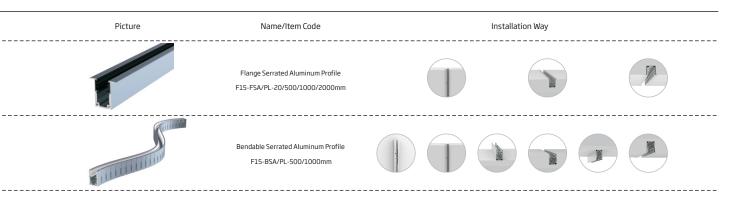
Note:

Please choose 2 wires excluding signal wire for 02 end if double-end feed to avoid signal interference.

## F15 Mounting Profile



Type/IP Rating	Seamless Middle Connector & Power Feed	Middle Connector & Power T-feed	Middle Connector	Jumper	End Cap
 Sleeve Connector	N/A	D-9-D	Da	A II	Ū.
IP40	N/A	F15S-HB-SL/MC- PTF-01/02- 0.3m/1m/3m 18AWG*3	F15S-HB-SL/MC	F155-HB-SL/JU- 01/02- 0.3m/1m 18AWG*3	F15-SL/EC
Snap Connector	N/A	10-Y-O	N/A		
IP67	N/A	F15S-HB-SN/MC- PTF-01/02- 0.3m/1m/3m 18AWG*3	N/A	F15S-HB-SN/JU- 01/02- 0.3m/Im 18AWG*3	F15-SN/EC-01/02
Socket Connector	N/A	N/A	N/A	N/A	
IP67	N/A	N/A	N/A	N/A	F15-S0/EC
Injection- moulded Connector	N/A		N/A		
IP67	N/A	F15S-HB-IM/MC- PTF-0.3m/1m/3m 18AWG*3	N/A	F15S-HB-IM/JU- 0.3m/Im 18AWG*3	F15-IM/EC
Dual Injection - moulded Connector	N/A	Brand Brand	N/A		
IP68	N/A	F15S-HB-DIM/MC- PTF-0.3m/1m/3m 18AWG*3	N/A	F15S-HB-DIM/JU- 0.3m/1m 18AWG*3	F15-DIM/EC



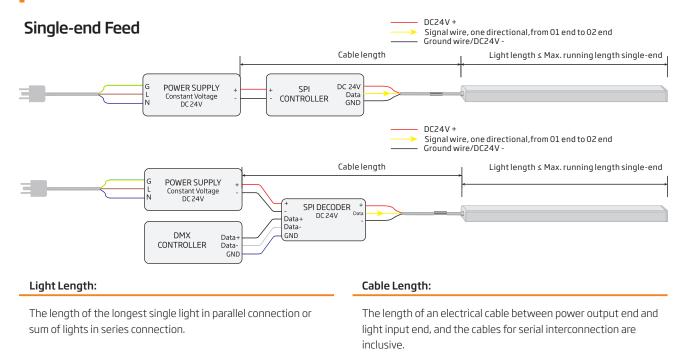
## Flexglo<sup>™</sup> F15S SPI Wiring Diagram

- Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;





- 3. Types of standard plugs are optional if power cord is purchased from CLEAR.
- 4. A compatible decoder or controller that outputs SPI signal is required for this product with UCS2903 or UCS2904 IC inside.
- 5. The number of pixels light used should not exceed the maximum number of pixels of controller/decoder.
- 6. To avoid signal attenuation, please ensure the overall cable length is within the maximum signal transmission distance according to the specification of controller/decoder.



How to Minimize Voltage Drop and Signal Transmission Attenuation

1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.

2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".

3. 2 wires of Shielded Twisted Pair cable is required to be used to connect DMX controller and decoder in the distance of max.300m, and wire gauge 20AWG or above is more recommended.

### Max. Running Length Single-end Feed

#### Input: DC24V

Wire Gauge         18AWG*3         18AWG*3         18AWG*3         18AWG*3         18AWG*3           C-FR-F15S10-10W-Static full loading         10m/32.8ft         10m/32.8ft         10m/32.8ft         10m/32.8ft         10m/32.8ft           C-FR-F15S10-10W-Dynamic operating         15m/49.2ft         15m/49.2ft         15m/49.2ft         15m/49.2ft         15m/49.2ft           C-FR-F15S8-12W-Static full loading         10m/32.8ft         10m/32.8ft         10m/32.8ft         10m/32.8ft         10m/32.8ft           C-FR-F15S8-12W-Dynamic operating         15m/49.2ft         15m/49.2ft         15m/49.2ft         15m/49.2ft         15m/49.2ft           C-FR-F15S8-12W-Dynamic operating         15m/49.2ft         15m/49.2ft         15m/49.2ft         15m/49.2ft         15m/49.2ft	Connector Type	Sleeve Connector	Snap Connector	SocketConnector	Injection-moulded Connector	Dual Injection-moulded Connector
C-FR-F15S10-10W-Dynamic operating         15m/49.2ft         15m/49.2ft         15m/49.2ft         15m/49.2ft           C-FR-F15S8-12W-Static full loading         10m/32.8ft         10m/32.8ft         10m/32.8ft         10m/32.8ft         10m/32.8ft           C-FR-F15S8-12W-Dynamic operating         15m/49.2ft         15m/49.2ft         15m/49.2ft         15m/49.2ft	Wire Gauge	18AWG*3	18AWG*3	18AWG*3	18AWG*3	18AWG*3
C-FR-F15S8-12W-Static full loading         10m/32.8ft         10m/32.8ft         10m/32.8ft         10m/32.8ft           C-FR-F15S8-12W-Dynamic operating         15m/49.2ft         15m/49.2ft         15m/49.2ft         15m/49.2ft	C-FR-F15S10-10W-Static full loading	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft
C-FR-F15S8-12W-Dynamic operating 15m/49.2ft 15m/49.2ft 15m/49.2ft 15m/49.2ft 15m/49.2ft 15m/49.2ft	C-FR-F15S10-10W-Dynamic operating	15m/49.2ft	15m/49.2ft	15m/49.2ft	15m/49.2ft	15m/49.2ft
	C-FR-F15S8-12W-Static full loading	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft
	C-FR-F15S8-12W-Dynamic operating	15m/49.2ft	15m/49.2ft	15m/49.2ft	15m/49.2ft	15m/49.2ft
C-FR-F15S8-15W-Staticfull/loading 5m/16.4tt 5m/16.4tt 5m/16.4tt 5m/16.4tt 5m/16.4tt 5m/16.4tt	C-FR-F15S8-15W-Static full loading	5m/16.4ft	5m/16.4ft	5m/16.4ft	5m/16.4ft	5m/16.4ft
C-FR-F15S8-15W-Dynamic operating 10m/32.8ft 10m/32.8ft 10m/32.8ft 10m/32.8ft 10m/32.8ft 10m/32.8ft	C-FR-F15S8-15W-Dynamic operating	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

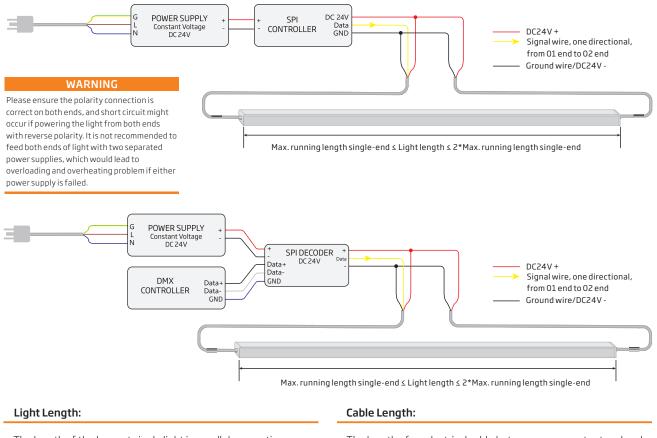
2. The maximum running length is based on the designated light in static full loading status exceptionally stated dynamic operating.

 ${\tt 3.\,Above\,running\,length\,is\,only\,the\,light\,length\,excluding\,lengths\,of\,connectors.}$ 

4. The delivered length might be subject to the maximum packing length.

### **Double-end Feed**

Please refer to the following wiring diagram with double-end feed to run length that is longer than max. running length for single-end feed but less than twice the value.



The length of the longest single light in parallel connection or sum of lights in series connection.

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

How to Minimize Voltage Drop and Signal Transmission Attenuation

1. It is optimal to position the power supply in the middle of a single light or multiple lines in daisy chain to keep the equivalent cable length on both ends for double-end feed.

2. Please ensure the cable length is not more than the table "Max. Cable Length" according to the half of light length and its wire gauge. 3. Please ensure the light length is less than the table "Max. Running Length Double-end Feed".

4.2 wires of Shielded Twisted Pair cable is required to be used to connect DMX controller and decoder in the distance of max. 300m, and wire gauge 20AWG or above is more recommended.

## Max. Running Length Double-end Feed

Input:	DC24V	

Connector Type	Sleeve Connector	Snap Connector	Socket Connector	Injection-moulded Connector	Dual Injection-moulded Connector
Wire Gauge	18AWG*3	18AWG*3	18AWG*3	18AWG*3	18AWG*3
C-FR-F15S10-10W-Static full loading	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft
C-FR-F15S10-10W-Dynamic operating	30m/98.4ft	30m/98.4ft	30m/98.4ft	30m/98.4ft	30m/98.4ft
C-FR-F15S8-12W-Static full loading	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft
C-FR-F15S8-12W-Dynamic operating	30m/98.4ft	30m/98.4ft	30m/98.4ft	30m/98.4ft	30m/98.4ft
C-FR-F15S8-15W-Static full loading	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft	10m/32.8ft
C-FR-F15S8-15W-Dynamic operating	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft	20m/65.6ft

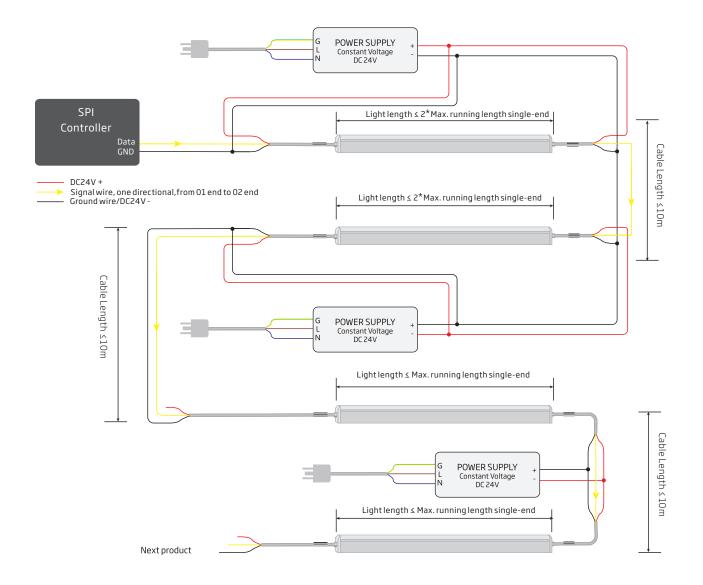
Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.

2. The maximum running length is based on the designated light in static full loading status exceptionally stated dynamic operating.

3. Above running length is only the light length excluding lengths of connectors.

4. The delivered length might be subject to the maximum packing length.



## F15S Max. Cable Length (PVC)

#### Input: DC24V

		Cable Length									
Item Code	Light Length	0.32	2 mm <sup>2</sup>	0.52	mm <sup>2</sup>	0.81	mm <sup>2</sup>	1.32	mm²	2.07 mm <sup>2</sup> 14AWG	
item code	(M)	22/	AWG	20/	\WG	18A	AWG	16 <i>A</i>	AWG		
		m	ft	m	ft	m	ft	m	ft	m	ft
	1	44.7	146.5	72.6	238.1	113.0	370.8	184.2	604.3	288.8	947.6
	2	21.2	69.4	34.4	112.8	53.6	175.7	87.3	286.4	136.9	449.1
	З	13.4	44.1	21.8	71.7	34.0	111.6	55.5	181.9	87.0	285.3
	4	9.7	31.7	15.7	51.5	24.5	80.2	39.8	130.7	62.5	205.0
C-FR-F15S-10/12W	5	7.0	22.9	11.3	37.2	17.7	57.9	28.8	94.4	45.1	148.1
C-1 K-1 155-10/12W	6	5.2	17.1	8.5	27.8	13.2	43.3	21.5	70.6	33.7	110.6
	7			6.4	21.0	10.0	32.7	16.2	53.3	25.5	83.5
	8			4.5	14.7	7.0	22.9	11.4	37.4	17.9	58.6
	9			З.О	9.8	4.7	15.3	7.6	24.9	11.9	39.0
	10			1.8	5.9	2.8	9.2	4.6	14.9	7.1	23.4
	1	34.1	111.7	55.3	181.6	86.2	282.8	140.5	460.9	220.3	722.8
	2	16.3	53.5	26.5	87.0	41.3	135.5	67.3	220.8	105.6	346.3
C-FR-F15S-15W	З	9.9	32.6	16.1	53.0	25.1	82.5	41.0	134.4	64.3	210.8
	4	7.1	23.2	11.5	37.7	17.9	58.7	29.1	95.6	45.7	149.9
	5	5.1	16.7	8.3	27.1	12.9	42.3	21.0	68.9	32.9	108.0

Note:

1. Please check the wire gauge of your connector in the table "Max. Running Length".

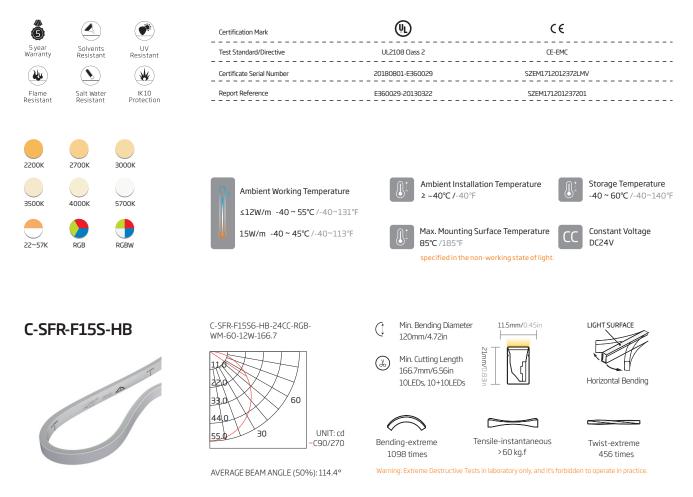
E.g.,

Single-end feed, C-FR-F15S-15W, 5m light length with 18AWG wire, max. cable length should refer to the corresponding value 12.9m for 5m light length;

Double-end feed, C-FR-F15S-15W, 10m light length with 18AWG wire, max. cable length of each end should refer to the corresponding value 12.9m for half of light length 5m; 2. The above cable lengths are calculated based on 10% allowable voltage drop maximum.

3. To aviod signal degredation, please ensure the data cable length is within the maximum signal transmission distance according to the specification of controller/decoder.

# Flexglo<sup>™</sup> F15S DMX Pixel Light (Silicone)



Note:

1. The illuminated light length shall be an integral multiple of min. cutting length.

2. The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

## Item Code

С	SFR	F15S6	HB	24CC	ЗОК	WM	60	80	15W	166.7
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	Color/CCT	Base & Lighting Surface	LEDs Qty/m	CRI	Power/m	Min. Cutting Length (mm)
					R=Red G=Green B=Blue A=Amber			/		
	SFR=		HB= Horizontal	DC24V &	22K=2200K 27K=2700K 30K=3000K 35K=3500K 40K=4000K 57K=5700K	WM= White &	60		15W	
Clear	Silicone Flex Ribbon	F15S6=6 Pixels	Bending	Constant Current	RGBW(27K)= RGB& 2700K RGBW(30K)= RGB & 3000K RGBW(40K)= RGB & 4000K	Milky		80		166.7
					RGB			/	12W	
					22~57K= 2200~5700K		120	80		

#### Feature

Flexglo<sup>™</sup> F15S DMX Pixel Light (Silicone) is a product that each segment is individually addressable so that you can achieve myriad color changing or animation effects via compatible controller. It is a DMX protocol product with built-in IC chip of UCS512CN, available in monochrome, dynamic light, RGB and RGBW. Thanks to the excellent weatherproof and UV-resistant performance of silicone material, it features a wide ambient working temperature range of -40-55 °C , especially suitable for harsh environment application. Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology,

\*The IPGS Injection-moulded Connector is engineered for outdoor use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship.

a The IP67 Field Assembly Connector, which is underpinned by the Insulfit™ technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology enhancing physical reliability of light engine, the TwinFlex™ technology improving the conductivity and optimizing heat dissipation performance, the C-Mask™ technology making the light body self-cleaning and anti-UV and enabling consistent illumination.

#### **Electrical Parameter**

Category	C-SFR-F15S6-HB	C-SFR-F15S6-HB	C-SFR-F15S6-HB	C-SFR-F15S6-HB
Voltage (V)	24	24	24	24
Current (mA/m)	625.0	500.0	500.0	625.0
Power (W/m)	15	12	12	15
Circuit Type	CC	CC	CC	CC
LED Type	2835	3015	5050	5050
LEDs Qty/m	60	120	60	60
LEDs Qty/unit	10	20(10+10)	10	10
Unit/m (Pixel Qty/m)	6(UCS512CN)	6(UCS512CN)	6(UCS512CN)	6(UCS512CN)
Min. Cutting Length (mm)	166.7	166.7	166.7	166.7
Min. Cutting Length (in)	6.56	6.56	6.56	6.56

### **Optical Parameter**

		F	Finished Produ	ct			LED	
Item Code	Color/CCT	Wavelength/ CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F15S6-HB-24CC-22K-WM-60-80-15W-166.7	2200K	2238±66K	<5SDCM	80	210lm	64lm	<2.3SDCM	82~87
C-SFR-F15S6-HB-24CC-27K-WM-60-80-15W-166.7	2700K	2725±85K	<5SDCM	80	250lm	76lm	<2.3SDCM	82~87
C-SFR-F15S6-HB-24CC-30K-WM-60-80-15W-166.7	3000K	3045±105K	<5SDCM	80	250lm	76Im	<2.3SDCM	82~87
C-SFR-F15S6-HB-24CC-35K-WM-60-80-15W-166.7	3500K	3465±245K	<5SDCM	80	250lm	76Im	<2.3SDCM	82~87
C-SFR-F15S6-HB-24CC-40K-WM-60-80-15W-166.7	4000K	3985±150K	<5SDCM	80	250lm	76lm	<2.3SDCM	82~87
C-SFR-F15S6-HB-24CC-57K-WM-60-80-15W-166.7	5700K	5669±305K	<5SDCM	80	250lm	76lm	<2.3SDCM	82~87
	2200K	2238±66K	<5SDCM	80	120lm	37lm	<2.3SDCM	82~87
C-SFR-F15S6-HB-24CC-22~57K-WM-120-80-12W-166	5700K	5669±305K	<5SDCM	80	150lm	46lm	<2.3SDCM	82~87
	Red	618-624nm			30lm	9lm	<3nm	
	Green	522-530nm			75lm	23lm	<3nm	
C-SFR-F15S6-HB-24CC-RGB-WM-60-12W-166.7	Blue	468-474nm			15lm	5lm	<3nm	
	R+G+B	R+G+B			120lm	37lm		
	Red	618-624nm			30lm	9Im	<3nm	
	Green	522-530nm			75lm	23lm	<3nm	
C-SFR-F15S6-HB-24CC-RGBW(27K)-WM-60-15W-166.	Blue	468-474nm			15lm	51m	<3nm	
	White	2725±85K	<5SDCM	80	80lm	24Im	<2.3SDCM	82~87

# Flexglo<sup>™</sup> F15S DMX Pixel Light (Silicone)

## **Optical Parameter**

		F	LED					
Item Code	Color/CCT	Wavelength/ CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	LED Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Co	CRI
	Red	618-624nm			30lm	9lm	<3nm	
C-SFR-F15S6-HB-24CC-RGBW(30K)-WM-60-15W-166.	Green	522-530nm			75lm	23lm	<3nm	
	Blue	468-474nm			15lm	5lm	<3nm	
	White	3045±140K	<5SDCM	80	80lm	24lm	ft Color Tolerance <3nm <3nm <3nm <2.3SDCM <3nm <3nm <3nm <3nm	82~87
	Red	618-624nm			30lm	9Im	<3nm	
C-SFR-F15S6-HB-24CC-RGBW(40K)-WM-60-15W-166.	Green	522-530nm			75lm	23lm	<3nm	
	Blue	468-474nm			15lm	5lm	<3nm	
	White	3985±150K	<5SDCM	80	80lm	24lm	<2.3SDCM	82~87

Note:

1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.

2. The color tolerance of finished products is kept < 5SDCM from batch to batch and narrowed to < 3SDCM at the same batch.

## Max. Running Length Input: DC24V

Туре	Silicone Injection-moulded Connector						
IP Rating	IP68						
Item Code	Single-end Feed	Double-end Feed					
C-SFR-F15S6-DMX-RGB/WW&W-12W-Static full loading	10m/32.8ft	20m/65.6ft					
C-SFR-F15S6-DMX-RGB/WW&W-12W-Dynamic operating	15m/49.2ft	30m/98.4ft					
C-SFR-F15S6-DMX-W-15W-Static full loading	8m/26.2ft	16m/52.5ft					
C-SFR-F15S6-DMX-W-15W-Dynamic operating	12m/39.4ft	24m/78.7ft					
C-SFR-F15S6-DMX-RGBW-15W-Static full loading	8m/26.2ft	16m/52.5ft					
C-SFR-F15S6-DMX-RGBW-15W-Dynamic operating	12m/39.4ft	24m/78.7ft					
Dimension of Connector	Page	P15149					
Max.Packing Length	Page	F15198					

Note:

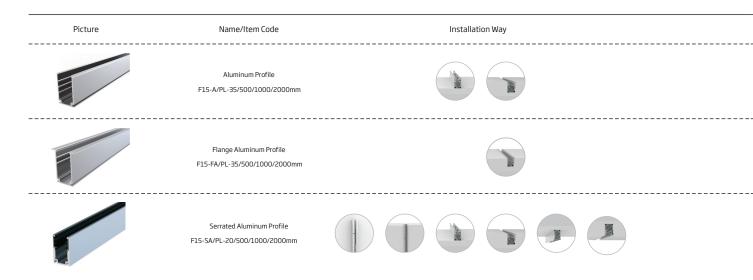
Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.
 The maximum running length is based on the light in static full loading status exceptionally stated dynamic operating.
 Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.
 The delivery length might be subject to the maximum packing length.



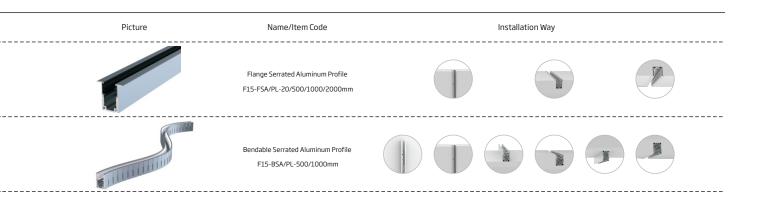
## F15S Connector (Silicone)

Type/IP Rating	Bending Direction	Front Connector End	Front Connector Side from Left	Front Connector Side from Right	Front Connector Bottom	
Silicone Injection-	нв	5				
moulded Connector		F15S-HB-SIM/FC- 01/02-E- 0.3m/1m/3m/	F15S-HB-SIM/FC- 02-SL- 0.3m/1m/3m/	F15S-HB-SIM/FC- 01-SR- 0.3m/1m/3m/	F15S-HB-SIM/FC- 01/02-B- 0.3m/1m/3m/	
IP68		5m/10m 20AWG*2+22AWG*3	5m/10m 20AWG*2+22AWG*3	5m/10m 20AWG*2+22AWG*3	5m/10m 20AWG*2+22AWG*3	

## F15 Mounting Profile

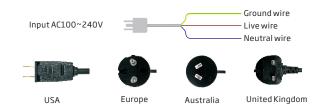


Type/IP Rating	Seamless Middle Connector & Power Feed	Middle Connector & Power T-feed	Middle Connector	Jumper	End Cap
Silicone Injection-	N/A	P-1-1	N/A		
moulded Connector IP68	N/A	F15S-HB-SIM/MC- PTF-0.3m/1m/3m 20AWG*2+22AWG*3	N/A	F15S-HB-SIM/JU- 0.3m/1m 20AWG*2+22AWG*3	F15-SIM/EC



# Flexglo<sup>™</sup> F15S DMX Wiring Diagram

- Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;



- 3. Types of standard plugs are optional if power cord is purchased from CLEAR.
- 4. Adopted UCS512CN IC inside, it is compatible with DMX512 controller at a baud rate of 250Kbps.
  - 4.1 Without signal amplifier and termination resistor, max. signal transmission distance of DMX controller is 300m including the light length;
  - 4.2 If any signal interference or attenuation occurs, in the case of no signal amplifier, <u>120Ω termination resistor</u><sup>®</sup> should be added
  - to achieve smooth and long-distance signal transmission up to 600m from DMX controller output to the light end;
  - 4.3 When DMX controller is far away from light, combined with signal amplifier, the signal can transmit further. Please be aware the max. distance between DMX512 controller and signal amplifier is 300m, and the extended signal transmission distance depends on the specification of signal amplifier.
- 5. DMX512 controller can run max. 512 channels each port, and for each pixel, 4 channels are needed for RGBW, 3 channels for RGB, 2 channels for Dynamic light, and 1 channel for Monochrome. The rest parts beyond control should work with other ports of controller once the total occupied channels of light exceed 512.
- 6. DMX controller is used for signal transmission only, and the independent power supply is required to power up lights. Please refer to the following wiring diagrams for your project. To enable address coding, the green ADR wire between lights must be connected correctly.

## Single-end Feed

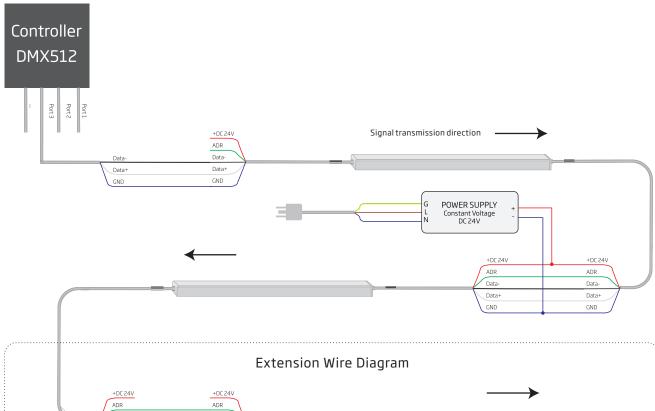
Light Length:	Cable Length:
The length of the longest single light in parallel connection or sum of lights in series connection.	The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

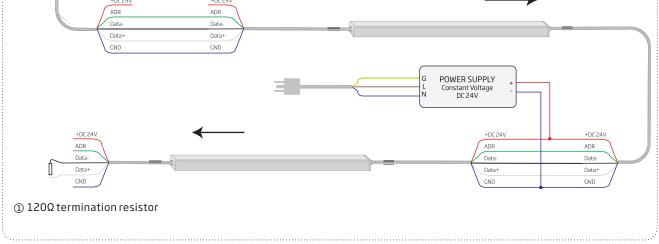
#### How to Minimize Voltage Drop and Signal Transmission Attenuation

1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.

2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".

3. 2 wires of Shielded Twisted Pair cable is required to be used to connect DMX controller and signal amplifier in the distance of max.300m, and wire gauge 20AWG or above is more recommended.





### Max. Running Length Single-end Feed

Input: DC24V

Connector Type	Injection-moulded Connector	
Wire Gauge	20AWG*2+22AWG*3	
C-SFR-F15S6-RGB/WW&W-12W-Static full loading	10m/32.8ft	
C-SFR-F15S6-RGB/WW&W-12W-Dynamic operating	15m/49.2ft	
C-SFR-F15S6-W-15W-Static full loading	8m/26.2ft	
C-SFR-F15S6-W-15W-Dynamic operating	12m/39.4ft	
C-SFR-F15S6-RGBW-15W-Static full loading	8m/26.2ft	
C-SFR-F15S6-RGBW-15W-Dynamic operating	12m/39.4ft	

Note:

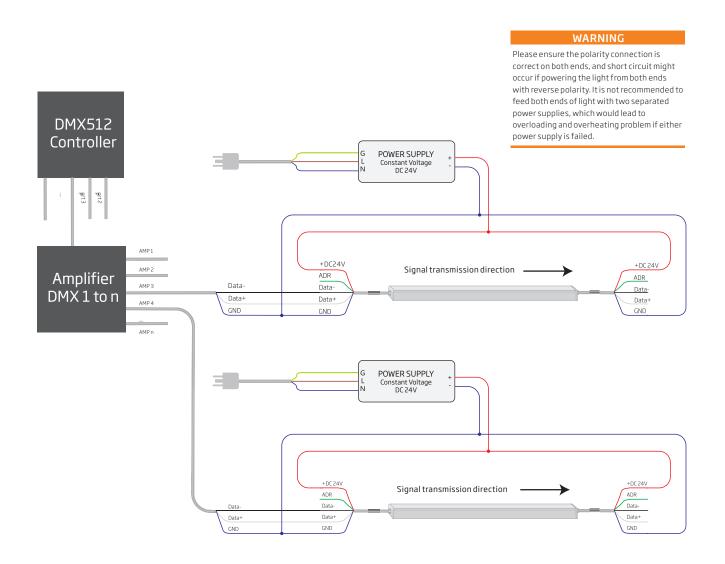
1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable and max. pixel output of international standard DMX512 controller.

2. The maximum running length is based on the designated light in static full loading status exceptionally stated dynamic operating.

 ${\tt 3}.$  Above running length is only the light length excluding lengths of connectors.

4. The delivered length might be subject to the maximum packing length.

### **Double-end Feed**



Please refer to the following wiring diagram with double-end feed to run length that is longer than max. running length for single-end feed but less than twice the value.

#### Light Length:

The length of the longest single light in parallel connection or sum of lights in series connection.

#### Cable Length:

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

#### How to Minimize Voltage Drop and Signal Transmission Attenuation

1. It is optimal to position the power supply in the middle of a single light or multiple lines in daisy chain to keep the equivalent cable length on both ends for double-end feed.

2. Please ensure the cable length is not more than the table "Max. Cable Length" according to the half of light length and its wire gauge. 3. Please ensure the light length is less than the table "Max. Running Length Double-end Feed".

4.2 wires of Shielded Twisted Pair cable is required to be used to connect DMX controller and signal amplifier in the distance of max.300m, and wire gauge 20AWG or above is more recommended.

### Max. Running Length Double-end Feed

Input: DC24V

Connector Type	Injection-moulded Connector	
Wire Gauge	20AWG*2+22AWG*3	
C-SFR-F15S6-RGB/WW&W-12W-Static full loading	20m/65.6ft	
C-SFR-F15S6-RGB/WW&W-12W-Dynamic operating	30m/98.4ft	
C-SFR-F15S6-W-15W-Static full loading	16m/52.5ft	
C-SFR-F15S6-W-15W-Dynamic operating	24m/78.7ft	
C-SFR-F15S6-RGBW-15W-Static full loading	16m/52.5ft	
C-SFR-F15S6-RGBW-15W-Dynamic operating	24m/78.7ft	

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable and max. pixel output of international standard DMX512 controller.

2. The maximum running length is based on the designated light in static full loading status exceptionally stated dynamic operating.

3. Above running length is only the light length excluding lengths of connectors.

4. The delivered length might be subject to the maximum packing length.

## F15S Max. Cable Length (Silicone)

Input: DC24V

			Cable Length									
Item Code	Light Length		2 mm <sup>2</sup>		2 mm <sup>2</sup>	0.81	L mm <sup>2</sup>		2 mm <sup>2</sup>		<sup>7</sup> mm <sup>2</sup>	
	(M)	22	22AWG		AWG	18	AWG	16	AWG	14	AWG	
		m	ft	m	ft	m	ft	m	ft	m	ft	
	1	43.7	143.3	71.0	232.9	110.6	362.8	180.2	591.1	282.6	927.0	
	2	22.1	72.4	35.9	117.7	55.9	183.4	91.1	298.8	142.8	468.6	
	З	14.6	47.8	23.7	77.6	36.9	120.9	60.1	197.0	94.2	309.0	
	4	10.5	34.3	17.0	55.8	26.5	86.9	43.2	141.6	67.7	222.1	
-	5	8.0	26.3	13.0	42.7	20.3	66.5	33.0	108.4	51.8	170.0	
	6	6.5	21.2	10.5	34.5	16.4	53.7	26.7	87.5	41.8	137.2	
C-SFR-F15S6-	7			8.9	29.1	13.8	45.3	22.5	73.9	35.3	115.9	
RGB-12W - C-SFR-F15S6-	8			7.6	24.8	11.8	38.6	19.2	62.9	30.1	98.7	
W&WW-12W	9			6.2	20.5	9.7	31.9	15.8	52.0	24.9	81.5	
-	10			5.3	17.5	8.3	27.2	13.5	44.3	21.2	69.5	
-	11			4.3	14.1	6.7	22.0	10.9	35.9	17.2	56.3	
-	12					5.4	17.7	8.8	28.8	13.8	45.1	
-	13							7.5	24.7	11.8	38.8	
-	14					1		5.9	19.4	9.3	30.4	
-	15							4.5	14.8	7.1	23.2	
	1	33.5	109.9	54.4	178.5	84.8	278.1	138.1	453.2	216.6	710.7	
-	2	16.9	55.4	27.4	90.0	42.7	140.2	69.7	228.5	109.2	358.3	
-	З	10.8	35.3	17.5	57.4	27.2	89.3	44.4	145.6	69.6	228.3	
-	4	8.1	26.4	13.1	43.0	20.4	66.9	33.2	109.0	52.1	171.0	
-	5	6.2	20.2	10.0	32.8	15.6	51.2	25.4	83.4	39.8	130.7	
-	6		2012	8.0	26.2	12.4	40.8	20.3	66.5	31.8	104.2	
-	7	•••		6.5	21.4	10.1	33.3	16.5	54.2	25.9	85.0	
- C-SFR-F15S6-15W		•••		5.1	16.8	8.0	26.2	13.0	42.7	20.4	66.9	
Monochrome	8	•••		4.3	14.1	6.7	22.0	10.9	35.8	17.1	56.1	
Monochionie -	9 10	•••			17.1	5.3	17.4	8.7	28.4	13.6	44.6	
-	10				•••••	4.5	14.8	7.3	24.1	11.5	37.7	
-		•••				3.3	14.8	5.3	17.4			
-	12 13					2.5	8.1	4.0	13.2	8.3 6.3	27.3	
-								+	9.5			
	14 15					1.8	5.8	2.9 1.5	5.1	4.6 2.4	14.9 8.0	
		22.5	109.9	E 4 4	170 5	84.8	278.1	1.5		216.6		
-	1	33.5		54.4	178.5			+	453.2		710.7	
-	2	16.9	55.4	27.4	90.0	42.7	140.2	69.7	228.5	109.2	358.3	
	З	10.8	35.3	17.5	57.4	27.2	89.3	44.4	145.6	69.6	228.3	
C-SFR-F15S6	4	8.1	26.4	13.1	43.0	20.4	66.9	33.2	109.0	52.1	171.0	
RGBW-15W	5	6.2	20.2	10.0	32.8	15.6	51.2	25.4	83.4	39.8	130.7	
Monochrome -	6			8.0	26.2	12.4	40.8	20.3	66.5	31.8	104.2	
-	7			6.5	21.4	10.1	33.3	16.5	54.2	25.9	85.0	
	8			5.1	16.8	8.0	26.2	13.0	42.7	20.4	66.9	
	9					6.7	22.0	10.9	35.8	17.1	56.1	
	10					5.3	17.4	8.7	28.4	13.6	44.6	

Note:

1. Please check the wire gauge of your connector in the table "Max. Running Length".

E.g., Single-end feed, C-SFR-F15S-15W, 5m light length with 20AWG wire, max. cable length should refer to the corresponding value 10m for 5m light length; Double-end feed, C-SFR-F15S-15W, 10m light length with 20AWG wire, max. cable length of each end should refer to the corresponding value 10m for half of light length 5m; 2. The above cable lengths are calculated based on 10% allowable voltage drop maximum.

3. To aviod signal degredation, please ensure the data cable length is within the maximum signal transmission distance according to the specification of controller/signal amplifier.

# F15 Swivel Connector IP20



Recommended for 1. Indoor and dry environments. 2. Uncertain breakdown lengths or on-site length adjustment.



#### Feature

Under the simple and convenient design concept, we developed our swivel connector, which is superb for indoor concealed installation in narrow space thanks to its mini size and omni-directional cable, (more details please refer to the page\*\*\*). Navigated by user manual, tool-free and quick assembly can be realized, and Press & Seal design enables the functions of energization and dustproof rapidly.

### **In-house Test**

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11

# **Connector Type**



## **Dimension: mm**

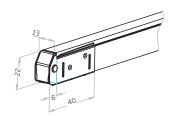
#### Swivel Front Connector



#### Swivel End Cap



F15-SW/EC



#### Note:

1.Unless otherwise stated, the tolerance of the connector is  $\pm 0.5$  mm;

2.To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

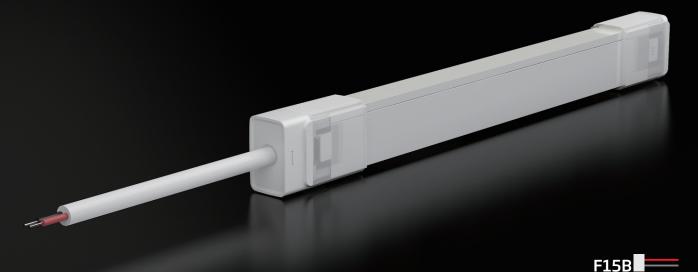


Item Code(B)	
F15B-HB-SW/FC-01-E-300mm	
F15B-HB-SW/FC-02-E-300mm	
F15-SW/EC	
Max. Cable Length Page F15 037~040	

#### Note:

1.Please ensure the cable length is not more than the "Max. Cable Length" in the page mentioned above according to light length and its wire gauge to minimize voltage drop.
 2.All the nominal cable lengths are measured before processing, so the delivered (visible) ones would be a little shorter. Please contact us before ordering if any strict requirement on them.
 3.The tolerance range of cable length enlarges as the cable becomes longer, maximum up to ±50mm.

# F15 Sleeve Connector IP40



**Recommended** for 1. Indoor and dry environments. 2. Uncertain breakdown lengths or on-site length adjustment.





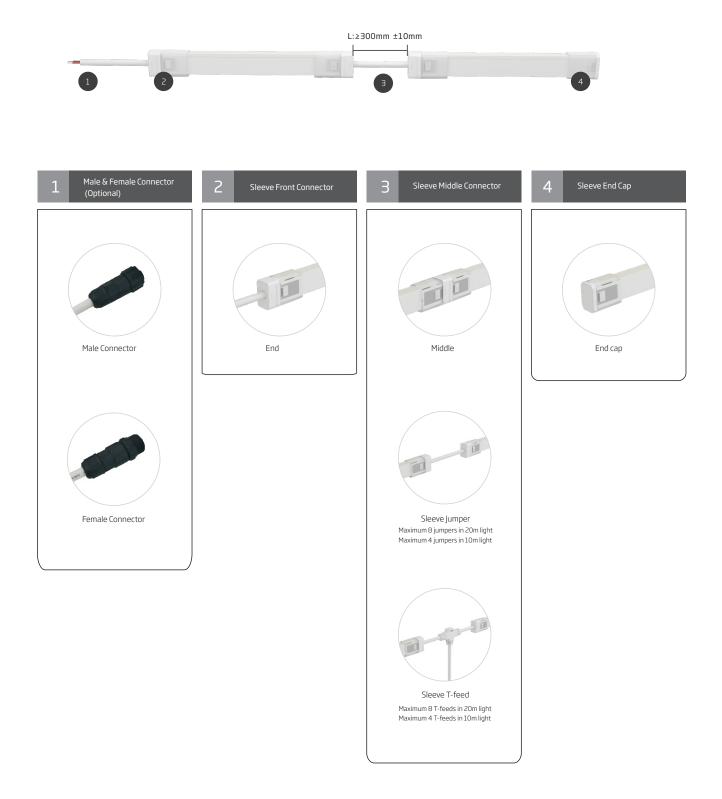
### Feature

It is IP40 rated, available for Monochrome, RGB, pixel addressable and dynamic light products, superb for indoor installation. Navigated by user manual, tool-free and quick assembly can be realized, and Sleeve design enables the functions of energization and dustproof rapidly.

### **In-house Test**

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11

# **Connector Type**

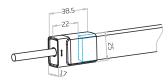


# **Dimension: mm**

#### Sleeve Front Connector-End



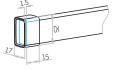
F15B/F15D/F15A/F15S-HB-SL/FC-01/02-E



#### **Sleeve End Cap**



F15-SL/EC

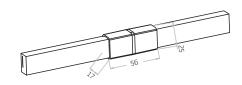


#### **Sleeve Middle Connector**

.....



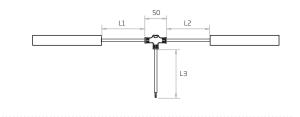
F15B/F15D/F15A/F15S-HB-SL/MC



#### Sleeve Middle Connector & Power T-feed



F15B/F15D/F15A/F15S-HB-SL/MC-PTF-01/02 L1 and L2 available in 300mm. L3 available in 300mm/1000mm/3000mm.



#### Note:

1. Unless otherwise stated, the tolerance of the connector is  $\pm 0.5$  mm;

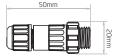
2. To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.



## Male & Female Connector



For plug and play cable junction, IP67



Note: Unless otherwise stated, the tolerance is ±2mm.

F15B	SL/FC	- 01 -	E	- 300mm
F15B-HB F15D-HB F15A-HB F15S-HB	SL=Sleeve FC=Front Connector MC-PTF=Middle Connector & Power T-feed MC=Middle Connector JU=Jumper EC=End Cap	01=01End 02=02End 01/02=01/02End	E=End Feed	300mm Cable 1000mm Cable 3000mm Cable 5000mm Cable 15000mm Cable 20000mm Cable

# C-FR-F15B/D/A/S-HB

Item Code(B)	Item Code(D)	Item Code(A)	Item Code(S)	
F15B-HB-SL/FC-01-E-300mm	F15D-HB-SL/FC-01-E-300mm	F15A-HB-SL/FC-01-E-300mm	F15S-HB-SL/FC-01-E-300mm	
F15B-HB-SL/FC-02-E-300mm	F15D-HB-SL/FC-02-E-300mm	F15A-HB-SL/FC-02-E-300mm	F15S-HB-SL/FC-02-E-300mm	
F15B-HB-SL/MC-PTF-01/02-300mm	F15D-HB-SL/MC-PTF-01/02-300mm	F15A-HB-SL/MC-PTF-01/02-300mm	F15S-HB-SL/MC-PTF-01/02-300mm	
F15B-HB-SL/MC	F15D-HB-SL/MC	F15A-HB-SL/MC	F15S-HB-SL/MC	
F15B-HB-SL/JU-01/02-300mm	F15D-HB-SL/JU-01/02-300mm	F15A-HB-SL/JU-01/02-300mm	F15S-HB-SL/JU-01/02-300mm	
F15-SL/EC	F15-SL/EC	F15-SL/EC	F15-SL/EC	
Max. Cable Length				
Page F15 037~040	Page F15 081~082	Page F15 093~094	Page F15 115~116	
F15-SL/EC F15-SL/EC Max.		able Length		

Note: 1.Please ensure the cable length is not more than the "Max. Cable Length" in the page mentioned above according to light length and its wire gauge to minimize voltage drop. 2.All the nominal cable lengths are measured before processing, so the delivered (visible) ones would be a little shorter. Please contact us before ordering if any strict requirement on them. 3.The tolerance range of cable length enlarges as the cable becomes longer, maximum up to ±50mm.

# F15 Snap Connector IP67



Recommended for1. Wet environments.2. Uncertain breakdown lengths or on-site length adjustment.





#### Feature

To seal the end of light and ensure the waterproof in case of any cutting or extension on site, Insulfit<sup>™</sup> technology prevents the water or vapor ingress from the end of the light. DryWire<sup>™</sup> technology applied on the cable eliminates the capillary phenomenon through wires, which secured the long-term reliability in any wading environments.

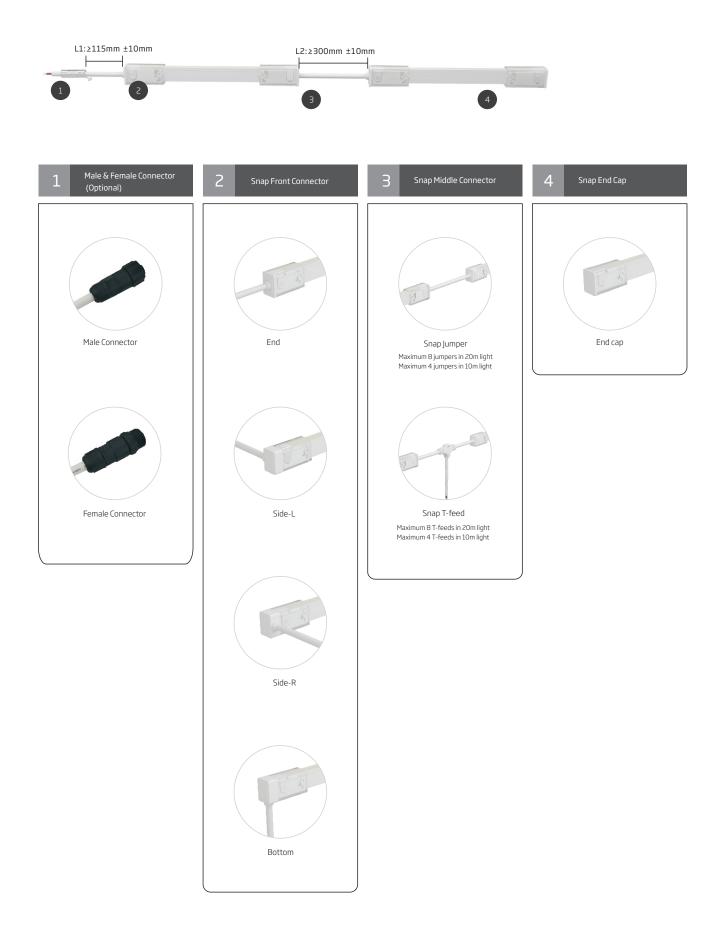
**Note:** the third party IPX8 rated at the depth of 2m underwater. CLEAR self-declared IP67 considering the unexpected factors in the process of installation or the potential improper assembly on site.

### **In-house Test**

TestObject	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Waterproof	1	Waterproof-IPX5 / IPX7 / IPX8	CLEAR-defined®
Connector	2	Swing-extreme	CLEAR-defined®

<sup>®</sup>Before waterproof test, high-low temperature cycling shock test has been implemented to simulate the outdoor harsh weather, and it's a more stringent standard we're compliant with than third party/s.

# **Connector Type**

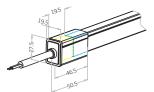


# **Dimension: mm**

#### **Snap Front Connector-End**



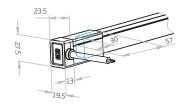
F15B/F15D/F15A/F15E/F15S-HB-SN/FC-01/02-E



#### **Snap Front Connector-Side**



F15B/F15D/F15A/F15S-HB-SN/FC-01/02-SL



Lat #

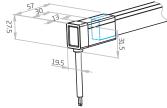
F15B/F15D/F15A/F15S-HB-SN/FC-01/02-SR



### Snap Front Connector-Bottom



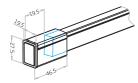
F15B/F15D/F15A/F15S-HB-SN/FC-01/02-B



#### **Snap End Cap**



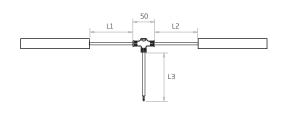
F15-HB-SN/EC-01/02



### Snap Middle Connector & Power T-feed



F15B/F15D/F15A/F15E/F15S-HB-SN/MC-PTF-01/02 L1 and L2 available in 300mm. L3 available in 300mm/1000mm/3000mm.

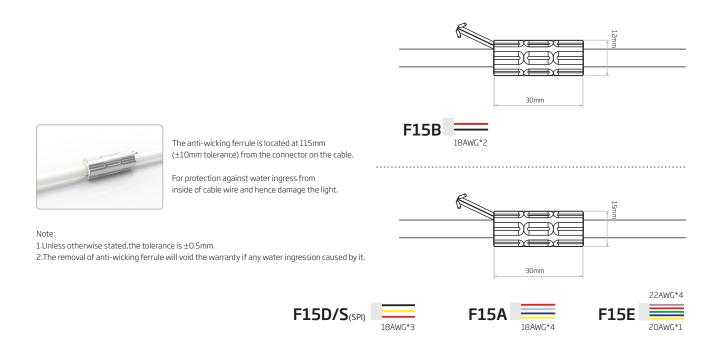


#### Note:

1.Unless otherwise stated, the tolerance of the connector is  $\pm 0.5$  mm;

2.To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

# **Anti-wicking Ferrule**

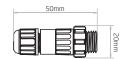


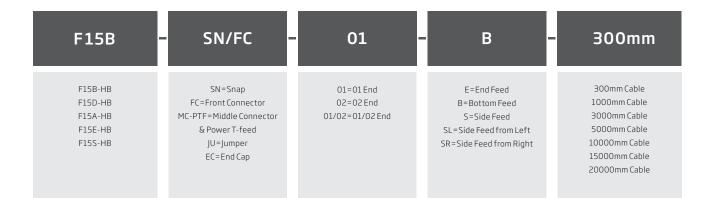
# Male & Female Connector

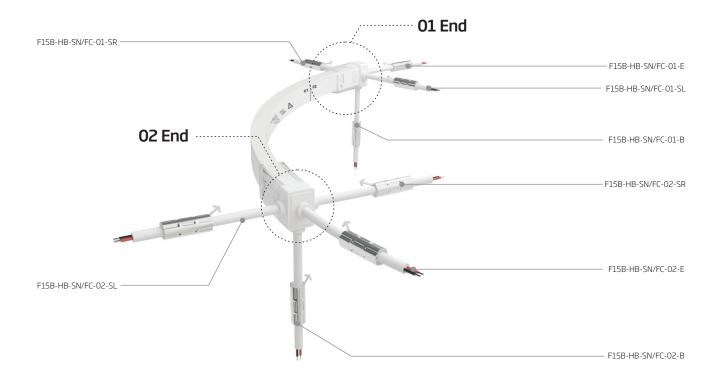


For plug and play cable junction, IP67

Note: Unless otherwise stated, the tolerance is  $\pm 2\text{mm.}$ 







# C-FR-F15B/D/A/E/S-HB

Item Code(B)	Item Code(D)	Item Code(A)	Item Code(E)	Item Code(S)
F15B-HB-SN/FC-01-E-300mm	F15D-HB-SN/FC-01-E-300mm	F15A-HB-SN/FC-01-E-300mm	F15E-HB-SN/FC-01-E-300mm	F15S-HB-SN/FC-01-E-300mm
F15B-HB-SN/FC-02-E-300mm	F15D-HB-SN/FC-02-E-300mm	F15A-HB-SN/FC-02-E-300mm	F15E-HB-SN/FC-02-E-300mm	F15S-HB-SN/FC-02-E-300mm
F15B-HB-SN/FC-01-B-300mm	F15D-HB-SN/FC-01-B-300mm	F15A-HB-SN/FC-01-B-300mm	/	F15S-HB-SN/FC-01-B-300mm
F15B-HB-SN/FC-02-B-300mm	F15D-HB-SN/FC-02-B-300mm	F15A-HB-SN/FC-02-B-300mm	/	F15S-HB-SN/FC-02-B-300mm
F15B-HB-SN/FC-01-SL-300mm	F15D-HB-SN/FC-01-SL-300mm	F15A-HB-SN/FC-01-SL-300mm	/	F15S-HB-SN/FC-01-SL-300mm
F15B-HB-SN/FC-01-SR-300mm	F15D-HB-SN/FC-01-SR-300mm	F15A-HB-SN/FC-01-SR-300mm	/	F15S-HB-SN/FC-01-SR-300mm
F15B-HB-SN/FC-02-SL-300mm	F15D-HB-SN/FC-02-SL-300mm	F15A-HB-SN/FC-02-SL-300mm	/	F15S-HB-SN/FC-02-SL-300mm
F15B-HB-SN/FC-02-SR-300mm	F15D-HB-SN/FC-02-SR-300mm	F15A-HB-SN/FC-02-SR-300mm	/	F15S-HB-SN/FC-02-SR-300mm
F15B-HB-SN/MC-PTF-01/02-300mm	F15D-HB-SN/MC-PTF-01/02-300mm	F15A-HB-SN/MC-PTF-01/02-300mm	F15E-HB-SN/MC-PTF-01/02-300mm	F15S-HB-SN/MC-PTF-01/02-300mm
F15B-HB-SN/JU-01/02-300mm	F15D-HB-SN/JU-01/02-300mm	F15A-HB-SN/JU-01/02-300mm	F15E-HB-SN/JU-01/02-300mm	F15S-HB-SN/JU-01/02-300mm
F15-SN/EC-01	F15-SN/EC-01	F15-SN/EC-01	F15-SN/EC-01	F15-SN/EC-01
F15-SN/EC-02	F15-SN/EC-02	F15-SN/EC-02	F15-SN/EC-02	F15-SN/EC-02
		Max. Cable Length		
Page F15 037~040	Page F15 081~082	Page F15 093~094	Page F15 105~106	Page F15 115~116

#### Note:

1.Please ensure the cable length is not more than the "Max. Cable Length" in the page mentioned above according to light length and its wire gauge to minimize voltage drop.
 2.All the nominal cable lengths are measured before processing, so the delivered (visible) ones would be a little shorter. Please contact us before ordering if any strict requirement on them.
 3.The tolerance range of cable length enlarges as the cable becomes longer, maximum up to ±50mm.



# F15 Socket Connector IP67



#### Recommended for

- 1. Outdoor environments.
- 2. Uncertain breakdown lengths or on-site length adjustment.

#### Feature

Socket connector, a new type of field-assembly connector for outdoor use, IP67 rated, brass casing, features unexceptional adaptability and excellent weather resistance. It achieves the unique balance between waterproof performance and physical dimension, highly functional yet incredibly minimal, giving you an extraordinary visual experience due to the less dark area at the jointing area. The whole assembling process is tool-less and quick, benefiting from its simple but smart structure design.

The remarkable innovation lies in the invisible waterproof pretreatment on the cable, which facilitates the wiring and slotting on the site greatly as the extra anti-wicking ferrule on the cable is no longer needed.

### **In-house Test**

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Waterproof  Connector	1	Waterproof-IPX5 / IPX7 / IPX8	$CLEAR ext{-}defined^{\oplus}$
	2	Swing-extreme	CLEAR-defined®

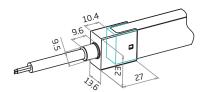
<sup>®</sup>Before waterproof test, high-low temperature cycling shock test has been implemented to simulate the outdoor harsh weather, and it's a more stringent standard we're compliant with than third party's.

### **Dimension: mm**

#### Socket Front Connector



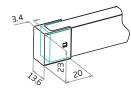
F15B-HB-SO/FC-01/02-E F15D-HB-SO/FC-01/02-E F15A-HB-SO/FC-01/02-E F15S-HB-SO/FC-01/02-E



#### Socket End Cap







Note:

1.Unless otherwise stated, the tolerance of the connector is  $\pm 0.5 \text{mm}$ ,

2.To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

3.Please refer to Page F10039 about how to assemble the socket connector.

F15B -	SO/FC	01	E ·	- 300mm
F15B-HB F15D-HB F15A-HB F15S-HB	SO=Socket FC=Front Connector EC=End Cap	01=01 End 02=02 End	E=End Feed	300mm Cable 1000mm Cable 3000mm Cable 5000mm Cable

Item Code(B)	Item Code(D)	Item Code(A)	Item Code(S)
F15B-HB-S0/FC-01-E-300mm	F15D-HB-SO/FC-01-E-300mm	F15A-HB-S0/FC-01-E-300mm	F15S-HB-S0/FC-01-E-300mm
F15B-HB-SO/FC-02-E-300mm	F15D-HB-SO/FC-02-E-300mm	F15A-HB-S0/FC-02-E-300mm	F15S-HB-SO/FC-02-E-300mm
F15B-SO/EC	F15D-SO/EC	F15A-S0/EC	F15S-SO/EC
	Max. Cabl	e Length	
Page F15 037~040	Page F15 081~082	Page F15 093~094	Page F15 115~116

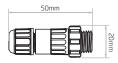
Note:

1.Please ensure the cable length is not more than the "Max. Cable Length" in the page mentioned above according to light length and its wire gauge to minimize voltage drop. 2.All the nominal cable lengths are measured before processing, so the delivered (visible) ones would be a little shorter. Please contact us before ordering if any strict requirement on them. 3.The tolerance range of cable length enlarges as the cable becomes longer, maximum up to ±50mm.

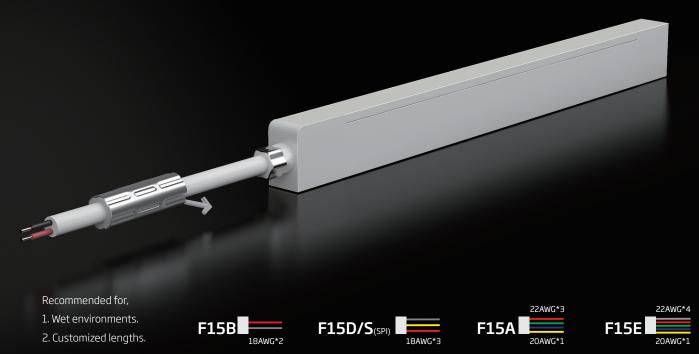
# Male & Female Connector



For plug and play cable junction, IP67



# F15 Injection-moulded Connector IP67



#### Feature

Adopting precision milling and special glue PVC injection moulding workmanship, the transparent terminal of the connector allows the seamless effects spliced end by end.

The copper ring protects the cable joint from the damage of excessively external force in the process of installation. DryWire<sup>™</sup> technology applied on the cable eliminates the capillary phenomenon through wires, which secured the long-term reliability in outdoor or any wet environments.

Light lengths can be customized on the basis of projects and pre-installation before the delivery eases the assembly trouble on site.

Note: This connector has been rated as IPX8 at the depth of 2m underwater by the third party. CLEAR degraded it to IP67 considering the unexpected factors in the process of installation or the potential improper assembly on site.

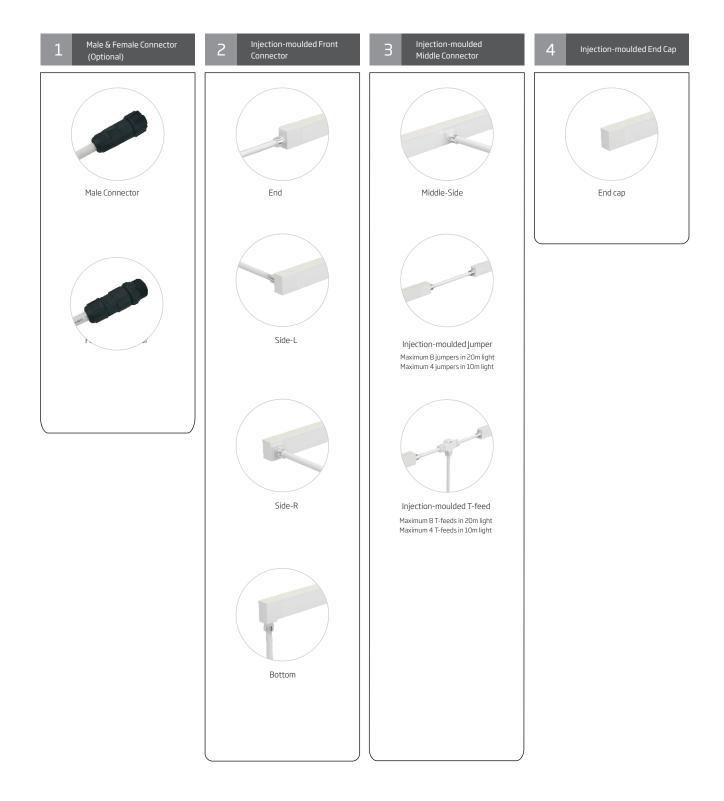
### **In-house Test**

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Waterproof	1	Waterproof-IPX5 / IPX7 / IPX8	CLEAR-defined <sup>®</sup>
Connector	2	Swing-extreme	CLEAR-defined $^{\circ}$

<sup>®</sup>Before waterproof test, high-low temperature cycling shock test has been implemented to simulate the outdoor harsh weather, and it's a more stringent standard we're compliant with than third party's.

# **Connector Type**



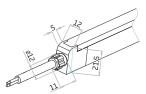


# **Dimension: mm**

#### Injection-moulded Front Connector-End



F15B/F15D/F15A/F15E/F15S-HB-IM/FC-01/02-E



Injection-moulded Front Connector-Side



F15B/F15D/F15A/F15E/F15S-HB-IM/FC-02-SL



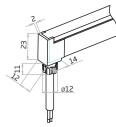
F15B/F15D/F15A/F15E/F15S-HB-IM/FC-01-SR

#### Injection-moulded Front Connector-Bottom



F15B/F15D/F15A/F15E/F15S-HB-IM/FC-01/02-B

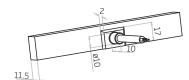
.....



#### Injection-moulded Seamless Middle Connector & Power Feed from Side



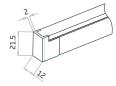
F15B/F15D/F15A-HB-IM/SEMC-PF-S



#### Injection-moulded End Cap



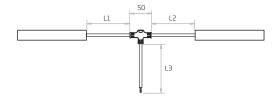
F15-IM/EC







F15B/F15D/F15A/F15E/F15S-HB-IM/MC-PTF L1 and L2 available in 300mm. L3 available in 300mm/1000mm/3000mm.

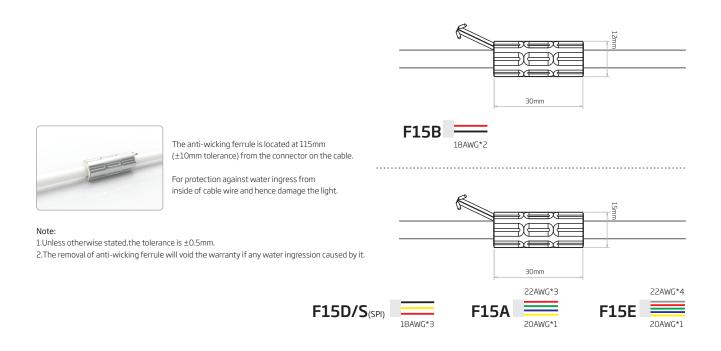


#### Note:

1. Unless otherwise stated, the tolerance of the connector is  $\pm 0.5$  mm;

2.To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

# **Anti-wicking Ferrule**

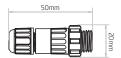


# Male & Female Connector

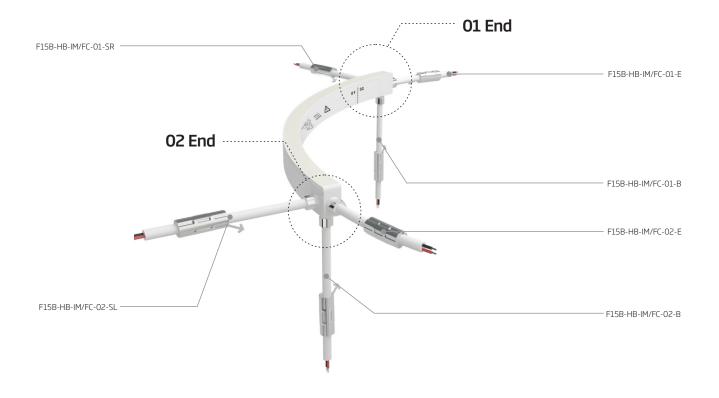


For plug and play cable junction, IP67

Note: Unless otherwise stated, the tolerance is  $\pm 2$ mm.



F15B -	IM/FC -	01 -	- В -	300mm
F15B-HB F15D-HB F15A-HB F15E-HB F15S-HB	IM=Injection-moulded FC=Front Connector SEMC-PF-S=Seamless Middle Connector & Power Feed from Side MC-PTF=Middle Connector & Power T-feed JU=Jumper EC=End Cap	01=01 End 02=02 End	E=End Feed B=Bottom Feed S=Side Feed SL=Side Feed from Left SR=Side Feed from Right	300MM Cable 1000MM Cable 3000MM Cable 5000MM Cable 10000MM Cable 15000MM Cable 20000MM Cable



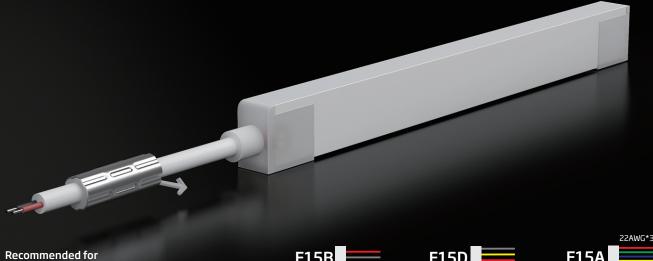
# C-FR-F15B/D/A/E/S-HB

Item Code(B)	Item Code(D)	Item Code(A)	Item Code(E)	Item Code(S)
F15B-HB-IM/FC-01-E-300mm	F15D-HB-IM/FC-01-E-300mm	F15A-HB-IM/FC-01-E-300mm	F15E-HB-IM/FC-01-E-300mm	F15S-HB-IM/FC-01-E-300mm
F15B-HB-IM/FC-02-E-300mm	F15D-HB-IM/FC-02-E-300mm	F15A-HB-IM/FC-02-E-300mm	F15E-HB-IM/FC-02-E-300mm	F15S-HB-IM/FC-02-E-300mm
F15B-HB-IM/FC-01-B-300mm	F15D-HB-IM/FC-01-B-300mm	F15A-HB-IM/FC-01-B-300mm	F15E-HB-IM/FC-01-B-300mm	F15S-HB-IM/FC-01-B-300mm
F15B-HB-IM/FC-02-B-300mm	F15D-HB-IM/FC-02-B-300mm	F15A-HB-IM/FC-02-B-300mm	F15E-HB-IM/FC-02-B-300mm	F15S-HB-IM/FC-02-B-300mm
F15B-HB-IM/FC-01-SR-300mm	F15D-HB-IM/FC-01-SR-300mm	F15A-HB-IM/FC-01-SR-300mm	F15E-HB-IM/FC-01-SR-300mm	F15S-HB-IM/FC-01-SR-300mm
F15B-HB-IM/FC-02-SL-300mm	F15D-HB-IM/FC-02-SL-300mm	F15A-HB-IM/FC-02-SL-300mm	F15E-HB-IM/FC-02-SL-300mm	F15S-HB-IM/FC-02-SL-300mm
F15B-HB-IM/SEMC-PF-S-300mm	F15D-HB-IM/SEMC-PF-S-300mm	F15A-HB-IM/SEMC-PF-S-300mm	F15E-HB-IM/MC-PTF-300mm	F15S-HB-IM/MC-PTF-300mm
F15B-HB-IM/MC-PTF-300mm	F15D-HB-IM/MC-PTF-300mm	F15A-HB-IM/MC-PTF-300mm	F15E-HB-IM/JU-300mm	F15S-HB-IM/JU-300mm
F15B-HB-IM/JU-300mm	F15D-HB-IM/JU-300mm	F15A-HB-IM/JU-300mm	F15-IM/EC	F15-IM/EC
F15-IM/EC	F15-IM/EC	F15-IM/EC		
		Max. Cable Length		
Page F15 037~040	Page F15 081~082	Page F15 093~094	Page F15 105~106	Page F15 115~116

Note: 1.Please ensure the cable length is not more than the "Max. Cable Length" in the page mentioned above according to light length and its wire gauge to minimize voltage drop. 2.All the nominal cable lengths are measured before processing, so the delivered (visible) ones would be a little shorter. Please contact us before ordering if any strict requirement on them. 3.The tolerance range of cable length enlarges as the cable becomes longer, maximum up to ±50mm.



# F15 Silicone Injection-moulded Connector IP68



### 1. Wet environments.

F15B 18AWG\*2



F15E

22AWG\*4

20AWG\*1



F155(DMX)

22AWG\*3

2. High-low temperature or intense humidity and UV.

3. Customized lengths.

4. Harsh working conditions or unexpected excessively external force during construction.

#### Feature

Precision milling and special glue Silicone liquid injection-moulded workmanship enable 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<sup>™</sup> technology applied on the cable eliminates the capillary phenomenon through wires, which secured the long-term reliability in outdoor or any wet environments.

Light lengths can be customized on the basis of projects and pre-installation before the delivery eases the assembly trouble on site.

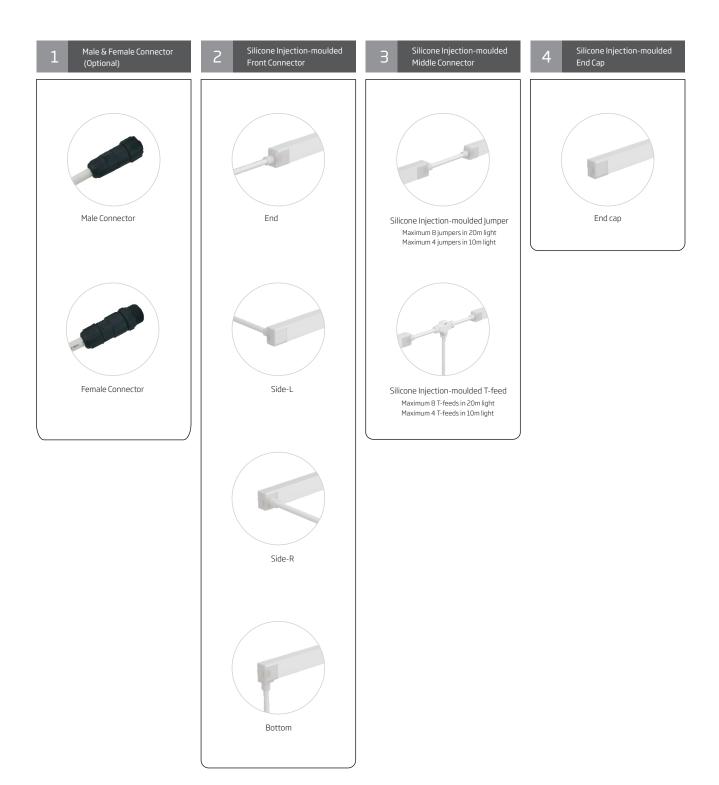
### **In-house Test**

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Waterproof	1	Waterproof-IPX5 / IPX7 / IPX8	CLEAR-defined ®
Connector	2	Swing-extreme	CLEAR-defined®

<sup>®</sup>Before waterproof test, high-low temperature cycling shock test has been implemented to simulate the outdoor harsh weather, and it's a more stringent standard we're compliant with than third party's.

# **Connector Type**



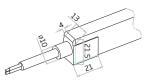


# Dimension: mm

#### Silicone Injection-moulded Front Connector-End



F15B/F15D/F15A/F15E/F15S-HB-SIM/FC-01/02-E



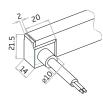
#### Silicone Injection-moulded Front Connector-Side



F15B/F15D/F15A/F15E/F15S-HB-SIM/FC-02-SL



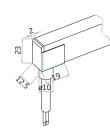
F15B/F15D/F15A/F15E/F15S-HB-SIM/FC-01-SR



#### Silicone Injection-moulded Front Connector-Bottom



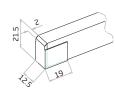
F15B/F15D/F15A/F15E/F15S-HB-SIM/FC-01/02-B



#### Silicone Injection-moulded End Cap



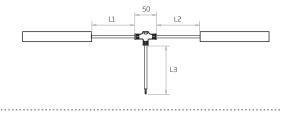
F15-SIM/EC



#### Silicone Injection-moulded Middle Connector & Power T-feed



F15B/F15D/F15S-HB-SIM/MC-PTF L1 and L2 available in 300mm. L3 available in 300mm/1000mm/3000mm.

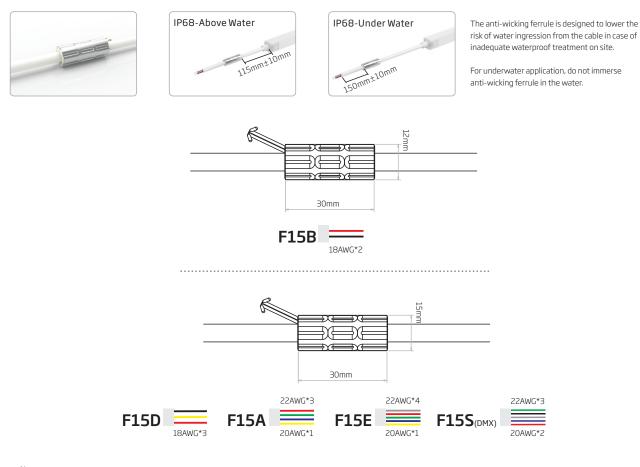


#### Note:

1. Unless otherwise stated, the tolerance of the connector is  $\pm 0.5$  mm;

2. To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

# **Anti-wicking Ferrule**



Note:

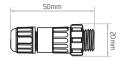
1.Unless otherwise stated, the tolerance is  $\pm 0.5$  mm.

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

### Male & Female Connector

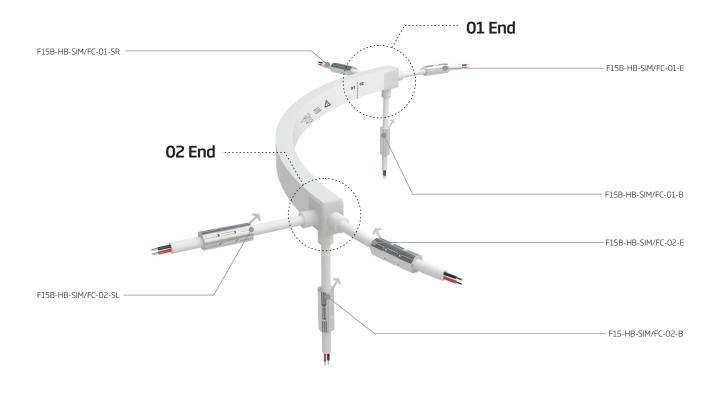


For plug and play cable junction, IP67



Note: Unless otherwise stated, the tolerance is  $\pm 2\text{mm.}$ 





# C-FR-F15B/D/A/E/S-HB

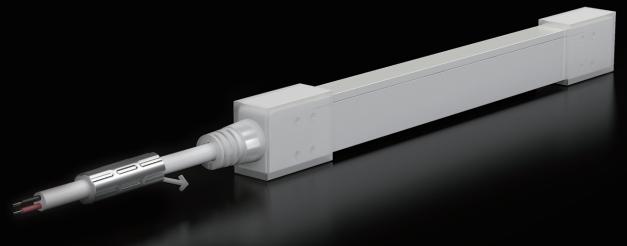
Item Code(D)	Item Code(A)	Item Code(E)	Item Code(S)
F15D-HB-SIM/FC-01-E-300mm	F15A-HB-SIM/FC-01-E-300mm	F15E-HB-SIM/FC-01-E-300mm	F15S-HB-SIM/FC-01-E-300mm
F15D-HB-SIM/FC-02-E-300mm	F15A-HB-SIM/FC-02-E-300mm	F15E-HB-SIM/FC-02-E-300mm	F15S-HB-SIM/FC-02-E-300mm
F15D-HB-SIM/FC-01-B-300mm	F15A-HB-SIM/FC-01-B-300mm	F15E-HB-SIM/FC-01-B-300mm	F15S-HB-SIM/FC-01-B-300mm
F15D-HB-SIM/FC-02-B-300mm	F15A-HB-SIM/FC-02-B-300mm	F15E-HB-SIM/FC-02-B-300mm	F15S-HB-SIM/FC-02-B-300mm
F15D-HB-SIM/FC-01-SR-300mm	F15A-HB-SIM/FC-01-SR-300mm	F15E-HB-SIM/FC-01-SR-300mm	F15S-HB-SIM/FC-01-SR-300mm
F15D-HB-SIM/FC-02-SL-300mm	F15A-HB-SIM/FC-02-SL-300mm	F15E-HB-SIM/FC-02-SL-300mm	F15S-HB-SIM/FC-02-SL-300mm
F15D-HB-SIM/MC-PTF-300mm	F15A-HB-SIM/MC-PTF-300mm	F15E-HB-SIM/MC-PTF-300mm	F15S-HB-SIM/MC-PTF-300mm
F15D-HB-SIM/JU-300mm	F15A-HB-SIM/JU-300mm	F15E-HB-SIM/JU-300mm	F15S-HB-SIM/JU-300mm
F15-SIM/EC	F15-SIM/EC	F15-SIM/EC	F15-SIM/EC
	Max. Cable Length		
Page F15 081~082	Page F15 093~094	Page F15 105~106	Page F15 115~116
	F15D-HB-SIM/FC-01-E-300mm F15D-HB-SIM/FC-02-E-300mm F15D-HB-SIM/FC-01-B-300mm F15D-HB-SIM/FC-02-B-300mm F15D-HB-SIM/FC-01-SR-300mm F15D-HB-SIM/FC-02-SL-300mm F15D-HB-SIM/MC-PTF-300mm F15D-HB-SIM/JU-300mm F15D-HB-SIM/JU-300mm	F15D-HB-SIM/FC-01-E-300mm         F15A-HB-SIM/FC-01-E-300mm           F15D-HB-SIM/FC-02-E-300mm         F15A-HB-SIM/FC-02-E-300mm           F15D-HB-SIM/FC-01-B-300mm         F15A-HB-SIM/FC-01-B-300mm           F15D-HB-SIM/FC-02-B-300mm         F15A-HB-SIM/FC-01-B-300mm           F15D-HB-SIM/FC-01-SR-300mm         F15A-HB-SIM/FC-02-B-300mm           F15D-HB-SIM/FC-01-SR-300mm         F15A-HB-SIM/FC-01-SR-300mm           F15D-HB-SIM/FC-02-SL-300mm         F15A-HB-SIM/FC-02-SL-300mm           F15D-HB-SIM/FC-02-SL-300mm         F15A-HB-SIM/FC-02-SL-300mm           F15D-HB-SIM/JU-300mm         F15A-HB-SIM/JU-300mm           F15D-HB-SIM/JU-300mm         F15A-HB-SIM/JU-300mm           F15D-HB-SIM/FC         F15A-HB-SIM/FC-02-SL-300mm	F15D-HB-SIM/FC-01-E-300mm         F15A-HB-SIM/FC-01-E-300mm         F15E-HB-SIM/FC-01-E-300mm           F15D-HB-SIM/FC-02-E-300mm         F15A-HB-SIM/FC-02-E-300mm         F15E-HB-SIM/FC-02-E-300mm           F15D-HB-SIM/FC-01-B-300mm         F15A-HB-SIM/FC-01-B-300mm         F15E-HB-SIM/FC-01-B-300mm           F15D-HB-SIM/FC-02-B-300mm         F15A-HB-SIM/FC-01-B-300mm         F15E-HB-SIM/FC-01-B-300mm           F15D-HB-SIM/FC-02-B-300mm         F15A-HB-SIM/FC-01-SR-300mm         F15E-HB-SIM/FC-02-B-300mm           F15D-HB-SIM/FC-01-SR-300mm         F15A-HB-SIM/FC-01-SR-300mm         F15E-HB-SIM/FC-01-SR-300mm           F15D-HB-SIM/FC-02-SL-300mm         F15A-HB-SIM/FC-02-SL-300mm         F15E-HB-SIM/FC-02-SL-300mm           F15D-HB-SIM/FC-02-SL-300mm         F15A-HB-SIM/FC-02-SL-300mm         F15E-HB-SIM/FC-02-SL-300mm           F15D-HB-SIM/FC-02-SL-300mm         F15A-HB-SIM/FC-02-SL-300mm         F15E-HB-SIM/FC-02-SL-300mm           F15D-HB-SIM/FC-02-SL-300mm         F15A-HB-SIM/MC-PTF-300mm         F15E-HB-SIM/JC-02-SL-300mm           F15D-HB-SIM/JU-300mm         F15A-HB-SIM/JU-300mm         F15E-HB-SIM/JU-300mm           F15D-HB-SIM/JU-300mm         F15A-HB-SIM/JU-300mm         F15E-HB-SIM/JU-300mm           F15D-HB-SIM/JEC         F15-SIM/EC         F15-SIM/EC           Max. Cable Length         Max. Cable Length         F15-SIM/EC

#### Note:

1.Please ensure the cable length is not more than the "Max. Cable Length" in the page mentioned above according to light length and its wire gauge to minimize voltage drop.
 2.All the nominal cable lengths are measured before processing, so the delivered (visible) ones would be a little shorter. Please contact us before ordering if any strict requirement on them.
 3.The tolerance range of cable length enlarges as the cable becomes longer, maximum up to ±50mm.



# F15 Dual Injection-moulded Connector IP68



Recommended for, F15B F15D/S(SPI) 1. Long-term "liquid" environments up to the depth of 2m (the liquid are safe to touch the 18AWG\*3 8AWG\*2 human skin for a long time). 22AWG\*3 22AWG\*4 2. High temperature and humidity environments (mounting surface temperature  $< 60 \,^{\circ}{\rm C}$ ). F15A F15E 3. Customized lengths and bulky connector. 204\//G\*1 20AWG\*1 4. Harsh working conditions .

#### Feature

Precision milling, copper ring, and PVC dual injection-moulded workmanship enhance the protection level and reliability of the cable joint and protect it from the damage in the process of installation, which secured the long-term reliability in wet, underwater or harsh working environments comprehensively.

Equipped with the product series F15, it is IP68 rated by SGS.

Light lengths can be customized on the basis of projects and pre-installation before the delivery eases the assembly trouble on site, and it will be a slim dark area spliced connector end by end from a long distance view.

**Note:**The connector size is larger than the light body's, please refer to the following "Dimension" of connector and reserve enough installation room.

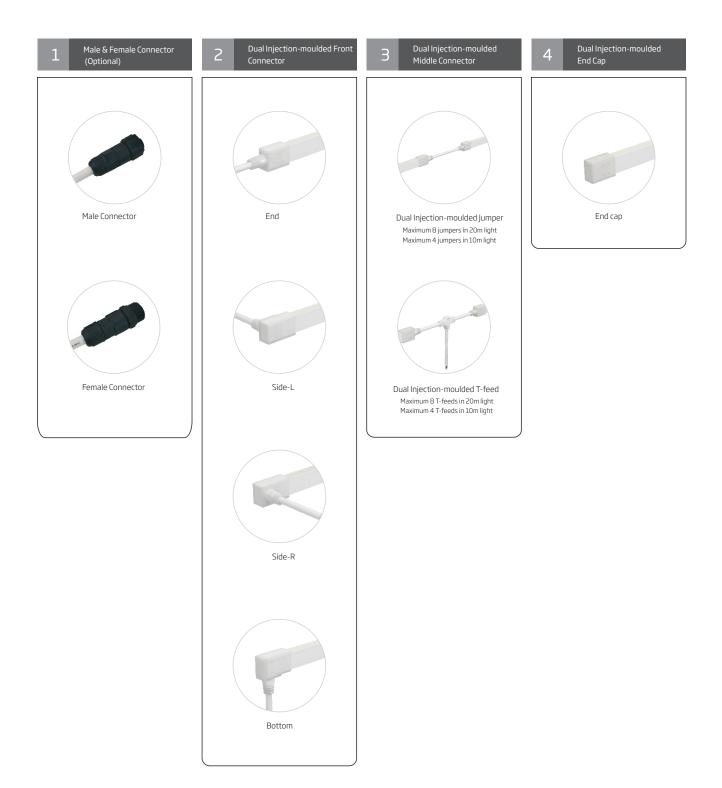
#### In-house Test

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Waterproof	1	Waterproof-IPX5 / IPX7 / IPX8	CLEAR-defined ®
Connector	2	Swing-extreme	CLEAR-defined®

<sup>®</sup>Before waterproof test, high-low temperature cycling shock test has been implemented to simulate the outdoor harsh weather, and it's a more stringent standard we're compliant with than third party's.

# **Connector Type**



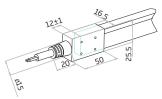


## **Dimension: mm**

#### **Dual Injection-moulded Front Connector-End**



F15B/F15D/F15A/F15E/F15S-HB-DIM/FC-01/02-E



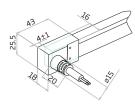
#### Dual Injection-moulded Front Connector-Side



F15B/F15D/F15A/F15E/F15S-HB-DIM/FC-02-SL



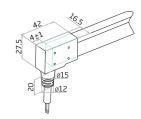
F15B/F15D/F15A/F15E/F15S-HB-DIM/FC-01-SR



#### Dual Injection-moulded Front Connector-Bottom



F15B/F15D/F15A/F15E/F15S-HB-DIM/FC-01/02-B

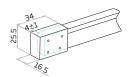


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#### **Dual Injection-moulded End Cap**



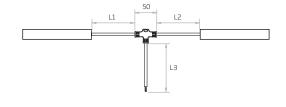
F15-DIM/EC



#### Dual Injection-moulded Middle Connector & Power T-feed



F15B/F15D/F15A/F15E/F15S-HB-DIM/MC-PTF L1 and L2 available in 300mm. L3 available in 300mm/1000mm/3000mm.

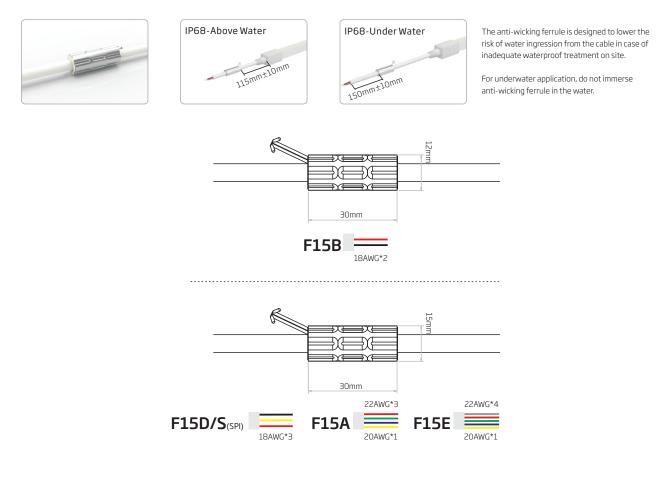


#### Note:

1. Unless otherwise stated, the tolerance of the connector is  $\pm 0.5$  mm;

2. To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

# **Anti-wicking Ferrule**



Note:

1.Unless otherwise stated, the tolerance is  $\pm 0.5$ mm.

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

### Male & Female Connector

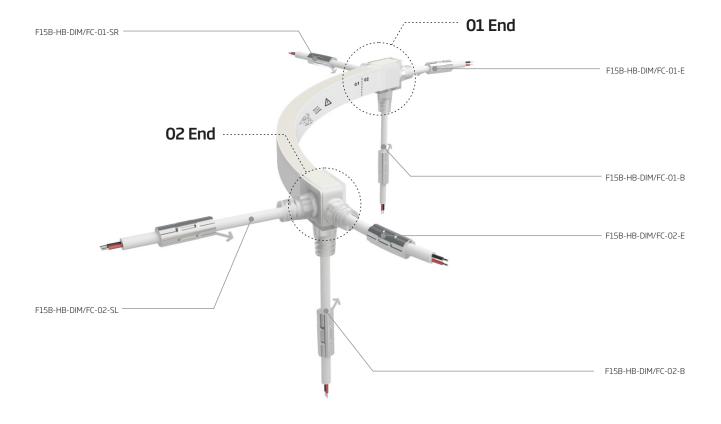


For plug and play cable junction, IP67



Note: Unless otherwise stated, the tolerance is ±2mm.

F15B	– DIM/FC –	01 -	- В -	- 300mm
F15B-HB F15D-HB F15A-HB F15E-HB F15S-HB	DIM=Dual Injection-moulded FC=Front Connector MC-PTF=Middle Connector & Power T-feed JU=Jumper EC=End Cap	01=01 End 02=02 End	E=End Feed B=Bottom Feed S=Side Feed SL=Side Feed from Left SR=Side Feed from Right	300mm Cable 1000mm Cable 3000mm Cable 5000mm Cable 10000mm Cable 15000mm Cable 20000mm Cable



# C-FR-F15B/D/A/E/S-HB

Item Code(B)	Item Code(D)	Item Code(A)	Item Code(E)	Item Code(S)
F15B-HB-DIM/FC-01-E-300mm	F15D-HB-DIM/FC-01-E-300mm	F15A-HB-DIM/FC-01-E-300mm	F15E-HB-DIM/FC-01-E-300mm	F15S-HB-DIM/FC-01-E-300mm
F15B-HB-DIM/FC-02-E-300mm	F15D-HB-DIM/FC-02-E-300mm	F15A-HB-DIM/FC-02-E-300mm	F15E-HB-DIM/FC-02-E-300mm	F15S-HB-DIM/FC-02-E-300mm
F15B-HB-DIM/FC-01-B-300mm	F15D-HB-DIM/FC-01-B-300mm	F15A-HB-DIM/FC-01-B-300mm	F15E-HB-DIM/FC-01-B-300mm	F15S-HB-DIM/FC-01-B-300mm
F15B-HB-DIM/FC-02-B-300mm	F15D-HB-DIM/FC-02-B-300mm	F15A-HB-DIM/FC-02-B-300mm	F15E-HB-DIM/FC-02-B-300mm	F15S-HB-DIM/FC-02-B-300mm
F15B-HB-DIM/FC-01-SR-300mm	F15D-HB-DIM/FC-01-SR-300mm	F15A-HB-DIM/FC-01-SR-300mm	F15E-HB-DIM/FC-01-SR-300mm	F15S-HB-DIM/FC-01-SR-300mm
F15B-HB-DIM/FC-02-SL-300mm	F15D-HB-DIM/FC-02-SL-300mm	F15A-HB-DIM/FC-02-SL-300mm	F15E-HB-DIM/FC-02-SL-300mm	F15S-HB-DIM/FC-02-SL-300mm
F15B-HB-DIM/MC-PTF-300mm	F15D-HB-DIM/MC-PTF-300mm	F15A-HB-DIM/MC-PTF-300mm	F15E-HB-DIM/MC-PTF-300mm	F15S-HB-DIM/MC-PTF-300mm
F15B-HB-DIM/JU-300mm	F15D-HB-DIM/JU-300mm	F15A-HB-DIM/JU-300mm	F15E-HB-DIM/JU-300mm	F15S-HB-DIM/JU-300mm
F15-DIM/EC	F15-DIM/EC	F15-DIM/EC	F15-DIM/EC	F15-DIM/EC
		Max. Cable Length		
Page F15 037~040	Page F15 081~082	Page F15 093~094	Page F15 105~106	Page F15 115 ~ 116

Note: 1.Please ensure the cable length is not more than the "Max. Cable Length" in the page mentioned above according to light length and its wire gauge to minimize voltage drop. 2.All the nominal cable lengths are measured before processing, so the delivered (visible) ones would be a little shorter. Please contact us before ordering if any strict requirement on them. 3.The tolerance range of cable length enlarges as the cable becomes longer, maximum up to ±50mm.



### **Aluminum Profile**

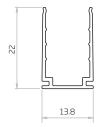


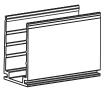
It uses high-quality 6063 aluminum with thin-wall, light- weight design to fit tightly the light body. It is deformation and rust resistant, and cost-effective.

Please refer to the applicable installation ways.

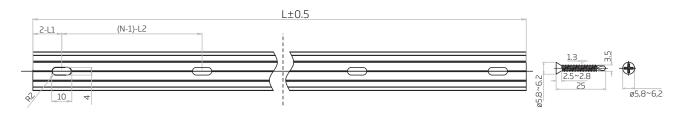
Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

# Dimension: mm





Tolerance: ±0.3mm



Note:

2-L1 refers to two of symmetric L1 in each piece of profile.
 (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

Item Code	Standard Length	L1	L2	Slotted Hole	Hole Number
F15-A/PL-35MM-AL	35mm/1.38in	17.5mm/0.69in	/	4*10mm/0.16*0.39in	1
F15-A/PL-500MM-AL	500mm/19.68in	50mm/1.97in	200mm/7.87in	4*10mm/0.16*0.39in	3
F15-A/PL-1000MM-AL	1000mm/39.37in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	5
F15-A/PL-2000MM-AL	2000mm/78.74in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	10

### **Flange Aluminum Profile**

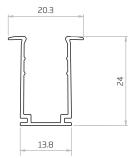


It uses high-quality 6063 aluminum with thin-wall, light- weight design to fit tightly the light body. It is deformation and rust resistant, and cost-effective. The "Flange" design is more suitable for recessed installation, better fits with the mounting groove and minimizes the operation tolerance during construction to some extent, like shielding the rough edges and the gaps of oversized groove.

Please refer to the applicable installation ways.

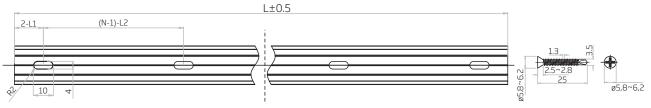
Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

### **Dimension: mm**





Tolerance: ±0.3mm



#### 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 below table

Item Code	Standard Length	L1	L2	Slotted Hole	Hole Number
F15-FA/PL-35MM-AL	35mm/1.38in	17.5mm/0.69in	/	4*10mm/0.16*0.39in	1
F15-FA/PL-500MM-AL	500mm/19.68in	50mm/1.97in	200mm/7.87in	4*10mm/0.16*0.39in	3
F15-FA/PL-1000MM-AL	1000mm/39.37in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	5
F15-FA/PL-2000MM-AL	2000mm/78.74in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	10

### **Serrated Aluminum Profile**

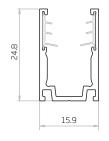


Specialized for the LED Flex Linear light, it was developed by combining the advantages of 6063 aluminum and elastic serrated tape. The inside elastic serrated tape as the grabbing force to keep continuous strong clamping force on the light body and protect the light from the damage caused by the large friction in the process of installation and dismantlement.

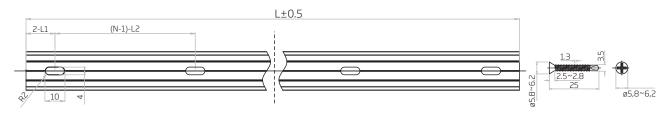
Please refer to the applicable installation ways.

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

### **Dimension: mm**



Tolerance: ±0.3mm



Note:

2-L1 refers to two of symmetric L1 in each piece of profile.
 (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

Item Code	Standard Length	L1	L2	Slotted Hole	Hole Number
F15-SA/PL-20MM-AL	20mm/0.787in	10mm/0.39in	/	4*10mm/0.16*0.39in	1
F15-SA/PL-500MM-AL	500mm/19.68in	50mm/1.97in	200mm/7.87in	4*10mm/0.16*0.39in	З
F15-SA/PL-1000MM-AL	1000mm/39.37in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	5
F15-SA/PL-2000MM-AL	2000mm/78.74in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	10

### Flange Serrated Aluminum Profile



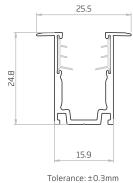
Specialized for the LED Flex Linear light, it was developed by combining the advantages of 6063 aluminum and elastic serrated tape. The inside elastic serrated tape as the grabbing force to keep continuous strong clamping force on the light body and protect the light from the damage caused by the large friction in the process of installation and dismantlement.

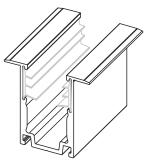
The "Flange" design is more suitable for recessed installation, better fits with the mounting groove and minimizes the operation tolerance during construction to some extent, like shielding the rough edges and the gaps of oversized groove.

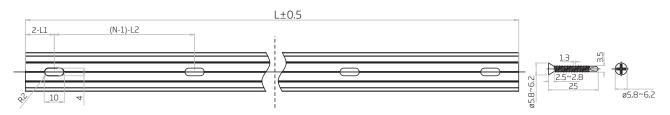
Please refer to the applicable installation ways.

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

### **Dimension: mm**







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 below table

Item Code	Standard Length	L1	L2	Slotted Hole	Hole Number
F15-FSA/PL-20MM-AL	20mm/0.787in	10mm/0.39in	/	4*10mm/0.16*0.39in	1
F15-FSA/PL-500MM-AL	500mm/19.68in	50mm/1.97in	200mm/7.87in	4*10mm/0.16*0.39in	З
F15-FSA/PL-1000MM-AL	1000mm/39.37in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	5
F15-FSA/PL-2000MM-AL	2000mm/78.74in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	10

### F15 Thickened Plastic Profile

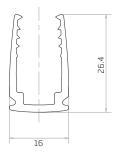


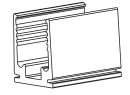
It uses thickened PC profile to 3mm thickness, specialized for underwater application up to 2m depth, and has excellent properties in rust, corrosion and fracture resistance.

Please refer to the applicable installation ways.

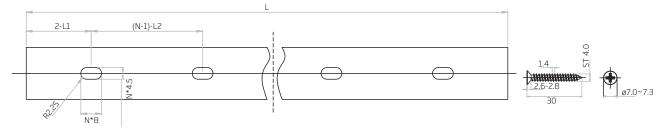
Test Object	No.	Experiment Item	Standard
Mounting profile	1	Clamping force	CLEAR-defined

### **Dimension: mm**





Tolerance: ±0.5mm



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 below table

Item Code	Standard Length	Ц1	L2	Slotted Hole	Hole Number
F15-TP/PL-35MM-TT	35mm/1.38in	17.5mm/0.69in	/	4.5*8mm/0.18*0.31in	1
F15-TP/PL-500MM-TT	500mm/19.68in	50mm/1.97in	200mm/7.87in	4.5*8mm/0.18*0.31in	З
F15-TP/PL-1000MM-TT	1000mm/39.37in	100mm/3.93in	200mm/7.87in	4.5*8mm/0.18*0.31in	5
F15-TP/PL-2000MM-TT	2000mm/78.74in	100mm/3.93in	200mm/7.87in	4.5*8mm/0.18*0.31in	10

### F15 Stainless Steel Profile

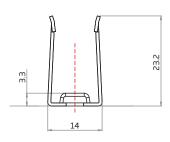


It uses grade 316 stainless steel with excellent property of deformation and rust resistance. The material makes it suitable for humid coastal surroundings and weak acid-base industrial environments that other mounting profiles can't accommodate. The structural design and material characteristics collectively ensure a tight clamping force. It's very convenient and reliable even for suspended installation in the curve shape.

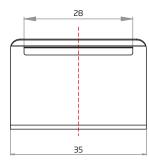
Please refer to the applicable installation ways.

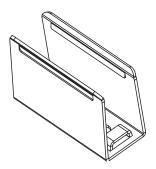
Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

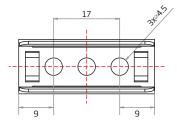
# **Dimension: mm**

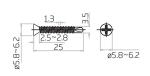


Tolerance: ±0.3mm



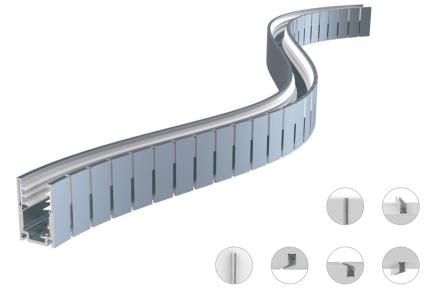






Item Code	Standard Length	Screw Hole	Hole Number	
F15-SS/PL-35MM-SSL	35mm/1.378in	ø4.5mm/0.18in	3	

### **Bendable Serrated Aluminum Profile**

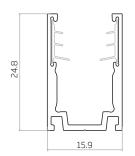


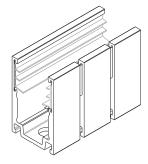
It is an expanded design of the serrated aluminum profile, and caters for the continuously streamlined aesthetics of curve shape. The secondary precision cutting process, not only maintains the advantage of clamping force, but also enables the two-way horizontal bending directions with super shape memory.

Please refer to the applicable installation ways.

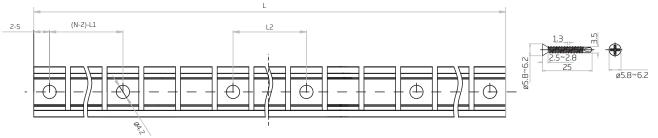
Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

### **Dimension: mm**





Tolerance: ±0.3mm



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 below table.

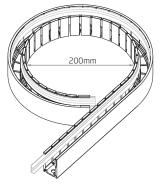
ltem Code	Standard Length	L1	L2	Screw Hole	Hole Number
F15-BSA/PL-500MM-AL	500mm/19.68in	110.3mm/4.34in	48.9mm/1.92in	ø4.2mm/0.17in	6
F15-BSA/PL-1000MM-AL	1000mm/39.37in	111.4mm/4.39in	98.8mm/3.89in	ø4.2mm/0.17in	10

# Installation Instructions

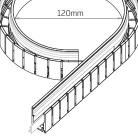
Friendly Reminder: please read instructions carefully before operation.

### **Bending Diameter**

Min. Bending Diameter (Toothed Side inwards)

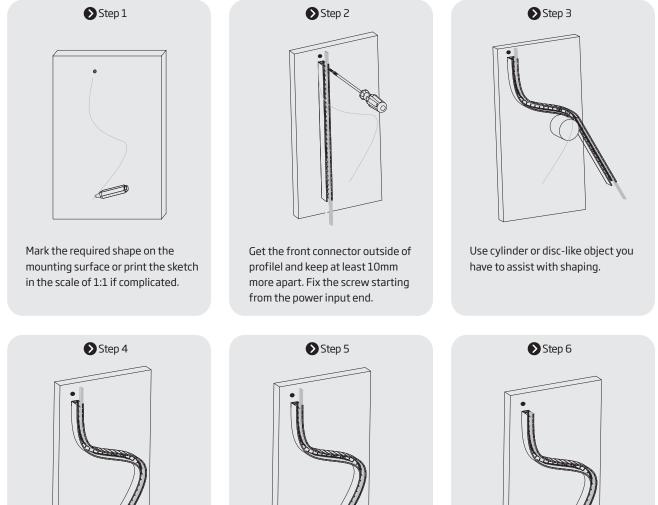


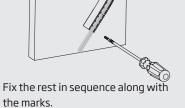
Min. Bending Diameter (Toothed Side outwards)

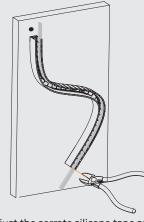


Finish and fix the light in.

### Installation

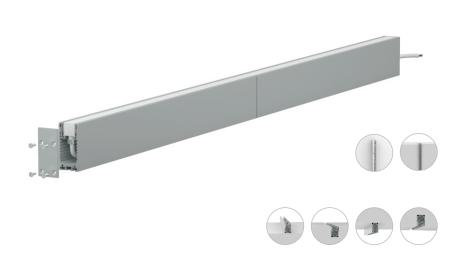






Adjust the serrate silicone tape and remove the redundant lengths at both ends.

# F15 Surface-mounted Raceway Aluminum Profile



F15-SMR/PL-1000MM-AL

F15-SMR/PL-2000MM-AL

1000mm/39.37in

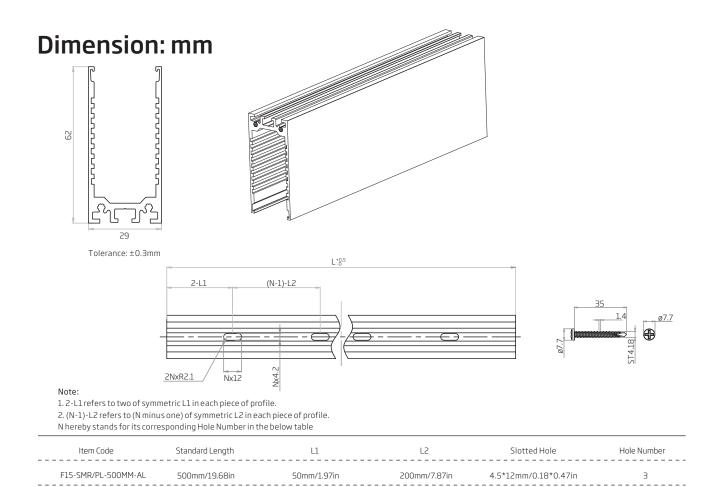
2000mm/78.74in

It is an expanded design of the serrated aluminum profile featuring hidden cable upon the advantage of 6063 aluminum profile.

The raceway space is up to 570mm<sup>2</sup>, enough to conceal injection-moulded connector with bottom feed and the general male/female connectors. It is superb for the facade where tidiness is required and the scenarios that lack of space for wiring.

Please refer to the applicable installation ways.

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined



100mm/3.94in

100mm/3.94in

200mm/7.87in

200mm/7.87in

4.5\*12mm/0.18\*0.47in

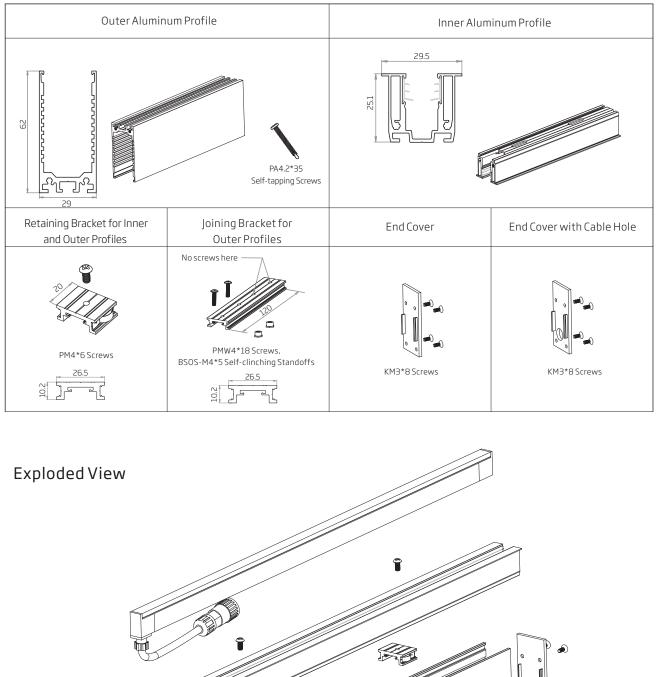
4.5\*12mm/0.18\*0.47in

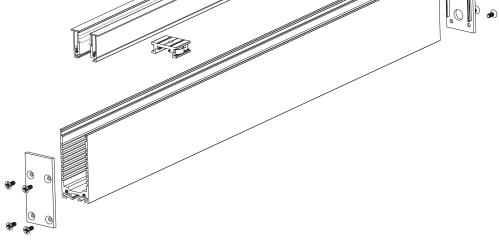
5

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# F15 Surface-mounted Raceway Aluminum Profile

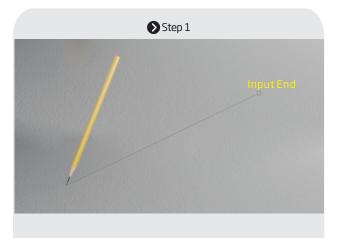
### Main Components



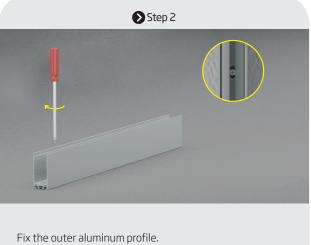


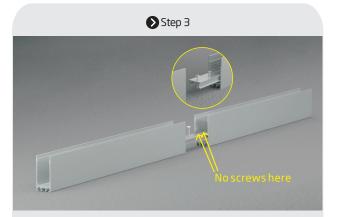
### Installation Instructions

Friendly Reminder: please read instructions carefully before operation.

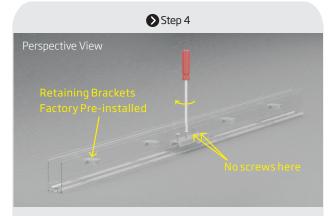




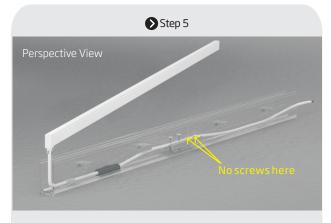




If needed, insert the joining bracket into the bottom slot of outer profiles and centered for the length extension.



Tighten the screws towards the bottom of outer aluminum profile until locked.

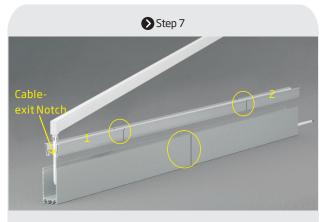


Wiring under the retaining bracket and over the joining bracket .

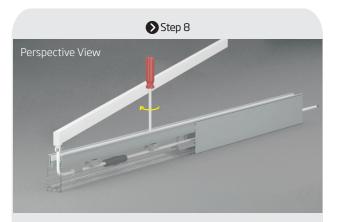


Cut one piece of inner aluminum profile evenly into two segments named 1 & 2 separately.

### Installation Instructions



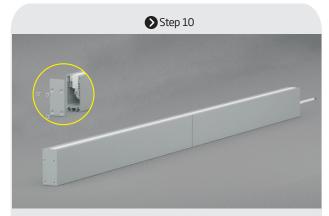
Put inner aluminum profiles inside in the rearranged sequence to keep a staggered installation with outer profiles and be aware of the notch direction prior to it.



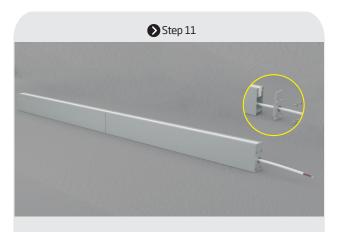
Tighten the screws through retaining bracket to lock the inner aluminum profile.



Fit in the light by palm orderly and tidy the excess cable gently.

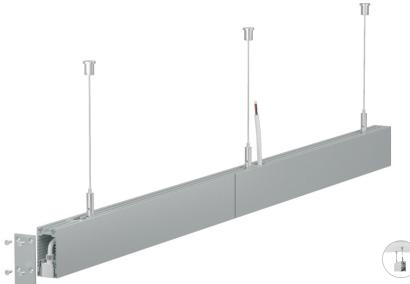


Seal the front connector by the end cover without cable hole and tighten the screws.



Threading the cable through the hole and seal the other end likewise.

# F15 Suspended Raceway Aluminum Profile



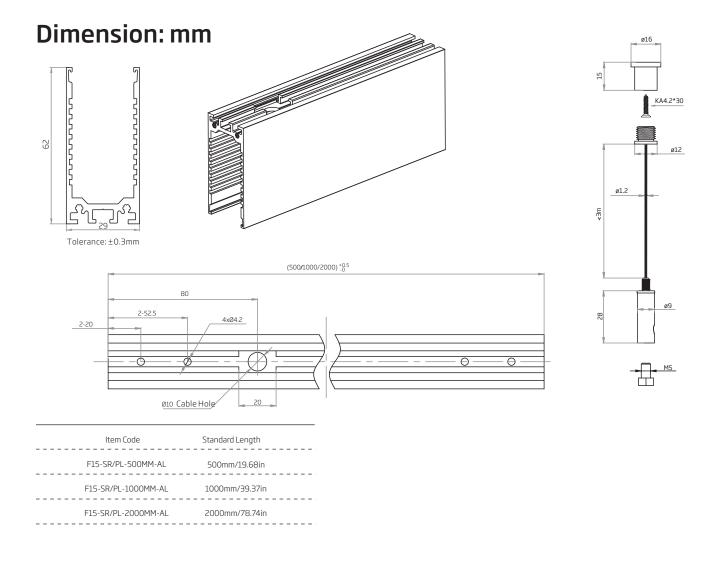
It is an expanded design of the serrated aluminum profile featuring hidden cable upon the advantage of 6063 aluminum profile.

The raceway space is up to 570mm<sup>2</sup>, enough to conceal injection-moulded connector with bottom feed and the general male/female connectors. It is superb for the facade where tidiness is required and the scenarios that lack of space for wiring.



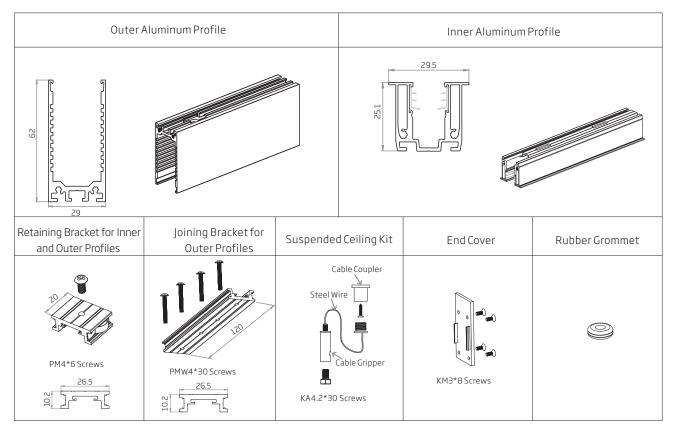
Please refer to the applicable installation ways.

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

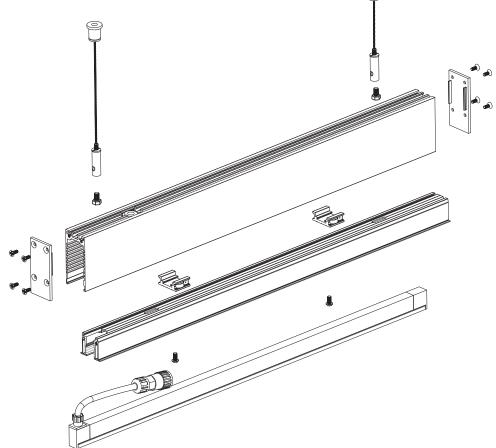


# F15 Suspended Raceway Aluminum Profile

### Main Components



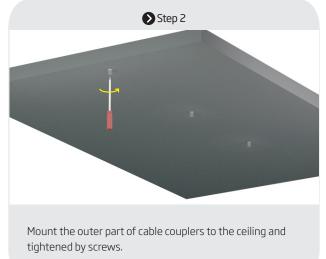
### Exploded View



### Installation Instructions

Friendly Reminder: please read instructions carefully before operation.



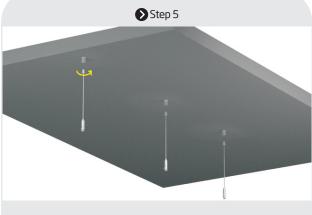




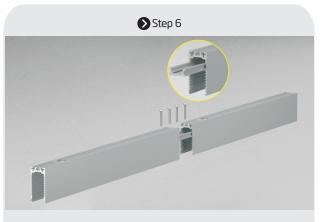
Thread steel wire through the inner part of cable coupler and its molded stop will prevent the wire from falling out.



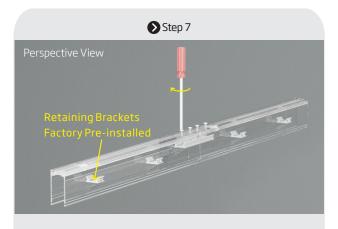
Unscrew the coupling nut on the top of cable gripper and then push in the plunger to allow the other end of steel wire to thread through the keyhole of cable gripper.



Tighten the assembled cable grippers to the mounted outer part of cable couplers.



If needed, insert the joining bracket into the bottom slot of outer profiles and centered for the length extension.



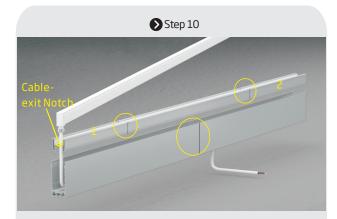
Tighten the screws going through the holes of joining bracket and outer aluminum profiles



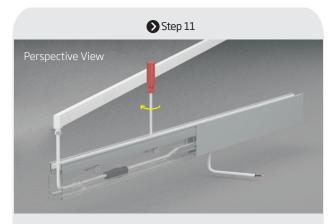
Wiring under the retaining brackets and over the joining bracket, and then thread the cable through the cable hole of outer aluminum profile.



Cut one piece of inner aluminum profile evenly into two segments named 1 & 2 separately.



Put inner aluminum profiles inside in the rearranged sequence to keep a staggered installation with outer profiles and be aware of the notch direction prior to it.



Tighten the screws through retaining brackets to lock the inner aluminum profile.

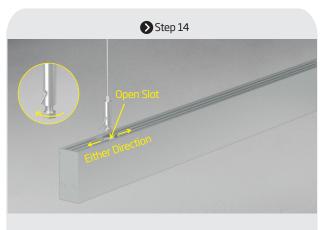


Fit in the light by palm orderly and tidy the excess cable gently.

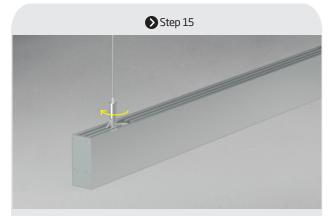
### Installation Instructions



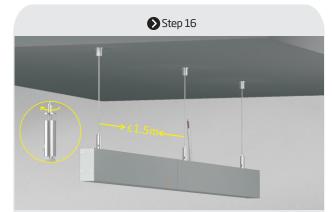
Seal both ends by the end covers and tighten the screws.



Flip the outer aluminum profiles. Then unscrew the hex bolt of cable gripper and slide it in from the open slots where rubber grommets lay.



Tighten the bushings of cable grippers with the hex bolts.



Adjust the position of cable grippers and the length of steel wires to the desired ones , and remain all of the steel wires hanging vertically. Tighten the coupling nut the and cut or roll up the excess steel wire at last.

## **Operating Instruction for Profiles**

#### Profile Processing



- 1. It's not recommended to process the profile without any protection by finishing or coating, etc.
- 2. If any similar demands, please keep the profile clean after processing.
- 3. For the profile involved the serrated tape, please take its serrated tape out to avoid being deformed and useless affected by the high temperature generated, or discuss with the manufacturer to separate the package in advance.

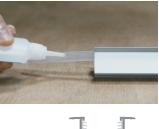
Serrate Tape



#### **Profile Cutting**



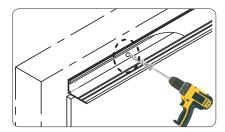
Make sure the crosssection of profile is smooth without any burrs when cutting, otherwise the light housing will be impaled and cause water ingression.



Round Head

For the profiles involved serrated tape, in case of any drop of serrated tape after cutting, please insert and fix it to the profile by a few adhesive glues on its backside, 5~8mm diameter of touching area is enough. Make sure its round head on the edge is downward when putting back.

#### **Profile Installation**





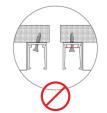
Install the screw into position and ensure the screw head is in line with or lower than the base of aluminum profile.



Place the rubber expansion bolt to assist with the screw fixation if the mounting surface is rigid.



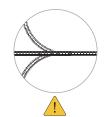
Make sure no debris in the profile before installation to avoid the light housing being impaled and cause water ingression.



Make sure no bulges on the slot to avoid the damage on the light and cause water ingression.



Do not use the profile deformed seriously.



It's recommended to mount in place at a time when using the bendable aluminum profile in case of any break due to the frequent repeated shaping.

## **Profile Jointing**



1. Please reserve at least 5mm for profile jointing to enable enough space for contraction and expansion.

Angular Misalignment



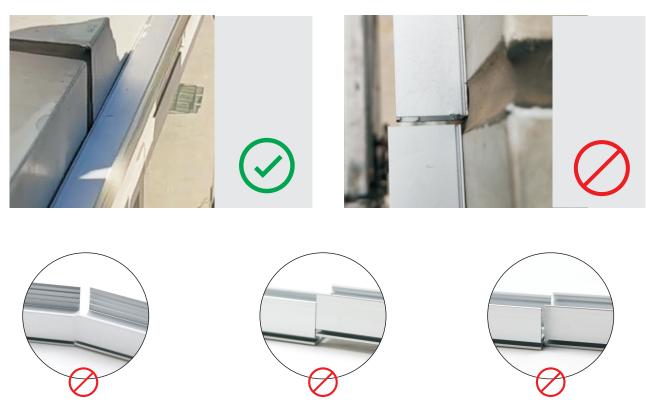
2. The profiles can be jointed to a right angle only if there are two pieces of lights connected to be a right angle.



3. For the curve shaping of light, make sure to leave enough space to separate profiles in between or use the bendable profile instead.

4. Splice Structure on Mounting Surface

In the case of an outdoor mounting surface with the splice structure, please make sure the mounting profile goes across the gap or separate the light and profile as per the splice structure. When the profile jointing lies where the mounting surface splices, contraction and expansion of the mounting surface in the long term will cause the misalignment of profiles and lights, and lead to the damage of inside PCB.



Parallel Vertical Misalignment

Parallel Horizontal Misalignment

Above wrong misalignments will make the light improperly bent, and lead to the wrinkle or fracture on PCB.

## **Light Installation**



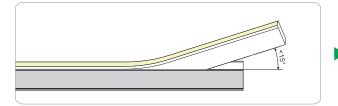
It's not recommended to install the light repeatedly, otherwise the light inside might be damaged.



Make sure the light is fitted in vertically.



Press the light into the profile by the palm instead of the finger, otherwise it might damage inside electronic components due to the overpressure caused.



Make sure the angle between the light and profile is not bigger than 15°, otherwise inside PCB might be damaged.



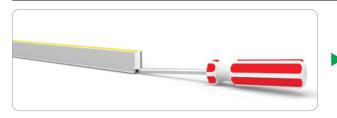
When light length > 2m, make sure somebody helps to lift the light, in case the heavy weight of light itself generates too small bending angle or twisting, which may damage inside PCB.

Make sure the light body is not scratched during installation, otherwise the light housing will be impaled and cause water ingression.





## **Light Uninstallation**



Prepare a screwdriver, and put the screwdriver at the bottom of light.



Once the end of light is out, hold both sides of light by hand and pull it out along the profile slowly and orderly.

Make sure the angle between the light and profile is not bigger than 15°, otherwise inside PCB might be damaged.



Move the screwdriver and unclench the light upwardly. Be careful the angle between the light and profile should not be bigger than 15°.



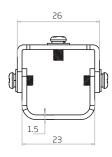
When light length > 2m, make sure somebody helps to lift the light, in case the heavy weight of light itself generates too small bending angle or twisting, which may damage inside PCB.

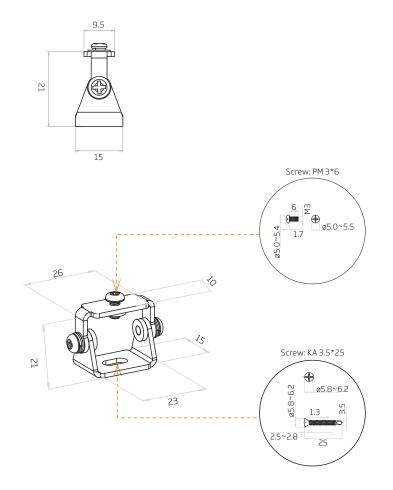


# **Pivot Mounting Bracket**

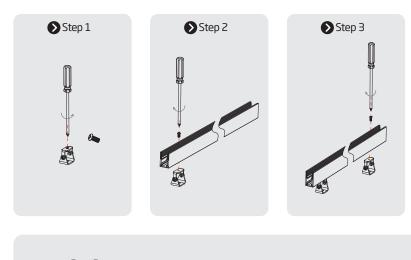


Item Code: PM/B





Note: Applicable to all types of mounting profiles



#### Step 1:

Remove the upper screw from pivot mounting bracket.

#### Step 2:

Fix pivot mounting bracket and mounting profile tightly by the screw.

#### Step 3:

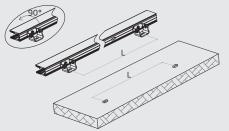
Repeat step 1 & step 2 for the remaining brackets and secure at least 2 locking points for each mounting profile, and the equal interval is more recommended.



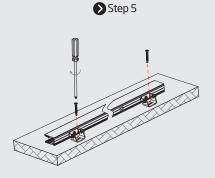


Warning: Keep pivot mounting bracket and mounting profile parallel from the side view.

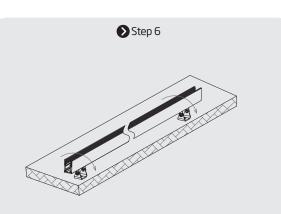
Step 4



Rotate pivot mounting bracket till the showing up of the unfixed screw hole to facilitate the installation with mounting surface as per the pre-marked hole.



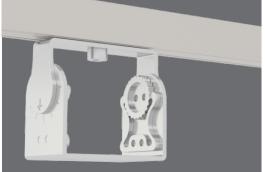
Fix pivot mounting bracket to mounting surface by KA3.5\*25 screw.



Adjust the angle of mounting profile to the one required.



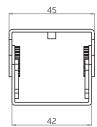
Tighten the side screws of pivot mounting bracket to avoid loosened locking point.

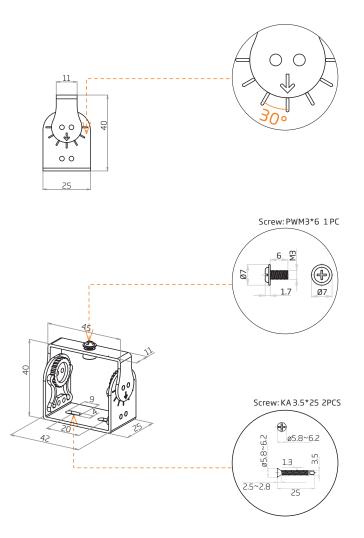


## **Rotary Locking Bracket**

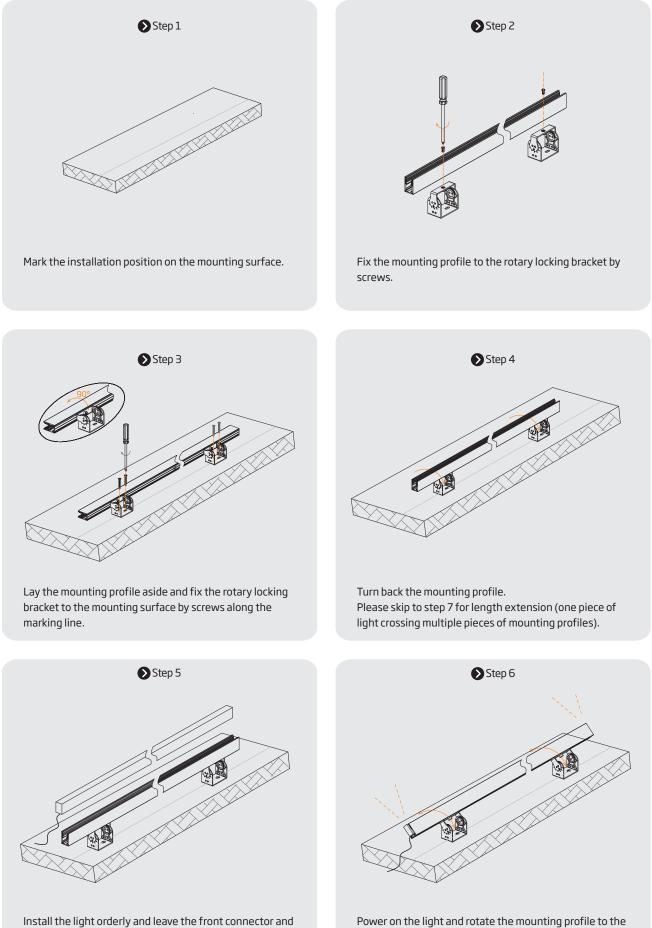


Item Code: RL/B





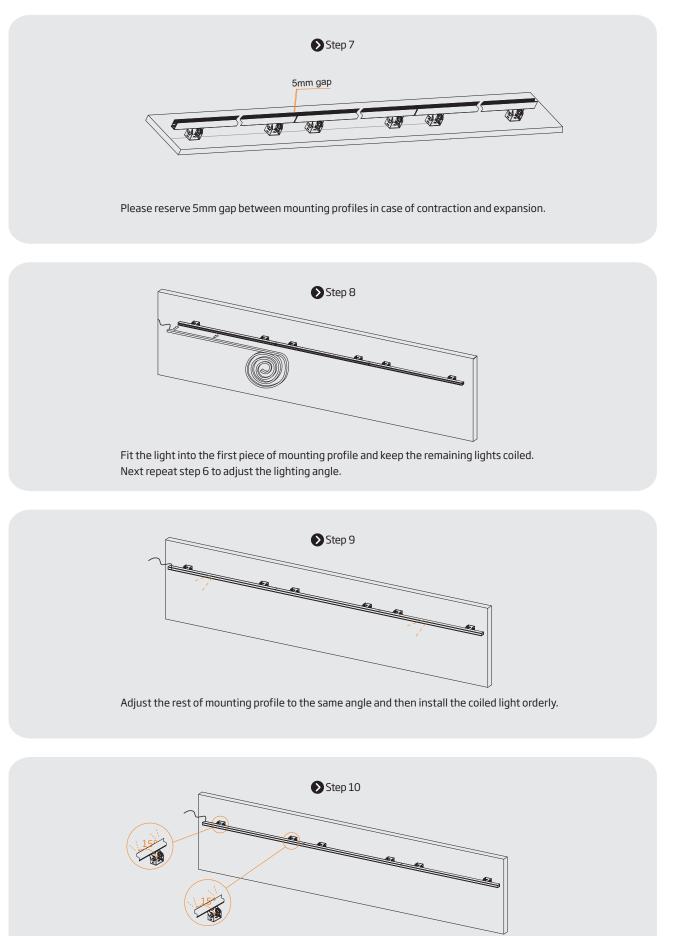
Note: Applicable to all types of mounting profiles



end cap outside of mounting profile .

desired lighting angle.

For length extension (one piece of light crossing multiple pieces of mounting profiles)



If you need further adjustment after installation, please fine tune rotary locking bracket 15 degree each time one by one in case of twisting on lights.

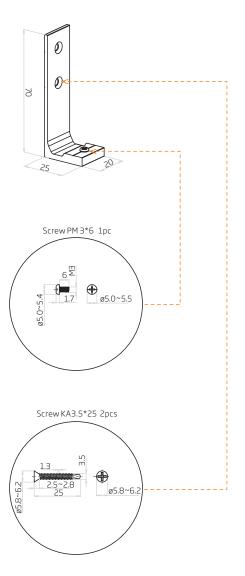


# 

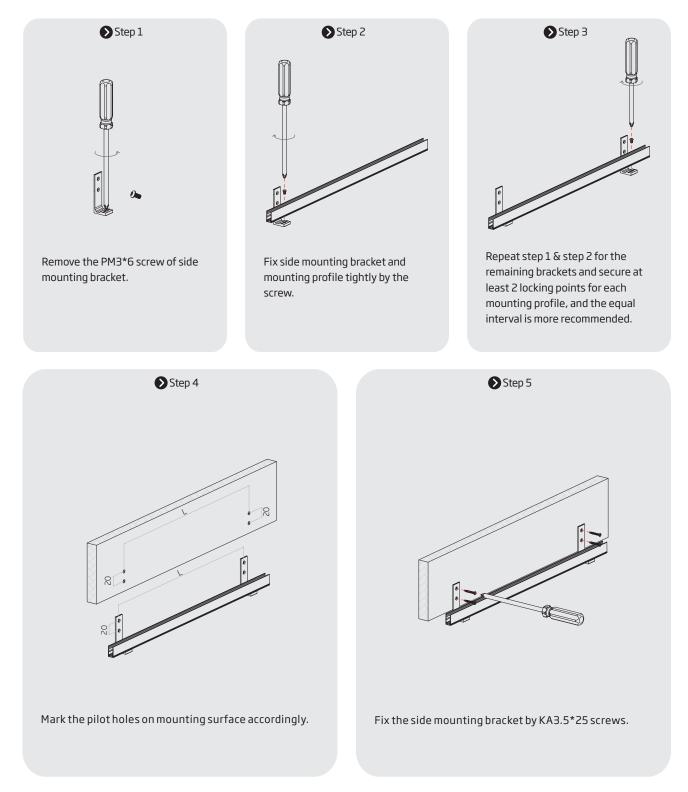
# Side Mounting Bracket

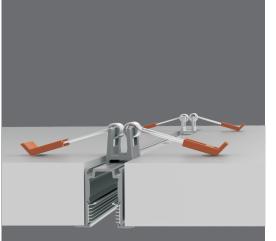


Item Code: SM/B





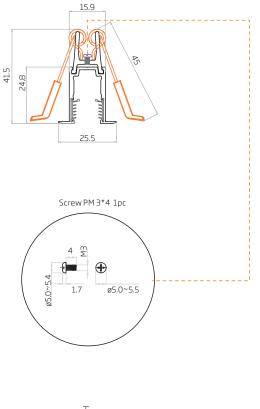


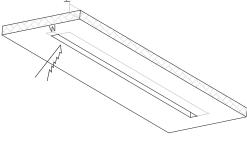


# **Ceiling Mounting Clip**



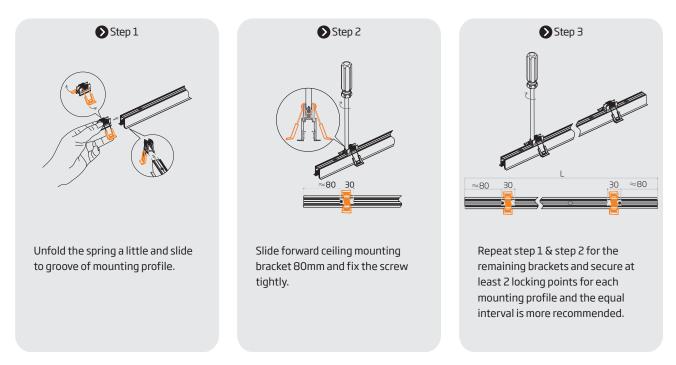
Item Code: CM/C

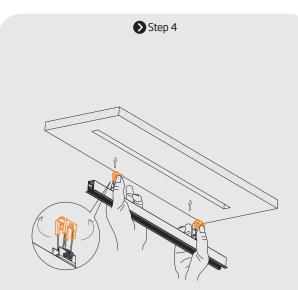




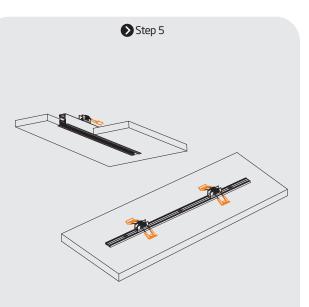
The width applicable to F15: 17~20mm The thickness of ceiling: 5~50mm

Note: Only applicable to flanged serrated aluminum profile.

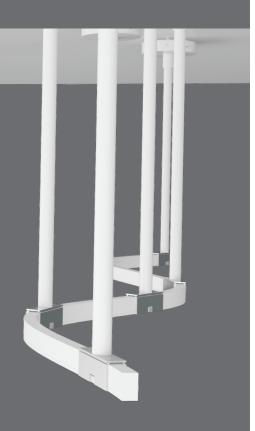




Mark and then slot the ceiling as instructed.



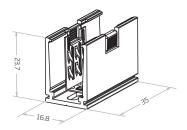
Hold the springs with hands and loosen them after clipping into the ceiling.

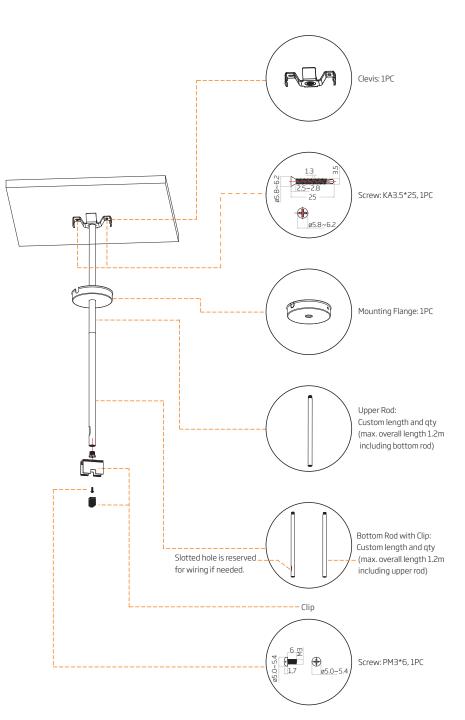


## Suspended Mounting Clip

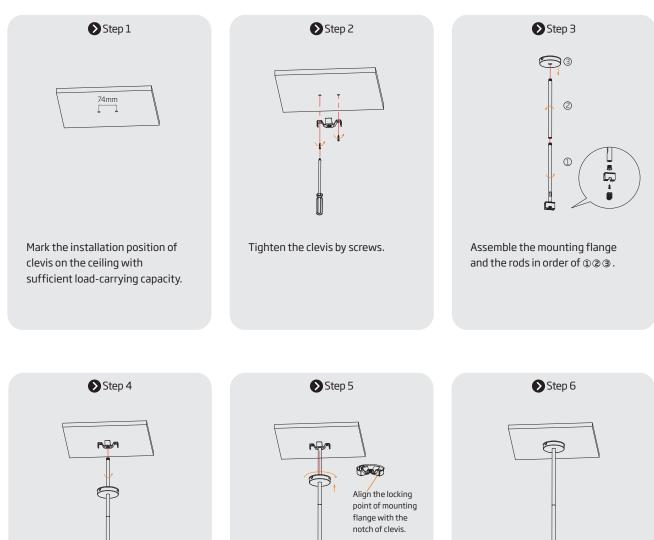


Item Code: SM/C

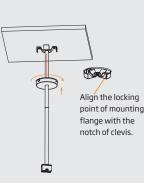




#### Suspended Mounting Rod without Wiring



Ë Rotate and fasten them clockwise.

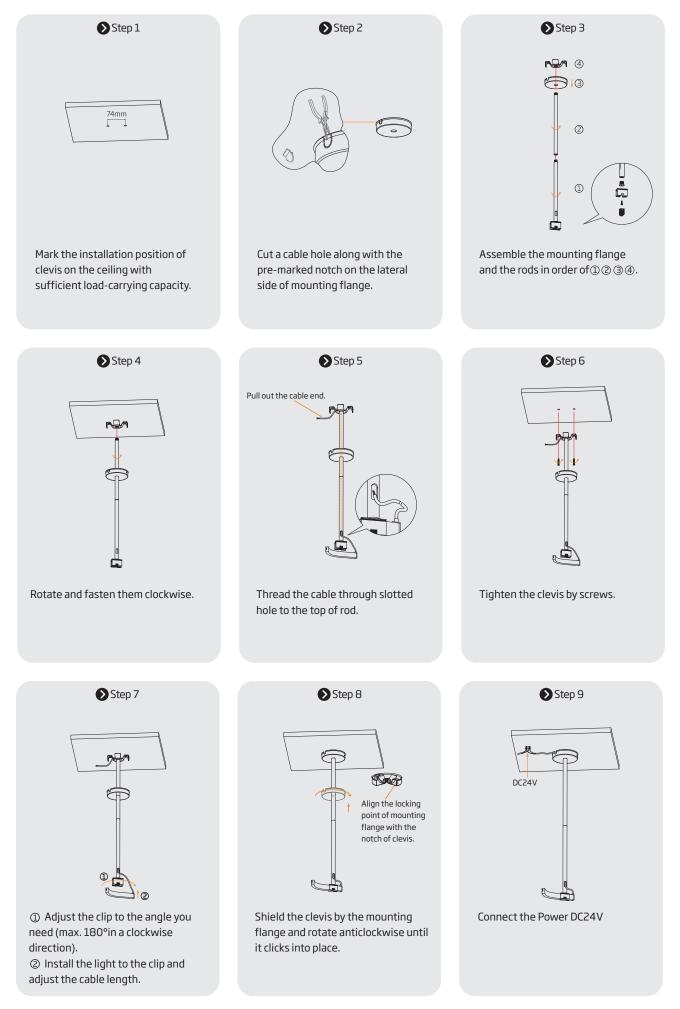


Shield the clevis by the mounting flange and rotate anticlockwise until it clicks into place.

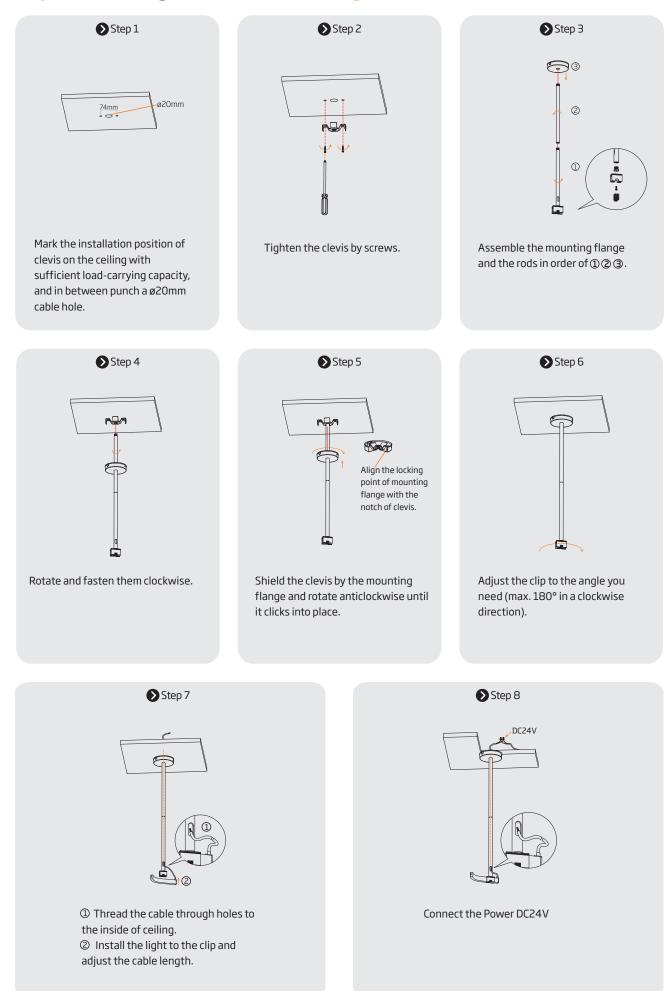


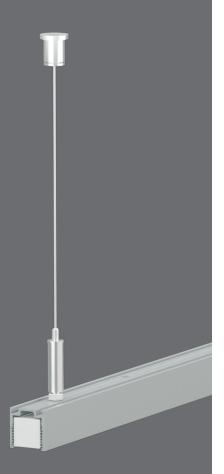
need (max. 180° in a clockwise direction).

#### Suspended Mounting Rod with Surface Wiring

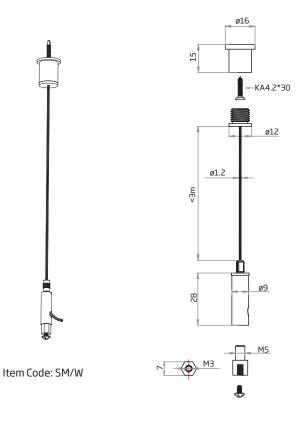


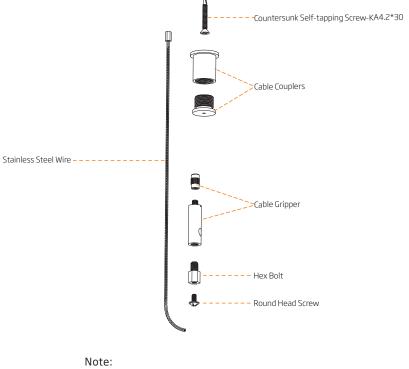
#### Suspended Mounting Rod with Concealed Wiring





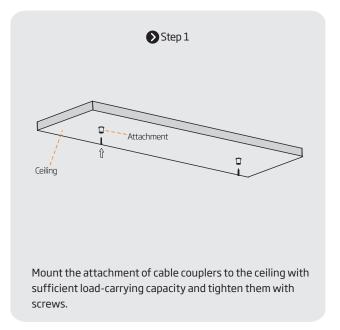
## **Suspended Mounting Wire**

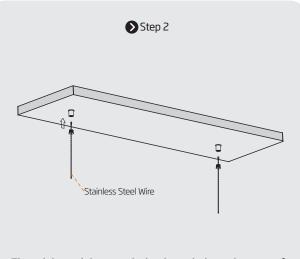




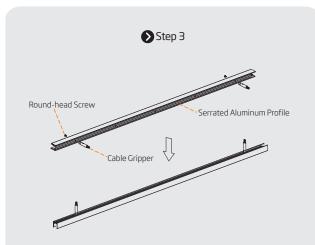
Applicable to serrated aluminum profile.

- 2 sets of stainless steel wires are offered to pair with
- 1 piece of 1m serrated aluminum profile.
- 3 sets of stainless steel wires are offered to pair with
- 1 piece of 2m serrated aluminum profile.

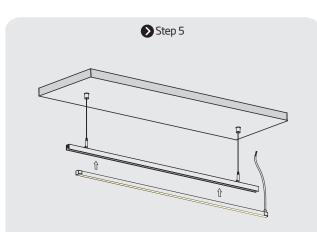




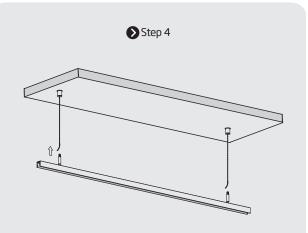
Thread the stainless steel wire through the male screw of cable couplers and then connect to the mounted attachment of cable couplers.



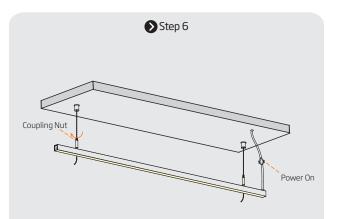
Insert the screw into the serrated aluminum profile to lock with the cable gripper sliding from the bottom slot of serrated aluminum profile.



Fix the light into the aluminum profile.

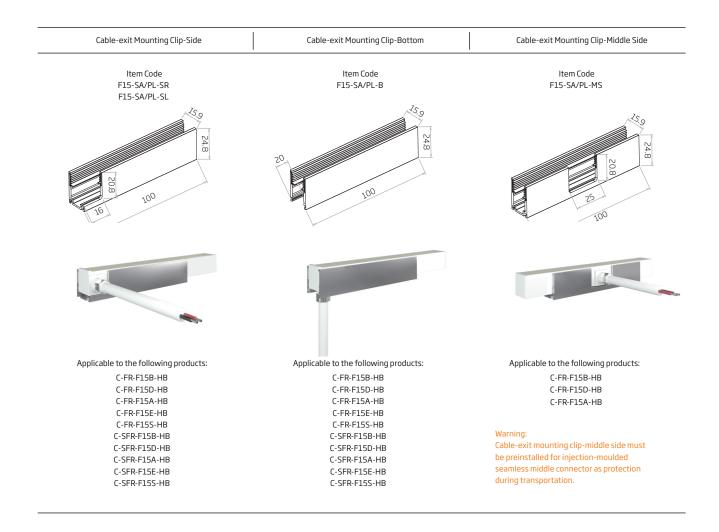


Thread the stainless steel wire through the bushing of cable gripper.



Adjust the length of stainless steel wires to the desired height. Tighten the coupling nut and cut or roll up the excess stainless steel wires after the power-on test.

## **Cable-exit Mounting Clip**



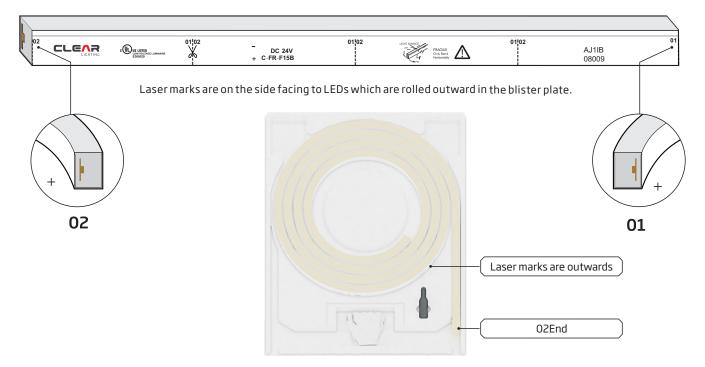
#### Note:

- Applicable to single-layer injection-moulded connector with side, or bottom cable entry, whose size can be matched exactly.
   Allow the cable to exit from gap loosely without over-bending and protect the cable joint from the damage of excessively external force in the process of installation. 3. 10cm/piece, combined with other lengths of mounting profiles to fit the equivalent light length.

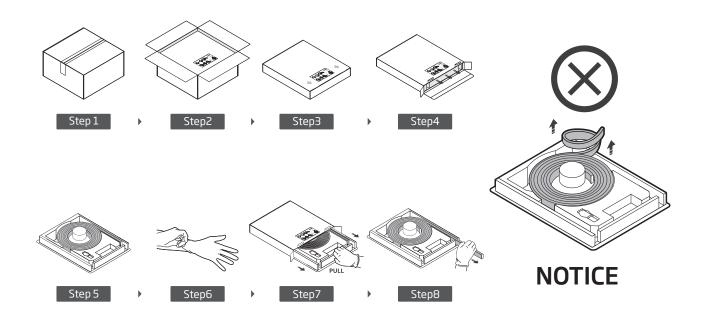


# **Standard Packaging:**

F15-HB



#### Unpacking White Box Packaging



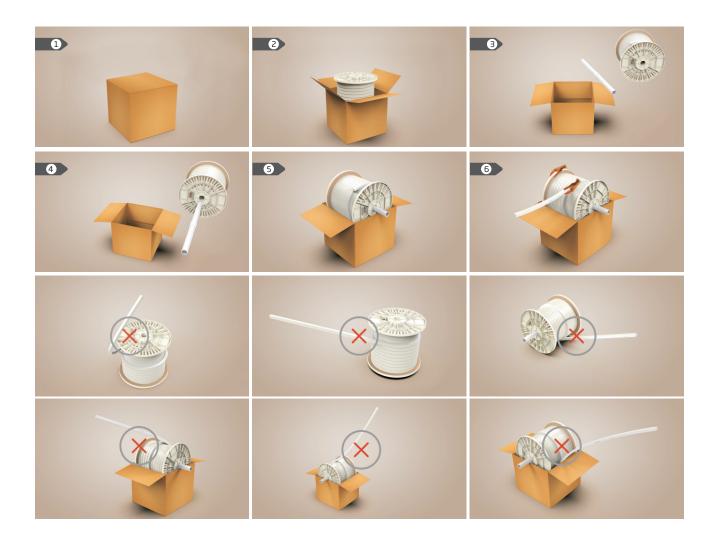
## Flexglo<sup>™</sup>F15 White Box Packaging



Cable Entry	Packing Length of PVC	Packing Length of Silicone	Inner Box Qty Per Carton	Carton Dimension	G.W. of PVC Product	G.W. of Silicone Product
	Product, L (m/box)	Product, L (m/box)	(box/ctn)	(cm)	(kg)	(kg)
	5	3.2	5	47.5*36*22.5	12.14	8.92
	5	3.2	1	48.2*37.2*5.3	2.72	2.08
	10	8.2	5	58.5*48*22.5	23.16	19.94
Fod / Sido Food	10	8.2	2	58.5*48*10.5	9.94	8.66
End / Side Feed	10	8.2	1	59.2*49.2*5.3	5.05	4.41
	20	18.2	З	74.3*63.8*14.5	27.13	25.20
	20	18.2	2	73.5*62.5*10.5	18.58	17.29
	20	18.2	1	74.2*63.7*5.3	9.45	8.81
	5	3.2	5	51.5*40*27.5	13.00	9.78
	5	3.2	2	51.5*40*12.5	5.57	4.28
	5	3.2	1	52.2*41.2*6.3	2.91	2.27
	5	3.2	1	52.2*41.2*7.3	2.94	2.30
	5	3.2	5	51.5*40*32.5	13.23	10.01
	10	8.2	5	63.5*52*27.5	24.30	21.08
	10	8.2	1	64.2*53.2*6.3	5.27	4.63
	10	8.2	З	63.5*52*17.5	15.05	13.12
	10	8.2	1	64.2*53.2*8.3	5.42	4.78
Bottom Feed	10	8.2	З	63.5*52*23.5	15.24	13.30
	10	8.2	5	63.5*52*37.5	24.79	21.58
	10	8.2	1	64.2*53.2*7.3	5.29	4.65
	10	8.2	З	63.5*52*20.5	15.25	13.32
	10	8.2	5	63.5*52*32.5	24.27	21.05
	20	18.2	1	81.2*70.2*6.3	9.92	9.28
	20	18.2	2	80.5*69*12.5	19.40	18.12
	20	18.2	1	81.2*70.2*7.3	10.01	9.37
	20	18.2	2	80.5*69*14.5	19.66	18.37
	≤5	/	5	47.5*36*22.5	12.14	/
	≤5	/	1	48.2*37.2*5.3	2.72	/
	5 <l≤8< td=""><td>/</td><td>5</td><td>58.5*48*22.5</td><td>16.01</td><td>/</td></l≤8<>	/	5	58.5*48*22.5	16.01	/
	5 <l≤8< td=""><td>/</td><td>2</td><td>58.5*48*10.5</td><td>7.08</td><td>/</td></l≤8<>	/	2	58.5*48*10.5	7.08	/
Middle Feed	5 <l≤8< td=""><td>/</td><td>1</td><td>59.2*49.2*5.3</td><td>3.62</td><td>/</td></l≤8<>	/	1	59.2*49.2*5.3	3.62	/
Middle Feed	8 <l≤12< td=""><td>/</td><td>5</td><td>63.5*52*27.5</td><td>24.30</td><td>/</td></l≤12<>	/	5	63.5*52*27.5	24.30	/
	8 <l≤12< td=""><td>/</td><td>З</td><td>63.5*52*17.5</td><td>15.05</td><td>/</td></l≤12<>	/	З	63.5*52*17.5	15.05	/
	12 <l≤20< td=""><td>/</td><td>2</td><td>80.5*69*12.5</td><td>15.83</td><td>/</td></l≤20<>	/	2	80.5*69*12.5	15.83	/
	12 <l≤20< td=""><td>/</td><td>З</td><td>74.3*63.8*14.5</td><td>27.13</td><td>/</td></l≤20<>	/	З	74.3*63.8*14.5	27.13	/
	12 <l≤20< td=""><td>/</td><td>1</td><td>81.2*70.2*6.3</td><td>8.13</td><td>/</td></l≤20<>	/	1	81.2*70.2*6.3	8.13	/

Note: 1, Min. volume of package shall be offered based on the actual order. 2, Packing details are subject to change, and please refer to the final packing list of each order.

# Unpacking Reel Packaging



## Flexglo<sup>™</sup>F15 Reel Packaging



Cable Entry	Packing Length of PVC Product (m/reel)		Reel Qty Per Carton (reel/ctn)	Carton Dimension (cm)	G.W. of PVC Product (kg)	
	 20		1	36*36*12	7.59	
End / Side / Bottom Feed	35		1	37*37*20	 13.28	
	40		1	34*34*24	 15.07	
	50		1	37*37*26.5	 18.65	
	 80		1	37*37*33.5	29.54	

#### Note:

1. Min. volume of the package shall be offered based on the actual order.

2, Packing details are subject to change, and please refer to the final packing list of each order.

## Flexglot<sup>™</sup>F15 Mounting Profile Packaging

	Туре	Profile Length(mm)	Carton Dimension(cm)	Qty(pcs)	G.W.(kg)
		35	29.0*22.0*14.5	980	5.50
	Aluminum Profile	500	55.0*12.0*12.0	32	3.50
Aluli	Auminum rome	1000	104.0*26.5*13.2	80	13.00
		2000	206.0*19.0*12.0	50	16.80
		35	29.0*22.0*14.5	630	4.50
	Flange	500	55.0*12.0*12.0	20	3.00
	Aluminum Profile	1000	104.0*26.5*13.2	48	10.00
		2000	206.0*19.0*12.0	36	14.50
		20	29.0*22.0*14.5	1200	6.60
	Serrated	500	55.0*12.0*12.0	28	8.80
	Aluminum Profile	1000	104.0*26.5*13.2	64	18.00
		2000	206.0*19.0*12.0	44	24.30
		20	29.0*22.0*14. 5	728	4.50
	Flange Serrated	500	55.0*12.0*12.0	12	2.00
	Aluminum Profile	1000	104.0*26. 5*13. 2	40	12.00
		2000	206.0*19.0*12.0	21	12.50
1	Bendable Serrated	500	55.0*12.0*12.0	28	3.50
	Aluminum Profile	1000	104.0*26. 5*13. 2	64	15.40