

# galaxy of light

## Specification

For LED Crystal Flex Ribbon

C-SFR-F2010B



**CLEAR**  
LIGHTING

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# Introduction

C-SFR-F2010B is a new member of the Galaxy of Light series. It is made of silicone, with creative patent optical design and meticulously selected LEDs which provides consistent lighting effects. Due to its transparent lighting surface, high lumen output can be achieved and it can be used together with frosted diffuser for direct view application.

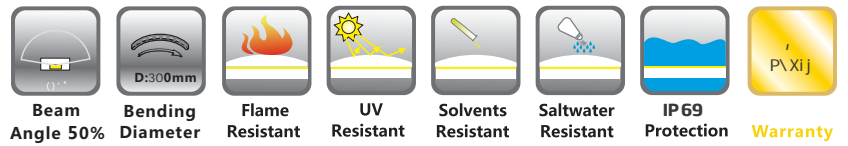
C-SFR-F2010B is CE and RoHS compliant. Whole LED strip even with male and female connector is IP69 approved and complies with all essential requirement of the EMC directive. Moreover, it has been passed environmental resistance, optical, mechanical and electrical tests in our lab under the support of advanced experimental equipment and technology to ensure it meets the requirements of harsh environments. Also, it has been passed relevant tests of third party inspection authority.

It's utilizing consummate extrusion technology, assembled with injection-moulded connectors to achieve IP69 protection, easy for installation and applicable for various circumstances.

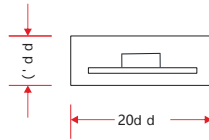
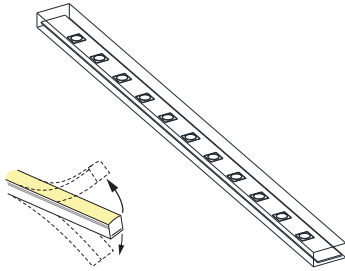
Applications:

1. Outdoor or Indoor Contour Lighting
2. Architectural Outline/Decorative Lighting
3. Cove/Accent Lighting
4. Background Lighting
5. Signage/Display Lighting
6. Tunnel Lighting

# 1. Specifications & Parameters



## 1.1 Dimensions of Light



Note: Unless otherwise specified, the tolerance of the dimensions is  $\pm 0.3\text{mm}$ .

## 1.2 Technical Parameters

Article No.	C-SFR-F2010B-D48CC
Color	White
Working Voltage	DC 48V
Rated Power/m	3W
LED Qty/m	48LEDs
LED Distance	20.83mm
Min. Cutting Unit	12LEDs(1unit)
Min. Cutting Length	250mm(1unit)
Continuous Length	150m(75m*2pcs)
Package Length	$\leq 75\text{m}$
Weight/m	285g
Storing Temp.	-40~60
Ambient Working Temperature	-40~55
Ambient Installation Temperature IP	-40~50
Rating	IP69
Lifespan	50000h (L80/B10)
Flammability Standard	UL94 V-0
Heat Resistance (Cable)	150°C
Heat Resistance (Female & Male Connector)	85°C
Light & Cable	100% Halogen Free
Electric System	Safety Extra Low Voltage (SELV)
EMC	350-500MHz
IK Rating	IK08



Silicone-Transparent

## 1.3 Optical Parameters

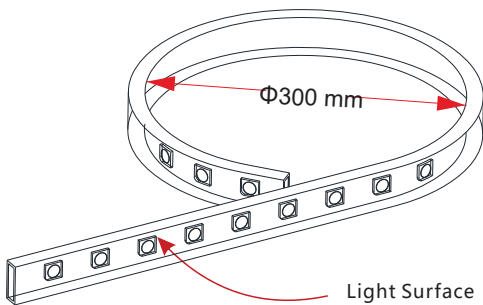
Photometric Data		
Beam Angle	50°	
Color Temperature	4000K	
Beam Diameter @ 50%	2.0m	
Beam Diameter @ 10%	4.0m	
Beam Diameter @ 5%	8.0m	
Beam Diameter @ 1%	16.0m	
Beam Diameter @ 0.5%	32.0m	
Beam Diameter @ 0.1%	64.0m	
Beam Diameter @ 0.05%	128.0m	
Beam Diameter @ 0.01%	256.0m	
Beam Diameter @ 0.005%	512.0m	
Beam Diameter @ 0.001%	1024.0m	
Beam Diameter @ 0.0005%	2048.0m	
Beam Diameter @ 0.0001%	4096.0m	
Beam Diameter @ 0.00005%	8192.0m	
Beam Diameter @ 0.00001%	16384.0m	
Beam Diameter @ 0.000005%	32768.0m	
Beam Diameter @ 0.000001%	65536.0m	
Beam Diameter @ 0.0000005%	131072.0m	
Beam Diameter @ 0.0000001%	262144.0m	
Beam Diameter @ 0.00000005%	524288.0m	
Beam Diameter @ 0.00000001%	1048576.0m	
Beam Diameter @ 0.000000005%	2097152.0m	
Beam Diameter @ 0.000000001%	4194304.0m	
Beam Diameter @ 0.0000000005%	8388608.0m	
Beam Diameter @ 0.0000000001%	16777216.0m	
Beam Diameter @ 0.00000000005%	33554432.0m	
Beam Diameter @ 0.00000000001%	67108864.0m	
Beam Diameter @ 0.000000000005%	134217728.0m	
Beam Diameter @ 0.000000000001%	268435456.0m	
Beam Diameter @ 0.0000000000005%	536870912.0m	
Beam Diameter @ 0.0000000000001%	1073741824.0m	
Beam Diameter @ 0.00000000000005%	2147483648.0m	
Beam Diameter @ 0.00000000000001%	4294967296.0m	
Beam Diameter @ 0.000000000000005%	8589934592.0m	
Beam Diameter @ 0.000000000000001%	17179869184.0m	
Beam Diameter @ 0.0000000000000005%	34359738368.0m	
Beam Diameter @ 0.0000000000000001%	68719476736.0m	
Beam Diameter @ 0.00000000000000005%	137438953472.0m	
Beam Diameter @ 0.00000000000000001%	274877906944.0m	
Beam Diameter @ 0.000000000000000005%	549755813888.0m	
Beam Diameter @ 0.000000000000000001%	1099511627776.0m	
Beam Diameter @ 0.0000000000000000005%	2199023255552.0m	
Beam Diameter @ 0.0000000000000000001%	4398046511104.0m	
Beam Diameter @ 0.00000000000000000005%	8796093022208.0m	
Beam Diameter @ 0.00000000000000000001%	17592186044416.0m	
Beam Diameter @ 0.000000000000000000005%	35184372088832.0m	
Beam Diameter @ 0.000000000000000000001%	70368744177664.0m	
Beam Diameter @ 0.0000000000000000000005%	140737488355328.0m	
Beam Diameter @ 0.0000000000000000000001%	281474976710656.0m	
Beam Diameter @ 0.00000000000000000000005%	562949953421312.0m	
Beam Diameter @ 0.00000000000000000000001%	1125899906842624.0m	
Beam Diameter @ 0.000000000000000000000005%	2251799813685248.0m	
Beam Diameter @ 0.000000000000000000000001%	4503599627370496.0m	
Beam Diameter @ 0.0000000000000000000000005%	9007199254740992.0m	
Beam Diameter @ 0.0000000000000000000000001%	18014398509481984.0m	
Beam Diameter @ 0.00000000000000000000000005%	36028797018963968.0m	
Beam Diameter @ 0.00000000000000000000000001%	72057594037927936.0m	
Beam Diameter @ 0.000000000000000000000000005%	144115188075855872.0m	
Beam Diameter @ 0.000000000000000000000000001%	288230376151711744.0m	
Beam Diameter @ 0.0000000000000000000000000005%	576460752303423488.0m	
Beam Diameter @ 0.0000000000000000000000000001%	1152921504606846976.0m	
Beam Diameter @ 0.00000000000000000000000000005%	2305843009213693952.0m	
Beam Diameter @ 0.00000000000000000000000000001%	4611686018427387904.0m	
Beam Diameter @ 0.000000000000000000000000000005%	9223372036854775808.0m	
Beam Diameter @ 0.000000000000000000000000000001%	18446744073709551616.0m	
Beam Diameter @ 0.0000000000000000000000000000005%	36893488147419103232.0m	
Beam Diameter @ 0.0000000000000000000000000000001%	73786976294838206464.0m	
Beam Diameter @ 0.00000000000000000000000000000005%	147573952589676412928.0m	
Beam Diameter @ 0.00000000000000000000000000000001%	295147905179352825856.0m	
Beam Diameter @ 0.000000000000000000000000000000005%	590295810358705651712.0m	
Beam Diameter @ 0.000000000000000000000000000000001%	1180591620717411303424.0m	
Beam Diameter @ 0.0000000000000000000000000000000005%	2361183241434822606848.0m	
Beam Diameter @ 0.0000000000000000000000000000000001%	4722366482869645213696.0m	
Beam Diameter @ 0.00000000000000000000000000000000005%	9444732965739290427392.0m	
Beam Diameter @ 0.00000000000000000000000000000000001%	18889465931478580854784.0m	
Beam Diameter @ 0.000000000000000000000000000000000005%	37778931862957161709568.0m	
Beam Diameter @ 0.000000000000000000000000000000000001%	75557863725914323419136.0m	
Beam Diameter @ 0.0000000000000000000000000000000000005%	151115727451828646838272.0m	
Beam Diameter @ 0.0000000000000000000000000000000000001%	302231454903657293676544.0m	
Beam Diameter @ 0.00000000000000000000000000000000000005%	604462909807314587353088.0m	
Beam Diameter @ 0.00000000000000000000000000000000000001%	1208925819614629174706176.0m	
Beam Diameter @ 0.000000000000000000000000000000000000005%	2417851639229258349412352.0m	
Beam Diameter @ 0.000000000000000000000000000000000000001%	4835703278458516698824704.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000005%	9671406556917033397649408.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000001%	19342813113834066795298816.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000005%	38685626227668133590597632.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000001%	77371252455336267181195264.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000005%	154742504910672534362390528.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000001%	309485009821345068724781056.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000005%	618970019642690137449562112.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000001%	1237940039285380274899124224.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000000005%	2475880078570760549798248448.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000000001%	4951760157141521099596496896.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000000005%	9903520314283042199192993792.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000000001%	19807040628566084398385987584.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000005%	39614081257132168796771975168.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000001%	79228162514264337593543950336.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000000000005%	158456325028528675187087900672.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000000000001%	316912650057057350374175801344.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000000000005%	633825300114114700748351602688.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000000000001%	1267650600228229401496703205376.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000000005%	2535301200456458802993406410752.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000000001%	5070602400912917605986812821504.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000000000000005%	10141204801825835211973625643008.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000000000000001%	20282409603651670423947251286016.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000000000000005%	40564819207303340847894502572032.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000000000000001%	81129638414606681695789005144064.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000000000005%	162259276829213363391578010288128.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000000000001%	324518553658426726783156020576256.0m	
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Beam Diameter @ 0.000000000000000000000000000000000000000000000000000001%	5192296858534827628530496329220096.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000000000000005%	10384593717069655257060992658440192.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000000000000001%	20769187434139310514121985316880384.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000000000000000000005%	41538374868278621028243970633760768.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000000000000000000001%	83076749736557242056487941267521536.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000000000000000000005%	166153499473114484112975882535043072.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000000000000000000001%	332306998946228968225951761070086144.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000000000000000005%	664613997892457936451903522140172288.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000000000000000001%	1329227995784915872903807044280344576.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000000000000000000000005%	2658455991569831745807614088560689152.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000000000000000000000001%	5316911983139663491615228177121378304.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000000000000000000000005%	10633823966279326983230456354242756608.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000000000000000000000001%	21267647932558653966460912708485513216.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000000000000000000005%	42535295865117307932921825416971026432.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000000000000000000001%	85070591730234615865843650833942052864.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000000000000000000000000005%	170141183460469231731687301667884105728.0m	
Beam Diameter @ 0.00000000000000000000000000000000000000000000000000000000000001%	340282366920938463463374603335768211456.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000000000000000000000000005%	680564733841876926926749206671536422912.0m	
Beam Diameter @ 0.000000000000000000000000000000000000000000000000000000000000001%	1361129467683753853853498413343072845824.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000000000000000000000005%	2722258935367507707706996826686145711648.0m	
Beam Diameter @ 0.0000000000000000000000000000000000000000000000000000000000000001%	5444517870735015415413993653372291423296.0m	
Beam Diameter @ 0		

## 2. Functions & Features

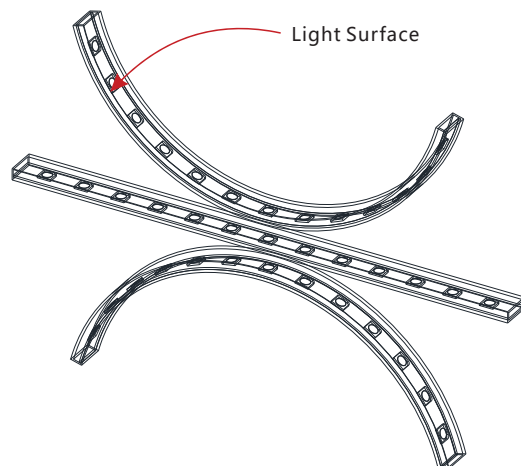
### 2.1 Product Features

1. High quality and high brightness SMD LED chip.
2. Protection Circuit.
3. Variety of monochromatic lights for option including White light.
4. UV & flame resistant construction(silicone).
5. Flat profile, good choice for recessed mounting.
6. High color consistency & uniformity.
7. Ultra flexible with 300mm minimum bending diameter.
8. High IP rating.
9. Continuous length up to 150m by powering one end.
10. Environmentally friendly & energy efficient.
11. Automated production, high reliability & long warranty.

### 2.2 Minimum Bend Diameter



The light can only be bent along the light surface.



Do not bend smaller than allowed minimum bend diameter.

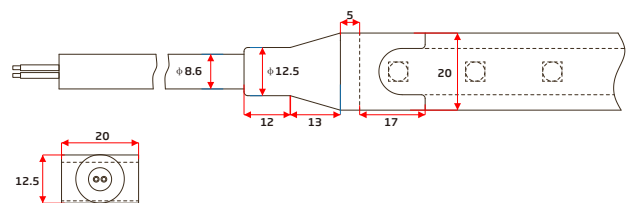
## 3. Types of Connector

### 3.1 Injection-moulded Connector



#### Injection-moulded Front Connector(top end)

Connects light to power supply with pre-installed front feed cable, IP69. Cable length available in 1m.

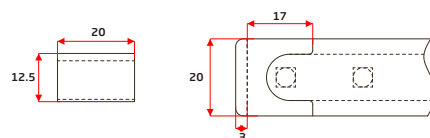


mm



#### Injection-moulded End Cap

Pre-installed termination protection of the light, IP69.



mm

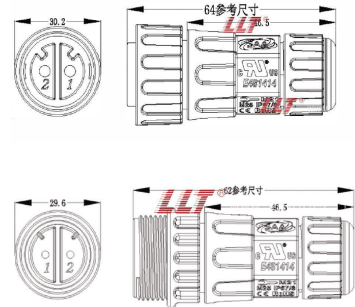
### 3.2 Male & Female Connector

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

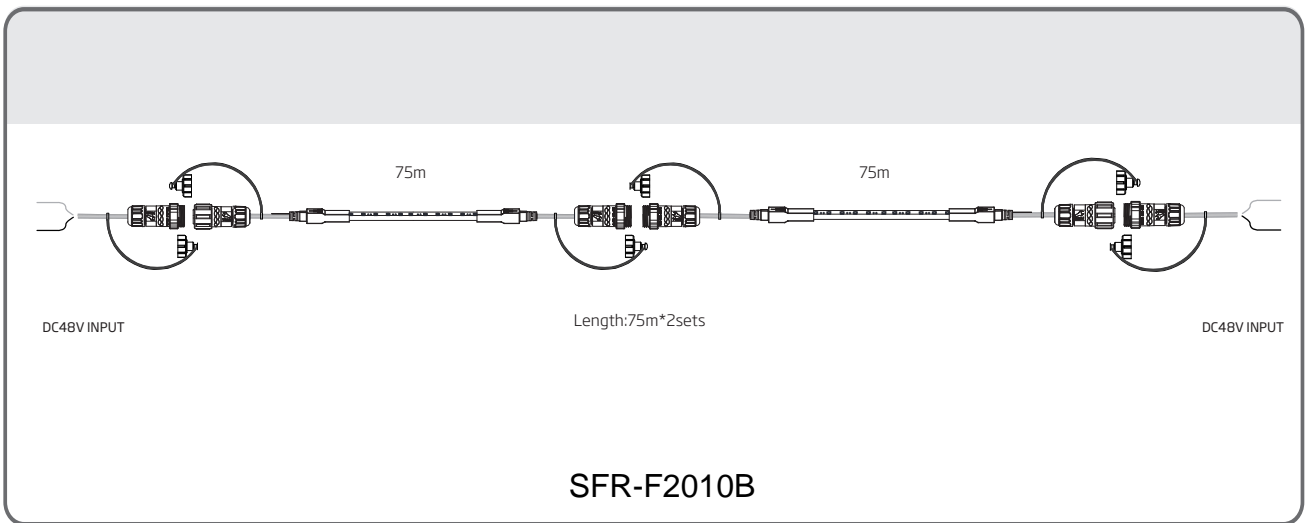


#### Male & female Connector

For plug and play cable junction, DIY or Pre-installed connector, IP69.



### 3.3 Wiring Diagram

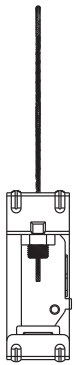
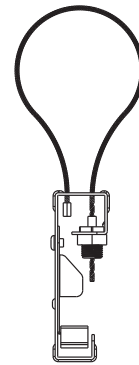
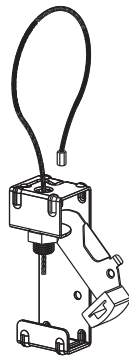
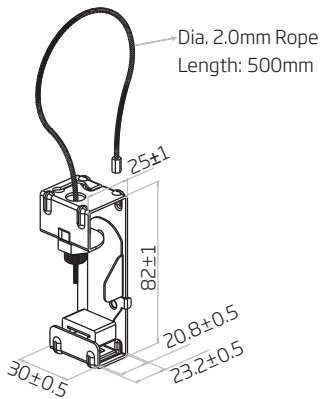


# 4. Suspension Kit

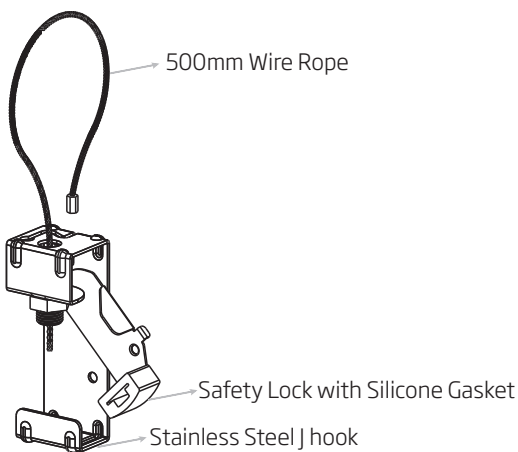


It's a simple but useful device for facilitating the suspension installation, portable and reusable, and the design of no screws enables the ease of assembly and disassembly on site. The hanging won't be subject to the shape, the size of the support, and its height is adjustable. Smartly locked with the hook, the wire rope is hard to fall off. In addition, it is rust-resistant, adopted 316 stainless steel, which makes it perfect for wet and vibration environments, such as mining tunnels, bridges, etc.

## 4.1 Dimension: mm



## 4.2 Main Components



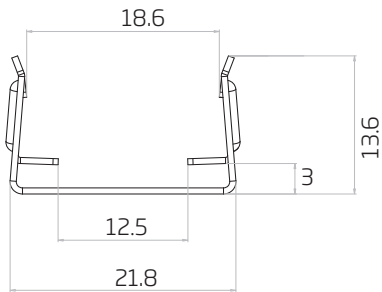
Item Code: F2010-S/KT

# 5. Stainless Steel Profile

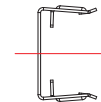
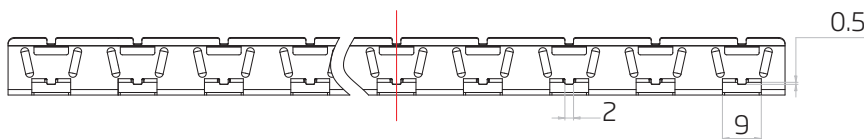
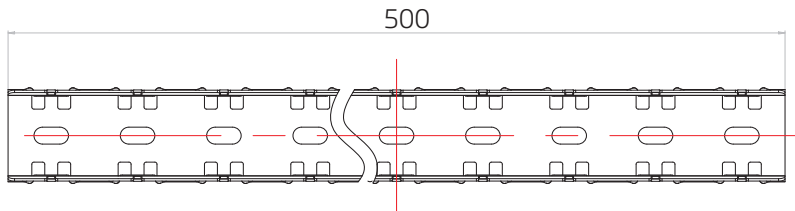
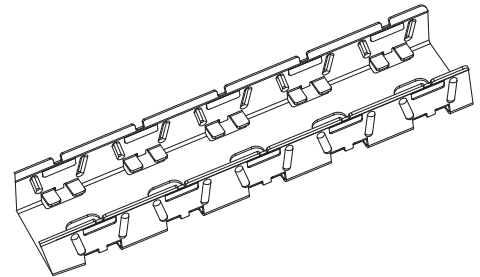
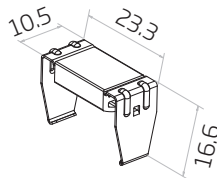


It's engineered for the safe and quick installation of F2010 Explosion Proof LED Strip. The design is smart enough to fix LED strip tightly, preventing it from falling off the mounting profile when vibration occurs. Accessories are available on demand for either screw mounting or strap mounting based on the site condition. The main structure, made of 316L stainless steel, makes it resistant to corrosion, suitable for environments where hazardous gas or dust exists and industrial workplaces.

## 5.1 Dimension: mm



Tolerance: ±0.2mm



Item Code	Standard Length	Slotted Hole
F2010-S/PL-500MM-SSL	500mm/19.68in	4*10mm/0.16*0.39in