

# Born for Industrial Safety



**Archer™** (NJZ-FEL-G Series)

Hazardous Location LED  
Luminaire



# Archer™



## Hazardous Location LED Luminaire NJZ-FEL-G Series

### Product description

The Archer™ FEL-G Series LED linear is designed for installations in hazardous area with presence of flammable gases or combustible dusts as defined by ATEX / IECEx for Zone 1/21 applications. New generation is great for replacing of existing fluorescent lighting system and provide an incredible 209,000 (L70) maintenance free hours at 25°C.

### Features

- Low profile design allows installation in work areas with low ceiling heights
- Lens and LED driver field replaceable by qualified personnel on-site
- UV stable and impact resistant clear or diffused PC lens (Standard) to minimize glare
- One wiring access cover with captive screws as standard, two(optional) for end to end feed through wiring WAGO screwless terminal block with 5-pole 6mm<sup>2</sup> max conductor for easy wiring
- Single Lens model 20W to 40W; Double Lens model 40W to 100W\*
- High luminous efficacy - Up to 120 lm / W.
- Universal Voltage: AC120-277V (50/60Hz)
- Superior CRI80 compared to HPS, LPS, MH
- Ambient range from - 40°C to + 55°C ( -20°C to 50°C for Emergency Model )
- Standard 12W 90mins operation time for emergency mode (6W 180mins optional)
- Resistant to shock and vibration

### Compliance

20 to 60W: II 2 G Ex db eb mb IIC T6 Gb  
II 2 D Ex tb IIIC T80°C Db  
>60 to 100W: II 2 G Ex db eb mb IIC T5 Gb  
II 2 D Ex tb IIIC T80°C Db

Zone 1, 21  
CE EMC / LVD / EMF  
EN 62471  
IP66 / IK10 / 5G  
1000hrs salt spray

### Application

Power Plants / Heavy Industrials  
Storage Facility / Paper mills  
Wastewater Treatment Plants  
Loading Docks / Platforms / Shipyards Chemical  
Processing Facility  
Petrochemical Processing Facility

### Warranty

5-Year Standard Warranty (Battery not included)\* \* Subject to NJZ general T & C.  
LED lumen Maintenance:  
L70 >150,000 hours @ 55°C ambient

### Technical Parameter

#### Electrical

Specification	NJZ-FEL-G-20	NJZ-FEL-G-30	NJZ-FEL-G-40
Rated Power	20W	30W	40W
Input Voltage	AC120-277V		
Input Frequency	50/60Hz		
Input Current (AC120V)	182mA	242mA	330mA
Input Current (AC230V)	99mA	128mA	172mA
Power Factor	≥0.95		
Driver Efficiency	≥90%		
THD	<20%		
Surge Protection	6KV Line-to ground		
Battery Material	Nickel-cadmium		
Expected Battery*	3 Year		
Battery Duration*	Standard 12W 90mins @ -20~+50°C (6W 180mins Optional)		

\*All values typical (tolerance

+/-10%) **Optical**

Specification	NJZ-FEL-G-20	NJZ-FEL-G-30	NJZ-FEL-G-40
Lumen Output	2400lm	3600lm	4400lm
Lumens Per Watt	120lm/W		
Beam Angle	110°		
Correlated Color Temperature (CCT)	2700K/4000K/5000K/5700K		
Color Rendering Index (CRI)	Ra>80		

#### Environmental

Specification	NJZ-FEL-G-20	NJZ-FEL-G-30	NJZ-FEL-G-40
Ambient Operating Temperature	- 40°C to + 55°C -20°C to 50°C (Emergency Model)		
Optimal Operating Temperature	25°C (77°F)		
Gas Environment	T6		
Dust Environment	T80°C		

#### Mechanical

Specification	NJZ-FEL-G-20	NJZ-FEL-G-30	NJZ-FEL-G-40
Housing Material	Marine grade aluminum		
Endcap / Front cover	Copper-free (< 0.4%) die-cast aluminum		
Hardware	Stainless steel 316		
Lens Material	Polycarbonate		
Color	Dark Grey (RAL7037)		
Finish	Polyester powder coating for uniform corrosion resistance		
Protection	IP66 / IK10		
Cable entries	4 x M25 - 2 at each end (Standard, others optional)		
Termination	L1 , L2 , L3 , N , PE; each Terminal 2x6mm² max		
Wiring	One access cover standard, two for through wiring		
Mounting	Ceiling (Flush mount ), Wall, Suspended (Chain/Eyebolt ), Pole		

## Technical Parameter

### Electrical

Specification	NJZ-FEL-G-50	NJZ-FEL-G-60	NJZ-FEL-G-80	NJZ-FEL-G-100
Rated Power	50W	60W	80W	100W
Input Voltage	AC120-277V			
Input Frequency	50/60Hz			
Input Current (AC120V)	402mA	497mA	651mA	825mA
Input Current (AC230V)	212mA	264mA	340mA	435mA
Power Factor	≥0.95			
Driver Efficiency	≥90%			
THD	<20%			
Surge Protection	6KV Line-to ground			
Battery Material	Nickel-cadmium			
Expected battery*	3 Year			
Battery Duration*	Standard 12W 90mins @ -20~+50°C (6W 180mins Optional)			

\*All values typical (tolerance+/-10%)

### Optical

Specification	NJZ-FEL-G-50	NJZ-FEL-G-60	NJZ-FEL-G-80	NJZ-FEL-G-100
Lumen Output	5500lm	6800lm	8700lm	10000lm
Lumens Per Watt	120lm/W			
Beam Angle	110°			
Correlated Color Temperature (CCT)	2700K/4000K/5000K/5700K			
Color Rendering Index (CRI)	Ra>80			

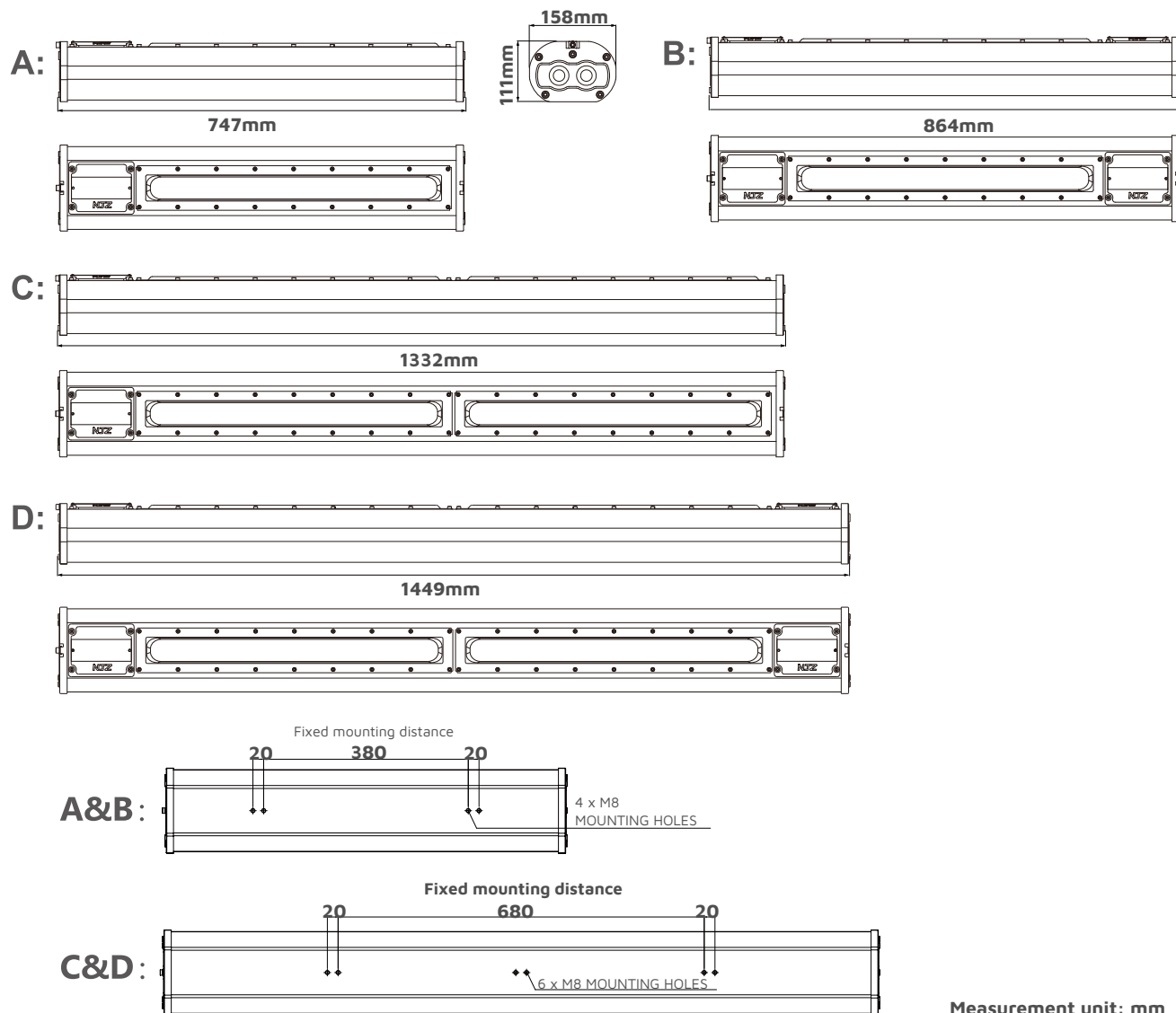
### Environmental

Specification	NJZ-FEL-G-50	NJZ-FEL-G-60	NJZ-FEL-G-80	NJZ-FEL-G-100
Ambient Operating Temperature	- 40°C to + 55°C -20°C to 50°C (Emergency Model)			
Optimal Operating Temperature	25°C (77°F)			
Gas Environment	T6		T5	
Dust Environment	T80°C			

### Mechanical

Specification	NJZ-FEL-G-50	NJZ-FEL-G-60	NJZ-FEL-G-80	NJZ-FEL-G-100
Housing Material	Marine grade aluminum			
Endcap / Front cover	Copper-free (< 0.4%) die-cast aluminum			
Hardware	Stainless steel 316			
Lens Material	Polycarbonate			
Color	Dark Grey (RAL7037)			
Finish	Polyester powder coating for uniform corrosion resistance			
Protection	IP66 / IK10			
Cable entries	4 x M25 - 2 at each end (Standard, others optional)			
Termination	L1 , L2 , L3 , N , PE; each Terminal 2x6 mm <sup>2</sup> max			
Wiring	One access cover standard, two for through wiring			
Mounting	Ceiling (Flush mount ), Wall, Suspended (Chain/Eyebolt ), Pole			

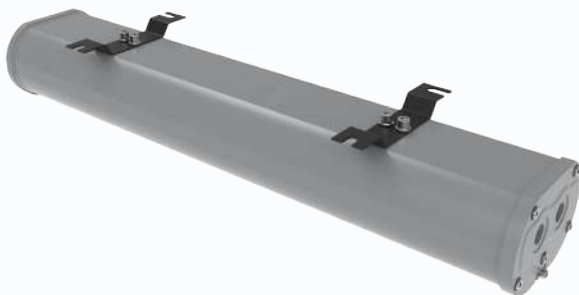
### Product Dimensions



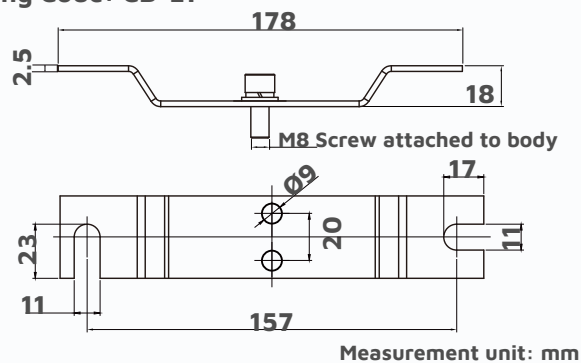
Model No.	Net Weight (Product)	Product Dimension	Gross weight	Package Dimension (LxWxH)
<b>A: NJZ-FEL-G-20/30/40</b>	6.3kg	747x158x111 mm	7.3kg	809x220x170 mm
<b>B: NJZ-FEL-G-20/30/40</b>	6.7kg	864x158x111 mm	7.7kg	920x220x170 mm
<b>C: NJZ-FEL-G-40/50/60/80/100</b>	9.5kg	1332x158x111 mm	10.5kg	1388x220x170 mm
<b>D: NJZ-FEL-G-40/50/60/80/100</b>	9.9kg	1449x158x111 mm	10.9kg	1505x220x170 mm

## Mounting Options

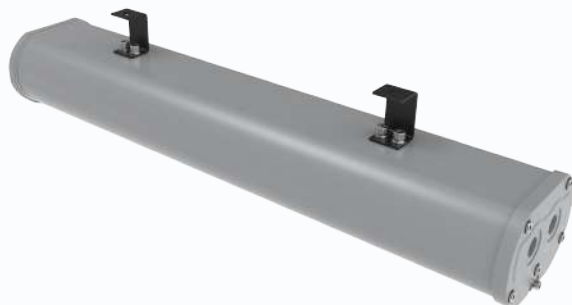
### Low Ceiling Mount Bracket



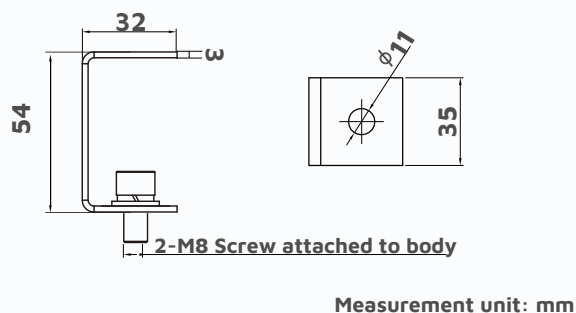
Ordering Code: CB-L1



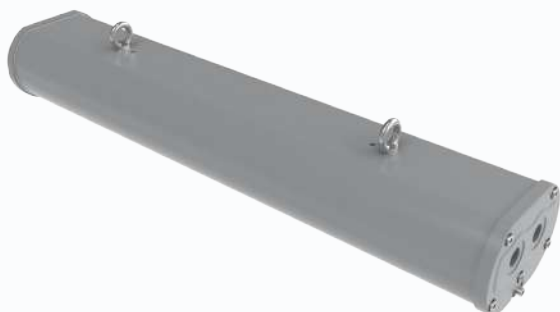
### High Ceiling Mount Bracket



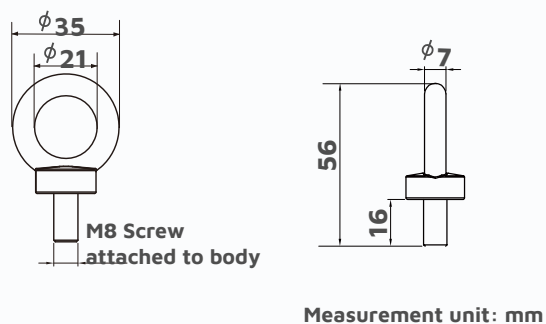
Ordering Code: CB-H1



### Eyebolt Mount



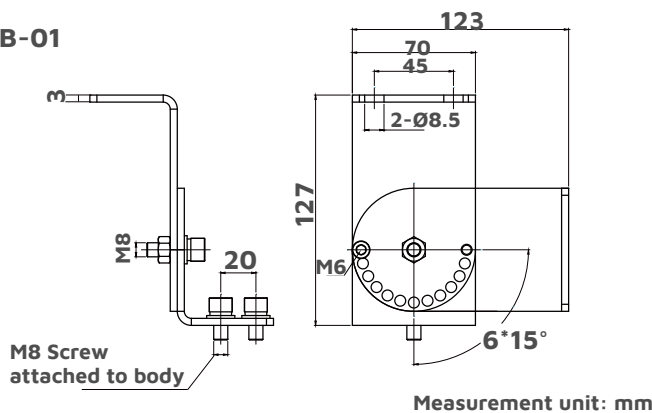
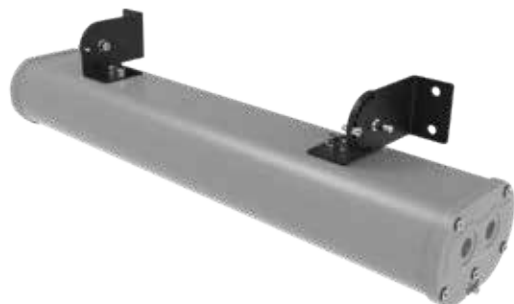
Ordering Code: EB-1





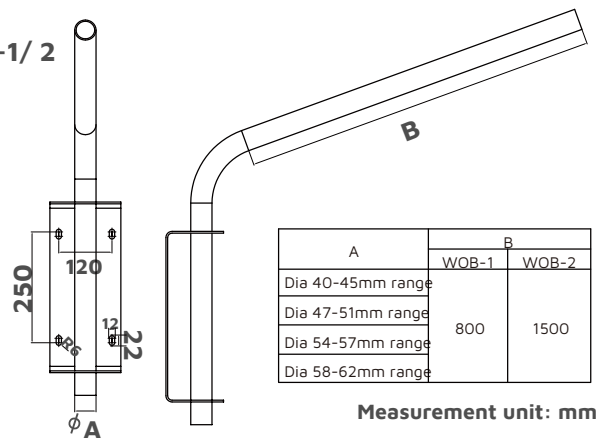
### Wall Mount Swivel Bracket

Ordering Code: WB-01



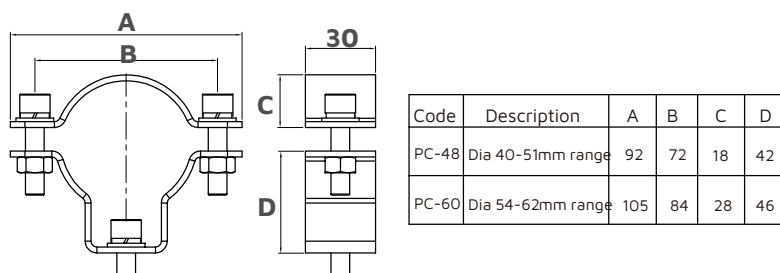
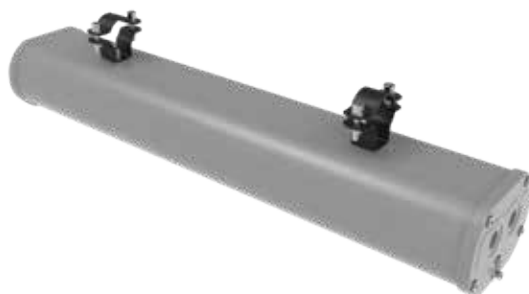
### Wall Mounting Outreach Bracket

Ordering Code: WOB-1/ 2



### Pole Mount Clamp

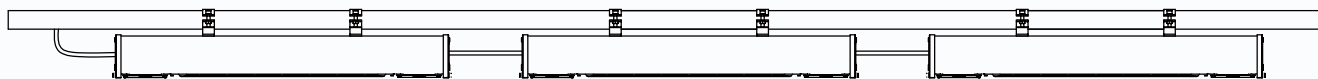
Ordering Code: PC-48/60



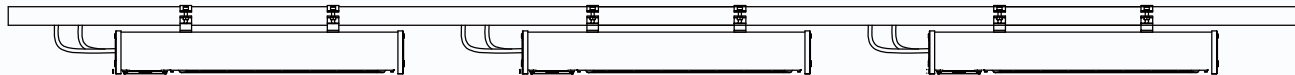
## Through Wiring

In-out connection can be made on one or both sides for quick installation

On both ends of the connection



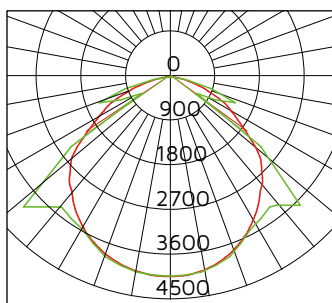
On end of the wire



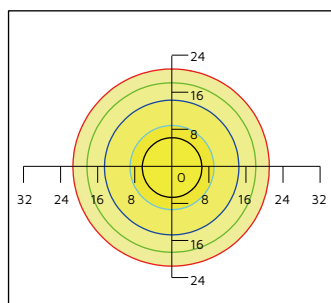
Measurement unit: mm

## Photometric

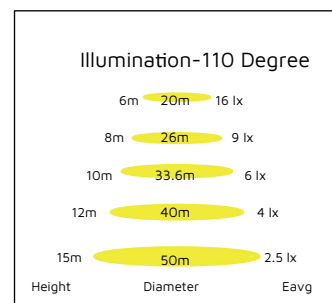
110 Degree



— V 0.0DEG PLAN, 112.1  
— H 0.0DEG PLAN, 109.1



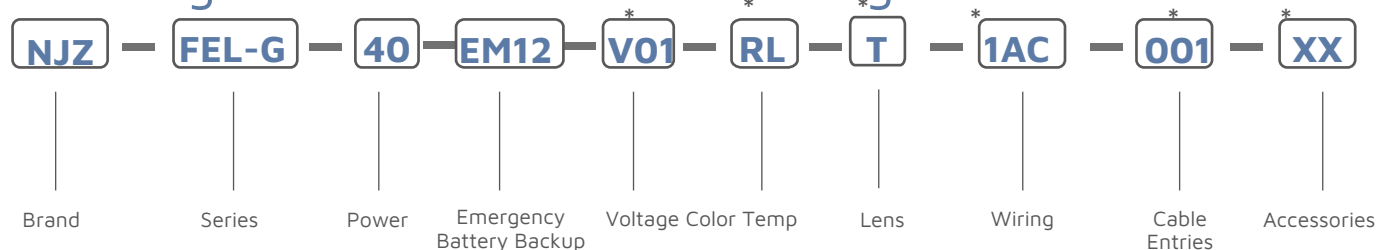
Mounting Height 10m, 0 Tilt



Flux out: 5253 lm



### Ordering Information and Mounting Accessories



\*: Suffix not within nomenclature as per Certification, for marketing purpose only

BRAND	SERIES	POWER	EMERGENCY BATTERY BACKUP	COLOR TEMP
NJZ	FEL-G	20 =20W 30 =30W 40 =40W * 50 =50W 60 =60W 80 =80W 100 =100W	BLANK =Standard (Non Emergency) EM6 =6W 180mins EM12 =12W 90mins (Emergency Standard)	RD =2700K RL =4000K RZ =5000K RM =5700K RD = Red GN =Green BU = Blue AM =Amber
			<u>VOLTAGE</u> V01 =AC120-277V	

(\*please specify if single or double Lens)

LENS	WIRING	CABLE ENTRIES
T =Transparent PC F =Frosted PC	1AC =Single Access Cover (standard) 2AC =Dual Access Cover	001 =4 X M20 X 1.5 002 =4 X M25 X 1.5 (Standard) 003 =4 X NPT 1/2 004 =4 X NPT 3/4

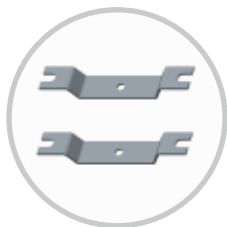
#### ACCESSORIES

CB-L1	=Low Ceiling Mount Bracket 1 pair
CB-H1	=High Ceiling Mount Bracket 1 pair
EB-1	=Eyebolt 1 pair
WB-01	=Wall Mount Swivel Bracket 1 pair
WOB-1	=0.6M wall mounting outreach bracket x1
WOB-2	=1.2M wall mounting outreach bracket x1
PC-48	=Dia 40-51mm range SS316 pole clamp 1 pair
PC-60	=Dia 54-62mm range SS316 pole clamp 1 pair
SC01	=Safety cable x1
R-D40	=Replacement Driver x1 (20-40W models)
R-D60	=Replacement Driver x1 (50-60W models)
R-D100	=Replacement Driver x1 (70-100W models)
R-T	=Replacement PC Lens, clear x1
R-F	=Replacement PC Lens, frosted x1
R-B	=Replacement Battery Pack x1

#### INSTALLATION TIPS

1. Wago Termination  
Conductor range: 0.5 ... 4 (6) mm<sup>2</sup> (20 ... 10 AWG)  
Rated voltage: 800 V  
Rated current/(max. current): 32 A (41 A)
2. Cable gland & Plug  
Standard: Plastic plugs x4 + Plastic Cable gland x1 Optional:  
Contact sales for other selections
3. Dimming  
Standard: 0-10V Dimming (10-100%)
4. Emergency  
Auto self-diagnostics function applied  
minimum 30 seconds test once a week to verify the status as per LED indicator





### CB-L1

Low Ceiling Mount  
Bracket 1 pair



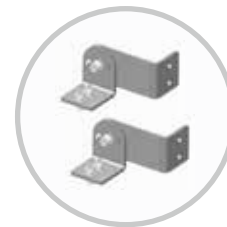
### CB-H1

High Ceiling Mount  
Bracket 1 pair



### EB-1

Eyebolt 1 pair



### WB-01

Wall Mount Swivel  
Bracket 1 pair



### WOB-1/2

Wall Mounting  
Outreach Bracket x1



### PC-48/60

SS316 Pole Clamp 1 pair



### SC01

Stainless Steel  
Safety Cable kit



**R-**  
**D40/60/100**  
Replacement Driver x1



### R-T

Replacement PC Lens,  
clear x1



### R-F

Replacement PC Lens,  
frosted x1



### R-B

Replacement Battery Pack x1