

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 6mm² 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 2x6mm ² 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			

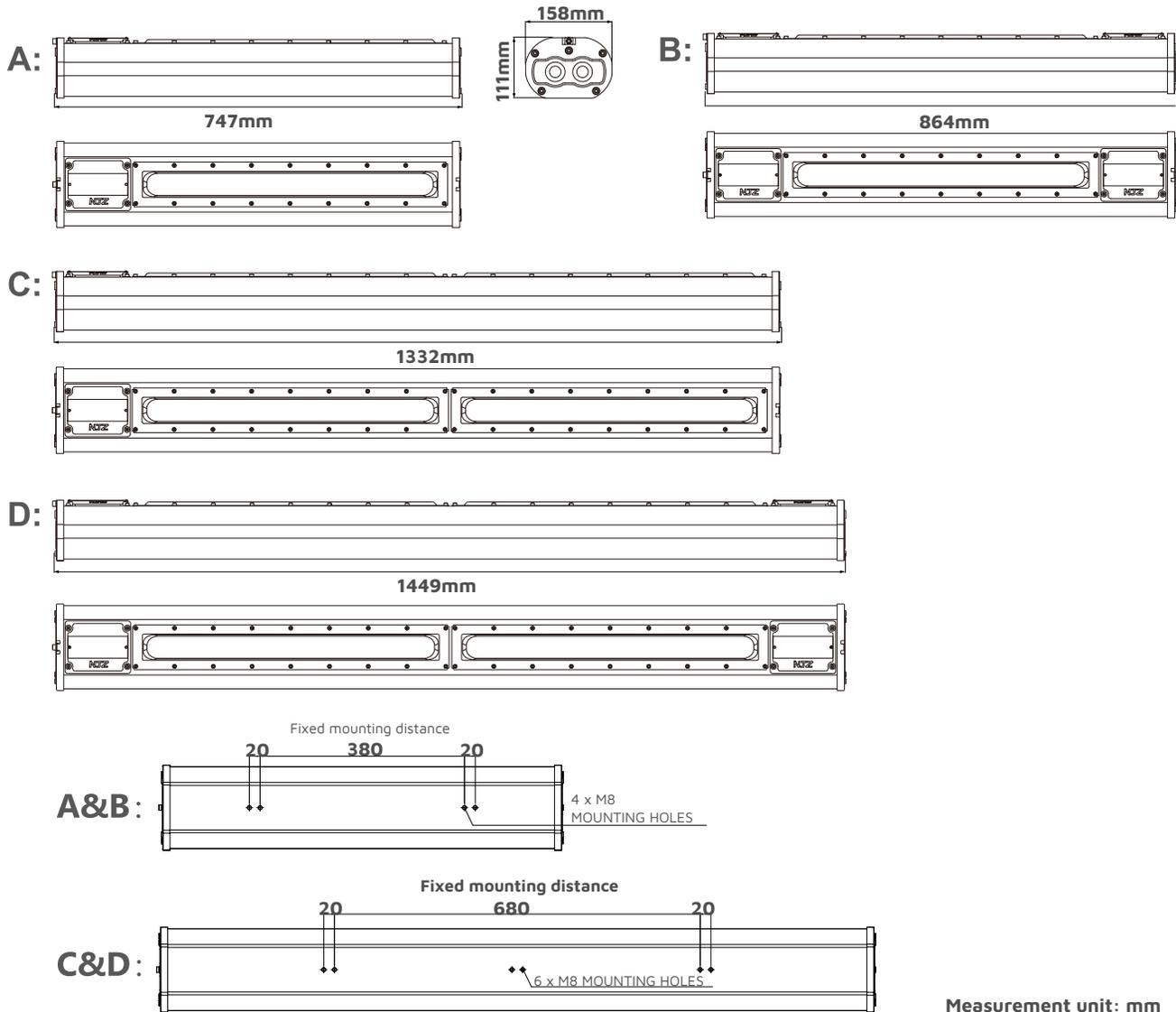
Environmental

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 ² max			
Wiring	One access cover standard, two for through wiring			
Mounting	Ceiling (Flush mount) , Wall, Suspended (Chain/Eyebolt) , Pole			

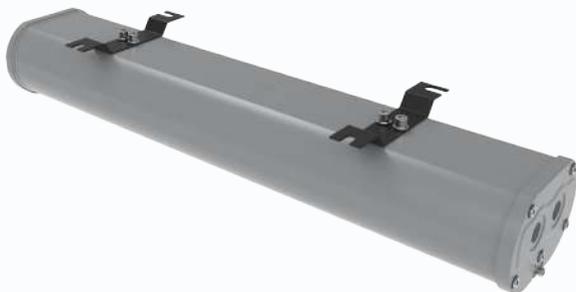
Product Dimensions



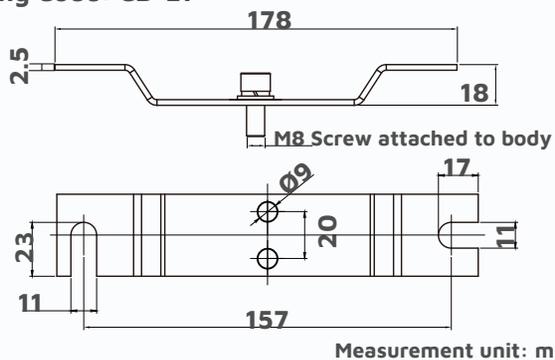
Model No.	Net Weight (Product)	Product Dimension	Gross weight	Package Dimension (LxWxH)
A: NJZ-FEL-G-20/30/40	6.3kg	747x158x111 mm	7.3kg	809x220x170 mm
B: NJZ-FEL-G-20/30/40	6.7kg	864x158x111 mm	7.7kg	920x220x170 mm
C: NJZ-FEL-G-40/50/60/80/100	9.5kg	1332x158x111 mm	10.5kg	1388x220x170 mm
D: NJZ-FEL-G-40/50/60/80/100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

Mounting Options

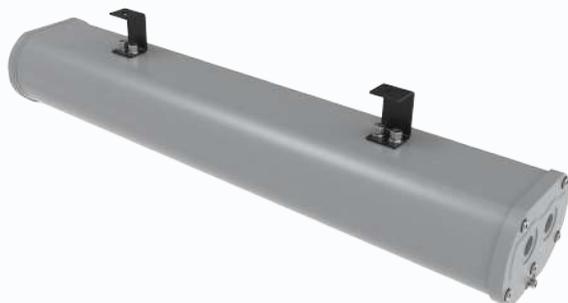
Low Ceiling Mount Bracket



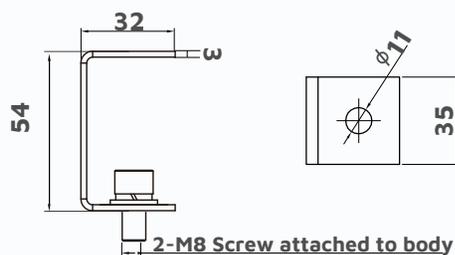
Ordering Code: CB-L1



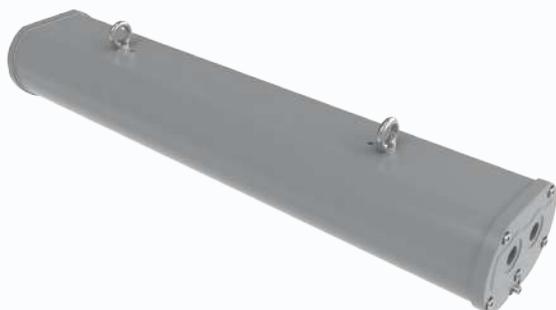
High Ceiling Mount Bracket



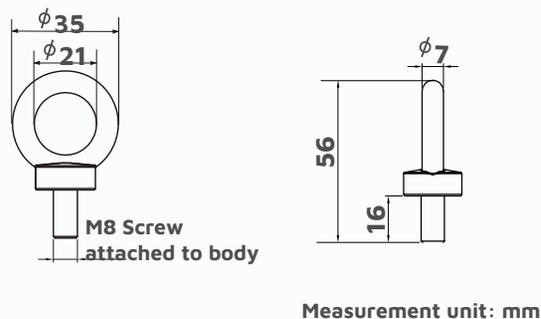
Ordering Code: CB-H1



Eyebolt Mount

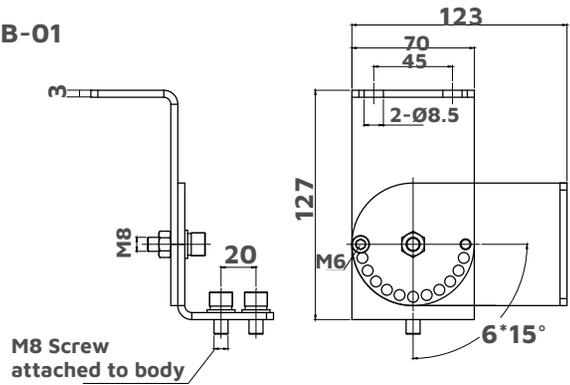
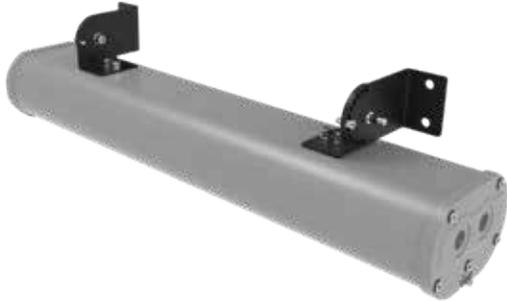


Ordering Code: EB-1



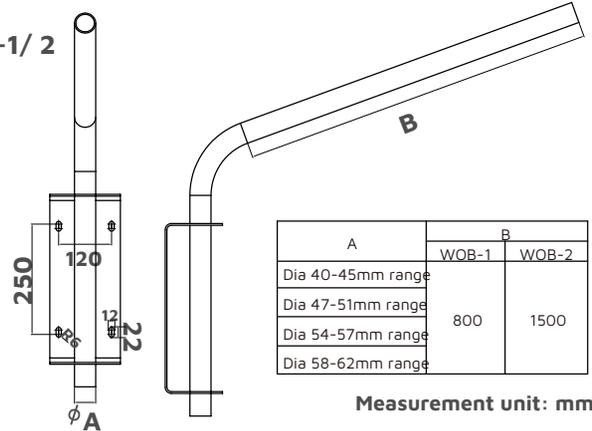
Wall Mount Swivel Bracket

Ordering Code: WB-01



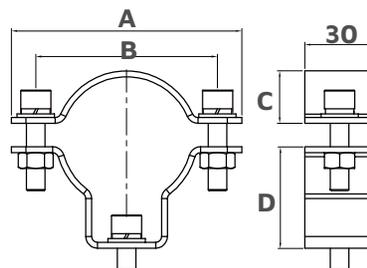
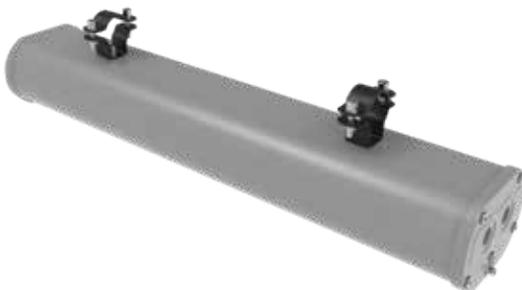
Wall Mounting Outreach Bracket

Ordering Code: WOB-1/ 2



Pole Mount Clamp

Ordering Code: PC-48/60

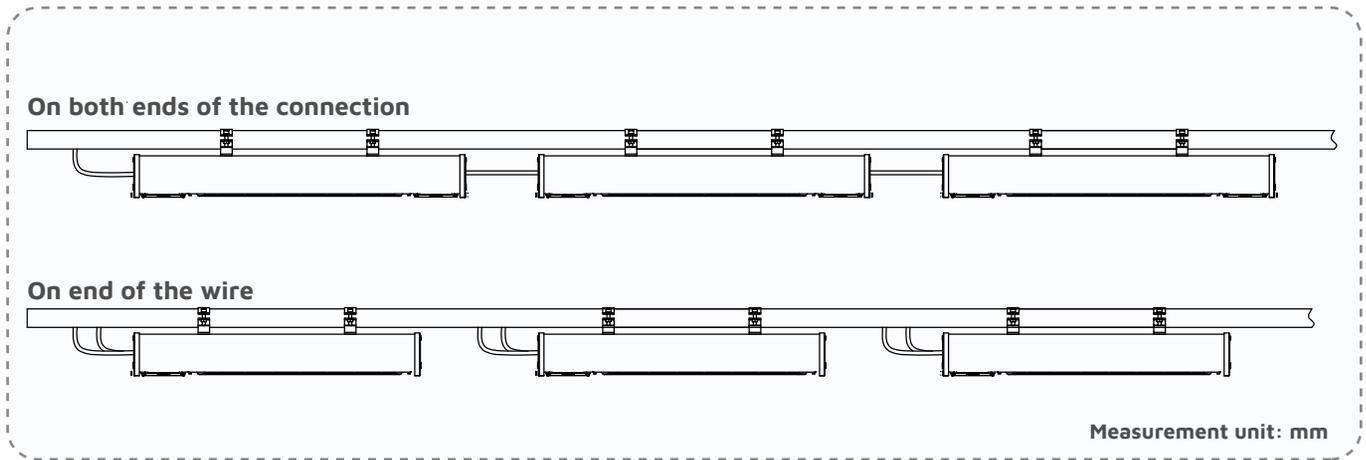


Code	Description	A	B	C	D
PC-48	Dia 40-51mm range	92	72	18	42
PC-60	Dia 54-62mm range	105	84	28	46

Measurement unit: mm

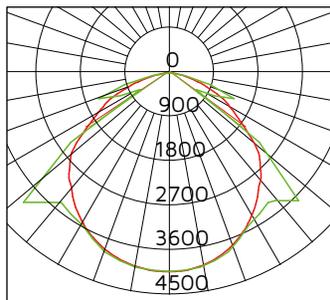
Through Wiring

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

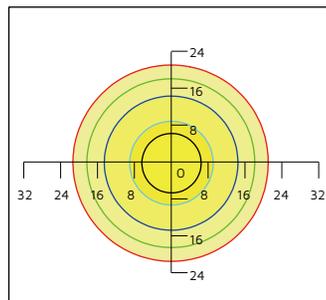


Photometric

110 Degree



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

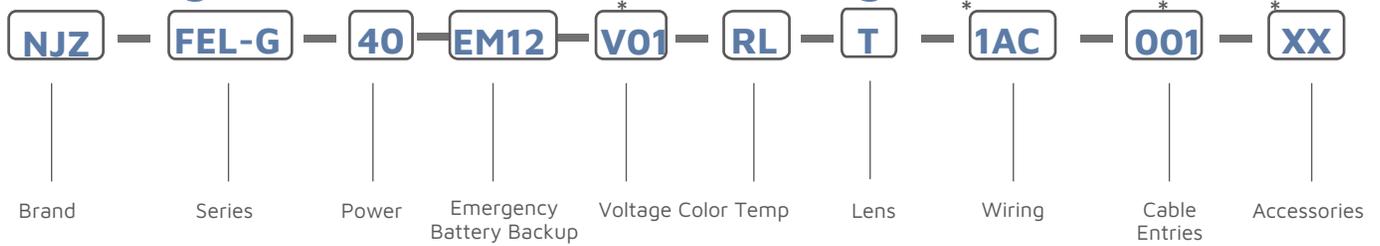


Mounting Height 10m, 0 Tilt

Illumination-110 Degree		
6m	20m	16 lx
8m	26m	9 lx
10m	33.6m	6 lx
12m	40m	4 lx
15m	50m	2.5 lx
Height	Diameter	Eavg

Flux out: 5253 lm

Ordering Information and Mounting Accessories



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

<u>BRAND</u>	<u>SERIES</u>	<u>POWER</u>	<u>EMERGENCY BATTERY BACKUP</u>	<u>COLOR TEMP</u>
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)

<u>LENS</u>	<u>WIRING</u>	<u>CABLE ENTRIES</u>
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

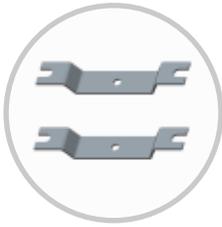
ACCESSORIES

- 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) mm² (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



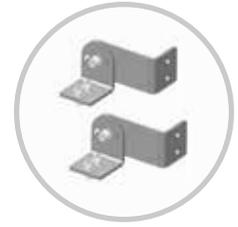
CB-H1

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