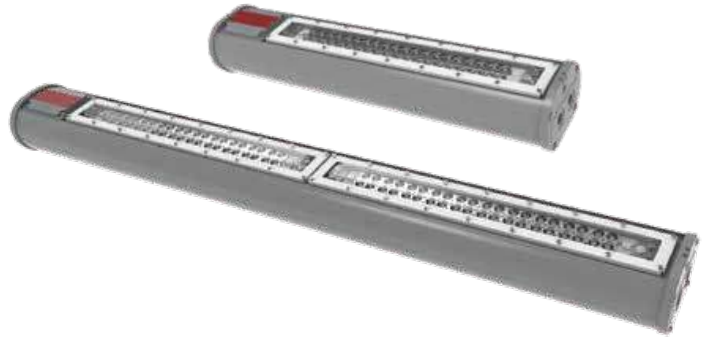


Archer™

Hazardous Location LED Luminaire

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 55°C for Emergency Model)
- Standard 12W 90mins operation time for emergency mode (6W 180mins optional)
- Resistant to shock and vibration

Compliance

IEC/ATEX Standard:

IECEX: Ex db eb mb op is IIC T6 G

Ex tb op is IIIC T80°C Db

ATEX: II 2 G Ex db eb mb op is IIC T6 Gb

II 2 D Ex op is tb IIIC T80°C Db

Zone 1, 21

CE EMC/LVD

IP66

IK10

5G

1000hrs salt spray

*For 80W / 100W models, Cert pending

till further notice

Application

Power Plants / Heavy Industrials

Storage Facility / Paper mills

Wastewater Treatment Plants

Loading Docks / Platforms / Shipyards

Chemical Processing Facility

Petrochemical Processing Facility

LED lumen Maintenance:

L70 > 150,000 hours @ 55°C ambient

Technical Parameter

Electrical

Specification	FEL-G-20	FEL-G-30	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~+55°C (6W 180mins Optional)		

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

Optical

Specification	FEL-G-20	FEL-G-30	FEL-G-40
Lumen Output	2400Lm	3600Lm	4300Lm
Lumens Per Watt	120Lm/W		
Beam Angle	110°		
Correlated Color Temperature (CCT)	2700K/4000K/5000K/5700K		
Color Rendering Index (CRI)	Ra>80		

Environmental

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

Mechanical

Specification	FEL-G-20	FEL-G-30	FEL-G-40
Housing Material	Marine grade aluminum		
Endcap / Front cover	Copper-free (< .4%) die-cast aluminum		
Hardware	Stainless steel 316		
Lens Material	Polycarbonate		
Color	Dark Grey (RAL7037)		
Finish	Polyster 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	FEL-G-50	FEL-G-60	FEL-G-80	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~+55°C (6W 180mins Optional)			

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

Optical

Specification	FEL-G-50	FEL-G-60	FEL-G-80	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			

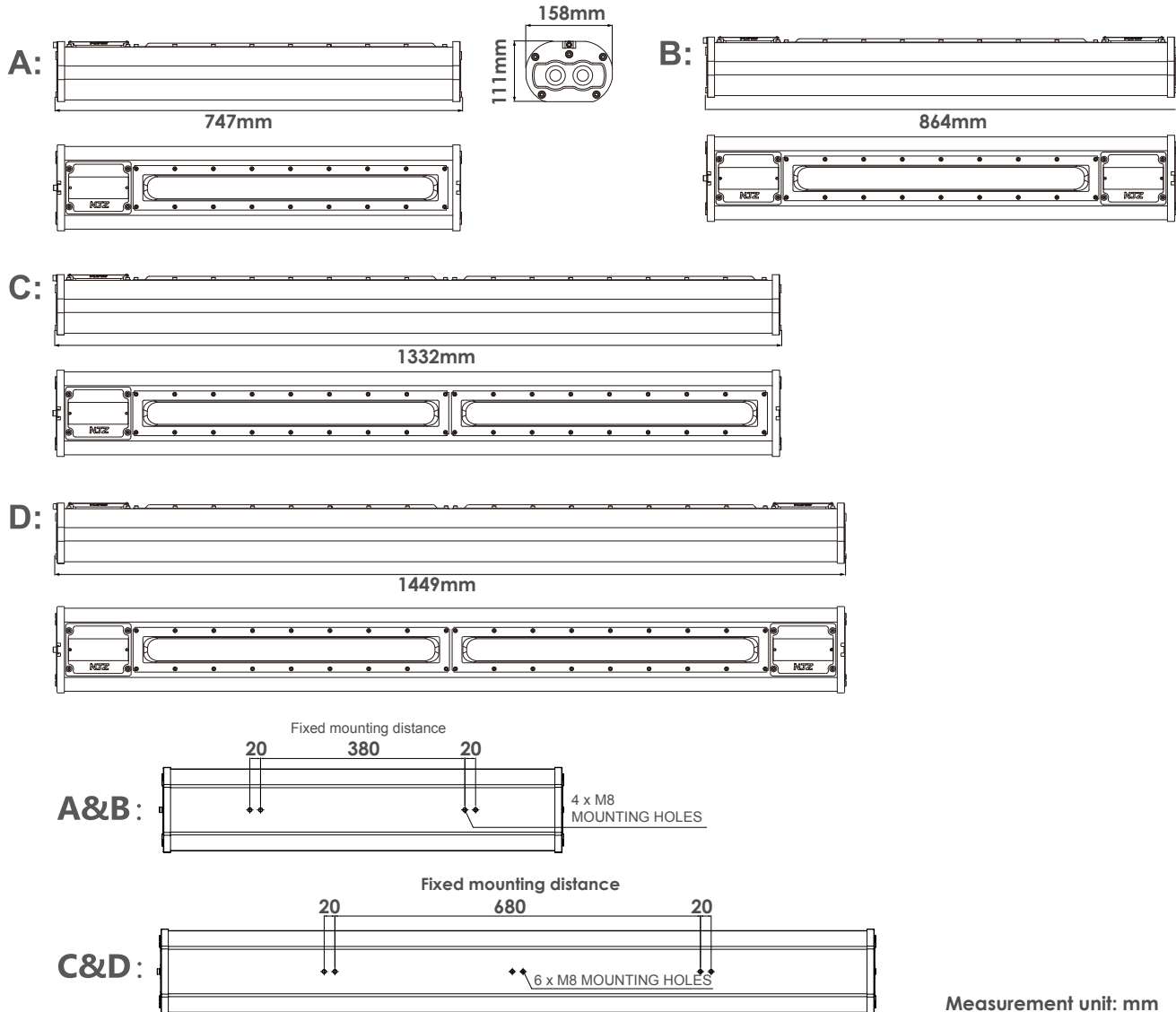
Environmental

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

Mechanical

Specification	FEL-G-50	FEL-G-60	FEL-G-80	FEL-G-100
Housing Material	Marine grade aluminum			
Endcap / Front cover	Copper-free (< .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			

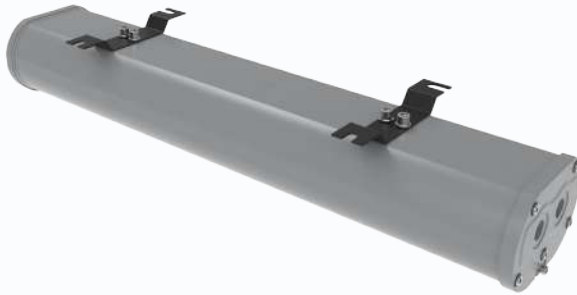
Product Dimensions



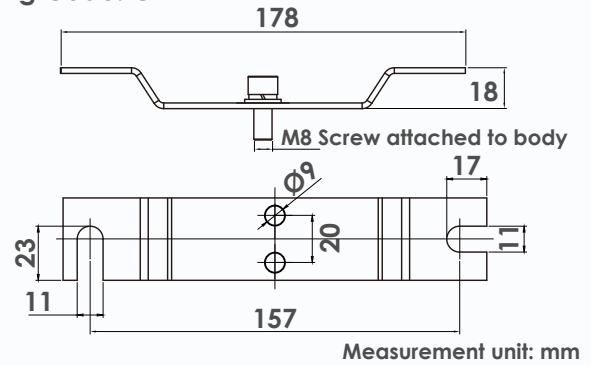
Model No.	Net Weight (Product)	Product Dimension	Gross weight	Package Dimension (L×W×H)
A: FEL-G-20/30/40	6.3kg	747×158×111 mm	7.3kg	809×220×170 mm
B: FEL-G-20/30/40	6.7kg	864×158×111 mm	7.7kg	920×220×170 mm
C: FEL-G-40/50/60/80/100	9.5kg	1332×158×111 mm	10.5kg	1388×220×170 mm
D: FEL-G-40/50/60/80/100	9.9kg	1449×158×111 mm	10.9kg	1505×220×170 mm

Mounting Options

Low Ceiling Mount Bracket



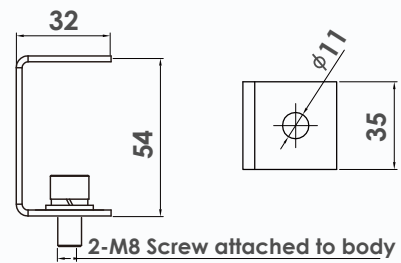
Ordering Code: CB-L1



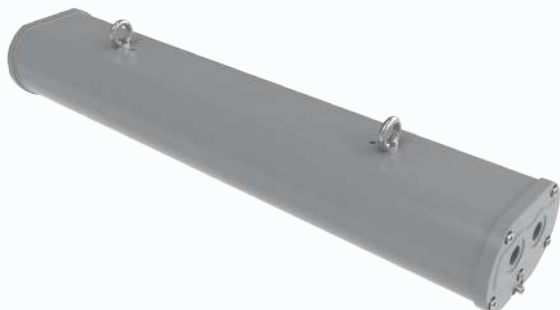
High Ceiling Mount Bracket



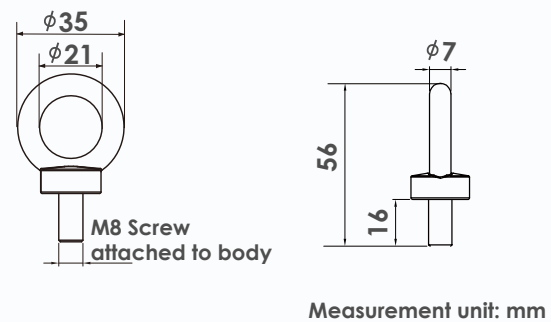
Ordering Code: CB-H1



Eyebolt Mount

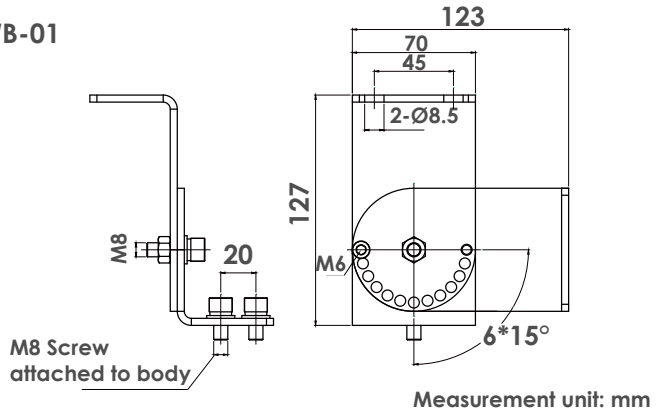
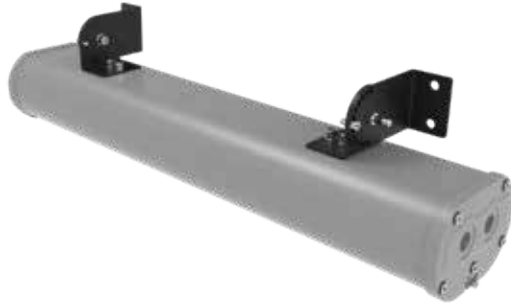


Ordering Code: EB-1



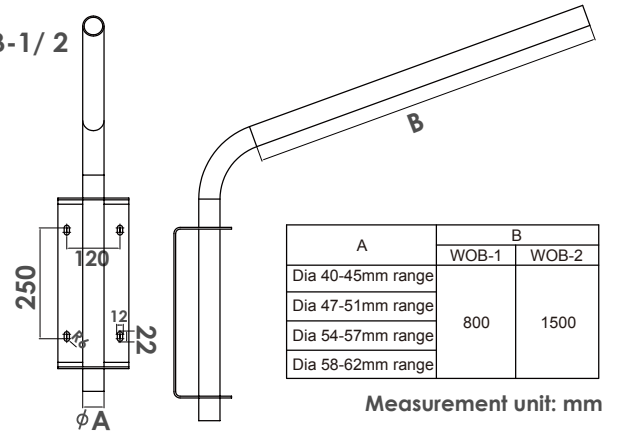
Wall Mount Swivel Bracket

Ordering Code: WB-01



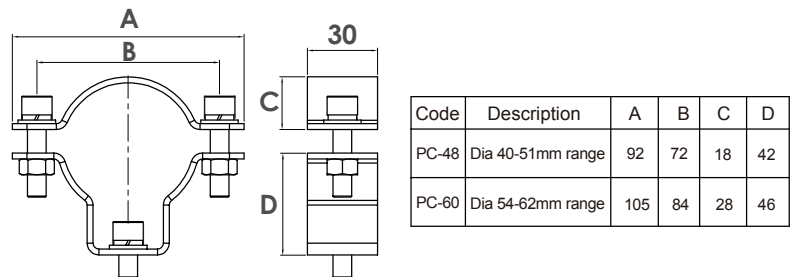
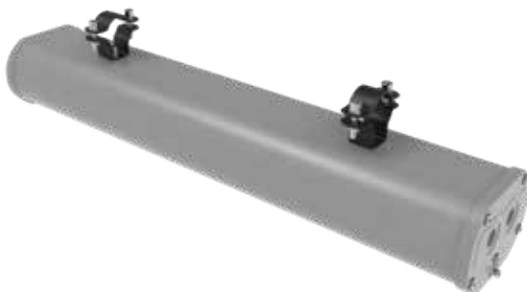
Wall mounting outreach bracket

Ordering Code: WOB-1/ 2



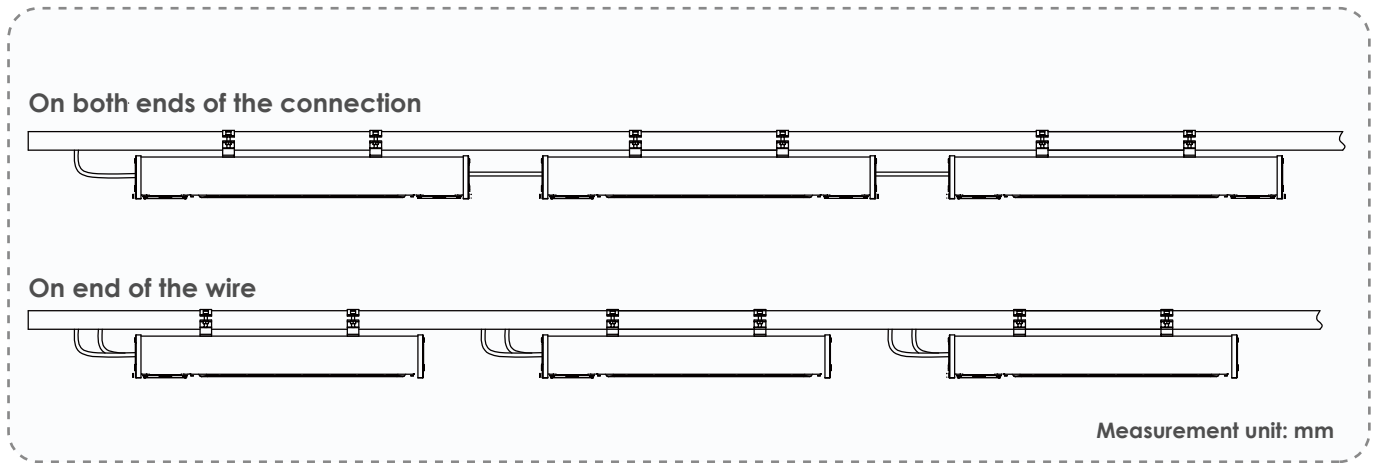
Pole Mount Clamp

Ordering Code: PC-48/60



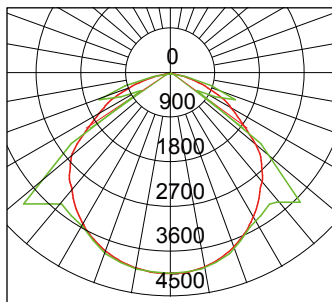
Through Wiring

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

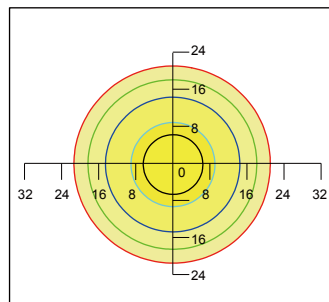


Photometric

I10 Degree



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

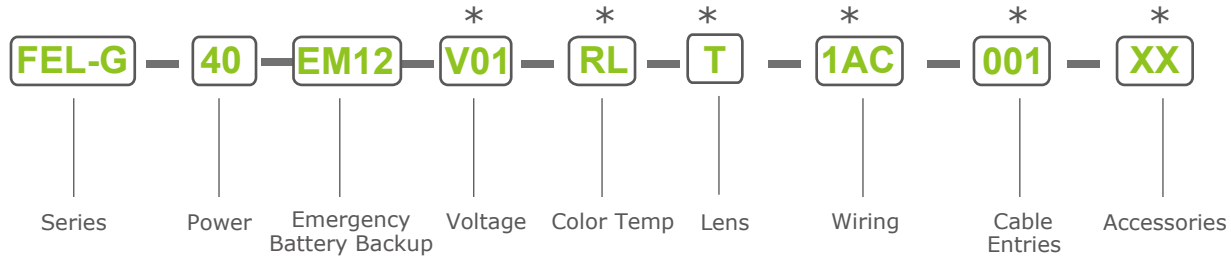


Mounting Height 33'(10m), 0 Tilt

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

Flux out: 5253 lm

Ordering Information and Mounting Accessories



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

SERIES

FEL-G

POWER

20=20W
 30=30W
 40=40W *
 50=50W
 60=60W
 80=80W
 100=100W

(*please specify if single or double Lens)

EMERGENCY BATTERY BACKUP

BLANK=Standard (Non Emergency)
 EM6=6W 180mins
 EM12=12W 90mins (Emergency Standard)

COLOR TEMP

RD=2700K
 RL=4000K
 RZ=5000K
 RM=5700K

VOLTAGE

V01= AC120-277V

LENS

T=Transparent PC
 F=Frosted PC

WIRING

1AC= Single Access Cover (standard)
 2AC= Dual Access Cover

CABLE ENTRIES

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

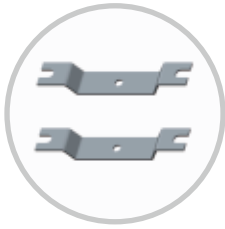
ACCESSORIES

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



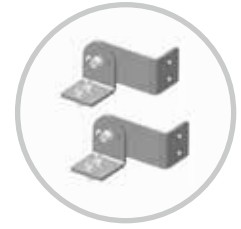
CB-H1

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



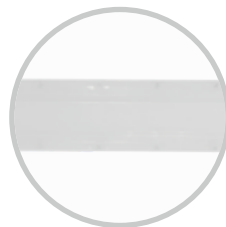
R-D40/60/100

Replacement Driver x1



R-T

Replacement PC Lens,
clear x1



R-F

Replacement PC Lens,
frosted x1



R-B

Replacement Battery Pack x1