



202507 - V1.2



Providing customized and cost-effective
explosion-proof solutions for
a wide array of hazardous and industrial applications.

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www.khjled.com



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RoHS

SHENZHEN KHJ SEMICONDUCTOR LIGHTING CO., LTD

Company Profile

Founded in 2009, **Shenzhen KHJ Semiconductor Lighting Co., Ltd.** is a professional manufacturer of LED explosion-proof lighting and explosion-proof electrical equipment, dedicated to providing safety solutions for hazardous areas.



**Focus On Security And Energy-Saving
Carry Brightness And Sustainable Future**

Product Categories

KHJ-LED Explosion Proof Lighting – Designed for hazardous environments (flammable gases, vapors, dust), featuring durable housing and high performance.

KHJ-Industrial Lighting – Built for harsh industrial conditions (vibration, corrosion, high temps), offering durability, energy efficiency, and reliable performance for continuous operations.

KHJ-Explosion proof electrical equipments – Safe solutions(e.g. Control Panel, Distribution box, Switches, Control station, Junction box.etc.) certified for explosive atmospheres.



Test Capacity

With rapid development, KHJ pays more attention to product's quality and builds laboratories with test equipment, thus 90% testing items could be done by us.



Production Capacity

3,000 square meters of processing factory area, several advanced automatic SMT production lines, semi-automatic DIP and assembly production lines, our daily average output can reach more than 2,000 sets of industrial luminaires.



Management Concepts

Mission:
Providing the best semiconductor products and service for customers.

Vision:
Becoming the best partner with customers.

Core Values:
Human-people oriented.

- Technology-knowledge innovation, technical innovation, management innovation.
- Value-Bring profit to customers, create wealth to society.
- Sharing-Together we share the responsibility and possession.
- Devotion-Great enthusiasm to work, whole-hearted to give.
- Responsibility-Undertaking and devotion.



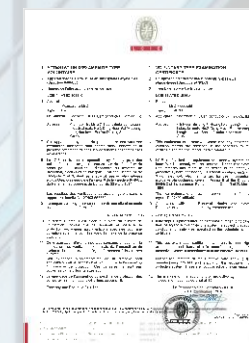
Service

With "Customer First" service principle, KHJ increase investment in service system constantly to provide customers with all-round service: pre-sale, sells and post-sale, including project solution, installation and maintenance, and technical support. We have founded four domestic marketing centers: Huabei, Shanxi, Xinjiang, Bohai, meanwhile, have expanded our international business to Europe, Asia, North America, South America and Middle East.

R&D Team

Owning a team of 20 engineers (over 7 senior engineers) with rich experience in safety lighting field.

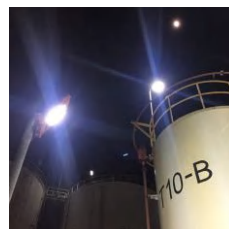
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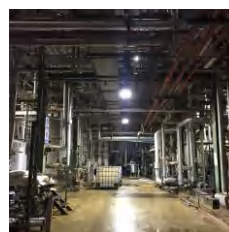
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Luminous flux

quantity derived from radiant flux by evaluating the radiation according to its action upon the CIE standard photometric observer. For photopic vision

$$\Phi = K_m \int_0^{\infty} \frac{d\Phi_e(\lambda)}{d\lambda} \cdot V(\lambda) \cdot d\lambda$$

where

$$d\Phi_e(\lambda)/d\lambda$$

is the spectral distribution of the radiant flux and $v(\lambda)$ is the spectral luminous efficiency.
unit: lm

Luminous intensity(of a source, in a given direction)(I)

quotient of the luminous flux $d\Phi$ leaving the source and propagated in the element of solid angle $d\Omega$ containing the given direction, by the element of solid angle

$$I = \frac{d\Phi}{d\Omega}$$

unit: cd = lm • sr⁻¹

Luminance (in a given direction, at a given point of a real or imaginary surface) (L)

quantity defined by the formula

$$L = d\Phi / (dA \cdot \cos \Theta \cdot d\Omega)$$

where

$d\Phi$ is the luminous flux transmitted by an elementary beam passing through the given point and propagating in the solid angle $d\Omega$ containing the given direction;

dA is the area of a section of that beam containing the given point.

Θ is the angle between the normal to that section and the direction of the beam.

unit: cd • m⁻² = lm • m⁻² • sr⁻¹

luminance uniformity

ratio of minimum luminance to average luminance

Illuminance (at a point of a surface) (E)

quotient of the luminous flux $d\Phi$ incident on an element of the surface containing the point, by the area dA of that element Equivalent definition. Integral, taken over the hemisphere visible from the given point, of the expression $L \cdot \cos \Theta \cdot d\Omega$, where L is the luminance at the given point in the various directions of the incident elementary beams of solid angle $d\Omega$, and Θ is the angle between any of these beams and the normal to the surface at the given point.

$$E = \frac{d\Phi}{dA}$$

unit: lx = lm • m⁻²

Average illuminance (E)

illuminance averaged over the specified area
unit: lx

Illuminance uniformity

ratio of minimum illuminance to average illuminance on a surface

Reference surface

surface on which illuminance is measured or specified

Disability glare

glare that impairs the vision of objects without necessarily causing discomfort

Discomfort glare

glare that causes discomfort without necessarily impairing the vision of objects

Veiling reflections

specular reflections that appear on the object viewed and that partially or wholly obscure the details by reducing contrast.

Luminous environment

lighting considered in relation to its physiological and psychological effects

Colour rendering

effect of an illuminant on the colour appearance of objects by conscious or subconscious comparison with their colour appearance under a reference illuminant.

CIE 1974 general colour rendering index [Ra]

mean of the CIE 1974 special colour rendering indices for a specified set of eight test colour samples.

Colour temperature (Tc)

temperature of a Planckian radiator whose radiation has the same chromaticity as that of a given stimulus.

unit: K

Reflectance

(for incident radiation of given spectral composition, polarization and geometrical distribution) (ρ)
ratio of the reflected radiant or luminous flux to the incident flux in the given conditions

unit: 1

Transmittance (for incident radiation of given spectral composition, polarization and geometrical distribution) (τ) ratio of the transmitted radiant or luminous flux to the incident flux in the given conditions
unit: 1

Absorptance (α)

ratio of the absorbed radiant or luminous flux to the incident flux under specified conditions
unit: 1

Explosion Proof Knowledge

Gas and Dust Grouping for Electrical Equipment for IEC 60079-0

Group	Representative Gases and Dusts
I	All underground coal mining. Firedamp (methane)
IIA	Industrial methane, propane, petrol and the majority of industrial gasses
IIB	Ethylene, coke oven gas and other industrial gasses
IIC	Hydrogen, acetylene, carbon disulphide
IIIA	Combustible flyings
IIIB	Non-conductive dust
IIIC	Conductive dust



Comparison of Surface Temperature Classification IEC and NEC

Maximum Temperature °C	Surface Temperature Classification	
	EN 50014	ANSI/UL844
450	T1	T1
300	T2	T2
280	280°C (T2)	T2A
260	260°C (T2)	T2B
230	230°C (T2)	T2C
210	215°C (T2)	T2D
200	T3	T3
180	180°C (T3)	T3A
160	165°C (T3)	T3B
160	160°C (T3)	T3C
135	T4	T4
120	120°C (T4)	T4A
100	T5	T5
85	T6	T6



Comparison of Representative Gases in IEC and NEC Gas Groups

Representative Gas	Explosion Group IEC 60079-0	Explosion Group National Electrical Code
Acetylene	IIC	A
Carbon disulphide	IIC	B
Hydrogen	IIC	B
Ethylene oxide	IIB	B
Hydrogen sulphide	IIB	C
Ethylene	IIB	C
Acrylo-nitrile	IIA	D
Industrial methane	IIA	D
Propane	IIA	D
Ethyl acetate	IIA	D



Hazardous Areas Classification according to IEC 60079-10-1 and IEC 61241-10-2

Zone	Description
Zone 0 and Zone 20	An area in which an explosive atmosphere is continuously present or for long periods or frequently
Zone 1 and Zone 21	An area in which an explosive atmosphere is likely to occur occasionally in normal operation
Zone 2 and Zone 22	An area in which an explosive atmosphere is not likely to occur in normal operation but, if it does occur, will persist for a short period only

Selection of Protected Equipment in Hazardous Areas generally according to IEC 60079-14

Zone	Type of Protection Assigned to Equipment	EPL
Zone 0	Ex ia Ex ma and types of protection suitable for Zone 0 as constructed to IEC 60079-26	Ga
Zone 1	Any type of protection suitable for Zone 0 and Ex d, Ex ib, Ex py, Ex e, Ex q and Ex mb (Also see notes on Ex s protection)	Gb
Zone 2	Any type of protection suitable for Zone 0 or 1 and Ex n, Ex mc, Ex ic, Ex pz and Ex o (Also see notes on Ex s protection)	Gc
Zone 20	tD A20, tD B20, iaD and maD	Da
Zone 21	Any type of protection suitable for Zone 20 and tD A21, tD B21, ibD, mbD and pD	Db
Zone 22	Any type of protection suitable for Zone 20 or 21 and tD A22 IP 6X	Dc

EPL, ATEX Category, Design Requirements and Expected Application

IEC EPL	ATEX Category	Degree of Safety	Design Requirement(condensed)	Expected Zone of use
Ga	Category 1	Very high level of protection	Two independent means of protection or safe with two independent faults	Zone 0
Da	Category 1			Zone 20
Gb	Category 2	High level of protection	Safe with frequently occurring disturbances or with a normal operating fault	Zone 1
Db	Category 2			Zone 21
Gc	Category 3	Enhanced level of protection	Safe in normal operation	Zone 2
Dc	Category 3			Zone 22



Certified Instrumentation from Endress+Hauser for North America

Markings for Canada (Marking Examples)

Option A: Zones Option B: Divisions

Ex ia IIC T4 Class I, Division 1, Groups A,B,C&D T4

Means:		Means:	
Ex	Explosion protected	Class I	Flammable gas or vapor
ia	Protection method (Intrinsic Safety)	Division 1	Area classification (explosive atmosphere may exist under normal operating conditions)
IIC	Gas group (acetylene & hydrogen)	Group A,B,C&D	Gas groups
T4	Temperature class	T4	Temperature code

Protection Concepts Ex/AEx

Method of Protection	Code	Permitted Use	Standard US (FM)	Standard Canada (CSA)	Protection Principle
Increased Safety	AEx e Ex e	Class I, Zone 1 Zone 1	FM 3600* (ISA S12.16.01) IEC 60079-7	CSA Std. E79-7	No arcs, sparks or hot surfaces
Non-incendive	(NI)	Class I, Div 2	FM 3611	CSA Std. C22.2 No. 213 and CEC, Part I, App. J	
Non-sparking	Ex nA	Zone 2	IEC 60079-15	CSA Std. E79-15	
Explosionproof	(XP)	Class I, Div 1	FM 3615	CSA Std. C22.2 No. 30	
Flameproof	AEx d Ex d	Class I, Zone 1 Zone 1	FM 3600* (ISA S12.22.01) IEC 60079-1	CSA Std. E79-1	Contain the explosion and quench the flame
Powder Filled	AEx q Ex q	Class I, Zone 1 Zone 1	FM 3600* (ISA S12.25.01) IEC 60079-5	CSA Std. E79-5	
Enclosed Break	Ex nC	Zone 2	IEC 60079-15	CSA Std. 79-15	
Intrinsic Safety	(IS) AEx ia AEx ib Ex ia	Class I, Div 1 Class I, Zone 0 Class I, Zone 1 Zone 0	FM 3610 FM 3610 FM 3610 IEC 60079-11	CSA Std. C22.2 No. 157 CSA Std. E79-11 CSA Std. E79-11	Limit energy of sparks and surface temperature
	Ex ib Ex nA Ex nL	Zone 1 Zone 2 Zone 2	IEC 60079-11 IEC 60079-15 IEC 60079-15	CSA Std. E79-11 CSA Std. E79-15 CSA Std. E79-15	
Limited Energy	Ex nL	Zone 2	IEC 60079-15	CSA Std. E79-15	
Pressurized	Type X Type Y Type Z Ex p Ex px Ex py Ex pz Ex nZ	Class I, Div 1 Class I, Div 1 Class I, Div 2 Zone 1 Zone 1 Zone 1 Zone 2 Zone 2	FM 3620 FM 3620 FM3620 IEC 60079-2 IEC 60079-2 IEC 60079-2 IEC 60079-15	CSA Std. E79-2 CSA Std. E79-15	Keep flammable gas out
Restricted Breathing	Ex nR	Zone 2	IEC 60079-15	CSA Std. E79-15	
Encapsulation	AEx m Ex m	Class I, Zone 1 Zone 1	FM 3600* (ISA S12.23.01) IEC 60079-18	CSA Std. E79-18	
Oil Immersion	AEx o Ex o	Class I, Zone 1 Zone 1	FM 3600* (ISA S12.26.01) IEC 60079-6	CSA Std. E79-6	

*Also shall comply with ISA S12.00.01 Based on ISA S12.02.01

Certified Instrumentation from Endress+Hauser for North America

Markings for the United States (Marking Examples)

Option A: Zones Option B: Divisions

Class I, Zone 0, AEx ia IIC T4 IS Class I, Division 1, Groups A,B,C&D T4

Means:		Means:	
Class I	Flammable gas or vapor	IS	Protection method (Intrinsic Safety)
Zone 0	Area classification (explosive atmosphere present continuously)	Class I	Flammable gas or vapor
A	Conformity to US requirements	Division 1	Area classification (explosive atmosphere may exist under normal operating conditions)
Ex	Explosion protected	Group A,B,C&D	Gas groups
ia	Protection method (Intrinsic Safety)	T4	Temperature code
IIC	Gas group (acetylene & hydrogen)		
T4	Temperature class		

Area Classification Zone/Division

		Flammable Material Present Continuously (> 1000 h/y)	Flammable Material Present Intermittently (10...000 h/y)	Flammable Material Present Abnormally (< 10 h/y)
IEC	Gas	Zone 0	Zone 1	Zone 2
CENELEC				
CENELEC	Dust	Zone 20	Zone 21	Zone 22
NEC & CEC (North America)	Gas, Dust and Fibers	Division 1	Division 1	Division 2
	Gas	Zone 0	Zone 1	Zone 2

Special Purpose Enclosures

Enclosure Type US (NEMA 250) and Canada (CSA Std. C22.2 No. 94)	Approximate equivalent IP-Code (IEC 60529)	Protection against
1	→ IP10	incidental contact with the enclosed equipment
2	→ IP11	dripping and light splashing of liquids
3	→ IP54	windblown dust, rain, sleet, snow and external formation of ice
3R	→ IP14	rain, sleet, snow and external formation of ice
3S	→ IP54	windblown dust, rain, sleet, snow and external mechanism(s) remain operable when ice laden
4	→ IP56	windblown dust, rain, sleet, snow, splashing water, hose-directed water
4X	→ IP56	windblown dust, rain, sleet, snow, splashing water, hose-directed water and corrosion
5	→ IP52	settling airborne dust, lint, fibers, flyings, dripping and light splashing of liquids
6	→ IP67	hose-directed water, entry of water during occasional temporary submersion at limited depth
6P	→ IP67	hose-directed water, entry of water during prolonged submersion at limited depth

Temperature Code T4 and Temperature Class

Maximum Surface Temperature [°C]	North American Temperature Code	CENELEC/IEC Temperature Class
450	T1	T1
300	T2	T2
280	T2A	
260	T2B	
230	T2C	
215	T2D	
200	T3	T3
180	T3A	
165	T3B	
160	T3C	
135	T4	T4
120	T4A	
100	T5	T5
85	T6	T6

IIC/Groups Hazardous Locations Groups

Typical Hazard	North America CEC Section 18 NEC Article 500	CENELEC/IEC CENELEC EN50014 IEC 60079
Acetylene	Class I/Group A or IIC	IIC
Hydrogen	Class I/Group B or IIC	IIC
Ethylene	Class I/Group C or IIB	IIB
Propane	Class I/Group D or IIA	IIA
Methane	Group D (gaseous mines) or I	I
Metal Dust	Class II/Group E	
Coal Dust	Class II/Group F	
Grain Dust	Class II/Group G	
Fibers	Class III	



ATEX certified instrumentation from Endress+Hauser

Approval number EC

KEMA 01 ATEX 1234 X

Notified body i.e. KEMA, PTB, CESI, TÜV, DMT, etc. Year of issue ATEX directive Consecutive number Special conditions

Protection Method

Summary of protection methods against explosion

General Principles	IEC / European Practice		Cenelec EN	American* ¹		Principle Characteristics
	Practice	Zone		Practice	Division	
Explosion Containment	Explosion-proof Ex >>d<<	1, 2	50018	Explosion-proof	1, 2	Relatively easy to be applied, but with specific mechanical requirements. Maintenance and checks are more time consuming.
Segregation	Pressurization Ex <<p<<	1, 2	50016	Purging	1, 2	Suitable for cabinets and motors. Requires specific monitoring alarm systems.
	Encapsulation Ex <<m<<	1, 2	50028	Not recognized	-	Suitable for sensors, small circuits and solenoid valves. Maintenance practically impossible.
	Oil-immersion Ex >>o<<	1, 2	50015	Oil-immersion	1, 2	Suitable for transformers and where there are moving parts. Generally not widely used.
Prevention	Powder filling Ex <<q<<	1, 2	50017	Not recognized	-	Suitable where there are no moving parts. Present maintenance difficulty. Not widely used.
	Increased safety Ex >>e<<	1, 2	50019	Not recognized	-	Suitable for non-sparking apparatus during normal functioning (terminals, connections, lamp sockets, motors). Particular construction requirements.
	Intrinsic safety Ex >>ia<<	0, 1, 2 (20, 21, 22)*	50020/50039/ 50284	Intrinsic safety	1, 2	Suitable for process instrumentation. Economical and easy installation, maintenance and checks. Limited to low power circuits.
	Intrinsic safety Ex >>ib<<	1, 2 (21, 22)*	50020/50039	Not recognized	-	Similar to Ex "ia" except for the number of faults to be considered.
	Type n Ex >>n<<	2	50021	Non incendive	2	Alternative to standardized types of protection for zone 2 and division 2. No certificate required in Europe.
Special requirement for category 1 equipment		0 (1, 2)*	50284	Not recognized	-	Additional requirements for equipment protected by standardized types of protection.
Dust Ex Protection	Protection by enclosure and temperature limitation	20, 21, 22	50281	NEC Section 90-4	1, 2	Special requirements for equipment in dust explosion hazardous areas.

ATEX certified instrumentation from Endress+Hauser

ATEX Marking

Marking example:

CE xxxx Ex II 2G EEx ia IIC T4

CE marking Identification code of notified body Ex mark Equipment group Gas, vapors Category of protection Protection method Temperature classification Apparatus group/Gas group

Category of Equipment

ATEX directive divides equipment into groups and additional into categories:

Group I (Mines)		Group II (Surface (non-mining) equipment)		
Subdivided into categories		Category	subdivided into	Zone
M1	Equipment remains functional with an explosive atmosphere present	1G (gas)	Equipment with a very high level of protection	0 (gas)
		1D (dust)		20 (dust)
M2	Equipment to be de-energized in the event of an explosive atmosphere	2G (gas)	Equipment with a high level of protection	1 (gas)
		2D (dust)		21 (dust)
		3G (gas)	Equipment with a normal level of protection	2 (gas)
		3D (dust)		22 (dust)

Note: category 2D apparatus required for Zone 22 (conductive dust).

Examples of Category marking:

1/2G for equipment interfacing Zone 0 and Zone 1 areas
1/3D for equipment interfacing Zone 20 and Zone 22 areas
(1) for associated apparatus with intrinsically safe output into Zone 0

Type of Protection

EEx ia IIC T4

Temperature Classification

** for comparison only

Maximum Surface Temperature		Temperature Classification	
Degree C	Degree F	IEC/European	North American*
450	842	T1	T1
300	572	T2	T2
280	536		T2A
260	500		T2B
230	446		T2C
215	419		T2D
200	392	T3	T3
180	356		T3A
165	329		T3B
160	320		T3C
135	275	T4	T4
120	248		T4A
100	212	T5	T5
85	185	T6	T6

Apparatus Group and Gas/Dust Group

Hazard Categories	Apparatus Classification		Min. Ignition Energy
	Europe	North America*	
Mines	Group I	Group D (gaseous mines)	
Acetylene	Group IIC	Class I, Group A	20 µJ
Hydrogen	Group IIC	Class I, Group B	20 µJ
Ethylene	Group IIB	Class I, Group C	60 µJ
Propane	Group IIA	Class I, Group D	180 µJ
Metal dust		Class II, Group E	More easily ignitable
Coal dust		Class II, Group F	
Grain dust		Class II, Group G	
Fibers		Class III	

ATEX

ATEX Directives

AT_{mosphere} EX_{plorable}

Old directives specify the European standards

New directives specify the so called Essential Health and Safety Requirements

Dust-Ex hazardous areas are regulated first time in EC.

At this moment there are three directives for equipment intended for use in Hazardous Area:

82/139/EEC (Mines)
Will be valid until June 30, 2003
Only Electrical Equipment

76/117/EEC (Surface Industries)
Will be valid until June 30, 2003
Only Electrical Equipment

New directive
94/9/EC (ATEX) valid since March 1, 1996 mandatory July 1, 2003
All Equipment, Protective Systems and Components

It will be mandatory to re-certify equipment certified under the old directives if you want to sell this equipment after July 1, 2003.

Summary of changes:

Categorisation of equipment matching area classifications.

Categorisation based upon Essential Safety Requirements (ESR):

- Consider electrical and non-electrical equipment, also dust-Ex hazardous areas
- Influencing equipment design with respect to:
 - Protective method
 - Choice of materials
 - Equipment marking
 - Safety instructions included
 - Environmental and atmospheric conditions
 - Software included



Type of interior, task or activity	Em lux	UGRL	Ra	Remarks
General building areas				
Entrance halls	100	22	60	
Lounges	200	22	80	
Circulation areas and corridors	100	28	40	At exits and entrances provide a transition zone and avoid sudden changes.
Stairs, escalators, travelators	150	25	40	
Loading ramps/bays	150	25	40	
Canteens	200	22	80	
Rest rooms	100	22	80	
Rooms for physical exercise	300	22	80	
Cloakrooms, washrooms, bathrooms, toilets	200	25	80	
Sick bay	500	19	80	
Rooms for medical attention	500	16	90	Tcp at least 4000 K
Plant rooms, switch gear rooms	200	25	60	
Post room, switchboard	500	19	80	
Store, stockrooms, cold store	100	25	60	200 lux if continuously occupied
Dispatch packing handling areas	300	25	60	
Control station	150	22	60	200 lux if continuously occupied
Cement, concrete, & bricks industry				
Drying	50	28	20	Safety colours shall be recognisable.
Preparation of materials, work on kilns and mixers	200	28	40	
General machine work	300	25	80	
Rough forms	300	25	80	
Ceramics and glass industry				
Drying	50	28	20	
Preparation, general machine work	300	25	80	
Enamelling, rolling, pressing, shaping simple parts, glazing, glass blowing	300	25	80	
Grinding, engraving, glass polishing, shaping precision parts, manufacture of glass instruments	700	19	80	
Decorative work	500	19	80	
Grinding of optical glass, crystal hand grinding and engraving, work on average goods	750	16	80	
Precision work e.g. decorative grinding, hand painting	1000	16	90	Tcp at least 4000 K
Manufacture of synthetic precious stones	1500	16	90	Tcp at least 4000 K

Type of interior, task or activity	Em lux	UGRL	Ra	Remarks
Chemicals, plastics and rubber industry				
Remote operated processing installations	50		20	Safety colours shall be recognisable .
Processing installations with limited manual intervention	150	28	40	
Constantly manned work places in processing installations	300	25	80	
Precision measuring rooms, laboratories	500	19	80	
Pharmaceutical production	500	22	80	
Tyre production	500	22	80	
Colour inspection	1000	16	90	Tcp at least 6500 K
Cutting, finishing, inspection	750	19	80	
Electrical industry				
Cable and wire manufacture	300	25	80	
Winding:				
-large coils	300	25	80	
-medium-sized coils	500	22	80	
-small coils	750	19	80	
Coil impregnating	300	25	80	
Galvanising	300	25	80	
Assembly work:				
-rough e.g. large transformers	300	25	80	
-medium e.g. switchboards	500	22	80	
-fine e.g. telephones	750	19	80	
-precision e.g. measuring equipm.	1000	16	80	
Electronic workshops, testing, adjusting	1500	16	80	
Foundries and metal casting plants				
Mansize underfloor tunnels, cellars etc.	50	28	20	Safety colours shall be recognisable.
Platforms	100	25	40	
Sand preparation	200	25	80	
Dressing room	200	25	80	
Workplaces at cupola and mixer	200	25	80	
Casting bay	200	25	80	
Shake out areas	200	25	80	
Machine moulding	200	25	80	
Hand and core moulding	300	25	80	
Die casting	300	25	80	
Model building	500	22	80	
Metal working and processing				
Open die forging	200	25	60	
Drop forging, welding, cold forming	300	25	60	



Lighting Standard in Industrial Architecture

Lighting Standard in Industrial Architecture

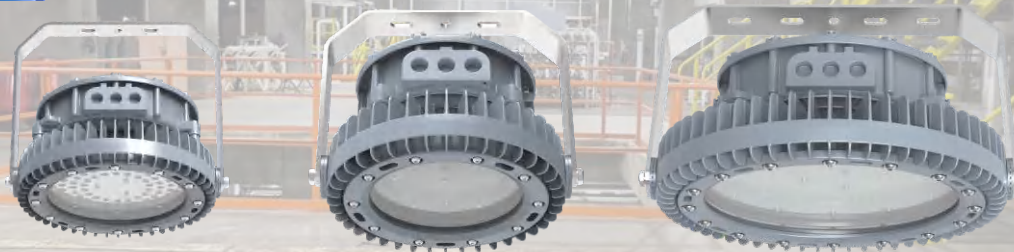
Type of interior, task or activity	Em lux	UGRL	Ra	Remarks
Rough and average machining: tolerances > 0,1 mm	300	22	60	
Precision machining: grinding: tolerances < 0,1 mm	500	19	60	
Scribing; inspection	750	19	60	
Wire & pipe drawing shapes	300	25	60	
Plate machining >5mm	200	25	60	
Sheet metalwork <5mm	300	22	60	
Tool making; cutting equipment manufacture	750	19	60	
Assembly:				
-rough	200	25	80	
-medium	300	25	80	
-fine	500	22	80	
-precision	750	19	80	
Galvanising	300	25	80	
Surface preparation and painting	750	25	80	
Tool, template and jig making,precision mechanics, micromechanics	1000	19	80	
Power stations				
Fuel supply plant	50	28	20	Safety colours shall be recognisable.
Boiler house	100	28	40	
Machine halls	200	25	80	
Auxiliary rooms, e.g pump rooms,condenser rooms, switchboard,etc.	200	25	60	
Control rooms	500	16	80	1. Control panels are often vertical. 2. Dimming may be required.
Offices				
Filing, copying, circulation, etc.	300	19	80	
Writing, typing, reading, data processing	500	19	80	
Technical drawing	750	16	80	
CAD workstation	500	19	80	
Conference and meeting rooms	500	19	80	
Reception desk	300	22	80	
Archives	200	25	80	
Restaurants and hotels				
Reception/cashier desk, porters desk	300	22	80	
Kitchen	500	22	80	
Restaurant, dining room, function room	200	22	80	
Self-service restaurant	200	22	80	

Type of interior, task or activity	Em lux	UGRL	Ra	Remarks
Buffet	300	22	80	
Conference rooms	500	19	80	
Corridors	100	25	80	
Places of entertainment				
Theatres & concert halls	200	22	80	
Multi purpose halls	300	22	80	
Practice rooms, dressing rooms	300	22	80	Glare free mirror lighting for make -up required.
Museums (general)	300	19	80	Lighting to suit the display requirements, protect against radiation effects. See Museum Lighting Guide.
Libraries				
Bookshelves	200	19	80	
Reading area	500	19	80	
Counters	500	19	80	
Public car parks (indoor)				
In/out ramps (during the day)	300	25	40	
In/out ramps (at night)	75	25	40	
Traffic lanes	75	25	40	
Parking areas	75	28	40	
Ticket office	300	19	80	
Airports				
Arrival and departure halls, baggage claim areas	200	22	80	
Connecting areas, escalators, travelators	150	22	80	
Information desks, check -in desks	500	19	80	
Customs and passport control desks	500	19	80	Vertical illuminance is important.
Waiting areas	500	22	80	
Luggage store rooms	200	28	60	
Security check areas	300	19	80	
Air traffic control tower	500	16	80	1. Lighting should be dimmable. 2. Glare from daylight should be avoided.
Air traffic rooms	500	16	80	1. Lighting should be dimmable.
Testing and repair hangars	500	22	80	
Engine test areas	500	22	80	
Measuring areas in hangars	500	22	80	
Platforms and passenger subways (underpasses)	50	28	40	
Ticket hall and concourse	200	28	40	



KHJ LED Explosion Proof Lighting Selection table

LED Hazardous Area Lighting	Product Series	Power(W)	Code						Group					ATEX/IECEX				UL			ATEX	IECEX	UL	CE	RoHS	Emergency battery			
			d	e	i	m	n	t	IIB	IIB+H2	IIC	IIIB	IIIC	Zone 1	Zone 21	Zone 2	Zone 22	Class I, Division 2	Class II, Division 2	Class III						Lithium battery	Lead-acid	Ni-Cd	Ni-MH
Lighting Fixture	Kingfish	18/36/48/64		●		●		●			●		●	●	●	●	●				●	●		●	●				
	Brown Bear	80/100/120/150					●	●			●		●			●	●				●			●	●				
	Firefly	12/24/35	●					●			●		●	●	●	●	●				●			●	●				
	Forest Frog	30/45/60	●	●				●			●		●	●	●	●	●				●	●		●	●				
	Golden Frog	30/60	●					●	●				●	●	●	●	●				●	●		●	●				
	Polar Bear	80/120/150/160/200/240					●	●			●		●			●	●	●				●	●	●	●	●			
	Tank	80/100/120/160 200/240/300 320/360/400/480	●					●			●		●	●	●	●	●				●	●		●	●				
	Sealion	30/45/60/80/100/120 150/200/240/300	●					●			●		●	●	●	●	●				●	●		●	●				
	Swordfish	18/36/48/56/72/100	●	●				●	●		●		●	●	●	●	●	●	●	●	●	●	●	●	●				
	Seal A	30/45/55/80/100/120 150/200/240/300		●				●			●		●			●	●				●	●		●	●				
	Seal B	80/100/120/150 200/240/300		●				●			●		●			●	●				●	●		●	●				
Emergency Light	BDJ11	0.6	●					●	●	●		●		●	●	●	●				●	●		●	●			●	
	Polaris	0.5			●	●		●			●		●	●	●	●	●				●			●	●				●
	Mickey Mouse	3	●					●			●		●	●	●	●	●				●			●	●				●
	Sealion	10	●					●			●		●	●	●	●	●				●	●		●	●				●
	Swordfish	5	●	●				●	●		●		●	●	●	●	●				●	●		●	●			●	
	Swordfish(EXIT)	5	●	●				●	●		●		●	●	●	●	●				●	●		●	●			●	
	Seal A	10		●				●			●		●			●	●				●	●		●	●				●
	Tank	10	●					●			●		●	●	●	●	●				●	●		●	●				●
Portable Light	Alcidae	2.52			●			●	●				●	●	●	●	●				●			●	●	●			
	Hill Myna	3/6			●	●		●			●		●	●	●	●	●				●					●			
Work Light	Firefly	12/24/35	●					●			●		●	●	●	●	●				●			●	●				
	Forest Frog	10/15	●					●			●		●	●	●	●	●				●	●		●	●	●			
	Saturn	5~60	●	●							●		●	●		●					●	●		●	●		●		



LED Explosion Proof Floodlight / Bay light / High bay light

- **Sealion Series**

Standard & Certificate:	
Ex Mark:	Gas: II 2 G Ex db IIC T4/T5 Gb Dust: II 2 D Ex tb IIIC T115°C/105°/T95°C Db IP66
Certificate:	ATEX Certification NO.: TÜV 20 ATEX 8608 X CE IECEX Certification NO.: IECEX TUR 20.0086X RoHS
Executive Standard:	(IEC)EN 60079-0,(IEC)EN 60079-18,(IEC)EN 60079-1,(IEC)EN 60079-31,(IEC)EN 60079-7 EN 55015,EN 61000-3-3,EN 61547,EN 61000-3-2 EN 60598-1,EN 62493,EN 60598-2-5,EN 62031 IEC 62321-4,IEC 62321-7-1,IEC 62321-5,IEC 62321-7-2,IEC 62321-6,IEC 62321-8
Classification:	Group II, Zone 1 & 21 and 2 & 22
Electrical & Photometric Features:	
Luminarie Efficacy:	136.5lm/W
Lifespan:	>100,000 hours
Operating Voltage:	Normal 20-30 VAC/100-277 VAC/347-480 VAC;20-30 VDC/28-42 VDC/141-392 VDC/491-679 VDC
	Emergency 220-240 VAC/311-339 VDC
Power:	Normal 30W/45W/60W/80W/100W/120W/150W/200W/240W/300W
	Emergency 10W
Frequency:	50/60Hz
Battery Capacity:	9.6V 4Ah
Battery Type:	NI-MH
Battery Lifespan:	500 cycles
Light Duration:	3h
Charge Time:	>24h
Power Factor:	>0.98
THD:	<10%
Insulation Class:	I
Surge Protection:	4KV/6KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	8.5Kg(30-80W)/11Kg(100-150W)/14Kg(200-300W)
Size:	φ 275*195mm(30-80W)/ φ 330*197mm(100-150W) φ 415*197mm(200-300W)
Ambient Temperature:	-40℃~+55℃(Normal);-20℃~+55℃(Emergency)
Connecting Terminals:	3*1.0-4.0mm²(L+N+PE)
Cable Entries:	2 x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition

Ex	K	SL	XX	XX	XX	XX	-X	-X
Type	Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Type	Area
Ex-Explosion Proof			30W 45W 60W 80W 100W 120W 150W 200W 240W 300W		H4V4(60°) H5V5(80°) H6V6(120°)		Default-Normal DA-DALI Dimming ON-Emergency Type S-Sensor V-0~10V Dimming	E- English
	K-KHJ	SL-SeaLion		Default-100~277VAC D-347~480VAC E-20~30 VAC/DC		WM-3000K±300 NH-4000K±300 NH-5000K±300 CH-5700K±300		

Ordering Information

P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	CRI	Color Temp.	CCT(K)	Temp. Classification	
							-40℃~+55℃	-40℃~+65℃
Ex-KSL30*WM-E	100~277 AC (141~392 DC)	3795	30	70	Warm white	3000±300	T5	T4
Ex-KSL30*NH-E		4095	30	70	Natural white	4000±300	T5	T4
Ex-KSL30*NH-E		4095	30	70	Natural white	5000±300	T5	T4
Ex-KSL30*CH-E		4095	30	70	Cool white	5700±300	T5	T4
Ex-KSL45*WM-E		5693	45	70	Warm white	3000±300	T5	T4
Ex-KSL45*NH-E		6143	45	70	Natural white	4000±300	T5	T4
Ex-KSL45*NH-E		6143	45	70	Natural white	5000±300	T5	T4
Ex-KSL45*CH-E		6143	45	70	Cool white	5700±300	T5	T4
Ex-KSL60*WM-E		7590	60	70	Warm white	3000±300	T5	T4
Ex-KSL60*NH-E		8190	60	70	Natural white	4000±300	T5	T4
Ex-KSL60*NH-E		8190	60	70	Natural white	5000±300	T5	T4
Ex-KSL60*CH-E		8190	60	70	Cool white	5700±300	T5	T4
Ex-KSL80*WM-E		10120	80	70	Warm white	3000±300	T5	/
Ex-KSL80*NH-E		10920	80	70	Natural white	4000±300	T5	/
Ex-KSL80*NH-E		10920	80	70	Natural white	5000±300	T5	/
Ex-KSL80*CH-E		10920	80	70	Cool white	5700±300	T5	/

Ordering Information

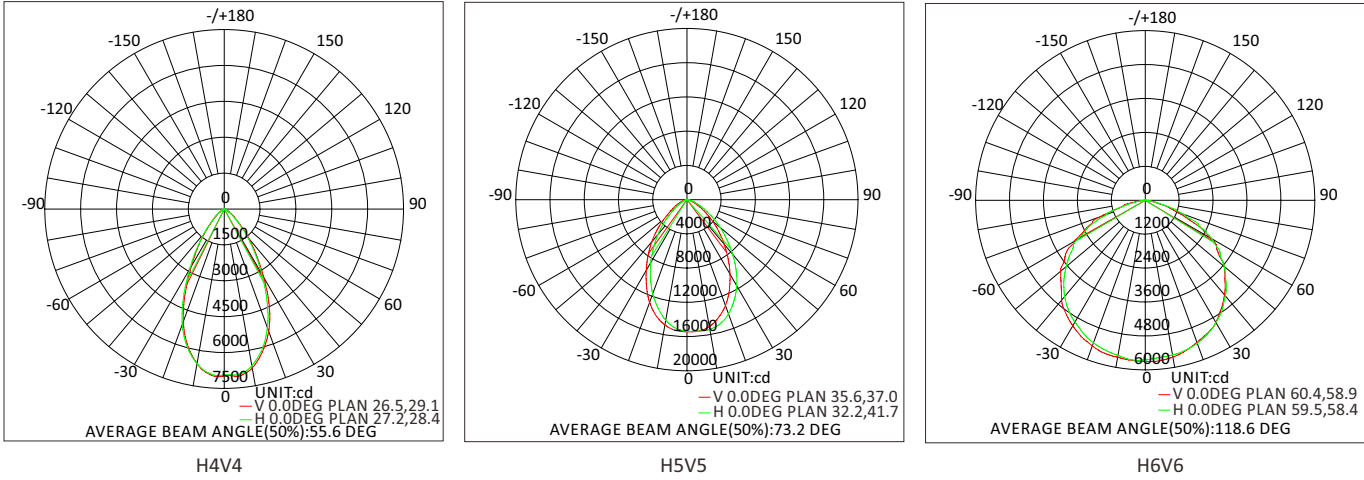
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	CRI	Color Temp.	CCT(K)	Temp. Classification	
							-40℃~+55℃	-40℃~+65℃
Ex-KSL100*WM-E	100~277 AC (141~392 DC)	12650	100	70	Warm white	3000±300	T5	T4
Ex-KSL100*NH-E		13650	100	70	Natural white	4000±300	T5	T4
Ex-KSL100*NH-E		13650	100	70	Natural white	5000±300	T5	T4
Ex-KSL100*CH-E		13650	100	70	Cool white	5700±300	T5	T4
Ex-KSL120*WM-E		15180	120	70	Warm white	3000±300	T5	T4
Ex-KSL120*NH-E		16380	120	70	Natural white	4000±300	T5	T4
Ex-KSL120*NH-E		16380	120	70	Natural white	5000±300	T5	T4
Ex-KSL120*CH-E		16380	120	70	Cool white	5700±300	T5	T4
Ex-KSL150*WM-E		18975	150	70	Warm white	3000±300	T5	/
Ex-KSL150*NH-E		20475	150	70	Natural white	4000±300	T5	/
Ex-KSL150*NH-E		20475	150	70	Natural white	5000±300	T5	/
Ex-KSL150*CH-E		20475	150	70	Cool white	5700±300	T5	/
Ex-KSL200*WM-E		25300	200	70	Warm white	3000±300	T5	/
Ex-KSL200*NH-E		27300	200	70	Natural white	4000±300	T5	/
Ex-KSL200*NH-E		27300	200	70	Natural white	5000±300	T5	/
Ex-KSL200*CH-E		27300	200	70	Cool white	5700±300	T5	/
Ex-KSL240*WM-E		30360	240	70	Warm white	3000±300	T5	/
Ex-KSL240*NH-E		32760	240	70	Natural white	4000±300	T5	/
Ex-KSL240*NH-E		32760	240	70	Natural white	5000±300	T5	/
Ex-KSL240*CH-E		32760	240	70	Cool white	5700±300	T5	/
Ex-KSL300*WM-E		37950	300	70	Warm white	3000±300	T4	/
Ex-KSL300*NH-E		40950	300	70	Natural white	4000±300	T4	/
Ex-KSL300*NH-E		40950	300	70	Natural white	5000±300	T4	/
Ex-KSL300*CH-E		40950	300	70	Cool white	5700±300	T4	/

Remarks: 1.*Stands for beam angle , including H4V4 / H5V5 / H6V6 .
2.For beam angle H4V4 and H5V5,the luminous flux will be 15% less;

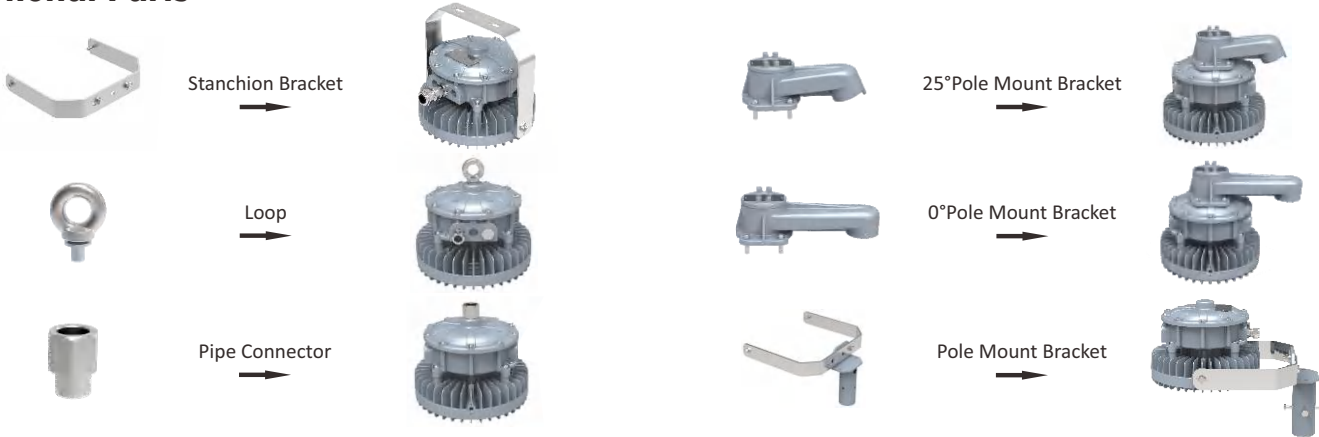
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
30W	70W	70W	Up to 60% reduction in energy costs
45W	100W-150W	100W-150W	
60W	150W-175W	150W-175W	
80W	175W-250W	175W-250W	
100W	250W-400W	250W-400W	
120W	250W-400W	250W-400W	
150W	400W	400W	
200W	400W-500W	400W-500W	
240W	600W-750W	600W-750W	
300W	750W-1000W	750W-1000W	

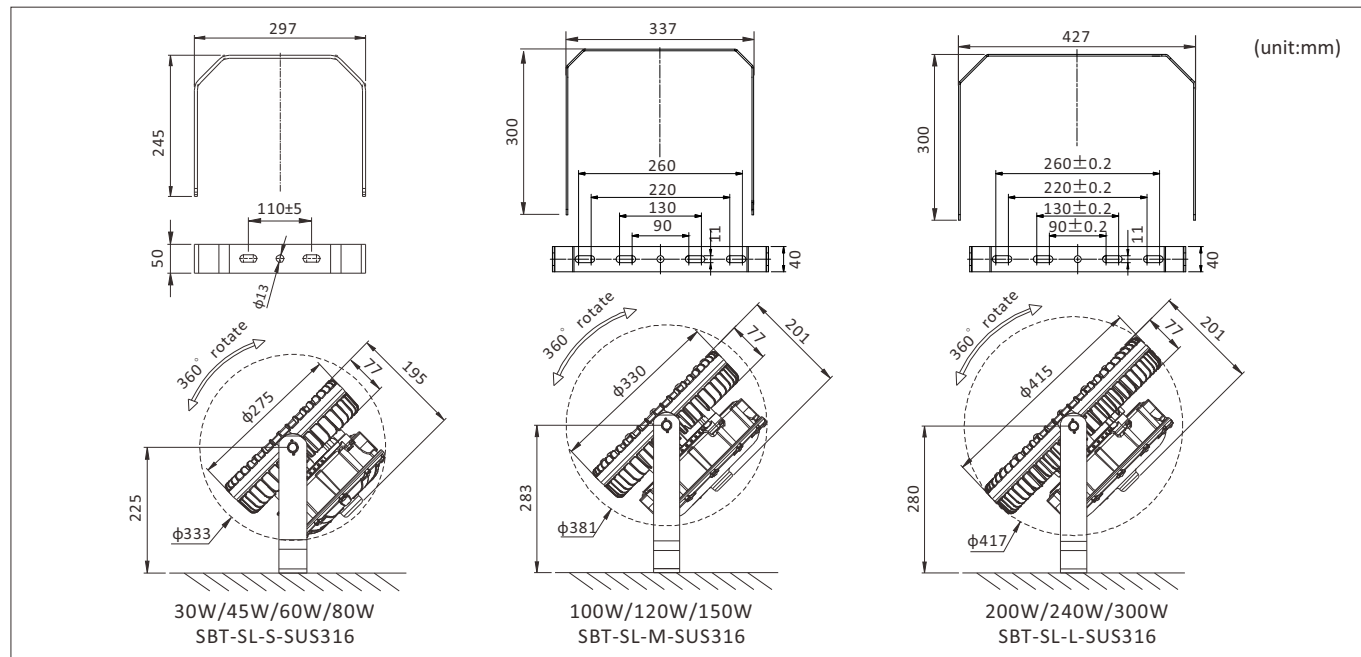
Candela Distribution



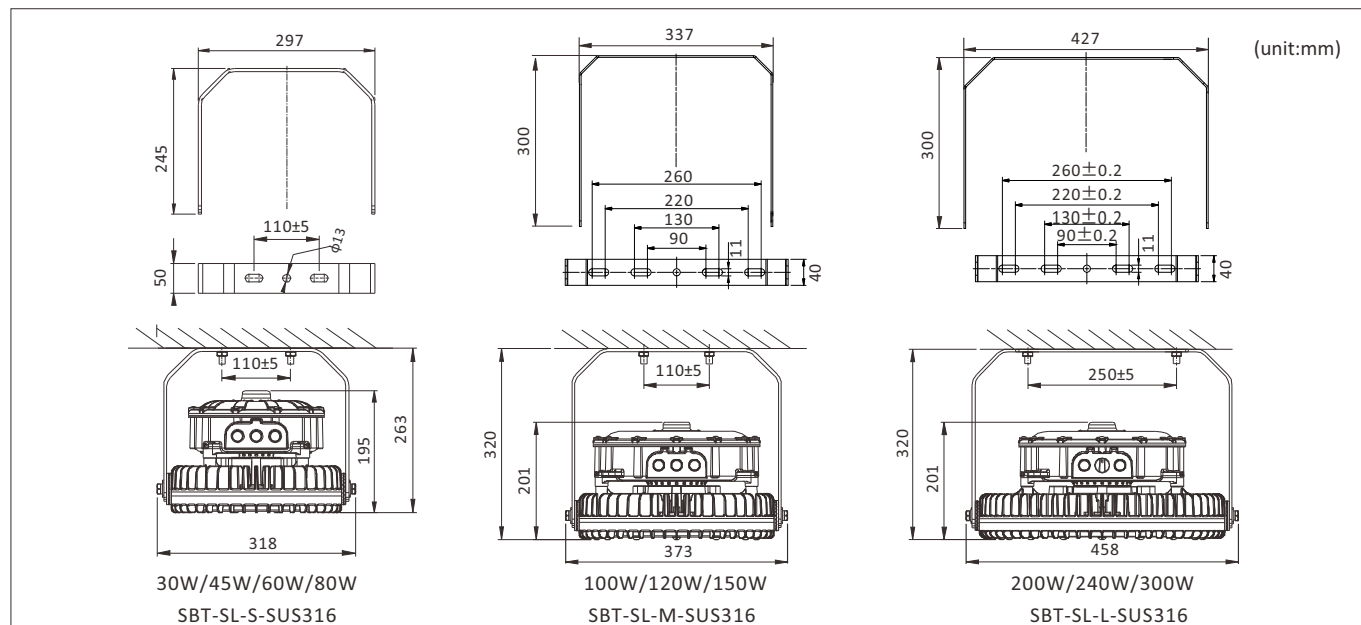
Optional Parts



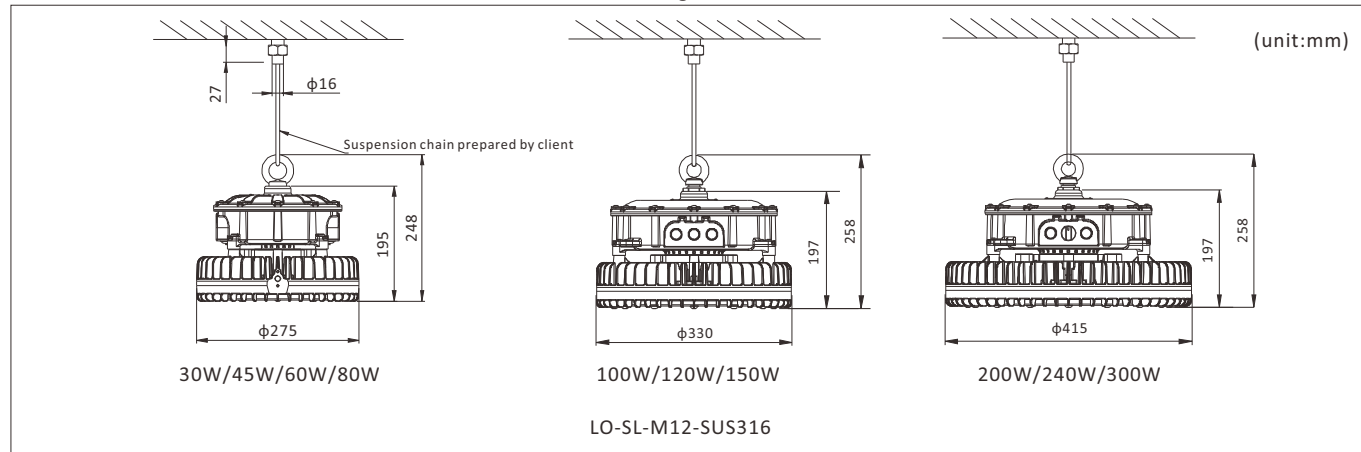
Installation Method



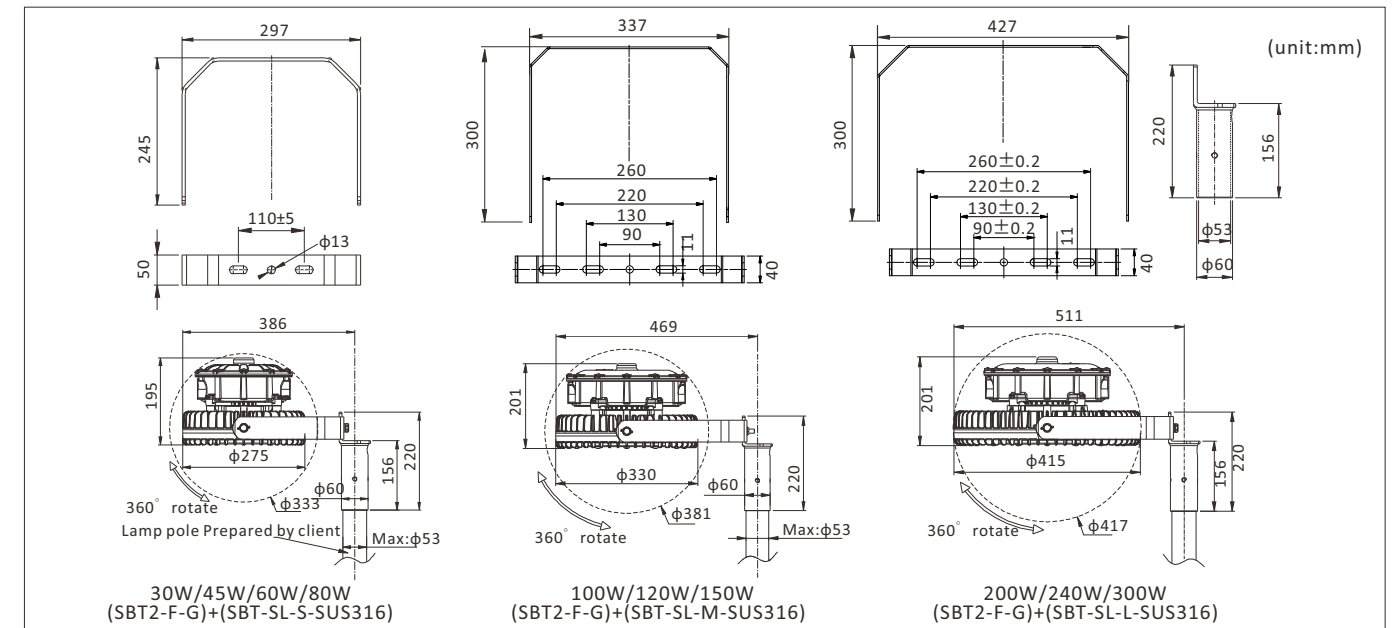
Stanchion Mount



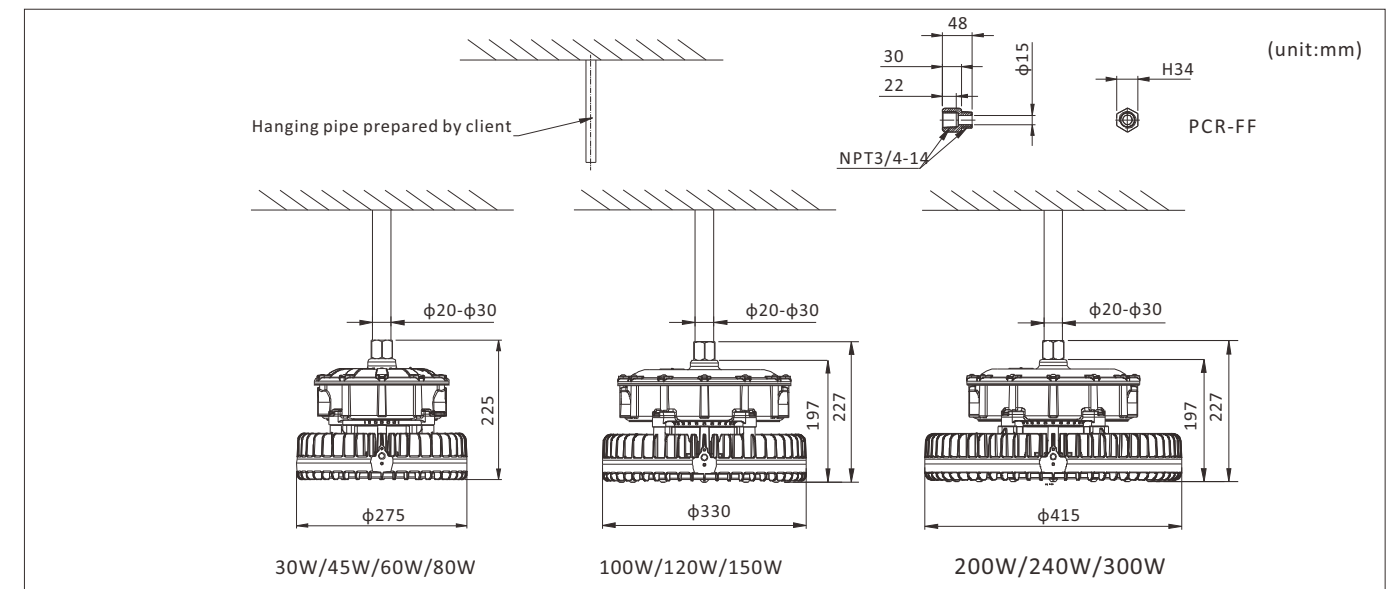
Ceiling Mount



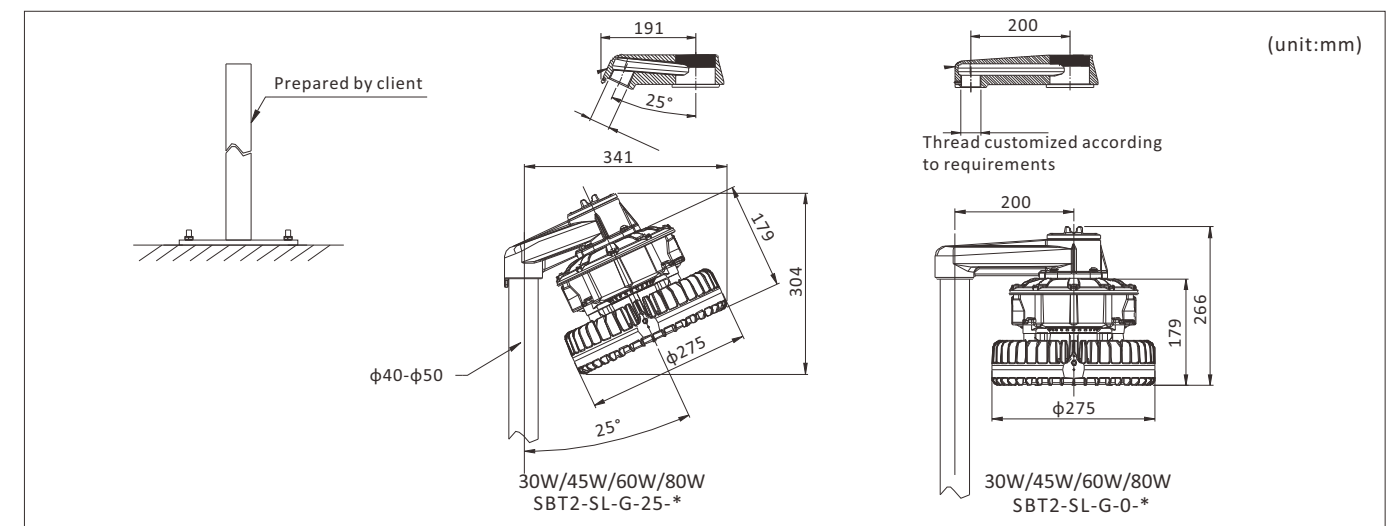
Pendant Mount



Pole Mount



Pipe Mount



Pole Mount

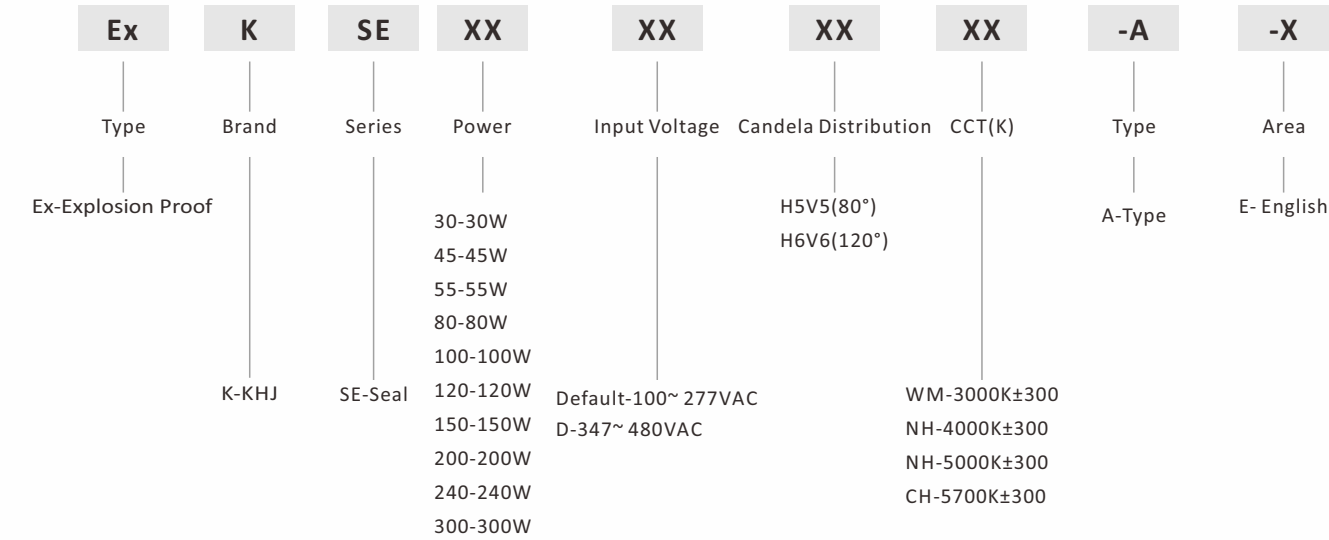


LED Explosion Proof Floodlight / Bay light / High bay light
- Seal-A Series

Standard & Certificate:		
Ex Mark:		Gas: II 3 G Ex ec IICT4/T5/T6 Gc Dust: II 3 D Ex tc IIIC T110/95/T80 Dc IP66
Certificate:		ATEX Certification NO.:TÜV 25 ATEX 9310 X IECEX Certification NO.:IECEX TUR 25.0050X CE RoHS
Executive Standard:		(IEC)EN 60079-0,(IEC)EN 60079-7,(IEC)EN 60079-31,EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3,EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-1, IEC 62321-3-1, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Classification:		Group II, Zone 2 & 22
Electrical & Photometric Features:		
Luminarie Efficacy:		150lm/W
Lifespan:		>100,000 hours
Operating Voltage:	Normal	100~277VAC 141~392VDC(standard) ,347~480VAC 491~679VDC(optional)
	Emergency	220-240 VAC/311-339 VDC
Power:	Normal	30W/45W/55W/80W/100W/120W/150W/200W/240W/300W
	Emergency	10W
Frequency:		50/60Hz
Battery Capacity:		9.6V 4Ah
Battery Type:		NI-MH
Battery Lifespan:		500 cycles
Light Duration:		3h
Charge Time:		>24h
Power Factor:		>0.98
THD:		<10%
CRI:		>70
Insulation Class:		I
Surge Protection:		4KV/6KV
LED Driver:		Over voltage protection/short circuit protection
Mechanical Features:		
Weight:		2.4Kg(30W/45W/55W)/6.3Kg(80W/100W/120W/150W)/9.1Kg(200W/240W/300W)
Size:		ϕ 215*146mm(30W/45W/55W)/ ϕ 330*160mm(80W/100W/120W/150W) ϕ 415*160mm(200W/240W/300W)
Ambient Temperature:		-40℃-+55℃(Normal);-20℃-+55℃(Emergemcy)
Connecting Terminals:		3*1.0-4.0mm²(L+N+PE)
Cable Entries:		2 x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:		M4 (Internal & external earth bolts)
IP Code:		IP66
Enclosure Maternal:		Die-casting aluminium alloy
Enclosure Colour:		Grey RAL7040
Coating:		Epoxy powder coating
Exposed Fastener:		Stainless steel
Protective Cover:		Tempered glass,Stand 7J impact



Product Definition



Ordering Information

P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)	Temp. Classification	
						-40℃-+55℃	-40℃-+65℃
Ex-KSE30*WM-A-E	100~277 AC (141~392 DC)	4185	30	Warm white	3000±300	T5	T4
Ex-KSE30*NH-A-E		4500	30	Natural white	4000±300	T5	T4
Ex-KSE30*NH-A-E		4500	30	Natural white	5000±300	T5	T4
Ex-KSE30*CH-A-E		4500	30	Cool white	5700±300	T5	T4
Ex-KSE45*WM-A-E		6278	45	Warm white	3000±300	T5	T4
Ex-KSE45*NH-A-E		6750	45	Natural white	4000±300	T5	T4
Ex-KSE45*NH-A-E		6750	45	Natural white	5000±300	T5	T4
Ex-KSE45*CH-A-E		6750	45	Cool white	5700±300	T5	T4
Ex-KSE55*WM-A-E		7673	55	Warm white	3000±300	T5	T4
Ex-KSE55*NH-A-E		8250	55	Natural white	4000±300	T5	T4
Ex-KSE55*NH-A-E		8250	55	Natural white	5000±300	T5	T4
Ex-KSE55*CH-A-E		8250	55	Cool white	5700±300	T5	T4
Ex-KSE80*WM-A-E		11160	80	Warm white	3000±300	T5	/
Ex-KSE80*NH-A-E		12000	80	Natural white	4000±300	T5	/
Ex-KSE80*NH-A-E		12000	80	Natural white	5000±300	T5	/
Ex-KSE80*CH-A-E		12000	80	Cool white	5700±300	T5	/
Ex-KSE100*WM-A-E		13950	100	Warm white	3000±300	T5	T4
Ex-KSE100*NH-A-E		15000	100	Natural white	4000±300	T5	T4
Ex-KSE100*NH-A-E		15000	100	Natural white	5000±300	T5	T4
Ex-KSE100*CH-A-E		15000	100	Cool white	5700±300	T5	T4

Ordering Information

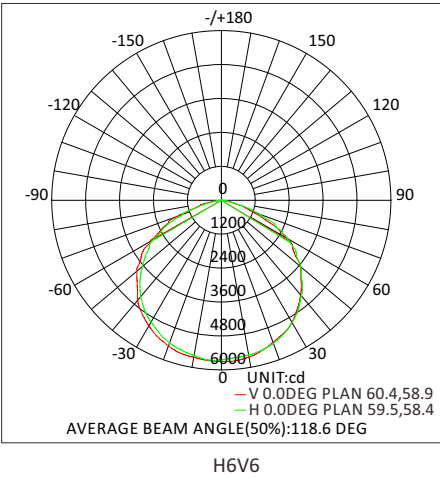
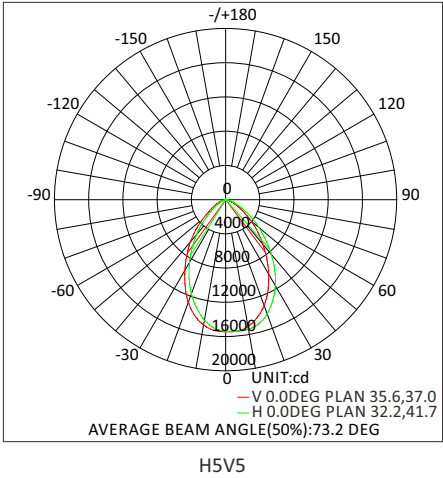
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)	Temp. Classification	
						-40℃~+55℃	-40℃~+65℃
Ex-KSE120*WM-A-E	100~277 AC (141~392 DC)	16740	120	Warm white	3000±300	T5	T4
Ex-KSE120*NH-A-E		18000	120	Natural white	4000±300	T5	T4
Ex-KSE120*NH-A-E		18000	120	Natural white	5000±300	T5	T4
Ex-KSE120*CH-A-E		18000	120	Cool white	5700±300	T5	T4
Ex-KSE150*WM-A-E		20925	150	Warm white	3000±300	T5	/
Ex-KSE150*NH-A-E		22500	150	Natural white	4000±300	T5	/
Ex-KSE150*NH-A-E		22500	150	Natural white	5000±300	T5	/
Ex-KSE150*CH-A-E		22500	150	Cool white	5700±300	T5	/
Ex-KSE200*WM-A-E		27900	200	Warm white	3000±300	T5	/
Ex-KSE200*NH-A-E		30000	200	Natural white	4000±300	T5	/
Ex-KSE200*NH-A-E		30000	200	Natural white	5000±300	T5	/
Ex-KSE200*CH-A-E		30000	200	Cool white	5700±300	T5	/
Ex-KSE240*WM-A-E		33480	240	Warm white	3000±300	T5	/
Ex-KSE240*NH-A-E		36000	240	Natural white	4000±300	T5	/
Ex-KSE240*NH-A-E		36000	240	Natural white	5000±300	T5	/
Ex-KSE240*CH-A-E		36000	240	Cool white	5700±300	T5	/
Ex-KSE300*WM-A-E		41850	300	Warm white	3000±300	T4	/
Ex-KSE300*NH-A-E		45000	300	Natural white	4000±300	T4	/
Ex-KSE300*NH-A-E		45000	300	Natural white	5000±300	T4	/
Ex-KSE300*CH-A-E		45000	300	Cool white	5700±300	T4	/

Remarks: 1.*Stands for beam angle , including H5V5 / H6V6,H5V5 is only available for 80-300W.
2.For beam angle H5V5,the luminous flux will be 8% less;

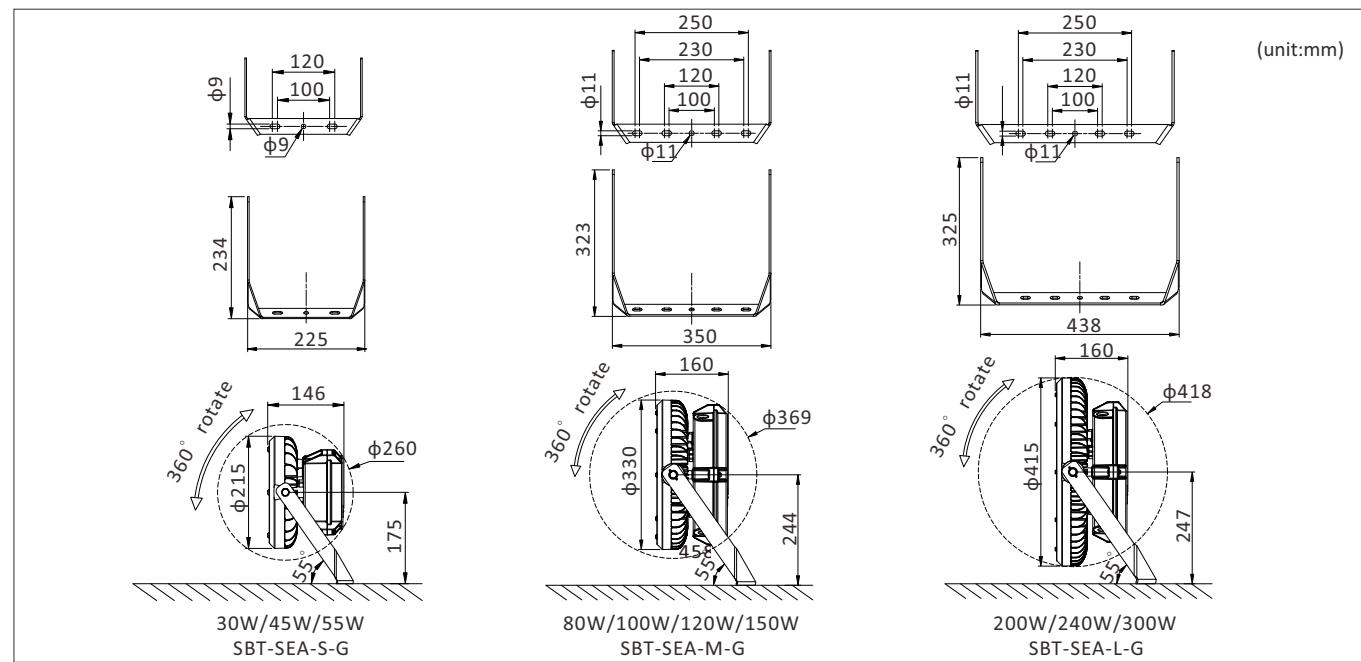
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
30W	70W	70W	Up to 60% reduction in energy costs
45W	100W-150W	100W-150W	
55W	150W-175W	150W-175W	
80W	175W-250W	175W-250W	
100W	250W-400W	250W-400W	
120W	250W-400W	250W-400W	
150W	400W	400W	
200W	400W-500W	400W-500W	
240W	600W-750W	600W-750W	
300W	750W-1000W	750W-1000W	

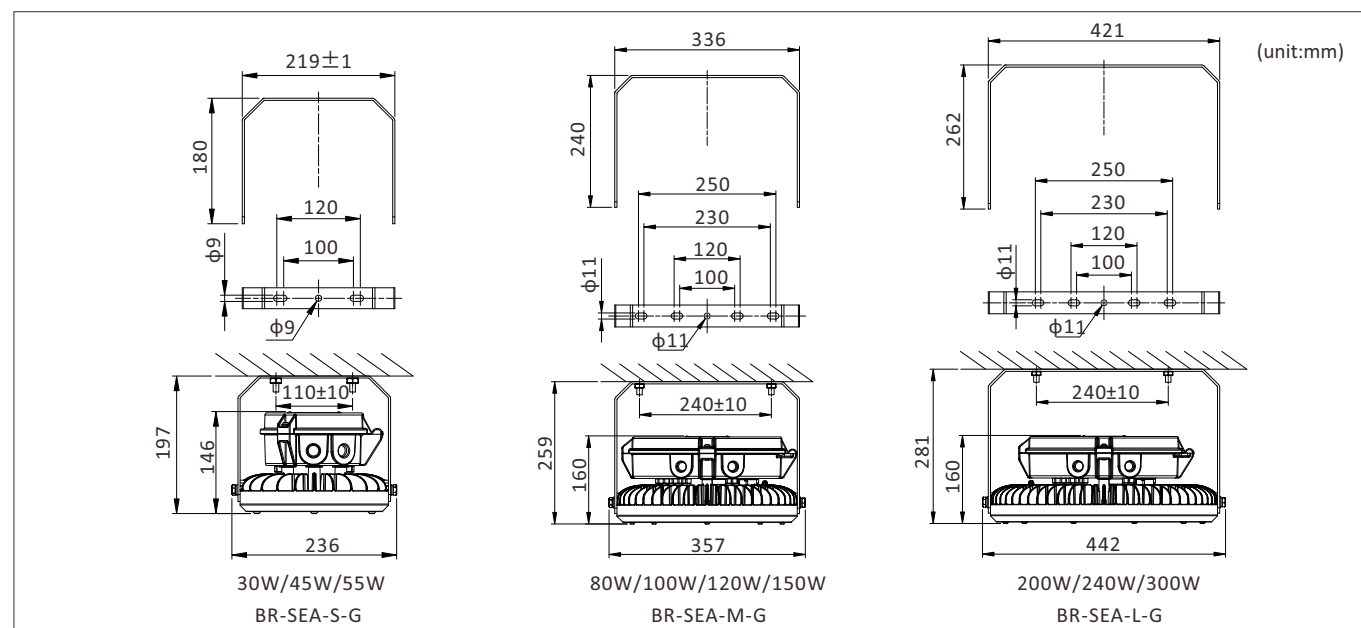
Candela Distribution



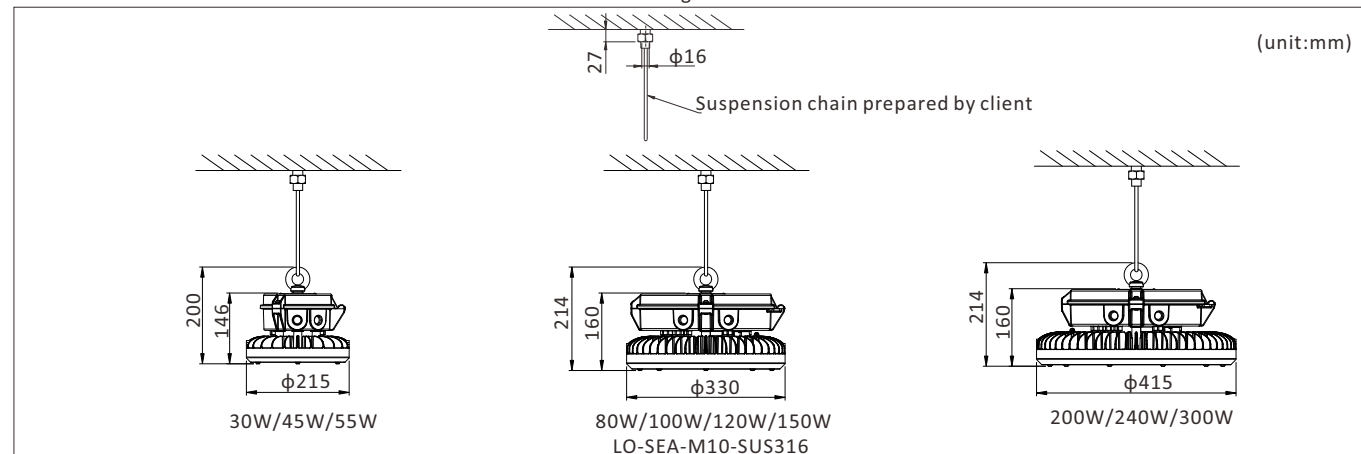
Installation Method



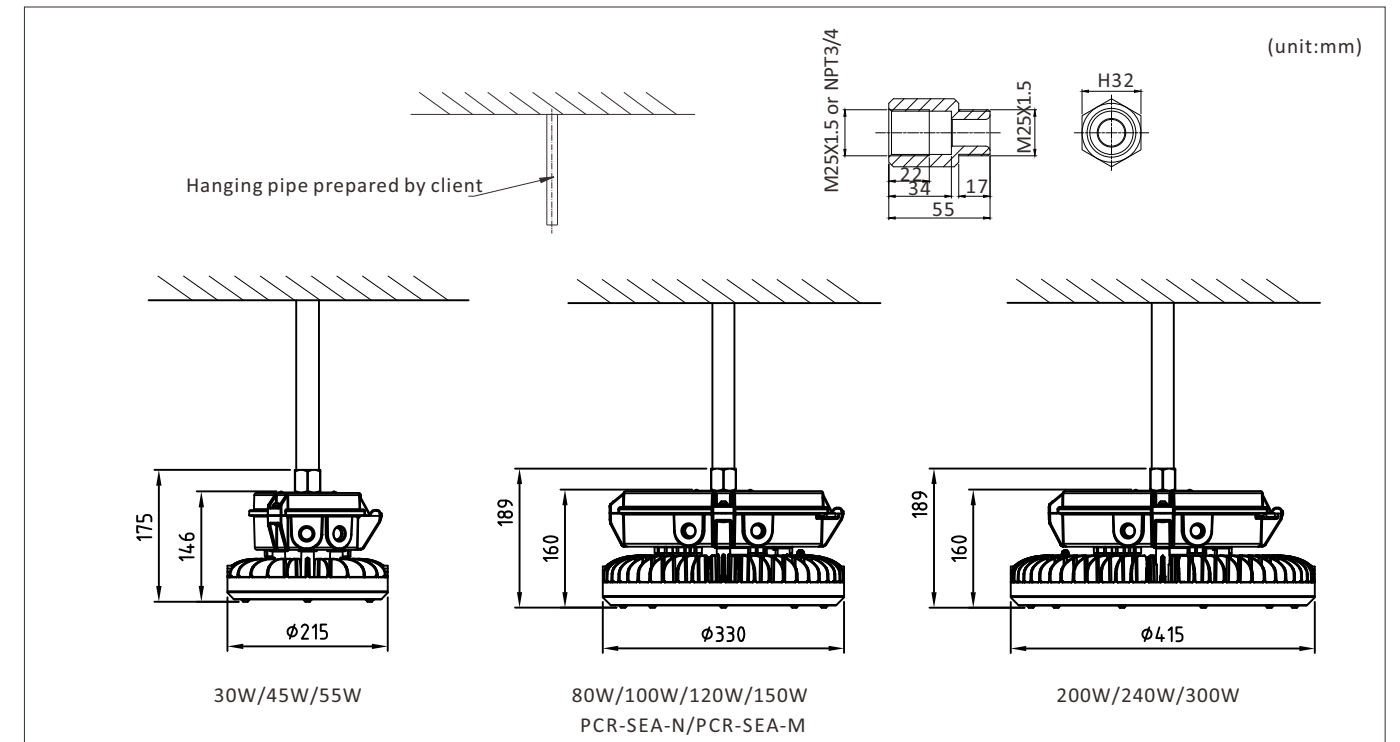
Stanchion Mount



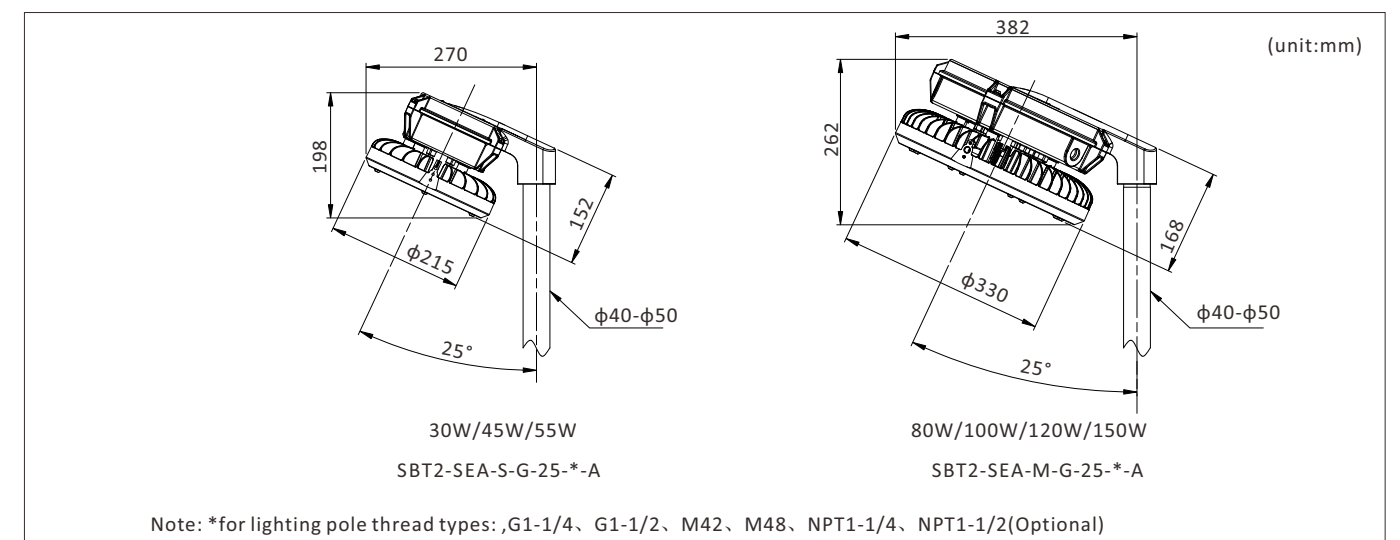
Ceiling Mount



Pendant Mount



Pipe Mount



Note: *for lighting pole thread types: G1-1/4、G1-1/2、M42、M48、NPT1-1/4、NPT1-1/2(Optional)

Pole Mount



LED Explosion Proof Floodlight
 - Seal-B Series

Standard & Certificate:	
Ex Mark:	Gas:  II 3 G Ex ec IIC T4/T5/T6 Gc Dust:  II 3 D Ex tc IIIC T110/95/T80 Dc IP66
Certificate:	ATEX Certification NO.:TÜV 25 ATEX 9310 X CE IECEX Certification NO.:IECEX TUR 25.0050X RoHS
Executive Standard:	(IEC)EN 60079-0,(IEC)EN 60079-7,(IEC)EN 60079-31,EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3,EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-1, IEC 62321-3-1, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Classification:	Group II, Zone 2 & 22
Electrical & Photometric Features:	
Luminarie Efficacy:	150lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100~277VAC 141~392VDC(standard) ,347~480VAC 491~679VDC(optional)
Power:	80W/100W/120W/150W/200W/240W/300W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	4KV/6KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	6.4Kg(80W/100W/120W/150W)/8.9Kg(200W/240W/300W)
Size:	332*282*167mm(80W/100W/120W/150W);332*435*167mm(200W/240W/300W)
Ambient Temperature:	-40℃~+55℃(80-300W)/-40℃~+65℃(100W/120W)
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Cable Entries:	2 x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition

Ex	K	SE	XX	XX	XX	XX	-B	-X
Type	Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Type	Area
Ex-Explosion Proof			80-80W 100-100W 120-120W 150-150W 200-200W 240-240W 300-300W		H3V3(30°) H4V4(60°) H5V5(80°) H6V6(120°)		B-Type	E- English
	K-KHJ	SE-Seal		Default-100~ 277VAC D-347~ 480VAC		WM-3000K±300 NH-4000K±300 NH-5000K±300 CH-5700K±300		

Ordering Information

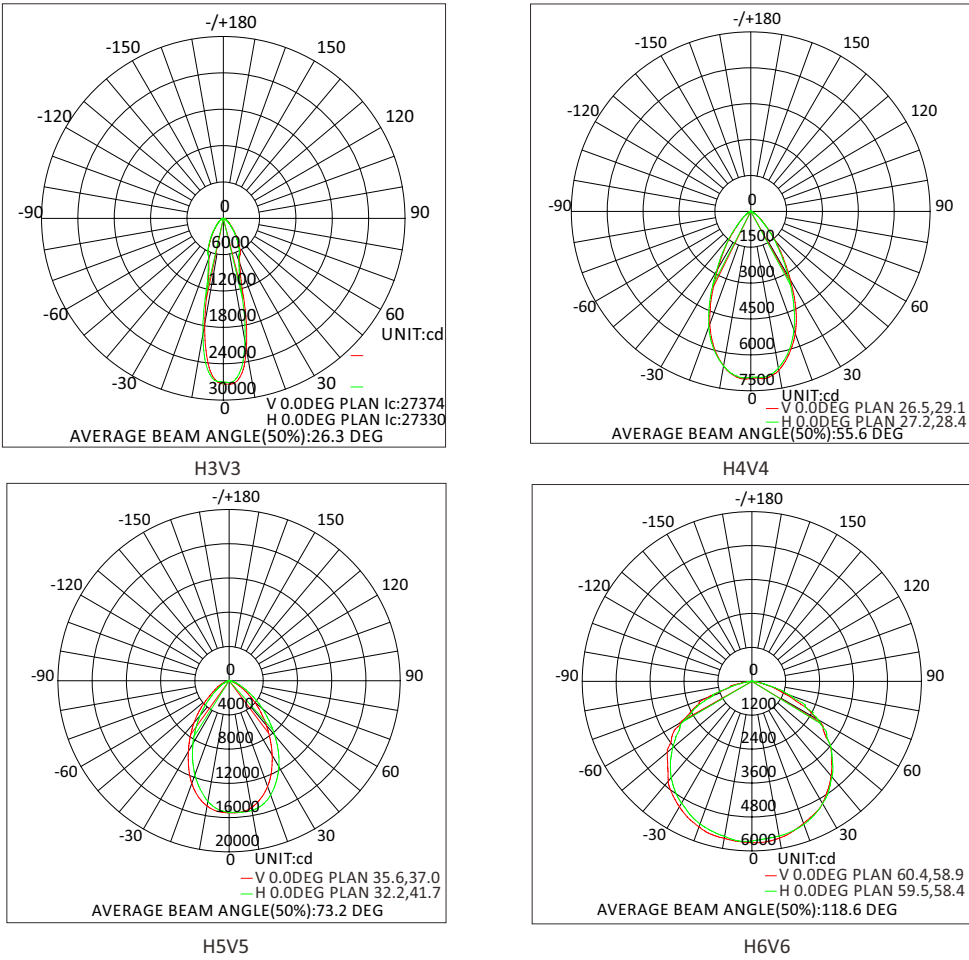
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)	Temp. Classification	
						-40℃~+55℃	-40℃~+65℃
Ex-KSE80*WM-B-E	100~277 AC (141~392 DC)	11160	80	Warm white	3000±300	T5	/
Ex-KSE80*NH-B-E		12000	80	Natural white	4000±300	T5	/
Ex-KSE80*NH-B-E		12000	80	Natural white	5000±300	T5	/
Ex-KSE80*CH-B-E		12000	80	Cool white	5700±300	T5	/
Ex-KSE100*WM-B-E		13950	100	Warm white	3000±300	T5	T4
Ex-KSE100*NH-B-E		15000	100	Natural white	4000±300	T5	T4
Ex-KSE100*NH-B-E		15000	100	Natural white	5000±300	T5	T4
Ex-KSE100*CH-B-E		15000	100	Cool white	5700±300	T5	T4
Ex-KSE120*WM-B-E		16740	120	Warm white	3000±300	T5	T4
Ex-KSE120*NH-B-E		18000	120	Natural white	4000±300	T5	T4
Ex-KSE120*NH-B-E		18000	120	Natural white	5000±300	T5	T4
Ex-KSE120*CH-B-E		18000	120	Cool white	5700±300	T5	T4
Ex-KSE150*WM-B-E		20925	150	Warm white	3000±300	T5	/
Ex-KSE150*NH-B-E		22500	150	Natural white	4000±300	T5	/
Ex-KSE150*NH-B-E		22500	150	Natural white	5000±300	T5	/
Ex-KSE150*CH-B-E		22500	150	Cool white	5700±300	T5	/
Ex-KSE200*WM-B-E		27900	200	Warm white	3000±300	T5	/
Ex-KSE200*NH-B-E		30000	200	Natural white	4000±300	T5	/
Ex-KSE200*NH-B-E		30000	200	Natural white	5000±300	T5	/
Ex-KSE200*CH-B-E		30000	200	Cool white	5700±300	T5	/
Ex-KSE240*WM-B-E		33480	240	Warm white	3000±300	T5	/
Ex-KSE240*NH-B-E		36000	240	Natural white	4000±300	T5	/
Ex-KSE240*NH-B-E		36000	240	Natural white	5000±300	T5	/
Ex-KSE240*CH-B-E		36000	240	Cool white	5700±300	T5	/
Ex-KSE300*WM-B-E		41850	300	Warm white	3000±300	T4	/
Ex-KSE300*NH-B-E		45000	300	Natural white	4000±300	T4	/
Ex-KSE300*NH-B-E		45000	300	Natural white	5000±300	T4	/
Ex-KSE300*CH-B-E		45000	300	Cool white	5700±300	T4	/

Remarks: 1.*Stands for beam angle , including H3V3 / H4V4 / H5V5 / H6V6.
 2.For beam angle H5V5,the luminous flux will be 8% less;

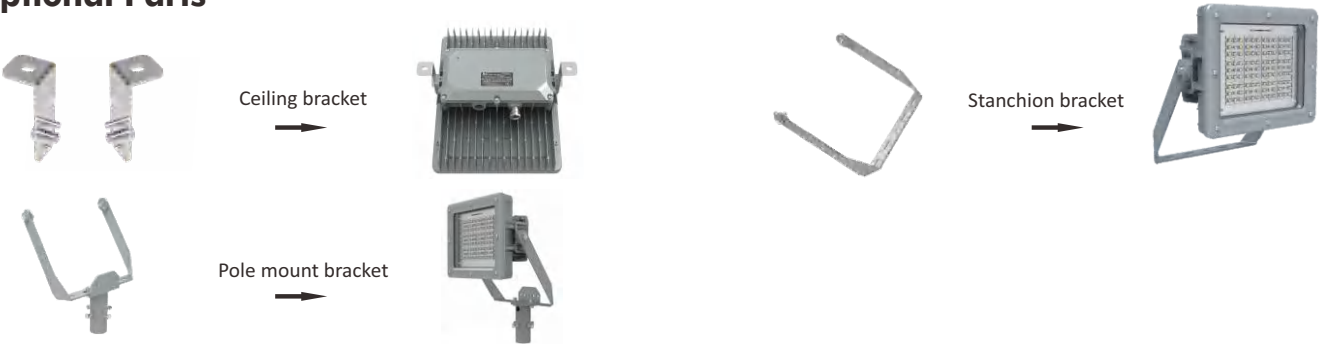
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
80W	175W-250W	175W-250W	Up to 60% reduction in energy costs
100W	250W-400W	250W-400W	
120W	250W-400W	250W-400W	
150W	400W	400W	
200W	400W-500W	400W-500W	
240W	600W-750W	600W-750W	
300W	750W-1000W	750W-1000W	

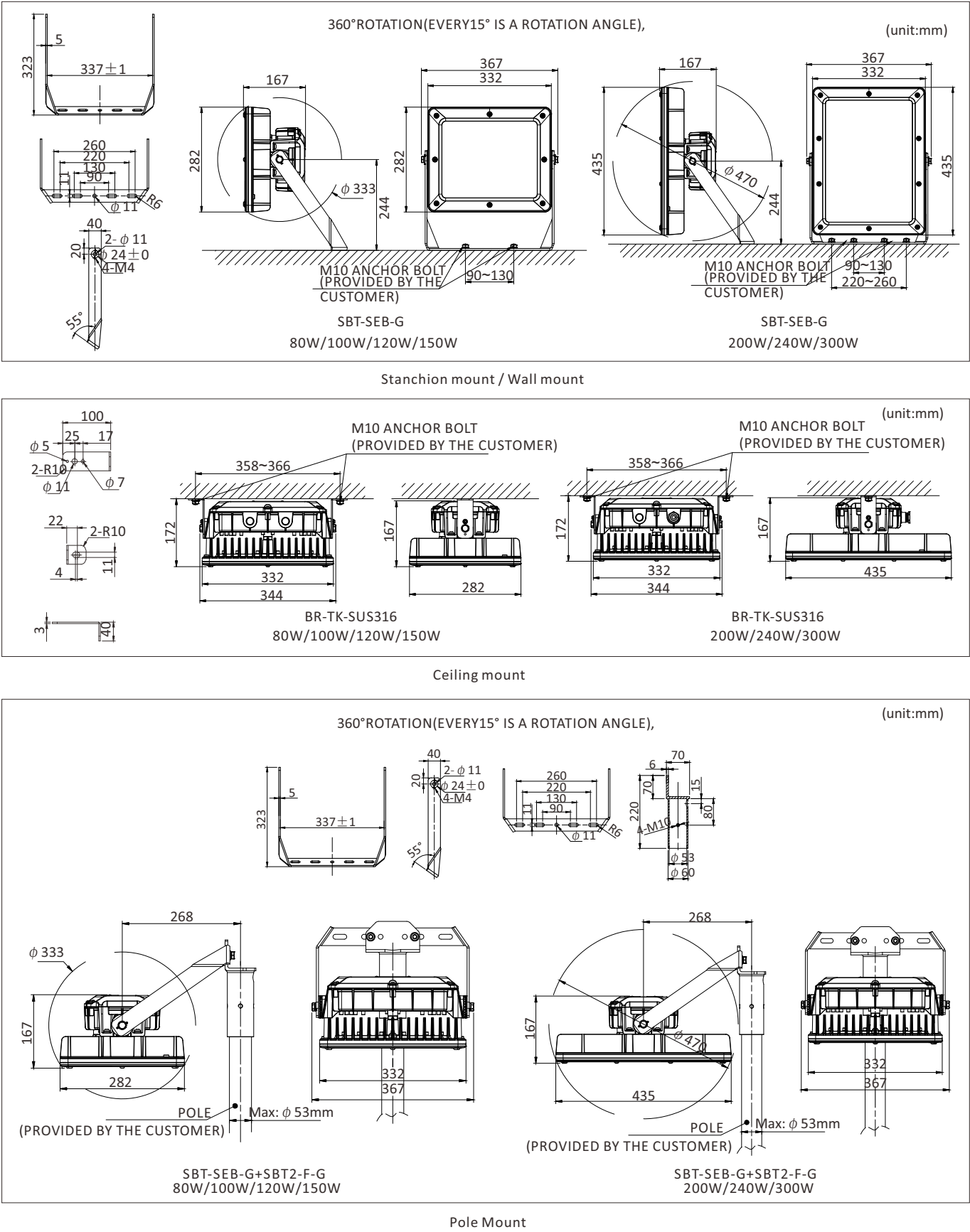
Candela Distribution



Optional Parts



Installation Method





LED Explosion Proof Floodlight
- Tank Series

Standard & Certificate:		
Ex Mark:		Gas:  II 2 G Ex db IIC T* Gb Dust:  II 2 D Ex tb IIIC T* Db IP66
Certificate:		ATEX Certification NO.: TÜV 21 ATEX 8775 X IECEX Certification NO.: IECEX TUR 21.0070X CE RoHS
Executive Standard:		(IEC)EN 60079-0, (IEC)EN 60079-1, (IEC)EN 60079-28, (IEC)EN 60079-31 EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Classification:		Group II, Zone 1 & 21 and 2 & 22
Electrical & Photometric Features:		
Luminarie Efficacy:		152lm/W
Lifespan:		>100,000 hours
Operating Voltage:	Normal	100-277 VAC,20-30 VAC,347-480 VAC,141-391VDC,491-679 VDC
	Emergency	220-240 VAC,311-339VDC
Power:	Normal	80W/100W/120W(Single lamp),160W/200W/240W(Two lamps), 320W/400W/480W(Four lamps)
	Emergency	10W
Frequency:		50/60Hz
Battery Capacity:		9.6V 4Ah
Battery Type:		NI-MH
Battery Lifespan:		500 cycles
Light Duration:		3h
Charge Time:		>24h
Power Factor:		>0.98
THD:		<10%
Insulation Class:		I
Surge Protection:		4KV/6KV
LED Driver:		Over voltage protection/short circuit protection
Mechanical Features:		
Weight:		8.3Kg(80W~120W)/13Kg(160W~240W)/27kg(320W~480W)
Size:		332*212*142mm(80W~120W)/332*426*142mm(160W~240W) 671*426*142mm(320W~480W)
Ambient Temperature:		-40℃~+55℃(Normal);-20℃~+55℃(Emergency)
Connecting Terminals:		3*1.0-4.0mm²(L+N+PE)
Cable Entries:		2 x M20*1.5 (NPT 3/4", M25*1.5 are optional)
Earthing Protection:		M4 (Internal & external earth bolts)
IP Code:		IP66
Enclosure Maternal:		Aluminium
Enclosure Colour:		Grey RAL7040
Coating:		Epoxy powder coating
Exposed Fastener:		Stainless steel
Protective Cover:		Tempered glass,Stand 7J impact



Product Definition

Ex	K	TK	XX	X	XX	XX	-X	-X	-X
Type	Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Type	Type	Area
Ex-Explosion Proof	K-KHJ	Tank series	80-80W 100-100W 120-120W 160-160W 200-200W 240-240W 320-320W 400-400W 480-480W	Default:100~277VAC D-347-480VAC E-20-30VAC	H3V3(40°) H5V5(80°) H6V6(120°)	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K	Default-single lamp P2-Two lamp P4-Four lamp	Default-Normal ON-Emergency	E- English

Ordering Information

P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	CRI	Color Temp.	CCT(K)	Temp. Classification -40℃~+55℃
Ex-KTK80**CH-E	100-277 AC (141-392 DC)	12107	80	70	Cool white	5700K±300K	T5
Ex-KTK80**NH-E		12107		70	Natural white	5000K±300K	T5
Ex-KTK80**NH-E		12107		70	Natural white	4000±300k	T5
Ex-KTK80**WM-E		10896		70	Warm white	3000±300k	T5
Ex-KTK100**CH-E		14954	100	70	Cool white	5700±300k	T5
Ex-KTK100**NH-E		14954		70	Natural white	5000±300k	T5
Ex-KTK100**NH-E		14954		70	Natural white	4000±300k	T5
Ex-KTK100**WM-E		13458		70	Warm white	3000±300k	T5
Ex-KTK120**CH-E		17310	120	70	Cool white	5700±300k	T5
Ex-KTK120**NH-E		17310		70	Natural white	5000±300k	T5
Ex-KTK120**NH-E		17310		70	Natural white	4000±300k	T5
Ex-KTK120**WM-E		15579		70	Warm white	3000±300k	T5
Ex-KTK160**CH-P2-E		22910	160	70	Cool white	5700K±300K	T5
Ex-KTK160**NH-P2-E		22910		70	Natural white	5000K±300K	T5
Ex-KTK160**NH-P2-E		22910		70	Natural white	4000±300k	T5
Ex-KTK160**WM-P2-E		20619		70	Warm white	3000±300k	T5
Ex-KTK200**CH-P2-E		29145	200	70	Cool white	5700±300k	T5
Ex-KTK200**NH-P2-E		29145		70	Natural white	5000±300k	T5
Ex-KTK200**NH-P2-E		29145		70	Natural white	4000±300k	T5
Ex-KTK200**WM-P2-E		26230		70	Warm white	3000±300k	T5
Ex-KTK240**CH-P2-E		34136	240	70	Cool white	5700±300k	T5
Ex-KTK240**NH-P2-E		34136		70	Natural white	5000±300k	T5
Ex-KTK240**NH-P2-E		34136		70	Natural white	4000±300k	T5
Ex-KTK240**WM-P2-E		30884		70	Warm white	3000±300k	T5

Ordering Information

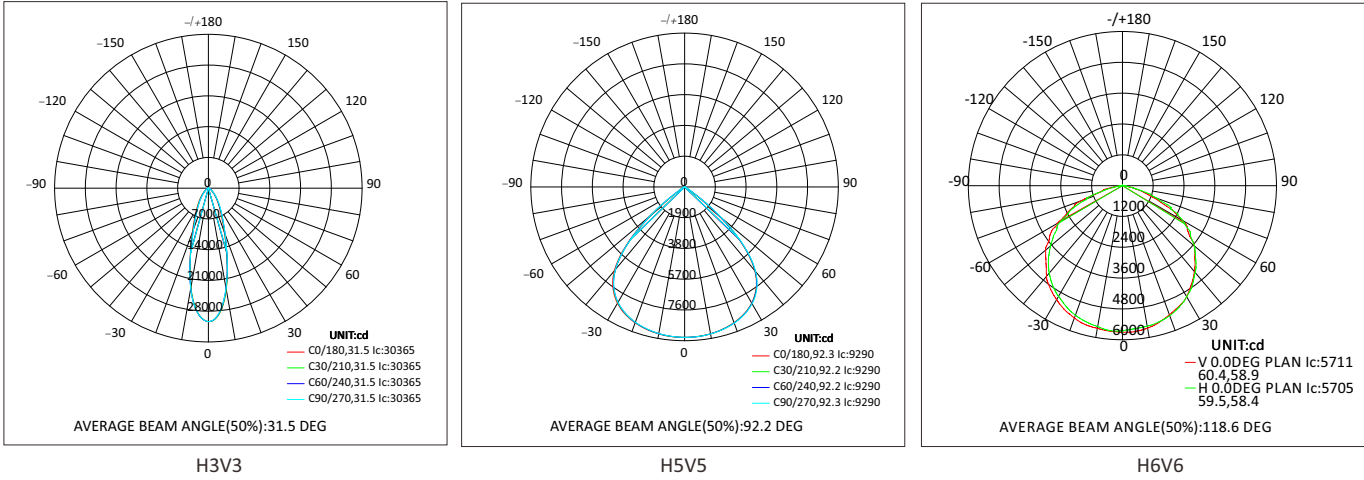
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	CRI	Color Temp.	CCT(K)	Temp. Classification -40℃-+55℃
Ex-KTK320**CH-P4-E	100-277 VAC (141-392 VDC)	46400	320	70	Cool white	5700±300k	T5
Ex-KTK320**NH-P4-E		46400		70	Natural white	5000±300k	T5
Ex-KTK320**NH-P4-E		46400		70	Natural white	4000±300k	T5
Ex-KTK320**WM-P4-E		41760		70	Warm white	3000±300k	T5
Ex-KTK400**CH-P4-E		58054	400	70	Cool white	5700±300k	T5
Ex-KTK400**NH-P4-E		58054		70	Natural white	5000±300k	T5
Ex-KTK400**NH-P4-E		58054		70	Natural white	4000±300k	T5
Ex-KTK400**WM-P4-E		52248		70	Warm white	3000±300k	T5
Ex-KTK480**CH-P4-E		69120	480	70	Cool white	5700±300k	T5
Ex-KTK480**NH-P4-E		69120		70	Natural white	5000±300k	T5
Ex-KTK480**NH-P4-E		69120		70	Natural white	4000±300k	T5
Ex-KTK480**WM-P4-E		62208		70	Warm white	3000±300k	T5

Remarks: 1.The first * stands for Operating Voltage including default -100-277VAC,D-347-480VAC ,E-20-30VAC.
2.The second * stands for Candela Distribution including H3V3,H5V5,H6V6.

KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
80W	175W-250W	175W-250W	Up to 60% reduction in energy costs
100W	250W-400W	250W-400W	
120W	250W-400W	250W-400W	
160W	400W	400W	
200W	400W-500W	400W-500W	
240W	600W-750W	600W-750W	
320W	750W-1000W	750W-1000W	
400W	1000W-1500W	1000W-1500W	
480W	1000W-2000W	1000W-2000W	

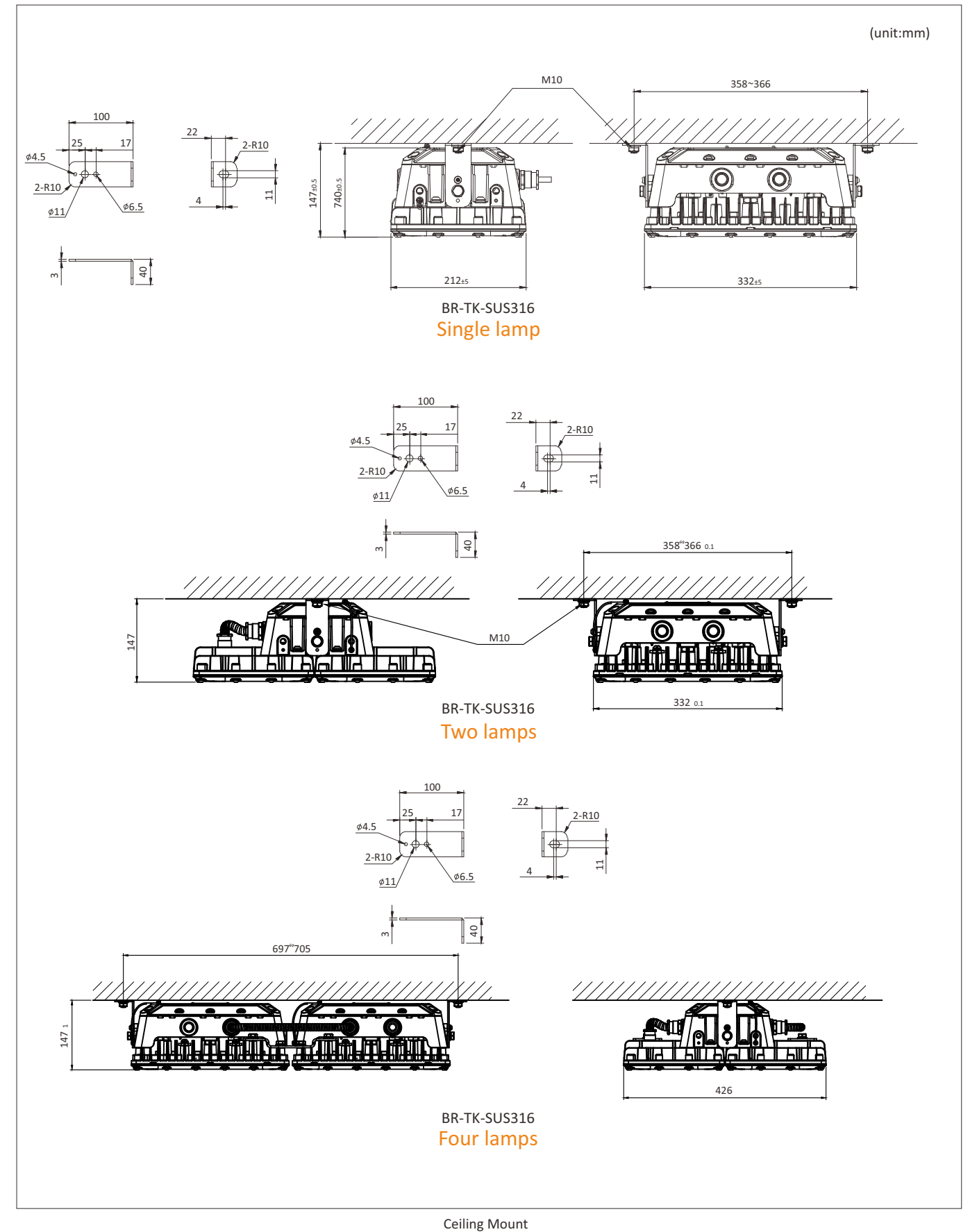
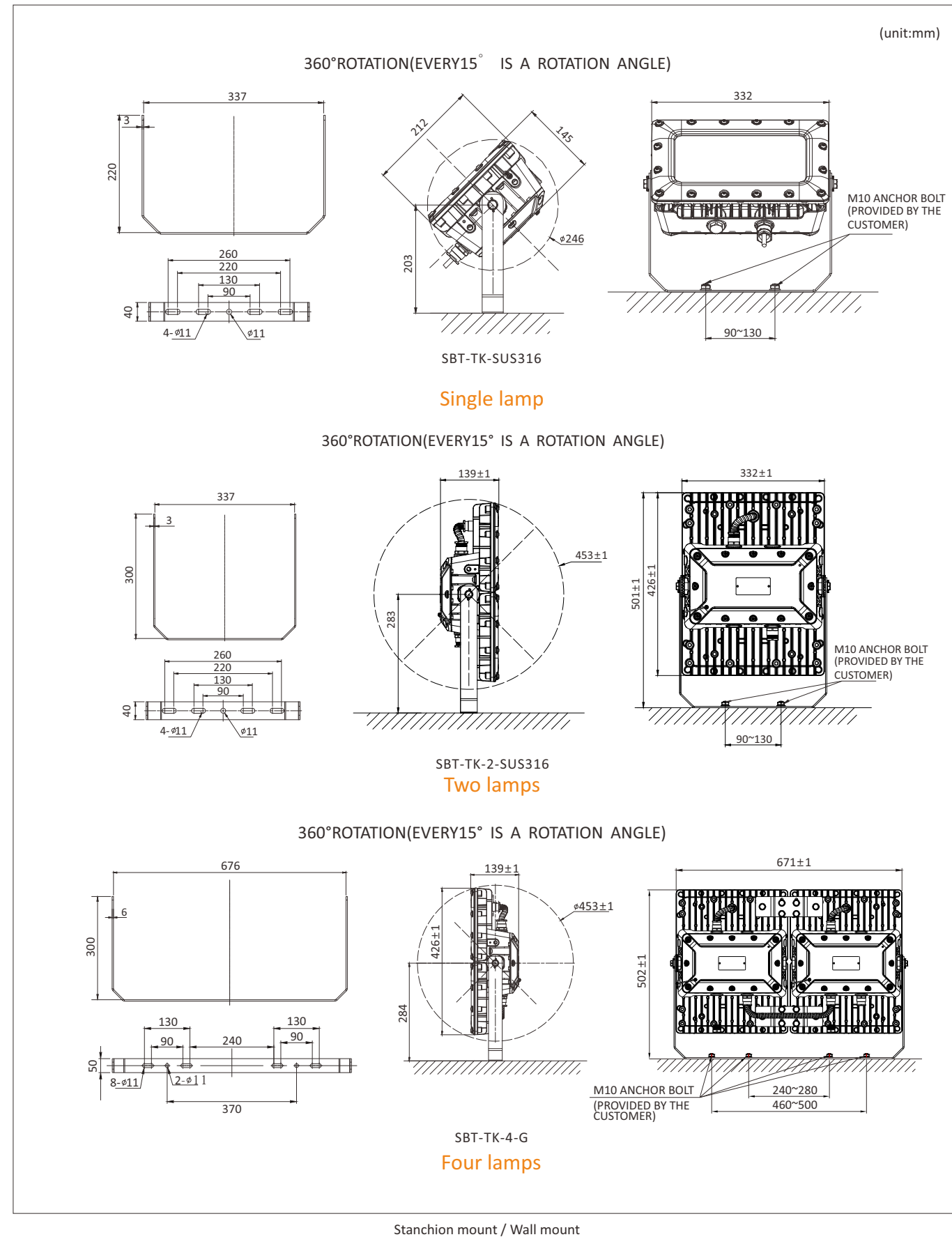
Candela Distribution



Optional Parts



Installation Method





LED Explosion Proof Linear light

- Swordfish Series

Standard & Certificate:	
Certificate:	UL Certification NO.: 20170823- E491372,E491373,E491374
Executive Standard:	UL 1598,UL 1598A,UL 844,UL 8750 CSA C22.2 No.137-M1981,CSA C22.2 No.250.1-08,CSA C22.2 No.250.13,CSA C22.2 No.250.13-14
Classification:	Class I Division 2,Group A, B ,C ,D Class II Division 2,Group F, G
Electrical & Photometric Features:	
Luminarie Efficacy:	136.5lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC,141-391VDC
Power:	36W/48W/56W(0.6m),36W/48W/56W/72W/100W(1.2m)
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	4KV/6KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	6.9Kg(0.6m)/11.5Kg(1.2m)
Size:	600*136*124mm(36W/48W/56W)/1200*136*124mm(36W/48W/56W/72W/100W)
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Cable Entries:	2 x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Copper-free Aluminium
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition

Ex	K	SF	XX	XX	XX	XX	XX	-U	-UL	-E	-X	
Type	Brand	Series	Power	Input Voltage	Length	Candela	Distribution	CCT(K)	Type	Type	Area	Color
Ex-Explosion Proof	K-KHJ	SF-Swordfish series	36-36W	Default-100-277 VAC	600-600mm	H7V7(120°)		WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K	U- Update	UL- UL Certificate	E- English	G-Grey
48-48W												
56-56W												
72-72W												
100-100W												

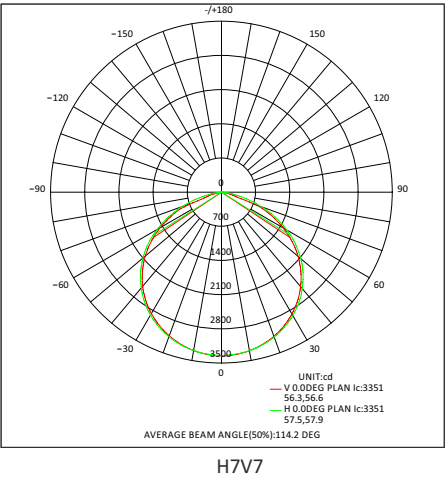
Ordering Information

P/N	Operating Voltage (V)	Luminous Flux (lm)	Powr (W)	Color Temp.	CCT(K)
Ex-KSF36600H7V7WM-U-UL-E	100-277 AC (141-392 DC)	4536	36	Warm white	3000±300
Ex-KSF36600H7V7NH-U-UL-E		4914	36	Natural white	4000±300
Ex-KSF36600H7V7NH-U-UL-E		4914	36	Natural white	5000±300
Ex-KSF36600H7V7CH-U-UL-E		4914	36	Cool white	5700±300
Ex-KSF48600H7V7WM-U-UL-E		6048	48	Warm white	3000±300
Ex-KSF48600H7V7NH-U-UL-E		6552	48	Natural white	4000±300
Ex-KSF48600H7V7NH-U-UL-E		6552	48	Natural white	5000±300
Ex-KSF48600H7V7CH-U-UL-E		6552	48	Cool white	5700±300
Ex-KSF56600H7V7WM-U-UL-E		7056	56	Warm white	3000±300
Ex-KSF56600H7V7NH-U-UL-E		7644	56	Natural white	4000±300
Ex-KSF56600H7V7NH-U-UL-E		7644	56	Natural white	5000±300
Ex-KSF56600H7V7CH-U-UL-E		7644	56	Cool white	5700±300
Ex-KSF361200H7V7WM-U-UL-E		4536	36	Warm white	3000±300
Ex-KSF361200H7V7NH-U-UL-E		4914	36	Natural white	4000±300
Ex-KSF361200H7V7NH-U-UL-E		4914	36	Natural white	5000±300
Ex-KSF361200H7V7CH-U-UL-E		4914	36	Cool white	5700±300
Ex-KSF481200H7V7WM-U-UL-E		6048	48	Warm white	3000±300
Ex-KSF481200H7V7NH-U-UL-E		6552	48	Natural white	4000±300
Ex-KSF481200H7V7NH-U-UL-E		6552	48	Natural white	5000±300
Ex-KSF481200H7V7CH-U-UL-E		6552	48	Cool white	5700±300
Ex-KSF561200H7V7WM-U-UL-E		7056	56	Warm white	3000±300
Ex-KSF561200H7V7NH-U-UL-E		7644	56	Natural white	4000±300
Ex-KSF561200H7V7NH-U-UL-E		7644	56	Natural white	5000±300
Ex-KSF561200H7V7CH-U-UL-E		7644	56	Cool white	5700±300
Ex-KSF721200H7V7WM-U-UL-E		9072	72	Warm white	3000±300
Ex-KSF721200H7V7NH-U-UL-E		9828	72	Natural white	4000±300
Ex-KSF721200H7V7NH-U-UL-E		9828	72	Natural white	5000±300
Ex-KSF721200H7V7CH-U-UL-E		9828	72	Cool white	5700±300
Ex-KSF1001200H7V7WM-U-UL-E		12600	100	Warm white	3000±300
Ex-KSF1001200H7V7NH-U-UL-E		13650	100	Natural white	4000±300
Ex-KSF1001200H7V7NH-U-UL-E		13650	100	Natural white	5000±300
Ex-KSF1001200H7V7CH-U-UL-E		13650	100	Cool white	5700±300

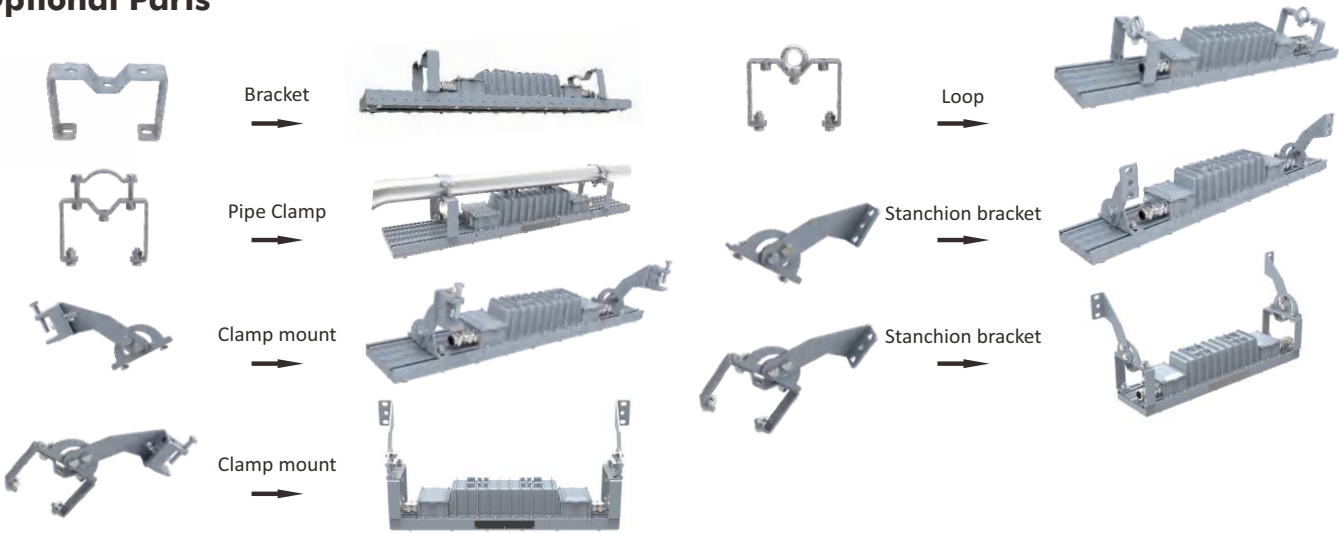
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
36W	4*18W/2*36W	4*18W/2*36W	Up to 60% reduction in energy costs
48W	4*18W/3*36W	4*18W/3*36W	
56W	3*36W	3*36W	
72W	4*36W	4*36W	
100W	5*36W/6*36W	5*36W/6*36W	

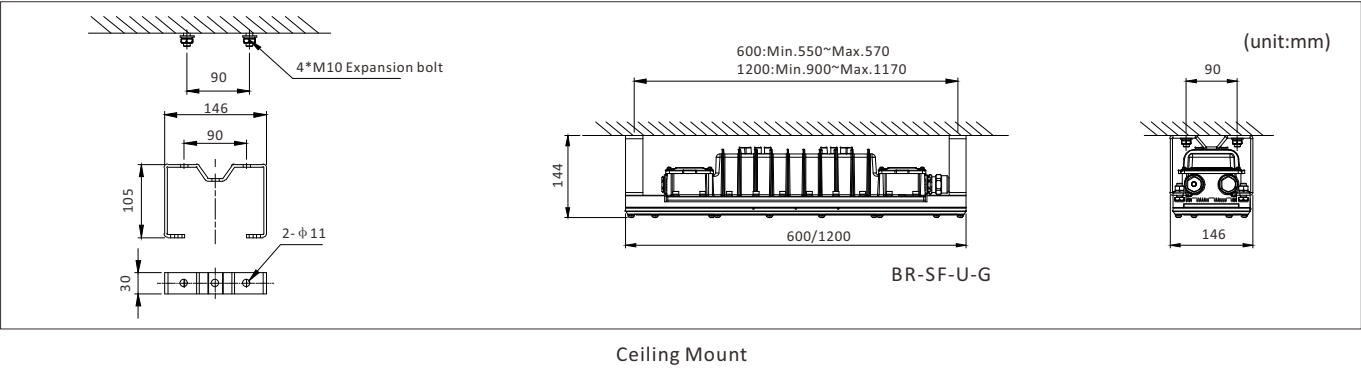
Candela Distribution



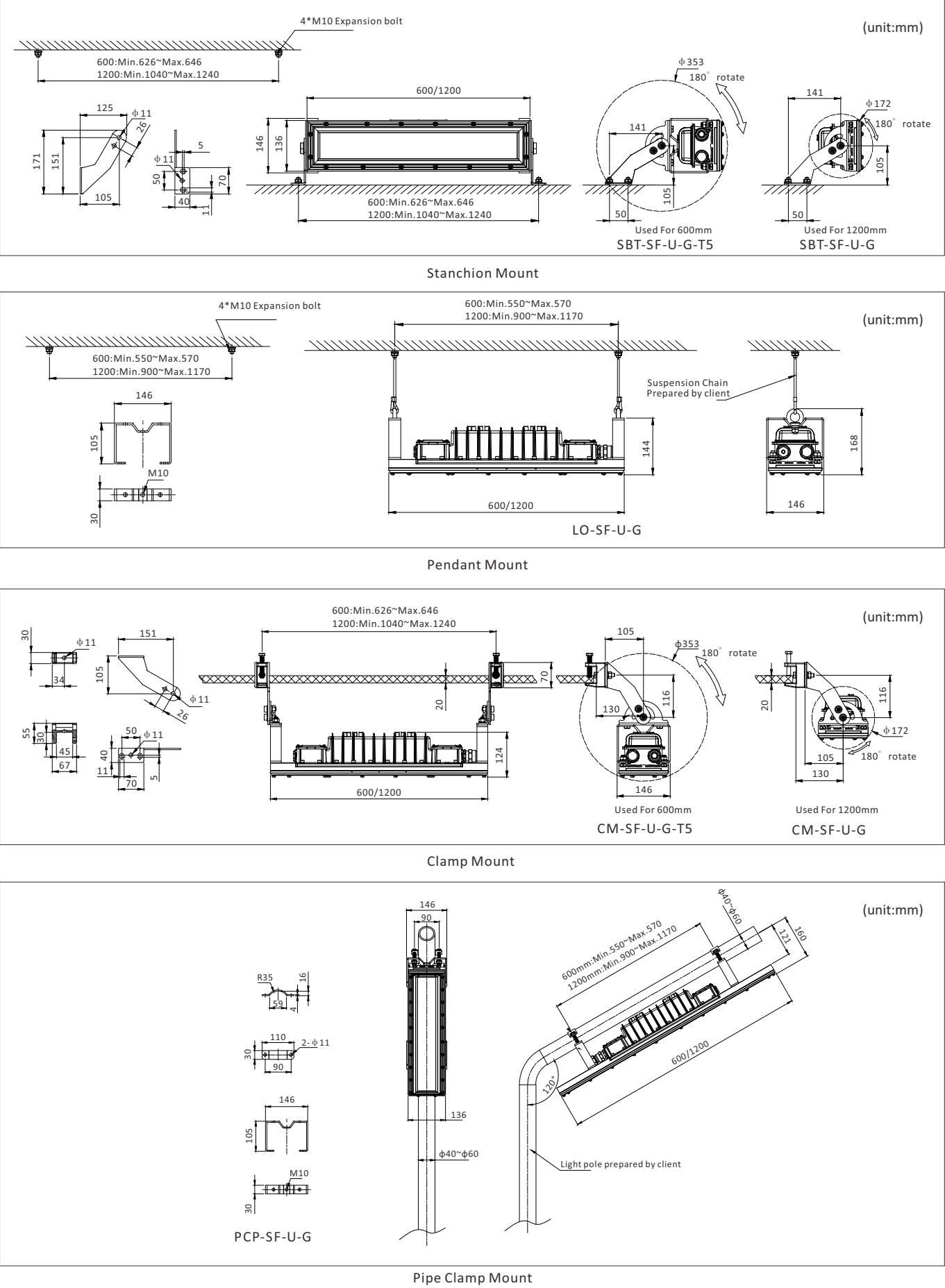
Optional Parts



Installation Method



Installation Method





LED Explosion Proof Linear light

- *Swordfish Series*

Standard & Certificate:		
Ex Mark:	Gas:  II 2 G Ex d eb op is IIB T6 Gb	 II 2 G Ex db eb IIC T6 Gb
	Dust:  II 2 D Ex tb op is IIIC T80°C Db	 II 2 D Ex tb IIIC T80°C Db
Certificate:	ATEX Certification NO.:TÜV 15 ATEX 7673 X CE IECEX Certification NO.: IECEx TUR 16.0028X RoHS	
Executive Standard:	(IEC)EN 60079-0, (IEC)EN 60079-1, (IEC)EN 60079-7, (IEC)EN 60079-28, (IEC)EN 60079-31 EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8	
Classification:	Group II Zone 1 & 21 and 2 & 22	
Electrical & Photometric Features:		
Luminarie Efficacy:	136.5lm/W	
Lifespan:	>100,000 hours	
Operating Voltage:	Normal	100-277 VAC/24-48 VAC,10-30 VDC/24-48 VDC/141-392 VDC
	Emergency	220-240 VAC,311-339 VDC
Power:	Normal	18W/36W/48W(0.6m),36W/48W/56W/72W(0.9m)
	Emergency	5W
Frequency:	50/60Hz	
Power Factor:	>0.98	
THD:	<10%	
CRI:	>70	
Insulation Class:	I	
Surge Protection:	4KV/6KV	
LED Driver:	Over voltage protection/short circuit protection	
Battery Capacity:	2.2 Ah	
Battery Type:	Ni-Cd	
Battery Lifespan:	500 cycles	
Back up:	180 min	
Chargeing time:(after full discharge)	24 hours	
Mechanical Features:		
Weight:	Normal	6.9Kg(0.6m)/9.2Kg(0.9m)
	Emergency	7.3Kg(0.6m)/9.6Kg(0.9m)
Size:	600*136*124mm(18W/36W/48W)/900*136*124mm(36W/48W/56W/72W)	
Ambient Temperature:	-20℃-+55℃	
Connecting Terminals:	3*1.0-4.0mm²(L+N+PE)	
Cable Entries:	2 x NPT 3/4" (M20*1.5, M25*1.5 are optional)	
Earthing Protection:	M4 (Internal & external earth bolts)	
IP Code:	IP66	
Enclosure Maternal:	Copper-free Aluminium	
Enclosure Colour:	Grey RAL7040	
Coating:	Epoxy powder coating	
Exposed Fastener:	Stainless steel	
Protective Cover:	Tempered glass,Stand 7J impact	



Product Definition

Ex	K	SF	XX	XX	XX	XX	XX	-X	-U	-X	-E	-X	
Type	Brand	Series	Power	Input Voltage	Length	Candela	Distribution	CCT(K)	Type	Type	Type	Area	Color
Ex-Explosion Proof	K-KHJ	SF-Swordfish series	18-18W	Default-100-277 VAC	600-600mm	H7V7(120°)		WM-3000±300K	Default-Normal	U- Update	E- English	G-Grey	
			36-36W										
			48-48W										
			56-56W										
			72-72W										
			A-24-48 VAC/DC										
			B-10-30 VDC										
			Emergency	Deafult-220-240 VAC				NH-5000±300K					
							CH-5700±300K						

Ordering Information

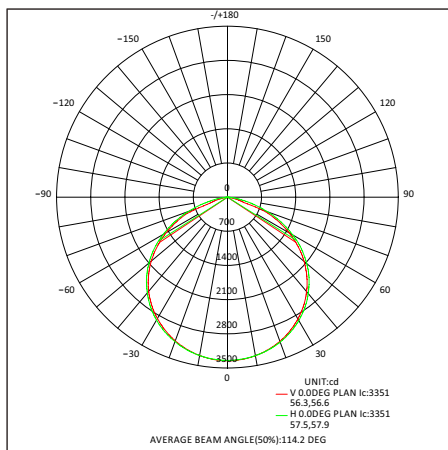
P/N	Operating Voltage (V)	Luminous Flux(lm)		Power(W)		Color Temp.	CCT(K)	Temp. Classification -20°C-+55°C
		Normal	Emergency	Normal	Emergency			
Ex-KSF18600H7V7WM-*-U-E	100-277 AC (141-391 DC)	2268	630	18	5	Warm white	3000±300	T6
Ex-KSF18600H7V7NH-*-U-E		2457	683	18		Natural white	4000±300	
Ex-KSF18600H7V7NH-*-U-E		2457	683	18		Natural white	5000±300	
Ex-KSF18600H7V7CH-*-U-E		2457	683	18		Cool white	5700±300	
Ex-KSF36600H7V7WM-*-U-E		4536	630	36		Warm white	3000±300	
Ex-KSF36600H7V7NH-*-U-E		4914	683	36		Natural white	4000±300	
Ex-KSF36600H7V7NH-*-U-E		4914	683	36		Natural white	5000±300	
Ex-KSF36600H7V7CH-*-U-E		4914	683	36		Cool white	5700±300	
Ex-KSF48600H7V7WM-*-U-E		6048	630	48		Warm white	3000±300	
Ex-KSF48600H7V7NH-*-U-E		6552	683	48		Natural white	4000±300	
Ex-KSF48600H7V7NH-*-U-E		6552	683	48		Natural white	5000±300	
Ex-KSF48600H7V7CH-*-U-E		6552	683	48		Cool white	5700±300	
Ex-KSF361200H7V7WM-*-U-E		4536	630	36		Warm white	3000±300	
Ex-KSF361200H7V7NH-*-U-E		4914	683	36		Natural white	4000±300	
Ex-KSF361200H7V7NH-*-U-E		4914	683	36		Natural white	5000±300	
Ex-KSF361200H7V7CH-*-U-E		4914	683	36		Cool white	5700±300	
Ex-KSF481200H7V7WM-*-U-E		6048	630	48		Warm white	3000±300	
Ex-KSF481200H7V7NH-*-U-E		6552	683	48		Natural white	4000±300	
Ex-KSF481200H7V7NH-*-U-E		6552	683	48		Natural white	5000±300	
Ex-KSF481200H7V7CH-*-U-E		6552	683	48		Cool white	5700±300	
Ex-KSF561200H7V7WM-*-U-E		7056	630	56		Warm white	3000±300	
Ex-KSF561200H7V7NH-*-U-E		7644	683	56		Natural white	4000±300	
Ex-KSF561200H7V7NH-*-U-E		7644	683	56		Natural white	5000±300	
Ex-KSF561200H7V7CH-*-U-E		7644	683	56		Cool white	5700±300	
Ex-KSF721200H7V7WM-*-U-E		9072	630	72		Warm white	3000±300	
Ex-KSF721200H7V7NH-*-U-E		9828	683	72		Natural white	4000±300	
Ex-KSF721200H7V7NH-*-U-E		9828	683	72		Natural white	5000±300	
Ex-KSF721200H7V7CH-*-U-E		9828	683	72		Cool white	5700±300	

Remarks: 1.The * stands for product type including default -Normal, ON-Emergency.
2.10-30VDC & 24-48V AC/DC are not suitable for 72W.

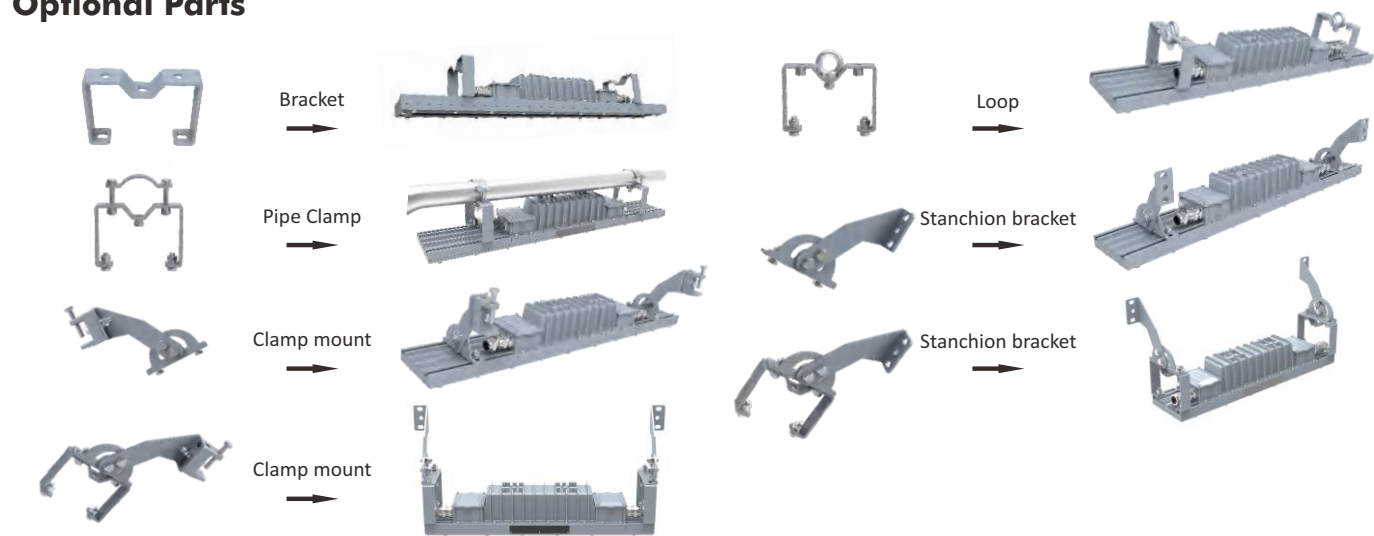
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
18W	2*18W/1*36W	2*18W/1*36W	Up to 60% reduction in energy costs
36W	4*18W/2*36W	4*18W/2*36W	
48W	4*18W/3*36W	4*18W/3*36W	
56W	3*36W	3*36W	
72W	4*36W	4*36W	

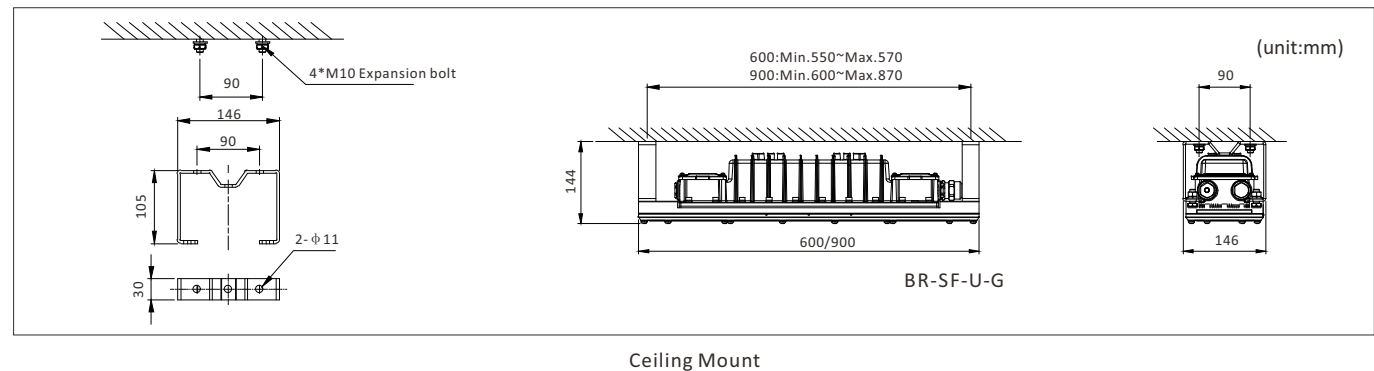
Candela Distribution



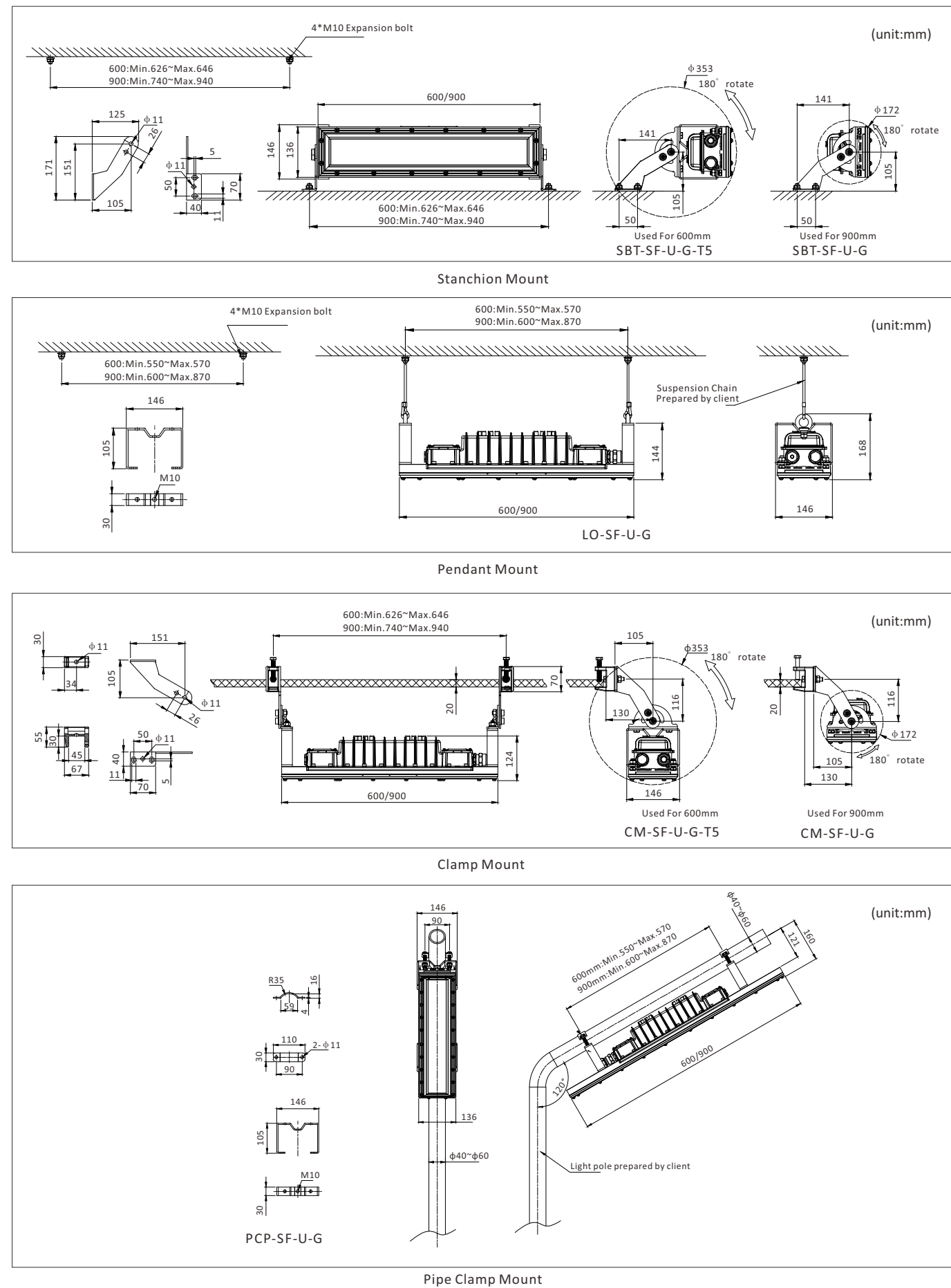
Optional Parts



Installation Method



Installation Method

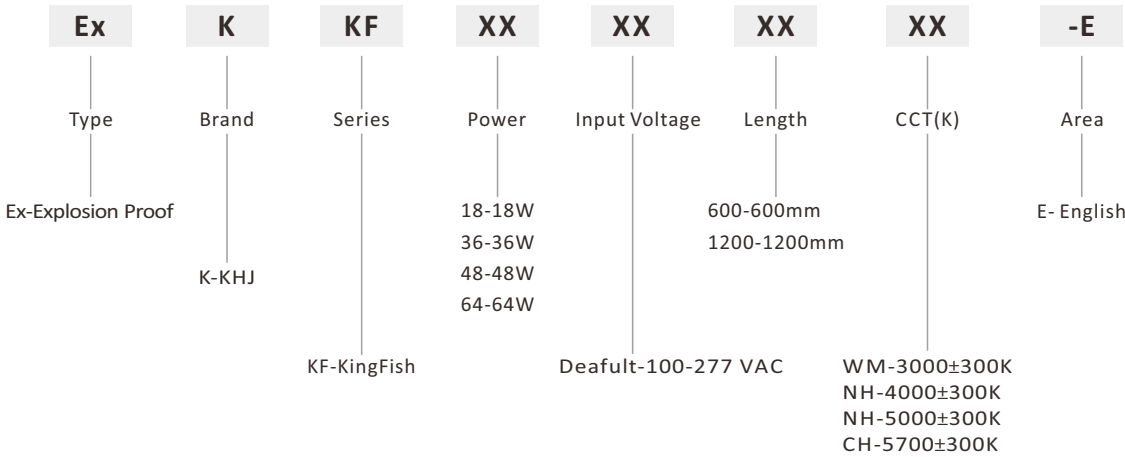




LED Explosion Proof Linear light
- Kingfish Series

Standard & Certificate:	
Ex Mark:	Gas:  II 2 G Ex eb mb IIC T5/T6 Gb Dust:  II 2 D Ex tb IIIC T95°C/T80°C Db IP66
Certificate:	ATEX Certification NO.:TPS 24 ATEX 114950 0008 X CE IECEX Certification NO.: IECEX TPS 24.0002 X RoHS
Executive Standard:	(IEC)EN 60079-0, (IEC)EN 60079-7, (IEC)EN 60079-18, (IEC)EN 60079-31, EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Classification:	Group II Zone 1 & 21 and 2 & 22
Electrical & Photometric Features:	
Luminarie Efficacy:	121lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC/141-392 VDC
Power:	18W/36W/48W(0.6m),36W/48W/64W(1.2m)
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	4KV/6KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	2.7Kg(0.6m)/4.3Kg(1.2m)
Size:	600*110*103mm(18W/36W/48W)/1200*110*103mm(48W/64W)
Ambient Temperature:	-40℃-+55℃/-40℃-+65℃
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Cable Entries:	2 x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Copper-free Aluminium
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition



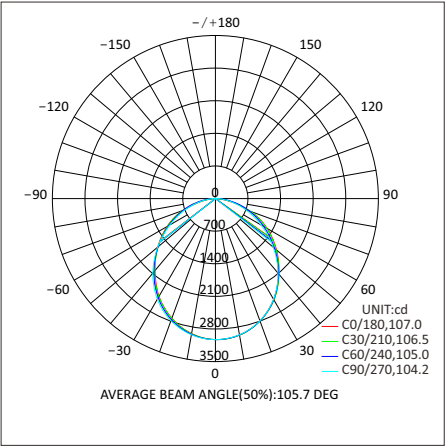
Ordering Information

P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)	Temp. Classification
						-40℃-+55℃
Ex-KKF18600WM-E	100-277 AC (141-392 DC)	2010	18	Warm white	3000±300	T6
Ex-KKF18600NH-E		2178	18	Natural white	4000±300	
Ex-KKF18600NH-E		2178	18	Natural white	5000±300	
Ex-KKF18600CH-E		2178	18	Cool white	5700±300	
Ex-KKF36600WM-E		4020	36	Warm white	3000±300	
Ex-KKF36600NH-E		4356	36	Natural white	4000±300	
Ex-KKF36600NH-E		4356	36	Natural white	5000±300	
Ex-KKF36600CH-E		4356	36	Cool white	5700±300	
Ex-KKF48600WM-E		5361	48	Warm white	3000±300	
Ex-KKF48600NH-E		5808	48	Natural white	4000±300	
Ex-KKF48600NH-E		5808	48	Natural white	5000±300	
Ex-KKF48600CH-E		5808	48	Cool white	5700±300	
Ex-KKF361200WM-E		4020	36	Warm white	3000±300	
Ex-KKF361200NH-E		4356	36	Natural white	4000±300	
Ex-KKF361200NH-E		4356	36	Natural white	5000±300	
Ex-KKF361200CH-E		4356	36	Cool white	5700±300	
Ex-KKF481200WM-E		5361	48	Warm white	3000±300	
Ex-KKF481200NH-E		5808	48	Natural white	4000±300	
Ex-KKF481200NH-E		5808	48	Natural white	5000±300	
Ex-KKF481200CH-E		5808	48	Cool white	5700±300	
Ex-KKF641200WM-E		7148	64	Warm white	3000±300	
Ex-KKF641200NH-E		7744	64	Natural white	4000±300	
Ex-KKF641200NH-E		7744	64	Natural white	5000±300	
Ex-KKF641200CH-E		7744	64	Cool white	5700±300	

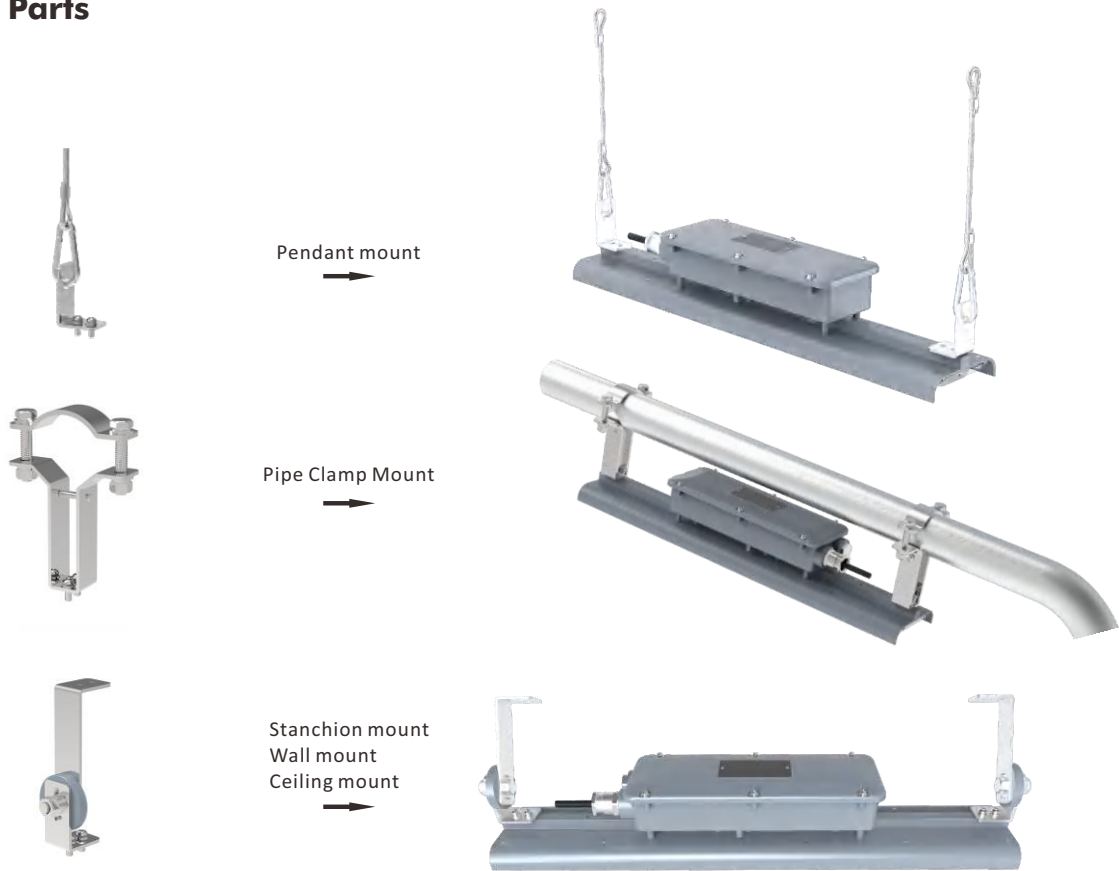
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
18W	2*18W/1*36W	2*18W/1*36W	Up to 60% reduction in energy costs
36W	4*18W/2*36W	4*18W/2*36W	
48W	4*18W/3*36W	4*18W/3*36W	
64W	3*36W	3*36W	

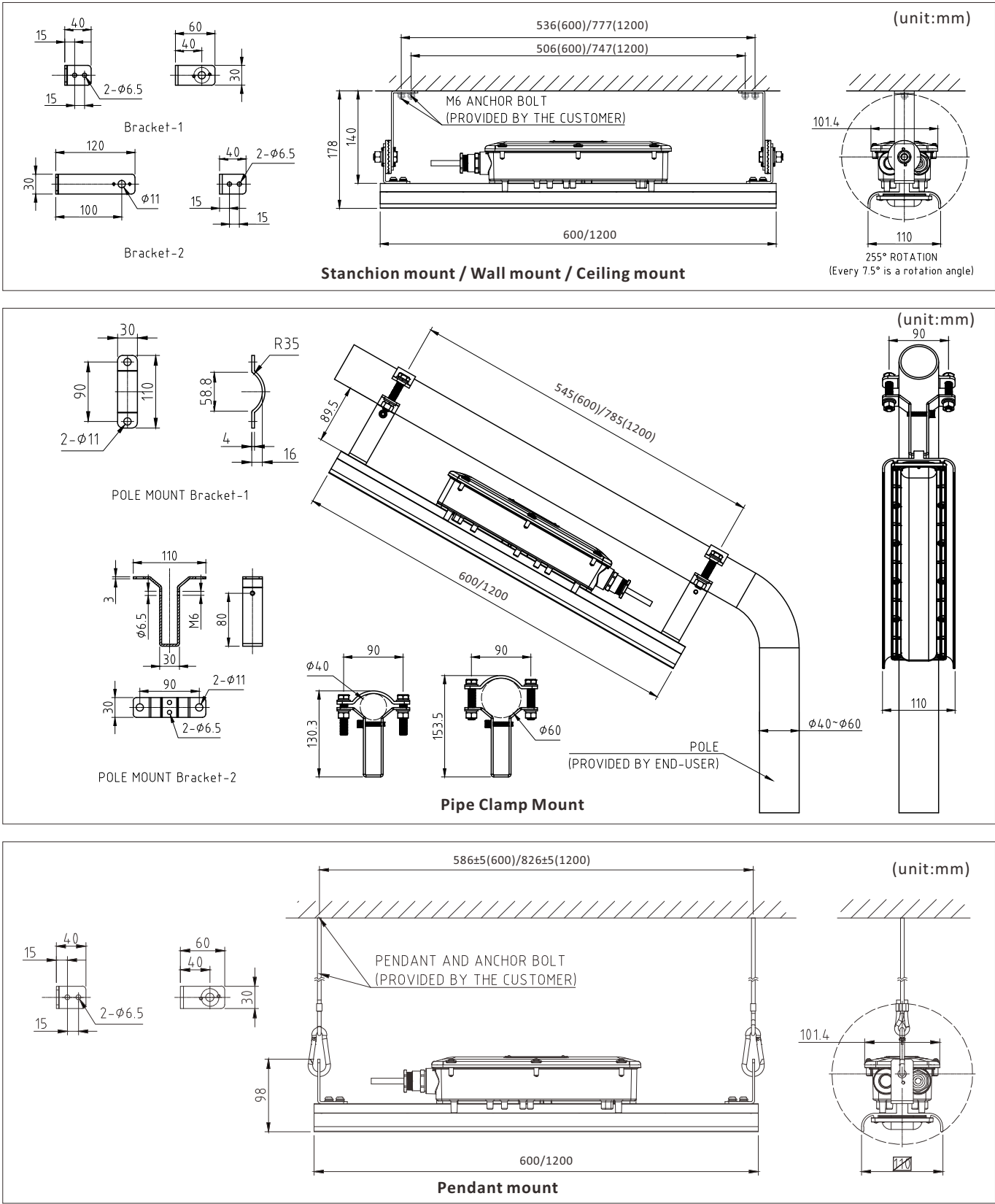
Candela Distribution



Optional Parts



Installation Method





LED Explosion Proof Floodlight/High bay light

- **Polarbear Series**

Standard & Certificate:	
Certificate:	UL Certification NO.: 20170823- E491372,E491373,E491374
Executive Standard:	UL 1598,UL 1598A,UL 844,UL 8750 CSA C22.2 No.137-M1981,CSA C22.2 No.250.1-08,CSA C22.2 No.250.13,CSA C22.2 No.250.13-14
Classification:	Class I Division 2,Group A, B ,C ,D
Electrical & Photometric Features:	
Luminarie Efficacy:	147lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC,141-391VDC
Power:	80W/120W/150W/200W/240W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	4KV/6KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	11Kg(80W/120W,150W)/18.4Kg(200W,240W)
Size:	260*400*161mm(80W/120W,150W)/500*400*161mm(200W,240W)
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Cable Entries:	1 x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Copper-free Aluminium
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition

Ex	K	PLB	XX	XX	XX	XX	-UL	-X	-X
Type	Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Type	Area	Color
Ex-Explosion Proof	K-KHJ	PLB-Polar Bear series	80-80W 120-120W 150-150W 200-200W 240-240W	Default-100-277 VAC	H1V1(15°) H4V4(60°) H5V5(80°) H6V6(120°) SL(C0-180°;90°;C90-270°;150°)	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K	UL- UL Certificate	E- English	G-Grey

Ordering Information

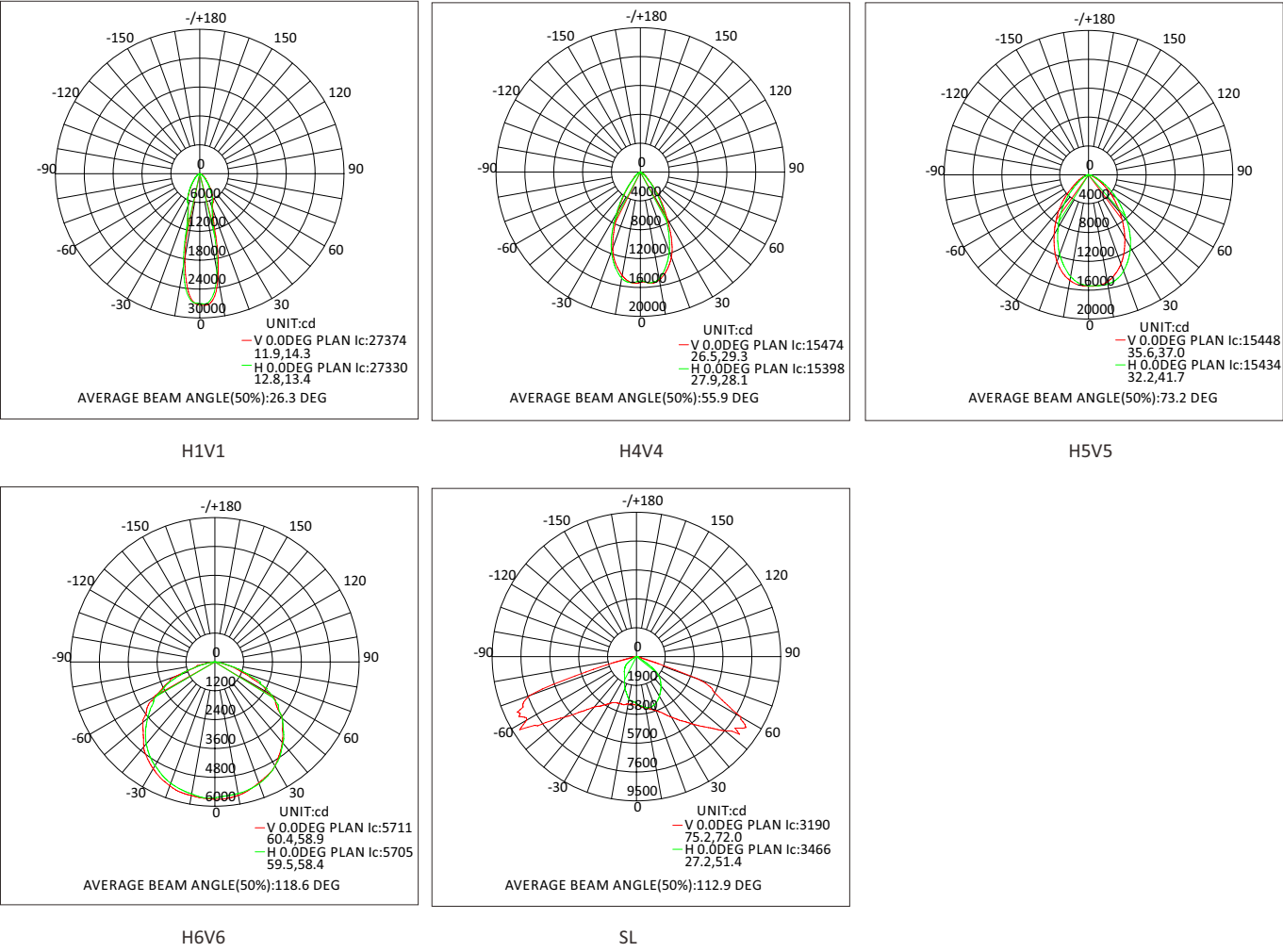
P/N	Operating Voltage (V)	Luminous Flux (lm)	Power (W)	Color Temp.	CCT(K)
Ex-KPLB80*WM-UL-E	100-277 AC (141-392 DC)	10920	80	Warm white	3000±300
Ex-KPLB80*NH-UL-E		11760	80	Natural white	4000±300
Ex-KPLB80*NH-UL-E		11760	80	Natural white	5000±300
Ex-KPLB80*CH-UL-E		11760	80	Cool white	5700±300
Ex-KPLB120*WM-UL-E		16380	120	Warm white	3000±300
Ex-KPLB120*NH-UL-E		17640	120	Natural white	4000±300
Ex-KPLB120*NH-UL-E		17640	120	Natural white	5000±300
Ex-KPLB120*CH-UL-E		17640	120	Cool white	5700±300
Ex-KPLB150*WM-UL-E		21840	150	Warm white	3000±300
Ex-KPLB150*NH-UL-E		23520	150	Natural white	4000±300
Ex-KPLB150*NH-UL-E		23520	150	Natural white	5000±300
Ex-KPLB150*CH-UL-E		23520	150	Cool white	5700±300
Ex-KPLB200*WM-UL-E		27300	200	Warm white	3000±300
Ex-KPLB200*NH-UL-E		29400	200	Natural white	4000±300
Ex-KPLB200*NH-UL-E		29400	200	Natural white	5000±300
Ex-KPLB200*CH-UL-E		29400	200	Cool white	5700±300
Ex-KPLB240*WM-UL-E		32760	240	Warm white	3000±300
Ex-KPLB240*NH-UL-E		35280	240	Natural white	4000±300
Ex-KPLB240*NH-UL-E		35280	240	Natural white	5000±300
Ex-KPLB240*CH-UL-E		35280	240	Cool white	5700±300

Remarks: 1.* Stands for beam angle,including H1V1 / H4V4 / H5V5 / H6V6 / SL;
2.For Beam angle H1V1,H4V4 and H5V5,the luminous flux will be 15% less;
For Beam angle SL the luminous flux will be 30% less.
3.SL beam angle is only applicable for 80W&120W.

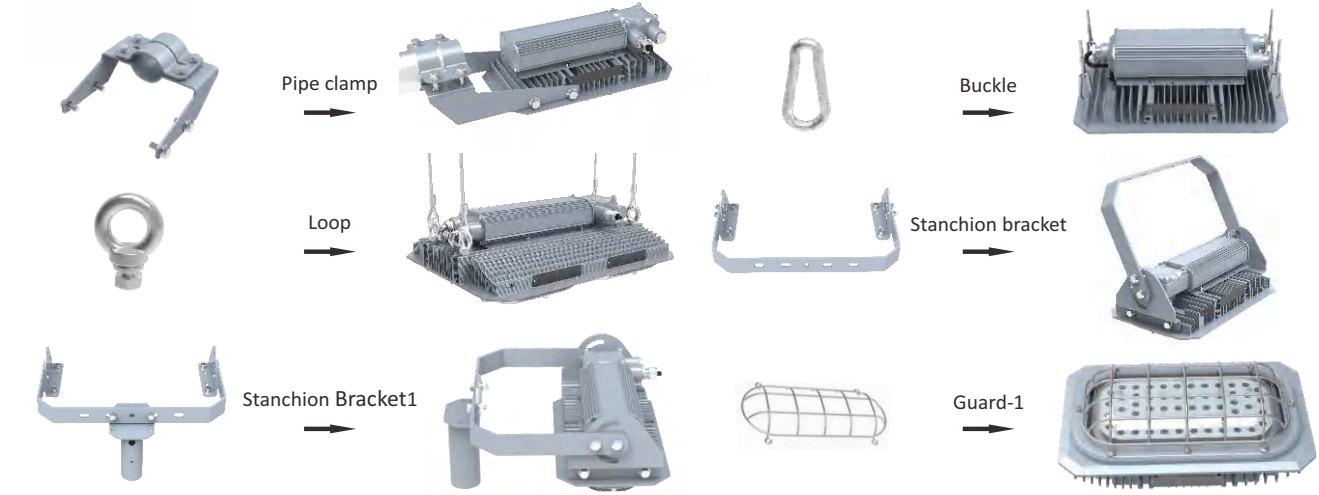
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
80W	175W~250W	175W~250W	Up to 60% reduction in energy costs
120W	250W~400W	250W~400W	
150W	400W	400W	
200W	400W~500W	400W~500W	
240W	600W~750W	600W~750W	

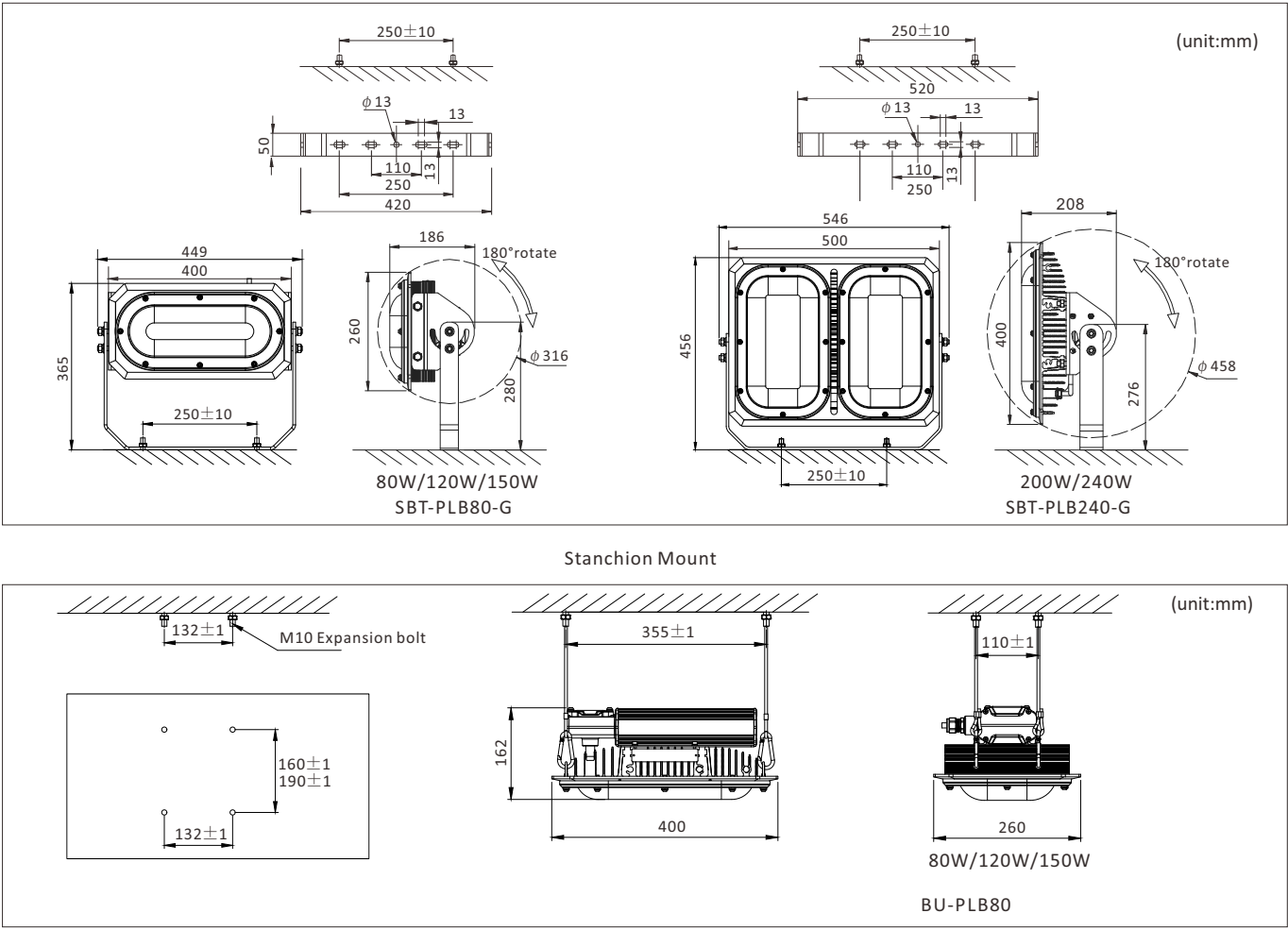
Candela Distribution



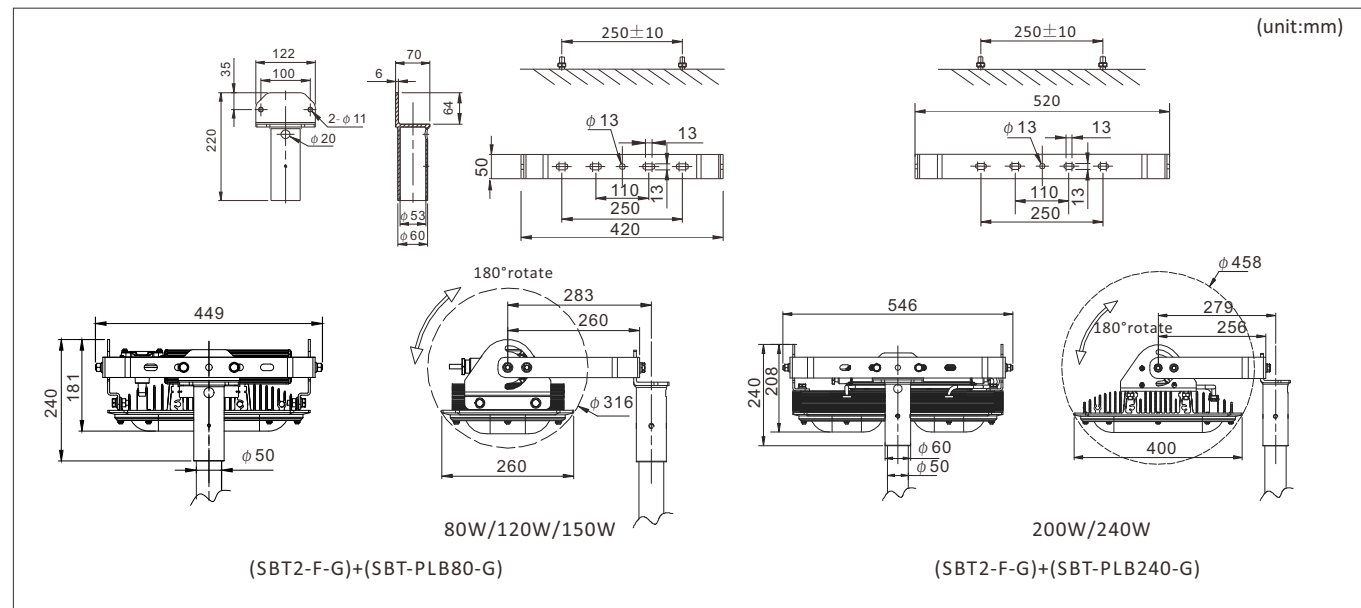
Optional Parts



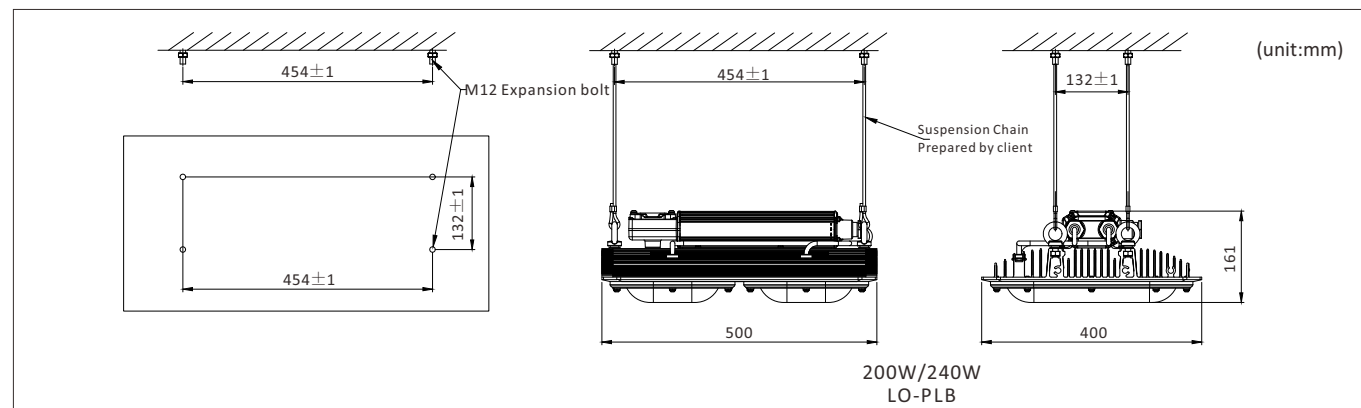
Installation Method



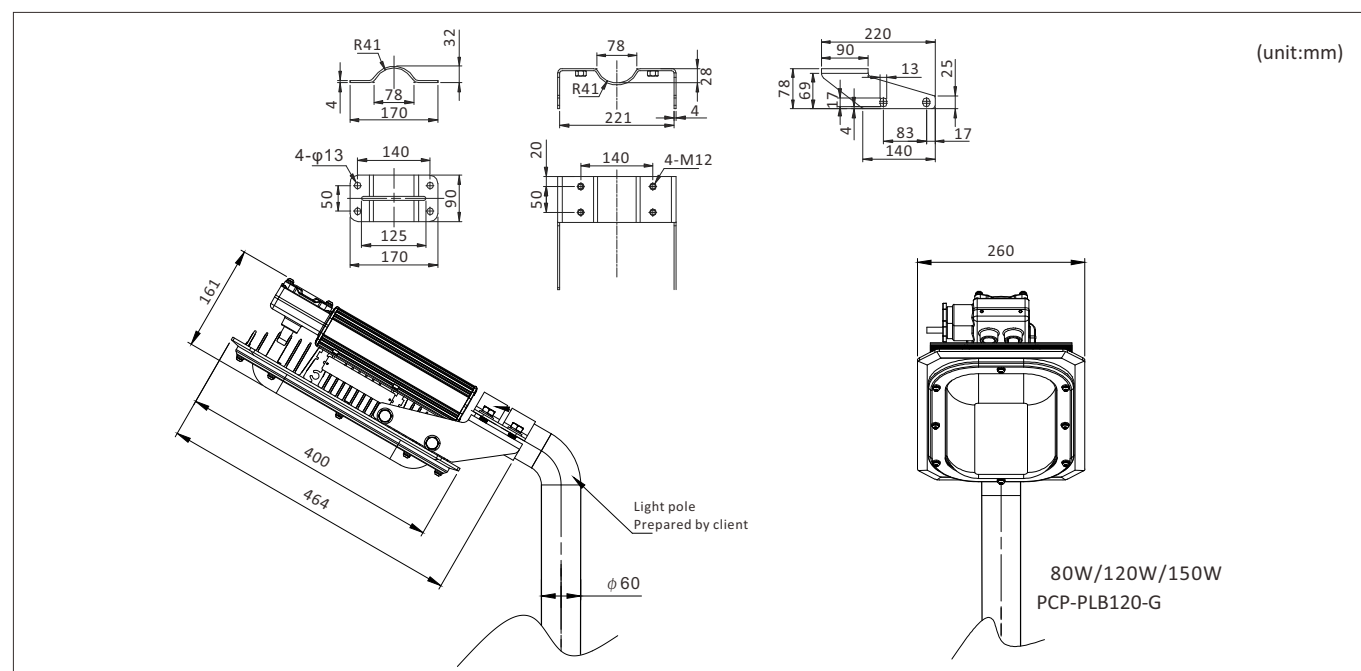
Installation Method



Pole Mount



Pendant Mount



Pipe Clamp





LED Explosion Proof Floodlight/High bay light

- Polarbear Series

Standard & Certificate:		
Ex Mark:	Gas:  II 3 G Ex nR IICT* Gc Dust:  II 3 D Ex tc IIIC T* Dc IP66	
Certificate:	ATEX Certification NO.:LCIE 14 ATEX 1014X IECEX Certification NO.:IECEX CQM 13.0044X	CE RoHS
Executive Standard:	(IEC)EN 60079-0, (IEC)EN 60079-15,(IEC)EN 60079-31 EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8	
Classification:	Group II Zone 2 & 22	
Electrical & Photometric Features:		
Luminarie Efficacy:	147lm/W	
Lifespan:	>100,000 hours	
Operating Voltage:	100-277 VAC/220-240 VAC/100-130 VAC 141-392 VDC/311-339 VDC/141-184 VDC	
Power:	80W/120W/160W/200W/240W	
Frequency:	50/60Hz	
Power Factor:	>0.98	
THD:	<10%	
CRI:	>70	
Insulation Class:	I	
Surge Protection:	4KV/6KV	
LED Driver:	Over voltage protection/short circuit protection	
Mechanical Features:		
Weight:	11Kg(80W,120W,160W)/18.4Kg(200W,240W)	
Size:	260*400*161mm(80W,120W,160W)/500*400*161mm(200W,240W)	
Ambient Temperature:	-40℃~+55℃	
Connecting Terminals:	3*1.0-4.0mm²(L+N+PE)	
Cable Entries:	2 x NPT 3/4″ (M20*1.5, M25*1.5 are optional)	
Earthing Protection:	M4 (Internal & external earth bolts)	
IP Code:	IP66	
Enclosure Maternal:	Copper-free Aluminium	
Enclosure Colour:	Grey RAL7040	
Coating:	Epoxy powder coating	
Exposed Fastener:	Stainless steel	
Protective Cover:	Tempered glass,Stand 7J impact	

Product Definition

Ex	K	PLB	XX	XX	XX	XX	-X	-X
Type	Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Area	Color
Ex-Explosion Proof			80-80W 120-120W 160-160W 200-200W 240-240W		H1V1(15°) H4V4(60°) H5V5(80°) H6V6(120°) SL(C0-180°;90°;C90-270°;150°)		E- English	
	K-KHJ	PLB-Polar Bear series		Default-100-277 VAC 100-130 VAC 220-240 VAC		WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K		G-Grey

Ordering Information

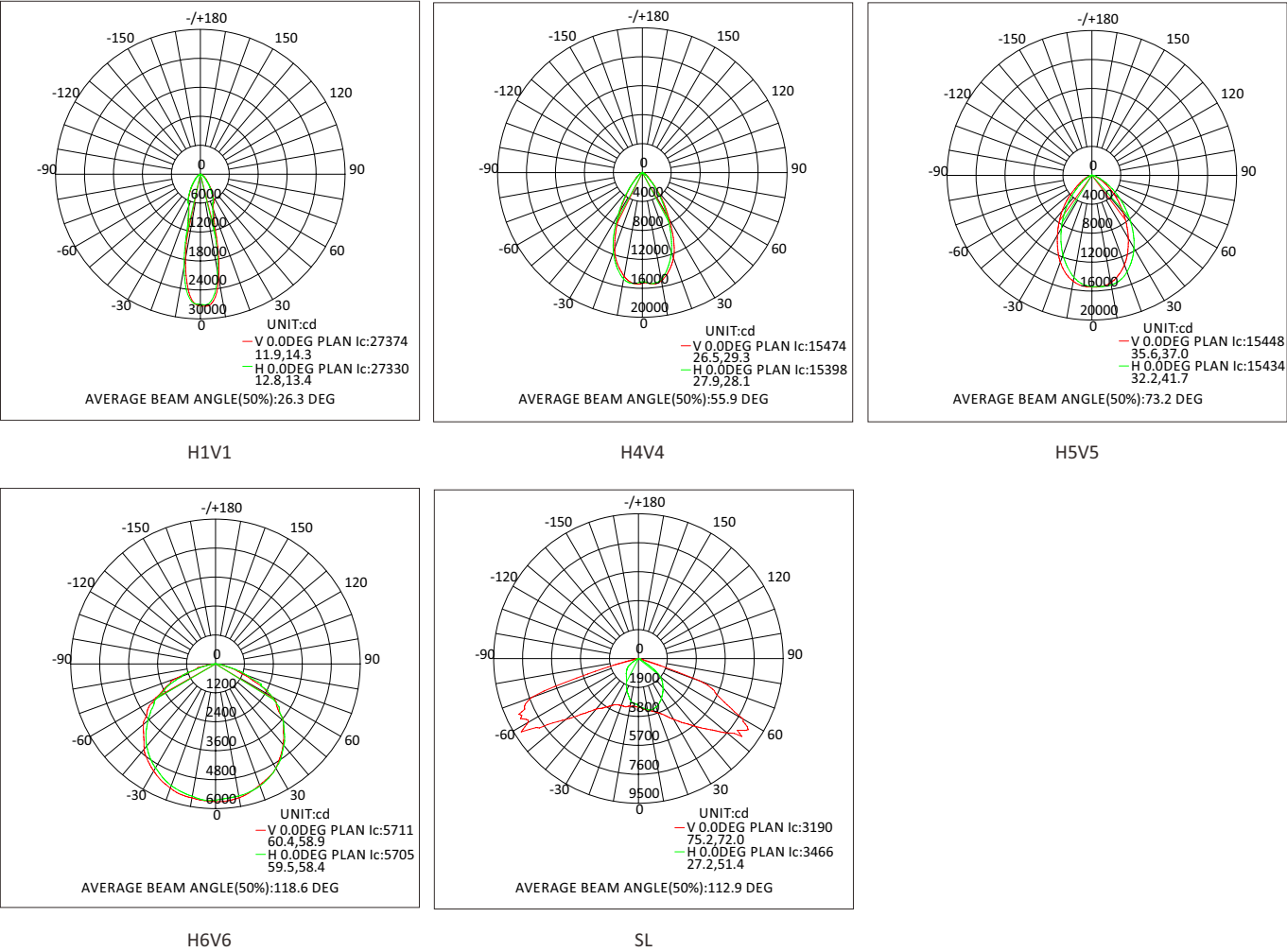
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)	Temp. Classification -40℃-+55℃
Ex-KPLB80*WM-E	100-277 AC (141-392 DC)	10920	80	Warm white	3000±300	T6/T5
Ex-KPLB80*NH-E		11760	80	Natural white	4000±300	T6/T5
Ex-KPLB80*NH-E		11760	80	Natural white	5000±300	T6/T5
Ex-KPLB80*CH-E		11760	80	Cool white	5700±300	T6/T5
Ex-KPLB120*WM-E		16380	120	Warm white	3000±300	T6/T5
Ex-KPLB120*NH-E		17640	120	Natural white	4000±300	T6/T5
Ex-KPLB120*NH-E		17640	120	Natural white	5000±300	T6/T5
Ex-KPLB120*CH-E		17640	120	Cool white	5700±300	T6/T5
Ex-KPLB160*WM-E		21840	160	Warm white	3000±300	T6/T5
Ex-KPLB160*NH-E		23520	160	Natural white	4000±300	T6/T5
Ex-KPLB160*NH-E		23520	160	Natural white	5000±300	T6/T5
Ex-KPLB160*CH-E		23520	160	Cool white	5700±300	T6/T5
Ex-KPLB200*WM-E		27300	200	Warm white	3000±300	T6/T5
Ex-KPLB200*NH-E		29400	200	Natural white	4000±300	T6/T5
Ex-KPLB200*NH-E		29400	200	Natural white	5000±300	T6/T5
Ex-KPLB200*CH-E		29400	200	Cool white	5700±300	T6/T5
Ex-KPLB240*WM-E		32760	240	Warm white	3000±300	T5/T4
Ex-KPLB240*NH-E		35280	240	Natural white	5000±300	T5/T4
Ex-KPLB240*NH-E		35280	240	Natural white	4000±300	T5/T4
Ex-KPLB240*CH-E		35280	240	Cool white	5700±300	T5/T4

Remarks: 1.* Stands for beam angle,including H1V1 / H4V4 / H5V5 / H6V6 / SL;
 2.For Beam angle H1V1,H4V4 and H5V5,the luminous flux will be 15% less;
 For Beam angle SL the luminous flux will be 30% less.
 3.SL beam angle is only applicable for 80W&120W.

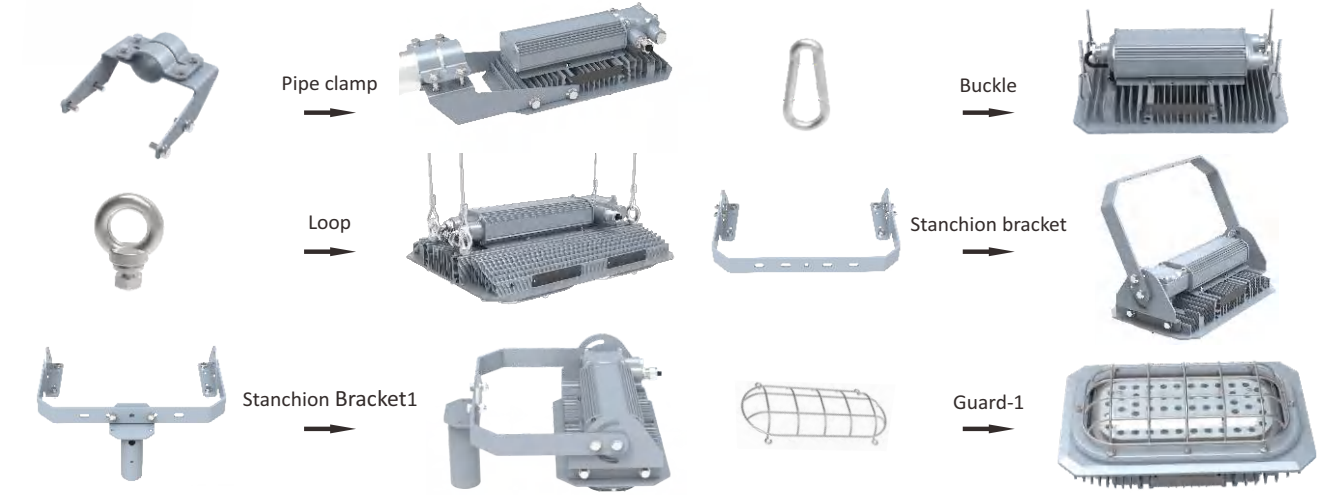
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
80W	175W~250W	175W~250W	Up to 60% reduction in energy costs
120W	250W~400W	250W~400W	
160W	400W	400W	
200W	400W~500W	400W~500W	
240W	600W~750W	600W~750W	

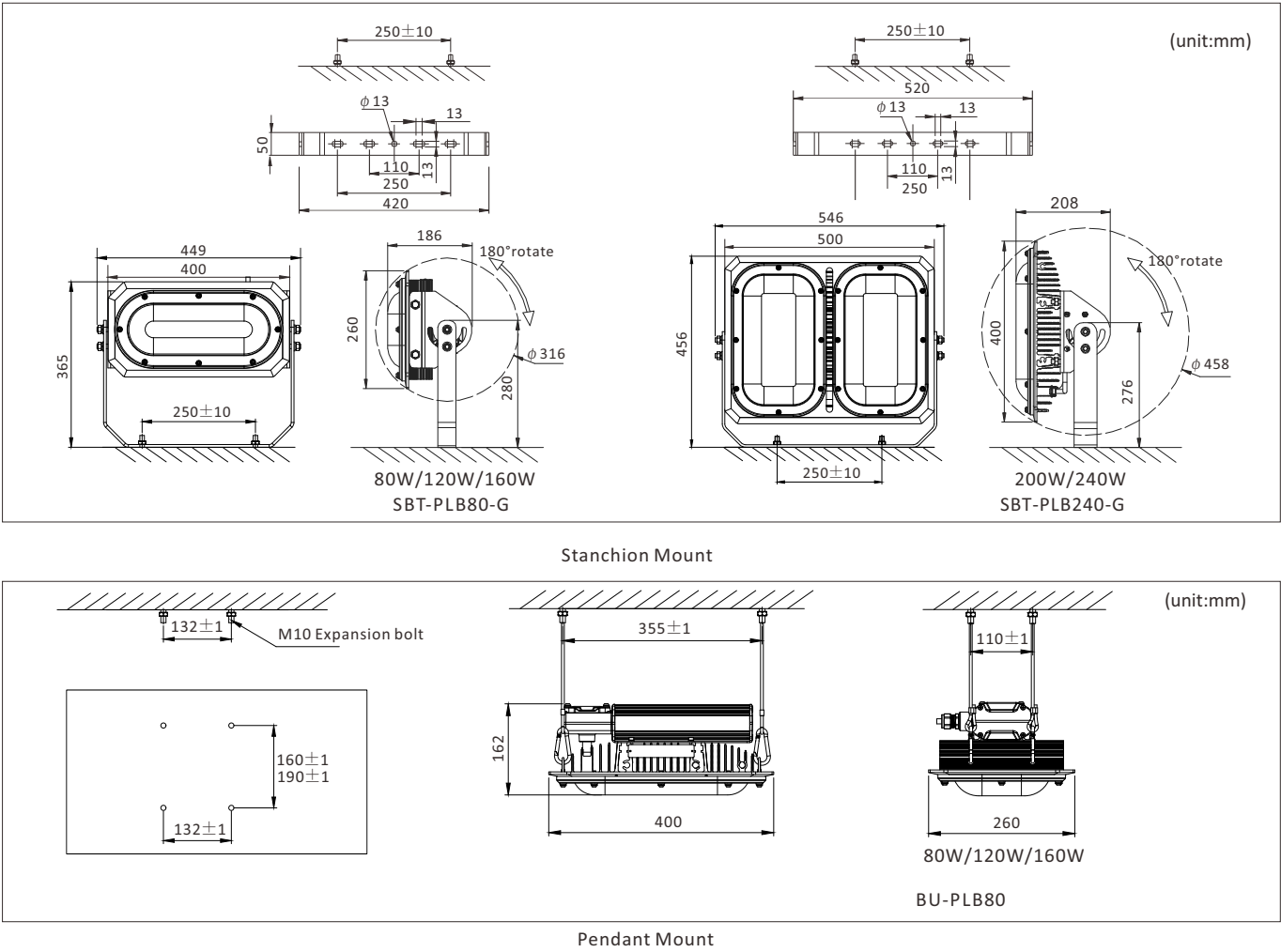
Candela Distribution



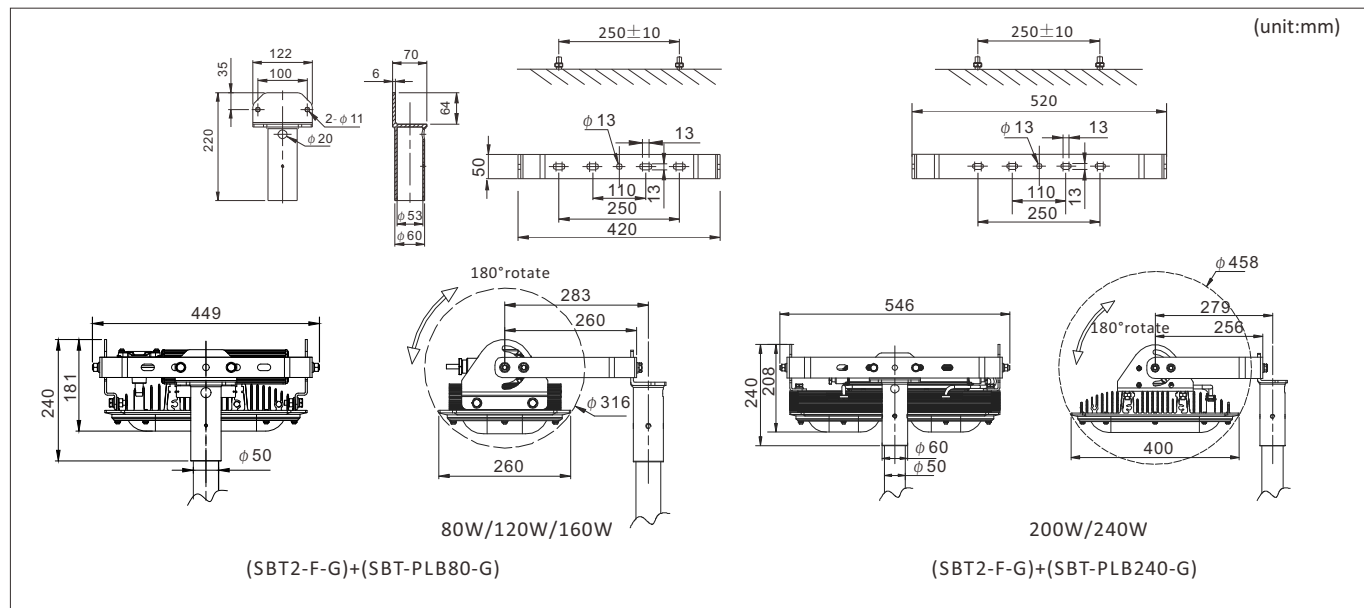
Optional Parts



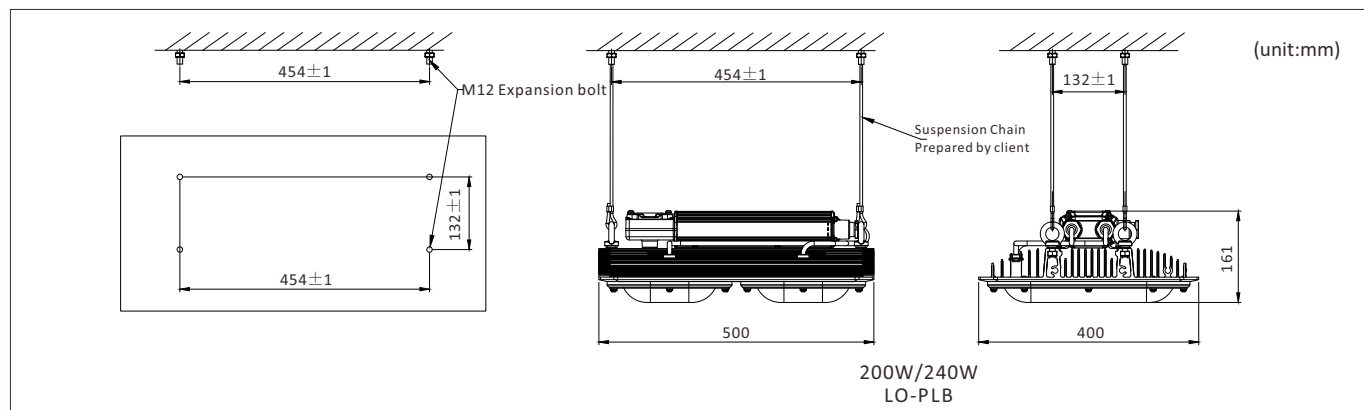
Installation Method



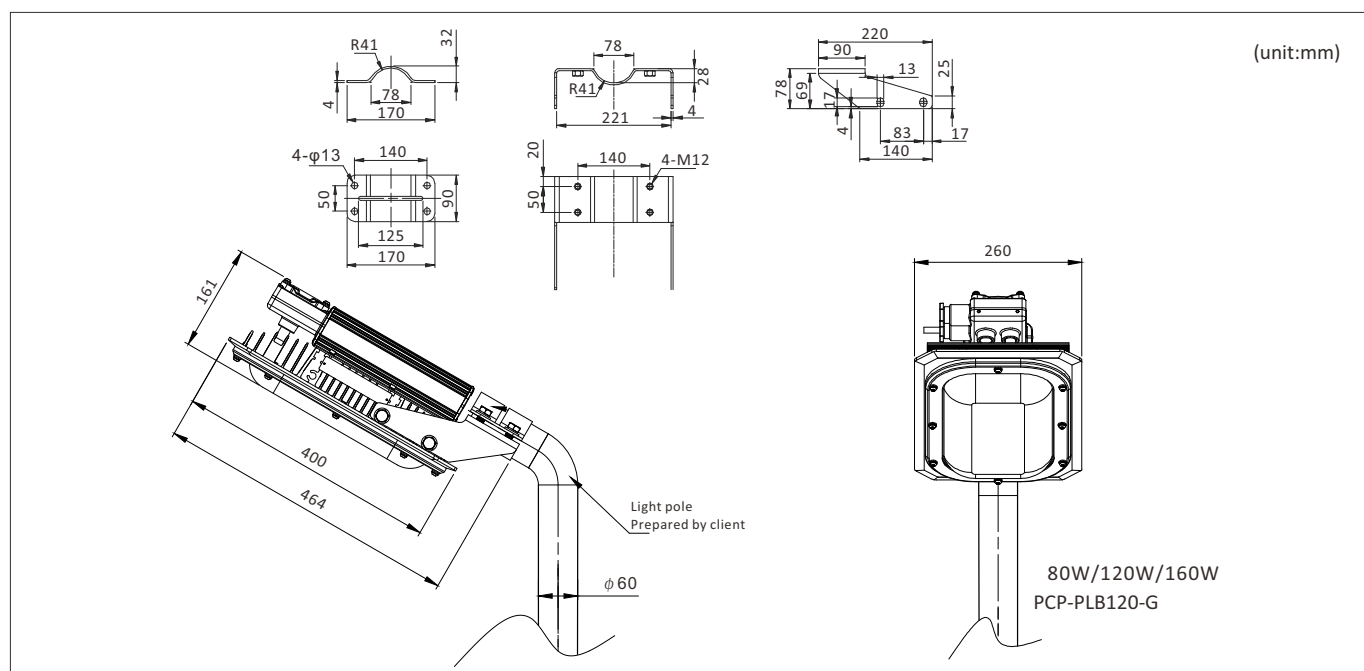
Installation Method



Pole Mount



Pendant Mount



Pipe Clamp





LED Explosion Proof Floodlight/Bay light/Platform light

- Forest Frog Series

Standard & Certificate:	
Ex Mark:	Gas: II 2 G Ex db IIC T6...T4 Gb II 2 Ex db eb IIC T6...T4 Gb Dust: II 2 D Ex tb IIIC T80°C...T130°C Db
Certificate:	ATEX Certification NO.:EPT 18 ATEX 2977 X IECEX Certification NO.:IECEX CQM 15.0039X
Executive Standard:	(IEC)EN 60079-0, (IEC)EN 60079-1, (IEC)EN 60079-7, (IEC)EN 60079-28, (IEC)EN 60079-31 EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Classification:	Group II Zone 1 & 21 and 2 & 22
Electrical & Photometric Features:	
Luminarie Efficacy:	136.5lm/W
Lifespan:	>100,000 hours
Operating Voltage:	24-48 VAC/100-277 VAC 10-30 VDC/24-48 VDC/141-392 VDC
Power:	30W/45W/60W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	5KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	3.3Kg
Size:	φ 220*191mm
Ambient Temperature:	-40℃~+55℃
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Cable Entries:	1 x NPT 3/4" (M25*1.5 option)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Orange,RAL2011(optional grey RAL7040)
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact



Product Definition

Ex	K	FF	XX	XX	XX	XX	-X	-J	-X	-X	
Type	Brand	Series	Power	Input Voltage	Candela	Distribution	CCT(K)	Type	Junction box	Area	Color
Ex-Explosion Proof											
	K-KHJ	FF-ForestFrog	30-30W 45-45W 60-60W	Default-100-277 VAC A-24-48 VAC/DC B-10-30 VDC		H1V1(15°) H5V5(80°) H6V6(120°)	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K		J-Junction box		Default-Orange G-Grey

Ordering Information

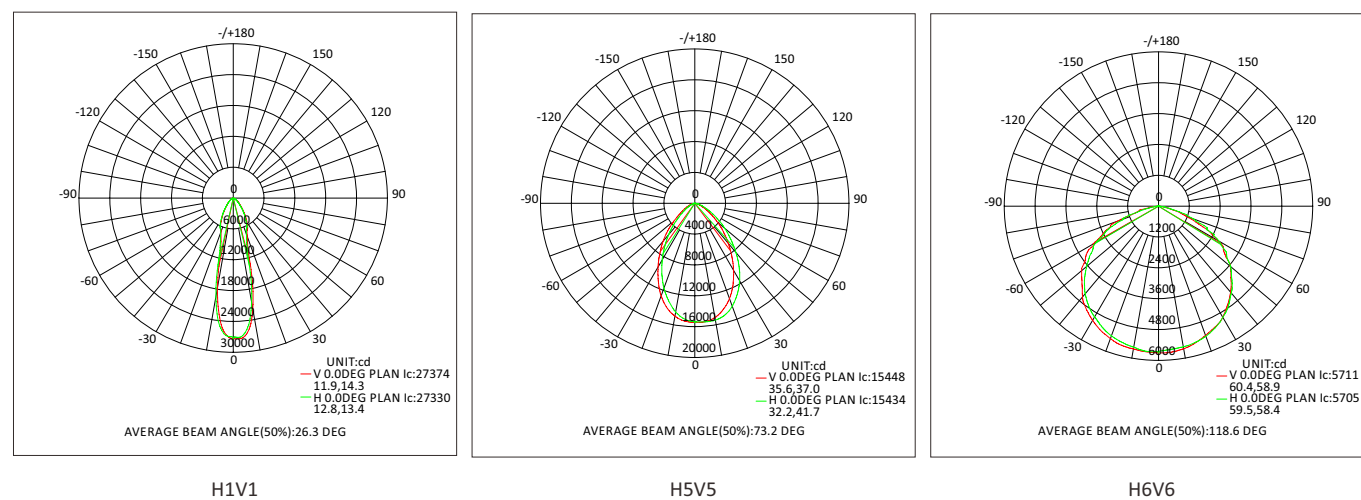
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)	Temp. Classification	
						-40℃~+40℃	-40℃~+55℃
Ex-KFF30*WM-J-E	100~277 AC (141~392 DC)	3780	30	Warm white	3000±300	T6	T5
Ex-KFF30*NH-J-E		4095	30	Natural white	4000±300	T6	T5
Ex-KFF30*NH-J-E		4095	30	Natural white	5000±300	T6	T5
Ex-KFF30*CH-J-E		4095	30	Cool white	5700±300	T6	T5
Ex-KFF45*WM-J-E		5670	45	Warm white	3000±300	T6	T5
Ex-KFF45*NH-J-E		6142	45	Natural white	4000±300	T6	T5
Ex-KFF45*NH-J-E		6142	45	Natural white	5000±300	T6	T5
Ex-KFF45*CH-J-E		6142	45	Cool white	5700±300	T6	T5
Ex-KFF60*WM-J-E		7560	60	Warm white	3000±300	T5	T4
Ex-KFF60*NH-J-E		8190	60	Natural white	4000±300	T5	T4
Ex-KFF60*NH-J-E		8190	60	Natural white	5000±300	T5	T4
Ex-KFF60*CH-J-E		8190	60	Cool white	5700±300	T5	T4

Remarks: 1、*Stands for candela distribution, including H1V1 / H5V5 / H6V6;
2、For beam angle H1V1/H5V5,the luminous flux will be 8% less;

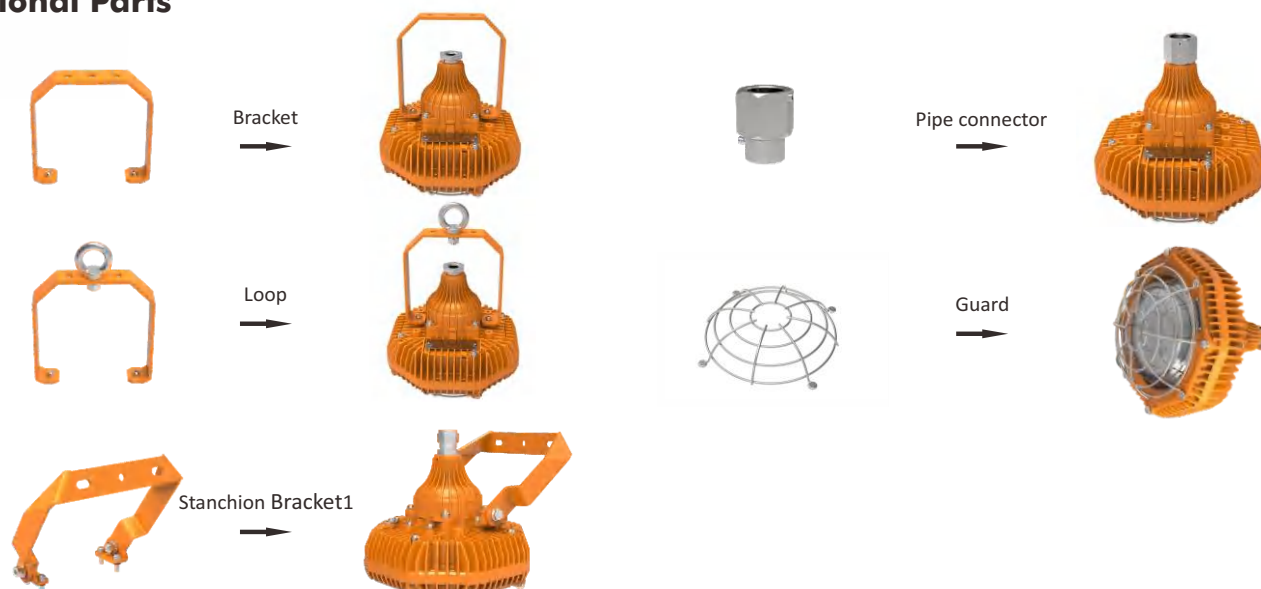
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
30W	70W	70W	Up to 60% reduction in energy costs
45W	100W~150W	100W~150W	
60W	150W~175W	150W~175W	

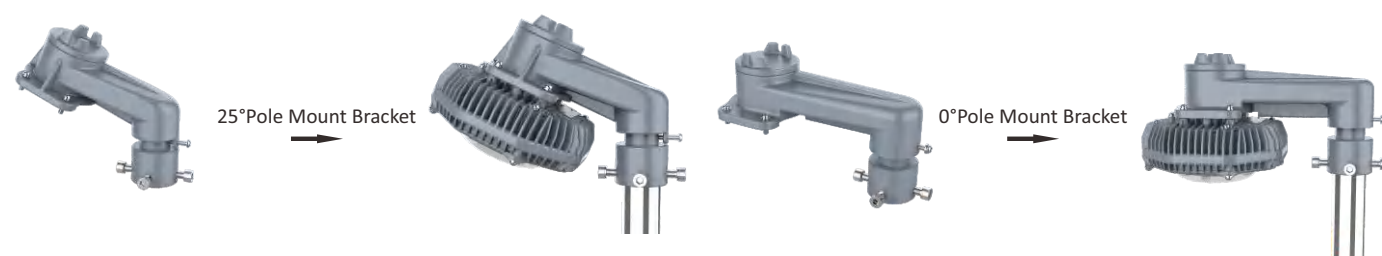
Candela Distribution



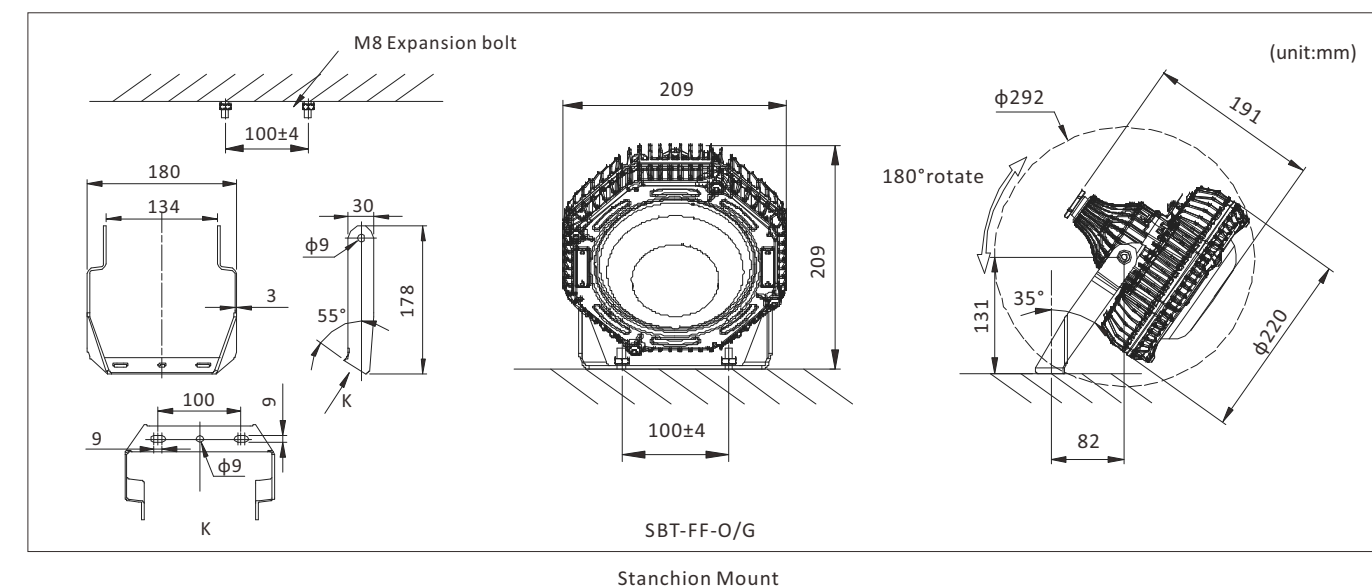
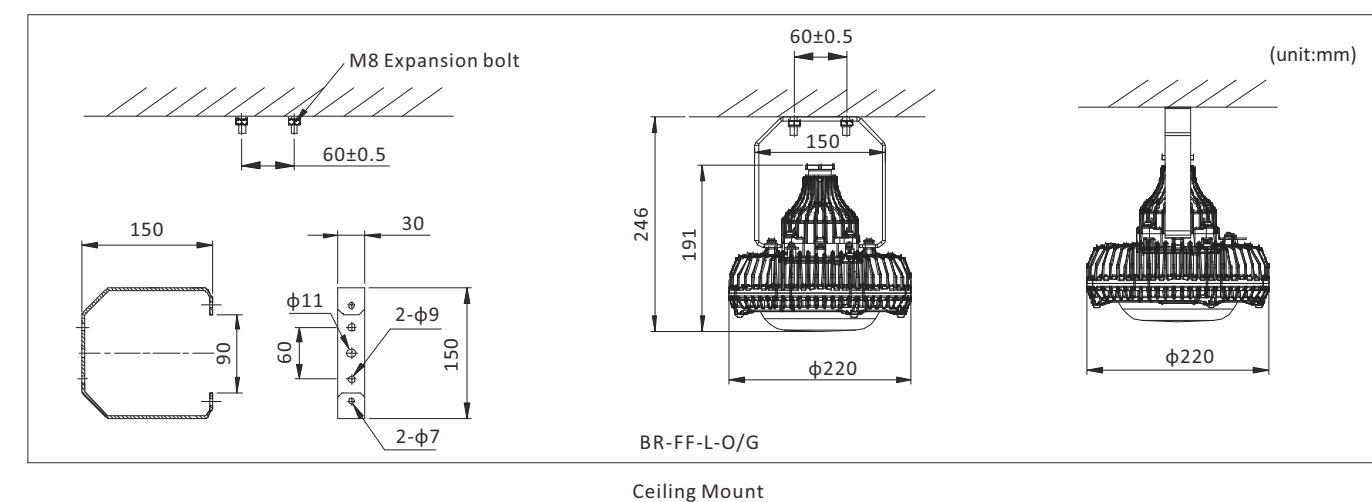
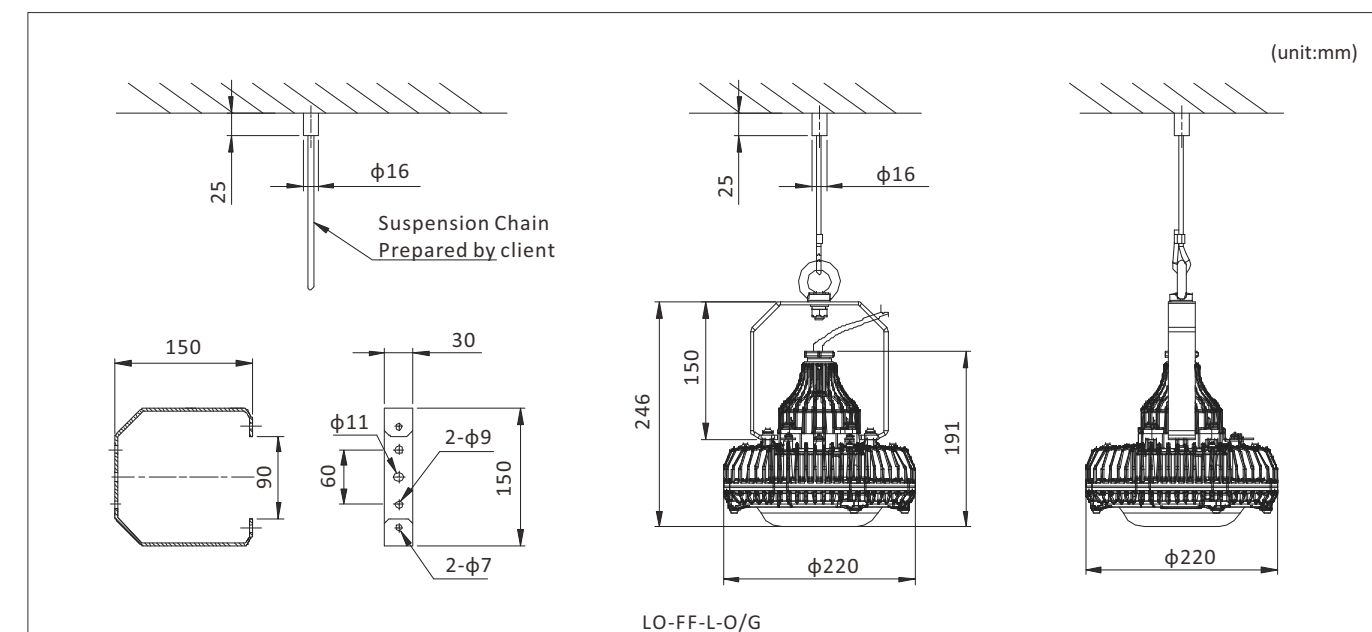
Optional Parts



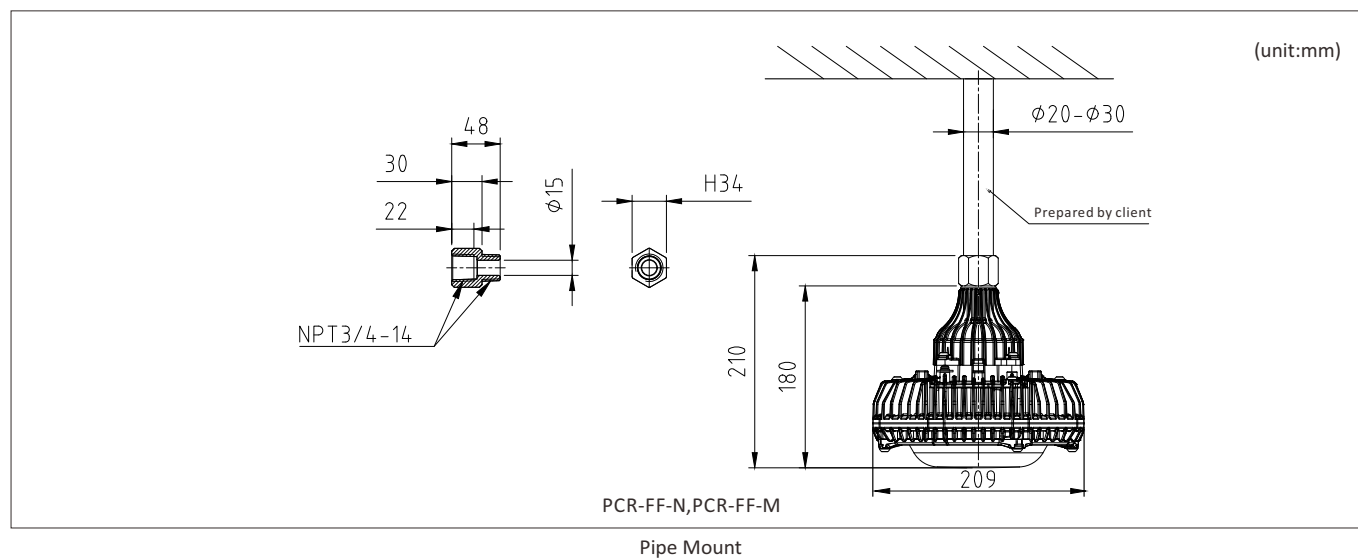
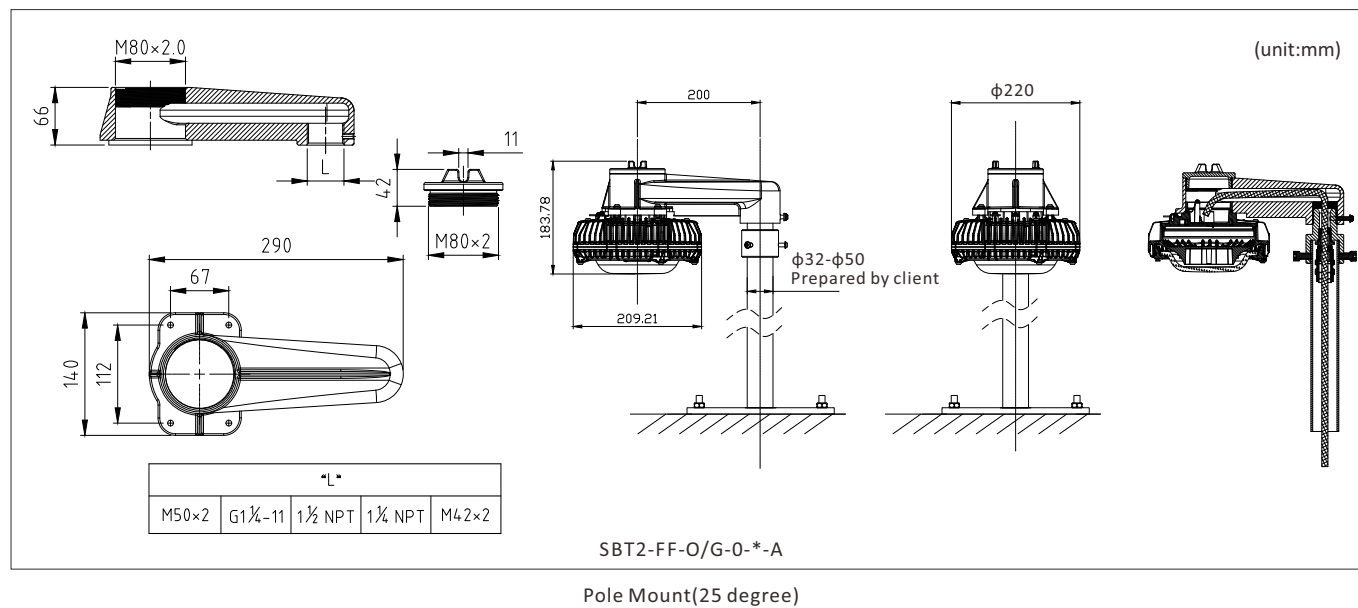
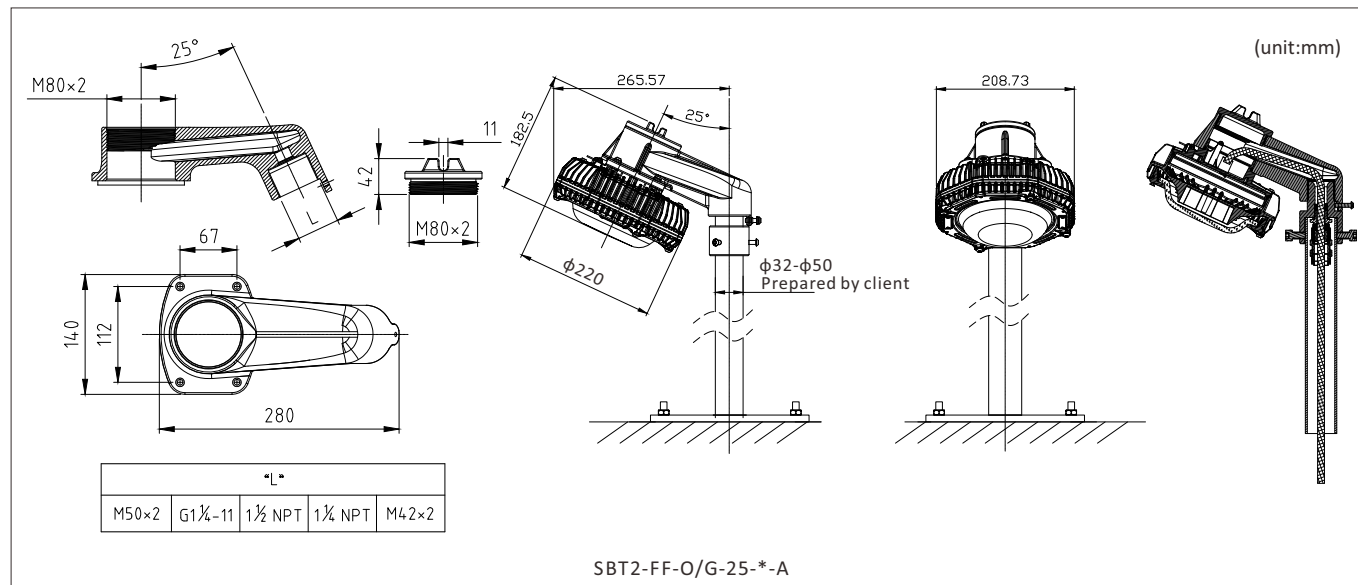
Remark: The pole mount bracket enclosure colour only grey, the lamp should be grey



Installation Method



Installation Method





LED Explosion Proof Floodlight/Bay light/Platform light

- Forest Frog Series

Standard & Certificate:	
Ex Mark:	Gas: II 2 G Ex db IIC T6...T4 Gb II 2 Ex db eb IIC T6...T4 Gb Dust: II 2 D Ex tb IIIC T80°C...T130°C Db
Certificate:	ATEX Certification NO.:EPT 18 ATEX 2977 X IECEX Certification NO.:IECEX CQM 15.0039X CE RoHS
Executive Standard:	(IEC)EN 60079-0, (IEC)EN 60079-1, (IEC)EN 60079-7, (IEC)EN 60079-28, (IEC)EN 60079-31 EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Classification:	Group II Zone 1 & 21 and 2 & 22
Electrical & Photometric Features:	
Luminarie Efficacy:	136.5lm/W
Lifespan:	>100,000 hours
Operating Voltage:	24-48 VAC/100-277 VAC 10-30 VDC/24-48 VDC/141-392 VDC
Power:	30W/45W/60W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	5KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	3.3Kg
Size:	φ 220*162mm
Ambient Temperature:	-40℃~+55℃
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Available cable outer diameter:	φ7-φ14(mm)
Cable Entries:	4 x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Orange,RAL2011(optional grey RAL7040)
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition

Ex	K	FF	XX	XX	XX	XX	-J	X	-X	-X	
Type	Brand	Series	Power	Input Voltage	Candela	Distribution	CCT(K)	Junction box	Drillings	Area	Color
Ex-Explosion Proof											
	K-KHJ	FF-ForestFrog	30-30W 45-45W 60-60W	Default-100-277 VAC A-24-48 VAC/DC B-10-30 VDC	H1V1(15°) H5V5(80°) H6V6(120°)	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K	J1-Junction box	A:  B:  C:  D:  E: 	E- English	Default-Orange G-Grey	

Ordering Information

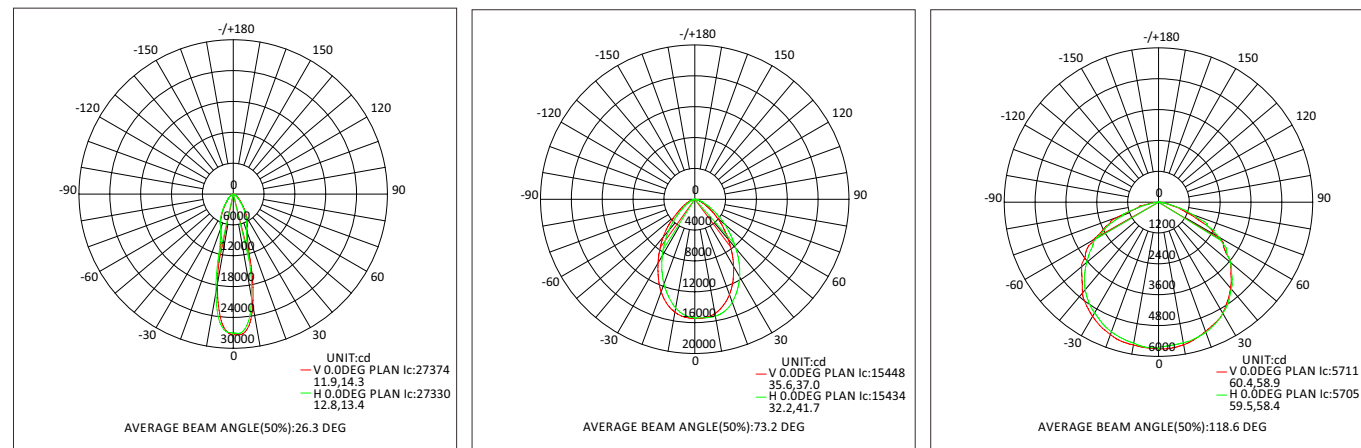
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)	Temp. Classification	
						-40℃~+40℃	-40℃~+55℃
Ex-KFF30*WM-J1*-E	100~277 AC (141~392 DC)	3780	30	Warm white	3000±300	T6	T5
Ex-KFF30*NH-J1*-E		4095	30	Natural white	4000±300	T6	T5
Ex-KFF30*NH-J1*-E		4095	30	Natural white	5000±300	T6	T5
Ex-KFF30*CH-J1*-E		4095	30	Cool white	5700±300	T6	T5
Ex-KFF45*WM-J1*-E		5670	45	Warm white	3000±300	T6	T5
Ex-KFF45*NH-J1*-E		6142	45	Natural white	4000±300	T6	T5
Ex-KFF45*NH-J1*-E		6142	45	Natural white	5000±300	T6	T5
Ex-KFF45*CH-J1*-E		6142	45	Cool white	5700±300	T6	T5
Ex-KFF60*WM-J1*-E		7560	60	Warm white	3000±300	T5	T4
Ex-KFF60*NH-J1*-E		8190	60	Natural white	4000±300	T5	T4
Ex-KFF60*NH-J1*-E		8190	60	Natural white	5000±300	T5	T4
Ex-KFF60*CH-J1*-E		8190	60	Cool white	5700±300	T5	T4

Remarks: 1、* Stands for candela distribution, including H1V1 / H5V5 / H6V6; * stands for Drillings Type
2、For beam angle H1V1/H5V5,the luminous flux will be 8% less;

KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
30W	70W	70W	Up to 60% reduction in energy costs
45W	100W~150W	100W~150W	
60W	150W~175W	150W~175W	

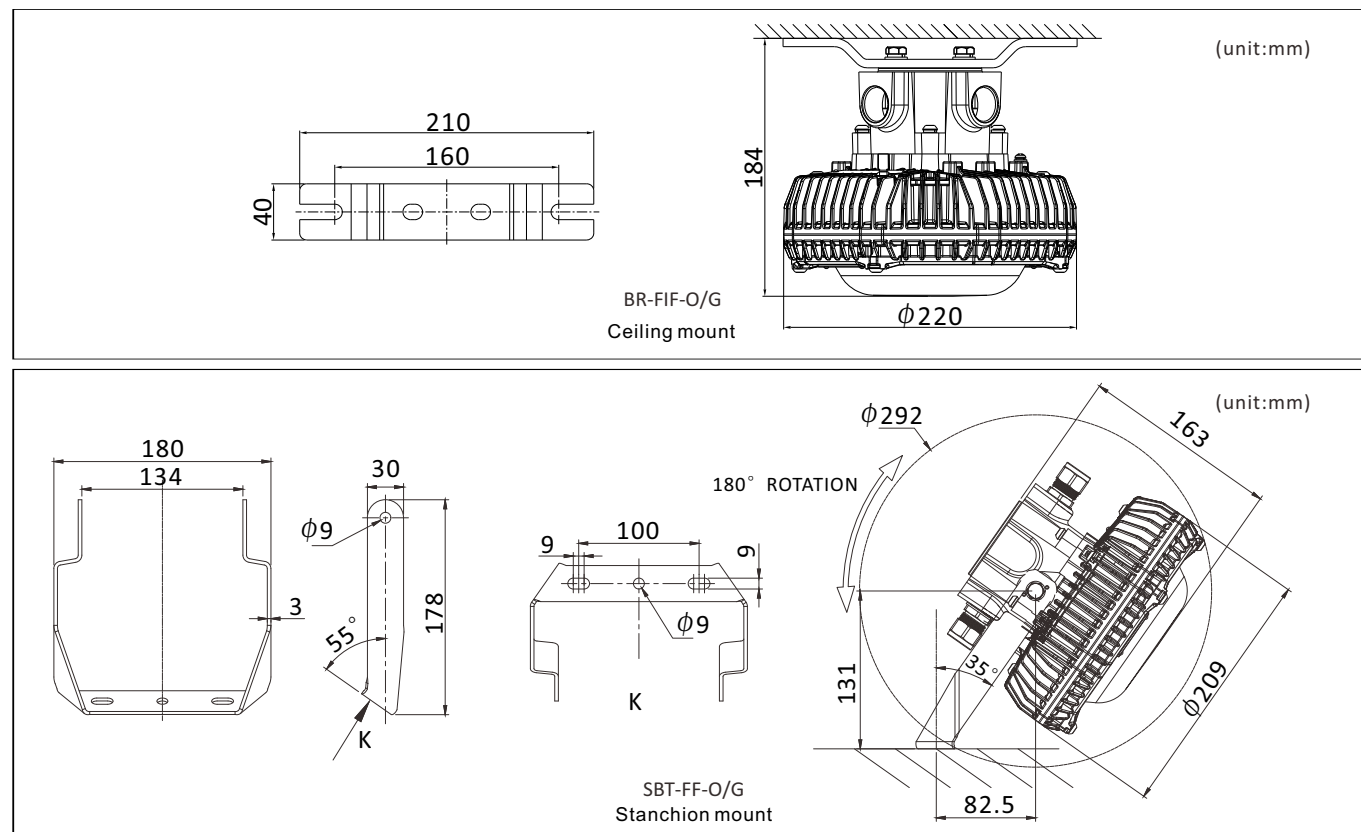
Candela Distribution



Optional Parts

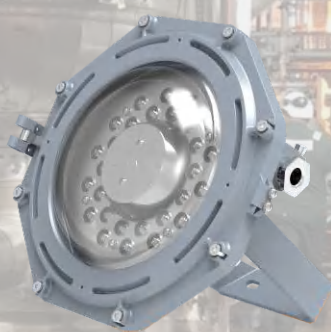


Installation Method





ATEX & IECEX Certified LED Floodlight/Bay light
in Hazardous Area



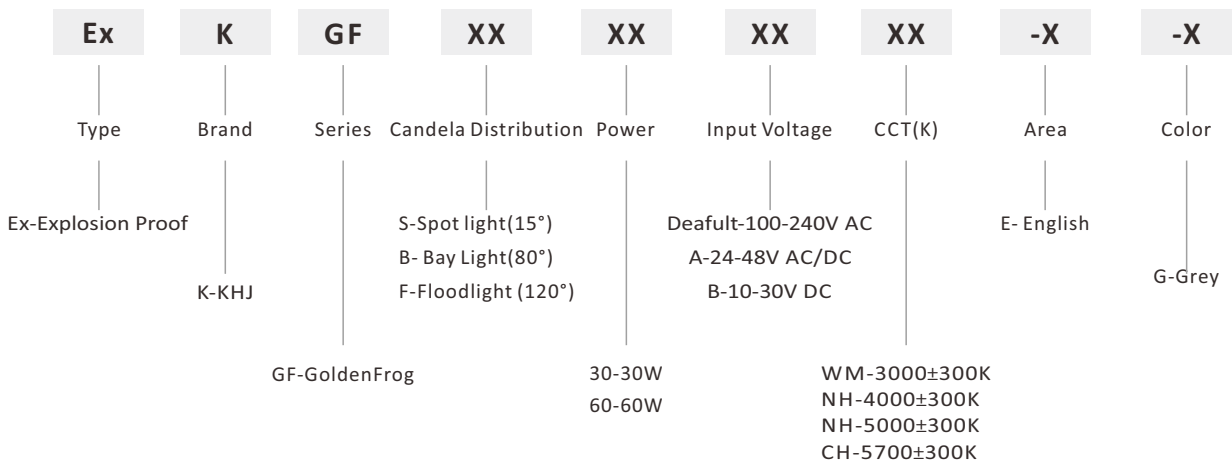
LED Explosion Proof Floodlight/Bay light
- Golden Frog Series

Standard & Certificate:		
Ex Mark:	Gas:  II 2 G Ex d IIB T5 or T6 Gb Dust:  II 2 D Ex t IIIC T95℃ or T80℃ Db IP66	
Certificate:	ATEX Certification NO.:LCIE 12 ATEX 3070X IECEX Certification NO.:IECEX CQM 12.0033X	CE RoHS
Executive Standard:	(IEC)EN 60079-0, (IEC)EN 60079-1, (IEC)EN 60079-31 EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8	
Classification:	Group II Zone 1 & 21 and 2 & 22	
Electrical & Photometric Features:		
Luminarie Efficacy:	136.5lm/W	
Lifespan:	>100,000 hours	
Operating Voltage:	24-48 VAC/100-240 VAC 10-30 VDC/24-48 VDC/141-339 VDC	
Power:	30W/60W	
Frequency:	50/60Hz	
Power Factor:	>0.98	
THD:	<10%	
CRI:	>70	
Insulation Class:	I	
Surge Protection:	5KV	
LED Driver:	Over voltage protection/short circuit protection	
Mechanical Features:		
Weight:	5.5Kg	
Size:	311*284*190mm	
Ambient Temperature:	-40℃-+55℃	
Connecting Terminals:	3*1.0-4.0mm²(L+N+PE)	
Cable Entries:	2 x NPT 3/4" (M20*1.5, M25*1.5 are optional)	
Earthing Protection:	M4 (Internal & external earth bolts)	
IP Code:	IP66	
Enclosure Maternal:	Die-casting aluminium alloy	
Enclosure Colour:	Grey RAL7040	
Coating:	Epoxy powder coating	
Exposed Fastener:	Stainless steel	
Protective Cover:	Tempered glass,Stand 7J impact	

ATEX & IECEX Certified LED Floodlight/Bay light
in Hazardous Area



Product Definition



Ordering Information

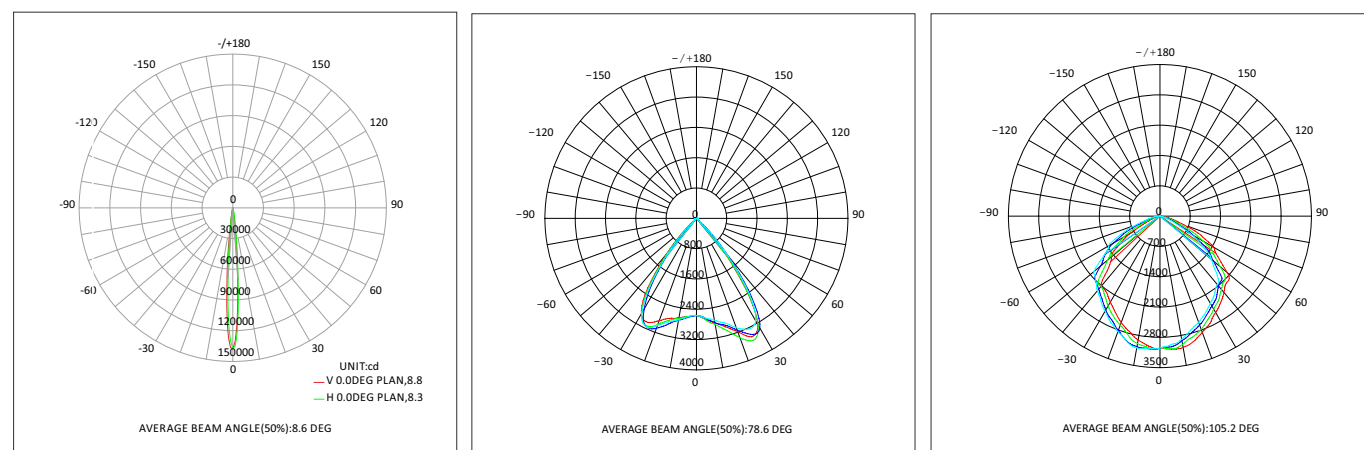
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)	Beam Distribution	Temp. Classification -40℃~+55℃
Ex-KGFF30WM-E-G	100~240 AC (141~339 DC)	3780	30	Warm white	3000±300	120°	T6
Ex-KGFF30NH-E-G		4095	30	Natural white	4000±300	120°	T6
Ex-KGFF30NH-E-G		4095	30	Natural white	5000±300	120°	T6
Ex-KGFF30CH-E-G		4095	30	Cool white	5700±300	120°	T6
Ex-KGFB30WM-E-G		3450	30	Warm white	3000±300	80°	T6
Ex-KGFB30NH-E-G		3780	30	Natural white	4000±300	80°	T6
Ex-KGFB30NH-E-G		3780	30	Natural white	5000±300	80°	T6
Ex-KGFB30CH-E-G		3780	30	Cool white	5700±300	80°	T6
Ex-KGFS30WM-E-G		2850	30	Warm white	3000±300	15°	T6
Ex-KGFS30NH-E-G		3150	30	Natural white	4000±300	15°	T6
Ex-KGFS30NH-E-G		3150	30	Natural white	5000±300	15°	T6
Ex-KGFS30CH-E-G		3150	30	Cool white	5700±300	15°	T6
Ex-KGFF60WM-E-G		7560	60	Warm white	3000±300	120°	T6/T5
Ex-KGFF60NH-E-G		8190	60	Natural white	4000±300	120°	T6/T5
Ex-KGFF60NH-E-G		8190	60	Natural white	5000±300	120°	T6/T5
Ex-KGFF60CH-E-G		8190	60	Cool white	5700±300	120°	T6/T5
Ex-KGFB60WM-E-G		6900	60	Warm white	3000±300	80°	T6/T5
Ex-KGFB60NH-E-G		7560	60	Natural white	4000±300	80°	T6/T5
Ex-KGFB60NH-E-G		7560	60	Natural white	5000±300	80°	T6/T5
Ex-KGFB60CH-E-G		7560	60	Cool white	5700±300	80°	T6/T5
Ex-KGFS60WM-E-G		5700	60	Warm white	3000±300	15°	T6/T5
Ex-KGFS60NH-E-G		6300	60	Natural white	4000±300	15°	T6/T5
Ex-KGFS60NH-E-G		6300	60	Natural white	5000±300	15°	T6/T5
Ex-KGFS60CH-E-G		6300	60	Cool white	5700±300	15°	T6/T5

Remark: Operating voltage including Default-100~240V AC; A-24-48V AC/DC; B-10-30V DC

KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
30W	70W	70W	Up to 60% reduction in energy costs
45W	100W~150W	100W~150W	
60W	150W~175W	150W~175W	

Candela Distribution

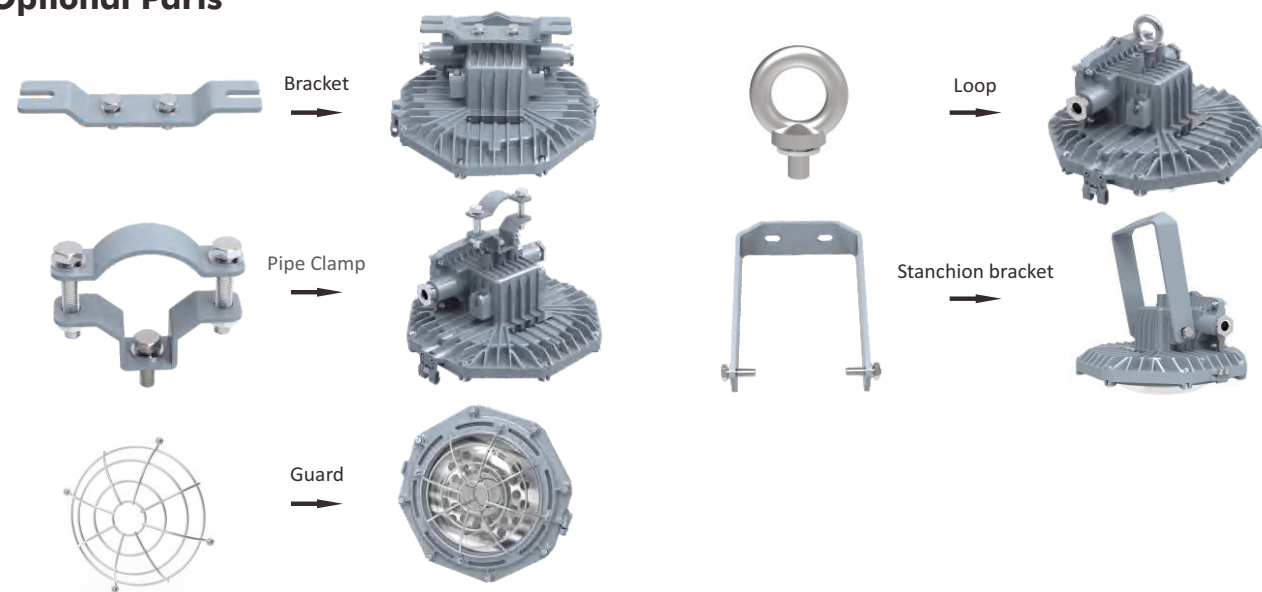


S-Spot light(15°)

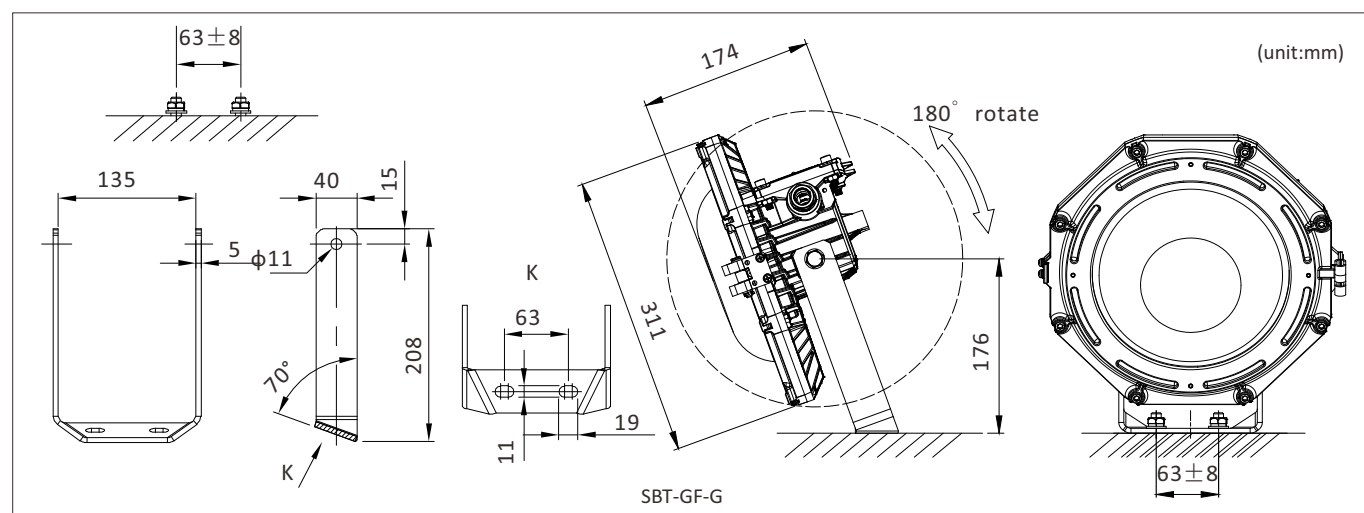
B-Bay light(80°)

F-Flood light(120°)

Optional Parts

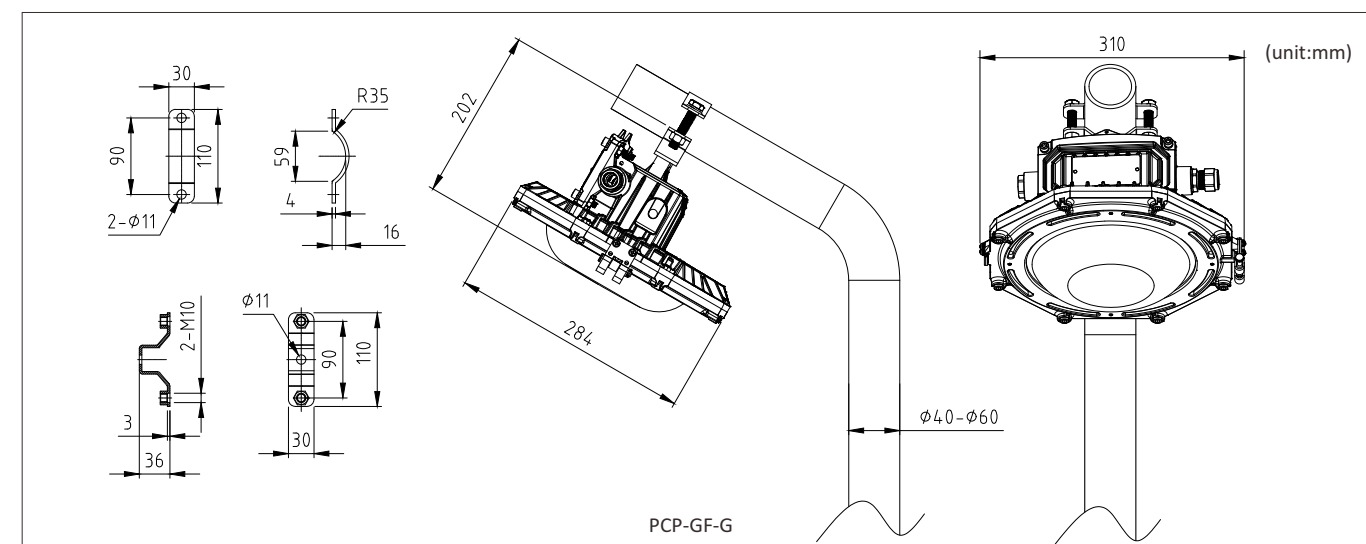


Installation Method

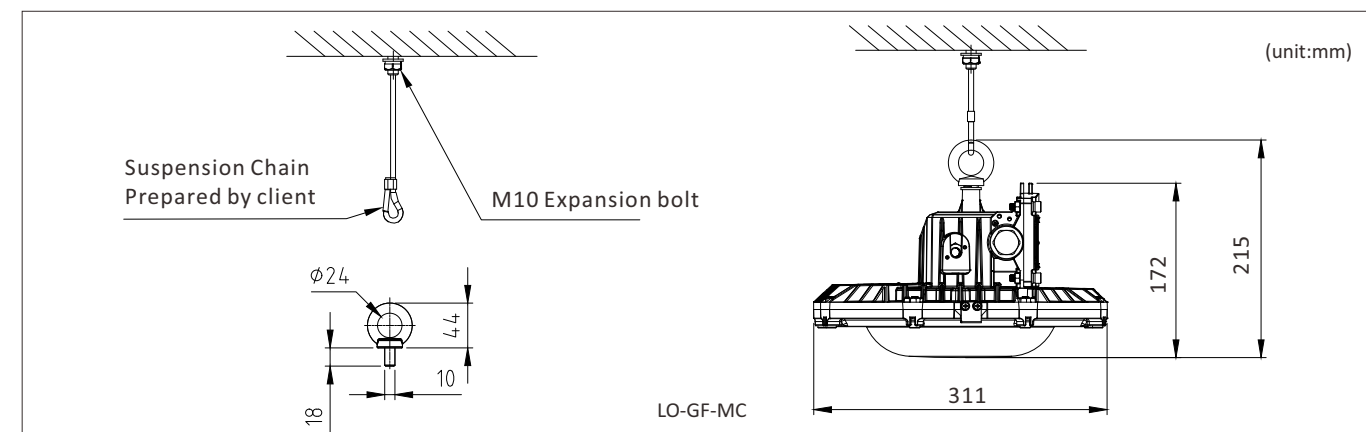


Stanchion Mount

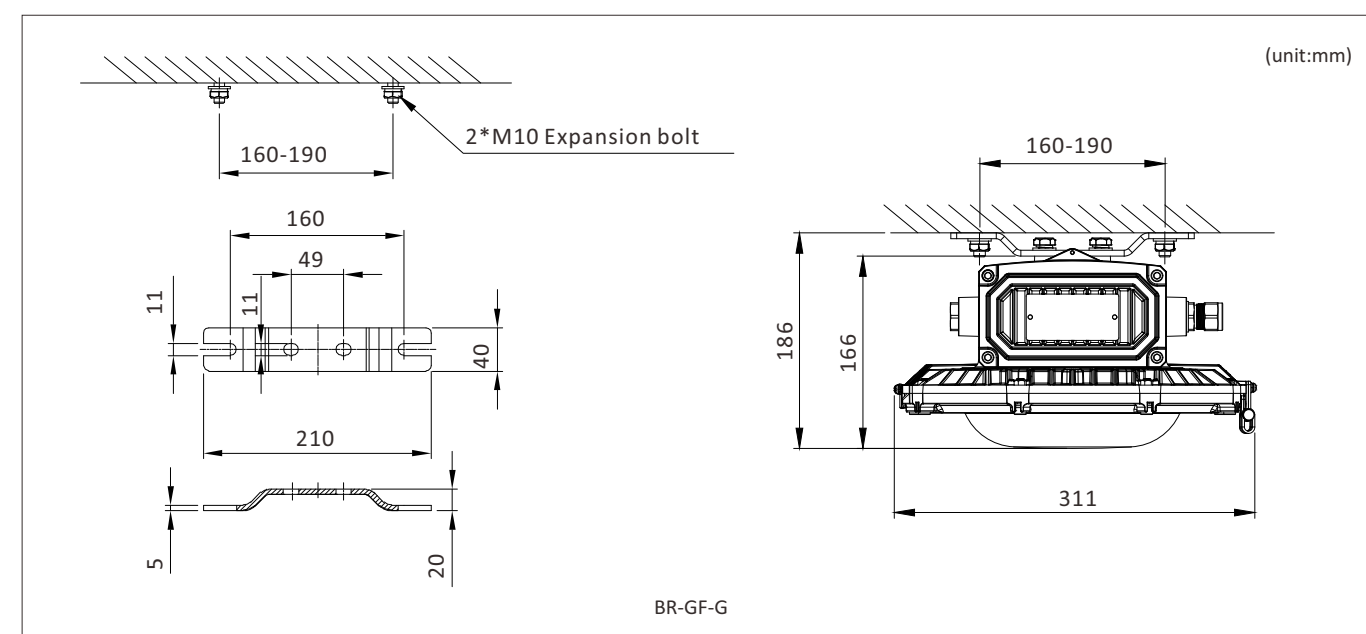
Installation Method



Pipe Clamp



Pendant Mount



Ceiling Mount

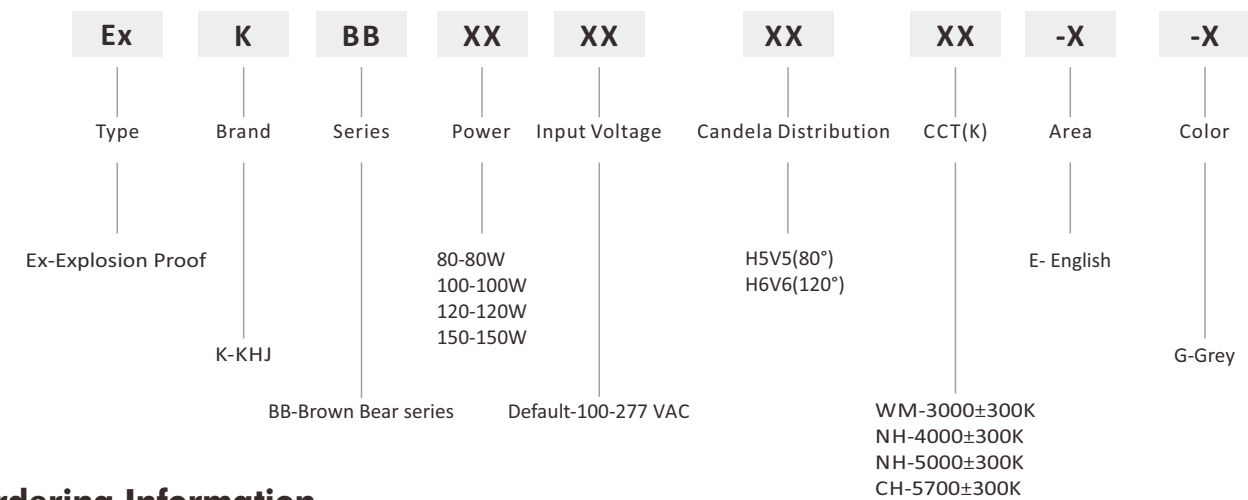


LED Explosion Proof Floodlight/Bay light

- **Brown Bear Series**

Standard & Certificate:	
Ex Mark:	Gas: II 3 G Ex nR IIC T5 or T6 Gc Dust: II 3 D Ex tc IIIC T95°C or T85°C Dc
Certificate:	ATEX Certification NO.:TÜV 15 ATEX 7672 X CE ,RoHS
Executive Standard:	(IEC)EN 60079-0, (IEC)EN 60079-15,(IEC)EN 60079-31 EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Classification:	Group II ,Zone 2 & 22
Electrical & Photometric Features:	
Luminarie Efficacy:	142lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC 141-392 VDC
Power:	80W/100W/120W/150W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	5KV(80W,100W)/10KV(120W,150W)
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	10.5Kg
Size:	336*336*163mm
Ambient Temperature:	-40℃~+55℃
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Cable Entries:	2 x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition



Ordering Information

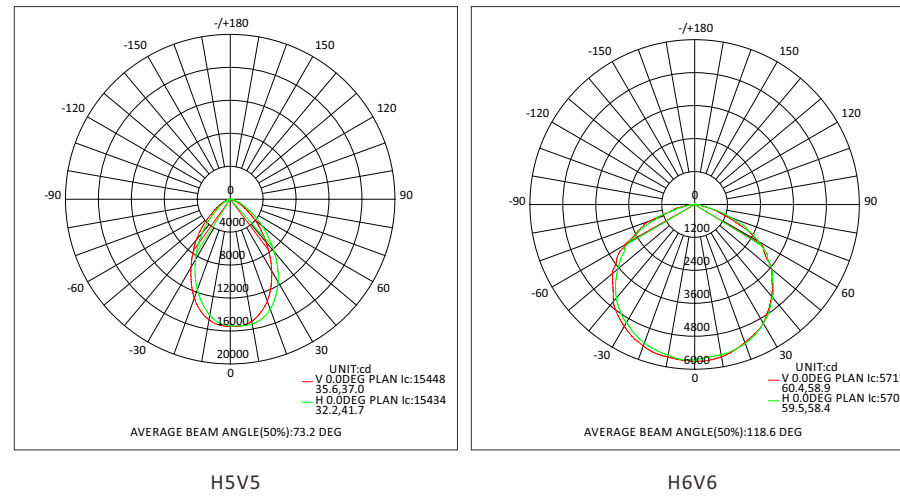
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)	Temp. Classification	
						-40℃~+55℃	-40℃~+65℃
Ex-KBB80*WM-E-G	100-277 AC (141-392 DC)	10500	80	Warm white	3000±300	T6	T5
Ex-KBB80*NH-E-G		11340	80	Natural white	4000±300	T6	T5
Ex-KBB80*NH-E-G		11340	80	Natural white	5000±300	T6	T5
Ex-KBB80*CH-E-G		11340	80	Cool white	5700±300	T6	T5
Ex-KBB100*WM-E-G		13125	100	Warm white	3000±300	T6	/
Ex-KBB100*NH-E-G		14175	100	Natural white	4000±300	T6	/
Ex-KBB100*NH-E-G		14175	100	Natural white	5000±300	T6	/
Ex-KBB100*CH-E-G		14175	100	Cool white	5700±300	T6	/
Ex-KBB120*WM-E-G		15750	120	Warm white	3000±300	T5	/
Ex-KBB120*NH-E-G		17010	120	Natural white	4000±300	T5	/
Ex-KBB120*NH-E-G		17010	120	Natural white	5000±300	T5	/
Ex-KBB120*CH-E-G		17010	120	Cool white	5700±300	T5	/
Ex-KBB150*WM-E-G		19687	150	Warm white	3000±300	T5	/
Ex-KBB150*NH-E-G		21262	150	Natural white	4000±300	T5	/
Ex-KBB150*NH-E-G		21262	150	Natural white	5000±300	T5	/
Ex-KBB150*CH-E-G		21262	150	Cool white	5700±300	T5	/

Remarks: 1.* Stands for beam angle,including H5V5 / H6V6;
2.For Beam angle H5V5,the luminous flux will be 15% less;

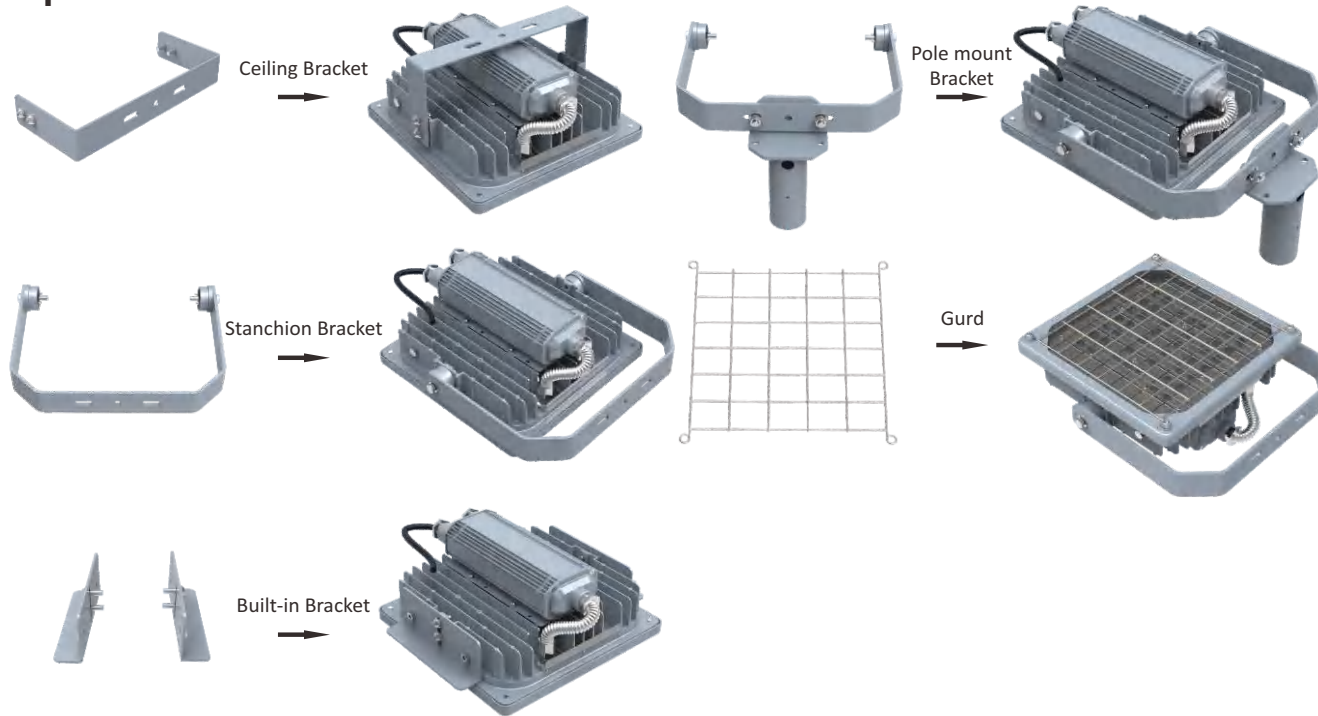
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
80W	175W~250W	175W~250W	Up to 60% reduction in energy costs
100W	250W~400W	250W~400W	
120W	250W~400W	250W~400W	
150W	400W	400W	

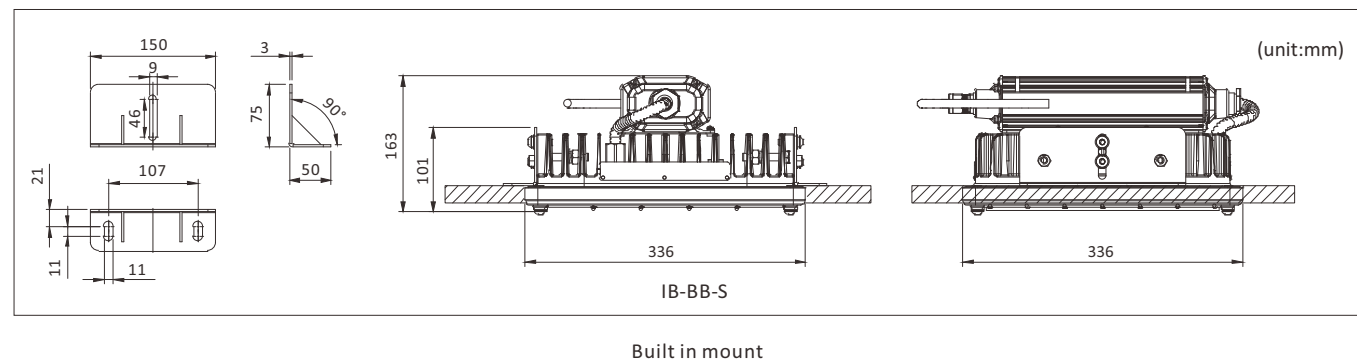
Candela Distribution



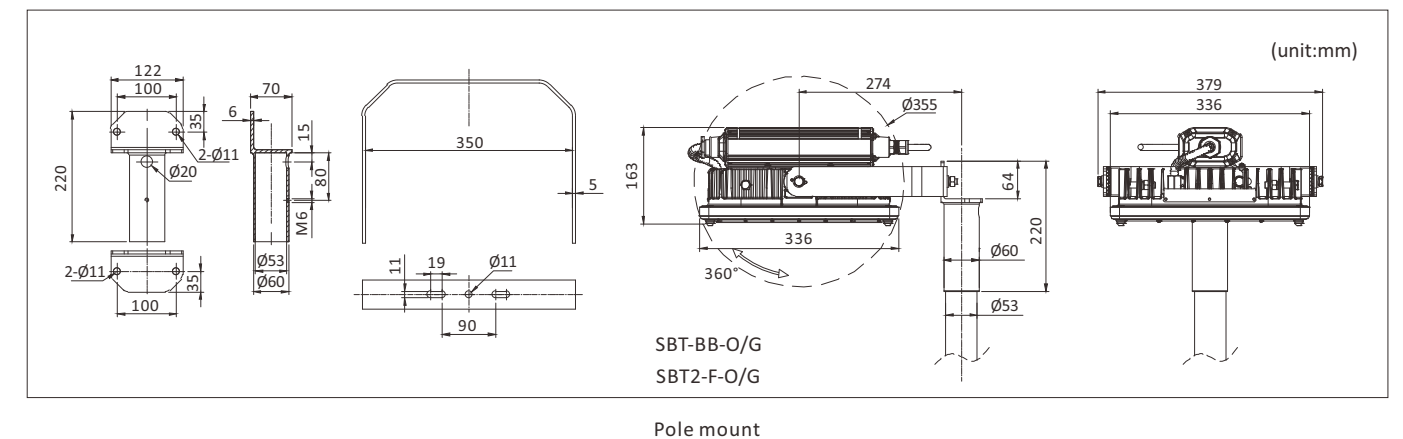
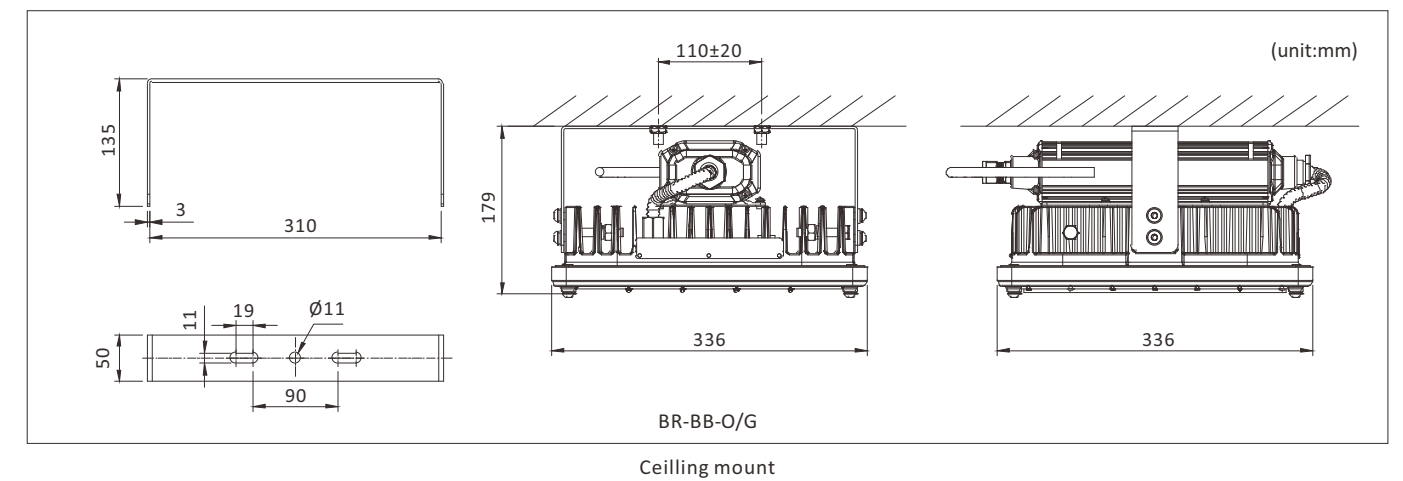
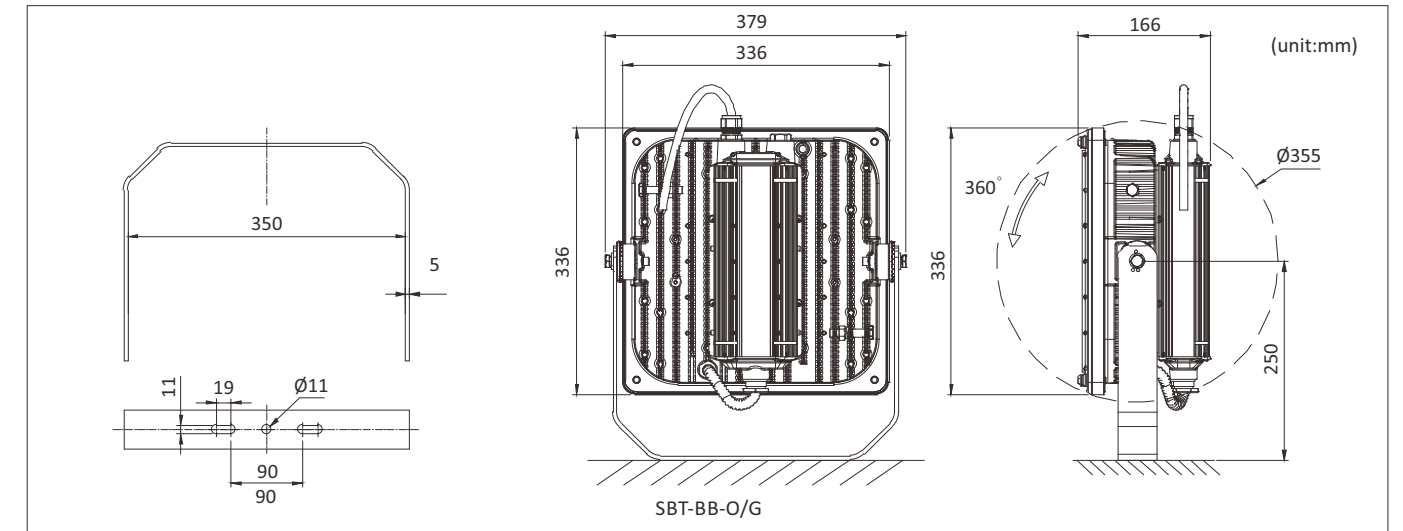
Optional Parts



Installation Method



Installation Method





LED Explosion Proof Mobile light

- Saturn Series

Standard & Certificate:	
Ex Mark:	Gas: II 2 G Ex de IIC T5 Gb IP54
Certificate:	ATEX Certification NO.:ECM 17 ATEX-B TD45 IECEx Certification NO.:IECEX CQM 16.0005X CE RoHS
Executive Standard:	EN 60079-0,EN 60079-1,EN 60079-7 IEC 60079-0:2011,IEC 60079-1:2007-04,IEC 60079-7:2006-07
Classification:	Group II Zone 1 and Zone 2
Electrical & Photometric Features:	
Luminarie Efficacy:	126lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC 141-392 VDC
Power:	5W~60W
CRI:	>70
Battery Rated Capacity:	12Ah
Battery Type:	Lead-acid batteries
Rated Lifespan:	300 Cycles
Battery Back Up:	12 h(15W);8 h(30W);4 h(60W)
Battery Charge Time:(after full discharge)	12 h-14h
Frequency:	50/60Hz
Insulation Class:	I
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	18Kg
Size:	695*350*218mm
Ambient Temperature:	-20℃~+55℃
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP54
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Orange,RAL2011
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact



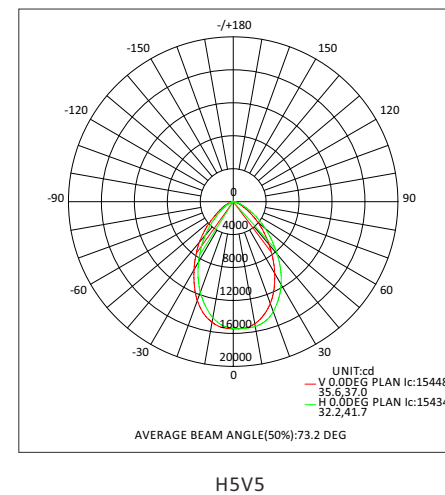
Product Definition

Ex	K	ST	BXX	XX	XX	XX	-U	-E
Type	Brand	Series	Battery Type	Capacity	Optional	CCT(K)	Type	Area
Ex-Explosion Proof			B24V-24V DC		FF-Forest Frog	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K	U- Update	E- English
	K-KHJ	ST-Saturn		12-12Ah				

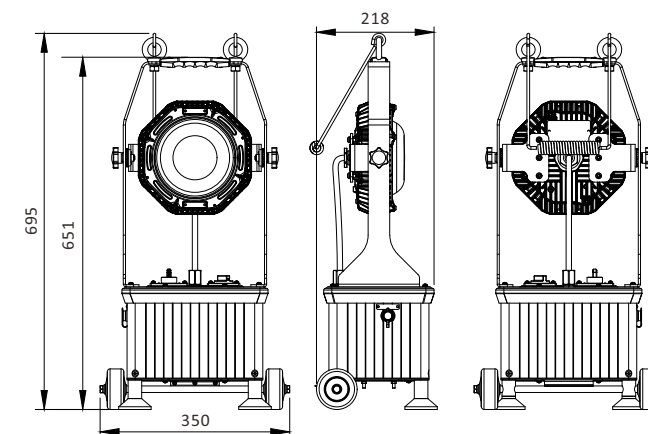
Ordering Information

P/N	Operating Voltage(V)	Color Temp.	CCT(K)	Power(W)	Luminous Flux(lm)	Temp. Classification
						-20℃~+55℃
Ex-KSTB24V12FFWM-U-E	100~277 AC (141~392 DC)	Warm white	3000±300	15	1740	T5
				30	3480	
				60	6950	
Ex-KSTB24V12FFNH-U-E		Natural white	4000±300	15	1890	
				30	3780	
				60	7560	
Ex-KSTB24V12FFNH-U-E		Natural white	5000±300	15	1890	
				30	3780	
				60	7560	
Ex-KSTB24V12FFCH-U-E		Cool white	5700±300	15	1890	
				30	3780	
				60	7560	

Candela Distribution



Size(unit:mm)





LED Explosion Proof Portable light

- Forest Frog Series

Standard & Certificate:	
Ex Mark:	Gas: II 2 G Ex db IIC T6...T4 Gb Dust: II 2 D Ex tb op is IIIC T80°C...T130°C Db
Certificate:	ATEX Certification NO.:EPT 18 ATEX 2977 X CE IECEx Certification NO.:IECEx CQM 15.0039X RoHS
Executive Standard:	(IEC)EN 60079-0, (IEC)EN 60079-1, (IEC)EN 60079-7, (IEC)EN 60079-28, (IEC)EN 60079-31 EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Classification:	Group II Zone 1 & 21 and 2 & 22
Electrical & Photometric Features:	
Luminarie Efficacy:	136.5lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC 141-392 VDC
Power:	10W/15W
CRI:	>70
Battery Capacity:	4.4 Ah
Battery Type:	Lithium battery
Battery Lifespan:	500 cycles
Light Duration:	>10h(10W)/>6h(15W)
Charging Time:(after full discharge)	3h
Frequency:	50/60Hz
Insulation Class:	I
Surge Protection:	5KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	6.5Kg(Magnetic)/5.2Kg(Bracket)
Size:	209*198*293mm(Magnetic)/209*236*303mm(Bracket)
Ambient Temperature:	-20°C~+55°C
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Orange,RAL2011
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

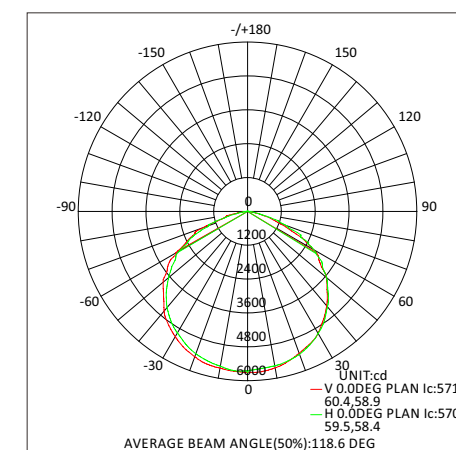
Product Definition

Ex	K	FF	XX	XX	XX	XX	-T	-X
Type	Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Type	Area
Ex-Explosion Proof				Default-100-277 VAC			T-Typical	E- English
	K-KHJ	FF-ForestFrog	10-10W 15-15W		H6V6(120°)	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K		

Ordering Information

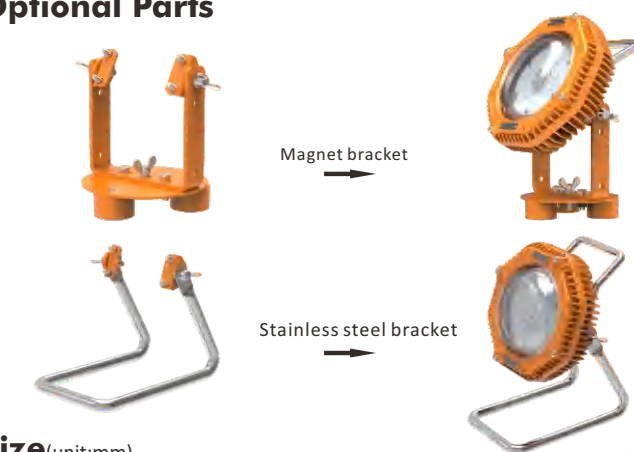
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)	Temp. Classification
						-20°C~+55°C
Ex-KFF10H6V6WM-T-E	100~277 AC (141~392 DC)	1260	10	Warm white	3000±300	T6
Ex-KFF10H6V6NH-T-E		1365	10	Natural white	4000±300	
Ex-KFF10H6V6NH-T-E		1365	10	Natural white	5000±300	
Ex-KFF10H6V6CH-T-E		1365	10	Cool white	5700±300	
Ex-KFF15H6V6WM-T-E		1890	15	Warm white	3000±300	
Ex-KFF15H6V6NH-T-E		2047	15	Natural white	4000±300	
Ex-KFF15H6V6NH-T-E		2047	15	Natural white	5000±300	
Ex-KFF15H6V6CH-T-E		2047	15	Cool white	5700±300	

Candela Distribution

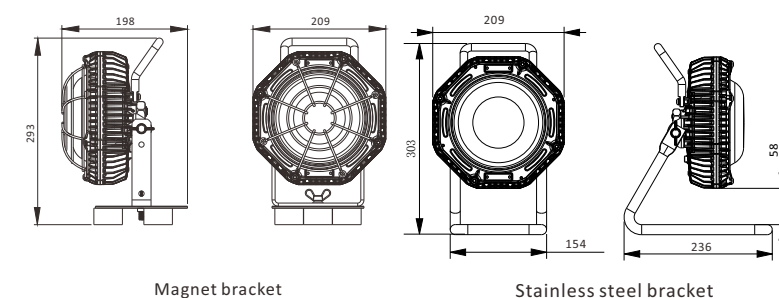


H6V6

Optional Parts



Size(unit:mm)



Magnet bracket

Stainless steel bracket



LED Explosion Proof Platform light

- Firefly Series

Standard & Certificate:	
Ex Mark:	Gas: II 2 G Ex db IIC T5 or T6 Gb Dust: II 2 D Ex tb IIC T95°C or T80°C Db IP66
Certificate:	ATEX Certification NO.:ECM 19 ATEX-B SU43 CE ,RoHS
Executive Standard:	EN 60079-0:2018,EN 60079- 1:2014,EN 60079-7:2015 EN 60079-11:2012,EN 60079-18:2015+A1:2017,EN 60079-28:2015 EN 60079-31:2014,IEC 60079-0:2018,IEC 60079-7:2015+A1:2018
Classification:	Group II Zone 1 & 21 and 2 & 22
Electrical & Photometric Features:	
Luminarie Efficacy:	136.5lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC 141-392 VDC/24 VDC
Power:	12W/24W/35W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	5KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	2.4Kg(Junction box),2.6Kg(Stanchion junction box)
Size:	φ 136*210mm(Junction box), φ 136*194mm(Stanchion junction box)
Ambient Temperature:	-40℃~+55℃
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Cable Entries:	1 x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition

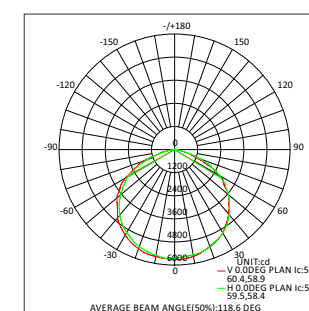
Ex	K	FIF	XX	XX	XX	XX	-X	-X	-X
Type	Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Type	Area	Color
Ex-Explosion Proof	K-KHJ	FIF-FireFly	12-12W 24-24W 35-35W	Default-100-277 VAC A-24 VDC	H6V6(120°)	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K	J-Junction box J1A-Stanchion junction box (one cable entry) J1B-Stanchion junction box (two cable entry) J1C-Stanchion junction box (three cable entry) J1D-Stanchion junction box (four cable entry)	E- English G-Grey	

Ordering Information

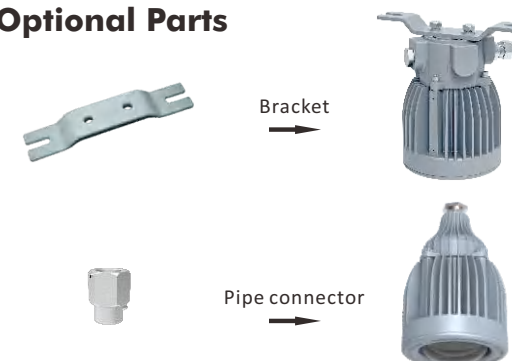
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)	Temp. Classification
Ex-KFIF12H6V6WM-*-E-G	100~277 AC (141~392 DC)	1512	12	Warm white	3000±300	T6
Ex-KFIF12H6V6NH-*-E-G		1638	12	Natural white	4000±300	
Ex-KFIF12H6V6NH-*-E-G		1638	12	Natural white	5000±300	
Ex-KFIF12H6V6CH-*-E-G		1638	12	Cool white	5700±300	
Ex-KFIF24H6V6WM-*-E-G		3024	24	Warm white	3000±300	
Ex-KFIF24H6V6NH-*-E-G		3276	24	Natural white	4000±300	
Ex-KFIF24H6V6NH-*-E-G		3276	24	Natural white	5000±300	T5
Ex-KFIF24H6V6CH-*-E-G		3276	24	Cool white	5700±300	
Ex-KFIF35H6V6WM-*-E-G		4410	35	Warm white	3000±300	
Ex-KFIF35H6V6NH-*-E-G		4778	35	Natural white	4000±300	
Ex-KFIF35H6V6NH-*-E-G		4778	35	Natural white	5000±300	
Ex-KFIF35H6V6CH-*-E-G		4778	35	Cool white	5700±300	

Remarks:*Stands for product type,including J,J1A,J1B,J1C,J1D

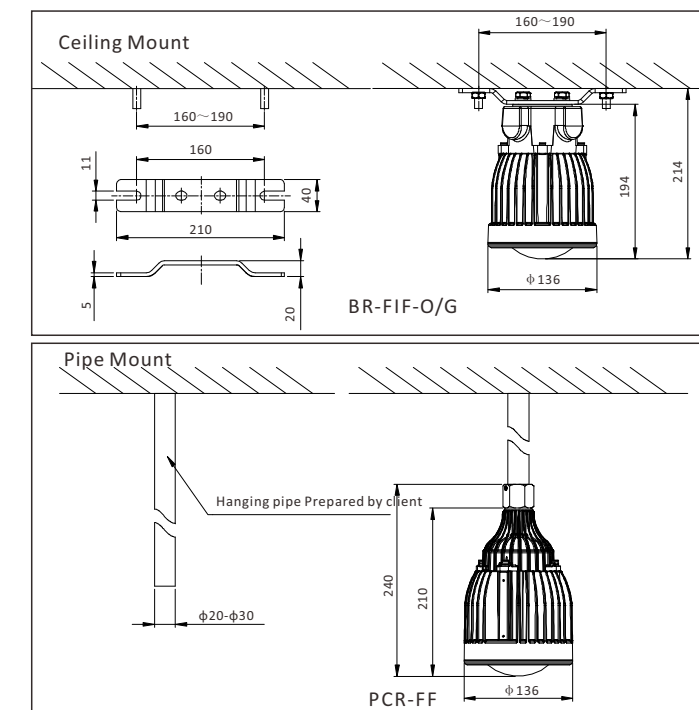
Candela Distribution



Optional Parts



Installation Method(unit:mm)





LED Explosion Proof Working Light

- Firefly Series

Standard & Certificate:	
Ex Mark:	Gas: II 2 G Ex db IIC T5 or T6 Gb Dust: II 2 D Ex tb IIIC T95°C or T80°C Db IP66
Certificate:	ATEX Certification NO.:ECM 19 ATEX-B SU43 CE ,RoHS
Executive Standard:	EN 60079-0:2018, EN 60079- 1:2014, EN 60079-7:2015 EN 60079-11:2012, EN 60079-18:2015+A1:2017, EN 60079-28:2015 EN 60079-31:2014, IEC 60079-0:2018, IEC 60079-7:2015+A1:2018
Classification:	Group II Zone 1 & 21 and 2 & 22
Electrical & Photometric Features:	
Luminarie Efficacy:	90lm/W(Frosted)
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC 141-392 VDC
Power:	12W/24W/35W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
Insulation Class:	I
Surge Protection:	5KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	3.2Kg
Size:	413*203*136mm
Ambient Temperature:	-40℃~+55℃
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Cable Entries:	1 x NPT 3/4" (M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

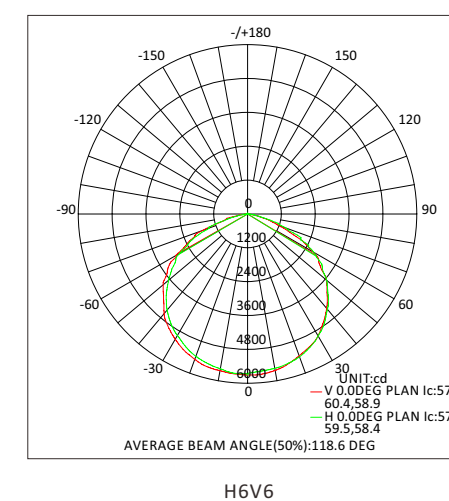
Product Definition

Ex	K	FIF	W	XX	XX	XX	XX	-X	-X	-X	
Type	Brand	Series	Type	Power	Input Voltage	Candela	Distribution	CCT(K)	Area	Color	Glass type
Ex-Explosion Proof			W-Worklight		Default-100-277 VAC				E- English		F-Frosted
	K-KHJ	FIF-FireFly		12-12W 24-24W 35-35W			H6V6(120°)	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K		G-Grey	

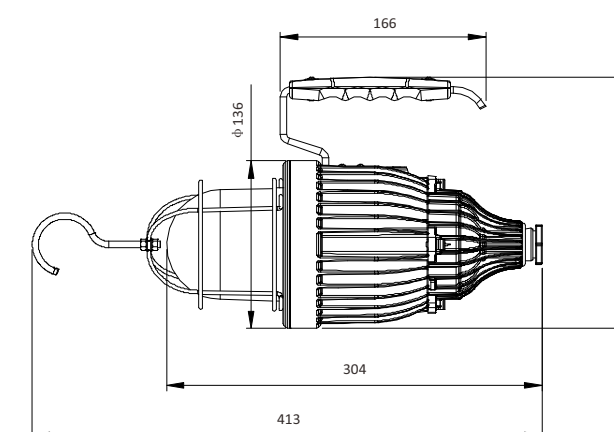
Ordering Information

P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)	Temp. Classification
Ex-KFIFW12H6V6WM-E-G-F	100~277 AC (141~392 DC)	900	12	Warm white	3000±300	T6
Ex-KFIFW12H6V6NH-E-G-F		1080	12	Natural white	4000±300	
Ex-KFIFW12H6V6NH-E-G-F		1080	12	Natural white	5000±300	
Ex-KFIFW12H6V6CH-E-G-F		1080	12	Cool white	5700±300	
Ex-KFIFW24H6V6WM-E-G-F		1800	24	Warm white	3000±300	
Ex-KFIFW24H6V6NH-E-G-F		2160	24	Natural white	4000±300	
Ex-KFIFW24H6V6NH-E-G-F		2160	24	Natural white	5000±300	
Ex-KFIFW24H6V6CH-E-G-F		2160	24	Cool white	5700±300	
Ex-KFIFW35H6V6WM-E-G-F		2625	35	Warm white	3000±300	T5
Ex-KFIFW35H6V6NH-E-G-F		3150	35	Natural white	4000±300	
Ex-KFIFW35H6V6NH-E-G-F		3150	35	Natural white	5000±300	
Ex-KFIFW35H6V6CH-E-G-F		3150	35	Cool white	5700±300	

Candela Distribution



Size(unit:mm)





LED Explosion Proof LED Emergency Exit Light

- Swordfish Series

Standard & Certificate:		
Ex Mark:		Gas:  II 2 G Ex db eb IIC T6 Gb Dust:  II 2 D Ex tb IIIC T80°C Db IP66
Certificate:		ATEX Certification NO.:TÜV 15 ATEX 7673 X IECEx Certification NO.: IECEx TUR 16.0028X CE RoHS
Executive Standard:		IEC 60079-0:2007,IEC 60079-1:2007,IEC 60079-7:2006,IEC 60079-28:2015 IEC 62321:2008,EN 60079-0:2009,EN 60079-1:2007,EN 60079-7:2007 EN 60598-1:2008+A11:2009,EN 55015:2013
Classification:		Group II Zone 1 & 21 and 2 & 22
Electrical & Photometric Features:		
Lifespan:		>100,000 hours
Operating Voltage:		220-240 VAC,311-339 VDC
Power:		Normal:Max 12W;Emergency:5W
Battery Rated Capacity:		2.2Ah
Battery Type:		Ni-Cd
Rated Lifespan:		500 Cycles
Battery Back Up:		180 Min
Battery Charge Time:(after full discharge)		Max: 24h
Frequency:		50/60Hz
Power Factor:		>0.5
Insulation Class:		I
LED Driver:		Over voltage protection/short circuit protection
Mechanical Features:		
Weight:		6.5Kg
Size:		465*187*124mm
Ambient Temperature:		-20℃~+55℃
Connecting Terminals:		3X1.0~4.0mm ² (L+N+PE)
Cable Entries:		2 x NPT 3/4″ (M20*1.5, M25*1.5 are optional)
IP Code:		IP66
Structure Material	Enclosure	Aluminum alloy enclosure, powder coated,industrial grey with dark lines texture (RAL7040)
	Transparent cover	Tempered glass, resistant to 7J impact
	Guide sign	4 signs, and customizable
	Control module	With overcharge, overdischarge, short circuit protection and others.
	Self-check function	With self-checking function, automatic discharge once per month, emergency working for 120seconds, and automatically back to main power supply.Annual self-checking function, automatically switch to emergency state and run over the battery, then automatically back to main power supply and charge the battery. The fault will automatically alert with light.
	Exposed Fastener:	Stainless steel

Product Definition

Ex	K	SF	12	456	H7V7	CH	-ON	-X	-X	-E	-G
Type	Brand	Series	Power	Length	Candela Distribution	CCT(K)	Type	Type	Exit Sign Designation	Area	Color
Ex-Explosion Proof			12-12W		H7V7(120°)		ON- Emergency			E- English	
	K-KHJ			465-465mm		CH-5700±300K		IIC- IIC Certificate			G-Grey
		SF-Swordfish series							E HD HR HL		

Guide sign



E



HL

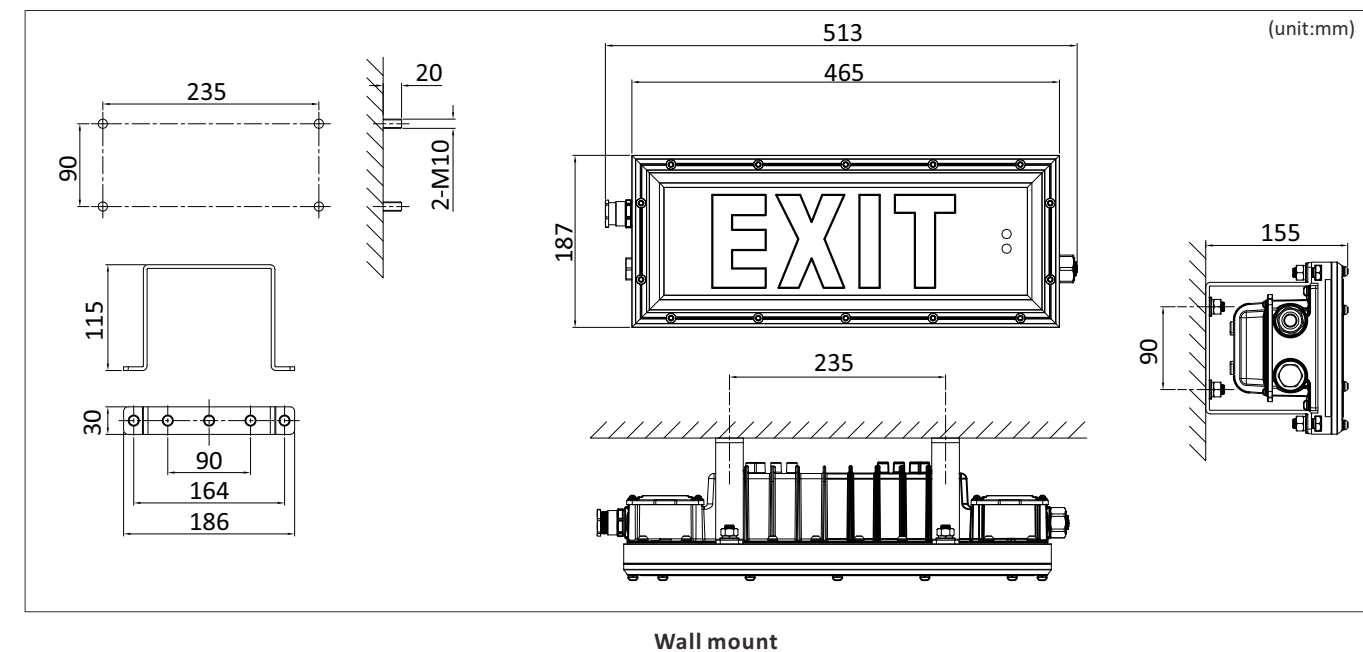


HR



HD

Installation Method



Wall mount



LED Explosion Proof LED Emergency Exit Light

- KBDJ11 Series

Standard & Certificate:		
Ex Mark:	Gas:  II 2 G Ex db IIB T6 Gb, II 2 G Ex db IIB +H2 T6 Gb, Dust:  II 2 D Ex tb IIIC T80℃ Db	
Certificate:	ATEX Certification NO.: SEV 22 ATEX 0608 X IECEx Certification NO.: IECEx SEV 22.0013X CE RoHS	
Executive Standard:	IEC60079-0, IEC60079-1, IEC60079-31 EN60079-0, EN60079-1, EN60079-31	
Classification:	Group II Zone 1 & 21 and 2 & 22	
Electrical & Photometric Features:		
Light Source:	LED	
Rated Voltage:	100~277V AC, 141-392 VDC	
Emergency Unit Voltage:	DC3.0~3.5V	
Emergency Working Time:	≤180 min	
Charging Time:	<24h	
Frequency:	50/60Hz	
Rated Power:	≤6W	
Mechanical Features:		
Weight:	Wall type (B): 7kg, Ceiling type (X1): 6.6kg, Ceiling type (X2): 6.8kg, Pendant type (G): 6.6kg	
Ambient Temperature:	-20℃~+55℃	
Connecting Terminals:	3X1.5~4.0mm ² (L+N+PE)	
Cable Entries:	NPT 3/4" (M20*1.5, M25*1.5, NPT1/2 are optional)	
IP Code:	IP66	
Structure Material	Enclosure	Aluminum alloy enclosure, powder coated, industrial grey with dark lines texture (RAL7035)
	Transparent cover	Tempered glass, resistant to 4J impact
	Guide sign	9 signs, and customizable
	Control module Self-check function	With overcharge, overdischarge, short circuit protection and others. With self-checking function, automatic discharge once per month, emergency working for 120seconds, and automatically back to main power supply. Annual self-checking function, automatically switch to emergency state and run over the battery, then automatically back to main power supply and charge the battery The fault will automatically alert with light and sound.
	Exposed fastener	Stainless steel

Product Definition

K	BDJ	11	X	X	X	X	X	X
Brand	Type	Design No.	Type	Rated voltage	Guide sign	Installation method	Number of inlets	Inlet thread specification
K-KHJ	Explosion-proof emergency exit lightings		H-IIB+H2 B-IIB	I- 100~277VAC	TypeA TypeB TypeC TypeD TypeE TypeF TypeG TypeH TypeI	B-Wall type X1-Ceiling type X2-Ceiling type G-Pendant type	2-Way 3-Way	

Guide sign



KBDJ11-*/A/*



KBDJ11-*/B/*



KBDJ11-*/C/*



KBDJ11-*/D/*



KBDJ11-*/E/*



KBDJ11-*/F/*



KBDJ11-*/G/*

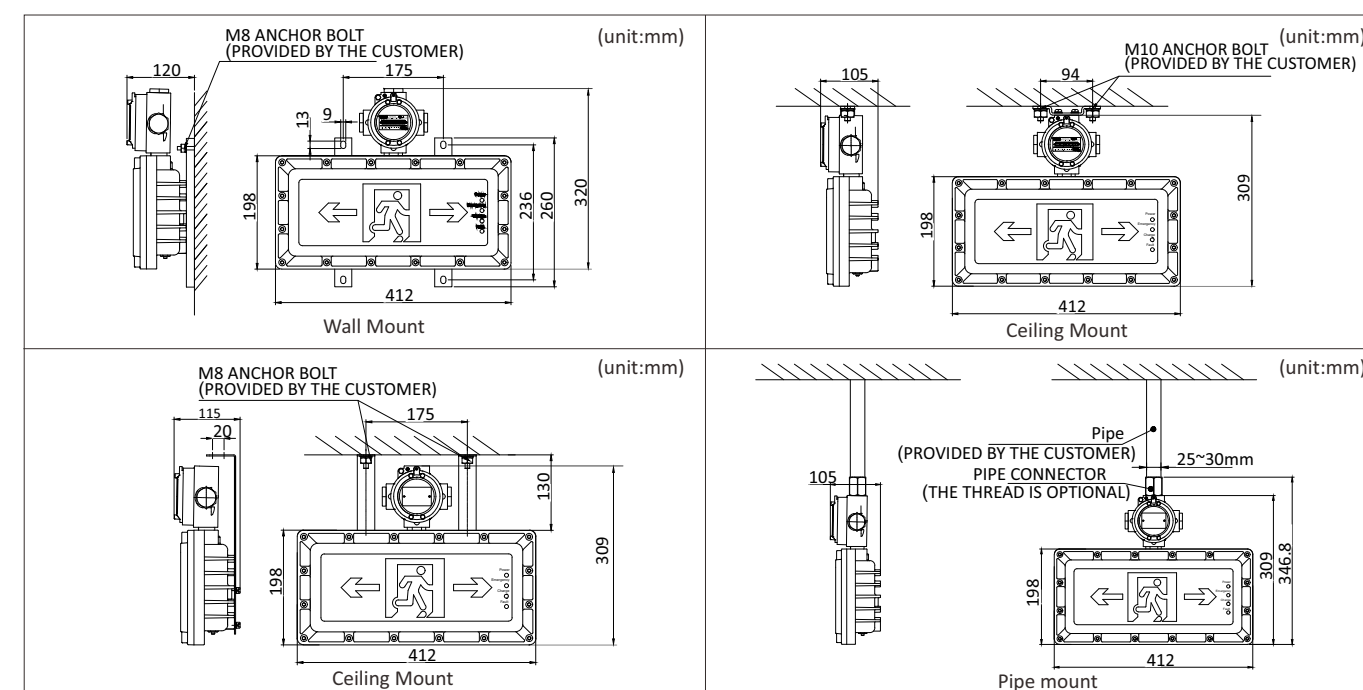


KBDJ11-*/H/*



KBDJ11-*/I/*

Installation Method





LED Explosion Proof LED Emergency Exit Light

- **Polaris Series**

Standard & Certificate:	
Ex Mark:	Gas: II 2 G Ex ib mb IIC T6 Gb Dust: II 2 D Ex tb IIIC T95°C or T80°C Db
Certificate:	ATEX Certification NO.: ECM 19 ATEX-B SU43 CE,RoHS
Executive Standard:	EN 60079-0:2018, EN 60079- 1:2014, EN 60079-7:2015+A1:2018 EN 60079-11:2012, EN 60079-18:2015+A1:2017, EN 60079-28:2015 EN 60079-31:2014., IEC 60079-0:2018, IEC 60079-7:2015+A1:2018
Classification:	Group II Zone 1 & 21 and 2 & 22
Electrical & Photometric Features:	
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC, 141-392 VDC
Power:	Normal:6W;Emergency:0.5W
Battery Rated Capacity:	2.6Ah
Battery Type:	Ni-MH
Rated Lifespan:	300 Cycles
Battery Back Up:	180 Min
Battery Charge Time:(after full discharge)	12 h
Frequency:	50/60Hz
Power Factor:	>0.98
Insulation Class:	I
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	3.1Kg
Size:	337*310*76mm
Ambient Temperature:	-20°C~+55°C
Connecting Terminals:	3X1.0~4.0mm ² (L+N+PE)
Cable Entries:	1x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP54
Enclosure Material:	Copper-free Aluminium
Enclosure Colour:	Grey RAL7040(optional Orange,RAL2011)
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 4J impact

Product Definition

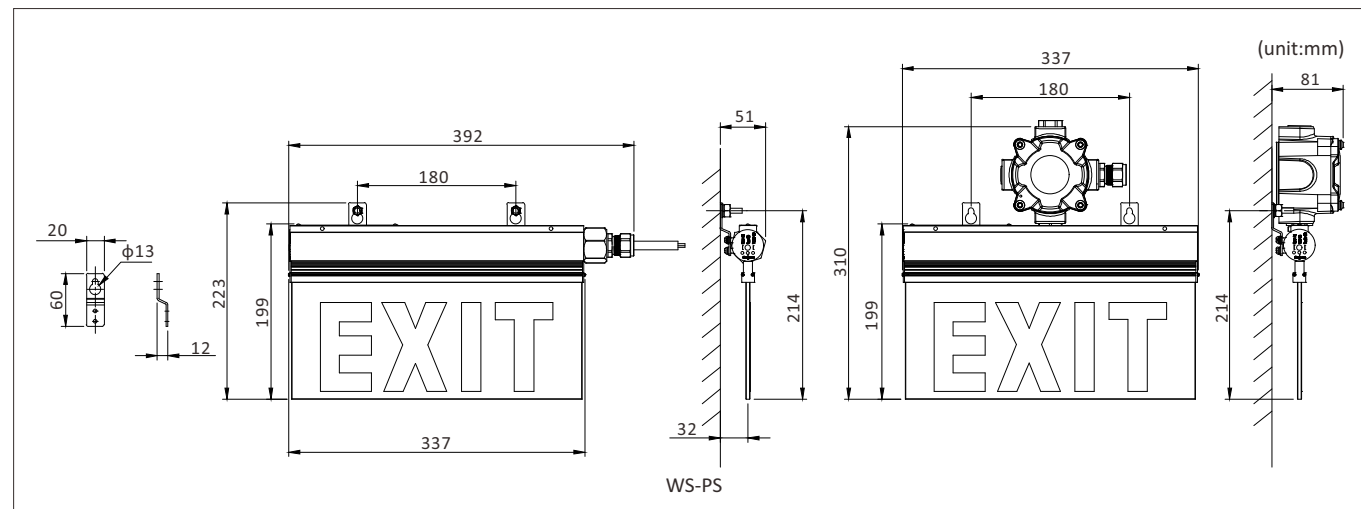
Ex	K	PS	E	XX	-X	-ON	-X	-E	-X
Type	Brand	Series	Type	Light Color	Exit Sign Designation	Control Mode	Junction Box	Area	Color
Ex-Explosion Proof	K-KHJ	PS-Polaris	E-EXIT	W-White G-Green	GE GHL GHR GHLR E HL HR HLR	ON-Maintained	J2AL- J2AR- J2AU- J2B- J2C- J2EL- J2ER-	E- English	G-Grey

Ordering Information

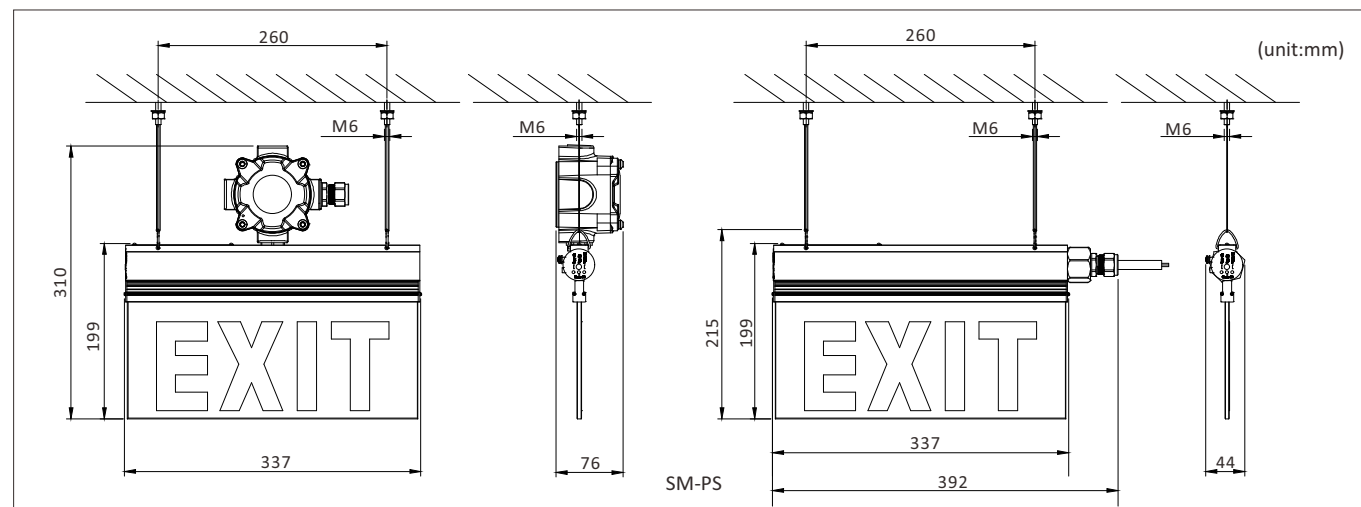
P/N	Operating Voltage(V)	Light Color	Exit Sign Designation	Temp. Classification -20°C~+55°C
Ex-KPSEW-GE-ON-*E-G	100-277 AC (141-392 DC)	White		T6
Ex-KPSEW-GHL-ON-*E-G				
Ex-KPSEW-GHR-ON-*E-G				
Ex-KPSEW-GHLR-ON-*E-G				
Ex-KPSEG-E-ON-*E-G		Green		
Ex-KPSEG-HL-ON-*E-G				
Ex-KPSEG-HR-ON-*E-G				
Ex-KPSEG-HLR-ON-*E-G				

Remarks:* Stands for junction box ,including J2AL,J2AR,J2AU,J2B,J2C,J2EL,J2ER.

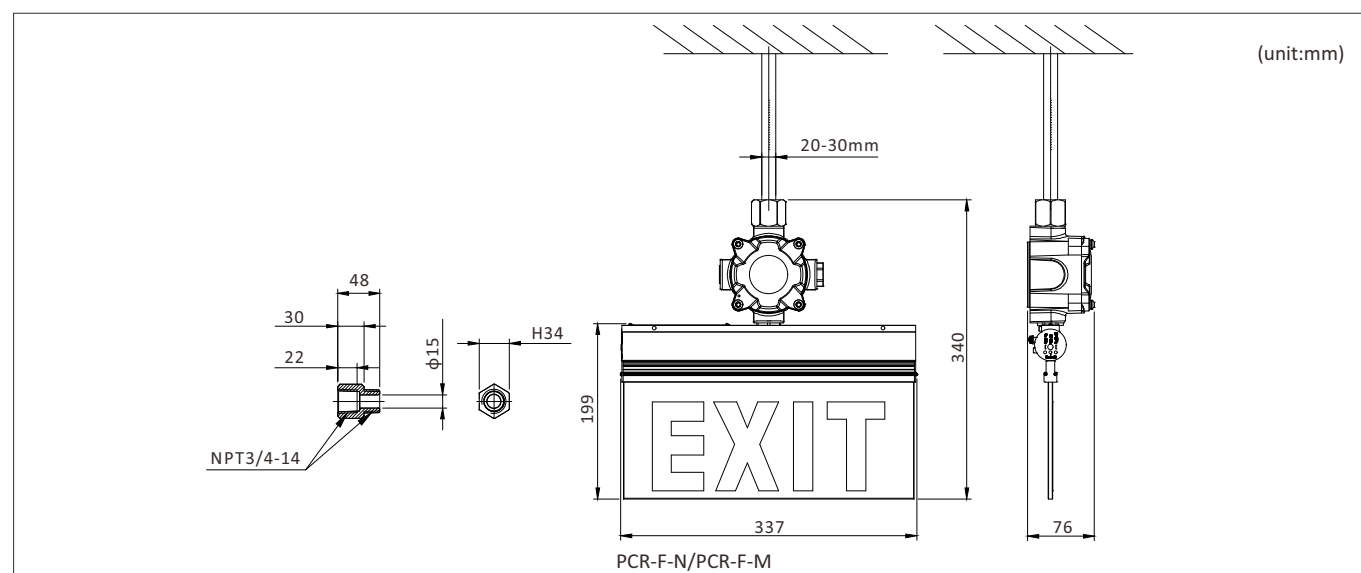
Installation Method



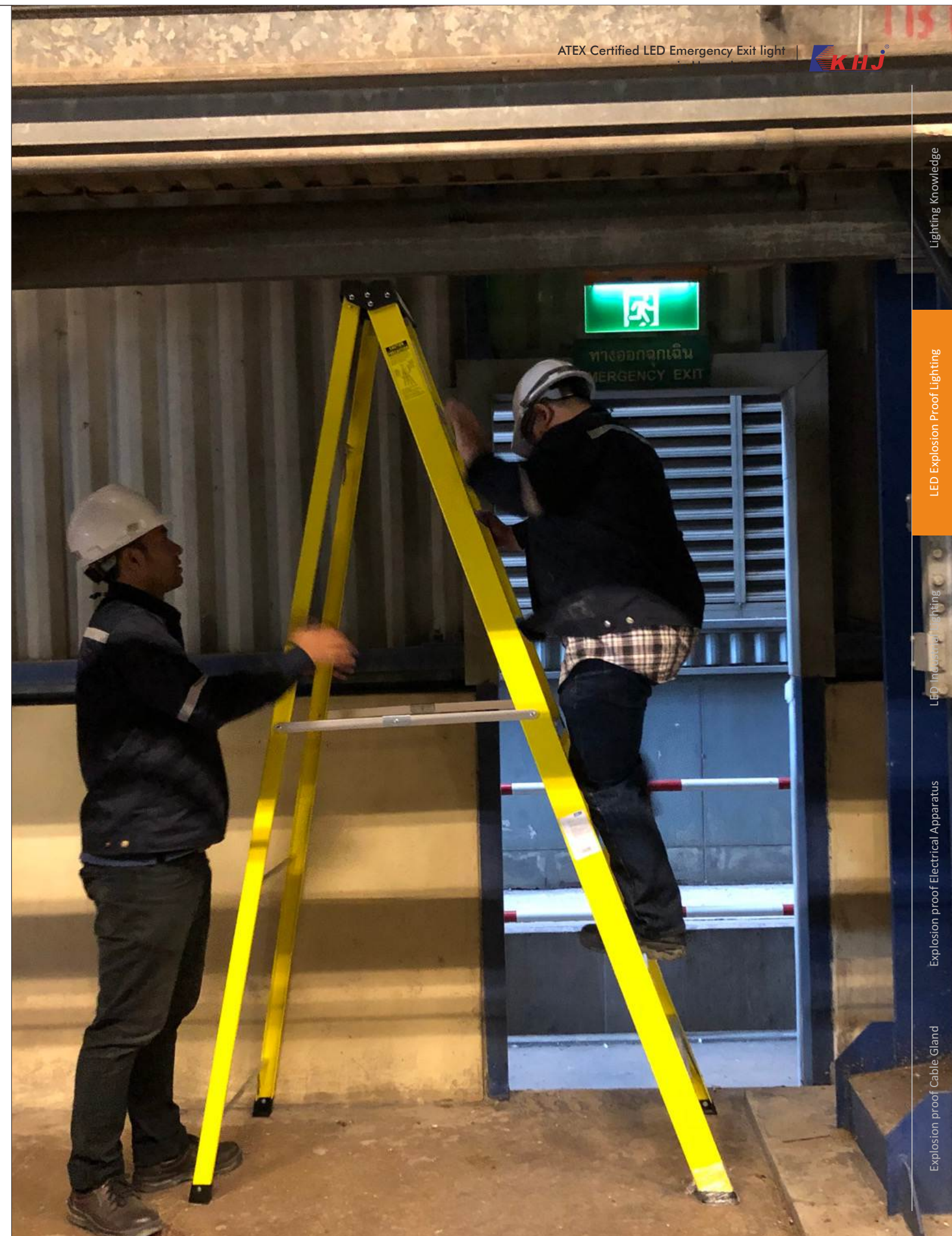
wall mount



Pendant Mount



Pipe mount





LED Explosion Proof LED Emergency Light

- *Mickeymouse Series*

Standard & Certificate:	
Ex Mark:	Gas: II 2 G Ex db IIC T5 or T6 Gb Dust: II 2 D Ex tb IIIC T95°C or T80°C Db
Certificate:	ATEX Certification NO.: ECM 19 ATEX-B SU43 CE,RoHS
Executive Standard:	EN 60079-0:2018, EN 60079- 1:2014, EN 60079-7:2015+A1:2018 EN 60079-11:2012, EN 60079-18:2015+A1:2017, EN 60079-28:2015 EN 60079-31:2014., IEC 60079-0:2018, IEC 60079-7:2015+A1:2018
Classification:	Group II Zone 1 & 21 and 2 & 22
Electrical & Photometric Features:	
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC, 141-392 VDC
Power:	3W
Battery Rated Capacity:	1.4Ah
Battery Type:	NI-MH
Rated Lifespan:	300 Cycles
Battery Back Up:	>120min
Battery Charge Time:(after full discharge)	12 h
Frequency:	50/60Hz
Power Factor:	>0.98
CRI:	>70
Insulation Class:	I
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	2.3Kg
Size:	223*95*233mm
Ambient Temperature:	-20°C~+40°C
Cable Entries:	1 x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Material:	Die-casting aluminum alloy
Enclosure Colour:	Orange, RAL2011(optional grey RAL7040)
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass, Stand 7J impact

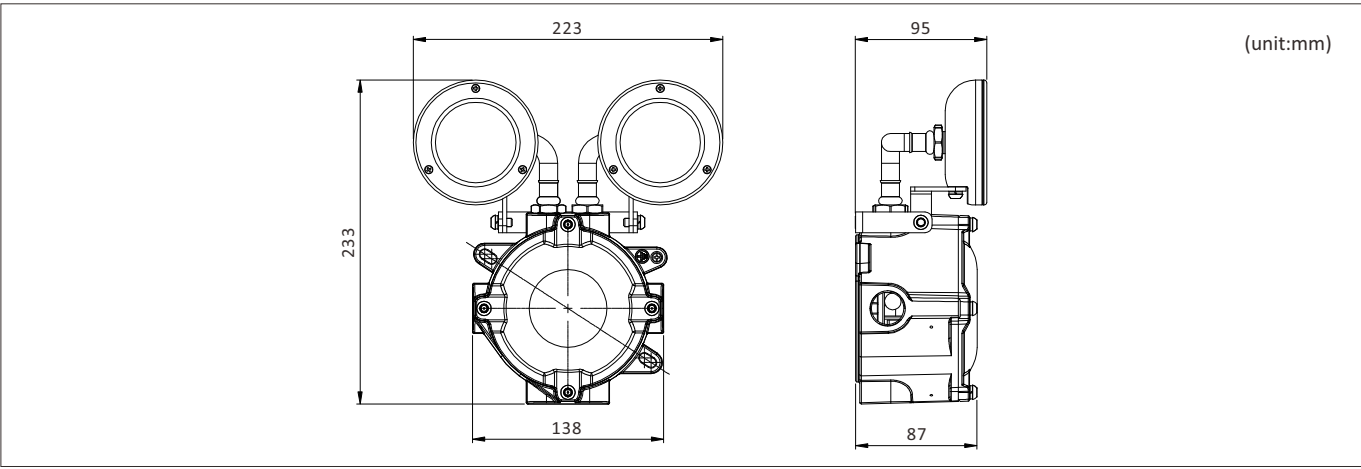
Product Definition

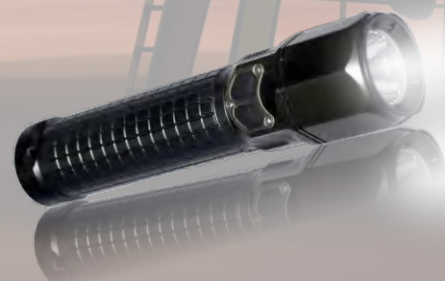
Ex	K	MM	F	XX	XX	-OFF	-X	-X
Type	Brand	Series	Type	Input Voltage	CCT(K)	EmergencyType	Opening Type	Area
Ex-Explosion Proof	K-KHJ	MM-MickeyMouse	F-Floodlight	Default-100-277 VAC	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K	OFF-Non-maintained	AL- AR- B-	E- English

Ordering Information

P/N	Operating Voltage(V)	Color Temp.	CCT(K)	Opening Type	Temp. Classification
					-20℃~+40℃
Ex-KMMFWM-OFF-AL-E	100~277 AC (141~392 DC)	Warm white	3000±300		T6
Ex-KMMFNH-OFF-AL-E		Natural white	4000±300		
Ex-KMMFNH-OFF-AL-E		Natural white	5000±300		
Ex-KMMFCH-OFF-AL-E		Cool white	5700±300		
Ex-KMMFWM-OFF-AR-E		Warm white	3000±300		
Ex-KMMFNH-OFF-AR-E		Natural white	4000±300		
Ex-KMMFNH-OFF-AR-E		Natural white	5000±300		
Ex-KMMFCH-OFF-AR-E		Cool white	5700±300		
Ex-KMMFWM-OFF-B-E		Warm white	3000±300		
Ex-KMMFNH-OFF-B-E		Natural white	4000±300		
Ex-KMMFNH-OFF-B-E		Natural white	5000±300		
Ex-KMMFCH-OFF-B-E		Cool white	5700±300		

Size





LED Explosion Proof LED Portable Light

- Alcidae Series

Standard & Certificate:		
Ex Mark:		Gas:  II 2 G Ex ib IIC T4 Gb Dust:  II 2 D Ex ib IIIC T130°C Db IP68
Certificate:		ATEX Certification NO.: TÜV 15 ATEX 7713X CE,RoHS
Executive Standard:		(IEC)EN 60079-0, (IEC)EN 60079-11 EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Classification:		Group II Zone 1 & 21 and 2 & 22
Electrical & Photometric Features:		
Luminaire Efficacy:		110lm/W
Illuminance:	Front	320 lx(5m)
	Back	150 lx(1m)
Lifespan:		>100,000 hours
Operating Voltage:		100-240VAC,141-339 VDC
Power:		2.52W
Battery Rated Capacity:		2.2Ah
Battery Type:		Lithium battery
Rated Lifespan:		300 Cycles
Battery Back Up:		>9h(High output);>18h(Normal ouput)
Battery Charge Time:(after full discharge)		2~3h
Frequency:		50/60Hz
Power Factor:		>0.98
Insulation Class:		I
LED Driver:		Over voltage protection/short circuit protection
Mechanical Features:		
Weight:		0.19Kg
Size:		φ35*156mm
Ambient Temperature:		-20℃~+55℃
IP Code:		IP68(3m)
Enclosure Material:		Aluminium alloy

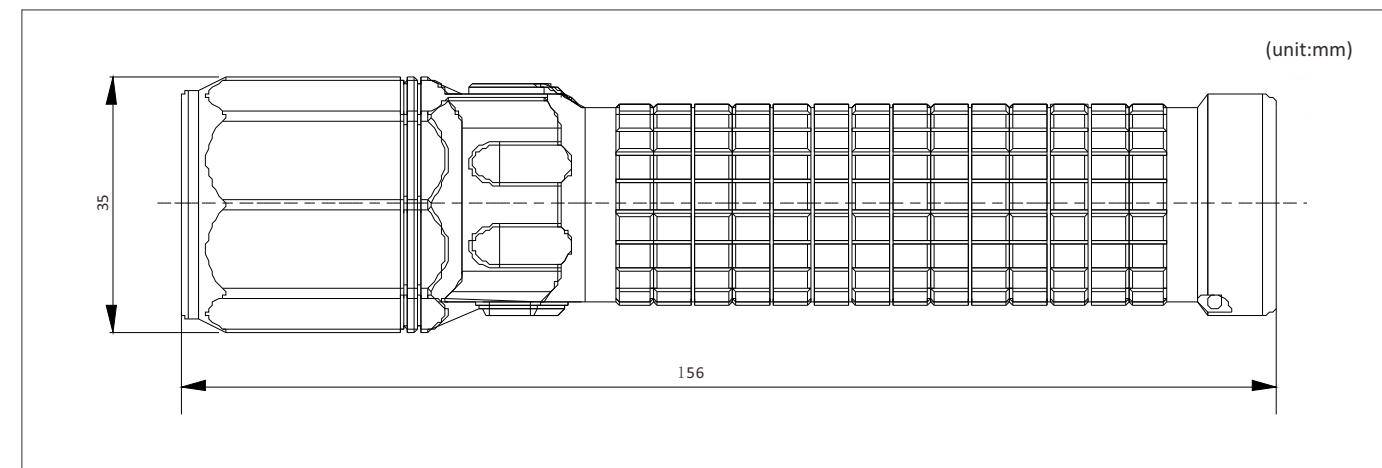
Product Definition

K	AC	F	XX	XX	XX	-X
Brand	Series	Type	Beam angle	Color	CCT(K)	Area
K-KHJ	AC-Alcidae	F-Flashlight	80-80°	G-Gray	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K	E- English

Ordering Information

P/N	Charge Voltage(V)	Luminous Flux(lm)	Power(W)	CRI	Color Temp.	CCT(K)	Beam angle(°)		Temp. Classification
							Spotlight	Floodlight	
KACF80GWM-E	100~240AC (141~339 DC)	277	2.52	80	Warm white	3000±300	10	80	T4
KACF80GNH-E		277	2.52	70	Natural white	4000±300			
KACF80GNH-E		277	2.52	70	Natural white	5000±300			
KACF80GCH-E		277	2.52	70	Cool white	5700±300			

Size





LED Explosion Proof LED Portable Light

- Hill Myna Series

Standard & Certificate:			
Ex Mark:	Gas:  II 2 G Ex ib mb IIC T6 Gb Dust:  II 2 D Ex tb IIIC T80°C Db IP66		
Certificate:	ATEX Certification NO.: ECM 19 ATEX-B SU43 CE,RoHS		
Executive Standard:	EN 60079-0:2018 EN 60079- 1:2014 EN 60079-7:2015+A1:2018	EN 60079-11:2012 EN 60079-18:2015+A1:2017 EN 60079-28:2015	EN 60079-31:2014. IEC 60079-0:2018 IEC 60079-7:2015+A1:2018
Classification:	Group II Zone 1 & 21 and 2 & 22		
Electrical & Photometric Features:			
Luminaire Efficacy:	110lm/W		
Illuminance(Front):	480 lx(5m)		
Lifespan:	>100,000 hours		
Operating Voltage:	100-240VAC,141-339 VDC		
Input voltage:	3.7V		
Power:	3W/6W		
Battery Rated Capacity:	15.6 Ah		
Battery Type:	Lithium battery		
Rated Lifespan:	500 Cycles		
Battery Back Up:	>8h(High output);>16h(Normal ouput)		
Battery Charge Time:(after full discharge)	<6h		
Frequency:	50/60Hz		
Power Factor:	>0.98		
Insulation Class:	I		
LED Driver:	Over voltage protection/short circuit protection		
Mechanical Features:			
Weight:	1Kg		
Size:	190*105*134mm		
Ambient Temperature:	-20℃~+40℃		
IP Code:	IP66		

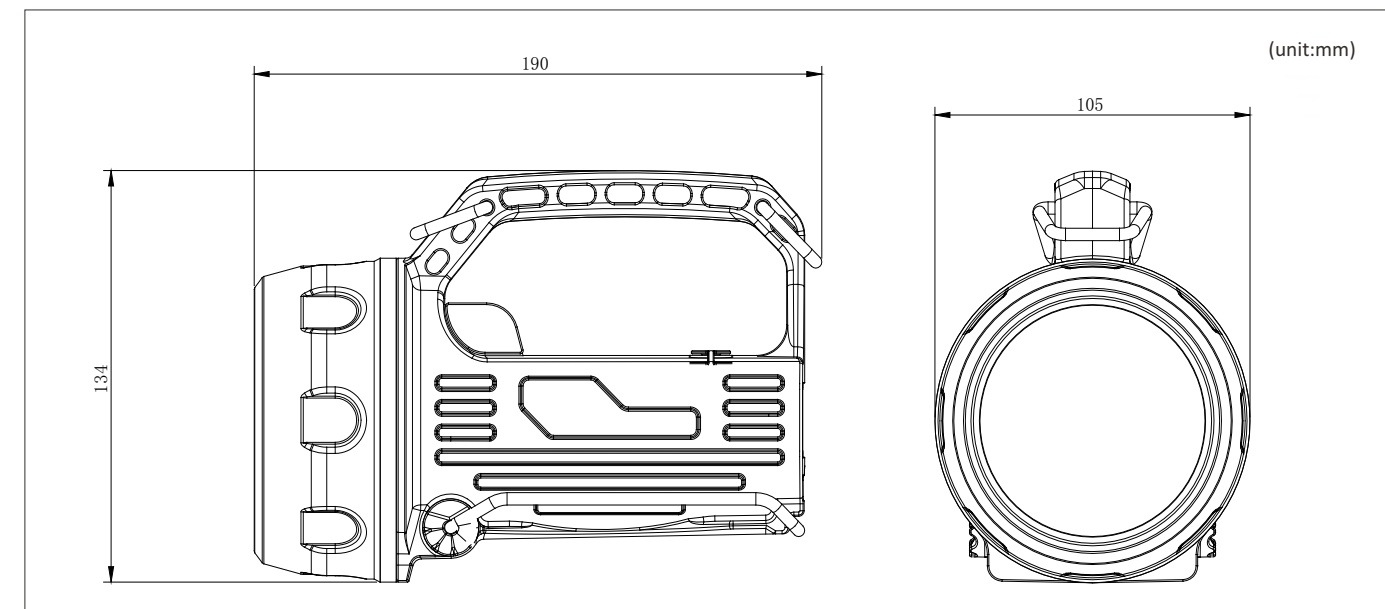
Product Definition

Ex	K	HM	W	XX	-X
Type	Brand	Series	Type	CCT(K)	Area
Ex-Explosion Proof	K-KHJ	HM-HillMyna	W-work light	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K	E- English

Ordering Information

P/N	Charge Voltage(V)	Luminous Flux(lm)		Power(W)		CRI	Color Temp.	CCT(K)	Temp. Classification
		3W	6W	Spotlight	Floodlight				-20°C~+55°C
Ex-KHMWWM-E	100~240 AC (141~339 DC)	270	540	6	3	80	Warm white	3000±300	T6
Ex-KHMWNH-E		330	660	6	3	80	Natural white	4000±300	
Ex-KHMWNH-E		330	660	6	3	80	Natural white	5000±300	
Ex-KHMWCH-E		330	660	6	3	80	Cool white	5700±300	

Size



CE RoHS



LED Floodlight / Bay light / High bay light

- *Sealion Series*

Standard & Certificate:	
Certificate:	CE ,RoHS
Executive Standard:	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3 EN 60598-1, EN 60598-2-5, EN 62031, EN 62493 IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Electrical & Photometric Features:	
Luminarie Efficacy:	136.5lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC/347-480 VAC 141-392 VDC/491-679 VDC
Power:	45W/60W/80W/100W/120W/150W/200W/240W/300W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	6KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	6.5Kg(45-100W);8.6Kg(120-150W);12.3Kg(200-300W)
Size:	φ 275*157mm(45-100W);φ 330*157mm(120-150W); φ 415*168mm(200-300W)
Ambient Temperature:	-40℃-+55℃
Cable Entries:	1x M16*1.5
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition

K	SL	XX	XX	XX	XX	-X	-X
Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Type	Area
K-KHJ	SL-SeaLion	45-45W 60-60W 80-80W 100-100W 120-120W 150-150W 200-200W 240-240W 300-300W	Default-100V~ 277VAC	H4V4(60°) H5V5(80°) H6V6(120°)	WM-3000K±300 NH-4000K±300 NH-5000K±300 CH-5700K±300	Default-Normal DA-DALI Dimming S-Sensor V-0~10V Dimming	E- English

Ordering Information

P/N	Operating Voltage(V)	Luminous Flux(lm)	Power	Color Temp.	CCT(K)
KSL45*WM-E	100~277 AC (141~392 DC)	5693	45	Warm white	3000±300
KSL45*NH-E		6143	45	Natural white	4000±300
KSL45*NH-E		6143	45	Natural white	5000±300
KSL45*CH-E		6143	45	Cool white	5700±300
KSL60*WM-E		7590	60	Warm white	3000±300
KSL60*NH-E		8190	60	Natural white	4000±300
KSL60*NH-E		8190	60	Natural white	5000±300
KSL60*CH-E		8190	60	Cool white	5700±300
KSL80*WM-E		10120	80	Warm white	3000±300
KSL80*NH-E		10920	80	Natural white	4000±300
KSL80*NH-E		10920	80	Natural white	5000±300
KSL80*CH-E		10920	80	Cool white	5700±300

Ordering Information

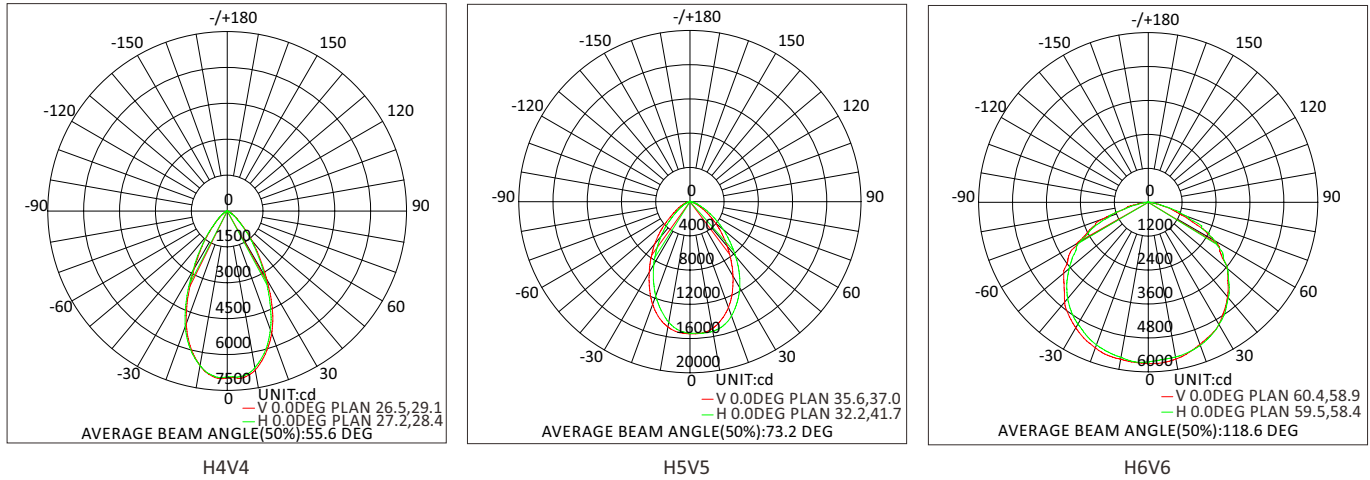
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power	Color Temp.	CCT(K)
KSL100*WM-E	100~277 AC (141~392 DC)	12650	100	Warm white	3000±300
KSL100*NH-E		13650	100	Natural white	4000±300
KSL100*NH-E		13650	100	Natural white	5000±300
KSL100*CH-E		13650	100	Cool white	5700±300
KSL120*WM-E		15180	120	Warm white	3000±300
KSL120*NH-E		16380	120	Natural white	4000±300
KSL120*NH-E		16380	120	Natural white	5000±300
KSL120*CH-E		16380	120	Cool white	5700±300
KSL150*WM-E		18975	150	Warm white	3000±300
KSL150*NH-E		20475	150	Natural white	4000±300
KSL150*NH-E		20475	150	Natural white	5000±300
KSL150*CH-E		20475	150	Cool white	5700±300
KSL200*WM-E		25300	200	Warm white	3000±300
KSL200*NH-E		27300	200	Natural white	4000±300
KSL200*NH-E		27300	200	Natural white	5000±300
KSL200*CH-E		27300	200	Cool white	5700±300
KSL240*WM-E		30360	240	Warm white	3000±300
KSL240*NH-E		32760	240	Natural white	4000±300
KSL240*NH-E		32760	240	Natural white	5000±300
KSL240*CH-E		32760	240	Cool white	5700±300
KSL300*WM-E		37950	300	Warm white	3000±300
KSL300*NH-E		40950	300	Natural white	4000±300
KSL300*NH-E		40950	300	Natural white	5000±300
KSL300*CH-E		40950	300	Cool white	5700±300

Remarks: 1.*Stands for beam angle , including H4V4 / H5V5 / H6V6 .
2.For beam angle H4V4 and H5V5,the luminous flux will be 15% less;

KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
45W	100W-150W	100W-150W	Up to 60% reduction in energy costs
60W	150W-175W	150W-175W	
80W	175W-250W	175W-250W	
100W	250W-400W	250W-400W	
120W	250W-400W	250W-400W	
150W	400W	400W	
200W	400W-500W	400W-500W	
240W	600W-750W	600W-750W	
300W	750W-1000W	750W-1000W	

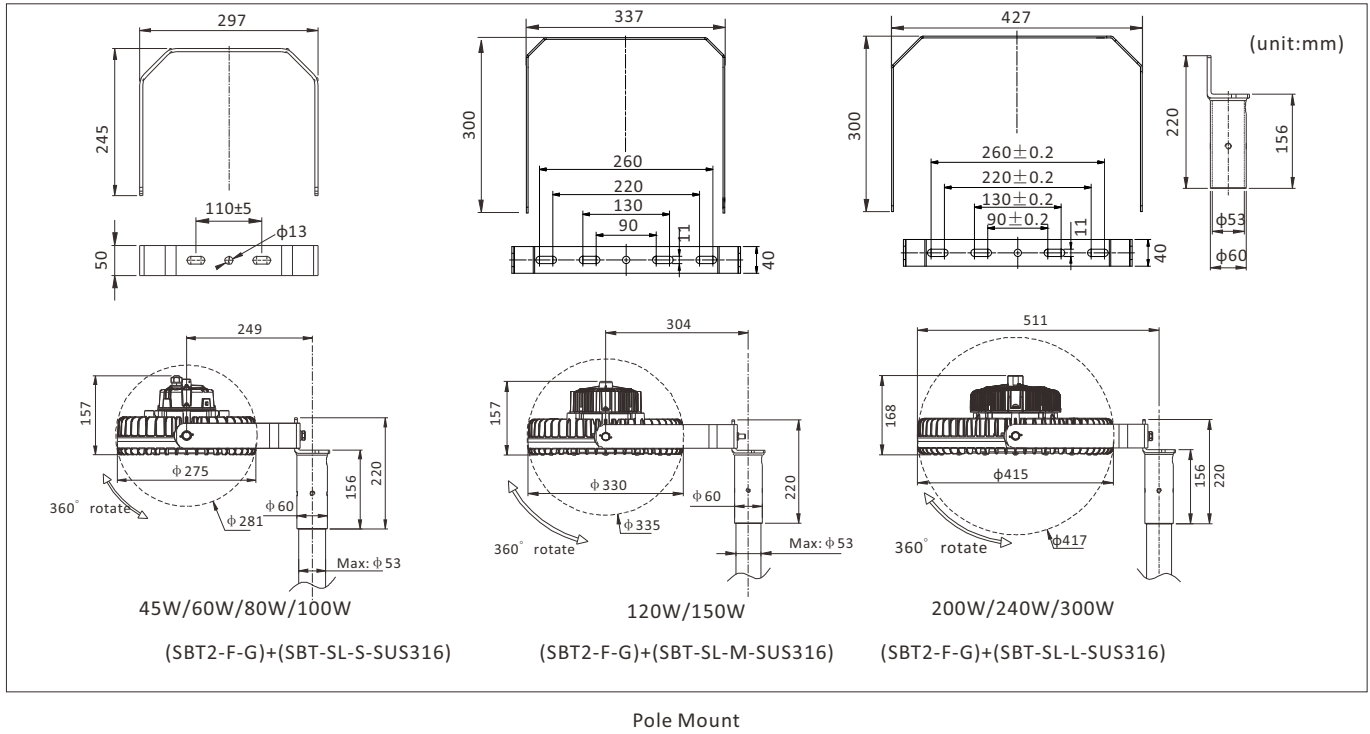
Candela Distribution



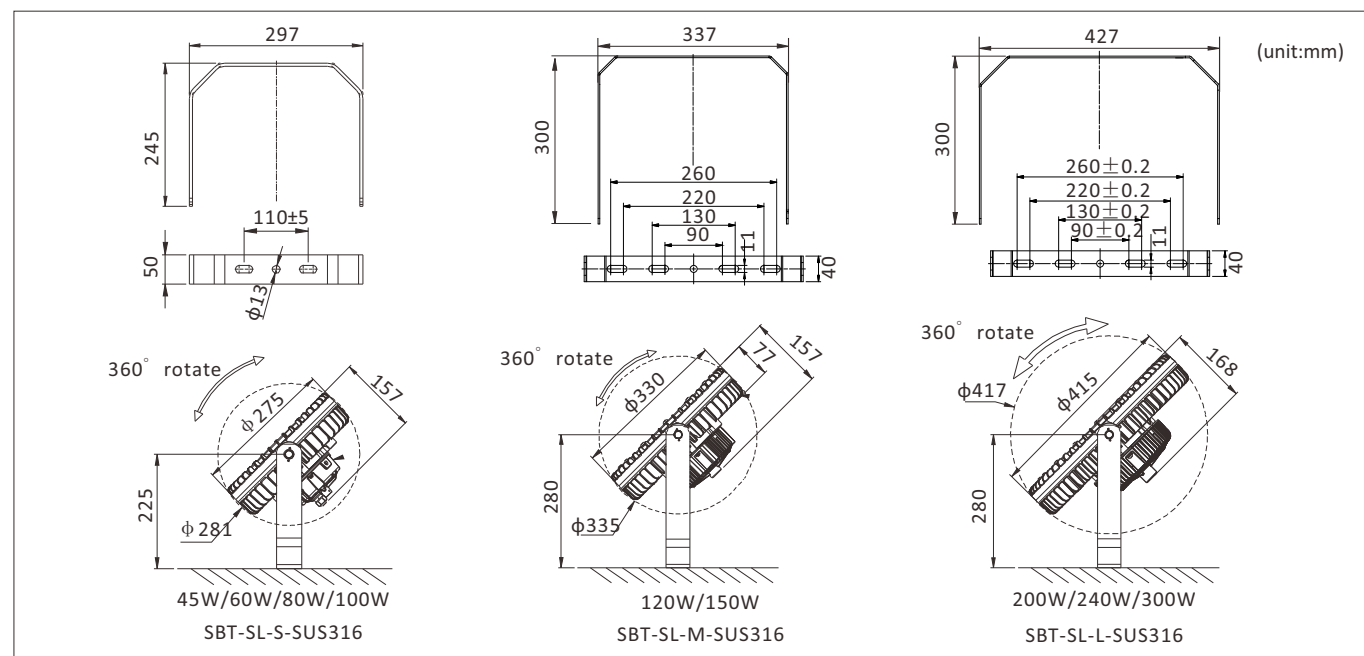
Optional Parts



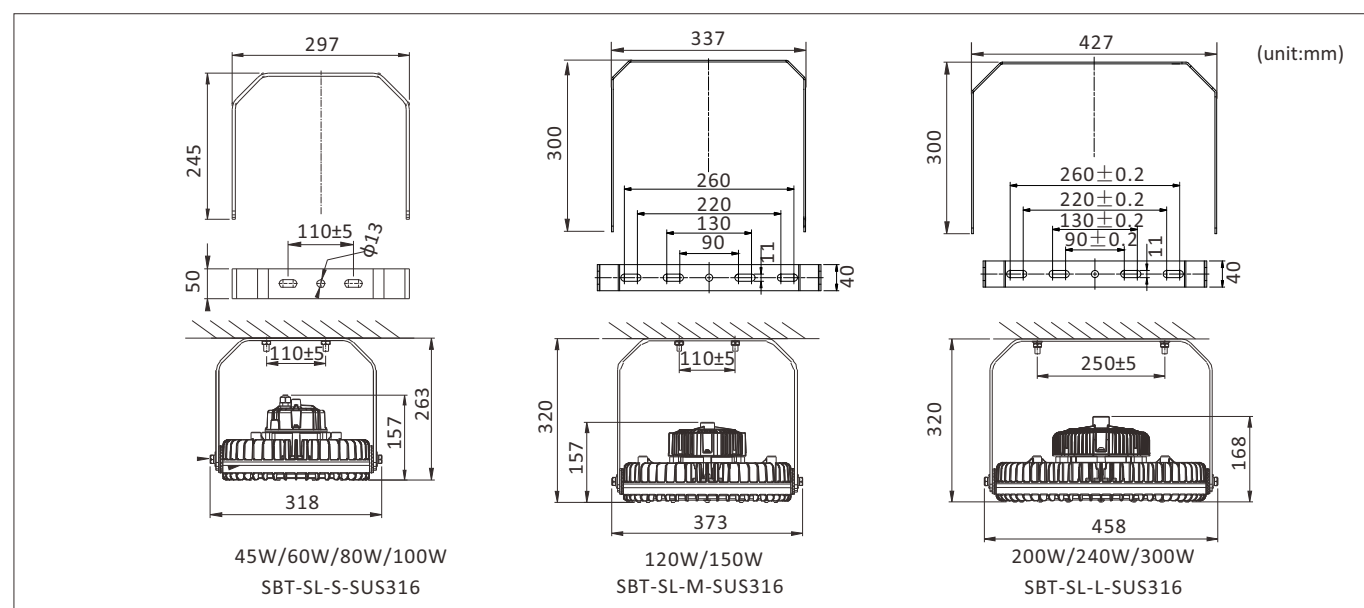
Installation Method



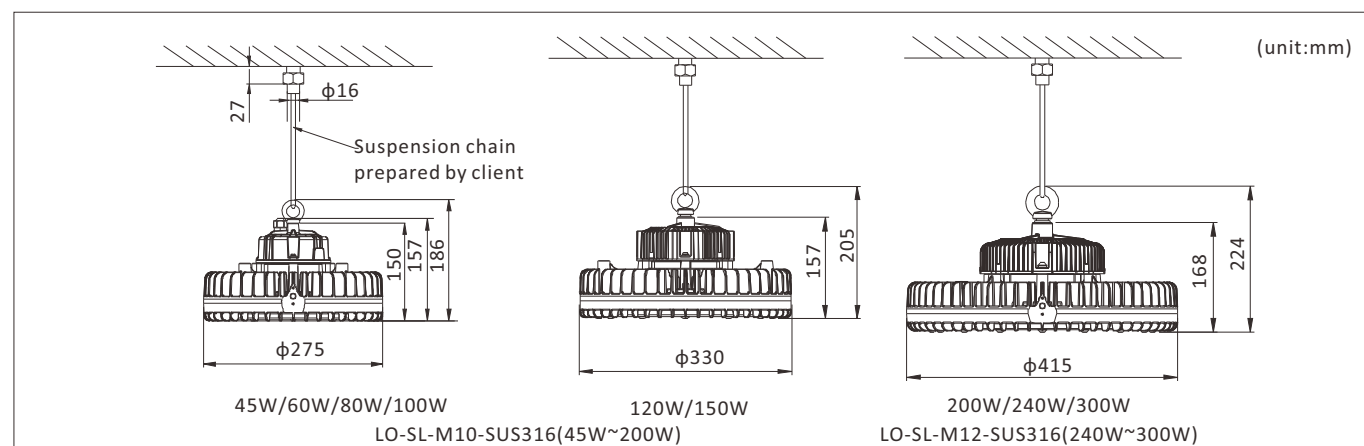
Installation Method



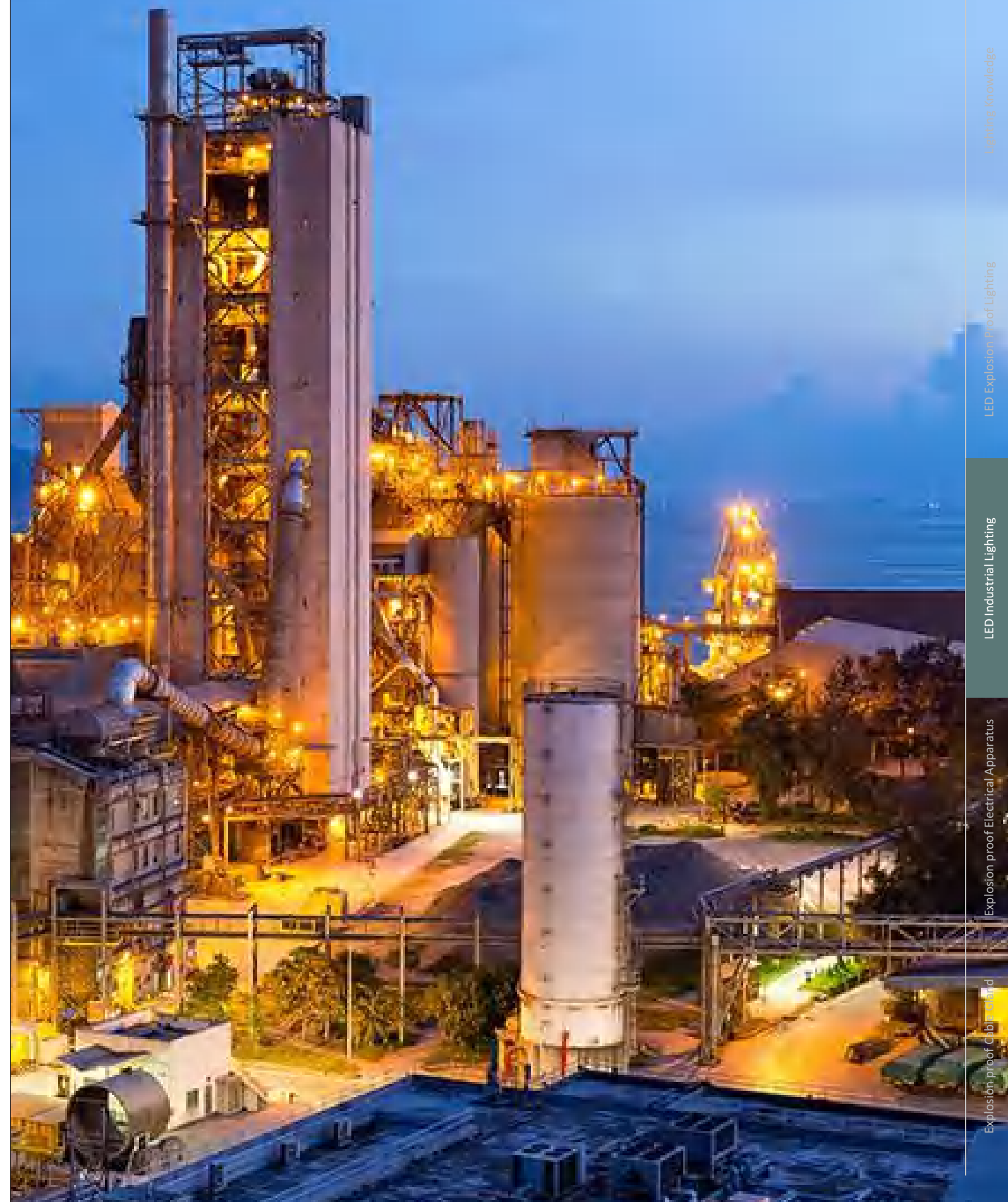
Stanchion Mount

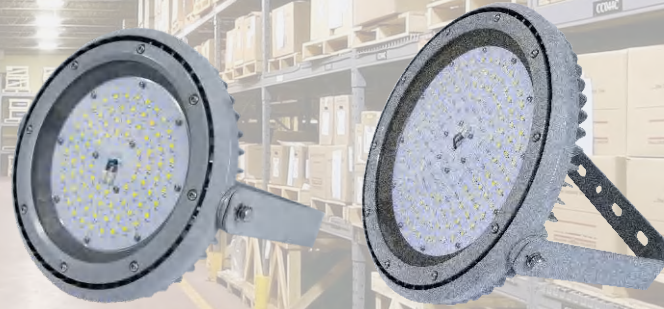


Ceiling Mount



Pendant Mount





LED Floodlight / Bay light / High bay light

- Seal A Series

Standard & Certificate:	
Certificate:	CE ,RoHS
Executive Standard:	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-1, IEC 62321-3-1, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Electrical & Photometric Features:	
Luminarie Efficacy:	150lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC 141-392 VDC
Power:	80W/100W/120W/150W/200W/240W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	4KV/6KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	4.7Kg(80W/100W/120W/150W)/7.7Kg(200W/240W)
Size:	φ 330*148mm(80W/100W/120W/150W) φ 415*159mm(200W/240W)
Ambient Temperature:	-40℃~+55℃
Cable Entries:	1 x M16*1.5
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition

K	SE	XX	XX	XX	XX	-A	-X
Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Type	Area
K-KHJ	SE-Seal	80-80W 100-100W 120-120W 150-150W 200-200W 240-240W	Default-100V~ 277VAC	H5V5(80°) H6V6(120°)	WM-3000K±300 NH-4000K±300 NH-5000K±300 CH-5700K±300	A-Type	E- English

Ordering Information

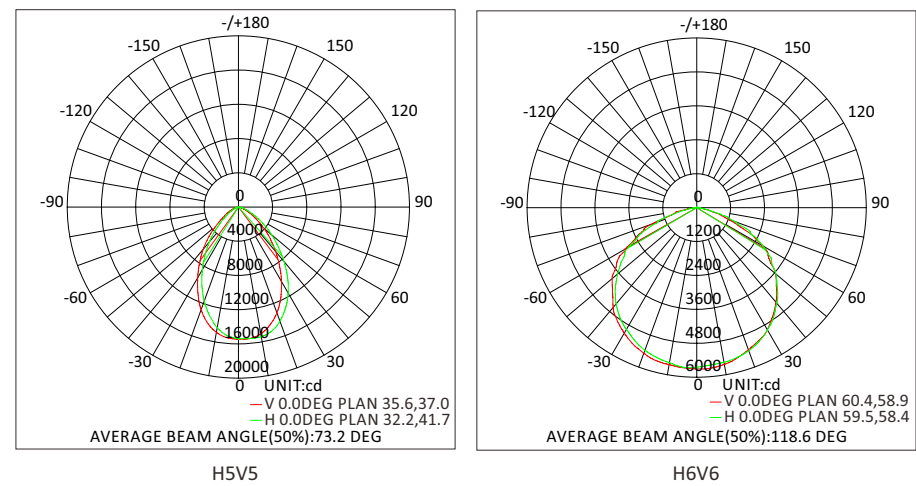
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)
KSE80*WM-A-E	100~277 AC (141~392 DC)	11160	80	Warm white	3000±300
KSE80*NH-A-E		12000	80	Natural white	4000±300
KSE80*NH-A-E		12000	80	Natural white	5000±300
KSE80*CH-A-E		12000	80	Cool white	5700±300
KSE100*WM-A-E		13950	100	Warm white	3000±300
KSE100*NH-A-E		15000	100	Natural white	4000±300
KSE100*NH-A-E		15000	100	Natural white	5000±300
KSE100*CH-A-E		15000	100	Cool white	5700±300
KSE120*WM-A-E		16740	120	Warm white	3000±300
KSE120*NH-A-E		18000	120	Natural white	4000±300
KSE120*NH-A-E		18000	120	Natural white	5000±300
KSE120*CH-A-E		18000	120	Cool white	5700±300
KSE150*WM-A-E		20925	150	Warm white	3000±300
KSE150*NH-A-E		22500	150	Natural white	4000±300
KSE150*NH-A-E		22500	150	Natural white	5000±300
KSE150*CH-A-E		22500	150	Cool white	5700±300
KSE200*WM-A-E		27900	200	Warm white	3000±300
KSE200*NH-A-E		30000	200	Natural white	4000±300
KSE200*NH-A-E		30000	200	Natural white	5000±300
KSE200*CH-A-E		30000	200	Cool white	5700±300
KSE240*WM-A-E		33480	240	Warm white	3000±300
KSE240*NH-A-E		36000	240	Natural white	4000±300
KSE240*NH-A-E		36000	240	Natural white	5000±300
KSE240*CH-A-E		36000	240	Cool white	5700±300

Remarks: 1.*Stands for beam angle , including H5V5 / H6V6,H5V5 is only available for 80-240W.
2.For beam angle H5V5,the luminous flux will be 8% less;

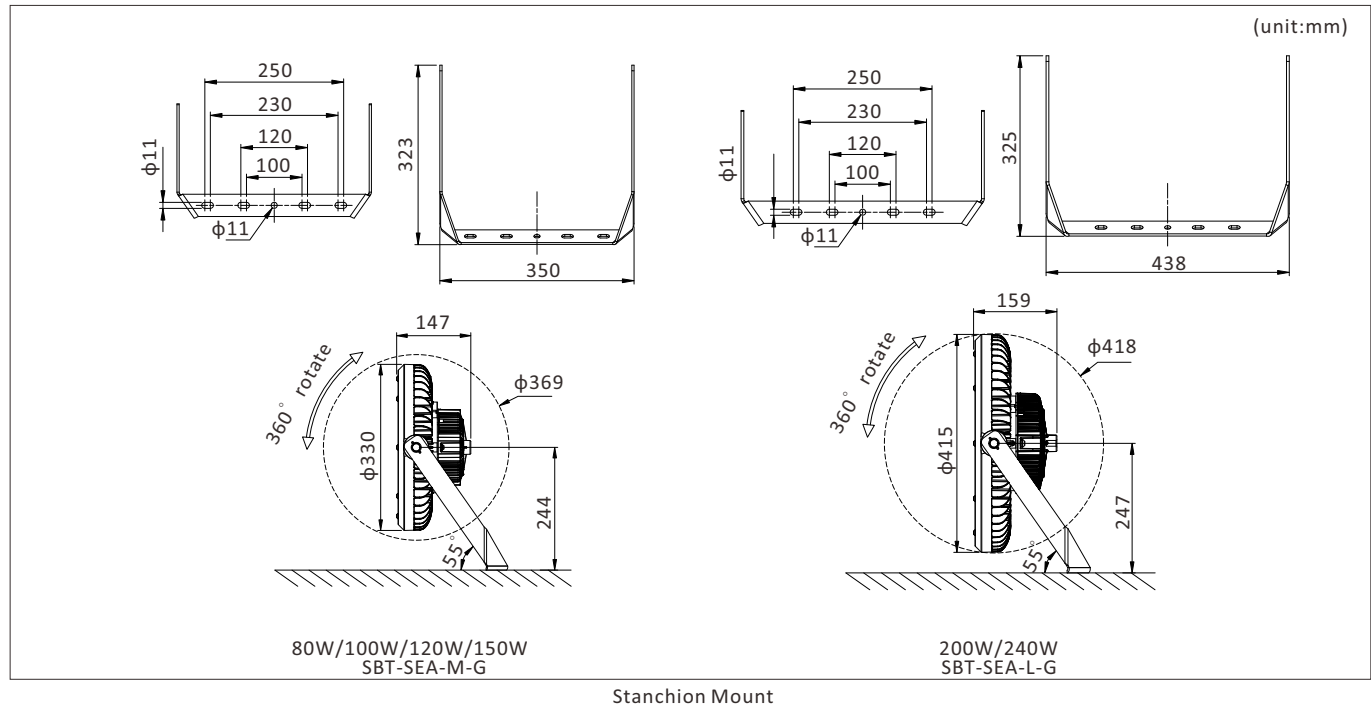
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
80W	175W-250W	175W-250W	Up to 60% reduction in energy costs
100W	250W-400W	250W-400W	
120W	250W-400W	250W-400W	
150W	400W	400W	
200W	400W-500W	400W-500W	
240W	600W-750W	600W-750W	

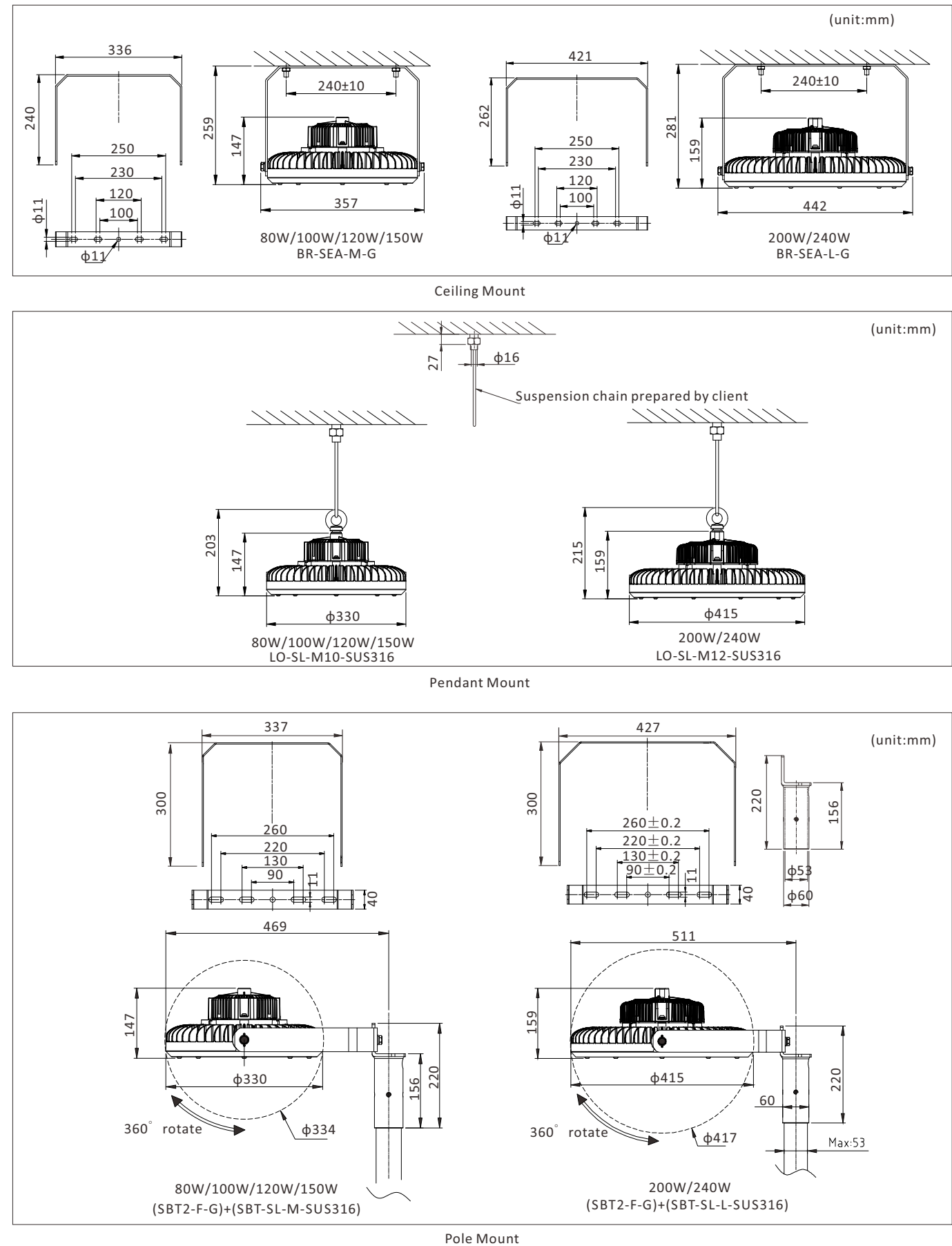
Candela Distribution

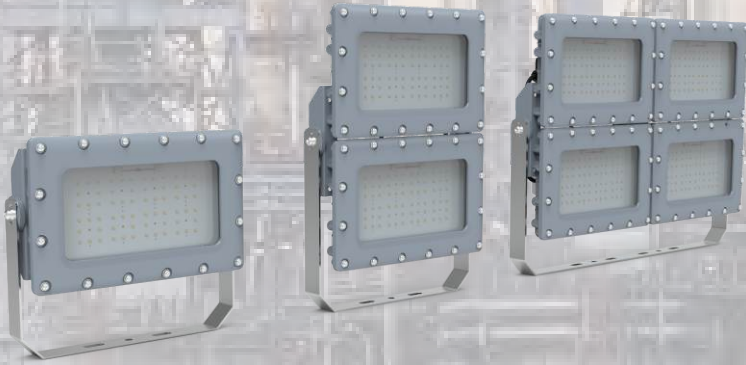


Installation Method



Installation Method





LED Floodlight
- Tank Series

Standard & Certificate:	
Certificate:	CE ,RoHS
Executive Standard:	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Electrical & Photometric Features:	
Luminarie Efficacy:	152lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC,141-392VDC(347-480 VAC,491-679 VDC are optional)
Power:	80W/100W/120W(Single lamp),160W/200W/240W(Two lamps), 320W/400W/480W(Four lamps)
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	4KV/6KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	6.3Kg(80W~120W)/13Kg(160W~240W)/28kg(320W~480W)
Size:	332*212*100mm(80W~120W)/332*426*100mm(160W~240W) 671*426*100mm(320W~480W)
Ambient Temperature:	-40℃~+55℃
Earthing Protection:	M4 (external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Aluminium
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition

K	TK	XX	X	XX	XX	-X	-X
Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Type	Area
K-KHJ	Tank series	80-80W 100-100W 120-120W 160-160W 200-200W 240-240W 320-320W 400-400W 480-480W	Default:100~277 VAC D-347-480VAC	H3V3(40°) H5V5(80°) H6V6(120°)	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K	Default-single lamp S2-Two lamps S4-Four lamps	E- English

Ordering Information

P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)
KTK80**CH-E	100-277 AC (141-392 DC)	12107	80	Cool white	5700K±300K
KTK80**NH-E		12107		Natural white	5000K±300K
KTK80**NH-E		12107		Natural white	4000±300k
KTK80**WM-E		10896		Warm white	3000±300k
KTK100**CH-E		14954	100	Cool white	5700±300k
KTK100**NH-E		14954		Natural white	5000±300k
KTK100**NH-E		14954		Natural white	4000±300k
KTK100**WM-E		13458		Warm white	3000±300k
KTK120**CH-E		17310	120	Cool white	5700±300k
KTK120**NH-E		17310		Natural white	5000±300k
KTK120**NH-E		17310		Natural white	4000±300k
KTK120**WM-E		15579		Warm white	3000±300k
KTK160**CH-S2-E		22910	160	Cool white	5700K±300K
KTK160**NH-S2-E		22910		Natural white	5000K±300K
KTK160**NH-S2-E		22910		Natural white	4000±300k
KTK160**WM-S2-E		20619		Warm white	3000±300k
KTK200**CH-S2-E		29145	200	Cool white	5700±300k
KTK200**NH-S2-E		29145		Natural white	5000±300k
KTK200**NH-S2-E		29145		Natural white	4000±300k
KTK200**WM-S2-E		26230		Warm white	3000±300k
KTK240**CH-S2-E		34136	240	Cool white	5700±300k
KTK240**NH-S2-E		34136		Natural white	5000±300k
KTK240**NH-S2-E		34136		Natural white	4000±300k
KTK240**WM-S2-E		30884		Warm white	3000±300k

Ordering Information

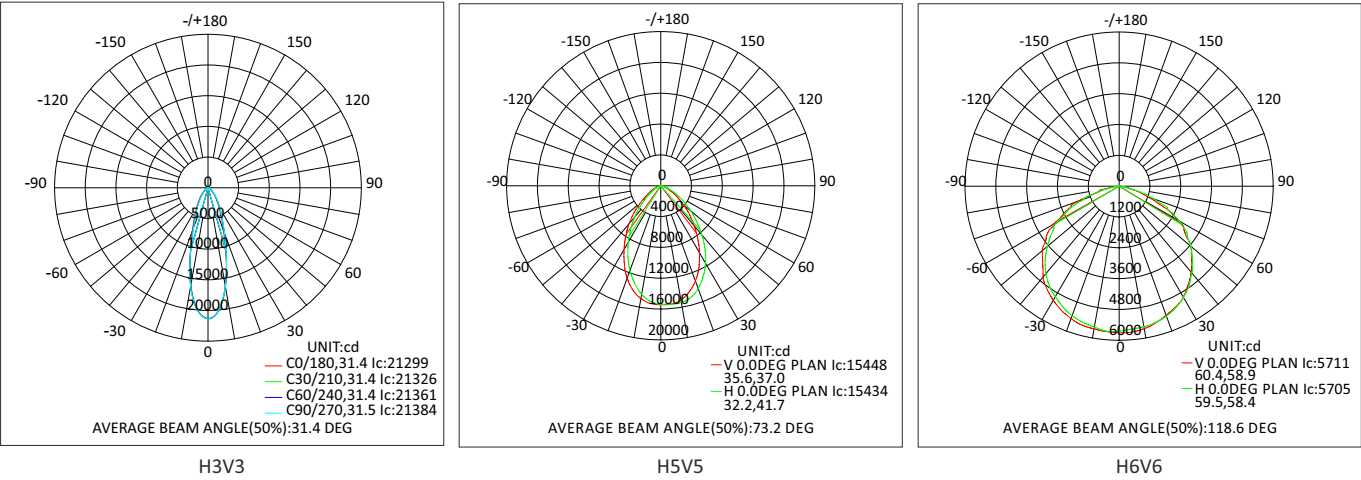
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)
KTK320**CH-S4-E	100-277 AC (141-392 DC)	46400	320	Cool white	5700±300k
KTK320**NH-S4-E		46400		Natural white	5000±300k
KTK320**NH-S4-E		46400		Natural white	4000±300k
KTK320**WM-S4-E		41760		Warm white	3000±300k
KTK400**CH-S4-E		58054	400	Cool white	5700±300k
KTK400**NH-S4-E		58054		Natural white	5000±300k
KTK400**NH-S4-E		58054		Natural white	4000±300k
KTK400**WM-S4-E		52248		Warm white	3000±300k
KTK480**CH-S4-E		69120	480	Cool white	5700±300k
KTK480**NH-S4-E		69120		Natural white	5000±300k
KTK480**NH-S4-E		69120		Natural white	4000±300k
KTK480**WM-S4-E		62208		Warm white	3000±300k

Remarks: 1.The first * stands for Operating Voltage including default -100-277VAC,D-347-480VAC .
2.The second * stands for Candela Distribution including H3V3,H5V5,H6V6.

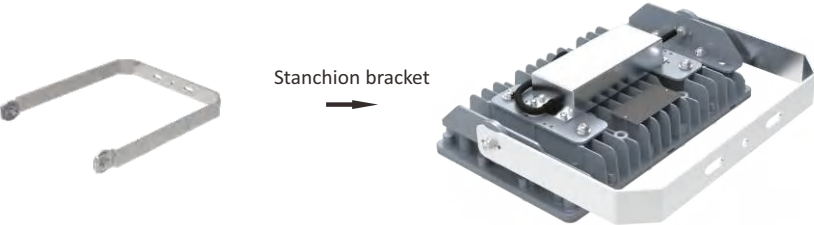
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
80W	175W-250W	175W-250W	Up to 60% reduction in energy costs
100W	250W-400W	250W-400W	
120W	250W-400W	250W-400W	
160W	400W	400W	
200W	400W-500W	400W-500W	
240W	600W-750W	600W-750W	
320W	750W-1000W	750W-1000W	
360W	750W-1000W	750W-1000W	
400W	1000W-1500W	1000W-1500W	
480W	1000W-2000W	1000W-2000W	

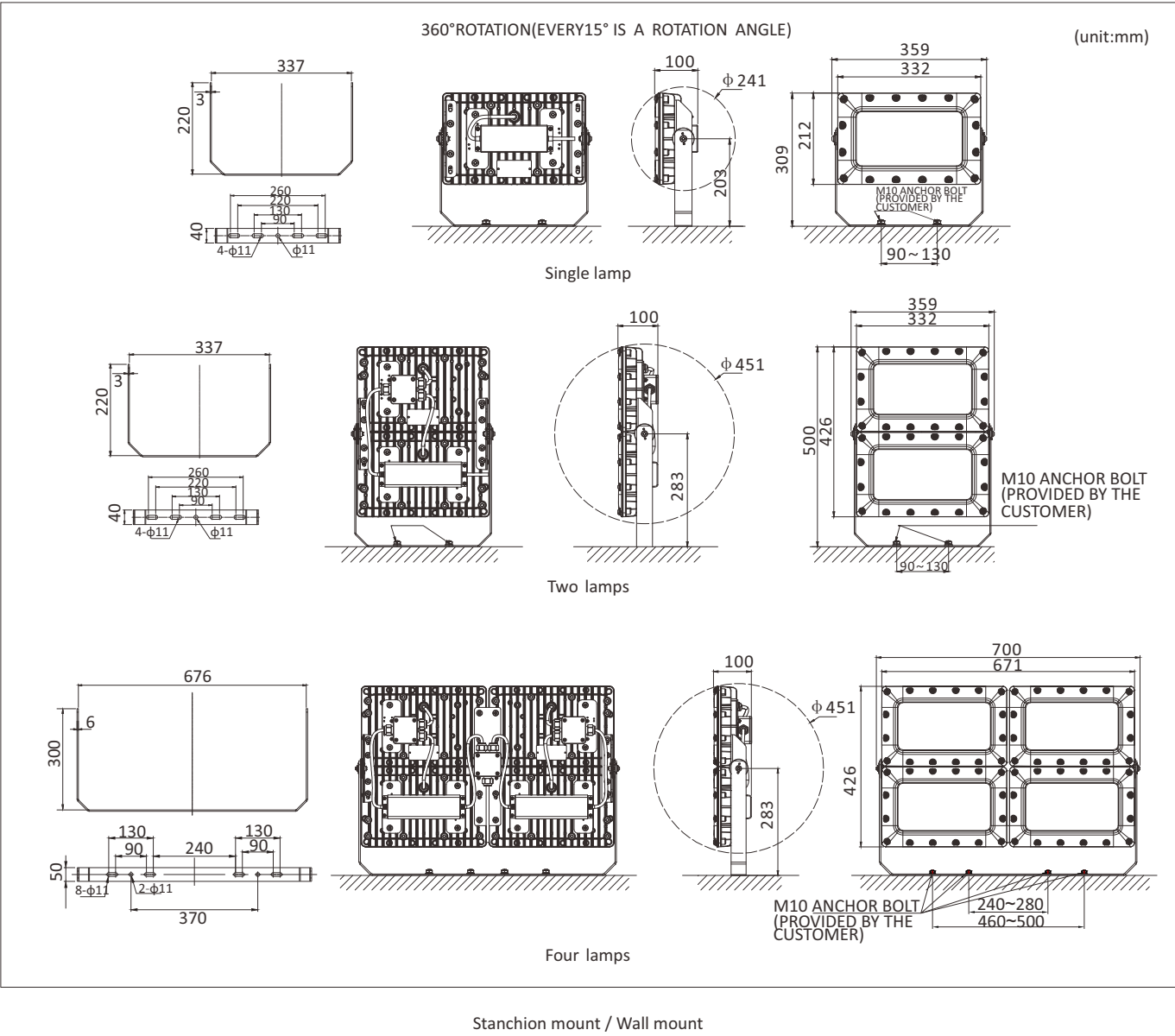
Candela Distribution



Optional Parts



Installation Method





LED Floodlight
- Seal B Series

Standard & Certificate:	
Certificate:	CE ,RoHS
Executive Standard:	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-1, IEC 62321-3-1, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Electrical & Photometric Features:	
Luminarie Efficacy:	150lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC 141-392 VDC
Power:	80W/100W/120W/150W/200W/240W/300W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	4KV/6KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	5.9Kg(80W/100W/120W/150W)/8.4Kg(200W/240W/300W)
Size:	332*282*72mm(80W/100W/120W/150W) 332*435*72mm(200W/240W/300W)
Ambient Temperature:	-40℃~+55℃
Connecting Terminals:	3*1.0mm ² (L+N+PE)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition

K	SE	XX	XX	XX	XX	-B	-X
Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Type	Area
K-KHJ	SE-SeaL	80-80W 100-100W 120-120W 150-150W 200-200W 240-240W 300-300W	Default-100~ 277VAC	H3V3(30°) H4V4(60°) H5V5(80°) H6V6(120°)	WM-3000K±300 NH-4000K±300 NH-5000K±300 CH-5700K±300	B-Type	E- English

Ordering Information

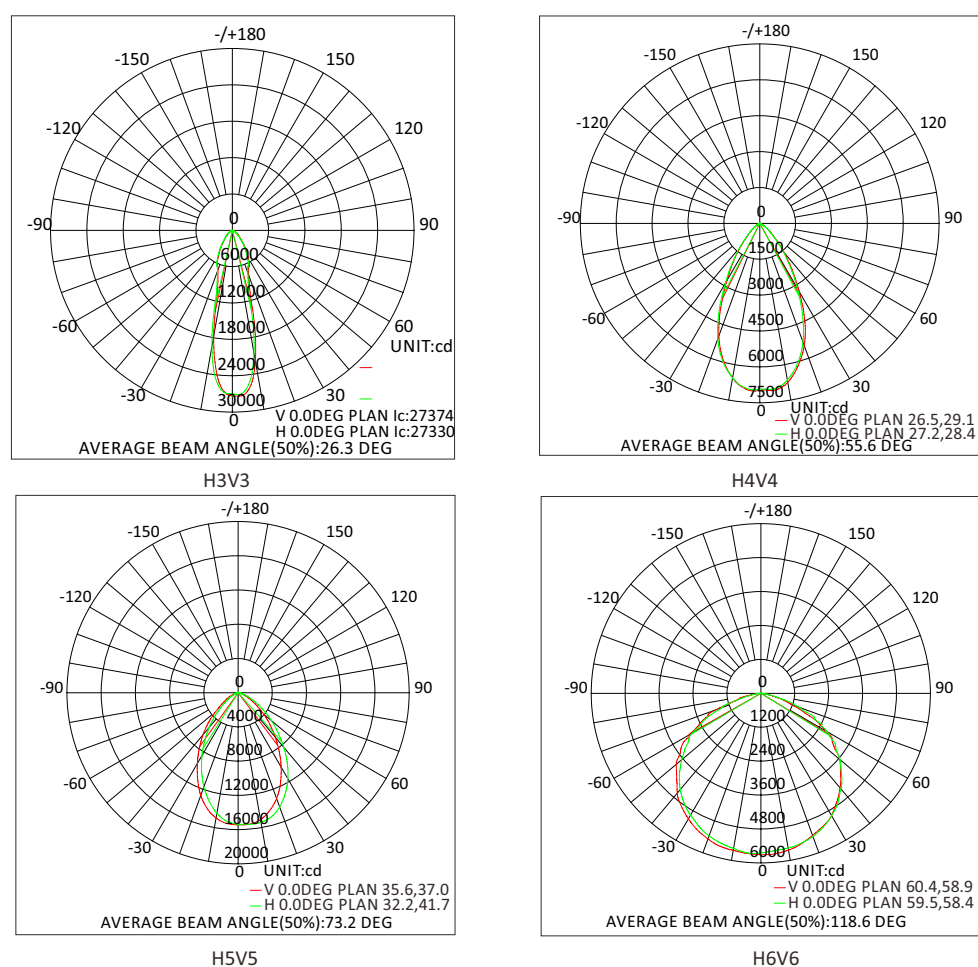
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)
KSE80*WM-B-E	100~277 AC (141~392 DC)	11160	80	Warm white	3000±300
KSE80*NH-B-E		12000	80	Natural white	4000±300
KSE80*NH-B-E		12000	80	Natural white	5000±300
KSE80*CH-B-E		12000	80	Cool white	5700±300
KSE100*WM-B-E		13950	100	Warm white	3000±300
KSE100*NH-B-E		15000	100	Natural white	4000±300
KSE100*NH-B-E		15000	100	Natural white	5000±300
KSE100*CH-B-E		15000	100	Cool white	5700±300
KSE120*WM-B-E		16740	120	Warm white	3000±300
KSE120*NH-B-E		18000	120	Natural white	4000±300
KSE120*NH-B-E		18000	120	Natural white	5000±300
KSE120*CH-B-E		18000	120	Cool white	5700±300
KSE150*WM-B-E		20925	150	Warm white	3000±300
KSE150*NH-B-E		22500	150	Natural white	4000±300
KSE150*NH-B-E		22500	150	Natural white	5000±300
KSE150*CH-B-E		22500	150	Cool white	5700±300
KSE200*WM-B-E		27900	200	Warm white	3000±300
KSE200*NH-B-E		30000	200	Natural white	4000±300
KSE200*NH-B-E		30000	200	Natural white	5000±300
KSE200*CH-B-E		30000	200	Cool white	5700±300
KSE240*WM-B-E		33480	240	Warm white	3000±300
KSE240*NH-B-E		36000	240	Natural white	4000±300
KSE240*NH-B-E		36000	240	Natural white	5000±300
KSE240*CH-B-E		36000	240	Cool white	5700±300
KSE300*WM-B-E		41850	300	Warm white	3000±300
KSE300*NH-B-E		45000	300	Natural white	4000±300
KSE300*NH-B-E		45000	300	Natural white	5000±300
KSE300*CH-B-E		45000	300	Cool white	5700±300

Remarks: 1.*Stands for beam angle , including H3V3 / H4V4 / H5V5 / H6V6.
2.For beam angle H3V3and H4V4,the luminous flux will be 8% less;

KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
80W	175W-250W	175W-250W	Up to 60% reduction in energy costs
100W	250W-400W	250W-400W	
120W	250W-400W	250W-400W	
150W	400W	400W	
200W	400W-500W	400W-500W	
240W	600W-750W	600W-750W	
300W	750W-1000W	750W-1000W	

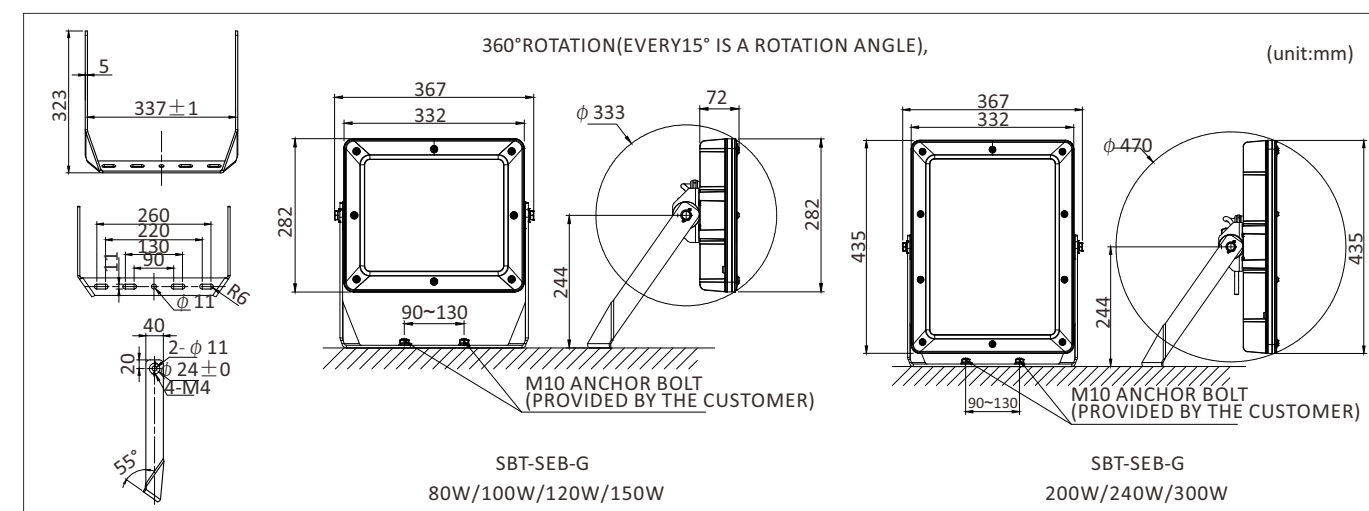
Candela Distribution



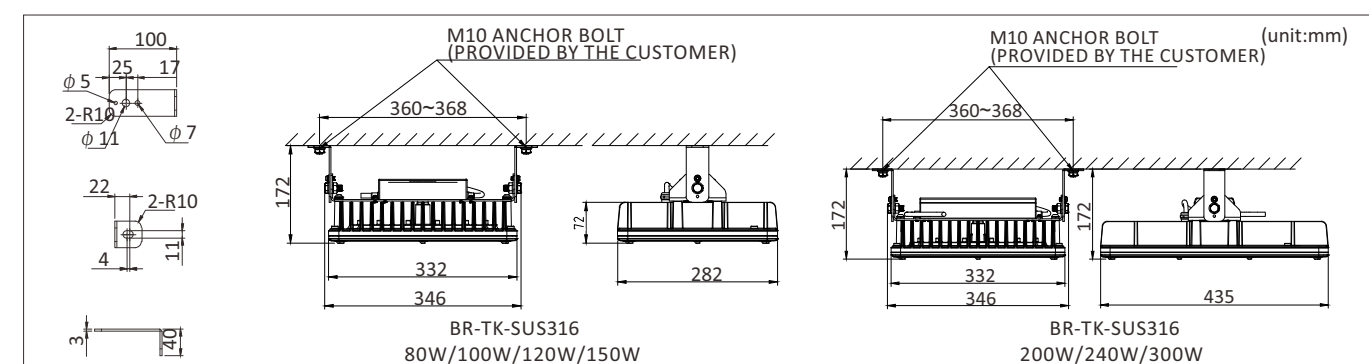
Optional Parts



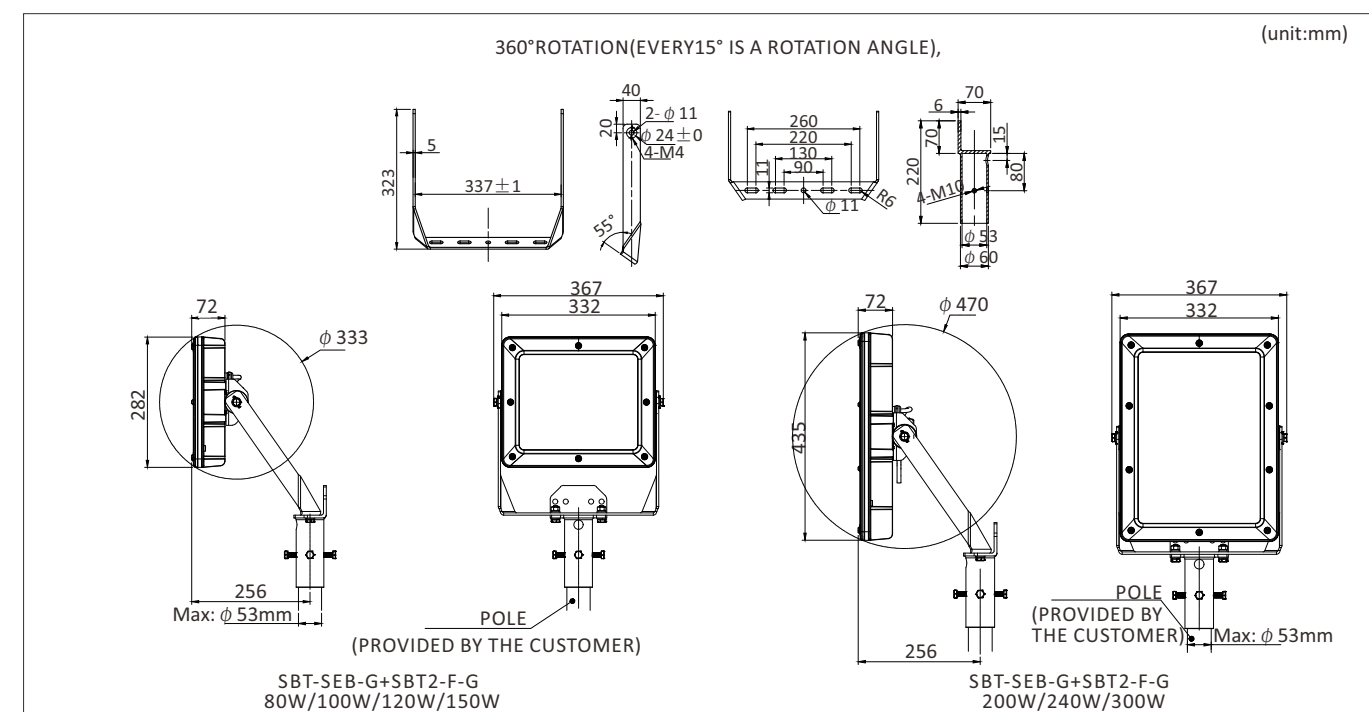
Installation Method



Stanchion mount / Wall mount



Ceiling mount



Pole Mount

LED Linear light
- Swordfish Series

Standard & Certificate:		
Certificate:		CE,RoHS
Executive Standard:		EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Electrical & Photometric Features:		
Luminarie Efficacy:		136.5lm/W
Lifespan:		>100,000 hours
Operating Voltage:	Normal	100-277 VAC/24-48 VAC,10-30 VDC/24-48 VDC/141-392 VDC
	Emergency	220-240 VAC,311-339 VDC
Power:	Normal	18W/36W/48W(0.6m),36W/48W/56W/72W(0.9m)
	Emergency	5W
Frequency:		50/60Hz
Power Factor:		>0.98
THD:		<10%
CRI:		>70
Insulation Class:		I
Surge Protection:		4KV/6KV
LED Driver:		Over voltage protection/short circuit protection
Battery Capacity:		2.2 Ah
Battery Type:		Ni-Cd
Battery Lifespan:		500 cycles
Back up:		180 min
Charging time:(after full discharge)		24 hours
Mechanical Features:		
Weight:	Normal	6.9Kg(0.6m)/9.2Kg(0.9m)
	Emergency	7.3Kg(0.6m)/9.6Kg(0.9m)
Size:		600*136*124mm(18W/36W/48W)/900*136*124mm(36W/48W/56W/72W)
Connecting Terminals:		3*1.0-4.0mm²(L+N+PE)
Cable Entries:		2 x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:		M4 (Internal & external earth bolts)
IP Code:		IP66
Enclosure Maternal:		Copper-free Aluminium
Enclosure Colour:		Grey RAL7040
Coating:		Epoxy powder coating
Exposed Fastener:		Stainless steel
Protective Cover:		Tempered glass,Stand 7J impact

Product Definition

K	SF	XX	XX	XX	XX	XX	-X	-U	-E	
Brand	Series	Power	Input Voltage	Length	Candela	Distribution	CCT(K)	Type	Type	Area
K-KHJ	SF-Swordfish series	18-18W	Deafult-100-277VAC A-24-48VAC/DC B-10-30VDC Emergency Deafult-220-240VAC	600-600mm	H7V7(120°)		WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K	Default-Normal	U- Update	E- English
		36-36W		1200-900mm				ON- Emergency		
		48-48W								
		56-56W								
		72-72W								

Ordering Information

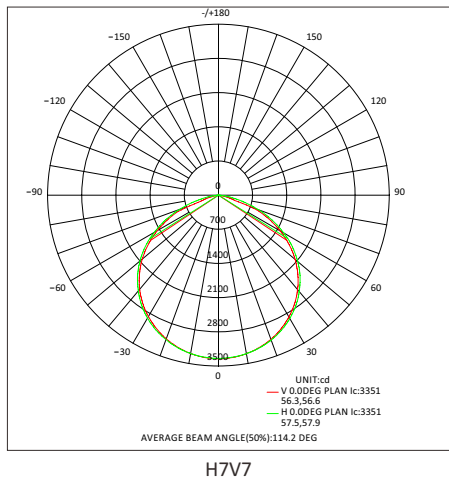
P/N	Operating Voltage(V)	Luminous Flux(lm)		Power(W)		Color Temp.	CCT(K)
		Normal	Emergency	Normal	Emergency		
KSF18*600H7V7WM-*-U-E	100-277 AC (141-392 DC)	2268	630	18	5	Warm white	3000±300
KSF18*600H7V7NH-*-U-E		2457	683	18		Natural white	4000±300
KSF18*600H7V7NH-*-U-E		2457	683	18		Natural white	5000±300
KSF18*600H7V7CH-*-U-E		2457	683	18		Cool white	5700±300
KSF36*600H7V7WM-*-U-E		4536	630	36		Warm white	3000±300
KSF36*600H7V7NH-*-U-E		4914	683	36		Natural white	4000±300
KSF36*600H7V7NH-*-U-E		4914	683	36		Natural white	5000±300
KSF36*600H7V7CH-*-U-E		4914	683	36		Cool white	5700±300
KSF48*600H7V7WM-*-U-E		6048	630	48		Warm white	3000±300
KSF48*600H7V7NH-*-U-E		6552	683	48		Natural white	4000±300
KSF48*600H7V7NH-*-U-E		6552	683	48		Natural white	5000±300
KSF48*600H7V7CH-*-U-E		6552	683	48		Cool white	5700±300
KSF36*1200H7V7WM-*-U-E		4536	630	36		Warm white	3000±300
KSF36*1200H7V7NH-*-U-E		4914	683	36		Natural white	4000±300
KSF36*1200H7V7NH-*-U-E		4914	683	36		Natural white	5000±300
KSF36*1200H7V7CH-*-U-E		4914	683	36		Cool white	5700±300
KSF48*1200H7V7WM-*-U-E		6048	630	48		Warm white	3000±300
KSF48*1200H7V7NH-*-U-E		6552	683	48		Natural white	4000±300
KSF48*1200H7V7NH-*-U-E		6552	683	48		Natural white	5000±300
KSF48*1200H7V7CH-*-U-E		6552	683	48		Cool white	5700±300
KSF56*1200H7V7WM-*-U-E		7056	630	56		Warm white	3000±300
KSF56*1200H7V7NH-*-U-E		7644	683	56		Natural white	4000±300
KSF56*1200H7V7NH-*-U-E		7644	683	56		Natural white	5000±300
KSF56*1200H7V7CH-*-U-E		7644	683	56		Cool white	5700±300
KSF72*1200H7V7WM-*-U-E		9072	630	72		Warm white	3000±300
KSF72*1200H7V7NH-*-U-E		9828	683	72		Natural white	4000±300
KSF72*1200H7V7NH-*-U-E		9828	683	72		Natural white	5000±300
KSF72*1200H7V7CH-*-U-E		9828	683	72		Cool white	5700±300

Remarks: 1.The first *Stands for Operating Voltage, including Default -AC-100~277V,A-AC/DC 24~48V,B-DC 10~30V.
2.The second *Stands for product type, including Default -Normal,ON-Emergency
3.10-30VDC & 24~48V AC/DC are not suitable for 72W

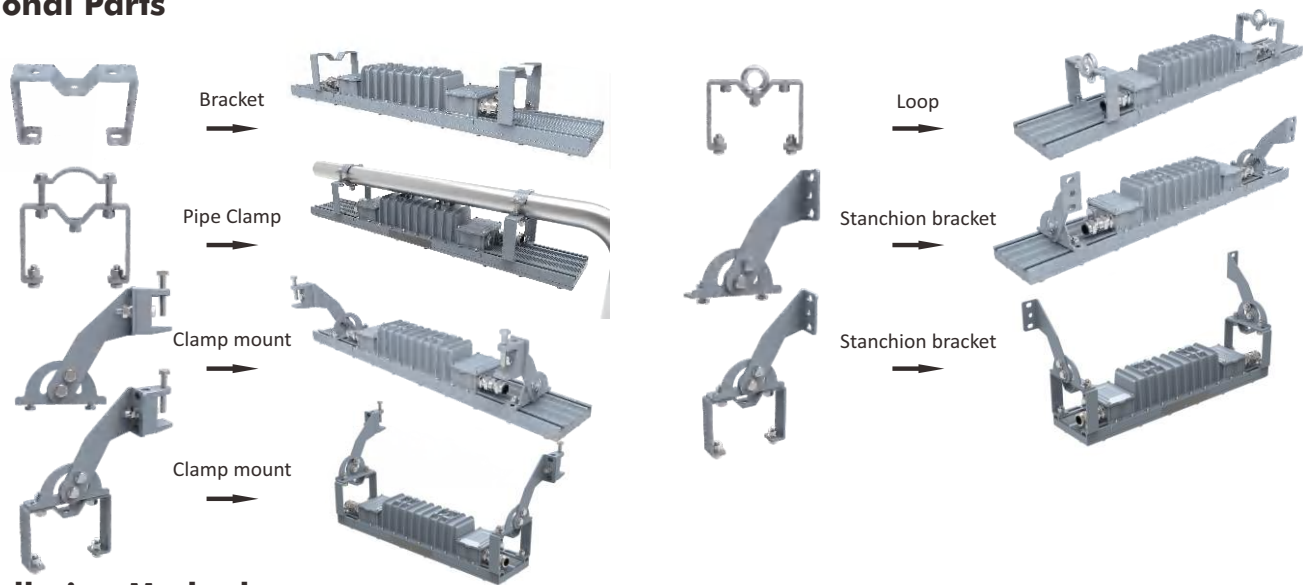
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
18W	2*18W/1*36W	2*18W/1*36W	Up to 60% reduction in energy costs
36W	4*18W/2*36W	4*18W/2*36W	
48W	4*18W/3*36W	4*18W/3*36W	
56W	3*36W	3*36W	
72W	4*36W	4*36W	

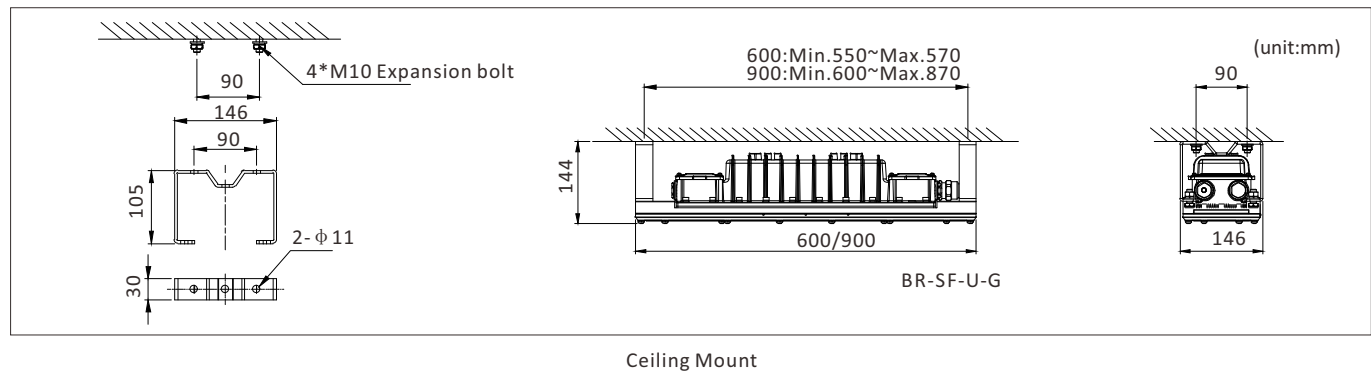
Candela Distribution



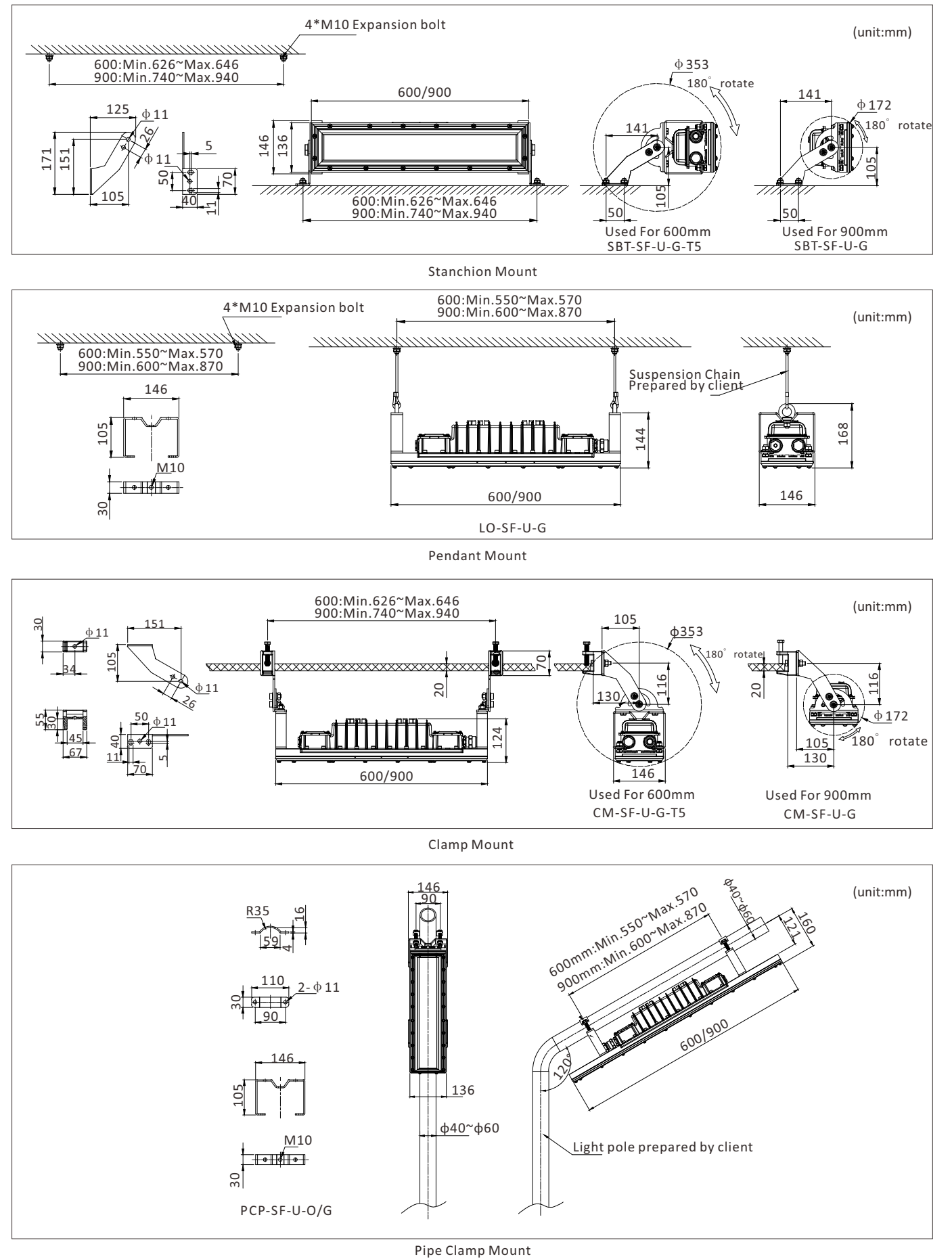
Optional Parts



Installation Method



Installation Method

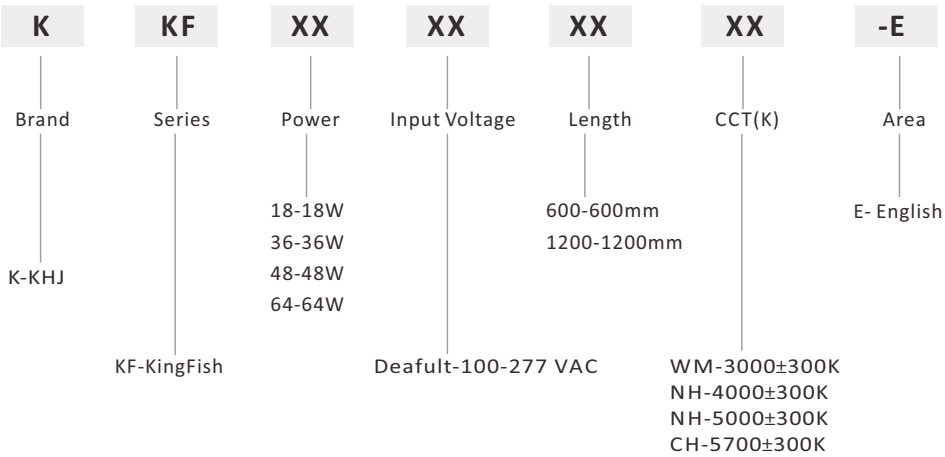




LED Linear light
- Kingfish Series

Standard & Certificate:	
Certificate:	CE RoHS
Executive Standard:	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Electrical & Photometric Features:	
Luminarie Efficacy:	132lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC/141-392 VDC
Power:	18W/36W/48W(0.6m), 36W/48W/64W(1.2m)
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	4KV/6KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	2.7Kg(0.6m)/4.3Kg(1.2m)
Size:	600*110*103mm(18W/36W/48W)/1200*110*103mm(48W/64W)
Ambient Temperature:	-40℃-+55℃
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Cable Entries:	2 x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Copper-free Aluminium
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition



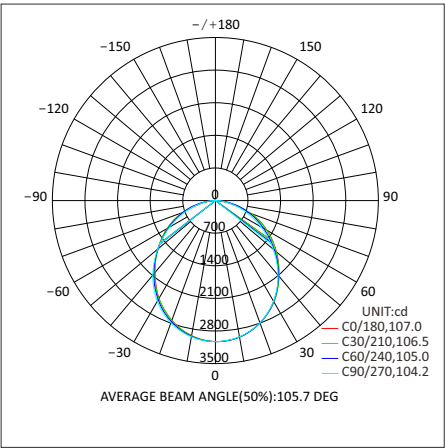
Ordering Information

P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)
KKF18600WM-E	100-277 AC (141-392 DC)	2193	18	Warm white	3000±300
KKF18600NH-E		2376	18	Natural white	4000±300
KKF18600NH-E		2376	18	Natural white	5000±300
KKF18600CH-E		2376	18	Cool white	5700±300
KKF36600WM-E		4386	36	Warm white	3000±300
KKF36600NH-E		4752	36	Natural white	4000±300
KKF36600NH-E		4752	36	Natural white	5000±300
KKF36600CH-E		4752	36	Cool white	5700±300
KKF48600WM-E		5848	48	Warm white	3000±300
KKF48600NH-E		6336	48	Natural white	4000±300
KKF48600NH-E		6336	48	Natural white	5000±300
KKF48600CH-E		6336	48	Cool white	5700±300
KKF361200WM-E		4386	36	Warm white	3000±300
KKF361200NH-E		4752	36	Natural white	4000±300
KKF361200NH-E		4752	36	Natural white	5000±300
KKF361200CH-E		4752	36	Cool white	5700±300
KKF481200WM-E		5848	48	Warm white	3000±300
KKF481200NH-E		6336	48	Natural white	4000±300
KKF481200NH-E		6336	48	Natural white	5000±300
KKF481200CH-E		6336	48	Cool white	5700±300
KKF641200WM-E		7797	64	Warm white	3000±300
KKF641200NH-E		8448	64	Natural white	4000±300
KKF641200NH-E		8448	64	Natural white	5000±300
KKF641200CH-E		8448	64	Cool white	5700±300

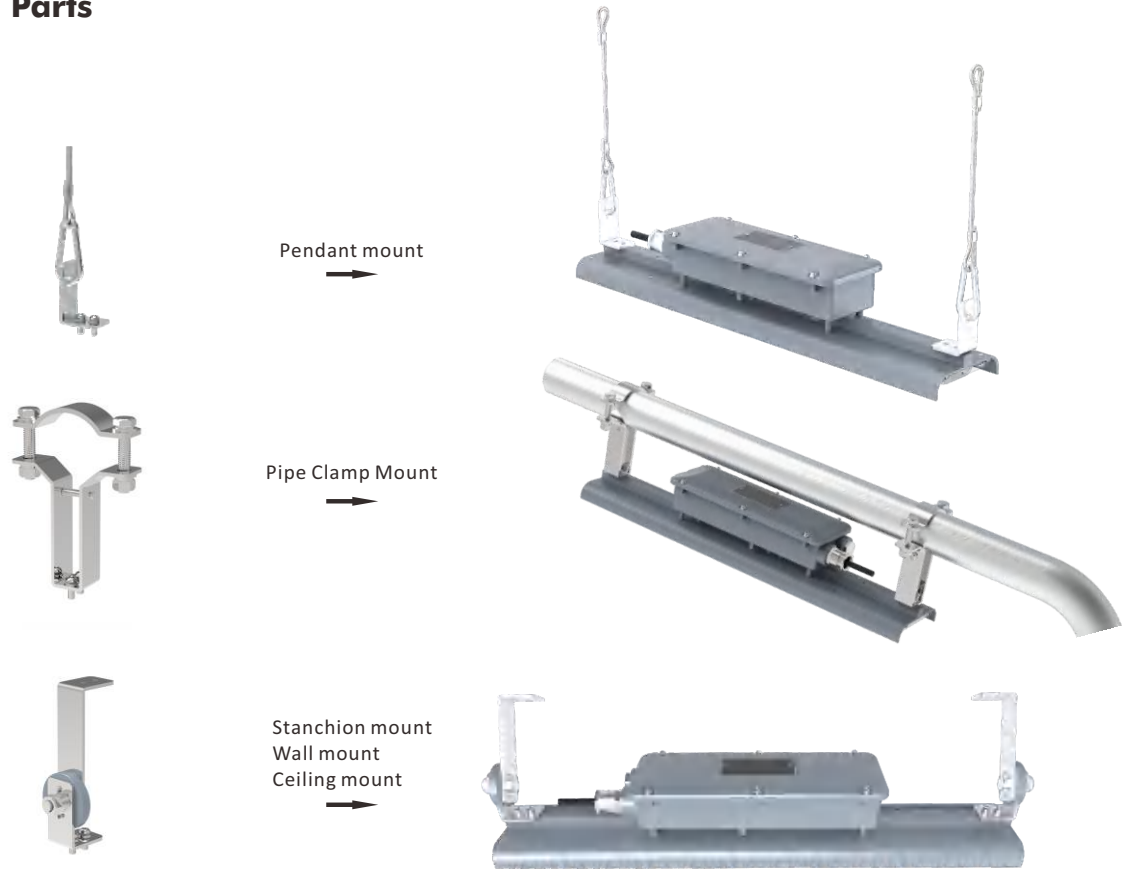
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
18W	2*18W/1*36W	2*18W/1*36W	Up to 60% reduction in energy costs
36W	4*18W/2*36W	4*18W/2*36W	
48W	4*18W/3*36W	4*18W/3*36W	
64W	3*36W	3*36W	

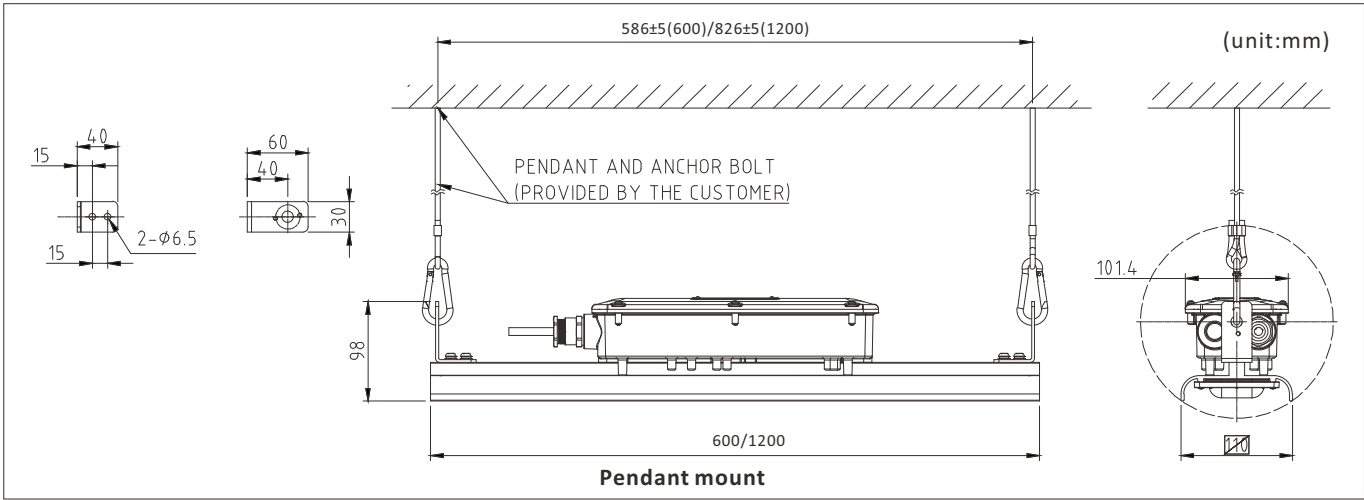
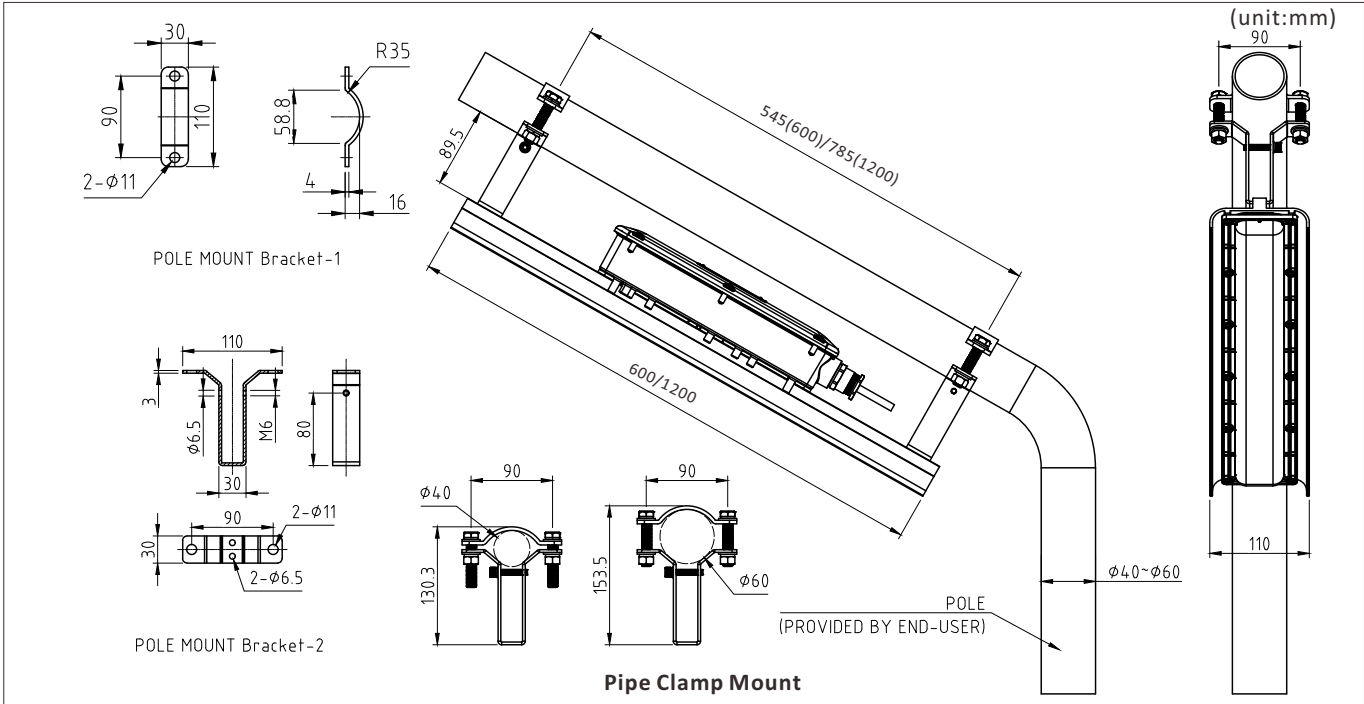
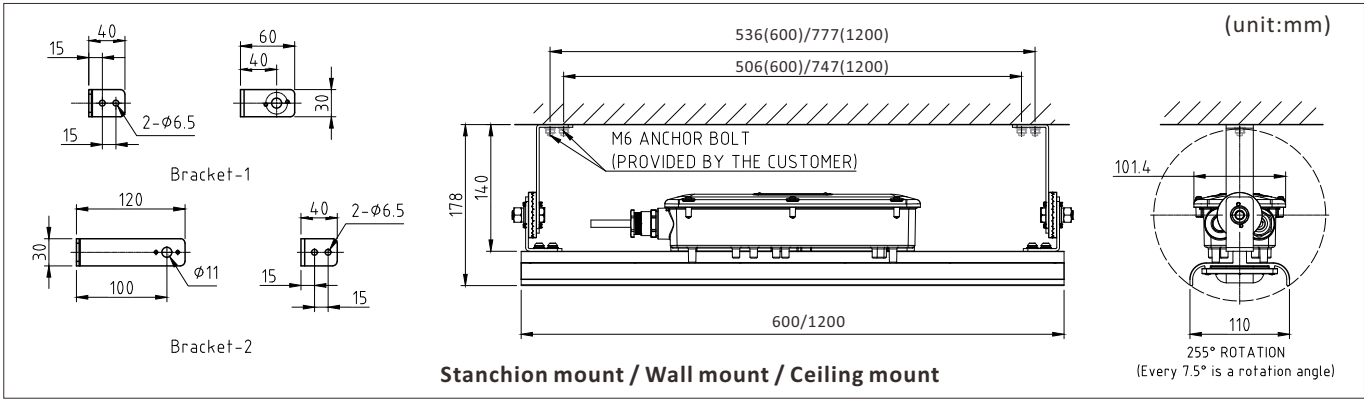
Candela Distribution



Optional Parts

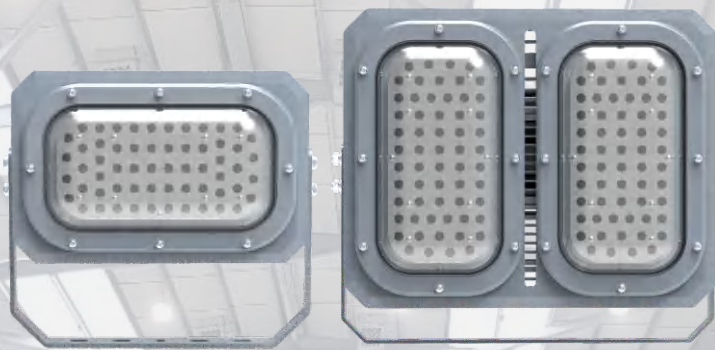


Installation Method





CE RoHS

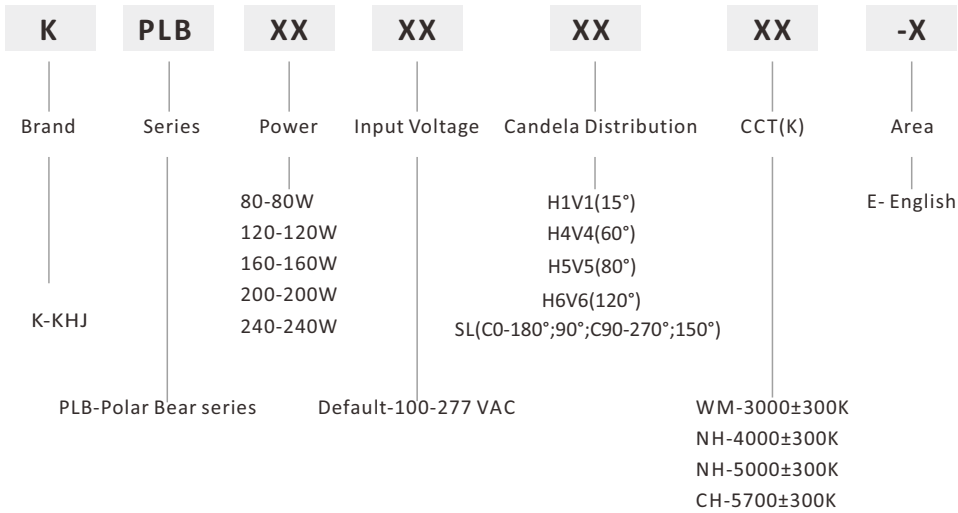


LED Floodlight/High bay light
- Polarbear Series

Standard & Certificate:	
Certificate:	CE ,RoHS
Executive Standard:	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Electrical & Photometric Features:	
Luminarie Efficacy:	147lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC,141-392 VDC
Power:	80W/120W/160W/200W/240W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	4KV/6KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	11Kg(80W/120W,160W)/18.4Kg(200W,240W)
Size:	260*400*161mm(80W/120W,160W)/500*400*161mm(200W/240W)
Ambient Temperature:	-40℃-+55℃
Connecting Terminals:	3*1.0mm²(L+N+PE);3*1.0-4.0mm²(L+N+PE) for optional
Cable Entries:	2 x M25*1.5 (M20*1.5 is optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Copper-free Aluminium
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact



Product Definition



Ordering Information

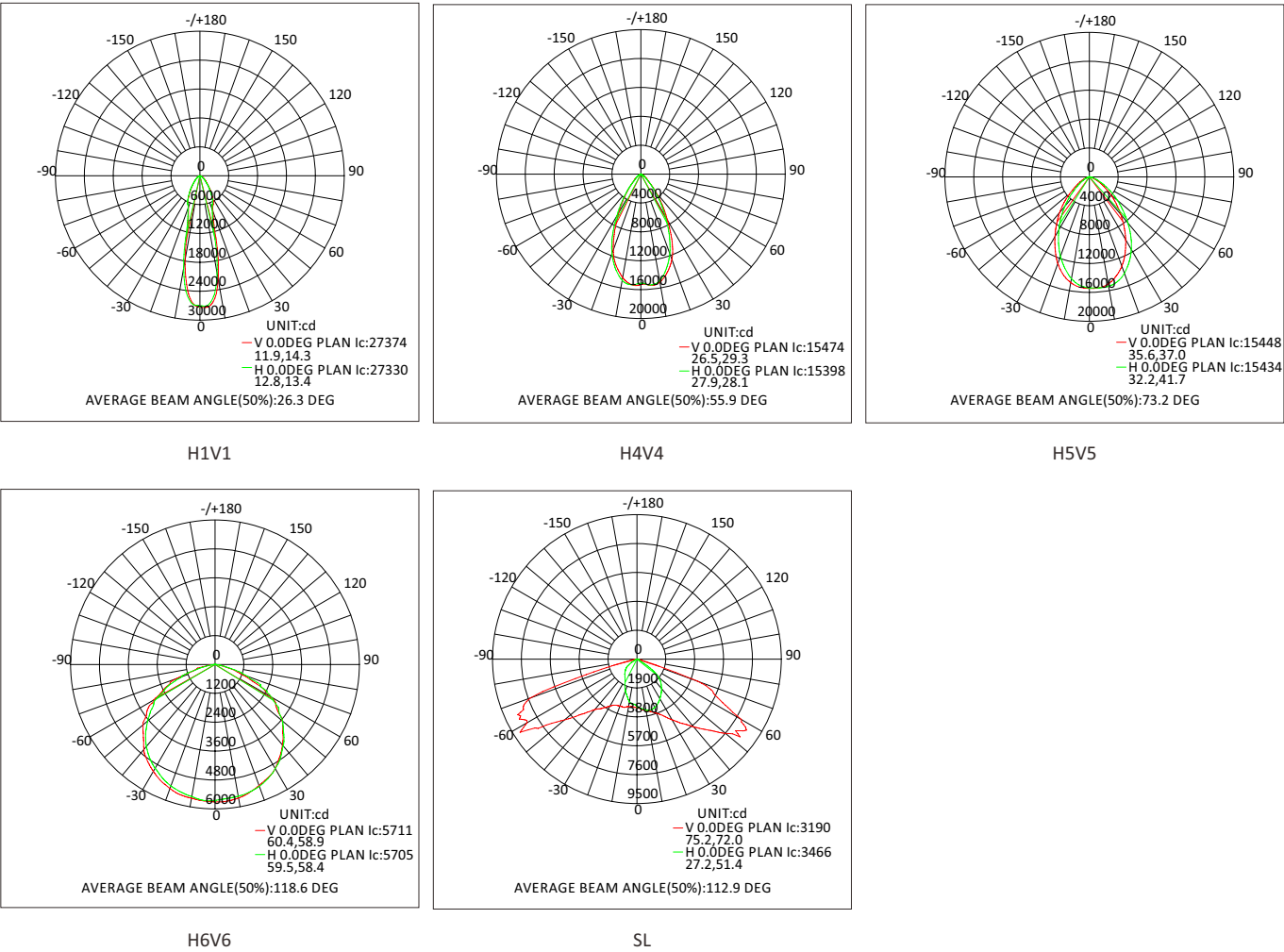
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)
KPLB80*WM-E	100-277 AC (141-392 DC)	10920	80	Warm white	3000±300
KPLB80*NH-E		11760	80	Natural white	4000±300
KPLB80*NH-E		11760	80	Natural white	5000±300
KPLB80*CH-E		11760	80	Cool white	5700±300
KPLB120*WM-E		16380	120	Warm white	3000±300
KPLB120*NH-E		17640	120	Natural white	4000±300
KPLB120*NH-E		17640	120	Natural white	5000±300
KPLB120*CH-E		17640	120	Cool white	5700±300
KPLB160*WM-E		21840	160	Warm white	3000±300
KPLB160*NH-E		23520	160	Natural white	4000±300
KPLB160*NH-E		23520	160	Natural white	5000±300
KPLB160*CH-E		23520	160	Cool white	5700±300
KPLB200*WM-E		27300	200	Warm white	3000±300
KPLB200*NH-E		29400	200	Natural white	4000±300
KPLB200*NH-E		29400	200	Natural white	5000±300
KPLB200*CH-E		29400	200	Cool white	5700±300
KPLB240*WM-E		32760	240	Warm white	3000±300
KPLB240*NH-E		35280	240	Natural white	5000±300
KPLB240*NH-E		35280	240	Natural white	4000±300
KPLB240*CH-E		35280	240	Cool white	5700±300

Remarks: 1.* Stands for beam angle,including H1V1 / H4V4 / H5V5 / H6V6 / SL;
2.For Beam angle H1V1,H4V4 and H5V5,the luminous flux will be 15% less;
For Beam angle SL the luminous flux will be 30% less.
3.SL beam angle is only applicable for 80W&120W.

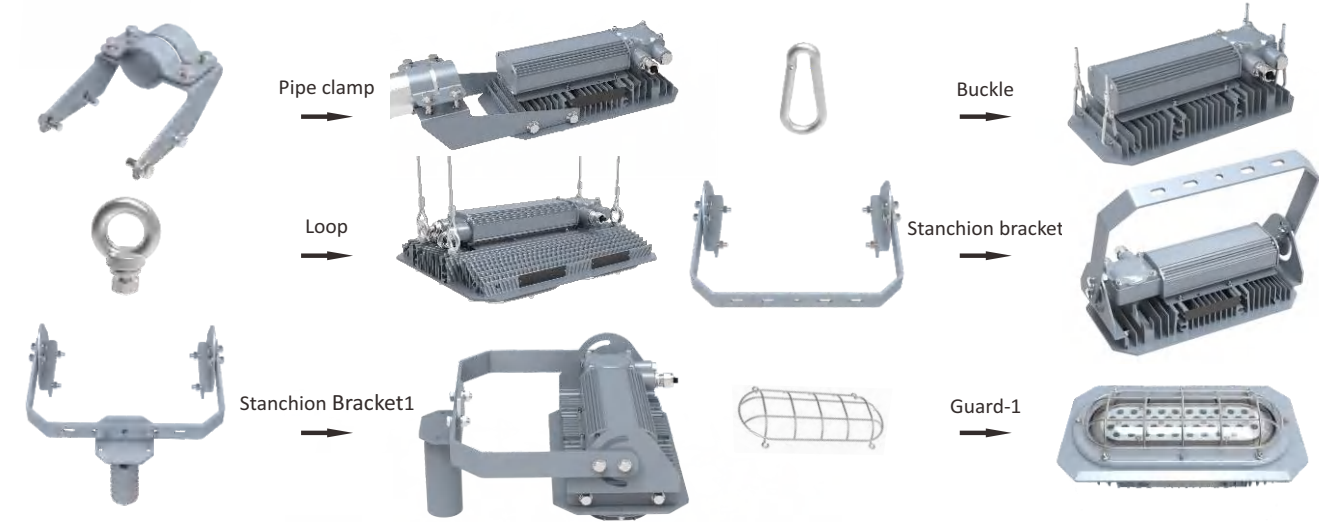
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
80W	175W~250W	175W~250W	Up to 60% reduction in energy costs
120W	250W~400W	250W~400W	
160W	400W	400W	
200W	400W~500W	400W~500W	
240W	600W~750W	600W~750W	

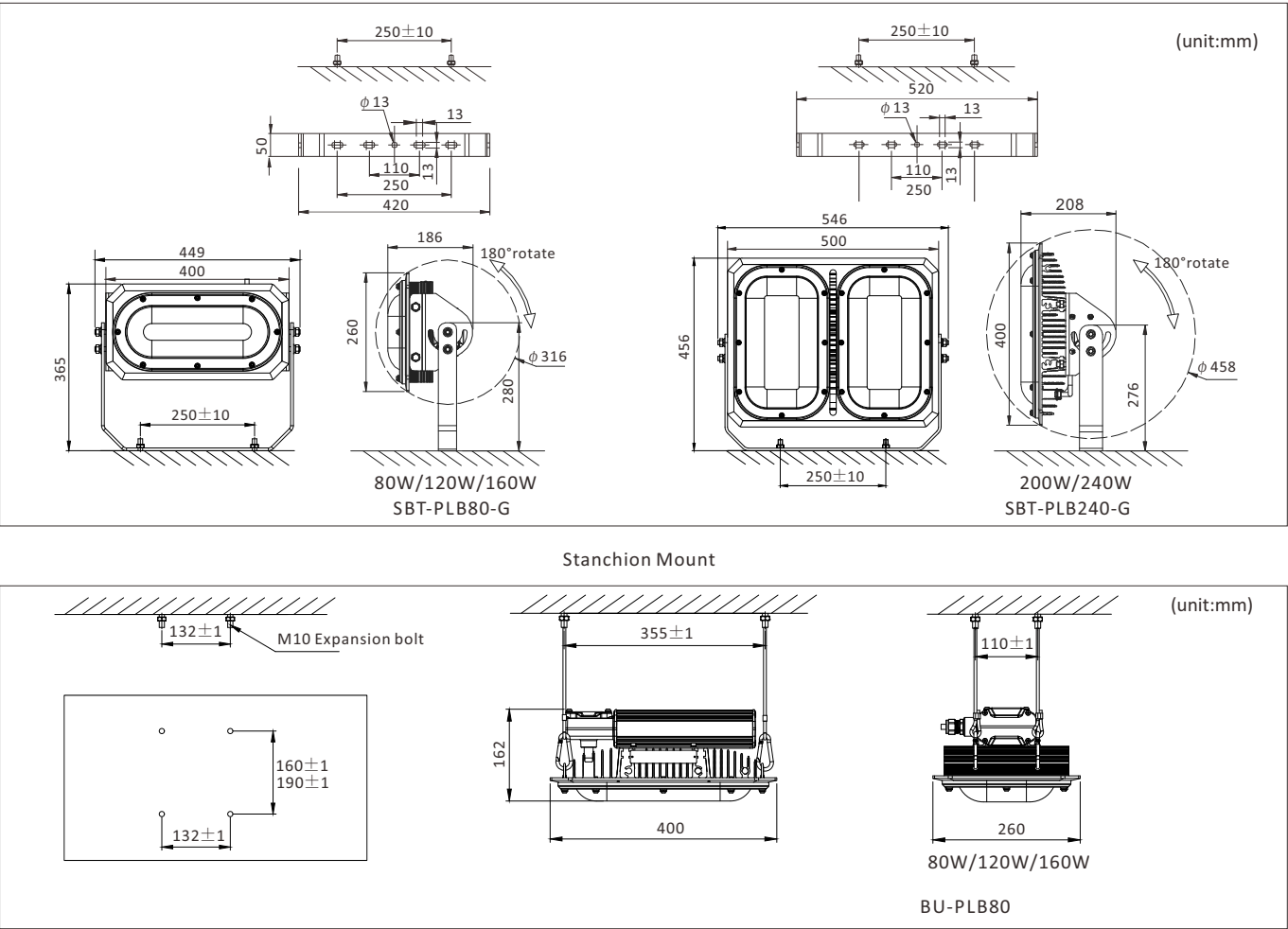
Candela Distribution



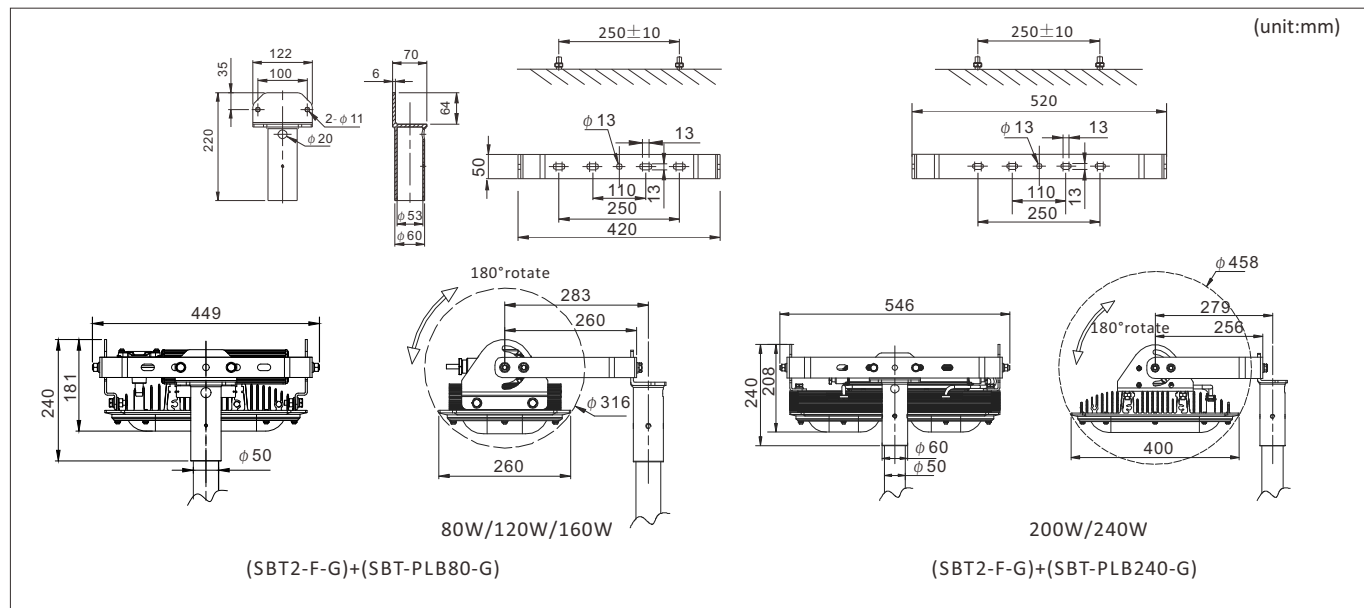
Optional Parts



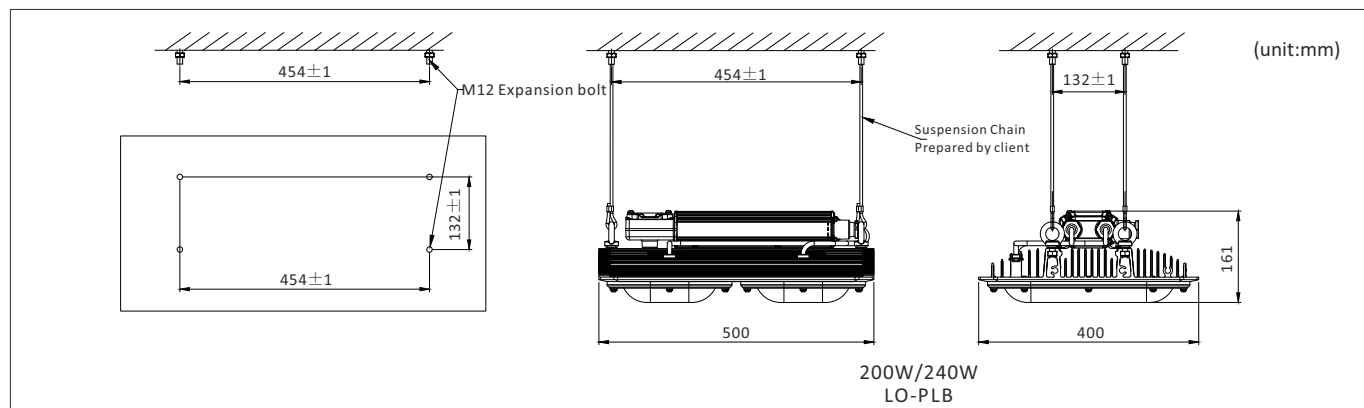
Installation Method



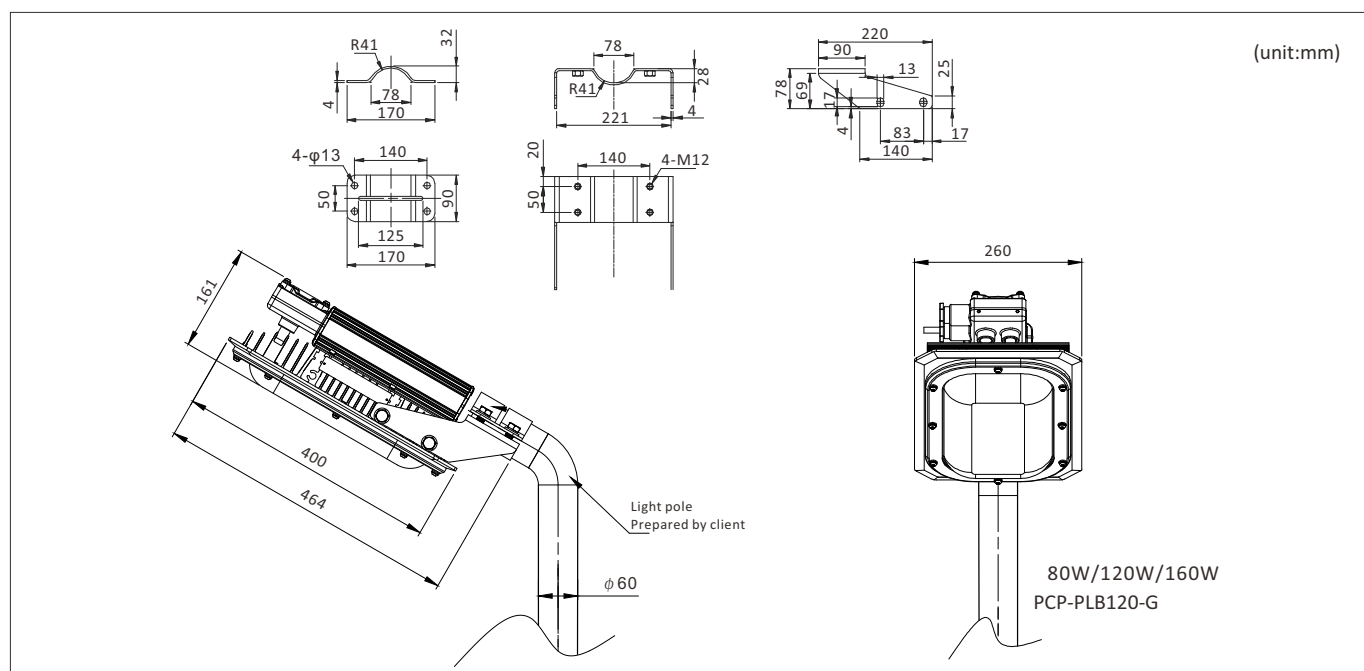
Installation Method



Pole Mount



Pendant Mount



Pipe Clamp





LED Floodlight/Bay light/Platform light

- Forest Frog Series

Standard & Certificate:	
Certificate:	CE ,RoHS
Executive Standard:	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Electrical & Photometric Features:	
Luminarie Efficacy:	136.5lm/W
Lifespan:	>100,000 hours
Operating Voltage:	24-48 VAC/100-277 VAC 10-30 VDC/24-48 VDC/141-392 VDC
Power:	30W/45W/60W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	5KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	3.3Kg
Size:	φ 220*191mm
Ambient Temperature:	-40℃-+55℃
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Cable Entries:	1 x M25*1.5
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition

K	FF	XX	XX	XX	XX	-X	-J	-X
Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Type	Junction box	Area
			Default-100-277 VAC A-24-48 VAC/DC B-10-30 VDC			Default-Normal P-Pole mount bracket		E- English
K-KHJ	FF-ForestFrog	30-30W 45-45W 60-60W		H1V1(15°) H5V5(80°) H6V6(120°)	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K		J-Junction box	

Ordering Information

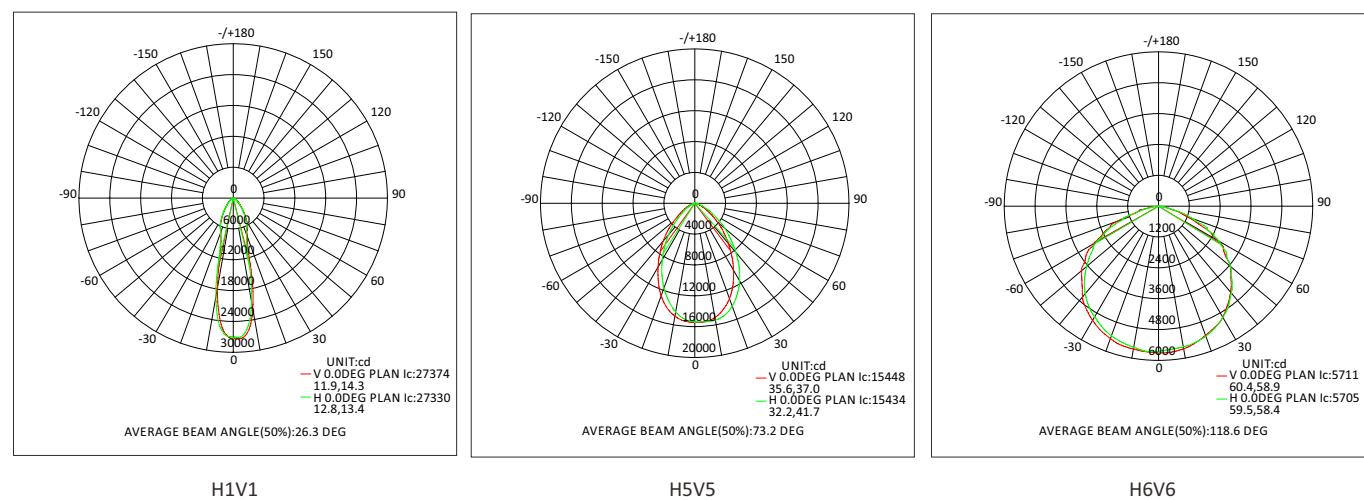
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)
KFF30*WM-J-E	100~277 AC (141~392 DC)	3780	30	Warm white	3000±300
KFF30*NH-J-E		4095	30	Natural white	4000±300
KFF30*NH-J-E		4095	30	Natural white	5000±300
KFF30*CH-J-E		4095	30	Cool white	5700±300
KFF45*WM-J-E		5670	45	Warm white	3000±300
KFF45*NH-J-E		6142	45	Natural white	4000±300
KFF45*NH-J-E		6142	45	Natural white	5000±300
KFF45*CH-J-E		6142	45	Cool white	5700±300
KFF60*WM-J-E		7560	60	Warm white	3000±300
KFF60*NH-J-E		8190	60	Natural white	4000±300
KFF60*NH-J-E		8190	60	Natural white	5000±300
KFF60*CH-J-E		8190	60	Cool white	5700±300

Remarks: 1、*Stands for candela distribution, including H1V1 / H5V5 / H6V6;
2、For beam angle H1V1/H5V5,the luminous flux will be 8% less;

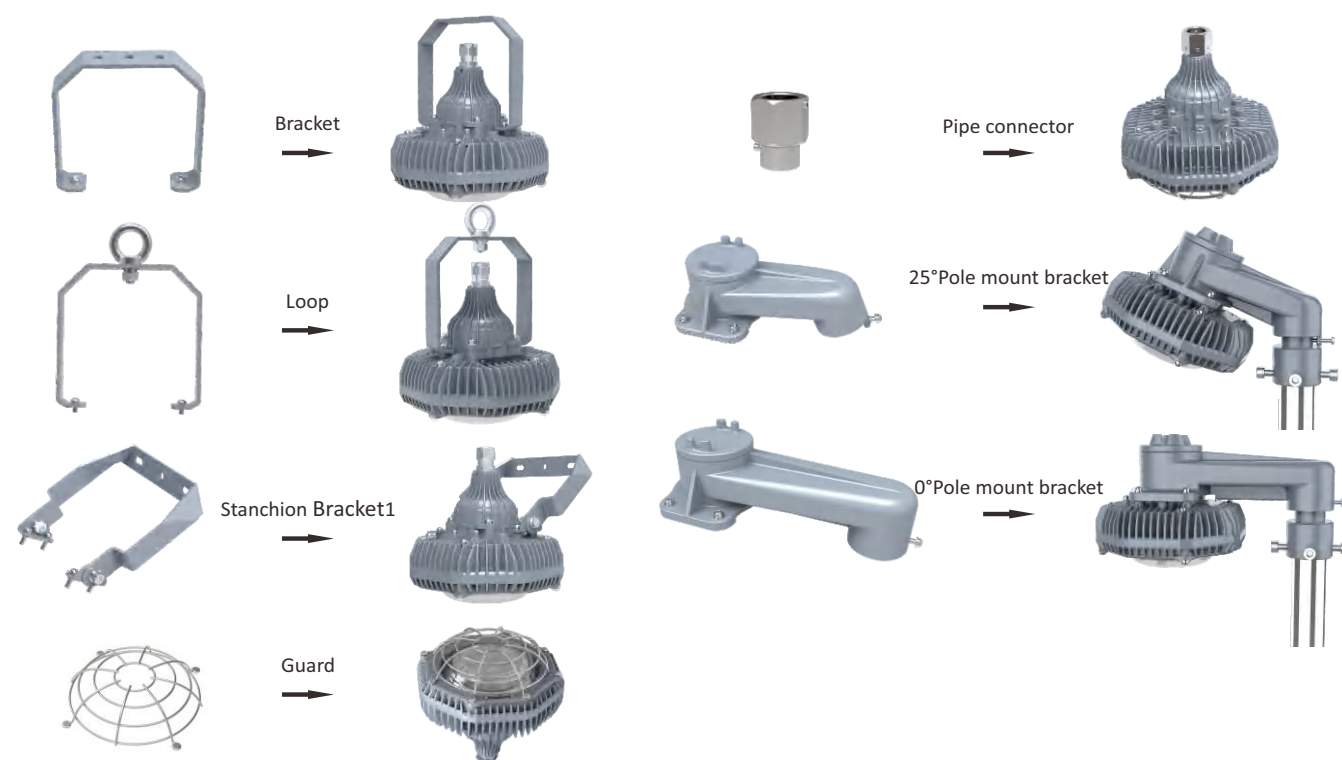
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
30W	70W	70W	Up to 60% reduction in energy costs
45W	100W~150W	100W~150W	
60W	150W~175W	150W~175W	

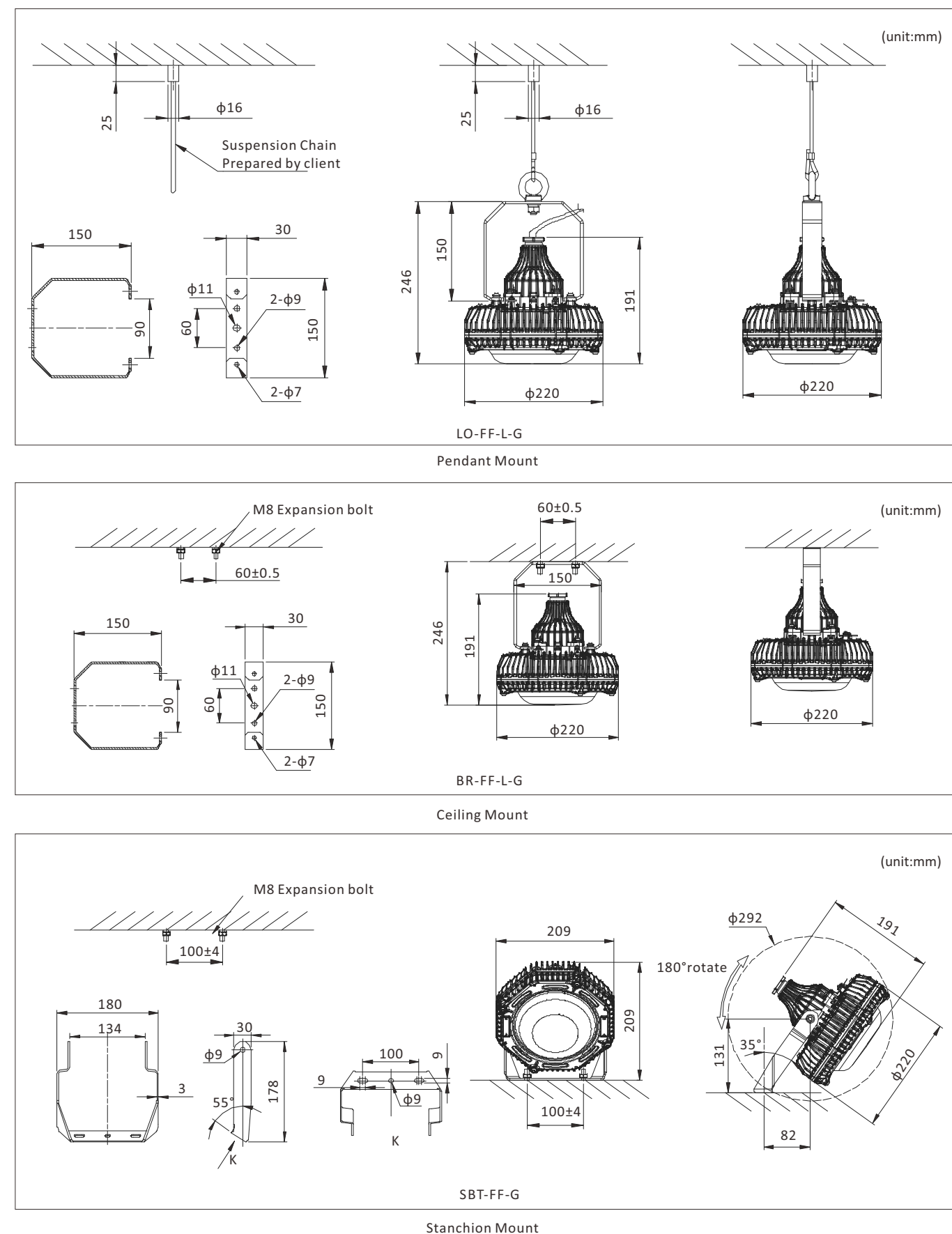
Candela Distribution



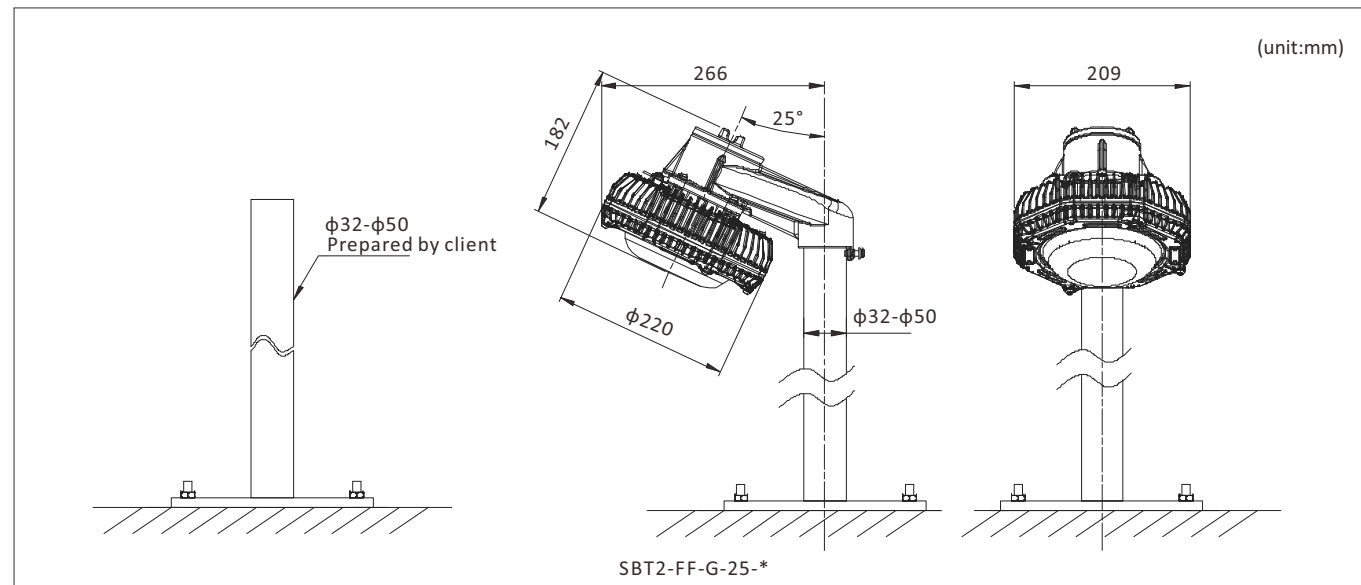
Optional Parts



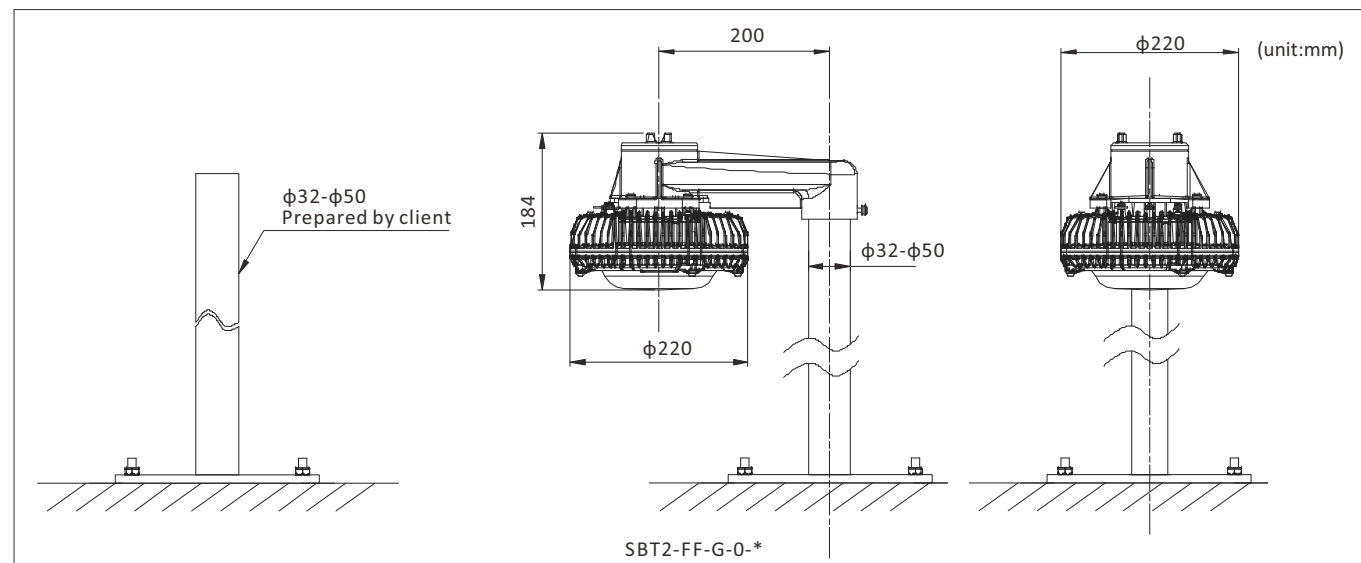
Installation Method



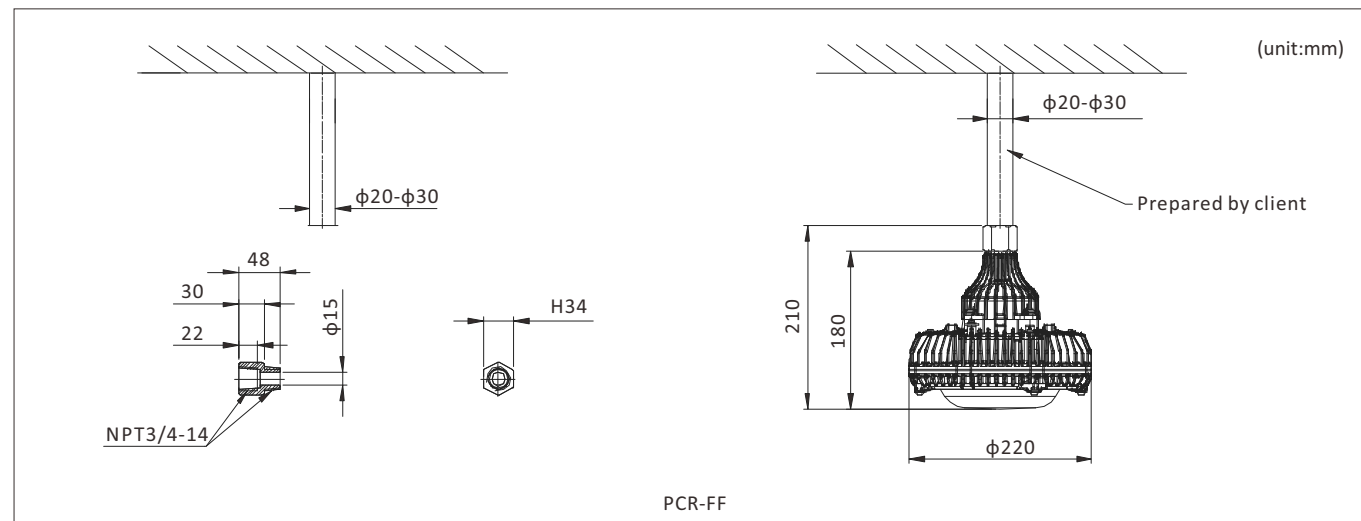
Installation Method



Pole Mount



Pole Mount



Pipe Mount





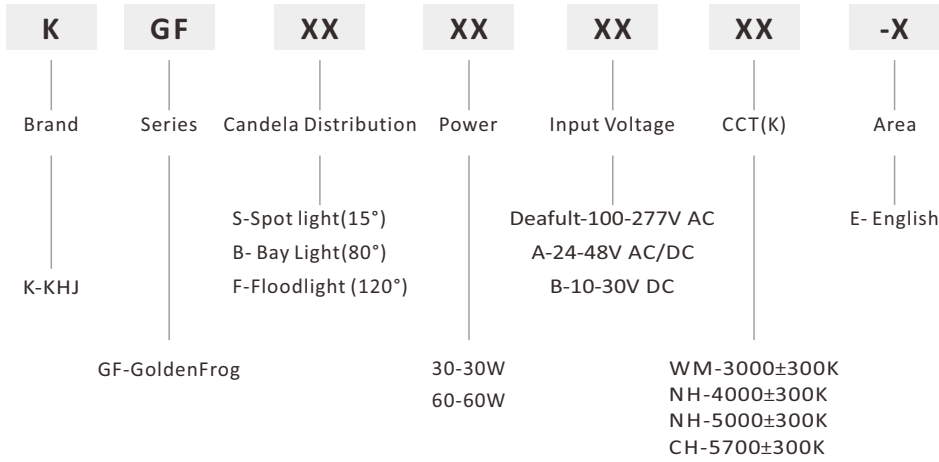
LED Floodlight/Bay light

- *Golden Frog Series*

Standard & Certificate:	
Certificate:	CE ,RoHS
Executive Standard:	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Electrical & Photometric Features:	
Luminarie Efficacy:	136.5lm/W
Lifespan:	>100,000 hours
Operating Voltage:	24-48 VAC/100-277 VAC 10-30 VDC/24-48 VDC/141-392 VDC
Power:	30W/60W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	5KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	5.5Kg
Size:	311*284*190mm
Ambient Temperature:	-40℃-+55℃
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Cable Entries:	2 x M25*1.5 (M20*1.5 is optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact



Product Definition



Ordering Information

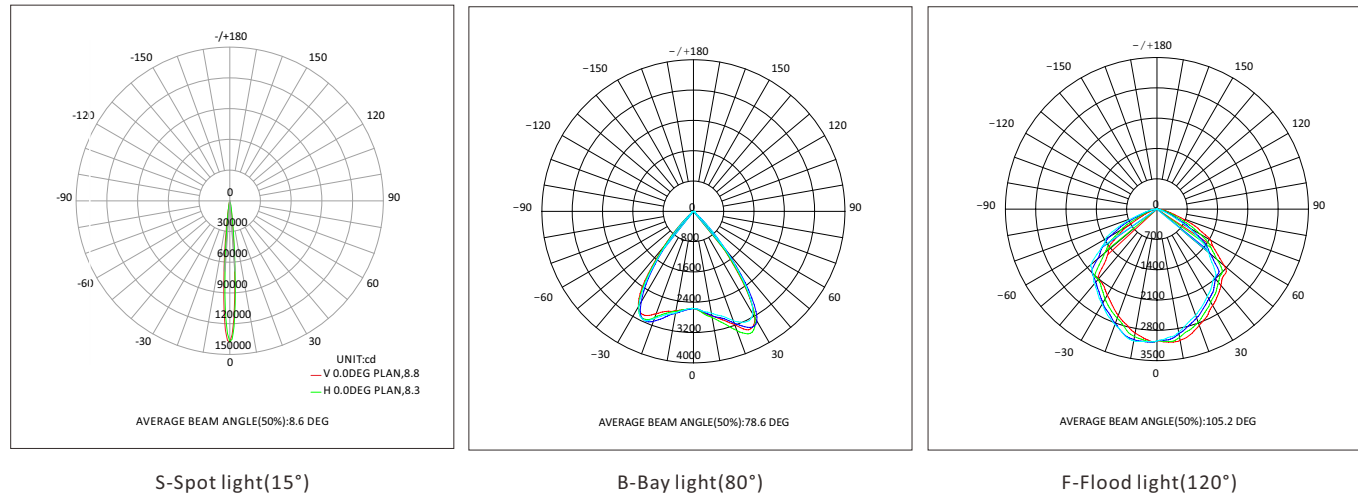
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)
KGFF30WM-E	100~240 AC (141~339 DC)	3780	30	Warm white	3000±300
KGFF30NH-E		4095	30	Natural white	4000±300
KGFF30NH-E		4095	30	Natural white	5000±300
KGFF30CH-E		4095	30	Cool white	5700±300
KGFB30WM-E		3450	30	Warm white	3000±300
KGFB30NH-E		3780	30	Natural white	4000±300
KGFB30NH-E		3780	30	Natural white	5000±300
KGFB30CH-E		3780	30	Cool white	5700±300
KGFS30WM-E		2850	30	Warm white	3000±300
KGFS30NH-E		3150	30	Natural white	4000±300
KGFS30NH-E		3150	30	Natural white	5000±300
KGFS30CH-E		3150	30	Cool white	5700±300
KGFF60WM-E		7560	60	Warm white	3000±300
KGFF60NH-E		8190	60	Natural white	4000±300
KGFF60NH-E		8190	60	Natural white	5000±300
KGFF60CH-E		8190	60	Cool white	5700±300
KGFB60WM-E		6900	60	Warm white	3000±300
KGFB60NH-E		7560	60	Natural white	4000±300
KGFB60NH-E		7560	60	Natural white	5000±300
KGFB60CH-E		7560	60	Cool white	5700±300
KGFS60WM-E		5700	60	Warm white	3000±300
KGFS60NH-E		6300	60	Natural white	4000±300
KGFS60NH-E		6300	60	Natural white	5000±300
KGFS60CH-E		6300	60	Cool white	5700±300

Remark: Operating voltage including Default-100~240V AC; A-24-48V AC/DC; B-10-30V DC

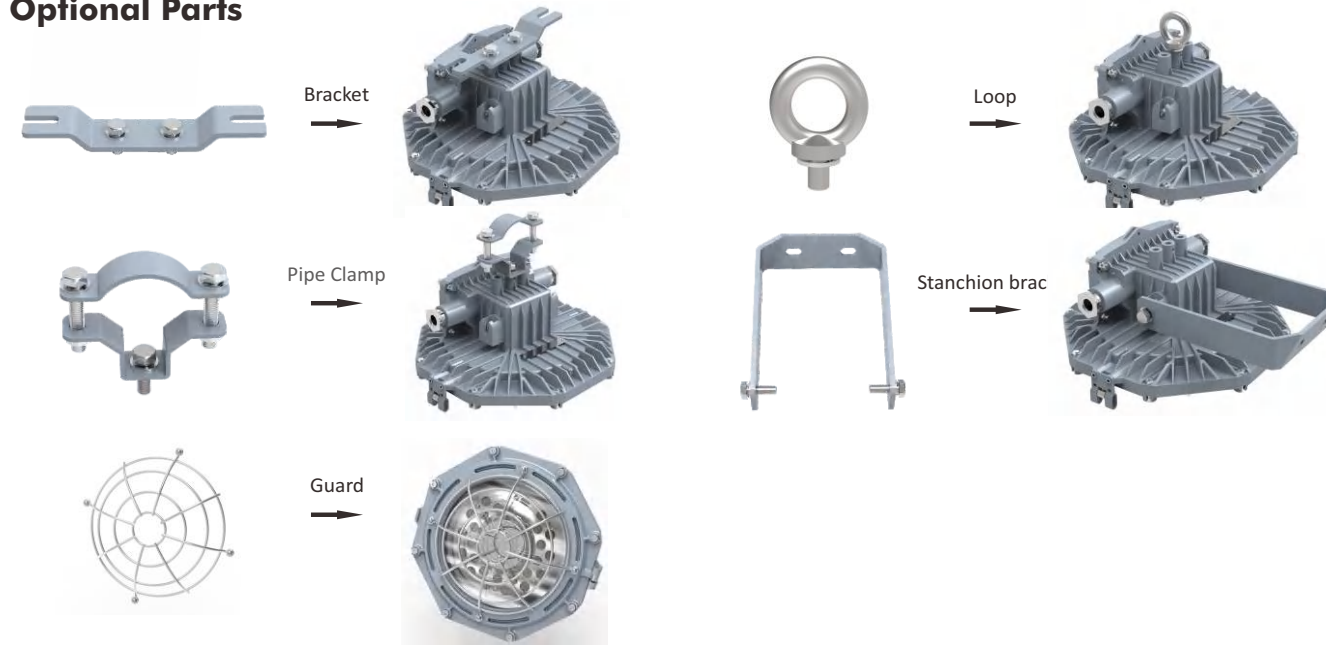
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
30W	70W	70W	Up to 60% reduction in energy costs
45W	100W~150W	100W~150W	
60W	150W~175W	150W~175W	

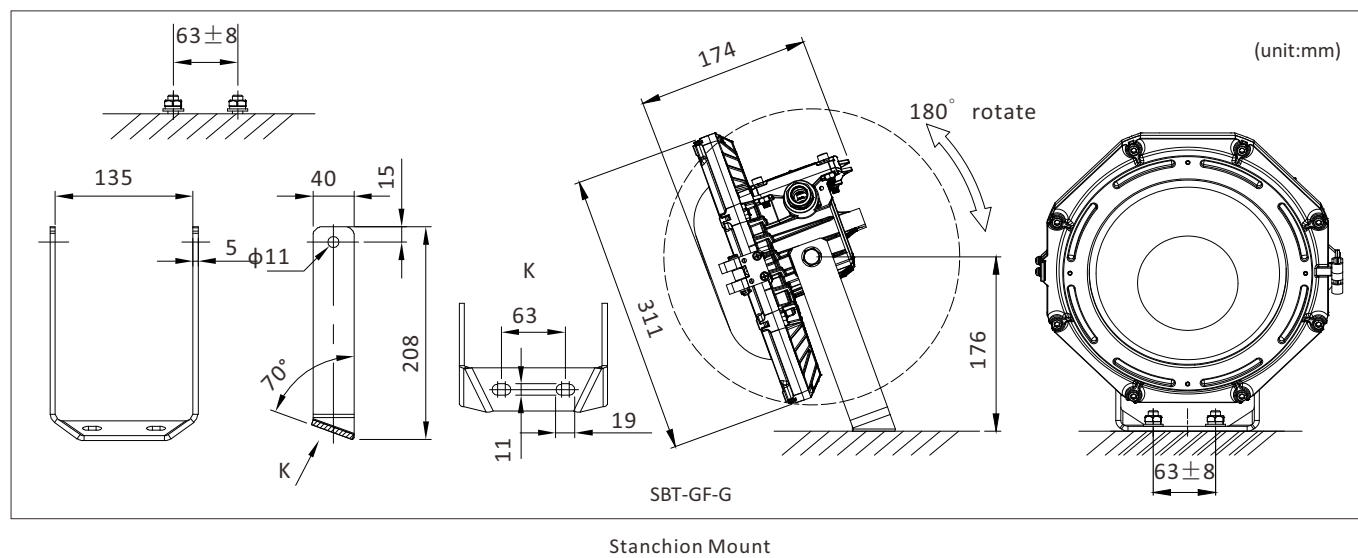
Candela Distribution



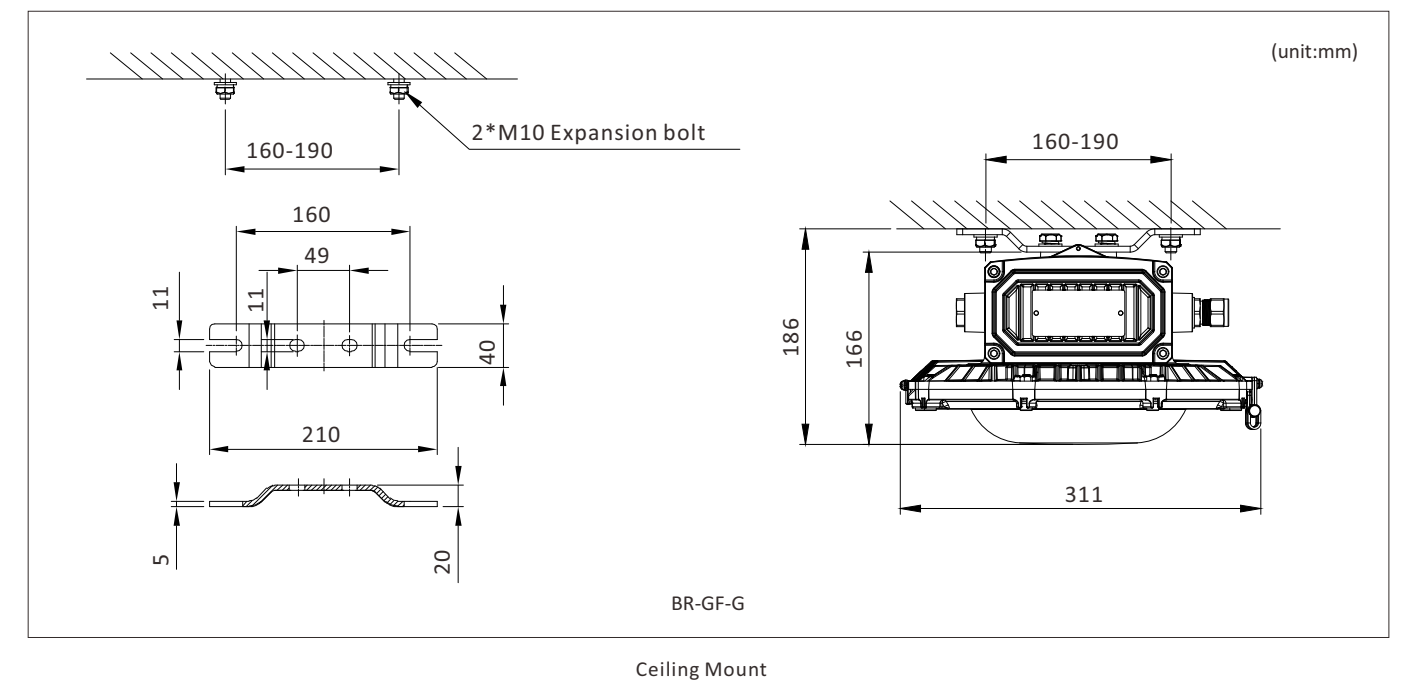
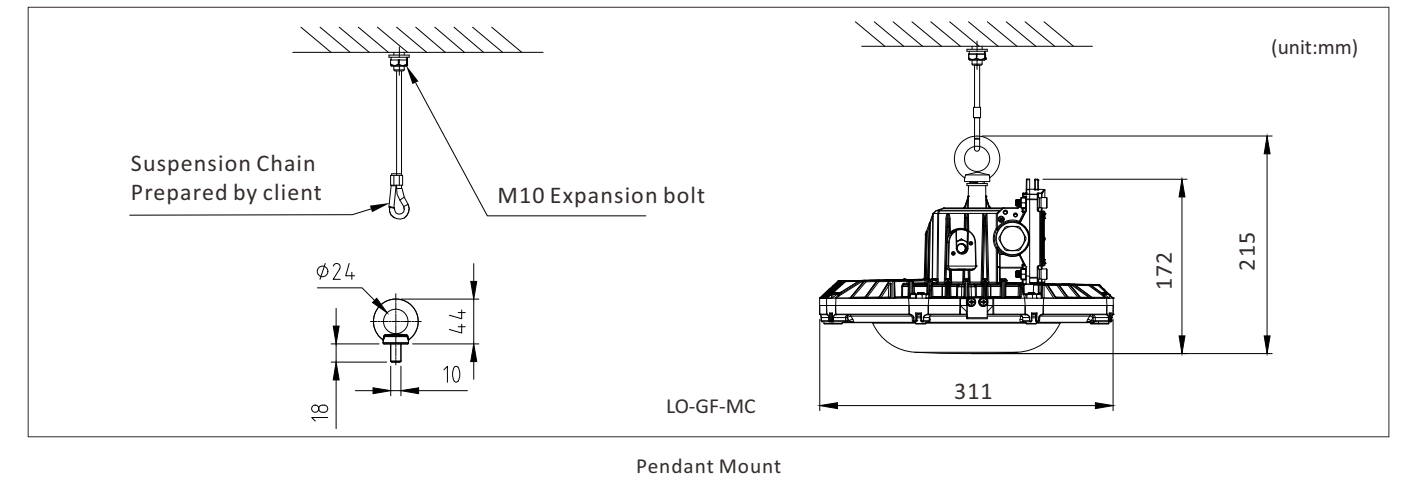
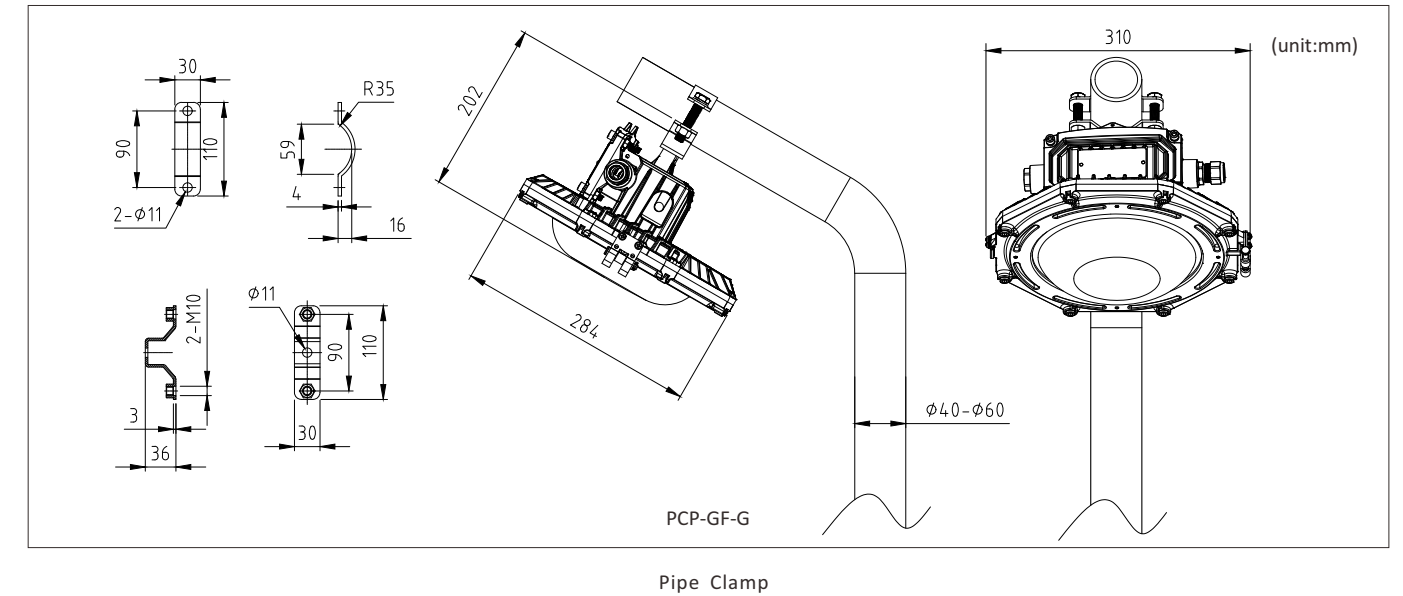
Optional Parts



Installation Method



Installation Method



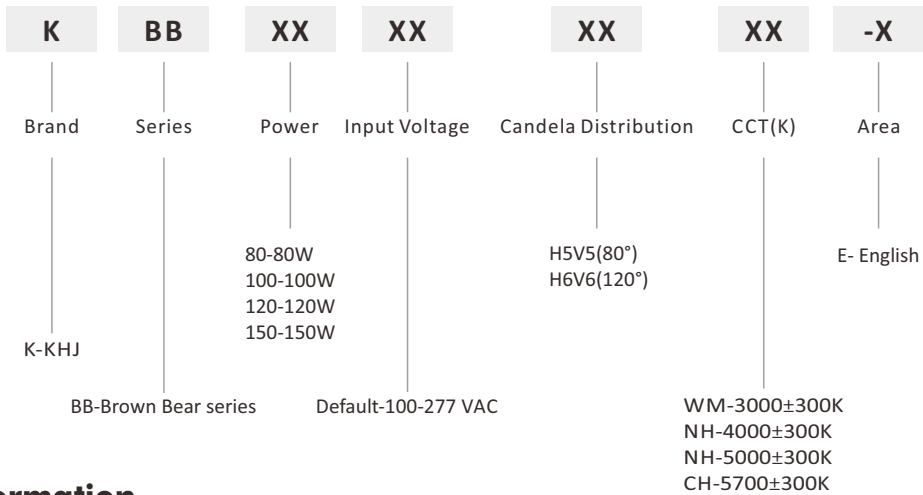


LED Floodlight/Bay light

- *Brown Bear Series*

Standard & Certificate:	
Certificate:	CE ,RoHS
Executive Standard:	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Electrical & Photometric Features:	
Luminarie Efficacy:	142lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC 141-392 VDC
Power:	80W/100W/120W/150W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	5KV(80W,100W)/10KV(120W,150W)
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	10.5Kg
Size:	336*336*163mm
Ambient Temperature:	-40℃-+55℃
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Cable Entries:	2 x M25*1.5 (M20*1.5 is optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition



Ordering Information

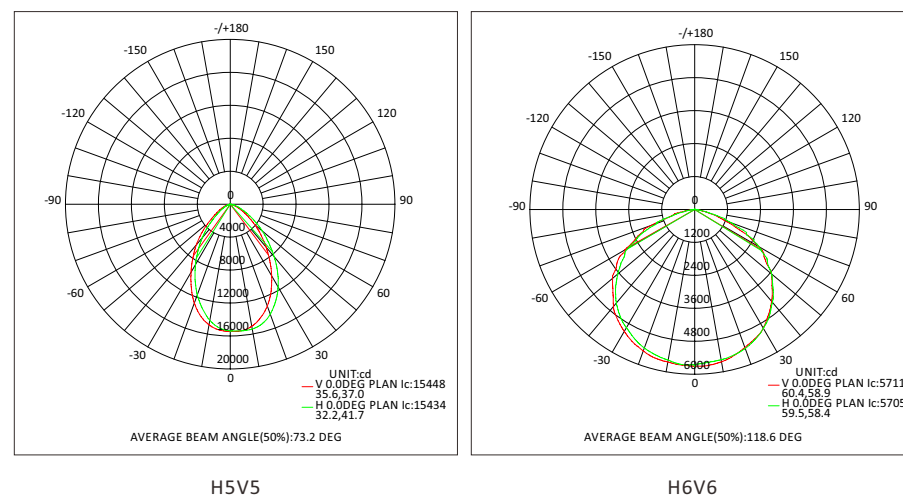
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)
KBB80*WM-E	100-277 AC (141-392 DC)	10500	80	Warm white	3000±300
KBB80*NH-E		11340	80	Natural white	4000±300
KBB80*NH-E		11340	80	Natural white	5000±300
KBB80*CH-E		11340	80	Cool white	5700±300
KBB100*WM-E		13125	100	Warm white	3000±300
KBB100*NH-E		14175	100	Natural white	4000±300
KBB100*NH-E		14175	100	Natural white	5000±300
KBB100*CH-E		14175	100	Cool white	5700±300
KBB120*WM-E		15750	120	Warm white	3000±300
KBB120*NH-E		17010	120	Natural white	4000±300
KBB120*NH-E		17010	120	Natural white	5000±300
KBB120*CH-E		17010	120	Cool white	5700±300
KBB150*WM-E		19687	150	Warm white	3000±300
KBB150*NH-E		21262	150	Natural white	4000±300
KBB150*NH-E		21262	150	Natural white	5000±300
KBB150*CH-E		21262	150	Cool white	5700±300

Remarks: 1.* Stands for beam angle,including H5V5 / H6V6;
2.For Beam angle H5V5,the luminous flux will be 15% less;

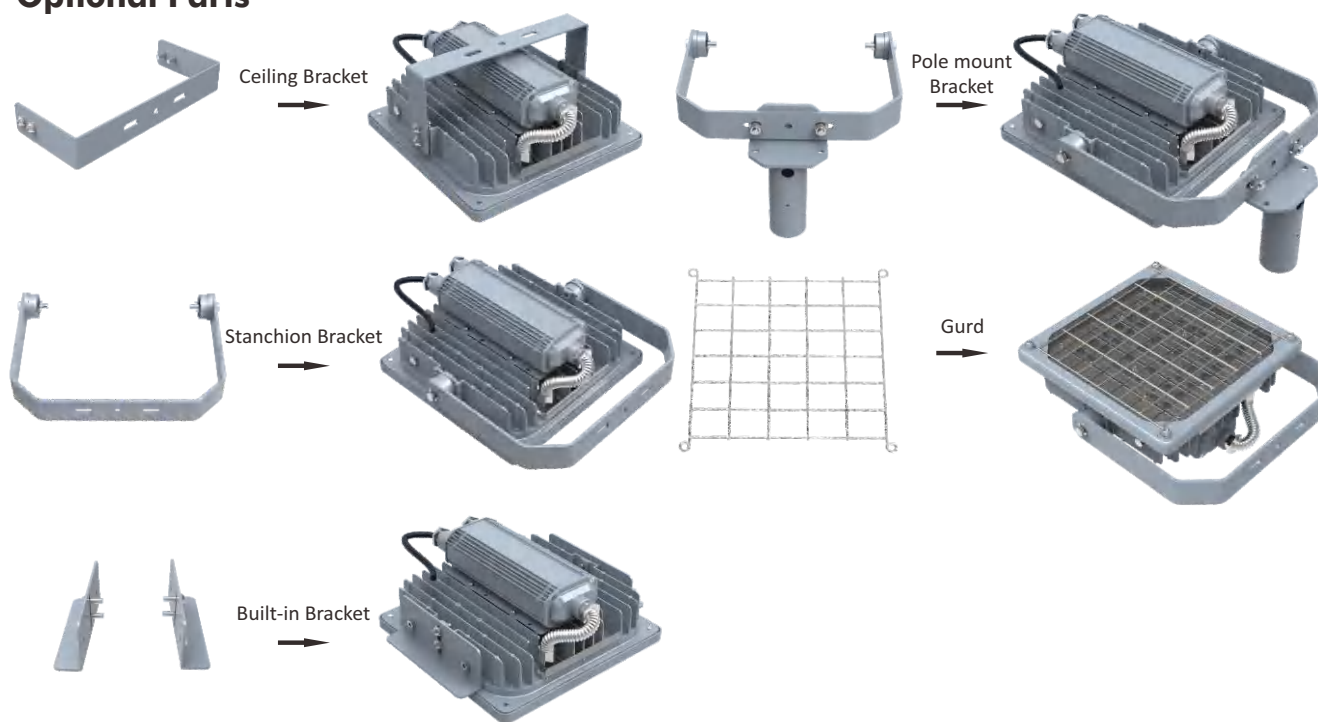
KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
80W	175W~250W	175W~250W	Up to 60% reduction in energy costs
100W	250W~400W	250W~400W	
120W	250W~400W	250W~400W	
150W	400W	400W	

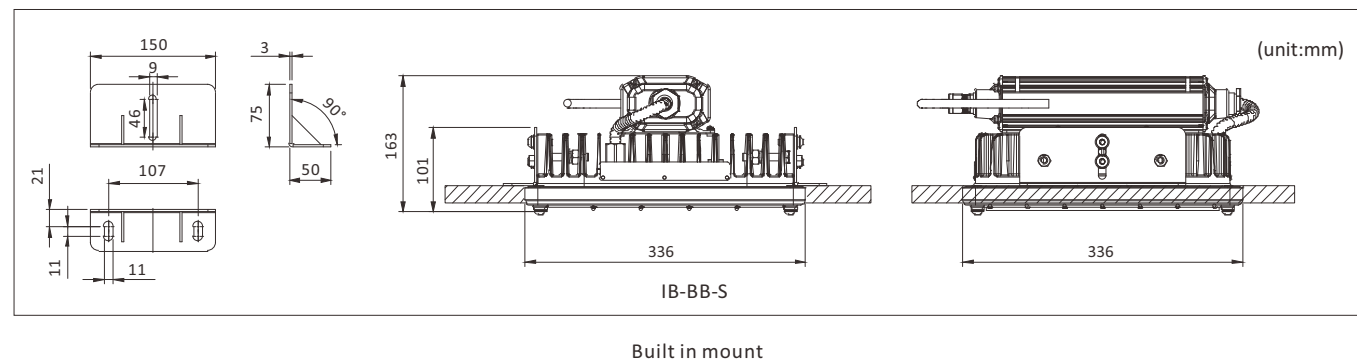
Candela Distribution



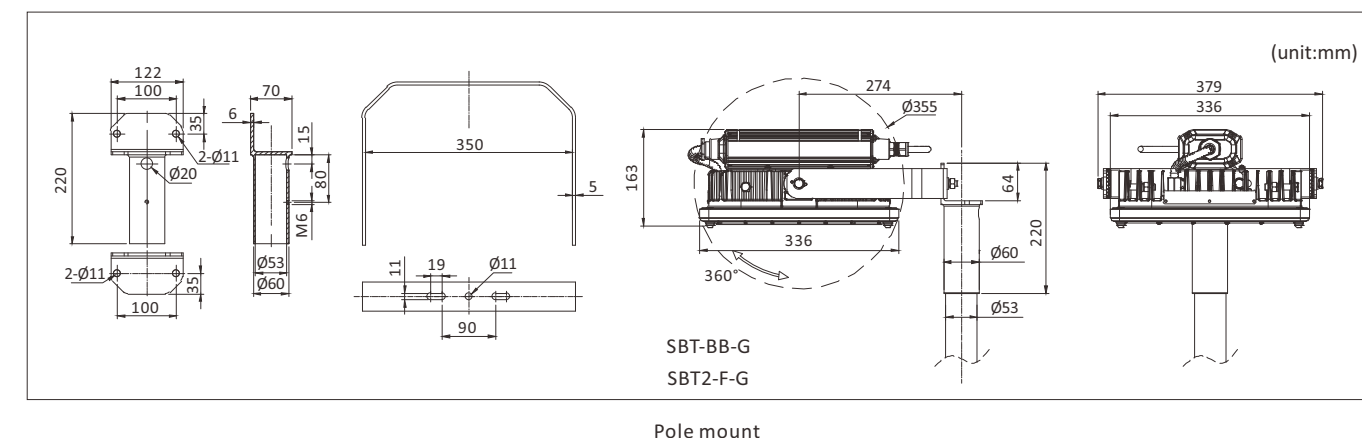
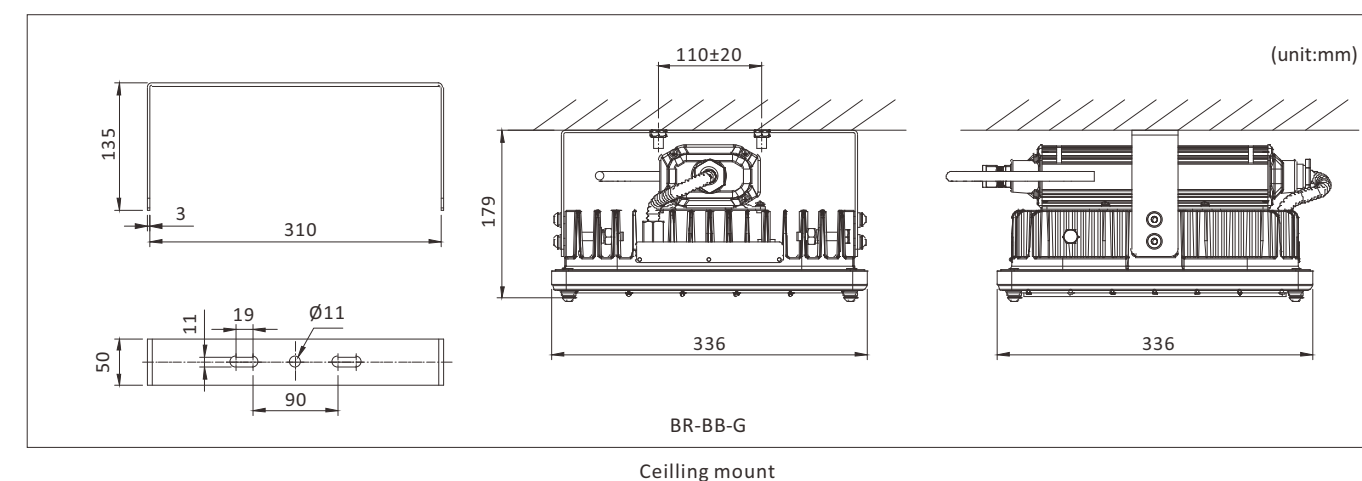
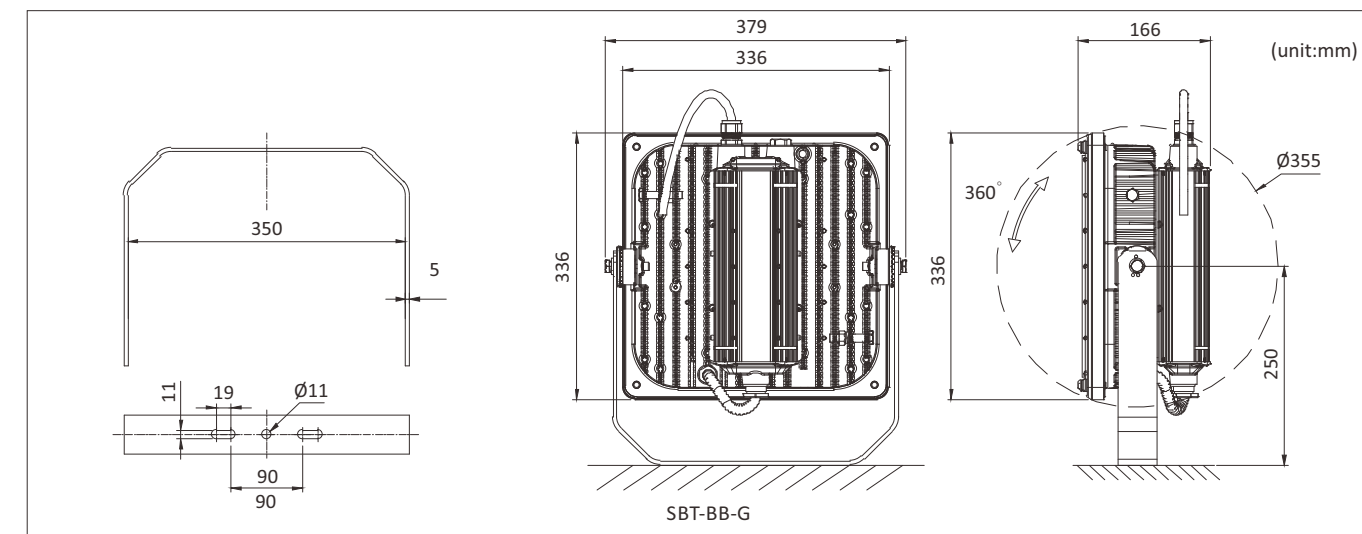
Optional Parts



Installation Method



Installation Method



LED Bay light/High bay light

- *SeaAnemone Series*

Standard & Certificate:	
Certificate:	CE ,RoHS
Executive Standard:	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, EN 60598-1, EN 60598-2-5, EN 62031, EN 62493, IEC 62321-4, IEC 62321-5, IEC 62321-6, IEC 62321-7-1, IEC 62321-7-2, IEC 62321-8
Electrical & Photometric Features:	
Luminarie Efficacy:	110lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC 141-392 VDC
Power:	360W/480W/720W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	L-N 4K/LN-PE 6K
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	24Kg(360W/480W);27Kg(720W)
Size:	φ 580*210mm
Ambient Temperature:	-40℃~+55℃
Connecting Terminals:	3*2.0mm²(L+N+PE)
Cable Entries:	1 x M16*1.5
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition

K	SL	XX	XX	XX	XX	-X
Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Area
K-KHJ	SA-Sea Anemone	360-360W 480-480W 720-720W	Default-100~ 277VAC	H1V1(15°) H4V4(60°) H5V5(80°)	WM-3000K±300 NH-4000K±300 NH-5000K±300 CH-5700K±300	E- English

Ordering Information

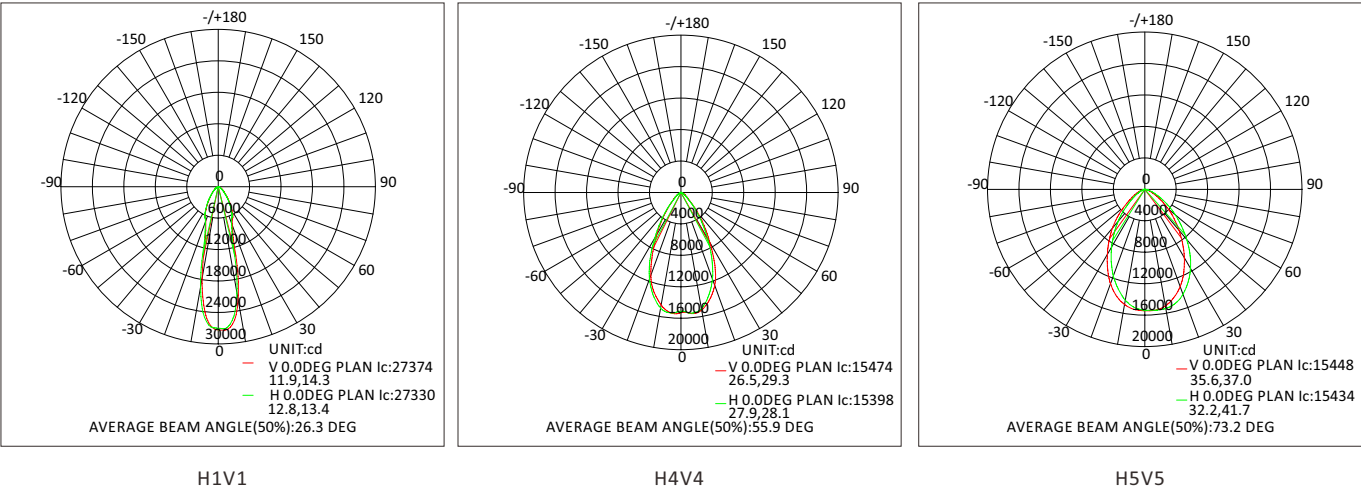
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power	Color Temp.	CCT(K)
KSA360*WM-E	100~277 AC (141~392 DC)	36000	360	Warm white	3000±300
KSA360*NH-E		39600	360	Natural white	4000±300
KSA360*NH-E		39600	360	Natural white	5000±300
KSA360*CH-E		39600	360	Cool white	5700±300
KSA480*WM-E		48000	480	Warm white	3000±300
KSA480*NH-E		52800	480	Natural white	4000±300
KSA480*NH-E		52800	480	Natural white	5000±300
KSA480*CH-E		52800	480	Cool white	5700±300
KSA720*WM-E		72000	720	Warm white	3000±300
KSA720*NH-E		79200	720	Natural white	4000±300
KSA720*NH-E		79200	720	Natural white	5000±300
KSA720*CH-E		79200	720	Cool white	5700±300

Remarks: 1.*Stands for beam angle , including H1V1 / H4V4 / H5V5 .

KHJ Replaceable Luminaire Models

KHJ LED	HPS	Metal halide lamp	Typical Energy Saving
360W	750W~1200W	750W~1200W	Up to 60% reduction in energy costs
480W	1200W~1500W	1200W~1500W	
720W	1500W~2400W	1500W~2400W	

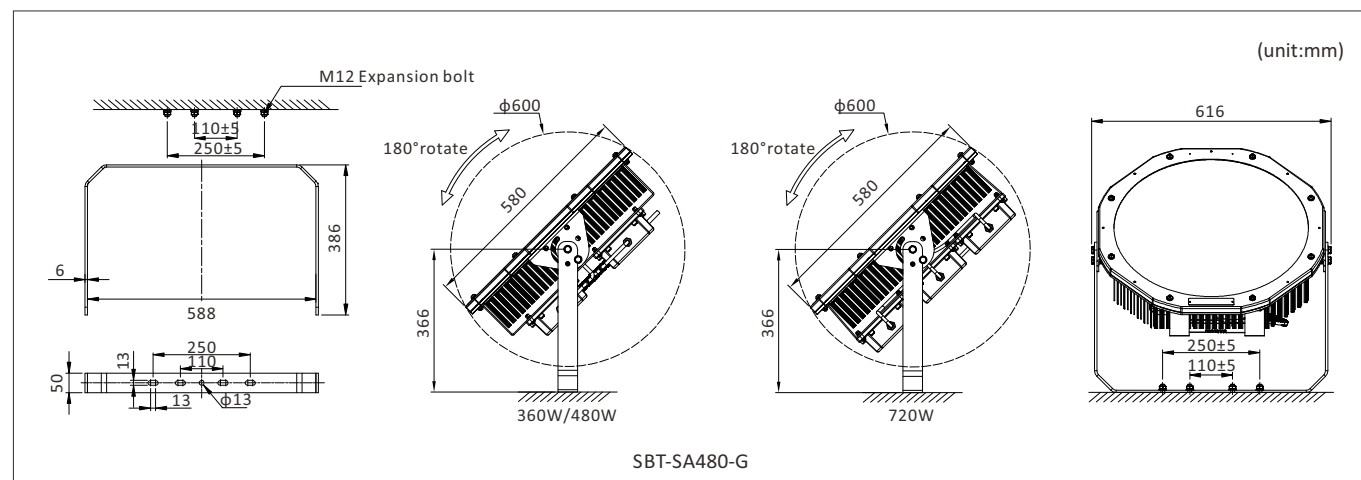
Candela Distribution



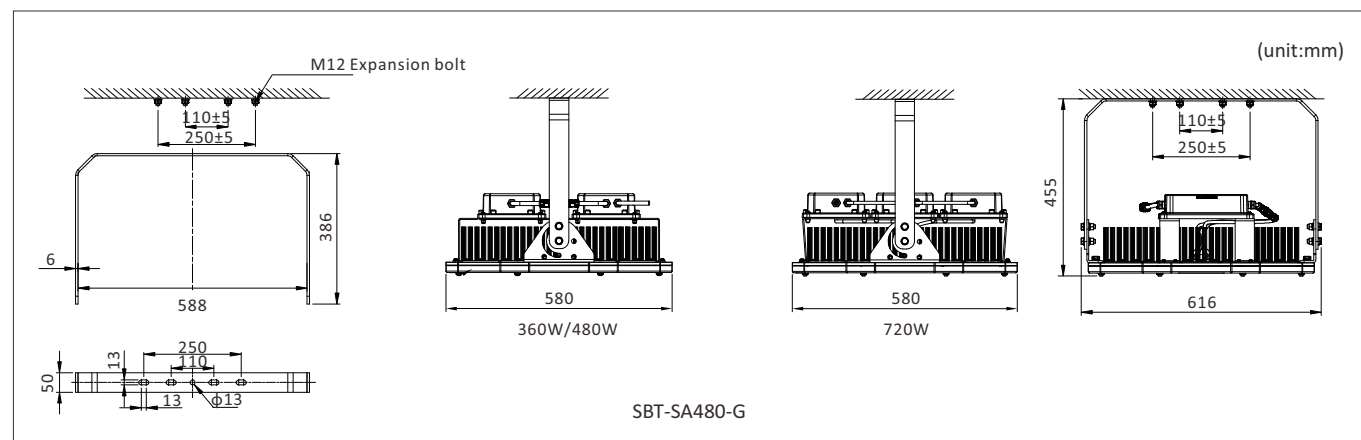
Optional Parts



Installation Method

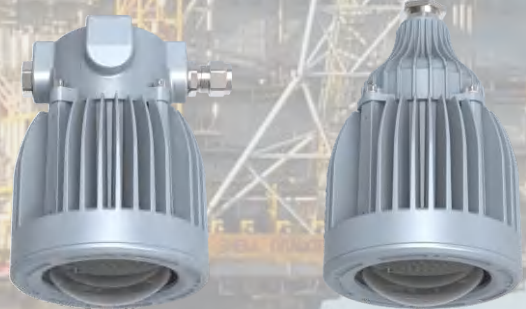


Stanchion mount / Wall mount



Ceiling mount





LED Platform light - Firefly Series

Standard & Certificate:	
Certificate:	CE ,RoHS
Executive Standard:	EN 60079-0:2018,EN 60079- 1:2014,EN 60079-7:2015 EN 60079-11:2012,EN 60079-18:2015+A1:2017,EN 60079-28:2015 EN 60079-31:2014,IEC 60079-0:2018,IEC 60079-7:2015+A1:2018
Electrical & Photometric Features:	
Luminarie Efficacy:	136.5lm/W
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC 141-392 VDC
Power:	12W/24W/35W
Frequency:	50/60Hz
Power Factor:	>0.98
THD:	<10%
CRI:	>70
Insulation Class:	I
Surge Protection:	5KV
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	2.4Kg(Junction box),2.6Kg(Stanchion junction box)
Size:	φ 136*210mm(Junction box), φ 136*194mm(Stanchion junction box)
Ambient Temperature:	-40℃~+55℃
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Cable Entries:	1XNPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP66
Enclosure Maternal:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass,Stand 7J impact

Product Definition

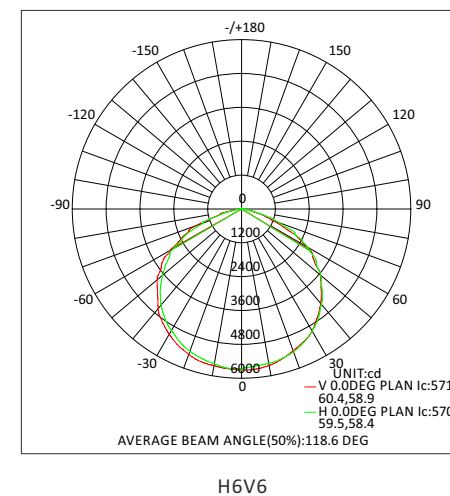
K	FIF	XX	XX	XX	XX	-X	-X
Brand	Series	Power	Input Voltage	Candela Distribution	CCT(K)	Type	Area
K-KHJ	FIF-FireFly	12-12W 24-24W 35-35W	Default-100-277 VAC A-24 VDC	H6V6(120°)	WM-3000±300K NH-4000±300K NH-5000±300K CH-5700±300K	J-Junction box J1-Stanchion junction box	E- English

Ordering Information

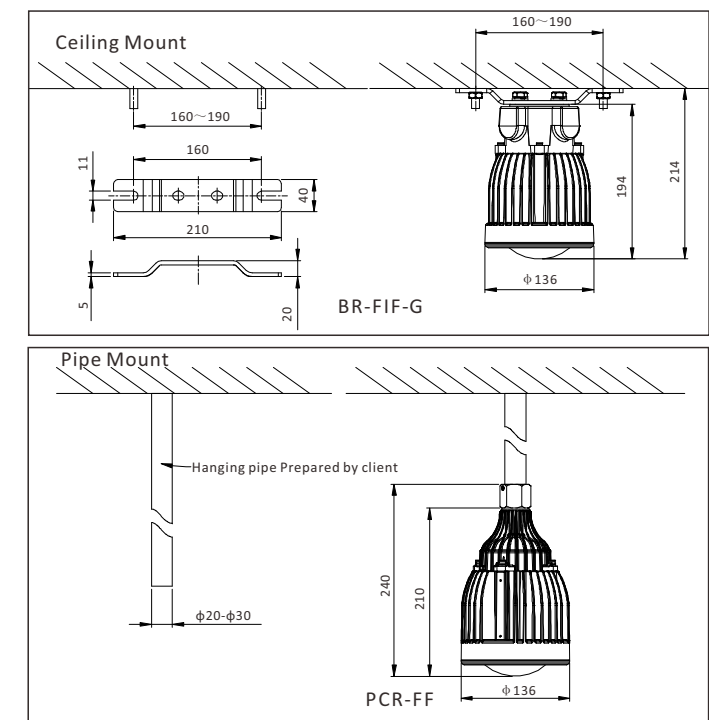
P/N	Operating Voltage(V)	Luminous Flux(lm)	Power(W)	Color Temp.	CCT(K)
KFIF12H6V6WM-*-E	100~277 AC (141~392 DC)	1512	12	Warm white	3000±300
KFIF12H6V6NH-*-E		1638	12	Natural white	4000±300
KFIF12H6V6NH-*-E		1638	12	Natural white	5000±300
KFIF12H6V6CH-*-E		1638	12	Cool white	5700±300
KFIF24H6V6WM-*-E		3024	24	Warm white	3000±300
KFIF24H6V6NH-*-E		3276	24	Natural white	4000±300
KFIF24H6V6NH-*-E		3276	24	Natural white	5000±300
KFIF24H6V6CH-*-E		3276	24	Cool white	5700±300
KFIF35H6V6WM-*-E		4410	35	Warm white	3000±300
KFIF35H6V6NH-*-E		4778	35	Natural white	4000±300
KFIF35H6V6NH-*-E		4778	35	Natural white	5000±300
KFIF35H6V6CH-*-E		4778	35	Cool white	5700±300

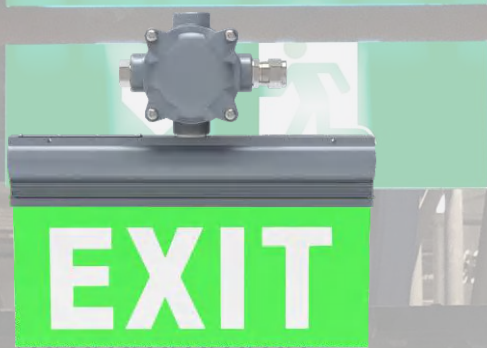
Remarks:*Stands for product type,including J,J1

Candela Distribution



Installation Method(unit:mm)

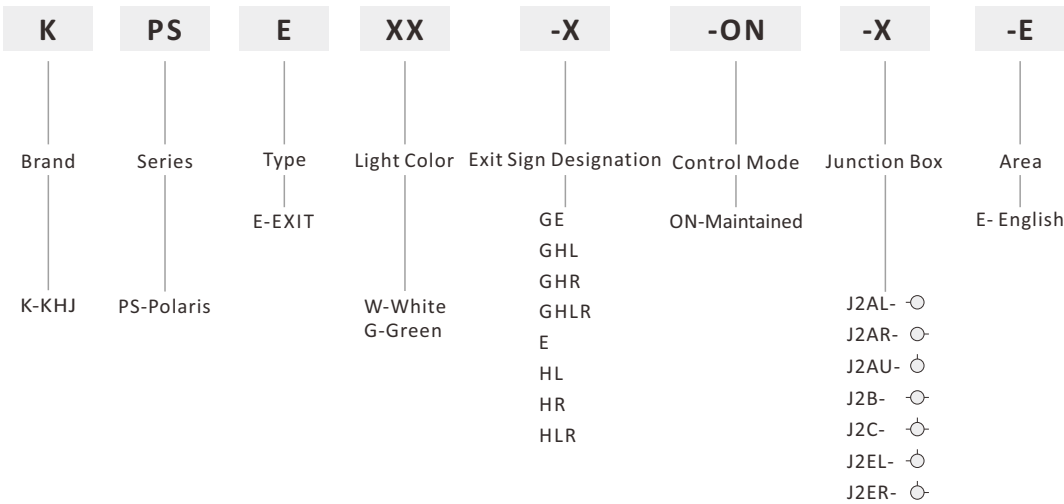




LED Emergency Exit Light
- *Polaris Series*

Standard & Certificate:	
Certificate:	CE RoHS
Executive Standard:	EN 60079-0:2018, EN 60079-1:2014, EN 60079-7:2015+A1:2018 EN 60079-11:2012, EN 60079-18:2015+A1:2017, EN 60079-28:2015 EN 60079-31:2014., IEC 60079-0:2018, IEC 60079-7:2015+A1:2018
Electrical & Photometric Features:	
Lifespan:	>100,000 hours
Operating Voltage:	100-277 VAC, 141-392 VDC
Power:	Normal: 6W; Emergency: 0.5W
Battery Rated Capacity:	2.6Ah
Battery Type:	Ni-MH
Rated Lifespan:	300 Cycles
Battery Back Up:	180 Min
Battery Charge Time:(after full discharge)	12 h
Frequency:	50/60Hz
Power Factor:	>0.98
Insulation Class:	I
LED Driver:	Over voltage protection/short circuit protection
Mechanical Features:	
Weight:	3.1Kg
Size:	337*310*76mm
Ambient Temperature:	-20℃~+55℃
Connecting Terminals:	3X1.0~4.0mm ² (L+N+PE)
Cable Entries:	1 x NPT 3/4" (M20*1.5, M25*1.5 are optional)
Earthing Protection:	M4 (Internal & external earth bolts)
IP Code:	IP54
Enclosure Material:	Die-casting aluminium alloy
Enclosure Colour:	Grey RAL7040
Coating:	Epoxy powder coating
Exposed Fastener:	Stainless steel
Protective Cover:	Tempered glass, Stand 4J impact

Product Definition

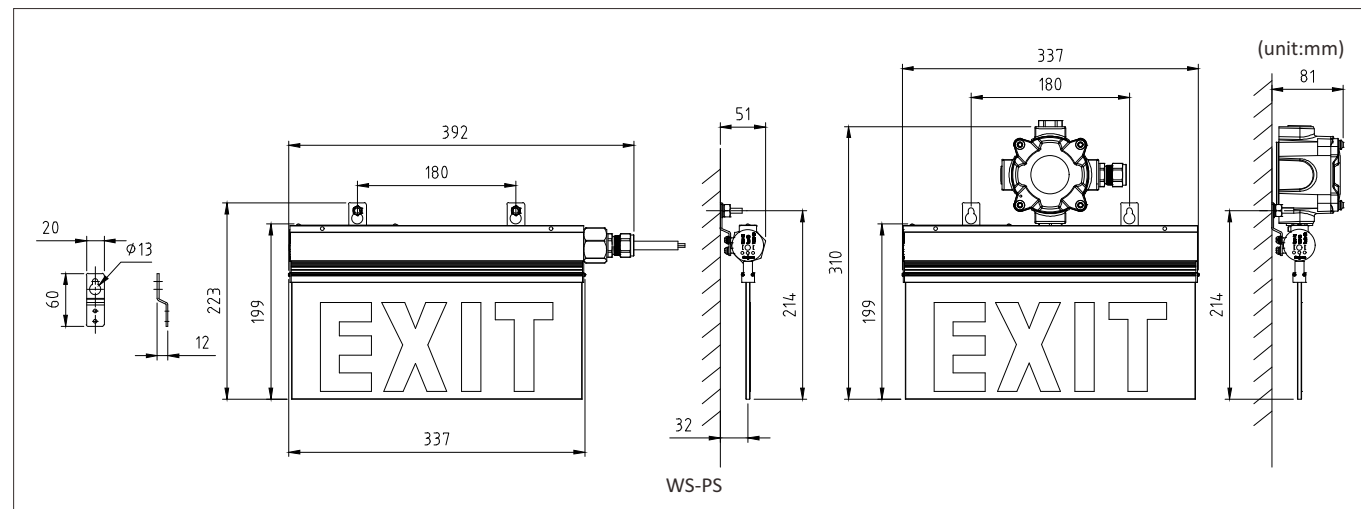


Ordering Information

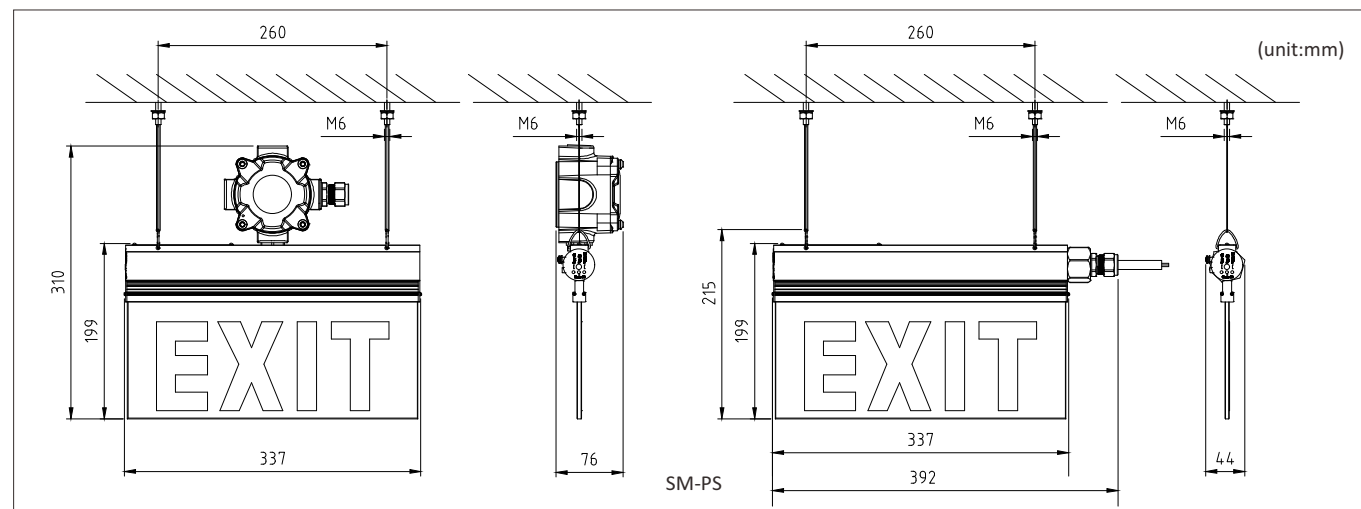
P/N	Operating Voltage(V)	Light Color	Exit Sign Designation
KPSEW-GE-ON-* -E	100-277 AC (141-392 DC)	White	
KPSEW-GHL-ON-* -E			
KPSEW-GHR-ON-* -E			
KPSEW-GHLR-ON-* -E			
KPSEG-E-ON-* -E		Green	
KPSEG-HL-ON-* -E			
KPSEG-HR-ON-* -E			
KPSEG-HLR-ON-* -E			

Remarks: * Stands for junction box ,including J2AL,J2AR,J2AU,J2B,J2C,J2EL,J2ER.

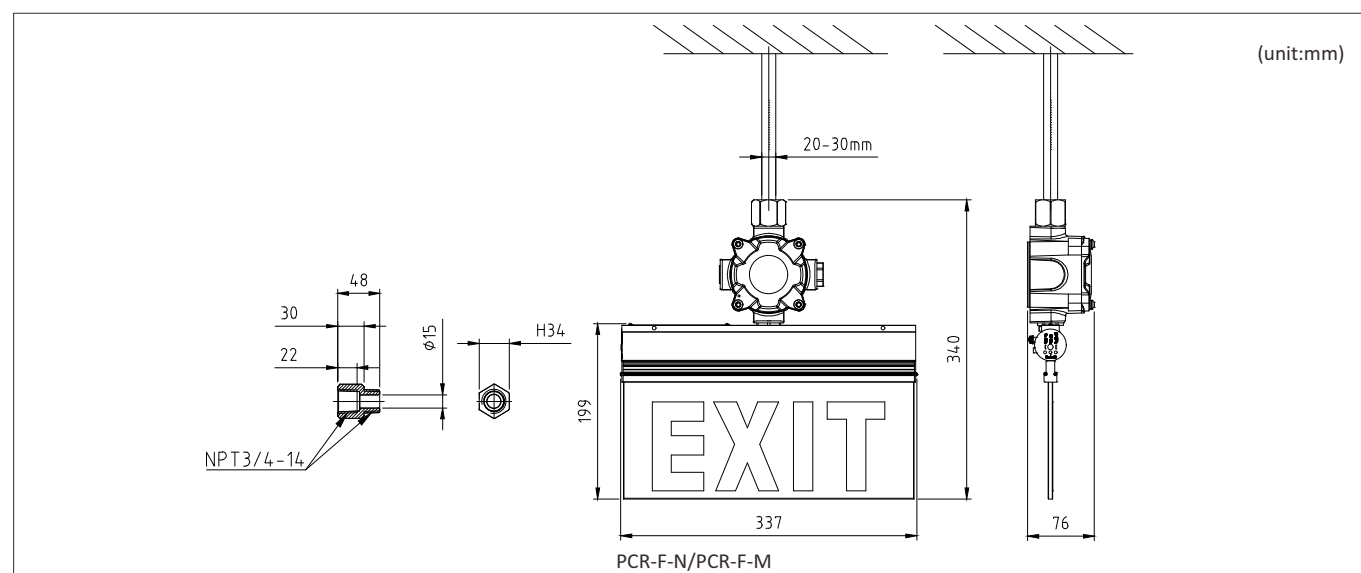
Installation Method



wall mount



Pendant Mount



Pipe mount





Explosion proof Electrical Apparatus

Product Name	Product Series	Product Classification	Code				Group						ATEX/IECEX						ATEX	IECEX
			d	e	I	t	IIB	IIB+H2	IIC	IIIB	IIIC		Zone 0	Zone 20	Zone 1	Zone 21	Zone 2	Zone 22		
Explosion-proof Terminal Box	KBH	KBH02-S		●	●	●			●		●		●		●	●	●	●	●	●
		KBH03		●	●	●			●		●		●		●	●	●	●	●	●
		KBH05		●	●	●			●		●		●		●	●	●	●	●	●
		KBH31 KBH32	●		●	●			●		●		●		●	●	●	●	●	●
Explosion-proof Control Station	KBX	KBX02	●	●		●			●		●				●	●	●	●	●	●
		KBX03	●	●		●			●		●				●	●	●	●	●	●
		KBX05	●	●		●			●		●				●	●	●	●	●	●
Explosion-proof Distribution Box	KDP	KDP03	●		●	●	●	●			●				●	●	●	●	●	●
Explosion-proof Circuit Breaker		KDP05	●			●	●				●				●	●	●	●	●	●
Explosion-proof Motor Starters		KDP06	●			●	●				●				●	●	●	●	●	●
Explosion-proof Control Box		KDP07	●		●	●	●	●			●				●	●	●	●	●	●
Explosion-proof Terminal Box		KDP11	●			●	●				●				●	●	●	●	●	●
Explosion-proof Plug And Sockets	KBSP01	/	●			●			●		●				●	●	●	●	●	●
Explosion-proof Junction Box Explosion-Proof Switch	KVH	/	●			●			●		●				●	●	●	●	●	●



Explosion - proof Terminal Box

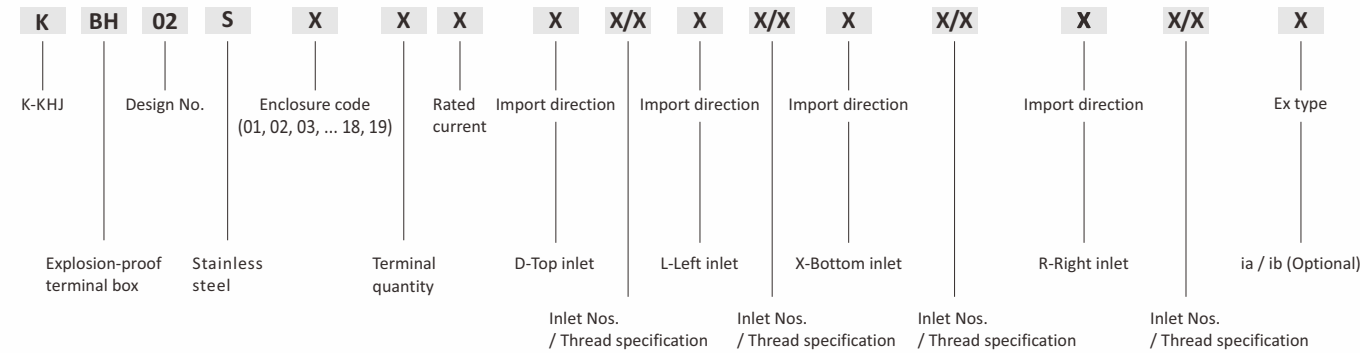
- KBH02-S Series

Application and Features

- Explosion proof certificates
 - ATEX : Pending
 - IECEx : Pending
- Application in hazardous area
 - Zone 0,
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Stainless steel enclosure, three types of explosion protection(Ex eb, Ex ia, Ex tb IIIC), which can meet the requirements of various places.
- There are 19 types of enclosure specifications, the current, the number of terminals, the size and direction of the entry can be customized upon request.
- Stainless steel exposed fastener, anti dropping structure, easy installation and maintenance.

- II 2 G Ex eb IIC T6/T5/T4 Gb
- II 1 G Ex ia IIC T6 Ga
- II 2 G Ex ia IIC T6 Gb
- II 2 D Ex tb IIIC T80/T95/T130°C Db

Product Definition



Note: Please confirm the quantity, specification, and direction (position) of cable entry holes, if that is needed.

No cable gland as default when delivery, which is supplied by users.

Pls specify the required quantity, specification and position of the cable entries.

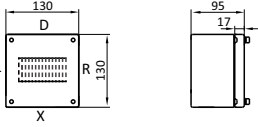
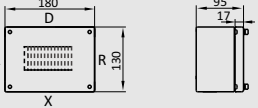
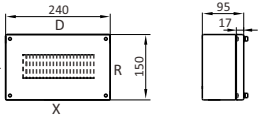
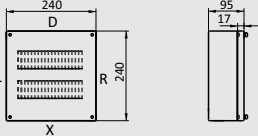
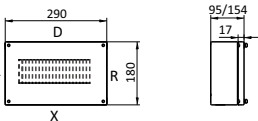
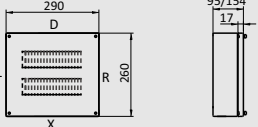
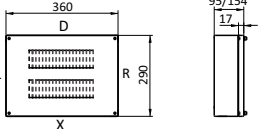
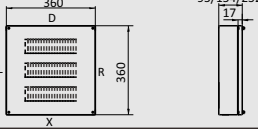
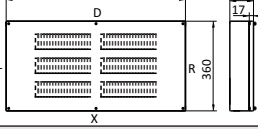
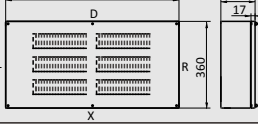
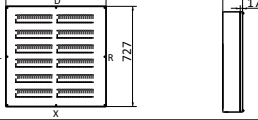


Technical Parameter

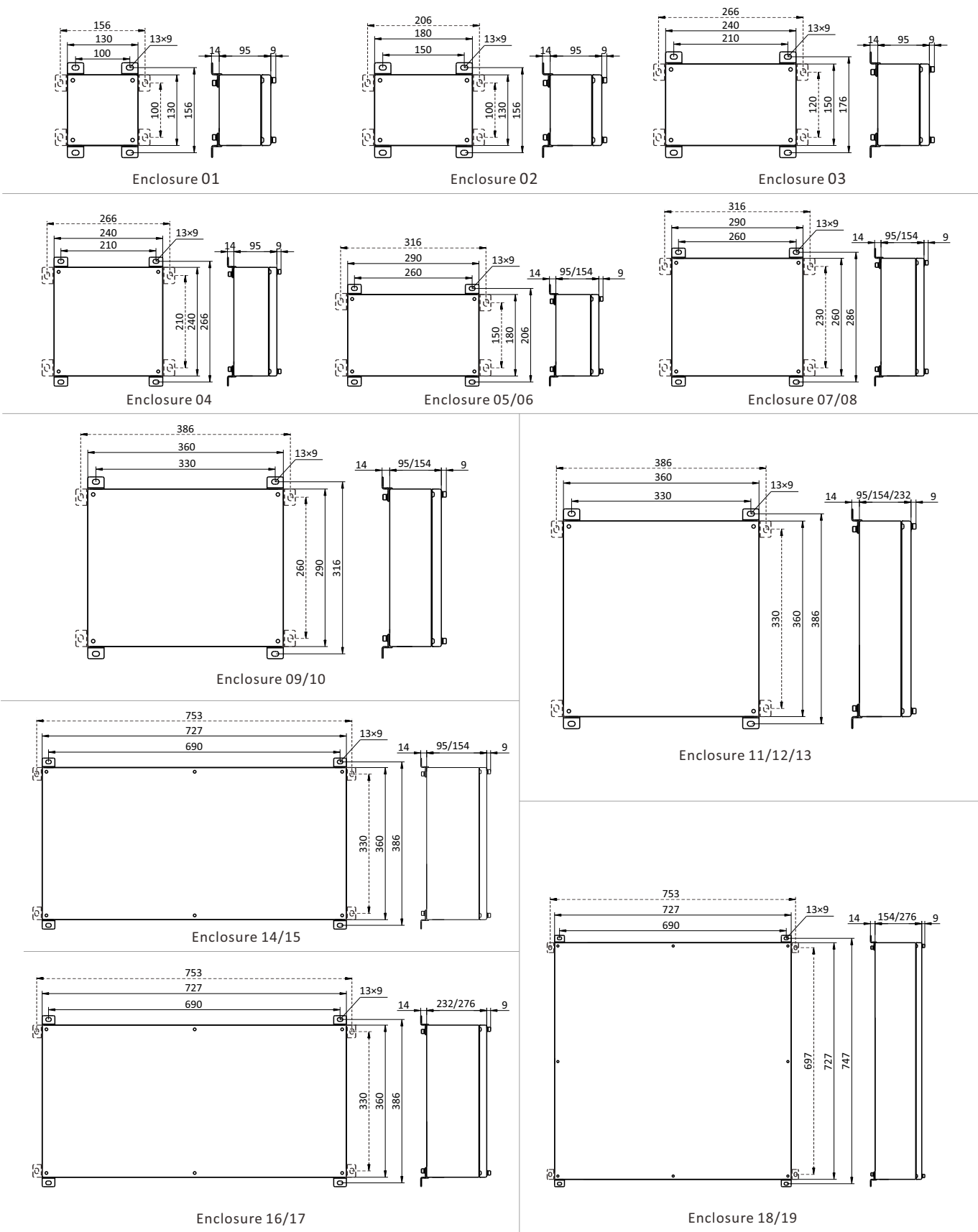
Ex marking	Gas	II 2 G Ex eb IIC T6/T5/T4 Gb					Ex eb IIC T6/T5/T4 Gb			
		II 1 G Ex ia IIC T6 Ga					Ex ia IIC T6 Ga			
		II 2 G Ex ib IIC T6 Gb					Ex ib IIC T6 Gb			
	Dust	II 2 D Ex tb IIIC T80/T95/T130°C Db					Ex tb IIIC T80/T95/T130°C Db			
Executive Standard		IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31 EN 60079-0, EN 60079-7, EN 60079-11, EN 60079-31								
Enclosure material		Stainless steel								
Brand of terminal		International brand								
Exposed fastener		Stainless steel								
Rated voltage	Ex e,Ex tb	Max. 690V AC, 250V DC								
	Ex i, Ex tb	Max. AC/DC36V								
Rated current		1.5mm ²	2.5mm ²	4mm ²	6mm ²	10mm ²	16mm ²	35mm ²	50mm ²	
	Ex e,Ex tb	-	10A	16A	25A	40A	50A	100A	142A	
	Ex i, Ex tb	5A	-	-	-	-	-	-	-	
Degree of protection		IP66								
Ambient temperature	Ex e,Ex tb	-40°C ~+40/55°C								
	Ex i, Ex tb	-40°C ~+40/45/55/60°C								
Cable gland		KBM Series Explosion-proof Cable Glands are recommended.								

Selection Table

The maximum terminal cross-section is 35mm², and the maximum quantity of terminals that can be installed are shown in the table below.

Enclosure specification		Guideway × Terminal (specification and quantity)						Outlet direction	Available maximum cable entries quantity							Weight (kg)
		2.5 ²	4 ²	6 ²	10 ²	16 ²	35 ²									
		UK3N	UK5N	UK6N	UK10N	UK16N	UK35N									
		SAK2.5EN	SAK4EN	SAK6EN	SAK10EN	SAK16EN	SAK35EN		M16	M20	M25	M32	M40	M50	M63	
01		1×14	1×12	1×9	—	—	—	D/X	8	6	5	3	2	1	—	1.3
		L/R	8	6	5	3	2	1	—							
02		1×21	1×18	1×13	1×11	1×8	—	D/X	12	10	8	4	3	2	—	1.9
		L/R	8	6	5	3	2	1	—							
03		1×27	1×23	1×18	1×14	1×12	1×9	D/X	16	12	10	4	3	3	—	3.1
		L/R	10	8	8	3	2	2	—							
04		2×27	2×23	1×18	1×14	1×12	1×9	D/X	16	12	10	4	3	3	—	4.0
		L/R	16	12	10	4	3	3	—							
05/06		1×37	1×31	1×25	1×20	1×18	1×11	D/X	18/36	16/21	14/21	5/10	4/8	4/6	--/4	4.5 /5.5
		L/R	12/24	10/15	8/12	3/6	3/4	2/3	--/2							
07/08		2×37	2×31	1×25	1×20	1×18	1×11	D/X	18/36	16/21	14/21	5/10	4/8	4/6	--/4	6.5 /7.5
		L/R	16/32	14/21	12/18	5/10	4/6	3/5	--/3							
09/10		2×52	2×43	1×33	1×25	1×22	1×18	D/X	24/48	20/30	18/27	7/14	5/10	4/8	--/5	8.5 /9.5
		L/R	18/36	16/21	14/21	5/10	4/8	4/6	--/4							
11/12/13		3×52	3×43	2×33	2×25	2×22	1×18	D/X	24/48/66	20/30/50	18/27/35	7/14/28	5/10/15	4/8/12	--/5/8	10.8 /11.8 /12.8
		L/R	24/48/66	20/30/50	18/27/35	7/14/28	5/10/15	4/8/12	--/5/8							
14/15		6×52	6×43	2×66	2×50	2×44	1×36	D/X	48/92	40/60	36/54	14/28	10/20	8/10	--/8	17.5 /18.5
		L/R	24/48	20/30	18/27	7/14	5/10	4/8	--/5							
16/17		6×52	6×43	2×66	2×50	2×44	1×36	D/X	138/161	100/120	83/102	42/56	30/40	20/25	15/20	21/22
		L/R	66/77	50/60	27/54	28/30	15/20	12/16	8/10							
18/19		12×52	12×43	12×66	4×50	4×44	3×36	D/X	92/161	60/120	54/102	28/56	20/40	10/25	8/20	29/31
		L/R	92/161	60/120	54/102	28/56	20/40	10/25	8/20							

Outline and Installation(mm)





Explosion-proof Terminal Box

- **KBH03 - Series**

Application and Features

- Explosion proof certificates
 - ATEX : SEV 22 ATEX 0630 X
 - IECEx : IECEx SEV 22.0012X
- Application in hazardous area
Zone 0, Zone 1 and Zone 2, Zone 21 and Zone 22
- This series of products have 4 types explosion protection (Ex eb, Ex ia, Ex ib and Ex tb IIIC), which can meet various requirements.
- GRP enclosure.
- There are 7 types of enclosure, easy to customize the current, terminals, size and direction of entry according to customer requirements.
- Stainless steel exposed fastener, anti dropping structure, easy installation and maintenance.

- II 2 G Ex eb IIC T6/T5 Gb
- II 1 G Ex ia IIC T6 Ga
- II 2 G Ex ib IIC T6 Gb
- II 2 D Ex tb IIIC T80/T95°C Db

Product Definition

K	BH	03-	X	X	X	X	X	X/X	X	X/X	X	X/X	X	X/X	X
K-KHJ	Design No.		Enclosure code (01,02,03,04,05, 06,06.1,07)		Rated current		Import direction	Import direction	Import direction	Import direction		Import direction		K-Electric heating bracket type (Optional)	
Explosion-proof terminal box	ia/ib (Optional)		Terminal quantity	D-Top inlet	Inlet Nos. / Thread specification	L-Left inlet / Thread specification	Inlet Nos. / Thread specification	X-Bottom inlet / Thread specification	Inlet Nos. / Thread specification	R-Right inlet / Thread specification	Inlet Nos. / Thread specification				

Note:
Please confirm the quantity, specification, and direction (position) of cable entry holes, if that is needed; No cable gland as default when delivery, which is supplied by users.

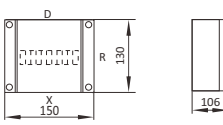
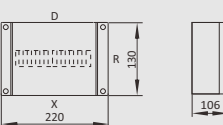
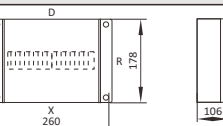
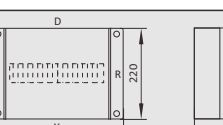
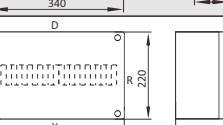
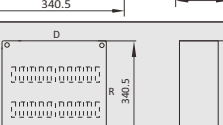
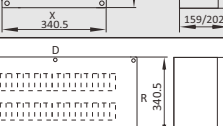


Technical Parameter

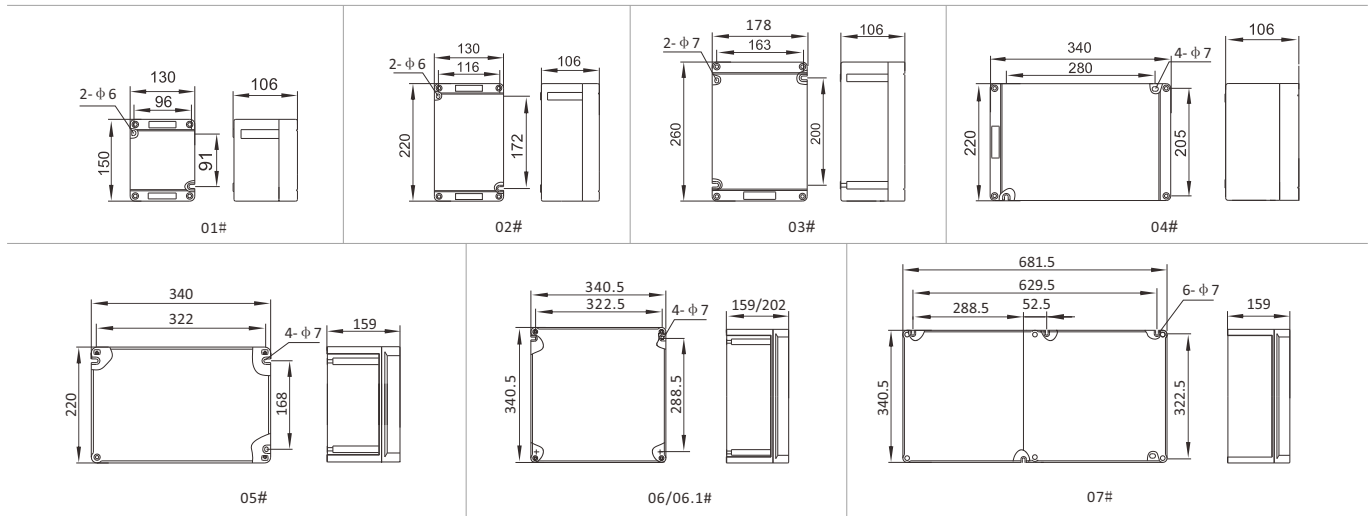
Ex marking	Gas	II 2 G Ex eb IIC T6/T5 Gb					Ex eb IIC T6/T5 Gb			
		II 1 G Ex ia IIC T6 Ga					Ex ia IIC T6 Ga			
		II 2 G Ex ib IIC T6 Gb					Ex ib IIC T6 Gb			
	Dust	II 2 D Ex tb IIIC T80/T95°C Db					Ex tb IIIC T80/T95°C Db			
Exectutive standards		IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31 EN 60079-0, EN 60079-7, EN 60079-11, EN 60079-31								
Enclosure material		GRP (Polyester resin, glass fibre reinforced), anti-static								
Enclosure color		Black								
Brand of terminal		International brand								
Exposed fastener		Stainless steel								
Rated voltage	Ex e,Ex tb	Max 690V AC, 220V DC								
	Ex i, Ex tb	Max AC/DC36V								
Rated current	-	1.5mm ²	2.5mm ²	4mm ²	6mm ²	10mm ²	16mm ²	35mm ²	50mm ²	
	Ex e,Ex tb	-	10A	16A	25A	40A	50A	100A	142A	
	Ex i, Ex tb	5A	-	-	-	-	-	-	-	
Degree of protection		IP66								
Ambient temperature	Ex e,Ex tb	-40°C~+40/55°C								
	Ex i, Ex tb	-40°C~+50/60/65°C								
Cable gland		KBM Series Explosion-proof Cable Glands is recommended.								

Selection Table(mm)

The maximum terminal cross-section is 35mm², and the maximum quantity of terminals that can be installed are shown in the table below.

Enclosure specification	Guideway × Terminal (specification and quantity)								Outlet direction	Cable gland quantity								Weight (kg)
	1.5 ²	2.5 ²	4 ²	6 ²	10 ²	16 ²	35 ²	50 ²		M16	M20	M25	M32	M40	M50	M63	—	
	UK2N	UK3N	UK5N	UK6N	UK10N	UK16N	UK35N	UK50N		—	G15	G20	G25	G32	G40	G50	G70	
	SAK1.5EN	SAK2.5EN	SAK4EN	SAK6EN	SAK10EN	SAK16EN	SAK35EN	SAK50EN		—	G15	G20	G25	G32	G40	G50	G70	
01# 	1×12	1×12	1×10	1×8	—	—	—	—	D/X	3	3	2	1	1	—	—	—	1.2
									L/R	—	2	2	1	1	1	—	—	
02# 	1×25	1×25	1×20	1×15	—	—	—	—	D/X	7	5	3	3	2	1	—	—	1.5
									L/R	—	4	3	3	2	1	—	—	
03# 	1×30	1×30	1×27	1×20	1×15	1×13	—	—	D/X	8	6	4	3	2	—	—	—	2.3
									L/R	—	5	4	3	3	2	—	—	
04# 	1×49	1×49	1×41	1×31	1×24	1×20	—	—	D/X	12	10	8	4	3	3	—	—	3.3
	2×39	2×40	2×31	2×18	—	—	—	—	L/R	—	8	7	4	3	3	—	—	
05# 	1×49	1×49	1×41	1×31	1×24	1×20	1×10	—	D/X	20	14	12	7	5	3	3	—	4.3
	2×40	2×40	2×31	2×18	—	—	—	—	L/R	—	12	9	7	4	3	2	2	
06/06.1# 	1×102	1×51	1×43	1×32	1×26	1×21	1×17	1×8	D/X	20	14	12	7	5	3	3	—	6.1 /6.7
	2×73	2×49	2×41	2×31	2×24	2×20	—	—	L/R	—	12	9	7	4	3	2	2	
07# 	1×102	1×102	1×86	1×64	1×52	1×42	1×34	1×16	D/X	32	22	18	12	6	4	4	—	11.3
	1×102	2×98	2×82	2×62	2×48	2×40	—	—	L/R	—	18	12	12	6	6	4	4	
	3×98	3×98	3×82	—	—	—	—	—		20	14	12	7	5	3	3	—	
										—	12	9	7	4	3	2	2	

Outline and Installation(mm)





Explosion-proof Terminal Box

- KBH05 - Series

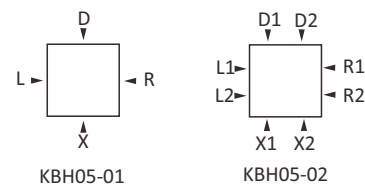
Application and Features

- Explosion proof certificate
 - ATEX : SEV 22 ATEX 0630 X
 - IECEX : IECEx SEV 22.0012X
- Application in hazardous area
 - Zone 0, Zone 1 and Zone 2, Zone 21 and Zone 22
- This series of products have 4 types explosion protection (Ex eb, Ex ia, Ex ib and Ex tb IIIC), which can meet the requirements of various places.
- PA66 enclosure.
- There are two types of enclosure which the current, terminal, size and direction of entry can be customized based on customer requirements.
- Type A: open crimping type terminal in enclosure.
- Type B (Standard): an International brand of terminal will be installed in the enclosure.
- Stainless steel exposed fastener, anti dropping structure, easy installation and maintenance.

Product Definition

K	BH	05-	X	X	X	X	X	X/X	X	X/X	X	X/X	X	X/X
K-KHJ	Design No.	Enclosure code (01,02,03,04,05, 06,06.1,07)	Rated current	Import direction	Import direction	Import direction	Import direction	Import direction	Import direction	Import direction	Import direction	Import direction	Import direction	Import direction
		ia/ib (Optional)		D-Top inlet	L-Left inlet	X-Bottom inlet	R-Right inlet							
			Terminal quantity	Inlet Nos. / Thread specification	Inlet Nos. / Thread specification	Inlet Nos. / Thread specification	Inlet Nos. / Thread specification							

Note: Please confirm the quantity, specification, and direction (position) of cable entry holes, if that is needed; No cable gland as default when delivery, which is supplied by users.



- II 2 G Ex eb IIC T6/T5 Gb
- II 1 G Ex ia IIC T6 Ga
- II 2 G Ex ib IIC T6 Gb
- II 2 D Ex tb IIIC T80°C Db

Technical Parameter

Ex marking	Gas	II 2 G Ex eb IIC T6 Gb	Ex eb IIC T6 Gb
		II 1 G Ex ia IIC T6 Ga	Ex ia IIC T6 Ga
Dust		II 2 G Ex ib IIC T6 Gb	Ex ib IIC T6 Gb
		II 2 D Ex tb IIIC T80°C Db	Ex tb IIIC T80°C Db
Exectutive standards		IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31 EN 60079-0, EN 60079-7, EN 60079-11, EN 60079-31	
Enclosure material		Nylon (PA66)	
Enclosure color		Black	
Brand of terminal		Type A: open crimping type terminal in enclosure	
		Type B (Standard): International brand	
Exposed fastener		Stainless steel	
Rated voltage	Ex e, Ex tb	Max. 500V AC, 220V DC	
	Ex i, Ex tb	Max. AC/DC36V	
Rated current	Wire diameter	1.5mm ²	2.5mm ²
	Ex e, Ex tb	10A,12A	10A,12A,20A
	Ex i, Ex tb	5A	5A
Degree of protection		IP66	
Ambient temperature	Ex e, Ex tb	-40°C~+45/55/60°C	
	Ex i, Ex tb	-40°C~+45/65°C	
Cable gland		M20X1.5, M25X1.5, M32X1.5 KBM Series Explosion-proof Cable Glands is Recommend	

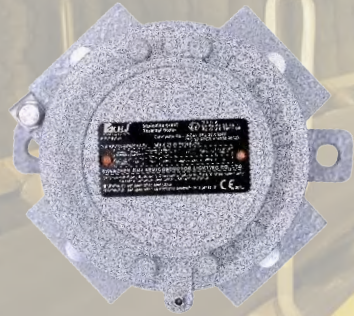
Proposal Examples

KBH05-01	Cable entries	Cable outer dia.
	2XM20	φ 6~ φ 12mm
	2XM25	φ 10~ φ 14mm
	3XM20	φ 6~ φ 12mm
	3XM25	φ 10~ φ 14mm
	4XM20	φ 6~ φ 12mm
	4XM25	φ 10~ φ 14mm

KBH05-02	Cable entries	Cable outer dia.
	4XM25	φ 10~ φ 14mm
	4XM32	φ 13~ φ 19mm
	6XM25	φ 10~ φ 14mm
	6XM32	φ 13~ φ 19mm
	8XM25	φ 10~ φ 14mm
	8XM32	φ 13~ φ 19mm

Outline and Installation(mm)

 KBH05-01	 KBH05-02	 Type A Weight: 0.6kg	 Type B Weight: 0.5kg
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Explosion-proof Junction Box

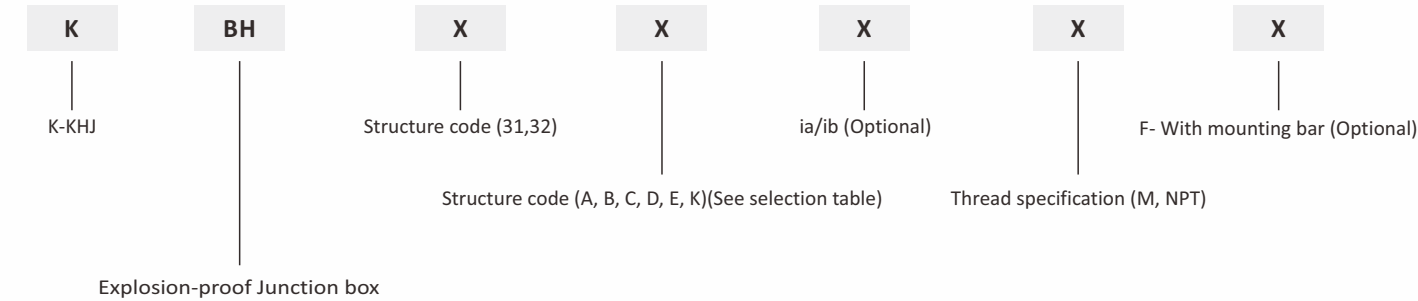
- **KBH 31/32 - Series**

Application and Features

- Explosion proof certificate:
 - ATEX : TPS 22 ATEX 114950 0002 X
 - IECEx : IECEx TPS 22.0024X
- Application in hazardous area
 - Zone 0,
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- This series product has 6 types for selection: A, B, C, D, E and K.

-  II 2 G Ex db IIC T6 Gb
-  II 1 G Ex ia IIC T6 Ga
-  II 2 G Ex ib IIC T6 Gb
-  II 2 D Ex tb IIIC T80°C Db

Product Definition

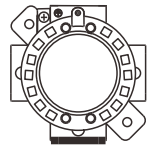
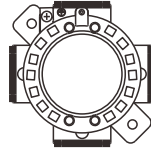
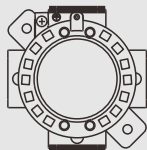
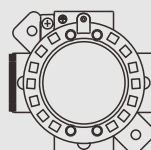
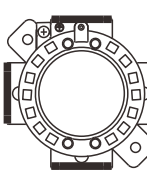
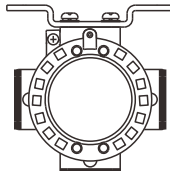


Note:
Cable gland should be installed.

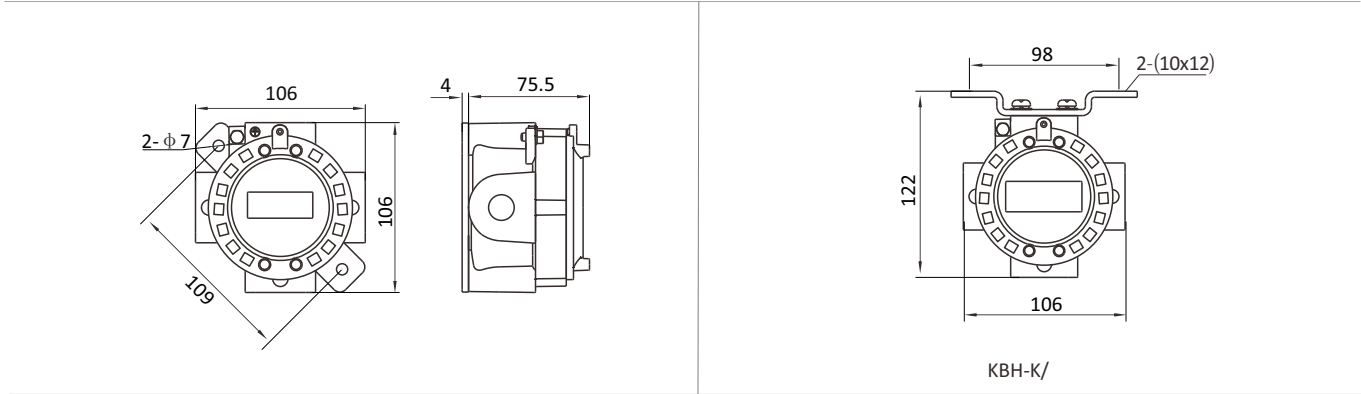
Technical Parameter

Ex marking	Gas	M, NPT	 II 2 G Ex db IIC T6 Gb	Ex db IIC T6 Gb					
	Dust	M, NPT	 II 1 G Ex ia IIC T6 Ga	Ex ia IIC T6 Ga					
			 II 2 G Ex ib IIC T6 Gb	Ex ib IIC T6 Gb					
			 II 2 D Ex tb IIIC T80°C Db	Ex tb IIIC T80°C Db					
Conformity to standards			IEC 60079-0, IEC 60079-1, IEC 60079-11, IEC 60079-31 EN 60079-0, EN 60079-1, EN 60079-11, EN 60079-31						
Enclosure material			Aluminum alloy enclosure, powder coated, industrial gray with dark lines texture(RAL7035)						
Exposed fastener			Stainless steel						
Frequency			50Hz / 60Hz						
Terminal block	Ex marking	Type	Terminal	Voltage	Current	Picture	Qty	Weight	
	Ex d, Ex tb	KBH31	MBK3/E-Z	400V AC 220V DC	16A		6	0.05kg	
			MBK5/E-Z	500V AC 220V DC	20A		4	0.04kg	
		KBH32	Pillar terminal 4-M5		20A			0.08kg	
	Ex i, Ex tb	KBH31	MBK3/E-Z	Max. 36VAC/DC	5A		6	0.05kg	
			MBK5/E-Z				4	0.04kg	
		KBH32	Pillar terminal 4-M5				0.08kg		
	Cable cross section			0.2~4.0mm ²					
	Degree of protection			IP66					
Ambient temperature			-60°C~+55°C						
Cable entries			Standard M20×1.5~M32×1.5						
			Optional NPT1/2~NPT1						

Selection Table

Type	Code	Outline	Weight (kg)	Type	Code	Outline	Weight (kg)
KBH-ANPT1/2	A		0.66	KBH-DNPT1/2	D		0.66
KBH-ANPT3/4			0.65	KBH-DNPT3/4			0.71
KBH-ANPT 1			0.62	KBH-DNPT 1			0.60
KBH-AM20×1.5			0.65	KBH-DM20×1.5			0.70
KBH-AM25×1.5			0.67	KBH-DM25×1.5			0.67
KBH-AM32×1.5			0.62	KBH-DM32×1.5			0.60
KBH-BNPT1/2	B		0.68	KBH-ENPT1/2	E		0.68
KBH-BNPT3/4			0.66	KBH-ENPT3/4			0.66
KBH-BNPT 1			0.61	KBH-ENPT 1			0.61
KBH-BM20×1.5			0.67	KBH-EM20×1.5			0.67
KBH-BM25×1.5			0.65	KBH-EM25×1.5			0.65
KBH-BM32×1.5			0.61	KBH-EM32×1.5			0.61
KBH-CNPT1/2	C		0.69	KBH-K/	K		0.80
KBH-CNPT3/4			0.66				
KBH-CNPT 1			0.61				
KBH-CM20×1.5			0.69				
KBH-CM25×1.5			0.66				
KBH-CM32×1.5			0.61				

Outline and Installation(mm)



Lighting Knowledge

LED Explosion Proof Lighting

LED Industrial Lighting

Explosion proof Electrical Apparatus

Explosion proof Cable Gland



Explosion-proof Control Station

- KBX02 - Series

Application and Features

- Explosion proof certificates
 - ATEX : SEV 22 ATEX 0606 X
 - IECEx : IECEx SEV 22.0011X
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Seven types of enclosure size, built-in explosion-proof components (control button, control switch, signal lamp, potentiometer, ammeter, etc.) and terminal blocks. The components is rail mounting type, which can be installed on the guide rail quickly and accurately, easy for installation and maintenance.
- Emergency stop button can be equipped with anti misoperation mechanism and padlock (If need).
- Stainless steel exposed fastener, anti dropping structure, easy for installation and maintenance.

II 2 G Ex db eb IIC T6 Gb

II 2 D Ex tb IIIC T80°C Db

Product Definition

K	BX	02	X	AX	BX	DX	KX	PX	X	X	X
K -KHJ	Design No.	Button quantity (Optional)	Signal lamp quantity (Optional)	Potentiometer quantity (Optional)	Inlet direction D-Top inlet X-Bottom inlet (default)						
Explosion-proof control station	Enclosure code	Ammeter quantity (Optional)	Switch quantity (Optional)	Installation method G-Hanging type L-Stand type	Inlet Nos. / Thread specification						

Note:

- Model example: KBX02-07A2D2GM25×1.5, 07# enclosure, equipped with two control buttons and two signal lamps, Hanging mounting, one bottom inlet M25×1.5.
- Specific components plan description refers to the requirements of the drawings.
- Button code, switch code, signal lamp code, ammeter code.
- Rain shade can be customized upon request.

Technical Parameter

Ex marking	Gas	 II 2 G Ex db eb IIC T6 Gb	Ex db eb IIC T6 Gb
	Dust	 II 2 D Ex tb IIIC T80°C Db	Ex tb IIIC T80°C Db
Exectutive standards		IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31	
Enclosure material	Enclosure	Stainless steel (Standard 304, if 316 is needed, please indicate)	
	Rain shade	Bended steel plate surface powder coated, industrial grey with dark lines texture (RAL7035) or stainless steel 304/316, please note when needed.	
Exposed fastener		Stainless steel, anti-drop structure.	
Rated voltage		Max. 415V AC, 250V DC	
Rated current		6A、10A、16A	
Wire diameter	≤6A: 0.75~2.5mm ²		
	6A<I≤10A: 1.5~2.5mm ²		
	10A<I≤16A: 2.5mm ²		
Degree of protection		IP66	
Ambient temperature		-40°C~+40/45/50/55/60/65/70°C	
Built-in components	K0101 explosion-proof control button.		
	K0102 explosion-proof signal lamp.		
	K0101-S explosion-proof control switch.		
	K0109 explosion-proof ammeter.		
Installation method		Hanging type, stand type	
Cable entries	Hanging type	M16×1.5~M63×1.5 The cable gland is not available when delivery, please indicate if necessary.	

Components and Accessories



K0101-Control button



K0101-A2 Two control button



K0102-Signal lamp



K0101-A Control button with signal lamp



K0109-Ammeter



K0155 Switch



φ 38 Operating handle



φ 65
Operating handle
(padlock available)

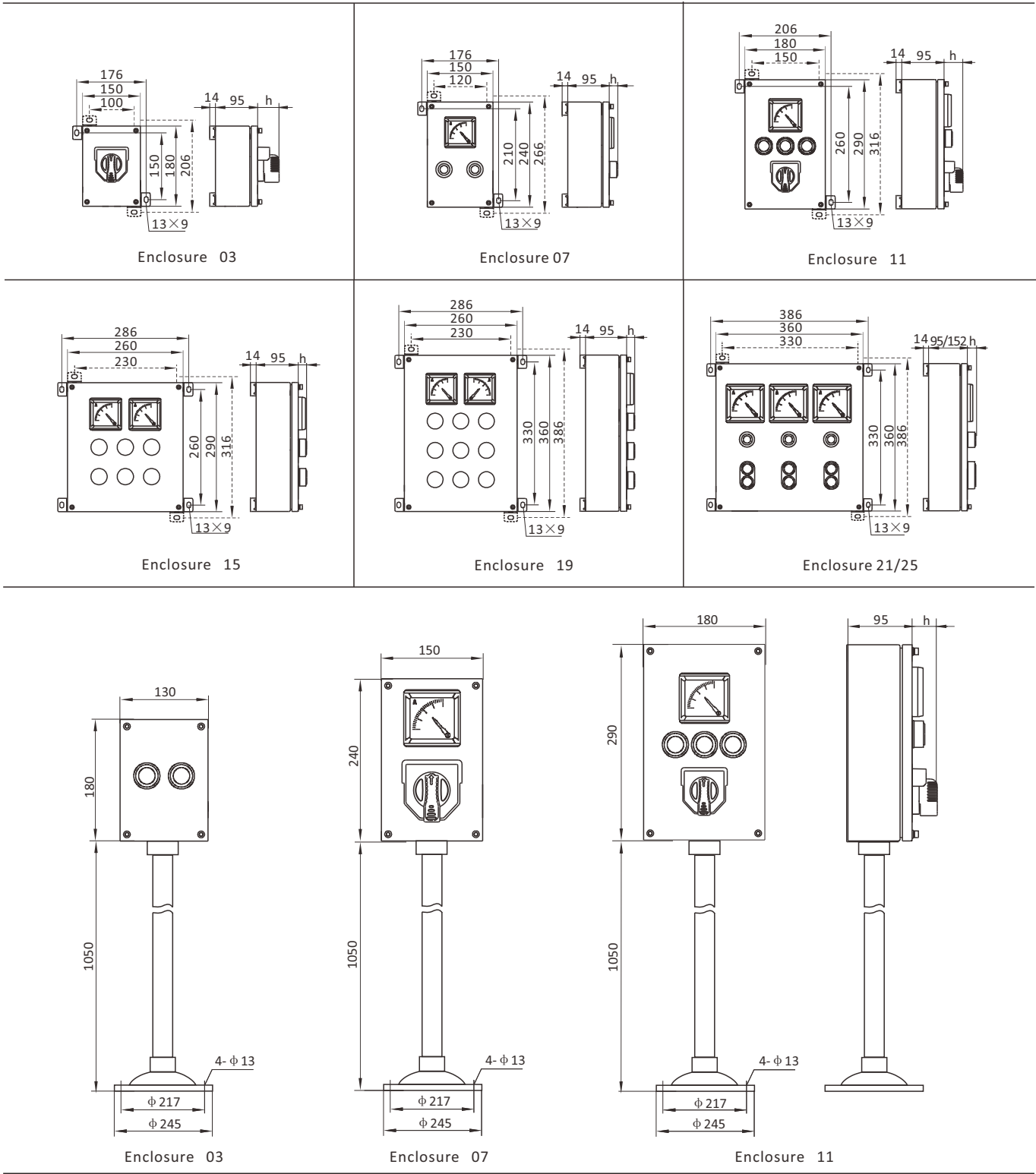


Square operating handle

Note:

- Installation area of 1 pcs K0109-48 is same as 2 pcs buttons.
- Installation area of 1 pcs φ 65 operating handle or 1 pcs square operating handle is same as 2 pcs buttons.
- Installation area of 1 pcs K0155 switch or 1 pcs K0109-72 is same as 2~3 buttons.

Outline and Installation (mm)



Height of electrical accessories

Electrical accessories	Frame of ammeter	Standard button	Double Button	Button with key	Self-lock button	Mushroom button	Mushroom button with key	Indicator light	illuminated button	Control switch S1, S3	Control switch S2	potentiometer (single turn)	potentiometer multi turn)
h(mm)	11	20.5	21.5	38(62)	40	32	45(69)	23.5	20.5	40	42	27	40.5

Selection Table

Code	Component layout								
03	a	b	c	d	e	f	g	h	
07	a	b	c	d	e	f	g	h	
11	a	b	c	d	e	f	g	h	j
15	a	b	c	d					
19	a	b	c						
21/25	a	b	c	d					



Explosion-proof Control Station

- KBX03 - Series

Application and Features

- Explosion proof certificates
 - ATEX : SEV 22 ATEX 0606 X
 - IECEx : IECEx SEV 22.0011X
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- There are 5 types of enclosure, assembled with explosion-proof components (control buttons, switches, indicator lights, potentiometers, ammeters, etc.) and terminal blocks. The components are rail-type structure, which can be quickly installed and convenient for installation and maintenance.
- The emergency stop button can be equipped with anti-misoperation mechanism and padlock by requirements.
- Stainless steel exposed fasteners, anti-drop structure, convenient for installation and maintenance.

II 2 G Ex db eb IIC T6 Gb

II 2 D Ex tb IIIC T80°C Db

Product Definition

K	BX	03	X	AX	BX	DX	KX	PX	X	X	X
K-KHJ	Design No.	Button quantity (Optional)	Signal lamp quantity (Optional)	Potentiometer quantity (Optional)	Inlet direction D-Top inlet X-Bottom inlet (default)	Explosion-proof control station	Enclosure code	Ammeter quantity (Optional)	Switch quantity (Optional)	Installation method G-Hanging type L-Stand type	Inlet Nos. / Thread specification

Note:

- Example: KBX03-19A2B1GXM25×1.5, 19# enclosure, which with two control buttons, one ammeter, wall mounting type, one bottom inlet M25×1.5.
- The specific requirements of the components are based on the drawings.
- Button code, switch code, signal lamp code, ammeter code.
- The rain shade is customizable by requirements.



Technical Parameter

Ex marking	Gas	 II 2 G Ex db eb IIC T6 Gb	Ex db eb IIC T6 Gb
	Dust	 II 2 D Ex tb IIIC T80°C Db	Ex tb IIIC T80°C Db
Exectutive standards		IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31	
Enclosure materials	Enclosure	GRP (Polyester resin, glass fibre reinforced), antistatic	
	Rain shade	Bended steel plate surface powder coated (black color) or stainless steel 304/316, please note when needed.	
Color of enclosure		Black	
Exposed fasteners		Stainless steel exposed fasteners, anti-drop structure	
Rated voltage		Maximum 415VAC, 250V DC	
Rated current		6A、10A、16A	
Wire diameter	≤6A: 0.75~2.5mm ²		
	6A<I≤10A: 1.5~2.5mm ²		
	10A<I≤16A: 2.5mm ²		
Degree of protection		IP66	
Ambient temperature		-40°C~+40/45/50/55/60/65/70°C	
Components	K0101 explosion-proof control button.		
	K0102 explosion-proof indicator.		
	K0101-S explosion-proof control switch.		
	K0109 explosion-proof ammeter.		
Installation method		Wall type and stand type	
Cable entries	Wall type	M16×1.5~M63×1.5 Without cable entry device as default, please note if which is needed.	

Components and accessories



K0101- Control button



K0101-A2 Double button



K0102- Signal lamp



K0101-A Illuminated control buttons



K0109- Ammeter



K0155 Switch



φ38 operating handle



φ65 operating handle (with padlock available)

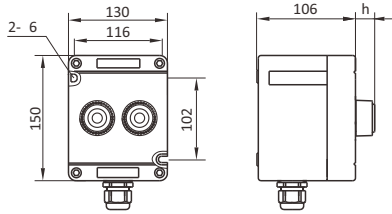
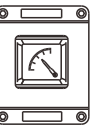
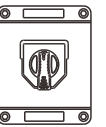
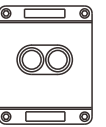
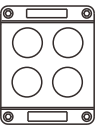
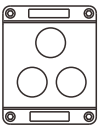
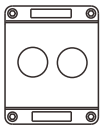
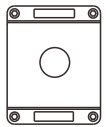
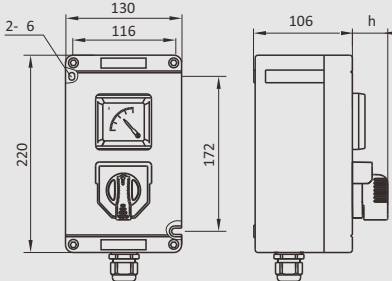
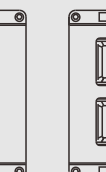
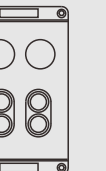
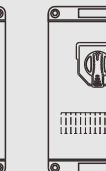
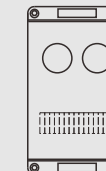
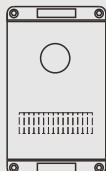
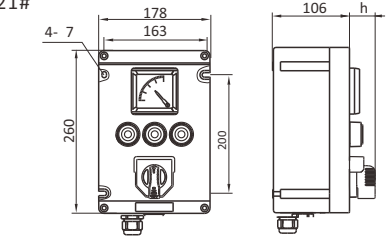
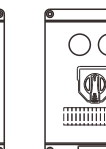
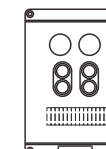
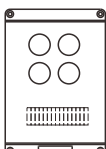
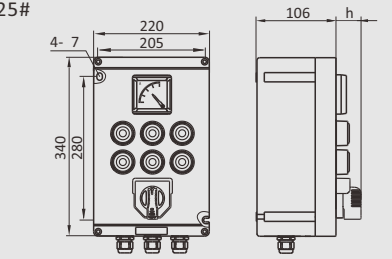
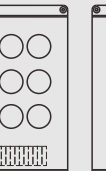
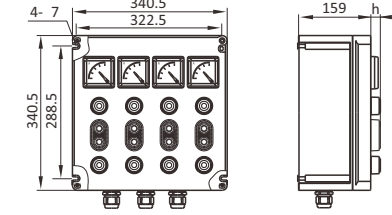
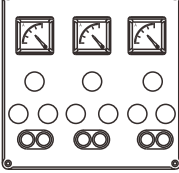
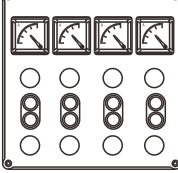
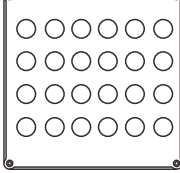
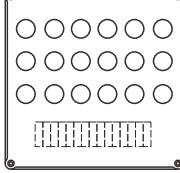


Square operating handle

Note:

- K0109-48 occupies 2 components position;
- φ 65 and square operating handle occupies 2 components position;
- K0155 switch, K0109-72 occupies 2~3 components position.

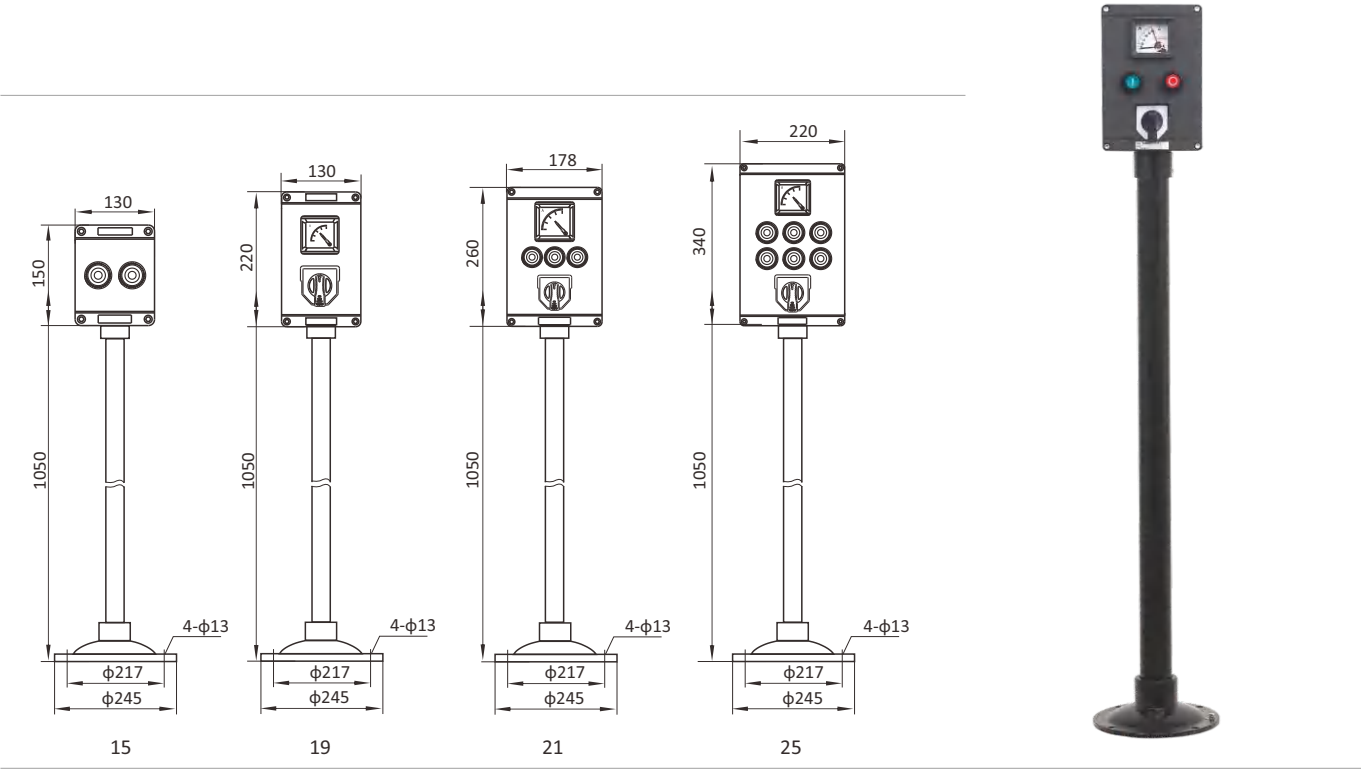
Selection Table (Dimensions in mm)

Outline	Component layout
15# 	 1501150215031504150515061507
19# 	 190119021903190419051906190719081909191019111912
21# 	 210121022103210421052106
25# 	 250125022503250425052506
29# 	 2901290229032904

Height of electrical accessories

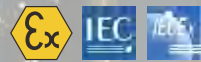
Electrical accessories	Frame of ammeter	Standard button	Double Button	Button with key	Self-lock button	Mushroom button	Mushroom button with key	Indicator light	illuminated button	Control switch S1, S3	Control switch S2	potentiometer (single turn)	potentiometer multi turn)
h(mm)	11	20.5	21.5	38(62)	40	32	45(69)	23.5	20.5	40	42	27	40.5

Outline and Installation (stand type)



Accessories list

Item	Picture	Weight (kg)
Stand type connection part		0.3
Pole		3.4
Basis		0.6



Explosion-proof Control Station

- KBX05 - Series

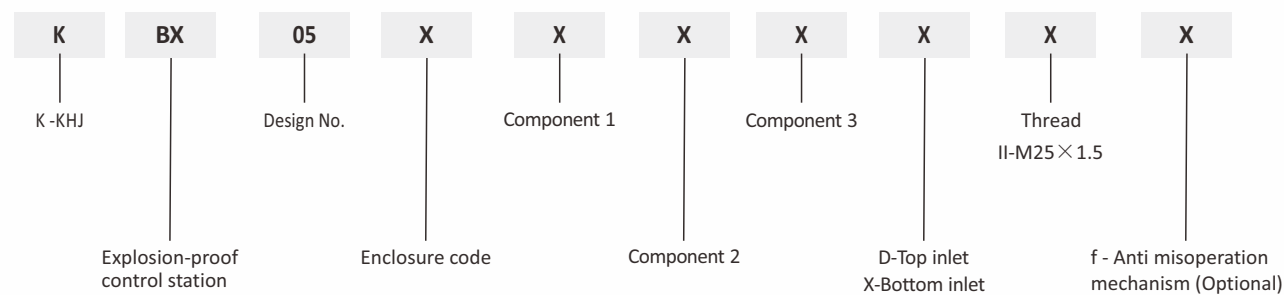
Application and Features

- Explosion proof certificates
 - ATEX : SEV 22 ATEX 0606 X
 - IECEx : IECEx SEV 22.0011X
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Three types of enclosure size, built-in explosion-proof components (control button, control switch, signal lamp, potentiometer, ammeter, etc.). The components is rail mounting type, which can be installed on the guide rail quickly and accurately, easy for installation and maintenance.
- Component arrangement can be combined upon request.
- Emergency stop can be equipped with anti misoperation mechanism and padlock (If need).
- Stainless steel exposed fastener, anti dropping structure, easy for installation and maintenance.

II 2 G Ex db eb IIC T6 Gb

II 2 D Ex tb IIIC T80°C Db

Product Definition



Note:

1. Rain shade can be customized upon request.

Model example:

KBX05-07/R01F-A1/I/02FX II : 07# enclosure, equipped with one signal lamp, AC/DC 12-36V, and one push button, 1NO+1NC, with marking "I", bottom inlet M25×1.5.



Technical Parameter

Ex marking	Gas	 II 2 G Ex db eb IIC T6 Gb	Ex db eb IIC T6 Gb
	Dust	 II 2 D Ex tb IIIC T80°C Db	Ex tb IIIC T80°C Db
Exectutive standards		IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31	
Enclosure material	Enclosure	GRP (Polyester resin, glass fibre reinforced), antistatic	
	Rain shade	Bended steel plate surface powder coated (black color) or stainless steel 304/316, please note when needed	
Enclosure color		Black	
Enclosure fastener		Stainless steel, anti-drop structure.	
Rated voltage		Max 415V AC, 250V DC	
Rated current		6A、10A、16A	
Wire diameter	≤6A: 0.75~2.5mm ²		
	6A<I≤10A: 1.5~2.5mm ²		
	10A<I≤16A: 2.5mm ²		
Degree of protection		IP66	
Ambient temperature		-40°C~+40/45/50/55/60/65/70°C	
Built-in components	K0101 explosion-proof control button.		
	K0102 explosion-proof signal lamp.		
	K0101-S explosion-proof control switch.		
	K0109 explosion-proof ammeter.		
Installation method		Hanging type	
Cable entries		Φ 25.5mm The cable gland is not available when delivery, please indicate if necessary.	

Components and Accessories



K0101-Control button



K0101-A2 Two control button



K0102-Signal lamp



K0101-A Control button with signal lamp



K0109-Ammeter



Φ 38 Operating handle



Φ 65
Operating handle
(padlock available)



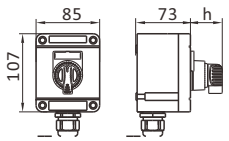
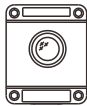
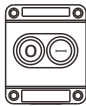
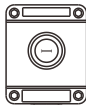
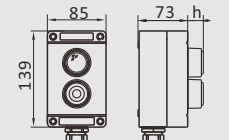
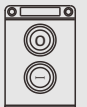
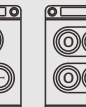
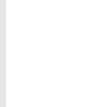
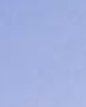
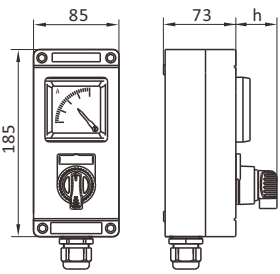
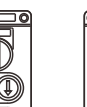
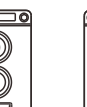
Square operating handle

Note:

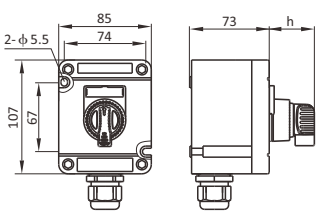
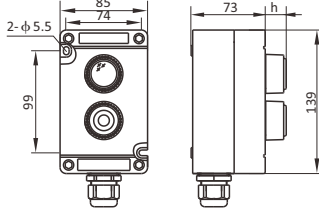
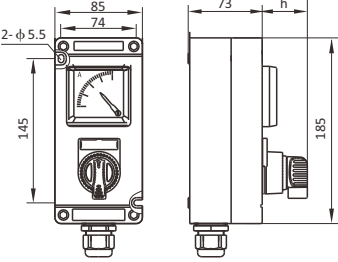
1. Installation area of 1 pcs K0109-48 is same as 2 pcs buttons.

2. Installation area of 1 pcs Φ 65 operating handle or 1 pcs square operating handle is same as 2 pcs buttons.

Selection table (mm)

Outline	Component layout
03# 	 301  302  303  304  305  306
07# 	 701  702  703  704  705  706  707  708  709
11# 	 1101  1102  1103  1104  1105  1106  1107  1108  1109  1110  1111  1112  1113

Outline and Installation (mm)

 03#	 07#	 11#
--	--	---

Component accessories	h (mm)
Meter frame	11
Standard button	20.5
Double button	21.5
Button with key	38(62)
Emergency stop button with self-locking	40
Mushroom head button	32
Mushroom head button with key	45(69)

Component accessories	h (mm)
Indicator light	23.5
Illuminated control button	20.5
Control switch S1、S3	40
Control switch S2	42
Potentiometer (single-turn)	27
Potentiometer (multi-turn)	40.5
—	—





Explosion - proof Electrical Apparatus

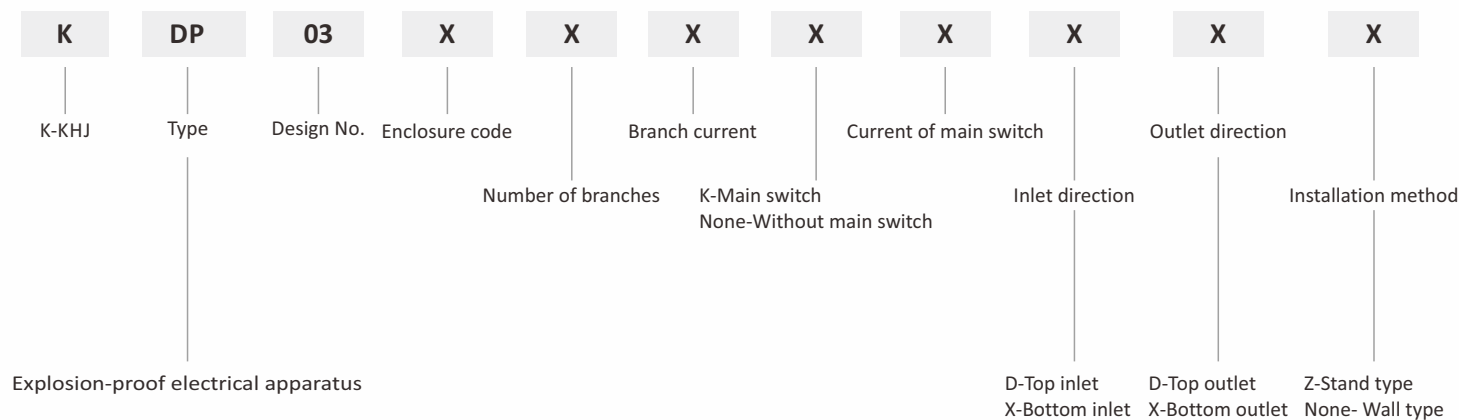
- KDP03 - Series

Application and Features

- Explosion proof certificates
 - ATEX : TPS 22 ATEX 114950 0003 X
 - IECEx : IECEx TPS 22.0025X
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Three types of explosion protection: Ex db IIB, Ex db IIB+H2, Ex tb IIC
- The enclosure can be equipped with miniature circuit breakers (MCB) or molded case circuit breakers (MCCB), leakage circuit breakers, contactors, thermal relays, PLCs, control transformers, soft starters, control buttons, indicator lights, push switches, potentiometers, Voltmeter, ammeter, tachometer, terminal block, etc.
- The enclosure with hinges and handle, convenient for installation and maintenance. Protect the flame-proof surface when operating.
- The circuit breaker using metal handle with frozen-resistant and can be equipped with a padlock.
- The enclosures can be combined and installed to meet the various requirements of power distribution systems.
- Can be customized according to user requirements, meet the certificate use restrictions.
- The number of elements and the maximum number of holes size needs to meet the requirements of power dissipation and mechanical strength of the housing.

- II 2 G Ex db IIB T6/T5/T4 Gb
- II 2 G Ex db[ia/ib] IIB T6/T5/T4 Gb
- II 2 G Ex db IIB+H2 T6/T5/T4 Gb
- II 2 G Ex db[ia/ib] IIB+H2 T6/T5/T4 Gb
- II 2 D Ex tb IIC T80/T95/T130°C Db

Product Definition



Note:

1. Please select the model according to the "Product Definition" above, and specify all the technical parameters.
2. Please provide the electrical schematic diagram.
3. Pls specify the number, specification and position of the cable entries.
4. The rain shade is customizable by requirements.



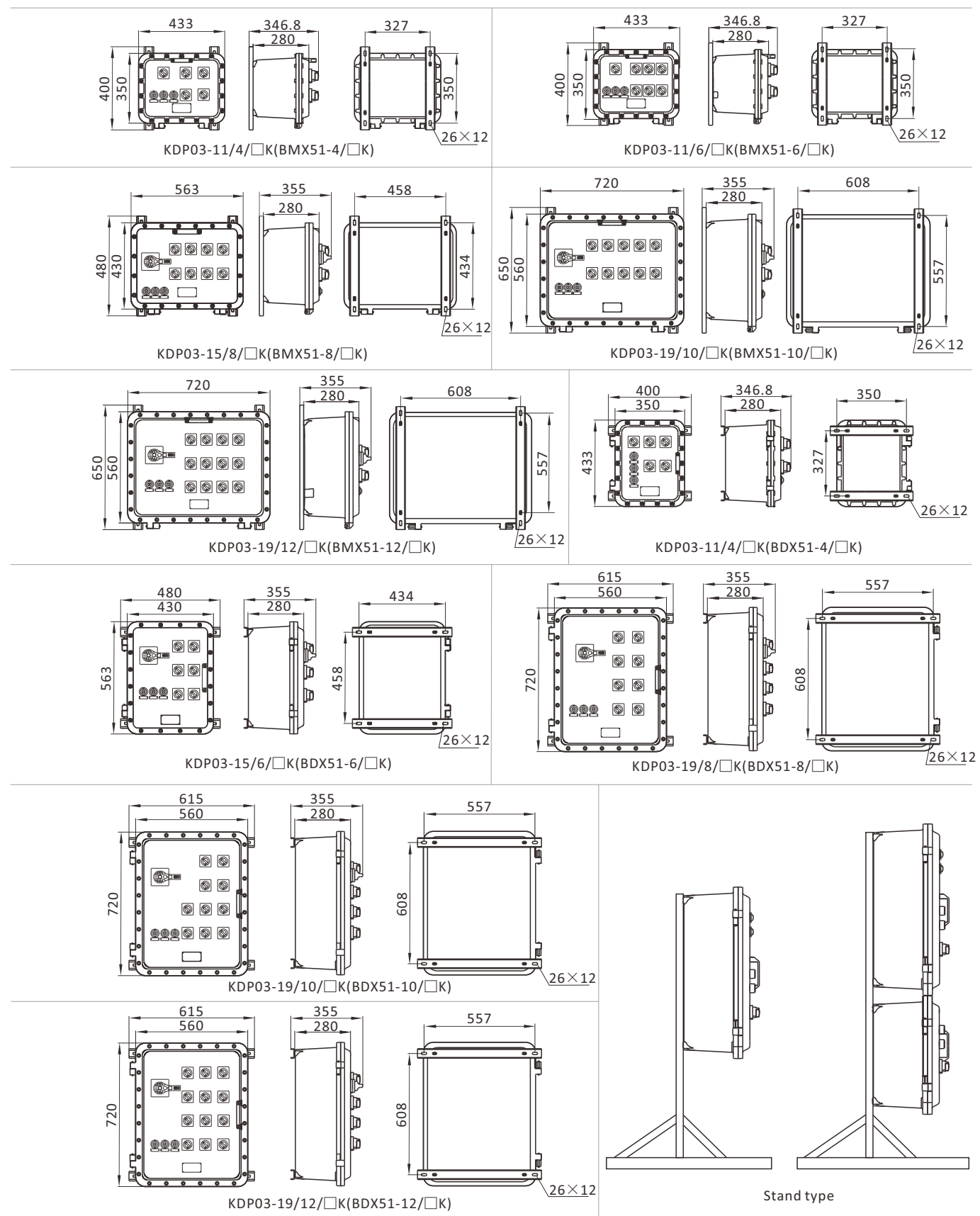
Technical Parameter

Ex marking	Gas	II 2 G Ex db IIB T6/T5/T4 Gb	Ex db IIB T6/T5/T4 Gb
		II 2 G Ex db[ia/ib] IIB T6/T5/T4 Gb	Ex db[ia/ib] IIB T6/T5/T4 Gb
		II 2 G Ex db IIB+H2 T6/T5/T4 Gb	Ex db IIB+H2 T6/T5/T4 Gb
		II 2 G Ex db[ia/ib] IIB+H2 T6/T5/T4 Gb	Ex db[ia/ib] IIB+H2 T6/T5/T4 Gb
	Dust	II 2 D Ex tb IIC T80/T95/T130°C Db	Ex tb IIC T80/T95/T130°C Db
Exectutive standards		IEC 60079-0, IEC 60079-1, IEC 60079-11, IEC 60079-31 EN 60079-0, EN 60079-1, EN 60079-11, EN 60079-31	
Enclosure material	Enclosure	Aluminum alloy enclosure, powder coated, Industrial grey with dark lines texture (RAL7035)	
	Transparent part	Tempered glass, resistant to 4J impact	
	Rain shade	Bended steel plate surface powder coated, industrial grey with dark lines texture (RAL7035) or stainless steel 304/316, please note when needed	
Exposed fasteners		Stainless steel	
Components	Power circuit breaker	Miniature circuit breaker (MCB) or molded case circuit breaker (MCCB) and leakage circuit breaker	
	Branch switch	Miniature circuit breaker (MCB) or molded case circuit breaker (MCCB) and leakage circuit breaker	
	Terminal block	World famous brand	
	Indicator	Red, green, yellow, blue, white	
	Button	Red, green, yellow, blue, white	
	Control switch	LW26-D, LW26-F	
	AC contactor	World famous brand	
	Thermal relay	World famous brand	
	PLC programmer	World famous brand	
	soft starter	World famous brand	
Rated voltage		Maximum 1000V AC, 1500V DC	
Rated current		Maximum 1200A	
Frequency		50Hz/60Hz	
Degree of protection		IP66	
Ambient temperature		-20°C~+40/60°C, -40°C~+40/60°C	
Cable entry		M□X1.5(default, exact size according to requirement) , NPT thread (optional), KBM-for recommended	
Inlet direction		Bottom in and bottom out, upon request	
Installation method		Wall type (Standard)	
		Stand type (Optional)	

Selection Table

Type	Enclousre size (mm)	Internal size (mm)	Maximum power dissipation (Ta: +40°C)			Maximum power dissipation (Ta: +60°C)		Weight (Empty enclosure)
	LxWxH	LxWxH	T6/T80°C	T5/T95°C	T4/T130°C	T6/T80°C	T5/T95°C	
KDP03-03	282X210X170	216X144X126	45W	110W	110W	45W	72W	9.0kg
KDP03-07	350X210X170	282X142X123	45W	80W	139W	45W	80W	11.5kg
KDP03-08	350X300X235	278X228X189	45W	80W	139W	45W	80W	16.6kg
KDP03-11	433X350X280	361X278X225	100W	288W	288W	100W	162W	26kg
KDP03-15	563X433X280	488X358X197	130W	365W	365W	130W	225W	48kg
KDP03-19	720X563X280	630X473X182	200W	448W	448W	200W	380W	85kg
KDP03-21	720X563X350	626X469X257	210W	690W	690W	210W	400W	95kg

Outline and Installation(mm)





Explosion-proof Electrical Apparatus(Circuit Breaker)

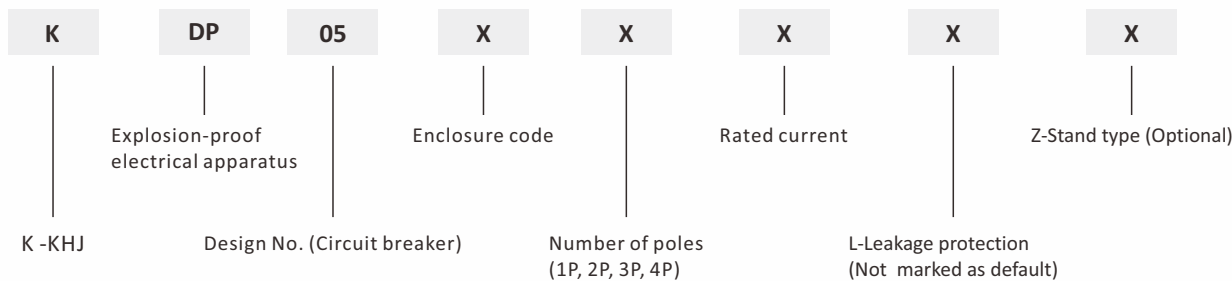
- KDP05 - Series

Application and Features

- Explosion proof certificates
 - ATEX : TPS 22 ATEX 114950 0003 X
 - IECEX : IECEx TPS 22.0025X
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Three types of explosion protection: Ex db IIB, Ex db IIB+H₂, Ex tb IIIC.
- The enclosure can be equipped with miniature circuit breakers (MCB) or molded, case circuit breakers (MCCB), leakage circuit breakers.
- leakage protection accessories, shunt tripping device, and other protection devices are optional.
- The enclosure with hinges and handle, convenient for installation and maintenance. Protect the flame-proof surface when operating.
- The circuit breaker using metal handle and can be equipped with a padlock.

- II 2 G Ex db IIB T6/T5/T4 Gb
- II 2 G Ex db IIB+H₂ T6/T5/T4 Gb
- II 2 D Ex tb IIIC T80/T95/T130°C Db

Product Definition



Note:

- Please select the model according to the "Product definition" above, and specify all the technical parameters.
- Please specify the number, specification and position of the cable entry holes, and cable entry device provided by user.
- The rain shade is customizable by requirements.



Technical Parameter

Ex marking	Gas	II 2 G Ex db IIB T6/T5/T4 Gb	Ex db IIB T6/T5/T4 Gb										
		II 2 G Ex db IIB+H2 T6/T5/T4 Gb	Ex db IIB+H2 T6/T5/T4 Gb										
	Dust	II 2 D Ex tb IIIC T80/T95/T130°C Db	Ex tb IIIC T80/T95/T130°C Db										
Exective standards		IEC 60079-0, IEC 60079-1, IEC 60079-31 EN 60079-0, EN 60079-1, EN 60079-31											
Enclosure material	Enclosure	Aluminum alloy enclosure, powder coated, Industrial grey with dark lines texture (RAL7035)											
	Rain shade	Bended steel plate surface powder coated, industrial grey with dark lines texture (RAL7035) or stainless steel 304/316, please note when needed.											
Exposed fasteners		Stainless steel											
Components	Circuit breaker	Miniature circuit breaker (MCB) or molded case circuit breaker (MCCB) and leakage circuit breaker											
	Indicator light	Red, green, yellow, blue, white, according to requirement add more											
Rated voltage		Maximum 1000V AC, 1500V DC											
Rated current		Maximum 630A											
Frequency		50Hz/60Hz											
Maximum dissipation power	Enclosure size	Type	Ta: +40°C						Ta: +60°C				
			T6/T80°C		T5/T95°C		T4/T130°C		T6/T80°C		T5/T95°C		The weight of Empten closure
	Power	Current	Power	Current	Power	Current	Power	Current	Power	Current			
	282X210X170	03	45W	≤63A	110W	---	110W	---	45W	≤63A	72W	---	9.0kg
	350X210X170	07	45W	63A~100A	80W	---	139W	---	45W	63A~100A	80W	---	11.5kg
	350X300X235	08	45W	63A~100A	80W	---	139W	---	45W	63A~100A	80W	---	16.6kg
	433X350X280	11	100W	100A~250A	288W	---	288W	---	100W	100A~250A	162W	---	26kg
	563X433X280	15	130W	250A~400A	365W	---	365W	---	130W	250A~400A	225W	---	48kg
	720X563X280	19	200W	---	448W	400A~630A	448W	---	200W	---	380W	---	85kg
720X563X350	21	210W	---	690W	---	690W	400A~630A	210W	---	400W	---	95kg	
Degree of protection		IP66											
Ambient temperature		-20°C~-40/60°C, -40°C~-40/60°C											
Cable entry		M16×1.5-M63×1.5(default, exact size according to requirement) , NPT thread (optional), KBM Series Explosion-proof Cable Glands is recommended.											
Inlet direction		Bottom in and bottom out											
Installation method		Wall type (Standard)											
		Stand type (Optional)											

Selection Table

KDP05-03/□63□	KDP05-11□/□160□ KDP05-11□/□250□
KDP05-15□/□400□	KDP05-19□/□630□



Explosion - proof Electrical Apparatus

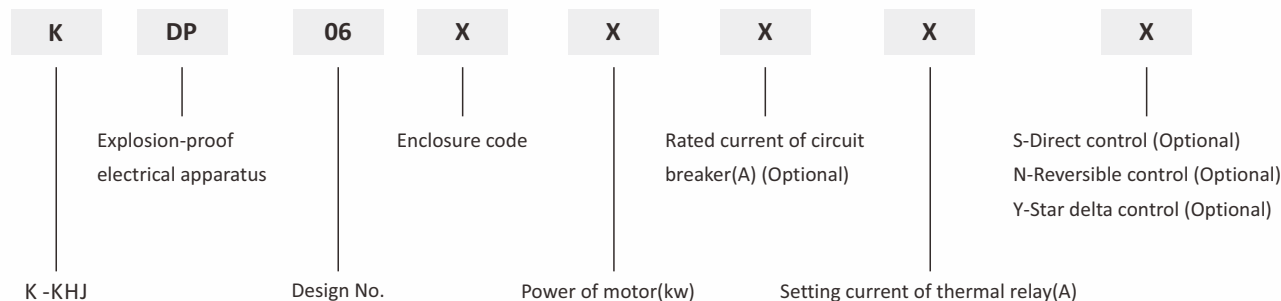
- KDP06- Series

Application and Features

- Explosion proof certificates
 - ATEX : TPS 22 ATEX 114950 0003 X
 - IECEx : IECEx TPS 22.0025X
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Three types of explosion protection: Ex db IIB, Ex db IIB+H2, Ex tb IIIC.
- The enclosure can be equipped with miniature circuit breakers (MCB) or molded case circuit breakers (MCCB), contactors, thermal relays, control buttons, indicator lights, push switches, potentiometers, voltmeters, ammeters, tachometers, terminals, etc.
- It's able to control the start, stop, forward and reverse rotation of the motor, and the comprehensive protection of the motor, able to multi-places control.
- The enclosure with hinges and handle, convenient for installation and maintenance. Protect the flame-proof surface when operating.
- The circuit breaker using metal handle and can be equipped with a padlock.
- Can be customized according to user requirements, meet the certificate use restrictions.
- The number of elements and the maximum number of holes size needs to meet the requirements of power dissipation and mechanical strength of the housing.
- Please specify the special requirements when ordering.

- II 2 G Ex db IIB T6/T5/T4 Gb
- II 2 G Ex db IIB+H2 T6/T5/T4 Gb
- II 2 D Ex tb IIIC T80/T95/T130°C Db

Product Definition



Note:

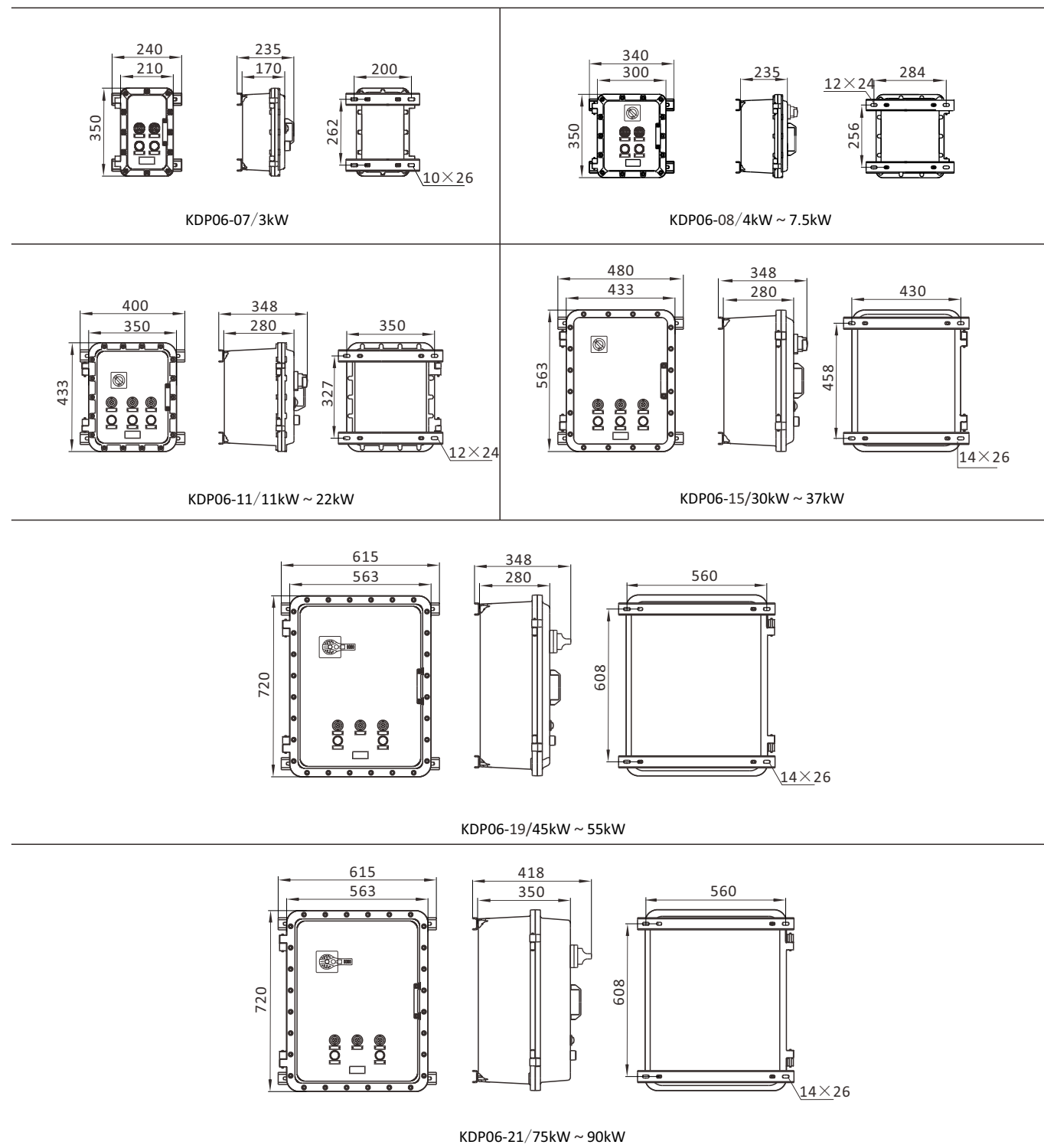
- Please select the model according to the “Product definition” above, and specify all the technical parameters.
- Please provide the electrical schematic diagram.
- Please specify the number, specification and position of the cable entry holes, and ex-proof cable glands provided by user.
- The rain shade is customizable by requirements.



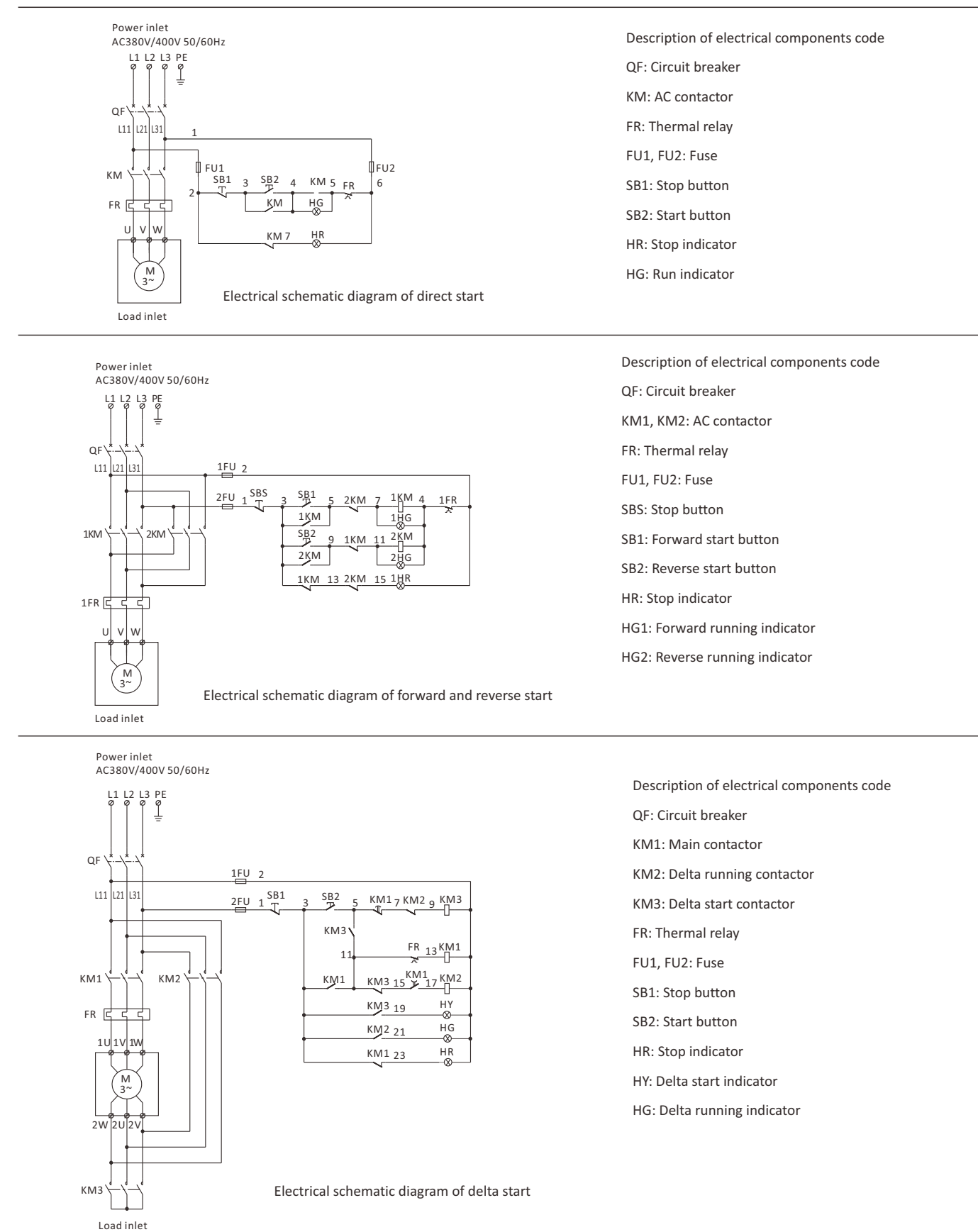
Technical Parameter

Ex marking	Gas	II 2 G Ex db IIB T6/T5/T4 Gb		Ex db IIB T6/T5/T4 Gb									
		II 2 G Ex db IIB+H2 T6/T5/T4 Gb		Ex db IIB+H2 T6/T5/T4 Gb									
	Dust	II 2 D Ex tb IIIC T80/T95/T130°C Db		Ex tb IIIC T80/T95/T130°C Db									
Exectutive standards		IEC 60079-0,IEC 60079-1,IEC 60079-31 EN 60079-0, EN 60079-1, EN 60079-31											
Enclosure material	Enclosure	Aluminum alloy enclosure, powder coated, Industrial grey with dark lines texture (RAL7035)											
	Transparent part	Tempered glass, resistant to 4J impact											
	Rain shade	Bended steel plate surface powder coated, industrial grey with dark lines texture (RAL7035) or stainless steel 304/316, please note when needed											
Exposed fasteners		Stainless steel											
Components	Power circuit breaker	Miniature circuit breaker (MCB) or molded case circuit breaker (MCCB) and leakage circuit breaker											
	Branch switch	Miniature circuit breaker (MCB) or molded case circuit breaker (MCCB) and leakage circuit breaker											
	Terminal block	World famous brand											
	Indicator	Red, green, yellow, blue, white											
	Button	Red, green, yellow, blue, white											
	Control switch	LW26-D, LW26-F											
	AC contactor	World famous brand											
	Thermal relay	World famous brand											
Rated voltage		Maximum 690V AC											
Rated current		Maximum 200A											
Frequency		50Hz/60Hz											
Maximum dissipation power	Enclosure size	Type	Ta:+40°C						Ta:+60°C				
			T6/T80°C		T5/T95°C		T4/T130°C		T6/T80°C		T5/T95°C		The weight of Empty enclosure
	Power	Current	Power	Current	Power	Current	Power	Current	Power	Current			
	282×210×170	03	45W	--	110W	--	110W	--	45W	--	72W	--	9.0kg
	350×210×170	07	45W	≤40A	80W	≤50A	139W	--	45W	≤40A	80W	≤50A	11.5kg
	350×300×235	08	45W	≤40A	80W	≤50A	139W	--	45W	≤40A	80W	≤50A	16.6kg
	433×350×280	11	100W	≤95A	288W	≤120A	288W	--	100W	≤95A	162W	≤120A	26kg
	563×433×280	15	130W	≤150A	365W	≤200A	365W	--	130W	≤150A	225W	≤200A	48kg
	720×563×280	19	200W	≤200A	448W	≤300A	448W	≤300A	200W	≤200A	380W	≤300A	85kg
720×563×350	21	210W	≤200A	690W	≤300A	690W	≤300A	210W	≤200A	400W	≤300A	95kg	
Degree of protection		IP66											
Ambient temperature		-20°C~+40/60°C, -40°C~+40/60°C											
Cable entry		M16×1.5-M63×1.5(default, exact size according to requirement) , NPT thread (optional), KBM Series Explosion-proof Cable Glands is recommended											
Inlet direction		Bottom in and bottom out, upon request											
Installation method		Wall type (Standard)											
		Stand type (Optional)											

Outline and Installation(mm)



Electrical Schematic Diagram





Explosion - proof Electrical Apparatus(Control circuit)

- **KDP07 - Series**

Application and Features

- Explosion proof certificates
 - ATEX : TPS 22 ATEX 114950 0003 X
 - IECEx : IECEx TPS 22.0025X
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Three types of explosion protection: Ex db IIB, Ex db IIB+H2, Ex tb IIIC.
- The enclosure can be equipped with transformers, buttons, indicator lights, switches, potentiometers, voltmeters, ammeters, tachometers, etc.
- The emergency stop button can be equipped with an anti-misoperation mechanism and a padlock by requirements.
- The enclosure with hinges and handle, convenient for installation and maintenance. Protect the flame-proof surface when operating.
- The enclosures can be combined and installed to meet the various requirements of power distribution systems.
- Can be customized according to user requirements, meet the certificate use restrictions.
- The number of elements and the maximum number of holes size needs to meet the requirements of power dissipation and mechanical strength of the housing.
- The circuit breaker using metal handle with frozen-resistant and can be equipped with a padlock.
- Please specify the special requirements when ordering.

- II 2 G Ex db IIB T6 Gb
- II 2 G Ex db[ia/ib] IIB T6 Gb
- II 2 G Ex db IIB+H2 T6 Gb
- II 2 G Ex db[ia/ib] IIB+H2 T6 Gb
- II 2 D Ex tb IIIC T80°C Db

Product Definition

K	DP	07	X	AX	BX	DX	KX	PX	X	X	X
K -KHJ	Design No.		Number of buttons None-without button	Number of indicator lights None-without indicator light	Number of potentiometers None-without potentiometer	Number of switches None-without switch			Inlet thread specification/quantity		
	Explosion-proof electrical apparatus	Enclosure code							Inlet direction D-Top inlet X-Bottom inlet		Installation method G-Wall type L-Stand type
			Number of Ammeter/Voltmeter None-without ammeter/voltmeter								

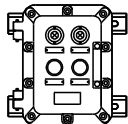
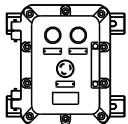
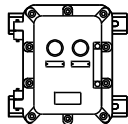
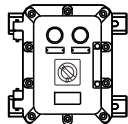
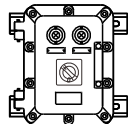
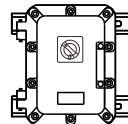
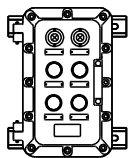
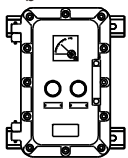
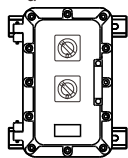
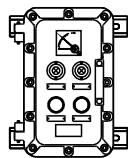
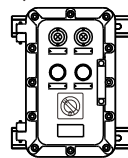
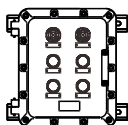
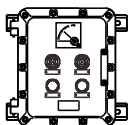
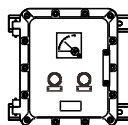
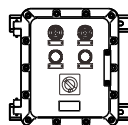
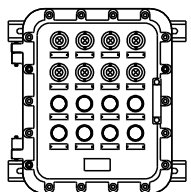
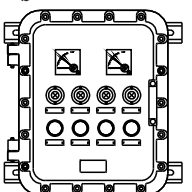
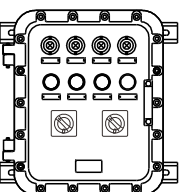
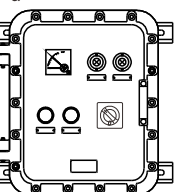
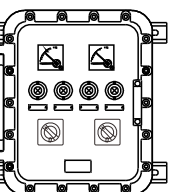
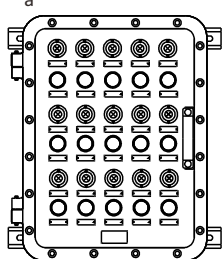
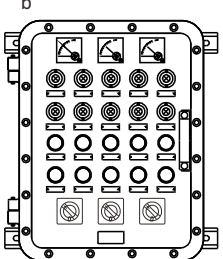
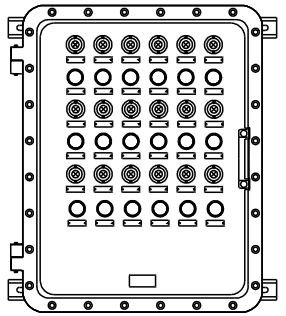
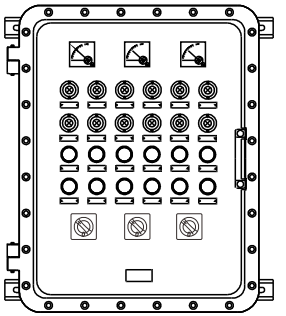
- Note :**
- Optional components:
 - K0105 explosion-proof switch button(1NO&1NC as default)
 - K0106 explosion-proof indicator
 - control switch
 - K0109 explosion-proof ammeter
 - Example: KDP07-A2B1K1
 - Components: 2 buttons, 1 ammeter, 1 control switch
 - Details: 1 start button (0105-A1I01, 1NO+1NC);
 - 1 stop button (K0105-A1I21,1NO+1NC);
 - 1 ammeter (50/5);
 - 1 control switch (stop-run-start);
 - The rain shade is customizable by requirements.

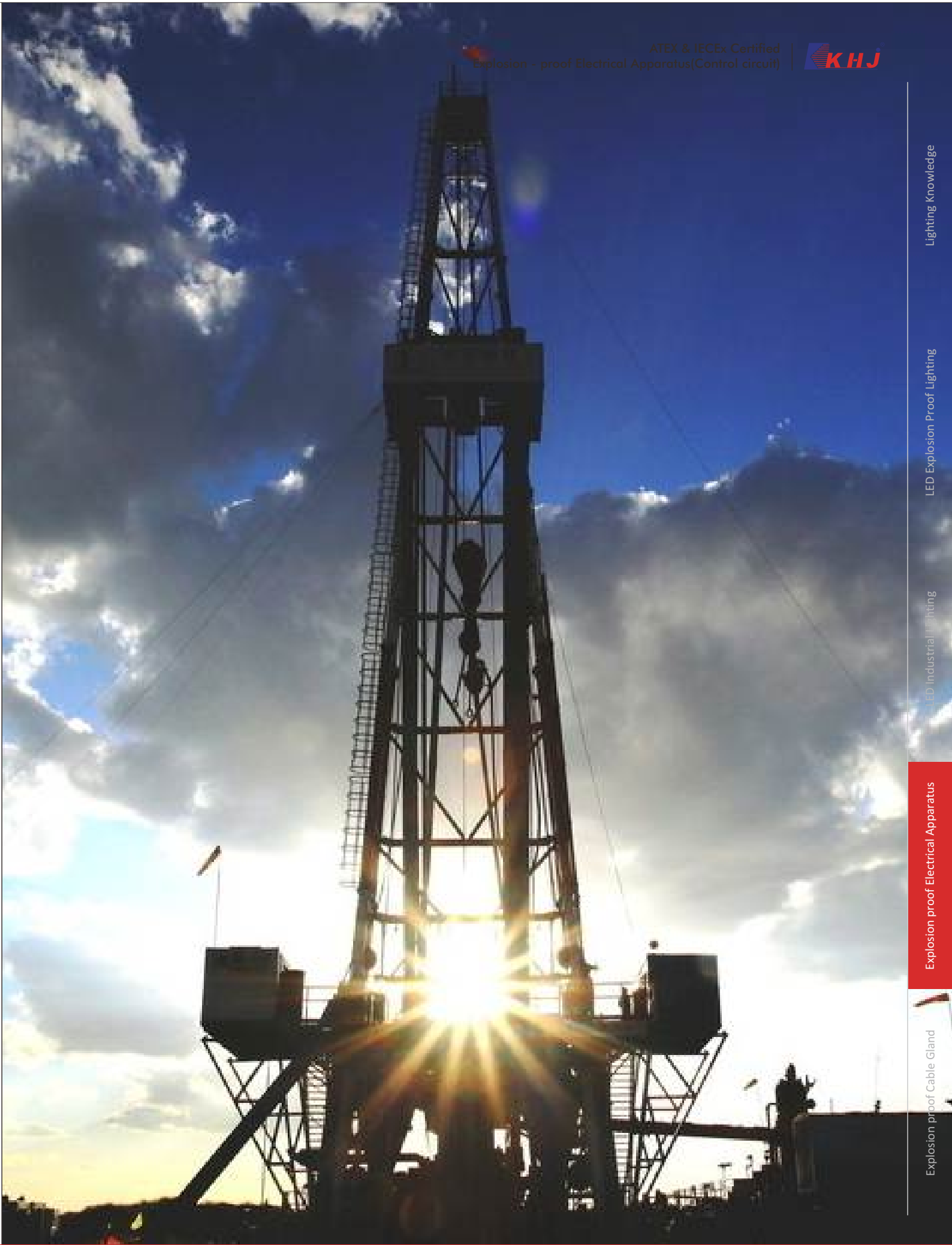


Technical Parameter

Ex marking	Gas	II 2 G Ex db IIB T6 Gb		Ex db IIB T6 Gb		
		II 2 G Ex db[ia/ib] IIB T6 Gb		Ex db[ia/ib] IIB T6 Gb		
		II 2 G Ex db IIB+H2 T6 Gb		Ex db IIB+H2 T6 Gb		
		II 2 G Ex db[ia/ib] IIB+H2 T6 Gb		Ex db[ia/ib] IIB+H2 T6 Gb		
	Dust	II 2 D Ex tb IIIC T80°C Db		Ex tb IIIC T80°C Db		
Exectutive standards		IEC 60079-0, IEC 60079-1, IEC 60079-11, IEC 60079-31 EN 60079-0, EN 60079-1, EN 60079-11, EN 60079-31				
Enclosure materials	Enclosure	Aluminum alloy enclosure, powder coated, Industrial grey with dark lines texture (RAL7035)				
	Transparent part	Tempered glass, resistant to 4J impact				
	Rain shade	Bended steel plate surface powder coated, industrial grey with dark lines texture (RAL7035) or stainless steel 304/316, please note when needed				
Exposed fasteners		Stainless steel				
Components		K0105 explosion-proof switch button				
		K0106 explosion-proof indicator				
		K0107 explosion-proof indicator				
		Control switch				
		Specifications of potentiometer according to requirements				
		The voltmeter, ammeter and tachometer are 48/72 type, specifications according to requirements				
Rated voltage		Maximum 415V AC				
Rated current		Maximum 200A				
Frequency		50Hz/60Hz				
Maximum dissipation power	Enclosure size	Type \ Temperature class	Ta:+40°C	Ta:+60°C	The weight of Empty enclosure	
			T6/T80°C	T6/T80°C		
		105×105×90	01.1	≤10A	≤16A	1. 1kg
		105×160×90	01.2	≤10A	≤16A	1. 5kg
		116×202×90	01.3	≤10A	≤16A	2. 6kg
		282×210×170	03	45W	45W	9.0kg
		350×210×170	07	45W	45W	11.5kg
		350×300×235	08	45W	45W	16.6kg
		433×350×280	11	100W	100W	26kg
		563×433×280	15	132W	132W	48kg
720×563×280	19	201W	201W	85kg		
720×563×350	21	210W	210W	95kg		
Degree of protection		IP66				
Ambient temperature		-20°C~+60°C, -40°C~+60°C				
Cable entry		M16×1.5-M63×1.5(default, exact size according to requirement) , NPT thread (optional), KBM Series Explosion-proof Cable Glands is recommended				
Inlet direction		Bottom in and bottom out				
Installation method		Wall type (Standard)				
		Stand type (Optional)				

Selection Table

Enclosure code	Arrangement of components					
03	a	b	c	d	e	f
						
07	a	b	c	d	e	f
						
08	a	b	c	d	e	
						
11	a	b	c	d	e	
						
15	a	b				
						
19/21	a	b				
						



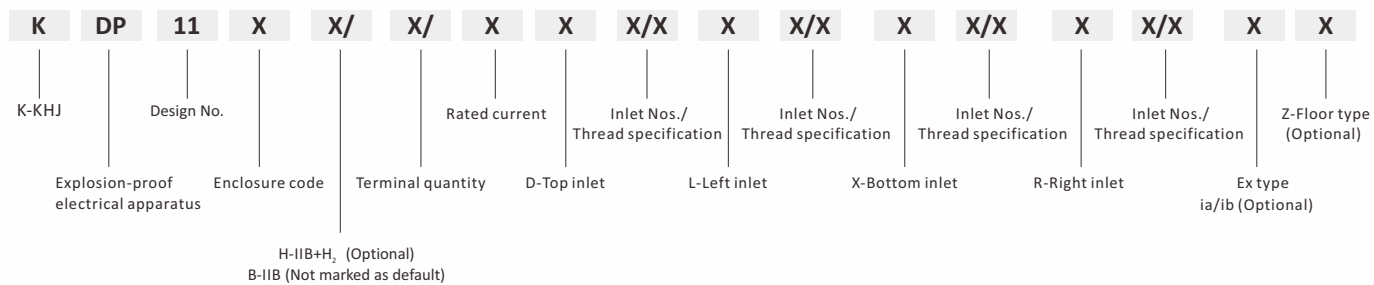


- KDP11 - Series

 II 2 G Ex db IIB T6/T5/T4 Gb
 II 2 G Ex db IIB+H₂ T6/T5/T4 Gb
 II 2 D Ex tb IIIC T80/T95/T130°C Db

- Explosion proof certificates
 - ATEX : TPS 22 ATEX 114950 0003 X
 - IECEx : IECEx TPS 22.0025X
- Application in hazardous area
Zone 1 and Zone 2,
Zone 21 and Zone 22
- Three types of explosion protection (Ex db IIB, Ex db IIB+H2, Ex tb IIIC).
- Aluminum alloy enclosure, power coated.
- Equipped with hinges and door handle, easy to installation and maintenance, also protect the flameproof surface from damage when the cover is opening or closing.
- Can be customized upon request and able to meet the usage restrictions of the certificate
- The circuit breaker using metal handle with frozen-resistant and can be equipped with a padlock.
- Direction, size and quantity of cable entry can be customized and meet the requirements of dissipated power and mechanical strength of the enclosure.

Product Definition

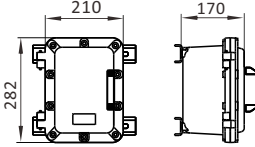
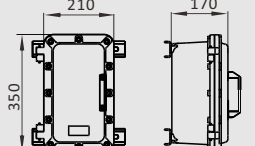
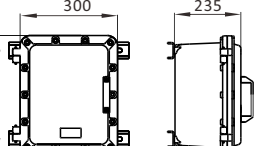
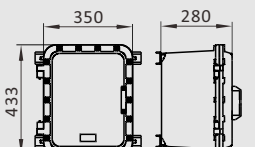
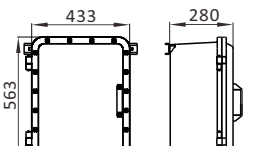
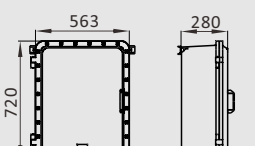
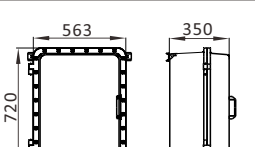


Technical Parameter

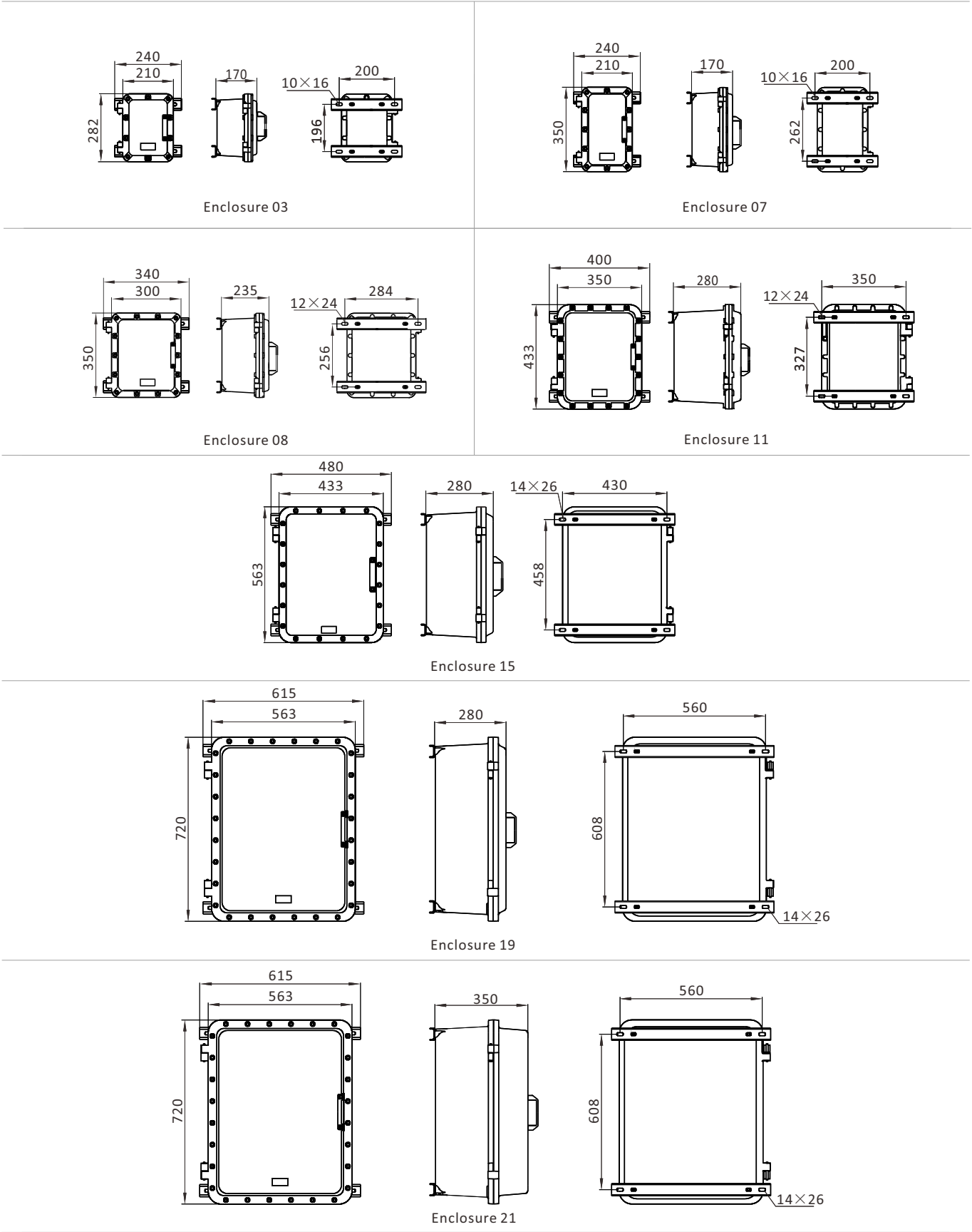
Ex marking	Gas	Ex II 2 G Ex db IIB T6/T5/T4 Gb		Ex db IIB T6/T5/T4 Gb					
		Ex II 2 G Ex db IIB+H2 T6/T5/T4 Gb		Ex db IIB+H2 T6/T5/T4 Gb					
	Dust	Ex II 2 D Ex tb IIIC T80/ T95/T130°C Db		Ex tb IIIC T80/ T95/T130°C Db					
Exectutive standards		IEC 60079-0, IEC 60079-1, IEC 60079-31 EN 60079-0, EN 60079-1, EN 60079-31							
Enclosure material	Enclosure	Aluminum alloy enclosure, powder coated, industrial gray with dark lines texture(RAL7035)							
Exposed fastener		Stainless steel							
Components	Brand of terminal	International brand							
Rated voltage		Max. 1000V AC, 1500V DC							
Rated current		Max. 1200A							
Frequency		50Hz/60Hz							
Maximum dissipation power	Enclosure size	Type	Ta:+60°C		Ta:+40°C				Weight of empty enclosure
			T6/T80°C		T5/T95°C		T4/T130°C		
			Power	Rated current	Power	Rated current	Power	Rated current	
	282X210X170	03	45W	≤63A	110W	--	110W	--	9.0kg
	350X210X170	07	45W	63A~100A	80W	--	139W	--	11.5kg
	350X300X235	08	45W	63A~100A	80W	--	139W	--	16.6kg
	433X350X280	11	100W	100A~250A	288W	--	288W	--	26kg
	563X433X280	15	130W	250A~400A	365W	400A~800A	365W	800A~1200A	48kg
720X563X280	19	200W	250A~400A	448W	400A~800A	448W	800A~1200A	85kg	
720X563X350	21	210W	250A~400A	690W	400A~800A	690W	800A~1200A	95kg	
Degree of protection		03,07,08,11,15--IP66/IP67 19,21--IP66							
Ambient temperature		-20°C~+40/60°C, -40°C~+40/60°C							
Cable entries		Standard M16×1.5-M63×1.5(Upon request),NPT thread (Optional), KBM Series Explosion-proof Cable Glands is recommended							
Inlet direction		Upon request							
Installation Method		Hanging type (Standard) Floor type (Optional)							

Selection Table (mm)

Maximum quantity of terminals that can be installed are shown in the table below:

Enclosure specifications	Guideway×Terminal (specification and quantity)										
	2.5 ²	4 ²	6 ²	10 ²	16 ²	35 ²	70 ²	120 ²	185 ²	240 ²	300 ²
	UK3N	UK5N	UK6N	UK10N	UK16N	UK35N	—	—	—	—	—
	SAK2.5EN	SAK4EN	SAK6EN	SAK10EN	SAK16EN	SAK35EN	—	—	—	—	—
03 	1×23	1×21	1×18	1×14	1×12	—	—	—	—	—	—
07 	1×31	1×29	1×24	1×19	1×16	—	—	—	—	—	—
08 	1×32	1×30	1×25	1×20	1×18	—	—	—	—	—	—
11 	1×45	1×40	1×34	1×28	1×24	1×16	—	—	—	—	—
	2×45	2×40	2×34	2×28	—	—	—	—	—	—	—
15 	1×60	1×54	1×48	1×36	1×30	1×20	—	—	—	—	—
	2×60	2×54	2×48	2×36	2×30	—	—	—	—	—	—
19 	1×90	1×80	1×70	1×60	1×40	1×25	1×25	1×14	1×10	1×8	1×5
	2×90	2×80	2×70	2×60	2×40	—	—	—	—	—	—
21 	1×90	1×80	1×70	1×60	1×40	1×25	1×25	1×14	1×10	1×8	1×5
	2×90	2×80	2×70	2×60	2×40	—	—	—	—	—	—

Outline and Installation(mm)





Explosion-proof Plug and Sockets

- KBSP01 - Series

Application and Features

- Explosion proof certificates
 - ATEX : CSANe 22ATEX1008 X
 - IECEx : IECEx CSAE 22.0005X
- Application in hazardous area
 - Zone 1 and Zone 2
 - Zone 21 and Zone 22
- Flame-proof type enclosure, four types of enclosure. eight kinds of current classes 10A, 16A, 25A, 32A, 50A, 63A, 100A, 125A, and four kinds of pole numbers 2P, 3P, 4P, 5P.
- Reliable interlocking function, the plug can be pulled out only after the power switch is off, and the power switch can be on only after the plug is inserted into the cavity.
- Contact performance of the plug is reliable. The plug sleeve in the socket has an elastic shutter spring sleeve, which not only makes the plug self-cleaning but also ensures small contact resistance and low-temperature rise. At the same time, it also reduces the required insertion and extraction force to the minimum. The design of shutter spring sleeve ensures the normal function of plug and socket and permanent self-cleaning.
- This model includes a timer with different working voltages, set to different colors to avoid mistaken insertion.

- II 2 G Ex db IIC T6 Gb
 II 2 D Ex tb IIIC T80°C Db

Product Definition

K	BSP	01	X	X	X	X
K-KHJ		Design No.	Rated current	Rated voltage	Pole	T-Plug (Optional) Z-Socket (Optional) M-Socket without enclosure (Optional) (10, 16, 25, 32, 50, 63A)
Explosion-proof electrical apparatus			10-10A 16-16A 25-25A 32-32A 50-50A 63-63A 100-100A 125-125A		2P 3P(2P+PE) 4P(3P+PE) 5P(3P+N+PE)	



Flame-proof thread type cover
Easy to install and disassemble



Stainless steel nameplate
Anti-corrosion



Different working voltage product
with different indication color



Dust-proof cover with safety chain
Protect contact copper rod and
flame-proof joint



Technical Parameter

Ex marking	Gas	 II 2 G Ex db IIC T6 Gb		Ex db IIC T6 Gb	
	Dust	 II 2 D Ex tb IIIC T80°C Db		Ex tb IIIC T80°C Db	
Conformity to standards		IEC 60079-0, IEC 60079-1, IEC 60079-31 EN 60079-0, EN 60079-1, EN 60079-31			
Enclosure material		Aluminum alloy enclosure, power coated surface,industrial gray with dark lines texture(RAL7035)			
Exposed fastener		Stainless steel			
Rated voltage		24,36V DC(10、16A)			
		20~50V AC,100~130V AC, 200~250V AC, 380~415V AC, 480~500V AC, 600~690V AC			
Rated current		10A, 16A, 25A, 32A, 50A, 63A,100A, 125A			
Poles		2P、3P(2P+PE)、4P(3P+PE)、5P(3P+N+PE)			
Frequency		50Hz / 60Hz			
Degree of protection		IP66			
Ambient temperature		10、16、25、32、50、63A: -60°C~-45°C, -60°C~-+65°C(Please specify when ordering)			
		100、125A: -60°C~+50°C			
Cable outer diameter(mm)	Rated current	10、16A	25、32A	50、63A	100、125A
	Wire diameter	2.5~4mm ²	4~6mm ²	10~16mm ²	25~35mm ²
	Weight (kg)	2.2	3.3	6.6	25.2

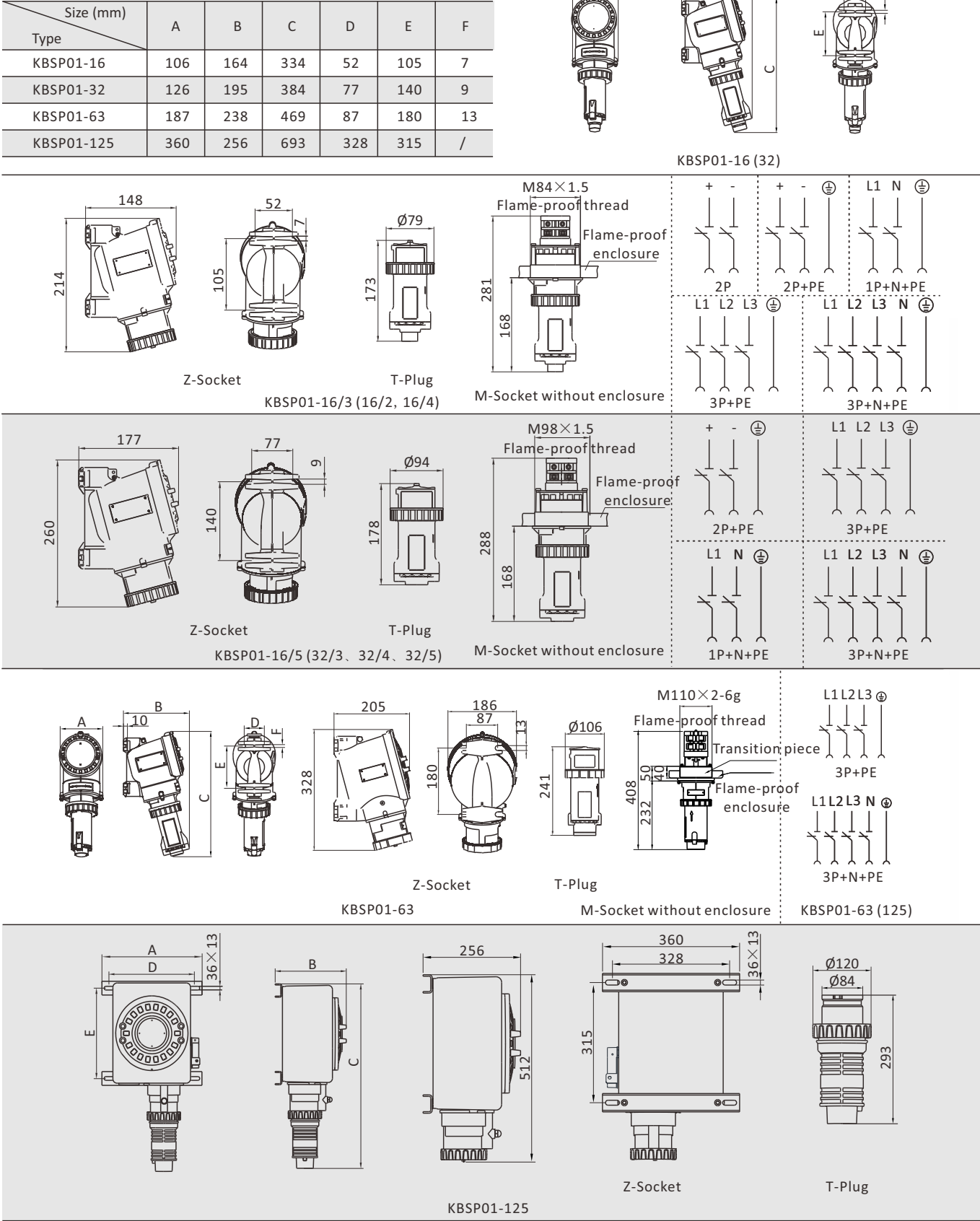
Main Parameter

Rated current (A)	Rated voltage (V)	Pole	Schematic diagram	h	Color	Outlet and Inlet thread
10、16	DC24	2P		-	Purple	Plug: 1-M25×1.5 1-NPT3/4 Socket: 2-M25×1.5 2-NPT3/4
	DC36			-	White	
	AC20~25	2P+PE		12	Purple	
	AC40~50			12	Purple	
	AC100~130			4	Yellow	
	AC200~250			6	Blue	
	AC100~130	3P+PE		4	Yellow	Plug: 1-M32×1.5 1-NPT1 Socket: 2-M32×1.5 2-NPT1
	AC200~250			9	Blue	
	AC380~415			6	Red	
	AC480~500			7	Black	
	AC600~690			5	Black	
	AC57~75	3P+N+PE		4	Yellow	
	AC100~130			4	Yellow	
	AC120~144			9	Blue	
	AC208~250			9	Blue	
	AC200~240			9	Blue	
	AC346~415			5	Black	
	AC277~288			7	Black	
	AC480~500			7	Black	
	AC347~400			5	Black	
	AC600~690			5	Black	

Selection Table

Rated current (A)	Rated voltage (V)	Pole	Schematic diagram	h	Color	Outlet and Inlet thread
25、32	AC20 ~ 25	2P + PE		12	Purple	Plug: 1-M32×1.5 1-NPT1 Socket: 2-M32×1.5 2-NPT1
	AC40 ~ 50			12	Purple	
	AC100 ~ 130			4	Yellow	
	AC200 ~ 250			6	Blue	
	AC200 ~ 250	3P + PE		9	Blue	
	AC380 ~ 415			6	Red	
	AC480 ~ 500			7	Black	
	AC600 ~ 690			5	Black	
	AC120 ~ 144	3P + N + PE		9	Blue	
	AC208 ~ 250			9	Blue	
	AC200 ~ 240			9	Blue	
	AC346 ~ 415			5	Black	
	AC277 ~ 288			7	Black	
	AC480 ~ 500			7	Black	
	AC347 ~ 400			5	Black	
	AC600 ~ 690			5	Black	
50、63	AC200 ~ 250	3P + PE		9	Blue	Plug: 1-M50×1.5 1-NPT11/2 Socket: 2-M40×1.5 2-NPT11/4
	AC380 ~ 415			6	Red	
	AC480 ~ 500			7	Black	
	AC600 ~ 690			5	Black	
	AC120 ~ 144	3P + N + PE		9	Blue	
	AC208 ~ 250			9	Blue	
	AC200 ~ 240			9	Blue	
	AC346 ~ 415			5	Black	
	AC277 ~ 288			7	Black	
	AC480 ~ 500			7	Black	
	AC347 ~ 400			6	Red	
	AC600 ~ 690			5	Black	
100、125	AC200 ~ 250	3P + PE		9	Blue	Plug: 1-M50×1.5 1-NPT11/2 Socket: 2-M63×1.5 3-M63×1.5 2-NPT2 3-NPT2
	AC380 ~ 415			6	Red	
	AC480 ~ 500			7	Black	
	AC600 ~ 690			5	Black	
	AC200 ~ 240	3P + N + PE		6	Red	
	AC346 ~ 415			6	Red	
	AC277 ~ 288			7	Black	
	AC480 ~ 500			7	Black	
	AC347 ~ 400			6	Red	
	AC600 ~ 690			5	Black	

Outline and Installation(mm)





Explosion - Proof Junction Box

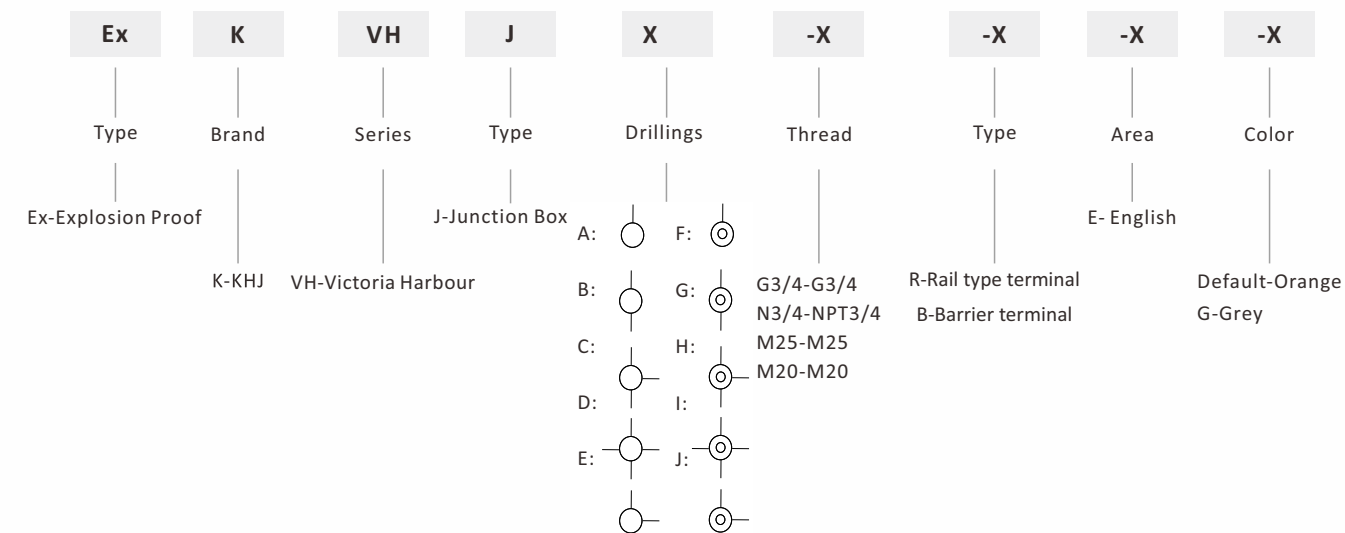
- Victoria Harbour Series

Features and Benefits:

- 3 optional terminal blocks for easy connection, to meet different termination requirements
- PA terminals with excellent insulation and reliability
- Copper free aluminium enclosure
- Enclosure: electrostatic powder coated, hardware: Stainless steel
- Multi-type cable entries for different connection requirement
- Optionally, the cables can be introduced into the terminal boxes via conduits or explosion-proof screw connections. Drilled holes through which no cables are conducted should be closed with certified threaded stoppers.

- II 2 G Ex db IIC T5 or T6 Gb
 II 2 D Ex tb IIIC T95°C or T80°C Db IP66

Product Definition



Standard & Certificate:

Ex Mark:	Gas:  II 2 G Ex db IIC T5 or T6 Gb Dust:  II 2 D Ex tb IIIC T95°C or T80°C Db IP66		
Certificate:	ATEX Certification NO.:ECM 19 ATEX-B SU43		CE
	RoHS		
Executive Standard:	EN 60079-0:2018	EN 60079-11:2012	EN 60079-31:2014
	EN 60079-1:2014	EN 60079-18:2015+A1:2017	IEC 60079-0:2018
	EN 60079-7:2015+A1:2018	EN 60079-28:2015	IEC 60079-7:2015+A1:2018
Classification:	Group II Zone 1 & 21 and 2 & 22		

Electrical & Photometric Features:

Operating Voltage:	Max.690V
Rated current	20A
Insulation Class:	I

Mechanical Features:

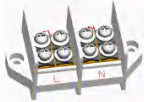
Weight:	1.24Kg
Size:	140*138*89mm
Ambient Temperature:	-40°C~+55°C
Connecting Terminals:	3*1.0-4.0mm ² (L+N+PE)
Thread:	NPT 3/4" (G 3/4",M20*1.5 ,M25*1.5 are optional)
IP Code:	IP67
Enclosure Material:	Die-casting aluminium alloy
Enclosure Colour:	Orange,RAL2011
Coating:	Epoxy powder coating

Product type And Diagrams

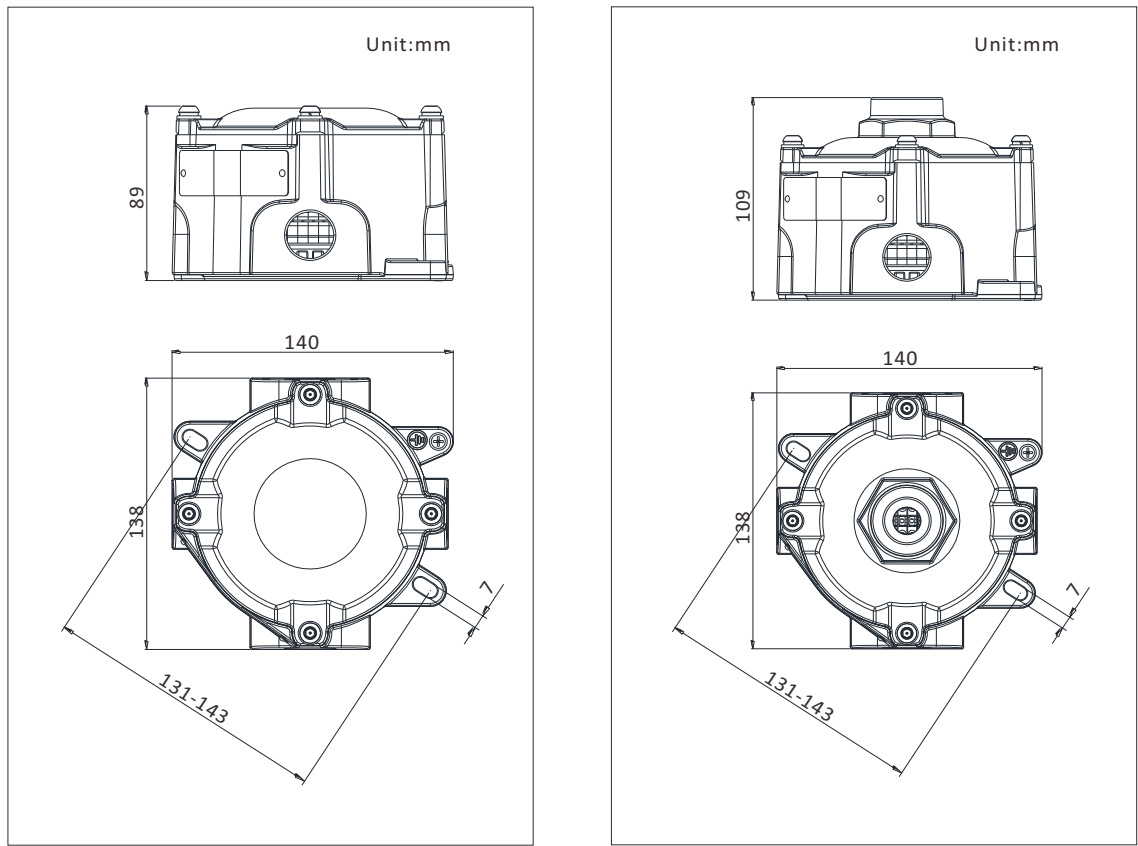
Product type	Type	Drillings	structural drawing	Qty of terminals (Rail-type)	Product type	Type	Drillings	Structural drawing	Qty of terminals (Rail-type)
Ex-KVHJA-□□-E	A			2	Ex-KVHJF-□□-E	F			2
Ex-KVHJB-□□-E	B			2	Ex-KVHJG-□□-E	G			4
Ex-KVHJC-□□-E	C			4	Ex-KVHJH-□□-E	H			4
Ex-KVHJD-□□-E	D			4	Ex-KVHJI-□□-E	I			6
Ex-KVHJE-□□-E	E			2	Ex-KVHJJ-□□-E	J			2

Remark: □ □ for type of thread M20、M25、NPT1/2、NTP3/4

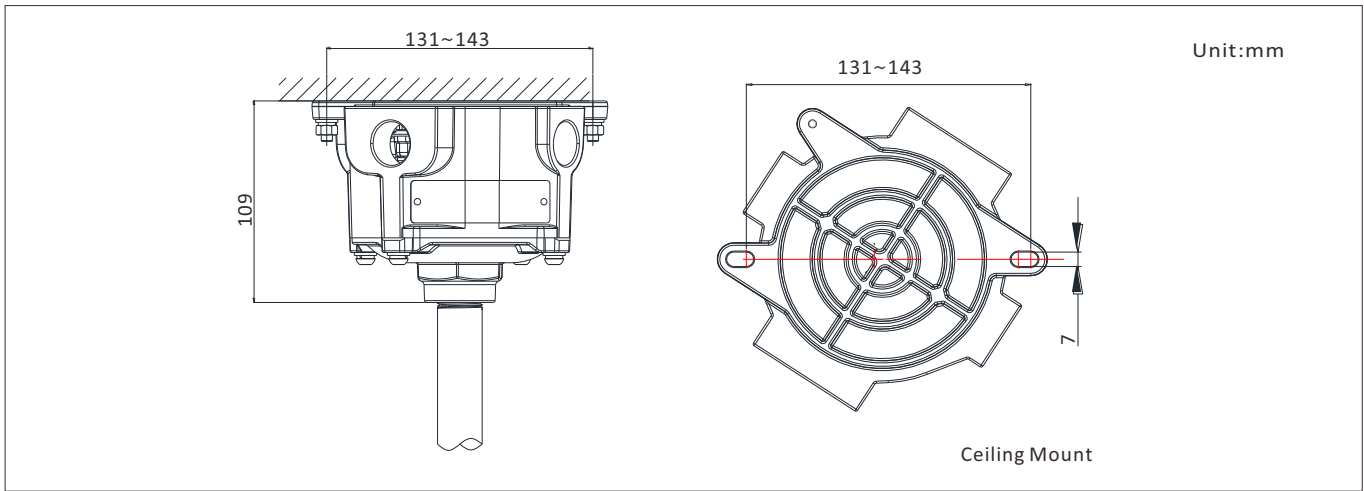
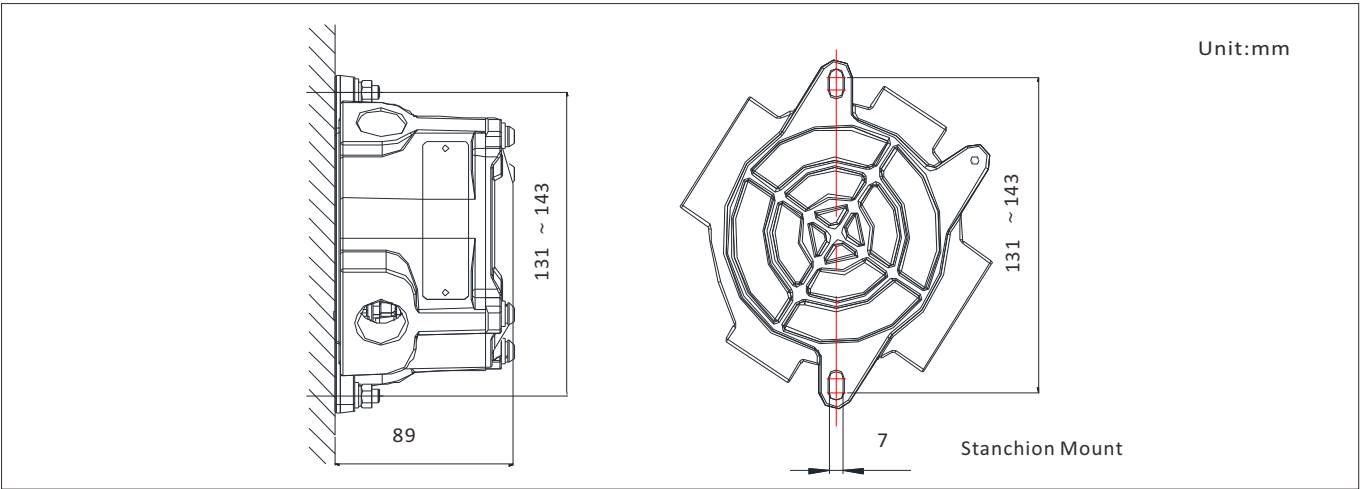
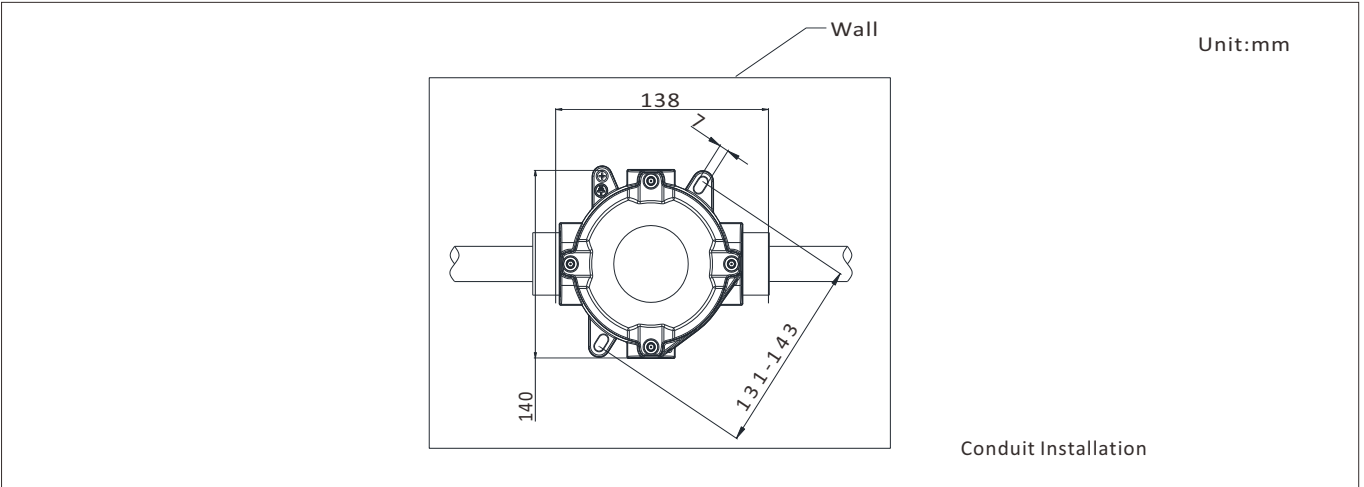
Parameters for terminal blocks

Type	Picture	Crimping cross -sectional area	QTY (PCS)	Dimension (mm)	material	Stripping length	Terminal mounting space on the terminal rail
Pillar		0.2 -4mm²	1	53*53*28	PA	8~ 10mm	18
Barrier terminal		0.2 -4mm²	1	75*38*36	PBT	5~ 8mm	/

Size



Installation Method





Explosion - Proof Switch

- Victoria Harbour Series

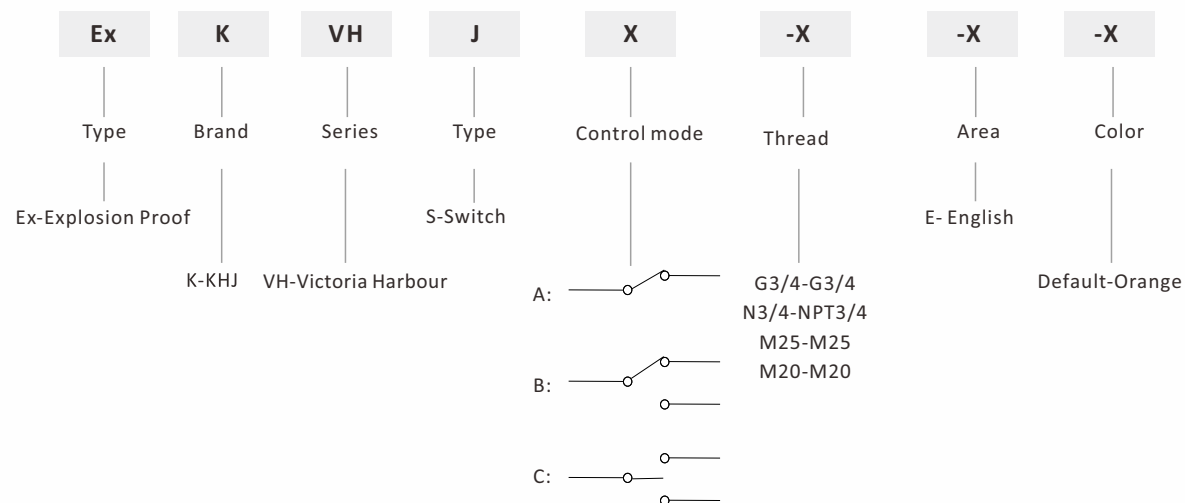
Features and Benefits:

- Copper free aluminium enclosure
- Enclosure:electrostatic powder coated,hardware:Stainless steel
- Multi-type cable entries for different connection requirement
- Optionally, the cables can be introduced into the terminal boxes via conduits or explosion-proof screw connections. Drilled holes through which no cables are conducted should be closed with certified threaded stoppers.

 II 2 G Ex db IIC T6 Gb

 II 2 D Ex tb IIIC T80°C Db IP66

Product Definition



Standard & Certificate:

Ex Mark:	Gas:  II 2 G Ex db IIC T5 or T6 Gb Dust:  II 2 D Ex tb IIIC T95°C or T80°C Db IP66		
Certificate:	ATEX Certification NO.:ECM 19 ATEX-B SU43 RoHSCE		
Executive Standard:	EN 60079-0:2018 EN 60079-1:2014 EN 60079-7:2015+A1:2018	EN 60079-11:2012 EN 60079-18:2015+A1:2017 EN 60079-28:2015	EN 60079-31:2014 IEC 60079-0:2018 IEC 60079-7:2015+A1:2018
Classification:	Group II Zone 1 & 21 and 2 & 22		

Electrical & Photometric Features:

Operating Voltage:	Max.380V
Rated current	20A
Insulation Class:	I

Mechanical Features:

Weight:	1.23Kg
Size:	140*138*104mm
Ambient Temperature:	-40℃~+55℃
Connecting Terminals:	3*1.0-4mm ² (L+N+PE)
Thread:	NPT 3/4" (G 3/4",M25*1.5 ,M20*1.5 are optional)
IP Code:	IP67
Enclosure Material:	Die-casting aluminium alloy
Enclosure Colour:	Orange,RAL2011
Coating:	Epoxy powder coating

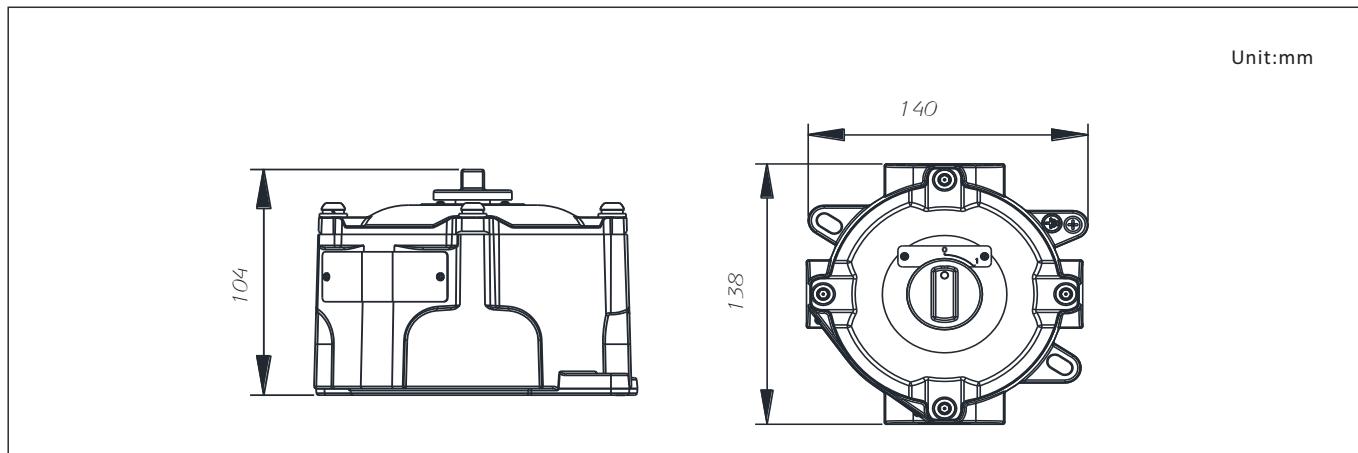
Main performance parameters

Product type	Switch type	Rated voltage	Rated current	Thread	Size(mm)	Weight(Kg)	IP Code	Ambient temp(°C)
Ex-KVHSA-□□	0-1	380VAC	20A	M20, NTP3/4 M25, G 3/4	140*138*104	1.23Kg	IP67	-45°C ~ +55°C
Ex-KVHSB-□□	1-2	380VAC	20A	M20, NTP3/4 M25, G 3/4	140*138*104	1.24Kg	IP67	-45°C ~ +55°C
Ex-KVHSC-□□	1-0-2	380VAC	20A	M20, NTP3/4 M25, G 3/4	140*138*104	1.24Kg	IP67	-45°C ~ +55°C

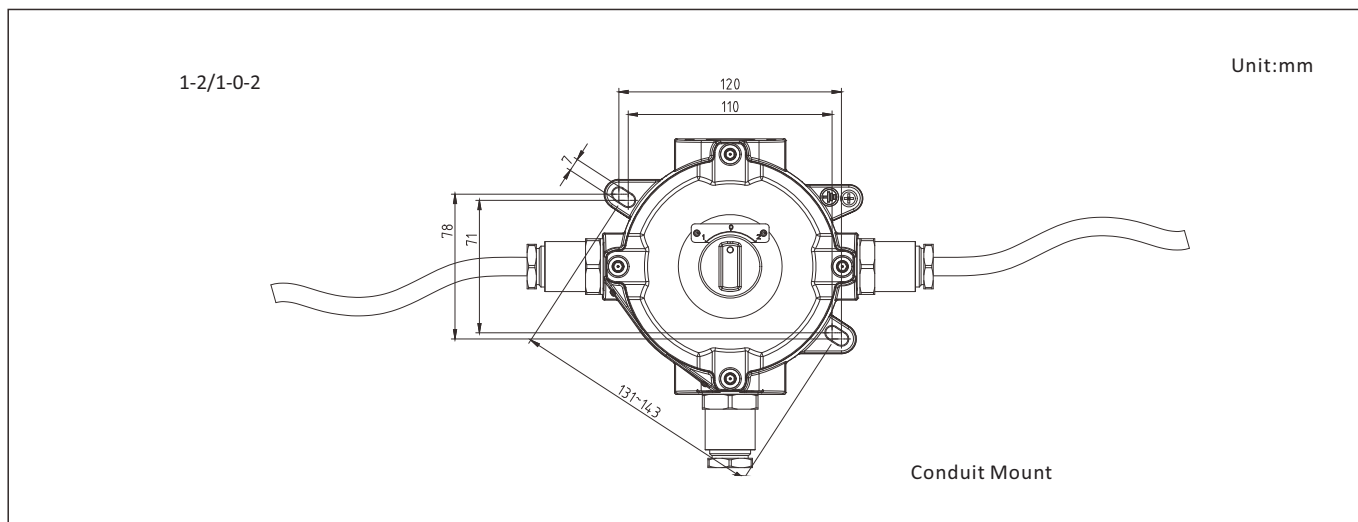
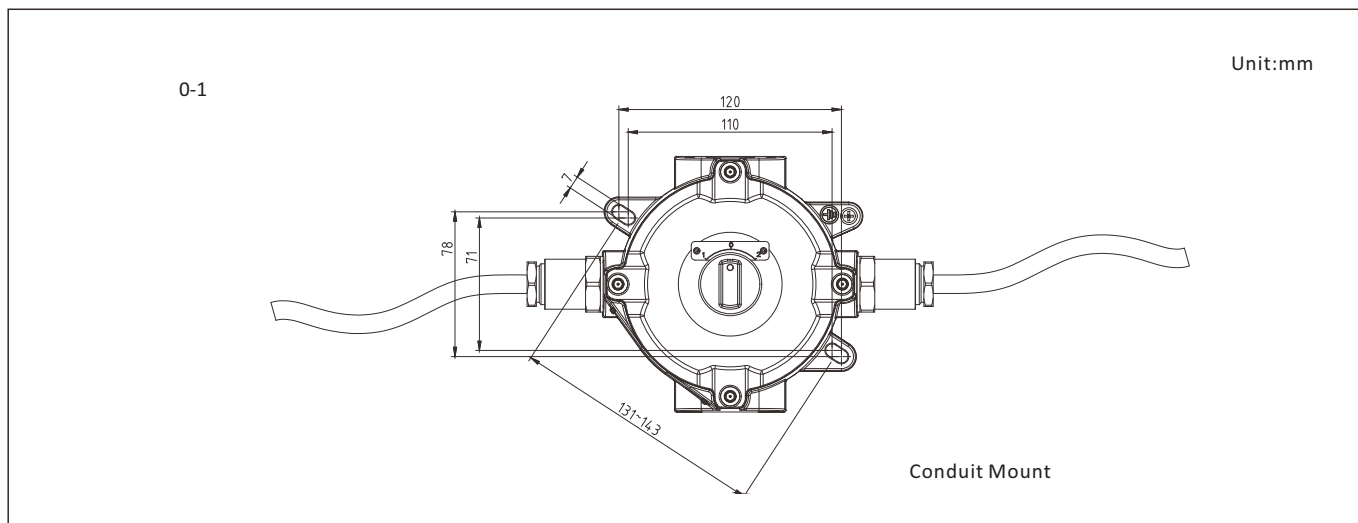
Switch Parameter

Product type	Switch type	Crimping cross-sectional area	Dimension(MM)	Suggested stripping length
Ex-KVHSA-□□ 	0-1 	0.2-3.5mm ²	50*50*43.1	5~8mm
Ex-KVHSB-□□ 	1-2 	0.2-3.5mm ²	50*50*53.6	5~8mm
Ex-KVHSC-□□ 	1-0-2 	0.2-3.5mm ²	50*50*53.6	5~8mm

Size



Installation Method





Explosion proof Cable Gland

Product Name	Product Series	Product Classification	Code				Group				ATEX/IECEX						ATEX	IECEX	Seal			Cable		Material	Wiring		
			d	e	I	t	IIB	IIC	IIIB	IIIC	Zone 1	Zone 21	Zone 2	Zone 22					Single Seal	Double Seal	Compound Barrier	Unarmoured	Armoured		Cable Wiring	Pipe Wiring	Flat Cable
Cable Gland	KBM	KBM01		●	●	●		●		●	●	●	●	●			●	●	●			●		●	●		
		KBM02		●	●	●		●		●	●	●	●	●			●	●	●			●				●	
		KBM07	●	●	●	●		●		●	●	●	●	●			●	●	●			●			●		●
		KBM08	●	●	●	●		●		●	●	●	●	●			●	●	●			●				●	●
		KBM09	●	●	●	●		●		●	●	●	●	●			●	●		●		●			●		
		KBM10	●	●	●	●		●		●	●	●	●	●			●	●		●			●	●		●	
		KBM13	●	●	●	●		●		●	●	●	●	●			●	●		●		●	●		●		
		KBM14	●	●	●	●		●		●	●	●	●	●			●	●		●						●	
		KBM15	●	●	●	●		●		●	●	●	●	●			●	●			●	●			●		
		KBM16	●	●	●	●		●		●	●	●	●	●			●	●			●	●	●			●	
		KBM17	●	●	●	●		●		●	●	●	●	●			●	●			●	●	●		●		
		KBM18	●	●	●	●		●		●	●	●	●	●			●	●			●	●					
	KUG	/	●	●		●		●		●	●	●	●	●			●		●			●		●	●		
	KDCG	/	●			●		●		●	●	●	●	●			●			●			●		●		
Stopping Plug	KTK	/	●	●		●		●		●	●	●	●	●			●										
Reducer	KRC	/	●	●		●		●		●	●	●	●	●			●										



KBM-01



KBM-02

Explosion - proof Cable Glands(Single Seal, Unarmoured)

- KBM-01,02 Series

Application and Features

- Explosion proof certificates
 - ATEX : TPS 22 ATEX 114950 0001 X
 - IECEx : IECEx TPS 22.0023X
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Increased safety (Type 'e'), restricted breathing (Type 'nR'), combustible dust (Type 'tb') structure.
- Single seal for unarmoured cables.
- Can be installed on Ex i (intrinsic safety type) equipment.

II 2 G Ex eb IIC Gb

II 3 G Ex nR IIC Gc

II 2 D Ex tb IIIC Db

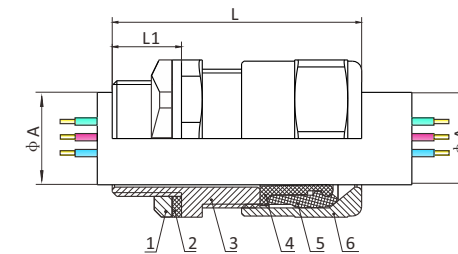
Product Definition

K	BM	X	X/	X	X/	X	X	X/
K-KHJ								
Ex cable glands		Product code 01-Cable wiring 02-Pipe wiring		D end thread specification (Optional)		4-304(Optional) 6-316(Optional) H-Brass (Optional)		S-Stripe (Optional)
		Mounting thread specification		O-With O-ring F-With PTFE gasket(Default)		nR (Optional)		

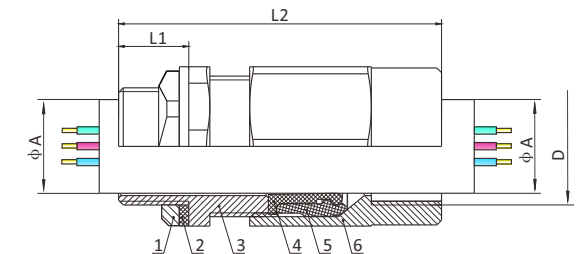
Technical Parameter

Explosion protection	Ex marking	 II 2 G Ex eb IIC Gb	Ex eb IIC Gb
		 II 3 G Ex nR IIC Gc	Ex nR IIC Gc
		 II 2 D Ex tb IIIC Db	Ex tb IIIC Db
Exectutive standards		IEC60079-0,IEC60079-7,IEC60079-15,IEC60079-31 EN60079-0, EN60079-7, EN60079-15, EN60079-31	
Material		Stainless steel, nickel plated brass, brass, etc.	
Degree of protection		IP66	
Ambient temperature		-43°C~+100°C	
Connection thread		NPT thread, Metric thread (M)	

Outline and Installation (mm)



KBM-01



KBM-02

- 1.Locknut 2.Sealing washer 3.Inlet connector
4.Sealing ring 5.Sealing ring loop 6. Compression nut

- 1.Locknut 2.Sealing washer 3.Inlet connector
4.Sealing ring 5.Sealing ring loop 6. Compression nut

Mounting thread		Cable outer diameter ϕ A(mm)	Thread length L1(mm)	Length L(mm)	Length L2(mm)	Maximum outer diameter (mm)	KBM-01 Weight (kg)	KBM-02 Weight (kg)
M	NPT							
M16×1.5	—	5.5~12	16	56	71	29	0.13	0.14
M20×1.5A	NPT1/2A	5.5~12	16	56	71	29	0.13	0.14
M20×1.5B	NPT1/2B	9.5~16	16	56	71	29	0.11	0.13
M25×1.5A	NPT3/4A	9.5~16	16	56	71	29	0.15	0.17
M25×1.5B	NPT3/4B	12.5~20.5	16	56	71	37	0.17	0.19
M32×1.5A	NPT1A	12.5~20.5	18	58	73	39	0.25	0.28
M32×1.5B	NPT1B	17~26	18	60	75	44	0.23	0.26
M40×1.5A	NPT1 1/4A	17~26	18	60	75	50	0.60	0.63
M40×1.5B	NPT1 1/4B	22~33	18	65	80	55	0.48	0.51
M50×1.5A	NPT1 1/2A	22~33	20	67	82	55	0.91	0.96
M50×1.5B	NPT1 1/2B	28~41	20	70	85	67	0.75	0.79
M63×1.5A	NPT2A	28~41	21	71	84	73	0.78	0.85
M63×1.5B	NPT2B	36~52.6	21	84	97	73	0.86	0.92

- Note:** 1. Locknut and sealing washer(PTFE gasket) are supplied as standard when delivery. Above weight is based on nickel plated brass material..
2. Earth lug and shroud are for optional.
3. The standard pitch of metric thread products is 1.5mm, other pitches can be customized, please specify when ordering.



Explosion-proof Cable Glands (Single Seal, Unarmoured)

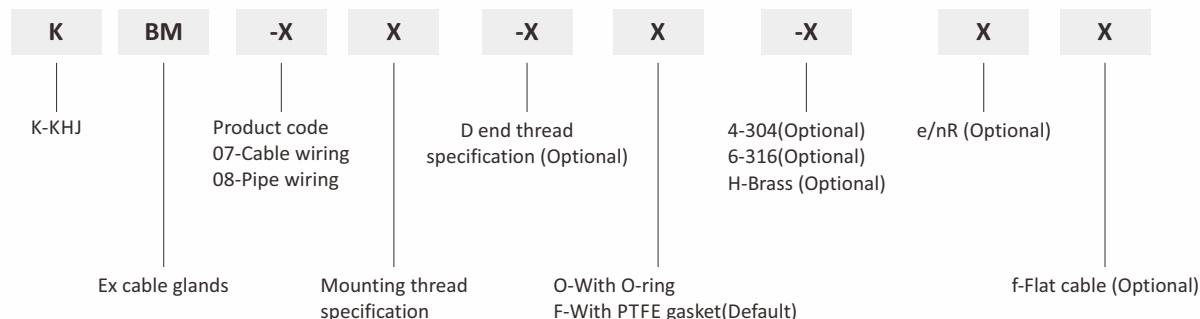
- KBM - 07,08 Series

Application and Features

- Explosion proof certificates
 - ATEX : TPS 22 ATEX 114950 0001 X
 - IECEx : IECEx TPS 22.0023X
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Flame-proof (Type 'd'), Increased safety (Type 'e'), restricted breathing (Type 'nR'), combustible dust (Type 'tb') structure.
- Single seal for unarmoured cables.
- Can be installed on Ex i (intrinsic safety type) equipment.

- II 2 G Ex db IIC Gb
- II 2 G Ex eb IIC Gb
- II 3 G Ex nR IIC Gc
- II 2 D Ex tb IIIC Db

Product Definition

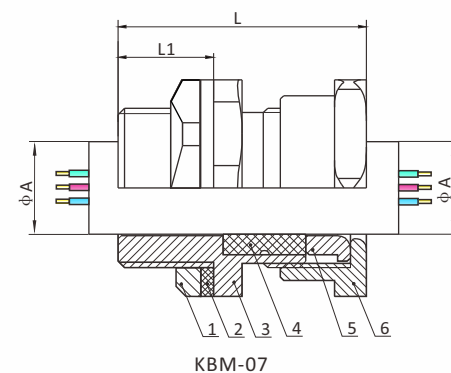


Technical Parameter

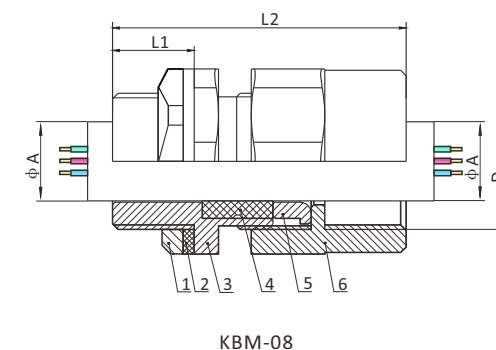
Explosion protection	Ex marking	 II 2 G Ex db IIC Gb	Ex db IIC Gb
		 II 2 G Ex eb IIC Gb	Ex eb IIC Gb
		 II 3 G Ex nR IIC Gc	Ex nR IIC Gc
		 II 2 D Ex tb IIIC Db	Ex tb IIIC Db
Exectutive standards		IEC60079-0,IEC60079-1,IEC60079-7,IEC60079-15,IEC60079-31 EN60079-0, EN60079-1, EN60079-7, EN60079-15, EN60079-31	
Material		Stainless steel, nickel plated brass, brass, etc.	
Degree of protection		IP66, IP67, IP68(2m/72h)	
Ambient temperature		-43°C~+100°C, -43°C~+120°C(f type)	
Connection thread		NPT1/2~NPT2, M16X1.5~M63X1.5	



Outline and Installation(mm)



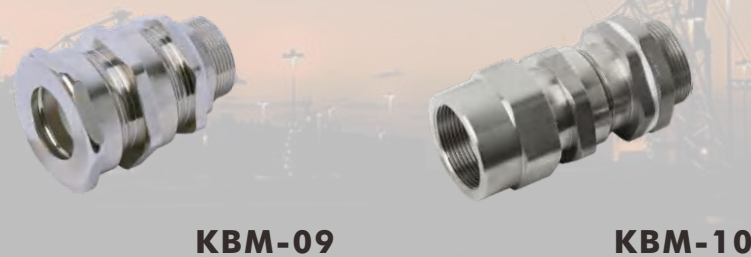
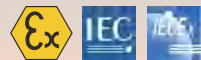
- 1.Locknut 2.Sealing washer 3.Connector body
4.Sealing ring 5.Washer 6. Compression nut



- 1.Locknut 2.Sealing washer 3.Connector body
4.Sealing ring 5.Washer 6. Compression nut

Mounting thread		Cable outer diameter ϕA (mm)	Flat cable (mm)			Thread length L1(mm)	Length L(mm)	Length L2(mm)	Maximum outer diameter (mm)	KBM-07 Weight (kg)	KBM-08 Weight (kg)
M	NPT		Outer diameter ϕA	L	L1						
M16×1.5	—	3~8	—	—	—	16	55	70	27	0.10	0.11
M20×1.5A	NPT1/2A	3~8	11×7(±1)	39	57	16	55	70	27	0.12	0.12
M20×1.5B	NPT1/2B	6~11	11×7(±1)	39	57	16	55	70	27	0.10	0.14
M20×1.5C	NPT1/2C	10~14.5	15×6(±1)	40	57	16	56	71	33	0.12	0.14
M25×1.5A	NPT3/4A	6~11	11×7(±1)	38	57	16	55	70	33	0.15	0.17
M25×1.5B	NPT3/4B	10~14.5	15×6(±1)	38	55	16	56	71	33	0.15	0.17
M25×1.5C	NPT3/4C	13~20	—	—	—	16	62	75	39	0.16	0.18
M32×1.5A	NPT1A	10~14.5	15×6(±1)	45	60	16	56	71	39	0.25	0.28
M32×1.5B	NPT1B	13~20	—	—	—	18	64	77	39	0.25	0.28
M32×1.5C	NPT1C	19.5~25.5	—	—	—	18	67	82	50	0.27	0.30
M40×1.5A	NPT11/4A	13~20	—	—	—	18	64	79	50	0.55	0.58
M40×1.5B	NPT11/4B	19.5~25.5	—	—	—	20	69	84	50	0.50	0.54
M40×1.5C	NPT11/4C	25~32	—	—	—	20	73	88	60	0.60	0.64
M50×1.5A	NPT11/2A	19.5~22.5	—	—	—	20	69	84	60	0.79	0.84
M50×1.5B	NPT11/2B	25~32	—	—	—	20	73	88	60	0.69	0.74
M50×1.5C	NPT11/2C	32~43	—	—	—	20	82	97	73	0.86	0.91
M63×1.5A	NPT2A	25~32	—	—	—	20	73	88	73	0.86	0.92
M63×1.5B	NPT2B	32~43	—	—	—	20	84	99	73	0.84	0.90

- Note:** 1. Locknut and sealing washer (PTFE washer) are supplied for Ex e, n, t type products,
Without lock nut when delivery for Ex d type. Above weight is based on nickel plated brass material.
2. Earth lug and shroud are on request.
3. The standard pitch of metric thread products is 1.5mm, other pitches can be customized, please specify when ordering.



Explosion-proof Cable Glands(Double Seal, Unarmoured)

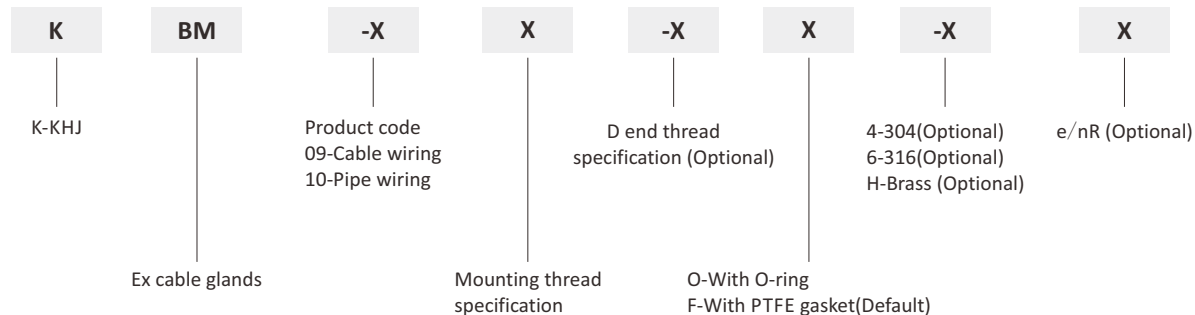
- KBM - 09,10 Series

Application and Features

- Explosion proof certificates
 - ATEX : TPS 22 ATEX 114950 0001 X
 - IECEx : IECEx TPS 22.0023X
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Flame-proof (Type 'd'), Increased safety (Type 'e'), restricted breathing (Type 'nR'), combustible dust (Type 'tb') structure.
- Double seal for unarmoured cables.
- Can be installed on Ex i (intrinsic safety type) equipment.

- II 2 G Ex db IIC Gb
- II 2 G Ex eb IIC Gb
- II 3 G Ex nR IIC Gc
- II 2 D Ex tb IIIC Db

Product Definition

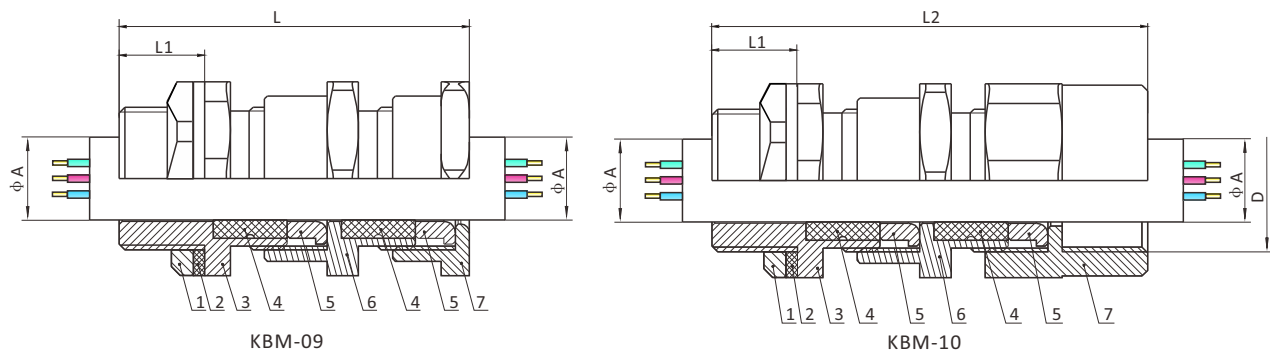


Technical Parameter

Explosion protection	Ex marking	 II 2 G Ex db IIC Gb	Ex db IIC Gb
		 II 2 G Ex eb IIC Gb	Ex eb IIC Gb
		 II 3 G Ex nR IIC Gc	Ex nR IIC Gc
		 II 2 D Ex tb IIIC Db	Ex tb IIIC Db
Exectutive standards		IEC60079-0,IEC60079-1,IEC60079-7,IEC60079-15,IEC60079-31 EN60079-0, EN60079-1, EN60079-7, EN60079-15, EN60079-31	
Material		Stainless steel, nickel plated brass, brass, etc.	
Degree of protection		IP66, IP67, IP68(2m/72h)	
Ambient temperature		-43°C~+120°C	
Connection thread		NPT thread, Metric thread (M)	



Outline and Installation(mm)



- 1.Locknut 2.Sealing washer 3.Inlet connector
4.Sealing ring 5.Washer 6.Middle connector
7.Compression nut

- 1.Locknut 2.Sealing washer 3.Inlet connector
4.Sealing ring 5.Washer 6.Middle connector
7.Compression nut

Mounting thread		Cable outer diameter ϕA (mm)	Thread length L1(mm)	Length L(mm)	Length L2(mm)	Maximum outer diameter (mm)	KBM-09 Weight (kg)	KBM-10 Weight (kg)
M	NPT							
M16×1.5	—	3~8	16	88	103	27	0.10	0.11
M20×1.5A	NPT1/2A	3~8	16	88	103	27	0.12	0.12
M20×1.5B	NPT1/2B	6~11	16	88	103	27	0.10	0.14
M20×1.5C	NPT1/2C	10~14.5	16	88	103	33	0.12	0.14
M25×1.5A	NPT3/4A	6~11	16	88	103	33	0.15	0.17
M25×1.5B	NPT3/4B	10~14.5	16	92	107	33	0.15	0.17
M25×1.5C	NPT3/4C	13~20	16	99	114	39	0.16	0.18
M32×1.5A	NPT1A	10~14.5	16	92	107	39	0.25	0.28
M32×1.5B	NPT1B	13~20	18	101	116	39	0.25	0.28
M32×1.5C	NPT1C	19.5~25.5	18	109	124	50	0.27	0.30
M40×1.5A	NPT11/4A	13~20	18	101	116	50	0.55	0.58
M40×1.5B	NPT11/4B	19.5~25.5	20	111	126	50	0.50	0.54
M40×1.5C	NPT11/4C	25~32	20	119	134	60	0.60	0.64
M50×1.5A	NPT11/2A	19.5~25.5	20	111	126	60	0.79	0.84
M50×1.5B	NPT11/2B	25~32	20	119	134	60	0.69	0.74
M50×1.5C	NPT11/2C	32~43	20	125	140	73	0.86	0.91
M63×1.5A	NPT2A	25~32	20	119	134	73	0.86	0.92
M63×1.5B	NPT2B	32~43	22	127	142	73	0.84	0.90

Note:

- Locknut and sealing washer (PTFE washer) are supplied for Ex e, n, t type products,
Without lock nut when delivery for Ex d type. Above weight is based on nickel plated brass material.
- Earth lug and shroud are on request.
- The standard pitch of metric thread products is 1.5mm, other pitches can be customized, please specify when ordering.



KBM-13

KBM-14

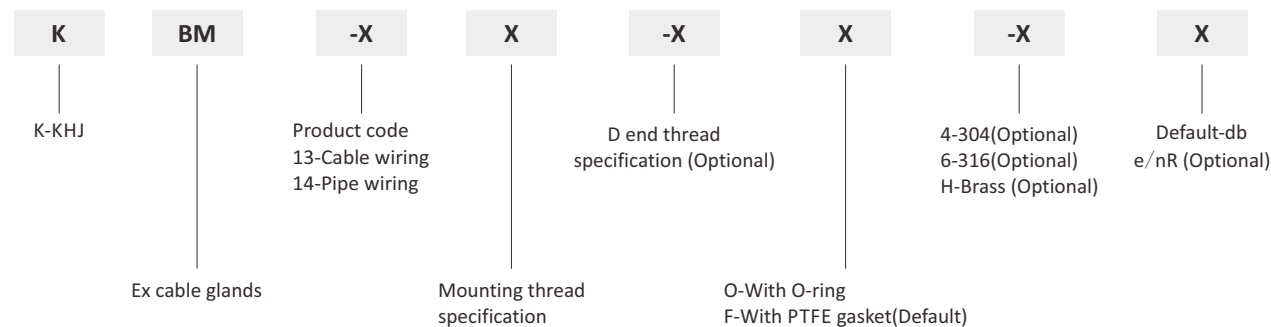
Explosion-proof Cable Glands (Double Seal, Armoured, Unarmoured) - KBM - 13,14 Series

Application and Features

- Explosion proof certificates
 - ATEX : TPS 22 ATEX 114950 0001
 - IECEx : IECEx TPS 22.0023X
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Flame-proof (Type 'd'), Increased safety (Type 'e'), restricted breathing (Type 'nR'), combustible dust (Type 'tb') structure.
- Double seal for armoured and unarmoured cables.
- Can be installed on Ex i (intrinsic safety type) equipment.

- II 2 G Ex db IIC Gb
- II 2 G Ex eb IIC Gb
- II 3 G Ex nR IIC Gc
- II 2 D Ex tb IIIC Db

Product Definition

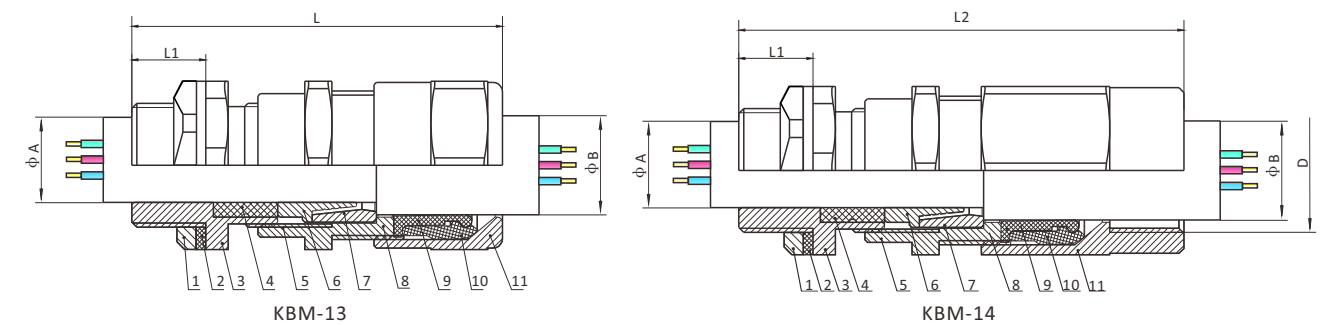


Technical Parameter

Explosion protection	Ex marking	 II 2 G Ex db IIC Gb	Ex db IIC Gb
		 II 2 G Ex eb IIC Gb	Ex eb IIC Gb
		 II 3 G Ex nR IIC Gc	Ex nR IIC Gc
		 II 2 D Ex tb IIIC Db	Ex tb IIIC Db
Exectutive standards		IEC60079-0,IEC60079-1,IEC60079-7,IEC60079-15,IEC60079-31 EN60079-0, EN60079-1, EN60079-7, EN60079-15, EN60079-31	
Material		Stainless steel, nickel plated brass, brass, etc.	
Degree of protection		IP66, IP67, IP68(2m/72h)	
Ambient temperature		-43°C~+100°C	
Connection thread		NPT thread, Metric thread (M)	



Outline and Installation(mm)



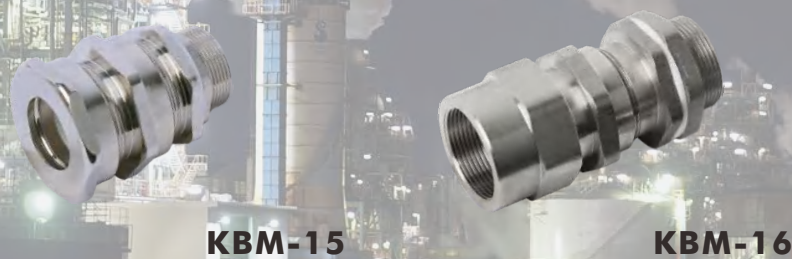
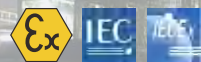
- 1.Locknut 2.Sealing washer 3.Inlet connector
4.Sealing ring 5.Middle connector 6.Armour cone
7.Clamping ring 8.Sealing ring 9.Sealing ring
10.Sealing ring loop 11.Compression nut

- 1.Locknut 2.Sealing washer 3.Inlet connector
4.Sealing ring 5.Middle connector 6.Armour cone
7.Clamping ring 8.Sealing ring 9.Sealing ring
10.Sealing ring loop 11.Compression nut

Mounting thread		Cable outer diameter (mm)		Thread length L1(mm)	Length L(mm)	Length L2(mm)	Maximum outer diameter (mm)	KBM-13 Weight (kg)	KBM-14 Weight (kg)
M	NPT	Outlet ϕ A	Inlet ϕ B						
M16×1.5	—	4~8	5.5~12	16	79	94	29	0.16	0.17
M20×1.5A	NPT1/2A	4~8	5.5~12	16	79	94	29	0.18	0.20
M20×1.5B	NPT1/2B	6.5~10.5	9.5~16	16	79	94	29	0.16	0.18
M20×1.5C	NPT1/2C	10~14.5	12.5~20.5	16	80	95	37	0.22	0.24
M25×1.5A	NPT3/4A	6.5~10.5	9.5~16	16	79	94	29	0.20	0.22
M25×1.5B	NPT3/4B	10~14.5	12.5~20.5	16	80	95	37	0.26	0.28
M25×1.5C	NPT3/4C	12.5~19.5	17~26	18	89	104	44	0.32	0.34
M32×1.5A	NPT1A	10~14.5	12.5~20.5	16	80	95	37	0.36	0.39
M32×1.5B	NPT1B	12.5~19.5	17~26	19	90	105	44	0.40	0.43
M32×1.5C	NPT1C	19~25.5	22~33	19	96	111	55	0.52	0.55
M40×1.5A	NPT11/4A	12.5~19.5	17~26	19	90	105	44	0.76	0.80
M40×1.5B	NPT11/4B	19~25.5	22~33	20	97	112	55	0.72	0.76
M40×1.5C	NPT11/4C	25~31	28~41	20	104	119	67	1.02	1.06
M50×1.5A	NPT11/2A	19~25.5	22~33	20	97	112	55	1.17	1.22
M50×1.5B	NPT11/2B	25~31	28~41	20	104	119	67	1.11	1.16
M50×1.5C	NPT11/2C	31.5~37	36~52.5	20	129	144	73	1.37	1.42
M63×1.5A	NPT2A	25~31	28~41	20	104	119	67	1.35	1.40
M63×1.5B	NPT2B	31.5~37	36~52.5	20	129	144	73	1.28	1.34
M63×1.5C	NPT2C	42.5~55	46~64	22	142	157	89	1.44	1.42

Note:

- Locknut and sealing washer (PTFE washer) are supplied for Ex e, n, t type products, Without lock nut when delivery for Ex d type. Above weight is based on nickel plated brass material.
- Earth lug and shroud are on request.
- The standard pitch of metric thread products is 1.5mm, other pitches can be customized, please specify when ordering.



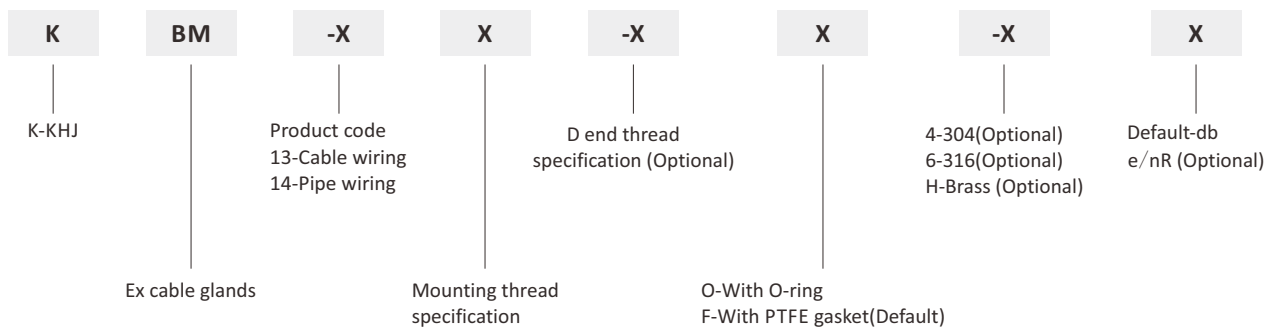
Explosion-proof Cable Glands (Compound Barrier, Unarmoured) - KBM - 15,16 Series

Application and Features

- Explosion proof certificates
 - ATEX : TPS 22 ATEX 114950 0001
 - IECEx : IECEx TPS 22.0023X
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Flame-proof (Type 'd'), Increased safety (Type 'e'), restricted breathing (Type 'nR'), combustible dust (Type 'tb') structure.
- Double seal for armoured and unarmoured cables.
- Can be installed on Ex i (intrinsic safety type) equipment.

- II 2 G Ex db IIC Gb
- II 2 G Ex eb IIC Gb
- II 3 G Ex nR IIC Gc
- II 2 D Ex tb IIIC Db

Product Definition

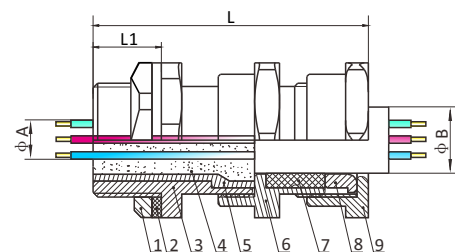


Technical Parameter

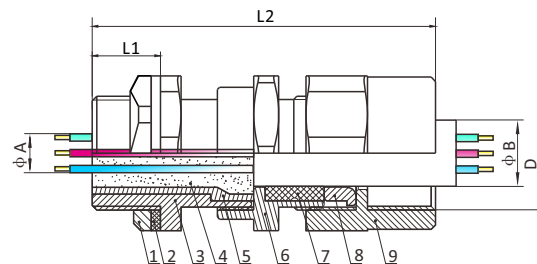
Explosion protection	Ex marking	 II 2 G Ex db IIC Gb	Ex db IIC Gb
		 II 2 G Ex eb IIC Gb	Ex eb IIC Gb
		 II 3 G Ex nR IIC Gc	Ex nR IIC Gc
		 II 2 D Ex tb IIIC Db	Ex tb IIIC Db
Exectutive standards		IEC60079-0,IEC60079-1,IEC60079-7,IEC60079-15,IEC60079-31 EN60079-0, EN60079-1, EN60079-7, EN60079-15, EN60079-31	
Material		Stainless steel, nickel plated brass, brass, etc.	
Degree of protection		IP66, IP67, IP68(2m/72h)	
Ambient temperature		-43°C~+120°C, -60°C~+120°C(Please specify when ordering)	
Connection thread		NPT thread, Metric thread (M)	



Outline and Installation(mm)



KBM-15



KBM-16

- 1.Locknut 2.Sealing washer 3.Inlet connector
4.AB Type cement 5.Flame-proof sleeve 6.Middle connector
7.Sealing ring 8.Washer 9.Compression nut

- 1.Locknut 2.Sealing washer 3.Inlet connector
4.AB Type cement 5.Flame-proof sleeve 6.Middle connector
7.Sealing ring 8.Washer 9.Compression nut

Mounting thread		Cable outer diameter (mm)		Thread length L1(mm)	Length L(mm)	Length L2(mm)	Maximum outer diameter (mm)	KBM-15 Weight (kg)	KBM-16 Weight (kg)
M	NPT	Outlet Φ A	Inlet Φ B						
M16×1.5	—	9	3~8	16	70	85	27	0.14	0.16
M20×1.5A	NPT1/2A	9	3~8	16	70	85	27	0.17	0.19
M20×1.5B	NPT1/2B	11.5	6~11	16	70	85	27	0.16	0.18
M20×1.5C	NPT1/2C	15	10~14.5	16	75	90	33	0.17	0.19
M25×1.5A	NPT3/4A	15	6~11	16	70	85	23	0.20	0.22
M25×1.5B	NPT3/4B	15	10~14.5	16	75	90	33	0.22	0.24
M25×1.5C	NPT3/4C	21	13~20	16	77	92	39	0.20	0.22
M32×1.5A	NPT1A	21	10~14.5	16	75	90	39	0.30	0.33
M32×1.5B	NPT1B	21	13~20	18	79	94	39	0.36	0.39
M32×1.5C	NPT1C	28	19.5~25.5	18	79	94	50	0.30	0.33
M40×1.5A	NPT11/4A	28	13~20	18	79	94	50	0.66	0.70
M40×1.5B	NPT11/4B	28	19.5~25.5	20	81	96	50	0.62	0.66
M40×1.5C	NPT11/4C	34	25~32	20	87	102	60	0.66	0.70
M50×1.5A	NPT11/2A	34	19.5~25.5	20	81	96	60	0.95	1.00
M50×1.5B	NPT11/2B	34	25~32	20	87	102	60	1.00	1.05
M50×1.5C	NPT11/2C	42	32~43	20	89	104	73	0.95	1.00
M63×1.5A	NPT2A	42	25~32	20	87	102	73	1.02	1.08
M63×1.5B	NPT2B	42	32~43	22	91	106	73	1.35	1.41

Note:

- Locknut and sealing washer (PTFE washer) are supplied for Ex e, n, t type products, Without lock nut when delivery for Ex d type. Above weight is based on nickel plated brass material.
- Earth lug and shroud are on request.
- The standard pitch of metric thread products is 1.5mm, other pitches can be customized, please specify when ordering.



KBM-17



KBM-18

Explosion-proof Cable Glands (Compound Barrier, Armoured, Unarmoured)

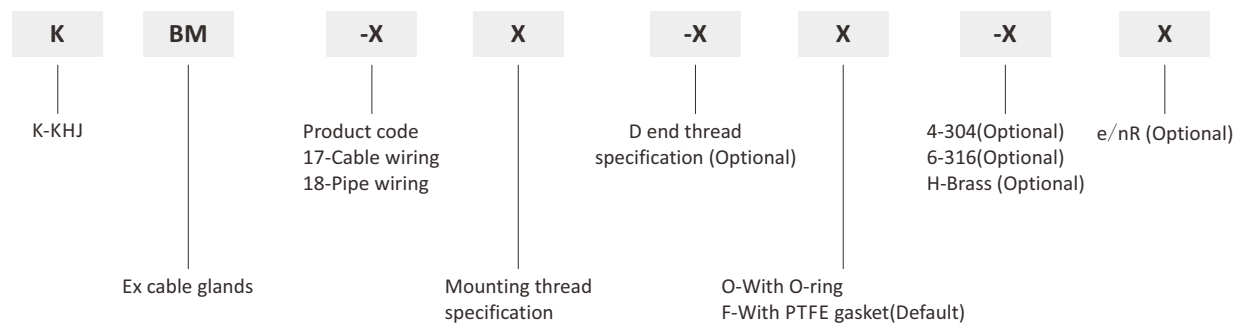
- KBM - 17,18 Series

Application and Features

- Explosion proof certificates
 - ATEX: TPS 22 ATEX 114950 0001 X
 - IECEx: IECEx TPS 22.0023X
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Flame-proof (Type 'd'), Increased safety (Type 'e'), restricted breathing (Type 'nR'), combustible dust (Type 'tb') structure.
- Single seal compound barrier for unarmoured cables.
- Can be installed on Ex i (intrinsic safety type) equipment.

- II 2 G Ex db IIC Gb
- II 2 G Ex eb IIC Gb
- II 3 G Ex nR IIC Gc
- II 2 D Ex tb IIIC Db

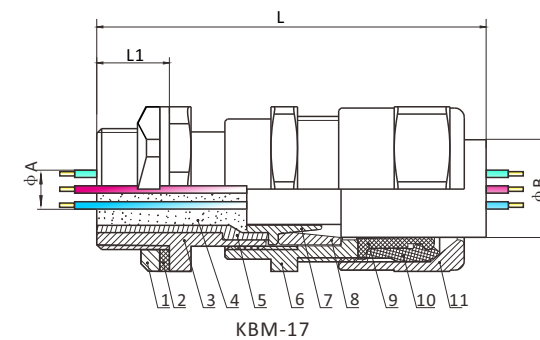
Product Definition



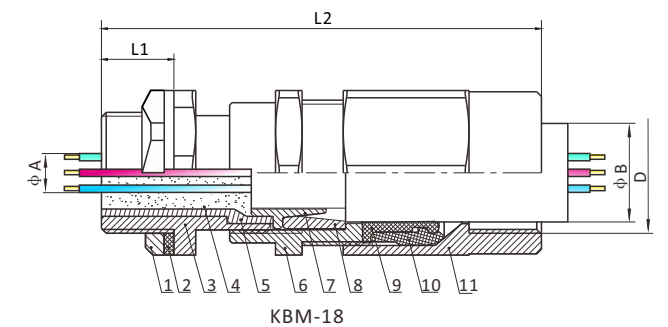
Technical Parameter

Explosion protection	Ex marking	 II 2 G Ex db IIC Gb	Ex db IIC Gb
		 II 2 G Ex eb IIC Gb	Ex eb IIC Gb
		 II 3 G Ex nR IIC Gc	Ex nR IIC Gc
		 II 2 D Ex tb IIIC Db	Ex tb IIIC Db
Exective standards		IEC60079-0,IEC60079-1,IEC60079-7,IEC60079-15,IEC60079-31 EN60079-0, EN60079-1, EN60079-7, EN60079-15, EN60079-31	
Material		Stainless steel, nickel plated brass, brass, etc.	
Degree of protection		IP66	
Ambient temperature		-43°C~+100°C, -60°C~+100°C (Please specify when ordering)	
Connection thread		NPT thread, Metric thread (M)	

Outline and Installation(mm)



- 1.Locknut 2.Sealing washer 3.Inlet connector
4.AB Type cement 5.Flame-proof sleeve 6.Middle connector
7.Armour cone 8.Clamping ring 9.Sealing ring
10.Sealing ring loop 11.Compression nut



- 1.Locknut 2.Sealing washer 3.Inlet connector
4.AB Type cement 5.Flame-proof sleeve 6.Middle connector
7.Armour cone 8.Clamping ring 9.Sealing ring
10.Sealing ring loop 11.Compression nut

Mounting thread		Cable outer diameter (mm)		Thread length L1(mm)	Length L(mm)	Length L2(mm)	Maximum outer diameter (mm)	KBM-17 Weight (kg)	KBM-18 Weight (kg)
M	NPT	Outlet ϕ A	Inlet ϕ B						
M16×1.5	—	<8	5.5~12	16	76	91	29	0.18	0.19
M20×1.5A	NPT1/2A	<11	5.5~12	16	76	91	29	0.18	0.19
M20×1.5B	NPT1/2B	<11	9.5~16	16	76	91	29	0.18	0.20
M20×1.5C	NPT1/2C	<15	12.5~20.5	16	76	91	37	0.18	0.19
M25×1.5A	NPT3/4A	<11	9.5~16	16	76	91	37	0.22	0.24
M25×1.5B	NPT3/4B	<15	12.5~20.5	16	76	91	37	0.28	0.30
M25×1.5C	NPT3/4C	<21	17~26	16	83	98	44	0.22	0.24
M32×1.5A	NPT1A	<15	12.5~20.5	16	76	91	44	0.36	0.39
M32×1.5B	NPT1B	<21	17~26	18	85	100	44	0.40	0.43
M32×1.5C	NPT1C	<27	22~33	18	91	106	55	0.36	0.39
M40×1.5A	NPT11/4A	<21	17~26	18	85	100	55	0.78	0.82
M40×1.5B	NPT11/4B	<27	22~33	18	91	106	55	0.72	0.76
M40×1.5C	NPT11/4C	<33	28~41	18	99	114	67	0.78	0.82
M50×1.5A	NPT11/2A	<27	22~33	18	91	106	67	1.15	1.20
M50×1.5B	NPT11/2B	<33	28~41	20	101	116	67	1.09	1.14
M50×1.5C	NPT11/2C	<42	36~52.5	20	122	137	73	1.15	1.20
M63×1.5A	NPT2A	<33	28~41	20	101	116	73	1.24	1.30
M63×1.5B	NPT2B	<42	36~52.5	21	123	138	73	1.44	1.50
M63×1.5C	NPT2C	<54.5	46~64	21	126	141	89	1.62	1.68

Note:

- Locknut and sealing washer (PTFE washer) are supplied for Ex e, n, t type products, Without lock nut when delivery for Ex d type. Above weight is based on nickel plated brass material.
- Earth lug and shroud are on request.
- The standard pitch of metric thread products is 1.5mm, other pitches can be customized, please specify when ordering.

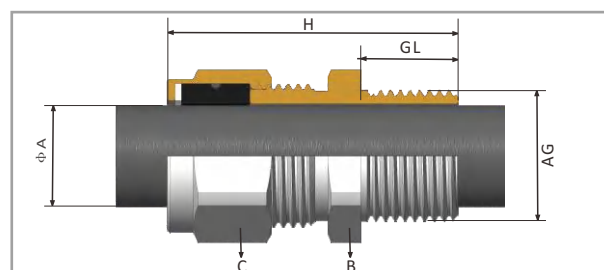


Explosion - Unarmoured cable glands

- KUG Series

Technical Details

- Type : KUG (Un-ar) Unarmoured gland
- Protection code : I M2 Ex db I Mb / I M2 Ex eb I Mb
II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb
II 2D Ex tb IIIC Db
- Certificate : IEP 20 ATEX 0755 X
- Material : MS58 Brass with nickel plated
- Standards : EN 60079-0:2012, 60079-7:2007, 60079-1:2007
60079-31:2009
- Protection class : IP66
- Temperature : -60 °C +180 °C
- Application area : ZONE1, ZONE2, ZONE21, ZONE22,
Gas Group IIA, IIB, IIC
- Cable type : Unarmoured



Product Definition

K	UG	X	X	X	X
Brand	Series	Material Type	Seal type	Product Size	Entry Thread size
K-KHJ	UG(Un-ar) Unarmoured gland	N-MS58 Brass with nickel plated	4-Silicone Washer	20s 25 25s	AG M20 M25 M25

Cable gland Selection Table

Product Size	Entry Thread size Metric "AG"	φA		Thread length "GL" min.(mm)	H mm	C mm		B
		Min	Max					
20s	M20*1.5 ★	6,1	13,2	15	27,8	27		27
25s	M25*1.5 ★	9,5	15,9	15	36,8	27		32
25	M25*1.5	12,5	20,5	15	36,8	36		36

Remark: ★ Stand for this specification is a standing stock .

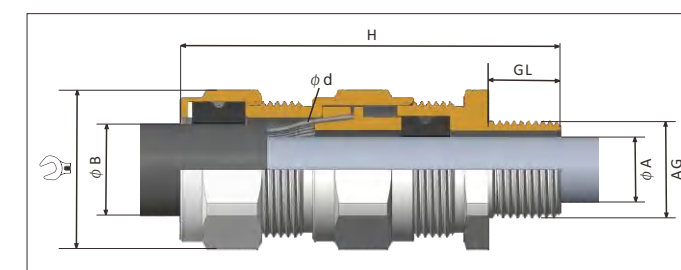


Explosion - Armoured Cable Glands

- KDCG Series

Technical Details

- Ttype : KDCG (Double compression gland)
- Protection code : I M2 Ex db I Mb/II 2G Ex db IIC Gb/II 2D Ex tb IIIC Db
- Certificate : IEP 20 ATEX 0754 X
- Material : MS58 Brass with nickel plated
Stainless steel AISI316L / Aluminium
- Standards : EN 60079-0:2012, 60079-1:2007, 60079-31:2009
- Protection class : IP66
- Temperature : -60 °C +180 °C
- Application area : ZONE1, ZONE2, ZONE21, ZONE22,
Gas Group IIA, IIB, IIC
- Cable type : SWA (Single wire armour)
(STA & other cables optional)



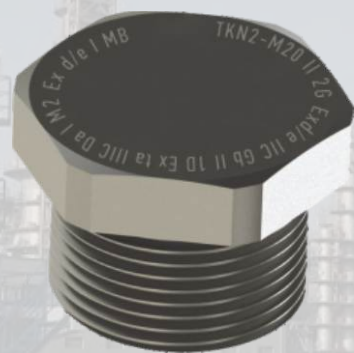
Product Definition

K	DCG	X	X	X	X
Brand	Series	Material Type	Seal type	Product Size	Entry Thread size
K-KHJ	DCG-Double compression gland	N-MS58 Brass with nickel plated Ss-AISI316L Stainless Steel A-Aluminium	4-Silicone Washer	20 25ss	AG M20 x 1,5 M25ss x 1,5

Cable gland Selection Table

Product Size	Product Code	Entry Thread size	Inner Sheath "A"		Outer Sheath "B"		Ø d (Armour)		Thread length "GL" min.(mm)	H mm	mm
		Metric "AG"	Min	Max	Min	Max	Min	Max			
20	KDCGX4-20-X	M20x1,5	6,1	13,2	12,5	20,9	0,8	1,25	15	80	30
25ss	KDCGX4-25ss-X	M25ssx1,5	6,1	13,2	12,5	20,9	1,25	1,60	15	89	38

Remark: ★ Stand for this specification is a standing stock .

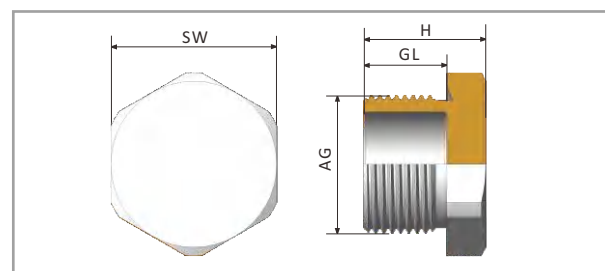


Explosion - Stopper Plug

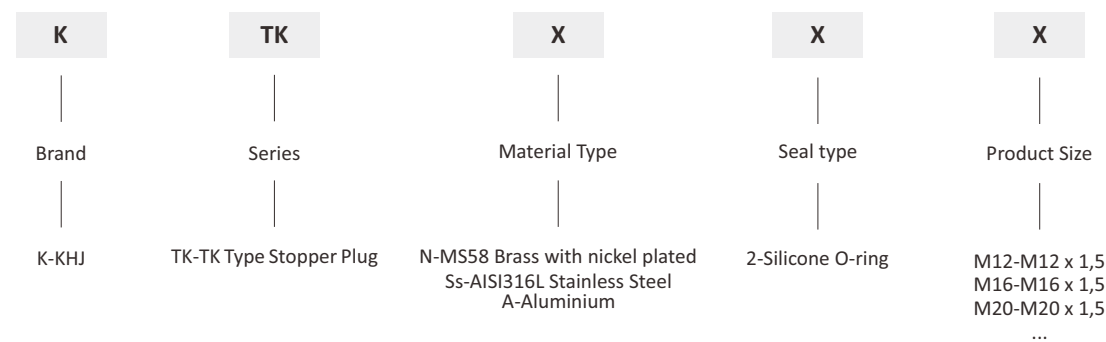
- KTK Series

Technical Details

- Type : KTK TYPE STOPPER PLUG
- Protection code : I M2 Ex db I Mb / I M2 Ex eb I Mb
II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb
II 1D Ex ta IIIC Da
- Certificate : IEP 20 ATEX 756 U
- Material : MS58 Brass with nickel plated
Stainless steel AISI316L / Aluminium
- Standards : EN 60079-0:2012, 60079-7:2007, 60079-1:2007
60079-31:2009
- O-ring : Silicone
- Protection class : IP66
- Temperature : -40 °C +100 °C
- Application area : ZONE1, ZONE2, ZONE21, ZONE22,
Gas Group IIA, IIB, IIC



Product Definition

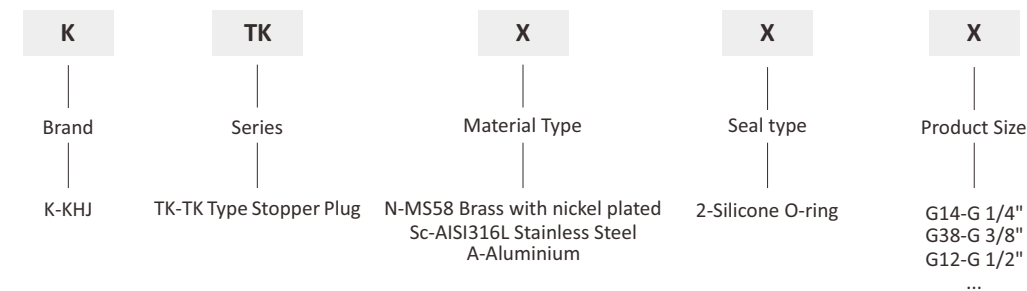


Cable Gland Selection Table

Product Size	Product Code	Thread length "GL" min. (mm)	H mm	SW mm
M12 x 1,5	KTK-X2-M12	15	22	17
M16 x 1,5	KTK-X2-M16	15	22	22
M20 x 1,5	KTK-X2-M20 ★	15	22	24
M25 x 1,5	KTK-X2-M25 ★	15	22	30
M32 x 1,5	KTK-X2-M32	15	22	36
M40 x 1,5	KTK-X2-M40	15	22	45
M50 x 1,5	KTK-X2-M50	15	22	55
M63 x 1,5	KTK-X2-M63	15	22	70
M75 x 1,5	KTK-X2-M75	15	22	80
M90 x 2	KTK-X2-M90	20	27	95
M100 x 2	KTK-X2-M100	20	27	110
NPT 1/4"	KTK-X-N1/4	15	22	15
NPT 3/8"	KTK-X-N3/8	15	22	20
NPT 1/2"	KTK-X-N1/2	15	22	24
NPT 3/4"	KTK-X-N3/4 ★	15	22	27
NPT 1"	KTK-X-N100	15	22	35
NPT 1 1/4"	KTK-X-N1 1/4	18	25	45
NPT 1 1/2"	KTK-X-N1 1/2	18	25	50
NPT 2"	KTK-X-N200	18	25	65
NPT 2 1/2"	KTK-X-N2 1/2	28	35	75
NPT 3"	KTK-X-N300	28	35	90
NPT 4"	KTK-X-N400	28	35	115

Remark: ★ Stand for this specification is a standing stock .

Product Definition



Stopper Plug Selection Table

Product Size	Product Code	Thread length "GL" min. (mm)	H mm	SW mm
G 1/4"	KTK-X2-G14	15	22	18
G 3/8"	KTK-X2-G38	15	22	22
G 1/2"	KTK-X2-G12	15	22	25
G 3/4"	KTK-X2-G34	15	22	32
G 1"	KTK-X2-G100	15	22	38
G 1 1/4"	KTK-X2-G114	15	22	45
G 1 1/2"	KTK-X2-G112	15	22	55
G 2"	KTK-X2-G200	15	22	65
G 2 1/2"	KTK-X2-G212	20	27	85
G 3"	KTK-X2-G300	20	27	95
G 4"	KTK-X2-G400	20	27	120
PG7	KTK-X2-P7	15	22	17
PG9	KTK-X2-P9	15	22	20
PG 11	KTK-X2-P11	15	22	25
PG 13,5	KTK-X2-P13	15	22	25
PG16	KTK-X2-P16	15	22	27
PG21	KTK-X2-P21	15	22	35
PG29	KTK-X2-P29	15	22	42
PG36	KTK-X2-P36	15	22	55
PG42	KTK-X2-P42	15	22	60
PG48	KTK-X2-P48	15	22	65

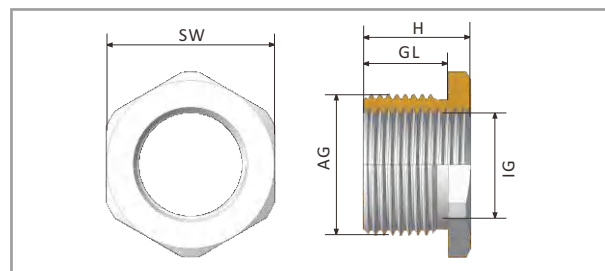


Explosion - Reducer

- KRC Series

Technical Details

- Type : KRC TYPE REDUCER
- Protection code : I M2 Ex db I Mb / I M2 Ex eb I Mb
II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb
II 1D Ex ta IIC Da
- Certificate : IEP 20 ATEX 756 U
- Material : MS58 Brass with nickel plated
Stainless steel AISI316L / Aluminium
- Standards : EN 60079-0:2012, 60079-7:2007, 60079-1:2007
60079-31:2009
- O-ring : Silicone
- Protection class : IP66
- Temperature : -40 °C +100 °C
- Application area : ZONE1, ZONE2, ZONE21, ZONE22,
Gas Group IIA, IIB, IIC



Product Definition

K	RC	X	X	Xm	Xf
Brand	Series	Material Type	Seal type	Product Size(Male)	Cable Gland Connection Size(Female)
K-KHJ	RC-RC Type Reducer	N-MS58 Brass with nickel plated Ss-AISI316L Stainless Steel A-Aluminium	2-Silicone O-ring	M16m-M16 x 1,5 M20m-M20 x 1,5 M20m-M20 x 1,5 ...	M12f-M12 x 1,5 M12f-M12 x 1,5 M16f-M16 x 1,5 ...

Cable gland Selection Table

Product Size	Product Code	Cable Gland Connection Size "IG"(F)	Thread length "GL" min. (mm)	H mm	SW mm
M16 x 1,5	KRCX2-M16m-M12f	M12 x 1,5	15	19	22
M20 x 1,5	KRCX2-M20m-M12f	M12 x 1,5	15	19	25
M20 x 1,5	KRCX2-M20m-M16f	M16 x 1,5	15	19	25
M25 x 1,5	KRCX2-M25m-M16f	M16 x 1,5	15	19	30
M25 x 1,5	KRCX2-M25m-M20f	M20 x 1,5	15	19	30
M32 x 1,5	KRCX2-M32m-M20f	M20 x 1,5	15	19	36
M32 x 1,5	KRCX2-M32m-M25f	M25 x 1,5	15	19	36
M40 x 1,5	KRCX2-M40m-M25f	M25 x 1,5	18	22	45
M40 x 1,5	KRCX2-M40m-M32f	M32 x 1,5	18	22	45
M50 x 1,5	KRCX2-M50m-M32f	M32 x 1,5	18	23	55
M50 x 1,5	KRCX2-M50m-M40f	M40 x 1,5	18	23	55
M63 x 1,5	KRCX2-M63m-M40f	M40 x 1,5	18	23	70
M63 x 1,5	KRCX2-M63m-M50f	M50 x 1,5	18	23	70
M75 x 1,5	KRCX2-M75m-M50f	M50 x 1,5	18	24	85
M75 x 1,5	KRCX2-M75m-M63f	M63 x 1,5	18	24	85
M90 x 1,5	KRCX2-M90m-M63f	M63 x 1,5	21	29	100
M90 x 1,5	KRCX2-M90m-M75f	M75 x 1,5	21	29	100
M110 x 1,5	KRCX2-M110m-M75f	M75 x 1,5	21	31	120
M110 x 1,5	KRCX2-M110m-M90f	M90 x 1,5	21	31	120

Product Definition

K	RC	X	X	Xm	Xf
Brand	Series	Material Type	Seal type	Product Size(Male)	Cable Gland Connection Size(Female)
K-KHJ	RC-RC Type Reducer	N-MS58 Brass with nickel plated Ss-AISI316L Stainless Steel A-Aluminium	2-Silicone O-ring	N38m-NPT 3/8" N12m-NPT 1/2" N12m-NPT 1/2" ...	N14f-NPT 1/4" N14f-NPT 1/4" N38f-NPT 3/8" ...

Reducer Selection Table

Product Size	Product Code	Cable Gland Connection Size "IG"(F)	Thread length "GL" min. (mm)	H mm	SW mm
NPT 3/8"	KRCX2-N38m-N14f	NPT 1/4"	15	19	22
NPT 1/2"	KRCX2-N12m-N14f	NPT 1/4"	15	19	25
NPT 1/2"	KRCX2-N12m-N38f	NPT 3/8"	15	19	25
NPT 3/4"	KRCX2-N34m-N38f	NPT 3/8"	15	19	30
NPT 3/4"	KRCX2-N34m-N12f	NPT 1/2"	15	19	30
NPT 1"	KRCX2-N100m-N12f	NPT 1/2"	15	19	36
NPT 1"	KRCX2-N100m-N34f	NPT 3/4"	15	19	36
NPT 1 1/4"	KRCX2-N114m-N12f	NPT 1/2"	18	22	45
NPT 1 1/4"	KRCX2-N114m-N34f	NPT 3/4"	18	22	45
NPT 1 1/4"	KRCX2-N114m-N100f	NPT 1"	18	22	45
NPT 1 1/2"	KRCX2-N112m-N12f	NPT 1/2"	18	23	55
NPT 1 1/2"	KRCX2-N112m-N34f	NPT 3/4"	18	23	55
NPT 1 1/2"	KRCX2-N112m-N100f	NPT 1"	18	23	55
NPT 1 1/2"	KRCX2-N112m-N114f	NPT 1 1/4"	18	23	55
NPT 2"	KRCX2-N200m-N114f	NPT 1 1/4"	18	23	65
NPT 2"	KRCX2-N200m-N112f	NPT 1 1/2"	18	23	65
NPT 2 1/2"	KRCX2-N212m-N112f	NPT 1 1/2"	28	34	75
NPT 2 1/2"	KRCX2-N212m-N200f	NPT 2"	28	34	75
NPT 3"	KRCX2-N300m-N200f	NPT 2"	28	36	95
NPT 3"	KRCX2-N300m-N212f	NPT 2 1/2"	28	36	95
NPT 4"	KRCX2-N400m-N212f	NPT 2 1/2"	28	38	120
NPT 4"	KRCX2-N400m-N300f	NPT 3"	28	38	120