

EP-02-G1

FlameProof Lighting
Explosion Proof Lighting

Born for Industrial Safety



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



Zone 1

Zone 2

Zone 21

Zone 22



CB





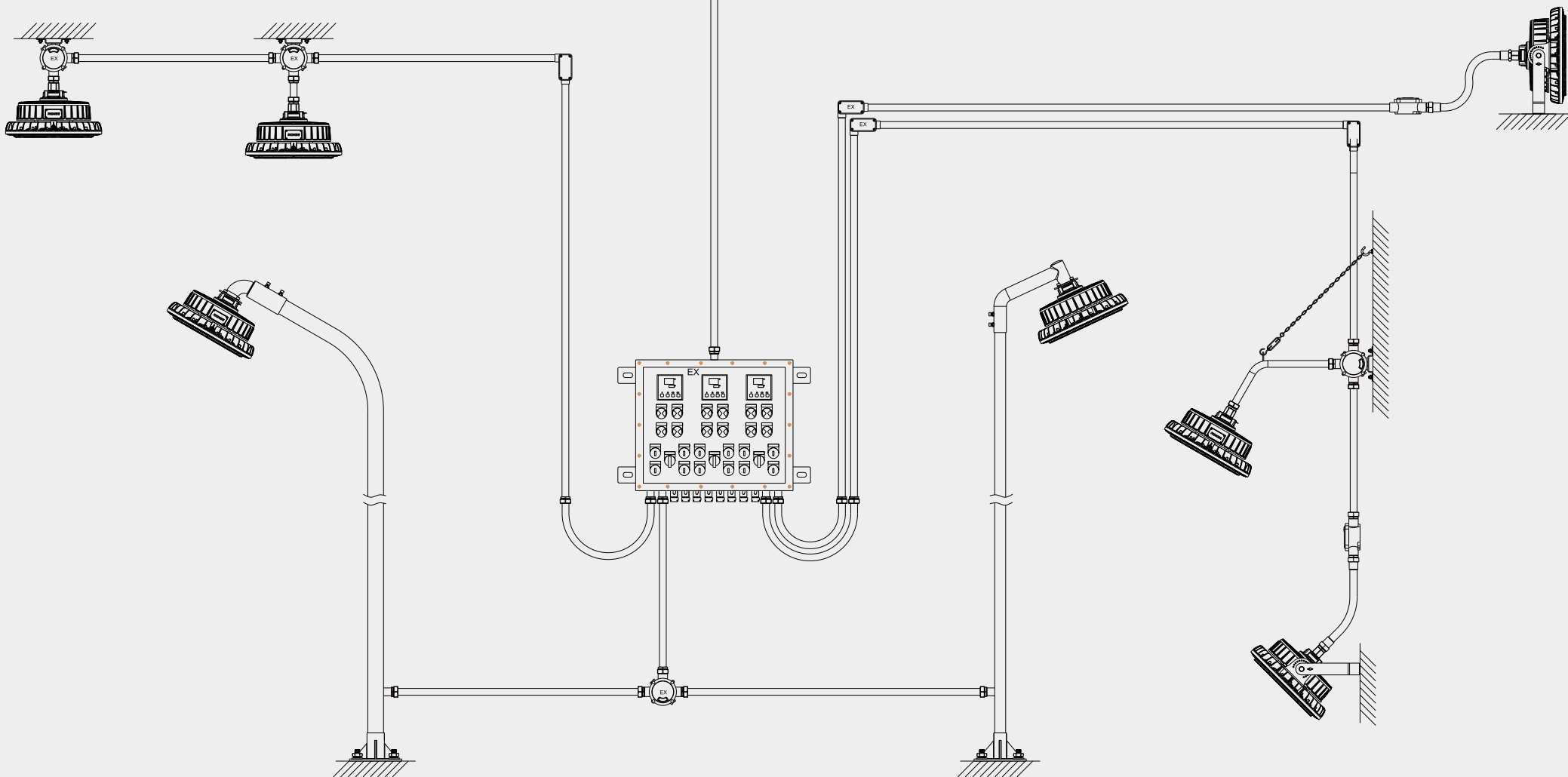
Product description

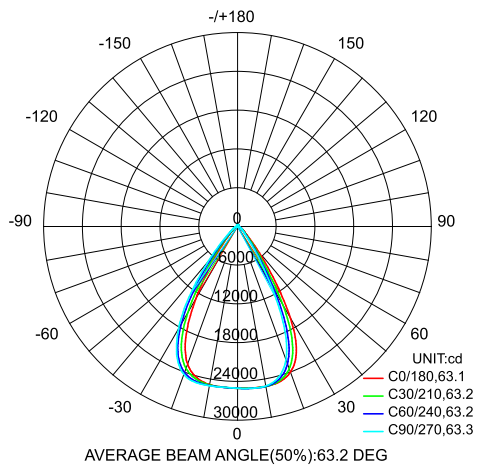
EP-02 series LED explosion-proof luminaires are suitable for moisture, dirt, dust, corrosion and vibration conditions, or for hazardous locations where flammable gases and dusts as specified by NEC and IEC. For example: They can be widely used in Refineries, Fuel depots, Marine vessels, Chemical production processing, Food processing, Wineries, and other high humidity, high temperature dusty places. EP-02 series LED explosion-proof lamps has higher efficacy, energy savings, lower maintenance costs and longer lifespan.

Application Diagram

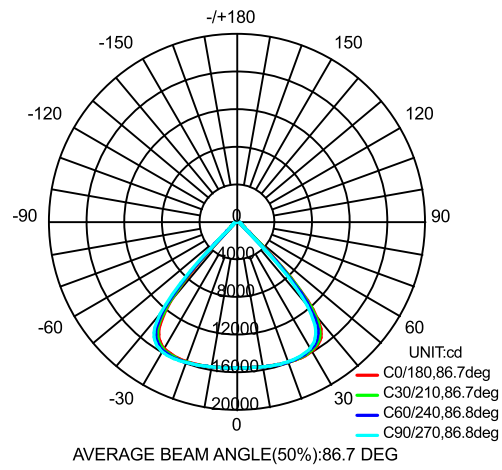


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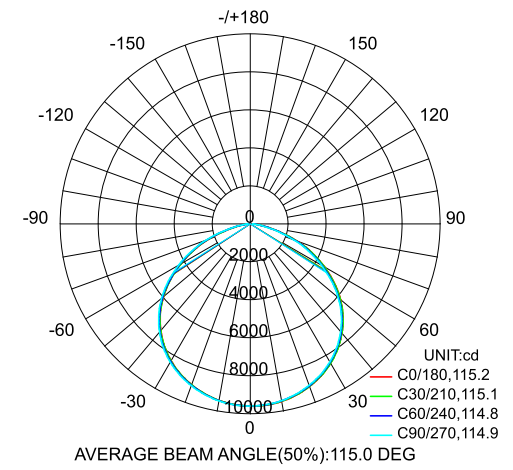




60°

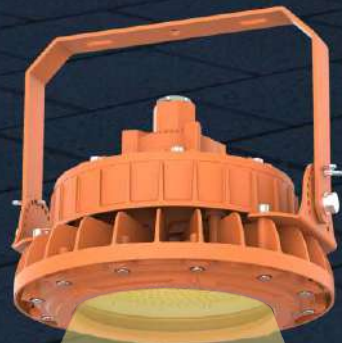


90°



120°

Photometry



60°

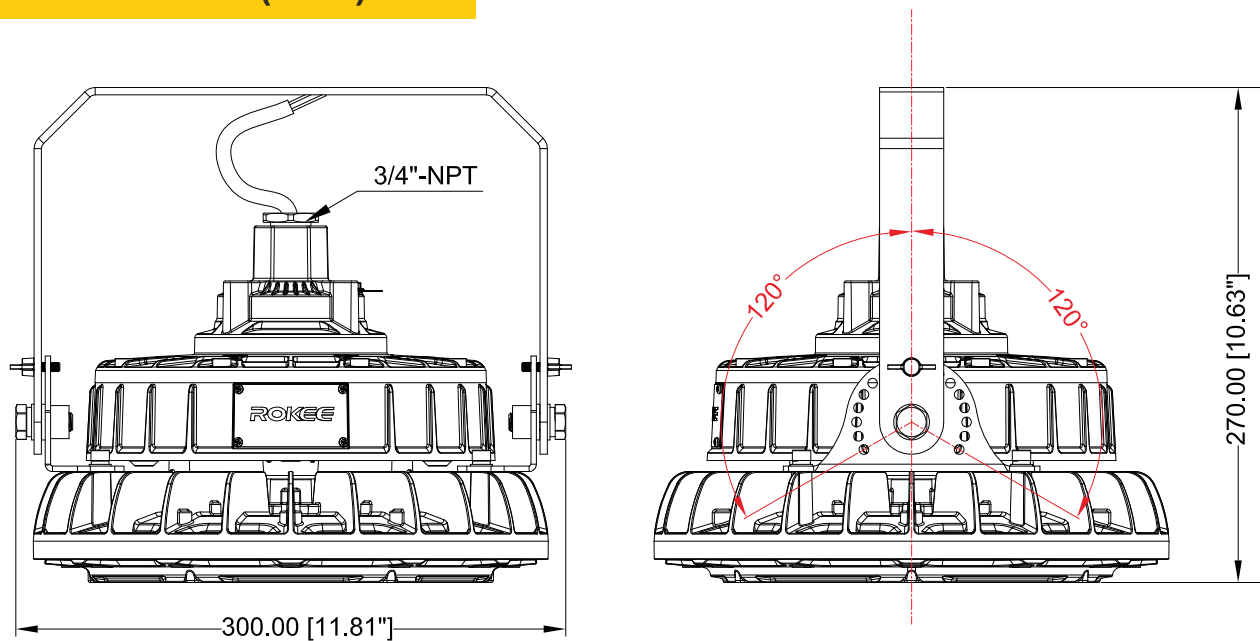
90°

120°

Specification

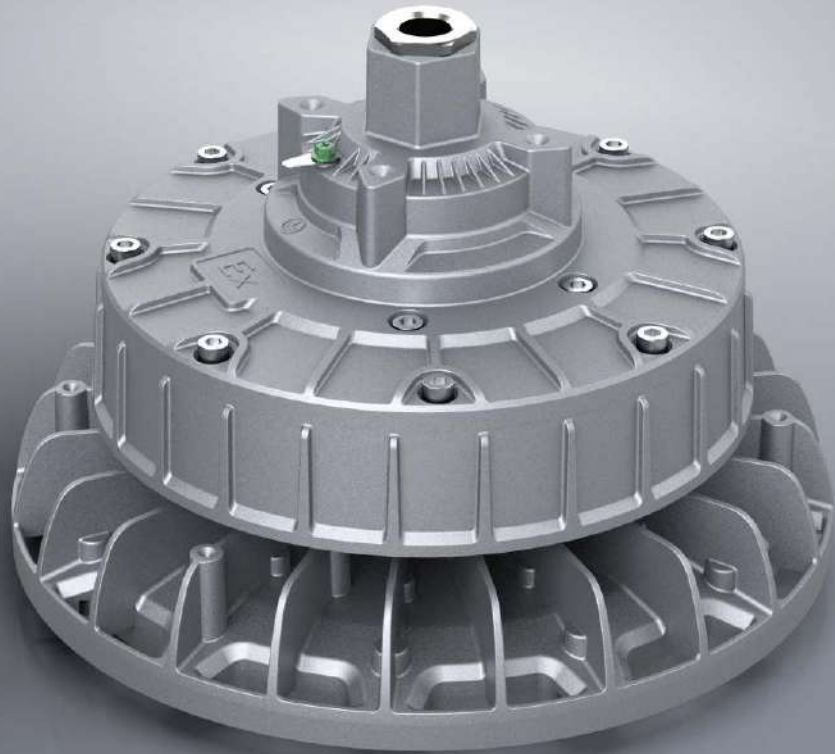
Item	Power	Effi.	Leds	CRI	Weight	Beam Angle	CCT
EP30W-02-G1	30W	140lm/W	Lumileds	>80	6.95kg(15.32lbs)	60°/90°/120°	3000K/4000K/5000K/5700K
EP50W-02-G1	50W	140lm/W	Lumileds	>80	6.95kg(15.32lbs)	60°/90°/120°	3000K/4000K/5000K/5700K
EP60W-02-G1	60W	140lm/W	Lumileds	>80	7.15kg(15.76lbs)	60°/90°/120°	3000K/4000K/5000K/5700K
EP80W-02-G1	80W	140lm/W	Lumileds	>80	7.15kg(15.76lbs)	60°/90°/120°	3000K/4000K/5000K/5700K
EP100W-02-G1	100W	140lm/W	Lumileds	>80	7.20kg(15.87lbs)	60°/90°/120°	3000K/4000K/5000K/5700K

Dimensions(mm)



WARRANTY

5 Years Warranty



Explosion-proof Housing

EP-02 Series uses External Explosion Proof Construction. Strictly according to EN 60079-0-2018, EN 60079-28-2015, EN 60079-1-2014, EN 60079-31-2014, IEC60079-0-2017, IEC60079-1-2014, IEC 60079-28-2015, IEC60079-31-2021's standard requirements. The Unique design structure has strong impact resistance, excellent sealing performance, ensure the lighting fixture's safety and stability, which can be used for various areas, Such as Refineries, Fuel depots, Marine vessels, Chemical production processing, Food processing, Wineries, and other high humidity, high temperature dusty places.



Quality Driver Area

Light Source Area

External Explosion Proof Construction

The Light Source Space and Quality Driver Space are designed separately to make the volume of each space smaller, so it is much safer and reliable. Also it helps the heat dissipation of the light source and longer lifespan.

Each space uses threads and potting to completely separate. Strictly follow the External Explosion Proof Designs.





4J

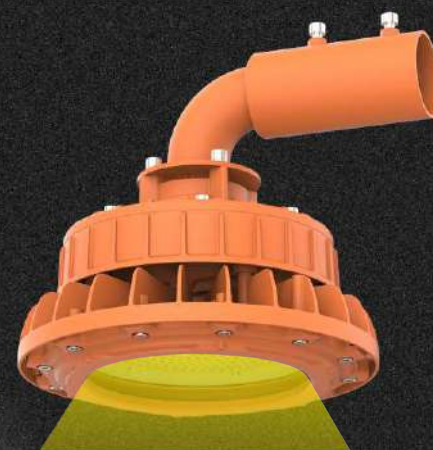
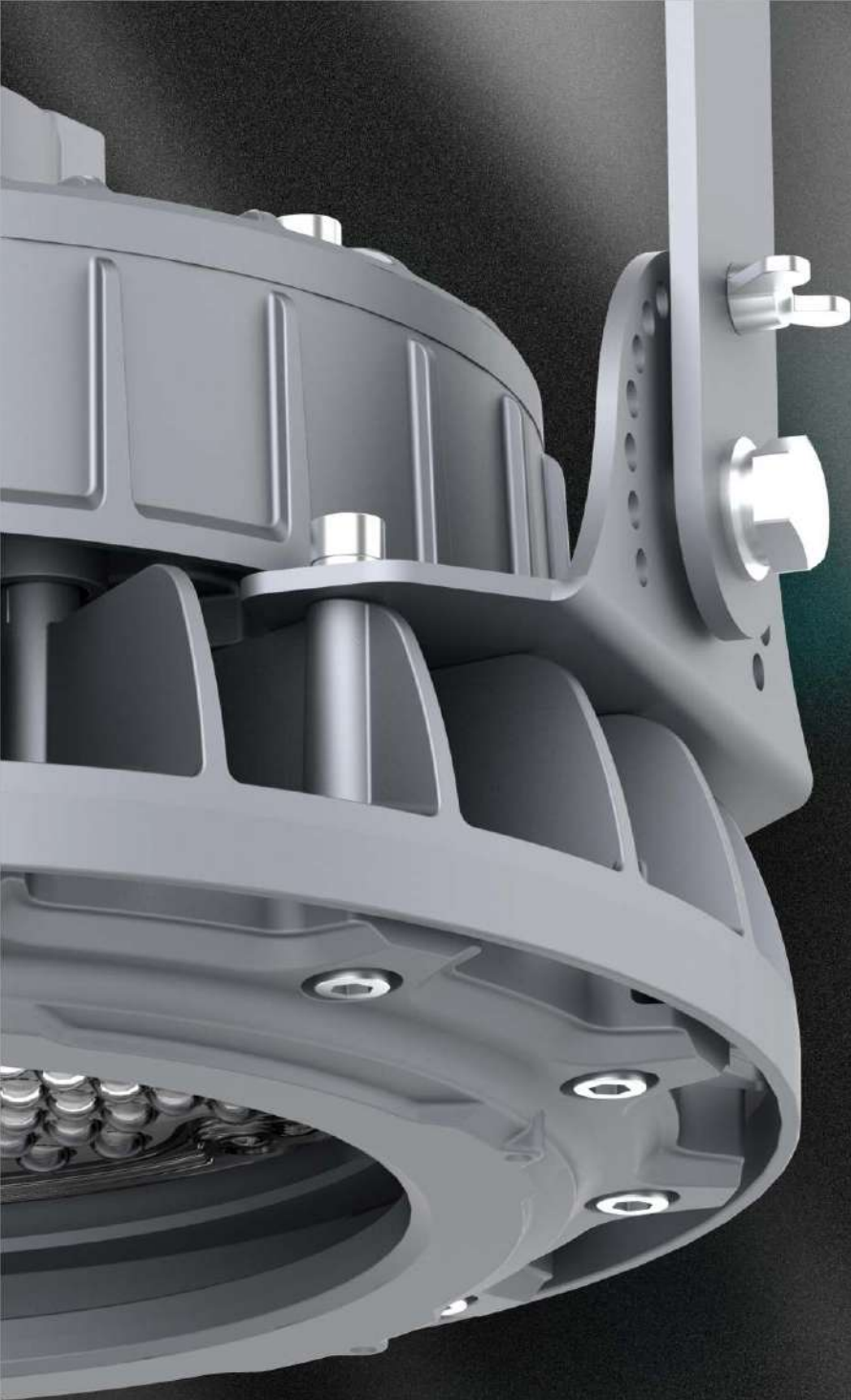


10 mm



**10mm
Tempered
Glass**

EP-02-G1 uses 10mm thickness tempered glass, which is durable, high light transmittance, strong impact resistance.
(resist 4 Joule impact)



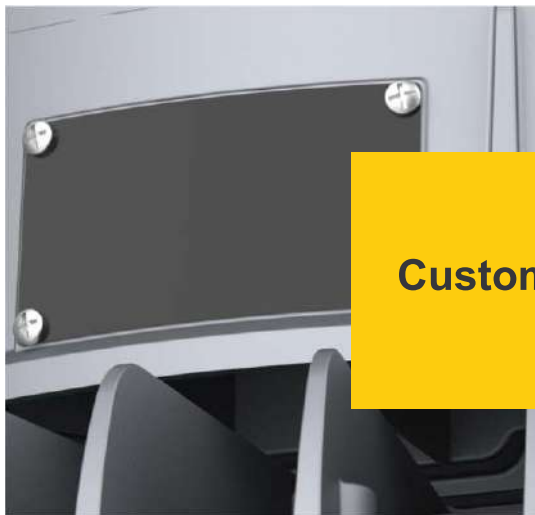
SUS 304

- ▶ All connectors of lamp are made of SUS 304 material;
- ▶ Stronger corrosion resistance. The anti-corrosion grade is C5 ;
- ▶ Outdoor Powder Paint , High rate corrosion resistance, suitable for harsh outdoor environment;
- ▶ The surface is treated with high-voltage electrostatic spraying to prevent static electricity, arcing and electric sparks.

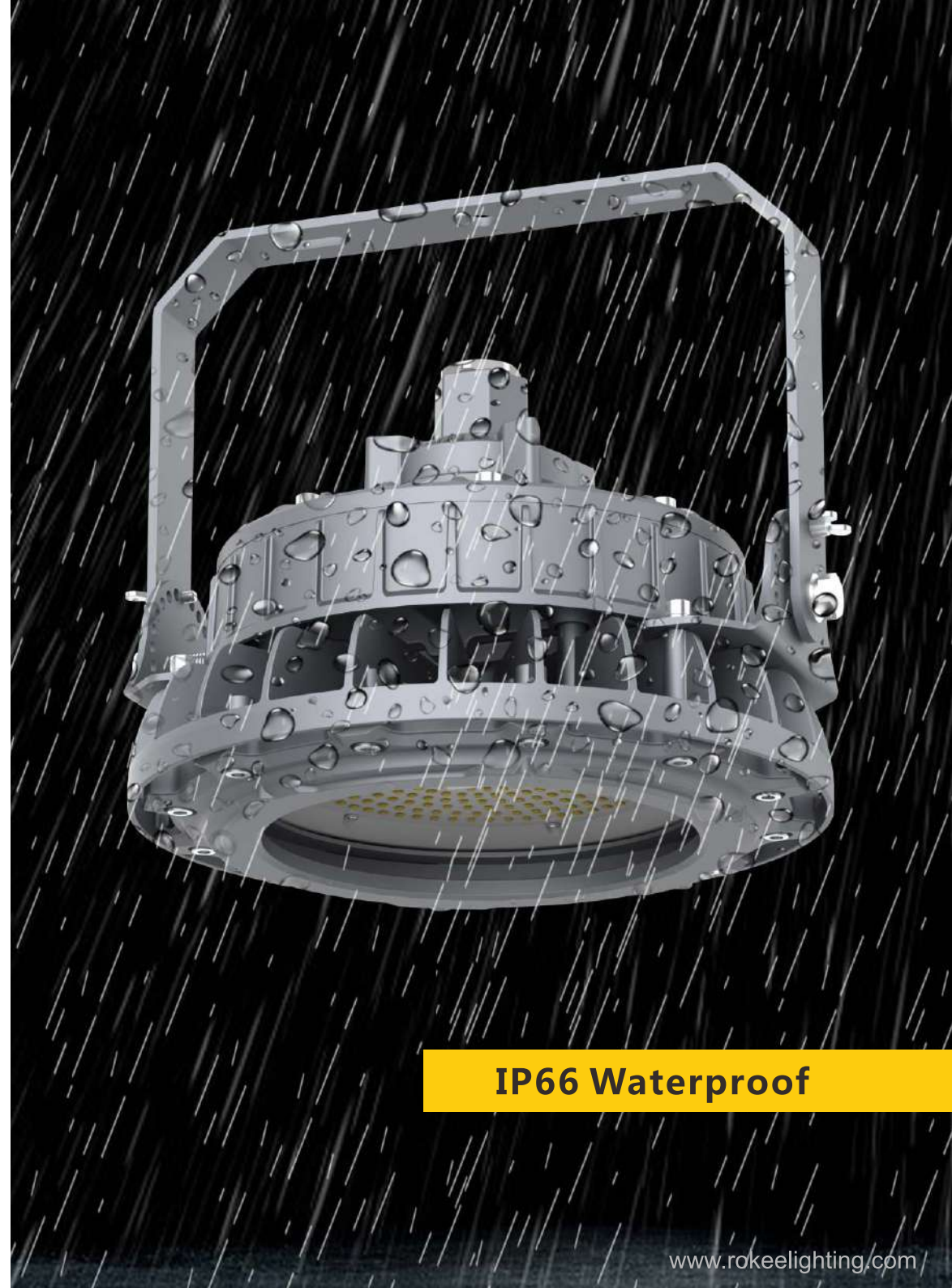


Wing slip bolt

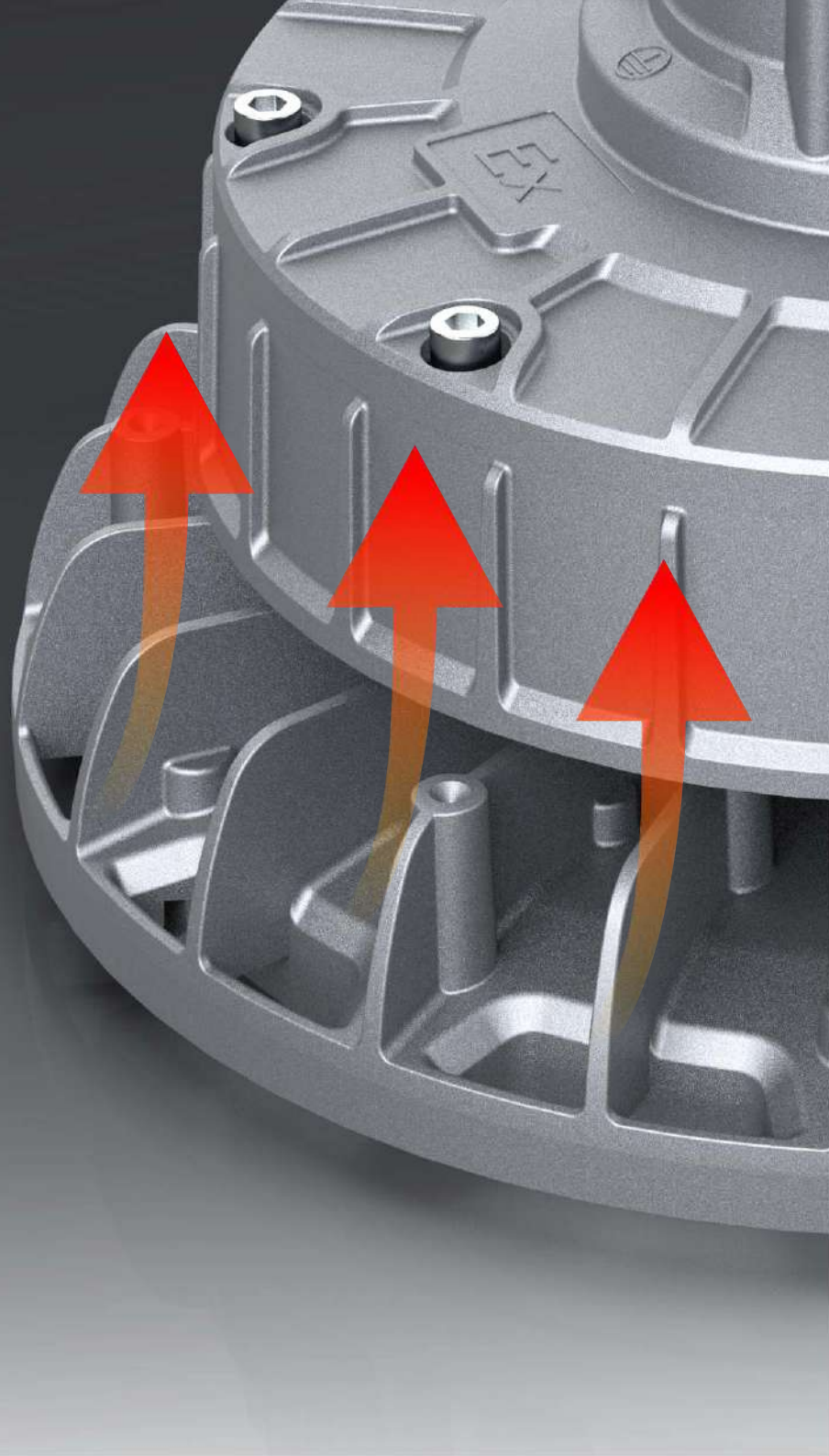
- ▶ Toolless beam angle adjustment;
- ▶ Toolless installation.



Customized Logo



IP66 Waterproof

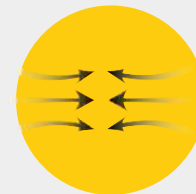


The Light Source Space and Quality Driver Space are designed separately, it helps better heat dissipation and longer lifespan.



EP-02-G1 uses ADC12 Die-casting housing, with nicely 3D heat dissipation.

Perfect Heatsink



EP-02-G1 uses air convection design, which speeds up the heat dissipation of the lamp.



EP-02-G1 uses more 50% larger dissipation area to dissipate.

International standards of explosive substances:

Class I: Mine methane;

Class II: Explosive gas mixture (including steam, mist);

Class III: Explosive dust and fibers.

North America of explosive substances:

CLASS I-explosive gas;

CLASS II-explosive dust;

CLASS III - Fiber.

EP-02-G1 is suitable for use in the following hazardous areas:

- Class I, Division 1, Groups C, D
- Class I, Division 2, Groups A, B, C, D
- Class II, Division 2, Groups E, F, G
- Class III
- Zone 1, Group IIC
- Zone 2, Group IIC
- Zone 21, Group IIIC
- Zone 22, Group IIIC



II 2G Ex db IIC T6 Gb

II 2D Ex tb IIIC T80°C Db IP66





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

Temperature classes	Ignition temperature range of the mixture	Permissible surface temperature of the electrical equipment
T1	> 450 °C	450 °C
T2	>300 °C ... ≤ 450 °C	300 °C
T3	>200 °C ... ≤ 300 °C	200 °C
T4	>135 °C ... ≤ 200 °C	135 °C
T5	>100 °C ... ≤ 135 °C	100 °C
T6	>85 °C ... ≤ 100 °C	85 °C

EP-02-G1



NPT 3/4"



ALU-Reflector



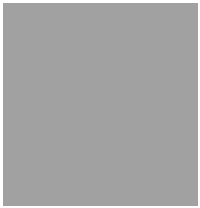
P2 Street Mount



Explosion-proof elbow



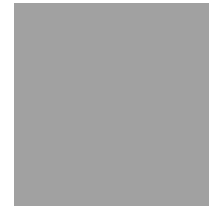
Explosion-proof flexible connecting tube



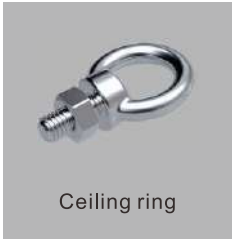
Explosion-proof connection box



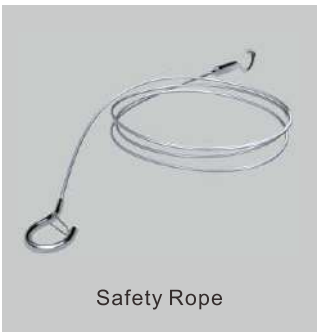
Impact Resistant Cover



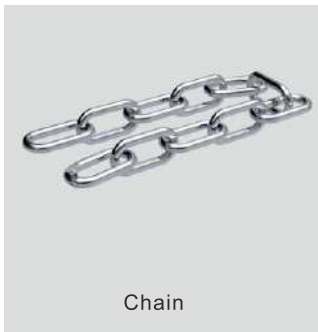
SPD-10KV IP67
SPD-20KV IP67



Ceiling ring



Safety Rope



Chain



P3 Flanged Mount



Explosion-proof joint



Explosion-proof cable clamp close sealing joint