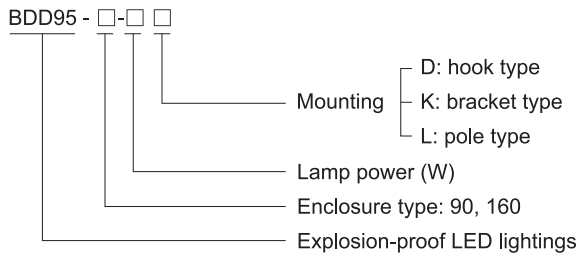


## LED Light Fittings BDD95 Series Explosion-proof LED Lightings



- ◆ Explosion protection to
  - CENELEC
  - IEC
  - NEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
  - Class I, Zone 1 and Zone 2
  - Class I, Division 2, Groups A, B, C, D
- ◆ Two enclosure types: 90, 160
- ◆ Applicable lamp and power (max.160W)
  - LED: 60W, 90W, 120W, 160W
- ◆ Isolated LED lamp compartment, CC-CV (constant current - constant voltage) power controller compartment and terminal compartment; Wind-convection heat dissipation structure.
- ◆ New COB technology, large power and white light LED array, power of single LED can reach 20W~40W, high lighting efficiency, long service life.
- ◆ Two types of light distribution: spotlight and floodlight, which can be selected on request.
- ◆ 160 type lightings adopt light fitting integrated two lamps, the power of whole machine is of 2x120W,2X160W
- ◆ Low-maintenance due to long service life of up to 100,000 operating hours.

### Catalogue number logic



### Selection table

Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)
BDD95-90-60K	60	8.50	BDD95-90-60D	60	8.10	BDD95-90-60L	60	8.10
BDD95-90-90K	90	8.50	BDD95-90-90D	90	8.10	BDD95-90-90L	90	8.10
BDD95-160-120K	120	12.20	BDD95-160-120D	120	11.60	BDD95-160-120L	120	11.70
BDD95-160-160K	160	12.20	BDD95-160-160D	160	11.60	BDD95-160-160L	160	11.70

**Note:** 1. The product is supplied according to "Type/Ordering code" in the table with mounting accessories.  
2. Two types of light distribution: spotlight and floodlight. The light fittings are supplied without lens. Lighting distribution is of floodlight. If required, please specify when ordering.

## Zones 1&2; 21&22

## LED Light Fittings BDD95 Series Explosion-proof LED Lightings



Technical data	
<b>Explosion-proof LED lightings BDD95-90-□□</b>	
<b>Explosion protection</b>	<p>Gas explosion protection <math>\text{Ex II 2 G Ex db e IIC T}\square^{(1)} \text{ Gb}</math></p> <p>Dust explosion protection <math>\text{Ex II 2 D Ex tb IIIC T}\square^{(1)} \text{ Db IP66}</math></p> <p><sup>1)</sup>See Selection Table</p>
<b>Certificates</b>	EPT 15 ATEX 2315X; IECEx CQM 15.0047X; E488274(UL); E488275(UL); CU-TR
<b>Conformity to standards</b>	EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 CSA C22.2 NO.137-M1981; UL 844; UL 8750; UL 1598 CSA C22.2 NO.250.0-08; CSA C22.2 NO.250.13-14
<b>Material</b>	
Enclosure	Copper-free aluminium, powder coated surface, yellow (RAL1021)
Glass cover	Toughened glass, stands 4J impact
Exposed fastener	Stainless steel
LED driver	Wide voltage input, CC-CV (constant current - constant voltage) output, power factor $\geq 0.95$ , with function of distributed current, constant current, surge-proof and anti-electromagnetic interference, and protection against overcurrent, open circuit, and short circuit
<b>Lamp</b>	
Lamp specification	Integrated LED, Multiple LED
Lamp power (W)	60W, 90W
Colour Temperature (CCT)	Cool white: 5400~6500K Note: cool white is available in general. Warm white (2700~3500K) or nature white (4700~5400K) is optional, please specify when ordering.
<b>Rated voltage</b>	100~300V AC 50/60Hz
<b>Earthing protection</b>	M5 (internal & external earth bolts)
<b>Degree of protection</b>	IP66, IP67(optional)
<b>Ambient temperature</b>	-40°C~+55°C
<b>Terminal</b>	3 x 1.5~4mm <sup>2</sup> (L+N+PE)
<b>Mounting</b>	bracket type, hook type, pole type
<b>Cable entries</b>	2 x M25 x 1.5 plugs
<b>Cable gland</b>	DQM-I (Ex e) is recommended. Please see P7/17~19.

Rated power(W)	Temperature classification			
	-40°C ≤ Ta ≤ +40°C		-40°C ≤ Ta ≤ +55°C	
	Gas	Dust	Gas	Dust
60	67°C (T6)	62°C	82°C (T5)	77°C
90	87°C (T5)	82°C	102°C (T4)	97°C

**Dimension drawings** (all dimensions in mm) - subject to alteration

BDD95-90

## LED Light Fittings

### BDD95 Series Explosion-proof LED Lightings

#### Technical data

#### Explosion-proof LED lightings BDD95-160-□□

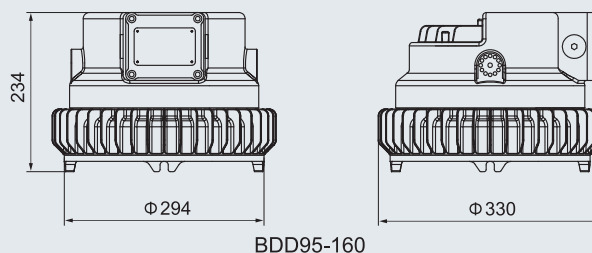
<b>Explosion protection</b>	
Gas explosion protection	Ex II 2 G Ex db e IIC T□ <sup>1)</sup> Gb
Dust explosion protection	Ex II 2 D Ex tb IIIC T□ <sup>1)</sup> Db IP66 <sup>1)</sup> See Selection Table
<b>Certificates</b>	EPT 15 ATEX 2315X; IECEx CQM 15.0047X; E488274(UL); E488275(UL); CU-TR
<b>Conformity to standards</b>	EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 CSA C22.2 NO.137-M1981; UL 844; UL 8750; UL 1598 CSA C22.2 NO.250.0-08; CSA C22.2 NO.250.13-14
<b>Material</b>	
Enclosure	Copper-free aluminium, powder coated surface, yellow (RAL1021)
Glass cover	Toughened glass, stands 4J impact
Exposed fastener	Stainless steel
LED driver	Wide voltage input, CC-CV (constant current - constant voltage) output, power factor ≥ 0.95, with function of distributed current, constant current, surge-proof and anti-electromagnetic interference, and protection against overcurrent, open circuit, and short circuit
<b>Lamp</b>	
Lamp specification	Integrated LED, Multiple LED
Lamp power (W)	120W, 160W
Colour Temperature (CCT)	Cool white: 5400~6500K Note: cool white is available in general. Warm white (2700~3500K) or nature white (4700~5400K) is optional, please specify when ordering.
<b>Rated voltage</b>	100~300V AC 50/60Hz
<b>Earthing protection</b>	M5 (internal & external earth bolts)
<b>Degree of protection</b>	IP66, IP67(optional)
<b>Ambient temperature</b>	-40°C~+55°C
<b>Terminal</b>	3 x 1.5~4mm <sup>2</sup> (L+N+PE)
<b>Mounting</b>	bracket type, hook type, pole type
<b>Cable entries</b>	2 x M25 x 1.5 plugs
<b>Cable gland</b>	DQM-I (Ex e) is recommended. Please see P7/17~19.



#### Selection table

Rated power(W)	Temperature classification			
	-40°C ≤ Ta ≤ +40°C		-40°C ≤ Ta ≤ +55°C	
	Gas	Dust	Gas	Dust
120	72°C (T6)	67°C	87°C (T5)	82°C
160	92°C (T5)	87°C	107°C (T4)	102°C

#### Dimension drawings (all dimensions in mm) - subject to alteration

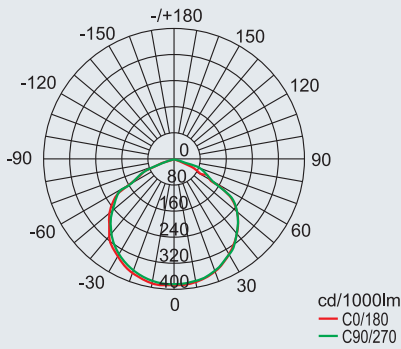


## LED Light Fittings BDD95 Series Explosion-proof LED Lightings

**Photometric data** Note: LED luminous flux is from the standard product of which colour temperature is 5400 to 6500K (cool white).

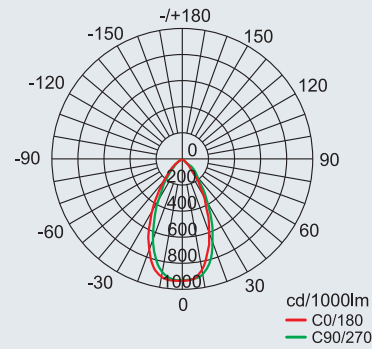
### BDD95-90-□□(Standard products without lens)

Rated luminous flux  
60W LED: 6730lm  
90W LED: 10120lm  
Luminous efficacy: 112lm/W



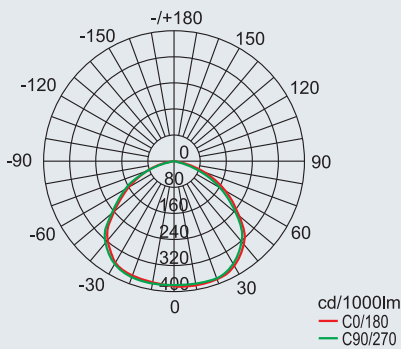
### BDD95-90-□□(With 60° lens)

Rated luminous flux  
60W LED: 6730lm  
90W LED: 10120lm  
Luminous efficacy: 112lm/W  
Note: Lens of 45° and 30° can be provided on request.



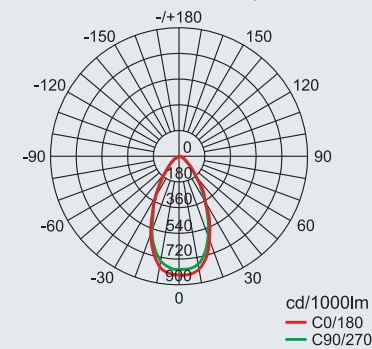
### BDD95-160-□□(Standard products without lens)

Rated luminous flux  
120W LED: 13420lm  
160W LED: 17930lm  
Luminous efficacy: 112lm/W



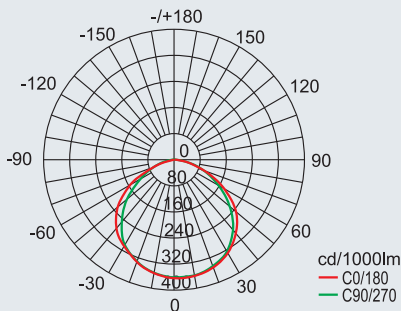
### BDD95-160-□□(With 60° lens)

Rated luminous flux  
120W LED: 13420lm  
160W LED: 17930lm  
Luminous efficacy: 112lm/W  
Note: Lens of 45° and 30° can be provided on request.



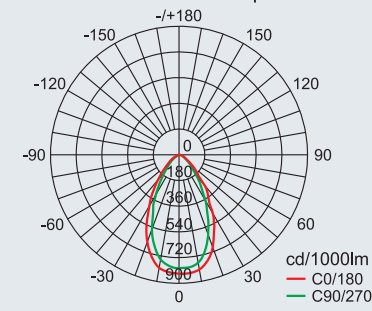
### BDD95-160-□□(Standard products without lens) Note: Measuring parameters of light fitting integrating two lamps

Rated luminous flux  
2 × 120W LED: 26880lm  
2 × 160W LED: 35860lm  
Luminous efficacy: 112lm/W



### BDD95-160-□□(With 60° lens) Note: Measuring parameters of light fitting integrating two lamps

Rated luminous flux  
2 × 120W LED: 26880lm  
2 × 160W LED: 35860lm  
Luminous efficacy: 112lm/W  
Note: Lens of 45° and 30° can be provided on request.

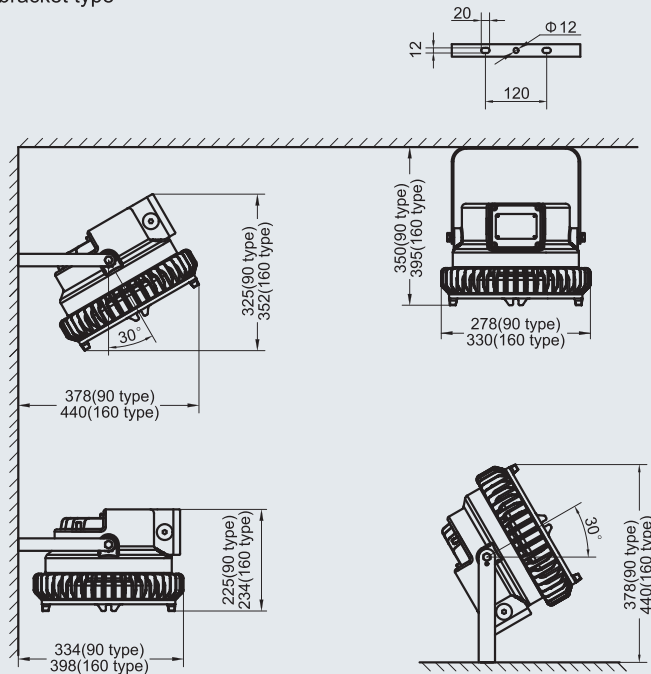


We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.

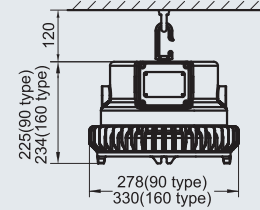
## LED Light Fittings BDD95 Series Explosion-proof LED Lightings

**Mounting type** (all dimensions in mm) - subject to alteration

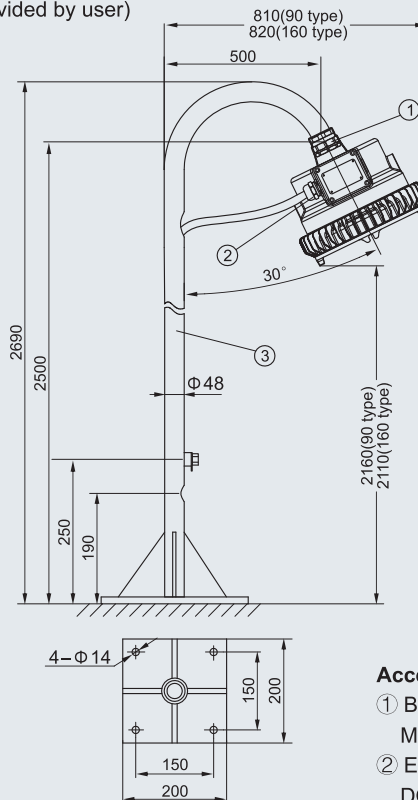
K: bracket type



D: hook type



L: pole type (the pole is provided by user)



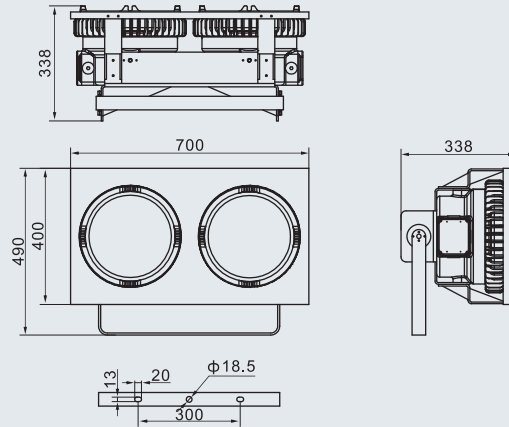
**Accessories supplied with the light fittings:**

- ① BGJ-III explosion-proof connector M25x 1.5(M) / M25x 1.5(M), carbon steel.
- ② Explosion-proof cable glands are provided by user. DQM-I (Ex e) is recommended, please see P7/17~19.
- ③ Pole shall be provided by user.



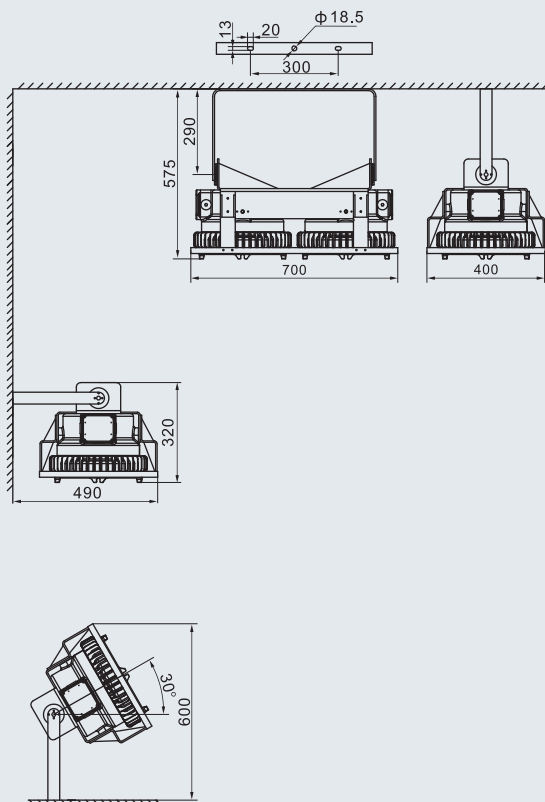
## LED Light Fittings BDD95 Series Explosion-proof LED Lightings

### The description of light fitting integrated two lamps (2x120W, 2X160W)



### Mounting types

#### Bracket type



#### Street lamp type

