



## Street Lamps

BAT53-250, BAT53-400 Series

BAD91-250, BAD91-400 Series

BDD91-150, BDD91-250, BDD91-400 Series

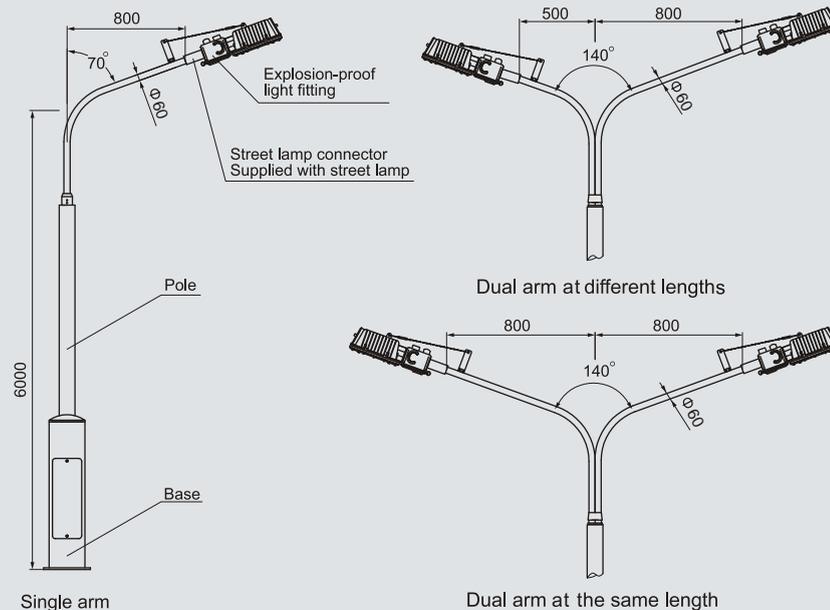
BnT81 Series

## Explosion-proof Street Lamps

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
- ◆ Please refer to mounting schematic diagram to select right lamp and mounting types on request of job site.
- ◆ Please refer to this catalogue for detail technical data and ordering information of each light fitting.
 

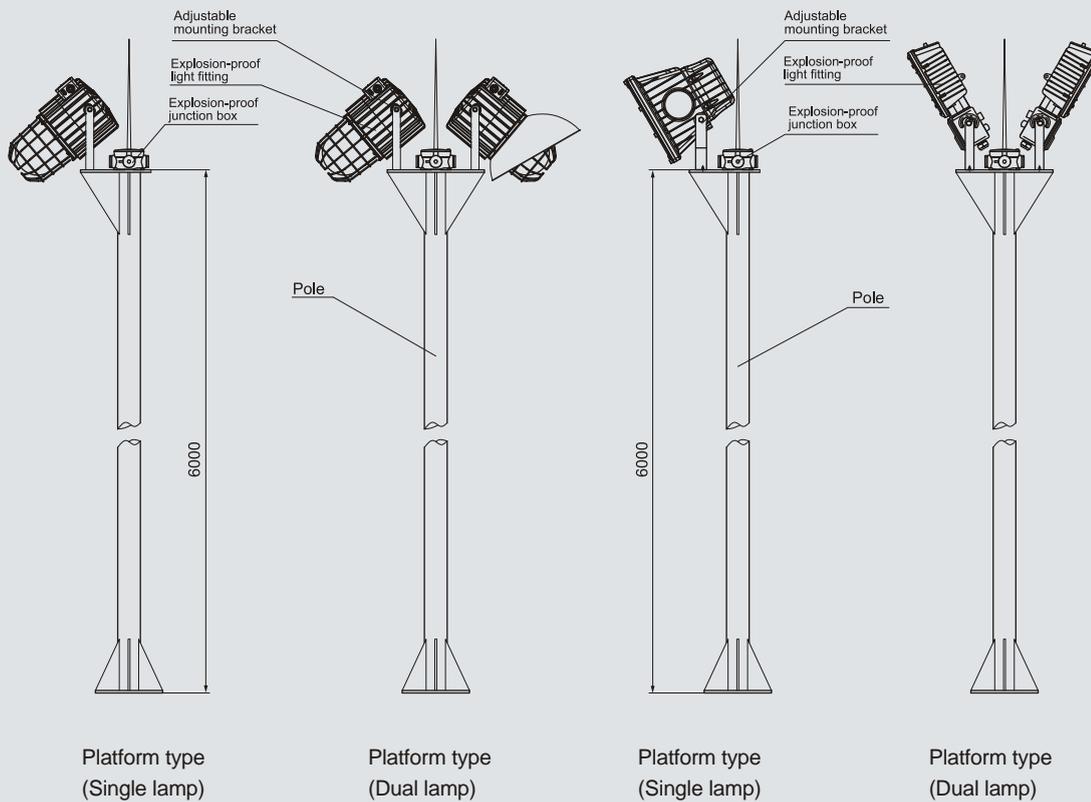
Note: If BAT53-250 type street lamp required, please specify when ordering.
- ◆ The street lamps are supplied without pole; please specify when ordering.

### Mounting schematic diagram of BAT53-250 series street lamps



## Zones 1&2; 21&22

### Mounting schematic diagram of BAT53-250, BAT53-400 series, BAD91-250, BAD91-400 series street lamps



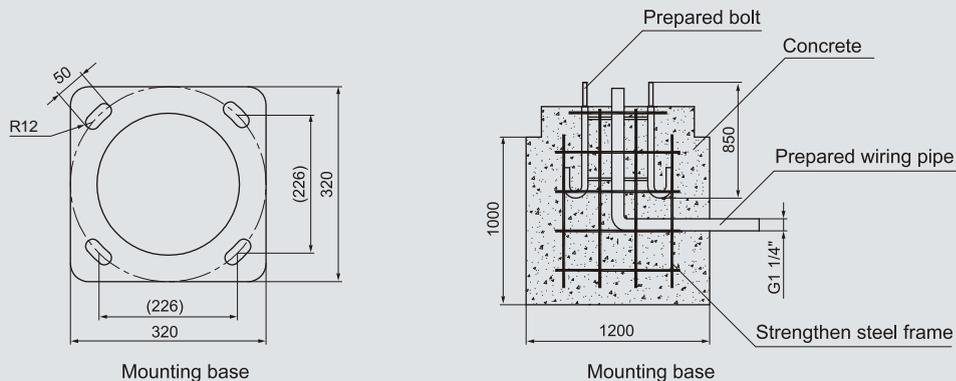
BAD91-250, BAD91-400 series

BAT53-250, BAT53-400 series

- Note:** 1. For BAD91-400 series or BAD91-250 series, the installation angle of light fittings can be adjusted on request of lighting on job site.  
2. External reflector is optional, which increases luminous intensity at site.



### Reference diagram of street lamp mounting base



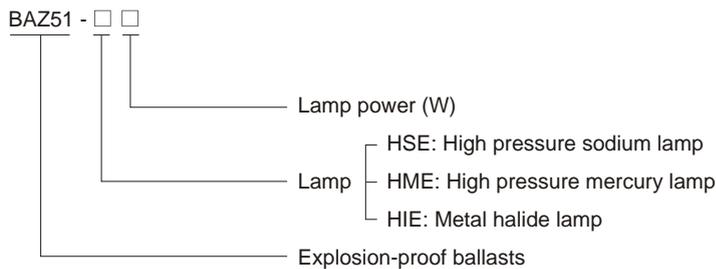


## Ballasts

### BAZ51 Series Explosion-proof Ballasts

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
- ◆ Applicable to lamp (max. 400W) of HIE, HSE and HME.
- ◆ Enclosure in copper-free aluminium, powder coated external surface, yellow (RAL1021).
- ◆ Choke ballast, rapid starting, stable performance.

### Catalogue number logic



### Selection table

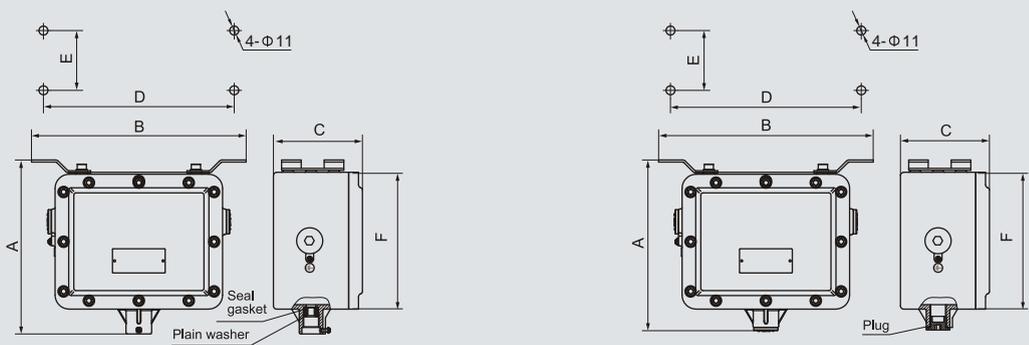
Type/Ordering code	Available lamp Power(W)	Weight (kg)	Enclosure	Type/Ordering code	Available lamp Power(W)	Weight (kg)	Enclosure
BAZ51-HIE 70	HIE 70	7.15	I	BAZ51-HSE 150	HSE 150	8.10	I
BAZ51-HIE 100	HIE 100	7.75	I	BAZ51-HSE 250	HSE 250	8.95	II
BAZ51-HIE 150	HIE 150	8.05	I	BAZ51-HSE 400	HSE 400	10.65	II
BAZ51-HIE 175	HIE 175	8.10	I	BAZ51-HME 80	HME 80	7.10	I
BAZ51-HIE 250	HIE 250	8.10	I	BAZ51-HME 125	HME 125	7.75	I
BAZ51-HIE 400	HIE 400	10.70	II	BAZ51-HME 175	HME 175	8.10	I
BAZ51-HSE 70	HSE 70	7.15	I	BAZ51-HME 250	HME 250	8.00	I
BAZ51-HSE 100	HSE 100	7.75	I	BAZ51-HME 400	HME 400	10.65	II

**Note:** The power factor is more than 0.85 while equipped with compensation capacitor.

## Zones 1&2; 21&22

Technical data	
<b>Explosion-proof ballasts</b>	<b>BAZ51-□□</b>
<b>Explosion protection</b> Gas explosion protection Dust explosion protection <b>Certificates</b> For gas explosion protection For dust explosion protection <b>Conformity to standards</b>	II 2 G Ex d IIB T6 Ex tD A21 T80°C IP65  LCIE 06 ATEX 6019; IECEx LCI 08. 0002 PCEC (China) EN 60079-0: 2004, EN 60079-1: 2004 IEC 60079-0: 2004, IEC 60079-1: 2003, IEC 61241-0: 2004, IEC 61241-1: 2004
<b>Material</b> Enclosure Exposed fastener <b>Available lamp</b>	Copper-free aluminium, powder coated external surface, yellow (RAL1021) Stainless steel High pressure sodium lamp (HSE): 70W, 100W, 150W, 250W, 400W High pressure mercury lamp (HME): 80W, 125W, 175W, 250W, 400W Metal halide lamp (HIE): 70W, 100W, 150W, 175W, 250W, 400W Note: HPI European standard ballast is available in general 220~240V AC 50Hz (60Hz is optional) Note: other voltage on request.
<b>Rated voltage</b>	M5 (internal & external earth bolts) IP65 -20°C ~ +55°C 3 x 1.5~2.5mm <sup>2</sup> (L+N+PE) 3 x M25 x 1.5 Plug for independent type 2 x M25 x 1.5 Plug for block type With seal gasket and plain washer at bottom entries DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~25.
<b>Earthing protection</b> <b>Degree of protection</b> <b>Ambient temperature</b> <b>Terminal</b> <b>Cable entries</b>	
<b>Cable gland (optional)</b>	

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



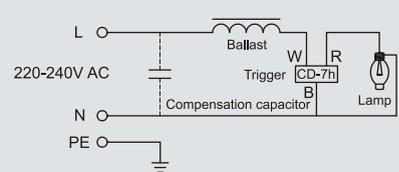
Enclosure	Size (mm)					
	A	B	C	D	E	F
I	245	301	135	265	65	190
II	265	331	140	295	65	210

Outline 1 (For block mounting, for example: used for series BAD)

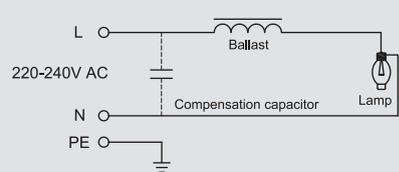
Enclosure	Size (mm)					
	A	B	C	D	E	F
I	240	301	135	265	65	190
II	250	331	140	295	65	210

Outline 2 (For independent mounting, for example: used for series BAT51-400)

#### Schematic diagram of light fittings and ballasts



Schematic diagram 1 (For HSE or HIE)



Schematic diagram 2 (For HME)





## Hand Lamps

### BSX-60 Series Explosion-proof Incandescent Hand Lamps

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in
  - Zone 1 and Zone 2
- ◆ Incandescent lamps: max. 60W
- ◆ Cable on request
- ◆ Handle in plastic, with control pushbutton
- ◆ Powder coated wire guard, white
- ◆ Toughened glass cover resistant to temperature changes
- ◆ Movable transformer on request (see the following diagram)

### BSX-60 is with the schematic diagram of BCZY Explosion-proof movable switchboard



**Note:** For BCZY Explosion-proof movable switchboard, please refer to P3/46-47 of the catalogue

## Zones 1&2

**Technical data**

**Explosion-proof incandescent hand lamps BSX-60**

**Explosion protection**

Gas explosion protection

⊕ II 2 G Ex de IIC T4

**Certificates**

For gas explosion protection

LCIE 07 ATEX 6028; IECEx CQM 08.0015; BVC 10.0043 (Brazil)

**Conformity to standards**

EN 60079-0: 2004, EN 60079-1: 2004, EN 60079-7: 2003

IEC 60079-0: 2004, IEC 60079-1: 2003, IEC 60079-7: 2001

**Material**

Enclosure

Copper-free aluminium, powder coated external surface, yellow (RAL1021)

Handle

Plastic, black

Exposed fastener

Stainless steel

Wire guard

Powder coated carbon steel, white

**Lamp**

Lamp holder

E27

Available lamp

Incandescent lamp: 25W, 40W, 60W

**Rated voltage**

Max. 230V

**Protection class**

II (Protection against electric shock)

**Degree of protection**

IP65

**Ambient temperature**

-20°C ~ +55°C

**Terminal**

3 x 1.5 ~ 2.5mm<sup>2</sup> (L+N+PE)

**Cable entries**

1 x M25 x 1.5 cable gland (DQM-I Ex e, plastic)

**Available cable outer diameter**

Φ9 ~ Φ16 (mm)

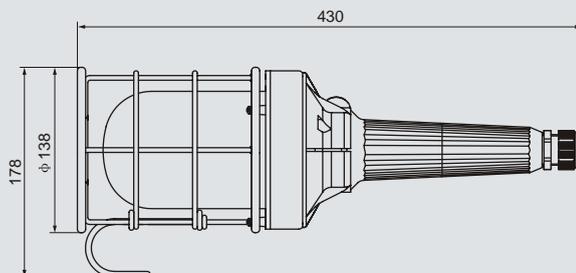
**Weight**

2.35kg

**Accessories**

Picture	Name	Ordering code	Weight (kg)
	Wire guard	BSX101	0.35
	Transparent cover with fixing-ring	BSX102	1.50

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





## Hand lamps

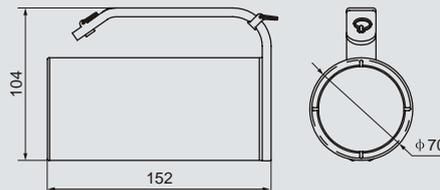
**BAD305 Portable Explosion-proof Searchlights**

**BAD309E Multi-functional Strong Explosion-proof Searchlights**

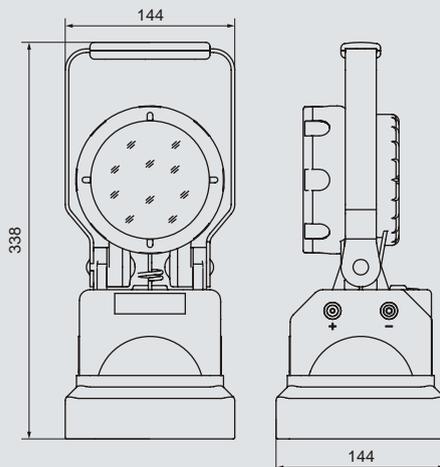
**BAD502A Explosion-proof Strong Working Lights**

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
- ◆ Safe and reliable
- ◆ Efficient and energy-saving:memory-free battery
- ◆ Intelligent control
- ◆ Water-proof and damage-proof
- ◆ Convenient and durable

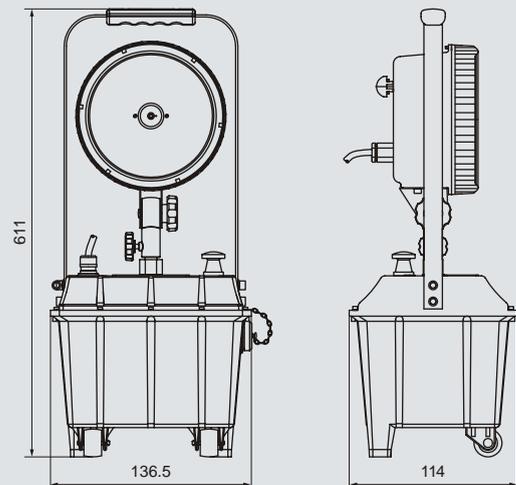
### Dimension drawings (all dimensions in mm) - subject to alteration



BAD305



BAD309E



BAD502A



## Zones 1&2; 21&22

### BAD305 Portable Explosion-proof Searchlights

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
- ◆ Safe and reliable: the product with reliable explosion-proof performance, can safely and reliably work in various combustible areas, the battery is equipped with PTC thermistor and temperature fuse; double-protected circuit, safety performance enhanced.
- ◆ Efficient and energy-saving: memory-free battery, with long service life, low auto-discharge rate, economic and environmental friendly, solid efficient LED lamp, low energy consumption and long service life.
- ◆ Water-proof and damage-proof: the enclosure is made of imported alloy with high strength, excellent strong impact resistant performance, unique sealing type, with very good water-proof performance.
- ◆ Anti-strong interference: scientific module driving circuit, strong performance of anti-shock and anti-electromagnetic interference.
- ◆ Heat resistant: LED radiator and battery are effectively isolated, which improves the stability of the light.
- ◆ Intelligent control: pulse dimming technology, strong light and working light can be changed at random, with battery detection indicator, which can detect the working condition at any time, intelligent charger is with protection circuit.
- ◆ Portable and flexible: small volume, light weight, several types of handling like portable and on shoulder, meet different working requirement.



### Technical data

#### Portable Explosion-proof Searchlights BAD305

##### Explosion protection

Gas explosion protection  
Dust explosion protection

⊕ II 2 G Ex d IIC T6 Gb  
⊕ II 2 D Ex t IIIIC T80°C Db IP66

##### Certificates

LCIE 12 ATEX\_\_\_\_\_

##### Conformity to standards

EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-31: 2009  
IEC 60079-0: 2007, IEC 60079-1: 2007, IEC 60079-31: 2008

##### Rated voltage

14.8V

##### Rated capacity

2Ah

##### Lamp(LED)

Rated power  
Current of strong light

9W / 3W  
900mA

##### Continuous working time

Strong light  
Working light

≥8h  
≥16h

##### Charge time

≥8h

##### Service life of battery

about 1000 times cycling

##### Degree of protection

IP66

##### Weight

790g



## Zones 1&2; 21&22

**BAD309E****Multi-functional Strong Explosion-proof Searchlights**

- ◆ Explosion protection to
    - CENELEC
    - IEC
  - ◆ Can be used in
    - Zone 1 and Zone 2
    - Zone 21 and Zone 22
  - ◆ Safe and reliable: the product with good explosion-proof performance and antistatic effect, can safely and reliably work in various combustible areas.
  - ◆ Efficient and energy-saving: LED solid lamp, low energy consumption, high luminous efficacy, long service life, maintenance free and no subsequent usage cost, memory-free battery is recyclable, pollution-free.
  - ◆ Water-proof and damage-proof: the light adopts whole-sealing craft, applicable in damp and severe atmosphere, special alloy enclosure makes sure the light can resist strong shock and impact.
- ◆ Intelligent control: the light is with two kinds of working modes: strong light and working light, switch is controlled by intelligent chip, the strong light and weak light can be changed at random, single-chip control; with battery display and special protection circuit, with protection function of anti-over charging, over discharging and short circuit, reliably protect the battery and prolong the service life.
- ◆ Convenient and durable: unique lamp cap; lighting angle can be adjusted within the scope of -45--55, no lighting dead angle (lighting range of strong light: 800m, effective distance: 300m, suitable for long-distance searching and lighting in large area of close range), light weight, portable type, horizontal type, hang type, magnetic absorption, etc, convenient to use; the switch is with anti-incorrect operation function.

**Technical data****Multi-functional strong explosion-proof searchlights BAD309E**

<b>Explosion protection</b>	
Gas explosion protection	Ex II 2 G Ex ib IIC T6 Gb
Dust explosion protection	Ex II 2 D Ex t IIIC T80°C Db IP65
<b>Certificates</b>	LCIE 12 ATEX_____
<b>Conformity to standards</b>	EN 60079-0: 2009, EN 60079-11: 2007, EN 60079-31: 2009 IEC 60079-0: 2007, IEC 60079-11: 2006, IEC60079-31: 2008
<b>Rated voltage</b>	12V
<b>Rated capacity</b>	4Ah
<b>Lamp(LED)</b>	
Rated power	9W / 3W
Average service life	100000h
<b>Continuous working time</b>	
Strong light	≥8h
Working light	≥18h
<b>Charging time</b>	≥8h
<b>Service life of battery</b>	about 1000 times cycling
<b>Degree of protection</b>	IP65
<b>Weight</b>	1.9kg

# Zones 1&2; 21&22

### BAD502A Explosion-proof Strong Working Lights

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
- ◆ Safe and reliable: the product with good explosion-proof performance, can safely and reliably work in various combustible areas.
- ◆ Efficient and energy-saving: special gas discharging lamp; high luminous efficiency, luminous flux is 5 times of that of halogen lamp with the same power, illumination is 3 times of 100W halogen bulb, service life is 5-10 times of that of normal halogen lamp, with the same brightness, the power consumption is 15% of that of normal halogen lamp, good anti-shock effect, small heating value, safer and more reliable.
- ◆ Water-proof and damage-proof: the light adopts whole-sealing craft, can work normally when in water, special alloy enclosure makes sure the light can resist strong shock and impact.
- ◆ Economic and environmental friendly: the memory-free battery can be charged at any time, after charging fully and laid aside for a year, the reserve of electricity is not less than 80% when it is full, for two years, it is not less than 50%, low-voltage discharging protection circuit is set; reliably protect the battery and prolong the service life.
- ◆ Convenient and durable: unique lamp cap, lighting angle can be adjusted at random, there are wheels at the bottom, easy to move and work.
- ◆ Other performances: normally, floodlight is provided; spotlight is on request.



#### Technical data

#### Explosion-proof strong working lights BAD502A

##### Explosion protection

- Gas explosion protection
- Dust explosion protection

 II 2 G Ex de IIC T4 Gb  
 II 2 D Ex t IIIIC T130°C Db IP65

##### Certificates

LCIE 12 ATEX\_\_\_\_\_

##### Conformity to standards

EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-7: 2007, EN 60079-31: 2009  
IEC 60079-0: 2007, IEC 60079-1: 2007, IEC 60079-7: 2006, IEC 60079-31: 2008

##### Rated voltage

24V

##### Rated capacity

20Ah

##### Lamp

Xenon lamp

##### Working voltage

24V

##### Rated power

35W

##### Luminous flux

3200lm

##### Average service life

3000h

##### Continuous working time

≥10h

##### Charging time

≥12h

##### Service life of battery

about 1000 times cycling

##### Degree of protection

IP65

##### Weight

15kg

## Zones 1&2; 21&22

