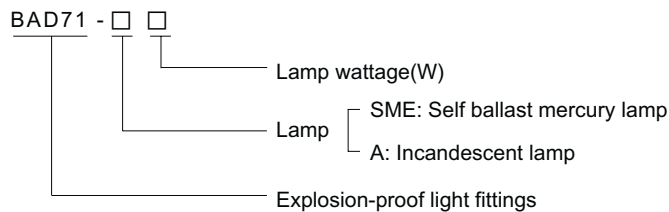




## BAD71-□□ Series Explosion-proof Light Fittings

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used
  - in Zone 1 and Zone 2
  - in Zone 21 and Zone 22
- ◆ Available light source (not more than 500W)
  - Self ballast mercury lamp
  - Incandescent lamp
- ◆ Independent connection compartment, side open for connection, convenient to install and maintain.
- ◆ Enclosure has two versions: 250 and 400.
- ◆ Possible to supply external reflector, enlarging the luminous intensity.

### ■ Catalogue number logic



### ■ Selection table

Type/Ordering code	Available lamp wattage (W)	
	SME	A
BAD71-250	160, 250	200, 300
BAD71-400	500(450)	500

### ■ Ordering note

1. Specify all data at request of "catalogue number logic",
2. If accessories are required, please purchase as the "Accessories table" or at guide of "ordering code".
3. The light fittings are supplied without external reflector, if required, please purchase as "ordering code" in "Accessories table".

# Zones 1&2; 21&22

## Pendant Light Fittings

### BAD71 Series Explosion-proof Light Fittings

#### Technical data

##### Explosion-proof light fittings

BAD71-250

##### Explosion protection

Gas explosion protection

Dust explosion protection

Ex II 2G Exde II CT3

Ex tD A21 IP65 T200°C

##### Certificates

For gas explosion protection

LCIE 08 ATEX 6105, IECEX CQM 08.0018

For dust explosion protection

PCEC (China)

##### 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

IEC 61241-0:2004 ; IEC 61241-1:2004

##### Material

Enclosure

Copper-free aluminium, powder coated, yellow

Transparent cover

Toughened glass, stands 4J impact

Reflector(internal)

High purity aluminium

Reflector(external)

Pure aluminium, anodicoxidation treatment for surface

Wire guard

Stainless steel

Exposed fastener

Stainless steel

##### Lamp

Available lamp	Lamp wattage	Lamp holder
SME	160W/250W	E27/E40
A	200W/300W	E27/E40

##### Rated voltage

AC 220V ~ 240V 50Hz

##### Earthing protection

M5(earthing bolt inside and outside of the light fittings)

##### Degree of protection

IP65

##### Ambient temperature

-20°C ~ +55°C

##### Connecting terminal

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

##### Cable entries

2 x M25 x 1.5 Plug

##### Cable gland(option)

Exe Cable gland DQM-I, manufactured by Warom, please see P7/17 ~ 18.

##### Remarks

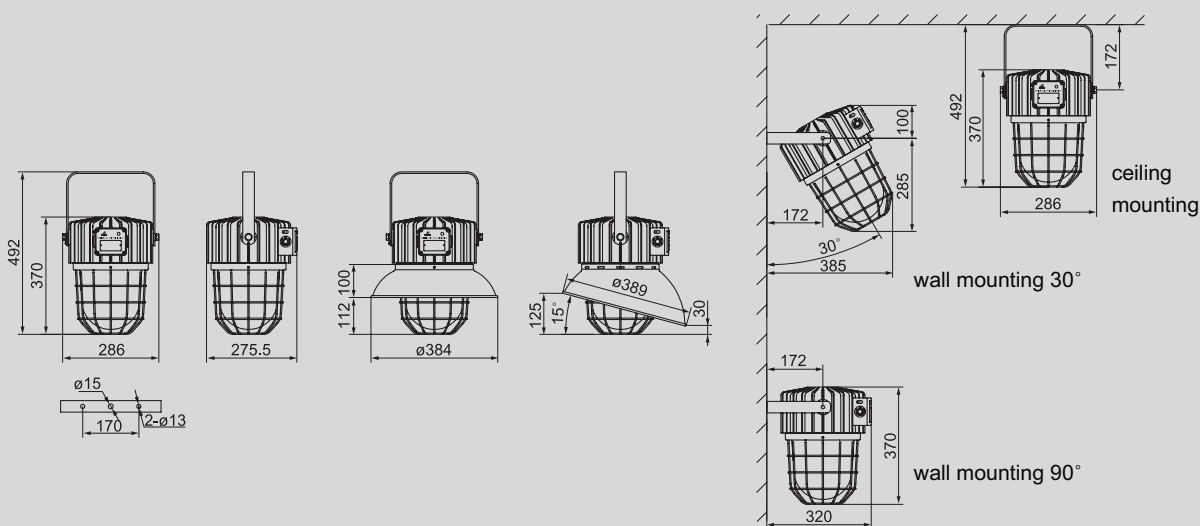
The light fittings are supplied without lamp.

##### Weight

9.30kg



#### Mounting versions



## Pendant Light Fittings BAD71 Series Explosion-proof Light Fittings

### Photometric data (BAD71-250)

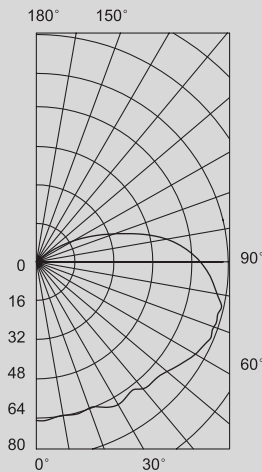


Photometric data of 250W self ballast mercury lamp

Rated luminous flux:4900lm;

The data from PHILIPS lamp;

Luminous intensity distribution cd/1000lm



160W Self ballast mercury lamp\*0.64  
200W Incandescent lamp\*0.41  
300W Incandescent lamp\*0.83

Angle	CP
0	315
5	314
10	309
15	304
20	299
25	300
30	303
35	298
40	293
45	296
50	303
55	310

Angle	CP
60	317
65	317
70	313
75	306
80	291
85	270
90	243
95	213
100	180
105	143
110	107
115	73

Angle	CP
120	45
125	45
130	23
135	9
140	4
145	3
150	2
155	1
160	0
165	0
170	0
175	0
180	0

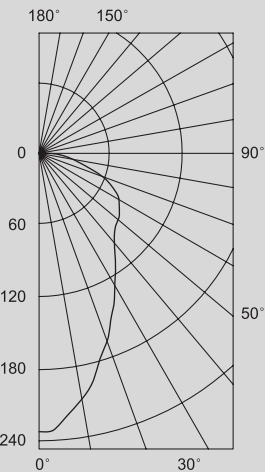


Photometric data of 250W self ballast mercury lamp(with spherical reflector)

Rated luminous flux:4900lm;

The data from PHILIPS lamp;

Luminous intensity distribution cd/1000lm



160W Self ballast mercury lamp\*0.64  
200W Incandescent lamp\*0.41  
300W Incandescent lamp\*0.83

Angle	CP
0	1117
5	1109
10	1070
15	980
20	875
25	763
30	666
35	587
40	506
45	443
50	401
55	364

Angle	CP
60	337
65	306
70	251
75	192
80	131
85	77
90	37
95	13
100	5
105	4
110	2
115	1

Angle	CP
120	1
125	0
130	1
135	1
140	1
145	1
150	1
155	1
160	1
165	1
170	1
175	1
180	1

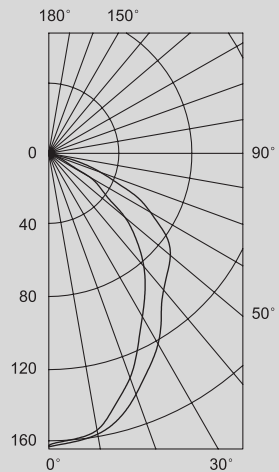


Photometric data of 250W self ballast mercury lamp(with bevel reflector)

Rated luminous flux:4900lm;

The data from PHILIPS lamp;

Luminous intensity distribution cd/1000lm



160W Self ballast mercury lamp\*0.64  
200W Incandescent lamp\*0.41  
300W Incandescent lamp\*0.83

0°	Reflection angle	CP
0	829	95 2
5	730	105 2
15	615	115 2
25	509	125 2
35	467	135 2
45	387	145 2
55	267	155 2
65	129	165 2
75	34	175 2
85	11	180 2
90	6	

90°	Reflection angle	CP
0	829	95 1
5	800	105 1
15	707	115 1
25	573	125 1
35	460	135 1
45	337	145 1
55	169	155 1
65	50	165 1
75	6	175 1
85	2	180 1
90	1	

We can provide lighting designs and lighting data by using professional lighting calculation software DIALUX of Germany upon stimulated situation and working conditions at user's request.



## Pendant Light Fittings

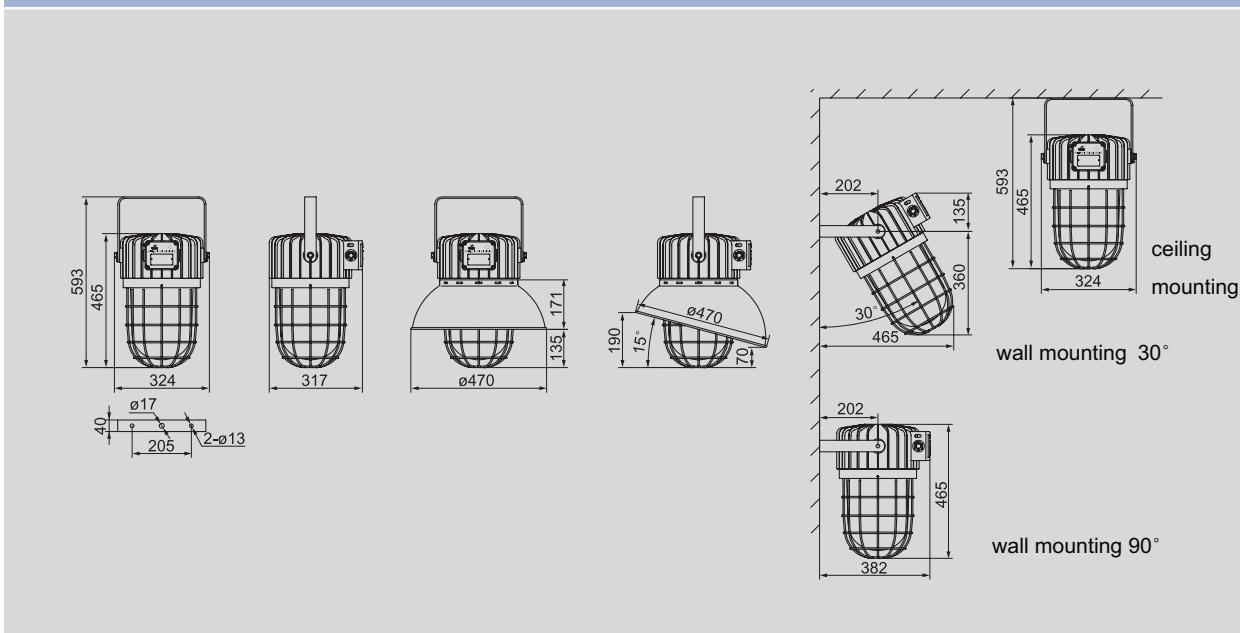
### BAD71 Series Explosion-proof Light Fittings

#### Technical data

Explosion-proof light fittings	BAD71-400									
<b>Explosion protection</b>	<p>Gas explosion protection</p> <p>Dust explosion protection</p>									
<b>Certificates</b>	<p>For gas explosion protection</p> <p>For dust explosion protection</p>									
<b>Conformity to standards</b>	<p>EN 60079-0:2004; EN 60079-1:2004; EN 60079-7:2003;</p> <p>IEC 60079-0:2004; IEC 60079-1:2003; IEC 60079-7:2001</p> <p>IEC 61241-0:2004; IEC 61241-1:2004</p>									
<b>Material</b>	<p>Enclosure</p> <p>Transparent cover</p> <p>Reflector(internal)</p> <p>Reflector(external)</p> <p>Wire guard</p> <p>Exposed fastener</p>									
<b>Lamp</b>	<table border="1"> <thead> <tr> <th>Available lamp</th> <th>Lamp wattage</th> <th>Lamp holder</th> </tr> </thead> <tbody> <tr> <td>SME</td> <td>500(450)W</td> <td>E40</td> </tr> <tr> <td>A</td> <td>500W</td> <td>E40</td> </tr> </tbody> </table>	Available lamp	Lamp wattage	Lamp holder	SME	500(450)W	E40	A	500W	E40
Available lamp	Lamp wattage	Lamp holder								
SME	500(450)W	E40								
A	500W	E40								
<b>Rated voltage</b>	AC 220V ~ 240V 50Hz									
<b>Earthing protection</b>	M5(earthing bolt inside and outside of the light fittings)									
<b>Degree of protection</b>	IP65									
<b>Ambient temperature</b>	-20°C ~ +55°C									
<b>Connecting terminal</b>	Terminal 3 x 1.5 ~ 2.5mm <sup>2</sup> (L+N+PE)									
<b>Cable entries</b>	2 x M25 x 1.5 Plug									
<b>Cable gland(option)</b>	Exe Cable gland DQM-I, manufactured by Warom, please see P7/17 ~ 18.									
<b>Remarks</b>	The light fittings are supplied without lamp.									
<b>Weight</b>	14.80kg									



#### Mounting versions



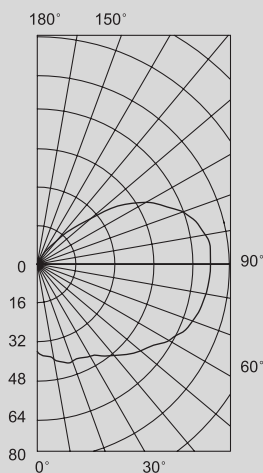
## Pendant Light Fittings BAD71 Series Explosion-proof Light Fittings

### Photometric data (BAD71-400)



Photometric data of 500W self ballast mercury lamp

Rated luminous flux:13000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



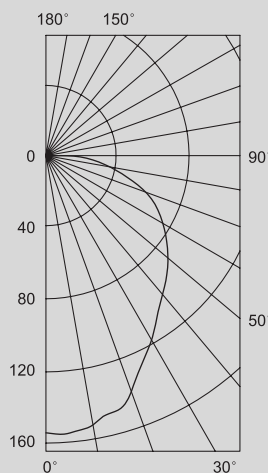
500W Incandescent lamp\*0.57

Angle	CP	Angle	CP	Angle	CP
0	451	60	718	120	731
5	453	65	765	125	649
10	481	70	805	130	533
15	488	75	836	135	402
20	494	80	862	140	179
25	488	85	882	145	178
30	492	90	896	150	94
35	514	95	904	155	37
40	548	100	907	160	18
45	578	105	891	165	12
50	617	110	857	170	6
55	666	115	803	175	2
				180	2



Photometric data of 500W self ballast mercury lamp(with spherical reflector)

Rated luminous flux:13000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



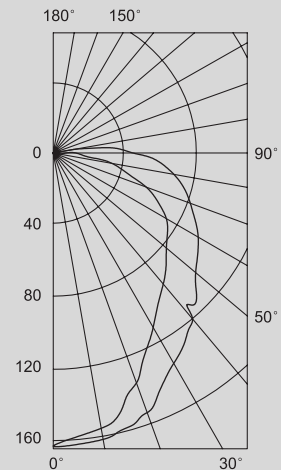
500W Incandescent lamp\*0.57

Angle	CP	Angle	CP	Angle	CP
0	1979	60	956	120	3
5	1903	65	878	125	2
10	1918	70	768	130	2
15	1815	75	626	135	2
20	1619	80	493	140	2
25	1450	85	327	145	2
30	1386	90	180	150	3
35	1272	95	87	155	3
40	1191	100	38	160	3
45	1107	105	16	165	3
50	1045	110	9	170	3
55	998	115	5	175	3
				180	3



Photometric data of 500W self ballast mercury lamp(with bevel reflector)

Rated luminous flux:13000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



500W Incandescent lamp\*0.57

0° Reflection angle CP			90° Reflection angle CP				
0	2064	95	12	0	2064	95	39
5	2025	105	3	5	2179	105	10
15	1719	115	2	15	1919	115	3
25	1371	125	2	25	1609	125	2
35	1066	135	3	35	1337	135	2
45	887	145	3	45	1148	145	2
55	765	155	3	55	1012	155	3
65	537	165	3	65	827	165	3
75	219	175	3	75	534	175	3
85	62	180	3	85	195	180	3
90	26			90	93		

We can provide lighting designs and lighting data by using professional lighting calculation software DIALUX of Germany upon stimulated situation and working conditions at user's request.



**Accessories table**

Picture	Accessories fittings	Ordering code	Weight (kg)
	250 Wire guard	271001	0.65
	400 Wire guard	271002	0.87
	250 Glass cover	271003	2.65
	400 Glass cover	271004	4.80
	250 Spherical reflector	271005	0.37
	400 Spherical reflector	271006	0.52
	250 Bevel reflector	271007	0.35
	400 Bevel reflector	271008	0.49

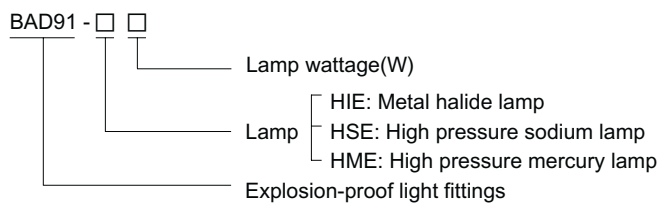




## BAD91-□□ Series Explosion-proof Light Fittings

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used
  - in Zone 1 and Zone 2
  - in Zone 21 and Zone 22
- ◆ Integral structure with the lamp, the ballast; Independent connection compartment, side open for connection, convenient to install and maintain.
- ◆ Enclosure has two versions: 250 and 400.
- ◆ Possible to supply external reflector, enlarging the luminous intensity.

### Catalogue number logic



### Selection table

Type/Ordering code	Available lamp wattage (W)		
	HIE	HSE	HME
BAD91-250	175, 250	150, 250	175, 250
BAD91-400	400	400	400

### Ordering note

1. Specify all data at request of "catalogue number logic".
2. If accessories are required, please purchase as the "Accessories table" or at guide of "ordering code".
3. The light fittings are supplied without lamp, if required, PHILIPS lamps are recommended. If metal halide lamp required, HPI European standard ballast will be supplied, please use HPI European standard lamp.
4. Possible to supply power compensation capacitor, power factor  $\cos\phi \geq 0.85$ . If required, please specify.
5. The light fittings are supplied without external reflector, if required, please purchase as "ordering code" in "Accessories table".

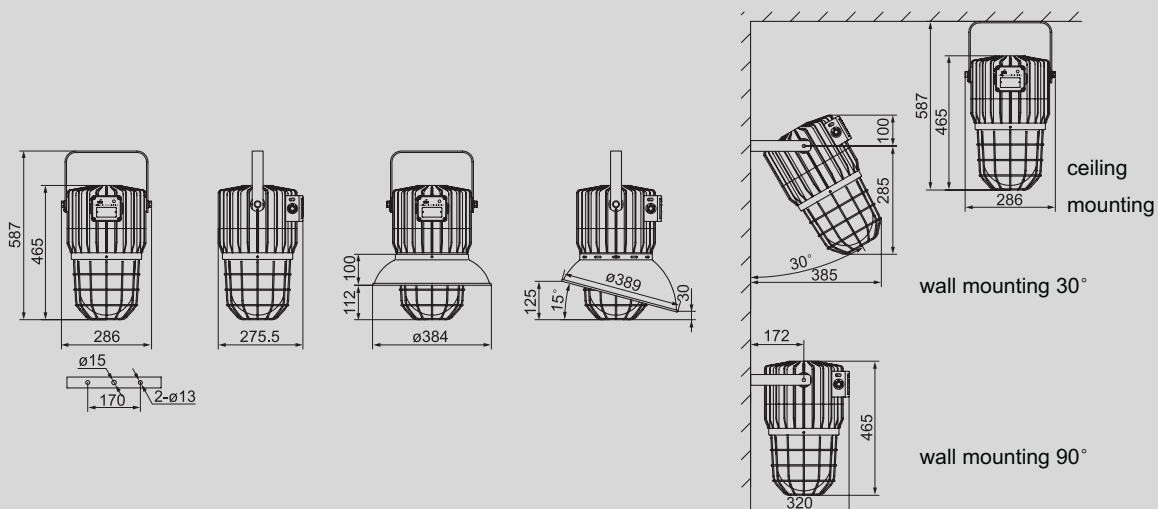
## Zones 1&2; 21&22

**Technical data**

Explosion-proof light fittings	BAD91-250
<b>Explosion protection</b> Gas explosion protection Dust explosion protection	⊕ II 2G Exde II CT3 Ex tD A21 IP65 T200°C
<b>Certificates</b> For gas explosion protection For dust explosion protection	LCIE 08 ATEX 6106, IECEX CQM 08.0019 PCEC (China)
<b>Conformity to standards</b>	EN 60079-0:2004; EN 60079-1:2004; EN 60079-7:2003; IEC 60079-0:2004; IEC 60079-1:2003; IEC 60079-7:2001 IEC 61241-0:2004 ; IEC 61241-1:2004
<b>Material</b> Enclosure Transparent cover Reflector(internal) Reflector(external) Wire guard Exposed fastener	Copper-free aluminium, powder coated, yellow Toughened glass, stands 4J impact High purity aluminium Pure aluminium, anodicoxidation treatment for surface Stainless steel Stainless steel
<b>Lamp</b> Lamp holder Available lamp and lamp wattage(W)	E40 High pressure sodium lamp (HSE): 150W, 250W High pressure mercury lamp (HME): 175W, 250W Metal halide lamp (HIE): 175W, 250W Note: HPI European standard lamp ballast is available in general
<b>Rated voltage</b>	AC 220V ~ 240V 50Hz
<b>Earthing protection</b>	M5(earthing bolt inside and outside of the light fittings))
<b>Degree of protection</b>	IP65
<b>Ambient temperature</b>	-20°C ~ +55°C
<b>Connecting terminal</b>	Terminal 3 x 1.5~2.5mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>	2 x M25 x 1.5 Plug
<b>Cable gland(option)</b>	Exe Cable gland DQM-I, manufactured by Warom, please see P7/17~18.
<b>Remarks</b>	The light fittings are supplied without lamp.
<b>Weight</b>	13.80kg



**Mounting versions**





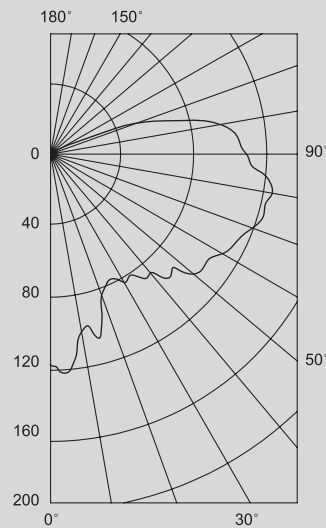
## Pendant Light Fittings BAD91 Series Explosion-proof Light Fittings

### Photometric data (BAD91-250)



Photometric data of 250W metal halide lamp

Rated luminous flux:23000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



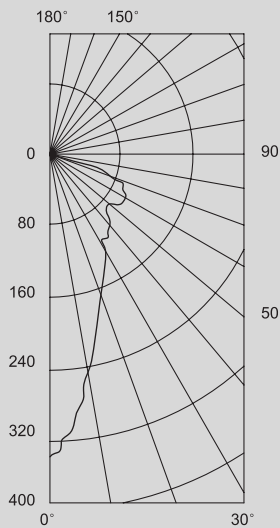
175W Metal halide lamp\*0.61  
175W High pressure mercury lamp\*0.32  
250W High pressure mercury lamp\*0.55  
150W High pressure sodium lamp\*0.65  
250W High pressure sodium lamp\*1.22

Angle	CP	Angle	CP	Angle	CP
0	2318	60	2409	120	98
5	1841	65	2434	125	54
10	1444	70	2474	130	41
15	1221	75	2526	135	30
20	1425	80	2454	140	21
25	1318	85	2413	145	14
30	1433	90	2343	150	10
35	1682	95	2290	155	7
40	1826	100	2116	160	5
45	2059	105	1591	165	4
50	2294	110	943	170	4
55	2323	115	372	175	4
				180	3



Photometric data of 250W metal halide lamp(with spherical reflector)

Rated luminous flux:23000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



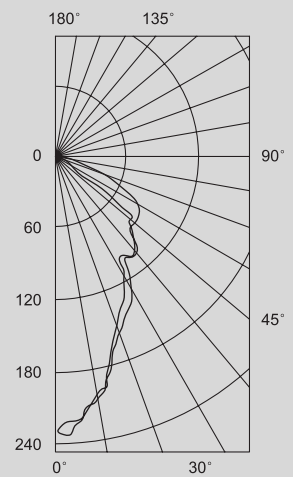
175W Metal halide lamp\*0.61  
175W High pressure mercury lamp\*0.32  
250W High pressure mercury lamp\*0.55  
150W High pressure sodium lamp\*0.65  
250W High pressure sodium lamp\*1.22

Angle	CP	Angle	CP	Angle	CP
0	6806	60	1883	120	9
5	6873	65	1790	125	8
10	6059	70	1471	130	6
15	5109	75	1038	135	4
20	4242	80	407	140	5
25	3672	85	139	145	5
30	3206	90	70	150	6
35	2538	95	47	155	6
40	2451	100	36	160	7
45	2010	105	25	165	7
50	1886	110	19	170	8
55	1983	115	12	175	7
				180	6



Photometric data of 250W metal halide lamp(with bevel reflector)

Rated luminous flux:23000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



175W Metal halide lamp\*0.61  
175W High pressure mercury lamp\*0.32  
250W High pressure mercury lamp\*0.55  
150W High pressure sodium lamp\*0.65  
250W High pressure sodium lamp\*1.22

0° Reflection angle CP				90° Reflection angle CP			
0	4532	95	29	0	4532	95	7
5	4386	105	14	5	4470	105	4
15	3495	115	8	15	3500	115	6
25	2862	125	5	25	2699	125	7
35	2063	135	6	35	2025	135	8
45	1797	145	7	45	1868	145	9
55	1687	155	7	55	944	155	10
65	1166	165	8	65	253	165	11
75	288	175	7	75	54	175	8
85	85	180	6	85	17	180	7
90	42			90	12		

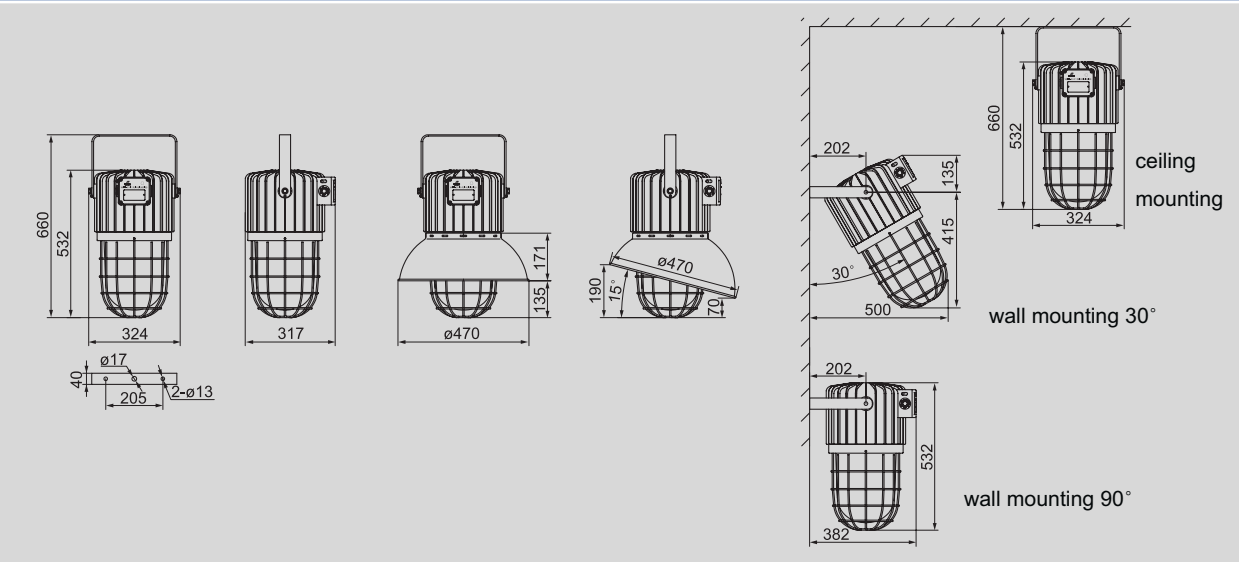
We can provide lighting designs and lighting data by using professional lighting calculation software DIALUX of Germany upon stimulated situation and working conditions at user's request.



Technical data

Explosion-proof light fittings	BAD91-400
<b>Explosion protection</b>	<p>Gas explosion protection <math>\text{Ex II 2G Exde II CT3}</math></p> <p>Dust explosion protection <math>\text{Ex tD A21 IP65 T200}^\circ\text{C}</math></p>
<b>Certificates</b>	<p>For gas explosion protection LCIE 08 ATEX 6112</p> <p>For dust explosion protection PCEC (China)</p>
<b>Conformity to standards</b>	<p>EN 60079-0:2004; EN 60079-1:2004; EN 60079-7:2003;</p> <p>IEC 60079-0:2004; IEC 60079-1:2003; IEC 60079-7:2001</p> <p>IEC 61241-0:2004; IEC 61241-1:2004</p>
<b>Material</b>	<p>Enclosure Copper-free aluminium, powder coated, yellow</p> <p>Transparent cover Toughened glass, stands 4J impact</p> <p>Reflector(internal) High purity aluminium</p> <p>Reflector(external) Pure aluminium, anodicoxidation treatment for surface</p> <p>Wire guard Stainless steel</p> <p>Exposed fastener Stainless steel</p>
<b>Lamp</b>	<p>Lamp holder E40</p> <p>Available lamp and lamp wattage(W) High pressure sodium lamp (HSE): 400W High pressure mercury lamp (HME): 400W Metal halide lamp (HIE): 400W</p> <p>Note: HPI European standard lamp ballast is available in general</p>
<b>Rated voltage</b>	AC 220V ~ 240V 50Hz
<b>Earthing protection</b>	M5(earthing bolt inside and outside of the light fittings)
<b>Degree of protection</b>	IP65
<b>Ambient temperature</b>	-20 $^\circ\text{C}$ ~ +55 $^\circ\text{C}$
<b>Connecting terminal</b>	Terminal 3 x 1.5 ~ 2.5mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>	2-M25 x 1.5 Plug
<b>Cable gland(option)</b>	Exe Cable gland DQM-I, manufactured by Warom, please see P7/17 ~ 18.
<b>Remarks</b>	The light fittings are supplied without lamp.
<b>Weight</b>	20.00kg

Mounting versions



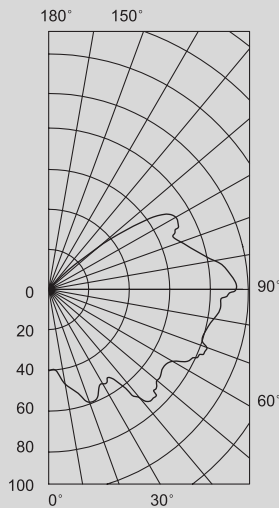
## Pendant Light Fittings BAD91 Series Explosion-proof Light Fittings

### Photometric data (BAD91-400)



Photometric data of 400W metal halide lamp

Rated luminous flux:38000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



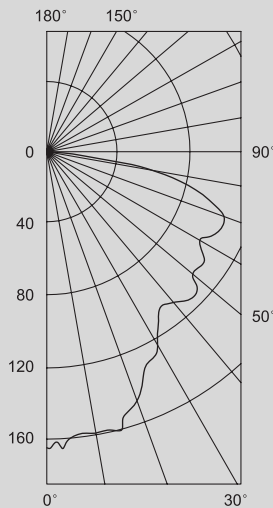
400W High pressure sodium lamp\*1.26  
400W High pressure mercury lamp\*0.58

Angle	CP	Angle	CP	Angle	CP
0	1743	60	2852	120	1005
5	1610	65	3055	125	184
10	1563	70	3200	130	101
15	1669	75	3028	135	73
20	1780	80	2857	140	60
25	1879	85	2729	145	51
30	1865	90	2761	150	49
35	1694	95	2996	155	52
40	2316	100	2930	160	50
45	2413	105	2787	165	57
50	2414	110	2600	170	6
55	2504	115	1963	175	6
				180	6



Photometric data of 400W metal halide lamp(with spherical reflector)

Rated luminous flux:38000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



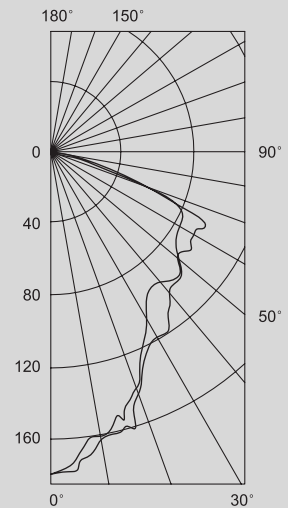
400W High pressure sodium lamp\*1.26  
400W High pressure mercury lamp\*0.58

Angle	CP	Angle	CP	Angle	CP
0	1743	60	2852	120	1005
5	1610	65	3055	125	184
10	1563	70	3200	130	101
15	1669	75	3028	135	73
20	1780	80	2857	140	60
25	1879	85	2729	145	51
30	1865	90	2761	150	49
35	1694	95	2996	155	52
40	2316	100	2930	160	50
45	2413	105	2787	165	57
50	2414	110	2600	170	6
55	2504	115	1963	175	6
				180	6



Photometric data of 400W metal halide lamp(with bevel reflector)

Rated luminous flux:38000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



400W High pressure sodium lamp\*1.26  
400W High pressure mercury lamp\*0.58

0° Reflection angle CP			90° Reflection angle CP				
0	6366	95	451	0	6366	95	48
5	6629	105	128	5	6320	105	16
15	5891	115	54	15	5671	115	10
25	5155	125	16	25	4462	125	11
35	4518	135	8	35	3919	135	12
45	4207	145	9	45	3475	145	12
55	3914	155	12	55	3034	155	12
65	3680	165	11	65	2875	165	12
75	3235	175	11	75	523	175	12
85	2640	180	11	85	139	180	12
90	1295			90	80		

We can provide lighting designs and lighting data by using professional lighting calculation software DIALUX of Germany upon stimulated situation and working conditions at user's request.



Accessories table

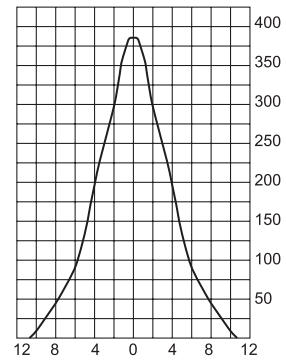
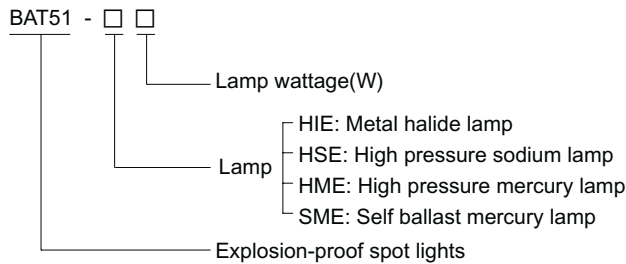
Picture	Accessories fittings	Ordering code	Weight (kg)
	N150 (HSE150)	61028	2.05
	L175 (HIE175)	61029	2.00
	G175 (HME175)	61041	2.02
	N250 (HSE250)	61030	2.10
	L250 (HIE250)	61031	2.10
	G250 (HME250)	61042	2.20
	L400 (HIE400)	61032	2.90
	N400 (HSE400)	61033	2.96
	G400 (HME400)	61043	3.00
	250 Wire guard	271001	0.65
	400 Wire guard	271002	0.87
	250 Glass cover	271003	2.65
	400 Glass cover	271004	4.80
	250 Spherical reflector	271005	0.37
	400 Spherical reflector	271006	0.52
	250 Bevel reflector	271007	0.35
	400 Bevel reflector	271008	0.49

## BAT51-□□Series Explosion-proof Spot Lights

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in Zone 1 and Zone 2
- ◆ Available lamp: high pressure sodium lamp, metal halide lamp, high pressure mercury lamp and self ballast mercury lamp, with E40 lamp holder.
- ◆ Enclosure has two versions: 400 and 1000.
- ◆ Enclosure in copper-free aluminium, powder coated, yellow.
- ◆ The light body can be adjusted within 360° horizontally, in elevation 60° ~90° for large area lighting.
- ◆ Toughened glass cover, impact resistance and high light transmission.



### Catalogue number logic



Luminous intensity distribution (cd/1000lm)



### Selection table

Type/Ordering code	Available lamp wattage (W)				Weight (kg)
	HIE	HME	HSE	SME	
BAT51-400	175, 250, 400	175, 250, 400	150, 250, 400	250, 500	14.50
BAT51-1000	1000	-	1000	-	75.50

### Ordering note

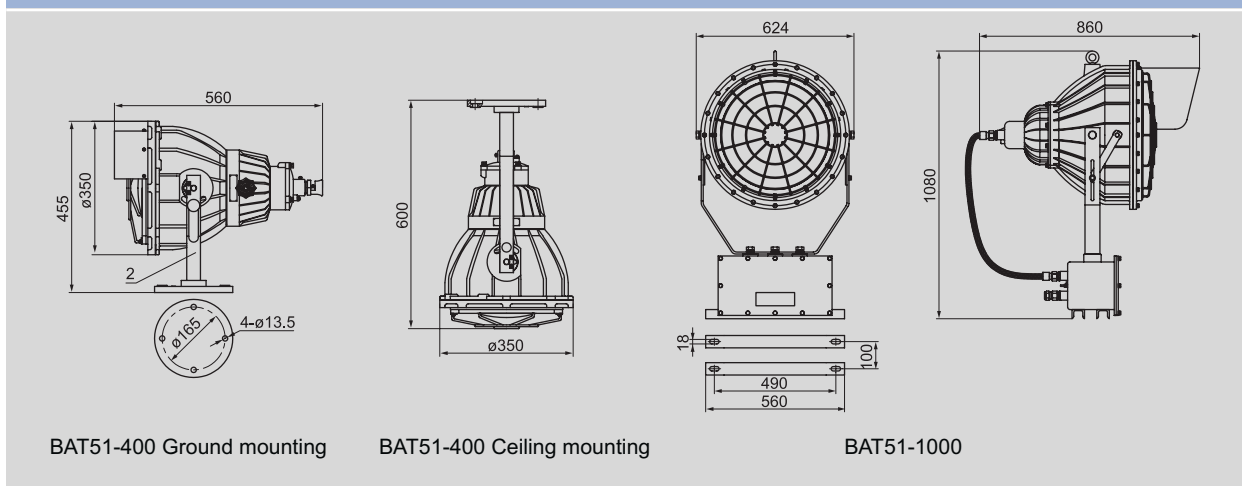
1. The light fittings are supplied without lamp, if required, PHILIPS lamps are recommended. If metal halide lamp required, HPI European standard ballast will be supplied, please use HPI European standard lamp.
2. Possible to supply power compensation capacitor, power factor  $\cos\phi \geq 0.85$ . If required, please specify.
3. Light fittings of 1000 version are supplied with lamp and ballast, please specify the type of lamp when place an order.

# Zones 1&2

Technical data																							
Explosion-proof spot lights	BAT51-400	BAT51-1000																					
<b>Explosion protection</b> Gas explosion protection	Ex II 2G Exd II BT4(T3)	Ex II 2G Exd II BT2																					
<b>Certificates</b> For gas explosion protection	PCEC (China)	PCEC (China)																					
<b>Conformity to standards</b>	IEC 60079-0:2004; IEC 60079-1:2003																						
<b>Material</b> Enclosure Wire guard Transparent cover Reflector(internal) Exposed fastener	Copper-free aluminium, powder coated, yellow. Zinc plated carbon steel, powder coated(white) Toughened glass, stands 4J impact High purity aluminium Stainless steel																						
<b>Lamp</b> Lamp holder Lamp wattage(W)	E40 <table border="1"> <thead> <tr> <th>Available lamp</th> <th>Ex II 2G Exd II BT4</th> <th>Ex II 2G Exd II BT3</th> <th>Ex II 2G Exd II BT2</th> </tr> </thead> <tbody> <tr> <td>HIE</td> <td>175W, 250W</td> <td>400W</td> <td>1000W</td> </tr> <tr> <td>HSE</td> <td>150W, 250W</td> <td>400W</td> <td>1000W</td> </tr> <tr> <td>HME</td> <td>175W, 250W</td> <td>400W</td> <td>—</td> </tr> <tr> <td>SME</td> <td>250W</td> <td>500W</td> <td>—</td> </tr> </tbody> </table>			Available lamp	Ex II 2G Exd II BT4	Ex II 2G Exd II BT3	Ex II 2G Exd II BT2	HIE	175W, 250W	400W	1000W	HSE	150W, 250W	400W	1000W	HME	175W, 250W	400W	—	SME	250W	500W	—
Available lamp	Ex II 2G Exd II BT4	Ex II 2G Exd II BT3	Ex II 2G Exd II BT2																				
HIE	175W, 250W	400W	1000W																				
HSE	150W, 250W	400W	1000W																				
HME	175W, 250W	400W	—																				
SME	250W	500W	—																				
<b>Rated voltage</b>	220V ~ 240V 50Hz(AC230V 50Hz for 1000W metal halide lamp and high pressure sodium lamp)																						
<b>Earthing protection</b>	M5(earthing bolt inside and outside of the light fittings)																						
<b>Degree of protection</b>	IP65																						
<b>Ambient temperature</b>	-20°C ~ +55°C																						
<b>Connecting terminal</b>	Terminal 3 x 1.5 ~ 2.5mm <sup>2</sup> (L+N+PE)																						
<b>Cable entries</b>	BAT51-400 type: G3/4", BAT51-1000 type: M25 x 1.5																						
<b>Cable gland</b>	BAT51-400 type: with seal ring and trumpet shaped gland BAT51-1000 type: power wires between light fittings and ballast are connected by BNG stainless steel wire explosion-proof pipe connector. Type: BNG-M25 x 1.5(M)/M25 x 1.5(M), 1000mm long. Cable gland at client cable entries: 1 x DQM-II M25 x 1.5, brass, armored, cable wiring. ø10 ~ ø14 (mm)																						
<b>Available cable outer diameter</b>																							
<b>Remarks</b>	<ol style="list-style-type: none"> <li>For BAT51-400 type: if use metal halide lamp, high pressure mercury lamp or high pressure sodium lamp, corresponding explosion-proof ballast shall be equipped. BAZ51 Series explosion-proof ballast manufactured by Warom is recommended, please see P2/80 for details.</li> <li>For BAT51-1000 type: it is supplied with explosion-proof ballast, no need to equip ballast additionally. If use metal halide lamp, please choose HPI European standard metal halide lamp.</li> </ol>																						



#### Dimensional drawings

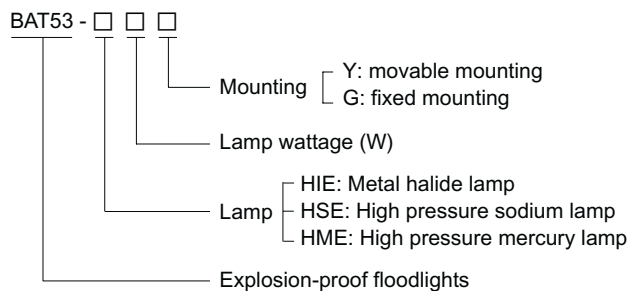


## BAT53-□□□ Series Explosion-proof Floodlights

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used
  - in Zone 1 and Zone 2
  - in Zone 21 and Zone 22
- ◆ Enclosure has four versions: 125, 250, 400 and 1000.
- ◆ Integral structure with the lamp, the ballast, convenient to maintain.
- ◆ Common explosion-proof trigger, quick starting, stable performance and long service life.
- ◆ Enclosure in copper-free aluminium, powder coated, yellow.
- ◆ Toughened glass cover, impact resistance and high light transmission.



### ■ Catalogue number logic



### ■ Selection table

Type/Ordering code	Available lamp wattage (W)			Lamp holder	Weight (kg)
	HIE	HSE	HME		
BAT53-125	70, 100, 150	70, 100	80, 125	E27	6.50
BAT53-250	175, 250	150, 250	175, 250	E40	13.00
BAT53-400	400	400	-	E40	28.00
BAT53-1000	1000	1000	-	E40	75.00

### ■ Ordering note

1. Specify all data at request of "catalogue number logic".
2. If accessories are required, please purchase as the "Accessories table" or at guide of "ordering code".
3. The light fittings are supplied without lamp, if required, PHILIPS lamps are recommended. If metal halide lamp required, HPI European standard ballast will be supplied, please use HPI European standard lamp.
4. Possible to supply power compensation capacitor, power factor  $\cos\phi \geq 0.85$ . If required, please specify.

# Zones 1&2; 21&22

### Technical data

<b>Explosion-proof floodlights</b>	<b>BAT53- □ 125 □</b>
<b>Explosion protection</b>	<p>Gas explosion protection</p> <p>Dust explosion protection</p>
<b>Certificates</b>	<p>LCIE 05 ATEX 6143; IECEx CQM 07.0004;</p> <p>PCEC (China)</p>
<b>Conformity to standards</b>	<p>EN 60079-0:2004; EN 60079-1:2004; EN 60079-7:2003;</p> <p>IEC 60079-0:2004; IEC 60079-1:2003; IEC 60079-7:2001</p> <p>IEC 61241-0:2004; IEC 61241-1:2004</p>
<b>Material</b>	<p>Enclosure</p> <p>Ballast</p> <p>Wire guard</p> <p>Reflector(internal)</p> <p>Trigger</p> <p>Capacitor</p> <p>Exposed fastener</p>
<b>Lamp</b>	<p>Lamp holder</p> <p>Available lamp and lamp wattage(W)</p>
<b>Rated voltage</b>	
<b>Earthing protection</b>	
<b>Degree of protection</b>	
<b>Ambient temperature</b>	
<b>Connecting terminal</b>	
<b>Cable entries</b>	
<b>Available cable outer diameter</b>	

Ex II 2G Exde II BT4

Ex tD A21 IP65 T135°C

LCIE 05 ATEX 6143; IECEx CQM 07.0004;

PCEC (China)

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

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

IEC 61241-0:2004; IEC 61241-1:2004

Copper-free aluminium, powder coated, yellow.

Inductive ballast, quick starting, stable performance

Zinc plated carbon steel, powder coated(white)

High purity aluminium

Common explosion-proof trigger

Explosion-proof capacitor, it is not supplied with standard products, but available at user's request.

Stainless steel

E27

High pressure sodium lamp (HSE): 70W, 100W

High pressure mercury lamp (HME): 80W, 125W

Metal halide lamp (HIE): 70W, 100W, 150W

Note: HPI European standard lamp ballast is available in general

AC 220V ~ 240V 50Hz

M5(earthing bolt inside and outside of the light fittings)

IP65

-20°C ~ +55°C

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

2 x ø21, 1 x M20 x 1.5 Cable gland(DQM-I, carbon steel), 1 x M20 x 1.5 Plug

ø5 ~ ø10 (mm)

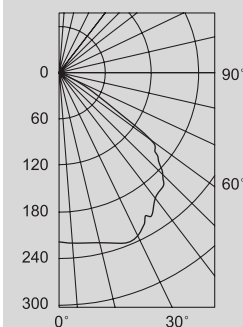


### Photometric data

#### Photometric data of 100W metal halide lamp

Rated luminous flux:9000lm;

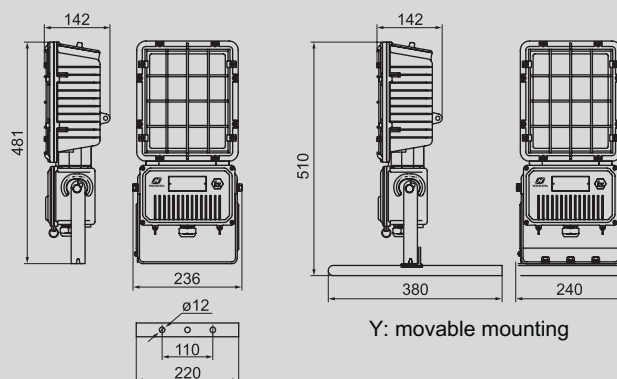
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP
0	1948	50	1370
5	1945	55	612
10	1953	60	385
15	1963	65	236
20	1950	70	131
25	1955	75	66
30	1839	80	37
35	1733	85	0
40	1649	90	0
45	1588		

70W Metal halide lamp\*0.56  
 70W High pressure sodium lamp\*0.67  
 100W High pressure sodium lamp\*1.06  
 80W High pressure mercury lamp\*0.41  
 125W High pressure mercury lamp\*0.68  
 150W Metal halide lamp\*1.66

### Dimensional drawings



G: fixed mounting

Y: movable mounting



## Floodlights

### BAT53 Series Explosion-proof Floodlights

#### Technical data

##### Explosion-proof floodlights

**BAT53- □ 250 □**

##### Explosion protection

Gas explosion protection  
Dust explosion protection

⊕ II 2G Exde II BT3  
Ex tD A21 IP65 T200°C

##### Certificates

For gas explosion protection  
For dust explosion protection

LCIE 05 ATEX 6143; IECEx CQM 07.0004;  
PCEC (China)

##### 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  
IEC 61241-0:2004 ; IEC 61241-1:2004

##### Material

Enclosure  
Ballast  
Wire guard  
Reflector(internal)  
Trigger  
Capacitor  
Exposed fastener

Copper-free aluminium, powder coated, yellow.  
Inductive ballast, quick starting, stable performance  
Zinc plated carbon steel, powder coated(white)  
High purity aluminium  
Common explosion-proof trigger  
Explosion-proof capacitor, it is not supplied with standard products, but available at user's request.  
Stainless steel

##### Lamp

Lamp holder  
Available lamp and lamp wattage(W)

E40  
High pressure sodium lamp (HSE): 150W, 250W  
High pressure mercury lamp (HME): 175W, 250W  
Metal halide lamp (HIE): 175W, 250W  
Note: HPI European standard lamp ballast is available in general  
AC 220V~240V 50Hz

##### Rated voltage

##### Earthing protection

##### Degree of protection

##### Ambient temperature

##### Connecting terminal

##### Cable entries

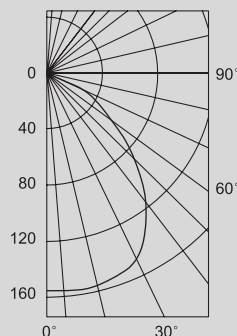
##### Available cable outer diameter

M5(earthing bolt inside and outside of the light fittings)  
IP65  
-20°C ~ +55°C  
Terminal 3 x 1.5~2.5mm<sup>2</sup> (L+N+PE)  
2 x ø26, 1 x M25 x 1.5 Cable gland(DQM-I ,carbon steel), 1 x M25 x 1.5 Plug  
ø10~ø14 (mm)



#### Photometric data

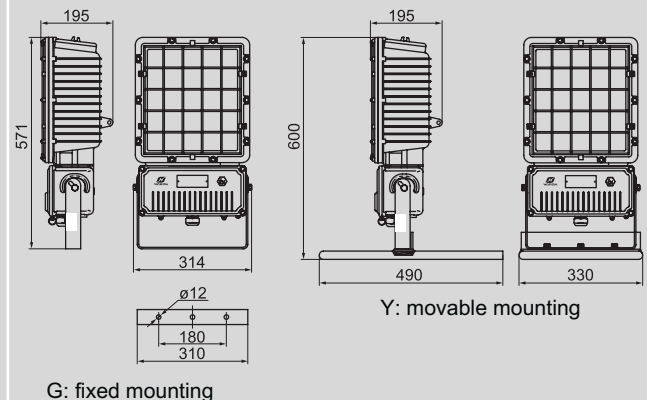
Photometric data of  
250W metal halide lamp  
Rated luminous flux:23000lm;  
Luminous intensity distribution  
cd/1000lm



Angle	CP	Angle	CP
0	3162	50	1419
5	3197	55	975
10	3183	60	613
15	3128	65	354
20	3073	70	202
25	3010	75	127
30	2790	80	65
35	2505	85	5
40	2191	90	3
45	1806		

175W Metal halide lamp\*0.61  
150W High pressure sodium lamp\*0.65  
250W High pressure sodium lamp\*1.22  
175W High pressure mercury lamp\*0.32  
250W High pressure mercury lamp\*0.55

#### Dimensional drawings



Technical data	
<b>Explosion-proof floodlights</b>	<b>BAT53- □ 400 □</b>
<b>Explosion protection</b>	<p>Gas explosion protection <math>\text{Ex II 2G Exde II BT3}</math></p> <p>Dust explosion protection <math>\text{Ex tD A21 IP65 T200}^\circ\text{C}</math></p>
<b>Certificates</b>	<p>For gas explosion protection LCIE 07 ATEX 6106; IECEx CQM 08.0014; MC, AEX-8549(Brazil)</p> <p>For dust explosion protection PCEC (China)</p>
<b>Conformity to standards</b>	<p>EN 60079-0:2004; EN 60079-1:2004; EN 60079-7:2003;</p> <p>IEC 60079-0: 2004; IEC 60079-1:2003; IEC 60079-7:2001</p> <p>IEC 61241-0:2004 ; IEC 61241-1:2004</p>
<b>Material</b>	<p>Enclosure Copper-free aluminium, powder coated, yellow.</p> <p>Ballast Inductive ballast, quick starting, stable performance</p> <p>Reflector(internal) High purity aluminium</p> <p>Trigger Common explosion-proof trigger</p> <p>Capacitor Explosion-proof capacitor, it is not supplied with standard products, but available at user's request.</p> <p>Exposed fastener Stainless steel</p>
<b>Lamp</b>	<p>Lamp holder E40</p> <p>Available lamp and lamp wattage(W) High pressure sodium lamp (HSE): 400W(tubular)</p> <p>Metal halide lamp (HIE): 400W(tubular)</p> <p>Note: HPI European standard lamp ballast is available in general</p>
<b>Rated voltage</b>	AC 220V ~ 240V 50Hz
<b>Earthing protection</b>	M5(earthing bolt inside and outside of the light fittings)
<b>Degree of protection</b>	IP65
<b>Ambient temperature</b>	-20 $^\circ\text{C}$ ~ +55 $^\circ\text{C}$
<b>Connecting terminal</b>	Terminal 3 x 1.5 ~ 2.5mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>	2 x M25 x 1.5 , 1 x M25 x 1.5 Cable gland(DQM-I, carbon steel), 1 x M25 x 1.5 Plug
<b>Available cable outer diameter</b>	$\phi 10 \sim \phi 14$ (mm)



Photometric data	Dimensional drawings																																												
<p><b>Photometric data of 400W metal halide lamp</b></p> <p>Rated luminous flux: 38000lm;</p> <p>Luminous intensity distribution cd/1000lm</p> <table border="1"> <thead> <tr> <th>Angle</th> <th>CP</th> <th>Angle</th> <th>CP</th> </tr> </thead> <tbody> <tr><td>0</td><td>5982</td><td>50</td><td>2330</td></tr> <tr><td>5</td><td>6178</td><td>55</td><td>1849</td></tr> <tr><td>10</td><td>6103</td><td>60</td><td>443</td></tr> <tr><td>15</td><td>6054</td><td>65</td><td>338</td></tr> <tr><td>20</td><td>5706</td><td>70</td><td>234</td></tr> <tr><td>25</td><td>5342</td><td>75</td><td>111</td></tr> <tr><td>30</td><td>4751</td><td>80</td><td>52</td></tr> <tr><td>35</td><td>4235</td><td>85</td><td>12</td></tr> <tr><td>40</td><td>3517</td><td>90</td><td>4</td></tr> <tr><td>45</td><td>2765</td><td></td><td></td></tr> </tbody> </table> <p>400W High pressure sodium lamp*1.26</p>	Angle	CP	Angle	CP	0	5982	50	2330	5	6178	55	1849	10	6103	60	443	15	6054	65	338	20	5706	70	234	25	5342	75	111	30	4751	80	52	35	4235	85	12	40	3517	90	4	45	2765			
Angle	CP	Angle	CP																																										
0	5982	50	2330																																										
5	6178	55	1849																																										
10	6103	60	443																																										
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20	5706	70	234																																										
25	5342	75	111																																										
30	4751	80	52																																										
35	4235	85	12																																										
40	3517	90	4																																										
45	2765																																												

## Floodlights

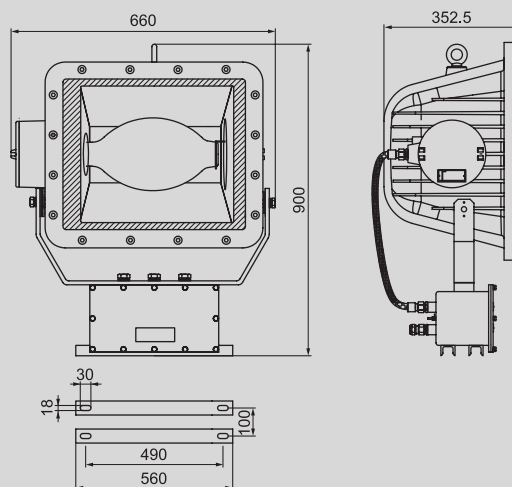
### BAT53 Series Explosion-proof Floodlights

#### Technical data

Explosion-proof floodlights	BAT53-□ 1000 □
<b>Explosion protection</b>	Ex II 2G Exd II BT2
Gas explosion protection	
<b>Certificates</b>	PCEC (China)
For gas explosion protection	IEC 60079-0: 2004; IEC 60079-1: 2003
<b>Conformity to standards</b>	
<b>Material</b>	
Enclosure	Copper-free aluminium, powder coated, yellow.
Ballast	Inductive ballast, quick starting, stable performance
Reflector(internal)	High purity aluminium
Exposed fastener	Stainless steel
<b>Lamp</b>	
Lamp holder	E40
Available lamp and lamp wattage(W)	High pressure sodium lamp (HSE):1000W Metal halide lamp (HIE):1000W Note: HPI European standard lamp ballast is available in general
<b>Rated voltage</b>	AC 230V 50Hz
<b>Earthing protection</b>	M5(earthing bolt inside and outside of the light fittings)
<b>Degree of protection</b>	IP65
<b>Ambient temperature</b>	-20°C ~ +55°C
<b>Connecting terminal</b>	Terminal 3 x 1.5~2.5mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>	1 x M25 x 1.5
<b>Cable gland</b>	Power wires between light fittings and ballast are connected by BNG stainless steel wire explosion-proof pipe connector. Type: BNG-M25 x 1.5(M)/M25 x 1.5(M), 1000mm long. Cable gland at client cable entries: 1 x DQM-II M25 x 1.5, brass, armored, cable wiring.
<b>Available cable outer diameter</b>	ø10 ~ ø14 (mm)




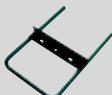


#### Dimensional drawings



BAT53-1000

## Accessories table

Picture	Accessories fittings	Ordering code	Weight (kg)	
	125 Ballast	N70 (HSE70)	53001	1.360
		L70 (HIE70)	53002	1.350
		G80 (HME80)	53026	1.439
		N100 (HSE100)	53003	1.800
		L100 (HIE100)	53004	1.750
		G125 (HME125)	53027	1.760
	250 Ballast	N150 (HSE150)	53005	2.050
		L175 (HIE175)	53007	2.000
		G175 (HME175)	53028	2.177
		N250 (HSE250)	53006	2.100
		L250 (HIE250)	53008	2.100
		G250 (HME250)	53029	2.200
	400 Ballast	L400 (HIE400)	53009	2.960
		N400 (HSE400)	53010	2.900
1000 Ballast	N1000 (HSE1000)	53030	10.65	
	L1000 (HIE1000)	53031	10.50	
	Explosion-proof trigger	61034	0.314	
	125 Explosion-proof capacitor	53012	0.450	
	250 Explosion-proof capacitor	53013	0.450	
	400 Explosion-proof capacitor	53014	0.510	
	125 Movable support	53015	1.800	
	250 Movable support	53016	2.350	

## Power connection



◆ Open the ballast case, select right cables, pass them through cable entries to connect to the connection base inside. Correctly connect, press down, ensuring no looseness and falling off. Then lock cable gland, close the cover, and tighten the bolt.

For 400 version, the ballast case is placed at back of the light fittings, with high. When connect wires, just need to loosen the tightening bolt and unscrew the ballast case.



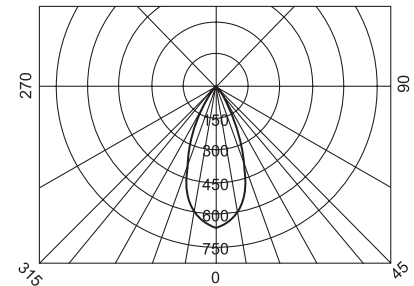
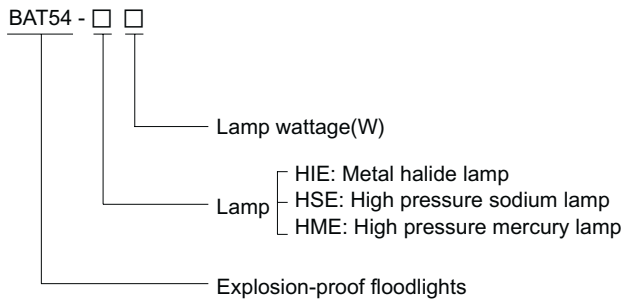
◆ Counter clockwise unscrew the cover on top of lamp case (at the side of lamp case for 400 and 1000 versions), screw right lamp into lamp holder and screw down it without looseness and falling off, ensuring good electric contact. Then clockwise screw down cover and ensure good seal performance. By the same steps for relamp.



## BAT54-□□Series Explosion-proof Floodlights

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in Zone 2
- ◆ Available lamp holder: E40
  - High pressure sodium lamp,
  - High pressure mercury lamp
  - Metal halide lamp
- ◆ Enclosure has two versions: 400 and 1000.
- ◆ Enclosure in welded stainless steel plate, light.
- ◆ Integral structure with the lamp, the ballast, convenient to maintain.
- ◆ Seal strip between cover and enclosure, fastened by agraffe for immediate starting and convenient maintenance.
- ◆ The light body can be adjusted in elevation 45° ~ 90° .
- ◆ Toughened glass, impact resistance and high light transmission.

### ■ Catalogue number logic



### ■ Selection table

Type/Ordering code	Available lamp wattage(W)			Weight (kg)
	HIE	HSE	HME	
BAT54-400	250, 400	250, 400	250, 400	7.20
BAT54-1000	1000	1000	-	10.50

### ■ Ordering note

- 1.Specify all data at request of "catalogue number logic".
- 2.The light fittings are supplied without lamp, if required, PHILIPS lamps are recommended.If metal halide lamp required, HPI European standard ballast will be supplied, please use HPI European standard lamp.
- 3..The light fittings are supplied without ballast. If required, BAZ51 Series explosion-proof ballast made of stainless steel manufactured by Warom is recommended, please see P2/82 for details.

# Zone 2



### Technical data

#### Explosion-proof floodlights

#### Explosion protection

Gas explosion protection

⊕ II 2G ExnR II T3(T2); T3 for 400W and below, T2 for 1000W

#### Certificates

For gas explosion protection

PCEC (China)

#### Conformity to standards

IEC 60079-0: 2004; IEC 60079-15: 2005

#### Material

Enclosure

Stainless steel plate, light, corrosion protection

Ballast

Inductive ballast, quick starting, stable performance

Reflector(internal)

High purity aluminium

Exposed fastener

Stainless steel

#### Lamp

Lamp holder

E40

Available lamp and lamp wattage(W)

High pressure sodium lamp (HSE): 250W, 400W, 1000W

High pressure mercury lamp (HME): 250W, 400W

Metal halide lamp (HIE): 250W, 400W, 1000W

AC 220V~240V 50Hz (AC230V 50Hz for 1000W metal halide lamp and high pressure sodium lamp)

#### Rated voltage

M5(earthing bolt inside and outside of the light fittings))

#### Earthing protection

#### Degree of protection

IP65

#### Ambient temperature

-20°C ~ +55°C

#### Connecting terminal

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

#### Cable gland

1 x G3/4" Cable gland (DQM-I, stainless steel)

#### Available cable outer diameter

ø10~ø14 (mm)

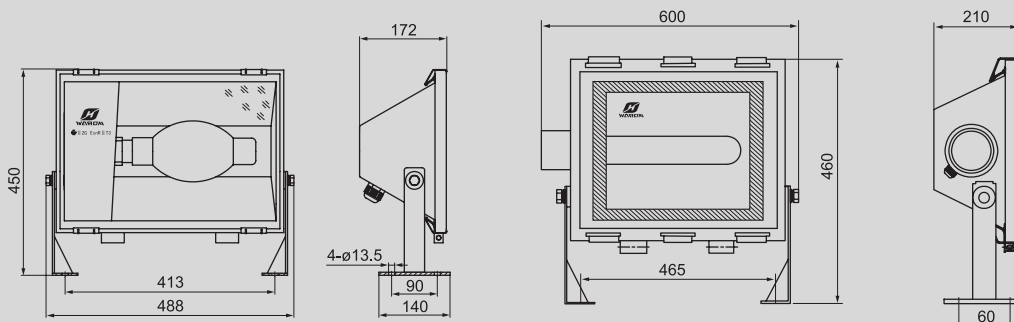
#### Remarks

1. The light fittings are supplied without explosion-proof ballast, if required, please purchase separately.

2. For 1000W lamp, please specify if ballast required.



### Dimensional drawings



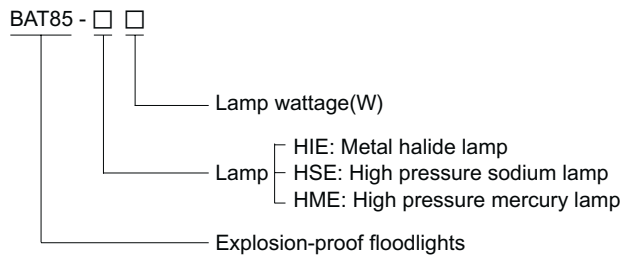
BAT54-400

BAT54-1000

## BAT85-□□ Series Explosion-proof Floodlights

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in Zone 1 and Zone 2
- ◆ Available lamp : type 250 and type 400.
- ◆ Enclosure in copper-free aluminium, powder coated, yellow.
- ◆ Integral structure with the lamp, the ballast, convenient to maintain.
- ◆ Toughened glass, high light transmission, stands 4J impact.

### Catalogue number logic



### Selection table

Type/Ordering code	Available lamp wattage (W)			Lamp holder	Weight (kg)
	HIE	HSE	HME		
BAT85- □ □	175, 250, 400	150, 250, 400	175, 250, 400	E40	25.00

### Ordering note

1. Specify all data at request of "catalogue number logic",
2. If accessories are required, please purchase as the "Accessories table" or at guide of "ordering code".
3. The light fittings are supplied without lamp, if required, PHILIPS lamps are recommended. If metal halide lamp required, HPI European standard ballast will be supplied, please use HPI European standard lamp.
4. Possible to supply power compensation capacitor, power factor  $\cos\phi \geq 0.85$ . If required, please specify.

# Zones 1&2

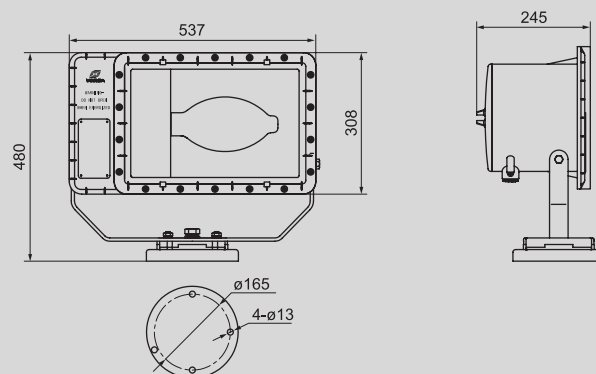


## Technical data

Explosion-proof floodlights	BAT85- □□
<b>Explosion protection</b>	Gas explosion protection
	⊕ II 2G Exd II CT3
<b>Certificates</b>	
For gas explosion protection	LCIE 09 ATEX_____
<b>Conformity to standards</b>	EN 60079-0:2007; EN 60079-1:2007 IEC 60079-0:2007; IEC 60079-1:2007
<b>Material</b>	
Enclosure	Copper-free aluminium, powder coated, yellow.
Glass sheet	Toughened glass, stands 4J impact
Ballast	Inductive ballast, quick starting, stable performance
Reflector	High purity aluminium
Exposed fastener	Stainless steel
<b>Lamp</b>	
Lamp holder	E40
Available lamp	Metal halide lamp (HIE): 175W, 250W, 400W Note: HPI European standard lamp ballast is available in general High pressure sodium lamp (HSE): 150W, 250W, 400W High pressure mercury lamp (HME): 175W, 250W, 400W
<b>Rated voltage</b>	AC 220V ~ 240V 50Hz
<b>Earthing protection</b>	M5(earthing bolt inside and outside of the light fittings)
<b>Degree of protection</b>	IP65
<b>Ambient temperature</b>	-20°C ~ +55°C
<b>Connecting terminal</b>	Terminal 3 x 1.5 ~ 2.5mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>	2 x M25 x 1.5 Plug
<b>Cable gland(option)</b>	Exd cable gland DQM-II, manufactured by Warom, please see P7/20 ~ 23.



## Dimensional drawings





## Floodlights BAT85 Series Explosion-proof Floodlights

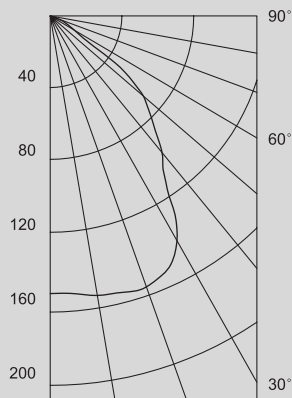
### Photometric data

#### Photometric data of 250W metal halide lamp

Rated luminous flux:20000lm;

The data from PHILIPS lamp;

Luminous intensity distribution cd/1000lm



175W Metal halide lamp\*0.61

150W High pressure sodium lamp\*0.65

250W High pressure sodium lamp\*1.22

175W High pressure mercury lamp\*0.32

250W High pressure mercury lamp\*0.55

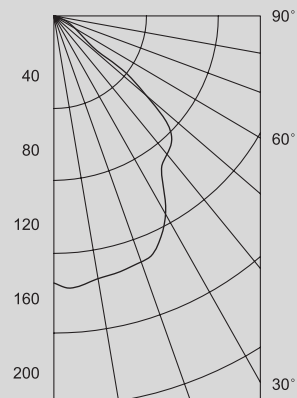
Angle	CP	Angle	CP
0	2964	50	488
5	2988	55	212
10	3115	60	150
15	2991	65	110
20	2879	70	79
25	2543	75	58
30	2319	80	36
35	2324	85	0
40	2140	90	0
45	1674		

#### Photometric data of 400W metal halide lamp

Rated luminous flux:38000lm;

The data from PHILIPS lamp;

Luminous intensity distribution cd/1000lm



400W High pressure sodium lamp\*1.26


400W High pressure mercury lamp\*0.58

Angle	CP	Angle	CP
0	5076	50	2373
5	5138	55	1015
10	5038	60	440
15	4975	65	257
20	4951	70	305
25	4691	75	220
30	4279	80	86
35	3681	85	0
40	3385	90	0
45	3156		

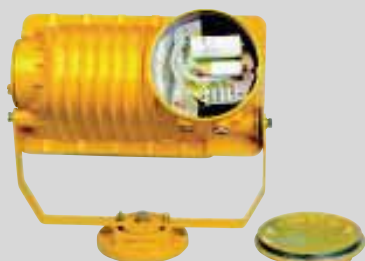


We can provide lighting designs and lighting data by using professional lighting calculation software DIALUX of Germany upon stimulated situation and working conditions at user's request.

#### Accessories table

Picture	Accessories fittings	Ordering code	Weight (kg)
	N150 (HSE150)	61028	2.05
	L175 (HIE175)	61029	2.00
	G175 (HME175)	61041	2.02
	N250 (HSE250)	61030	2.10
	L250 (HIE250)	61031	2.10
	G250 (HME250)	61042	2.20
	L400 (HIE400)	61032	2.90
	N400 (HSE400)	61033	2.96
	G400 (HME400)	61043	3.00

#### Power connection and lamp fixing



◆ Open the ballast case at bottom of the light fittings, select right cables, pass them through cable entries to connect to the connection base inside. Correctly connect, press down, ensuring no looseness and falling off. Then lock cable gland, close the cover (please take note to protect the flameproof threads).



◆ Counter clockwise unscrew the cover at the side of lamp case, screw right lamp into lamp holder and screw down it without looseness and falling off, ensuring good electric contact. Then clockwise screw down cover and ensure good seal performance. By the same steps for relamp (please take note to protect the flameproof threads).

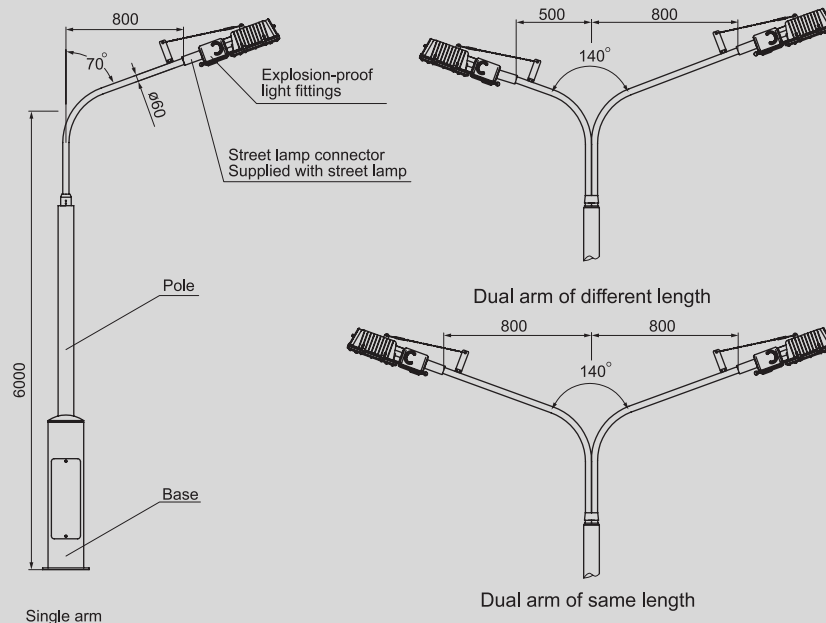




**BAT53-250, BAT53-400 Type  
BAD71-250, BAD71-400 Type  
BAD91-250, BAD91-400 Type  
Street Mounted Explosion-proof Lamps**

- ◆ Explosion protection to
    - CENELEC
    - IEC
  - ◆ Can be used
    - in Zone 1 and Zone 2
    - in Zone 21 and Zone 22
  - ◆ Please refer to below mounting schematic diagram to select right lamp and mounting versions at request of job site,
  - ◆ Please refer to this catalogue for technical data and ordering information of each light fittings.
- Note: If mounting version of BAT53-250 type street lamp required, please specify when order.
- ◆ The street lamps are supplied without lamp pole, if required, possible to supply, please contact us or our local office.

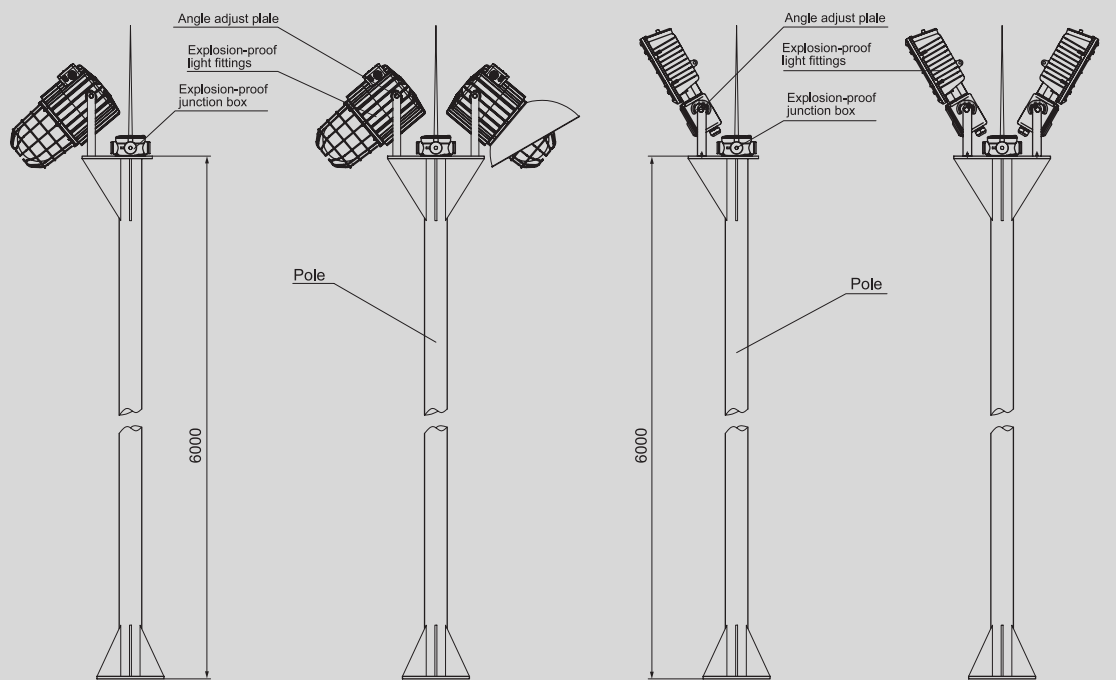
### Mounting schematic diagram of BAT53-250 type street lamp



- ◆ Note: Diameter of connecting light fittings is  $\varnothing 60$ .

## Zones 1&2; 21&22

### Mounting schematic diagram of BAT53-250, BAT53-400 type, BAD71-250, BAD71-400 type, BAD91-250, BAD91-400 type street lamps



Platform mounting  
(Single lamp)

Platform mounting  
(Multiple lamps)

Platform mounting  
(Single lamp)

Platform mounting  
(Multiple lamps)

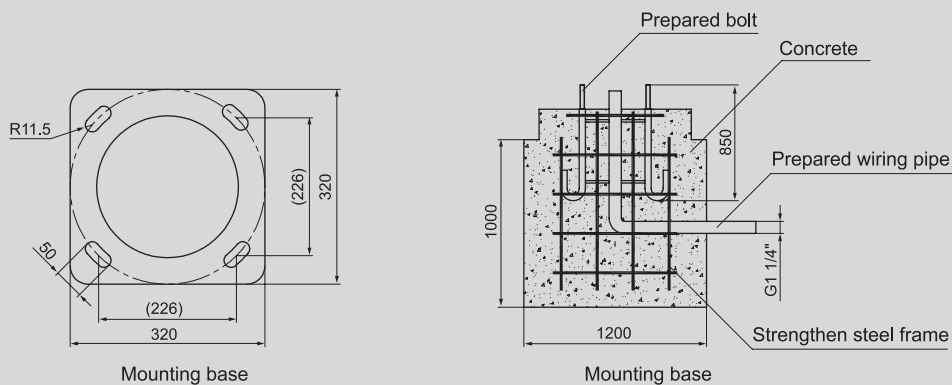
BAD71-250, BAD71-400 type  
BAD91-250, BAD91-400 type

BAT53-250, BAT53-400 type

Note: For BAD71-250, BAD71-400, BAD91-400 type and BAD91-250 type, the installation angle of light fittings can be adjusted at the request of lighting on job site. The external reflector is also can be installed to increase the luminous intensity of working face.



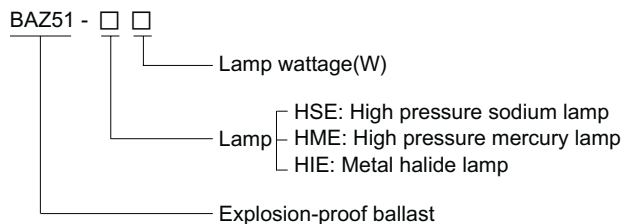
### Reference diagram of street lamp mounting base



## BAZ51-□□ Series Explosion-proof Ballast

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used
  - in Zone 1 and Zone 2
  - in Zone 21 and Zone 22
- ◆ Applicable to metal halide lamp, high pressure sodium lamp and high pressure mercury lamp with lamp wattage 400W and below.
- ◆ Can be mounted separately as well as block mounted together with explosion-proof light fittings. If mounted separately, please match it with BAT51-400 of Warom for external mounting, If block mounted, please match it with BAD series products of Warom for mounting of pendant light fittings.
- ◆ Enclosure in copper-free aluminium, powder coated, yellow.
- ◆ Inductive ballast, quick starting, stable performance.

### Catalogue number logic



### Selection table

Type/Ordering code	Available lamp wattage(W)	Weight (kg)	Enclosure	Type/Ordering code	Available lamp wattage(W)	Weight (kg)	Enclosure
BAZ51-HIE 70	HIE 70	6.20	I	BAZ51-HSE 150	HSE 150	6.90	I
BAZ51-HIE 100	HIE 100	6.60	I	BAZ51-HSE 250	HSE 250	7.70	II
BAZ51-HIE 150	HIE 150	6.70	I	BAZ51-HSE 400	HSE 400	8.50	II
BAZ51-HIE 175	HIE 175	6.85	I	BAZ51-HME 80	HME 80	6.30	I
BAZ51-HIE 250	HIE 250	6.95	I	BAZ51-HME 125	HME 125	6.61	I
BAZ51-HIE 400	HIE 400	7.70	II	BAZ51-HME 175	HME 175	7.03	I
BAZ51-HSE 70	HSE 70	6.21	I	BAZ51-HME 250	HME 250	7.05	I
BAZ51-HSE 100	HSE 100	6.65	I	BAZ51-HME 400	HME 400	8.60	II

Remarks: Possible to supply power compensation capacitor, power factor  $\cos\phi \geq 0.85$ . If required, please specify.

## Zones 1&2; 21&22

## Technical data

## Explosion-proof ballast

BAZ51-□□

## Explosion protection

Gas explosion protection

Dust explosion protection

## Certificates

For gas explosion protection

For dust explosion protection

## Conformity to standards

## Material

Enclosure

Exposed fastener

## Available lamp and lamp wattage(W)

## Rated voltage

## Earthing protection

## Degree of protection

## Ambient temperature

## Connecting terminal

## Cable entries

## Cable gland(option)

Ex II 2G Exd II BT6

Ex tD A21 IP65 T85°C

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

Copper-free aluminium, powder coated, yellow.

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 lamp ballast is available in general

AC 220V ~ 240V 50Hz

Note: If any special requirements for power voltage, please specify when order.

M5(earthing bolt inside and outside of the light fittings)

IP65

-20°C ~ +55°C

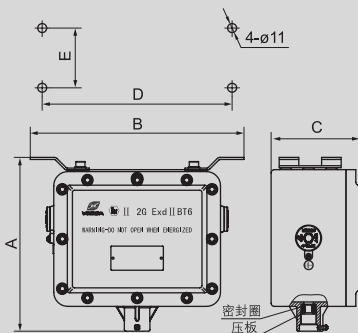
Terminal 3 x 1.5~2.5mm<sup>2</sup> (L+N+PE)

3 x M25 x 1.5

Standard assemblies for independent mounting: 3 x M25 x 1.5 Plug; Exd cable gland (option) DQM-II, manufactured by Warom, please see P7/20~23;

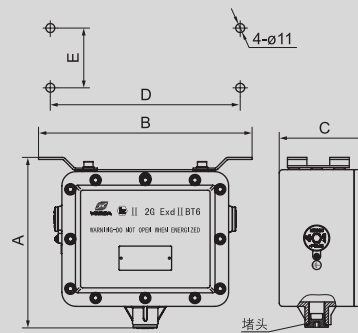
Standard assemblies for block mounting: 2 x M25 x 1.5 Plug; Exd cable gland (option) DQM-II, manufactured by Warom, please see P7/20~23; With cable-clamped seal ring and pressing plate at cable entries at bottom.

## Dimensional drawings



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

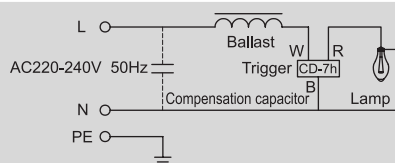
Outline 1(For block mounting, for example: used for series BAD)



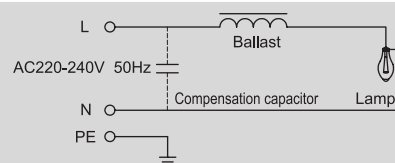
Enclosure	Size (mm)				
	A	B	C	D	E
I	240	301	135	265	65
II	250	331	140	295	65

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

## Wiring diagram of light fittings and ballast



Wiring diagram 1(For high pressure sodium lamp and metal halide lamp)



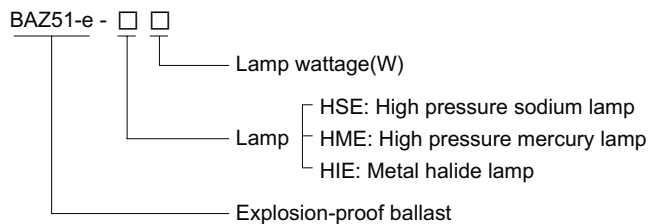
Wiring diagram 2(For high pressure mercury lamp)



## BAZ51-e □□ Series Explosion-proof Ballast

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in Zone 1 and Zone 2
- ◆ Applicable to metal halide lamp, high pressure sodium lamp and high pressure mercury lamp with lamp wattage 1000W and below.
- ◆ Enclosure in welded stainless steel plate, light, corrosion protection.
- ◆ This product is used together with BAT54 series products of Warom.
- ◆ Enclosure has three specifications: I, II and III.
- ◆ Inductive ballast, quick starting, stable performance.

### Catalogue number logic



### Selection table

Type/Ordering code	Available lamp wattage(W)	Weight (kg)	Enclosure	Type/Ordering code	Available lamp wattage(W)	Weight (kg)	Enclosure
BAZ51-e-HIE 70	HIE 70	3.20	I	BAZ51-e-HSE 150	HSE 150	3.80	I
BAZ51-e-HIE 100	HIE 100	3.60	I	BAZ51-e-HSE 250	HSE 250	4.70	II
BAZ51-e-HIE 150	HIE 150	3.70	I	BAZ51-e-HSE 400	HSE 400	6.50	II
BAZ51-e-HIE 175	HIE 175	3.80	I	BAZ51-e-HSE 1000	HSE 1000	13.50	III
BAZ51-e-HIE 250	HIE 250	3.90	I	BAZ51-e-HME 80	HME 80	3.00	I
BAZ51-e-HIE 400	HIE 400	6.50	II	BAZ51-e-HME 125	HME 125	3.60	I
BAZ51-e-HIE 1000	HIE 1000	13.50	III	BAZ51-e-HME 175	HME 175	3.80	I
BAZ51-e-HSE 70	HSE 70	3.00	I	BAZ51-e-HME 250	HME 250	3.90	I
BAZ51-e-HSE 100	HSE 100	3.60	I	BAZ51-e-HME 400	HME 400	4.70	II

Remarks: Possible to supply power compensation capacitor, power factor  $\cos\phi \geq 0.85$ . If required, please specify.



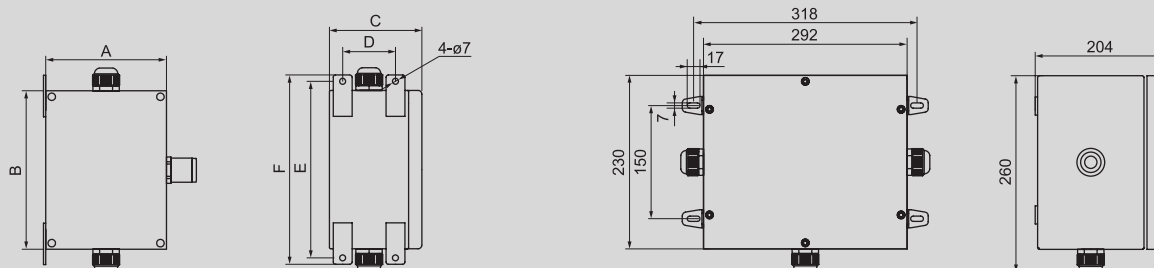
## Zones 1&2

## Technical data

<b>Explosion-proof ballast</b>	<b>BAZ51-e-□□</b>
<b>Explosion protection</b>	Gas explosion protection
	⊕ II 2G Exe II T4
<b>Certificates</b>	
For gas explosion protection	PCEC (China)
<b>Conformity to standards</b>	IEC 60079-0:2004 ; IEC 60079-7:2001
<b>Material</b>	
Enclosure	Stainless steel
Exposed fastener	Stainless steel
<b>Available lamp and lamp wattage(W)</b>	High pressure sodium lamp (HSE): 70W, 100W, 150W, 250W, 400W, 1000W High pressure mercury lamp (HME): 80W, 125W, 175W, 250W, 400W Metal halide lamp (HIE): 70W, 100W, 175W, 250W, 400W, 1000W Note: HPI European standard lamp ballast is available in general
<b>Rated voltage</b>	AC 220V ~ 240V 50Hz (AC230V 50Hz for 1000W metal halide lamp and high pressure sodium lamp)
<b>Earthing protection</b>	M5(earthing bolt inside and outside of the light fittings)
<b>Degree of protection</b>	IP65
<b>Ambient temperature</b>	-20°C ~ +55°C
<b>Connecting terminal</b>	Terminal 3 x 1.5 ~ 2.5mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>	Type I, Type II: 2 x $\phi$ 26, 1 x M25 x 1.5; Type III: 3 x $\phi$ 26
<b>Cable gland(option)</b>	Type I, Type II: 2 x M25 x 1.5 Cable gland(DQM-I, plastic), 1 x M25 x 1.5 Plug Type III: 3 x M25 x 1.5 Cable gland(DQM-I, plastic)
<b>Available cable outer diameter</b>	$\phi$ 10 ~ $\phi$ 14mm



## Dimensional drawings



Outline of enclosure III (for 1000W)

Enclosure	Size (mm)					
	A	B	C	D	E	F
I	152	170	122	70	194	211
II	160	210	122	70	234	251

Outline of enclosure I and II (for 400W and below)



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

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in Zone 1 and Zone 2
- ◆ For incandescent lamps up to 60W.
- ◆ Can be supplied with or without connecting wires.
- ◆ Handle in engineering plastic, with control pushbutton switch inside.
- ◆ Zinc plated wire guard is powder coated, white.
- ◆ Toughened glass cover, impact resistance and high light transmission.



**Technical data**

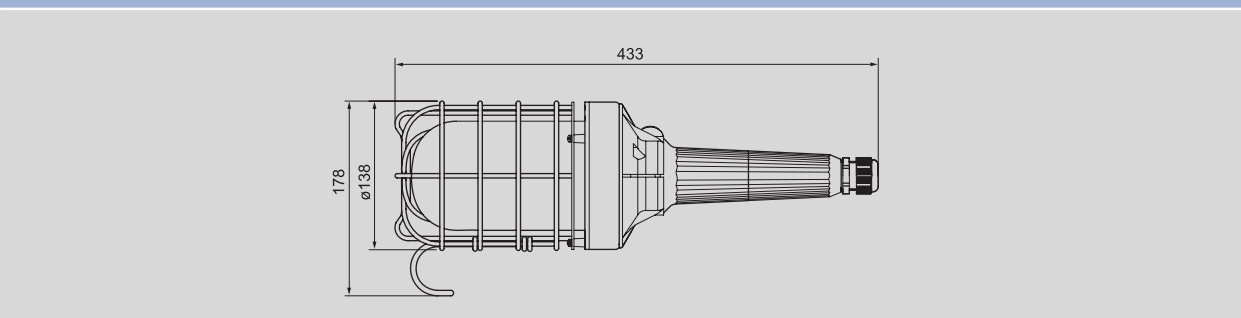
Explosion-proof incandescent hand lamps		BSX-60
<b>Explosion protection</b>	Gas explosion protection	⊕ II 2G Exde II CT4
<b>Certificates</b>	For gas explosion protection	LCIE 07 ATEX 6028; IECEx CQM 08.0015; ML,AEX-8531-X(Brazil)
<b>Conformity to standards</b>		EN 60079-0: 2004; EN 60079-1: 2004; EN 60079-7: 2003; IEC 60079-0: 2004; IEC 60079-1: 2003; IEC 60079-7: 2001
<b>Material</b>	Enclosure	Copper-free aluminium, powder coated, yellow. Handle in engineering plastic, black
	Pushbutton switch	Built-in explosion-proof control pushbutton, be able to switch on and off the lamp directly.
	Exposed fastener	Stainless steel
	Wire guard	Zinc plated carbon steel, powder coated(white)
<b>Lamp</b>	Lamp holder	E27
	Available lamp	Incandescent lamp: 25W, 40W, 60W
<b>Rated voltage</b>		Max. 230V
<b>Protection class</b>		II(Protection against electric shock)
<b>Degree of protection</b>		IP65
<b>Ambient temperature</b>		-20°C ~ +55°C
<b>Connecting terminal</b>		Terminal 3 x 1.5~2.5mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>		1 x M25 x 1.5 Cable gland (DQM-I, plastic)
<b>Available cable outer diameter</b>		ø9~ø13 (mm)
<b>Weight</b>		2.10kg



**Accessories table**

Picture	Accessories fittings	Ordering code	Weight (kg)
	Wire guard	BSX101	0.303
	Glass cover fittings	BSX102	1.076

**Dimensional drawings**

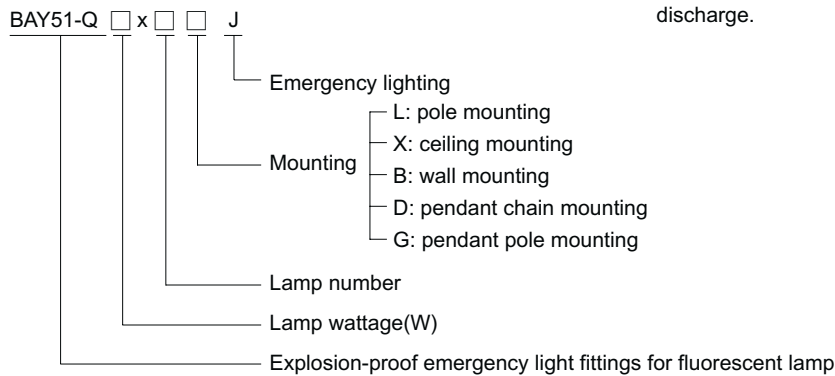


## BAY51-Q □ x □ □ □ Series Explosion-proof Emergency Light Fittings for Fluorescent Lamp

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used
  - in Zone 1 and Zone 2
  - in Zone 21 and Zone 22
- ◆ Enclosure has two versions: 1 or 2; Available lamp wattage; 18W and 36W.
- ◆ Enclosure in engineering plastic, corrosion protection;
- ◆ "Exe" enclosure with explosion-proof components inside.
- ◆ There is explosion-proof switch interlocking gear between enclosure and transparent cover, the power can be switched off when open the transparent cover.
- ◆ Built-in electronic ballast, power factor  $\geq 0.95$ .
- ◆ With protection against dissymmetry power of lamp tube.
- ◆ Emergency unit has protection against over charge and over discharge.



### Catalogue number logic



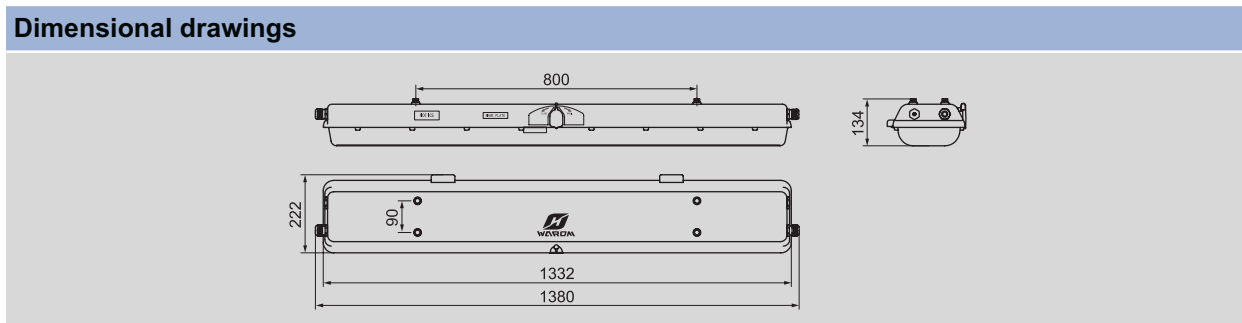
# Zones 1&2 ; 21&22

## BAY51-Q Series Explosion-proof Emergency Light Fittings for Fluorescent Lamp

Technical data	
<b>Explosion-proof emergency light fittings for fluorescent lamp</b> <b>BAY51-Q36 x □□ J</b>	
<b>Explosion protection</b>	
Gas explosion protection	⊕ II 2G Exdeq II CT4
Dust explosion protection	Ex tD A21 IP66 T135°C
<b>Certificates</b>	
For gas explosion protection	PCEC (China); LCIE 09 ATEX_____;
For dust explosion protection	PCEC (China)
<b>Conformity to standards</b>	EN 60079-0:2004; EN 60079-1:2004; EN60079-5:1997;EN 60079-7:2003 IEC 60079-0: 2004; IEC 60079-:2003; IEC 60079-5:1997; IEC 60079-7:2001 IEC 61241-0: 2004 ; IEC 61241-1: 2004
<b>Material</b>	
Enclosure	Compression moulding of GRP, stands 7J impact, corrosion protection.
Transparent cover	Injection moulding of polycarbonate, 90% light transmission,
Emergency unit	Built-in special emergency controller and nickel-cadmium battery pile, has protection against over charge and over discharge.
Exposed fastener	Stainless steel
<b>Lamp</b>	
Lamp	PHILIPS T8(supplied with the light fittings)
Lamp wattage(W)	36 x 1, 36 x 2
Emergency wattage(W)	36 x 1
<b>Emergency start time</b>	0.3s
<b>Charge time</b>	24h
<b>Emergency lighting time</b>	90min
<b>Rated voltage</b>	AC 220V ~ 240V 50/60Hz
<b>Protection class</b>	II(Protection against electric shock)
<b>Degree of protection</b>	IP66
<b>Ambient temperature</b>	-20°C ~ +55°C
<b>Connecting terminal</b>	Terminal 3 x 1.5 ~ 4mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>	4 x $\varnothing$ 26, 2 x M25 x 1.5 Cable gland (DQM-I, plastic), 2 x M25 x 1.5 Plug
<b>Available cable outer diameter</b>	$\varnothing$ 9 ~ $\varnothing$ 13 (mm)



Selection table					
Type/Ordering code	Lamp wattage (W)	Weight (kg)	Type/Ordering code	Lamp wattage (W)	Weight (kg)
BAY51-Q36 x 1LJ	36 x 1	13.65	BAY51-Q36 x 2BJ	36 x 2	15.01
BAY51-Q36 x 2LJ	36 x 2	13.68	BAY51-Q36 x 1DJ	36 x 1	13.57
BAY51-Q36 x 1XJ	36 x 1	13.70	BAY51-Q36 x 2DJ	36 x 2	13.62
BAY51-Q36 x 2XJ	36 x 2	13.75	BAY51-Q36 x 1GJ	36 x 1	15.22
BAY51-Q36 x 1BJ	36 x 1	14.96	BAY51-Q36 x 2GJ	36 x 2	15.25



## Emergency Light Fittings

## BAY51-Q Series Explosion-proof Emergency Light Fittings for Fluorescent Lamp

## Technical data

## Explosion-proof emergency light fittings for fluorescent lamp BAY51-Q18 x □□ J

## Explosion protection

Gas explosion protection

Ex II 2G Exdeq II CT4

Dust explosion protection

Ex tD A21 IP65 T135°C

## Certificates

For gas explosion protection

PCEC (China); LCIE 09 ATEX\_\_\_\_\_;

For dust explosion protection

PCEC (China)

## Conformity to standards

EN 60079-0:2004; EN 60079-1:2004; EN60079-5:1997;EN 60079-7:2003

IEC 60079-0:2004; IEC 60079-1:2004; IEC 60079-5:1997; IEC 60079-7:2001

IEC 61241-0:2004 ; IEC 61241-1:2004

## Material

Enclosure

Compression moulding of GRP, stands 7J impact, corrosion protection.

Transparent cover

Injection moulding of polycarbonate,90% light transmission,

Emergency unit

Built-in special emergency controller and nickel-cadmium battery pile, has protection against over charge and over discharge.

Exposed fastener

Stainless steel

## Lamp

Lamp

PHILIPS T8(supplied with the light fittings)

Lamp wattage(W)

18 x 1, 18 x 2

Emergency wattage(W)

18 x 1

## Emergency start time

0.3s

## Charge time

24h

## Emergency lighting time

90min

## Rated voltage

AC 220V~240V 50/60Hz

## Protection class

II(Protection against electric shock)

## Degree of protection

IP65

## Ambient temperature

-20°C ~ +55°C

## Connecting terminal

Terminal 3 x 1.5~4mm<sup>2</sup> (L+N+PE)

## Cable entries

4 x ø26, 2 x M25 x 1.5 Cable gland (DQM-I, plastic), 2 x M25 x 1.5 Plug

## Available cable outer diameter

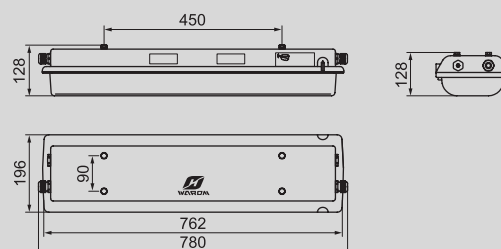
ø9~ø13 (mm)



## Selection table

Type/Ordering code	Lamp wattage (W)	Weight (kg)	Type/Ordering code	Lamp wattage (W)	Weight (kg)
BAY51-Q18 x 1LJ	18 x 1	8.03	BAY51-Q18 x 2BJ	18 x 2	9.40
BAY51-Q18 x 2LJ	18 x 2	8.08	BAY51-Q18 x 1DJ	18 x 1	7.97
BAY51-Q18 x 1XJ	18 x 1	8.10	BAY51-Q18 x 2DJ	18 x 2	8.02
BAY51-Q18 x 2XJ	18 x 2	8.15	BAY51-Q18 x 1GJ	18 x 1	9.60
BAY51-Q18 x 1BJ	18 x 1	9.35	BAY51-Q18 x 2GJ	18 x 2	9.65

## Dimensional drawings

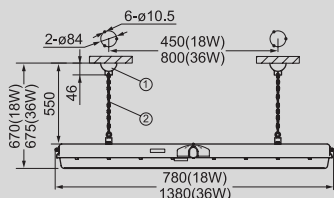


### BAY51-Q Series Explosion-proof Emergency Light Fittings for Fluorescent Lamp

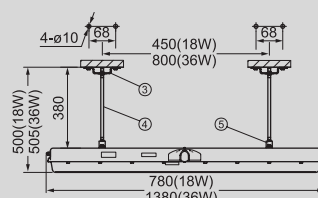
#### Mounting versions

As a reference to the installation on the site

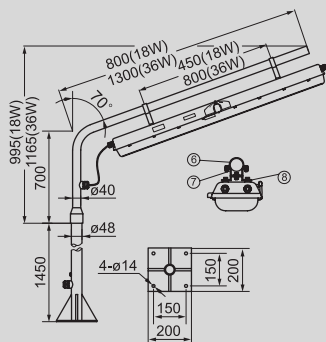
D: pendant chain mounting



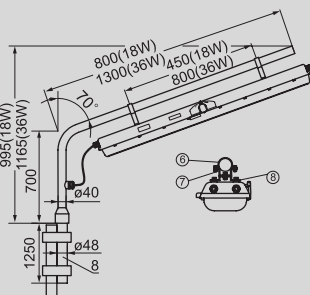
G: pendant pole mounting



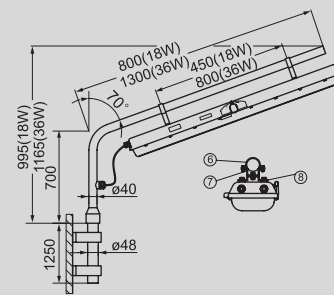
L: pole mounting



Suitable for ground pole mounting

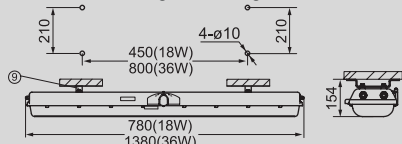


Suitable for fence pole mounting

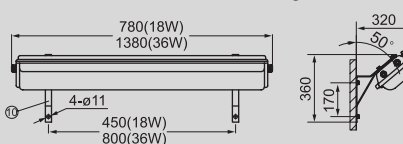


Suitable for wall pole mounting

X: ceiling mounting



B: wall mounting



#### Installation accessories and spare parts table

Supplied according to the mounting version

Mounting version	Accessories supplied with the light fittings			Ordering code	Weight (kg)
	Accessories fittings	Qty	Remark		
D: pendant chain mounting	① . Sucker	2		5136017	0.136
	② . Chain	2	450mm	5136016	0.133
G: pendant pole mounting	③ . Mounting bracket	2		51S01G1	0.050
	④ . M8 Screw	2	350mm	51S01G2	0.130
	⑤ . Bracket	2		5136030	0.070

Remarks: 1. Accessories not in the table should be supplied by user.

2. Quantity of accessories in table is for one set of light fittings.

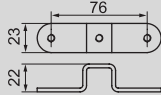
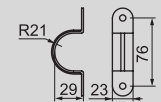
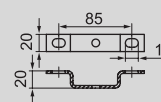
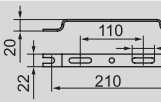


## Emergency Light Fittings

## BAY51-Q Series Explosion-proof Emergency Light Fittings for Fluorescent Lamp

## Installation accessories and spare parts table

Supplied according to the mounting version

Mounting version	Accessories supplied with the light fittings			Ordering code	Weight (kg)
	Accessories fittings	Qty	Remark		
L: pole mounting	⑥ . Mounting plate (1)	2		5136012	0.060
	⑦ . G1 1/4" Pipe clamp	2		5136014	0.057
	⑧ . Mounting plate (2)	2		5136013	0.050
X: ceiling mounting	⑨ . Mounting plate (3)	2		5136015	0.201
B: wall mounting	⑩ . Wall bracket	2	Sheet steel welded	5136B02	0.830

Remarks: 1. Accessories not in the table should be supplied by user.


2. Quantity of accessories in table is for one set of light fittings.

## Accessories table

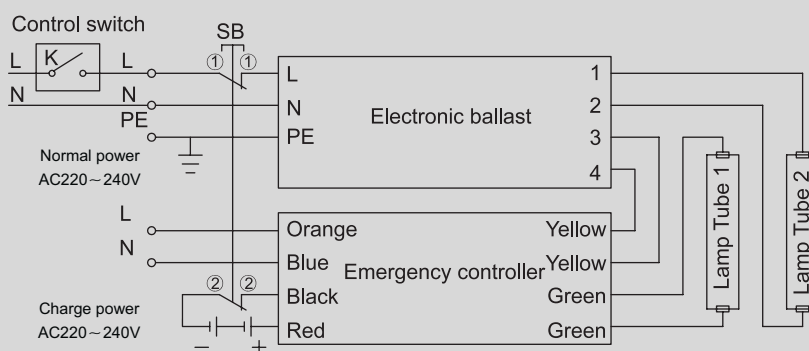
Picture	Accessories fittings	Ordering code	Weight (kg)
	Explosion-proof travel switch	5136003	0.042
	36W Key	5136004	0.024
	18W Key	5118002	0.022
	36W Lamp holder (with wires)	5136005	0.022
	18W Lamp holder (with wires)	5118003	0.014
	36W Explosion-proof electronic ballast	5136011	1.320
	18W Explosion-proof electronic ballast	5118004	1.320

## BAY51-Q Series Explosion-proof Emergency Light Fittings for Fluorescent Lamp

## Accessories table

Picture	Accessories fittings	Ordering code	Weight (kg)
	36W Emergency controller	5136019	1.650

## Wiring diagram



Note: Control switch K(supplied by user) can't control the charge power simultaneously. For single lamp, no lamp tube 2.

Emergency wiring diagram



## BAJ52-20 □ Series Explosion-proof Emergency Light Fittings

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in Zone 1 and Zone 2
- ◆ Enclosure in copper-free aluminium, powder coated, yellow.
- ◆ Two emergency lamps at upper light fittings, gimbal mounting for versatile lighting angle.
- ◆ Iodine-tungsten lamp of small wattage, spotlight, with reflector, be able to control the lighting angle effectively(LED lamp is optional).
- ◆ Maintenance free nickel cadmium battery pile and emergency unit: automatically charged when normally powered; The emergency lamp will be turned on automatically when light off, power off or power cut. It has various protection against over charge, over discharge and short circuit.
- ◆ Toughened glass plate, impact resistance and high light transmission.

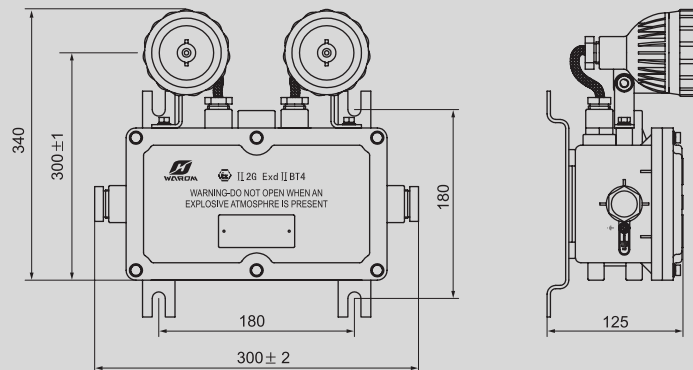


**Technical data**

Explosion-proof emergency light fittings	BAJ52-20
<b>Explosion protection</b>	
Gas explosion protection	Ex II 2G Exd II BT4
<b>Certificates</b>	
For gas explosion protection	LCIE 07 ATEX 6086; IECEx CQM 08. 0001;
<b>Conformity to standards</b>	EN 60079-0: 2004; EN 60079-1: 2004; IEC 60079-0: 2004; IEC 60079-1: 2003
<b>Material</b>	
Enclosure	Copper-free aluminium, powder coated, yellow.
Exposed fastener	Stainless steel
<b>Rated voltage</b>	AC 220V ~ 240V 50Hz
<b>Lamp</b>	Iodine-tungstem lamp(LED lamp is optional)
Lamp wattage(W)	2 x 10W (LED lamp wattage: 3W x 2)
Emergency time	90min
<b>Technical data of battery</b>	
Description	GNYG5.0 Nickel-cadmium battery pile
Rated capacity	5Ah
Rated voltage	6V
Charge current	500mA
Discharge current	1000mA
Charge time	24h
<b>Protection class</b>	IP65
<b>Ambient temperature</b>	-20°C ~ +55°C
<b>Connecting terminal</b>	Terminal 3 x 1.5~2.5mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>	2 x G3/4" Plug
<b>Cable gland(option)</b>	Exd Cable gland DQM-II, manufactured by Warom, please see P7/20~23..
<b>Weight</b>	5.20kg



**Dimensional drawings**

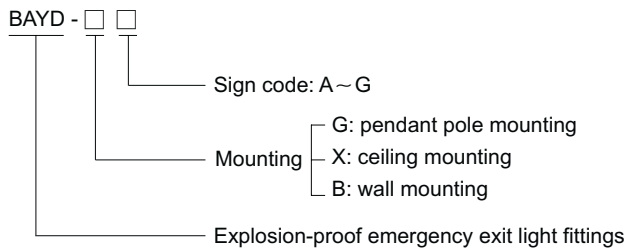




### BAYD-□□ Series Explosion-proof Emergency Exit Light Fittings

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used
  - in Zone 1 and Zone 2
  - in Zone 21 and Zone 22
- ◆ Available for normal lighting and emergency lighting, various protections. When normal power fails, it switches to emergency state automatically, the emergency battery discharges. Built-in control circuit has various protections against over charge, over discharge and short circuit, it has high usability.
- ◆ With test pushbutton, convenient for user to overhaul termly. Press down test pushbutton, the light fittings switch to emergency state automatically, the display panel works normally. If any abnormal found, please maintain it immediately.
- ◆ LED lamp, high efficient, energy-saving, long service life up to 5000 hours.
- ◆ Enclosure in copper-free aluminium, powder coated, yellow.
- ◆ Toughened glass plate, impact resistance and high light transmission.

#### ■ Catalogue number logic



#### ■ Sign code type A-G



Type A



Type B



Type C



Type D



Type E



Type F



Type G

Zones 1&2; 21&22

## Emergency Light Fittings

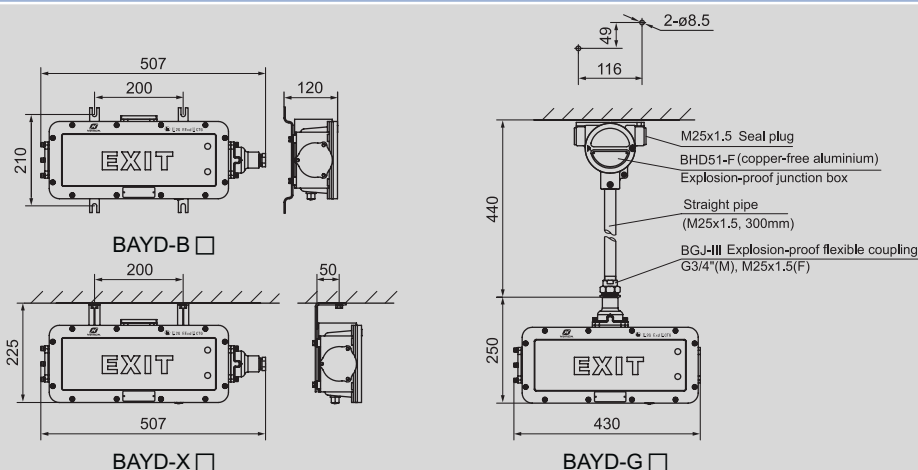
### BAYD Series Explosion-proof Emergency Exit Light Fittings

#### Technical data

Explosion-proof emergency exit light fittings	BAYD- □□
<b>Explosion protection</b>	<p>Gas explosion protection Dust explosion protection</p> <p>⊕ II 2G Exd II CT6 Ex tD A21 IP65 T85°C</p>
<b>Certificates</b>	<p>For gas explosion protection For dust explosion protection</p> <p>LCIE 07 ATEX 6005X; IECEx LCI 08. 0012X PCEC (China)</p>
<b>Conformity to standards</b>	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>	<p>Enclosure Exposed fastener</p> <p>Copper-free aluminium, powder coated, yellow. Stainless steel</p>
<b>Rated voltage</b>	AC 220V ~ 240V 50Hz
<b>Lamp</b>	LED lamp(working voltage DC3.6V)
<b>Power consumption</b>	< 2W
<b>Emergency start time</b>	90min
<b>Technical data of battery</b>	
Rated capacity	600mAh
Charge time	24h
<b>Earthing protection</b>	M5(earthing bolt inside and outside of the light fittings)
<b>Degree of protection</b>	IP65
<b>Ambient temperature</b>	-20°C ~ +55°C
<b>Connecting terminal</b>	Terminal 3 x 1.5 ~ 2.5mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>	1 x G3/4" for wall mounting and ceiling mounting; 2 x M25 x 1.5 for pendant pole mounting.
<b>Cable gland</b>	<p>1.For wall mounting and ceiling mounting: The light fittings are supplied with cable gland and lock device. Cable gland is not required for drawing in cables.</p> <p>2.For pendant pole mounting: The light fittings are supplied with BHD51-F explosion-proof junction box(in copper-free aluminium); With fittings at cable entries: 2 x M25 x 1.5 plug; Exd Cable gland (option) DQM-II, manufactured by Warom, please see P7/20 ~ 23.</p>
<b>Available cable outer diameter</b>	ø10 ~ ø14 (mm)
<b>Remarks</b>	The light fittings are supplied with installation accessories and spare parts as shown in mounting versions.



#### Dimensional drawings

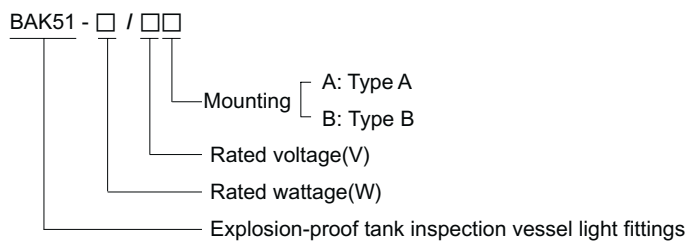


## BAK51-□/□□ Series Tank Inspection Vessel Light Fittings

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in Zone 1 and Zone 2
- ◆ Available for halogen tungsten lamp of 35W and 50W, high light efficiency, long service life. Assembled with specially designed reflector, improves spot lighting effect.
- ◆ A and B mounting versions are available for options.
- ◆ Enclosure in copper-free aluminium, powder coated, yellow.



### Catalogue number logic



### Selection table

Type/Ordering code	Available lamp/wattage (W)	Weight (kg)	Type/Ordering code	Available lamp/wattage (W)	Weight (kg)
BAK51-35/AC220VA	Halogen tungsten lamp 35W	2.00	BAK51-50/AC220VA	Halogen tungsten lamp 50W	2.00
BAK51-35/AC220VB		2.00	BAK51-50/AC220VB		2.00
BAK51-35/DC12VA		1.90	BAK51-50/DC12VA		1.90
BAK51-35/DC12VB		1.90	BAK51-50/DC12VB		1.90

## Zones 1&2

## Local, Caution Spotlight Fittings

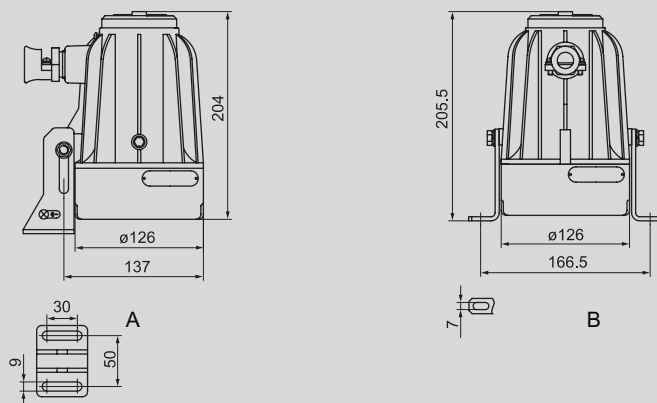
### BAK51 Series Tank Inspection Vessel Light Fittings

#### Technical data

Explosion-proof tank inspection vessel light fittings		BAK51- □ / □ □
<b>Explosion protection</b>	Gas explosion protection	⊕ II 2G Exd II BT3
<b>Certificates</b>	For gas explosion protection	LCIE 06 ATEX 6020; IECEx LCI 08. 0007;
<b>Conformity to standards</b>		EN 60079-0:2004; EN 60079-1:2004; IEC 60079-0:2004; IEC 60079-1:2003
<b>Material</b>	Enclosure	Copper-free aluminium, powder coated, yellow.
	Glass cover	Toughened glass cover, impact resistance and high light transmission
	Exposed fastener	Stainless steel
<b>Lamp</b>	Available lamp	Halogen tungstem lamp
	Lamp holder	GY6.35
	Lamp wattage(W)	35W, 50W
	Adaptable voltage	AC 220V ~ 240V 50Hz DC12V
<b>Earthing protection</b>		M5(earthing bolt inside and outside of the light fittings)
<b>Degree of protection</b>		IP65
<b>Ambient temperature</b>		-20°C ~ +55°C
<b>Connecting terminal</b>		Terminal 3 x 1.5 ~ 2.5mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>		1 x G3/4"
<b>Cable gland</b>		The light fittings are supplied with cable-clamped seal ring and trumpet shaped gland, Cable gland is not required for drawing in cables.
<b>Available cable outer diameter</b>		ø10 ~ ø14 (mm)



#### Dimensional drawings

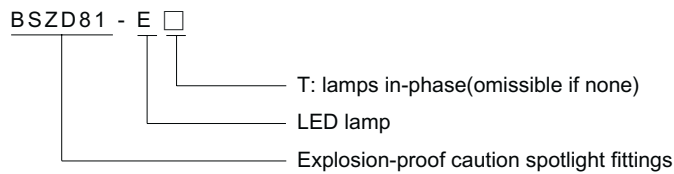


## BSZD81-E □ Series Explosion-proof Caution Spotlight Fittings

- ◆ Can be used in Zone 1 and Zone 2
- ◆ LED lamp, low power consumption, long service life up to 5000 hours, meeting requirements for energy-saving and environment protection effectively.
- ◆ Integrated chip control, with multiple protective circuits, be able to realize synchronous flash of multiple lamps via synchronous signal wires connection.
- ◆ Enclosure in copper-free aluminium, powder coated, yellow.



### ■ Catalogue number logic



## Zones 1&2

## Local, Caution Spotlight Fittings

### BSZD81 Series Explosion-proof Caution Spotlight Fittings

#### Technical data

Explosion-proof caution spotlight fittings BSZD81-E □	
<b>Explosion protection</b>	Gas explosion protection
<b>Certificates</b>	For gas explosion protection
<b>Conformity to standards</b>	Material
<b>Rated voltage</b>	Lamp
<b>Power consumption</b>	Bulb color
<b>Max. luminous intensity value</b>	Flash frequency
<b>Earthing protection</b>	Degree of protection
<b>Ambient temperature</b>	Connecting terminal
<b>Cable entries</b>	Cable gland(option)
<b>Weight</b>	

Ex II 2G Exde II CT6

NEMKO 08 ATEX 1096;

EN 60079-0:2006; EN 60079-1:2004, EN 60079-7: 2004;

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

Enclosure Copper-free aluminium, powder coated, yellow.

Glass cover Toughened glass cover, stands 4J impact.

Exposed fastener Stainless steel

AC 220V ~ 240V 50/60Hz

LED

≤ 10W(continuously work)

Red

> 200cd

20~60(time/min)

M5(earthing bolt inside and outside of the light fittings)

IP65

-20°C ~ +55°C

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

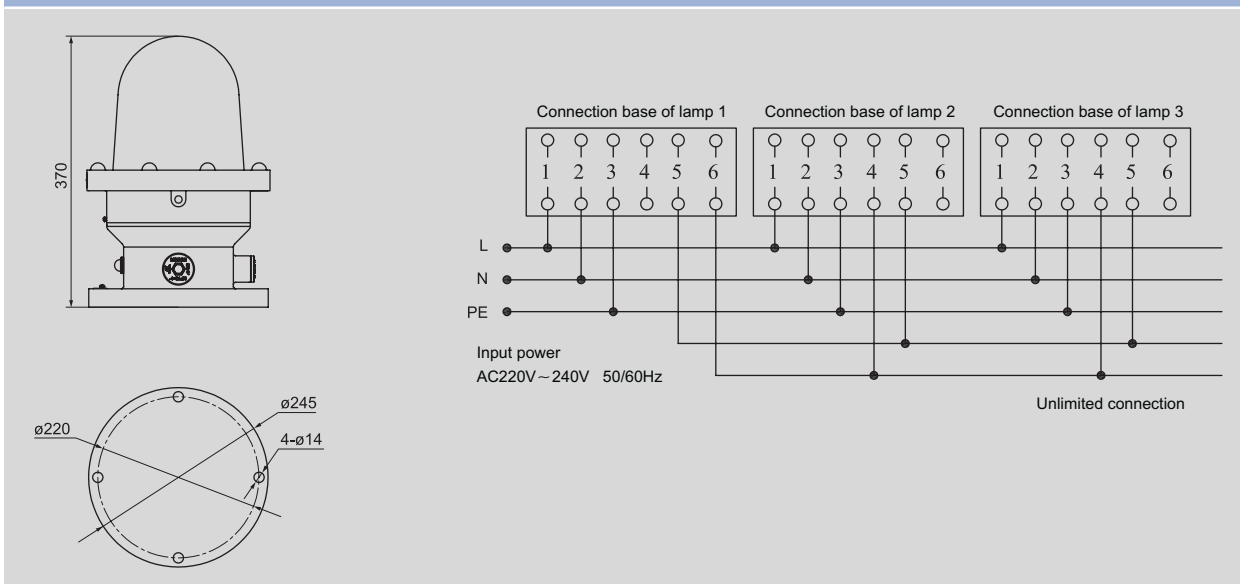
4 x G3/4" Plug

Exe Cable gland DQM-I, manufactured by Warom, please see P7/17 ~ 18.

10kg



#### Dimensional drawings



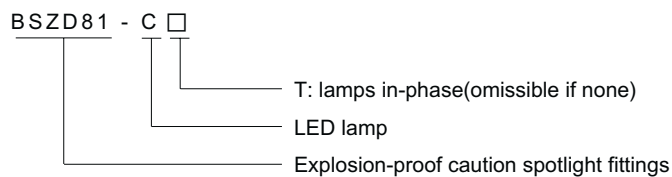


## BSZD81-C □ Series Explosion-proof Caution Spotlight Fittings

- ◆ Can be used in Zone 1 and Zone 2
- ◆ Lamp: 7 sets of halogen tungsten lamp(150W), high light efficiency. 1 lamp works, others are spare. When the lamp bulb damaged, spare ones will be used automatically.
- ◆ Integrated chip control, with multiple protective circuits, be able to realize synchronous flash of multiple lamps via synchronous signal wires connection.
- ◆ Enclosure in copper-free aluminium, powder coated, yellow.



### ■ Catalogue number logic



## Zones 1&2

## Local, Caution Spotlight Fittings

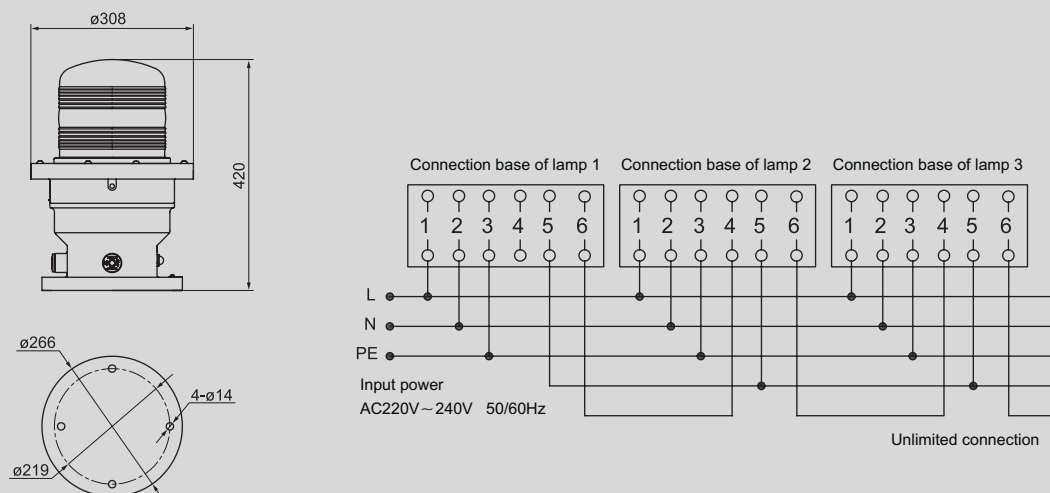
### BSZD81 Series Explosion-proof Caution Spotlight Fittings

#### Technical data

Explosion-proof caution spotlight fittings		BSZD81-C □
<b>Explosion protection</b>	Gas explosion protection	Ex II 2G Exde II CT4
<b>Certificates</b>	For gas explosion protection	PCEC(China)
<b>Conformity to standards</b>		IEC 60079-0: 2004; IEC 60079-1: 2003; IEC 60079-7: 2001;
<b>Material</b>		
Enclosure		Copper-free aluminium, powder coated, yellow.
Glass cover		Toughened glass cover, stands 4J impact.
Exposed fastener		Stainless steel
<b>Rated voltage</b>		AC 220V ~ 240V 50Hz
<b>Lamp</b>		Halogen tungsten lamp
<b>Lamp wattage</b>		150W(7 sets of halogen tungsten lamp, 1 lamp works, others are spare. When the lamp bulb damaged, spare ones will be used automatically.)
<b>Bulb color</b>		Red
<b>Max. luminous intensity value</b>		> 2000cd
<b>Flash frequency</b>		12 time/min generally, nonadjustable (20 ~ 60 time/min if need to adjust, please specify when order)
<b>Earthing protection</b>		M5(earthing bolt inside and outside of the light fittings)
<b>Degree of protection</b>		IP65
<b>Ambient temperature</b>		-20°C ~ +55°C
<b>Connecting terminal</b>		Terminal 3 x 1.5 ~ 2.5mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>		4 x G3/4" Plug
<b>Cable gland(option)</b>		Exe Cable gland DQM-I, manufactured by Warom, please see P7/17 ~ 18.
<b>Weight</b>		13.8kg



#### Dimensional drawings

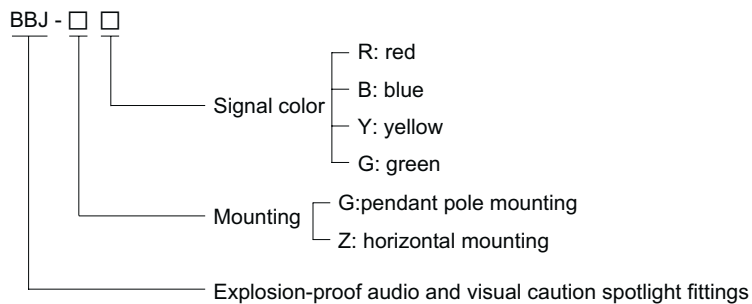


## BBJ- □□ Series Explosion-proof Audio and Visual Caution Spotlight Fittings

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in Zone 1 and Zone 2
- ◆ LED lamp, low power consumption, long service life.
- ◆ Enclosure in copper-free aluminium, powder coated, yellow.



### ■ Catalogue number logic



### ■ Selection table

Type/Ordering code	Weight (kg)
BBJ-ZR	2.80
BBJ-ZB	2.80
BBJ-ZY	2.80
BBJ-ZG	2.80
BBJ-GR	4.50
BBJ-GB	4.50
BBJ-GY	4.50
BBJ-GG	4.50

Remarks: The light fittings are supplied according to ordering code, with accessories and spare parts.

## Zones 1&2

## Local, Caution Spotlight Fittings BBJ Series Explosion-proof Audio and Visual Caution Spotlight Fittings

### Technical data

#### Explosion-proof audio and visual caution spotlight fittings

BBJ- □□

#### Explosion protection

Gas explosion protection

⊕ II 2G Exd [ib] ib II CT6

#### Certificates

For gas explosion protection

NEMKO 08 ATEX 1095;

#### Conformity to standards

EN 60079-0:2006; EN 60079-1:2004; EN 60079-11:2007;

IEC 60079-0: 2004; IEC 60079-1: 2003; IEC 60079-11:1999;

#### Material

Enclosure

Copper-free aluminium, powder coated, yellow.

Transparent cover

Toughened glass cover, impact resistance, high light transmission.

Exposed fastener

Stainless steel

#### Rated voltage

AC 220V ~ 240V 50/60Hz

#### Signal color

Red, blue, yellow and green for options.

#### Flash frequency

150(time/min)

#### Sound intensity

≥ 80 dB(R=2m)

#### Earthing protection

M5(earthing bolt inside and outside of the light fittings)

#### Degree of protection

IP65

#### Ambient temperature

-20°C ~ +55°C

#### Connecting terminal

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

#### Cable entries

1 x G3/4" for horizontal mounting; 2 x M25 x 1.5 for pendant pole mounting

#### Cable gland

1.For horizontal mounting: The light fittings are supplied with cable gland and lock device. Cables can be drew in directly.

2.For pendant pole mounting:

The light fittings are supplied with BHD51-F explosion-proof junction box(in copper-free aluminium);

With fittings at cable entries: 2 x M25 x 1.5 plug; Exd Cable gland (option) DQM-II, manufactured by Warom, please see P7/20 ~ 23.

#### Available cable outer diameter

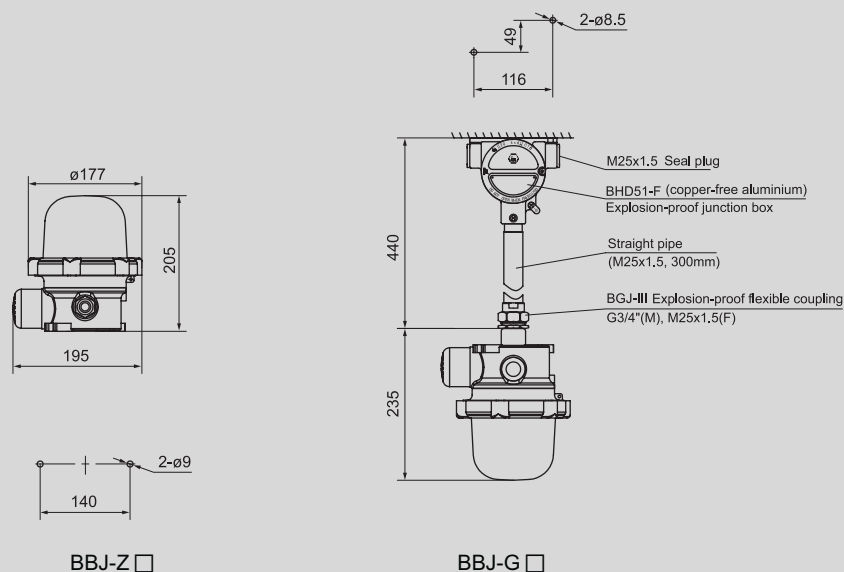
ø10 ~ ø14 (mm)

#### Remarks

The light fittings are supplied with installation accessories and spare parts as shown in mounting versions.



### Dimensional drawings

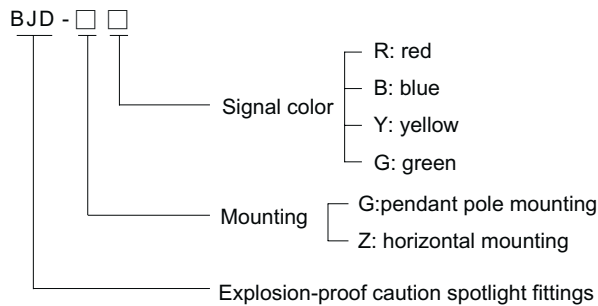




### BJD- □□ Series Explosion-proof Caution Spotlight Fittings

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in Zone 1 and Zone 2
- ◆ LED lamp, low power consumption, long service life.
- ◆ Enclosure in copper-free aluminium, powder coated, yellow.

#### Catalogue number logic



#### Selection table

Type/Ordering code	Weight(kg)
BJD-ZR	2.70
BJD-ZB	2.70
BJD-ZY	2.70
BJD-ZG	2.70
BJD-GR	4.40
BJD-GB	4.40
BJD-GY	4.40
BJD-GG	4.40

Remarks: The light fittings are supplied according to ordering code, with accessories and spare parts.

## Zones 1&2

## Local, Caution Spotlight Fittings

### BJD Series Explosion-proof Caution Spotlight Fittings

Technical data	
<b>Explosion-proof caution spotlight fittings</b>	<b>BJD- □□</b>
<b>Explosion protection</b> Gas explosion protection	⊕ II 2G Exd II CT6
<b>Certificates</b> For gas explosion protection	NEMKO 08 ATEX 1091;
<b>Conformity to standards</b>	EN 60079-0:2006; EN 60079-1:2004 IEC 60079-0: 2004; IEC 60079-1: 2003;;
<b>Material</b> Enclosure Transparent cover Exposed fastener	Copper-free aluminium, powder coated, yellow. Toughened glass cover, impact resistance, high light transmission. Stainless steel
<b>Rated voltage</b>	AC 220V ~ 240V 50/60Hz
<b>Signal color</b>	Red, blue, yellow and green for options.
<b>Flash frequency</b>	150(time/min)
<b>Earthing protection</b>	M5(earthing bolt inside and outside of the light fittings)
<b>Degree of protection</b>	IP65
<b>Ambient temperature</b>	-20°C ~ +55°C
<b>Connecting terminal</b>	Terminal 3 x 1.5~2.5mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>	1 x G3/4" for horizontal mounting; 2 x M25 x 1.5 for pendant pole mounting
<b>Cable gland</b>	1.For horizontal mounting: The light fittings are supplied with cable gland and lock device. Cables can be drew in directly. 2.For pendant pole mounting: The light fittings are supplied with BHD51-F explosion-proof junction box(in copper-free aluminium); With fittings at cable entries: 2 x M25 x 1.5 plug; Exd Cable gland (option) DQM-II, manufactured by Warom, please see P7/20 ~ 23.
<b>Available cable outer diameter</b>	ø10 ~ ø14 (mm)
<b>Remarks</b>	The light fittings are supplied with installation accessories and spare parts as shown in mounting versions.



### Dimensional drawings

