



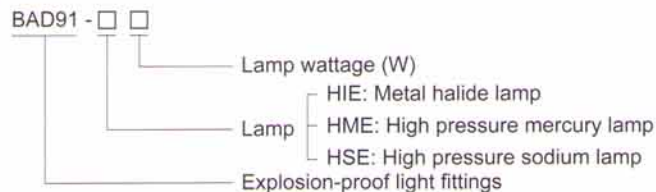
BAD91-□□ Series

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 box, side open for connection, simple installation and maintenance.
- ◆ 250 and 400 versions
- ◆ Possible to supply external reflector, enlarging the luminous intensity.

BAD91-□□series explosion-proof light fittings is usable for lighting in the petrochemical factory, where is filled with II A, II B, II C explosive gas mixture and flammable and explosive dust.

■ Catalogue number logic



■ Lamp selection table

Enclosure	Available lamp wattage (W)		
	HIE	HME	HSE
BAD91-250	175, 250	175, 250	150, 250
BAD91-400	400	400	400

■ Ordering note

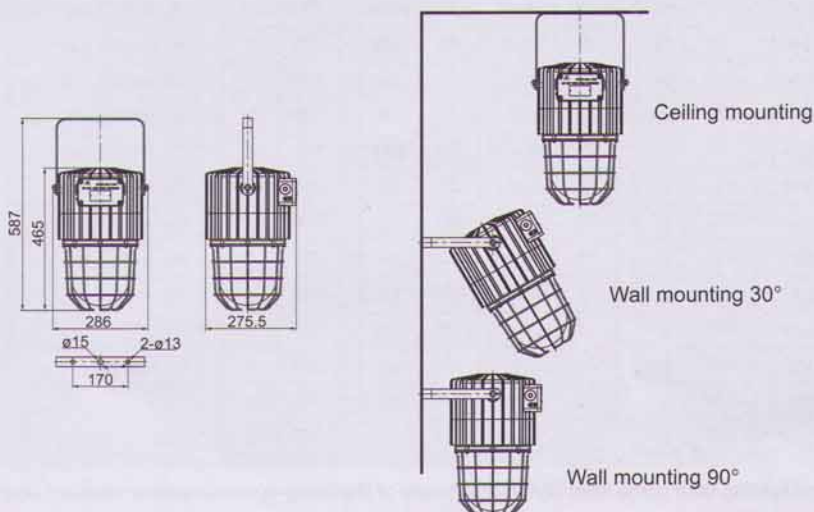
1. Specify all data at request of "catalogue number logic".
2. Select the accessories in "accessories table" or order at the guide of "ordering code".
3. The light fittings are supplied without lamp, PHILIPS recommended; if metal halide lamp required, HIP European standard ballast will be supplied.
4. With compensation, power factor $\cos\phi \geq 0.85$. Please specify if required.
5. The light fittings are supplied without external reflector, if required, please specify as the ordering code in "accessories table".

Zones 1&2 ; 21&22

Technical Data

Explosion-proof light fittings	BAD91-250
Explosion protection	
Gas explosion protection	⊕ II 2G Exde II CT3
Dust explosion protection	Ex tD A21 IP65 T200°C
Certificates	
For gas explosion protection	LCIE 08 ATEX _____
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	
Housing	Aluminum alloy, powder-coated, yellow
Transparent cover	Toughened glass
Reflector	Pure aluminum
Lamps	
Lamp holder	E40
Available lamp and wattage	High pressure sodium lamp (HSE): 150W, 250W High pressure mercury lamp (HME): 175W, 250W Metal halide lamp (HIE): 175W, 250W Note: With HPI European standard lamp available ballast
Rated voltage	AC 230V 50Hz(207~253V)
Earthing protection	M5 (earthing bolt inside and outside the light fittings)
Degree of protection	IP65
Ambient temperature	-20°C ~ +55°C
Connection	Terminals 3 x 1.5~2.5mm ² (L+N+PE)
Hub	2-M25 x 1.5
Cable gland	With seal stopping plug, explosion-proof cable gland is required when put into use, DQM-I (WAROM ordering code in P7/17)
Available cable outer diameter	ø10~ø14 (mm)
Note	The light fittings are supplied without lamp.
Weight	13.8kg

Mounting versions

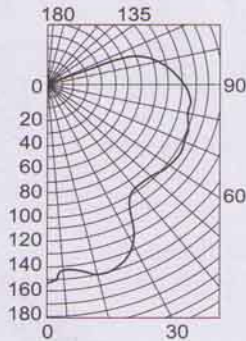


Pendant Light Fittings BAD91 Explosion-proof Light Fittings

Photometric Data (BAD91-250)



250W metal halide lamp photometric data
Rated luminous flux: 27000lm;
The data from PHILIPS lamp;
Luminous intensity distribution cd/1000lm
(lighting efficiency: 65.7%)



For a 175W HIE multiply by 0.518
For a 175W HME multiply by 0.314
For a 250W HME multiply by 0.470
For a 150W HSE multiply by 0.555
For a 250W HSE multiply by 1.037

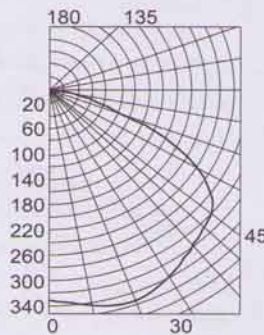
Angle	CP
0	1569
5	1697
10	1201
15	983
20	720
25	834
30	972
35	864
40	1096
45	1224
50	1267
55	1209

Angle	CP
60	1547
65	1646
70	1544
75	145
80	1453
85	1645
90	1614
95	1581
100	1547
105	1492
110	1202
115	642

Angle	CP
120	110
125	73
130	56
135	45
140	36
145	0
150	0
155	0
160	0
165	0
170	0
175	0
180	0



250W metal halide lamp photometric data
Rated luminous flux: 27000lm;
The data from PHILIPS lamp;
Luminous intensity distribution cd/1000lm
(lighting efficiency: 57.4%)



For a 175W HIE multiply by 0.518
For a 175W HME multiply by 0.314
For a 250W HME multiply by 0.470
For a 150W HSE multiply by 0.555
For a 250W HSE multiply by 1.037

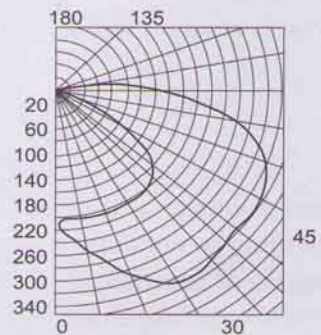
Angle	CP
0	3393
5	3435
10	3528
15	3597
20	3616
25	3562
30	3466
35	3374
40	3282
45	3188
50	3086
55	2902

Angle	CP
60	2498
65	1896
70	1242
75	720
80	342
85	138
90	44
95	54
100	82
105	100
110	93
115	60

Angle	CP
120	28
125	0
130	0
135	0
140	0
145	0
150	0
155	0
160	0
165	0
170	0
175	0
180	0



250W metal halide lamp photometric data
Rated luminous flux: 27000lm;
The data from PHILIPS lamp;
Luminous intensity distribution cd/1000lm
(lighting efficiency: 60.6%)



For a 175W HIE multiply by 0.518
For a 175W HME multiply by 0.314
For a 250W HME multiply by 0.470
For a 150W HSE multiply by 0.555
For a 250W HSE multiply by 1.037

0° reflecting angle CP		
0	2943	1356
5	3188	105 0
15	4292	115 0
25	4610	125 0
35	4820	135 0
45	4674	145 0
55	4660	155 0
65	4496	165 0
75	4022	175 0
85	2616	180 0
90	1881	

90° reflecting angle CP		
0	2943	95 0
5	2811	105 0
15	3025	115 0
25	3106	125 0
35	2909	135 0
45	2616	145 0
55	2322	155 0
65	0	165 0
75	0	175 0
85	0	180 0
90	0	

All lighting designs and lighting data come from DIALUX software of Germany upon stimulated situation and working conditions.

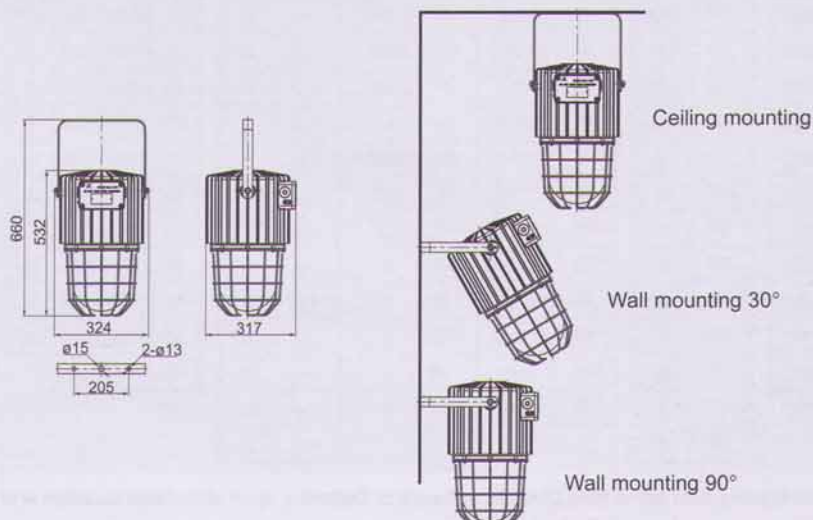
Pendant Light Fittings






BAD91 Explosion-proof Light Fittings

Technical Data

Explosion-proof light fittings	BAD91-400
Explosion protection Gas explosion protection Dust explosion protection	II 2G Exde II CT3 Ex tD A21 IP65 T200°C
Certificates For gas explosion protection For dust explosion protection	LCIE 08 ATEX _____ 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 Housing Transparent cover Reflector	Aluminum alloy, powder-coated, yellow Toughened glass Pure aluminum
Lamps Lamp holder Available lamp and wattage (bulb)	E40 High pressure sodium lamp (HSE): 400W High pressure mercury lamp (HME): 400W Metal halide lamp (HIE):400W Note: With HPI European standard lamp available ballast
Rated voltage	AC 230V 50Hz(207~253V)
Earthing protection	M5 (earthing bolt inside and outside the light fittings)
Degree of protection	IP65
Ambient temperature	-20°C ~ +55°C
Connection	Terminals 3 x 1.5~2.5mm ² (L+N+PE)
Hub	2-M25 x 1.5
Cable gland	With seal stopping plug, explosion-proof cable gland is required when put into use, DQM-I (WAROM ordering code in P7/17)
Available cable outer diameter	ø10~ø14 (mm)
Note	The light fittings are supplied without lamp.
Weight	20kg

Mounting versions



Accessories and spare parts			
Picture	Description	Ordering code	Weight
	N150 (HSE150)	61028	2.05 kg
	L175 (HIE175)	61029	2.00 kg
	G175 (HME175)	61040	2.02 kg
	N250 (HSE250)	61030	2.10 kg
	L250 (HIE250)	61031	2.10 kg
	G250 (HME250)	61041	2.20 kg
	L400 (HIE400)	61032	2.90 kg
	N400 (HSE400)	61033	2.96 kg
	G400 (HME400)	61042	3.00 kg
	250 type wire guard	271001	0.65 kg
	400 type wire guard	271002	0.87 kg
	250 type glass cover fittings	271003	2.65 kg
	400 type glass cover fittings	271004	4.80 kg
	250 type external reflector	271005	0.37 kg
	400 type external reflector	271006	0.52 kg
	250 type angle external reflector	271007	0.35 kg
	400 type angle external reflector	271008	0.49 kg

www.explosion-proof-light.com