

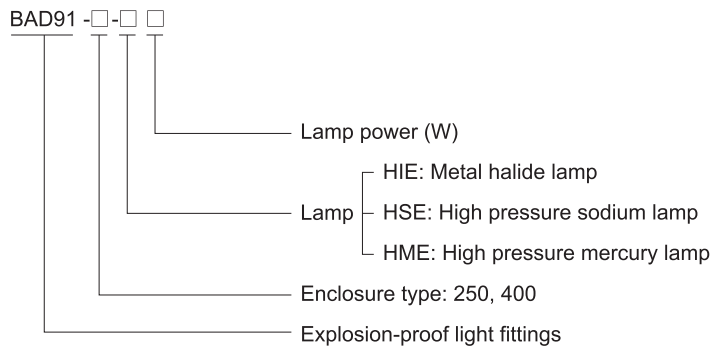


Pendant Light Fittings

BAD91 Series Explosion-proof Light Fittings

- ◆ Explosion protection to
 - CENELEC
 - IEC
 - NEC
- ◆ Can be used in
 - Zone 1 and Zone 2
 - Zone 21 and Zone 22
 - Class I, Zone 1 and Zone 2
 - Class I, Division 2, Groups A, B, C, D
- ◆ Integral control gear, easy installation and maintenance.
- ◆ External terminal compartment, convenient for connection and maintenance.
- ◆ Two enclosure types: 250, 400.
- ◆ External reflector is optional, to increase lighting intensity.
- ◆ Both American standard and Europea standard are available.

Catalogue number logic



Selection table

Type/Ordering code	Lamp	Available lamp power (W)		Weight (kg)	
		American standard	European standard	American standard	European standard
BAD91-250	HIE	70, 100, 150, 175, 250	175, 250	16.55	14.45
	HSE	70, 100, 150, 250	150, 250	17.25	14.45
	HME	-	175, 250	-	14.45
BAD91-400	HIE	400	400	21.20	20.00
	HSE	400	400	22.30	20.00
	HME	-	400	-	20.00

Note

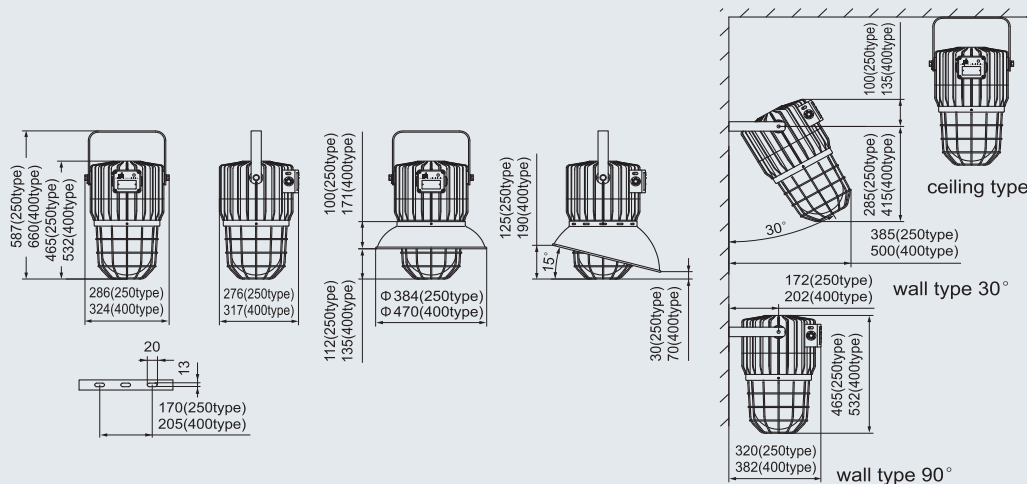
1. The light fittings are supplied without lamp. PHILIPS lamps are recommended.
2. High pressure mercury lamp is not available in American standard products.
3. The light fittings are supplied without external reflector. Please specify when ordering.

Zones 1&2; 21&22

Technical data																																											
Explosion-proof light fittings		BAD91-250-□□	BAD91-400-□□																																								
Explosion protection Gas explosion protection		⊕ II 2 G Ex de IIC T3	⊕ II 2 G Ex de IIC T3																																								
	Dust explosion protection	Ex tD A21 T190°C IP65	Ex de IIC T3 Gb Ex tD A21 T190°C IP65																																								
Certificates For gas explosion protection		LCIE 08 ATEX 6106 IECEX CQM 08.0019; FM (USA) PCEC (China)	LCIE 08 ATEX 6112 IECEX CQM 11.0019X; FM (USA) PCEC (China)																																								
	For dust explosion protection																																										
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	EN 60079-0: 2004, EN 60079-1: 2004 EN 60079-7: 2003 IEC 60079-0: 2007, IEC 60079-1: 2007 IEC 60079-7: 2006, IEC 61241-0: 2004 IEC 61241-1: 2004																																								
Material		Copper-free aluminium, powder coated surface, yellow(RAL1021) Toughened glass, stands 4J impact High-purity aluminium Pure aluminium, anodicoxidation treatment for surface Stainless steel Choke ballast, rapid starting, stable performance General trigger Power factor ≥ 0.90 (compensated) Stainless steel																																									
Lamp Available lamp and lamp power (W)		<table border="1"> <thead> <tr> <th rowspan="2">Type</th> <th rowspan="2">Lamp</th> <th colspan="2">American standard</th> <th>European standard</th> </tr> <tr> <th colspan="2">Lamp holder</th> <th>Lamp holder</th> </tr> <tr> <td></td> <td></td> <th>E27</th> <th>E40</th> <th>E40</th> </tr> </thead> <tbody> <tr> <td rowspan="3">BAD91-250</td> <td>HSE</td> <td>70W, 100W</td> <td>150W, 250W</td> <td>150W, 250W</td> </tr> <tr> <td>HIE</td> <td>70W, 100W, 150W</td> <td>175W, 250W</td> <td>175W, 250W</td> </tr> <tr> <td>HME</td> <td>-</td> <td>-</td> <td>175W, 250W</td> </tr> <tr> <td rowspan="3">BAD91-400</td> <td>HSE</td> <td>-</td> <td>400W</td> <td>400W</td> </tr> <tr> <td>HIE</td> <td>-</td> <td>400W</td> <td>400W</td> </tr> <tr> <td>HME</td> <td>-</td> <td>-</td> <td>400W</td> </tr> </tbody> </table>			Type	Lamp	American standard		European standard	Lamp holder		Lamp holder			E27	E40	E40	BAD91-250	HSE	70W, 100W	150W, 250W	150W, 250W	HIE	70W, 100W, 150W	175W, 250W	175W, 250W	HME	-	-	175W, 250W	BAD91-400	HSE	-	400W	400W	HIE	-	400W	400W	HME	-	-	400W
Type	Lamp	American standard		European standard																																							
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BAD91-400	HSE	-	400W	400W																																							
	HIE	-	400W	400W																																							
	HME	-	-	400W																																							
Rated voltage		American standard: 120V/208V/240V/277V AC 60Hz (50Hz is optional) European standard: 220~240V AC 50Hz (60Hz is optional)																																									
Earthing protection		M5 (internal & external earth bolts)																																									
Degree of protection		IP65																																									
Ambient temperature		-20°C~+55°C																																									
Terminal		3 x 1.5~2.5mm ² (L+N+PE)																																									
Cable entries		2 x M25 x 1.5 Plug																																									
Cable gland (optional)		DQM-I (Ex e) is recommended. Please see P7/17~18.																																									



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



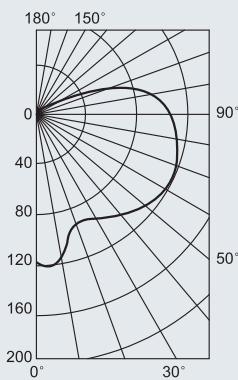
Pendant Light Fittings BAD91 Series Explosion-proof Light Fittings

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



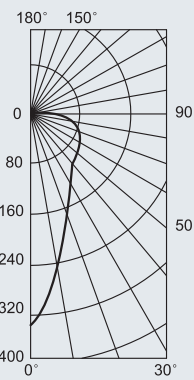
175W Metal halide lamp*0.61
175W High pressure mercury lamp*0.32
250W High pressure mercury lamp*0.55
150W High pressure sodium lamp*0.65
250W High pressure sodium lamp*1.22

Angle	CP	Angle	CP	Angle	CP
0	1569	60	1547	120	103
5	1697	65	1646	125	72
10	1201	70	1544	130	55
15	983	75	1485	135	45
20	720	80	1453	140	36
25	814	85	1646	145	31
30	970	90	1614	150	28
35	864	95	1581	155	27
40	1196	100	1547	160	27
45	1224	105	1492	165	25
50	1267	110	1202	170	23
55	1209	115	641	175	9
				180	4



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

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



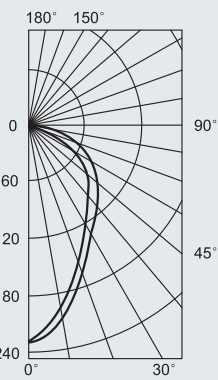
175W Metal halide lamp*0.61
175W High pressure mercury lamp*0.32
250W High pressure mercury lamp*0.55
150W High pressure sodium lamp*0.65
250W High pressure sodium lamp*1.22

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	0
25	3672	85	139	145	0
30	3206	90	70	150	0
35	2538	95	47	155	0
40	2451	100	36	160	0
45	2010	105	25	165	0
50	1886	110	19	170	0
55	1983	115	12	175	0
				180	0



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

Rated luminous flux:23000lm;
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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	6
15	3495	115	8	15	3500	115	0
25	2862	125	0	25	2699	125	0
35	2063	135	0	35	2025	135	0
45	1797	145	0	45	1868	145	0
55	1687	155	0	55	944	155	0
65	1166	165	0	65	253	165	0
75	288	175	0	75	54	175	0
85	85	180	0	85	17	180	0
90	42			90	12		



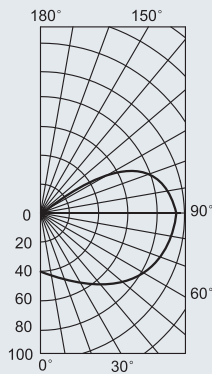
We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.

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



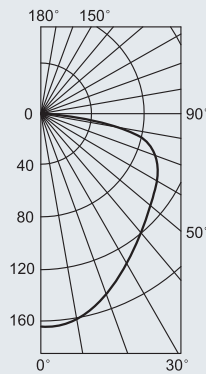
400W High pressure sodium lamp*1.26
400W High pressure mercury lamp*0.58

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 wide reflector)

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



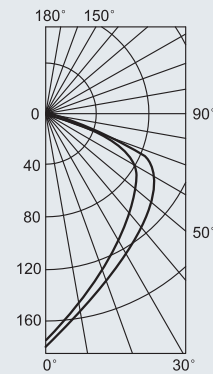
400W High pressure sodium lamp*1.26
400W High pressure mercury lamp*0.58

Angle	CP	Angle	CP	Angle	CP
0	5194	60	3324	120	9
5	6163	65	3506	125	9
10	6104	70	3447	130	9
15	5900	75	3053	135	9
20	5459	80	2052	140	0
25	5037	85	759	145	0
30	4647	90	255	150	0
35	4324	95	133	155	0
40	4251	100	81	160	0
45	4257	105	48	165	0
50	3733	110	26	170	0
55	3671	115	15	175	0
				180	0



Photometric data of 400W metal halide lamp (with angle 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	0
35	4518	135	8	35	3919	135	0
45	4207	145	0	45	3475	145	0
55	3914	155	0	55	3034	155	0
65	3680	165	0	65	2875	165	0
75	3235	175	0	75	523	175	0
85	2640	180	0	85	139	180	0
90	1295			90	80		



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