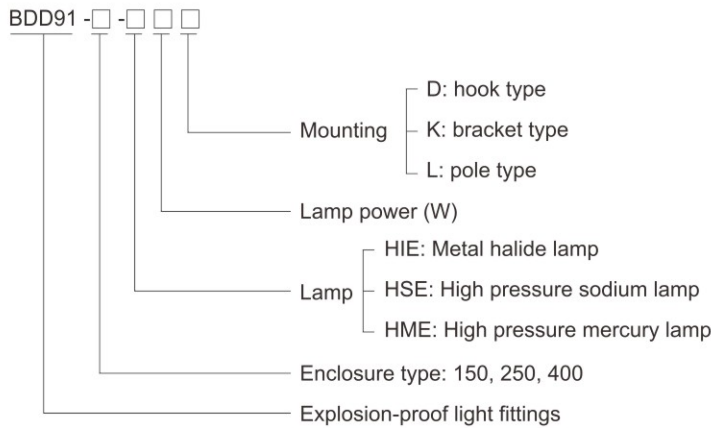


Pendant Light Fittings BDD91 Series Explosion-proof Light Fittings



- ◆ 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 1, Groups A, B, C, D
- ◆ Applicable lamp (max.400W):
 - Metal halide lamp (HIE)
 - High pressure sodium lamp (HSE)
 - High pressure mercury lamp (HME)
- ◆ Three enclosure types: 150, 250, 400
- ◆ Integral control gear, easy installation and maintenance.

Catalogue number logic



Selection table

Type/Ordering code	Available lamp power (W)			Lamp holder	Weight (kg)
	HIE	HSE	HME		
BDD91-150	70, 100, 150	70, 100	80, 125	E27	11.20
BDD91-250	250	150, 250	250	E40	14.80
BDD91-400	250, 400	150, 250, 400	400	E40	16.70

Note: 1. The light fittings are supplied without lamp. PHILIPS lamps are recommended.
 2. HPI European standard ballast is supplied with HIE light fitting. HPI European standard lamps are recommended.
 3. The light fittings are supplied without external reflector. Please specify when ordering.

Zones 1&2; 21&22

Pendant Light Fittings

BDD91 Series Explosion-proof Light Fittings

Technical data												
Explosion-proof light fittings	BDD91-150-□□□											
Explosion protection	Global (IECEX) Gas and dust Europe (ATEX) Gas and dust											
Certificates	IECEX CQM 12.0016X											
Conformity to standards	Ex d IIC T□ ¹⁾ Gb Ex t IIIC T□ ¹⁾ Db IP66 DNV 11 ATEX 05977X Ⓢ II 2 G Ex d IIC T□ ¹⁾ Gb Ⓢ II 2 D Ex tb IIIC T□ ¹⁾ Db IP66 ¹⁾ See Selection table IECEX; ATEX; CU-TR EN 60079-0, EN 60079-1, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-31											
Material	Enclosure Transparent cover Internal reflector External reflector (optional) Wire guard Ballast Trigger Power factor Exposed fastener											
Lamp	Available lamp and lamp power (W)											
Rated voltage	220~240V AC 50Hz (60Hz is optional)											
Earthing protection	M5 (internal & external earth bolts)											
Degree of protection	IP66, IP67 (optional)											
Ambient temperature	-60°C~+55°C											
Terminal	3 x 1.5~4mm ² (L+N+PE)											
Mounting	Bracket type, pole type, hook type											
Cable entries	2 x M25x1.5 for bracket type, 1 x M25x1.5 for pole type.											
Cable gland (optional)	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~29											
	<table border="1"> <thead> <tr> <th colspan="3">Available lamp</th> <th rowspan="2">Lamp holder</th> </tr> <tr> <th>HIE</th> <th>HSE</th> <th>HME</th> </tr> </thead> <tbody> <tr> <td>70W, 100W, 150W</td> <td>70W, 100W</td> <td>80W, 125W</td> <td>E27</td> </tr> </tbody> </table> <p>Note: HPI European standard ballast is available in general.</p>	Available lamp			Lamp holder	HIE	HSE	HME	70W, 100W, 150W	70W, 100W	80W, 125W	E27
Available lamp			Lamp holder									
HIE	HSE	HME										
70W, 100W, 150W	70W, 100W	80W, 125W	E27									



Selection table (BDD91-150)

Lamp	Lamp power (W)	Temperature classes	
		Gas	Dust
HIE	70, 100	T4	T130°C
HME	80		
HSE	70, 100		
HIE	150	T142°C	T142°C
HME	125	T147°C	T147°C

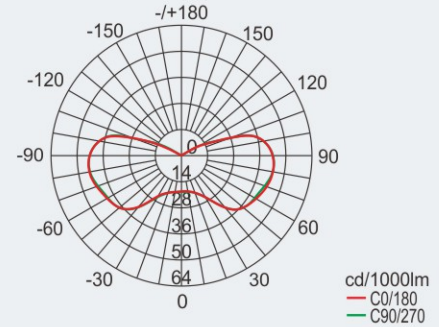
Pendant Light Fittings BDD91 Series Explosion-proof Light Fittings

Photometric data

BDD91-150-□□□(Without external reflector)



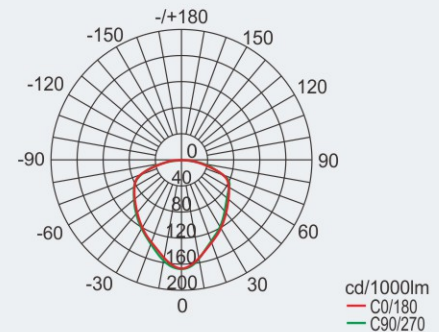
Rated luminous flux
 70W High pressure sodium lamp: 6600 lm
 100W High pressure sodium lamp: 10200 lm
 80W High pressure mercury lamp: 3800 lm
 125W High pressure mercury lamp: 6300 lm
 70W Metal halide lamp: 5800 lm
 100W Metal halide lamp: 8700 lm
 150W Metal halide lamp: 13500 lm
 The data from Philips lamp



BDD91-150-□□□(With wide reflector)



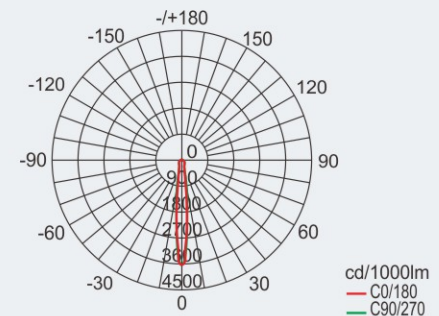
Rated luminous flux
 70W High pressure sodium lamp: 6600 lm
 100W High pressure sodium lamp: 10200 lm
 80W High pressure mercury lamp: 3800 lm
 125W High pressure mercury lamp: 6300 lm
 70W Metal halide lamp: 5800 lm
 100W Metal halide lamp: 8700 lm
 150W Metal halide lamp: 13500 lm
 The data from Philips lamp



BDD91-150-□□□(With deep reflector)



Rated luminous flux
 70W High pressure sodium lamp: 6600 lm
 100W High pressure sodium lamp: 10200 lm
 80W High pressure mercury lamp: 3800 lm
 125W High pressure mercury lamp: 6300 lm
 70W Metal halide lamp: 5800 lm
 100W Metal halide lamp: 8700 lm
 150W Metal halide lamp: 13500 lm
 The data from Philips lamp



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

Pendant Light Fittings

BDD91 Series Explosion-proof Light Fittings

Technical data				
Explosion-proof light fittings	BDD91-250-□□□			
Explosion protection	IECEX CQM 12.0016X			
Global (IECEX)	Ex d IIC T3 Gb			
Gas and dust	Ex t IIIC T190°C Db IP66			
Europe (ATEX)	DNV 11 ATEX 06159X			
Gas and dust	Ex II 2 G Ex d IIC T3 Gb Ex II 2 D Ex tb IIIC T190°C Db IP66			
Certificates	IECEX; ATEX; CU-TR			
Conformity to standards	EN 60079-0, EN 60079-1, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-31			
Material	Copper-free Aluminium Alloy, powder coated surface, yellow (RAL1021)			
Enclosure	Toughened glass, stands 4J impact			
Transparent cover	High-purity aluminium			
Internal reflector	Pure aluminium, anodic-oxidation treatment for surface			
External reflector (optional)	Stainless steel			
Wire guard	Electromagnetic ballast, rapid starting, stable performance			
Ballast	General trigger			
Trigger	COS $\phi \geq 0.90$ (compensated)			
Power factor	Stainless steel			
Exposed fastener				
Lamp				
Available lamp and lamp power (W)	Available lamp			Lamp holder
	HIE	HSE	HME	
	250W	150W, 250W	250W	E40
	Note: HPI European standard ballast is available in general			
Rated voltage	220~240V AC 50Hz (60Hz is optional)			
Earthing protection	M5 (internal & external earth bolts)			
Degree of protection	IP66, IP67 (optional)			
Ambient temperature	-60°C~+55°C			
Terminal	3 x 1.5~4mm ² (L+N+PE)			
Mounting	Bracket type, pole type, hook type			
Cable entries	2 x M25x1.5 for bracket type, 1 x M25x1.5 for pole type.			
Cable gland (optional)	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~29.			



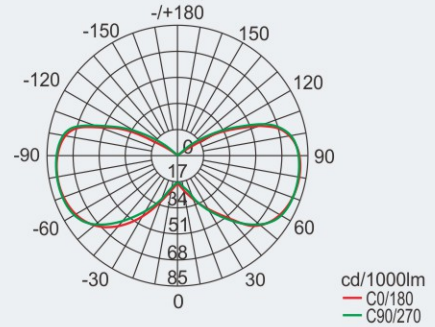
Pendant Light Fittings BDD91 Series Explosion-proof Light Fittings

Photometric data

BDD91-250-□□□□(Without external reflector)



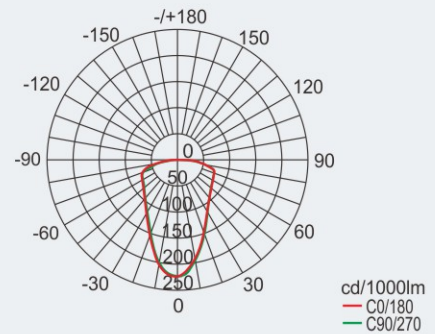
Rated luminous flux
 250W Metal halide lamp: 23200 lm
 150W High pressure sodium lamp: 18000 lm
 250W High pressure sodium lamp: 33200 lm
 250W High pressure mercury lamp: 13000 lm
 The data from Philips lamp



BDD91-250-□□□□(With wide reflector)



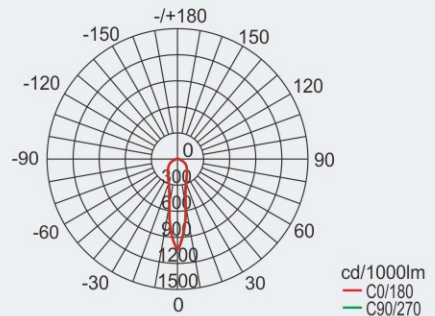
Rated luminous flux
 250W Metal halide lamp: 23200 lm
 150W High pressure sodium lamp: 18000 lm
 250W High pressure sodium lamp: 33200 lm
 250W High pressure mercury lamp: 13000 lm
 The data from Philips lamp



BDD91-250-□□□□(With deep reflector)



Rated luminous flux
 250W Metal halide lamp: 23200 lm
 150W High pressure sodium lamp: 18000 lm
 250W High pressure sodium lamp: 33200 lm
 250W High pressure mercury lamp: 13000 lm
 The data from Philips lamp



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Pendant Light Fittings

BDD91 Series Explosion-proof Light Fittings

Technical data												
Explosion-proof light fittings	BDD91-400-□□□											
Explosion protection	IECEX CQM 12.0016X Ex d IIC T□ ¹ Gb Ex tb IIIC T□ ¹ Db IP66											
Global (IECEX) Gas and dust												
Europe (ATEX) Gas and dust	DNV 11 ATEX 06160X ⊕ II 2 G Ex d IIC T□ ¹ Gb ⊕ II 2 D Ex tb IIIC T□ ¹ Db IP66											
Certificates	¹ See Selection Table IECEX; ATEX; CU-TR											
Conformity to standards	EN 60079-0, EN 60079-1, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-31											
Material												
Enclosure	Copper-free Aluminium Alloy, powder coated surface, yellow (RAL1021)											
Transparent cover	Toughened glass, stands 4J impact											
Internal reflector	High-purity aluminium											
External reflector (optional)	Pure aluminium, anodic-oxidation treatment for surface											
Wire guard	Stainless steel											
Ballast	Electromagnetic ballast, rapid starting, stable performance											
Trigger	General trigger											
Power factor	COS φ ≥ 0.90 (compensated)											
Exposed fastener	Stainless steel											
Lamp												
Available lamp and lamp power (W)	<table border="1"> <thead> <tr> <th colspan="3">Available lamp</th> <th rowspan="2">Lamp holder</th> </tr> <tr> <th>HIE</th> <th>HSE</th> <th>HME</th> </tr> </thead> <tbody> <tr> <td>250W, 400W</td> <td>150W, 250W, 400W</td> <td>400W</td> <td>E40</td> </tr> </tbody> </table> <p>Note: HPI European standard ballast is available in general.</p>	Available lamp			Lamp holder	HIE	HSE	HME	250W, 400W	150W, 250W, 400W	400W	E40
Available lamp			Lamp holder									
HIE	HSE	HME										
250W, 400W	150W, 250W, 400W	400W	E40									
Rated voltage	220V, 230V, 240V AC 50Hz, 220~240V AC 50Hz (60Hz is optional)											
Earthing protection	M5 (internal & external earth bolts)											
Degree of protection	IP66, IP67 (optional)											
Ambient temperature	-60°C~+55°C											
Terminal	3 x 1.5~4mm ² (L+N+PE)											
Mounting	Bracket type, pole type, hook type											
Cable entries	2 x M25x1.5 for bracket type, 1 x M25x1.5 for pole type.											
Cable gland (optional)	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~29.											



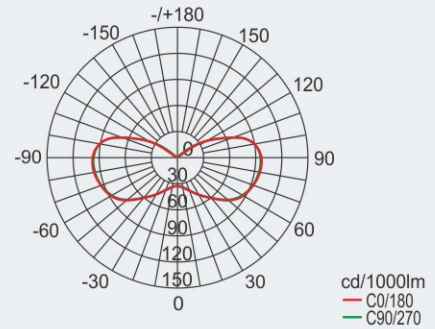
Selection table		Temperature classes			
Rated voltage (V)	Rated power (W)	-60°C ≤ Ta ≤ +55°C		-60°C ≤ Ta ≤ +40°C	
		Gas	Dust	Gas	Dust
220V~240V AC 50/60Hz	HIE250W HSE150W	T4	T130°C	-	-
	HIE400W, HSE400W HME400W	T3	T190°C	-	-
220V AC 50/60Hz	HSE250W	T4	T130°C	-	-
230V/240V AC 50/60Hz	HSE250W	-	-	T4	T130°C

Pendant Light Fittings BDD91 Series Explosion-proof Light Fittings

Photometric data

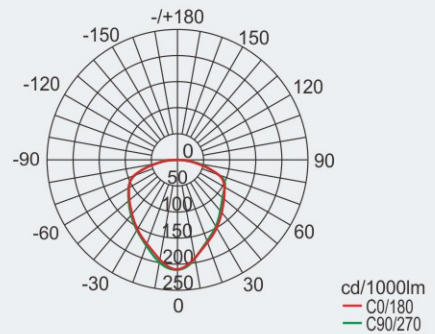
BDD91-400-□□□(Without external reflector)

Rated luminous flux
 400W High pressure sodium lamp: 56500 lm
 400W High pressure mercury lamp: 22000 lm
 400W Metal halide lamp: 42000 lm
 The data from Philips lamp



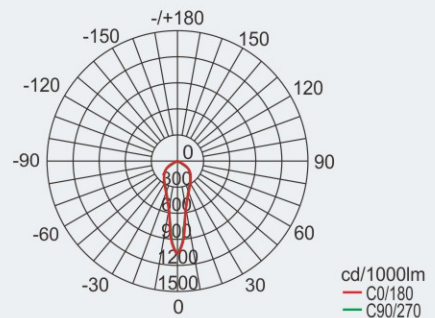
BDD91-400-□□□(With wide reflector)

Rated luminous flux
 400W High pressure sodium lamp: 56500 lm
 400W High pressure mercury lamp: 22000 lm
 400W Metal halide lamp: 42000 lm
 The data from Philips lamp



BDD91-400-□□□(With deep reflector)

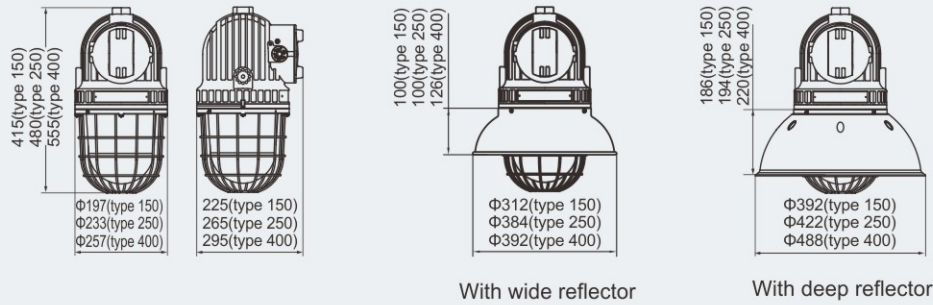
Rated luminous flux
 400W High pressure sodium lamp: 56500 lm
 400W High pressure mercury lamp: 22000 lm
 400W Metal halide lamp: 42000 lm
 The data from Philips lamp



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

Pendant Light Fittings BDD91 Series Explosion-proof Light Fittings

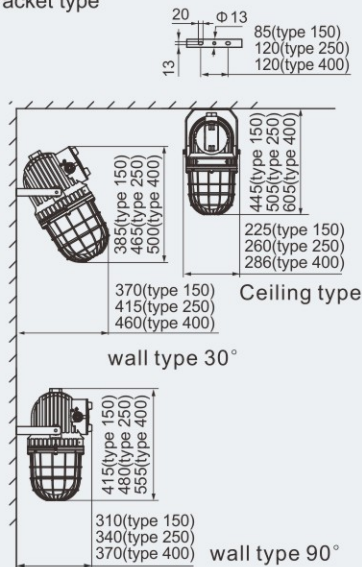
Dimension drawings (all dimensions in mm) - subject to alteration



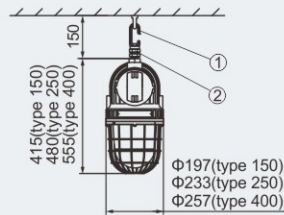
Mounting type (all dimensions in mm) – subject to alteration

Installation reference

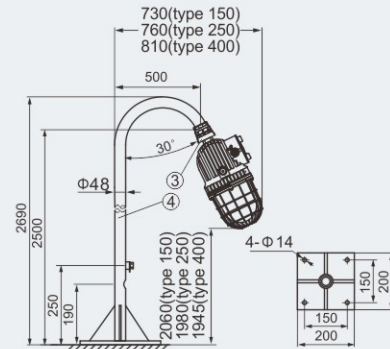
K: bracket type



D: hook type



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



- ①. Hook (Stainless steel).
- ②. BGJ-III explosion-proof connector, M25 x 1.5(M) / M25 x 1.5(F) Stainless steel.
- ③. BGJ-III explosion-proof connector, M25 x 1.5(M) / M25 x 1.5(M) Stainless steel.
- ④. Pole shall not be supplied with light fittings; if required, please specify when ordering.



Accessories

Picture	Name	Ordering code	Weight (kg)
	150 Wide reflector	91001	0.20
	250 Wide reflector	61002	0.27
	400 Wide reflector	91003	0.45
	150 Deep reflector	91004	0.44
	250 Deep reflector	91005	0.55
	400 Deep reflector	91006	0.65

Note: Ballast, trigger and capacitor see P1/21.