

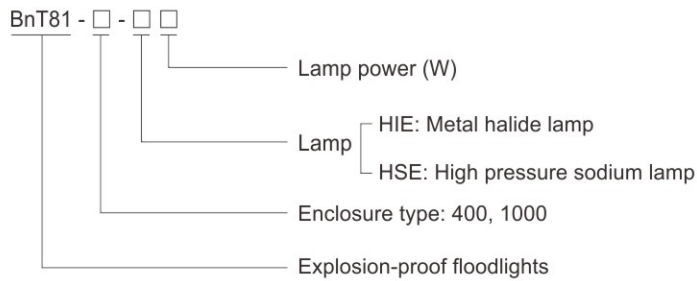
Floodlights

BnT81 Series Explosion-proof Floodlights



- ◆ Explosion protection to
 - CENELEC
 - IEC
 - NEC
- ◆ Can be used in
 - Zone 2
 - Zone 21 and Zone 22
 - Class I, Zone 2
 - Class I, Division 2, Groups A, B, C, D
- ◆ Available lamp (max. 1000W):
 - Metal halide lamp (HIE)
 - High pressure sodium lamp (HSE)
- ◆ Two enclosure types: 400, 1000.
- ◆ Type 400: lamp and ballast are of integral type.
Type 1000: lamp and ballast are split type.
- ◆ Enclosure in Copper-free Aluminium Alloy, powder coated surface, yellow (RAL 1021)
- ◆ Both American standard and European standard are available.
- ◆ Type 400 are supplied without lamp, PHILIPS lamps are recommended.
- ◆ Type 1000 are supplied with lamp.

Catalogue number logic



Zones 2; 21&22

Floodlights BnT81 Series Explosion-proof Floodlights

Technical data													
Explosion-proof floodlights BnT81-400-□□													
Explosion protection	IECEX CQM 12.0011X Ex nR IIC xxx ¹⁾ Gc Ex t IIIC Txxx°C ¹⁾ Db IP65 LCIE 12 ATEX 1012X (gas); LCIE 12 ATEX 3052X (dust); ⊕ II 3 G Ex nR IIC xxx ¹⁾ Gc ⊕ II 2 D Ex t IIIC Txxx°C ¹⁾ Db IP65 ¹⁾ See Selection table												
Certificates	IECEX; ATEX; CU-TR; UL												
Conformity to standards	EN 60079-0, EN 60079-15, EN 60079-31 IEC 60079-0, IEC 60079-15, IEC 60079-31 UL 1598, CSA C22.2 No.250.0-8, UL 60079-0, UL 60079-15 CSA C22.2 No. 60079-0, CSA C22.2 No. 60079-15												
Material	Copper-free Aluminium Alloy, powder coated surface, yellow (RAL 1021) Toughened glass, stands 4J impact High-purity aluminium Electromagnetic ballast, rapid starting, stable performance General trigger COS φ ≥ 0.90 (compensated) Stainless steel												
Lamp	American Standard: E39; European Standard: E40												
Available lamp and lamp power (W)	<table border="1"> <thead> <tr> <th>American standard</th> <th>HIE</th> <th>175W, 250W, 400W</th> </tr> </thead> <tbody> <tr> <td>120V/208V/240V/277V/480V AC</td> <td>HSE</td> <td>150W, 250W, 400W</td> </tr> <tr> <th>European standard</th> <th>HIE</th> <th>250W, 400W</th> </tr> <tr> <td>220~240V, 250V AC</td> <td>HSE</td> <td>150W, 250W, 400W</td> </tr> </tbody> </table>	American standard	HIE	175W, 250W, 400W	120V/208V/240V/277V/480V AC	HSE	150W, 250W, 400W	European standard	HIE	250W, 400W	220~240V, 250V AC	HSE	150W, 250W, 400W
American standard	HIE	175W, 250W, 400W											
120V/208V/240V/277V/480V AC	HSE	150W, 250W, 400W											
European standard	HIE	250W, 400W											
220~240V, 250V AC	HSE	150W, 250W, 400W											
Rated voltage	Note: Please see Selection table of American standard HID lamp and corresponding electrical components (See P1/22) American standard: 120V/208V/240V/277V/480V AC 60Hz (50Hz is optional) European standard: 220~240V, 250V AC 50Hz (60Hz is optional)												
Earthing protection	M5 (internal & external earth bolts)												
Degree of protection	IP65												
Ambient temperature	ATEX / IECEX: -60°C~+55°C; UL: -60°C~+45°C												
Terminal	3 x 1.5~4mm ² (L+N+PE)												
Cable entries	2 x Φ21: 1 x M20 x 1.5 plug, 1 x M20 x 1.5 cable gland (DQM-I Ex e)												
Applicable cable outer diameter	Φ5~Φ10 (mm)												
Weight	American standard: 16.10kg European standard: 12.85kg												



Selection table					Dimension drawings (all dimensions in mm) - subject to alteration	
Rated voltage	Lamp	Lamp power (W)	Temperature classes		Gas	Dust
			Gas	Dust		
220~240V 250V AC 50/60Hz	HIE	250	T3	T190°C		
	HSE	150,250	T3	T190°C		
	HIE	400	T252°C	T252°C		
	HSE	400	T252°C	T252°C		
120V/208V 240V/277V 480V AC 50/60Hz	HIE	175,250,400	T3	T190°C		
	HSE	150,250,400	T3	T190°C		

Floodlights BnT81 Series Explosion-proof Floodlights

Technical data

Explosion-proof floodlights BnT81-1000-□□

Explosion protection

Global (IECEX)
Gas and dust

IECEX CQM 13.0006X

Europe (ATEX)
Gas and dust

Ex nR IIC T2 Gc

Ex tb IIIC T290°C Db IP65

LCIE 13 ATEX 1002X (gas); LCIE 13 ATEX 3008X (dust)

⊕ Ex II 3 G Ex nR IIC T2 Gc

⊕ Ex II 2 D Ex tb IIIC T290°C Db IP65

IECEX; ATEX; CU-TR

Certificates

Conformity to standards

EN 60079-0, EN 60079-15, EN 60079-31

IEC 60079-0, IEC 60079-15, IEC 60079-31

Material

Enclosure
Glass cover
Internal reflector
Ballast
Trigger
Power factor
Exposed fastener

Copper-free Aluminium Alloy, powder coated surface

Toughened glass, stands 4J impact

High-purity aluminium

Electromagnetic ballast, rapid starting, stable performance

General trigger

COSφ ≥ 0.90 (compensated)

Stainless steel

Lamp

Lamp holder
Available lamp and lamp power (W)

E40

American standard 120V/208V/240V/277V AC	HIE	1000W
	HSE	1000W
European standard 230V AC	HIE	1000W
	HSE	1000W

Note: Please see Selection table of American standard HID lamp and corresponding electrical components (See P1/22)

Rated voltage

American standard: 120V/208V/240V/277V AC 60Hz (50Hz is optional)

European standard: 230V AC 50Hz (60Hz is optional)

Earthing protection

M5 (internal & external earth bolts)

Degree of protection

IP65

Ambient temperature

-60°C~+55°C

Terminal

3 x 1.5~4mm²(L+N+PE)

Cable entries

Lamp: 1 x M20 x1.5 cable gland (DQM-I Ex e, plastic, cable wiring)

Ballast: 2 x M20 x1.5 cable glands (DQM-I Ex e, plastic, cable wiring)

Applicable cable outer diameter

Φ6~Φ12 (mm)

Weight

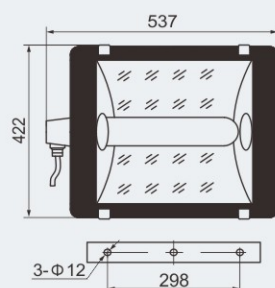
Lamp
Ballast

10.00kg

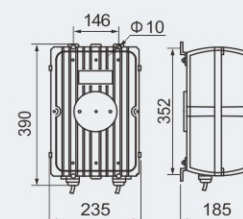
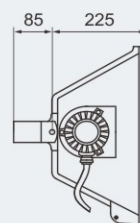
American standard: 21.8kg European standard: 18.6kg



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



BnT81-1000



BnT81-1000 Ballast

Floodlights

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Photometric data

BnT81-400-□□

Rated luminous flux

250W Metal halide lamp: 25000 lm

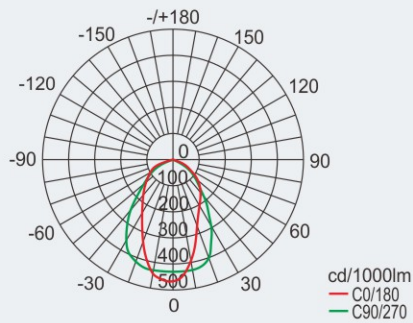
150W High pressure sodium lamp: 18000 lm

250W High pressure sodium lamp: 33200 lm

400W Metal halide lamp: 42500 lm

400W High pressure sodium lamp: 56500 lm

The data from Philips lamp



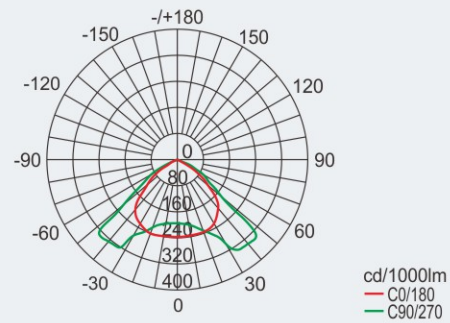
BnT81-1000-□□

Rated luminous flux

1000W Metal halide lamp: 85000 lm

1000W High pressure sodium lamp: 130000 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

