

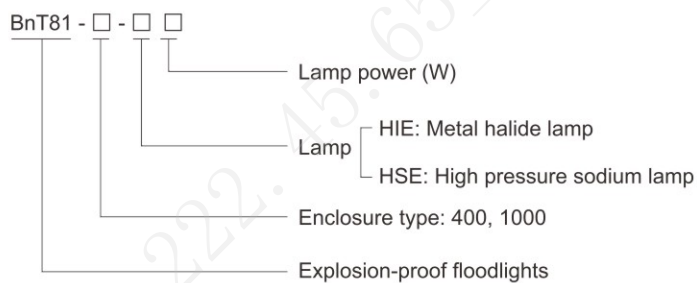
Floodlights

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	Global (IECEX)	IECEX CQM 12.0011X		
	Gas and dust	Ex nR IIC xxx ¹⁾ Gc		
	Europe (ATEX)	Ex tb IIIC Txxx ¹⁾ Db IP65		
	Gas and dust	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 ¹⁾ Db IP65		
		¹⁾ See Selection table		
		IECEX; ATEX; UL		
Certificates		EN 60079-0, EN 60079-15, EN 60079-31		
Conformity to standards		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				
Enclosure		Copper-free Aluminium Alloy, powder coated surface, yellow (RAL 1021)		
Glass cover		Toughened glass, stands 4J impact		
Internal reflector		High-purity aluminium		
Ballast		Electromagnetic ballast, rapid starting, stable performance		
Trigger		General trigger		
Power factor		COSΦ ≥0.90 (compensated)		
Exposed fastener		Stainless steel		
Lamp				
Lamp holder		American Standard: E39; European Standard: E40		
Available lamp and lamp power (W)		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
		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/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		3×1.5~4mm ² (L+N+PE)		
Cable entries		2×Φ21: 1×M20×1.5 plug, 1×M20×1.5 cable gland (DQM-I Ex eb)		
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		
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

Europe (ATEX)

Gas and dust

IECEX CQM 13.0006X

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

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

COS Φ $\geq$ 0.85 (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)

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

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

Rated voltage

Earthing protection

Degree of protection

Ambient temperature

Terminal

Cable entries

M5 (internal & external earth bolts)

IP65

-60°C~+55°C

3×1.5~4mm² (L+N+PE)

Lamp: 1×M20×1.5 cable gland (DQM-I/I Ex eb, plastic, cable wiring)

Ballast: 2×M20×1.5 cable glands (DQM-I/I Ex eb, plastic, cable wiring)

Applicable cable outer diameter

Φ6~Φ12 (mm)

Weight

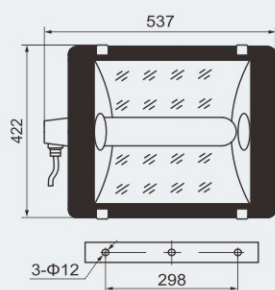
Lamp

10.00kg

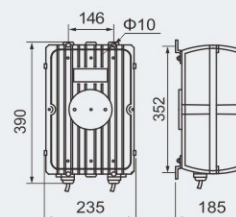
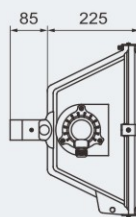
Ballast

American standard: 21.8kg European standard: 18.6kg

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



BnT81-1000



BnT81-1000 Ballast

Floodlights

BnT81 Series Explosion-proof Floodlights

Photometric data

BnT81-400-□□

Rated luminous flux

250W Metal halide lamp: 25000 lm

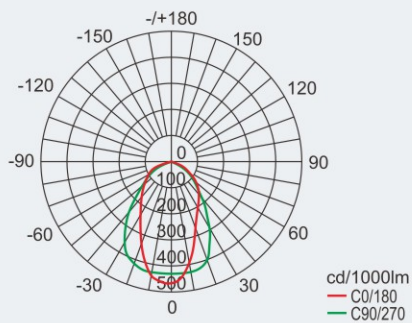
150W High pressure sodium lamp: 18000 lm

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



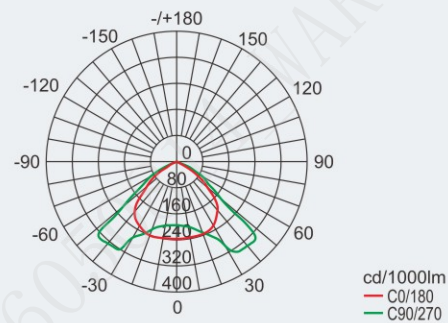
BnT81-1000-□□

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

