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 cooper-free aluminium, 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

BnT81 - □ - □ □

- Lamp power (W)
- Lamp
  - HIE: Metal halide lamp
  - HSE: High pressure sodium lamp
- Enclosure type: 400, 1000
- Explosion-proof floodlights

Zones 2; 21&22

Technical data

Explosion-proof floodlights BnT81-400-□□

Explosion protection	
Gas explosion protection	Ex II 3 G Ex nR IIC xxx[1] Gc
Dust explosion protection	Ex II 2 D Ex t IIIC Txxx℃[1] Db IP65
	[1] See Selection table
Certificates	LCIE 12 ATEX 1012X (gas); LCIE 12 ATEX 3052X (dust); IECEx CQM 12.0011X; 20150925-E477178(UL); 20151209-E477179(UL); CU-TR
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	
Enclosure	Copper-free aluminium, 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
Capacitor	Power factor≥0.90 (compensated)
Exposed fastener	Stainless steel
Lamp	
Lamp holder	American Standard: E39; European Standard: E40
Available lamp and lamp power (W)	

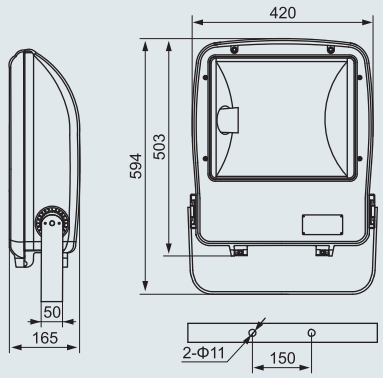
American standard 120V/208V/240V/277V/480V AC	HIE	175W, 250W, 400W
	HSE	150W, 250W, 400W
European standard 220~240V, 250V AC	HIE	175W, 250W, 400W
	HSE	150W, 250W, 400W

	Note: Please see Selection table of American standard HID lamp and corresponding electrical components (See P1/20)
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℃~+55℃; UL: -60℃~+45℃
Terminal	3 x 1.5~4mm²(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, carbon steel)
Applicable cable outer diameter	Φ5~Φ10 (mm)
Weight	American standard: 16.10kg European standard: 12.85kg

Selection table

Rated voltage	Lamp	Lamp power (W)	Temperature classes	
			Gas	Dust
220~240V 250V AC 50/60Hz	HIE	175,250	T3	T190℃
	HSE	150,250	T3	T190℃
	HIE	400	T252℃	T252℃
	HSE	400	T252℃	T252℃
120V/208V 240V/277V 480V AC 50/60Hz	HIE	175,250,400	T3	T190℃
	HSE	150,250,400	T3	T190℃

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



Floodlights
BnT81 Series Explosion-proof Floodlights

Technical data

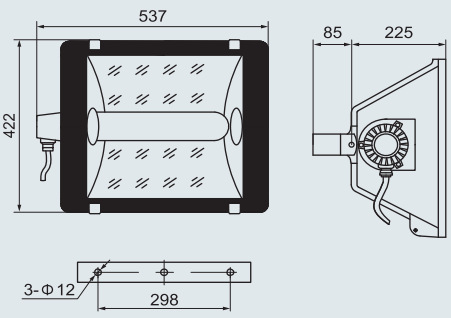
Explosion-proof floodlights BnT81-1000-□□

Explosion protection	
Gas explosion protection	Ⓔx II 3 G Ex nR IIC T2 Gc
Dust explosion protection	Ⓔx II 2 D Ex tb IIIC T290℃ Db IP65
Certificates	LCIE 13 ATEX 1002X (gas); LCIE 13 ATEX 3008X (dust) IECEx CQM 13.0006X; CU-TR
Conformity to standards	EN 60079-0, EN 60079-15, EN 60079-31 IEC 60079-0, IEC 60079-15, IEC 60079-31
Material	
Enclosure	Copper-free aluminium, powder coated surface
Glass cover	Toughened glass, stands 4J impact
Internal reflector	High-purity aluminium
Ballast	Electromagnetic ballast, rapid starting, stable performance
Trigger	General trigger
Capacitor	Power factor≥0.90 (compensated)
Exposed fastener	Stainless steel
Lamp	
Lamp holder	E40
Available lamp and lamp power (W)	

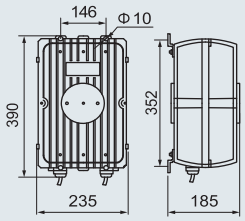
American standard 120V/208V/240V/277V AC	HIE	1000W
	HSE	1000W
European standard 230V AC	HIE	1000W
	HSE	1000W

Rated voltage	Note: Please see Selection table of American standard HID lamp and corresponding electrical components (See P1/20) 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℃~+55℃
Terminal	3 x 1.5~4mm^2(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	10.00kg
Ballast	American standard: 21.8kg European standard: 18.6kg

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



BnT81-1000

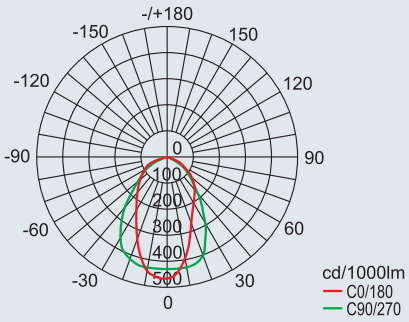


BnT81-1000 Ballast

Photometric data

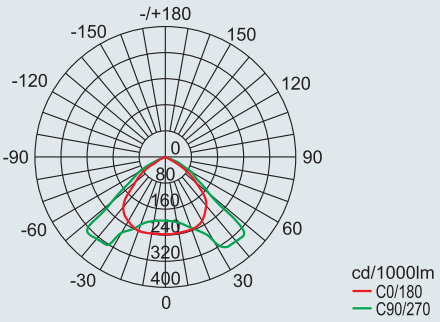
BnT81-400-□□

Rated luminous flux
175W Metal halide lamp: 16000 lm
250W Metal halide lamp: 23500 lm
150W High pressure sodium lamp: 18000 lm
250W High pressure sodium lamp: 33200 lm
400W Metal halide lamp: 41000 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