

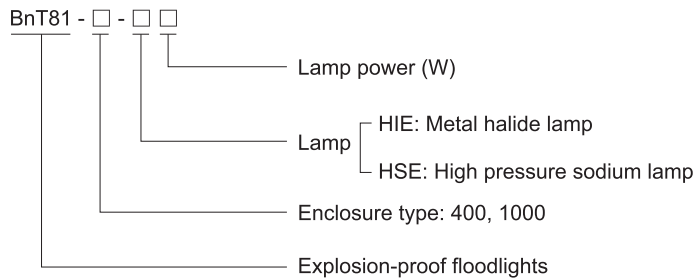
## Floodlights

### 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



# Zones 2; 21&22

## Floodlights

### BnT81 Series Explosion-proof Floodlights

Technical data													
<b>Explosion-proof floodlights</b>	<b>BnT81-400-□□</b>												
<b>Explosion protection</b>	<p>Gas explosion protection <math>\text{Ex}</math> II 3 G Ex nR IIC xxx<sup>1)</sup> Gc</p> <p>Dust explosion protection <math>\text{Ex}</math> II 2 D Ex t IIIC Txxx°C<sup>1)</sup> Db IP65</p> <p><sup>1)</sup> See Selection table</p>												
<b>Certificates</b>	LCIE 12 ATEX 1012X (gas); LCIE 12 ATEX 3052X (dust); IECEX CQM 12.0011X; 20150925-E477178(UL); 20151209-E477179(UL); CU-TR												
<b>Conformity to standards</b>	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												
<b>Material</b>	Copper-free aluminium, powder coated surface, yellow (RAL 1021)												
Enclosure	Toughened glass, stands 4J impact												
Glass cover	High-purity aluminium												
Internal reflector	Electromagnetic ballast, rapid starting, stable performance												
Ballast	General trigger												
Trigger	Power factor $\geq 0.90$ (compensated)												
Capacitor	Stainless steel												
Exposed fastener													
<b>Lamp</b>	American Standard: E39; European Standard: E40												
Lamp holder													
Available lamp and lamp power (W)	<table border="1"> <thead> <tr> <th>American standard 120V/208V/240V/277V/480V AC</th> <th>HIE</th> <th>175W, 250W, 400W</th> </tr> </thead> <tbody> <tr> <td></td> <th>HSE</th> <td>150W, 250W, 400W</td> </tr> <tr> <th>European standard 220~240V, 250V AC</th> <th>HIE</th> <td>175W, 250W, 400W</td> </tr> <tr> <td></td> <th>HSE</th> <td>150W, 250W, 400W</td> </tr> </tbody> </table>	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
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											
<b>Rated voltage</b>	Note: Please see Selection table of American standard HID lamp and corresponding electrical components (See P1/20) American standard: 120V/208V/240V/277V/480V AC 60Hz (50Hz is optional) European standard: 220~240V, 250V AC 50Hz (60Hz is optional)												
<b>Earthing protection</b>	M5 (internal & external earth bolts)												
<b>Degree of protection</b>	IP65												
<b>Ambient temperature</b>	ATEX / IECEx: -60°C~+55°C; UL: -60°C~+45°C												
<b>Terminal</b>	3 x 1.5~4mm <sup>2</sup> (L+N+PE)												
<b>Cable entries</b>	2 x $\Phi 21$ : 1 x M20 x 1.5 plug, 1 x M20 x 1.5 cable gland (DQM-I Ex e, carbon steel)												
<b>Applicable cable outer diameter</b>	$\Phi 5 \sim \Phi 10$ (mm)												
<b>Weight</b>	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	175,250	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

Gas explosion protection  
Dust explosion protection

⊕ II 3 G Ex nR IIC T2 Gc  
⊕ II 2 D Ex tb IIIC T290°C 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  
Glass cover  
Internal reflector  
Ballast  
Trigger  
Capacitor  
Exposed fastener

Copper-free aluminium, powder coated surface  
Toughened glass, stands 4J impact  
High-purity aluminium  
Electromagnetic ballast, rapid starting, stable performance  
General trigger  
Power factor  $\geq 0.90$  (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

##### 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°C~+55°C

##### Terminal

3 x 1.5~4mm<sup>2</sup>(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

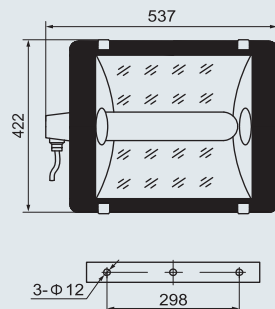
10.00kg

American standard: 21.8kg

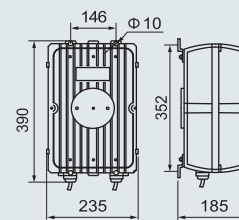
European standard: 18.6kg



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



BnT81-1000



BnT81-1000 Ballast

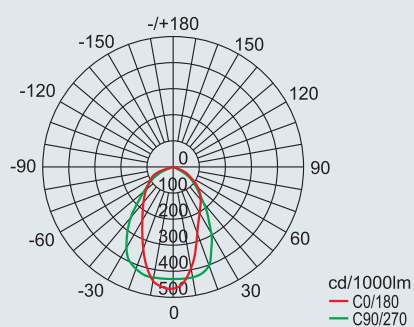
## Floodlights

### BnT81 Series Explosion-proof Floodlights

#### Photometric data

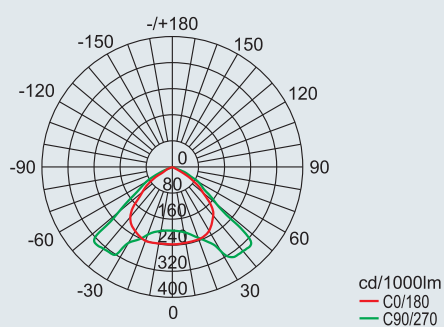
##### BnT81-400-□□

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

