

PB Series Floodlights IIB

Flameproof. Metal Halide, Sodium, Mercury Vapor, Halogen

Zone 1 and 2 - 21 and 22
Gas (G) and Dust (D)

Applications

- Designed for large area lighting in industrial outdoor and indoor hazardous areas.
- Ideal for use in Zones 1 and 2 and 21 and 22 in the oil and gas industry. In locations such as: refineries, pipelines, warehouses, offshore platforms and drilling rigs.

Features

- Gray epoxy painted light marine grade aluminum housing and door.
- Fast and easy lamp replacement via threaded cover on the side of the fixture. The cover is fitted with a short safety chain.
- Lampholder can be easily field-adjustable for either a narrow or wide beam.
- Fixtures operate safely in high ambient temperatures up to +55 °C and in low ambient temperature up to -20 °C.
- Electrical components (ballast, ignitor and capacitor) are thermally separated from the lighting compartment with a bulkhead, providing extended life.
- Easy and efficient wiring due to separate Ex e terminal box with wiring onto 2 captive terminals 2 x 6 mm²; 2 internal earth terminals capacity 6 mm² and 1 external earth terminal capacity 4 mm².
- 2 x M20 clearance holes throughwire cable entries supplied with:
 - One Ex e unarmored cable gland — sealing diameter 6.5 mm to 14.5 mm
 - One blanking plug
 - Two M20 locknuts
- For use with either tubular or ellipsoidal shape lamps. See ordering information for details.
- Choice of mounting with galvanized hinged bracket fixed mounting or tube/pole mounting with galvanized brackets.
- Thermoshock and impact-resistant glass factory sealed into the cover frame.
- Operates in any position.
- Reversible hinge allows for fixture access from either side.
- E40 or H3 lampholders for the 2 x 70 W Vac/Vdc halogen version.
- Internal symmetric reflector.

Standard Materials

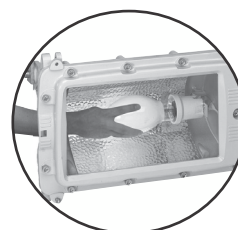
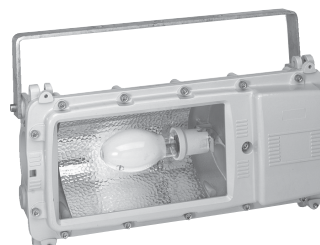
- Housing and door: copperfree marine-grade aluminum alloy
- Lens: toughened safety glass
- Reflector: bright highly polished aluminum
- Bolts: stainless steel bolt
- Cable gland and blanking plug: polyamide
- Locknut: nickel plated brass

Standard Finishes

- Housing and door: gray epoxy powder paint

Options

- Other voltages, please contact your sales representative.
- Terminal block with 2 more terminals for wiring with 3 phases plus Neutral in 380/415 V (loop in/loop out wiring possible): add suffix **-T** at the end of the catalog number.
- Asymmetrical light distribution is available, add suffix **-A** at end of catalog number.
- Screwed-on overhead diffuser out of galvanized steel with black painting (see accessories).
- Screwed-on zinc-coated protection guard (see accessories).



Certifications and Compliances

◆ATEX/IECEX Certification

- **Certification Type: PjD**
 - Gas: Zone 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex de IIB
 - Temperature class: See Table on following page
 - Dust: Zone 21 - 22
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: See Table on following page
 - Ambient Temperature: -20 °C ≤ Ta ≤ +55 °C
 - CE Declaration of Conformity: 50207
 - ATEX Certificate: LCIE 99 ATEX 6002
 - IECEx Certificate: IECEx LCI 04.0020
 - Index of Protection according EN/IEC 60529: IP66 (Type PB)
 - Impact Resistance (shock): IK10

◆EURASEC Certification

- EURASEC N° TC RU C-FR.Г505.B.00912

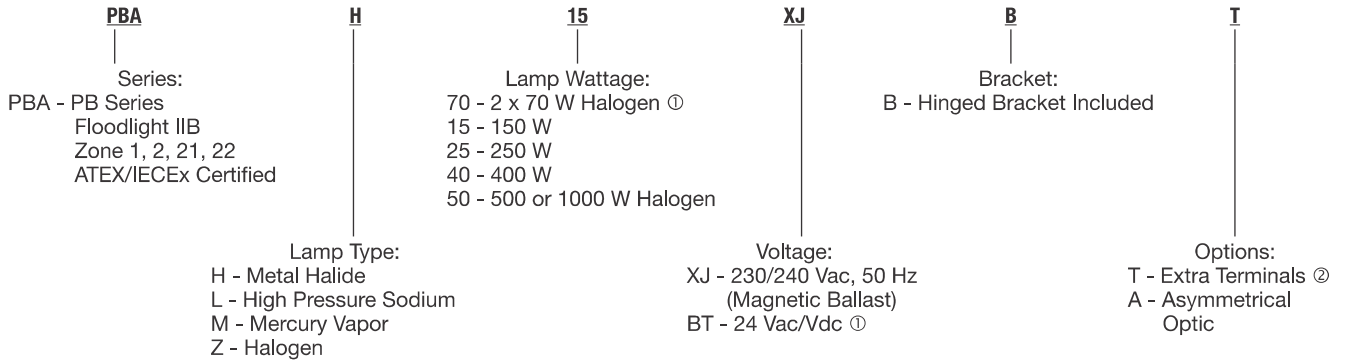
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Order using catalog numbering guide below or select catalog number from the following pages.

Catalog Numbering Guide – PB Series Floodlights



T Rating (Gas) and Surface Temperature (Dust) Table

Lamp Type and Wattage	Gas Temperature Rating According to Ta			Dust Surface Temperature °C
	+40 °C	+50 °C	+55 °C	
2 x 70 W - H3 ①	T4	T4	T4	+130 °C
150 W High Pressure Sodium	T4	T3	T3	+145 °C
250 W High Pressure Sodium	T3	T3	T3	+195 °C
250 W Metal Halide	T3	T3	T3	+197 °C
250 W Mercury Vapor	T3	T3	T3	+194 °C
400 W High Pressure Sodium	T3	T3	T3	+189 °C
400 W Metal Halide	T3	T3	T3	+193 °C
400 W Mercury Vapor	T3	T3	T3	+195 °C
600 W High Pressure Sodium	T2	T2	T2	+257 °C
500 W Halogen	T2	T2	T2	+267 °C
1000 W Halogen	T1	T1	T1	+378 °C

① 2 x 70 W Halogen 24 Vac/Vdc.
② 3 Phase + Neutral.

PB Series Floodlights IIB

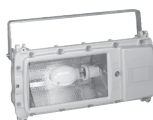
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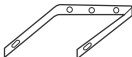


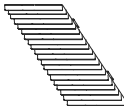
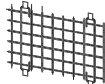
Ordering Information – IIB Versions

Floodlights supplied with hinged mounting bracket, 1 plug, 1 M20 cable gland — 6.5 mm to 14.5 mm diameter. Lamps are not included

Lamp Wattages	Lampholder	Voltage (+/-10%)	Lamp Type		Weight kg	Volume dm ³	Catalog Number ② ③
			Ellipsoidal	Tubular			
High Pressure Sodium							
150	E40	230/240 V, 50 Hz	x	x	29.3	79.4	PBAL15XJB
250	E40	230/240 V, 50 Hz	x	x	30.3	79.4	PBAL25XJB
400	E40	230/240 V, 50 Hz	–	x	31.8	79.4	PBAL40XJB
Mercury Vapor							
250	E40	230/240 V, 50 Hz	x	x	29.3	79.4	PBAM25XJB
400	E40	230/240 V, 50 Hz	–	x	29.8	79.4	PBAM40XJB
Metal Halide							
250	E40	230/240 V, 50 Hz	x	x	30.3	79.4	PBAH25XJB
400	E40	230/240 V, 50 Hz	–	x	31.8	79.4	PBAH40XJB
Halogen							
500/1000	E40	–	–	x	26.3	79.4	PBAZ50B
2 x 70	H3	24 Vac/Vdc, 50 Hz	–	–	27.3	79.4	PBAZ70BTB ①



Accessories

	Catalog Number
Galvanized Steel Hinged Brackets	
	PBHBG
Pole/Tube Mounting Galvanized Steel Brackets	
	1-1/4" to 1-1/2" PNHC49G
	2" PNHC60G
Flat Surface Mounting Galvanized Steel Brackets	
	PNSBG
Screwed-on Overhead Diffuser	
	PBGDG
Screwed-on Protective Guard	
	PBPGZ

① Supplied with 2 x 70 W H3 bulbs, 24 Vac/Vdc.

② Terminal block with 2 more terminals for wiring with 3 phases plus Neutral in 380/415 V: add suffix **-T** at the end of the catalog number.

③ Asymmetrical light distribution is available, add suffix **-A** to end of catalog number.

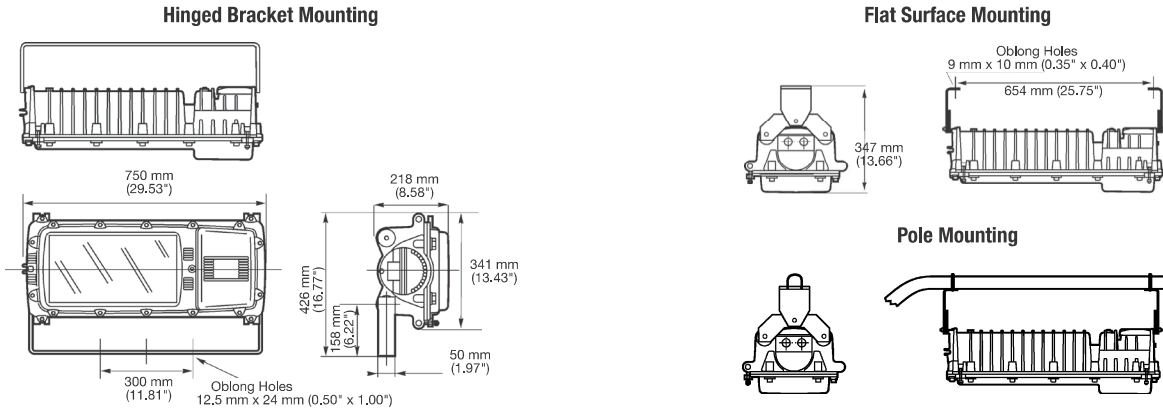
Shaded catalog numbers are normally stocked items. All other items are made to order.

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Dimensions in Millimeters (Inches)



Photometrics

Polar curves for a 1000 lm flux, according to NF C 71-120
Luminaire symbol according to NF C 71-121

--- Longitudinal
— Transverse

Narrow beam Metal Halide 250 W

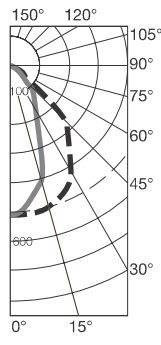
Efficiency 68.3%

NF C 71-121: 0.68B

CANDELA DISTRIBUTION

0-180 90-270

0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
505	515	512	501	476	453	427	394	368	290	160	51	34	15	6
505	499	469	403	312	248	190	146	117	97	12	7	4	4	4



Narrow beam Metal Halide 400 W ①

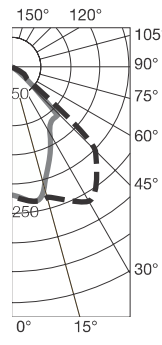
Efficiency 49.3%

NF C 71-121: 0.49C

CANDELA DISTRIBUTION

0-180 90-270

0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
217	210	218	223	238	255	266	263	244	201	136	85	51	28	5
217	219	231	205	193	148	132	130	116	104	37	15	8	6	4



Narrow beam Halogen 1000 W

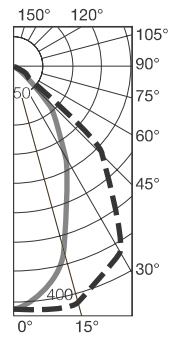
Efficiency 59.2%

NF C 71-121: 0.59B

CANDELA DISTRIBUTION

0-180 90-270

0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
417	406	419	419	408	398	371	344	295	213	135	68	34	16	5
417	418	399	330	266	218	177	142	115	98	12	7	4	3	3



Wide beam Metal Halide 250 W

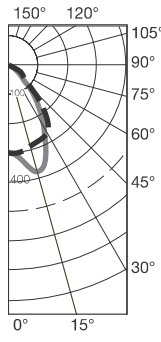
Efficiency 67.9%

NF C 71-121: 0.68C

CANDELA DISTRIBUTION

0-180 90-270

0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
301	303	299	294	287	286	271	231	172	133	83	48	34	23	6
301	318	342	387	382	306	237	208	186	140	104	18	8	6	6



Wide beam Metal Halide 400 W ①

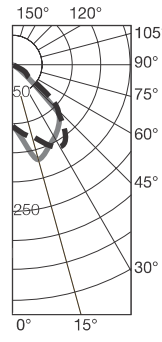
Efficiency 46.7%

NF C 71-121: 0.46C

CANDELA DISTRIBUTION

0-180 90-270

0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
105	104	108	124	148	167	165	142	116	74	52	48	44	34	18
105	106	130	165	177	183	147	127	113	115	103	40	13	9	6



Wide beam Halogen 1000 W

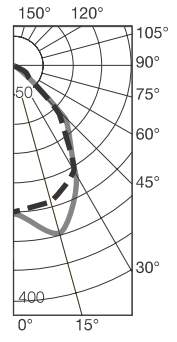
Efficiency 57.7%

NF C 71-121: 0.57C

CANDELA DISTRIBUTION

0-180 90-270

0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
251	244	247	245	237	229	213	194	163	120	82	52	35	20	8
251	255	272	293	306	262	213	188	161	133	105	18	8	5	5



① 400 W Metal Halide: Efficiency rate lower than 250 W due to thermal deflector between glass and lamp, requested for T3.