PC Series Floodlights IIC

Flameproof. Metal Halide, High Pressure 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-adjusted 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 -25 °C.
- Electrical components (ballast, ignitor and capacitor) are thermally separated from the lighting compartment with an insulating protection, providing extended life.
- Easy and efficient wiring due to separate Ex e terminal box with wiring onto 2 captive terminals 2 x 6 mm^2; 2 internal earth terminals capacity 6 mm^2 and 1 external earth terminal capacity 4 mm^2.
- 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 floodlight body.
- Operates in any position.
- Reversible hinge allows for fixture access from either side.
- Internal symmetric reflector.

Standard Materials

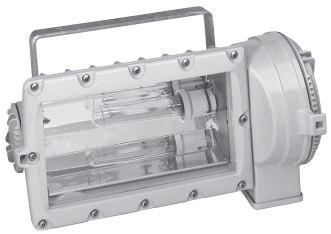
- Housing and door: copperfree marine-grade aluminum alloy
- Lens: toughened safety glass
- Reflector: bright highly polished aluminum
- Bolts: stainless steel bolt
- Cable gland and blanking plug: polyamide
- Locknut: nickel plated brass

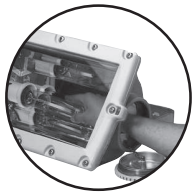
Standard Finishes

- 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** to 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: Ⓔx II 2 G
    - – Type of Protection: Ex de IIC
    - – Temperature class: *See Table on following page*
  - — Dust: Zone 21 - 22
    - – Conforming to ATEX 94/9/CE: Ⓔx II 2 D
    - – Type of Protection: Ex tD A21
    - – Surface Temperature: *See Table on following page*
  - — Ambient Temperature: standard fixture: -20 °C ≤ to ≤ +55 °C ; with asymmetrical optic "C": -25 °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: IP66/67
  - — Impact Resistance (shock): IK10

♦EURASEC Certification

- — EURASEC N° TC RU C-FR.Гб05.B.00912

♦Others Certification

- — INMETRO Certificate: BVC12.2098①

① *Inmetro certification available on special request only. Contact your local sales for more information*

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

Catalog Numbering Guide — PC Series Floodlights

PCA — Series:
PCA - PC Series Floodlight IIC Zone 1, 2, 21, 22 ATEX/IECEx Certified

H — Lamp Type:
H - Metal Halide
L - High Pressure Sodium
M - Mercury Vapor
Z - Halogen

15 — Lamp Wattage:
15 - 150 W
25 - 250 W
40 - 400 W
50 - 500 or 1000 W Halogen
60 - 600 W

XJ — Voltage:
XJ - 230/240 Vac, 50 Hz (Magnetic Ballast)

B — Bracket:
B - Hinged Bracket Included

T — Options:
T - Extra Terminals ①
A - Asymmetrical Optic
C -25 °C Ambient Temperature

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

	Gas Temperature Rating According to Ta			Dust
Lamp Type and Wattage	**+40 °C**	**+50 °C**	**+55 °C**	**Surface Temperature °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 *3 Phase + Neutral.*

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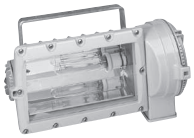
Ordering Information – IIC Versions

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 dm³	Catalog Number ①②
High Pressure Sodium							
150	E40	230/240 V, 50 Hz	x	x	29.0	104.4	**PCAL15XJB**
250	E40	230/240 V, 50 Hz	x	x	30.0	104.4	**PCAL25XJB**
400	E40	230/240 V, 50 Hz	—	x	32.0	104.4	**PCAL40XJB**
600	E40	230/240 V, 50 Hz	—	x	35.0	104.4	**PCAL60XJB**
Mercury Vapor							
250	E40	230/240 V, 50 Hz	x	x	30.0	104.4	**PCAM25XJB**
400	E40	230/240 V, 50 Hz	—	x	30.5	104.4	**PCAM40XJB**
Metal Halide							
250	E40	230/240 V, 50 Hz	x	x	30.0	104.4	**PCAH25XJB**
400	E40	230/240 V, 50 Hz	—	x	32.0	104.4	**PCAH40XJB**
Halogen							
500/1000	E40	—	—	x	27.0	104.4	**PCAZ50B**

*① 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.*
*② 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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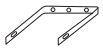
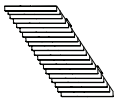
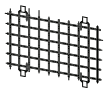
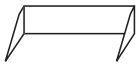
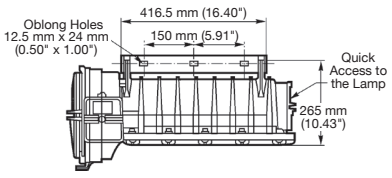
Accessories

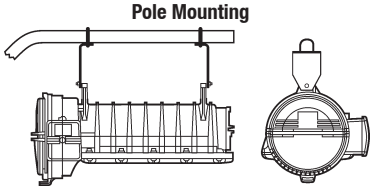
			Catalog Number
Standard Galvanized Steel Hinged Mounting Bracket Replacement Part			
			**PCHBG**
Optional Galvanized Steel Mounting Brackets			
 **Pole/Tube**  **Flat Surface**	Pole/Tube Mounting	1-1/4" to 1-1/2"	**PCHC49G**
		2"	**PCHC60G**
	Flat Surface Mounting		**PCSBG**
Screwed-on Overhead Diffuser			
			**PCGDG**
Screwed-on Protective Guard			
			**PCPGZ**
Visor — Secured With 2 Screws			
			**PCVG**

Dimensions in Millimeters (Inches)

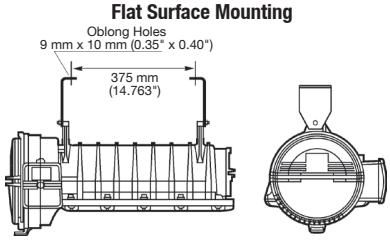
Hinged Bracket Mounting



Pole Mounting



Flat Surface Mounting



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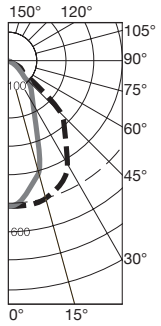
Photometrics

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

Longitudinal
Transverse

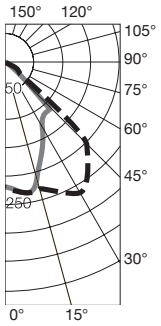
Narrow beam Metal Halide 250 W
Efficiency 68.3%
NF C 71–121: 0.68B

CANDELA DISTRIBUTION		
	0–180	90–270
0	505	505
5	515	499
10	512	469
15	501	403
20	476	312
25	453	248
30	427	190
35	394	146
40	368	117
45	290	97
50	160	12
55	51	7
60	34	4
65	15	4
70	6	4



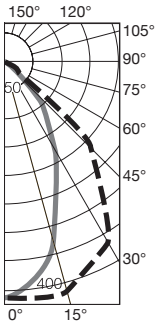
Narrow beam Metal Halide 400 W ①
Efficiency 49.3%
NF C 71–121: 0.49C

CANDELA DISTRIBUTION		
	0–180	90–270
0	217	217
5	210	219
10	218	231
15	223	205
20	238	193
25	255	148
30	266	132
35	263	130
40	244	116
45	201	104
50	136	37
55	85	15
60	51	8
65	28	6
70	5	4



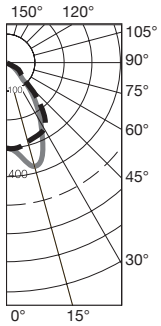
Narrow beam Halogen 1000 W
Efficiency 59.2%
NF C 71–121: 0.59B

CANDELA DISTRIBUTION		
	0–180	90–270
0	417	417
5	406	418
10	419	399
15	419	330
20	408	266
25	398	218
30	371	177
35	344	142
40	295	115
45	213	98
50	135	12
55	68	7
60	34	4
65	16	3
70	5	3



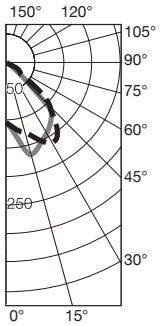
Wide beam Metal Halide 250 W
Efficiency 67.9%
NF C 71–121: 0.68C

CANDELA DISTRIBUTION		
	0–180	90–270
0	301	301
5	303	318
10	299	342
15	294	387
20	287	382
25	286	306
30	271	237
35	231	208
40	172	186
45	133	140
50	83	104
55	48	18
60	34	8
65	23	6
70	6	6



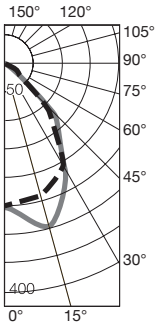
Wide beam Metal Halide 400 W ①
Efficiency 46.7%
NF C 71–121: 0.46C

CANDELA DISTRIBUTION		
	0–180	90–270
0	105	105
5	104	106
10	108	130
15	124	165
20	148	177
25	167	183
30	165	147
35	142	127
40	116	113
45	74	115
50	52	103
55	48	40
60	44	13
65	34	9
70	18	6



Wide beam Halogen 1000 W
Efficiency 57.7%
NF C 71–121: 0.57C

CANDELA DISTRIBUTION		
	0–180	90–270
0	251	251
5	244	255
10	247	272
15	245	293
20	237	306
25	229	262
30	213	213
35	194	188
40	163	161
45	120	133
50	82	105
55	52	18
60	35	8
65	20	5
70	8	5



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