

# PN Areamaster Series Floodlights

## Zone 2 – 21 and 22. Metal Halide, High Pressure Sodium, Mercury Vapor

Listed for simultaneous exposure to gas, combustible dusts and flammable gases or vapors.

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

### Applications

- Powerful, efficient floodlights for large areas such as industrial complexes and ship loading areas.
- Rated for use in hazardous areas.

### Features

- Highly efficient, integrally ballasted floodlight. Has compact, lightweight, yet rugged die cast aluminum construction.
- Simple installation and maintenance.
- Integral ballast: 230/240 V, 50 Hz
- One piece lens cover.
- Heavy duty, high temperature silicone rubber gasket, firmly seated.
- Socket: E40 (E27 for 70 W HPS version).
- Reflectors: double segment compound parabolic with finish for maximum efficiency.
- Mounting: yoke mount.
- 2 x M20 clearance entries with one plug

### Standard Materials

- Ballast housing and lens door: copperfree (4/10 of 1% max.) aluminum
- Gasket: silicone rubber
- Socket: heavy duty porcelain with heavy gauge brass shell
- Reflector: finished aluminum
- Yoke mount: zinc plated steel
- Bolts: stainless steel

### Standard Finishes

- Ballast housing, lens cover, yoke and pole mount: architectural bronze polyester
- Socket: porcelain

### Certifications and Compliances

#### ◆ ATEX or ATEX/IECEX Certification

- **Certification Type: PjN**
  - Gas: Zone 2
    - Conforming to ATEX 94/9/CE: Ⓢ 3 G
    - Type of Protection: Ex nR IIC Gc
    - Temperature Class: T2 to T4
    - Ambient Temperature: -40 °C to +55 °C (-40 °C +50 °C for body size L)
    - ATEX Certificate: LCIE 08 ATEX 6035X
    - IECEX Certificate: IECEX LCI 04.0015
  - Dust: Zone 22
    - Conforming to ATEX 94/9/CE: Ⓢ II 3 D
    - Type of Protection: Ex t IIIC Dc
    - Surface Temperature: T117 °C to T228 °C
    - Ambient Temperature: -40 °C to +55 °C (-40 °C +50 °C for body size L)
    - ATEX Certificate: LCIE 08 ATEX 6035X
    - IECEX Certificate: IECEX LCI 04.0015
  - Dust: Zone 21
    - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
    - Type of Protection: Ex tD A21
    - Surface Temperature: T65 °C to T182 °C
    - Ambient Temperature: -20 °C to +40 °C
    - CE Declaration of Conformity: 50274
    - ATEX Certificate: LCIE 02 ATEX 6246X
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK07 with glass diffuser, IK08 with polycarbonate diffuser

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



#### ◆ EURASEC Certification

– EURASEC N° TC RU C-FR.T605.B.00912

#### ◆ Others Certification

- **Size M - Certification Type: PjN**
  - INMETRO Certificate: BVC 11.0394-X ①

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

#### Catalog Numbering Guide – Areamaster ATEX PN Series Floodlights

<b>PN</b>	<b>M</b>	<b>1</b>	<b>L</b>	<b>25</b>	<b>A</b>	<b>G</b>	<b>XJ</b>	<b>S</b>
Series:		Mounting:		Wattage:		Diffuser:		Options:
PN - PN Series Zone 21 ATEX certified Zone 2-22 ATEX/IECEX certified		1 - Yoke 5 - Pole Slip-fit		70 - 70 W 15 - 150 W 25 - 250 W 40 - 400 W ① 99 - 1000 W ②		G - Glass P - Polycarbonate ②		S - Stainless Steel Housing
	Body Size:		Lamp Type:		Entry Size:		Options:	
	P - Small M - Medium L - Large		H - Metal Halide L - High Pressure Sodium M - Mercury Vapor		A - M20		225 - 220 Vac, 50 Hz (Magnetic Ballast) XJ - 230/240 Vac, 50 Hz (Magnetic Ballast)	

① 400 Watt is rated for Zones 21-22 and 1000 Watt is rated for Zones 2-22 when used with large body. Select glass diffuser.

② Polycarbonate diffuser is not rated for use in Zones 2-22.

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### Zone 21 (Dust)

Operating Position		Dust Surface Temperatures for Ta = +40 °C		Time Before Opening in Minutes
		Glass Diffuser	Polycarbonate Diffuser	
Body Size: M	Lamp Type and Wattage			
	70 W High Pressure Sodium	+75 °C	+65 °C	50
	150 W High Pressure Sodium	+101 °C	+91 °C	25
	250 W High Pressure Sodium	+127 °C	+117 °C	15
	250 W Metal Halide	+123 °C	+113 °C	15
Body Size: L	250 W Mercury	+136 °C	+131 °C	15
	400 W High Pressure Sodium	+126 °C	+121 °C	30
	1000 W High Pressure Sodium	+177 °C	–	30
	1000 W Metal Halide	+182 °C	–	30

### Zone 2 (Gas)

Lamp Type and Wattage		T° Class for Ta = +40 °C	T° Class for Ta = +50 °C	T° Class for Ta = +55 °C
Body Size: M	70 W High Pressure Sodium	T4	T4	T4
	150 W High Pressure Sodium	T4	T4	T4
	150 W Metal Halide	T4	T4	T4
	250 W High Pressure Sodium	T3	T3	T3 – Cable T° = +82 °C
	250 W Metal Halide	T3	T3	T3
	250 W Mercury	T3	T3	T3 – Cable T° = +81 °C
	400 W High Pressure Sodium	T3	T3 – Cable T° = +87 °C	T2 – Cable T° = +92 °C
	400 W Metal Halide	T2	T2 – Cable T° = +84 °C	T2 – Cable T° = +89 °C
Body Size: L	400 W Mercury	T2	T2 – Cable T° = +84 °C	T2 – Cable T° = +89 °C
	1000 W High Pressure Sodium	T3	T3	–
1000 W Metal Halide	T3	T3	–	

### Zone 22 (Dust)

Lamp Type and Wattage		Surface T° for Ta = +55 °C	Spreading cable for Ta = +50 °C	Spreading cable for Ta = +55 °C
Body Size: M	70 W High Pressure Sodium	+117 °C	–	–
	150 W High Pressure Sodium	+130 °C	–	–
	150 W Metal Halide	+128 °C	–	–
	250 W High Pressure Sodium	+160 °C	–	Cable T° = +82 °C
	250 W Metal Halide	+175 °C	–	–
	250 W Mercury	+181 °C	–	Cable T° = +81 °C
	400 W High Pressure Sodium	+198 °C	Cable T° = +87 °C	Cable T° = +92 °C
	400 W Metal Halide	+228 °C	Cable T° = +84 °C	Cable T° = +89 °C
Body Size: L	400 W Mercury	+227 °C	Cable T° = +84 °C	Cable T° = +89 °C
	1000 W High Pressure Sodium	+187 °C for Ta = +50 °C	Cable T° = +90 °C	–
	1000 W Metal Halide	+192 °C for Ta = +50 °C	Cable T° = +90 °C	–

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Lamp Type and Wattage	Weight kg	Volume dm <sup>3</sup>	Permissible lamps (not supplied)	Socket	Body Size	Catalog Number ③
<b>Standard with Lamp Glass Sealed on Frame</b>						
70 W HPS	12.1	62.5	Ovoid/Tubular	E27	Medium	<b>PNM1L70AGXJ</b>
150 W HPS	12.9	62.5	Ovoid/Tubular	E40	Medium	<b>PNM1L15AGXJ</b>
250 W HPS	14.3	62.5	Ovoid/Tubular	E40	Medium	<b>PNM1L25AGXJ</b>
400 W HPS	16.0	62.5	Ovoid/Tubular	E40	Medium	<b>PNM1L40AGXJ ①</b>
400 W HPS	–	–	Ovoid/Tubular	E40	Large	<b>PNL1L40AGXJ ①</b>
150 W MH	12.9	62.5	Ovoid/Tubular	E40	Medium	<b>PNM1H15AGXJ</b>
250 W MH	14.3	62.5	Ovoid/Tubular	E40	Medium	<b>PNM1H25AGXJ</b>
400 W MH	16.0	62.5	Tubular	E40	Medium	<b>PNM1H40AGXJ ①</b>
400 W MH	–	–	Ovoid/Tubular	E40	Large	<b>PNL1H40AGXJ ①</b>
250 W MV	12.9	62.5	Ovoid	E40	Medium	<b>PNM1M25AGXJ</b>
400 W MV	13.8	62.5	Ovoid/Tubular	E40	Medium	<b>PNM1M40AGXJ ①</b>
<b>With External Polycarbonate Weatherproof Protection ②</b>						
70 W HPS	13.2	62.5	Ovoid/Tubular	E40	Medium	<b>PNM1L70APXJ</b>
150 W HPS	14.0	62.5	Ovoid/Tubular	E40	Medium	<b>PNM1L15APXJ</b>
250 W HPS	15.4	62.5	Ovoid/Tubular	E40	Medium	<b>PNM1L25APXJ</b>
400 W HPS	–	–	Ovoid/Tubular	E40	Large	<b>PNL1L40APXJ ①</b>
150 W MH	14.0	62.5	Ovoid/Tubular	E40	Medium	<b>PNM1H15APXJ</b>
250 W MH	15.4	62.5	Ovoid/Tubular	E40	Medium	<b>PNM1H25APXJ</b>
400 W MH	–	–	Ovoid/Tubular	E40	Large	<b>PNL1H40APXJ</b>
250 W MV	14.0	62.5	Ovoid	E40	Medium	<b>PNM1M25APXJ ①</b>

① 400 Watt is rated for Zones 21-22 and 1000 Watt is rated for Zones 2-22 when used with large body. Select glass diffuser.

② Polycarbonate diffuser is not rated for use in Zones 2-22.

③ For a 220 Vac, 50 Hz, magnetic ballast, replace the letters **XJ** in the 10th and 11th positions with the letters **225**; example: PNP1L70AG**225**.

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



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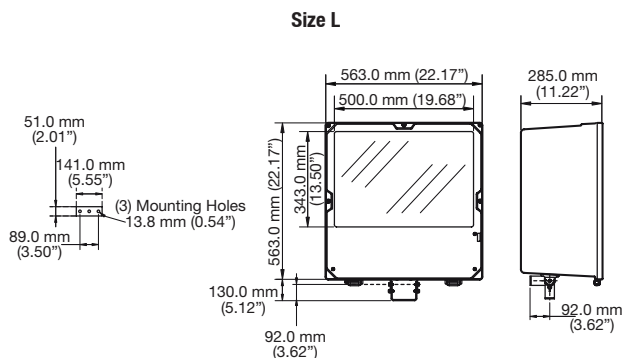
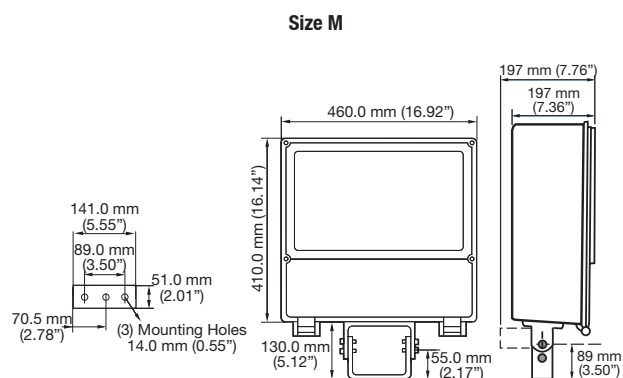
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### Accessories

Description	Catalog Number
Fall Prevention Kit 1.2 m stainless steel chain for M20 cable entry	FESCM20
 Slip-Fitter Adapter — fits medium body (Size M)	GSF20
 Slip-Fitter Adapter — fits large body/1000 Watt floodlight (Size L)	GAM8SF

### Dimensions in Millimeters (Inches)



### Photometric Data

Lamps: 70 W High Pressure Sodium

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

Degrees	Candelas	
	(0-180)	(90-270)
0	487	487
5	439	461
10	416	387
15	372	324
20	208	290
25	129	294
30	116	319
35	111	318
40	101	289
45	86	193
50	70	150
55	84	141
60	62	132
65	22	88
70	9	15

Total Luminaire Efficiency = 74.6%

