

Hazard-Gard EVM HID luminaires

Mogul base

Cl. I, Div. 1, Groups B (with suffix GB), C, D
Cl. I, Zone 1, Groups IIB + H₂ (with suffix GB), IIB, IIA
Cl. II, Div. 1, Groups E, F, G
Cl. III

Paint Spray (100W max.)
Marine & Wet Locations
3, 3R, 4, 4X; IP66

3L

Applications:

Hazard-Gard® EVM HID luminaires are used in:

- Heavy process industries where flammable or explosive vapors, gases or combustible dusts are present
- Hazardous areas, both indoors and outdoors where long life and low maintenance costs are desired
- Petroleum refineries, chemical, petrochemical and other heavy process industry facilities
- Paint spray facilities
- Hazardous locations requiring elevated ambient capability

Features:

- Luminaire is factory wired; power is fed through wireless connection block which serves as a mechanical seal between conduit and ballast compartments, eliminating the need for an external, field installed seal; the result is fast, easy installation
- Dome and 30° angle reflectors made of Krydon material – won't rust, corrode, dent, chip or peel
- High bay reflectors of Alzak aluminum for high wattage applications
- Internally fluted glass globes reduce glare and provide comfortable viewing light
- Wide range of light sources and wattages to meet specific lighting needs – 50-400 watt high pressure sodium (HPS); 70-400 watt metal halide (MH)
- High power factor (90%+) ballasts reduce power costs – allow more luminaires per circuit
- Four mounting arrangements to suit any lighting layout – pendant, ceiling, wall bracket and stanchion
- Paint spray booth suitability on 50-100W luminaires provides efficient, economical HID lighting for areas where paint residue may accumulate on luminaires
- Elevated ambient capability permits reliable operation at high ambient temperature; selected luminaires are suitable for ambient temperature up to 75°C
- Integral ballasts – separate ballasts are not required; lowest installed cost
- Factory sealed, porcelain, mogul base socket



Certifications and compliances:

NEC/CEC:

- Class I, Division 1, Groups B (with suffix GB), C, D
- Class I, Zone 1, Groups IIB + H₂ (with suffix GB), IIB, IIA
- 100W max. – paint spray suitability
- 175W max. – Class II, Class III

UL standards:

- UL844 – Hazardous (Classified) Locations
- UL1598 – Luminaires
- UL1598A – Marine Locations

CSA standard:

- C22.2 No. 137

Standard materials:

- Mounting modules, cover, ballast housing, guard, globe ring – copper-free aluminum
- Globe – heat- and impact-resistant glass
- Exterior hardware – stainless steel
- Lamp socket – porcelain with stainless steel screw shell
- Reflectors – dome and angle: Krydon fiberglass-reinforced polyester; high bay: Alzak aluminum

Standard finishes:

- Copper-free aluminum – epoxy powder coat
- Krydon – high reflectance white
- Alzak – natural (anodized)

Options:

Description

Suffix

- Fused – to protect ballast and capacitor against abnormal line conditions **S658^A^B**

Not suitable for marine applications

- Instant restrike – enables a hot HPS lamp to immediately restrike after a momentary loss of arc due to voltage fluctuation or power outage; has no effect on the warm-up period of a cold lamp **IR^C**

Available with 50-150W LX HPS only

- Quartz auxiliary lighting – quartz lamp comes to full brightness instantly upon restoration of power to provide emergency illumination during the normal restrike period of the HID lamp **QTZ^D**

For use with ED28 lamp

Quartz lamp not included; use 100W single-ended lamp (Q100DC, Q100CL/DC or 100Q/CL/DC)

- Ballast-Gard – eliminates the normally continuous high voltage pulsing in the event of a cycling lamp, inoperative lamp or no lamp in the socket, extending the life of the ballast **BG^E**

For use with 50-400W HPS lamps

- Group B suitability – luminaires suitable for use in Class I, Group B hazardous (classified) locations **GB**
- Trunnion arm – Hazard-Gard supplied with trunnion arm for floodlighting applications **S812**

*For use on pendant mount luminaires only
See Section 5L for more information*

Size ranges:

- ¾", 1" and 1¼" hubs

Electrical ratings:

- 120, 208, 240, 277, 347, 480, 600 volts and multi-tap^A
- 50-400W

Photometrics:

- Refer to www.eaton.com (under the Resources tab of each product family) for specific photometric IES files

^A CSA certification not available with multi-tap ballast or S658 fuse option.

^B When ordering fuses for luminaires, you must specify the operating voltage. S658 cannot be ordered with /MT in the catalog number.

^C IR and BG options cannot be used together.

^D Can be used with BG option.

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50-400W
Mogul base

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Paint Spray (100W max.)
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Ordering information:



Watts	Hub size	Pendant mount		Wall bracket mount		Ceiling mount		Stanchion mount 25° angle	
		Cat. # Without guard	Cat. # With guard	Cat. # Without guard	Cat. # With guard	Cat. # Without guard	Cat. # With guard	Cat. # Without guard	Cat. # With guard
High pressure sodium									
50	3/4"	EVMA42050	EVMA42051	EVMBX42050	EVMBX42051	EVMCX42050	EVMCX42051		
	1"	EVMA43050	EVMA43051	EVMBX43050	EVMBX43051	EVMCX43050	EVMCX43051		
	1 1/4"							EVMJ44050	EVMJ44051
70	3/4"	EVMA42070	EVMA42071	EVMBX42070	EVMBX42071	EVMCX42070	EVMCX42071		
	1"	EVMA43070	EVMA43071	EVMBX43070	EVMBX43071	EVMCX43070	EVMCX43071		
	1 1/4"							EVMJ44070	EVMJ44071
100	3/4"	EVMA42100	EVMA42101	EVMBX42100	EVMBX42101	EVMCX42100	EVMCX42101		
	1"	EVMA43100	EVMA43101	EVMBX43100	EVMBX43101	EVMCX43100	EVMCX43101		
	1 1/4"							EVMJ44100	EVMJ44101
150	3/4"	EVMA42150	EVMA42151	EVMBX42150	EVMBX42151	EVMCX42150	EVMCX42151		
	1"	EVMA43150	EVMA43151	EVMBX43150	EVMBX43151	EVMCX43150	EVMCX43151		
	1 1/4"							EVMJ44150	EVMJ44151
200	3/4"	EVMA42200	EVMA42201	EVMBX42200	EVMBX42201	EVMCX42200	EVMCX42201		
	1"	EVMA43200	EVMA43201	EVMBX43200	EVMBX43201	EVMCX43200	EVMCX43201		
	1 1/4"							EVMJ44200	EVMJ44201
250	3/4"	EVMA42250	EVMA42251	EVMBX42250	EVMBX42251	EVMCX42250	EVMCX42251		
	1"	EVMA43250	EVMA43251	EVMBX43250	EVMBX43251	EVMCX43250	EVMCX43251		
	1 1/4"							EVMJ44250	EVMJ44251
400	3/4"	EVMA42400	EVMA42401	EVMBX42400	EVMBX42401	EVMCX42400	EVMCX42401		
	1"	EVMA43400	EVMA43401	EVMBX43400	EVMBX43401	EVMCX43400	EVMCX43401		
	1 1/4"							EVMJ44400	EVMJ44401

Complete catalog number as follows:

1. Add voltage suffix to end of catalog number.

Standard voltage ballasts – 60 Hz

NEC/UL					CEC/CSA (cUL)		
Voltage	Multi-tap	Dual-tap	120V	480V	Tri-tap	Dual-tap	120V
Suffix	/MT (120, 208, 240, 277)	/DT (120, 277)	/120	/480	/TT (120, 277, 347)	/DT (120, 277)	/120

Optional voltage ballasts – 50 or 60 Hz

CEC/CSA (cUL) – CWI isolated ballasts				Export			
Voltage	208V CWI	240V CWI	600V CWI	220V 60 Hz	220V 50 Hz	230V 50 Hz	240V 50 Hz
Suffix	/208 CWI	/240 CWI	/600 CWI	/220	/220 50	/230 50	/240 50

2. 150W HPS luminaires only:

- 55V lamps standard – use suffix LX; for 100V lamps – use suffix CE

3. Options: Add the required option suffixes in alphanumeric order.

Hazard-Gard EVM HID luminaires

70-400W
Mogul base

Cl. I, Div. 1, Groups B (with suffix GB), C, D
Cl. I, Zone 1, Groups IIB + H₂ (with suffix GB), IIB, IIA
Cl. II, Div. 1, Groups E, F, G
Cl. III

Paint Spray (100W max.)
Marine & Wet Locations
3, 3R, 4, 4X; IP66

3L

Ordering information (continued):



Watts	Hub size	Pendant mount		Wall bracket mount		Ceiling mount		Stanchion mount 25° angle	
		Cat. # Without guard	Cat. # With guard	Cat. # Without guard	Cat. # With guard	Cat. # Without guard	Cat. # With guard	Cat. # Without guard	Cat. # With guard
Pulse start metal halide									
150	3/4"	EVMA92150 S828	EVMA92151 S828	EVMBX92150 S828	EVMBX92151 S828	EVMCX92150 S828	EVMCX92151 S828		
	1"	EVMA93150 S828	EVMA93151 S828	EVMBX93150 S828	EVMBX93151 S828	EVMCX93150 S828	EVMCX93151 S828		
	1 1/4"							EVMJ94150 S828	EVMJ94151 S828
175	3/4"	EVMA92170 S828	EVMA92171 S828	EVMBX92170 S828	EVMBX92171 S828	EVMCX92170 S828	EVMCX92171 S828		
	1"	EVMA93170 S828	EVMA93171 S828	EVMBX93170 S828	EVMBX93171 S828	EVMCX93170 S828	EVMCX93171 S828		
	1 1/4"							EVMJ94170 S828	EVMJ94171 S828
200	3/4"	EVMA92200 S828	EVMA92201 S828	EVMBX92200 S828	EVMBX92201 S828	EVMCX92200 S828	EVMCX92201 S828		
	1"	EVMA93200 S828	EVMA93201 S828	EVMBX93200 S828	EVMBX93201 S828	EVMCX93200 S828	EVMCX93201 S828		
	1 1/4"							EVMJ94200 S828	EVMJ94201 S828
250	3/4"	EVMA92250 S828	EVMA92251 S828	EVMBX92250 S828	EVMBX92251 S828	EVMCX92250 S828	EVMCX92251 S828		
	1"	EVMA93250 S828	EVMA93251 S828	EVMBX93250 S828	EVMBX93251 S828	EVMCX93250 S828	EVMCX93251 S828		
	1 1/4"							EVMJ94250 S828	EVMJ94251 S828
320	3/4"	EVMA92320 S828	EVMA92321 S828	EVMBX92320 S828	EVMBX92321 S828	EVMCX92320 S828	EVMCX92321 S828		
	1"	EVMA93320 S828	EVMA93321 S828	EVMBX93320 S828	EVMBX93321 S828	EVMCX93320 S828	EVMCX93321 S828		
	1 1/4"							EVMJ94320 S828	EVMJ94321 S828
400	3/4"	EVMA92400 S828	EVMA92401 S828	EVMBX92400 S828	EVMBX92401 S828	EVMCX92400 S828	EVMCX92401 S828		
	1"	EVMA93400 S828	EVMA93401 S828	EVMBX93400 S828	EVMBX93401 S828	EVMCX93400 S828	EVMCX93401 S828		
	1 1/4"							EVMJ94400 S828	EVMJ94401 S828

Watts	Hub size	Pendant mount		Wall bracket mount		Ceiling mount		Stanchion mount 25° angle	
		Cat. # Without guard	Cat. # With guard	Cat. # Without guard	Cat. # With guard	Cat. # Without guard	Cat. # With guard	Cat. # Without guard	Cat. # With guard
Metal halide									
70	3/4"	EVMA92070	EVMA92071	EVMBX92070	EVMBX92071	EVMCX92070	EVMCX92071		
	1"	EVMA93070	EVMA93071	EVMBX93070	EVMBX93071	EVMCX93070	EVMCX93071		
	1 1/4"							EVMJ94070	EVMJ94071
100	3/4"	EVMA92100	EVMA92101	EVMBX92100	EVMBX92101	EVMCX92100	EVMCX92101		
	1"	EVMA93100	EVMA93101	EVMBX93100	EVMBX93101	EVMCX93100	EVMCX93101		
	1 1/4"							EVMJ94100	EVMJ94101
175	3/4"	EVMA92170	EVMA92171	EVMBX92170	EVMBX92171	EVMCX92170	EVMCX92171		
	1"	EVMA93170	EVMA93171	EVMBX93170	EVMBX93171	EVMCX93170	EVMCX93171		
	1 1/4"							EVMJ94170	EVMJ94171
250	3/4"	EVMA92250	EVMA92251	EVMBX92250	EVMBX92251	EVMCX92250	EVMCX92251		
	1"	EVMA93250	EVMA93251	EVMBX93250	EVMBX93251	EVMCX93250	EVMCX93251		
	1 1/4"							EVMJ94250	EVMJ94251
400	3/4"	EVMA92400	EVMA92401	EVMBX92400	EVMBX92401	EVMCX92400	EVMCX92401		
	1"	EVMA93400	EVMA93401	EVMBX93400	EVMBX93401	EVMCX93400	EVMCX93401		
	1 1/4"							EVMJ94400	EVMJ94401

Complete catalog number as follows:

1. Add voltage suffix to end of catalog number.

Standard voltage ballasts – 60 Hz

NEC/UL					CEC/CSA (cUL)		
Voltage Suffix	Multi-tap /MT (120, 208, 240, 277)	Dual-tap /DT (120, 277)	120V /120	480V /480	Tri-tap /TT (120, 277, 347)	Dual-tap /DT (120, 277)	120V /120

Optional voltage ballasts – 50 or 60 Hz

CEC/CSA (cUL) – CWI isolated ballasts ^③				Export			
Voltage Suffix	208V CWI /208 CWI	240V CWI /240 CWI	600V CWI /600 CWI	220V 60 Hz /220	220V 50 Hz /220 50	230V 50 Hz /230 50	240V 50 Hz /240 50

2. 150W HPS luminaires only:

- 55V lamps standard – use suffix LX; for 100V lamps – use suffix CE

3. Options: Add the required option suffixes in alphanumeric order.

^③ CWI isolated ballasts are only available for 175-400W metal halide (non-pulse start) luminaires.

Hazard-Gard EVM HID luminaires

Accessories

Cl. I, Div. 1, Groups B (with suffix GB), C, D
Cl. I, Zone 1, Groups IIB + H₂ (with suffix GB), IIB, IIA
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Reflectors



Dome



30° angle



High bay

Type	Cat. #
Dome	RD739
30° angle	RA739
High bay	EV3912

Temperature performance data:

Type	Watts	Maximum ambient							
		Class I				Class II, Groups E, F, G	Simultaneous presence	Paint spray booth	Supply wire °C
		40°C	55°C	65°C	75°C	40°C	40°C	40°C	
High pressure sodium	50	T6	T6	T6	T5	T4	T4	T4A	90
	70	T6	T6	T5	T4A	T4	T4	T4A	90
	100	T5	T5	T4A	T4A	T4	T4	T4A	90
	150	T4A	T4A	T4	—	T3C	T3C	—	90
	200	T4A	T4A	T4	—	—	—	—	90
	250	T4	T3C	—	—	—	—	—	90
Metal halide (including pulse start)	400	T3C	—	—	—	—	—	—	90
	70	T6	T6	T5	T3	T3C	T3C	T4A	90
	100	T5	T5	T4A	T3	T3C	T3C	T4A	90
	150	T4A	T4	T4	—	T3C	T3C	—	90
	175	T4A	T4	T4	—	T3C	T3C	—	90
	200	T4	T3C	—	—	—	—	—	90
	250	T4	T3C	—	—	—	—	—	90
	320	T3A	—	—	—	—	—	—	90
	400	T3A	—	—	—	—	—	—	90

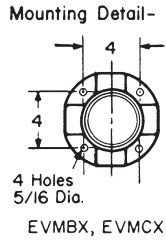
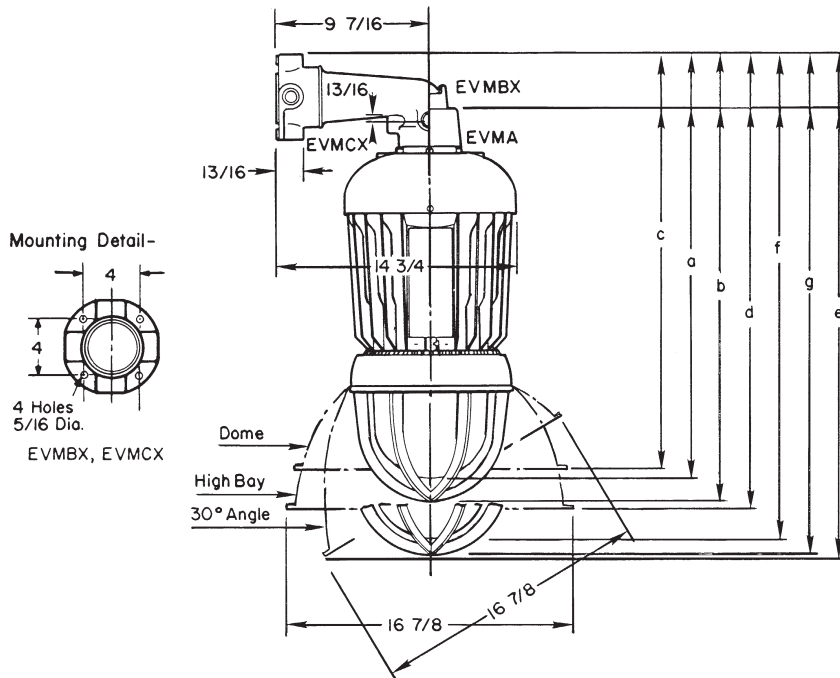
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Dimensions (in inches):



Net luminaire weights:

Type	Lamp watts	Luminaire with globe and guard (lbs.)
High pressure sodium	50	40.00
	70	40.00
	100	44.00
	150	45.00
	200	46.00
	250	46.00
Metal halide	400	55.00
	70	39.00
	100	39.00
	175	42.00
	250	43.00
	400	51.00

Type	Weight (lbs.)
Add mounting modules:	
Pendant	1.00
Ceiling	2.00
Bracket	4.25
Stanchion	2.25
Add reflectors:	
Dome	1.75
Angle	2.00
High bay	2.50

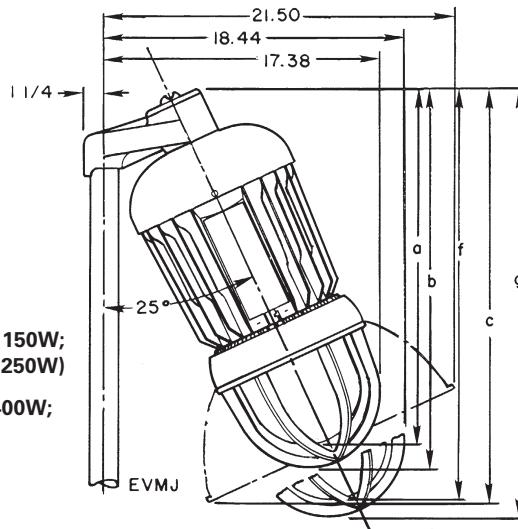
Deduct: 1.50 lbs. for fixture without guard



Guard:

EV503 (HPS 50, 70, 100, 150W;
MH 70, 100, 175, 250W)

EV5140 (HPS 200, 250, 400W;
MH 400W)



Replacement globe:

EV7302 (HPS 50, 70, 100, 150W;
MH 70, 100, 175, 250W)

EV7404 (HPS 200, 250, 400W;
MH 400W)

50, 70, 100, 150W HPS;
70, 100, 175, 250W MH

All luminaires with QTZ option
and 200, 250, 400W HPS;
400W MH

All - reflectors

Series	a	b	f	g	All - reflectors		
					Dome	High bay	30° angle
EVMA	25 ¹¹ / ₁₆	26	27 ⁹ / ₁₆	28 ³ / ₄	23 ⁹ / ₁₆	26 ¹¹ / ₁₆	28 ⁹ / ₁₆
EVMBX	27 ⁷ / ₈	28 ¹³ / ₁₆	30 ⁷ / ₈	31 ¹ / ₁₆	26 ¹¹ / ₁₆	29 ⁹ / ₄	31 ³ / ₈
EVMCX	24	24 ¹⁵ / ₁₆	26 ¹ / ₄	27 ⁹ / ₁₆	22 ¹³ / ₁₆	25 ⁵ / ₈	27 ¹ / ₂
EVMJ	22 ¹¹ / ₁₆	24 ¹ / ₈	25 ¹ / ₄	26 ⁵ / ₈	25 ⁵ / ₈	27 ¹¹ / ₁₆	28 ³ / ₄