50-175W

CI. I, Div. 2, Groups A, B, C, D Restricted Breathing CI. I, Div. 2 & Zone 2 (with suffix S826) CI. II, Groups E, F, G CI. III & Simultaneous Presence (HPS 50W, 70W) Marine & Wet Locations 3, 3R, 4, 4X; IP56 to IP66

### **Applications:**

Champ® VMV HID luminaires are used:

- In manufacturing plants, refineries, chemical, petrochemical and other industrial process facilities, waste or sewage treatment facilities, offshore, dockside and harbor installations, and other heavy industrial applications
- In areas in which ignitable concentrations of flammable gases or vapors will be present only due to abnormal, unusual or accidental conditions
- Where combustible dusts are present
- In marine applications where water spray and corrosive atmospheres are considerations
- In elevated ambient temperatures often found in industrial applications
- In installations where moisture, dirt, dust, vibration, corrosion and rough usage are problematic
- Wherever the damaging effects of water, wind, snow, sleet, hot sun or any combination of these elements are found

#### **Features:**

- Compact, lightweight design is ideal for medium and low mounting heights
- Cast copper-free aluminum construction (less than 0.4 of 1% copper) and epoxy powder finish provide excellent resistance to corrosion
- Hinged ballast housing for ease of installation and maintenance
- Wide choice of photometric distributions; glass globes, refractors and compact refractors available for all wattage luminaires; plastic refractors (for nonhazardous applications only) for 50-100 watt luminaires
- All luminaires are designed to perform in a 40°C ambient temperature; selected luminaires are suitable for ambient temperatures up to 65°C
- Superior gasketing seals between the mounting module, housing and optical assembly for optimum performance in wet and corrosive environments
- Hubs with an integral conduit stop and bushing to help prevent damage to field wiring during installation
- Low ambient capability to -40°C
- Dome and 30° angle reflectors made of bright white Krydon material provide superior reflectivity, with twist-on feature requiring no tools or additional hardware; will not chip, peel, dent, rust or corrode
- Grounding wire for safety
- High power factor ballasts (min. P.F. 90%) and available in a variety of voltages to meet local area requirements
- · Mogul base porcelain lamp socket



## Certifications and compliances:

#### NEC/CEC:

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2
- HPS 50W, 70W Class II, Class III & Simultaneous Presence (Class I, Division 2 and Class II)

#### **UL standards:**

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

#### **CSA** standard:

• C22.2 No. 137

#### IEC standard:

• 60079-15

#### Standard materials:

- Ballast housings and mountings copperfree aluminum (less than 0.4 of 1%)
- Exterior hardware stainless steel
- Reflectors (dome and angle) Krydon fiberglass-reinforced polyester
- Globes heat- and impact-resistant internally fluted glass
- Refractors glass (50-175W); plastic (50-100W), for non-hazardous applications
- Guards globe: copper-free aluminum; refractor: stainless steel

#### Standard finishes:

- Copper-free aluminum epoxy powder coat
- Krydon high reflectance white
- Stainless steel natural

## **Electrical ratings:**

- 120, 208, 240, 277, 347, 480, 600 volts and multi-tap (120, 208, 240 and 277 volts)
- 50-150W HPS; 70-175W MH

## Options:

Description	Suffix
Factory sealed Champs	S865
Class I, Division 2 & Zone 2 Provides T3 code without conduit or cable	e seals
Restricted breathing/non-sparking	

- Restricted breathing construction ..... **S826**Class I, Division 2 & Zone 2 suitability

  Cooler operating temperatures (T-codes)
- Fused to protect ballast and capacitors against abnormal line conditions .... S658@ Not available with MT ballast Not for use in Canada Not suitable for marine applications
- Quick-Clip holds weight of housing when closed; no need to support luminaire while screwing the housing to the cover.... S890

- Factory assembled with HID lamps installed for additional labor savings......FA

Note: BG and IR options cannot be used together. IR and QTZ options cannot be used together. S865 and S826 options cannot be used together.

#### **Accessories:**

• See pages 216-217 for complete listing

### **Photometrics:**

- Complete photometrics can be found at www.crouse-hinds.com/photometrics
- When ordering fuses for luminaires, you must specify the operating voltage. S658 cannot be ordered with /MT in the catalog number.



50-150W high pressure sodium

Cl. I, Div. 2, Groups A, B, C, D Restricted Breathing Cl. I, Div. 2 & Zone 2 (with suffix \$826) CI. II, Groups E, F, G, CI. III & Simultaneous Presence (HPS 50W, 70W) Marine & Wet Locations 3, 3R, 4, 4X; IP66

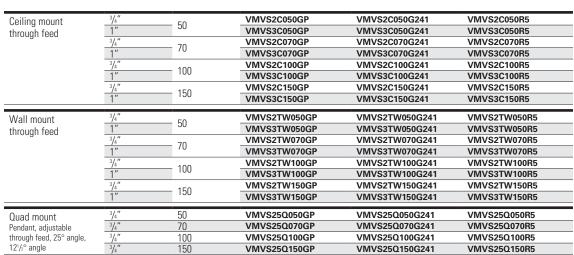
To complete the catalog number, include information in Notes 1, 2 and 3 below. For guards and other optics, see VMV – ordering by components page.

BASIC CATALOG NUMBER



Mounting style	Hub size	Lamp watts	Cat. # With G24 globe and P21 guard	Cat. # With G241 Type I compact refractor <sup>©</sup>	Cat. # With R5 glass refractor <b>G</b>
Pendant mount	3/4"	50	VMVS2A050GP	VMVS2A050G241	VMVS2A050R5
	1"	30	VMVS3A050GP	VMVS3A050G241	VMVS3A050R5
	3/4"	70	VMVS2A070GP	VMVS2A070G241	VMVS2A070R5
	1"	70	VMVS3A070GP	VMVS3A070G241	VMVS3A070R5
	3/4"	100	VMVS2A100GP	VMVS2A100G241	VMVS2A100R5
	1"	100	VMVS3A100GP	VMVS3A100G241	VMVS3A100R5
	3/4"	150	VMVS2A150GP	VMVS2A150G241	VMVS2A150R5
	1"	130	VMVS3A150GP	VMVS3A150G241	VMVS3A150R5
Flexible pendant	3/4"	50	VMVS2HA050GP	VMVS2HA050G241	VMVS2HA050R5
mount	3/4"	70	VMVS2HA070GP	VMVS2HA070G241	VMVS2HA070R5
	3/4"	100	VMVS2HA100GP	VMVS2HA100G241	VMVS2HA100R5
	3/4"	150	VMVS2HA150GP	VMVS2HA150G241	VMVS2HA150R5







Stanchion mount	11/2"	50	VMVSJ050GP	VMVSJ050G241	VMVSJ050R5
25° angle	11/2"	70	VMVSJ070GP	VMVSJ070G241	VMVSJ070R5
20 ungio	11/2"	100	VMVSJ100GP	VMVSJ100G241	VMVSJ100R5
	11/2"	150	VMVSJ150GP	VMVSJ150G241	VMVSJ150R5



Stanchion mount	11/2"	50	VMVSP050GP	VMVSP050G241	VMVSP050R5	
Straight	11/2"	70	VMVSP070GP	VMVSP070G241	VMVSP070R5	
•	11/2"	100	VMVSP100GP	VMVSP100G241	VMVSP100R5	
	11/2"	150	VMVSP150GP	VMVSP150G241	VMVSP150R5	



- For G243 Type III compact refractor, change '241' at end of catalog number to '243.' Example: VMVS2A050G243. For G245 Type V compact refractor, change '241' at end of catalog number to '245.' Example: VMVS2A050G245.
- For R2 glass refractor, change 'R5' at end of catalog number to 'R2.' Example: VMVS2A050R2. For R3 glass refractor, change 'R5' at end of catalog number to 'R3.' Example: VMVS2A050R3.
- 1. Add voltage suffix to end of catalog number (example: VMVS2C070CP/480).

Standard voltage ballasts - 60 Hz

Optional voltage ballasts – 50 or 60 Hz

	NEC/UL				CEC/CSA	A (cUL)			CEC/CSA (	cUL) – CWI is	olated ballas	ts	Export		
Voltage	Multi-tap	Dual-tap	120V	480V	Tri-tap	Dual-tap	120V	Voltage	208V CWI	240V CWI	480V CWI	600V CWI	220V 60 Hz	220V 50 Hz	240V 50 Hz
Suffix	/MT	/DT	/120	/480	/TT	/DT	/120	Suffix	/208 CWI	/240 CWI	/480 CWI	/600 CWI	/220	/220 50	/240 50

Multi-tap and dual-tap ballasts are powered for 277V.

- 2. 150W HPS luminaires:
- 55V lamps standard use suffix LX; for 100V lamps use suffix CE
- 50W HPS luminaire is dual-tap only

3. Options: Add the required option suffixes (see page 179) in alphanumeric order.

Marine & Wet Locations

3, 3R, 4, 4X; IP66

# Champ VMV HID luminaires

150-175W pulse start metal halide

Cl. I, Div. 2, Groups A, B, C, D Restricted Breathing Cl. I, Div. 2 & Zone 2 (with suffix S826)

To complete the catalog number, include information in Note 1 below. For guards and other optics, see VMV - ordering by components page.

#### **BASIC CATALOG NUMBER**



Mounting style	Hub size	Lamp watts	Cat. # With G24 globe and P21 guard	Cat. # With G245 Type V compact refractor <b>©</b>	Cat. # With R5 glass refractor
Pendant mount	3/4"	150	VMVM2A150GP S828	VMVM2A150G245 S828	VMVM2A150R5 S828
	1"	100	VMVM3A150GP S828	VMVM3A150G245 S828	VMVM3A150R5 S828
	3/4"	175	VMVM2A175GP S828	VMVM2A175G245 S828	VMVM2A175R5 S828
	1"	175	VMVM3A175GP S828	VMVM3A175G245 S828	VMVM3A175R5 S828



Flexible pendant mount	3/4"	150	VMVM2HA150GP S828	VMVM2HA150G245 S828	VMVM2HA150R5 S828
	3/4"	175	VMVM2HA175GP S828	VMVM2HA175G245 S828	VMVM2HA175R5 S828



Ceiling mount	3/4"	150	VMVM2C150GP S828	VMVM2C150G245 S828	VMVM2C150R5 S828
through feed	1"	100	VMVM3C150GP S828	VMVM3C150G245 S828	VMVM3C150R5 S828
till ought tood	3/4"	175	VMVM2C175GP S828	VMVM2C175G245 S828	VMVM2C175R5 S828
	1"	175	VMVM3C175GP S828	VMVM3C175G245 S828	VMVM3C175R5 S828



Wall mount	<sup>3/4"</sup> 150	VMVM2TW150GP S828	VMVM2TW150G245 S828	VMVM2TW150R5 S828
through feed	1"	VMVM3TW150GP S828	VMVM3TW150G245 S828	VMVM3TW150R5 S828
amough rood	<sup>3/4"</sup> 175	VMVM2TW175GP S828	VMVM2TW175G245 S828	VMVM2TW175R5 S828
	1"	VMVM3TW175GP S828	VMVM3TW175G245 S828	VMVM3TW175R5 S828



Quad mount Pendant, adjustable	3/4"	150	VMVM25Q150GP S828	VMVM25Q150G245 S828	VMVM25Q150R5 S828
through feed, 25° angle, 12¹/₂° angle	3/4"	175	VMVM25Q175GP S828	VMVM25Q175G245 S828	VMVM25Q175R5 S828



Stanchion mount	11/2"	150	VMVMJ150GP S828	VMVMJ150G245 S828	VMVMJ150R5 S828
25° angle	11/2"	175	VMVMJ175GP S828	VMVMJ175G245 S828	VMVMJ175R5 S828



Stanchion mount	11/2"	150	VMVMP150GP S828	VMVMP150G245 S828	VMVMP150R5 S828
Straight	11/2"	175	VMVMP175GP S828	VMVMP175G245 S828	VMVMP175R5 S828

• For G241 Type I compact refractor, change '245' at end of catalog number to '241.' Example: VMVM2A150G241 S828. For G243 Type III compact refractor, change '245' at end of catalog number to '243.' Example: VMVM2A150G243 S828.

● For R2 glass refractor, change 'R5' at end of catalog number to 'R2.' Example: VMVM2A150R2 S828. For R3 glass refractor, change 'R5' at end of catalog number to 'R3.' Example: VMVM2A150R3 S828.

#### 1. Add voltage suffix to end of catalog number (example: VMVM2A175GP/MT S828).

Standard voltage ballasts - 60 Hz

Optional voltage ballasts – 50 or 60 Hz

	NEC/UL	CEC/CSA (cUL)			
Voltage	Multi-tap	120V	480V	Tri-tap	120V
Suffix	/MT	/120	/480	/TT	/120

	Export			
Voltage	220V 60 Hz	220V 50 Hz	230V 50 Hz	240V 50 Hz
Suffix	/220	/220 50	/230 50	/240 50

70-175W metal halide

Cl. I, Div. 2, Groups A, B, C, D Restricted Breathing Cl. I, Div. 2 & Zone 2 (with suffix \$826) Marine & Wet Locations 3, 3R, 4, 4X; IP66

VMVM2HA175G241

VMVM2HA175R5

To complete the catalog number, include information in Notes 1, 2 and 3 below. For guards and other optics, see VMV – ordering by components page.

BASIC CATALOG NUMBER

Ш

Mounting style	Hub size	Lamp watts	Cat. # With G24 globe and P21 guard	Cat. # With G241 Type I compact refractor	Cat. # With R5 glass refractor <b>©</b>
Pendant mount	3/4"	70	VMVM2A070GP	VMVM2A070G241	VMVM2A070R5
	1"	70	VMVM3A070GP	VMVM3A070G241	VMVM3A070R5
	3/4"	100	VMVM2A100GP	VMVM2A100G241	VMVM2A100R5
	1"	100	VMVM3A100GP	VMVM3A100G241	VMVM3A100R5
	3/4"	175	VMVM2A175GP	VMVM2A175G241	VMVM2A175R5
	1"	175	VMVM3A175GP	VMVM3A175G241	VMVM3A175R5
Flexible pendant	3/4"	70	VMVM2HA070GP	VMVM2HA070G241	VMVM2HA070R5
mount	3/4"	100	VMVM2HA100GP	VMVM2HA100G241	VMVM2HA100R5
	0.1.11	475			

VMVM2HA175GP



Ceiling mount through feed	3/4"	70	VMVM2C070GP	VMVM2C070G241	VMVM2C070R5
	1"	70	VMVM3C070GP	VMVM3C070G241	VMVM3C070R5
	3/4"	100	VMVM2C100GP	VMVM2C100G241	VMVM2C100R5
	1"	100	VMVM3C100GP	VMVM3C100G241	VMVM3C100R5
	3/4"	175	VMVM2C175GP	VMVM2C175G241	VMVM2C175R5
	1"	1/5	VMVM3C175GP	VMVM3C175G241	VMVM3C175R5



Wall mount through feed	3/ <sub>4</sub> " 1"	70	VMVM2TW070GP VMVM3TW070GP	VMVM2TW070G241 VMVM3TW070G241	VMVM2TW070R5 VMVM3TW070R5
	3/4"	100	VMVM2TW100GP	VMVM2TW100G241	VMVM2TW100R5
	1"	100	VMVM3TW100GP	VMVM3TW100G241	VMVM3TW100R5
	3/4"	175	VMVM2TW175GP	VMVM2TW175G241	VMVM2TW175R5
	1"	<del></del> 175	VMVM3TW175GP	VMVM3TW175G241	VMVM3TW175R5



Quad mount Pendant, adjustable through feed, 25° angle, 12'/2° angle	3/4"	70	VMVM25Q070GP	VMVM25Q070G241	VMVM25Q070R5
	3/4"	100	VMVM25Q100GP	VMVM25Q100G241	VMVM25Q100R5
	3/4"	175	VMVM25Q175GP	VMVM25Q175G241	VMVM25Q175R5



Stanchion mount	1¹/₂"	70	VMVMJ070GP	VMVMJ070G241	VMVMJ070R5	
25° angle	11/2"	100	VMVMJ100GP	VMVMJ100G241	VMVMJ100R5	
	11/2"	175	VMVMJ175GP	VMVMJ175G241	VMVMJ175R5	



Stanchion mount	1¹/₂"	70	VMVMP070GP	VMVMP070G241	VMVMP070R5
Straight	11/2"	100	VMVMP100GP	VMVMP100G241	VMVMP100R5
•	11/2"	175	VMVMP175GP	VMVMP175G241	VMVMP175R5

• For G243 Type III compact refractor, change '241' at end of catalog number to '243.' Example: VMVM2A070G243. For G245 Type V compact refractor, change '241' at end of catalog number to '245.' Example: VMVM2A070G245.

● For R2 glass refractor, change 'R5' at end of catalog number to 'R2.' Example: VMVM2A070R2. For R3 glass refractor, change 'R5' at end of catalog number to 'R3.' Example: VMVM2A070R3.

#### 1. Add voltage suffix to end of catalog number (example: VMVM2A070G241/120).

Standard voltage ballasts – 60 Hz

Optional voltage ballasts - 50 or 60 Hz

NEC/UL			CEC/CSA (cUL	.)		CEC/CSA (cUL) - CWI isolated ballasts			Export				
Voltage	Multi-tap	120V	480V	Tri-tap	120V	Voltage	208V CWI	480V CWI	600V CWI	220V 60 Hz	220V 50 Hz	230V 50 Hz	240V 50 Hz
Suffix	/MT	/120	/480	/TT	/120	Suffix	/208 CWI	/480 CWI	/600 CWI	/220	/220 50	/230 50	/240 50

<sup>2. 70</sup>W ballast not available in 480V.

<sup>3.</sup> Options: Add the required option suffixes (see page 179) in alphanumeric order.

Ordering by components

Cl. I, Div. 2, Groups A, B, C, D Restricted Breathing Cl. I, Div. 2 & Zone 2 (with suffix S826) CI. II, Groups E, F, G CI. III & Simultaneous Presence (HPS 50W, 70W) Marine & Wet Locations 3, 3R, 4, 4X; IP56 to IP66

#### VMV luminaires are available in components.

A complete luminaire consists of:

- I. Champ cover (mounting module)
- II. VMV ballast housing include voltage and required option(s)
- III. Globe, guard, reflector, refractor

### I. Champ cover (mounting module):

Туре	Conduit size	Cat. #
Pendant mount	3/4"	APM2
rendant mount	1"	APM3
Flexible pendant mount	3/4"	HPM2
Cailing mount	3/4"	CM2
Ceiling mount®	1"	CM3
Wall mount	3/4"	TWM2
wan mount	1"	TWM3
Stanchion mount – 25° angle	11/2"	JM5
Stanchion mount – straight	11/2"	PM5
Quad mount	3/4"	QM25

### II. Ballast housings:

Complete catalog number must have the voltage suffix and any options suffixes.

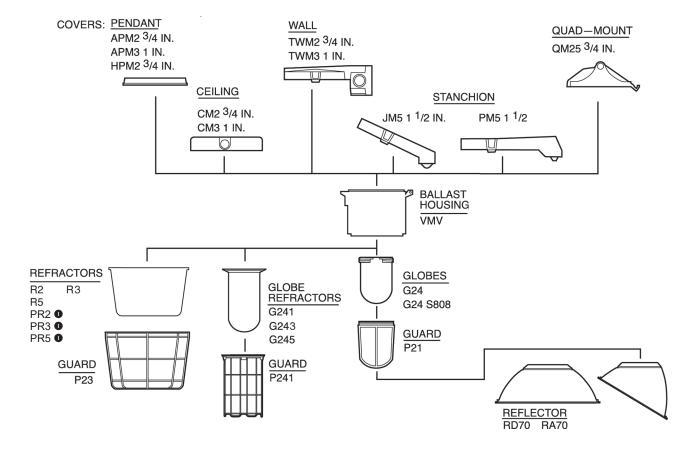
Lamp type	Lamp watts	Cat. # Globe and compact refractor	Cat. # Large refractor
	50	VMVS050/DT	VMVS050/DT RM
High progrum andium	70	VMVS070/MT	VMVS070/MT RM
High pressure sodium	100	VMVS100/MT	VMVS100/MT RM
	150	VMVS150/MT LX	VMVS150/MT LX RM
	70	VMVM070/MT	VMVM070/MT RM
Metal halide	100	VMVM100/MT	VMVM100/MT RM
	175	VMVM175/MT	VMVM175/MT RM

## III. Globes, guards, reflectors, refractors:

Туре	Cat. #
Globe	G24
Globe – Teflon coated	G24 S808
Globe guard	P21
Reflector – dome	RD70
Reflector – angle	RA70
Compact refractor – Type I	G241
Compact refractor – Type III	G243
Compact refractor – Type V	G245
Compact refractor guard	P241
Large refractor – Type II	R2
Large refractor – Type III	R3
Large refractor – Type V	R5
Large refractor guard	P23
Large plastic refractor – Type II	PR2
Large plastic refractor – Type III	PR3
Large plastic refractor – Type V	PR5

Cl. I, Div. 2, Groups A, B, C, D Restricted Breathing Cl. I, Div. 2 & Zone 2 (with suffix \$826) CI. II, Groups E, F, G CI. III & Simultaneous Presence (HPS 50W, 70W) Marine & Wet Locations 3, 3R, 4, 4X; IP56 to IP66

### Family tree:



CI. I, Div. 2, Groups A, B, C, D Restricted Breathing CI. I, Div. 2 & Zone 2 (with suffix S826) CI. II, Groups E, F, G CI. III & Simultaneous Presence (HPS 50W, 70W) Marine & Wet Locations 3, 3R, 4, 4X; IP56 to IP66

### Temperature performance data:

	Lamp			Class I, Div. 2			Class II, Div. 1	_	Class I, Zone 2		Supply wire suitable for °C		
Cat. #	Watts	Туре	Rated ambient °C	Globe (G24, G241, G245)	Globe (G24) with reflector (RA70, RD70)	Refractor (R2, R3, R5)	Group	Globe (G24) with or without reflector (RA70, RD70)	Simult. Pres. Class I, Div. 2; Class II, Div. 1	Restricted breathing suffix S826 with globe (G24, G241, G245)	Factory sealed suffix S865 AEx nA nR II	Globe (G24, G241, G245)	Refractor (R2, R3, R5)
VMVM70	70	MH	40	T3A	T3A	T3A	-	T3A	_	T5	T3	90	90
VMVM70	70	MH	55	T3	T3	T3		T3		T4	T3	90	90
VMVM70	70	MH	65	T3	T3	T3		T3		T4	T3	90	90
VMVM100	100	MH	40	T2D	T2D	T2D	-	T2D	_	T4	T3	90	90
VMVM100 S849	100	MH	40	T2	T2	T2		T2		<u>T4</u>	T3	75	75
VMVM100	100	MH	55	T2D	T2D	T2D	_	T2D	_	T4	T3	90	90
VMVM150	150	MH	40	T2A	T2A	T2B	_	T2A	_	T3	T3	90	90
VMVM175	175	MH	40	T2A	T2A	T2B	-	T2A	_	T3	T3	90	90
VMVS50	50	HPS	40	T3A	T3A	T3B	EFG	T4A	T3A	T5	T3	75	65
VMVS50	50	HPS	55	T3A	T3A	T3A	EFG	T4	T3	T5	T3	75	75
VMVS50	50	HPS	65	_T3	T3	T3	EFG	T4	T2D	T5	T3	75	75
VMVS70	70	HPS	40	T3	T3	T3B	EFG	T3C	T2C	T4	T3	75	65
VMVS70	70	HPS	55	T3	T3	T3	EFG	T3C	T2B	T4	T3	90	90
VMVS100	100	HPS	40	T2C	T2C	T2D	EFG	T3A	T2A	T4	T3	90	75
VMVS100	100	HPS	55	T2B	T2B	T2C	EFG	_	_	T3	T3	105	90
VMVS150	150	HPS	40	T2A	T2A	T2B	-	_	_	T3	T3	90	85
VMVS150	150	HPS	55	T2	T2	T2A	-	_	_	T3	T3	105	105

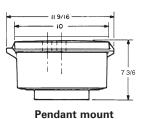
The Class I, Division 2T-codes apply to luminaires without the restricted breathing (S826) or factory sealed (S865) options. These luminaires are listed to UL844. UL844 specifies how the temperatures are measured.

The Class I, Zone 2 T-codes are for luminaires that are additionally listed to UL60079-15 that specify a different method for measuring temperatures. Since NEC 501.1 states that equipment "...for use in Class I, Zone 0, 1 or 2 locations shall be permitted in Class I, Division 2 locations...," then these luminaires are suitable for Class I, Division 2 but with cooler temperature ratings. They also have the advantage of meeting the more rigorous mechanical tests of UL844.

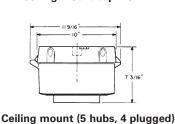
Cl. I, Div. 2, Groups A, B, C, D Restricted Breathing Cl. I, Div. 2 & Zone 2 (with suffix S826)

Cl. II, Groups E, F, G Cl. III & Simultaneous Presence (HPS 50W, 70W) Marine & Wet Locations 3, 3R, 4, 4X; IP56 to IP66

## **Dimensions (in inches):**



Ceiling mount top view



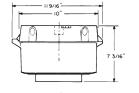
Lamp watts Luminaire series 50 100 150 175 Luminaire with globe, guard (lbs. 14.50 14.50 **VMVS** 14.50 15.50 Luminaire with glass refractor (lbs.): 22.75 21.00 22.75 21.50 VMVS 21.75 22.75 VMVM 23.75

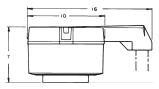
Туре	Weight (lbs.)	Туре	Weight (lbs.)
Add mounting mo	dules:		
Pendant	1.25	Quad	3.50
Flexible pendant	1.50	Stanchion 25° angle	3.50
Ceiling	2.75	Stanchion straight	4.50
Wall	4.50		
Add reflectors:			
Dome	1.50	30° angle	1.50

Deduct: 0.50 lbs. for fixture without P21 guard

Net luminaire weights:

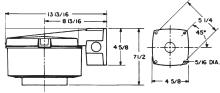
Quad mount



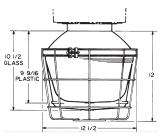


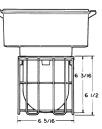
Stanchion mount 25° angle

Stanchion mount straight



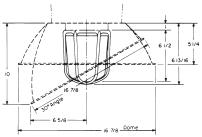
Wall mount (5 hubs, 4 plugged)





Luminaire with refractors, guard

Compact refractor



Globe, guard, reflectors