

Champ® VMV Series LED Luminaires

Cl. I, Div. 2, Groups A, B, C, D
Cl. I, Zone 2, nA nR
Cl. II, Groups E, F, G
Cl. III & Simultaneous
Presence

UL/cUL Listed
IECEX/ATEX/CE
Wet Locations
Type 4X, IP66

2L

2L

The Champ® VMV LED Family:

Champ VMV LED Series Luminaires are designed to provide full-spectrum, crisp, white light with custom IES Type I, III and V distribution. Nine versions of the VMV LED are available, providing ideal solutions for a wide range of applications.

| Model | Typical Lumens (Type V) ^A | Watts | Lumens per Watt | Equivalent HID Luminaire | Typical Energy Savings/Lifetime |
|--------|--------------------------------------|-------|-----------------|--------------------------|---------------------------------|
| VMV3L | 3,531 | 29 | 122 | 70W-100W | Up to 77% |
| VMV5L | 5,335 | 43 | 124 | 100W-150W | Up to 67% |
| VMV7L | 7,195 | 62 | 116 | 150W-175W | Up to 67% |
| VMV9L | 9,266 | 85 | 109 | 250W-320W | Up to 74% |
| VMV11L | 11,440 | 113 | 101 | 320W-400W | Up to 74% |
| VMV13L | 13,226 | 130 | 102 | 400W | Up to 68% |
| VMV17L | 18,793 | 168 | 112 | 400W-600W | Up to 72% |
| VMV21L | 22,110 | 196 | 113 | 600W-750W | Up to 74% |
| VMV25L | 26,531 | 232 | 114 | 750W-1000W | Up to 77% |



Applications:

- For areas with mounting heights of 8-60 feet
- Oil and gas refineries, drilling rigs, petrochemical facilities, food and beverage facilities, platforms, loading docks, tunnels, indoor/outdoor spotlighting, outdoor wall and stanchion mounted general area lighting, and where flammable vapors, gases, ignitable dusts, fibers or flyings are present
- Locations requiring continuous and consistent light levels in extreme ambient temperatures
- Where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- Classified and hazardous locations

Features:

- Instant illumination and restrike
- Cold temperature operation/no warm-up required
- Option for redundancy in drivers with multiple series circuits connected to each driver to avoid complete loss of illumination
- Easy installation – compact modular fixture attaches onto existing Champ mounting module
- Energy-efficient technology – up to 64% energy savings over HID fixtures
- Contains no mercury or other hazardous substances
- Shock- and vibration-resistant solid-state luminaires have no filaments or glass components that could break – greatly reduces the risk of premature failure
- Operating ambient: -40°C to 65°C (VMV3L-VMV11L/UNV1 models); -40°C to 55°C (VMV3L-VMV11L/UNV34 and VMV13L-VMV25L models)
- 5 year fixture warranty^B

Certifications and Compliances:

- DesignLights Consortium® Qualified (some models are not DLC qualified)^C

NEC/CEC:

- Class I, Division 2, Groups A, B, C, D; Class I, Zone 2, nA nR; Class II, Groups E, F, G; Class III
- Zone 21 tb
- Simultaneous Presence
- Wet locations, Type 4X, IP66

UL Standards:

- UL844; UL1598 – Luminaires; UL1598A – Marine; UL8750; UL150; UL50E

CSA Standard:

- cUL Listed to CSA Standard CSA C22.2 No. 137

IEC: ^D

- IEC 60079-0:2011; IEC 60079-15:2010; IEC 60079-31:2008; IEC 60598-2-1:1979; IEC 60529:2001
- Ex nA nR IIC T* Gc -40 to +40
- Ex nA nR IIC T* Gc -40 to +55
- Ex nA nR IIC T* Gc -40 to +65
- Ex tb IIIC T*°C Db -40 to +40
- Ex tb IIIC T*°C Db -40 to +55
- Ex tb IIIC T*°C Db -40 to +65

VMV3L-VMV11L only

- IECEx UL 13.0052X

VMV13L-VMV25L only

- IECEx UL 14.0031X

^ATolerance +/- 10%.

^BRefer to page 2 of the current authorized distributor price book for Eaton's standard Terms and Conditions.

^CApproved models include: VMV3L/UNV1; VMV5L/UNV1; VMV7L/UNV1; VMV9L/UNV1; VMV11L/UNV1; VMV13L/UNV1; VMV17L/UNV1; VMV21L/UNV1; VMV25L/UNV1; VMV3L/UNV34; VMV5L/UNV34; VMV7L/UNV34; VMV9L/UNV34; VMV11L/UNV34. Refer to www.designlights.org Qualified Products List under family models for full listing details. Not all models are approved for all application categories.

^DVMV3L-VMV11L/UNV1 rated to +65°C; VMV13L-VMV25L and VMV3L-VMV11L/UNV34 rated to +55°C.

*See temperature code table on following page.

Certifications and Compliances (Continued):

ATEX/CE: ^D

- EN 60079-0:2012; EN 60079-15:2010; EN 60079-31:2009; EN 60598-2-1:1989; EN 60929:1991 +A1:2001
- II 3 G Ex nA nR IIC T* Gc -40 to +40
- II 3 G Ex nA nR IIC T* Gc -40 to +55
- II 3 G Ex nA nR IIC T* Gc -40 to +65
- II 2 D Ex tb IIIC T*°C Db IP66 -40 to +40
- II 2 D Ex tb IIIC T*°C Db IP66 -40 to +55
- II 2 D Ex tb IIIC T*°C Db IP66 -40 to +65

VMV3L-VMV11L only

- DEMKO 13 ATEX 1475031X; DEMKO 13 ATEX 1305741X

VMV13L-VMV25L only

- DEMKO 14 ATEX 1324722X; DEMKO 14 ATEX 2274231X

Standard Materials:

- Lamp housing and adapter – die cast aluminum with Corro-free™ epoxy powder coat
- Lens – heat- and impact-resistant glass
- Gaskets – silicone
- External hardware – stainless steel
- Factory sealed, no external seals required

Photometrics:

- Complete photometrics can be found at www.crouse-hinds.com/photometrics

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LED System:

- High intensity discrete power emitters
- Cool white (5000K, 70 CRI) (standard); warm white, (3000K, 80 CRI) (optional)
- Custom Type I, III and V optics available
- Optics clocking in field to align Type I and Type III light patterns to illumination path for VMV13L-VMV25L

Drivers:

| Option | Voltage |
|--------|--|
| /UNV1 | 120-277 VAC, 50/60 Hz; 108-250 VDC, 50/60 Hz |
| /UNV34 | 347-480 VAC, 50/60 Hz |

Custom Optics:

Three optical options to maximize light distribution and intensity:



TYPE I

Long and rectangular for hallways, walkways, loading docks, catwalks.

Ideal for:

- Mining conveyor belts
- Aisleways and hallways
- Catwalks and walkways
- Ramps and loading docks
- Tunnels with overhead mounts

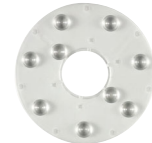


TYPE III

Wall mount light distribution, minimizing spillover on the wall.

Ideal for:

- Narrow crosswalks or passages with wall mounted fixtures
- Tunnels with wall mount
- Wall or stanchion mount requiring 180° forward throw beam patterns



TYPE V

Regular circular distribution pattern for high/low bay indoor and outdoor ceiling or pendant mount lighting.

Ideal for:

- Pendant, ceiling or stanchion mount overhead building mounts
- Processing mills, industrial plants, large buildings, warehouses, etc.



Colored LED Options:

- Available in red, blue, green and amber[Ⓔ]
- Reduction in light pollution for night space observation and sky glow due to isolating blue wavelength in red and amber colors
- Wildlife-friendly
- Improves visibility for telescopes in observatories during night sky space exploration

Electrical Ratings:

| | VMV3L | VMV5L | VMV7L | VMV9L | VMV11L | VMV13L | VMV17L | VMV21L | VMV25L |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Voltage Range, VAC | 120-277 | 120-277 | 120-277 | 120-277 | 120-277 | 120-277 | 120-277 | 120-277 | 120-277 |
| Frequency | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| Input Power (Watts) | 29 | 43 | 62 | 85 | 113 | 131 | 168 | 196 | 232 |
| Input Amps at 120-277 VAC | 0.24 - 0.11 | 0.35 - 0.16 | 0.52 - 0.23 | 0.71 - 0.31 | 0.95 - 0.41 | 1.08 - 0.48 | 1.40 - 0.62 | 1.64 - 0.73 | 1.94 - 0.87 |
| Voltage Range, VDC | 108-250 | 108-250 | 108-250 | 108-250 | 108-250 | 108-250 | 108-250 | 108-250 | 108-250 |
| Power Factor | >0.90 | >0.90 | >0.90 | >0.90 | >0.90 | >0.90 | >0.90 | >0.90 | >0.90 |
| Total Harmonic Distortion (THD) | <20% | <20% | <20% | <20% | <20% | <20% | <20% | <20% | <20% |
| Nominal Lumens (Type V) [Ⓕ] | 3,531 | 5,335 | 7,195 | 9,266 | 11,440 | 13,226 | 18,793 | 22,110 | 26,531 |

Temperature Performance Data:

| Lamp/Lumen Output | Driver Type | Ambient Temp. °C | Class I, Div. 2 | Class II, Div. 1 | Class III, Div. 1 | | |
|---------------------|--------------|------------------|-----------------|------------------|-------------------------|------------------------|-------------------------------------|
| | | | | | Simultaneous Rating | Class I, Zone 2 | |
| | | | | | Class I, Div. 2, Div. 1 | AEx nA nR; Ex nA nR | Class II, Div. 1, Groups E, F, G |
| | | | | | | | Zone 21, AEx tb IIIC |
| 3L, 5L, 7L, 9L, 11L | /UNV1 | 40 | T5 | T5 | T3C | T6 | T66°C |
| 3L, 5L, 7L, 9L, 11L | /UNV1 | 55 | T5 | T4A | T3A | T5 | T83°C |
| 3L, 5L, 7L, 9L, 11L | /UNV1 | 65 | T4A | T4A | T3A | T4 | T92°C |
| 3L, 5L, 7L, 9L, 11L | /UNV34 | 40 | T3C | T5 | T3C | T4 | T70°C |
| 3L, 5L, 7L, 9L, 11L | /UNV34 | 55 | T3A | T4A | T3A | T4 | T85°C |
| 13L, 17L | /UNV1; UNV34 | 40 | T4A | T5 | T4A | T6 | T66°C |
| 13L, 17L | /UNV1; UNV34 | 55 | T4 | T4A | T4 | T5 | T81°C |
| 21L, 25L | /UNV1; UNV34 | 40 | T4A | T5 | T4A | T6 | T71°C |
| 21L, 25L | /UNV1; UNV34 | 55 | T4 | T4A | T4 | T5 | T86°C |

[Ⓔ] Custom optics not available with colored LEDs. One model per color; see catalog numbering system on following page.

[Ⓕ] Tolerance +/- 10%.

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Ordering Information:

Part number example

VMV17LW2AR1G /UNV1 S890

VMV 17L W 2A R1 G /UNV1 S890

Lamp/Function

| | |
|-----------------|-------------------------|
| 3L | 3,531 Lumen LED |
| 5L | 5,335 Lumen LED |
| 7L | 7,195 Lumen LED |
| 9L | 9,226 Lumen LED |
| 11L | 11,440 Lumen LED |
| 13L | 13,226 Lumen LED |
| 17L | 18,793 Lumen LED |
| 21L | 22,110 Lumen LED |
| 25L | 26,531 Lumen LED |
| RL [Ⓞ] | Red (3,200 Lumen LED) |
| GL [Ⓞ] | Green (4,300 Lumen LED) |
| BL [Ⓞ] | Blue (2,100 Lumen LED) |
| AL [Ⓞ] | Amber (5,000 Lumen LED) |

Color Temperature

| | |
|-------|-----------------------|
| BLANK | Cool (5000K), Colored |
| W | Warm (3000K) |

Mounting Style

| | | | |
|----------------|----------------------------|------|---------------------|
| BLANK | No Cover | 2C | ¾" Ceiling |
| J [Ⓜ] | 1-½" Stanchion, 25° Angled | 3C | 1" Ceiling |
| P | 1-½" Stanchion, Straight | 20C | 20mm Ceiling |
| 2A | ¾" Pendant | 25C | 25mm Ceiling |
| 3A | 1" Pendant | 2HA | ¾" Flexible Pendant |
| 20A | 20mm Pendant | 2TW | ¾" Wall |
| 25A | 25mm Pendant | 3TW | 1" Wall |
| 2B | ¾" Cone Pendant | 20TW | 20mm Wall |
| 3B | 1" Cone Pendant | 25TW | 25mm Wall |

Options

| | |
|-------------------|-----------------------------|
| S812 [Ⓛ] | Trunnion Mount Kit with Pin |
| S831 [Ⓛ] | Safety Cable |
| S890 | Quick Clip |
| S891 [Ⓛ] | Diffused Lens |
| S892 [Ⓚ] | Redundant Driver |
| S896 [Ⓛ] | Teflon® Coated Lens |
| S903 | Polycarbonate Lens |
| TB6 | Six-pole Terminal Block |

Voltage

| | |
|--------|---|
| /UNV1 | 120-277 VAC, 50/60 Hz; 108-250 VDC, 50/60 Hz |
| /UNV34 | 347-480 VAC, 50/60 Hz |

Guard

| | |
|-------|------------------|
| BLANK | No Guard |
| G | P3001 Wire Guard |

Optics

| | |
|-------------------|---|
| BLANK | Type V Optic Standard (All Mounts) |
| R1 | Type I Optic (All Mounts Minus Ceiling) |
| R1A [Ⓜ] | Type I Optic (Ceiling with Conduit 45° Counterclockwise or 135° Clockwise from Hinge) |
| R1B [Ⓜ] | Type I Optic (Ceiling with Conduit 45° Clockwise or 135° Counterclockwise from Hinge) |
| R3 | Type III Optic (All Mounts Minus Ceiling) |
| R3AP [Ⓜ] | Type III Optic (Select when using Appleton® Top Hat Adapter with Champ Fixture) |
| R3A1 [Ⓜ] | Type III Optic (Ceiling with Conduit 45° Counterclockwise from Top Hat Hinge) |
| R3A2 [Ⓜ] | Type III Optic (Ceiling with Conduit 135° Clockwise from Top Hat Hinge) |
| R3B1 [Ⓜ] | Type III Optic (Ceiling with Conduit 45° Clockwise from Top Hat Hinge) |
| R3B2 [Ⓜ] | Type III Optic (Ceiling with Conduit 135° Counterclockwise from Top Hat Hinge) |

Accessories (Ordered Separately):

Description

- Photocell, 120V, 50/60 Hz **D2S20**
- Photocell, 208-277V..... **D2S208 277**
- Trunnion mount kit with pin **VMVL S812 K1[Ⓛ]**

Cat.

[Ⓞ] Custom optics not available with colored LEDs.

[Ⓜ] For VMV3L-VMV11L only.

[Ⓛ] Order with ceiling mount only.

[Ⓛ] Not available for IEC.

[Ⓚ] Available for VMV5L and VMV7L only. Redundant driver standard on VMV9L-VMV25L models. 7L = 6,616 lumens with S892 suffix.

Teflon® is a registered trademark of E.I. duPont Co.

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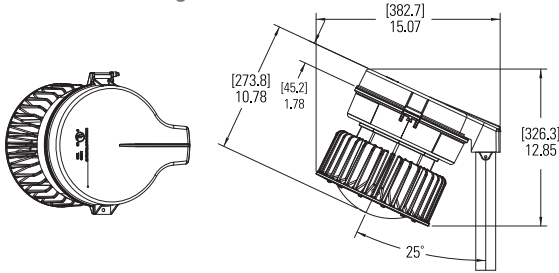
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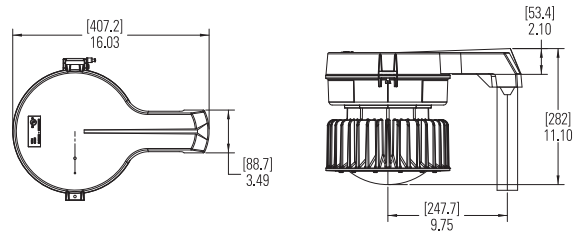
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Dimensions:

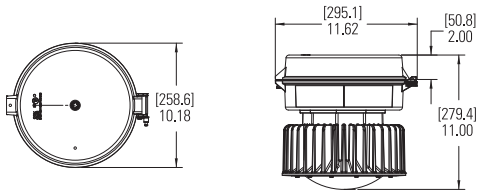
Stanchion - 25° Angled



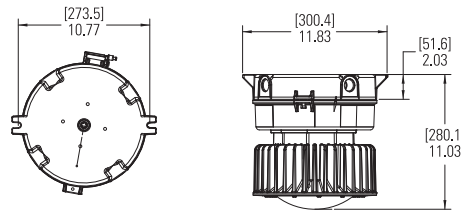
Stanchion - Straight



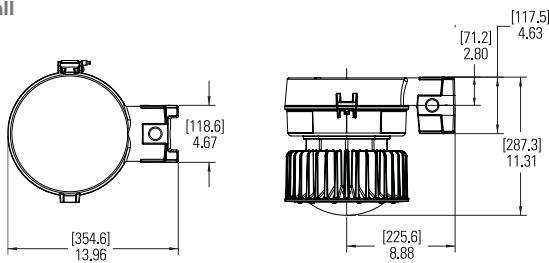
Pendant



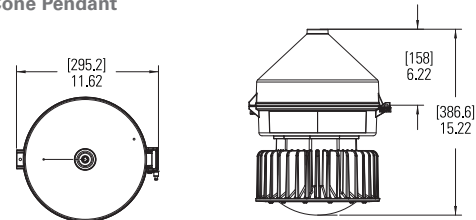
Ceiling



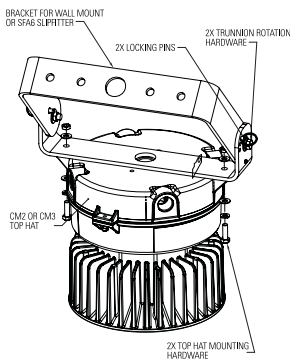
Wall



Cone Pendant



Trunnion



Net Luminaire Weights:

| Model | Lbs. | Kg. |
|-------------------------------|-------|-------|
| VMV3L-VMV11L | 21.80 | 8.07 |
| VMV13L & VMV17L | 36.00 | 16.32 |
| VMV21L & VMV25L | 44.00 | 19.95 |
| Add Mounting Modules: | | |
| Pendant | 1.25 | 0.57 |
| Cone Pendant | 4.00 | 1.81 |
| Flexible Pendant | 1.50 | 0.68 |
| Ceiling | 2.75 | 1.25 |
| Wall | 4.50 | 2.04 |
| Angled Stanchion ¹ | 3.50 | 1.59 |
| Straight Stanchion | 4.50 | 2.04 |

¹ Angled stanchion for VMV3L-VMV11L models only.