

Champ Pro PVML LED luminaires

3,000 to 13,000 lumens

UL/cUL Listed
IEC/CE
Wet Locations
Type 4X; IP66

2L

2L

The Champ Pro PVML LED family:

Champ® Pro PVML LED luminaires are engineered to provide maintenance-free illumination in the most demanding harsh and heavy industrial environments.

The Champ PVML features a compact, high efficacy design with custom optics to ensure maximum efficiency and mounting flexibility, including the ability to retrofit the Crouse-Hinds installed base to service both LED upgrades and new projects.

Model	Nominal lumens ^A	Watts	Efficacy	Equivalent HID luminaire
PVML-3	3,302	27	122 lm/W	70W
PVML-5	5,412	43	126 lm/W	100W
PVML-7	7,327	57	129 lm/W	175W
PVML-9	9,229	75	123 lm/W	250W
PVML-11	11,266	92	122 lm/W	320W
PVML-13	13,093	92	142 lm/W	400W

Applications:

- Non-hazardous locations with mounting heights up to 30 feet
- Heavy industrial, mine site processing areas, platforms, loading docks, tunnels, indoor/outdoor spotlighting, outdoor wall and stanchion mounted general area lighting, and areas requiring frequent on-and-off of lights
- Locations requiring continuous and consistent light levels in extreme ambient temperatures
- Where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- Type 4X, IP66, marine, wet locations and hose down environments

Features:

- Instant illumination and restrike
- Dimmable driver, 0-10V
- Better visibility with crisp, white light
- Cold temperature operation/no warm-up required
- Option for redundant drivers to avoid complete loss of illumination
- Easy installation – compact modular fixture attaches onto existing Champ mounting module
- Energy-efficient – up to 77% 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
- Full cut-off with no wasted light above the fixture
- 5 year fixture warranty

Certifications and compliances:

- DesignLights Consortium® Qualified (pending)^B
- NEC/CEC:**
- Wet locations, Type 4X, IP66
- UL standards:**
- UL1598 – Luminaires; UL1598A – Marine
- CSA standard:**
- cUL Listed to CSA standard CSA C22.2 No. 250
- IEC standard:**
- CE

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

LED system:

- High intensity discrete LEDs
- Cool white (5000K, 70 CRI) (standard); warm white (3000K, 80 CRI) or neutral white (4000K, 70 CRI) (optional)
- Custom Type I, III and V optics available

Colored LED options:

- Available in green or amber^C
- 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



Enhanced surge protection:

- 6kV IEC rated (6 kV/3kA L-L, 10 kV/0.83kA L-G) (standard)
- 6kV IEC and ANSI rated (6kV/3kA L-L and L-G) (with SG1 option)

Photometrics:

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

Net luminaire weights:

Model	Lbs.	Kg.
PVML-3 to PVML-7	19.00	8.62
PVML-9 to PVML-13	19.20	8.70
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	3.50	1.59
Straight stanchion	4.50	2.04

^A Nominal lumens based on Type V optics, 5000K CCT with clear glass lens. Wattage measured at 120 VAC.

^B Refer to www.designlights.org Qualified Products List under family models for full listing details. Not all models are approved for all application categories.

^C Custom optics not available with colored LEDs. One model per color; see ordering information.

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Design features:



Shown with optional diffused lens

Built to last:

- Type 4X and IP66 rated
- Impact-resistant lens sealed from the outside environment provides ingress protection against water and dust
- Die cast aluminum LED housing provides efficient thermal path to heat sink assembly
- Vertical fin design facilitates air flow and dust shedding

Simple installation and replacement:

- Contractor-friendly design is ideal for both retrofit and new construction
- Easy to retrofit using existing HID Champ mounting module
- Straightforward wiring with lever lock connectors

Increased efficiency:

- Up to 127 lumens per watt (7L model)

Custom optics:

- Type I, III and V optics designed to maximize light distribution and intensity[Ⓛ]



Multiple lens options:

- Clear glass lens standard
- Uplight refractor lens provides ~5% uplight and ~16% sidelight for better visibility
- Optional lenses include diffused glass, clear polycarbonate or uplight refractor

Shown with optional uplight refractor lens and guard



ORDC/UNV1

REMOTE CONTROL 1

Occupancy sensor and remote (ordered separately)

Occupancy sensor:

- Optional occupancy sensor with photocell available
- Remote control for customizing occupancy sensor performance

[Ⓛ]Type V optics standard.

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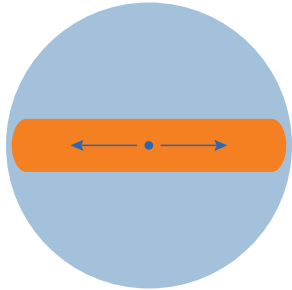
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Custom optics:

Three optical options to maximize light distribution and intensity:

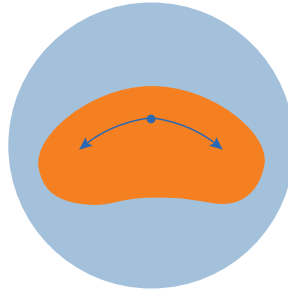


TYPE I

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

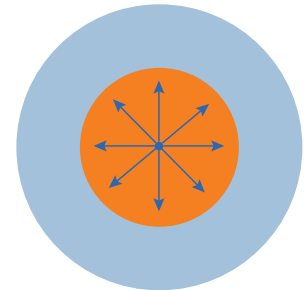


TYPE III

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.

Electrical ratings:

UNV1 driver	Input power (watts)	Input amps at 100-277 VAC	UNV34 driver	Input power (watts)	Input amps at 347-480 VAC
PVML-3	27	0.27 - 0.10	PVML-3	28	0.08 - 0.06
PVML-5	45	0.45 - 0.16	PVML-5	44	0.13 - 0.09
PVML-7	61	0.61 - 0.21	PVML-7	57	0.16 - 0.12
PVML-7-S892	60	0.60 - 0.23	PVML-7-S892	61	0.18 - 0.13
PVML-9	76	0.76 - 0.26	PVML-9	68	0.20 - 0.14
PVML-9-S892	80	0.80 - 0.29	PVML-9-S892	73	0.22 - 0.15
PVML-11	92	0.92 - 0.32	PVML-11	83	0.24 - 0.17
PVML-11-S892	97	0.97 - 0.35	PVML-11-S892	86	0.25 - 0.18
PVML-13	95	1.06 - 0.42	PVML-13	91	0.29 - 0.17
PVML-13-S892	95	1.10 - 0.36	PVML-13-S892	96	0.31 - 0.19

EMC / CE compliance:

If the dimming interface of the LED driver is connected to an external dimmer which is not provided with the luminaire, a ferrite core must be used on the input and dimming lines. Approved ferrite cores are: Fair-Rite P/N 0431167281.

All models

Power factor	≥0.90	THD	≤15%
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UNV1

Voltage range, 100-277V at VAC[Ⓔ]
50/60 Hz

Voltage range, VDC
127-250V

UNV34

Voltage range, 347-480V at VAC[Ⓔ]
50/60 Hz

[Ⓔ] IEC voltage: 100-240 VAC at 50/60 Hz. For PMVL-3: PF>0.9 from 100-255 VAC.

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Ordering information:

Part number example

PVML-3-N-2A-R1-G-UNV1-S831-UPLT

<h3>PVML</h3>	<h3>-3</h3>	<h3>-N</h3>	<h3>-2A</h3>	<h3>-R1</h3>	<h3>-G</h3>	<h3>-UNV1</h3>	<h3>-S831</h3>	<h3>-UPLT</h3>																																																					
<h4>Light source / intensity</h4> <table border="1"> <tr><td>3</td><td>3,250 nominal lumens</td></tr> <tr><td>5</td><td>5,537 nominal lumens</td></tr> <tr><td>7</td><td>7,442 nominal lumens</td></tr> <tr><td>9</td><td>9,234 nominal lumens</td></tr> <tr><td>11</td><td>11,114 nominal lumens</td></tr> <tr><td>13^F</td><td>13,100 nominal lumens</td></tr> <tr><td>A</td><td>Amber – 5,200 lumens</td></tr> <tr><td>G</td><td>Green – 4,300 lumens</td></tr> </table>			3	3,250 nominal lumens	5	5,537 nominal lumens	7	7,442 nominal lumens	9	9,234 nominal lumens	11	11,114 nominal lumens	13 ^F	13,100 nominal lumens	A	Amber – 5,200 lumens	G	Green – 4,300 lumens	<h4>Lens guard</h4> <table border="1"> <tr><td>BLANK</td><td>No guard</td></tr> <tr><td>G</td><td>Wire guard</td></tr> </table>			BLANK	No guard	G	Wire guard	<h4>Voltage^I</h4> <table border="1"> <tr><td>UNV1</td><td>100-277 VAC, 50/60 Hz; 127-250 VDC</td></tr> <tr><td>UNV34</td><td>347-480 VAC, 50/60 Hz</td></tr> </table>			UNV1	100-277 VAC, 50/60 Hz; 127-250 VDC	UNV34	347-480 VAC, 50/60 Hz	<h4>Lens material</h4> <table border="1"> <tr><td>BLANK</td><td>Clear glass</td></tr> <tr><td>S891</td><td>Diffused glass</td></tr> <tr><td>S896^L</td><td>Teflon coated lens</td></tr> <tr><td>S903</td><td>Polycarbonate</td></tr> <tr><td>UPLT^M</td><td>Uplight refractor lens</td></tr> </table>			BLANK	Clear glass	S891	Diffused glass	S896 ^L	Teflon coated lens	S903	Polycarbonate	UPLT ^M	Uplight refractor lens																
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^FFor 13L models, add suffix -M2 at the end of the part number. Example: PVML-13-2A-R1-UNV1-S831-M2.

^GConsult factory for lead time. 5700K and 6500K are available upon request; consult factory. Not available for amber or green LED.

^HAvailable with ceiling mount modules only.

^IIEC voltage: 100-240 VAC at 50/60 Hz.

^JOrdered with fixture or available separately.

^KAvailable for PVML-7, -9, -11 and -13 only.

^LFor NEC/CEC only.

^MFor use with Type V optic only.

^NNot available on PVML-11L, -13L and all UNV34 models.

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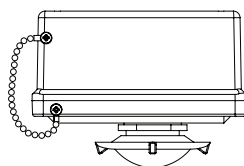
Accessories (ordered separately):

Replacement driver kits

VMVL-3-5-7L-UNV1-DRIVER-KIT	UNV1 replacement driver kit for PVML-3, -5 and -7
VMVL-9-11L-UNV1-DRIVER-KIT	UNV1 replacement driver kit for PVML-9 and -11
VMVL-96W-13L-UNV1-M2-DRIVER-REPL-KIT	UNV1 replacement driver kit for PVML-13
VMVL-3L-5L-UNV34-DRIVER-KIT	UNV34 replacement driver kit for PVML-3 and -5
VMVL-7L-UNV34-DRIVER-KIT	UNV34 replacement driver kit for PVML-7
VMVL-9L-UNV34-DRIVER-KIT	UNV34 replacement driver kit for PVML-9
VMVL-11L-UNV34-DRIVER-KIT	UNV34 replacement driver kit for PVML-11
VMVL-13-M2-DRIVER-KIT	UNV34 replacement driver kit for PVML-13
VMVL-7L-S892-UNV1-DRIVER-KIT	UNV1 replacement redundant driver kit for PVML-7
VMVL-9L-11L-S892-UNV1-DRIVER-KIT	UNV1 replacement redundant driver kit for PVML-9 and -11
VMVL-13-UNV1-S892-M2-DRIVER-KIT	UNV1 replacement redundant driver kit for PVML-13
VMVL-7L-S892-UNV34-DRIVER-KIT	UNV34 replacement redundant driver kit for PVML-7
VMVL-9L-S892-UNV34-DRIVER-KIT	UNV34 replacement redundant driver kit for PVML-9
VMVL-11L-S892-UNV34-DRIVER-KIT	UNV34 replacement redundant driver kit for PVML-11
VMVL-13-UNV34-S892-M2-DRIVER-KIT	UNV34 replacement redundant driver kit for PVML-13
VMVL-AL-GL-UNV1-DRIVER-KIT	UNV1 replacement driver kit for amber or green models

Occupancy sensor

ORDC/UNV1	3/4" NPT entry, 100-277 VAC
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Occupancy sensor accessories

CABLE KIT ORD 1	TECK armored cable (5 ft.) with TECK glands (3/4")
CABLE KIT ORD 2	P Type non-armored cable (5 ft.) with ADE 1F glands (3/4")
CABLE KIT ORD 3	Metal-clad armored cable (5 ft.) with TMC glands (3/4")
CABLE KIT ORD 4	SO cable (5 ft.) with ADE 1F glands (3/4")
ORDC WKIT	Wall mount kit
ORDC PKIT	Pendant mount kit
ORDC SKIT	Stanchion mount kit
REMOTE CONTROL 1	Remote control for programming sensor



ORDC/UNV1



REMOTE CONTROL 1

Mounting and hardware

VMVL S812 K1	Trunnion mount kit with pin ①
VMVL S812 K1 DBR	PVC coated trunnion mount kit with pin ①
VMVL S831 K1	Safety cable
VMVL S890 K1	Quick Clip

Mounting adapters

CHMM1	For Appleton MercMaster III mounts
CHMM2	For Appleton MercMaster II mounts
CHMM3	For Thomas & Betts HazLux mounts
CHMM4	For GE H2 Filtr-Gard mounts

Photocells

D2S20	Photocell, 120V
D2S208 277	Photocell, 208-277V

Lens guard

PA3001	Wire guard
P3003	UPLT wire guard

① Available with ceiling mount modules only.

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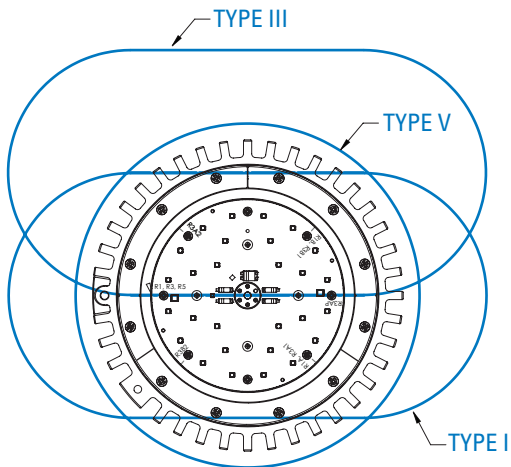
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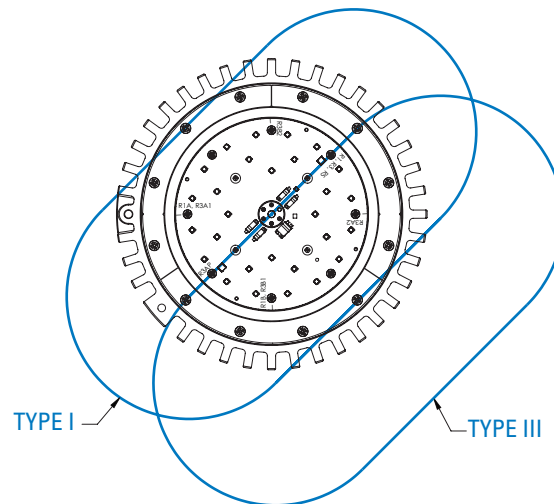
R1, R3 and BLANK

Type I, III and V optics with all mounts minus ceiling



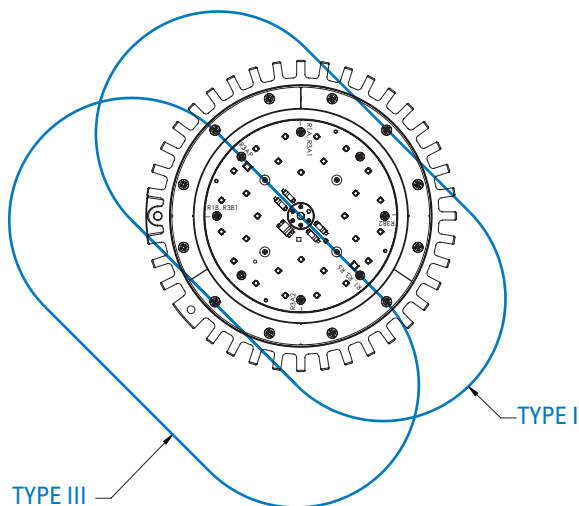
R1A and R3A1

Type I and Type III ceiling mount only



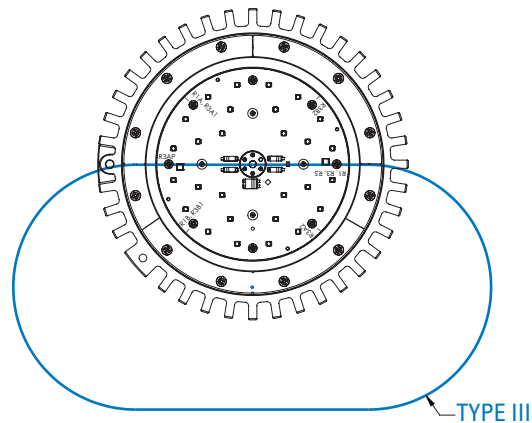
R1B and R3B1

Type I and Type III ceiling mount only



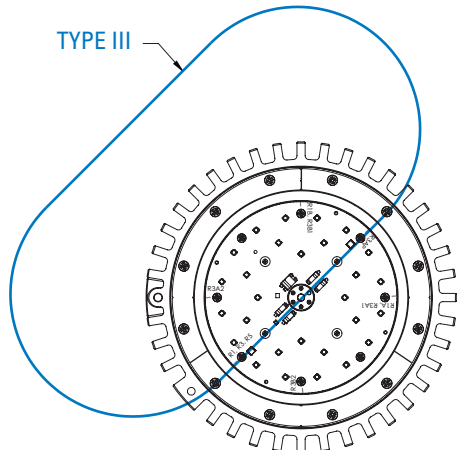
R3AP

Type III wall mount



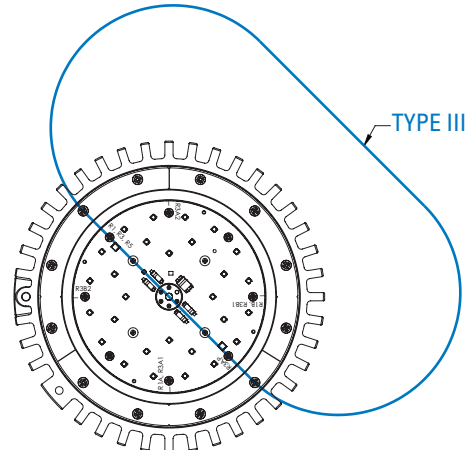
R3A2

Type III ceiling mount only



R3B2

Type III ceiling mount only



Champ Pro PVML LED Luminaires

3,000 to 13,000 lumens

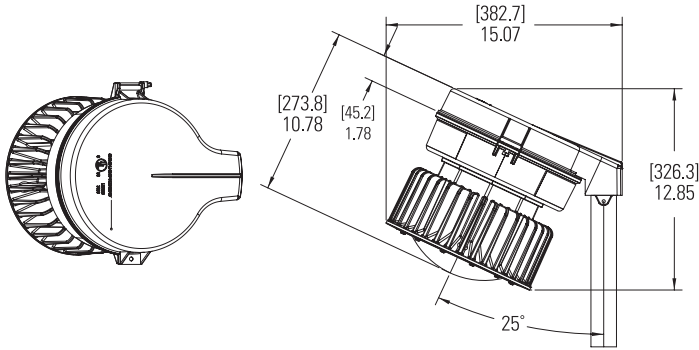
UL/cUL Listed
IEC/CE
Wet Locations
Type 4X; IP66

2L

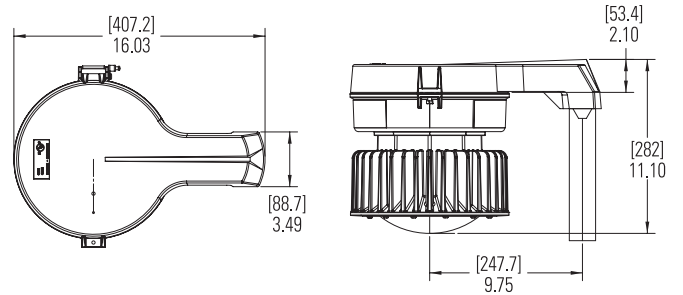
2L

Dimensions:

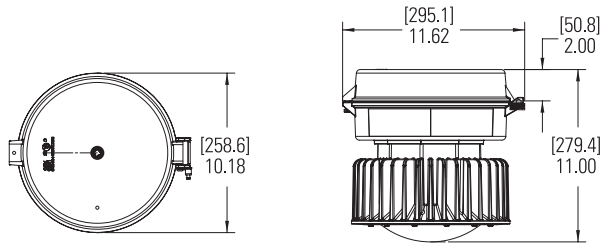
Stanchion - 25° angled



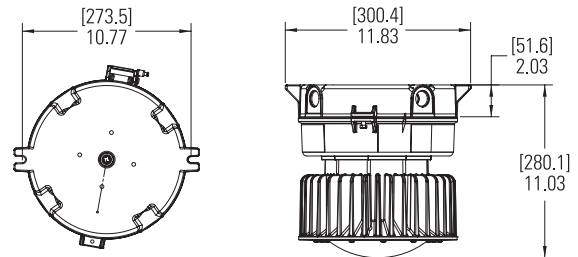
Stanchion - straight



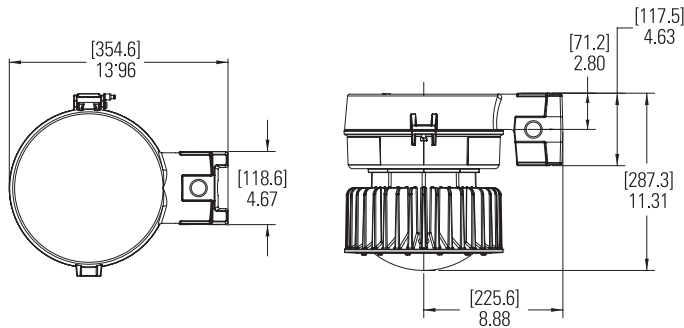
Pendant



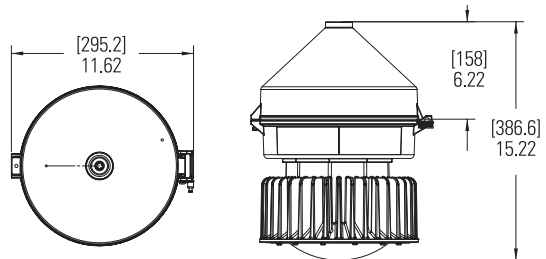
Ceiling



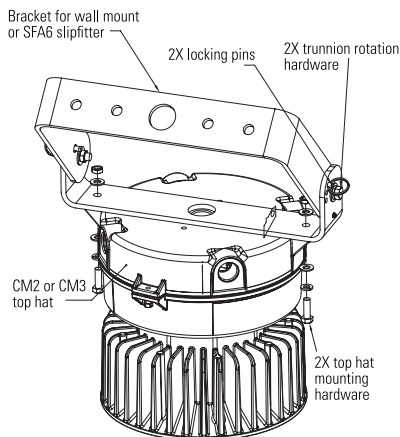
Wall



Cone pendant



Trunnion



Mounting module series:

