

Champ VMVL LED luminaires

17,000 to 25,000 lumens

Cl. I, Div. 2, Groups A, B, C, D
Cl. I, Zone 2, nA
Cl. II, Groups E, F, G
Cl. III & Simultaneous Presence
Zone 21 tb (UNV1 model only)

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

2L

The Champ VMVL LED family

Champ® VMVL LED luminaires are engineered to provide maintenance-free illumination in the most demanding harsh and hazardous rated environments.

The Champ VMVL 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	Typical lumens ^A	Watts	Lumens per watt	Equivalent HID luminaire	Typical energy savings / lifetime
VMVL-17	17,800	147	121	400W-600W	Up to 75%
VMVL-21	21,500	172	125	600W-750W	Up to 77%
VMVL-25	25,000	206	121	750W-1000W	Up to 80%

Applications:

- For areas with mounting heights of up to 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
- Extremely corrosive, wet, dusty, hot and/or cold conditions
- Classified and hazardous locations

Features:

- Instant illumination and restrike
- Dimmable driver, 0-10V
- 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 125 lumens per watt
- 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 55°C
- Up to 60,000 hours lifetime at 55°C
- 5 year fixture warranty

Certifications and compliances:

NEC/CEC:

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- Class III
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UL standards:

- UL844; UL1598 Luminaires; UL1598A Marine; UL8750; UL50; UL50E

CSA standard:

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

IEC standards^B:

- IEC 60079-0:2011; IEC 60079-15:2010; IEC 60079-31:2013; IEC 60598-2-1:1979; IEC 60529:2001

- Ex nA IIC T* Gc -40 to +40
- Ex nA IIC T* Gc -40 to +55
- Ex tb IIIC T*°C Db -40 to +40
- Ex tb IIIC T*°C Db -40 to +55
- IECEx UL 14.0031X

ATEX/CE^B:

- EN 60079-0:2012 +A11:2013; EN 60079-15:2010; EN 60079-31:2014; EN 60598-2-1:1989; EN 60929:1991 +A1:2001
- Ex II 3 G Ex nA IIC T* Gc -40 to +40
- Ex II 3 G Ex nA IIC T* Gc -40 to +55
- Ex II 2 D Ex tb IIIC T*°C Db IP66 -40 to +40
- Ex II 2 D Ex tb IIIC T*°C Db IP66 -40 to +55
- DEMKO 14 ATEX 1324722X; DEMKO 14 ATEX 2274231X

Qualifications and compliances:

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

*See temperature code tables for details.



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 power emitters
- 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
- Optics clocking in field to align Type I and Type III light patterns to illumination path for VMVL-17 to VMVL-25

Drivers:

Option	Voltage: VMVL-17 to VMVL-21
UNV1	100-277 VAC, 50/60 Hz; 127-250 VDC, 50/60 Hz
UNV34	347-480 VAC, 50/60 Hz

Net luminaire weights:

Model	Lbs.	Kg.
VMVL-17 to VMVL-25	25.15	11.41
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

^ATolerance +/- 10%. Typical lumens is measured with Type V optics.

^BIEC/ATEX certifications applicable for voltage ranges: 100-277 VAC, 127-250 VDC.

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

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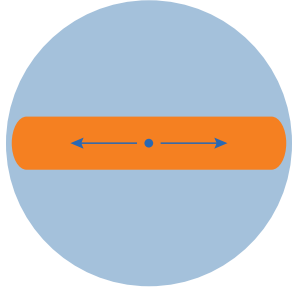
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Type 4X; IP66

2L

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Custom optics:

Three optical options to maximize light distribution and intensity:

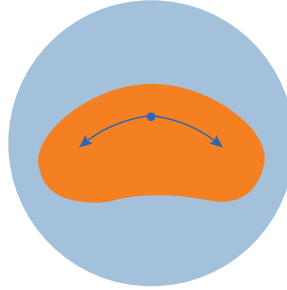


TYPE I

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

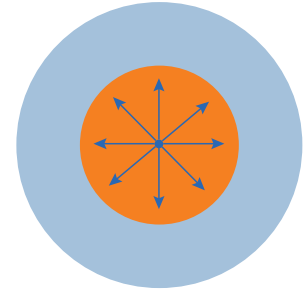


TYPE III

Stanchion and 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	VMVL-17	VMVL-21	VMVL-25
Voltage range UNV1 (VAC 50/60 Hz)	100-277	100-277	100-277
Voltage range UNV1 (VDC 50/60 Hz)	127-250	127-250	127-250
Input power (watts)	147	172	206
Input amps at 100-277 VAC	0.52 - 1.47	0.61 - 1.72	0.72 - 2.06
Input amps at 127-250 VDC	0.56 - 1.14	0.66 - 1.33	0.79 - 1.58

UNV34	VMVL-17	VMVL-21	VMVL-25
Voltage range UNV34 (VAC 50/60 Hz)	347-480	347-480	347-480
Input power (watts)	141	164	195
Input amps at 347-480 VAC	0.29 - 0.41	0.34 - 0.47	0.40 - 0.56

All models	
Power factor	>0.90
THD	<20%

Temperature performance data:

UNV1	VMVL-17		VMVL-21 & -25	
	40°C	55°C	40°C	55°C
Class I, Division 2	T4A	T4	T4A	T4
Class II, Division 1	T5	T4A	T5	T4A
Simultaneous rating Class I, Divisions 1 & 2	T4A	T4	T4A	T4
Class I, Zone 2 AEx nA nR; Ex nA nR	T4	T3	T4	T4
Class III, Division 1 Class II, Division 1, Groups E, F, G Zone 21, AEx tb IIIC	T61°C	T73°C	T62°C	T75°C

UNV34	VMVL-17		VMVL-21 & -25	
	40°C	55°C	40°C	55°C
Class I, Division 2	T4A	T4	T4A	T4
Class II, Division 1	T5	T4A	T5	T4A
Simultaneous rating Class I, Divisions 1 & 2	T4A	T4	T4A	T4

Type I and III optic clocking patterns can be adjusted in the field. Each optic is suitable for use with any mounting style for 17-25L.

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Ordering information:

Part number example

VMVL-17-W-2A-R1-G-UNV1-S890-M2

VMVL -17 -W -2A -R1 -G -UNV1 -S890 -M2

Lamp / function

17	17,800 lumen LED
21	21,500 lumen LED
25	25,000 lumen LED

Color temperature [Ⓔ]

BLANK	Cool white (5000K) or colored
N	Neutral white (4000K)
W	Warm white (3000K)

Mounting style

BLANK	No mounting module	2C	¾" ceiling
J	1½" stanchion, 25° angled	3C	1" ceiling
P	1½" 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

Optics

BLANK	Type V optic
R1	Type I optic
R3	Type III optic

Guard

BLANK	No guard
G	Wire guard

Voltage

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

Options

S812 [Ⓕ]	Trunnion mount kit with pin
S831 [Ⓕ]	Safety cable
S890	Quick Clip
S891 [Ⓕ]	Diffused lens
S896 [Ⓕ]	Teflon coated lens
S903	Polycarbonate lens
TB6	Six-pole terminal block

Accessories (ordered separately):

Mounting and hardware

VMVL S812 K1	Trunnion mount kit with pin [Ⓕ]
VMVL S812 K1 DBR	PVC coated trunnion mount kit with pin [Ⓕ]
VMVL S831 K1	Safety cable
VMVL S890 K1	Quick Clip
CHMM1	Mounting adapter for Appleton MercMaster III mounts
CHMM2	Mounting adapter for Appleton MercMaster II mounts
CHMM3	Mounting adapter for Thomas & Betts HazLux mounts
CHMM4	Mounting adapter for GE H2 Filtr-Gard mounts

Replacement drivers UNV1

VMVL-17L-UNV1-DRIVER-KIT	UNV1 replacement driver kit for VMVL-17
VMVL-21L-25L-UNV1-DRIVER-KIT	UNV1 replacement driver kit for VMVL-21, -25
VMVL-17L-25L-UNV34-DRIVER-KIT	UNV34 replacement driver kit for VMVL-17, -21, -25

[Ⓔ] Consult factory for additional color temperature options.

[Ⓕ] Available with ceiling mount modules only.

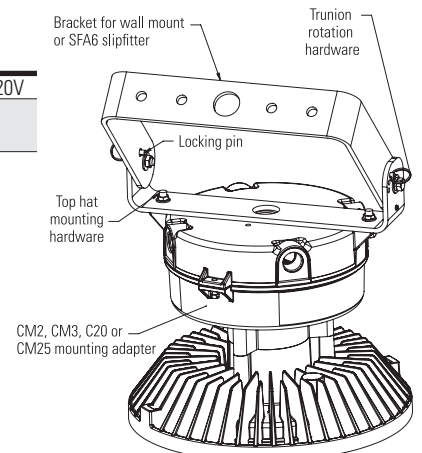
[Ⓕ] For NEC/CEC only.

Photocells

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

Lens guard

P3002	Wire guard
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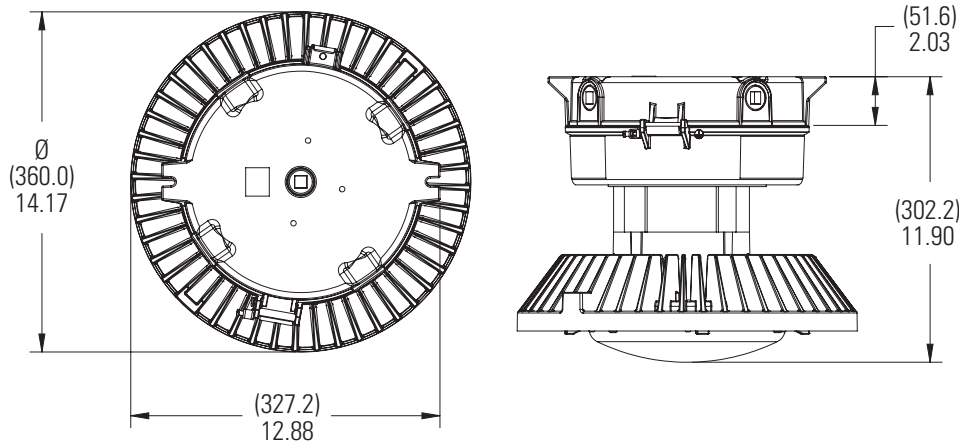
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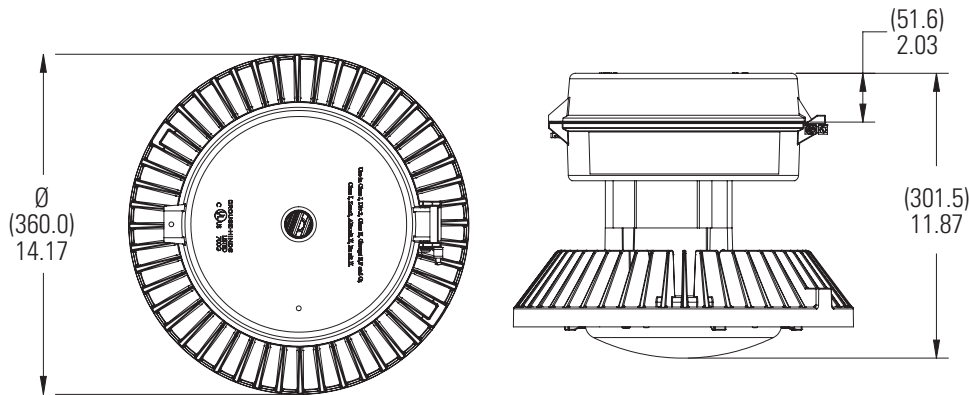
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Dimensions:

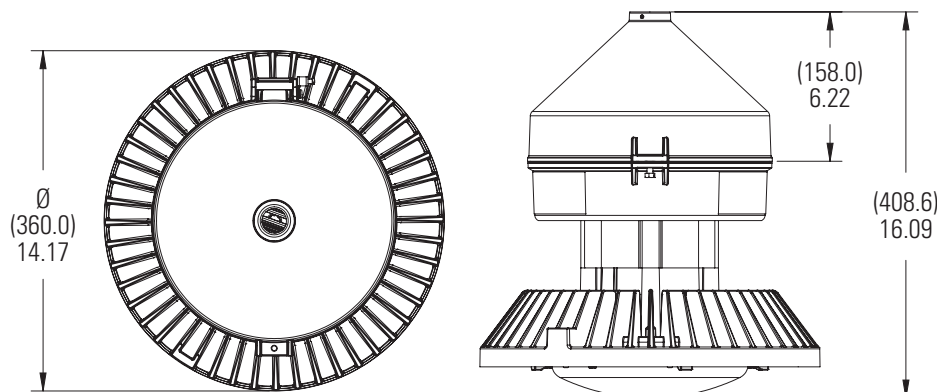
Ceiling



Pendant



Cone pendant



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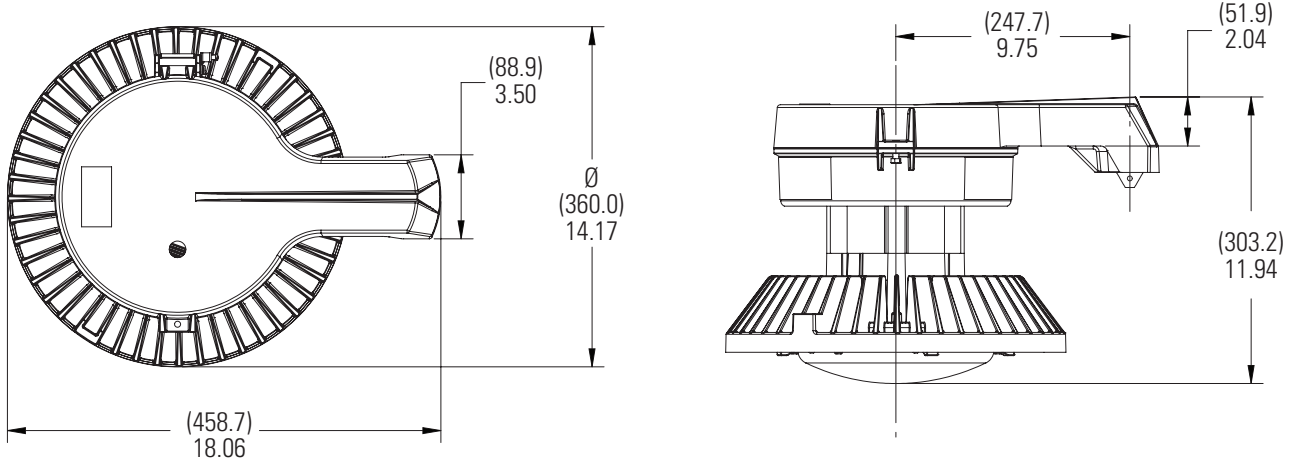
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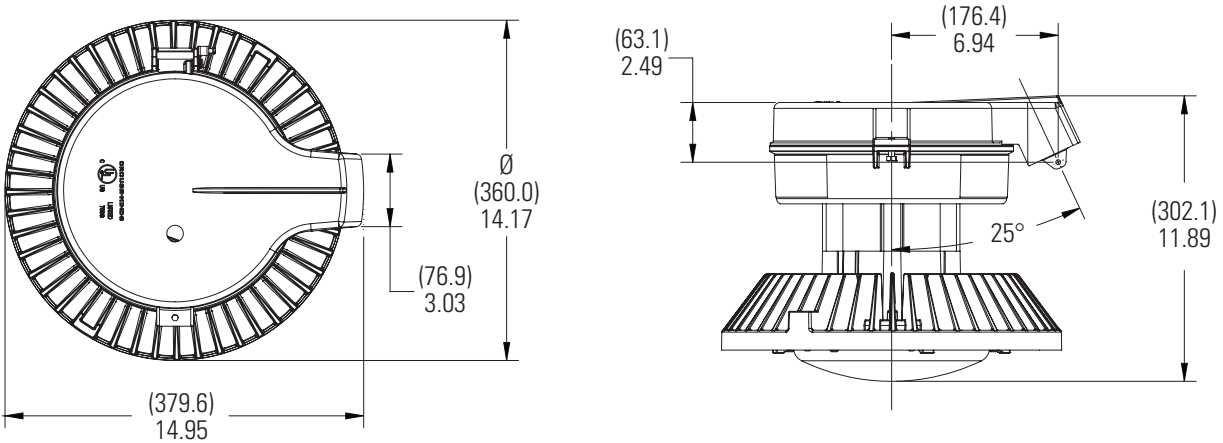
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Dimensions (continued):

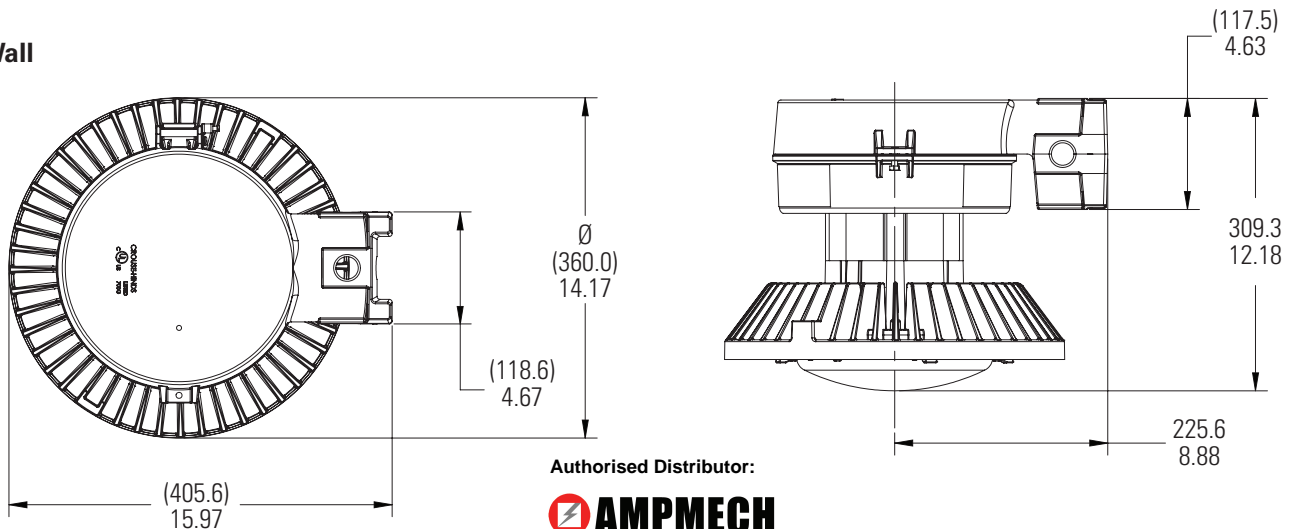
Stanchion straight



25° angled stanchion



Wall



Authorised Distributor:



46, Jalan SS 22/21, Damansara Jaya,
47400 Petaling Jaya,
Selangor Darul Ehsan, Malaysia.

Email: ampmech@ampmech.com
Website: www.ampmech.com