



Harsh & Hazardous

**KILLARK®**

# **VM2L & VM4L Series**

## **STANDARD & EMERGENCY LIGHTING FIXTURES**

*for Harsh and Hazardous Environments*





# VM2&4LB, VM2&4LC SERIES

# KILLARK

## HIGH WATTAGE – INTRODUCTION



VM2LB with Globe/Guard



VM4LB with Globe/Guard



VM4LC with Flat Lens



Class I, Div. 2, Groups A,B,C,D  
Class I, Zone 2, Groups IIC, IIB, IIA  
Class II, Div. 1 & 2, Groups E,F,G  
Class III  
Suitable for wet locations  
Type 3, 4X  
IP66  
Marine Rated (US only)

CSUS Certified - File LR11713

IECEX Rated Models (VM4L with IEx suffix)  
Ex nA IIC T4, Gc / Ex tb IIIC T83°C Db  
Tamp -40°C ≤Ta≤+65°C, IP66

IECEX Certificate  
QPS 15.0006

INMETRO Certificate  
IEx 16.0137

ATEX Certificate  
CML 15ATEX4101X(nA)  
&  
CML 15ATEX3102X(tb)

Contact Factory for other certification details



Consult website for current list of approved luminaires

- Instant On – Including after power interruption
- World Voltage 120 – 277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- Dual Driver Option (DDR) – For additional energy savings, half of the fixture can be turned off.
- Two LED internal heat sink styles
  - » Bulb VM2LB/VM4LB
  - » Concave VM2LC/VM4LC

## CERTILITE V LED

### FEATURES-SPECIFICATIONS

#### Applications

CERTILITE® V VM4L LED fixtures are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or Type 3 and 4X areas where wind, water, snow or high ambients can be expected. They can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC/CEC/IECEX/ATEX & INMETRO.

Typical applications include manufacturing plants, food processing, certain chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, garages and storage facilities.

#### Compliances

- UL-8750 for LED lighting
- UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 2; Class II, Divisions 1 and 2; Class III
- CSA C22.2 no. 137-M1981 electric luminaires for use in hazardous locations
- Enclosed and gasketed
- Type 3, 4X
- IP66 & Marine
- Self-testing per NFPA 101® Life Safety Code

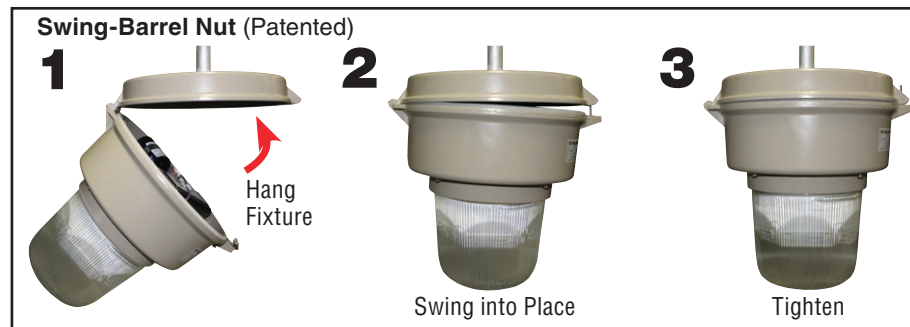
#### Materials

- Housing, splice box and cast guards corrosion resistant copper-free aluminum alloy
- Baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware – stainless steel
- Reflectors – Polyester reinforced fiber glass or aluminum

### LED Luminaire Features and Standards

Supplemental **20KA/10KV Surge Protection** is **standard** (for 120-277 VAC models)  
**10KA/10KV Surge Protection** (for 347-480 VAC)

- Traditional Industrial Appearance, Suitability, and Photometric Performance
- Wide variety of optics including globes, globes with reflectors, all-glass refractors, spin-top refractors and flat lens
- Swing-Barrel Nut patented tank mounting system
- Optional Mounting arrangements including Pendant, Wall, Ceiling, Stanchion and others
- VM4L LED Housings can be retrofitted to existing VM splice boxes; upgrade from HID sources
- **VM2Lx housing is 1.56" shallower for low ceilings**
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000 K (CCT range); approx. 70 CRI
- Energy Savings – less than 130 Watts of Power
- LED Array Life – 100,000+ hours with 70% initial lumens
- Long Fixture Life – 50,000 - 55,000 maintenance free hours
- Ambient suitability -40°C to 65°C (see tables). **-20°C to 50°C Ambient suitability for Emergency models.**





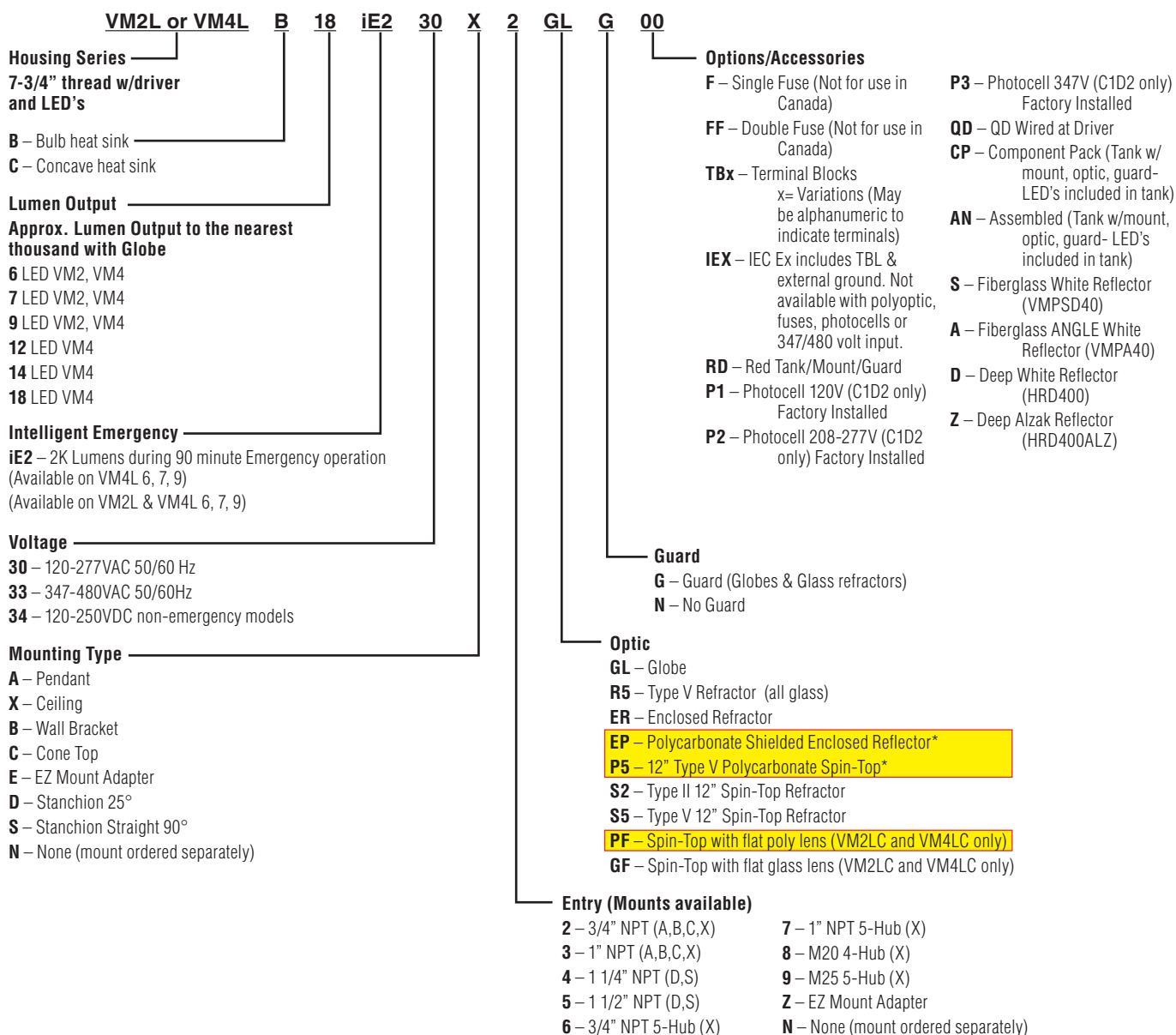
### HIGH WATTAGE – CATALOG LOGIC

# CERTILITE<sup>®</sup>V LED

**Killark high efficiency LED Luminaries require NO external heat sink which adds weight and collects dust and other contaminants**



## CertiLite<sup>®</sup>V LED Catalog Number Logic



\*Non-glass Group G Food Processing Suitability





## VM2&4LB, VM2&4LC SERIES

# KILLARK

### HIGH WATTAGE – OPTICS AND ACCESSORIES

| DELIVERED LUMENS |       |        |        |          |          |          |         |         |
|------------------|-------|--------|--------|----------|----------|----------|---------|---------|
| CATALOG NUMBER   | VMG25 | VMR255 | VMER40 | VZRP175B | VZRG4020 | VZRG4050 | VZRPF12 | VZRGF12 |
|                  | GL    | R5     | ER     | P5       | S2       | S5       | PF      | GF      |
| VM4LB6(XX)(YY)N  | 6278  | 5915   | 4575   | 4692     | 4771     | 4879     |         |         |
| VM4LC6(XX)(YY)N  | 6223  | 5127   | 4645   | 4880     | 4989     | 4914     | 5570    | 5644    |
| VM4LB7(XX)(YY)N  | 7437  | 6996   | 5589   | 5846     | 5968     | 5973     |         |         |
| VM4LC7(XX)(YY)N  | 7344  | 6026   | 5491   | 5757     | 5892     | 5830     | 6563    | 6679    |
| VM4LB9(XX)(YY)N  | 9692  | 9084   | 7465   | 7928     | 8090     | 8078     |         |         |
| VM4LC9(XX)(YY)N  | 9453  | 7746   | 6973   | 7420     | 7671     | 7482     | 8492    | 8647    |
| VM4LB12(XX)(YY)N | 12750 | 12020  | 9804   | 10410    | 10550    | 9168     |         |         |
| VM4LC12(XX)(YY)N | 12300 | 10380  | 9470   | 9969     | 10190    | 10030    | 11370   | 11570   |
| VM4LB14(XX)(YY)N | 14760 | 13810  | 11240  | 11890    | 12110    | 12010    |         |         |
| VM4LC14(XX)(YY)N | 14120 | 11980  | 10910  | 11460    | 11810    | 11520    | 13080   | 13300   |
| VM4LB18(XX)(YY)N | 17710 | 16700  | 14080  | 14910    | 15050    | 15140    |         |         |
| VM4LC18(XX)(YY)N | 17820 | 14530  | 13380  | 13970    | 14390    | 14190    | 15940   | 16270   |

(XX) = VOLTAGE  
(YY) = MOUNT



VMG25



VMR255



VMER40



VZRP175B



VZRG4020



VZRG4050



VZRPF/VZRGF

| TYPICAL WEIGHTS (LBS./KG) W/STANDARD GLOBE AND GUARD - VM4LB/C SERIES |           |           |           |
|---|-----------|-----------|-----------|
| Pendant   | Ceiling   | Wall      | Stanchion |
| 33.4/15.2   | 33.0/15.0 | 37.9/17.2 | 34.3/15.6 |

| ORDERING INFORMATION AND AMBIENT SUITABILITY |                                  |       |             |           | C1D2 |      |      | C2D1 |      |      |
|--|----------------------------------|-------|-------------|-----------|------|------|------|------|------|------|
| CATALOG NO.②                                 | TYPICAL TANK ONLY WEIGHT LBS./KG | WATTS | VOLTAGE     | AMPS①     | 40°C | 55°C | 65°C | 40°C | 55°C | 65°C |
| VM4L(Y)630                                   | 18.90 / 8.57                     | 40    | 120-277 VAC | 0.35-0.16 | T4A  | T4A  | T4   | EFG  |      |      |
| VM4L(Y)633                                   |                                  | 40    | 347-480VAC  | 0.12-0.09 |      |      |      |      |      |      |
| VM4L(Y)634                                   |                                  | 40    | 120-250VDC  | 0.33-0.16 |      |      |      |      |      |      |
| VM4L(Y)730                                   |                                  | 50    | 120-277 VAC | 0.43-0.21 | T4A  | T4A  | T4   | EFG  |      |      |
| VM4L(Y)733                                   |                                  | 50    | 347-480VAC  | 0.15-0.12 |      |      |      |      |      |      |
| VM4L(Y)734                                   |                                  | 50    | 120-250VDC  | 0.42-0.20 |      |      |      |      |      |      |
| VM4L(Y)930                                   |                                  | 65    | 120-277 VAC | 0.56-0.24 | T4A  | T4A  | T4   | EFG  |      |      |
| VM4L(Y)933                                   |                                  | 65    | 347-480VAC  | 0.19-0.14 |      |      |      |      |      |      |
| VM4L(Y)934                                   |                                  | 65    | 120-250VDC  | 0.54-0.26 |      |      |      |      |      |      |
| VM4L(Y)1230                                  |                                  | 90    | 120-277 VAC | 0.77-0.33 | T4A  | T4   | -    | EFG  | -    |      |
| VM4L(Y)1233                                  |                                  | 90    | 347-480VAC  | 0.27-0.19 |      |      |      |      |      |      |
| VM4L(Y)1234                                  |                                  | 90    | 120-250VDC  | 0.75-0.36 |      |      |      |      |      |      |
| VM4L(Y)1430                                  |                                  | 105   | 120-277 VAC | 0.89-0.39 | T4A  | T4   | -    | EFG  | -    |      |
| VM4L(Y)1433                                  |                                  | 105   | 347-480VAC  | 0.31-0.23 |      |      |      |      |      |      |
| VM4L(Y)14834                                 |                                  | 105   | 120-250VDC  | 0.88-0.42 |      |      |      |      |      |      |
| VM4L(Y)1830                                  |                                  | 130   | 120-277 VAC | 1.10-0.46 | T4A  | T4   | -    | EFG  | -    |      |
| VM4L(Y)1833                                  |                                  | 130   | 347-480 VAC | 0.38-0.27 |      |      |      |      |      |      |

| ORDERING INFORMATION AND AMBIENT SUITABILITY |                                  |       |             |           | C1D2 |      |      | C2D1 |      |      |
|--|----------------------------------|-------|-------------|-----------|------|------|------|------|------|------|
| CATALOG NO.②                                 | TYPICAL TANK ONLY WEIGHT LBS./KG | WATTS | VOLTAGE     | AMPS①     | 40°C | 55°C | 65°C | 40°C | 55°C | 65°C |
| VM2L(Y)630                                   | 17.65 / 8.00                     | 40    | 120-277 VAC | 0.35-0.16 | T4A  | T4A  | T4   | EFG  |      |      |
| VM2L(Y)633                                   |                                  | 40    | 347-480VAC  | 0.12-0.09 |      |      |      |      |      |      |
| VM2L(Y)634                                   |                                  | 40    | 120-250VDC  | 0.33-0.16 |      |      |      |      |      |      |
| VM2L(Y)730                                   |                                  | 50    | 120-277 VAC | 0.43-0.21 | T4A  | T4A  | T4   | EFG  |      |      |
| VM2L(Y)733                                   |                                  | 50    | 347-480VAC  | 0.15-0.12 |      |      |      |      |      |      |
| VM2L(Y)734                                   |                                  | 50    | 120-250VDC  | 0.42-0.20 |      |      |      |      |      |      |
| VM2L(Y)930                                   |                                  | 65    | 120-277 VAC | 0.56-0.24 | T4A  | T4A  | T4   | EFG  |      |      |
| VM2L(Y)933                                   |                                  | 65    | 347-480VAC  | 0.19-0.14 |      |      |      |      |      |      |
| VM2L(Y)934                                   |                                  | 65    | 120-250VDC  | 0.54-0.26 |      |      |      |      |      |      |

① For a given wattage current values are the same, regardless of tank type VM2LB/C or VM4LB/C.

② Replace (Y) with heat sink style B or C.



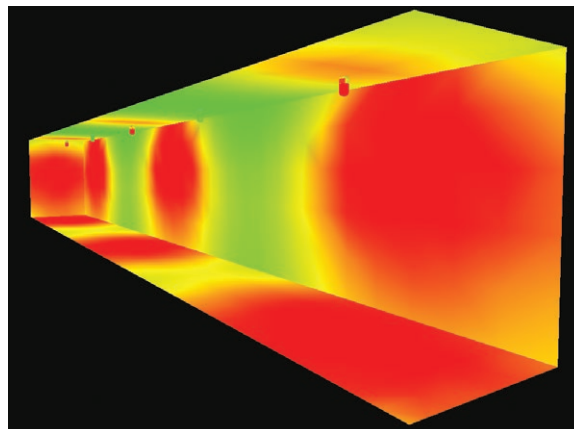
### HIGH WATTAGE SELF-TESTING EMERGENCY

#### Electronics Includes:

- Self-diagnostics monitors LED status, LED driver circuit, battery capacity and charger function and displays any fault detection by means of a flashing code
- Self-Test feature automatically runs a 1 minute test once a month and an alternating 30-60 minute test once every 6 months. LED indicator provides visible fault detection and charging status
- User initiated 1, or 90-minute system test feature
- 15 minute re-transfer delay
- Automatic unit transfer in brown-out conditions (below 80% of nominal AC input voltage)

| INDICATOR STATUS SIGNAL | DESCRIPTION OF STATUS SIGNAL      |
|-------------------------|-----------------------------------|
| 0.5s ON and 0.5s OFF    | Battery disconnected.             |
| 2.5s ON and 2.5s OFF    | LED load disconnected.            |
| 4.5s ON and 0.5s OFF    | Driver in self-diagnostic mode.   |
| 1.5s ON and 3.5s OFF    | Battery needs to be replaced.     |
| 0.5s ON and 4.5s OFF    | Damaged driver. Replace           |
| ON                      | Normal/Charging.                  |
| OFF (LED Load ON)       | Discharging / Emergency Operation |

#### LED Emergency Lighting Design



### HIGH WATTAGE – COMPONENTS



| CERTILITE® VM MOUNTING SPLICE BOXES |                |               |               |        |          |                     |                    |
|-------------------------------------|----------------|---------------|---------------|--------|----------|---------------------|--------------------|
| HUB SIZE                            | CATALOG NUMBER |               |               |        |          |                     |                    |
|                                     | PENDANT        | CEILING 4 HUB | CEILING 5 HUB | WALL   | CONE TOP | 25 DEGREE STANCHION | STRAIGHT STANCHION |
| 3/4"                                | VMA2B          | VMX2B         | VMX6B         | VMB2B  | VMC2B    | —                   | —                  |
| 1"                                  | VMA3B          | VMX3B         | VMX7B         | VMB3B  | VMC3B    | —                   | —                  |
| 1-1/4"                              | —              | —             | —             | —      | —        | VMD4B               | VMS4B              |
| 1-1/2"                              | —              | —             | —             | —      | —        | VMD5B               | VMS5B              |
| M-20                                | —              | VMX8B         | VMX9B         | VMB8B  | —        | —                   | —                  |
| M-25                                | —              | —             | —             | VMB10B | —        | —                   | —                  |



## VM2&4LB, VM2&4LC SERIES

# KILLARK

### HIGH WATTAGE – COMPONENTS & RATINGS



**“EZ” Mount Adapter**  
For easy fixture relocation  
or to repair fixture on  
'bench top'.



VMEZA adapter is used  
between a driver tank  
and EZ mount ordered  
separately.



Pendant



Ceiling



Wall Bracket



25° Stanchion

| MOUNTING BOXES |         |         |           |                |
|----------------|---------|---------|-----------|----------------|
| CATALOG NUMBER |         |         |           | HUB SIZE       |
| PENDANT        | CEILING | BRACKET | STANCHION |                |
| EZA2           | EZX2    | EZB3    | —         | 3/4"           |
| EZA3           | EZX3    | EZB3    | —         | 1"             |
| —              | —       | —       | EZD4A     | 1-1/4" / 1/2"* |

\*1-1/2" furnished with 1-1/2"-1-1/4" reducer and extension.

#### Competitive Adapters

Designed to ease upgrading of other manufacturer's fixtures to KILLARK LEDs where removal of existing mounting screws and conduit would be difficult and time consuming.

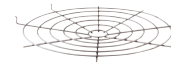
| VM2L/VM4L LED OPTICS AND ACCESSORIES             |               |           |
|--|---------------|-----------|
| DESCRIPTION                                      | OPTIC LOGIC   | GUARD     |
| Flat Lens (glass spin top) "C" tank only         | VZRGF12 (GF)  | VZRF12GRD |
| Flat Lens (polycarbonate spin top) "C" tank only | VZRPF12 (PF)  | VZRF12GRD |
| Globe (glass)                                    | VMG25 (GL)    | VMAG25S   |
| Reflector (all glass) Type V                     | VMR255 (R5)   | VMAG25S   |
| Enclosed Reflector                               | VMER40 (ER)   | VMERG     |
| Enclosed Reflector with polycarbonate Lens       | VMEP40 (EP)   | —         |
| Reflector (polycarbonate spin top) 12" Type V    | VZRP175B (P5) | VMRWGS    |
| Reflector (glass spin top) 12" Type V            | VZRG4050 (S5) | VMRWGS    |



VMAG25S



VMRWGS



VMERG



VMAGBC



VMPSD40  
Standard Dome, Fiberglass  
White Reflector, Dia: 16"



VMR40  
30° Angle, Fiberglass  
White Reflector, Dia:16"



HRD400  
Deep Aluminum, White  
Reflector, Dia: 21"



HRD400ALZ  
Deep Aluminum, Anodized  
Reflector, Dia: 21"

| VM2L/VM4L LED REFLECTORS AND ACCESSORIES          |           |
|---|-----------|
| DOME REFLECTOR (Polyester reinforced fiberglass)  | VMPSD40   |
| ANGLE REFLECTOR (Polyester reinforced fiberglass) | VMR40     |
| DEEP DOME REFLECTOR (White Painted Aluminum)      | HRD400    |
| DEEP DOME REFLECTOR (Anodized Aluminum)           | HRD400ALZ |
| 120VAC Photocell with FS Style Cover              | VMFSPC1   |
| 208-277VAC Photocell with FS Style Cover          | VMFSPC2   |
| Bottom Closure for VMAG25S                        | VMAGBC    |
| 4-sided EXIT Accessory (use without guard)        | VEXA400   |

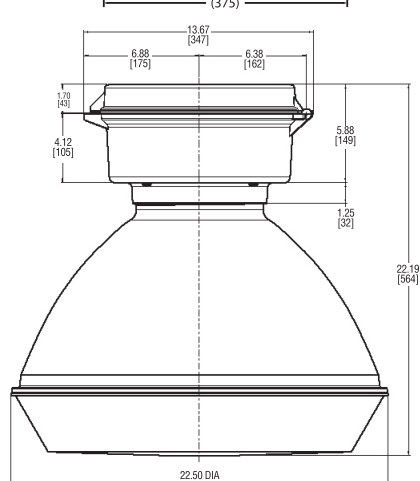
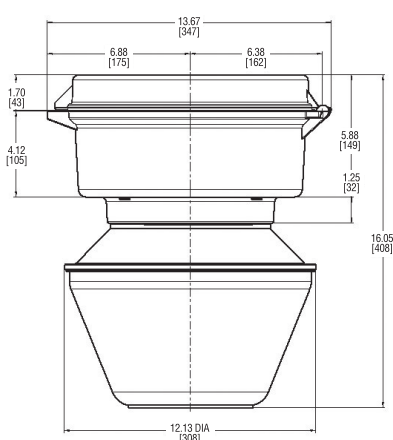
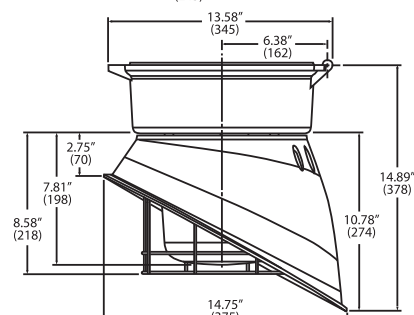
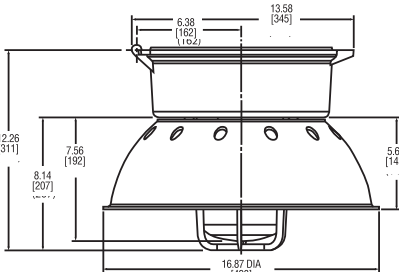
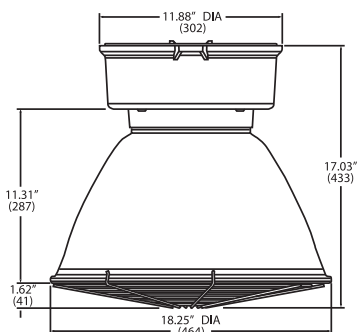
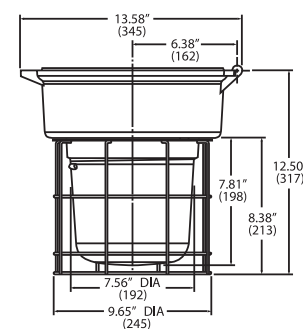
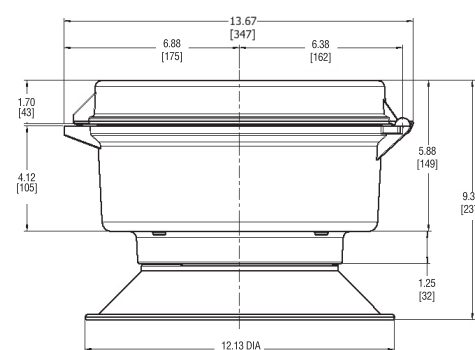
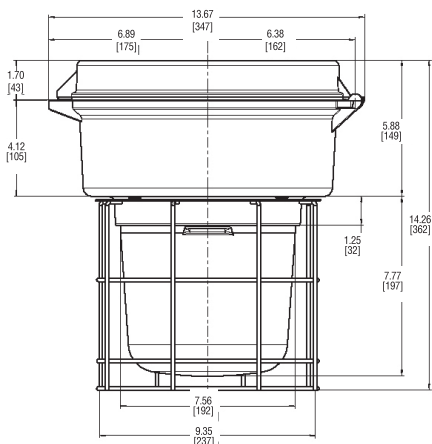
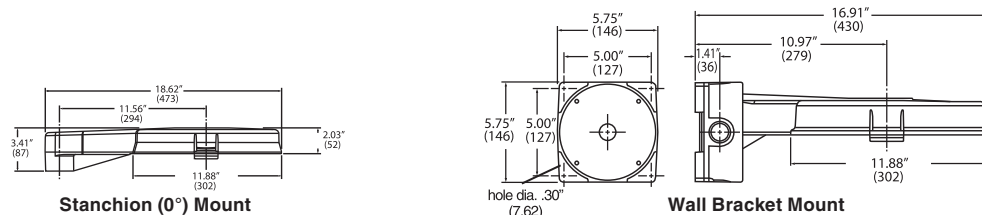
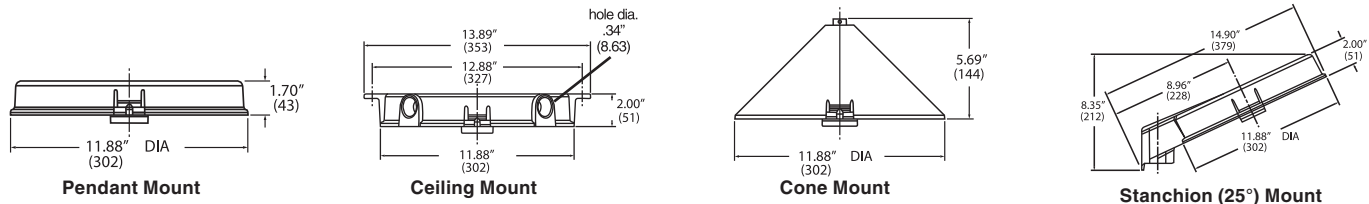


VEXA400  
Fixture not included



VMFSPC

### HIGH WATTAGE – DIMENSIONS & WEIGHTS



For Height of VM2L models, deduct 1.56" (40mm) from VM4L tank, or overall dimensions with some mount and optic. All other dimensions are the same.



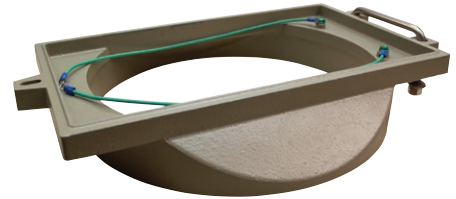
## FIXTURE ADAPTERS



VMCHVM-DEEP



VMCHVM



VMGEH2

## CERTiTE<sup>V</sup> LED

### FEATURES-SPECIFICATIONS

#### Applications

The Killark VM adapters are designed to ease upgrading of other manufacturer's fixtures to KILLARK LEDs where removal of existing mounting screws and conduit would be difficult and time consuming.

Adapters are used with the Killark Fixture Housing, Globe, guard (if applicable) and the competitive fixture splicebox. The Killark fixtures when used with the Killark adapters and appropriate competitive adapter.

#### Features

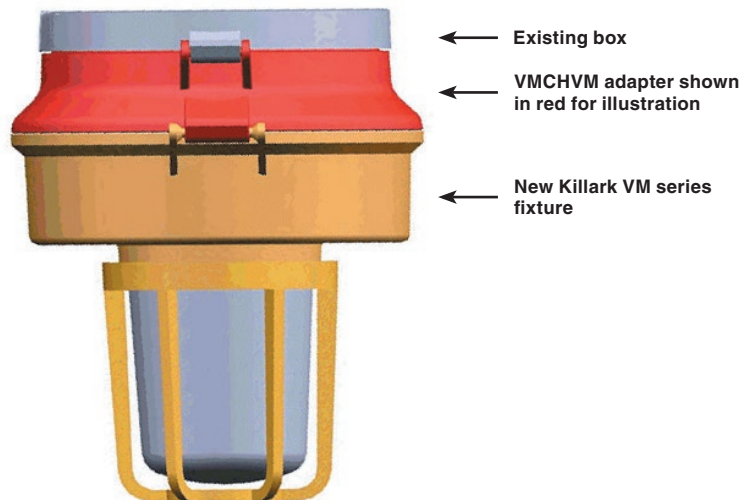
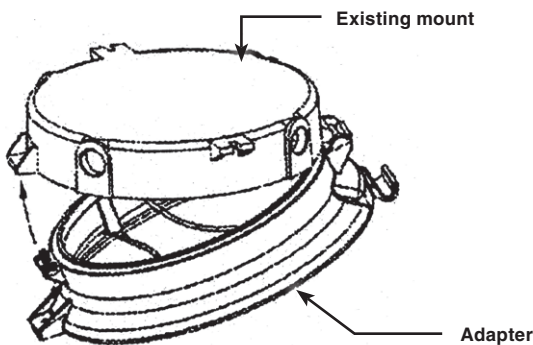
- Fixture and competitive mount are certified together
- Baked powder epoxy/polyester finish, electrostatically applied to match the Killark VM tank
- All external hardware – Stainless Steel

Class I, Div. 2, Groups A, B, C, D  
Class II, Div. 1, Groups E, F, G  
Class III  
Type 4X



### VM SERIES COMPETATIVE ADAPTERS

| CATALOG NUMBER | DESCRIPTION  | EXAMPLE OF MODEL UTILIZED OR REPLACED |
|----------------|--|---------------------------------------|
| VMCHVM         | Tank adapter to Crouse-Hinds® VM Series mounts         | VMV S2 C 050 R5                       |
| VMCHVM-DEEP    | Tank adapter to CH (70's era wall mount with deep box) | VMV S2 TW 050 R5                      |
| VMM2LP         | Tank adapter to Appleton® MERCMaster II mounts         | LPCL 50 75 J                          |
| VMM3KP         | Tank adapter to Appleton® MERCMaster III mounts        | KPCL 50 75 J5 MT                      |
| VMHLD5         | Tank adapter to Hazlux®3 mounts                        | DS015 H040-TGL-P2 E1 F                |
| VMHPP2         | Tank adapter mount to Holophane® Petrolux™             | PETL 250HP 27 S25 CD                  |
| VMGEH2         | Tank adapter H2 mount to GE® H2 Filtr-gard™            | H2 4 05L 3C GG                        |



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**KILLARK**<sup>®</sup>

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Harsh & Hazardous