## LIGHTING INDEX

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LAL/LALXE/LALC SERIES

LOW PROFILE LINEAR ALUMINUM LED • EXCLUSIVE DESIGN FEATURES

High temperature rated silicone gasketing provides Type 4X & IP66 sealing.

2 Lens Choices:
- Clear for maximum lumens
- Diffused for glare control

Looping Terminal Blocks under Wiring Access Plate(s).

Optional Through Wiring
2 Access Plates for feed through wiring

End Caps include feet for direct ceiling mounting and safety cable connection

Earth
External Earth Ground for IECEx requirement

Surge
Standard with internal 20kA/10kA Supplemental Surge Protection

Battery
E5, E13 and E26 models include internal Emergency battery systems to 50°C suitability

Endcaps standard with 1 x 3/4” hub. 1/2” NPT and M20 available.

Shown with LAL-SB Height adjustable Swivel Brackets

Mounting Slots on back and at 45°

Showing: Diffused • Clear

- Diffused for glare control
- Clear for maximum lumens

- High temperature rated silicone gasketing provides Type 4X & IP66 sealing.

- Looping Terminal Blocks under Wiring Access Plate(s).

- Optional Through Wiring 2 Access Plates for feed through wiring

- End Caps include feet for direct ceiling mounting and safety cable connection

- Earth External Earth Ground for IECEx requirement

- Mounting Slots on back and at 45°

- Shown with LAL-SB Height adjustable Swivel Brackets
LINEAR LED TECHNOLOGY

LAL/LALxE/LALC SERIES

FEATURES-SPECIFICATIONS

Applications
ABS (American Bureau of Shipping) type approval for use on decks, vessels, platforms, barges, ships and boats. Also suitable for docks and marinas.

Compliances
- UL-8750 for LED lighting
- ANSI/UL 1598(A)
- 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
- IEC suffix Zone 2/21 to IEC 60079-0, 60079-15, 60079-31 Standards
- Enclosed and gasketed
- Type 3, 4X
- IP66

Materials
- Housing – one piece natural finish < .1% copper-free aluminum extrusion
- Endcaps & wiring – Access covers are copper-free (< .4%) aluminum with gray baked powder epoxy-polyester finish, electrostatically applied for complete uniform corrosion resistance.
- External screws are 316 stainless steel
- Lens – Impact resistant polycarbonate lens available in diffuse or clear

LED Features and Standards
- Many Midpower LEDs blend light to simulate fluorescent tubes
- Chromaticity outputs:
  - standard – 5000K 70 CRI
  - 3590 option – 3500K 90 CRI
  - 3070 option – 3000K 70 CRI
- 3590 option is not available on the LALC
- 3070 option is only available on the LALC 15-45 watt.
- Energy Savings – High lumens per watt
- 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.
- Instant On – Including after power interruption
- World Voltage 120 - 277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant

LAL & LALxE Product Features
- LALxE models have “built-in” battery backup for 90 or 180 minute emergency exit
- Shallow design minimizes profile in work areas with low ceiling heights
- Diffuse Lens Standard to minimize glare; Clear Lens available
- Polycarbonate Single Lens 18W to 60W; Double Lens model 80W & 120W
- Slot Back Design allows multiple mounting access points across length – slots can also be used with 5/16” or 8mm bolts & nuts, 3 housing slots, 1 center back and 2 at 45°.
- Variety of mounting options including swivel brackets, wall, ceiling brackets, or beam clamps
- End Caps each have 2 mounting feet built-in plus a safety strap attachment point
- Standard unit End Caps each have single a ¾” NPT hub, and fixture is furnished with one ¾” close-up plug and two ¾” to ½” reducers – provides out of the box ½” dead-end to ¾” feed-through flexibility. Metric openings are available.
- Standard LALs have one wiring Access Plate for easy access to driver leads.

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

Class I, Div. 2, Groups A, B, C, D
Class I, Zone 2, Groups IIIC, IIB, IIA
Class II, Div. 1 & 2, Groups E, F, G
AEx nAll, Ex nAll
Wet Locations
Type 4X
IP66
Marine Rated (US only)
IECEx Rated
Zone 2 and Zone 21 areas
Ex nA IIc T6 to T3, Gc
Ex tb IIc T95°C Db
Tamb -50°C < Tz < +65°C, IP66
IECEx Certificate
QPS 15.0010
ATEX Certificate
CML 15ATEX4081X (nA)
&
CML15ATEX3082X (tb)

Supplemental 20KA/10KV Surge Protection

Wet Locations
Type 4X
IECEx Rated
Zone 2 and Zone 21 areas
Ex nA IIc T6 to T3, Gc
Ex tb IIc T95°C Db
Tamb -50°C < Tz < +65°C, IP66
IECEx Certificate
QPS 15.0010
ATEX Certificate
CML 15ATEX4081X (nA)
&
CML15ATEX3082X (tb)

Certified - File LR11713
Supplemental 20KA/10KV Surge Protection is standard (for 120-277 VAC models)
10KA/10KV Surge Protection (for 347-480 VAC)

Certified - File LR11713
Supplemental 20KA/10KV Surge Protection is standard (for 120-277 VAC models)
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Certified - File LR11713
Supplemental 20KA/10KV Surge Protection is standard (for 120-277 VAC models)
10KA/10KV Surge Protection (for 347-480 VAC)
**LAL/LALXE/LALC SERIES**

**CATALOG LOGIC**

LAL(C) – Series Constant
Aluminum Extrusion with Polycarbonate Lens

LAL(R) – Rig Version with Poke out Hubs

**Fixture Wattage**

- 18, 28, 45, 60, 80, 120, C15, C20, C25, C30, C35, C40, C45, C50

  - Single Lens – Dimension B or C
  - Two Lens – Dimension D
  - Compact Lens – See Dimension A

**Emergency Battery Backup**
(LAL 120-277VAC 50/60Hz only)

- Blank – No Emergency
- E5 – 5 watts LED Power 180 minute egress
- E13 – 13 watts LED Power 90 minute egress
- E26 – 26 watts LED Power 90 minute egress (2 Lens models only)

**Options**

- L4-2AP – approx. 4 foot with 2 access covers (Dimension C)
- F – Single Fuse (1 pole)
- FF – Two Fuses (2 pole - 2 hot legs)
- SS2 – 1 Endcap with 1x1/2" NPT and 1xM20 Entries (3/4" NPT Plugged)
- D52 – 2 Endcaps with 1x1/2" NPT and 1xM20 Entries (3/4" NPT Plugged)
- D50 – 2x1/2" NPT Entries 1 end cap, 3/4” plugged; 2nd end cap std. 1x3/4” NPT
- D502 – 2x1/2" Entries 2 end caps, 3/4” NPTs plugged
- D20 – 2xM20 Entries 1 end cap, 3/4” plugged; 2nd end cap std. 1x3/4” NPT
- D202 – 2xM20 Entries 2 end caps, 3/4” NPTs plugged
- LSP – Less Surge Protector
- GH – Gray Housing
- RH – Red Housing
- 2AP – Dual Access Plates (Increases Length by 4.2” [102])
- TBL – Terminal Blocks Looping through Wiring
- CAH – Clear Anodized Housing
- 3590 – 3500K (CCT) and 90 CRI LEDs
- 3070 – 3000K (CCT) and 70 CRI LEDs

**Specials**

- LSP – Less Surge Protector
- GH – Gray Housing
- RH – Red Housing
- 2AP – Dual Access Plates (Increases Length by 4.2” [102])
- TBL – Terminal Blocks Looping through Wiring
- CAH – Clear Anodized Housing
- 3590 – 3500K (CCT) and 90 CRI LEDs
- 3070 – 3000K (CCT) and 70 CRI LEDs

**Energy Savings**

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<td>138</td>
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**LED VS FLUORESCENT WATTAGE & DELIVERED LUMENS**
## ORDERING INFORMATION

| CATALOG NUMBER W/ DIFFUSE LENS | WEIGHT LBS./KG | WATTS STD. POWER | LENGTH STYLE - INCHES (MM) | VOLTAGE | AMPS | DELIVERED LUMENS Diffuse/ Clear | 40°C | 55°C | 65°C | 40°C | 55°C | 65°C | 40°C | 55°C | 65°C | 40°C | 55°C | 65°C | 40°C | 55°C | 65°C |
|-------------------------------|---------------|-----------------|----------------------------|---------|------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| LAL1830D                      | 17.9 / 8.1    | 18              | B-32.6 (828)                | 120-277VAC | 0.15 - 0.06 | 2272 / 2479                   | T6   | T6   | T5   | T4A  | T4A  | T4A  | T4A  | T4A  | T4A  | T5   | T4   | T4   |
| LAL1830D-L4-2AP               | 21.9 / 9.9    | 28              | C-51 (1295)                 |          | 0.23 - 0.10 | 3321 / 3624                   | T6   | T6   | T5   | T4A  | T4A  | T4A  | T4A  | T4A  | T6   | T6   | T4   | T4   |
| LAL18E1330D-L4-2AP            | 31.9 / 14.5   | 45              | C-51 (1295)                 |          | 0.38 - 0.16 | 5054 / 5515                   | T6   | T5   | -    | T4A  | T4A  | T4A  | T4A  | -    | T6   | T5   | T4   | T4   |
| LAL4530D                      | 17.9 / 8.1    | 40              | B-32.6 (828)                | 120-277VAC | 0.37 - 0.17 | 4754 / 5210                   | T6   | T5   | T4A  | T4A  | T4A  | T4A  | T4A  | T4A  | T5   | T5   | T4   | T4   |
| LAL4530D-L4-2AP               | 21.9 / 9.9    |                | C-51 (1295)                 |          | 0.53 - 0.21 | 6402 / 6960                   | T6   | T5   | -    | T4A  | T4A  | T4A  | T4A  | -    | T6   | T5   | T4   | T4   |
| LAL6030D                      | 18.9 / 8.6    | 60              | C-51 (1295)                 |          | 0.84 - 0.34 | 7260 / 7800                   | T6   | T5   | -    | T4A  | T4A  | T4A  | T4A  | -    | T6   | T5   | T4   | T4   |
| LAL60E1330D-L4-2AP            | 32.9 / 14.9   |                | C-51 (1295)                 |          | 0.97 - 0.42 | 7812 / 8400                   | T6   | T5   | -    | T4A  | T4A  | T4A  | T4A  | -    | T6   | T5   | T4   | T4   |
| LAL8030D                      | 34.5 / 15.6   | 80              | D-57.9 (1471)               | 12-24VDC  | 0.54 - 0.22 | 9760 / 10399                  | T6   | T5   | T4A  | T4A  | T4A  | T4A  | T4A  | T4A  | T5   | T5   | T4   | T4   |
| LAL80E1330D                   | 44.5 / 20.2   |                | D-57.9 (1471)               |          | 0.84 - 0.34 | 11200 / 12000                 | T6   | T5   | T4A  | T4A  | T4A  | T4A  | T4A  | T4A  | T5   | T5   | T4   | T4   |
| LAL80E2630D                   | 54.5 / 24.7   |                | D-57.9 (1471)               |          | 0.97 - 0.42 | 12300 / 13200                 | T6   | T5   | T4A  | T4A  | T4A  | T4A  | T4A  | T4A  | T5   | T5   | T4   | T4   |
| LAL12030D                     | 36.5 / 16.6   | 120             | D-57.9 (1471)               | 12-24VDC  | 1.00 - 0.45 | 15000 / 16467                 | T6   | T5   | T4A  | T4A  | T4A  | T4A  | T4A  | -    | T6   | T5   | T4   | T4   |
| LAL120E1330D                  | 46.5 / 21.1   |                | D-57.9 (1471)               |          | 1.30 - 0.55 | 17230 / 18649                 | T6   | T5   | T4A  | T4A  | T4A  | T4A  | T4A  | -    | T6   | T5   | T4   | T4   |
| LAL120E2630D                  | 56.5 / 25.6   |                | D-57.9 (1471)               |          | 1.50 - 0.63 | 19400 / 21000                 | T6   | T5   | T4A  | T4A  | T4A  | T4A  | T4A  | -    | T6   | T5   | T4   | T4   |

### CABLE GLAND ORDERING OPTIONS

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<th>CABLE ACCEPTANCE DETAILS</th>
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<td>MCX1B</td>
<td>1/2&quot;</td>
<td>0.51&quot; (13.0) / 0.63&quot; (16.0)</td>
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<td>MCX1C</td>
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<td>0.60&quot; (15.2) / 0.82&quot; (20.8)</td>
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<td>0.73&quot; (18.5) / 1.03&quot; (26.2)</td>
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For entire series, please see page 81.
LAL/LALXE/LALC SERIES

DIMENSIONS AND ACCESSORIES

A: Dimensions for LALC

B: Dimension for Single Lens

C: Dimension Single Lens with approx. 4 foot length and 2 access covers

D: Dimension Double Lens

End Views
### ACCESSORIES AND REPLACEMENT PARTS

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAL-SB</td>
<td>Swivel Bracket Set w/ Adjustable Height; includes 5/16&quot; bolts/nuts/lock-washers for attachment to LAL(C) “slots”; can also be attached to end cap mounting feet with FBO bolts.</td>
</tr>
<tr>
<td>LZCB</td>
<td>Ceiling Bracket Set with Stainless Steel Bolts to attach to LAL(C) “slots”</td>
</tr>
<tr>
<td>LWB</td>
<td>Wall Bracket Set with Stainless Steel Bolts to attach to LAL(C) “slots”</td>
</tr>
<tr>
<td>LAL-BC</td>
<td>Steel/malleable Iron with Zinc electroplate for corrosion resistance; includes Stainless Steel Bolts to attach to LAL(C) “slots”</td>
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<tr>
<td>LAL-E8</td>
<td>Eyebolt Set with Stainless Steel Bolts to attach to LAL(C) “slots”</td>
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<tr>
<td>VMSC10</td>
<td>10’ Stainless Steel Safety Cable with loop grip</td>
</tr>
<tr>
<td>LALG</td>
<td>Stainless Guard for 1 LAL Lens, order two for 2 lens models</td>
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<tr>
<td>LALCG</td>
<td>LALC Stainless Guard</td>
</tr>
<tr>
<td>LAL-LENSCLR</td>
<td>Single Clear Lens with Gasket for LAL Series</td>
</tr>
<tr>
<td>LAL-LENSDIF</td>
<td>Single Diffuse Lens with Gasket for LAL Series</td>
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<tr>
<td>LALC-LENSCLR</td>
<td>Single Clear Lens with Gasket for LALC Series</td>
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<td>Single Diffuse Lens with Gasket for LALC Series</td>
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<td>LAL-RIG-CB</td>
<td>Rig Mounting Style Ceiling Bracket</td>
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<tr>
<td>LAL-RIG-WB</td>
<td>Rig Mounting Style Wall Bracket</td>
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<tr>
<td>RIG-LALC</td>
<td>Rig End Caps for LALC</td>
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</table>

**LAL-SB on Center Slot**

**LAL-SB on 45° Slot**

**LAL-SB Dimensions – extended shown**

**Ceiling Bracket Set**
Part Number LZCB
Stainless Steel (natural finish)

**Wall Bracket Set**
Part Number LZWLB
Stainless Steel (natural finish)

**VMSC10 Safety Cable**

**LAL-BC Beam Clamp**

SEE WWW.HUBBELL-KILLARK.COM LIGHTING SOFTWARE FOR LATEST LED PHOTOMETRY
LALFP Linear LED Food Processing Fixture

- Extremely durable copper-free aluminum mounting feet & access plate with anodized aluminum housing
- 90 or 180 minute emergency with Self-diagnostics in accordance with NFPA 101® Life Safety Code
- NSF Certified with Impact Resistant polycarbonate lens
- Maintenance free long-lasting LEDs
- Large wiring access for ease of installation
- All exterior stainless steel hardware
**LINEAR LED TECHNOLOGY**

**LALFP Series**

**Features-Specifications**

**Applications**
- NSF (National Sanitation Foundation) approved for “Food Handling” areas, typically requiring non-glass lighting.
- ABS (American Bureau of Shipping) type approval for use on docks, vessels, platforms, barges, and boats. Also suitable for docks and marinas.

**Compliances**
- UL-8750 for LED lighting
- ANSI/UL 1598(A)
- 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/IP67

**Materials**
- Housing – one piece clear anodized ≤ .1% copper-free aluminum extrusion
- Endcaps & wiring – Access covers are copper-free (≤ .4%) aluminum with natural finish.
- External screws are 316 stainless steel
- Lens – Impact resistant polycarbonate lens available in diffuse or clear

**LED Features and Standards**
- Many Midpower LEDs blend light to simulate fluorescent tubes
- Chromaticity outputs:
  - Standard – 5000K 70 CRI
  - 3590 option – 3500K 90 CRI
  - 3070 option – 3000K 70 CRI
- 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.
- Instant On – Including after power interruption
- World Voltage 120 - 277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant

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

**LALFP & LALFPxIE Product Features**
- LALFPxIE models have “built-in” battery backup for 90 or 180 minute battery backup
- Shallow design minimizes profile in work areas with low ceiling heights
- Diffuse Lens Standard to minimize glare; Clear Lens available
- Polycarbonate Single Lens L1 & L3; Double Lens model L5
- Variety of mounting options including swivel brackets, wall, ceiling brackets, or beam clamps
- End Caps each have 2 mounting feet built-in plus a safety strap attachment point
- Standard unit End Caps each have one wiring Access Plate for easy access to terminal block.

**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)

**Certifications**
- NSF Food Handling
- Marine Rated (US only)
- ATEX Rated
  - Zone 2 and Zone 21 areas
  - Ex nA IIC T6 to T3, Gc
  - Ex tb IIC T95°C Db
  - Tamb -50°C < Tz < +65°C, IP66
  - Certified - File LR11713
  - ATEX Certificate
    - QPS 15.0010
  - IECEx Certificate
    - CML15ATEX4081X (nA)
    - CML15ATEX3082X (tb)

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LALFP SERIES

CATALOG LOGIC

- **Weather Rated**
  - **W** – Weather only
  - **Blank** – Hazardous Location and Weather rated

- **LALFP – Series Constant**
  - Aluminum Extrusion with Polycarbonate Lens

**Fixture Lumen Output**
- **2** – 2000 Lumen Range
- **4** – 4000 Lumen Range
- **6** – 6000 Lumen Range
- **8** – 8000 Lumen Range
- **11** – 11,000 Lumen Range
- **16** – 16,000 Lumen Range

- **Emergency Battery Backup**
  - **Blank** – No Emergency
  - **iE05** – 500 Lumen Range during 180 minute emergency
  - **iE1** – 1000 Lumen Range during 90 minute emergency
  - **iE3** – 3000 Lumen Range during 90 minute emergency
    (only available on L5)

- **Voltage**
  - **30** – 120V-277VAC 50/60Hz all models
  - **27** – 12VDC - 24VDC models only L1 Length and 2 & 3 Lumen Range non-emergency models
  - **33** – 347-480VAC LAL 28W & 55W non-emergency models only
  - **34** – 125VDC-250VDC, 120-277VAC 50/60Hz Lumen Range 2, 4, 8, & 16 non-emergency models

- **Energy Savings**

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<tr>
<th>CATALOG NUMBER</th>
<th>LUMENS</th>
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<th>FLUORESCENT</th>
<th>LUMENS</th>
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<td>LALFP230L3C</td>
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<td>138</td>
<td>40W 1x40W BK</td>
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<td>55W 1x55W BK</td>
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<td>64W 2x32T8</td>
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<td>162W 3x54T5HO</td>
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</table>

**Options**
- **F** – Single Fuse (1 pole)
- **FF** – Two Fuses (2 pole - 2 hot legs)
- **S52** – 1 Endcap with 1x1/2” NPT and 1xM20 Entries (3/4” NPT Plugged)
- **D52** – 2 Endcaps with 1x1/2” NPT and 1xM20 Entries (3/4” NPT Plugged)
- **D50** – 2x1/2” NPT Entries 1 end cap, 3/4” plugged; 2nd end cap std. 1x3/4” NPT
- **D502** – 2x1/2” Entries 2 end caps, 3/4” NPTs plugged
- **D20** – 2xM20 Entries 1 end cap, 3/4” plugged; 2nd end cap std. 1x3/4” NPT
- **D202** – 2xM20 Entries 2 end caps, 3/4” NPTs plugged
- **LSP** – Less Surge Protector
- **GH** – Gray Housing
- **RH** – Red Housing
- **TBL** – Terminal Blocks Looping through Wiring
  - **3590** – 3500K (CCT) and 90 CRI LEDs
  - **3070** – 3000K (CCT) and 70 CRI LEDs

**Specials**
- Contact Factory for custom configurations and options

- **Lens**
  - **D** – Diffuse Polycarbonate
  - **C** – Clear Polycarbonate

- **Length**
  - **L1** – Approximately 1 foot (2, 4, 6 Lumen Outputs)
  - **L3** – Approximately 3 feet (2, 4, 6, 8 Lumen Outputs)
  - **L5** – Approximately 5 feet (11, 16 Lumen Outputs)
### LALFP Series

#### Ordering Information and Ambient Suitability

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Weight Lbs./Kg</th>
<th>Watts</th>
<th>Length IN / MM</th>
<th>Voltage</th>
<th>LUMENS Diffuse/Clear</th>
<th>C1D2 A,B,C,D Zone 2 IIC, IIB, IIA</th>
<th>C1D2 E, F, G Simultaneous</th>
<th>C2D1 E, F, G</th>
<th>IEC Zone 2</th>
<th>IEC Zone 21</th>
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<tbody>
<tr>
<td>LALFP230L1D</td>
<td>12.03 / 4.49</td>
<td>15</td>
<td>18.73 / 476</td>
<td>120/277</td>
<td>0.15 - 0.06</td>
<td>1503 / 1640</td>
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<td>2272 / 2479</td>
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</table>
LALFP SERIES

DIMENSIONS

LALFP-L1 Single Access Panel

LALFP-L3 Single Access Panel

LALFP-L5 Single Access Panel

End View

Ø.28 TYP (6) HOLES
## ACCESSORIES AND REPLACEMENT PARTS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAL-SB</td>
<td>Swivel Bracket Set w/ Adjustable Height; includes 5/16&quot; bolts/nuts/lock-washers for attachment to LAL(C) “slots; can also be attached to end cap mounting feet with FB0 bolts.</td>
</tr>
<tr>
<td>LZCB</td>
<td>Ceiling Bracket Set with Stainless Steel Bolts</td>
</tr>
<tr>
<td>LZW8</td>
<td>Wall Bracket Set with Stainless Steel Bolts</td>
</tr>
<tr>
<td>LAL-BC</td>
<td>Steel/malleable Iron with Zinc electroplate for corrosion resistance; includes Stainless Steel Bolts to attach to LAL(C) “slots”</td>
</tr>
<tr>
<td>LAL-EB</td>
<td>Eyebolt Set with Stainless Steel Bolts</td>
</tr>
<tr>
<td>VMSC10</td>
<td>10’ Stainless Steel Safety Cable with loop grip</td>
</tr>
<tr>
<td>LALG</td>
<td>Stainless Guard for 1 LAL Lens, order two for 2 lens models</td>
</tr>
<tr>
<td>LALCG</td>
<td>LALC Stainless Guard</td>
</tr>
<tr>
<td>LAL-LENSCLR</td>
<td>Single Clear Lens with Gasket for L3 &amp; L5 Lengths</td>
</tr>
<tr>
<td>LAL-LENSDIF</td>
<td>Single Diffuse Lens with Gasket for L3 &amp; L5 Lengths</td>
</tr>
<tr>
<td>LALC-LENSCLR</td>
<td>Single Clear Lens with Gasket for L1 Length</td>
</tr>
<tr>
<td>LALC-LENSDIF</td>
<td>Single Diffuse Lens with Gasket for L1 Length</td>
</tr>
</tbody>
</table>

### LAL-SB Dimensions – extended shown

![LAL-SB Dimensions](image)

### Ceiling Bracket Set

**Part Number: LZCB**  
Stainless Steel (natural finish)

![Ceiling Bracket Set](image)

### VMSC10 Safety Cable

![VMSC10 Safety Cable](image)

### LAL-BC Beam Clamp

![LAL-BC Beam Clamp](image)
LZ LED INTRODUCTION & LOGIC

4’ styles shown

FEATURES - SPECIFICATIONS

Applications

ABS (American Bureau of Shipping) type approval for use on decks, vessels, platforms, barges, ships and boats. Also suitable for docks and marinas.

NSF (National Sanitation Foundation) approved for “Food Handling” areas, typically requiring non-glass lighting.

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

Compliances

• UL-8750 for LED lighting
• ANSI/UL 1598(A)
• 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

Materials

• Housing – one piece fiberglass reinforced polyester or 316 Stainless Steel
• Lens – Clear Lexan® impact resistant polycarbonate lens (Lexan is a registered trademark of SABIC)
• Two 3/4” NTP hubs – one at each end (includes one 3/4” close-up plug and two 3/4”x1/2” reducers for maximum user flexibility – LZ2NL hubs aluminum; LZ2SL hubs 316 Stainless Steel

LED Features and Standards

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

• Many Midpower LEDs blend light to simulate fluorescent tube
• Crisp White Light for Excellent Color Rendering – Chromaticity 5000K (CCT); approx. 70 CRI
• Energy Savings – High lumens per watt
• 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 55°C up to 120W
• Instant On – Including after power interruption
• World Voltage 120 - 277VAC 50/60Hz
• Solder-LESS LED Board Connections – Vibration Resistant

LED VS FLUORESCENT WATTAGE & DELIVERED LUMENS

<table>
<thead>
<tr>
<th>LED WATT</th>
<th>LUMENS</th>
<th>L/W</th>
<th>FLUORESCENT</th>
<th>LUMENS</th>
<th>L/W</th>
</tr>
</thead>
<tbody>
<tr>
<td>18W</td>
<td>2557</td>
<td>150</td>
<td>40W</td>
<td>1x40W BX</td>
<td>2471</td>
</tr>
<tr>
<td>28W</td>
<td>3775</td>
<td>144</td>
<td>55W</td>
<td>1x55W BX</td>
<td>3766</td>
</tr>
<tr>
<td>34W</td>
<td>5075</td>
<td>149</td>
<td>56W</td>
<td>2x28T5</td>
<td>4676</td>
</tr>
<tr>
<td>45W</td>
<td>5562</td>
<td>137</td>
<td>64W</td>
<td>2x32T8</td>
<td>4772</td>
</tr>
<tr>
<td>55W</td>
<td>7577</td>
<td>144</td>
<td>108W</td>
<td>2x54T5HO</td>
<td>8088</td>
</tr>
<tr>
<td>60W</td>
<td>7618</td>
<td>132</td>
<td>120W</td>
<td>2x60T12HO</td>
<td>6965</td>
</tr>
<tr>
<td>80W</td>
<td>11140</td>
<td>137</td>
<td>162</td>
<td>3x54T5HO</td>
<td>11619</td>
</tr>
</tbody>
</table>

Catalog Number Logic

LZ2NL - Series Constant FRP Housing, Lexan Lens
LZ2SL - Series Constant 316 Stainless Housing, Lexan Lens

Voltage

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Wattage</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>120V-277VAC 50/60Hz</td>
</tr>
<tr>
<td>33</td>
<td>347-480VAC 60Hz</td>
</tr>
<tr>
<td>34</td>
<td>125VDC - 250VDC, 120-277VAC 28W, 60W, 55W, 120W</td>
</tr>
</tbody>
</table>

Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Single Fuse (1 hot leg) (Not to be used in Canada)</td>
</tr>
<tr>
<td>FF</td>
<td>2 Fuses (2 hot legs) (Not to be used in Canada)</td>
</tr>
<tr>
<td>TBL</td>
<td>Terminal Blocks Looping</td>
</tr>
<tr>
<td>P1</td>
<td>120V Photocell factory installed (C1D2 only)</td>
</tr>
<tr>
<td>P2</td>
<td>208V-277VAC (C1D2 only)</td>
</tr>
<tr>
<td>P3</td>
<td>347V only - 28W, 40W, 55W, 75W (C1D2 only)</td>
</tr>
<tr>
<td>QD</td>
<td>QuickDisconnect (before driver)</td>
</tr>
<tr>
<td>GS</td>
<td>Glare Reducing Shield</td>
</tr>
</tbody>
</table>
## LZ SERIES – ORDERING INFORMATION & TECHNICAL DATA

### ORDERING INFORMATION AND AMBIENT SUITABILITY

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>FIBERGLASS</th>
<th>STAINLESS</th>
<th>WEIGHT LBS/KG</th>
<th>STAINLESS</th>
<th>WEIGHT LBS/KG</th>
<th>LENGTH</th>
<th>VOLTAGE</th>
<th>AMPS</th>
<th>DELIVERED LUMENS</th>
<th>C1D2</th>
<th>C2D1</th>
<th>C1Z2 AEx nA</th>
</tr>
</thead>
<tbody>
<tr>
<td>L2N1830</td>
<td>L2SL1830</td>
<td>L2NL1830</td>
<td>12/5.4</td>
<td>L2SL1830</td>
<td>13/5.9</td>
<td>18</td>
<td>2&quot;</td>
<td>120-277VAC</td>
<td>0.15 - 0.06</td>
<td>2557</td>
<td>T5</td>
<td>T4</td>
</tr>
<tr>
<td>L2N2830</td>
<td>L2SL2830</td>
<td>L2NL2830</td>
<td>12/5.4</td>
<td>L2SL2830</td>
<td>13/5.9</td>
<td>28</td>
<td>2&quot;</td>
<td>120-277VAC</td>
<td>0.23 - 0.10</td>
<td>3775</td>
<td>T5</td>
<td>T4</td>
</tr>
<tr>
<td>L2N4530</td>
<td>L2SL4530</td>
<td>L2NL4530</td>
<td>12/5.4</td>
<td>L2SL4530</td>
<td>13/5.9</td>
<td>45</td>
<td>2&quot;</td>
<td>120-277VAC</td>
<td>0.38 - 0.16</td>
<td>5562</td>
<td>T5</td>
<td>T4</td>
</tr>
<tr>
<td>L2N6630</td>
<td>L2SL6630</td>
<td>L2NL6630</td>
<td>14/6.4</td>
<td>L2SL6630</td>
<td>15/6.8</td>
<td>60</td>
<td>2&quot;</td>
<td>120-277VAC</td>
<td>0.50 - 0.22</td>
<td>7618</td>
<td>T4A</td>
<td>-</td>
</tr>
<tr>
<td>L2N8830</td>
<td>L2SL8830</td>
<td>L2NL8830</td>
<td>23/10.4</td>
<td>L2SL8830</td>
<td>24/10.9</td>
<td>34</td>
<td>4&quot;</td>
<td>120-277VAC</td>
<td>0.28 - 0.12</td>
<td>5075</td>
<td>T5</td>
<td>T4</td>
</tr>
<tr>
<td>L2N11130</td>
<td>L2SL11130</td>
<td>L2NL11130</td>
<td>23/10.4</td>
<td>L2SL11130</td>
<td>24/10.9</td>
<td>55</td>
<td>4&quot;</td>
<td>120-277VAC</td>
<td>0.46 - 0.20</td>
<td>7577</td>
<td>T5</td>
<td>T4</td>
</tr>
<tr>
<td>L2N14830</td>
<td>L2SL14830</td>
<td>L2NL14830</td>
<td>23/10.4</td>
<td>L2SL14830</td>
<td>24/10.9</td>
<td>80</td>
<td>4&quot;</td>
<td>120-277VAC</td>
<td>0.67 - 0.29</td>
<td>11140</td>
<td>T5</td>
<td>T4</td>
</tr>
<tr>
<td>L2N21830</td>
<td>L2SL21830</td>
<td>L2NL21830</td>
<td>25/11.3</td>
<td>L2SL21830</td>
<td>26/11.8</td>
<td>120</td>
<td>4&quot;</td>
<td>120-277VAC</td>
<td>1.00 - 0.43</td>
<td>16010</td>
<td>T4A</td>
<td>-</td>
</tr>
</tbody>
</table>

### REPLACEMENT PARTS:

- **LZ2N4LENS**: 4' Lens only LZ2NL/LZ2SL
- **LZ2N2LENS**: 2' Lens only LZ2NL/LZ2SL
- **LZ2N4BAR**: 4' Locking Bar only LZ2NL
- **LZ2N2BAR**: 2' Locking Bar only LZ2NL
- **LZ2S-LATCH**: Latch and Spring LZ2SL

*Mounting Centers are 1/4-20" tapped for user all thread rod or below accessories.*

### Mounting Accessories

- **Wall Bracket Set**
  - Part Number LZW2B
  - Stainless Steel (natural finish)

- **Adjustable Wall Bracket Set**
  - Part Number LZAB
  - Stainless Steel bracket with ceramic coated pivot bolt

- **Ceiling Bracket Set**
  - Part Number LZCB
  - Stainless Steel bracket with ceramic coated pivot bolt

- **Eyebolt Set**
  - Part Number LZE8
  - Stainless Steel bolt with lockwasher & nut (natural finish)

- **Suspension Chains (2 required)**
  - Part Number HFX-SC
  - 36" length plated steel chain with snap link ends
  - For use with LZE8

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See [WWW.HUBBELL-KILLARK.COM](http://WWW.HUBBELL-KILLARK.COM) LIGHTING SOFTWARE FOR LATEST LED PHOTOMETRY
L1L SERIES

T-slot for easy mounting using a 5/16 or M8 bolt

¾" NPT on 3 sides with Available M20 hub option

Removable Ceiling Flush Mount

Tool-less entry for easy access to wiring chamber

Bright Bi-colored LED indicator visually reports battery backup status

Clear or diffuse optic

Field Installed Eye-bolts for Safety Chain

¾" NPT on 3 sides with Available M20 hub option

Removable Ceiling Flush Mount

Tool-less entry for easy access to wiring chamber

Bright Bi-colored LED indicator visually reports battery backup status

Clear or diffuse optic

Field Installed Eye-bolts for Safety Chain
LED LIGHTING

LED FIXTURES

L1L SERIES

FEATURES-SPECIFICATIONS

LINEAR®

LED Features
- Industry-Leading efficacy: up to 153 LPW
- Corrosion resistant copper-free housing
- Standard 5000K CCT @ 70 CRI minimum
- Option 3500K CCT @ 90 CRI minimum
- 20kV / 10kA surge protection on standard fixture
- T-slot mounting for the ultimate in easy mounting
- Self-testing and self-diagnostics on battery backup fixtures
- Angled LED boards for wider mounting distances
- Terminal blocks standard
- Low Profile
- Tool-less access to wiring chamber
- Diffuser option available
- 5 year fixture warranty

Applications
- Paint Spray Booths
- Chemical Facilities
- Waste Water Facilities
- Pipeline Pump Stations
- Ammunition Facilities
- Paint Manufacturing Plants
- Oil & Gas Refineries
- Fuel Transfer Facilities

LED VS FLUORESCENT WATTAGE & DELIVERED LUMENS

<table>
<thead>
<tr>
<th>LED PART NUMBER</th>
<th>LED WATT</th>
<th>LUMENS</th>
<th>L/W</th>
<th>LAMP WATTAGE</th>
<th>NUMBER AND STYLE OF LAMP</th>
<th>LAMPS</th>
<th>LUMENS</th>
<th>L/W</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1L730C</td>
<td>46.5</td>
<td>7,147</td>
<td>154</td>
<td>55W</td>
<td>1x55W BIAx</td>
<td>4,788</td>
<td>87</td>
<td>56.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>56W</td>
<td>2x28 T5</td>
<td>3,878</td>
<td>60.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>64W</td>
<td>2x32 T8</td>
<td>3,734</td>
<td>58.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>80W</td>
<td>2x40W BIAx</td>
<td>6,300</td>
<td>78.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>108W</td>
<td>2x54 TSHO</td>
<td>6,551</td>
<td>60.7</td>
<td></td>
</tr>
<tr>
<td>L1L1030C</td>
<td>68.5</td>
<td>10,190</td>
<td>149</td>
<td>162W</td>
<td>3x54 TSHO</td>
<td>9,826</td>
<td>60.7</td>
<td></td>
</tr>
<tr>
<td>L1L1230C</td>
<td>80.4</td>
<td>11,500</td>
<td>143</td>
<td>160W</td>
<td>4x40W BIAx</td>
<td>12,600</td>
<td>78.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>180W</td>
<td>3x80 T12HO</td>
<td>11,202</td>
<td>62.2</td>
<td></td>
</tr>
<tr>
<td>L1L1430C</td>
<td>91.8</td>
<td>13,800</td>
<td>148</td>
<td>216W</td>
<td>4x54 TSHO</td>
<td>12,930</td>
<td>59.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>240W</td>
<td>4x80 T12HO</td>
<td>14,936</td>
<td>62.2</td>
<td></td>
</tr>
</tbody>
</table>

Class I, Div. 1 & 2, Groups B, C, D
Class I, Zones 1 & 2, Groups IIB, IIA
Class II, Div. 1 & 2, Groups E, F, G
Class III, Div. 1 & 2
IP66
Suitable for wet locations
Suitable for paint spray booths

SEE WWW.HUBBELL-KILLARK.COM LIGHTING SOFTWARE FOR LATEST LED PHOTOMETRY
L1L SERIES

CATALOG LOGIC

L1L – Series Constant
Fixture Lumen Output
7 – 7,000
10 – 10,000
12 – 12,000
14 – 14,000

Emergency Battery Backup
Blank – No Emergency
IE05 – 500 Lumen Range during 180 minute emergency
IE1 – 1000 Lumen Range during 90 minute emergency

Voltage
30 – 120V-277VAC 50/60Hz all models
33 – 347-480VAC non-emergency models only
34 – 125VDC-250VDC, 120-277VAC 50/60Hz non-emergency models only

Lens
D – Diffuse
C – Clear

Example
= L1L 14,000 lumen output with 1,000 lumen output during 90 minute emergency operation, 120-277VAC, Diffuse Lens, 2 Fuses

Options
F – Single Fuse (1 pole)
FF – Two Fuses (2 pole - 2 hot legs)
LSP – Less Surge Protector
GH – Gray Housing
RH – Red Housing
WH – White Housing
TBL – Terminal Blocks Loopping through Wiring
YH – Yellow Housing
3590 – 3500k LED @ 90 CRI
D20 – 3 M20 entries
D25 – 3 M25 entries

Specials – Contact Factory for custom configurations and options

DIMENSIONS

59 [15]
1.77 [45]
3.35 [85]
5.19 [131]
6.22 [158]
17.97 [464]
17.12 [434]
6.09 [155]
3.99 [98]
2.88 [73]
75.00 [189]
5.39 [137]
6.51 [165]
6.22 [165]
6.09 [155]

3/4 NPT ENTRY TYP. (3) PLACES
Both Sides

WWW.HUBBELL-KILLARK.COM
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
- 15 minute re-transfer delay
- Automatic unit transfer in brown-out conditions (below 80% of nominal AC input voltage)

<table>
<thead>
<tr>
<th>TEST SWITCH INDICATOR STATUS</th>
<th>LED INDICATORS STATUS</th>
<th>EM DRIVER STATUS/MODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid Green</td>
<td>System OK/AC OK (Self-diagnostic Enabled or Disabled).</td>
<td></td>
</tr>
<tr>
<td>Slow Flashing Red, 4s on/1s off</td>
<td>Battery not detected, check battery switch or connection.</td>
<td></td>
</tr>
<tr>
<td>Flashing Red, 1s on/1s off</td>
<td>Battery Failure, replace battery.</td>
<td></td>
</tr>
<tr>
<td>Flashing Green, 1s on/1s off</td>
<td>Self Diagnostic test underway.</td>
<td></td>
</tr>
<tr>
<td>Fast Flashing Red, 0.1s on/0.1s off</td>
<td>Abnormal driver performance, replace driver.</td>
<td></td>
</tr>
<tr>
<td>Very Slow Flashing Red, 4s on/4s off</td>
<td>Over temperature.</td>
<td></td>
</tr>
<tr>
<td>None. Both LEDs OFF</td>
<td>Normal working in EM mode.</td>
<td></td>
</tr>
<tr>
<td>Green/Red alternative flashing, 1s green/1s red</td>
<td>No load or output over voltage protection triggered.</td>
<td></td>
</tr>
</tbody>
</table>

LED EMERGENCY LIGHTING DESIGN
### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>WEIGHT LBS./KG</th>
<th>WATTS</th>
<th>VOLTAGE</th>
<th>AMPS</th>
<th>DELIVERED LUMENS CLEAR/DIFFUSE</th>
<th>40°C</th>
<th>55°C</th>
<th>40°C</th>
<th>55°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1L730D</td>
<td>26/11.8</td>
<td>46</td>
<td>120-277</td>
<td>0.4-0.2</td>
<td>T6</td>
<td>T6</td>
<td>T6</td>
<td>T6</td>
<td>T5</td>
</tr>
<tr>
<td>L1L7E05300D</td>
<td>28/12.7</td>
<td>75</td>
<td>120-277</td>
<td>0.6-0.3</td>
<td>10,100 / 7,926</td>
<td>T6</td>
<td>T6</td>
<td>T6</td>
<td>T5</td>
</tr>
<tr>
<td>L1L733D</td>
<td>26/11.8</td>
<td>88</td>
<td>120-277</td>
<td>0.7-0.3</td>
<td>11,500 / 8,919</td>
<td>T6</td>
<td>T6</td>
<td>T6</td>
<td>T5</td>
</tr>
<tr>
<td>L1L734D</td>
<td>26/11.8</td>
<td>80</td>
<td>120-277</td>
<td>0.7-0.3</td>
<td>T6</td>
<td>T6</td>
<td>T6</td>
<td>T6</td>
<td>T5</td>
</tr>
<tr>
<td>L1L1030D</td>
<td>26/11.8</td>
<td>88</td>
<td>120-277</td>
<td>0.8-0.3</td>
<td>13,800 / 10,649</td>
<td>T6</td>
<td>–</td>
<td>T6</td>
<td>–</td>
</tr>
<tr>
<td>L1L101E05300D</td>
<td>28/12.7</td>
<td>93</td>
<td>120-277</td>
<td>0.9-0.4</td>
<td>T6</td>
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</table>

### ACCESSORIES

- **Ceiling Bracket Set**
  - Part Number LZCB
  - Stainless Steel (natural finish)

- **VMSC10 Safety Cable**

- **LAL-BC Beam Clamp**

### CABLE GLAND ORDERING OPTIONS

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>ENTRY THREADED SIZE (NPT)</th>
<th>BEND TYPE</th>
<th>CABLE ACCEPTANCE DETAILS</th>
<th>MAX LENGTH</th>
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<tbody>
<tr>
<td>MCX1B</td>
<td>1/2&quot;</td>
<td>Straight</td>
<td>0.51&quot; (13.0) 0.63&quot; (16.0)</td>
<td>2.10&quot; (53.3)</td>
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<tr>
<td>MCX1C</td>
<td>1/2&quot;</td>
<td>Straight</td>
<td>0.60&quot; (15.2) 0.82&quot; (20.8)</td>
<td>2.40&quot; (61.0)</td>
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<tr>
<td>MCX2</td>
<td>3/4&quot;</td>
<td>Straight</td>
<td>0.73&quot; (18.5) 1.03&quot; (26.2)</td>
<td>2.60&quot; (66.0)</td>
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<tr>
<td>MCX14C</td>
<td>1/2&quot;</td>
<td>45°</td>
<td>0.60&quot; (15.2) 0.82&quot; (20.8)</td>
<td>3.25&quot; (82.6)</td>
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<td>MCX24</td>
<td>3/4&quot;</td>
<td>45°</td>
<td>0.73&quot; (18.5) 1.03&quot; (26.2)</td>
<td>3.43&quot; (87.1)</td>
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<tr>
<td>MCX19C</td>
<td>1/2&quot;</td>
<td>90°</td>
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<td>MCX29</td>
<td>3/4&quot;</td>
<td>90°</td>
<td>0.73&quot; (18.5) 1.03&quot; (26.2)</td>
<td>2.61&quot; (66.3)</td>
</tr>
</tbody>
</table>

For entire series, please see page 81.
Killark
Now Offers
Warm LED Colors!

WARM WHITE
COLD WHITE
CERTI/ITE LED

FEATURES-SPECIFICATIONS

Compliances
- UL-8750 for LED lighting; UL 1598A
- UL Marine type lighting fixtures
- 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 luminaries for use in hazardous locations
- Enclosed and gasketed
- Type 3, 4X

Materials
- Housing, splice box and guards (MBAG, VMAG) 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 fiberglass

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)
  - Compact in Size with Traditional Industrial Appearance and Suitability
  - Wide variety of optics including globes, globes with reflectors, all-glass refractors, and spin-top refractors
  - Optional Mounting arrangements including Pendant, Wall, Ceiling, and Stanchion
  - MBL LED Housings can be retrofitted to existing MB splice boxes; upgrade from Fluorescent or HID
  - Warm LED color option available with 3070 option

Catalog Number Logic

Housing Series | LED Wattage | Voltage | Mounting Style | Entry | Options | Guard | Optic | LEDs |
---|---|---|---|---|---|---|---|---|
MBL | 14 - 14W | 05 - 480VAC | A – Pendant | 2 – 3/4” NPT (A, X, B) | CP | N – No Guard | GL | 50160H3 |
30 | 22 - 22W | 15 - 347VAC | X – Ceiling | 3 – 1” NPT (A, B) | AN | G – Guard | R5 | 50160H3 |
50 | 25 - 25W | 27 - 12-24VDC | B – Wall | 4 – 1-1/4” NPT (D only) | DDR | | | |
50 | 40 - 40W | 30 - 120-277VAC | D – Stanchion 25° | 5 – 1-1/2” NPT (D only) | | | | |
50 | 50 - 50W | | | 8 – M20 4 hub (X only) | | | | |
50160H3 | | | | | | | | |
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50160H3 | | | | | | | | |
50160H3 | | | | | | | | |
### MBL SERIES

**COMPACT SIZE – COMPONENTS**

**MBL MOUNTING BRACKETS**

<table>
<thead>
<tr>
<th>PENDANT</th>
<th>CEILING</th>
<th>WALL</th>
<th>STANCHION</th>
<th>HUB SIZE</th>
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<tbody>
<tr>
<td>MBA-2</td>
<td>MBX-2</td>
<td>MBB-2</td>
<td>—</td>
<td>3/4”</td>
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<tr>
<td>MBA-3</td>
<td>MBX-3</td>
<td>MBB-3</td>
<td>—</td>
<td>1”</td>
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<tr>
<td>—</td>
<td>MBX-5</td>
<td>—</td>
<td>—</td>
<td>M20</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>MBD-4</td>
<td>1-1/4”</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>MBD-5</td>
<td>1-1/2”</td>
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**MBL LED OPTICS AND ACCESSORIES**

<table>
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<tr>
<th>DESCRIPTION</th>
<th>OPTIC LOGIC</th>
<th>GUARD</th>
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<tbody>
<tr>
<td>Globe (glass)</td>
<td>MBG (GL)</td>
<td>MBAG</td>
</tr>
<tr>
<td>Refractor (all glass) Type V</td>
<td>VMR175 (RG)</td>
<td>VMAG17</td>
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<tr>
<td>Refractor (spin top) 8” Type V</td>
<td>VZRG1550 (S8)</td>
<td>VRMRGWGS</td>
</tr>
<tr>
<td>Refractor (spin top) 12” Type V</td>
<td>VZRG2550 (SS)</td>
<td>VMRWS</td>
</tr>
<tr>
<td>8” Spin-top flat lens (glass) 14-24W</td>
<td>VZRGF8 (GF)</td>
<td>VZRF8GRD</td>
</tr>
<tr>
<td>8” Spin-top flat lens (polycarbonate) 14-24W</td>
<td>VZRPF8 (PF)</td>
<td>VZRF8GRD</td>
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<tr>
<td>Refractor polycarbonate (spin-top) 12” Type V</td>
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<tr>
<td>Pathway Reflector 14-24W</td>
<td>VZRF8PR</td>
<td>NA</td>
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<tr>
<td>Reflector for MBG Globe - DOME</td>
<td>VMPSD-17</td>
<td>NA</td>
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<tr>
<td>Reflector for MBG Globe - ANGLE</td>
<td>VMPA-17</td>
<td>NA</td>
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<tr>
<td>120VAC Photocell with FS Style Cover</td>
<td>VMFSPC1</td>
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<tr>
<td>208-277VAC Photocell with FS Style Cover</td>
<td>VMFSPC2</td>
<td>NA</td>
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<tr>
<td>3-sided EXIT Accessory (use without guard)</td>
<td>VEXA100B</td>
<td>NA</td>
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</table>

**Non-Glass Polycarbonate 8” Flat Lens or Spin-top**

*Patented Design*
**COMPACT SIZE – RATINGS, SPECIAL AIMING ANGLES**

### ORDERING INFORMATION AND AMBIENT SUITABILITY

<table>
<thead>
<tr>
<th>CATALOG NO.</th>
<th>WEIGHT LBS./KG</th>
<th>WATTS</th>
<th>VOLTAGE</th>
<th>AMPS</th>
<th>40°C</th>
<th>55°C</th>
<th>40°C</th>
<th>55°C</th>
<th>40°C</th>
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<td>12-24VDC</td>
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<td>T3B</td>
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**TYPICAL WEIGHTS (LBS.) W/STANDARD GLOBE AND GUARD - MBL SERIES**

<table>
<thead>
<tr>
<th>WATTS</th>
<th>WEIGHTS</th>
<th>HANGING CONFIGURATIONS</th>
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<tr>
<td>14-25W</td>
<td>Pendant 14.96</td>
<td>Ceiling 15.96 Wall 19.30 Stanchion 16.83</td>
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<tr>
<td>40-50W</td>
<td>Pendant 20.96</td>
<td>Ceiling 21.69 Wall 25.30 Stanchion 22.83</td>
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**DELIVERED LUMENS**

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<tr>
<th>WATTS</th>
<th>MBL + MBG</th>
<th>MBL + VMR</th>
<th>MBL + VZRXF8</th>
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<td>800</td>
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<td>2009</td>
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<td>6139</td>
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</table>
MBL SERIES

COMPACT SIZE – DIMENSIONS & WEIGHTS

MBL Flat Lens, Pathway Reflector Wall Mount

MBL Pendant

MBB Wall Mount

MBX Ceiling

MBD Stanchion

MBL Tank with Flat Lens

MBL Flat Lens Ceiling Mount

MBL Pendant, Globe, Guard

MBL Pendant, Refractor, Guard

MBL & MBG Globe Only

MBL & VMR Refractor

MBL Pendant, Refractor, Guard

MBL & 8” Type V Spin-top

MBL & 12” Type V Spin-top
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)

- Reduced profile with Traditional Industrial Appearance and Suitability
- Wide variety of optics including globes, globes with reflectors, all-glass refractors, and spin-top refractors
- Swing-Barrel Nut patented tank mounting system
- Optional Mounting arrangements including Pendant, Wall, Ceiling, Stanchion and others
- VM1L LED Housings can be retrofitted to existing VM splice boxes; upgrade from HID sources
- Energy Savings – less than 55 Watts of Power
- LED Array Life – 100,000+ hours with 70% initial lumens
- Long Fixture Life – 50,000 - 55,000 maintenance free hours
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000°K (CCT); 70 CRI
- Ambient suitability -40°C to 55°C
- 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
- Warm LED color option available with 3070 option

**CERTIFIED LED**

**FEATURES-SPECIFICATIONS**

**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 luminaries for use in hazardous locations
- Enclosed and gasketed
- Type 3, 4X

**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 fiberglass

**Swing-Barrel Nut (Patented)**

1. Hang Fixture
2. Swing into Place
3. Tighten

**Photo controls – Class I Div. 2 / N4X areas**
Available as Field or Factory Installed to save energy when light not required.

**Earthquake Tab**
- Built-in attachment point for safety cables.
- Safety: Secures fixture to structure in case of conduit failure.

**Polycarbonate 12” Spin-top Refractor VZRG2550**
VM1L SERIES

REduced Profile – Catalog Logic

CertiLite®V LED Catalog Number Logic

**Housing Series**
VM1L 50 30 0 0 00 0 0
5-1/2" thread w/driver and LED’s

**Lamp Wattage**
40W – LED
50W – LED

**Voltage**
05 – 480VAC 50/60 Hz
15 – 347VAC 50/60 Hz
27 – 12-24VDC
30 – 120-277VAC 50/60 Hz

**Mounting Type**
A – Pendant
X – Ceiling
B – Wall Bracket
C – Cone Top
E – EZ Mount Adapter
D – Stanchion 25°
S – Stanchion Straight 90°
N – None (mount ordered separately)

**Entry (Mounts available)**
2 – 3/4" NPT (A,B,C,X)
3 – 1" NPT (A,B,C,X)
4 – 1 1/4" NPT (D,S)
5 – 1 1/2" NPT (D,S)
6 – 3/4" NPT 5-Hub (X)
7 – 1" NPT 5-Hub (X)
8 – M20 4-Hub (X)
9 – M20 5-Hub (X)
Z – EZ Mount Adapter
N – None (mount ordered separately)

**Options**
F – Single Fuse (Not to be used in Canada)
FF – Double Fuse (Not to be used in Canada)
TBX – Terminal Blocks
X= Variations
(May be alphanumeric to indicate terminals)
P1 – Photocell 120V (C1D2 only)
Factory Installed
P2 – Photocell 208-277V (C1D2 only)
Factory Installed
QD – QD Wired at Driver
CP – Component Pack
(Tank w/mount, optic, guard - LED’s included in tank)
AN – Assembled
(Tank w/mount, optic, guard-LED’s included in tank)
DDR – Dual Driver Option
3070–3000K (CCT) and 70 CRI LEDs

**Guard**
G – Guard (Globes & Glass refractors)
N – No Guard

**Optic**
GL – Globe
R5 – Type V Refractor (all glass)
S8 – Type V 8" Spin-Top Refractor
S5 – Type V12” Spin-Top Refractor
P5 – Polycarbonate Type V 12” Spin-Top Refractor

---

VM1L
50
30
00
00
00
REDUCED PROFILE – COMPONENTS

CERTILITE®V MOUNTING SPLICE BOXES

<table>
<thead>
<tr>
<th>HUB SIZE</th>
<th>PENDANT</th>
<th>CEILING 4 HUB</th>
<th>CEILING 5 HUB</th>
<th>WALL</th>
<th>CONE TOP</th>
<th>25 DEGREE STANCHION</th>
<th>90 DEGREE STANCHION</th>
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<tbody>
<tr>
<td>3/4”</td>
<td>VMA2B</td>
<td>VMX2B</td>
<td>VMX6B</td>
<td>VM3B</td>
<td>VMG2B</td>
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<tr>
<td>1”</td>
<td>VMA3B</td>
<td>VMX3B</td>
<td>VMX7B</td>
<td>VM3B</td>
<td>VMG3B</td>
<td>—</td>
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<tr>
<td>1-1/4”</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1-1/2”</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td>M-20</td>
<td>—</td>
<td>VMX8B**</td>
<td>VMX9B**</td>
<td>—</td>
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* VMEZA is used between a driver tank and an EZ mount-ordered separately.
** Furnished with non-metallic plugs. Also available: VMB10B wall 4xM25 hubs, and VMB810B 2xM20 side hubs and 2xM25 top/bottom

VM1L LED OPTICS AND ACCESSORIES

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>OPTIC LOGIC</th>
<th>GUARD</th>
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</thead>
<tbody>
<tr>
<td>Globe (glass)</td>
<td>VMG17 (GL)</td>
<td>VMAG17</td>
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<tr>
<td>Refractor (all glass) Type V</td>
<td>VMR175 (R5)</td>
<td>VMAG17</td>
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<tr>
<td>Refractor (spin top) 8” Type V</td>
<td>VZRG1550 (S8)</td>
<td>VMRWG8</td>
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<tr>
<td>Refractor (spin top) 12” Type V</td>
<td>VZRG2550 (S5)</td>
<td>VMRWG8</td>
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<tr>
<td>Refractor polycarbonate (spin-top) 12” Type V</td>
<td>VZRP175 (P5)</td>
<td>VMRWG8</td>
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<tr>
<td>DOME REFLECTOR (Polyester reinforced fiberglass)</td>
<td>VMPSD40</td>
<td>NA</td>
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<tr>
<td>ANGLE REFLECTOR (Polyester reinforced fiberglass)</td>
<td>VMPA40</td>
<td>NA</td>
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<tr>
<td>120VAC Photocell with FS Style Cover</td>
<td>VMFSPC1</td>
<td>NA</td>
</tr>
<tr>
<td>208-277VAC Photocell with FS Style Cover</td>
<td>VMFSPC2</td>
<td>NA</td>
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<tr>
<td>3-sided EXIT Accessory (use without guard)</td>
<td>VEXA100B</td>
<td>NA</td>
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<tr>
<td>Tank adapter to Crouse-Hinds® VM Series mounts*</td>
<td>VMCHVM</td>
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ORDERING INFORMATION AND AMBIENT SUITABILITY

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<tr>
<th>CATALOG NO.</th>
<th>WEIGHT LBS./KG</th>
<th>WATTS</th>
<th>VOLTAGE</th>
<th>AMPS</th>
<th>VMG15 LUMENS</th>
<th>VM175 LUMENS</th>
<th>40°C</th>
<th>55°C</th>
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<td>15.50 / 7.03</td>
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<td>480 VAC</td>
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<td>5060</td>
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<td>T4A</td>
<td>T4</td>
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<td>VM1L4015</td>
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<td>347</td>
<td>12-24VDC</td>
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<td>1.67</td>
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<td>1.19</td>
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<td>6427</td>
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<td>VM1L5027</td>
<td>120-277VAC</td>
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</table>

TYPICAL WEIGHTS (LBS.) W/ STANDARD GLOBE AND GUARD - VM1L SERIES

- Pendant 23.00
- Ceiling 24.10
- Wall 27.50
- Stanchion 23.90

SEE WWW.HUBBELL-KILLARK.COM LIGHTING SOFTWARE FOR LATEST LED PHOTOMETRY
### VM1L SERIES

**REduced Profile – Dimensions & Weights**

<table>
<thead>
<tr>
<th>Model</th>
<th>Globe &amp; Guard</th>
<th>Pendant Mount</th>
<th>Cone Mount</th>
<th>Ceiling Mount</th>
<th>Wall Bracket Mount</th>
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</thead>
<tbody>
<tr>
<td>VM1L</td>
<td>6.38 (162)</td>
<td>11.88&quot; DIA (302)</td>
<td>5.69&quot; (144)</td>
<td>13.99&quot; (353)</td>
<td>10.97&quot; (278)</td>
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<td></td>
<td>13.55 (344)</td>
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<td>12.88&quot; (327)</td>
<td>11.89&quot; (302)</td>
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<td></td>
<td>6.75 (171)</td>
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<td></td>
<td>5.75&quot; (146)</td>
<td>5.73&quot; (146)</td>
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<td>7.74 (197)</td>
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<td>16.87 DIA (428)</td>
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<td>10.77 (274)</td>
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<td>14.75 DIA (375)</td>
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<td>10.11 (257)</td>
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<td>13.34 (339)</td>
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<td>12.19 (310)</td>
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<td>13.58 (345)</td>
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<td>6.38 (162)</td>
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<td></td>
<td>6.38 (162)</td>
<td>6.38 (162)</td>
</tr>
</tbody>
</table>

**VM1L Tank with Pendant Mount & Globe**

- Hole dia. .30" (7.62)
- Wall Bracket Mount: hole dia. .30" (7.62)
- Cone Mount: hole dia. .34" (8.63)
- Ceiling Mount: hole dia. .30" (7.62)

**VM1L Tank with Dome Refractor**

- Pendant Mount: 11.88" DIA (302)
- Cone Mount: 11.88" DIA (302)
- Ceiling Mount: 11.88" DIA (302)

**VM1L Tank with 8" Spin-top Refractor**

- Pendant Mount: 11.88" DIA (302)
- Cone Mount: 11.88" DIA (302)
- Ceiling Mount: 11.88" DIA (302)

**VM1L Tank with 12" Spin-top Refractor**

- Pendant Mount: 11.88" DIA (302)
- Cone Mount: 11.88" DIA (302)
- Ceiling Mount: 11.88" DIA (302)
VM LED SERIES FIXTURES

HOUSING Fixture assembly guide

Mounting Type

- Tank Adapter
- Pendant
- Cone Top
- Ceiling
- Wall
- Straight Stanchion
- 25° Stanchion
- EZ Adapter VMEZA

Tank

- VM1L
- VM2LC
- VM4LC
- VM2LB
- VM4LB

Optic

- VMG17
- VMR175
- VZRG1550
- VZRPF
- VZRGF
- VMG25
- VMR255
- VMR253
- VMR251
- VMER40

Guard

- VMAG17
- VMRWG8
- VMRWGS
- VMAG25S
- VMERG
- VMAGBC

Reflector

- VEXA100B
- VMPSD40
- VMPA40
- HRD400
- VEXA400
- HRD400ALZ
- VMPSD40
- VMPA40

See www.hubbell-killark.com lighting software for latest LED photometry.
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
- Chromaticity outputs:
  - Standard – 5000K 70 CRI
  - 3070 option – 3000K 70 CRI
- TURTLE option provides Amber LEDs that have no blue wavelength light (Not available with 14 & 18 lumen outputs)
- AMBER option provides phospher converted LEDs. (Not available with 14 & 18 lumen outputs).
- LED Array Life – 100,000+ hours with 70% initial lumens
- Long Fixture Life – 50,000 - 55,000 maintenance free hours

**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

**Certified – File LR11713**

IECEx Rated Models (VM4L with IEx suffix)

Ex nA IIC T4, Gc / Ex tb IIC 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

- Ambient suitability -40°C to 65°C (see tables). -20°C to 50°C Ambient suitability for Emergency models.
- Warm LED color option available with 3070
- 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 Catalog Number Logic

### VM2L or VM4L

<table>
<thead>
<tr>
<th>Housing Series</th>
<th>7-3/4&quot; thread w/driver and LED's</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Bulb heat sink</td>
</tr>
<tr>
<td>C</td>
<td>Concave heat sink</td>
</tr>
</tbody>
</table>

### Lumen Output

Approx. Lumen Output to the nearest thousand with Globe

- **6** LED VM2, VM4
- **7** LED VM2, VM4
- **9** LED VM2, VM4
- **12** LED VM4
- **14** LED VM4
- **18** LED VM4

### Intelligent Emergency

- **IE2** – 2K Lumens during 90 minute Emergency operation
  (Available on VM4L 6, 7, 9)
  (Available on VM2L & VM4L 6, 7, 9)

### Voltage

- **30** – 120-277VAC 50/60 Hz
- **33** – 347-480VAC 50/60Hz
- **34** – 120-250VDC non-emergency models

### Mounting Type

- **A** – Pendant
- **X** – Ceiling
- **B** – Wall Bracket
- **C** – Cone Top
- **E** – EZ Mount Adapter
- **D** – Stanchion 25°
- **S** – Stanchion Straight 90°
- **N** – None (mount ordered separately)

### Options/Accessories

- **F** – Single Fuse (Not for use in Canada)
- **FF** – Double Fuse (Not for use in Canada)
- **TBx** – Terminal Blocks
  (May be alphanumeric to indicate terminals)
- **IEX** – IEC Ex includes TBL & external ground. Not available with polyoptic, fuses, photocells or 347/480 volt input.
- **RD** – Red Tank/Mount/Guard
- **P1** – Photocell 120V (C1D2 only) Factory Installed
- **P2** – Photocell 208-277V (C1D2 only) Factory Installed
- **P3** – Photocell 347V (C1D2 only) Factory Installed
- **QD** – QD Wired at Driver

### Guard

- **G** – Guard (Globes & Glass refractors)
- **N** – No Guard

### Optic

- **GL** – Globe
- **R5** – Type V Refractor (all glass)
- **ER** – Enclosed Refractor
- **P5** – 12” Type V Polycarbonate Spin-Top*
- **S2** – Type II 12” Spin-Top Refractor
- **SS** – Type V 12” Spin-Top Refractor
- **PF** – Spin-Top with flat poly lens (VM2LC and VM4LC only)
- **GF** – Spin-Top with flat glass lens (VM2LC and VM4LC only)

### Entry (Mounts available)

- **2** – 3/4” NPT (A,B,C,X)
- **3** – 1” NPT (A,B,C,X)
- **4** – 1 1/4” NPT (D,S)
- **5** – 1 1/2” NPT (D,S)
- **6** – 3/4” NPT 5-Hub (X)
- **7** – 1” NPT 5-Hub (X)
- **8** – M20 4-Hub (X)
- **9** – M25 5-Hub (X)
- **Z** – EZ Mount Adapter
- **N** – None (mount ordered separately)

*Non-glass Group G Food Processing Suitability
# VM2&4LB, VM2&4LC SERIES

## HIGH WATTAGE – OPTICS AND ACCESSORIES

### DELIVERED LUMENS

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>VMG25</th>
<th>VMR25S</th>
<th>VMER40</th>
<th>VZRP175B</th>
<th>VZRG4020</th>
<th>VZRG4050</th>
<th>VZRPF12</th>
<th>VZRGF12</th>
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</thead>
<tbody>
<tr>
<td>VM4LB6(XX)(YY)N</td>
<td>6278</td>
<td>5915</td>
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<td>VM4LC6(XX)(YY)N</td>
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<td>CATALOG NO. TYPICAL TANK ONLY WEIGHT LBS./KG</td>
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<td>VM4L(Y)630 18.90 / 8.57</td>
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<tr>
<td>VM4L(Y)633 19.90 / 8.57</td>
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<tr>
<td>VM4L(Y)634 19.90 / 8.57</td>
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<tr>
<td>VM4L(Y)730 27.70 / 12.5</td>
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<tr>
<td>VM4L(Y)733 27.70 / 12.5</td>
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<tr>
<td>VM4L(Y)734 27.70 / 12.5</td>
</tr>
<tr>
<td>VM4L(Y)930 39.90 / 18.5</td>
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<tr>
<td>VM4L(Y)933 39.90 / 18.5</td>
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<tr>
<td>VM4L(Y)934 39.90 / 18.5</td>
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<tr>
<td>VM4L(Y)1230 59.90 / 27.5</td>
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<td>VM4L(Y)1233 59.90 / 27.5</td>
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<td>VM4L(Y)1234 59.90 / 27.5</td>
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<td>VM4L(Y)14834 89.90 / 40.5</td>
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<td>VM4L(Y)1830 119.90 / 54.5</td>
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<td>VM4L(Y)1833 119.90 / 54.5</td>
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### ORDERING INFORMATION AND AMBIENT SUITABILITY

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<th>WATTS</th>
<th>VOLTAGE</th>
<th>AMPS</th>
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<td>347-480VAC</td>
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<tr>
<td>VM4L(Y)733 27.70 / 12.5</td>
<td>50</td>
<td>347-480VAC</td>
<td>0.15-0.12</td>
<td>T4A T4A T4</td>
<td>EFG</td>
</tr>
<tr>
<td>VM4L(Y)734 27.70 / 12.5</td>
<td>50</td>
<td>120-250VDC</td>
<td>0.42-0.20</td>
<td>T4A T4A T4</td>
<td>EFG</td>
</tr>
<tr>
<td>VM4L(Y)930 39.90 / 18.5</td>
<td>65</td>
<td>120-277 VAC</td>
<td>0.56-0.24</td>
<td>T4A T4A T4</td>
<td>EFG</td>
</tr>
<tr>
<td>VM4L(Y)933 39.90 / 18.5</td>
<td>65</td>
<td>347-480VAC</td>
<td>0.19-0.14</td>
<td>T4A T4A T4</td>
<td>EFG</td>
</tr>
<tr>
<td>VM4L(Y)934 39.90 / 18.5</td>
<td>65</td>
<td>120-250VDC</td>
<td>0.54-0.26</td>
<td>T4A T4A T4</td>
<td>EFG</td>
</tr>
<tr>
<td>VM4L(Y)1230 59.90 / 27.5</td>
<td>90</td>
<td>120-277 VAC</td>
<td>0.77-0.33</td>
<td>T4A T4 - EFG -</td>
<td></td>
</tr>
<tr>
<td>VM4L(Y)1233 59.90 / 27.5</td>
<td>90</td>
<td>347-480VAC</td>
<td>0.27-0.19</td>
<td>T4A T4 - EFG -</td>
<td></td>
</tr>
<tr>
<td>VM4L(Y)1234 59.90 / 27.5</td>
<td>90</td>
<td>120-250VDC</td>
<td>0.75-0.36</td>
<td>T4A T4 - EFG -</td>
<td></td>
</tr>
<tr>
<td>VM4L(Y)1430 89.90 / 40.5</td>
<td>105</td>
<td>120-277 VAC</td>
<td>0.89-0.39</td>
<td>T4A T4 - EFG -</td>
<td></td>
</tr>
<tr>
<td>VM4L(Y)1433 89.90 / 40.5</td>
<td>105</td>
<td>347-480VAC</td>
<td>0.31-0.23</td>
<td>T4A T4 - EFG -</td>
<td></td>
</tr>
<tr>
<td>VM4L(Y)14834 89.90 / 40.5</td>
<td>105</td>
<td>120-250VDC</td>
<td>0.88-0.42</td>
<td>T4A T4 - EFG -</td>
<td></td>
</tr>
<tr>
<td>VM4L(Y)1830 119.90 / 54.5</td>
<td>130</td>
<td>120-277 VAC</td>
<td>1.10-0.46</td>
<td>T4A T4 - EFG -</td>
<td></td>
</tr>
<tr>
<td>VM4L(Y)1833 119.90 / 54.5</td>
<td>130</td>
<td>347-480VAC</td>
<td>0.38-0.27</td>
<td>T4A T4 - EFG -</td>
<td></td>
</tr>
</tbody>
</table>

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

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)

<table>
<thead>
<tr>
<th>TEST SWITCH INDICATOR STATUS</th>
<th>LED INDICATORS STATUS</th>
<th>EM DRIVER STATUS/MODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid Green</td>
<td>System OK/AC OK (Self-diagnostic Enabled or Disabled).</td>
<td></td>
</tr>
<tr>
<td>Slow Flashing Red, 4s on/1s off</td>
<td>Battery not detected, check battery switch or connection.</td>
<td></td>
</tr>
<tr>
<td>Flashing Red, 1s on/1s off</td>
<td>Battery Failure, replace battery.</td>
<td></td>
</tr>
<tr>
<td>Flashing Green, 1s on/1s off</td>
<td>Self Diagnostic test underway.</td>
<td></td>
</tr>
<tr>
<td>Fast Flashing Red, 0.1s on/0.1s off</td>
<td>Abnormal driver performance, replace driver.</td>
<td></td>
</tr>
<tr>
<td>Very Slow Flashing Red, 4s on/4s off</td>
<td>Over temperature.</td>
<td></td>
</tr>
<tr>
<td>None. Both LEDs OFF</td>
<td>Normal working in EM mode.</td>
<td></td>
</tr>
<tr>
<td>Green/Red alternative flashing, 1s green/1s red</td>
<td>No load or output over voltage protection triggered.</td>
<td></td>
</tr>
</tbody>
</table>

LED Emergency Lighting Design

HIGH WATTAGE – COMPONENTS

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>PENDANT</th>
<th>CEILING 4 HUB</th>
<th>CEILING 5 HUB</th>
<th>WALL</th>
<th>CONE TOP</th>
<th>25 DEGREE STANCHION</th>
<th>STRAIGHT STANCHION</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUB SIZE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>VMA2B</td>
<td>VMX2B</td>
<td>VMX6B</td>
<td>VMB2B</td>
<td>VMC2B</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1&quot;</td>
<td>VMA3B</td>
<td>VMX3B</td>
<td>VMX7B</td>
<td>VMB3B</td>
<td>VMC3B</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>VMD4B</td>
<td>VMS4B</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>VMD5B</td>
<td>VMS5B</td>
</tr>
<tr>
<td>M-20</td>
<td>—</td>
<td>VMX8B</td>
<td>VMX9B</td>
<td>VMB8B</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>M-25</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>VMB10B</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

CERTILITE® VM MOUNTING SPLICE BOXES

KILLARK®

SEE WWW.HUBBELL-KILLARK.COM LIGHTING SOFTWARE FOR LATEST LED PHOTOMETRY
VM2&4LB, VM2&4LC SERIES

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.

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.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>OPTIC LOGIC</th>
<th>GUARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat Lens (glass spin top) “C” tank only</td>
<td>VZRGF12 (GF)</td>
<td>VZRF12GRD</td>
</tr>
<tr>
<td>Flat Lens (polycarbonate spin top) “C” tank only</td>
<td>VZRPF12 (PF)</td>
<td>VZRF12GRD</td>
</tr>
<tr>
<td>Globe (glass)</td>
<td>VMG25 (GL)</td>
<td>VMAG25S</td>
</tr>
<tr>
<td>Refractor (all glass) Type V</td>
<td>VMR255 (RS)</td>
<td>VMAG25S</td>
</tr>
<tr>
<td>Enclosed Reflector</td>
<td>VMER40 (ER)</td>
<td>VMERG</td>
</tr>
<tr>
<td>Refractor (polycarbonate spin top) 12” Type V</td>
<td>VZRP175B (P5)</td>
<td>VMRWGS</td>
</tr>
<tr>
<td>Refractor (glass spin top) 12” Type V</td>
<td>VZRG4050 (S5)</td>
<td>VMRWGS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>OPTIC LOGIC</th>
<th>GUARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOME REFLECTOR (Polyester reinforced fiberglass)</td>
<td>VMPSD40</td>
<td></td>
</tr>
<tr>
<td>ANGLE REFLECTOR (Polyester reinforced fiberglass)</td>
<td>VMPA40</td>
<td></td>
</tr>
<tr>
<td>DEEP DOME REFLECTOR (White Painted Aluminum)</td>
<td>HRD400</td>
<td></td>
</tr>
<tr>
<td>DEEP DOME REFLECTOR (Anodized Aluminum)</td>
<td>HRD400ALZ</td>
<td></td>
</tr>
<tr>
<td>120VAC Photocell with FS Style Cover</td>
<td>VMFSPC1</td>
<td></td>
</tr>
<tr>
<td>208-277VAC Photocell with FS Style Cover</td>
<td>VMFSPC2</td>
<td></td>
</tr>
<tr>
<td>Bottom Closure for VMAG25S</td>
<td>VMAGBC</td>
<td></td>
</tr>
<tr>
<td>4-sided EXIT Accessory (use without guard)</td>
<td>VEXA400</td>
<td></td>
</tr>
</tbody>
</table>

MOUNTING BOXES

<table>
<thead>
<tr>
<th>PENDANT</th>
<th>CEILING</th>
<th>BRACKET</th>
<th>STANCHION</th>
<th>HUB SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EZA2</td>
<td>EZX2</td>
<td>EZB3</td>
<td>—</td>
<td>3/4”</td>
</tr>
<tr>
<td>EZA3</td>
<td>EZX3</td>
<td>EZB3</td>
<td>—</td>
<td>1”</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>EZD4A</td>
<td>1-1/4” / 1/2”</td>
</tr>
</tbody>
</table>

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

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

**CERTIFICATE LED**

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

**EXPLOSION-PROOF – INTRODUCTION & LOGIC**

**HOSTILE/LITE LED**

**FEATURES-SPECIFICATIONS**

**Compliances**
- UL-8750 for LED lighting
- UL-844 Electric Lighting Fixtures for use in Hazardous Locations
- UL Marine Type Electric Lighting Fixtures
- Type 3, 4, 4X, 7CD, 9EFG

**Materials**
- Housing, splice box and 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 are aluminum with white finish

**LED Luminaire Features and Standards**
- Compact Explosion-proof with Traditional Industrial Appearance and Suitability
- Fluted or Exclusive Clear Globe; Dome or Angle Reflectors
- Optional Mounting arrangements including Pendant, Wall, Ceiling, and Stanchion
- EML LED Housings can be retrofitted to existing EZ splice boxes; upgrade from Incandescent, Fluorescent or HID
- Energy Savings – Less than 55 Watts of Power
- LED Array Life – 100,000+ hours with 70% initial lumens
- Long Fixture Life – 50,000 - 55,000 maintenance free hours
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000K (CCT range; approx. 70 CRI
- Ambient suitability -40°C to 55°C
- Instant on – Including after power interruption
- “World Voltage” 120-277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- Factory Sealed Construction – No external seal required, simply wire mounting cap and thread-in fixture to install
- Warm LED color option available with 3070

**Suitable for Paint Spray Booth Applications**

**Catalog Number Logic**

```
<table>
<thead>
<tr>
<th>Tank &amp; Globe with Driver and LEDs</th>
<th>EMLC</th>
<th>50</th>
<th>30</th>
<th>A2</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMLC – Tank w/Clear Globe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EML – Tank w/Fluted Globe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Wattage**
- 40W - LED
- 50W - LED

**Voltage**
- 12 — 12-24VDC
- 30 — 120-277VAC 50/60Hz
- 33 — 347-480V (40W only)

**Accessories (sold separately)**
- ERS30 — Dome Reflector
- ERA30 — Angle Reflector

**Mounting Type**
- A2 — 3/4” Pendant
- A3 — 1” Pendant
- X2 — 3/4” Ceiling
- X3 — 1” Ceiling
- B2 — 3/4” Bracket
- B3 — 1” Bracket
- D4 — 1-1/4” / 1-1/2” Stanchion

**Options**
- AN – Assembled Fixture
- 3070 - 3000K (CCT) and 70 CRI LEDs

**Class I, Div. 1 & 2, Groups C,D**
**Class I, Zones 1 & 2, Groups IIB, IIA**
**Class II, Div. 1 & 2, Groups E,F,G**
**Class III, Div. 1 & 2**
**Suitable for wet locations**
**Suitable for Paint Spray Booth**
**Marine Rated (US only)**
**Type 3, 4, 4X**
**Factory Sealed**

Certified - File LR11713
### EML SERIES

**EXPLOSION-PROOF – COMPONENTS & RATINGS**

**EZ MOUNTING BRACKETS**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Pendant</th>
<th>Ceiling</th>
<th>Wall</th>
<th>Stanchion</th>
</tr>
</thead>
<tbody>
<tr>
<td>EZA2</td>
<td>EZX2</td>
<td>EZB2</td>
<td>—</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>EZA3</td>
<td>EZX3</td>
<td>EZB3</td>
<td>—</td>
<td>1&quot;</td>
</tr>
</tbody>
</table>

* 1-1/2" furnished with 1-1/2" - 1-1/4" reducer

**EML - EMLC LED ACCESSORIES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guard</td>
<td>EMG2</td>
</tr>
<tr>
<td>Dome Reflector</td>
<td>ERSD30</td>
</tr>
<tr>
<td>Angle Reflector</td>
<td>ERA30</td>
</tr>
<tr>
<td>CIDI C2D1 N4X Photocell 120VAC</td>
<td>VMHKPC1</td>
</tr>
<tr>
<td>CIDI C2D1 N4X Photocell 208-277VAC</td>
<td>VMHKPC2</td>
</tr>
<tr>
<td>Replacement Fluted Globe &amp; Support</td>
<td>EMGS3</td>
</tr>
<tr>
<td>Replacement Clear Globe &amp; Support</td>
<td>EMGS2</td>
</tr>
<tr>
<td>Adapter to old Killark “H” Series or Crouse Hinds®</td>
<td>EAC/EACH</td>
</tr>
</tbody>
</table>

**ORDERING INFORMATION AND AMBIENT SUITABILITY**

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Weight Lbs./Kg</th>
<th>Watts</th>
<th>Voltage</th>
<th>Amps</th>
<th>EML Fluted Lumens</th>
<th>EMLC Clear Lumens</th>
<th>40°C</th>
<th>55°C</th>
<th>40°C</th>
<th>55°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>EML4030</td>
<td>26.00 / 11.79</td>
<td>40</td>
<td>120-277VAC</td>
<td>0.46-0.16</td>
<td>3479</td>
<td>3750</td>
<td>T6</td>
<td>T6</td>
<td>T4A (EFG)</td>
<td>T4 (EFG)</td>
</tr>
<tr>
<td>EML4033</td>
<td></td>
<td>40</td>
<td>347-480VAC</td>
<td>0.14-0.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EML5030</td>
<td></td>
<td>50</td>
<td>120-277VAC</td>
<td>0.43-0.18</td>
<td>5740</td>
<td>5741</td>
<td>T6</td>
<td>T6</td>
<td>T4A (EFG)</td>
<td>T4 (EFG)</td>
</tr>
</tbody>
</table>

**TYPICAL WEIGHTS (LBS.) W/STANDARD GLOBE AND GUARD - EML (C) SERIES**

| Pendant 29.33 | Ceiling 31.79 | Wall 33.25 | Stanchion 30.94 |
**FEATURES - SPECIFICATIONS**

**Compliances**
- UL-8750 for LED lighting
- UL-844 Electric Lighting Fixtures for use in Hazardous Locations
- UL Marine Type Electric Lighting Fixtures
- Type 3, 4, 4X, 7CD, 9EF

**Materials**
- Housing, splice box, and 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 are aluminum with white finish

**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)
- Explosion-proof with Traditional Industrial Appearance and Suitability
- Mounting choice – Pendant, ceiling, 25° stanchion or 90° wall mount, all with “wireless” design that allows fast, easy fixture installation or removal for maintenance.
- Accessories – Available with or without guard, standard dome or angle reflector
- EZL LED Housings can be retrofitted to existing EZ splice boxes; upgrade from Incandescent, Fluorescent or HID
- 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
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000K (CCT range; approx. 70 CRI)
- Ambient suitability -40°C to 55°C
- Instant on – Including after power interruption
- “World Voltage” 120-277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- Factory Sealed Construction – No external seal required, simply wire mounting cap and thread-in fixture to install
- Warm LED color option available with 3070

**Catalog Number Logic**

```
<table>
<thead>
<tr>
<th>Series Constant</th>
<th>Lamp Wattage</th>
<th>Voltage, Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>EZL 125 30 A2 G AN</td>
<td>55 – 55 W</td>
<td>30 – 120 - 277 VAC, 50/60 Hz</td>
</tr>
<tr>
<td></td>
<td>65 – 65 W</td>
<td>33 – 347 - 480 VAC, 50/60 Hz</td>
</tr>
<tr>
<td></td>
<td>90 – 90 W</td>
<td>34 – 120-250VDC</td>
</tr>
<tr>
<td></td>
<td>95 – 95 W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100 – 100 W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>125 – 125 W</td>
<td></td>
</tr>
</tbody>
</table>
```

**Options**
- AN – Assembled Fixture
- EB – Eyebolts
- 3070 – 3000K (CCT) and 70 CRI LEDs

**Guard**
- G – Guard
  (omit G if guard is not required)

**Mounting Type**
- A2 – 3/4” Pendant
- A3 – 1” Pendant
- X2 – 3/4” Ceiling
- X3 – 1” Ceiling
- B2 – 3/4” Bracket
- B3 – 1” Bracket
- D4 – 1-1/4” / 1-1/2” Stanchion
## EZL SERIES

### EXPLOSION PROOF – ORDERING INFORMATION, COMPONENTS & RATINGS

#### EZL SERIES PENDANT WITH OPTIC AND GUARD

<table>
<thead>
<tr>
<th>WATTS</th>
<th>HUB SIZE</th>
<th>VOLTAGE</th>
<th>GLOBE &amp; GUARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>3/4&quot;</td>
<td>120-277VAC</td>
<td>EZL5530A2G</td>
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<tr>
<td>65</td>
<td>3/4&quot;</td>
<td>120-277VAC</td>
<td>EZL6530A2G</td>
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<tr>
<td>90</td>
<td>3/4&quot;</td>
<td>120-277VAC</td>
<td>EZL9030A2G</td>
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<tr>
<td>95</td>
<td>3/4&quot;</td>
<td>120-277VAC</td>
<td>EZL9530A2G</td>
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<tr>
<td>100</td>
<td>3/4&quot;</td>
<td>120-277VAC</td>
<td>EZL10030A2G</td>
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<tr>
<td>125</td>
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<td>EZL12530A2G</td>
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#### EZL SERIES WALL BRACKET WITH OPTIC AND GUARD

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<th>VOLTAGE</th>
<th>GLOBE &amp; GUARD</th>
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<td>55</td>
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<tr>
<td>65</td>
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<td>120-277VAC</td>
<td>EZL6530B2G</td>
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<tr>
<td>90</td>
<td>3/4&quot;</td>
<td>120-277VAC</td>
<td>EZL9030B2G</td>
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#### EZL SERIES CEILING WITH OPTIC AND GUARD

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<th>WATTS</th>
<th>HUB SIZE</th>
<th>VOLTAGE</th>
<th>GLOBE &amp; GUARD</th>
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</thead>
<tbody>
<tr>
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<td>EZL5530X2G</td>
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<tr>
<td>65</td>
<td>3/4&quot;</td>
<td>120-277VAC</td>
<td>EZL6530X2G</td>
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<tr>
<td>90</td>
<td>3/4&quot;</td>
<td>120-277VAC</td>
<td>EZL9030X2G</td>
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<tr>
<td>95</td>
<td>3/4&quot;</td>
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<td>100</td>
<td>3/4&quot;</td>
<td>120-277VAC</td>
<td>EZL10030X2G</td>
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<tr>
<td>125</td>
<td>3/4&quot;</td>
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#### EZL SERIES STANCHION WITH OPTIC AND GUARD

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<th>GLOBE &amp; GUARD</th>
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<td>55</td>
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<td>EZL6530D4G</td>
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<td>120-277VAC</td>
<td>EZL9530D4G</td>
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<tr>
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<td>3/4&quot;</td>
<td>120-277VAC</td>
<td>EZL10030D4G</td>
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<td>EZL12530D4G</td>
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### MOUNTING BOXES

<table>
<thead>
<tr>
<th>HUB SIZE</th>
<th>PENDANT</th>
<th>CEILING</th>
<th>BRACKET</th>
<th>STANCHION</th>
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<tbody>
<tr>
<td>3/4&quot;</td>
<td>EZA2</td>
<td>EZX2</td>
<td>EZB2</td>
<td>—</td>
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<tr>
<td>1&quot;</td>
<td>EZA3</td>
<td>EZX3</td>
<td>EZB3</td>
<td>—</td>
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<tr>
<td>1-1/4&quot;7/1-1/2&quot;</td>
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<td>EZD4</td>
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### REFLECTORS

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<tr>
<th>CATALOG NUMBER</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>VMPSD40</td>
<td>Standard dome, fiberglass reinforced polyester</td>
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<tr>
<td>VMPA40</td>
<td>30° Angle fiberglass reinforced polyester</td>
</tr>
<tr>
<td>HRD400</td>
<td>Deep dome. Aluminum with white finish</td>
</tr>
<tr>
<td>HRD400ALZ</td>
<td>Deep dome with specular anodized finish</td>
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</table>

### ORDERING INFORMATION AND AMBIENT SUITABILITY

<table>
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<tr>
<th>CATALOG NO.</th>
<th>WEIGHT LBS./KG</th>
<th>WATTS</th>
<th>VOLTAGE</th>
<th>AMPS</th>
<th>DELIVERED LUMENS</th>
<th>40°C</th>
<th>55°C</th>
<th>40°C</th>
<th>55°C</th>
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<tr>
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<td>36 / 16.33</td>
<td>55</td>
<td>120-277VAC</td>
<td>0.46/0.20</td>
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<td>EFG</td>
<td>EFG</td>
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<td>120-277VAC</td>
<td>0.54/0.23</td>
<td>6515</td>
<td>T6</td>
<td>T6</td>
<td>EFG</td>
<td>EFG</td>
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<tr>
<td>EZL9030</td>
<td>90</td>
<td>120-277VAC</td>
<td>0.75/0.32</td>
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<td>T6</td>
<td>T6</td>
<td>EFG</td>
<td>EFG</td>
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<td>EZL9530</td>
<td>95</td>
<td>120-277VAC</td>
<td>0.79/0.34</td>
<td>9121</td>
<td>T6</td>
<td>T6</td>
<td>EFG</td>
<td>EFG</td>
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<td>EZL10030</td>
<td>100</td>
<td>120-277VAC</td>
<td>0.83/0.36</td>
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<td>T6</td>
<td>XXX</td>
<td>EFG</td>
<td>XXX</td>
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<td>EZL12530</td>
<td>125</td>
<td>120-277VAC</td>
<td>1.04/0.45</td>
<td>12720</td>
<td>T6</td>
<td>XXX</td>
<td>EFG</td>
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## Replacement Information

- **HIC-BEIGE** replacement wiring plug for EZBx Wall Bracket
- **Replacement Globe & Support Assemblies** EZGS1
- **Replacement Guard** EZG1

---

See www.hubbell-killark.com lighting software for latest LED photometry.
EZ SERIES

DIMENSIONS

Pendant

Ceiling

Wall Bracket

25° Stanchion

Reflector Dimensions

Standard Dome

Angle

Deep Dome

PENDANT

CEILING

BRACKET

STANCION

<table>
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<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>A</th>
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<th>C</th>
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<td>22&quot;</td>
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<td>22-7/8&quot;</td>
<td>22-1/8&quot;</td>
<td>16-2/4&quot;</td>
<td>18&quot;</td>
<td>24-7/8&quot;</td>
<td>24&quot;</td>
<td>19-13/16&quot;</td>
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<td>558</td>
<td>539</td>
<td>285</td>
<td>457</td>
<td>558</td>
<td>539</td>
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<td>457</td>
<td>580</td>
<td>561</td>
<td>425</td>
<td>457</td>
<td>631</td>
<td>609</td>
<td>503</td>
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</table>

2.50" (63) 10.25" (260) 10.25" (260) 9.87" (250) 10.75" (273)
FEATURES-SPECIFICATIONS

Applications
EAC Series adapters are designed to ease upgrading of existing Crouse-Hinds® “EV” series or existing Killark “H” series to Killark HOSTILELITE® EML or EZL series. Units are primarily designed to aid replacement of old ceiling or wall mount units where removal of the existing mounting box and conduit would be difficult or time consuming. Adapter & Killark fixtures rated Type 4.

Adapters are used with Fixture Housing, Globe, Globe Support assemblies. Complete fixture with mounting box is not required. Adapters are painted to match Killark beige fixture finish.

Features
• Setscrews permit secure adapter attachment into old mounting box and to new fixture
• Converted fixtures may be easily removed for service using the Killark EZ mounting system. Wire terminals are included in the adapter (EZTB Terminal Block)

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>DESCRIPTION</th>
<th>EXAMPLE OF MODEL UTILIZED OR REPLACED</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAC</td>
<td>Killark H series Ceiling or Wall</td>
<td>HXG-2-125 Fixture</td>
</tr>
<tr>
<td>EACH12</td>
<td>Crouse old style Ceiling Mount with lamp socket in adapter ring between fixture body and a GUF 12 pitch box</td>
<td>GUF box w/Set Screw</td>
</tr>
<tr>
<td>EZBA12</td>
<td>Crouse old style Wall Mount, old style Arm with integral lamp socket (socket in fixture in newer models) attached to GUF 12 pitch mounting box. EZBA12 includes arm</td>
<td>GUF box w/Set Screw</td>
</tr>
<tr>
<td>EACH16</td>
<td>Crouse newer style ceiling or wall fixtures w/lamp socket in fixture body; mounted to EV series 16 pitch threaded box; adapter fits in ceiling box or existing arm attached to wall fixture</td>
<td>EVA26/EV22 Box; EVBX240</td>
</tr>
<tr>
<td>EAAP-C2</td>
<td>Appleton Code-Master 2</td>
<td>CLC5075</td>
</tr>
</tbody>
</table>

Existing box & conduit
Adapter shown in red for illustration
New Killark EML or EZL series fixture
C1D2 FLOOD – INTRODUCTION & LOGIC

FEATURES-SPECIFICATIONS

Compliances
- UL-8750 for LED lighting
- ANSI/UL 1598(A)
- 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 luminaries for use in hazardous locations
- Enclosed and gasketed
- Type 3, 4X
- IP66
- IEX suffix Zone 2/21 to IEC 60079-0, 60079-15, 60079-31 Standards

Materials
- Body, end caps and lens frame corrosion resistant copper-free aluminum alloy with baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware - stainless steel
- Thermal shock and impact resistant glass lens
- High temperature silicone gasketing
- Trunnion heavy gauge galvanized steel with painted finish

LED Flood Features and Standards
- Crisp White Light for Excellent Color Rendering - Chromaticity 5000K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- LED Array Life – 100,000+ hours with 70% initial lumens
- Long Fixture Life – 50,000 - 55,000 maintenance free hours
- Ambient suitability -50°C to 55°C up to 125W
- Instant On – Including after power interruption
- World Voltage 120 – 277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- Standard Fixture is supplied with a single 3/4” NPT entry
- Warm LED color option available with 3070 option
- Chromaticity output: Standard – 5000K 70 CRI 3070 option – 3000K 70 CRI
- TURTLE option provides Amber LEDs that have no blue wavelength light
- AMBER option provides phosphor converted LEDs.

Compliance & Approvals
- UL-8750 for LED lighting
- ANSI/UL 1598(A)
- UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 2; Class II, Divisions 1 and 2; Class III
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Materials
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- All external hardware - stainless steel
- Thermal shock and impact resistant glass lens
- High temperature silicone gasketing
- Trunnion heavy gauge galvanized steel with painted finish

LED Flood Features and Standards
- Crisp White Light for Excellent Color Rendering - Chromaticity 5000K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- LED Array Life – 100,000+ hours with 70% initial lumens
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- World Voltage 120 – 277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- Standard Fixture is supplied with a single 3/4” NPT entry
- Warm LED color option available with 3070 option
- Chromaticity output: Standard – 5000K 70 CRI 3070 option – 3000K 70 CRI
- TURTLE option provides Amber LEDs that have no blue wavelength light
- AMBER option provides phosphor converted LEDs.

PATENTED LUMINAIRE DESIGN

IEX Units include Qty. 3 6mm terminals plus external ground as standard

LED Catalog Number Logic

KFL - Series Constant

KFL 125 30 XX

KFL

IEX

DLC

Options
- Voltage
- 30 – 120 - 277VAC 50/60Hz
- 33 – 347 - 480VAC 60Hz (60W to 125W models)
- 34 – 120 - 250VDC (60W to 125W models)

- Power Factor
- 0.90 - 0.93

- Options
- PL – Polycarbonate Lens
- F – Single Fuse (Not for use in Canada)
- FF – Double Fuse (Not for use in Canada)
- TBL – Terminal Blocks Loopping (Std. w/IEX)
- P1 – 120V Photocell, factory installed
- P2 – 208V-277V Photocell, factory installed
- P3 – 347V Photocell, factory installed
- D20 – 2x M20 entries
- D25 – 2x M25 entries
- D75 – 2 x 3/4” NPT
- SY – 316 SS Yoke
- IEX – IECEx & ATEX includes TBL and External Ground (to 125W)
- 3070 – 3000K (CCT) and 70 CRI LEDs
- TURTLE – Wildlife friendly Amber LEDs
- AMBER – PC Amber (Phosphor-Converted) LEDs

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

Consult website for current list of approved luminaires

See www.hubbell-killark.com lighting software for latest LED photometry
### KFL SERIES

**C1D2 FLOOD – ORDERING INFORMATION & TECHNICAL DATA**

#### Ordering Information and Ambient Suitability

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Weight Lbs./Kg</th>
<th>WATTS</th>
<th>Voltage</th>
<th>Amps</th>
<th>Delivered Lumens 40°C</th>
<th>55°C</th>
<th>C1D2 Simultaneous</th>
<th>C2D1</th>
<th>IEC Zone 2</th>
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<td>60</td>
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<td>T3C (EFG)</td>
<td>T3C (EFG)</td>
<td>T6 T5</td>
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<td>347-480VAC</td>
<td>0.31-0.23</td>
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<td>T3C (EFG)</td>
<td>T3C (EFG)</td>
<td>T6 T5</td>
<td>145 160</td>
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<td>KFL11034</td>
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<td>T3C (EFG)</td>
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<td>T6 T5 T3C</td>
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<td>T3C (EFG)</td>
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<td>T3C (EFG)</td>
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<td>T3C (EFG)</td>
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#### KFL Mounts and Accessories

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>KFS-6</td>
<td>Steel Slipfitter for 2” Pipe (2-3/8” o.d.) Tenon. Slips 3.75” Over Pipe.</td>
</tr>
<tr>
<td>KFCB</td>
<td>Heavy Duty Cast-Iron Crossarm Fitting for Horizontal Trunnion</td>
</tr>
<tr>
<td>KFWB</td>
<td>Heavy Duty Wall Mount and/or Pipe Clamp Fitting Clamps 2” Pipe (2-3/8” o.d.) Through 2-1/2” Pipe (2-7/8” o.d.)</td>
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<tr>
<td>K4040</td>
<td>Heavy Duty Steel Wall Bracket. (Must be with KFCB Crossarm Fitting)</td>
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<tr>
<td>4041</td>
<td>Heavy Duty Steel Wall Bracket 2” Pipe (2-3/8” o.d.) Tenon Fitting. Uses with KFS-6</td>
</tr>
<tr>
<td>KFLG</td>
<td>Wire Guard, 316 Stainless Steel (not used with KFL-DARK)</td>
</tr>
<tr>
<td>VMSC10</td>
<td>1” Stainless Steel Safety Cable with loop grip</td>
</tr>
<tr>
<td>KFL-DARK</td>
<td>Dark Sky Visor, White Painted Aluminum (not used with KFLG)</td>
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<tr>
<td>KFL-DOOR</td>
<td>Replacement Door and Lens Assembly (for units w/o internal reflectors)</td>
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<tr>
<td>KFL-DOOR2</td>
<td>Replacement Internal Reflector and Lens Assembly</td>
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#### Cable Gland Ordering Options

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>Entry Thread Size (NPT)</th>
<th>Bend</th>
<th>Cable Acceptance Details</th>
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<tbody>
<tr>
<td>MCX19C</td>
<td>1/2”</td>
<td>90°</td>
<td>60° (15.2) 82° (20.8)</td>
</tr>
<tr>
<td>MCX29</td>
<td>3/4”</td>
<td>90°</td>
<td>.73° (18.5) 1.03° (26.2)</td>
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</table>

For entire series, please see page 81.
**LED Flood Features and Standards**

- One 3/4” NPT hub & R-21 3/4” x 1/2” reducer is standard
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000 K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- LED Array Life – 100,000+ hours with 70% initial lumens

**LED Wattage**

<table>
<thead>
<tr>
<th>Voltage</th>
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<th>27</th>
<th>34</th>
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<td>0.26-0.31</td>
<td>0.20-0.17</td>
<td>0.2-0.1</td>
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<td>12-24VDC</td>
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<tr>
<td>120-250VDC/250VAC</td>
<td>0.25-0.21</td>
<td>0.19-0.15</td>
<td>0.2-0.1</td>
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**Options**

- LY- Less Yoke for Wall Mount
- F- Single Fuse (Not for use in Canada)
- FF- 2 Fuses (Not for use in Canada)
- SP- Surge Protection
- TBL- Terminal Blocks Looping
- D7- Dual 3/4” threaded NPT entry
- M25- Single M25 Slip-hole Entry
- M20- Single M20 Slip-hole Entry

**Supplemental 20KA/10KV Surge Protection**

- Standard for 120-277 VAC models
- Standard for 347-480 VAC models

**Dimensions**

- Trunnion Mounting Detail
- Front View
- Side View

**Catalog Number Logic**

- KFLC - Series Constant
- KFLC 45 30 X X
- LED Wattage
  - 15 - 15W “30, 27 or 34” voltage codes
  - 20 - 20W “30, 27 or 34” voltage codes
  - 25 - 25W “30, 27 or 34” voltage codes
  - 30 - 30W “30” voltage code 120 - 277VAC
  - 35 - 35W “30” voltage code 120 - 277VAC
  - 40 - 40W “30” voltage code 120 - 277VAC
  - 45 - 45W “30” voltage code 120 - 277VAC
  - 50 - 50W “30” voltage code 120 - 277VAC

- Voltage
  - 30 - 120 - 277VAC 50/60Hz
  - 27 - 12 - 24VDC input
  - 34 - 120-250VDC input; 120-277VAC (15 - 23W only)

- Options
  - LY- Less Yoke for Wall Mount
  - F- Single Fuse (Not for use in Canada)
  - FF- 2 Fuses (Not for use in Canada)
  - SP- Surge Protection
  - TBL- Terminal Blocks Looping
  - D7- Dual 3/4” threaded NPT entry
  - M25- Single M25 Slip-hole Entry
  - M20- Single M20 Slip-hole Entry
  - PL- Polycarbonate Lens
  - 3070- 3000K (CCT) and 70 CRI LEDs
LED Flood Features and Standards

- Crisp White Light for Excellent Color Rendering – Chromaticity 5000K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- 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 55°C up to 250W to -50°C for non-hazardous applications
- Instant On – Including after power interruption
- World Voltage 120 – 277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- Standard fixture is supplied with dual M20 slip holes with 3/4” NPT hub adapters with one plugged
- Warm LED color option available with 3070

Compliances
- UL-8750 for LED lighting
- ANSI/UL 1598(A)
- 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 luminaries for use in hazardous locations
- Enclosed and gasketed
- Type 3, 4X
- IP66

Materials
- Body and lens frame corrosion resistant copper-free aluminum alloy with baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware – stainless steel
- Thermal shock and impact resistant glass lens (Polycarbonate available)
- High temperature silicone gasketing
- Trunnion heavy gauge 316 stainless steel

LED Flood Features and Standards

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

Options
- PL - Polycarbonate Lens
- F - Single Fuse (Not for use in Canada)
- FF - Double Fuse (Not for use in Canada)
- TBL - Terminal Blocks Looping
- P1 - 120V Photocell, factory installed
- P2 - 208V-277V Photocell, factory installed
- P3 - 347V Photocell, factory installed
- 3070 - 3000K (CCT) and 70 CRI LEDs
- TURTLE - Wildlife Friendly Amber LEDs
- AMBER - PC Amber (Phosphor Converted) LEDs

Catalog Number Logic

<table>
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<tr>
<th>Fixture Wattage</th>
<th>Voltage</th>
<th>Options</th>
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<tr>
<td>170 - 170W</td>
<td>30 – 120 - 277VAC 50/60Hz</td>
<td>PL - Polycarbonate Lens</td>
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<tr>
<td>210 - 210W</td>
<td>33 – 347 - 480VAC 60Hz (170W to 250W)</td>
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<tr>
<td>220 - 220W</td>
<td>34 – 120 - 250VDC (170W to 250W)</td>
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<td>250 - 250W</td>
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<td>300 - 300W</td>
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<td>390 - 390W</td>
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Class I, Div. 2, Groups A, B, C, D
Class I, Zone 2, IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E, F, G
Class III
Suitable for wet locations
Marine Rated (US only)
Type 3, 4X
IP66

IEC Ex Rated Model
Zone 2 and Zone 21 areas
Ex nA IIC T6...T3, Gc
Ex tb IIC T105°C, Db
Tamb -50°C < Ta < +55°C, IP66

IECEx Certificate
QPS 15.0011

ATEX Certificate
CML 15ATEX4079X (nA)
&
CML 15ATEX3080X (tb)
KFLH SERIES

C1D2 FLOOD – ORDERING INFORMATION & TECHNICAL DATA

<table>
<thead>
<tr>
<th>CATALOG NO.</th>
<th>WEIGHT LBS./KG</th>
<th>WATTS</th>
<th>VOLTAGE</th>
<th>AMPS</th>
<th>LUMENS</th>
<th>40°C</th>
<th>55°C</th>
<th>40°C</th>
<th>55°C</th>
<th>40°C</th>
<th>55°C</th>
<th>40°C</th>
<th>55°C</th>
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<td>T4</td>
<td>T3C</td>
<td>T4</td>
<td>T3C</td>
<td>T4</td>
<td>T3C</td>
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<td>347-480VAC</td>
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Dimensions

KFLH MOUNTS AND ACCESSORIES

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<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>KFS-6</td>
<td>Steel Slipfitter for 2” Pipe (2-3/8” o.d.) Tenon. Slips 3.75” Over Pipe.</td>
</tr>
<tr>
<td>KFCB</td>
<td>Heavy Duty Cast-Iron Crossarm Fitting for Horizontal Trunnion</td>
</tr>
<tr>
<td>KFWB</td>
<td>Heavy Duty Wall Mount and/or Pipe Clamp Fitting Clamps 2” Pipe (2-3/8” o.d.)</td>
</tr>
<tr>
<td>K4040</td>
<td>Heavy Duty Steel Wall Bracket. (Must be with KFCB Crossarm Fitting)</td>
</tr>
<tr>
<td>4041</td>
<td>Heavy Duty Steel Wall Bracket 2” Pipe (2-3/8” o.d.) Tenon Fitting. Use with KFS-6</td>
</tr>
<tr>
<td>KFLG</td>
<td>Wire Guard, 316 Stainless Steel (order 2 per fixture)</td>
</tr>
<tr>
<td>VMSC10</td>
<td>10’ Stainless Steel Safety Cable with loop grip</td>
</tr>
<tr>
<td>KFLH-DARK</td>
<td>Dark Sky Visor, White Painted Aluminum</td>
</tr>
<tr>
<td>KFLH-DOOR</td>
<td>Replacement Internal Reflector and Lens Assembly (order 2 per fixture as required)</td>
</tr>
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CABLE GLAND ORDERING OPTIONS

<table>
<thead>
<tr>
<th>CATALOG #</th>
<th>ENTRY THREAD SIZE (NPT)</th>
<th>BEND</th>
<th>CABLE ACCEPTANCE DETAILS</th>
<th>DIAMETER ‘C’</th>
<th>MIN.</th>
<th>MAX.</th>
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<tbody>
<tr>
<td>MCX19C</td>
<td>1/2”</td>
<td>90°</td>
<td>60° (15.2)</td>
<td>82° (20.8)</td>
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<td></td>
</tr>
<tr>
<td>MCX29</td>
<td>3/4”</td>
<td>90°</td>
<td>.73” (18.5)</td>
<td>1.03” (26.2)</td>
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<td></td>
</tr>
</tbody>
</table>

For entire series, please see page 81.
LED Flood Features and Standards

- Crisp White Light for Excellent Color Rendering – Chromaticity 5000K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- 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 55°C up to 500W to -50°C for non-hazardous applications
- Instant On – Including after power interruption
- World Voltage 120 – 277VAC 50/60Hz
- Warm LED color option available with 3070
- Solder-LESS LED Board Connections – Vibration Resistant
- Standard fixture is supplied with dual M20 slip holes with 3/4" NPT hub adapters with one plugged

Compliances
- UL-8750 for LED lighting
- ANSI/UL 1598(A)
- 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 luminaries for use in hazardous locations
- Enclosed and gasketed
- Type 3, 4X
- IP66

Materials
- Body and lens frame corrosion resistant copper-free aluminum alloy with baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware – stainless steel
- Thermal shock and impact resistant glass lens (Polycarbonate available)
- High temperature silicone gasketing
- Trunnion heavy gauge 316 stainless steel

Features-Specifications

- UL-8750 for LED lighting
- ANSI/UL 1598(A)
- 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 luminaries for use in hazardous locations
- Enclosed and gasketed
- Type 3, 4X
- IP66

Catalog Number Logic

- KFL2H - Series Constant
- 340 - 340W
- 420 - 420W
- 440 - 440W
- 500 - 500W
- 600 - 600W
- 780 - 780W

- Voltage:
  - 30 – 120 - 277VAC 50/60Hz
  - 33 – 347 - 480VAC 60Hz
  - 34 – 120 - 250VDC (340W to 500W)

- Options:
  - PL - Polycarbonate Lens
  - F - Single Fuse (Not for use in Canada)
  - FF - Double Fuse (Not for use in Canada)
  - TBL - Terminal Blocks Looping
  - P1 - 120V Photocell, factory installed
  - P2 - 208Y-277V Photocell, factory installed
  - P3 - 347V Photocell, factory installed
  - IEX - IExEx includes TBL & External ground
  - 3070 - 3000K (CCT) and 70 CRI LEDs
  - TURTLE - Wildlife Friendly Amber LEDs
  - AMBER - PC Amber (Phosphor Converted) LEDs
### C1D2 FLOOD – ORDERING INFORMATION & TECHNICAL DATA

<table>
<thead>
<tr>
<th>CATALOG NO.</th>
<th>WEIGHT LBS./KG</th>
<th>WATTS</th>
<th>VOLTAGE</th>
<th>AMPS</th>
<th>LUMENS</th>
<th>40°C</th>
<th>55°C</th>
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<td>347-480VAC</td>
<td>1.30-0.94</td>
<td>4.34-1.00</td>
<td>4.34-1.00</td>
<td>T4A</td>
<td>T4</td>
<td>T4</td>
<td>T4</td>
<td>T3C</td>
<td>T4</td>
<td>T3C</td>
<td>T4</td>
<td>T3C</td>
</tr>
</tbody>
</table>

**Dimensions**

- **KFL2H MOUNTS AND ACCESSORIES**
  - **KFS-6**: Steel Slipfitter for 2" Pipe (2-3/8" o.d.) Tenon. Slips 3.75" Over Pipe
  - **KFCB**: Heavy Duty Cast-Iron Crossarm Fitting for Horizontal Trunnion
  - **KFWB**: Heavy Duty Wall Mount and/or Pipe Clamp Fitting Clamps 2" Pipe (2-3/8" o.d.) Through 2-1/2" Pipe (2-7/8" o.d.)
  - **K4040**: Heavy Duty Steel Wall Bracket. (Must be with KFCB Crossarm Fitting)
  - **4041**: Heavy Duty Steel Wall Bracket 2" Pipe (2-3/8" o.d.) Tenon Fitting. Use with KFS-6
  - **KFLG**: Wire Guard, 316 Stainless Steel (order 4 per fixture)
  - **VMSC10**: 10' Stainless Steel Safety Cable with loop grip
  - **KFLH-DARK**: Dark Sky Visor, White Painted Aluminum
  - **KFLH-DOOR**: Replacement Internal Reflector and Lens Assembly (order 4 per fixture as required)

- **CABLE GLAND ORDERING OPTIONS**
  - **MCX19C**: Entry Thread Size (NPT) 1/2" Bend 90° Diameter ‘C’ MIN. MAX.
    - **MCX19C**: 0.60 (15.2) 0.82 (20.8)
    - **MCX29**: 0.73 (18.5) 1.03 (26.2)

For entire series, please see page 81.
C1D1 FLOOD – INTRODUCTION & LOGIC

FEATURES-SPECIFICATIONS

Compliances
- UL-8750 for LED lighting
- ANSI/UL 1598A
- UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 1; Class II, Division 1; Class III
- CSA C22.2 no. 137-M1981 electric luminaries for use in hazardous locations
- Zone 1 and Zone 21 to IEC 60079-0, 60079-1, 60079-31, 60079-7 Standards
- Enclosed and gasketed
- Type 3, 4X
- IP66

Materials
- Body, end caps and lens frame corrosion resistant copper-free aluminum alloy with baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware - stainless steel
- Thermal shock and impact resistant extra heavy-duty glass lens
- High temperature silicone gasketing
- Trunnion heavy gauge 316 SS

LED Flood Features and Standards

Supplemental 20KA/10KV Surge Protection is standard (for 120-277 VAC models)
- Factory Sealed Construction
- One 3/4” NPT & one M20 entry standard (see logic for other choices)
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000 K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- LED Array Life – 100,000+ hours with 70% initial lumens
- Long Fixture Life – 50,000 - 55,000 maintenance free hours
- Instant On – Including after power interruption
- World Voltage 120 – 277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- LT option for models needing IECEx, Zone 1, -50°C to +55°C suitability for hydrogen

IECEx Certificate
CSA 14.0010
ATEX Certificate
SIRA14ATEX1159X

LED Flood Features and Standards

Class I, Div. 1&2, Groups B,C,D
Class I, Zone 1&2, Groups IIB+H2, IIA
Class II, Div. 1&2, Groups EFG, Class III
Enclosure Type 4X, IP66 (-50°C to +55°C)

IEC Ex Rated model (w/EX or IEX4B suffix) Zone 1, Zone 21
Ex de IIB+H2 T6..T5, Gb, IP66
Tamb -20°C ≤Ta≤ +55°C; Option LT for
-50°C ≤Ta≤ +55°C
Ex de IIB T6..T5, Gb, -50°C ≤Ta≤ +55°C
Ex tb IIIC T90°C Db, -50°C ≤Ta≤ +55°C

Suitable for Paint Spray

Catalog Number Logic

<table>
<thead>
<tr>
<th>KF1L - Series Constant</th>
<th>125</th>
<th>30</th>
<th>Options</th>
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<tbody>
<tr>
<td>Fixture Wattage</td>
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<tr>
<td>090 - 90W</td>
<td>125</td>
<td>125W</td>
<td>LT - For -50°C to +55°C, IEC Zone 1</td>
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<tr>
<td>105 - 105W</td>
<td>125</td>
<td>195W</td>
<td>D20 - Dual M-20 Entries</td>
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<tr>
<td>110 - 110W</td>
<td>125</td>
<td>195W</td>
<td>D25 - Dual M-25 Entries</td>
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<tr>
<td>Voltage</td>
<td></td>
<td></td>
<td>D75 - Dual 3/4” NPT</td>
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<tr>
<td>30 - 120 - 277VAC 50/60Hz +130-300 VDC</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>33 - 347 - 480VAC 60Hz</td>
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## KF1L SERIES

### C1D1 FLOOD – ORDERING & TECHNICAL DATA

<table>
<thead>
<tr>
<th>CATALOG NO.</th>
<th>WEIGHT LBS./KG</th>
<th>WATTS</th>
<th>VOLTAGE</th>
<th>AMPS</th>
<th>DELIVERED LUMENS</th>
<th>C1D1 40°C</th>
<th>C1D1 55°C</th>
<th>C2D1 40°C</th>
<th>C2D1 55°C</th>
<th>IEC ZONE 1 40°C</th>
<th>IEC ZONE 1 55°C</th>
<th>IEC ZONE 21 40°C</th>
<th>IEC ZONE 21 55°C</th>
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<tbody>
<tr>
<td>KFL00930</td>
<td>46.00 / 20.87</td>
<td>90</td>
<td>120-277VAC</td>
<td>0.72-0.31</td>
<td>7182</td>
<td>T6</td>
<td>T6</td>
<td>(EFG)</td>
<td>T6</td>
<td>T5</td>
<td>160-75</td>
<td>175-90</td>
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<tr>
<td>KFL00933</td>
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<td>105</td>
<td>120-277VAC</td>
<td>0.85-0.37</td>
<td>8362</td>
<td>T6</td>
<td>T6</td>
<td>(EFG)</td>
<td>T6</td>
<td>T5</td>
<td>160-76</td>
<td>175-91</td>
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<td>KFL00934</td>
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<td>110</td>
<td>120-277VAC</td>
<td>0.95-0.41</td>
<td>10590</td>
<td>T6</td>
<td>T6</td>
<td>(EFG)</td>
<td>T6</td>
<td>T5</td>
<td>160-77</td>
<td>175-92</td>
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<tr>
<td>KFL1033</td>
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<td>125</td>
<td>120-277VAC</td>
<td>1.10-0.48</td>
<td>11590</td>
<td>T6</td>
<td>T6</td>
<td>(EFG)</td>
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<td>T5</td>
<td>160-78</td>
<td>175-93</td>
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<tr>
<td>KFL1034</td>
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<td>195</td>
<td>120-277VAC</td>
<td>1.63-0.70</td>
<td>15707</td>
<td>T5</td>
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<td>T5</td>
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### Dimensions

**Trunnion Mounting Detail**

**Aiming Notes**

**KFL MOUNTS AND ACCESSORIES**

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>KFS-6</td>
<td>Steel Slipfitter for 2&quot; Pipe (2-3/8&quot; o.d.) Tenon. Slips 3.75&quot; Over Pipe</td>
</tr>
<tr>
<td>KFCB</td>
<td>Heavy Duty Cast-Iron Crossarm Fitting for Horizontal Trunnion</td>
</tr>
<tr>
<td>KFWB</td>
<td>Heavy Duty Wall Mount and/or Pipe Clamp Fitting Clamps 2&quot; Pipe (2-3/8&quot; o.d.) Through 2-1/2&quot; Pipe (2-7/8&quot; o.d.)</td>
</tr>
<tr>
<td>K4040</td>
<td>Heavy Duty Steel Wall Bracket. (Must be with KFCB Crossarm Fitting)</td>
</tr>
<tr>
<td>4041</td>
<td>Heavy Duty Steel Wall Bracket 2&quot; Pipe (2-3/8&quot; o.d.) Tenon Fitting</td>
</tr>
<tr>
<td>KFLG</td>
<td>Wire Guard, 316 Stainless Steel</td>
</tr>
<tr>
<td>VMSC10</td>
<td>10&quot; Stainless Steel Safety Cable with loop grip</td>
</tr>
<tr>
<td>KFL-DARK</td>
<td>Dark Sky Visor, White Painted Aluminum</td>
</tr>
<tr>
<td>KFL-DOOR</td>
<td>Replacement Door and Lens Assembly</td>
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</tbody>
</table>

### CABLE GLAND ORDERING OPTIONS

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>ENTRY THREAD SIZE (NPT)</th>
<th>CABLE ACCEPTANCE DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCX18</td>
<td>1/2&quot;</td>
<td>MIN.</td>
</tr>
<tr>
<td>MCX1C</td>
<td>1/2&quot;</td>
<td>0.60&quot; (15.2) 0.82&quot; (20.8)</td>
</tr>
<tr>
<td>MCX2</td>
<td>3/4&quot;</td>
<td>0.73&quot; (18.5) 1.03&quot; (26.2)</td>
</tr>
</tbody>
</table>

For entire series, please see www.hubbell-killark.com
KWPL SERIES

WALLPACK

**FEATURES-SPECIFICATIONS**

**Applications**
KWPL Wall Luminaires are ideally suited for applications requiring a pleasing aesthetic appearance or hazardous location suitability in a compact energy saving fixture. Units are made of aluminum construction for cool operation with a bronze electrostatically applied powder-coat finish. Suitable for locations such as perimeter security lighting, parking areas, factories and parking garages.

**Features**
- Aluminum with Bronze finish 1/2” hub on either side for conduit entry
- Suitability for 55°C ambient, 90°C supply wire required (see table)
- Lens thermal shock and impact resistant prismatic borosilicate glass
- Two Hubbell Guard® Corrosion resistant hex head fasteners provide water-tight seal for door gasket
- Options include: factory installed photo cells, fusing

**Compliances**
- UL 1598 Standard for Luminaires
- UL 844 Standard for lighting fixtures for hazardous locations
- CSA C22 no. 137-M1981 electric luminaires for use in hazardous locations
- Enclosed and gasketed
- Type 3, 4X
- LED Array Life – 100,000+ hours with 70% initial lumens
- Long Fixture Life – 50,000 - 55,000 maintenance free hours

**Catalog Logic**

<table>
<thead>
<tr>
<th>Lumen output</th>
<th>KWPL</th>
<th>11</th>
<th>30</th>
<th>TBL</th>
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<tr>
<td>4 – 4000 lumen</td>
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<tr>
<td>6 – 6000 lumen</td>
<td></td>
<td></td>
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<tr>
<td>8 – 8000 lumen</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>11 – 11,000 lumen</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 – 120-277VAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33 – 347-480VAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34 – 120-250VDC</td>
<td></td>
<td></td>
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</tbody>
</table>

**Options**
- F – Single Fuse
- FF – Double Fuse
- TBL – Terminal Blocks
- P1 – Photocell 120VAC
- P2 – Photocell 208-277VAC
- P3 – Photocell 347VAC
- LSP – Less Surge Protector
ORDDERING INFORMATION

ORDERING INFORMATION AND AMBIENT SUITABILITY

<table>
<thead>
<tr>
<th>CATALOG NO.</th>
<th>WEIGHT LBS./KG</th>
<th>WATTS</th>
<th>VOLTAGE</th>
<th>AMPS</th>
<th>LUMENS</th>
<th>40°C</th>
<th>55°C</th>
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<tbody>
<tr>
<td>KWPL430</td>
<td>14.00 / 6.35</td>
<td>34</td>
<td>120-277VAC</td>
<td>0.12-0.28</td>
<td>4436</td>
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<td>T4A</td>
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<td>KWPL433</td>
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<td>34</td>
<td>347-480VAC</td>
<td>0.07-0.10</td>
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<td>KWPL434</td>
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<td>46</td>
<td>120-250VDC</td>
<td>0.14-0.28</td>
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<tr>
<td>KWPL630</td>
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<td>46</td>
<td>120-277VAC</td>
<td>0.17-0.38</td>
<td>5636</td>
<td>T4A</td>
<td>T4</td>
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<tr>
<td>KWPL633</td>
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<td>347-480VAC</td>
<td>0.10-0.13</td>
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<td>KWPL634</td>
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<td>120-250VDC</td>
<td>0.18-0.38</td>
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<td>KWPL830</td>
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<td>120-277VAC</td>
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<td>KWPL834</td>
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<td>KWPL1134</td>
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<td>120-250VDC</td>
<td>0.36-0.75</td>
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1/2" feed through surface hub conduit

Photo Cell Field Kits for Harsh Type 4X and Class I, Div. 2 Locations

<table>
<thead>
<tr>
<th>PHOTO CELL FIELD KITS</th>
<th>CATALOG NUMBER</th>
<th>VOLTS</th>
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<tr>
<td>VMFSPC1</td>
<td>120VAC</td>
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</tr>
<tr>
<td>VMFSPC2</td>
<td>208-277VAC</td>
<td></td>
</tr>
<tr>
<td>VMFSPC3</td>
<td>347VAC</td>
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KWP ACCESSORIES

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<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>PGPS</td>
<td>Clear Shield (Polycarbonate) for Protecting Lens</td>
</tr>
<tr>
<td>PGWG</td>
<td>Wire Guard, Cadmium Plated Steel</td>
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<tr>
<td>PVLV</td>
<td>Glare Shield Full Cutoff Visor – Formed Bronze Aluminum Forces light to Walkway</td>
</tr>
<tr>
<td>KWPLENS</td>
<td>Replacement Door and Lens</td>
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</tbody>
</table>
EMERGENCY BATTERY SYSTEM

FEATURES-SPECIFICATIONS

Applications
The NEBS Series is a highly versatile superior lumen output, industrial application emergency lighting unit, designed to provide a minimum of 90 minutes illumination when primary power is lost. The NEBS Series provides the same level of lumen output with no light degradation for the full 90 minutes of battery discharge. It has a flame-rated, UV stable thermoplastic housing which is fully gasketed and corrosion resistant with a gray finish. LED based lamp-heads are made of high strength die-cast aluminum with a polycarbonate lens. Includes micro-controller based 3-stage charger and Lithium Iron Phosphate (LiFePO4) battery. The NEBS Series accepts 120 through 277VAC input at 50 or 60Hz. Not designed for self-diagnostics operation at 220-240VAC input. Universal mounting plate made of painted stamped steel. The NEBS is specifically designed for demanding environments, high reliability operation in industrial settings such as wet location or hose-down, food processing, food storage, production facilities, chemical plant and wastewater treatment.

Constructions
The NEBS Series housing, covers, remote housing, shield and LED Lenses are made of impact resistant polycarbonate. Lamp-heads are made of die-cast aluminum for thermal dissipation.

Installation
The unit includes a universal mounting plate which facilitates mounting to a truss or I-beam, pole, column, or wall.

Illumination
The NEBS series provides bright and uniform illumination and is specifically designed for higher mounting heights above 9’. Coverage provided by 2 sealed aluminum lamp-heads using 3 high power LEDs each. The LEDs are located in a specially designed heat dissipating lamp-head which is fully adjustable and can be locked into position. The NEBS is designed for full lumen output across the entire 90 minutes of operation. This ensures maximum visibility of the egress path over the full 90 minute discharge period.

Electronics
Upon failure of the normal utility power, a LED driver is automatically activated to power the emergency LED lamp-heads. At resumption of normal utility power, the LED driver is turned off. The battery is recharged through a micro-controller based 3-stage charger. The battery is a maintenance-free Lithium Iron Phosphate (LiFePO4) type. The NEBS series accepts dual-voltage input of 120 through 277VAC at 50 or 60 Hz. A low voltage battery disconnect feature protects the battery from severe damage during prolonged power failures. Manual testing is available at any time using the push-to-test button. The NEBS remote can be located up to 100’ from the source unit using 75°C minimum rated 12 gage wire.

Applications
The NEBS Series is a highly versatile superior lumen output, industrial application emergency lighting unit, designed to provide a minimum of 90 minutes illumination when primary power is lost. The NEBS Series provides the same level of lumen output with no light degradation for the full 90 minutes of battery discharge. It has a flame-rated, UV stable thermoplastic housing which is fully gasketed and corrosion resistant with a gray finish. LED based lamp-heads are made of high strength die-cast aluminum with a polycarbonate lens. Includes micro-controller based 3-stage charger and Lithium Iron Phosphate (LiFePO4) battery. The NEBS Series accepts 120 through 277VAC input at 50 or 60Hz. Not designed for self-diagnostics operation at 220-240VAC input. Universal mounting plate made of painted stamped steel. The NEBS is specifically designed for demanding environments, high reliability operation in industrial settings such as wet location or hose-down, food processing, food storage, production facilities, chemical plant and wastewater treatment.

Class I, Division 2, Groups A, B, C, D
Class I, Zone 2, Groups IIA, IIB, IIB+H2, IIC
Class II, Division 1, Groups E, F, G
Class III
Suitable for wet locations
Type 4, 4X
IP66

UL Sanitation Certified with FP Option
Operating Temperature:
C1D2 & C2D1: 50° to 122°F (10° to 50°C)
C1D2 & C2D1: with heater option -22° to 122°F (-30° to 50°C)

Spectron 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. Multi-color 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)

SERVICE ALERT CODES
- BATTERY DISCONNECTED
- BATTERY FAULT
- CHARGER FAULT
- LED DRIVER FAULT
- LAMP FAULT
- LOAD LEARN FAILURE
- ALTERNATING = LOAD LEARN PROGRESS
- PUSH TO TEST

OPERATING STATUS
- OFF = AC OFF
- ON = AC ON
- BLINKING = TEST IN PROGRESS

KILLARK®

SEE WWW.HUBBELL-KILLARK.COM LIGHTING SOFTWARE FOR LATEST LED PHOTOMETRY
# NEBS SERIES

## EMERGENCY BATTERY SYSTEM

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity</th>
<th>Self-Diagnostics</th>
<th>Application</th>
<th>Lamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEBS6</td>
<td>6 - 6 Watt</td>
<td>Blank - None</td>
<td>FP - Food Processing Rated</td>
<td>Blank - 3 Watt LED lamps</td>
</tr>
<tr>
<td>NEBS6</td>
<td>12 - 12 Watt</td>
<td>LP - Spectron® Self-Diagnostics</td>
<td>C1D2 - Class 1 Div. 2</td>
<td>06L - 6 Watt LED lamps</td>
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## OPERATING TEMPERATURE IN °C

<table>
<thead>
<tr>
<th>AMBIENT °C</th>
<th>CLASS 1 DIV. 2 A, B, C, D</th>
<th>CLASS 2 DIV. 1 E, F, G</th>
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<tbody>
<tr>
<td>40</td>
<td>T6</td>
<td>T6</td>
</tr>
<tr>
<td>50</td>
<td>T5</td>
<td>T6</td>
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## ADDITIONAL PRODUCT INFORMATION

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>BATTERY</th>
<th>CAPACITY</th>
<th>LAMP(W)</th>
<th>LUMENS PER LAMP</th>
<th>RUNTIME</th>
<th>REMOTE CAPABLE</th>
<th>REMOTE PART NUMBER</th>
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<tbody>
<tr>
<td>NEBS6I-C1D2</td>
<td>LiFePO4</td>
<td>6 watts</td>
<td>3 watts</td>
<td>331</td>
<td>90 min</td>
<td>Yes</td>
<td>NEBSRS-C1D2</td>
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<td>NEBS6I-C2D1</td>
<td></td>
<td>12 watts</td>
<td>3 watts</td>
<td>331</td>
<td>90 min</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>NEBS12I-C1D2</td>
<td></td>
<td>12 watts</td>
<td>6 watts</td>
<td>514</td>
<td>90 min</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>NEBS12I-C2D1</td>
<td></td>
<td>12 watts</td>
<td>6 watts</td>
<td>514</td>
<td>90 min</td>
<td>Yes</td>
<td>NEBSRD-C1D2</td>
</tr>
<tr>
<td>NEBS12I-C1D2-06L</td>
<td></td>
<td>12 watts</td>
<td>3 watts</td>
<td>331</td>
<td>90 min</td>
<td>Yes</td>
<td>NEBS12I-C1D2-06L</td>
</tr>
<tr>
<td>NEBS12I-C2D1-06L</td>
<td></td>
<td>12 watts</td>
<td>6 watts</td>
<td>514</td>
<td>90 min</td>
<td>No</td>
<td>N/A</td>
</tr>
</tbody>
</table>

## INPUT POWER CONSUMPTION

<table>
<thead>
<tr>
<th>INPUT VOLTAGE</th>
<th>AMPS.</th>
<th>MAX. WATTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEBS6</td>
<td>120</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>277</td>
<td>0.04</td>
</tr>
<tr>
<td>NEBS12</td>
<td>120</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>277</td>
<td>0.04</td>
</tr>
</tbody>
</table>

## ACCESSORIES

- **NEBSRS**: Type 4X Rated Single Head Remote
- **NEBSRD**: Type 4X Rated Double Head Remote
- **NEBSRS-FP**: Food Processing Rated Single Head Remote
- **NEBSRD-FP**: Food Processing Rated Double Head Remote
- **NEBSWG**: Wire Guard (Does not include Food Processing option) 15"H x 14"L x 7"D
- **NEBSRD-C1D2**: Class 1, Div. 2 Remote, 3W heads, 1 conduit hub included
- **NEBSRD-C2D1**: Class 2, Div. 1 Remote, 3W heads with shield, 1 conduit hub included

The NEBS Series meets proposed California Energy Commission (CEC) requirements for limits on power consumption in maintenance mode with less than 0.5 watts.

- Maintenance Mode Power Consumption 120VAC- 0.33W
- Maintenance Mode Power Consumption 277VAC- 0.36W
INDUSTRIAL PARAMETERS CH=30', R=10/10/10, CEILING MOUNTED (MULTIPLE UNIT SPACING), 6' PATH

<table>
<thead>
<tr>
<th>MOUNTING HEIGHT</th>
<th>NEBS12I-06L (6 WATT HEAD OPTION)</th>
<th>NEBS66I (3 WATT HEADS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAX SPACING @ 1 FC AVG.</td>
<td>62' 65' 68' 71' 74' 77' 81'</td>
<td>43' 45' 48' 51' 53' 56' 59'</td>
</tr>
<tr>
<td>MAX SPACING @ 1 FC MIN.</td>
<td>35' 34' 33' 32' 31' 29'</td>
<td>28' 28' 27' 27' 26' 24' 22'</td>
</tr>
</tbody>
</table>

* Multiple unit spacing based on 6' path
EMERGENCY BATTERY SYSTEM – INTRODUCTION

HOSTILEITE® EBS

EMERGENCY
FEATURES-SPECIFICATIONS

Applications
Where required by the NEC (or local “Life Safety” code) for safe egress (over doors, aisles, stairs, walkways, exit paths, and outer perimeter walls) to provide illumination during interruption of normal power to area lighting.

In indoor or outdoor locations made hazardous by the presence of flammable gas, vapors, or dusts. Includes refinery/chemical production and storage, grain processing, waste water treatment facilities and any area requiring heavy-duty dependable emergency lighting.

Exclusive Features
- LED Heads provide clear crisp illumination at 5000° Kelvin
- LED Head L70 value 100,000 hours for minimal maintenance
- Two head models up to 500% brighter than competitive non-LED units
- Enclosure Type 4 (Type 4) for wet and harsh locations
- Group B is standard when using EBSHK type heads
- Automatic Safety Disconnect – Removing main cover disconnects battery power
- Ambient Suitability 0°C to 45°C Battery Unit; Heads to 55°
- Compact unit requires only two mounting points
- World Voltage 120-277 VAC 50/60Hz input

Other Features
- High % of lumens maintained during 90 minute egress cycle
- EBSHK type heads are fully adjustable on unit or remote when ordered with RFSL Factory Sealed mounting kits
- EBSEL type heads are factory sealed on their EZ type mounting boxes
- Heads can be remote mounted over 300° from battery unit
- Ni-Cad sealed batteries provide 90 minutes of illumination
- Integral base unit LED pilot light indicates AC power is present
- Choice of Integral or Remote Push-To-Test station to verify system operation
- Vapor Capsule to inhibit corrosion is standard with main enclosure unit
- Terminal Blocks identified for incoming and outgoing connections

Compliances
- UL 1598 Standard for Luminaires
- UL 8750 for LED Lighting
- UL 844 Luminaires for Hazardous Locations
- UL 1203 Explosion-Proof/Dust-Ignition-Proof Electrical Enclosures
- UL 924 Emergency Lighting
- CSA C22.2 no. 137-M1981 Luminaires for Hazardous Locations
- CSA C22.2 no. 30-1986 C1D1 Enclosures
- CSA C22.2 no. 25-1066 C2D1 EFG Enclosures
- Enclosure Type 4
- Type 4, 7BCD, 9EFG

Materials
- Main Enclosure and Heads Copper Free Aluminum alloy with Baked Powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- Attachment fittings copper-free aluminum
- External hardware 316 Stainless Steel
- EBSEL reflectors EXIT accessory aluminum with white paint

Notes
- Main EBS unit is CID1 Grp B (Suitable Zone 1 IIB+H2) with attached EBSHK heads or no heads; with attached EBSEL heads unit is CID1 Groups CD (Suitable Zone 1 IIB, IIA)
**EMERGENCY BATTERY SYSTEM – LOGIC & COMPONENTS**

### Catalog Number Logic

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBS23DH</td>
<td>EBS23DH - P T A D</td>
</tr>
</tbody>
</table>

#### Test Options

- **P** – Push-To-Test on Enclosure
- **R** – Remote Push-To-Test Station (EBS-PTT shipped separately)
- **N** – None - ordered separately or breaker controlled

#### Time Delay Option

- **T** – Power Resumption Emergency Time-delay (Factory set approx. 15 min.) 120 thru 277V
- **N** – No Time-Delay

#### Luminaire Head Options

<table>
<thead>
<tr>
<th>N</th>
<th>No heads - For Remote Heads Ordered Separately</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2 EBSHK1030 Heads Factory Attached</td>
</tr>
<tr>
<td>B</td>
<td>2 EBSEL1030 Heads (Less Guards) and Fittings for Attachment</td>
</tr>
<tr>
<td>BG</td>
<td>2 EBSEL1030 Heads with Guards and Fittings for Attachment</td>
</tr>
<tr>
<td>BE</td>
<td>2 EBSEL1030 Heads with 1 Guard and 1 HEXA-100 EXIT and Fittings for Attachment</td>
</tr>
<tr>
<td>C</td>
<td>1 EBSHK1030 Head Attached and 1 EBSEL1030 Head (Less Guard) and Fittings for Attachment</td>
</tr>
<tr>
<td>CG</td>
<td>1 EBSHK1030 Heads Attached and 1 EBSEL1030 Head with Guard and Fittings for Attachment</td>
</tr>
<tr>
<td>CE</td>
<td>1 EBSHK1030 Heads Attached and 1 EBSEL1030 Head with HEXA-100 EXIT and Fittings for Attachment</td>
</tr>
<tr>
<td>D</td>
<td>1 EBSEL1030 Only (2nd Head Remote - Ordered Separately)</td>
</tr>
<tr>
<td>E</td>
<td>1 EBSEL1030 Only Less Guard and Fittings for Attachment (2nd Head Remote - Ordered Separately)</td>
</tr>
<tr>
<td>ED</td>
<td>1 EBSEL1030 Only with HEXA100 EXIT and Fittings for Attachment</td>
</tr>
</tbody>
</table>

#### Drain

- **D** – Group B Drain for Wet Applications including condensation from heat <> cold cycling
- **Blank** – Not included

---

**EBS UNIT - BOTTOM DETAIL**

- **A** Optional Push-To-Test
- **B** Optional Group B Drain
- **C** Standard Pilot Light
- **D** Entry for Remote P-T-T Station
- **E** Power Entry (also on top)

The EBS23 System is designed to power 2 Heads for operation (total attached or remote); each Head is approximately 10 Watts.
## EBS SERIES

**EMERGENCY BATTERY SYSTEM – PRE-CONFIGURED UNITS**

### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>INTEGRAL PUSH-TO-TEST</th>
<th>REMOTE PUSH-TO-TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EBS SYSTEM WITH TWO EBSHK HEADS</strong></td>
<td><strong>EBS SYSTEM WITH TWO EBSEL HEADS WITH GUARDS</strong></td>
</tr>
<tr>
<td>Integral PTT, Two EBSHK</td>
<td>Integral PTT, Two EBSEL Heads w/ Guards</td>
</tr>
<tr>
<td>EBS23DH-PNA</td>
<td>EBS23DH-PTNA</td>
</tr>
<tr>
<td>EBS23DH-PNA</td>
<td>EBS23DH-PN8G</td>
</tr>
<tr>
<td>EBS23DH-PN8G</td>
<td>EBS23DH-RTBG</td>
</tr>
<tr>
<td><strong>EBS SYSTEM WITH TWO EBSEL HEADS WITH GUARDS</strong></td>
<td><strong>EBS SYSTEM WITH ONE EBSHK HEAD &amp; 1 EBSEL HEAD WITH GUARD</strong></td>
</tr>
<tr>
<td>Integral PTT, Two EBSEL Heads w/ Guards</td>
<td>Integral PTT, Two EBSEL Heads w/ Guards</td>
</tr>
<tr>
<td>Remote PTT, Two EBSEL Heads w/ Guards</td>
<td>Remote PTT, Two EBSEL Heads w/ Guards</td>
</tr>
<tr>
<td>EBS23DH-PNBG</td>
<td>EBS23DH-RNBG</td>
</tr>
<tr>
<td>EBS23DH-PTBG</td>
<td>EBS23DH-RTBG</td>
</tr>
<tr>
<td><strong>EBS SYSTEM WITH ONE EBSHK HEAD &amp; 1 EBSEL HEAD WITH GUARD</strong></td>
<td><strong>EBS SYSTEM WITH TWO EBSEL HEADS ONE WITH EXIT</strong></td>
</tr>
<tr>
<td>Integral PTT, One EBSHK &amp; One EBSEL Head w/ Guard</td>
<td>Integral PTT, Two EBSEL Heads, One w/ Guard</td>
</tr>
<tr>
<td>Remote PTT, One EBSHK &amp; One EBSEL Head w/ Guard</td>
<td>Remote PTT, Two EBSEL Heads, One w/ Guard</td>
</tr>
<tr>
<td>EBS23DH-PNCG</td>
<td>EBS23DH-PTCG</td>
</tr>
<tr>
<td>EBS23DH-PNCG</td>
<td>EBS23DH-PNBE</td>
</tr>
<tr>
<td>EBS23DH-PTCG</td>
<td>EBS23DH-RNCG</td>
</tr>
<tr>
<td>EBS23DH-RNCG</td>
<td>EBS23DH-RTCG</td>
</tr>
<tr>
<td><strong>EBS SYSTEM WITH TWO EBSEL HEADS ONE WITH EXIT</strong></td>
<td><strong>EBS SYSTEM WITH ONE EBSHK HEAD &amp; ONE EBSEL HEAD WITH EXIT</strong></td>
</tr>
<tr>
<td>Integral PTT, Two EBSEL Heads, One w/ EXIT, One w/ Guard</td>
<td>Integral PTT, One EBSHK Head, One EBSEL w/ EXIT</td>
</tr>
<tr>
<td>Remote PTT, Two EBSEL Heads, One w/ EXIT, One w/ Guard</td>
<td>Remote PTT, One EBSHK Head, One EBSEL w/ EXIT</td>
</tr>
<tr>
<td>EBS23DH-PNBE</td>
<td>EBS23DH-PNCE</td>
</tr>
<tr>
<td>EBS23DH-PNBE</td>
<td>EBS23DH-RNCE</td>
</tr>
<tr>
<td>EBS23DH-PTBE</td>
<td>EBS23DH-RTCE</td>
</tr>
<tr>
<td><strong>EBS SYSTEM WITH ONE EBSHK HEAD &amp; ONE EBSEL HEAD WITH EXIT</strong></td>
<td><strong>EBS SYSTEM ONLY FOR REMOTE HEADS (ORDER TWO SEPARATELY)</strong></td>
</tr>
<tr>
<td>Integral PTT, One EBSHK Head, One EBSEL w/ EXIT</td>
<td>Integral PTT, No Heads</td>
</tr>
<tr>
<td>Remote PTT, One EBSHK Head, One EBSEL w/ EXIT</td>
<td>Remote PTT, No Heads</td>
</tr>
<tr>
<td>EBS23DH-PNCE</td>
<td>EBS23DH-PNN</td>
</tr>
<tr>
<td>EBS23DH-PNCE</td>
<td>EBS23DH-PTN</td>
</tr>
<tr>
<td>EBS23DH-RNCE</td>
<td>EBS23DH-RNN</td>
</tr>
<tr>
<td>EBS23DH-RTCE</td>
<td>EBS23DH-RTN</td>
</tr>
</tbody>
</table>

*Class I, Div. 1&2, Groups B,C,D*
*Class I, Zone 1&2, Groups IIB+H2, IIA*
*Class II, Div. 1&2, Groups EFG*
*Class III*
*Enclosure Type 4 (Type 4, 7B CD, 9EFG)*
*File LR11713*

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EMERGENCY BATTERY SYSTEM – REMOTE HEADS & ACCESSORIES

**EBSEL1030 COMPONENTS & ACCESSORIES – DESCRIPTION**

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBSEL 10W Head Only with LED’s, Less Mount and Guard ①</td>
<td>EBSEL1030</td>
</tr>
<tr>
<td>Guard</td>
<td>EMG1</td>
</tr>
<tr>
<td>Red Guard – used to signify remote fixture is for Emergency</td>
<td>EMG1-R</td>
</tr>
<tr>
<td>EXIT Accessory – 3-sided white painted aluminum</td>
<td>HEXA-100</td>
</tr>
<tr>
<td>Dome Reflector</td>
<td>ERS15</td>
</tr>
<tr>
<td>Angle Reflector</td>
<td>ERA15</td>
</tr>
<tr>
<td>Sealed Fittings Set for attachment of Pendant EBSEL to EBS23HD-xxx</td>
<td>EBS-AHFS</td>
</tr>
<tr>
<td>Replacement Globe and Support Assembly</td>
<td>EMGS1</td>
</tr>
</tbody>
</table>

① Cannot be used as a stand alone product and is not certified unless used with EBS23DH unit.

**MOUNTING BOXES**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>PENDANT</th>
<th>CEILING</th>
<th>BRACKET</th>
<th>STANCHION</th>
<th>HUB SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EZA2</td>
<td>EZA2</td>
<td>EZX2</td>
<td>EZA2</td>
<td>EZA2</td>
<td>3/4”</td>
</tr>
<tr>
<td>EZA3</td>
<td>EZA3</td>
<td>EZX3</td>
<td>EZA3</td>
<td>EZA3</td>
<td>1”</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1-1/4” / 1-1/2”</td>
</tr>
</tbody>
</table>

**EBS23DH SERIES ACCESSORIES – DESCRIPTION**

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Push-To-Test Station Group B 3/4” Feed-Thru w/Close Up Plug</td>
<td>EBS-PTT</td>
</tr>
<tr>
<td>Remote Push-To-Test Station with Lock Off, Group B 3/4” Feed-Thru</td>
<td>EBS-PTT-L0</td>
</tr>
<tr>
<td>Lock-Off for Integral Push-To-Test</td>
<td>G010502</td>
</tr>
<tr>
<td>Sealed Fittings Set for attachment of EBSHK to GEBC-2 or GEBL-2</td>
<td>EBS-AHFS</td>
</tr>
<tr>
<td>Replacement Battery Pack and Electronics</td>
<td>KLBP01</td>
</tr>
<tr>
<td>Replacement Vapor Capsule for corrosion protection</td>
<td>EBS-VC</td>
</tr>
</tbody>
</table>

EBSHK Heads can be aimed up to 45 above horizontal – If flush on wall will require spacing out.
EMERGENCY BATTERY SYSTEM – ELECTRICAL & TEMPERATURE DATA

**EBS23DH ELECTRICAL DATA**

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>VOLTAGE</th>
<th>WATTS</th>
<th>CURRENT</th>
<th>VOLTAGE</th>
<th>WATTS</th>
<th>CURRENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBS23DH</td>
<td>120-277VAC</td>
<td>7.5</td>
<td>.1 A</td>
<td>33VDC</td>
<td>23</td>
<td>700mA</td>
</tr>
</tbody>
</table>

**THERMAL PERFORMANCE DATA**

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>AMBIENT</th>
<th>CID1</th>
<th>CID1</th>
<th>SUITABILITY</th>
<th>SUPPLY WIRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBS23DH</td>
<td>45°C</td>
<td>T6</td>
<td>EFG</td>
<td>0-45°C</td>
<td>75°C</td>
</tr>
<tr>
<td>EBSEL1030</td>
<td>55°C</td>
<td>T6</td>
<td>EFG</td>
<td>-40 to 40°C</td>
<td>75°C</td>
</tr>
<tr>
<td>EBSHK1030</td>
<td>55°C</td>
<td>T6</td>
<td>EFG</td>
<td>-40 to 40°C</td>
<td>75°C</td>
</tr>
</tbody>
</table>

* Heads are NOT certified for use without EBS Battery Unit

**4 Head EBS option:**

EBS units are designed for 2 head operation and will provide the lumens noted at right. However, 4 heads can be connected and will operate for 90 minutes at half the published lumen values. The EBSHK1030 would provide 456 lumens; the EVSEL1030 540 lumens. Instructions for wiring are included with the main EBS unit.

**EMERGENCY MODE LUMENS**

<table>
<thead>
<tr>
<th>ZONE</th>
<th>LUMENS</th>
<th>FIXT%</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Min.</td>
<td>94.4%</td>
<td>102 Lumens</td>
</tr>
<tr>
<td>45 Min.</td>
<td>91.3%</td>
<td>987 Lumens</td>
</tr>
<tr>
<td>90 Min.</td>
<td>89.3%</td>
<td>966 Lumens</td>
</tr>
</tbody>
</table>

Absolute Photometry: Total Luminaire Efficiency = N.A.%
Spacing to Mounting Height Ratio 2.1

**EBSHK Heads can be aimed up to 45° above horizontal – if flush on wall will require spacing out.**
EMERGENCY BATTERY SYSTEM – DIMENSIONS & WEIGHTS

Dimensions - EBS with HK Heads

Dimensions - EBS with EL Heads

Dimensions - EBS with EL-EXIT & HK Heads

Dimensions - EBS with EL Heads

Dimensions - Remote Test Station

Dimensions - EBS Main Unit

Dimensions - Factory Sealed Remote HK Head For EBSEL with mounting Dimensions, see EM/15 in lighting section.

WEIGHTS (SHIPPING) INDIVIDUAL AND COMBINATIONS

<table>
<thead>
<tr>
<th>Item Description</th>
<th>LBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGS23DH Main Unit Only</td>
<td>36.6</td>
</tr>
<tr>
<td>EBSEL1030 Pendant Head Only w/ Fittings Set</td>
<td>12.3</td>
</tr>
<tr>
<td>EBSHK1030 Head Only w/ Fittings Set</td>
<td>5.0</td>
</tr>
<tr>
<td>EBSHK1030-RFSC (or RFS)</td>
<td>11.0</td>
</tr>
<tr>
<td>EBS-PTT</td>
<td>3.0</td>
</tr>
<tr>
<td>EBS-AHFS Factory Sealed Fittings Set</td>
<td>0.6</td>
</tr>
<tr>
<td>EBS23DH &amp; 1 EBSHK w/ Fittings</td>
<td>41.6</td>
</tr>
<tr>
<td>EBS23DH &amp; 2 EBSHK w/ Fittings</td>
<td>46.6</td>
</tr>
<tr>
<td>EBS23DH &amp; 1 EBSEL w/ Fittings</td>
<td>48.0</td>
</tr>
<tr>
<td>EBS23DH &amp; 2 EBSEL w/ Fittings</td>
<td>61.2</td>
</tr>
<tr>
<td>EBS23DH &amp; 1 EBSEL &amp; 1 EBSHK w/ Fittings</td>
<td>53.9</td>
</tr>
</tbody>
</table>
NON-METALLIC CORROSION RESISTANT HAZARDOUS FIXTURES

FEATURES - SPECIFICATIONS

Features
- Corrosive resistant body molded from 30% glass-filled thermoset polyester
- Energy and labor-saving LED
- High Efficacy (lumens per watt)
- Compact Size
- Diffuse polycarbonate globe that softens the light while providing impact protection
- Accessories include polycarbonate dome reflectors and wall extension
- Type 3, 4, & 4X Rated
- IP66
- Marine Rated
- ABS Approved

Catalog Number Logic

Housing Series
NVL

Lumen Output
2 – Approx. 2000 Lumens

Voltage
30 – 120-277VAC 50/60 Hz

Mounting Type
A – Pendant
X – Ceiling
B – Wall Bracket

Guard
G – Guard
N – No Guard

Entry
2 – ¾” NPT
8 – M20 (X, B)

ENVIRO RITE II

NVL COMPONENTS AND ACCESSORIES

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>NV2AG</td>
<td>Pendant 3/4” NPT Pendant splice box with 316 stainless steel set screw at the conduit connection</td>
</tr>
<tr>
<td>NV2XG</td>
<td>Ceiling Box 3/4” NPT Ceiling box vol. 24 cu. inches</td>
</tr>
<tr>
<td>NV2MG</td>
<td>M20</td>
</tr>
<tr>
<td>NV2BG</td>
<td>Wall Bracket Use with NV2XG or NV2MG for wall mount</td>
</tr>
<tr>
<td>NVPSD12</td>
<td>Reflector White Polycarbonate Reflector (secured by guard)</td>
</tr>
<tr>
<td>NVEXTG</td>
<td>Extension for wall mount fixture with reflector</td>
</tr>
<tr>
<td>NV2CG</td>
<td>Gray Cover Blank covers for NV2XG &amp; NV2MG Ceiling Boxes</td>
</tr>
<tr>
<td>NV2CC</td>
<td>Clear Cover</td>
</tr>
<tr>
<td>NV2GG-S</td>
<td>Compact Guard Low Profile Non-Metallic Guard that is also used to secure reflector</td>
</tr>
</tbody>
</table>
NON-METALLIC CORROSION RESISTANT HAZARDOUS FIXTURES

COMPONENT PARTS

Pendent  Ceiling/Wall  Ceiling/Wall  Wall Elbow  NV2GG-S Compact Guard  Extension  Reflector  Gray Blank  Clear

Ceiling Mount

Pendant Mount

Wall Mount
V SERIES LED
FEATURES-SPECIFICATIONS

Introduction
Killark ‘VSL’ Series LED fixtures are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or Type 3 and 4 areas where wind, water, snow or high ambient conditions can be expected. VSL’s are sized to replace “Utility” type fixtures (incandescent or CFL’s) in hallways, closets, elevator pits, docks, stairwells, access tunnels, and mechanical rooms. These fixtures can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC. Typical applications include manufacturing plants, and certain chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, and garage areas.

LED Luminaire Features and Standards
• Compact in Size with Traditional Industrial Appearance and Suitability
• Wide variety of optics including glass globes (clear and tempered, color) plus polycarbonate globes in clear and colors (Polycarbonate globes are suitable to 40°C.)
• Optional Mounting arrangements including Pendant, Wall, Ceiling, Stanchion and Adapters
• Fixtures available unit packed, order option CP
• VSL LED Housings can be retrofitted to existing V Series splice boxes; upgrade from CFL or incandescent
• Energy Savings – less than 13 Watts of Power; less than 16 Watts for VSL1630. Replaces 75W or higher incandescent

• Long Fixture Life – 50,000 – 55,000 maintenance free hours
• Crisp White Light for Excellent Color Rendering – Chromaticity 5000°K (CCT); 70 CRI
• Integral driver – maintains fixture’s compact profile to fit in existing spaces
• Ambient suitability -40°C to 55°C
• Instant on – including after power interruption
• “World Voltage” 120-277VAC 50/60Hz
• Solder-LESS LED Board Connections – Vibration Resistant

Compliances
• UL-8750 for LED lighting
• UL 1598 standard for luminaires
• UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 2; Class II, Division 2; Class III, Division 2
• CSA C22.2 no. 137-M1981 electric luminaries for use in hazardous locations
• Enclosed and gasketed
• Type 3, 4

Materials, Weights
• Body, splice box and guards are corrosion resistant copper-free aluminum alloy
• Baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
• Reflectors – Polypropylene for pendant or ceiling applications
• Heavy-duty silicone gasketing for Type 4 requirements

Optic Selection Examples
• Broadest trapped globe offering for Hazardous Locations in the industry
• Use as status lights or specialty/ emergency indicators

Clear Glass w/Guard  White Glass w/Guard
Red Glass  Blue Glass
Red Polycarbonate  Clear Polycarbonate

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups II,IIA
Class II, Div. 2, Groups F,G
Class III
Suitable for wet locations
Enclosure Type 4

Certified - File LR11713
**V SERIES LED Catalog Number Logic**

- **VSL Series Constant**
- **Lamp Wattage**
  - 13 = 13W LED
  - 16 = 16W LED
- **Voltage**
  - 30 – 120-277VAC (13W, 16W)
  - 27 – 12-24VDC (13W, 16W)
  - 34 – 120-250VDC (13W)
- **Mounting Type**
  - NN – Mounr Ordered Separately
  - A1 – 1/2" Pendant (VGA-1)
  - A2 – 3/4" Pendant (VGA-2)
  - F1 – 1/2" Ceiling w/Feet & Adapter (VBC-1 w/VBA)
  - F2 – 3/4" Ceiling w/Feet & Adapter (VBC-2 w/VBA)
  - X1 – 1/2" Ceiling (VGX-1)
  - X2 – 3/4" Ceiling (VGX-2)
  - C1 – 1/2" Ceiling (VGC-1)
  - C2 – 3/4" Ceiling (VGC-2)
  - H1 – 1/2" Ceiling Dead End (VGH-1)
  - H2 – 3/4" Ceiling Dead End (VGH-2)
  - D1 – 1/2" Ceiling Deep (VXA-1)
  - D2 – 3/4" Ceiling Deep (VXA-2)
  - D4 – 1-1/4" Stanchion (VD-4)
  - RA – Round (Box) Adapter (VBA)
  - SA – Square (Box) Adapter (VFPS)
  - W1 – 1/2” Wall w/Feet (VBC-1 w/VB-1)
  - W2 – 3/4” Wall w/Feet (VBC-2 w/VB-2)
  - V1 – 1/2” Wall Elbow (VB-1)
  - V2 – 3/4” Wall Elbow (VB-2)
  - FL – Elbow for “V” Box (VFL)

**Reflector**
- S – Standard Reflector (Pendant or Ceiling Use Only)
- CP – Component Pack

**Optic Color (Optic Type)**
- A – Amber (S, H, P)
- B – Blue (S, H)
- R – Red (S, H, P)
- G – Green (S, P)
- P – Purple (S)
- BG – Blue Green (S, H)
- W – White (S)

**Guard**
- G – Guard (For Glass Globes Only)
- N – No Guard (Standard on Polycarbonate Globes)
- R – Guard Red (For Glass Globes Only)

**Optics**
- S – Standard Globe (Clear)
- H – Heat Resistant (Tempered) Globe (Clear)
- P – Polycarbonate (Clear)

**COLORED GLOBE OPTIONS**

**EXAMPLE VSL1330A1SG-A**

<table>
<thead>
<tr>
<th>COLOR</th>
<th>STANDARD GLOBE</th>
<th>TEMPERED GLOBE</th>
<th>POLYCARBONATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMBER</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>BLUE</td>
<td>B</td>
<td>B</td>
<td>—</td>
</tr>
<tr>
<td>RUBY</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>GREEN</td>
<td>G</td>
<td>—</td>
<td>G</td>
</tr>
<tr>
<td>PURPLE</td>
<td>P</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>BLUE-GREEN</td>
<td>BG</td>
<td>BG</td>
<td>—</td>
</tr>
<tr>
<td>WHITE</td>
<td>W</td>
<td>W</td>
<td>W</td>
</tr>
</tbody>
</table>

**Use tempered glass or poly globe for wet location applications.**
**VSL Fixture Bodies Only**

Fixture bodies contain the LED driver and array, heat sink plus gaskets, and are threaded to accept globes, guards and reflectors. Users with KILLARK “V” Series vapor tight fixtures from the 1960’s onward can upgrade to the latest technology and, in many cases, reuse existing mounts, globes and guards. VSL bodies are designed for metallic boxes and mount directly to V Series splice boxes or adapters as indicated.

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>VSL1330</td>
<td>13W 120-277VAC 50/60Hz Body with LEDs and Driver</td>
</tr>
<tr>
<td>VSL1630</td>
<td>16W 120-277VAC 50/60Hz Body with LEDs and Driver</td>
</tr>
</tbody>
</table>

**VSL Splice Boxes**

For use with VSL Series fixture bodies.

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>HUB SIZE</th>
<th>QTY.</th>
<th>LOGIC CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>VGA-1</td>
<td>1/2&quot;</td>
<td>1</td>
<td>A1</td>
<td>Pendant mount</td>
</tr>
<tr>
<td>VGA-2</td>
<td>3/4&quot;</td>
<td>1</td>
<td>A2</td>
<td>Ceiling mount</td>
</tr>
<tr>
<td>VGH-1</td>
<td>1/2&quot;</td>
<td>1</td>
<td>H1</td>
<td>Ceiling mount</td>
</tr>
<tr>
<td>VGH-2</td>
<td>3/4&quot;</td>
<td>1</td>
<td>H2</td>
<td>Ceiling mount</td>
</tr>
<tr>
<td>VGC-1</td>
<td>1/2&quot;</td>
<td>2</td>
<td>C1</td>
<td>Ceiling mount</td>
</tr>
<tr>
<td>VGC-2</td>
<td>3/4&quot;</td>
<td>2</td>
<td>C2</td>
<td>Ceiling mount</td>
</tr>
<tr>
<td>VX-1</td>
<td>1/2&quot;</td>
<td>5</td>
<td>D1</td>
<td>Ceiling mount, deep box</td>
</tr>
<tr>
<td>VX-2</td>
<td>3/4&quot;</td>
<td>5</td>
<td>D2</td>
<td>Ceiling mount, deep box</td>
</tr>
<tr>
<td>VBC-1</td>
<td>1/2&quot;</td>
<td>4</td>
<td>F1</td>
<td>Ceiling mount, with 3 close-up plugs (requires VBA Adapter) or wall mount with VB elbow</td>
</tr>
<tr>
<td>VBC-2</td>
<td>3/4&quot;</td>
<td>4</td>
<td>F2</td>
<td>Blank close-up plate (less gasket)</td>
</tr>
<tr>
<td>VXA-1</td>
<td>1/2&quot;</td>
<td>1</td>
<td></td>
<td>Wall mount to VJ or VB boxes</td>
</tr>
<tr>
<td>VXA-2</td>
<td>3/4&quot;</td>
<td>1</td>
<td></td>
<td>Wall mount to VJ or VB boxes</td>
</tr>
<tr>
<td>VFL</td>
<td>–</td>
<td>–</td>
<td></td>
<td>Wall mount to V boxes directly or to VJ, VB boxes with VBA adapter</td>
</tr>
<tr>
<td>VB</td>
<td>1-1/4&quot;</td>
<td>1</td>
<td></td>
<td>Stanchion mount</td>
</tr>
</tbody>
</table>

**VSL Adapters**

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBA</td>
<td>Adapts fixture body to VB, VJ or steel 3-1/2” &amp; 4” splice boxes. Supplied with gasket.</td>
</tr>
<tr>
<td>VFPS</td>
<td>Adapts fixture body to steel 4” square outlet boxes or 3-1/2” or 4” octagon boxes</td>
</tr>
</tbody>
</table>

**VSL Wall/Stanchion Mounts**

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>HUB SIZE</th>
<th>QTY.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>VB-1</td>
<td>1/2&quot;</td>
<td>1</td>
<td>Wall mount to VJ or VB boxes</td>
</tr>
<tr>
<td>VB-2</td>
<td>3/4&quot;</td>
<td>1</td>
<td>Wall mount to VJ or VB boxes</td>
</tr>
<tr>
<td>VFL</td>
<td>–</td>
<td>–</td>
<td>Wall mount to V boxes directly or to VJ, VB boxes with VBA adapter</td>
</tr>
<tr>
<td>VD-4</td>
<td>1-1/4&quot;</td>
<td>1</td>
<td>Stanchion mount</td>
</tr>
</tbody>
</table>
### VSL Globes

#### VSL Globes – Ordering Information and Suffix Grid*

<table>
<thead>
<tr>
<th>COLOR</th>
<th>GLASS</th>
<th>OPTIC LOGIC</th>
<th>TEMPERED GLASS</th>
<th>OPTIC LOGIC</th>
<th>POLYCARBONATE</th>
<th>OPTIC LOGIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>VCG-100</td>
<td>S*</td>
<td>VCGP-100</td>
<td>H*</td>
<td>VPLCG-100A</td>
<td>P*</td>
</tr>
<tr>
<td>Amber</td>
<td>AMG-100</td>
<td>A</td>
<td>VAMGP-100</td>
<td>A</td>
<td>VPLCG-100A</td>
<td>A</td>
</tr>
<tr>
<td>Blue</td>
<td>VG-100</td>
<td>B</td>
<td>VBGP-100</td>
<td>B</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Ruby (Red)</td>
<td>VRG-100</td>
<td>R</td>
<td>VRGP-100</td>
<td>R</td>
<td>VPLCG-100R</td>
<td>R</td>
</tr>
<tr>
<td>Green</td>
<td>VRS-100</td>
<td>G</td>
<td>–</td>
<td>–</td>
<td>VPLCG-100G</td>
<td>G</td>
</tr>
<tr>
<td>Purple</td>
<td>VPG-100</td>
<td>P</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Blue-Green</td>
<td>VGG-100</td>
<td>BG</td>
<td>VGGP-100</td>
<td>BG</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>White</td>
<td>VWG-100</td>
<td>W</td>
<td>VWGP-100</td>
<td>W</td>
<td>VPLCG-100W</td>
<td>W</td>
</tr>
</tbody>
</table>

* Use tempered glass or polycarbonate globes for wet location applications.

### VSL Components

#### VSL Component Parts and Accessories

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAG-100</td>
<td>Aluminum Guard for use with Glass Globe</td>
</tr>
<tr>
<td>VAG-100R</td>
<td>Red Aluminum Guard for use with Glass Globe</td>
</tr>
<tr>
<td>VTG-S</td>
<td>Body to Splice Box Gasket – Silicone</td>
</tr>
<tr>
<td>VTGG1-S</td>
<td>Globe Gasket – Silicone</td>
</tr>
<tr>
<td>VPRSD-100</td>
<td>White polypropylene for pendant &amp; ceiling applications. Not for use with wall or stanchion models.</td>
</tr>
</tbody>
</table>

Typical Weights (lbs.) w/Standard Globe and Guard – VSL Series

| Pendant 700  | Ceiling 7.5 | Wall 8.09 | Stanchion 7.6 |

### VSL Thermal Ratings

#### VSL Thermal Performance Data Including VPRSD-100 Reflector

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>AMBIENT</th>
<th>GLASS GLOBE</th>
<th>POLY GLOBE</th>
<th>GLASS GLOBE</th>
<th>POLY GLOBE</th>
<th>SUPPLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>VSL1330</td>
<td>40°C</td>
<td>T6</td>
<td>T5</td>
<td>T5 (F.G)</td>
<td>T5 (F.G)</td>
<td>90°</td>
</tr>
<tr>
<td>VSL1630</td>
<td>55°C</td>
<td>T5</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>90°</td>
</tr>
<tr>
<td>VSL1830</td>
<td>40°C</td>
<td>T5</td>
<td>–</td>
<td>T5 (F.G)</td>
<td>–</td>
<td>90°</td>
</tr>
</tbody>
</table>

### VSL Electrical Ratings

#### VSL LED Body with Drivers & LEDS – Electrical Ratings

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>VOLTAGE 50/60HZ</th>
<th>WATTS</th>
<th>AMPS 120/277</th>
<th>LUMENS</th>
<th>WEIGHT LBS</th>
<th>DELIVERED LUMENS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VSL1330</td>
<td>120-277VAC</td>
<td>12.42</td>
<td>0.108/0.047</td>
<td>1300</td>
<td>5.0</td>
<td>13W 1211 1104 905</td>
</tr>
<tr>
<td>VSL1630</td>
<td>120-277VAC</td>
<td>15.64</td>
<td>0.156/0.067</td>
<td>1625</td>
<td>5.0</td>
<td>16W 1328 1308 1072</td>
</tr>
</tbody>
</table>
**CLASS II UTILITY LIGHT – INTRODUCTION & ORDERING INFORMATION**

**DV SERIES LED FEATURES - SPECIFICATIONS**

**Introduction**
Killark ‘DVL’ Series LED fixtures are designed for hazardous locations where suspended metal, carbon (such as coal) and grain dusts create explosive or ignitable mixture with the air.

**LED Luminaire Features and Standards**
- Compact in Size with Traditional Industrial Appearance and Suitability
- DVL LED Housings can be retrofitted to existing DV Series splice boxes; upgrade from incandescent housing 100 Series components
- Long Fixture Life – 50,000 - 55,000 maintenance free hours
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000°K (CCT); 70 CRI
- Integral driver – maintains fixture’s compact profile to fit in existing spaces
- Instant on – including after power interruption
- “World Voltage” 120-277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant

**Compliances**
- UL-8750 for LED lighting
- UL 1598 standard for luminaires
- UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 2; Class II, Division 2; Class III, Division 2
- CSA C22.2 no. 137-M1981 electric luminaries for use in hazardous locations

**Materials, Weights**
- Body and splice box are corrosion resistant copper-free aluminum alloy. Steel guard.
- Baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection

---

**DV SERIES LED CATALOG LOGIC**

**DV 100 SERIES**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>LAMP</th>
<th>HUB</th>
<th>PENDANT</th>
<th>CEILING</th>
<th>WALL</th>
<th>DELIVERED LUMENS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 100 13Watt</td>
<td>Included</td>
<td>1/2”</td>
<td>DVL1330A1G</td>
<td>DVL1330X1G</td>
<td>1144</td>
<td></td>
</tr>
<tr>
<td>Type 100 16Watt</td>
<td>Included</td>
<td>1/2”</td>
<td>DVL1630A1G</td>
<td>DVL1630X1G</td>
<td>1355</td>
<td></td>
</tr>
</tbody>
</table>

**DVL Series LED Catalog Logic**

- **Series Constant**
- **Wattage**
  - 13 – 13W LED
  - 16 – 16W LED
- **Voltage**
  - 30 – 120-277VAC 50/60 Hz
  - 27 – 12-24VDC input

**ACCESSORIES/COMPONENTS**

<table>
<thead>
<tr>
<th>BODIES</th>
<th>MOUNTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVL 1330</td>
<td>LED 13W</td>
</tr>
<tr>
<td>DVL 1327</td>
<td>LED 13W</td>
</tr>
<tr>
<td>DVL 1630</td>
<td>LED 16W</td>
</tr>
<tr>
<td>DVL 1627</td>
<td>LED 16W</td>
</tr>
<tr>
<td>DVL 1330</td>
<td>LED 13W</td>
</tr>
<tr>
<td>DVL 1630</td>
<td>LED 16W</td>
</tr>
<tr>
<td>DVL THERMAL RATINGS</td>
<td></td>
</tr>
<tr>
<td>CAT. NO</td>
<td>AMBIENT</td>
</tr>
<tr>
<td>DVL1330</td>
<td>40°C</td>
</tr>
<tr>
<td>DVL1630</td>
<td>40°C</td>
</tr>
<tr>
<td>DVL1330</td>
<td>55°C</td>
</tr>
<tr>
<td>DVL1630</td>
<td>55°C</td>
</tr>
</tbody>
</table>

**DVL Electrical and L70 Ratings**
Same as VSL Series - See page 73

---

**Dimensions**

**Pendant Mount**

**Ceiling Mount**

**Wall Mount overall dimensions**
Height = 13.125” (333mm)
Outward from wall = 7.4” (188mm)
FEATURES-SPECIFICATIONS

FKA Features
• Ball joint permits fixture to hang plumb. Fixture may swing up to 20° from vertical in any direction
• Cast of aluminum alloy (copper-free aluminum; less than 4/10 of 1%)
• Set screw locks fixture stem in place. Cannot accidently loosen – intended for use with threaded metal conduit
• Joint cannot twist conductor
• Suitable for fixtures up to 125 pounds

<table>
<thead>
<tr>
<th>FKA</th>
<th>CATALOG NUMBER</th>
<th>MALE THREAD</th>
<th>FIXTURE STEM SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FKA-22</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
<td></td>
</tr>
</tbody>
</table>

FH Features
• Combination splice box and flexible fixture hanger
• Ball joint permits fixture to hang plumb. Fixture may swing up to 20° from vertical
• Cast of aluminum alloy (copper-free aluminum; less than 4/10 of 1%)
• Set screw locks fixture stem in place—intended for use with threaded metal conduit
• Joint cannot twist conductors
• Cover may be removed for easy wiring—11 cu. inches
• Mounts directly to metal conduit
• Suitable for fixtures up to 125 pounds

<table>
<thead>
<tr>
<th>FH</th>
<th>TWO HUBS</th>
<th>THREE HUBS</th>
<th>CONDUIT SIZE</th>
<th>FIXTURE STEM SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHC-21</td>
<td>FHT-21</td>
<td>3/4&quot;</td>
<td>1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>FHC-22</td>
<td>FHT-22</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
<td></td>
</tr>
</tbody>
</table>

HOOKLOOP Features
• Pendant fixture hanger consists of a “HOOK” and safety bar which allows conversion to a “LOOP” configuration as necessary
• 3/4” male thread
• Maximum load 125 pounds

For replacement ball only catalog number 00890545
Listed - File E27731
Certified - File LR11851
See files for details or call Killark.
FH/Hook

**Features**
- Economical hanger for pendant fixtures
- Fixtures may absorb minor bumps and vibration through free swinging action
- Hub provided with a set screw to prevent accidental loosening of fixture stem
- A 1/2 inch hole in body is for flexible cable. Cord may be assembled with plug for quick removal of fixtures
- Cast of aluminum alloy (copper-free—less than 4/10 of 1%)
- FH supports up to 125 pounds

**V Series**

**Features**
- Flexible fixture hanger for threaded fixture stem. +120° from vertical
- Enclosed and gasketed, suitable for wet locations
- Permits angular displacement of fixture without twisting wires
- Cushioned—absorbs shock and vibration. Internal strap assures ground continuity
- Combines splice box and hanger in one unit. Splice box available in four configurations
- Cast of corrosion resistant aluminum alloy (copper-free—less than 4/10 of 1%)
- Supports up to 125 pounds

**Flexible Hangers, V Series Enclosed and Gasketed**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
<th>Hub Size</th>
<th>Fixture Stem Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>VPFHA-12</td>
<td>VGA-1</td>
<td>1/2&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>VPFHA-22</td>
<td>VGA-2</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>VPFHC-12</td>
<td>VGC-1</td>
<td>1/2&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>VPFHC-22</td>
<td>VGC-2</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>VPFHH-12</td>
<td>VGH-1</td>
<td>1/2&quot;</td>
<td>3/4&quot;</td>
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<tr>
<td>VPFHH-22</td>
<td>VGH-2</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>VPFHX-12</td>
<td>VGX-1</td>
<td>1/2&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>VPFHX-22</td>
<td>VGX-2</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

**Fixture Hangers Only**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
<th>Fixture Stem Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>VPFH-2</td>
<td>Flexible hanger cover, maximum load 125 Lbs.</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>VG-2</td>
<td>Hub cover for rigid mounting</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

Flexible cover with box, dotted line is VGA pendant

See files for details or call Killark

- File E27731 or E3397

**Features-Specifications**
**HXB/XFH/EKJ SERIES**

**FEATURES-SPECIFICATIONS**

**HXB**
- Class I, Div. 1 & 2, Groups C,D
- Class I, Zones 1 & 2, Groups IIIB, IIIA
- Class II, Div. 1 & 2, Groups E,F,G
- Class III

**Features**
- Fixture hanger for hazardous locations combining splice box and hanger
- Set screws in female hub prevents accidental loosening of fixture stem; set screws in hub cover lock cover to the splice box
- Four hubs in “X” configuration up to 3/4”
- Flange mounting ring cast as integral part of box
- Splice box wiring hole with cover for access to box interior
- Cast of corrosion resistant aluminum alloy (copper-free aluminum; less than 4/10 of 1%)  
  - Supports to 125 pounds; vol. 16 cu.

**XFH**
- Class I, Div. 1 & 2, Groups C,D
- Class I, Zones 1 & 2, Groups IIIB, IIIA
- Class II, Div. 1 & 2, Groups E,F,G
- Class III

**Features**
- Fixture hanger for hazardous locations combining splice box and hanger
- Set screws in female hub prevents accidental loosening of fixture
- Straight through conduit hubs for through feed. 20 cu
- Mounting lugs are standard
- Cast of corrosion resistant aluminum alloy (copper-free aluminum; less than 4/10 of 1%)
- Supports to 125 pounds

**EKJ**
- Class I, Div. 1 & 2, Groups A,B,C,D
- Class I, Zones 1 & 2, Groups IIIC, IIIB, IIIA
- Class II, Div. 1 & 2, Groups E,F,G
- Class III

**Features**
- Fixture pendant hanger for hazardous locations
- Permits free swing and plumb hang
- Set screws in each hub prevents accidental loosening of fixture
- Constructed of seamless bronze hose with brass outer braid. Asphaltum impregnated jute inner insulates and protects wire from abrasion. Brass female end fittings are supplied with short nipples
- Electrical ground continuity without bonding jumper
- Suitable for wet locations as well as hazardous locations
- Flexible lengths 4 to 18 inches
- Supports to 125 pounds

**HXB SPLICE BOX AND HANGER**

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>CONDUIT HUB SIZE</th>
<th>FIXTURE STEM SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HXB-11</td>
<td>1/2”</td>
<td>1/2”</td>
</tr>
<tr>
<td>HXB-12</td>
<td>1/2”</td>
<td>3/4”</td>
</tr>
<tr>
<td>HXB-21</td>
<td>3/4”</td>
<td>1/2”</td>
</tr>
<tr>
<td>HXB-22</td>
<td>3/4”</td>
<td>3/4”</td>
</tr>
<tr>
<td>HX8C</td>
<td>Blank Cover</td>
<td></td>
</tr>
<tr>
<td>HIC-SILVER</td>
<td>Replacement Wiring Plug</td>
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**XFH SPLICE BOX AND HANGER**

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>CONDUIT HUB SIZE</th>
<th>FIXTURE STEM SIZE</th>
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<tbody>
<tr>
<td>XFH-21</td>
<td>3/4”</td>
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</tr>
<tr>
<td>XFH-22</td>
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**EKJ FLEXIBLE PENDANT HANGER**

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>CONDUIT HUB SIZE</th>
<th>FIXTURE STEM SIZE</th>
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<tbody>
<tr>
<td>EKJ-14</td>
<td>1/2”</td>
<td>4”</td>
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<tr>
<td>EKJ-16</td>
<td>1/2”</td>
<td>6”</td>
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<tr>
<td>EKJ-18</td>
<td>1/2”</td>
<td>8”</td>
</tr>
<tr>
<td>EKJ-20</td>
<td>1/2”</td>
<td>10”</td>
</tr>
<tr>
<td>EKJ-110</td>
<td>1/2”</td>
<td>12”</td>
</tr>
<tr>
<td>EKJ-210</td>
<td>1/2”</td>
<td>15”</td>
</tr>
<tr>
<td>EKJ-118</td>
<td>1/2”</td>
<td>18”</td>
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</table>
**JL/JAL SPICE BOX AND HUB COVER FIXTURE HANGER**

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
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</thead>
<tbody>
<tr>
<td>ENY-2SET</td>
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**JL/JAL SPICE BOX AND HUB COVER FIXTURE HANGER**

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>SIZE</th>
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</thead>
<tbody>
<tr>
<td>ENY-2SET</td>
<td>3/4&quot;</td>
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**JL/JAL DIMENSIONS**

<table>
<thead>
<tr>
<th>SERIES</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>JL</td>
<td>1-15/16&quot; (49)</td>
<td>11/16&quot; (17)</td>
<td>3-1/4&quot; (95)</td>
<td>4-7/32&quot; (107)</td>
<td>2-3/8&quot; (60)</td>
<td>5/16&quot; (8)</td>
</tr>
<tr>
<td></td>
<td>2-3/8&quot; (60)</td>
<td>15/32&quot; (12)</td>
<td>4-5/8&quot; (117)</td>
<td>5-1/4&quot; (133)</td>
<td>4-1/8&quot; (105)</td>
<td>5/16&quot; (8)</td>
</tr>
</tbody>
</table>

**FEATURES**

- Splice box and hub cover for mounting pendant fixtures in hazardous locations
- Conduit openings in two configurations
- Flange type cover. Set screw in hub prevents accidental loosenings of fixture stem
- Integral lugs for mounting box to ceiling
- Cast of corrosion resistant aluminum alloy (copper-free aluminum; less than 4/10 of 1%)
- Supports up to 125 pounds

**ENY PENDANT SEALS**

- ENY Pendant Seals are designed for hazardous locations and meet code requirements for a safety set-screw when hanging fixtures. Common applications are for Class I Division I Group B or Class I Zone 2 Ex-IR restricted breathing fixtures
- Cast of corrosion resistant aluminum alloy (copper-free aluminum; less than 4/10 of 1%)
- Supports up to 125 pounds
FLOODLIGHT MOUNTS

Features:
- Zinc Plated ductile iron
- Stainless Steel Set Screw prevents accidental loosening due to vibration
- Indentation in slot to prevent the nut from moving for one handed tightening during installation
- 1” or ½” NPT Conduit
- ¾” NPT Cord Connector or Flexible Coupling
- Splice box wiring hole with cover for wiring access
- Earthquake tab
- Supports 125 lbs.

Features:
- Zinc Plated ductile iron
- Stainless Steel Set Screw prevents accidental loosening due to vibration
- 1.5”, 1” or ¾” NPT Conduit
- (2) - ¾” NPT Cord Connector or Flexible Coupling
- Stackable; allowing up-to 4 positions to mount a floodlight
- Splice box wiring hole with cover for wiring access
- Supports 125 lbs.

Suitable for wet locations when used with gasketed covers.
Suitable for use in hazardous location applications when installed according to NEC Articles 501.10(b), Class I, Div. 2.
(Suitable for use in Class I Zone 2 applications) 502.10 and 503.10.
**MC SERIES**

**ALUMINUM CABLE CONNECTORS**

**FEATURES-SPECIFICATIONS**

**Applications**
- Designed for use with jacketed interlocked, continuously corrugated and welded armor cable (all types shown in chart below). Install where it is essential to provide positive grounding to the cable and for a Type 3,4 connection.

**Features**
- 360° armor grounding spring is **reusable**.
- Robust threads and world class seal enables easy installation with minimal torque required.
- Design meets and exceeds third party requirements for **cable retention**.
- Provides sealing back nut plus inner O-ring seal to prevent moisture ingress to the cable armor and enclosure.
- Copper free aluminum construction for hostile, corrosive and certain hazardous locations.

**Materials**
- Body – Copper free aluminum (less than 4/10 of 1%)
- Ground Spring – Stainless Steel
- Backnut Seal – Thermoplastic elastomer (silicone)
- Backnut Clamp – Nylon
- Inner and Outer O-rings – Nitrile

**Operating Temperature Range**
- -50°C to +60°C

**Construction Details**
- Inner o-ring seal
- Reuseable Grounding Spring

---

**SUITABLE ARMORED/METAL CLAD CABLE TYPES**

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>ENTRY THREAD SIZE (NPT)</th>
<th>MAX NUMBER OF CORES</th>
<th>THROUGH DIAMETER 'A'</th>
<th>ARMOR DIAMETER 'B'</th>
<th>DIAMETER 'C'</th>
<th>MAX LENGTH 'D'</th>
<th>NPT LENGTH 'E'</th>
<th>HEXAGON DIMENSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC1B</td>
<td>1/2&quot;</td>
<td>6</td>
<td>.47&quot; (11.9)</td>
<td>.43&quot; (10.9)</td>
<td>.55&quot; (14.0)</td>
<td>1.7&quot; (43)</td>
<td>.83&quot; (21.1)</td>
<td>1.06&quot; (26.9)</td>
</tr>
<tr>
<td>MC1C</td>
<td>1/2&quot;</td>
<td>10</td>
<td>.56&quot; (14.2)</td>
<td>.52&quot; (13.2)</td>
<td>.74&quot; (18.8)</td>
<td>2.3&quot; (58)</td>
<td>.83&quot; (21.1)</td>
<td>1.42&quot; (36)</td>
</tr>
<tr>
<td>MC2</td>
<td>3/4&quot;</td>
<td>21</td>
<td>.80&quot; (20.3)</td>
<td>.65&quot; (16.5)</td>
<td>.95&quot; (24.1)</td>
<td>2.5&quot; (64)</td>
<td>.84&quot; (21.3)</td>
<td>1.61&quot; (41)</td>
</tr>
<tr>
<td>MC3</td>
<td>1&quot;</td>
<td>42</td>
<td>1.04&quot; (26.4)</td>
<td>0.89&quot; (22.6)</td>
<td>1.23&quot; (31.2)</td>
<td>2.6&quot; (66)</td>
<td>1.03&quot; (26.2)</td>
<td>1.97&quot; (50)</td>
</tr>
<tr>
<td>MC4</td>
<td>1 1/4&quot;</td>
<td>73</td>
<td>1.28&quot; (32.5)</td>
<td>1.15&quot; (29.2)</td>
<td>1.48&quot; (37.6)</td>
<td>3.1&quot; (79)</td>
<td>1.05&quot; (26.7)</td>
<td>2.36&quot; (60)</td>
</tr>
<tr>
<td>MC5</td>
<td>1 1/2&quot;</td>
<td>80</td>
<td>1.66&quot; (42.2)</td>
<td>1.39&quot; (35.3)</td>
<td>1.62&quot; (41.1)</td>
<td>4.5&quot; (114.3)</td>
<td>1.07&quot; (27.2)</td>
<td>2.95&quot; (74.9)</td>
</tr>
<tr>
<td>MC6</td>
<td>2&quot;</td>
<td>80</td>
<td>1.98&quot; (50.3)</td>
<td>1.39&quot; (35.3)</td>
<td>1.89&quot; (48)</td>
<td>4.5&quot; (114.3)</td>
<td>1.10&quot; (27.9)</td>
<td>2.95&quot; (74.9)</td>
</tr>
<tr>
<td>MC7</td>
<td>2 1/4&quot;</td>
<td>100</td>
<td>2.46&quot; (62.5)</td>
<td>1.85&quot; (47)</td>
<td>2.36&quot; (60)</td>
<td>4.7&quot; (119.4)</td>
<td>1.62&quot; (41.1)</td>
<td>3.54&quot; (89.1)</td>
</tr>
<tr>
<td>MC8</td>
<td>3&quot;</td>
<td>120</td>
<td>2.93&quot; (74.4)</td>
<td>2.19&quot; (55.6)</td>
<td>2.81&quot; (71.4)</td>
<td>4.8&quot; (121.9)</td>
<td>1.68&quot; (42.7)</td>
<td>4.06&quot; (103.4)</td>
</tr>
<tr>
<td>MC9</td>
<td>3 1/2&quot;</td>
<td>120</td>
<td>3.40&quot; (86.4)</td>
<td>2.69&quot; (68.3)</td>
<td>3.28&quot; (83.3)</td>
<td>4.8&quot; (121.9)</td>
<td>1.73&quot; (43.9)</td>
<td>4.53&quot; (115.1)</td>
</tr>
<tr>
<td>MC0</td>
<td>4&quot;</td>
<td>120</td>
<td>3.92&quot; (99.6)</td>
<td>3.28&quot; (83.3)</td>
<td>3.82&quot; (97)</td>
<td>5.1&quot; (129.5)</td>
<td>1.78&quot; (45.2)</td>
<td>5.12&quot; (130)</td>
</tr>
</tbody>
</table>

*Cable armor diameter and cable jacket diameter refer to the dimensions across the crest.
† Where explosion proof/flameproof enclosures are being used the MC must be installed in conjunction with an approved sealing fitting. In Division 2 areas the MC can be fitted directly to an enclosure which has no source of ignition.
Features
- Provides cable retention and a low smoke and fume, zero halogen seal onto the cables outer sheath.
- Provides sealing back nut plus inner O-ring seal to prevent moisture ingress to the cable armor and enclosure.
- Copper free aluminum construction for harsh, corrosive and hazardous duty.
- Back nut is RED to indicate HAZARDOUS area product.

Materials
- Body – Copper free aluminum (less than 4/10 of 1%)
- Ground Spring – Stainless Steel
- Backnut Seal – Thermoplastic elastomer (silicone)
- Backnut Clamp – Nylon
- Inner and Outer O-rings – Nitrile

Operating Temperature Range
- -50°C to +60°C

Construction Details
- Provides cable retention and a low smoke and fume, zero halogen seal onto the cables outer sheath.
- Provides sealing back nut plus inner O-ring seal to prevent moisture ingress to the cable armor and enclosure.
- Copper free aluminum construction for harsh, corrosive and hazardous duty.
- Back nut is RED to indicate HAZARDOUS area product.

Suitable armored/metal clad cable types

- AC- AC90, ACWU90, AC90-HL, ACWU90-HL, ACG90, ACGWU90
- MC- MCC, MCI, MCI-A, MC-HL
- RA- RA90, RA90-HL
- TECK- TECK90, TECK90-HL

Class I, Div. 1 & 2, Groups A, B, C, D
Class II, Div. 1 & 2, Groups E, F, G
Class III
Class I, Zones 1 & 2, Group IIC, Zone 20
Types 3, 4X IP66
MCX5-MCX0: IPX8 6ft/1hr.

Cable armor diameter and cable jacket diameter refer to the dimensions across the crest.
ALUMINUM CABLE CONNECTORS

FEATURES - SPECIFICATIONS

Applications:
Designed for use with jacketed interlock, continuously corrugated and welded armor cable where it is essential to prevent explosive vapors from passing through electrical devices. This series provides a 45 and 90 degree bend for the most compact space. It is rated for indoor and outdoor use.

Features:
- 360° armor grounding spring is reusable
- Provides a barrier seal between the individual insulated cores within the cable
- Assembly of the cable gland compresses and distributes the compound evenly to create a barrier seal at the point of entry into the enclosure.
- Provides a cable retention and low smoke fume, zero halogen seal onto the cables outer sheath
- Copper-free aluminum construction for harsh, corrosive and hazardous areas

Materials:
- Body: Copper-free aluminum (less than 4/10 of 1%)
- Backnut Seal: Thermoplastic elastomer (silicone)
- Backnut Clamp: Nylon
- Inner and Outer O-rings: Nitrile

Operating Temperature:
- -50°C to +60°C

SUITABLE ARMORED/METAL CLAD CABLE TYPES

<table>
<thead>
<tr>
<th>CATALOG #</th>
<th>ENTRY THREAD SIZE (NPT)</th>
<th>BEND</th>
<th>MAX NUMBER OF CORES</th>
<th>ARMOR DIAMETER 'B'</th>
<th>DIAMETER 'C'</th>
<th>MAX LENGTH 'D'</th>
<th>MAX LENGTH 'E'</th>
<th>MAX LENGTH 'F'</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCX14C</td>
<td>1/2''</td>
<td>45°</td>
<td>10</td>
<td>48'' (12.2)</td>
<td>74'' (19.8)</td>
<td>2.25'' (57.1)</td>
<td>3.25'' (82.6)</td>
<td>2.05'' (52)</td>
</tr>
<tr>
<td>MCX24</td>
<td>3/4''</td>
<td>45°</td>
<td>21</td>
<td>71'' (18)</td>
<td>95'' (24.1)</td>
<td>2.25'' (57.1)</td>
<td>3.43'' (87.1)</td>
<td>2.19'' (55.6)</td>
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<tr>
<td>MCX19C</td>
<td>1/2''</td>
<td>90°</td>
<td>10</td>
<td>48'' (12.2)</td>
<td>74'' (19.8)</td>
<td>2.51'' (63.8)</td>
<td>3.62'' (91.9)</td>
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<td>MCX29</td>
<td>3/4''</td>
<td>90°</td>
<td>21</td>
<td>71'' (18)</td>
<td>95'' (24.1)</td>
<td>2.61'' (66.3)</td>
<td>3.73'' (94.7)</td>
<td>3.60'' (91.4)</td>
</tr>
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</table>

Class I, Div. 1, Groups A, B, C, D
Class II, Div. 1, Groups E, F, G
Class III,
CL. I Zone 1 GR. IIC. Zone 20
Types 3, 4X, IP66
MCX 45°/90° SERIES

ALUMINUM CABLE CONNECTORS

FEATURES-SPECIFICATIONS

Applications:
Designed for use with jacketed interlock, continuously corrugated and welded armor cable. Rated for indoor and outdoor use and allows for a 45 and 90 degree bend where space is limited.

Features:
- 360° armor grounding spring is reusable
- Provides sealing backnut plus inner O-ring seal to prevent moisture ingress to the cable armor and enclosure
- Copper-free aluminum construction for harsh, corrosive and hazardous duty
- Patent pending combination union elbow that allows proper 360° alignment where space is limited
- Compact 45° & 90° bends for optimized wiring configurations
- Armor is terminated prior to bend allowing for minimal bending radius

Materials:
- Body: Copper-free aluminum (less than 4/10 of 1%)
- Backnut Seal: Thermoplastic elastomer (silicone)
- Backnut Clamp: Nylon
- Inner and Outer O-rings: Nitrile

Operating Temperature:
- -50°C to +60°C

SUITABLE ARMORED/METAL CLAD CABLE TYPES

<table>
<thead>
<tr>
<th>SUITABLE ARMORED/METAL CLAD CABLE TYPES</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC-</td>
</tr>
<tr>
<td>MC-</td>
</tr>
<tr>
<td>RA-</td>
</tr>
<tr>
<td>TECK-</td>
</tr>
</tbody>
</table>

CATALOG NUMBER | ENTRY THREAD SIZE (NPT) | BEND | MAX NUMBER OF CORES | THROUGH DIAMETER 'A' | ARMOR DIAMETER 'B' | DIAMETER 'C' | MAX LENGTH 'D' | MAX LENGTH 'E' | MAX LENGTH 'F' |
<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>MC14C</td>
<td>1/2&quot;</td>
<td>45°</td>
<td>10</td>
<td>.48&quot; (12.2)</td>
<td>.52&quot; (13.2)</td>
<td>.74&quot; (18.8)</td>
<td>3.25&quot; (82.6)</td>
<td>4.35&quot; (110.5)</td>
<td>2.05&quot; (52)</td>
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<tr>
<td>MC24C</td>
<td>3/4&quot;</td>
<td>45°</td>
<td>21</td>
<td>.71&quot; (18)</td>
<td>.65&quot; (16.5)</td>
<td>.95&quot; (24.1)</td>
<td>3.43&quot; (87.1)</td>
<td>4.55&quot; (115.6)</td>
<td>2.19&quot; (55.6)</td>
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<tr>
<td>MC19C</td>
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<td>90°</td>
<td>10</td>
<td>.48&quot; (12.2)</td>
<td>.52&quot; (13.2)</td>
<td>.74&quot; (18.8)</td>
<td>3.25&quot; (82.6)</td>
<td>4.35&quot; (110.5)</td>
<td>2.05&quot; (52)</td>
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<tr>
<td>MC29</td>
<td>3/4&quot;</td>
<td>90°</td>
<td>21</td>
<td>.71&quot; (18)</td>
<td>.65&quot; (16.5)</td>
<td>.95&quot; (24.1)</td>
<td>3.43&quot; (87.1)</td>
<td>4.55&quot; (115.6)</td>
<td>2.19&quot; (55.6)</td>
</tr>
</tbody>
</table>

Class II, Div. 1, Groups E, F, G
Class III, Zone 20, IP66,
Types 3, 4X
Suitable for use in hazardous location
application when installed according to
NEC Articles 501.10
United States

Killark
2112 Fenton Logistics Park Blvd.
Fenton, Missouri 63026
Tel: (314) 531-0460 • Fax: (314) 531-7164
www.hubbell-killark.com
Email: killarkin@hubbell.com

RigPower (Hawke International)
4140 World Houston Parkway, Suite 130
Houston, TX 77032
Tel: (281) 445-7400 • Fax: (281) 445-7404
Email: rigpowerinfo@hubbell.com

Vantage Technology
4140 World Houston Parkway, Suite 130
Houston, TX 77032
Tel: (281) 445-7400 • Fax: (281) 445-7404
Email: xpsales@vantagexp.com

Canada

Hubbell Canada LP
870 Brock Road South
Pickering, Ontario
Canada L1W 1Z8
Tel: (905) 839-1139 • Fax: (905) 839-9108
Email: info@hubbell-canada.com

Mexico

Hubbell Products Mexico
Toluca Edo. Mex. CP 50200
Tel: (01 52) 559-151-9999 • Fax: (01 52) 559-151-9988/89
www.hubbell.com.mx
Email: info@hubbell.com.mx

United Kingdom

Hubbell Products
Brunel Drive
Stretton Park Burton on Trent
Staffordshire DE13 0BZ UK
Tel: +44 (0) 1283 500500 • Fax: +44 (0) 1283 500400
Email: Sales@hubbell.co.uk

Victor Lighting
PO Box 5571
Glasgow G52 9AH Scotland
Tel: +44 (0) 141 810 9644 • Fax: +44 (0) 141 810 9642
www.victor-lighting.com

Chalmit Lighting
PO Box 5575
Glasgow G52 9AP Scotland
Tel: +44 (0) 141 882 5555 • Fax: +44 (0) 141 883 3704
www.chalmit.com

Middle East

Office #432, Bldg #6EB
Dubai Airport Free Zone (DAFZ) • PO Box 23529 Dubai UAE
Tel: +971 (0) 4 609 1222 • Email: killarkin@hubbell.com

Asia Pacific

130 Joo Seng Road, #03-02, Olivine Building
Singapore 368357
Tel: 00 65 6282 2242 • Fax: 00 65 6284 4244
Email: killarkin@hubbell.com

Korea

512 Hyosung Intellian 681-3 Deungchon Dong
Kangseo-Ku Seoul 157-030 Korea
Tel: +82 2 2063 3719 • Fax: +82 2 2603 7386
Email: killarkin@hubbell.com

China

Room H/I 18F No. 728 Pudong Avenue
Shanghai International Ocean and Finance Building
Shanghai 20120 P.R. China
Tel: (86 21) 3392 6550 ext. 318 • Fax (86 21) 3392 6551
Email: killarkin@hubbell.com