

Class I, Div. 1 & 2 Zones 1 & 2





EXPANDING RANGE of HARSH & HAZARDOUS LED LUMINAIRES and SYSTEMS



























your mobile device





EVER EXPANDING RANGE of HARSH & HAZARDOUS LED LUMINAIRES and SYSTEMS

From basic Utility Luminaires to complex Egress Lighting Systems, Killark is a major provider of LED labor and energy saving products for harsh and hazardous locations.

Market demand for this long life, clean white light is growing exponentially. Killark is there with a range of products for Class I, Div. 1 & 2, Zones 1 and 2, plus Class II applications.

Killark also satisfies the need for wet and corrosive environments with NEMA 4X ratings.





QUICK LOCATOR TO LED PRODUCTS IN THIS MINI-CATALOG



Series - VSL/DVL Utility Lights CID2/C2D1

Starts on page 1



Series - MBL Compact Size CID2/Zone 2

Starts on page 10



Series - VM1L Reduced Profile CID2/Zone 2

Starts on page 15



Series - VM2L/4L High Wattage CID2/Zone 2

Starts on page 21



Series - EML Explosion-Proof CID1/Zone 1

Starts on page 33



Series - KFLC Compact Flood CID2/Zone 2

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Series - KFL Flood Light CID2/Zone 2

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Series - KF1L Explosion-Proof CID1/Zone 1

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Series - EBS Egress Lighting CID1/Zone 1

Starts on page 43

LED Lighting Range - Back Cover

Lighting Design Software - Inside Back Cover

Lighting Photometry - On Website









Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIC,IIB,IIA Class II, Div. 2, Groups F,G① Class III Suitable for wet locations Enclosure Type 4①



FEATURES-SPECIFICATIONS

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V SERIES LED

Introduction

Killark 'VSL' Series LED fixtures are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4 areas where wind, water, snow or high ambients 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
- Optional Mounting arrangements including Pendant, Wall, Ceiling, Stanchion and Adapters
- Fixtures available <u>unit packed</u>, 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 Life 60,500+ maintenance-free hours to 70% initial lumens
- Crisp White Light for Excellent Color Rendering
 Chromaticity 5000K (CCT); 70 CRI
- Integral driver maintains fixture's compact profile to fit in existing spaces
- Ambient suitability -40°C to 55°C②

- Instant on including after power interruption
- "World Voltage" 120-277VAC 50/60Hz
- Solder-LESS LED Board Connections Vibration Resistant
- LM80-08* Measurement of lumen maintenance for LED light sources
- LM79-08* Certified "Absolute" Photometry, including Chromaticity Color for Solid State Lighting
- TM-21* method to project long term lumen maintenance
- L70 Values Industry Nomenclature for Hours of use to 70% of Initial Lumens

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
- NEMA 3, 4

Materials

- 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 NEMA 4 requirements
- * LM-xx & TM-21 are Illumination Engineering Society Standards designed to promote uniformity in testing procedures among test labs and manufacturers. For more information go to www.ies.org
 ①When mounted (globe down) to V series boxes; not Class II,
 Div. 2 or NEMA 4 on VBA, VFPS, VB or VFL adaptors to sheet metal boxes

②Glass globe models to 55°C; Polycarbonate suitable to 40°C.

Optic Selection Examples

- Broadest Golden globe offering for Hazardous Locations in the industry
- Use as status lights or specialty/emergency indicators









White Glass w/Guard



Blue Glass

S



Clear Polycarbonate



Red Polycarbonate

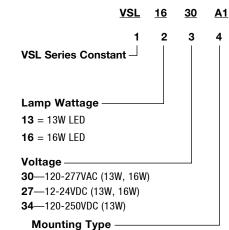


TECHNOLOGY

Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIC,IIB,IIA Class II, Div. 2, Groups F,G^① Class III Suitable for wet locations **Enclosure Type 4**①



V SERIES LED Catalog Number Logic



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)

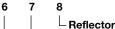
W1-1/2" Wall w/Feet (VBC-1 w/VB-1)

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)



S

<u>G</u> - <u>B</u>

S—Standard Reflector (Pendant or Ceiling Use Only) ② **CP**— Component Pack ③

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) Can Signify Emergency UPS Circuits

Optics**

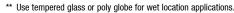
S- Standard Globe (Clear)

H— Heat Resistant (Tempered) Globe (Clear)

P- Polycarbonate (Clear)

COLORED GLOBE OPTIONS** Example VSL1330A1SG-A

SUFFIX AND	AVAILABLE CO	MBINATIONS	
COLOR Number	STANDARD TEMPERED Globe Globe		POLYCARBONATE
Amber	Α	Α	Α
Blue	В	В	_
Ruby	R	R	R
Green	G	_	G
Purple	Р	_	_
Blue- Green	BG	BG	_
White	W	W	W



① When mounted (globe down) to V series boxes; not Class II, Div.2 or NEMA 4 on VBA, VFPS, VB or VFL adaptors to sheet metal boxes.

2 Reflector is held on fixture body by VAG-100 guard for glass globe models or polycarbonate globe's shoulder. Reflectors ship separately.

3 CP option includes complete fixture in components contained in single outer carton.

















'Utility Light'



Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIC,IIB,IIA Class II, Div. 2, Groups F,G① Class III **Suitable for wet locations Enclosure Type 4**①



ORDERING INFORMATION





Poly Globe

PENDANT M	PENDANT MOUNT WITH VGA SPLICE BOX 1 - HUB						
LED	Watts	Voltage	Hub Size		Fixture w/Tempered Clear Glass Globe & Guard **	Fixture w/Clear Polycarbonate Globe	
VSL1330	13	120-277VAC	1/2"	VSL1330A1SG	VSL1330A1HG	VSL1330A1PN	
V3L1330	13 120-277VAC	3/4"	VSL1330A2SG	VSL1330A2HG	VSL1330A2PN		
VSL1630	/SL1630 16 120-277VAC	1/2"	VSL1630A1SG	VSL1630A1HG	VSL1630A1PN		
V3L1630	16	120-277VAC	3/4"	VSL1630A2SG	VSL1630A2HG	VSL1630A2PN	



Globe



Polv
Globe

CEILING MO	CEILING MOUNT WITH FEET USING VBC SPLICE BOX AND VBA ADAPTER 4 - HUBS							
LED	Watts	Voltage	Hub Size		Fixture w/Tempered Clear Glass Globe & Guard **	Fixture w/Clear Polycarbonate Globe		
VSL1330	13	120-277VAC	1/2"	VSL1330F1SG	VSL1330F1HG	VSL1330F1PN		
V3L1330	13	120-211VAC	3/4"	VSL1330F2SG	VSL1330F2HG	VSL1330F2PN		
VSL1630	SL1630 16 120-277VAC	1/2"	VSL1630F1SG	VSL1630F1HG	VSL1630F1PN			
V3L1030	16	120-2//VAC	3/4"	VSL1630F2SG	VSL1630F2HG	VSL1630F2PN		





Glass Poly Globe Globe

CEILING MO	CEILING MOUNT WITH VGX SPLICE BOX 4 - HUBS							
LED	Watts	Voltage	Hub Size		Fixture w/Tempered Clear Glass Globe & Guard **	Fixture w/Clear Polycarbonate Globe		
VSL1330	13	120-277VAC	1/2"	VSL1330X1SG	VSL1330X1HG	VSL1330X1PN		
VSL1330	13	120-277VAC	3/4"	VSL1330X2SG	VSL1330X2HG	VSL1330X2PN		
VSL1630	16 120-277VAC	1/2"	VSL1630X1SG	VSL1630X1HG	VSL1630X1PN			
V3L1030	16	120-211VAC	3/4"	VSL1630X2SG	VSL1630X2HG	VSL1630X2PN		



Glass

Globe



Poly

Globe

CEILING MO	CEILING MOUNT WITH VGC SPLICE BOX - FEED THROUGH 2 - HUBS							
LED	Watts	Voltage	Hub Size		Fixture w/Tempered Clear Glass Globe & Guard **	Fixture w/Clear Polycarbonate Globe		
VSL1330	13	120-277VAC	1/2"	VSL1330C1SG	VSL1330C1HG	VSL1330C1PN		
V3L1330	13	120-277 VAC	3/4"	VSL1330C2SG	VSL1330C2HG	VSL1330C2PN		
VSL1630	16 120-277VAC	1/2"	VSL1630C1SG	VSL1630C1HG	VSL1630C1PN			
V3L1030		3/4"	VSL1630C2SG	VSL1630C2HG	VSL1630C2PN			

① When mounted (globe down) to V series boxes; not Class II, Div.2 or NEMA 4 on VBA, VFPS, VB or VFL adaptors to sheet metal boxes.

** Use tempered glass or poly globes for wet location applications. See logic page for available globe colors.













Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIC,IIB,IIA Class II, Div. 2, Groups F,G① Class III Suitable for wet locations **Enclosure Type 4**①



ORDERING INFORMATION







lass	Poly
lohe	Globe

CEILING MO	CEILING MOUNT WITH VGH SPLICE BOX - DEAD END 1 - HUB							
LED	Watts	Voltage	Hub Size		Fixture w/Tempered Clear Glass Globe & Guard **	Fixture w/Clear Polycarbonate Globe **		
VSL1330	13 120-277V	120-277VAC	1/2"	VSL1330H1SG	VSL1330H1HG	VSL1330H1PN		
V3L1330	13	120-2//VAC	3/4"	VSL1330H2SG	VSL1330H2HG	VSL1330H2PN		
VSL1630	16	120.277VAC	1/2"	VSL1630H1SG	VSL1630H1HG	VSL1630H1PN		
V3L1630	30 16 1	16 120-277VAC	3/4"	VSL1630H2SG	VSL1630H2HG	VSL1630H2PN		





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Poly	
Globe	

CEILING MO	UNT WITI	H VXA DEEP SPLI	CE BOX	5 - HUBS		
LED	Watts	Voltage	Hub Size	Fixture w/Standard Clear Glass Globe & Guard **	Fixture w/Tempered Clear Glass Globe & Guard **	Fixture w/Clear Polycarbonate Globe **
VSL1330	13	120-277VAC	1/2"	VSL1330D1SG	VSL1330D1HG	VSL1330D1PN
V3L1330	13	120-277 VAC	3/4"	VSL1330D2SG	VSL1330D2HG	VSL1330D2PN
VSL1630	16	120-277VAC	1/2"	VSL1630D1SG	VSL1630D1HG	VSL1630D1PN
V3L1030	10		3/4"	VSL1630D2SG	VSL1630D2HG	VSL1630D2PN





Glass Poly Globe Globe

	CEILING MOUNT WITH VBA ADAPTER FOR ROUND OUTLET BOX 0 - HUBS ①								
	LED	Watts	Voltage	Hub Size		Fixture w/Tempered Clear Glass Globe & Guard **	Fixture w/Clear Polycarbonate Globe		
I	VSL1330	13	120-277VAC	-	VSL1330RASG	VSL1330RAHG	VSL1330RAPN		
ſ	VSL1630	16	120-277VAC	-	VSL1630RASG	VSL1630RAHG	VSL1630RAPN		



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41 3	① **

Poly Globe

CEILING MO	CEILING MOUNT WITH VFPS ADAPTER FOR SQUARE OR OCTAGON OUTLET BOX 0 - HUBS ①						
LED	Watts	Voltage	Hub Size		Fixture w/Tempered Clear Glass Globe & Guard **	Fixture w/Clear Polycarbonate Globe	
VSL1330	13	120-277VAC	-	VSL1330SASG	VSL1330SAHG	VSL1330SAPN	
VSL1630	16	120-277VAC	-	VSL1630SASG	VSL1630SAHG	VSL1630SAPN	

- When mounted (globe down) to V series boxes; not Class II, Div.2 or NEMA 4 on VBA, VFPS, VB or VFL adaptors to sheet metal boxes.
- Use tempered glass or poly globes for wet location applications. See logic page for available globe colors.



Globe







Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIC,IIB,IIA Class II, Div. 2, Groups F,G① Class III **Suitable for wet locations Enclosure Type 4**①



ORDERING INFORMATION



Glass	Pol
Sinhe	Glob

WALL MOUNT WITH FEET USING VBC SPLICE BOX AND VB ELBOW 4 - HUBS						
LED	Watts	Voltage	Hub Size		Fixture w/Tempered Clear Glass Globe & Guard **	Fixture w/Clear Polycarbonate Globe **
VSL1330	13	120-277VAC	1/2"	VSL1330W1SG	VSL1330W1HG	VSL1330W1PN
V3L1330	VSL1330 13 120-277	120-277VAC	3/4"	VSL1330W2SG	VSL1330W2HG	VSL1330W2PN
VSL1630	16	120-277VAC	1/2"	VSL1630W1SG	VSL1630W1HG	VSL1630W1PN
	16	120-2//VAC	3/4"	VSL1630W2SG	VSL1630W2HG	VSL1630W2PN



Globe

WALL MOUN	WALL MOUNT WITH VB ELBOW TO MOUNT TO 4 " OUTLET BOX 0 - HUBS ①							
LED	Watts	Voltage	Neck Hub Size	Fixture w/Standard Clear Glass globe & Guard **	Fixture w/Tempered Clear Glass globe & Guard **	Fixture w/Clear Polycarbonate Globe **		
VSL1330	13	120-277VAC	1/2"	VSL1330V1SG	VSL1330V1HG	VSL1330V1PN		
VOLIDOO	V3E1330 13	120-277740	3/4"	VSL1330V2SG	VSL1330V2HG	VSL1330V2PN		
VSL1630	16	16 120-277VAC	1/2"	VSL1630V1SG	VSL1630V1HG	VSL1630V1PN		
	16		3/4"	VSL1630V2SG	VSL1630V2HG	VSL1630V2PN		



Globe

Poly Globe Glass Globe

ı	WALL MOUNT-WITH VFL ELBOW FOR DIRECT MOUNT TO V SERIES SPLICE BOXES 0 - HUBS ①						
	LED	Watts	Voltage	Hub Size		Fixture w/Tempered Clear Glass Globe & Guard **	Fixture w/Clear Polycarbonate Globe **
ı	VSL1330	13	120-277VAC	-	VSL1330FLSG	VSL1330FLHG	VSL1330FLPN
ı	VSL1630	16	120-277VAC	-	VSL1630FLSG	VSL1630FLHG	VSL1630FLPN



Poly
Globe

STANCHION	STANCHION MOUNT FOR 1 - 1 / 4 " THREADED PIPE 1 - HUB							
LED	Watts	Voltage	Hub Size		Fixture w/Tempered Clear Glass Globe & Guard **	Fixture w/Clear Polycarbonate Globe		
VSL1330	13	120-277VAC	1-1/4"	VSL1330D4SG	VSL1330D4HG	VSL1330D4PN		
VSL1630	16	120-277VAC	1-1/4"	VSL1630D4SG	VSL1630D4HG	VSL1630D4PN		

- ① When mounted (globe down) to V series boxes; not Class II, Div.2 or NEMA 4 on VBA, VFPS, VB or VFL adaptors to sheet metal boxes.
- ** Use tempered glass or poly globes for wet location applications. See logic page for available globe colors.



Globe



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.

VSL FIXT	URE BODIES
CATALOG NUMBER	DESCRIPTION
VSL1330	13W 120-277VAC 50/60Hz Body with LEDs and Driver
VSL1630	16W 120-277VAC 50/60Hz Body with LEDs and Driver





VGA VGH





VGC VGX



VXA



VBC

VSL Splice Boxes

For use with VSL Series fixture bodies.

of the With Vol. defined fixture bodies.						
VSL SPLIC	CE BOXES	3				
CATALOG Number	HUB Size	QTY.	LOGIC CODE	DESCRIPTION		
VGA-1	1/2"	1	A1	Pendant mount		
VGA-2	3/4"	1	A2	Feridant mount		
VGH-1	1/2"	1	H1	Callian areas and		
VGH-2	3/4"	1	H2	Ceiling mount		
VGC-1	1/2"	2	C1	Ceiling mount		
VGC-2	3/4"	2	C2			
VGX-1	1/2"	4	X1	Colling mount		
VGX-2	3/4"	4	X2	Ceiling mount		
VXA-1	1/2"	5	D1	Callian manual dans have		
VXA-2	3/4"	5	D2	Ceiling mount, deep box		
VBC-1*	1/2"	4	F1	Ceiling mount, with 3 close-up plugs (requires VBA Adapter)		
VBC-2*	3/4"	4	F2	or wall mount with VB elbow		
VXAB	_	_	_	Blank close-up plate (less gasket)		

^{*}Volume cu. in. is 18

VSL Adapters





VSL ADAI	VSL ADAPTER MOUNTING PLATES						
CATALOG NUMBER							
VBA	Adapts fixture body to VB, VJ or steel 3-1/2" & 4" splice boxes. Supplied with gasket.						
VFPS	Adapts fixture body to steel 4" square outlet boxes or 3-1/2" or 4" octagon boxes						

VSL Wall/Stanchion Mounts



VSL MOU	TING BRACKETS				
CATALOG Number	HUB Size	QTY.	DESCRIPTION		
VB-1	1/2"	1	Wall mount to VJ or VB boxes		
VB-2	3/4"	1	Wall mount to VJ or VB boxes		
VFL	_	_	Wall mount to V boxes directly or to VJ, VB boxes with VBA adapter		
VD-4	1-1/4"	1	Stanchion mount		



Glass

Globe



Globe





Poly Color Polv Globe Globe

VSL Globes

VSL GLOBI	VSL GLOBES - ORDERING INFORMATION AND SUFFIX GRID**							
COLOR	GLASS	OPTIC Logic	TEMPERED GLASS	OPTIC Logic	POLYCARBONATE	OPTIC Logic		
Clear	VCG-100	S*	VCGP-100	H*	VPLCG-100	P*		
Amber	VAMG-100	Α	VAMGP-100	Α	VPLCG-100A	Α		
Blue	VBG-100	В	VBGP-100	В	_	-		
Ruby (Red)	VRG-100	R	VRGP-100	R	VPLCG-100R	R		
Green	VRSG-100	G	_	_	VPLCG-100G	G		
Purple	VPG-100	P	_	_	_	_		
Blue-Green	VGG-100	BG	VGGP-100	BG	_	_		
White	VWG-100	W	VWGP-100	W	VPLCG-100W	W		

^{*} See Pre-configured ordering tables for complete fixtures.









VPRSD-100 16-3/8" Dia. 5-5/8" High

VSL Components

VSL COMF	VSL COMPONENT PARTS AND ACCESSORIES						
CATALOG Number	DESCRIPTION						
VAG-100	G-100 Aluminum Guard for use with Glass Globe						
VAG-100R	Red Aluminum Guard for use with Glass Globe						
VTG-S	Body to Splice Box Gasket - Silicone						
VTGG1-S	Globe Gasket - Silicone						
VPRSD-100	White polypropylene for pendant & ceiling applications. Not for use with wall or stanchion models.						

VSL Thermal Ratings

VSL THERM	VSL THERMAL PERFORMANCE DATA INCLUDING VPRSD-100 REFLECTOR									
CATALOG	AMBIENT	C1D2 C2D2		SUPPLY	L7	70③				
NUMBER		GLASS GLOBE	POLY GLOBE	GLASS GLOBE	POLY GLOBE	WIRE	TM-21	CALCULATED		
VSL1330	40°C	T6	T5	T5 (F,G)	T5 (F,G)	90°	60,500	100,000+		
VSL1330	55°C	T5	_	_	_	90°	60,500	100,000+		
VSL1630	40°C	T5	_	T5 (F,G)	_	90°	60,500	100,000+		

VSL Electrical Ratings

VSL LED BODY WITH DRIVERS ① AND LEDS - ELECTRICAL RATINGS								
CATALOG Number	VOLTAGE 50/60HZ	WATTAGE	AMPS 120/277	CIL@	WEIGHT LBS.			
VSL1330	120-277VAC	12.42	.108/.047	1300	5.0			
VSL1630	120-277VAC	15.64	.156/.067	1625	5.0			

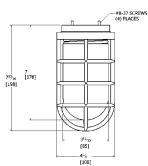
① Driver THD<20%, Powerfactor >90% @ 120V; Line regulation 2%; Load regualtion 5%; Protected against Over-voltage and Overcurrent.



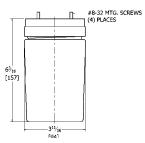
^{**} Use tempered glass or polycarbonate globes for wet location applications.

② CIL = Calculated Initial Lumens of LED component based on mfg. data and driver current INSIDE the optic. This value is provided as a reference only for comparison to traditional light sources such as Incandescent, HID, or fluorescent which use initial values in "relative" photometry. KILLARK LED luminaires are tested using the Absolute photometry method (LM79-08), which calculates delivered lumens only. KILLARK's LED luminaires provide very bright white 5000K (CCT) color and can appear brighter than traditional light sources with higher lumen values under both photopic

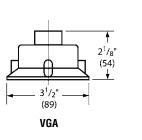
③ "TM-21 based values require very long duration testing. The L70/TM-21 "official reported" value is based on 10,000 hours testing at 1000mA drive current ("reported L70" is a factor of test duration). KILLARK's VSL utilizes lower 450mA maximum drive current - "calculated" values by the chip vendor predict L70 life substantially in excess of 100,000 hours even at 1000mA."

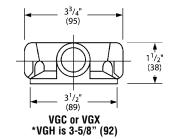


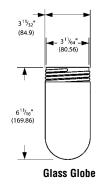
VSL Body w/Globe & Guard, No Splice Box

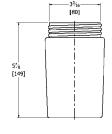


VSL Body w/Polycarbonate Globe, No Splice Box

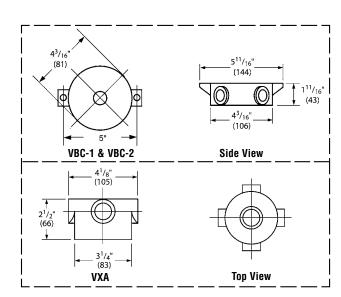


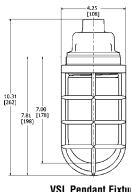




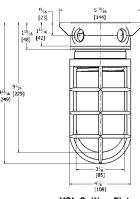


Polycarbonate Globe

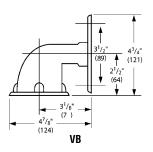


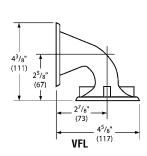


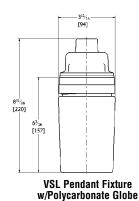
VSL Pendant Fixture w/Globe & Guard

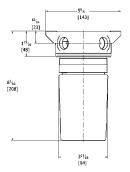


VSL Ceiling Fixture w/Globe & Guard

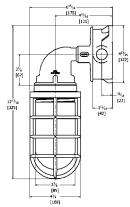




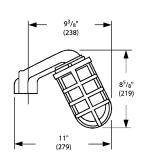




VSL Ceiling Fixture w/Polycarbonate Globe



VSL Wall Mounted Fixture w/Globe & Guard



VSL Stanchion Fixture w/Globe & Guard



Typical Weights (lbs.) with Standard Globe and Guard - VSL Serie						
	Pendant 7.03	Ceiling 7.51	Wall 8.09	Stanchion 7.61		

Class II Utility Light

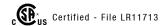








Class II, Div. 1 & 2, Groups E, F, G Class III Class I, Div. 2, Groups A, B, C, D



FEATURES-SPECIFICATIONS

DV SERIES LED

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 Life 60,500+ maintenance-free hours to 70% initial lumens
- Crisp White Light for Excellent Color Rendering
 Chromaticity 5000K (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

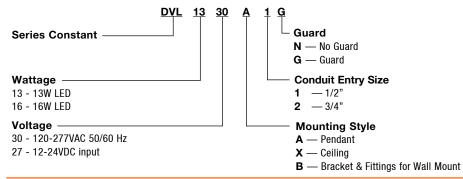
Materials, Weights

- 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
- Typical Weights (lbs.) with Standard Globe and Guard - DVL Series Pendant 7.7, Ceiling 7.7 and Wall 8.5

DVL 100 SERIES ①							
MODEL	LAMP	HUB	PENDANT	CEILING	WALL		
Type 100	Included	1/2"	DVL1330A1G	DVL1330X1G	DVL1330B1G		
13Watt		3/4"	DVL1330A2G	DVL1330X2G	DVL1330B2G		
Type 100	Included	1/2"	DVL1630A1G	DVL1630X1G	DVL1630B1G		
16Watt		3/4"	DVL1630A2G	DVL1630X2G	DVL1630B2G		

①Fixtures supplied with guard. Substitute 'N' for 'G' for fixture less guard.

DVL Series LED Catalog Logic



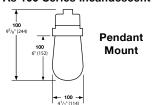
Accessories/Components

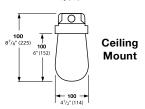
Bodies		Mounts	
DVL 1330	LED 13W	DVA1	1/2" Pendant Mount
DVL 1327	LED 13W	DVA2	3/4" Pendant Mount
DVL 1630	LED 16W	DVX1	1/2" Ceiling Mount
DVL 1627	LED 16W	DVX2	3/4" Ceiling Mount
		DVB1	1/2" Wall Mount
Globe	Guard	DVB2	3/4" Wall Mount
DCGE-10	DAG-100		

DVL THERMAL RATINGS								
CAT. NO.	AMBIENT	WATTS	C2D1 EFG	C1D2 ABCD	SUPPLY WIRE			
DVL1330	40°C	13	ТЗВ	T6	90°C			
DVL1630	40°C	16	T3B	T6	90°C			
DVL1330	55°C	13	-	T5	90°C			
DVL1630	55°C	16	-	T5	90°C			

DVL Electrical Ratings Same as VSL Series - See page 7

DimensionsAs 100 Series incandescent



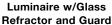


Wall Mount overall dimensions Height = 13.125" (333mm) Outward from wall = 7.4" (188mm)



Compact Size







Luminaire w/Flat Lens



Wall Mount w/VZRF8PR Pathway Reflector

Expanded wattage range RANGE 14, 17, 20, 22, 25, 40, 45, 50W

Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIC,IIB,IIA Class II, Div. 1 & 2, Groups E,F,G Class III Suitable for wet locations Marine NEMA 3, 4X



FEATURES-SPECIFICATIONS



Applications

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

Typical applications can low ceiling areas in manufacturing plants, and certain chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, garages and storage facilities.

Compliances

- UL-8750 for LED lighting; UL 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
- NEMA 3. 4X

Materials

- Ballast tank, 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



Non-Glass Polycarbonate 8" Flat Lens or Spin-top



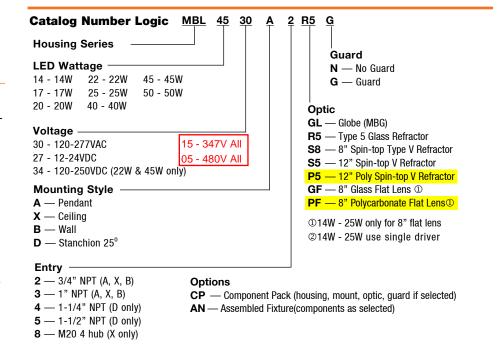
LED Luminaire Features and Standards

- 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
- Energy Savings less than 50 Watts of Power; 25 Watts for MBL2230
- Long Life up to 100,000+ maintenance free hours to 70% initial lumens
- Crisp White Light for Excellent Color Rendering -Chromaticity 5000K (CCT); 70 CRI, TM-21
- Ambient suitability -40°C to 40°C (to 55°C for 14W to 22W)

- Instant on including after power interruption
- "World Voltage" 120-277VAC 50/60Hz
- Solder-LESS LED Board Connections Vibration Resistant
- Dual Drivers 40, 45, 50W Redundant Systems (built-in backup), or for additional energy savings half of MBL luminaire can be turned off
- LM80-08* Measurement of lumen maintenance for LED light sources
- LM79-08* Certified "Absolute" Photometry, including Chromaticity Color for Solid State Lighting
- L70 Values Industry Nomenclature for Hours of use to 70% of Initial Lumens (TM-21+ Cal.)

Single supplemental surge protector included as standard for AC models only

* LM-xx are Illumination Engineering Society Standards designed to promote uniformity in testing procedures among test labs and manufacturers. For more information go to www.ies.org













PENDANT CEILING WALL STANCHION

ORDERING INFORMATION

MBL SEF	MBL SERIES PENDANT WITH OPTIC AND GUARD							
WATTS	HUB SIZE@	VOLTAGE3	GLOBE & GUARD	8" SPIN-TOP Polycarbonate Flat Lens*	TYPE V GLASS REFRACTOR & GUARD	8" SPIN-TOP TYPE V REFRACTOR & GUARD	12" SPIN-TOP TYPE V POLY REFR & GUARD	
14	3/4"	120-277VAC	MBL1430A2GLG	MBL1430A2PFN	MBL1430A2R5G	MBL1430A2S8G	MBL1430A2P5G	
17	3/4"	120-277VAC	MBL1730A2GLG	MBL1730A2PFN	MBL1730A2R5G	MBL1730A2S8G	MBL1730A2P5G	
20	3/4"	120-277VAC	MBL2030A2GLG	MBL2030A2PFN	MBL2030A2R5G	MBL2030A2S8G	MBL2030A2P5G	
22	3/4"	120-277VAC	MBL2230A2GLG	MBL2230A2PFN	MBL2230A2R5G	MBL2230A2S8G	MBL2230A2P5G	
25	3/4"	120-277VAC	MBL2530A2GLG	MBL2530A2PFN	MBL2530A2R5G	MBL2530A2S8G	MBL2530A2P5G	
40	3/4"	120-277VAC	MBL4030A2GLG	-	MBL4030A2R5G	MBL4030A2S8G	MBL4030A2P5G	
45	3/4"	120-277VAC	MBL4530A2GLG	-	MBL4530A2R5G	MBL4530A2S8G	MBL4530A2P5G	
50	3/4"	120-277VAC	MBL5030A2GLG	-	MBL5030A2R5G	MBL5030A2S8G	MBL5030A2P5G	
MBL SEF	RIES CEILING V	VITH OPTIC AND	GUARD ®					
14	3/4"	120-277VAC	MBL1430X2GLG	MBL1430X2PFN	MBL1430X2R5G	MBL1430X2S8G	MBL1430X2P5G	
17	3/4"	120-277VAC	MBL1730X2GLG	MBL1730X2PFN	MBL1730X2R5G	MBL1730X2S8G	MBL1730X2P5G	
20	3/4"	120-277VAC	MBL2030X2GLG	MBL2030X2PFN	MBL2030X2R5G	MBL2030X2S8G	MBL2030X2P5G	
22	3/4"	120-277VAC	MBL2230X2GLG	MBL2230X2PFN	MBL2230X2R5G	MBL2230X2S8G	MBL2230X2P5G	
25	3/4"	120-277VAC	MBL2530X2GLG	MBL2530X2PFN	MBL2530X2R5G	MBL2530X2S8G	MBL2530X2P5G	
40	3/4"	120-277VAC	MBL4030X2GLG	-	MBL4030X2R5G	MBL4030X2S8G	MBL4030X2P5G	
45	3/4"	120-277VAC	MBL4530X2GLG	-	MBL4530X2R5G	MBL4530X2S8G	MBL4530X2P5G	
50	3/4"	120-277VAC	MBL5030X2GLG	-	MBL5030X2R5G	MBL5030X2S8G	MBL5030X2P5G	
MBL SEF	RIES WALL WIT	H OPTIC AND G	UARD ①					
14	3/4"	120-277VAC	MBL1430B2GLG	MBL1430B2PFN	MBL1430B2R5G	MBL1430B2S8G	MBL1430B2P5G	
17	3/4"	120-277VAC	MBL1730B2GLG	MBL1730B2PFN	MBL1730B2R5G	MBL1730B2S8G	MBL1730B2P5G	
20	3/4"	120-277VAC	MBL2030B2GLG	MBL2030B2PFN	MBL2030B2R5G	MBL2030B2S8G	MBL2030B2P5G	
22	3/4"	120-277VAC	MBL2230B2GLG	MBL2230B2PFN	MBL2230B2R5G	MBL2230B2S8G	MBL2230B2P5G	
25	3/4"	120-277VAC	MBL2530B2GLG	MBL2530B2PFN	MBL2530B2R5G	MBL2530B2S8G	MBL2530B2P5G	
40	3/4"	120-277VAC	MBL4030B2GLG	-	MBL4030B2R5G	MBL4030B2S8G	MBL4030B2P5G	
45	3/4"	120-277VAC	MBL4530B2GLG	-	MBL4530B2R5G	MBL4530B2S8G	MBL4530B2P5G	
50	3/4"	120-277VAC	MBL5030B2GLG	-	MBL5030B2R5G	MBL5030B2S8G	MBL5030B2P5G	
MBL SEI	RIES 25° STANO	CHION WITH OP	TIC AND GUARD®					
14	1-1/4" ④	120-277VAC	MBL1430D4GLG	MBL1430D4PFN	MBL1430D4R5G	MBL1430D4S8G	MBL1430D4P5G	
17	1-1/4" ④	120-277VAC	MBL1730D4GLG	MBL1730D4PFN	MBL1730D4R5G	MBL1730D4S8G	MBL1730D4P5G	
20	1-1/4" ④	120-277VAC	MBL2030D4GLG	MBL2030D4PFN	MBL2030D4R5G	MBL2030D4S8G	MBL2030D4P5G	
22	1-1/4" ④	120-277VAC	MBL2230D4GLG	MBL2230D4PFN	MBL2230D4R5G	MBL2230D4S8G	MBL2230D4P5G	
25	1-1/4" ④	120-277VAC	MBL2530D4GLG	MBL2530D4PFN	MBL2530D4R5G	MBL2530D4S8G	MBL2530D4P5G	
40	1-1/4" ④	120-277VAC	MBL4030D4GLG	-	MBL4030D4R5G	MBL4030D4S8G	MBL4030D4P5G	
45	1-1/4" ④	120-277VAC	MBL4530D4GLG	-	MBL4530D4R5G	MBL4530D4S8G	MBL4530D4P5G	
50	1-1/4" ④	120-277VAC	MBL5030D4GLG	-	MBL5030D4R5G	MBL5030D4S8G	MBL5030D4P5G	

- ① Catalog numbers shown are with Guard; to omit guard change ending G to N; e.g. MBL2230A2GLN
- ② Catalog numbers shown are with 3/4" conduit openings; change "2" to "3" for 1" e.g. MBL2230A3GLG
- ③ 120VAC through 277VAC 50/60Hz
- $\ \oplus$ Catalog numbers shown are with 1-1/4" conduit openings; change "4" to "5" for 1-1/2" e.g. MBL2230D5GLG
- *For Glass 8" Spin-top Flat Lens, change PFN to GFN at end of catalog number











Pendant

Ceiling

Wall

Stanchion

MB MOUNTING BRACKETS							
	CATALOG NUMBER						
PENDANT	CEILING	HUB SIZE					
MBA-2	MBX-2	MBB-2	_	3/4"			
MBA-3	MBX-3	MBB-3	_	1"			
_	MBX-8*	_	_	M20			
_	_	_	MBD-4	1-1/4"			
_	-	_	MBD-5	1-1/2"			

^{*} MBX-8 furnished with 3 non-metallic Explugs





VMR175



VZRG1550



VZRG2550

VZRP175



VZRGF8

VZRPF8





MBAG



Non-Glass Polycarbonate 8" Flat Lens or Spin-top













VMRWG8®

VMRWGS®

VMPSD-17

VMPA-17

VMFSPC1





MBL LED OPTICS AND ACCESSORIES		
DESCRIPTION	OPTIC LOGIC	GUARD
Globe (glass)	MBG (GL)	MBAG
Refractor (all glass) Type V	VMR175 (R5)	VMAG17
Refractor (spin top) 8"Type V	VZRG1550 (S8)	VMRWG8
Refractor (spin top) 12"Type V	VZRG2550 (S5)	VMRWGS
8" Spin-top flat lens (glass)①	VZRGF8 (GF)	VZRF8GRD
8" Spin-top flat lens (polycarbonate) ①	VZRPF8 (PF)	VZRF8GRD
Refractor polycarbonate (spin -top) 12" Type V	VZRP175 (P5)	VMRWGS
Flat Lens (glass spin-top)①	VZRGF8	VZRF8GRD
Pathway Reflector①	VZRF8PR	NA
Reflector for MBG Globe - DOME@	VMPSD-17	NA
Reflector for MBG Globe - ANGLE ②	VMPA-17	NA
120VAC Photocell with FS Style Cover	VMFSPC1	NA
208-277VAC Photocell with FS Style Cover	VMFSPC2	NA
3-sided EXIT Accessory (use without guard)	VEXA100B	NA

①14-25W only

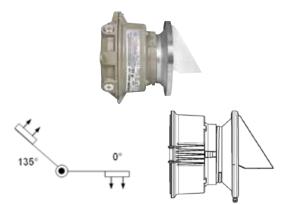


②Reflectors for use with MBG/MBAG only; VMG17 globe with VMAG17 guard will fit without reflector.

LED HOUSINGS WITH DRIVERS AND LEDS - ELECTRICAL RATINGS ①								
WATTAGE	AMPS 120/277	AMPS 12-24VDC	CIL@	WEIGHT3				
14	0.12/0.05	1.17/0.58	1400	10.0				
17	0.14/0.06	1.42/0.71	2550	10.0				
20	0.17/0.07	1.67/0.83	2745	10.0				
22	0.18/0.08	1.83/0.92	2100	10.0				
25	0.21/0.09	2.08/1.04	3828	10.0				
40	0.33/0.14	3.33/1.67	5490	15.5				
45	0.38/0.16	3.75/1.88	4200	15.5				
50	0.42/0.18	4.17/2.08	7656	15.5				

- ① Driver THD<20%, Powerfactor 99% @ 120V; Line Regulation 2%; Load regulation 5%; Protected against Over-voltage and Over-current.</p>
- © CIL = Calculated Initial Lumens of LED component based on mfg. data and driver current INSIDE the optic. This value is provided as a reference only for comparison to traditional light sources such as incandescent, HID, or fluourescent which use initial values in "relative" photometry. KILLARK LED luminaires are tested using the Absolute photometry method (LM79-08), which calculates delivered lumens only. KILLARK's LED luminaires provide very bright white 5000K (CCT) color and can appear brighter than traditional light sources with higher lumen values under both photopic and scotopic conditions.
- 3 Weights are shown are MBL tank only.
- TM-21 based values require very long duration testing. The TM-21/L70 "official reported" value is based on 7,800 to 10,000 hours testing (at time of printing) at 1000mA to 1500mA drive current, depending on LED chip utilized. "Reported L70" is a factor of test duration. KILLARK's MBL series utilizes lower 350mA or 700mA maximum drive current "calculated" values by the major chip vendors utilized predict L70 life up to 150,000+ hours even at 1000mA.

Special Aiming Angles Wall Mount MBL with Pathway Reflector



14W-25W MBL Housings with 8" Flat Spin-Top Lens may be aimed from 135° to 0° with or without the VZRF8PF Pathway Reflector. Pathway Reflector must NOT be aimed upwards in a Class II (Dust) environment, or where any contaminant may be collected. Applications include tunnels, lighting dark spots around ceiling piping or pathways near handrails.

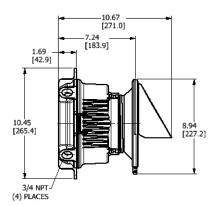
THERMAL PERFORMANCE DATA								
WATTAGES	AMBIENT	CID2 ABCD		C2D1 EFG		L70		SUPPLY
		Optic Only	w/Reflector	Optic Only	w/Reflector	TM-21@	CALCULATED	WIRE
1.4	40°C	T5	T5	T4	T4	60100	270000	75°C
14	55°C	T4A	T4A	T4	T4	60100	270000	90°C
17	40°C	T5	T5	T4	T4	72600	278000	75°C
17	55°C	T5	T5	T4	T4	72600	278000	90°C
00	40°C	T5	T5	T4	T4	60100	270000	75°C
20	55°C	T5	T5	T4	T4	60100	270000	90°C
00	40°C	T4A	T4A	T4	T4	60400	60400	75°C
22	55°C	T4	T4	T4	T4	60400	60400	90°C
0.5	40°C	T5	T5	T4	T4	72600	278000	75°C
25	55°C	-	-	-	-	72600	278000	75°C
40	40°C	T5	T5	T4	T4	60100	270000	75°C
40	55°C	-	-	-	-	60100	270000	75°C
45	40°C	T4A	T4A	T4	T4	60400	60400	90°C
45	55°C	-	-	-	-	60400	60400	90°C
50	40°C	T5	T5	T4	T4	72600	278000	75°C
50	50°C	-	-	-	-	72600	278000	90°C

TOTAL LUM	TOTAL LUMEN OUTPUT					
Wattage	MBL + MBG	MBL + VZRxF8				
14	910*	980*				
17 ^①	1650*	2040*				
20	1785*	1920*				
22	1365*	1470*				
25 ^①	2485*	2680*				
40	4023	-				
45	2940	-				
50 ①	4590*	-				

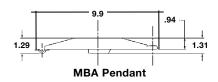
①Extra high lumen per watt LED's

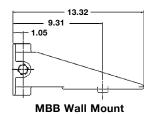
^{*}Values indicated are estimates; LM-79 Absolute Photometry testing is in progress.



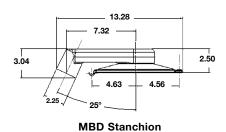


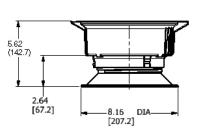
MBL Flat Lens, Pathway Reflector Wall Mount





9.90 4.63 4.63 9.63 10.95 MBX Ceiling

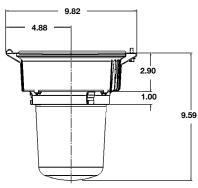




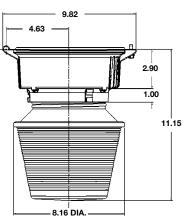
MBL Tank with Flat Lens



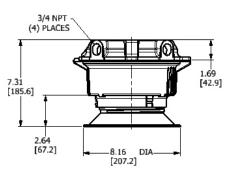
MBL Pendant, Globe, Guard



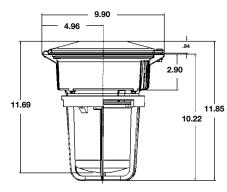
MBL & MBG Globe Only



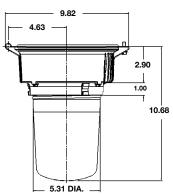
MBL & 8" Type V Spin-top



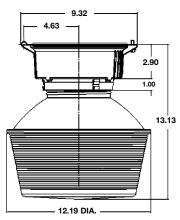
MBL Flat Lens Ceiling Mount



MBL Pendant, Refractor, Guard



MBL & VMR Refractor



MBL & 12" Type V Spin-top



Ту	Typical Weights (lbs.) with Standard Globe and Guard - MBL Series							
14-25W	14-25W Pendant 14.96 Ceiling 15.69 Wall 19.30 Stanchion 16.83							
40-50W	40-50W Pendant 20.96 Ceiling 21.69 Wall 25.30 Stanchion 22.83							







Expanded wattage range RANGE 40, 45, 50W

Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIC,IIB,IIA Class II, Div. 1 & 2, Groups E,F,G Class III Suitable for wet locations Marine NEMA 3, 4X



FEATURES-SPECIFICATIONS

RETURN to Index



Applications

CERTILITE®V VM1L LED fixtures are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4X areas where wind, water, snow or high ambients can be expected. They can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC.

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

Compliances

- UL-8750 for LED lighting
- UL Marine type lighting fixtures (HID models)
 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
- NEMA 3, 4X

Materials

- Ballast tank, 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

LED Luminaire Features and Standards

- 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 exist-
- ing VM splice boxes; upgrade from HID sources
- Energy Savings less than 55 Watts of Power
- Long Life 50,000 55,000 maintenance free hours to 70% initial lumens
- Crisp White Light for Excellent Color Rendering - Chromaticity 5000K (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 Drivers Redundant Systems (built-in backup), or for additional energy savings half of VM1L4530 can be turned off
- LM80-08* Measurement of lumen maintenance for LED light sources
- LM79-08* Certified "Absolute" Photometry, including Chromaticity Color for Solid State Lighting
- L70 Values Industry Nomenclature for Hours of use to 70% of Initial Lumens

Supplemental surge protection included as standard for AC models only

* LM-xx are Illumination Engineering Society Standards designed to promote uniformity in testing procedures among test labs and manufacturers. For more information go to www.ies.org

Swing-Barrel Nut



Polycarbonate 12" Spin-top

Refractor VZRP175







Photo controls - Class I Div. 2 / N4X areas

Available as Field or Factory Installed to save energy when light not required.

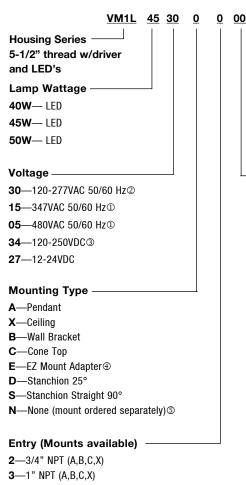
Earthquake Tab - Built-in attachment point for safety cables.

Safety: Secures fixture to structure in case of conduit failure.





CertiLite®V LED Catalog Number Logic



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

① Single step-down transformer feeds 2 drivers.

② Dual drivers 40, 45, 50W.

3 45W only.

① Completes as "EZ", conduit mounting boxes ordered seperately. - See page 18

00

Options

F-Single Fuse®

FF-Double Fuse®

TBX—Terminal Blocks

P1—Photocell 120V⑦

P2—Photocell 208-277V⑦

SP—Surge Protection®

CP—Component Pack

AN—Assembled

QD—QD Wired at Ballast®

X= Variations

(May be alphanumeric

to indicate terminals)

Factory Installed

Factory Installed

(Tank w/mount,

included in tank)

(Tank w/mount.

included in tank)

optic, quard- LED's

optic, guard - LED's

S NN mount ordered seperately.

© Fusing not for Marine or Canadian installations.

Photo cells for Class I, Div. 2 only.

® QD = Quick Disconnect. Allows easy tank removal for maintenance. Electrician simply unplugs tank from mount for fixture relocation or repair due to impact damage.

⑤ One supplemental surge protector for both drivers is included as standard. Option SP is needed only for applications were the two drivers will be powered separately <u>AND</u> each circuit requires additional protection.

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 ④

N—None (mount ordered separately) ⑤





ORDERING INFORMATION

VM1L SERIES PENDANT WITH OPTIC AND GUARD®							
WATTS	HUB SIZE②	VOLTAGE3	GLOBE & GUARD	TYPE V GLASS Refractor & Guard	8" SPIN-TOP TYPE V Refractor & Guard	12" SPIN-TOP TYPE V POLY REFR & GUARD	
40	3/4"	120-277VAC	VM1L4030A2GLG	VM1L4030A2R5G	VM1L4030A2S8G	VM1L4030A2P5G	
45	3/4"	120-277VAC	VM1L4530A2GLG	VM1L4530A2R5G	VM1L4530A2S8G	VM1L4530A2P5G	
50	3/4"	120-277VAC	VM1L5030A2GLG	VM1L5030A2R5G	VM1L5030A2S8G	VM1L5030A2P5G	

VM1L SE	VM1L SERIES CEILING WITH OPTIC AND GUARD®							
I WATTS HIR SIZE VOI TAGE GOOR GOOR & GUARD						12" SPIN-TOP TYPE V POLY REFR & GUARD		
40	3/4"	120-277VAC	VM1L4030X2GLG	VM1L4030X2R5G	VM1L4030X2S8G	VM1L4030X2P5G		
45	3/4"	120-277VAC	VM1L4530X2GLG	VM1L4530X2R5G	VM1L4530X2S8G	VM1L4530X2P5G		
50	3/4"	120-277VAC	VM1L5030X2GLG	VM1L5030X2R5G	VM1L5030X2S8G	VM1L5030X2P5G		

VM1L SE	VM1L SERIES WALL WITH OPTIC AND GUARD®							
WATTS	HUB SIZE@	VOLTAGE3	GLOBE & GUARD	TYPE V GLASS REFRACTOR & GUARD	8" SPIN-TOP TYPE V REFRACTOR & GUARD	12" SPIN-TOP TYPE V POLY REFR & GUARD		
40	3/4"	120-277VAC	VM1L4030B2GLG	VM1L4030B2R5G	VM1L4030B2S8G	VM1L4030B2P5G		
45	3/4"	120-277VAC	VM1L4530B2GLG	VM1L4530B2R5G	VM1L4530B2S8G	VM1L4530B2P5G		
50	3/4"	120-277VAC	VM1L5030B2GLG	VM1L5030B2R5G	VM1L5030B2S8G	VM1L5030B2P5G		

VM1L SE	VM1L SERIES CONE WITH OPTIC AND GUARD ①							
WATTS	HUB SIZE②	VOLTAGE3	GLOBE & GUARD	TYPE V GLASS Refractor & Guard	8" SPIN-TOP TYPE V Refractor & Guard	12" SPIN-TOP TYPE V POLY REFR & GUARD		
40	3/4"	120-277VAC	VM1L4030C2GLG	VM1L4030C2R5G	VM1L4030C2S8G	VM1L4030C2P5G		
45	3/4"	120-277VAC	VM1L4530C2GLG	VM1L4530C2R5G	VM1L4530C2S8G	VM1L4530C2P5G		
50	3/4"	120-277VAC	VM1L5030C2GLG	VM1L5030C2R5G	VM1L5030C2S8G	VM1L5030C2P5G		

- ① Catalog numbers shown are with Guard; to omit guard change ending G to N; e.g. VM1L4530A2GLN
- ② Catalog numbers shown are with 3/4" conduit openings; change "2" to "3" for 1" e.g. VM1L4530A3GLG
- ③ 120VAC through 277VAC 50/60Hz



Reduced Profile







STANCHION 25°

STANCHION STRAIGHT

EZ ADAPTER

ORDERING INFORMATION

VM1L SE	VM1L SERIES 25° STANCHION WITH OPTIC AND GUARD®							
WATTS	HUB SIZE@	VOLTAGE ③	GLOBE & GUARD	TYPE V GLASS REFRACTOR & GUARD	8" SPIN-TOP TYPE V Refractor & Guard	12" SPIN-TOP TYPE V POLY REFR & GUARD		
40	1-1/2"	120-277VAC	VM1L4030D5GLG	VM1L4030D5R5G	VM1L4030D5S8G	VM1L4030D5P5G		
45	1-1/2"	120-277VAC	VM1L4530D5GLG	VM1L4530D5R5G	VM1L4530D5S8G	VM1L4530D5P5G		
50	1-1/2"	120-277VAC	VM1L5030D5GLG	VM1L5030D5R5G	VM1L5030D5S8G	VM1L5030D5P5G		

VM1L SE	VM1L SERIES STRAIGHT STANCHION WITH OPTIC AND GUARD®								
WATTS	HUB SIZE@	VOLTAGE3	GLOBE & GUARD	TYPE V GLASS Refractor & Guard	8" SPIN-TOP TYPE V REFRACTOR & GUARD	12" SPIN-TOP TYPE V POLY REFR & GUARD			
40	1-1/2"	120-277VAC	VM1L4030S5GLG	VM1L4030S5R5G	VM1L4030S5S8G	VM1L4030S5P5G			
45	1-1/2"	120-277VAC	VM1L4530S5GLG	VM1L4530S5R5G	VM1L4530S5S8G	VM1L4530S5P5G			
50	1-1/2"	120-277VAC	VM1L5030S5GLG	VM1L5030S5R5G	VM1L5030S5S8G	VM1L5030S5P5G			

VM1L SERIES EZ ADAPTER WITH OPTIC AND GUARD®							
WATTS	HUB SIZE⊕	VOLTAGE3	GLOBE & GUARD	TYPE V GLASS REFRACTOR & GUARD	8" SPIN-TOP TYPE V REFRACTOR & GUARD	12" SPIN-TOP TYPE V POLY REFR & GUARD	
40	NA	120-277VAC	VM1L4030EZGLG	VM1L4030EZR5G	VM1L4030EZS8G	VM1L4030EZP5G	
45	NA	120-277VAC	VM1L4530EZGLG	VM1L4530EZR5G	VM1L4530EZS8G	VM1L4530EZP5G	
50	NA	120-277VAC	VM1L5030EZGLG	VM1L5030EZR5G	VM1L5030EZS8G	VM1L5030EZP5G	

- ① Catalog numbers shown are with Guard; to omit guard change ending G to N; e.g. VM1L4530D5GLN
- ② Catalog numbers shown are with 1-1/2" conduit openings; change "5" to "4" for 1-1/4" e.g. VM1L4530D4GLG
- ③ 120VAC through 277VAC 50/60Hz
- ④ VMEZA tank adapters UL "classified" as an assembly for use between VM tanks and EZ mounts. Order EZ mounts separately (see below).

MOUNTING BO	MOUNTING BOXES FOR EZ ADAPTER						
PENDANT	HUB SIZE						
EZA2	EZX2	EZB2	_	3/4"			
EZA3	EZX3	EZB3	_	1"			
_	— — — EZD4A*						

^{*1-1/2&}quot; furnished with 1-1/2"-1-1/4" reducer and extension.



Wall Bracket 25° Stanchion





Pendant



25° Stanchion



Ceiling



Straight Stanchion



EZ Adapter* **VMEZA**



Cone Top



Tank Adapter See page 31 for Full Range

CERTILITE	CERTILITE®V VM MOUNTING SPLICE BOXES								
		CATALOG NUMBER							
HUB SIZE	PENDANT	PENDANT CEILING 4 HUB CEILING 5 HUB WALL CONE TOP 25 DEGREE STANCHION 90 DEGREE STANCHION							
3/4"	VMA2B	VMX2B	VMX6B	VMB2B	VMC2B	ı	_		
1 "	VMA3B	VMX3B	VMX7B	VMB3B	VMC3B	_	_		
1-1/4"	_	_	_	_	_	VMD4B	VMS4B		
1-1/2"	_	_	_	_	_	VMD5B	VMS5B		
M-20	_	VMX8B**	VMX9B	_	-	1	_		

^{*}VMEZA is used between a ballast tank and an EZ mount-ordered separately. See page 18 for more information.

^{**}VMX8B furnished with 3 non-metallic plugs.

VM1L LED OPTICS AND ACCESSORIES		
DESCRIPTION	OPTIC LOGIC	GUARD
Globe (glass)	VMG17 (GL)	VMAG17
Refractor (all glass) Type V	VMR175 (R5)	VMAG17
Refractor (spin top) 8"Type V	VZRG1550 (S8)	VMRWG8
Refractor (spin top) 12"Type V	VZRG2550 (S5)	VMRWGS
Refractor polycarbonate (spin-top) 12" Type V	VZRP175 (P5)	VMRWGS
DOME REFLECTOR (Polyester reinforced fiberglass)	VMPSD40	NA
ANGLE REFLECTOR (Polyester reinforced fiberglass)	VMPA40	NA
120VAC Photocell with FS Style Cover	VMFSPC1	NA
208-277VAC Photocell with FS Style Cover	VMFSPC2	NA
3-sided EXIT Accessory (use without guard)	VEXA100B	NA
Tank adapter to Crouse-Hinds® VM Series mounts (see pg 31)	VMCHVM	NA

VM1L LED HOUSINGS WITH DRIVERS AND LEDS - ELECTRICAL RATINGS ①										
CAT. NO.	VOLTAGE 50/60HZ	WATTAGE	AMPS 120	/277 CIL②	WEIGHT					
VM1L4030	120-277VAC	40	.361/.16	5490	15.5 LBS					
VM1L4530	120-277VAC	48.4	.416/.180	3960	15.5 LBS					
VM1L5030	120-277VAC	50	.43/.18	7656	15.5 LBS					

THERMAL P	THERMAL PERFORMANCE DATA (ANY OPTIC)									
CAT. NO.	AMBIENT	C1D2	C2D1	L70	SUPPLY WIRE					
VM1L4030	40°C	T6	T4(EFG)	61000	75°C					
VM1L4030	55°C	T5	T4(EFG)	61000	90°C					
VM1L4530	40°C	T4A	T4(EFG)	55000	75°C					
VM1L4530	40°C	T4	T4(EFG)	50000	90°C					
VM1L4530	40°C	T5	T4(EFG)	72600	75°C					
VM1L4530	40°C	T4A	T4(EFG)	72600	90°C					



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VMG17 VMR175



VZRG1550 VZRG2550



VMAG17



VMRWG83 **VMRWGS**3









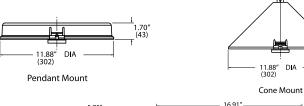
VMFSPC1 VEXA100B

③ VMRWG8 Plated Steel, VMRWGS 316 Stainless Steel.



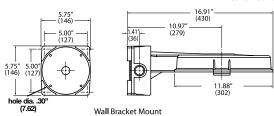
① Driver THD < 20%, Powerfactor 99% @ 120V; Line Regulation 2%; Load regulation 5%; Protected against Over-voltage and Over-current.

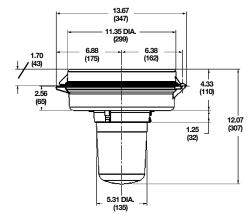
② CIL = Calculated Initial Lumens of LED component based on mfg. data and driver current INSIDE the optic. This value is provided as a reference only for comparison to traditional light sources such as incandescent, HID, or fluorescent which use initial values in "relative" photometry. KILLARK LED luminaires are tested using the Absolute photometry method (LM79-08), which calculates delivered lumens only. KILLARK's LED luminaires provide very bright white 5000K (CCT) color and can appear brighter than traditional light sources with higher lumen values under both photopic and scotopic conditions.



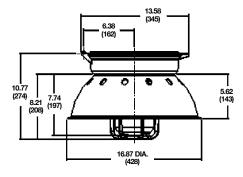
Reduced Profile

5.69" (144)

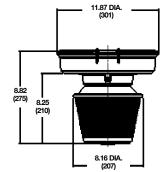




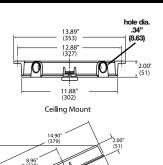
VM1L Tank w/Pendant Mount & Globe

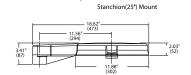


VM1L Tank with Dome Refractor

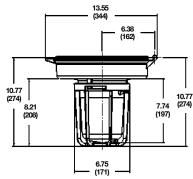


VM1L Tank with 8" Spin-top Refractor

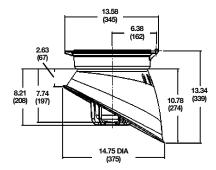




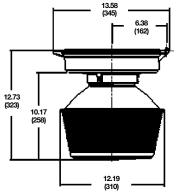
Stanchion(0°) Mount



VM1L Tank Globe & Guard



VM1L Tank with Angle Refractor



VM1L Tank with 12" Spin-top Refractor



Typical Weights (lbs.) with Standard Globe and Guard - VM1L Series						
Pendant 23.00 Ceiling 24.10 Wall 27.50 Stanchion 23.90						

Expanded wattage range and shallower depth VM2LB & VM2LC models









VM4LC with Flat Lens

Class I, Zone 2, Groups IIC, IIB, IIA Class II, Div. 1 & 2, Groups E,F,G Class III Suitable for wet locations **NEMA 3, 4X IP66 Marine**

Class I, Div. 2, Groups A,B,C,D

Certified - File LR11713

Contact Factory for other certification details

VM2LB with Globe/Guard

FEATURES-SPECIFICATIONS

Applications

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

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

Compliances

- UL-8750 for LED lighting
- UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 2; Class II, Divisions 1 and 2; Class III
- CSA C22.2 no. 137-M1981 electric luminairies for use in hazardous locations
- Enclosed and gasketed
- NEMA 3, 4X
- IP66 & Marine

Materials

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

LED Luminaire Features and Standards

 Traditional Industrial Appearance, Suitability, and Photometric Performance

- Wide variety of optics including globes, globes with reflectors, all-glass refractors, spin-top refrac tors 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 to 65 Watt
- Crisp White Light for Excellent Color Rendering - Chromaticity 5000K (CTT range); approx. 70 CRI
- Energy Savings less than 130 Watts of
- Long Life 50,000 55,000 maintenance free hours to 70% initial lumens
- 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 Drivers Redundant Systems (built-in backup) for most models, or for additional energy savings half of fixture can be turned off
- LM80-08* Measurement of lumen maintenance for LED light sources (including TM-21)
- LM79-08* Certified "Absolute" Photometry, including Chromaticity Color for Solid State Lighting
- L70 Values Industry Nomenclature for Hours of use to 70% of Initial Lumens
- Two LED internal heat sink styles - Bulb VM2LB/VM4LB
- Concave VM2LC/VM4LC

Supplemental surge protection included

as standard for AC models only * LM-xx + TM-21 are Illumination Engineering Society standards designed to promote uniformity in testing procedures among test labs and manufacturers. For more information go to www.ies.org

Swing-Barrel Nut (Patented)





LED <u>INTERNAL</u> Heat Sinks



Bulb style (VM4LB) offers traditional appearance - important in facility upgrades. Maximum lumen output, but has more glare at line-of-sight mounting heights.



Concave style (VM4LC) models can use all optics plus new patent pending VZRxF12 flat Spin-Top for a compact profile. Recessed concave LED array produces less glare.



Patent Pending





CertiLite®V LED Catalog Number Logic

and LED's

B-Bulb heat sink -

C—Concave heat sink

Lamp Wattage

Approx. VA (wattage) of driver & LED's

040W LED VM2, VM4

050W LED VM2, VM4

055W LED VM2, VM4

065W LED VM2, VM4

070W LED VM4

080W LED VM4

090W LED VM4

100W LED VM4

105W LED VM4

130W LED VM4

Voltage -

30—120-277VAC 50/60 Hz①

33—347-480VAC 50/60Hz①

34-120-250VDC (to 105W)@

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—M25 5-Hub (X)

Z—EZ Mount Adapter®

N—None (mount ordered separately)



Recommended energy saving replacement for VM4L12030 is VM4LC07030 (lumen equivalent)



Higher efficiency LED's require NO external heat sink

Options/Accessories

F-Single Fuse®

FF-Double Fuse®

TBx-Terminal Blocks

P1—Photocell 120V®

P3—Photocell 347V®

SP—Surge Protection®

CP—Component Pack

AN—Assembled

QD-QD Wired at Ballast®

P2—Photocell 208-277V®

x= Variations

(May be alphanumeric

to indicate terminals)

Factory Installed

Factory Installed

Factory Installed

(Tank w/mount,

included in tank)

(Tank w/mount,

included in tank)

Accessories—See ® below

optic, guard- LED's

optic, guard- LED's

• •

Guard

G—Guard

(Globes & Glass refractors)

<u>00</u>

N-No Guard

Optic

GL—Globe

R5-Type V Refractor (all glass)

ER—Enclosed Reflector

EP—Polycarbonate Shielded Enclosed Reflector

P5— 12" Type V Polycarbonate Spin-Top*

\$5—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)

① 40W, 50W, 55W, 65W, 70W single driver; 80W -130W dual drivers

@ 105W max

③ Completes as "EZ", conduit mounting boxes ordered separately -See catalog grids.

Completes as NN-Mount ordered separately.

S Fusing not for Marine or Canadian installations.

@ Photo cells for Class I, Div. 2 only.

QD = Quick Disconnect. Allows easy tank removal for maintenance. Electrician simply unplugs tank from mount for fixture relocation or repair due to impact damage.

Accessories - Shown for ordering convenience (shipped separately)

S VMPSD40 Fiberglass White Reflector A VMPA40 Fiberglass ANGLE White Reflector

D HRD400 Deep White Reflector Z HRD400ALZ Deep Alzak Reflector

One supplemental surge protector for both drivers is included as standard.
 Option SP is needed only for applications were the two drivers (80 - 130W) will be powered separately <u>AND</u> each circuit requires additional protection.

*Non-glass Group G Food Processing Suitability





Globe & Guard or Glass Refractor & Guard



Spin-Top Poly or Glass Flat Lens VM4LC only



Spin-Top Poly or Glass Refractor



Enclosed Reflector



VM4LE	SERIE	S CEILING	WITH OPTIC AND	GUARD ①				
WATTS	HUB Size@	VOLTAGE ③	GLOBE & GUARD	TYPE V GLASS REFRACTOR & GUARD	12" SPIN-TOP Type V Glass Refractor & Guard	12" SPIN-TOP TYPE V POLYCARBONATE REFRACTOR & GUARD	ENCLOSED Reflector	POLYCARBONATE FOOD OPTIC
40@	3/4"	120-277VAC	VM4LB04030A2GLG	VM4LB04030A2R5G	VM4LB04030A2S5G	VM4LB04030A2P5G	VM4LB04030A2ERN	VM4LB04030A2EPN
50⊕	3/4"	120-277VAC	VM4LB05030A2GLG	VM4LB05030A2R5G	VM4LB05030A2S5G	VM4LB05030A2P5G	VM4LB05030A2ERN	VM4LB05030A2EPN
55④	3/4"	120-277VAC	VM4LB05530A2GLG	VM4LB05530A2R5G	VM4LB05530A2S5G	VM4LB05530A2P5G	VM4LB05530A2ERN	VM4LB05530A2EPN
65④	3/4"	120-277VAC	VM4LB06530A2GLG	VM4LB06530A2R5G	VM4LB06530A2S5G	VM4LB06530A2P5G	VM4LB06530A2ERN	VM4LB06530A2EPN
70	3/4"	120-277VAC	VM4LB07030A2GLG	VM4LB07030A2R5G	VM4LB07030A2S5G	VM4LB07030A2P5G	VM4LB07030A2ERN	VM4LB07030A2EPN
80	3/4"	120-277VAC	VM4LB08030A2GLG	VM4LB08030A2R5G	VM4LB08030A2S5G	VM4LB08030A2P5G	VM4LB08030A2ERN	VM4LB08030A2EPN
90	3/4"	120-277VAC	VM4LB09030A2GLG	VM4LB09030A2R5G	VM4LB09030A2S5G	VM4LB09030A2P5G	VM4LB09030A2ERN	VM4LB09030A2EPN
100	3/4"	120-277VAC	VM4LB10030A2GLG	VM4LB10030A2R5G	VM4LB10030A2S5G	VM4LB10030A2P5G	VM4LB10030A2ERN	VM4LB10030A2EPN
105	3/4"	120-277VAC	VM4LB10530A2GLG	VM4LB10530A2R5G	VM4LB10530A2S5G	VM4LB10530A2P5G	VM4LB10530A2ERN	VM4LB10530A2EPN
130	3/4"	120-277VAC	VM4LB13030A2GLG	VM4LB13030A2R5G	VM4LB13030A2S5G	VM4LB13030A2P5G	VM4LB13030A2ERN	VM4LB13030A2EPN

VM4L0	VM4LC SERIES PENDANT WITH OPTIC AND GUARD®											
WATTS	HUB Size@	VOLTAGE3	GLOBE & GUARD	12" SPIN-TOP POLYCARBONATE FLAT LENS*	TYPE V GLASS Refractor & Guard	12" SPIN-TOP TYPE V GLASS REFRACTOR & GUARD	12" SPIN-TOP Type v Polycarbonate Refractor & Guard	POLYCARBONATE FOOD OPTIC				
40@	3/4"	120-277VAC	VM4LC04030A2GLG	VM4LC04030A2PFN	VM4LC04030A2R5G	VM4LC04030A2S5G	VM4LC04030A2P5G	VM4LC04030A2EPN				
50⊕	3/4"	120-277VAC	VM4LC05030A2GLG	VM4LC05030A2PFN	VM4LC05030A2R5G	VM4LC05030A2S5G	VM4LC05030A2P5G	VM4LC05030A2EPN				
55④	3/4"	120-277VAC	VM4LC05530A2GLG	VM4LC05530A2PFN	VM4LC05530A2R5G	VM4LC05530A2S5G	VM4LC05530A2P5G	VM4LC05530A2EPN				
65④	3/4"	120-277VAC	VM4LC06530A2GLG	VM4LC06530A2PFN	VM4LC06530A2R5G	VM4LC06530A2S5G	VM4LC06530A2P5G	VM4LC06530A2EPN				
70	3/4"	120-277VAC	VM4LC07030A2GLG	VM4LC07030A2PFN	VM4LC07030A2R5G	VM4LC07030A2S5G	VM4LC07030A2P5G	VM4LC07030A2EPN				
80	3/4"	120-277VAC	VM4LC08030A2GLG	VM4LC08030A2PFN	VM4LC08030A2R5G	VM4LC08030A2S5G	VM4LC08030A2P5G	VM4LC08030A2EPN				
90	3/4"	120-277VAC	VM4LC09030A2GLG	VM4LC09030A2PFN	VM4LC09030A2R5G	VM4LC09030A2S5G	VM4LC09030A2P5G	VM4LC09030A2EPN				
100	3/4"	120-277VAC	VM4LC10030A2GLG	VM4LC10030A2PFN	VM4LC10030A2R5G	VM4LC10030A2S5G	VM4LC10030A2P5G	VM4LC10030A2EPN				
105	3/4"	120-277VAC	VM4LC10530A2GLG	VM4LC10530A2PFN	VM4LC10530A2R5G	VM4LC10530A2S5G	VM4LC10530A2P5G	VM4LC10530A2EPN				
130	3/4"	120-277VAC	VM4LC13030A2GLG	VM4LC13030A2PFN	VM4LC13030A2R5G	VM4LC13030A2S5G	VM4LC13030A2P5G	VM4LC13030A2EPN				

① Catalog numbers shown are with Guard (except ER/EP/PF); to omit guard change ending G to N; e.g. VM4LB05530X2GLN.

^{*} For Glass 12" Spin-Top Flat Lens change PFN to GFN at end of catalog number.



 $^{{\}it @ Catalog numbers shown are with 3/4" conduit openings; change "2" to "3" for 1"; e.g. VM4LB05530X3GLG.}\\$

③ 120VAC through 277VAC 50/60Hz. See logic for other voltages.



Globe & Guard or Glass Refractor & Guard



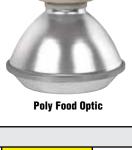
Spin-Top Poly or Glass Flat Lens



Spin-Top Poly or Glass Refractor



Enclosed Reflector



VM4LE	VM4LB SERIES CEILING WITH OPTIC AND GUARD ①											
WATTS	HUB Size@	VOLTAGE ③	GLOBE & GUARD	TYPE V GLASS REFRACTOR & GUARD	12" SPIN-TOP Type V Glass Refractor & Guard	12" SPIN-TOP TYPE V POLYCARBONATE REFRACTOR & GUARD	ENCLOSED Reflector	POLYCARBONATE FOOD OPTIC				
40@	3/4"	120-277VAC	VM4LB04030X2GLG	VM4LB04030X2R5G	VM4LB04030X2S5G	VM4LB04030X2P5G	VM4LB04030X2ERN	VM4LB04030X2EPN				
50@	3/4"	120-277VAC	VM4LB05030X2GLG	VM4LB05030X2R5G	VM4LB05030X2S5G	VM4LB05030X2P5G	VM4LB05030X2ERN	VM4LB05030X2EPN				
55@	3/4"	120-277VAC	VM4LB05530X2GLG	VM4LB05530X2R5G	VM4LB05530X2S5G	VM4LB05530X2P5G	VM4LB05530X2ERN	VM4LB05530X2EPN				
65@	3/4"	120-277VAC	VM4LB06530X2GLG	VM4LB06530X2R5G	VM4LB06530X2S5G	VM4LB06530X2P5G	VM4LB06530X2ERN	VM4LB06530X2EPN				
70	3/4"	120-277VAC	VM4LB07030X2GLG	VM4LB07030X2R5G	VM4LB07030X2S5G	VM4LB07030X2P5G	VM4LB07030X2ERN	VM4LB07030X2EPN				
80	3/4"	120-277VAC	VM4LB08030X2GLG	VM4LB08030X2R5G	VM4LB08030X2S5G	VM4LB08030X2P5G	VM4LB08030X2ERN	VM4LB08030X2EPN				
90	3/4"	120-277VAC	VM4LB09030X2GLG	VM4LB09030X2R5G	VM4LB09030X2S5G	VM4LB09030X2P5G	VM4LB09030X2ERN	VM4LB09030X2EPN				
100	3/4"	120-277VAC	VM4LB10030X2GLG	VM4LB10030X2R5G	VM4LB10030X2S5G	VM4LB10030X2P5G	VM4LB10030X2ERN	VM4LB10030X2EPN				
105	3/4"	120-277VAC	VM4LB10530X2GLG	VM4LB10530X2R5G	VM4LB10530X2S5G	VM4LB10530X2P5G	VM4LB10530X2ERN	VM4LB10530X2EPN				
130	3/4"	120-277VAC	VM4LB13030X2GLG	VM4LB13030X2R5G	VM4LB13030X2S5G	VM4LB13030X2P5G	VM4LB13030X2ERN	VM4LB13030X2EPN				

VM4L0	VM4LC SERIES CEILING WITH OPTIC AND GUARD®											
WATTS	HUB Size@	VOLTAGE3	GLOBE & GUARD	12" SPIN-TOP POLYCARBONATE FLAT LENS*	TYPE V GLASS Refractor & Guard	12" SPIN-TOP TYPE V GLASS REFRACTOR & GUARD	12" SPIN-TOP Type v Polycarbonate Refractor & Guard	POLYCARBONATE FOOD OPTIC				
40@	3/4"	120-277VAC	VM4LC04030X2GLG	VM4LC04030X2PFN	VM4LC04030X2R5G	VM4LC04030X2S5G	VM4LC04030X2P5G	VM4LC04030X2EPN				
50⊕	3/4"	120-277VAC	VM4LC05030X2GLG	VM4LC05030X2PFN	VM4LC05030X2R5G	VM4LC05030X2S5G	VM4LC05030X2P5G	VM4LC05030X2EPN				
55@	3/4"	120-277VAC	VM4LC05530X2GLG	VM4LC05530X2PFN	VM4LC05530X2R5G	VM4LC05530X2S5G	VM4LC05530X2P5G	VM4LC05530X2EPN				
65④	3/4"	120-277VAC	VM4LC06530X2GLG	VM4LC06530X2PFN	VM4LC06530X2R5G	VM4LC06530X2S5G	VM4LC06530X2P5G	VM4LC06530X2EPN				
70	3/4"	120-277VAC	VM4LC07030X2GLG	VM4LC07030X2PFN	VM4LC07030X2R5G	VM4LC07030X2S5G	VM4LC07030X2P5G	VM4LC07030X2EPN				
80	3/4"	120-277VAC	VM4LC08030X2GLG	VM4LC08030X2PFN	VM4LC08030X2R5G	VM4LC08030X2S5G	VM4LC08030X2P5G	VM4LC08030X2EPN				
90	3/4"	120-277VAC	VM4LC09030X2GLG	VM4LC09030X2PFN	VM4LC09030X2R5G	VM4LC09030X2S5G	VM4LC09030X2P5G	VM4LC09030X2EPN				
100	3/4"	120-277VAC	VM4LC10030X2GLG	VM4LC10030X2PFN	VM4LC10030X2R5G	VM4LC10030X2S5G	VM4LC10030X2P5G	VM4LC10030X2EPN				
105	3/4"	120-277VAC	VM4LC10530X2GLG	VM4LC10530X2PFN	VM4LC10530X2R5G	VM4LC10530X2S5G	VM4LC10530X2P5G	VM4LC10530X2EPN				
130	3/4"	120-277VAC	VM4LC13030X2GLG	VM4LC13030X2PFN	VM4LC13030X2R5G	VM4LC13030X2S5G	VM4LC13030X2P5G	VM4LC13030X2EPN				

① Catalog numbers shown are with Guard (except ER/EP/PF); to omit guard change ending G to N; e.g. VM4LB05530X2GLN.

^{*} For Glass 12" Spin-Top Flat Lens change PFN to GFN at end of catalog number.



 $^{@ \} Catalog \ numbers \ shown \ are \ with \ 3/4" \ conduit \ openings; \ change \ "2" \ to \ "3" \ for \ 1"; e.g. \ VM4LB05530X3GLG.$

③ 120VAC through 277VAC 50/60Hz. See logic for other voltages.

^{@ 40, 50, 55} and 65W are available in VM2LB/VM2LC shallower housings. Substitute VM2L for VM4L in catalog number.

High Wattage Wall Mount



VM4LE	VM4LB SERIES WALL WITH OPTIC AND GUARD®											
WATTS	HUB Size@	VOLTAGE3	GLOBE & GUARD	TYPE V GLASS REFRACTOR & GUARD	12" SPIN-TOP TYPE V GLASS REFRACTOR & GUARD	12" SPIN-TOP TYPE V POLYCARBONATE REFRACTOR & GUARD	ENCLOSED Reflector	GLOBE, GUARD & Angle Relfector 4				
40⑤	3/4"	120-277VAC	VM4LB04030B2GLG	VM4LB04030B2R5G	VM4LB04030B2S5G	VM4LB04030B2P5G	VM4LB04030B2ERN	VM4LB04030B2GLG-A				
50©	3/4"	120-277VAC	VM4LB05030B2GLG	VM4LB05030B2R5G	VM4LB05030B2S5G	VM4LB05030B2P5G	VM4LB05030B2ERN	VM4LB05030B2GLG-A				
55®	3/4"	120-277VAC	VM4LB05530B2GLG	VM4LB05530B2R5G	VM4LB05530B2S5G	VM4LB05530B2P5G	VM4LB05530B2ERN	VM4LB05530B2GLG-A				
65©	3/4"	120-277VAC	VM4LB06530B2GLG	VM4LB06530B2R5G	VM4LB06530B2S5G	VM4LB06530B2P5G	VM4LB06530B2ERN	VM4LB06530B2GLG-A				
70	3/4"	120-277VAC	VM4LB07030B2GLG	VM4LB07030B2R5G	VM4LB07030B2S5G	VM4LB07030B2P5G	VM4LB07030B2ERN	VM4LB07030B2GLG-A				
80	3/4"	120-277VAC	VM4LB08030B2GLG	VM4LB08030B2R5G	VM4LB08030B2S5G	VM4LB08030B2P5G	VM4LB08030B2ERN	VM4LB08030B2GLG-A				
90	3/4"	120-277VAC	VM4LB09030B2GLG	VM4LB09030B2R5G	VM4LB09030B2S5G	VM4LB09030B2P5G	VM4LB09030B2ERN	VM4LB09030B2GLG-A				
100	3/4"	120-277VAC	VM4LB10030B2GLG	VM4LB10030B2R5G	VM4LB10030B2S5G	VM4LB10030B2P5G	VM4LB10030B2ERN	VM4LB10030B2GLG-A				
105	3/4"	120-277VAC	VM4LB10530B2GLG	VM4LB10530B2R5G	VM4LB10530B2S5G	VM4LB10530B2P5G	VM4LB10530B2ERN	VM4LB10530B2GLG-A				
130	3/4"	120-277VAC	VM4LB13030B2GLG	VM4LB13030B2R5G	VM4LB13030B2S5G	VM4LB13030B2P5G	VM4LB13030B2ERN	VM4LB13030B2GLG-A				

VM4L	VM4LC SERIES WALL WITH OPTIC AND GUARD®											
WATTS	HUB Size ②	VOLTAGE ③	GLOBE & GUARD	12" SPIN-TOP POLYCARBONATE FLAT LENS*	TYPE V GLASS Refractor & Guard	12" SPIN-TOP TYPE V GLASS REFRACTOR & GUARD	12" SPIN-TOP TYPE V POLYCARBONATE REFRACTOR & GUARD	GLOBE, GUARD & Angle Relfector (4)				
40⑤	3/4"	120-277VAC	VM4LC04030B2GLG	VM4LC04030B2PFN	VM4LC04030B2R5G	VM4LC04030B2S5G	VM4LC04030B2P5G	VM4LC04030B2GLG-A				
50⑤	3/4"	120-277VAC	VM4LC05030B2GLG	VM4LC05030B2PFN	VM4LC05030B2R5G	VM4LC05030B2S5G	VM4LC05030B2P5G	VM4LC05030B2GLG-A				
55®	3/4"	120-277VAC	VM4LC05530B2GLG	VM4LC05530B2PFN	VM4LC05530B2R5G	VM4LC05530B2S5G	VM4LC05530B2P5G	VM4LC05530B2GLG-A				
65®	3/4"	120-277VAC	VM4LC06530B2GLG	VM4LC06530B2PFN	VM4LC06530B2R5G	VM4LC06530B2S5G	VM4LC06530B2P5G	VM4LC06530B2GLG-A				
70	3/4"	120-277VAC	VM4LC07030B2GLG	VM4LC07030B2PFN	VM4LC07030B2R5G	VM4LC07030B2S5G	VM4LC07030B2P5G	VM4LC07030B2GLG-A				
80	3/4"	120-277VAC	VM4LC08030B2GLG	VM4LC08030B2PFN	VM4LC08030B2R5G	VM4LC08030B2S5G	VM4LC08030B2P5G	VM4LC08030B2GLG-A				
90	3/4"	120-277VAC	VM4LC09030B2GLG	VM4LC09030B2PFN	VM4LC09030B2R5G	VM4LC09030B2S5G	VM4LC09030B2P5G	VM4LC09030B2GLG-A				
100	3/4"	120-277VAC	VM4LC10030B2GLG	VM4LC10030B2PFN	VM4LC10030B2R5G	VM4LC10030B2S5G	VM4LC10030B2P5G	VM4LC10030B2GLG-A				
105	3/4"	120-277VAC	VM4LC10530B2GLG	VM4LC10530B2PFN	VM4LC10530B2R5G	VM4LC10530B2S5G	VM4LC10530B2P5G	VM4LC10530B2GLG-A				
130	3/4"	120-277VAC	VM4LC13030B2GLG	VM4LC13030B2PFN	VM4LC13030B2R5G	VM4LC13030B2S5G	VM4LC13030B2P5G	VM4LC13030B2GLG-A				

- © Catalog numbers shown are with Guard (except ER/EP/PF); to omit guard change ending G to N; e.g. VM4LB05530B2GLN.
- ② Catalog numbers shown are with 3/4" conduit openings; change "2" to "3" for 1"; e.g. VM4LB05530B3GLG.
- ③ 120VAC through 277VAC 50/60Hz. See logic for other voltages.
- ① See logic for reflector ordering options or order angle reflector VMPA40 separately.
- © 40, 50, 55 and 65W are available in VM2LB/VM2LC shallower housings. Substitute VM2L for VM4L in catalog number.

^{*} For Glass 12" Spin-Top Flat Lens change PFN to GFN at end of catalog number.



KILLARK LED VM2LB, VM2LC SERIES VM4LB, VM4LC SERIES



Globe & Guard or Glass Refractor & Guard



Enclosed Reflector



High Wattage Cone Mount

Spin-Top Poly or Glass Flat Lens



Poly Food Optic



Glass Refractor

VM4LE	VM4LB SERIES CONE WITH OPTIC AND GUARD®											
WATTS	HUB Size@	VOLTAGE3	GLOBE & GUARD	TYPE V GLASS REFRACTOR & GUARD	12" SPIN-TOP Type V Glass Refractor & Guard	12" SPIN-TOP TYPE V POLYCARBONATE REFRACTOR & GUARD	ENCLOSED Reflector	POLYCARBONATE FOOD OPTIC				
40@	3/4"	120-277VAC	VM4LB04030C2GLG	VM4LB04030C2R5G	VM4LB04030C2S5G	VM4LB04030C2P5G	VM4LB04030C2ERN	VM4LB04030C2EPN				
50④	3/4"	120-277VAC	VM4LB05030C2GLG	VM4LB05030C2R5G	VM4LB05030C2S5G	VM4LB05030C2P5G	VM4LB05030C2ERN	VM4LB05030C2EPN				
55@	3/4"	120-277VAC	VM4LB05530C2GLG	VM4LB05530C2R5G	VM4LB05530C2S5G	VM4LB05530C2P5G	VM4LB05530C2ERN	VM4LB05530C2EPN				
65@	3/4"	120-277VAC	VM4LB06530C2GLG	VM4LB06530C2R5G	VM4LB06530C2S5G	VM4LB06530C2P5G	VM4LB06530C2ERN	VM4LB06530C2EPN				
70	3/4"	120-277VAC	VM4LB07030C2GLG	VM4LB07030C2R5G	VM4LB07030C2S5G	VM4LB07030C2P5G	VM4LB07030C2ERN	VM4LB07030C2EPN				
80	3/4"	120-277VAC	VM4LB08030C2GLG	VM4LB08030C2R5G	VM4LB08030C2S5G	VM4LB08030C2P5G	VM4LB08030C2ERN	VM4LB08030C2EPN				
90	3/4"	120-277VAC	VM4LB09030C2GLG	VM4LB09030C2R5G	VM4LB09030C2S5G	VM4LB09030C2P5G	VM4LB09030C2ERN	VM4LB09030C2EPN				
100	3/4"	120-277VAC	VM4LB10030C2GLG	VM4LB10030C2R5G	VM4LB10030C2S5G	VM4LB10030C2P5G	VM4LB10030C2ERN	VM4LB10030C2EPN				
105	3/4"	120-277VAC	VM4LB10530C2GLG	VM4LB10530C2R5G	VM4LB10530C2S5G	VM4LB10530C2P5G	VM4LB10530C2ERN	VM4LB10530C2EPN				
130	3/4"	120-277VAC	VM4LB13030C2GLG	VM4LB13030C2R5G	VM4LB13030C2S5G	VM4LB13030C2P5G	VM4LB13030C2ERN	VM4LB13030C2EPN				

VM4L0	VM4LC SERIES CONE WITH OPTIC AND GUARD®											
WATTS	HUB Size@	VOLTAGE3	GLOBE & GUARD	12" SPIN-TOP POLYCARBONATE FLAT LENS*	TYPE V GLASS Refractor & Guard	12" SPIN-TOP Type V Glass Refractor & Guard	12" SPIN-TOP TYPE V POLYCARBONATE REFRACTOR & GUARD	POLYCARBONATE FOOD OPTIC				
40④	3/4"	120-277VAC	VM4LC04030C2GLG	VM4LC04030C2PFN	VM4LC04030C2R5G	VM4LC04030C2S5G	VM4LC04030C2P5G	VM4LC04030C2EPN				
50④	3/4"	120-277VAC	VM4LC05030C2GLG	VM4LC05030C2PFN	VM4LC05030C2R5G	VM4LC05030C2S5G	VM4LC05030C2P5G	VM4LC05030C2EPN				
55⊕	3/4"	120-277VAC	VM4LC05530C2GLG	VM4LC05530C2PFN	VM4LC05530C2R5G	VM4LC05530C2S5G	VM4LC05530C2P5G	VM4LC05530C2EPN				
65④	3/4"	120-277VAC	VM4LC06530C2GLG	VM4LC06530C2PFN	VM4LC06530C2R5G	VM4LC06530C2S5G	VM4LC06530C2P5G	VM4LC06530C2EPN				
70	3/4"	120-277VAC	VM4LC07030C2GLG	VM4LC07030C2PFN	VM4LC07030C2R5G	VM4LC07030C2S5G	VM4LC07030C2P5G	VM4LC07030C2EPN				
80	3/4"	120-277VAC	VM4LC08030C2GLG	VM4LC08030C2PFN	VM4LC08030C2R5G	VM4LC08030C2S5G	VM4LC08030C2P5G	VM4LC08030C2EPN				
90	3/4"	120-277VAC	VM4LC09030C2GLG	VM4LC09030CC2PFN	VM4LC09030CC2R5G	VM4LC09030CC2S5G	VM4LC09030CC2P5G	VM4LC09030CC2EPN				
100	3/4"	120-277VAC	VM4LC10030C2GLG	VM4LC10030C2PFN	VM4LC10030C2R5G	VM4LC10030C2S5G	VM4LC10030C2P5G	VM4LC10030C2EPN				
105	3/4"	120-277VAC	VM4LC10530C2GLG	VM4LC10530C2PFN	VM4LC10530C2R5G	VM4LC10530C2S5G	VM4LC10530C2P5G	VM4LC10530C2EPN				
130	3/4"	120-277VAC	VM4LC13030C2GLG	VM4LC13030C2PFN	VM4LC13030C2R5G	VM4LC13030C2S5G	VM4LC13030C2P5G	VM4LC13030C2EPN				

① Catalog numbers shown are with Guard (except ER/EP/PF); to omit guard change ending G to N; e.g. VM4LB05530C2GLN.

^{*} For Glass 12" Spin-Top Flat Lens change PFN to GFN at end of catalog number.



② Catalog numbers shown are with 3/4" conduit openings; change "2" to "3" for 1"; e.g. VM4LB05530C3GLG.

③ 120VAC through 277VAC 50/60Hz. See logic for other voltages.

^{@ 40, 50, 55} and 65W are available in VM2LB/VM2LC shallower housings. Substitute VM2L for VM4L in catalog number.

KILLARK LEDVM2LB, VM2LC SERIES VM4LB, VM4LC SERIES



VM4LE	SERIE	S 25° STA	NCHION WITH OP	TIC AND GUARD	D			
WATTS	HUB Size@	VOLTAGE3	GLOBE & GUARD	TYPE V GLASS REFRACTOR & GUARD	12" SPIN-TOP Type V Glass Refractor & Guard	12" SPIN-TOP TYPE V POLYCARBONATE REFRACTOR & GUARD	ENCLOSED Reflector	GLOBE, GUARD & Angle Reflector⊕
40⑤	1-1/2"	120-277VAC	VM4LB04030D5GLG	VM4LB04030D5R5G	VM4LB04030D5S5G	VM4LB04030D5P5G	VM4LB04030D5ERN	VM4LB040D5GLG-A
50⑤	1-1/2"	120-277VAC	VM4LB05030D5GLG	VM4LB05030D5R5G	VM4LB05030D5S5G	VM4LB05030D5P5G	VM4LB05030D5ERN	VM4LB050D5GLG-A
55⑤	1-1/2"	120-277VAC	VM4LB05530D5GLG	VM4LB05530D5R5G	VM4LB05530D5S5G	VM4LB05530D5P5G	VM4LB05530D5ERN	VM4LB055D5GLG-A
65⑤	1-1/2"	120-277VAC	VM4LB06530D5GLG	VM4LB06530D5R5G	VM4LB06530D5S5G	VM4LB06530D5P5G	VM4LB06530D5ERN	VM4LB065D5GLG-A
70	1-1/2"	120-277VAC	VM4LB07030D5GLG	VM4LB07030D5R5G	VM4LB07030D5S5G	VM4LB07030D5P5G	VM4LB07030D5ERN	VM4LB070D5GLG-A
80	1-1/2"	120-277VAC	VM4LB08030D5GLG	VM4LB08030D5R5G	VM4LB08030D5S5G	VM4LB08030D5P5G	VM4LB08030D5ERN	VM4LB080D5GLG-A
90	1-1/2"	120-277VAC	VM4LB09030D5GLG	VM4LB09030D5R5G	VM4LB09030D5S5G	VM4LB09030D5P5G	VM4LB09030D5ERN	VM4LB090D5GLG-A
100	1-1/2"	120-277VAC	VM4LB10030D5GLG	VM4LB10030D5R5G	VM4LB10030D5S5G	VM4LB10030D5P5G	VM4LB10030D5ERN	VM4LB100D5GLG-A
105	1-1/2"	120-277VAC	VM4LB10530D5GLG	VM4LB10530D5R5G	VM4LB10530D5S5G	VM4LB10530D5P5G	VM4LB10530D5ERN	VM4LB105D5GLG-A
130	1-1/2"	120-277VAC	VM4LB13030D5GLG	VM4LB13030D5R5G	VM4LB13030D5S5G	VM4LB13030D5P5G	VM4LB13030D5ERN	VM4LB130D5GLG-A

VM4L0	VM4LC SERIES 25° STANCHION WITH OPTIC AND GUARD®									
WATTS	HUB Size@	VOLTAGE3	GLOBE & GUARD	12" SPIN-TOP Polycarbonate Flat Lens*	TYPE V GLASS Refractor & Guard	12" SPIN-TOP Type V Glass Refractor & Guard	12" SPIN-TOP TYPE V POLYCARBONATE REFRACTOR & GUARD	GLOBE, GUARD & Angle Reflector⊕		
40⑤	1-1/2"	120-277VAC	VM4LC04030D5GLG	VM4LC04030D5PFN	VM4LC04030D5R5G	VM4LC04030D5S5G	VM4LC04030D5P5G	VM4LC04030D5GLG-A		
50©	1-1/2"	120-277VAC	VM4LC05030D5GLG	VM4LC05030D5PFN	VM4LC05030D5R5G	VM4LC05030D5S5G	VM4LC06530D5P5G	VM4LC05030D5GLG-A		
55©	1-1/2"	120-277VAC	VM4LC05530D5GLG	VM4LC05530D5PFN	VM4LC05530D5R5G	VM4LC05530D5S5G	VM4LC05530D5P5G	VM4LC05530D5GLG-A		
65©	1-1/2"	120-277VAC	VM4LC06530D5GLG	VM4LC06530D5PFN	VM4LC06530D5R5G	VM4LC06530D5S5G	VM4LC06530D5P5G	VM4LC06530D5GLG-A		
70	1-1/2"	120-277VAC	VM4LC07030D5GLG	VM4LC07030D5PFN	VM4LC07030D5R5G	VM4LC07030D5S5G	VM4LC07030D5P5G	VM4LC07030D5GLG-A		
80	1-1/2"	120-277VAC	VM4LC08030D5GLG	VM4LC08030D5PFN	VM4LC08030D5R5G	VM4LC08030D5S5G	VM4LC08030D5P5G	VM4LC08030D5GLG-A		
90	1-1/2"	120-277VAC	VM4LC09030D5GLG	VM4LC09030D5PFN	VM4LC09030D5R5G	VM4LC09030D5S5G	VM4LC09030D5P5G	VM4LC09030D5GLG-A		
100	1-1/2"	120-277VAC	VM4LC10030D5GLG	VM4LC10030D5PFN	VM4LC10030D5R5G	VM4LC10030D5S5G	VM4LC10030D5P5G	VM4LC10030D5GLG-A		
105	1-1/2"	120-277VAC	VM4LC10530D5GLG	VM4LC10530D5PFN	VM4LC10530D5R5G	VM4LC10530D5S5G	VM4LC10530D5P5G	VM4LC10530D5GLG-A		
130	1-1/2"	120-277VAC	VM4LC13030D5GLG	VM4LC13030D5PFN	VM4LC13030D5R5G	VM4LC13030D5S5G	VM4LC13030D5P5G	VM4LC13030D5GLG-A		

① Catalog numbers shown are with Guard (except ER/EP/PF); to omit guard change ending G to N; e.g. VM4LB05530D5GLN.

 $^{^{\}star}$ For Glass 12" Spin-Top Flat Lens change PFN to GFN at end of catalog number.



 $^{{\}tt @ Catalog \ numbers \ shown \ are \ with \ 1-1/2" \ conduit \ openings; \ change \ "5" \ to \ "4" \ for \ 1-1/4"; e.g. \ VM4LB05530D4GLG.}$

^{3 120}VAC through 277VAC 50/60Hz. See logic for other voltages.

① See logic for reflector ordering options or order angle reflector VMPA40 separately.

^{© 40, 50, 55} and 65W are available in VM2LB/VM2LC shallower housings. Substitute VM2L for VM4L in catalog number.

High Wattage 90° Stanchion Mount







Spin-Top Poly or Glass Flat Lens



Spin-Top Poly or Glass Refractor



Enclosed Reflector



VM4LE	M4LB SERIES STRAIGHT STANCHION WITH OPTIC AND GUARD®									
WATTS	HUB Size@	VOLTAGE3	GLOBE & GUARD	TYPE V GLASS REFRACTOR & GUARD	12" SPIN-TOP Type V Glass Refractor & Guard	12" SPIN-TOP TYPE V POLYCARBONATE REFRACTOR & GUARD	ENCLOSED Reflector	GLOBE, GUARD And Dome Reflector®		
40⑤	1-1/2"	120-277VAC	VM4LB0403S5GLG	VM4LB0403S5R5G	VM4LB0403S5S5G	VM4LB0403S5P5G	VM4LB0403S5ERN	VM4LB040S5GLG-S		
50®	1-1/2"	120-277VAC	VM4LB0503S5GLG	VM4LB0503S5R5G	VM4LB0503S5S5G	VM4LB0503S5P5G	VM4LB0503S5ERN	VM4LB050S5GLG-S		
55©	1-1/2"	120-277VAC	VM4LB0553S5GLG	VM4LB0553S5R5G	VM4LB0553S5S5G	VM4LB0553S5P5G	VM4LB0553S5ERN	VM4LB055S5GLG-S		
65©	1-1/2"	120-277VAC	VM4LB0653S5GLG	VM4LB0653S5R5G	VM4LB0653S5S5G	VM4LB0653S5P5G	VM4LB0653S5ERN	VM4LB065S5GLG-S		
70	1-1/2"	120-277VAC	VM4LB0703S5GLG	VM4LB0703S5R5G	VM4LB0703S5S5G	VM4LB0703S5P5G	VM4LB0703S5ERN	VM4LB070S5GLG-S		
80	1-1/2"	120-277VAC	VM4LB0803S5GLG	VM4LB0803S5R5G	VM4LB0803S5S5G	VM4LB0803S5P5G	VM4LB0803S5ERN	VM4LB080S5GLG-S		
90	1-1/2"	120-277VAC	VM4LB0903S5GLG	VM4LB0903S5R5G	VM4LB0903S5S5G	VM4LB0903S5P5G	VM4LB0903S5ERN	VM4LB090S5GLG-S		
100	1-1/2"	120-277VAC	VM4LB1003S5GLG	VM4LB1003S5R5G	VM4LB1003S5S5G	VM4LB1003S5P5G	VM4LB1003S5ERN	VM4LB100S5GLG-S		
105	1-1/2"	120-277VAC	VM4LB1053S5GLG	VM4LB1053S5R5G	VM4LB1053S5S5G	VM4LB1053S5P5G	VM4LB1053S5ERN	VM4LB105S5GLG-S		
130	1-1/2"	120-277VAC	VM4LB1303S5GLG	VM4LB1303S5R5G	VM4LB1303S5S5G	VM4LB1303S5P5G	VM4LB1303S5ERN	VM4LB130S5GLG-S		

VM4L0	/M4LC SERIES STRAIGHT STANCHION WITH OPTIC AND GUARD ①									
WATTS	HUB Size@	VOLTAGE3	GLOBE & GUARD	12" SPIN-TOP Polycarbonate Flat Lens*	TYPE V GLASS Refractor & Guard	12" SPIN-TOP Type V Glass Refractor & Guard	12" SPIN-TOP TYPE V POLYCARBONATE REFRACTOR & GUARD	GLOBE, GUARD AND DOME REFLECTOR®		
40⑤	1-1/2"	120-277VAC	VM4LC0403S5GLG	VM4LC0403S5PFN	VM4LC0403S5R5G	VM4LC0403S5S5G	VM4LC0403S5P5G	VM4LC040S5GLG-S		
50©	1-1/2"	120-277VAC	VM4LC0503S5GLG	VM4LC0503S5PFN	VM4LC0503S5R5G	VM4LC0503S5S5G	VM4LC0503S5P5G	VM4LC050S5GLG-S		
55©	1-1/2"	120-277VAC	VM4LC0553S5GLG	VM4LC0553S5PFN	VM4LC0553S5R5G	VM4LC0553S5S5G	VM4LC0553S5P5G	VM4LC055S5GLG-S		
65©	1-1/2"	120-277VAC	VM4LC0653S5GLG	VM4LC0653S5PFN	VM4LC0653S5R5G	VM4LC0653S5S5G	VM4LC0653S5P5G	VM4LC065S5GLG-S		
70	1-1/2"	120-277VAC	VM4LC0703S5GLG	VM4LC0703S5PFN	VM4LC0703S5R5G	VM4LC0703S5S5G	VM4LC0703S5P5G	VM4LC070S5GLG-S		
80	1-1/2"	120-277VAC	VM4LC0803S5GLG	VM4LC0803S5PFN	VM4LC0803S5R5G	VM4LC0803S5S5G	VM4LC0803S5P5G	VM4LC080S5GLG-S		
90	1-1/2"	120-277VAC	VM4LC0903S5GLG	VM4LC0903S5PFN	VM4LC0903S5R5G	VM4LC0903S5S5G	VM4LC0903S5P5G	VM4LC090S5GLG-S		
100	1-1/2"	120-277VAC	VM4LC1003S5GLG	VM4LC1003S5PFN	VM4LC1003S5R5G	VM4LC1003S5S5G	VM4LC1003S5P5G	VM4LC100S5GLG-S		
105	1-1/2"	120-277VAC	VM4LC1053S5GLG	VM4LC1053S5PFN	VM4LC1053S5R5G	VM4LC1053S5S5G	VM4LC1053S5P5G	VM4LC105S5GLG-S		
130	1-1/2"	120-277VAC	VM4LC1303S5GLG	VM4LC1303S5PFN	VM4LC1303S5R5G	VM4LC1303S5S5G	VM4LC1303S5P5G	VM4LC130S5GLG-S		

[©] Catalog numbers shown are with Guard (except ER/EP/PF); to omit guard change ending G to N; e.g. VM4LB05530S5GLN.

^{*} For Glass 12" Spin-Top Flat Lens change PRN to GFN at end of catalog number.



² Catalog numbers shown are with 1-1/2" conduit openings; change "5" to "4" for 1-1/4"; e.g. VM4LB05530S4GLG.

^{3 120}VAC through 277VAC 50/60Hz. See logic for other voltages.

① See logic for reflector ordering options or order dome reflector VMPSD40 separately.

^{© 40, 50, 55} and 65W are available in VM2LB/VM2LC shallower housings. Substitute VM2L for VM4L in catalog number.

High Wattage EZ Adapter Mount



Globe & Guard or Glass Refractor & Guard



Spin-Top Poly or Glass Flat Lens



Spin-Top Poly or Glass Refractor



Enclosed Reflector



VM4LB SERIES EZ ADAPTER WITH OPTIC AND GUARD 102 TYPE V 12" SPIN-TOP 12" SPIN-TOP TYPE V **VOLTAGE**® WATTS HUB **GLOBE & GUARD GLASS REFRACTOR TYPE V GLASS ENCLOSED POLYCARBONATE** SIZE@ & GUARD REFRACTOR & GUARD FOOD OPTIC REFLECTOR 40@ 2 120-277VAC VM4LB04030EZGLG VM4LB04030EZR5G VM4LB04030EZS5G VM4LB04030EZP5G VM4LB04030EZERN VM4LB04030EZEPN 50@ 120-277VAC VM4LB05030EZGLG VM4LB05030EZR5G VM4LB05030EZS5G VM4LB05030EZERN VM4LB05030EZEPN 2 VM4LB05030EZP5G 120-277VAC VM4LB05530EZGLG VM4LB05530EZR5G VM4LB05530EZS5G VM4LB05530EZERN VM4LB05530EZEPN 55@ 2 VM4LB05530EZP5G VM4LB06530EZGLG VM4LB06530EZEPN 65④ 120-277VAC VM4LB06530EZR5G VM4LB06530EZS5G VM4LB06530EZP5G VM4LB06530EZERN 2 VM4LB07030EZERN VM4LB07030EZEPN 70 2 120-277VAC VM4LB07030EZGLG VM4LB07030EZR5G VM4LB07030EZS5G VM4LB07030EZP5G VM4LB08030EZGLG VM4LB08030EZR5G VM4LB08030EZERN VM4LB08030EZEPN 80 2 120-277VAC VM4LB08030EZS5G VM4LB08030EZP5G 90 120-277VAC VM4LB09030EZGLG VM4LB09030EZR5G VM4LB09030EZS5G VM4LB09030EZP5G VM4LB09030EZERN VM4LB09030EZEPN 2 100 2 120-277VAC VM4LB10030EZGLG VM4LB10030EZR5G VM4LB10030EZS5G VM4LB10030EZP5G VM4LB10030EZERN VM4LB10030EZEPN 120-277VAC VM4LB10530EZGLG VM4LB10530EZERN 105 2 VM4LB10530EZR5G VM4LB10530EZS5G VM4LB10530EZP5G VMAI R10530F7FPN 130 2 120-277VAC VM4LB13030EZGLG VM4LB13030EZR5G VM4LB13030EZS5G VM4LB13030EZP5G VM4LB13030EZERN VM4LB13030EZEPN

VM4L0	SERIE	/M4LC SERIES EZ ADAPTER WITH OPTIC AND GUARD © ©									
WATTS	HUB Size 2	VOLTAGE3	GLOBE & GUARD	12" SPIN-TOP Polycarbonate Flat Lens*	TYPE V GLASS REFRACTOR & GUARD	12" SPIN-TOP Type V Glass Refractor & Guard	12" SPIN-TOP TYPE V POLYCARBONATE REFRACTOR & GUARD	POLYCARBONATE FOOD OPTIC			
40@	2	120-277VAC	VM4LC04030EZGLG	VM4LC04030EZPFN	VM4LC04030EZR5G	VM4LC04030EZS5G	VM4LC04030EZP5G	VM4LC04030EZEPN			
50@	2	120-277VAC	VM4LC05030EZGLG	VM4LC05030EZPFN	VM4LC05030EZR5G	VM4LC05030EZS5G	VM4LC05030EZP5G	VM4LC05030EZEPN			
55④	2	120-277VAC	VM4LC05530EZGLG	VM4LC05530EZPFN	VM4LC05530EZR5G	VM4LC05530EZS5G	VM4LC05530EZP5G	VM4LC05530EZEPN			
65④	2	120-277VAC	VM4LC06530EZGLG	VM4LC06530EZPFN	VM4LC06530EZR5G	VM4LC06530EZS5G	VM4LC06530EZP5G	VM4LC06530EZEPN			
70	2	120-277VAC	VM4LC07030EZGLG	VM4LC07030EZPFN	VM4LC07030EZR5G	VM4LC07030EZS5G	VM4LC07030EZP5G	VM4LC07030EZEPN			
80	2	120-277VAC	VM4LC08030EZGLG	VM4LC08030EZPFN	VM4LC08030EZR5G	VM4LC08030EZS5G	VM4LC08030EZP5G	VM4LC08030EZEPN			
90	2	120-277VAC	VM4LC09030EZGLG	VM4LC09030EZPFN	VM4LC09030EZR5G	VM4LC09030EZS5G	VM4LC09030EZP5G	VM4LC09030EZEPN			
100	2	120-277VAC	VM4LC10030EZGLG	VM4LC10030EZPFN	VM4LC10030EZR5G	VM4LC10030EZS5G	VM4LC10030EZP5G	VM4LC10030EZEPN			
105	2	120-277VAC	VM4LC10530EZGLG	VM4LC10530EZPFN	VM4LC10530EZR5G	VM4LC10530EZS5G	VM4LC10530EZP5G	VM4LC10530EZEPN			
130	2	120-277VAC	VM4LC13030EZGLG	VM4LC13030EZPFN	VM4LC13030EZR5G	VM4LC13030EZS5G	VM4LC13030EZP5G	VM4LC13030EZEPN			

[©] Catalog numbers shown are with Guard (except ER/EP/PF); to omit guard change ending G to N; e.g. VM4LB05530EZGLN.

^{*} For Glass 12" Spin-Top Flat Lens change PFN to GFN at end of catalog number.



[©] VMEZA tank adapters UL "classified" as an assembly for use between VM tanks and EZ mounts. Order EZ mounts separately - see page 11 on components page.

^{3 120}VAC through 277VAC 50/60Hz. See logic for other voltages.

^{© 40, 50, 55} and 65W are available in VM2LB/VM2LC shallower housings. Substitute VM2L for VM4L in catalog number.



Pendant



Ceiling





Cone Top



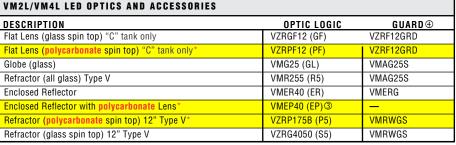
Tank Adapter

	25° Stanchion	Straight Sta	nchion	EZ Ada	•	Tank Adapt	
				VME	ZA	See next page to	o oraer
CERTILITE	®∨ VM MOUNTING S	SPLICE BOXES					
			CATALO	NUMBER			
HUB SIZE	PENDANT	CEILING 4 HUB	CEILING 5 HUB	WALL	CONE TOP	25 DEGREE STANCHION	90 DEGREE STANCHION
3/4"	VMA2B	VMX2B	VMX6B	VMB2B	VMC2B	_	_
1"	VMA3B	VMX3B	VMX7B	VMB3B	VMC3B	_	-
1-1/4"	_	-	_	_	_	VMD4B	VMS4B
1-1/2"	_	_	_	_	_	VMD5B	VMS5B
M-20	_	VMX8B**	VMX9B	_	_	_	_

^{*}VMEZA is used between a ballast tank and an EZ mount - ordered separately. See catalog grids.

^{**}VMX8B furnished with 3 non-metallic (Ex)plugs.

VM2L/VM4L LED OPTICS AND ACCESSORIES		
DESCRIPTION	OPTIC LOGIC	GUARD ⊕
Flat Lens (glass spin top) "C" tank only	VZRGF12 (GF)	VZRF12GRD
Flat Lens (polycarbonate spin top) "C" tank only*	VZRPF12 (PF)	VZRF12GRD
Globe (glass)	VMG25 (GL)	VMAG25S
Refractor (all glass) Type V	VMR255 (R5)	VMAG25S
Enclosed Reflector	VMER40 (ER)	VMERG
Enclosed Reflector with polycarbonate Lens*	VMEP40 (EP)3	_
Refractor (polycarbonate spin top) 12" Type V*	VZRP175B (P5)	VMRWGS
Refractor (glass spin top) 12" Type V	VZRG4050 (S5)	VMRWGS





VM2L/VM4L LED REFLECTORS AND ACCESSORIES	
DOME REFLECTOR (Polyester reinforced fiberglass)	VMPSD40
ANGLE REFLECTOR (Polyester reinforced fiberglass)	VMPA40
DEEP DOME REFLECTOR (White Painted Aluminum)	HRD400
DEEP DOME REFLECTOR (Anodized Aluminum)	HRD400ALZ
120VAC Photocell with FS Style Cover①	VMFSPC1
208-277VAC Photocell with FS Style Cover®	VMFSPC2
Bottom Closure for VMAG25S⊕	VMAGBC
4-sided EXIT Accessory (use without guard) ②	VEXA400

 $\textcircled{$\mathbb{D}$ Order single-gang FS box separately. For photocell factory installed in tank, see logic. } \\$

②For use with Generator or UPS powered fixtures

3 For wall applications mount must be spaced out for bottom hub

@Guards are 316 Stainless. Bottom closure for VMAG25S pt. no. VMAGBC



VMG25



VMR255



VMAGBC



VMER40



VMERG



VMEP40



VZRG4050



VMRWGS



VZRPF/VZRGF



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



VMPA40 30º Angle, Fiberglass White Reflector, Dia:16"



HRD400 Deep Aluminum, White Reflector, Dia: 21"



HRD400ALZ Deep Aluminum, Anodized Reflector, Dia: 21"



VMFSPC



VEXA400 Fixture not included



High Wattage



"EZ" Mount Adapter

For easy fixture relocation or to repair fixture on 'bench top'.









Pendant

Ceiling

Wall Bracket

25° Stanchion

ACCUSED TO SECURITY OF THE PARTY OF THE PART

ZA adapter is used between a ballast tank and EZ mount ordered separately.

MOUNTING BO	XES			
	CATA	ALOG NUMBER		1111D 017E
PENDANT	CEILING	BRACKET	STANCHION	HUB SIZE
EZA2	EZX2	EZB2	_	3/4"
EZA3	EZX3	EZB3	_	1"
_	_	_	EZD4A*	1-1/4"/1-1/2"*

^{*1-1/2&}quot; furnished with 1-1/2"-1-1/4" reducer and extension.



Competitive **Adapters**

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

Tank adapter to Crouse-Hinds® VM Series mounts Tank adapter to CH (70's era wall mount with deep box) Tank adapter to Appleton®2 MERCMASTER II mounts Tank adapter to Appleton® MERCMASTER III mounts

VMCHVM VMCHVM-DEEP VMM2LP VMM3KP **VMHLDS**

- OCrouse-Hinds is a registered trademark of EATON® corporation.
- @Appleton and MERCMASTER are registered trademarks of Emerson® Industrial Automation.
- 3 Hazlux is a registered trademark of Thomas & Betts.

Tank adapter to Hazlux®3® mounts

LED HOUSINGS	WITH DRIVERS AND	LEDS - ELECTRICAL	RATINGS ①	
WATTAGE	VOLTAGE 50/60HZ	AMPS 120/277	CIL@	WEIGHT3
40	120-277VAC	0.36/0.16	5490	18.9
50	120-277VAC	0.43/0.18	7650	18.9
55	120-277VAC	0.48/0.21	6960	18.9
65	120-277VAC	0.56/0.24	10200	18.9
70	120-277VAC	0.60/0.30	8700	18.9
80	120-277VAC	0.68/0.30	10440	18.9
90	120-277VAC	0.77/0.33	12760	18.9
100	120-277VAC	0.85/0.37	15310	18.9
105	120-277VAC	0.89/0.39	13920	18.9
130	120-277VAC	1.10/0.48	20415	18.9

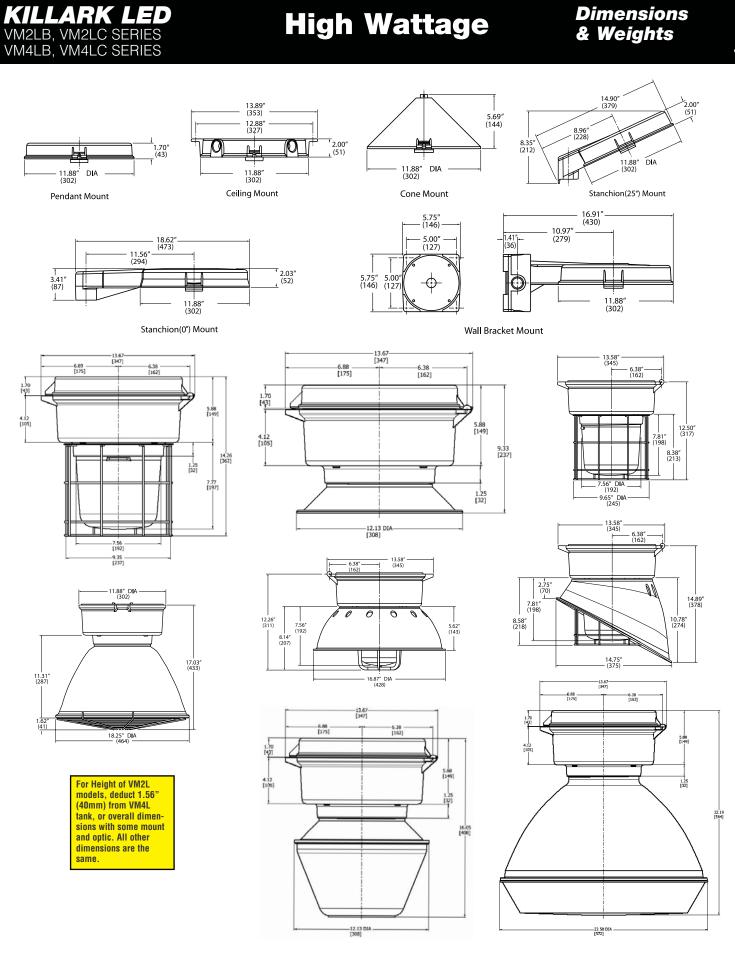
- ① Driver THD<20%, Powerfactor 99% @ 120V; Line Regulation 2%; Load regulation 5%; Protected against Over-voltage and Over-current.
- ② CIL = Calculated Initial Lumens of LED component based on mfg. data and driver current INSIDE the optic. This value is provided as a reference only for comparison to traditional light sources such as incan descent, HID, or fluourescent which use initial values in "relative" photometry. KILLARK LED luminaires are tested using the Absolute photometry method (LM79-08), which calculates delivered lumens only. KILLARK's LED luminaires provide very bright white 5000K (CCT) color and can appear brighter than traditional light sources with higher lumen values under both photopic and scotopic conditions.
- 3 Weights are shown with VM4LB with ceiling mount. VM4LC with ceiling mount approx. 17.4 lbs. For VM2L models, deduct approx. 1.25 lbs.
- ① TM-21 based values require very long duration testing. The TM-21/L70 "official reported" value is based on 7,800 to 10,000 hours testing (at time of printing) at 1000mA to 1500mA drive current, depending on LED chip utilized. "Reported L70" is a factor of test duration. KILLARK's VM4LC/B series utilizes lower 700mA maximum drive current - "calculated" values by the major chip vendors utilized predict L70 life up to 150,000+ hours even at 1000mA.
- ⑤ For a given wattage current & CIL values are the same, regardless of tank type VM2LB/C or VM4LB/C.

THERMAL PERFORMANCE DATA									
WATTAGE (\$)	AMBIENT	C1D2	C2D1	L	70	SUPPLY			
				TM-21@	CALCULATED	WIRE			
	40°C	T4A	EFG	60100	137000	75°C			
40	55°C	T4	EFG	60100	137000	90°C			
	65°C	T4	EFG	60100	137000	90°C			
	40°C	T4A	EFG	72600	109000	75°C			
50	55°C	T4A	EFG	72600	109000	90°C			
	65°C	T4	EFG	72600	109000	90°C			
	40°C	T4A	EFG	60100	137000	75°C			
55	55°C	T4	EFG	60100	137000	90°C			
	65°C	T4	EFG	60100	137000	90°C			
	40°C	T4A	EFG	72600	109000	75°C			
65	55°C	T4A	EFG	72600	109000	90°C			
	65°C	T4	EFG	72600	109000	90°C			
70	40°C	T4A	EFG	60100	137000	75°C			
70	55°C	T4	EFG	60100	137000	90°C			
	40°C	T4A	EFG	60100	137000	75°C			
80	55°C	T4	EFG	60100	137000	90°C			
	40°C	T4A	EFG	72600	109000	75°C			
90	55°C	T4	EFG	72600	109000	90°C			
	40°C	T4A	EFG	60100	137000	75°C			
100	55°C	T4	EFG	60100	137000	90°C			
	40°C	T4A	EFG	60100	137000	75°C			
105	55°C	T4	EFG	60100	137000	90°C			
400	40°C	T4A	EFG	72600	109000	75°C			
130	50°C	T4	EFG	72600	109000	90°C			

TOTAL LUMEN OUTPUT				
Wattage	Globe(VM4LB)	Globe (VM4LC)	Flat Lens (VM4LC)	
40	4600	4180	3873	
50 ①	6715	6087	5556	
55	5842	5275	4790	
65 ^①	8577	8229	7441	
70	7111	6524	5980	
80	8525	7559	6923	
90 ^①	10520	10210	9115	
100①	12220	11910	10666	
105	10780	9600	8809	
130①	15630	15370	13780	

①Extra high lumen per watt LED's













Expanded wattage range RANGE 40, 45, 50W

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 Marine NEMA 3, 4, 4X Factory Sealed



FEATURES-SPECIFICATIONS

RETURN to Index



Applications

HOSTILELITE® EML LED Series fixtures are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4x areas where wind, water, snow or high ambients can be expected. They can be used in locations made hazardous due to the presence of flammable or explosive gases, vapors and combustible dusts as defined by the NEC.

Applications include classified areas such as paint manufacturing plants, ammunition facilities, oil and gas producing and refining plants, off-shore and dockside installations, tank farms, pipeline pumping stations and marine loading and fuel transfer terminals.

Compliances

- UL-8750 for LED lighting
- UL-844 Electric Lighting Fixtures for use in Hazardous Locations
- UL Marine Type Electric Lighting Fixtures
- CSA C22.2 no. 137-M1981 Electric Luminaires for use in Hazardous Locations
- NEMA 3, 4, 4X, 7CD, 9EFG

Materials

- Ballast tank, splice box and guards corrosion resistant copper-free aluminum alloy
- Baked powder epoxy/polyester finish, electorstatically 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

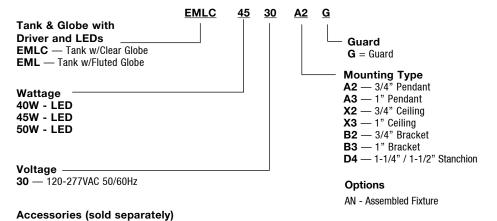
- Optional Mounting arrangements including Pendant, Wall, Ceiling, and Stanchion
- EML LED Housings can be retrofitted to existing EZ splice boxes; upgrade from Incandescent, Fluorescent or HID
- . Energy Savings less than 55 Watts of Power
- Long Life 50,000 55,000 Maintenance Free Hours to 70% Initial Lumens
- Crisp White Light for Excellent Color Rendering
 Chromaticity Avg. 4950K (CCT); 69 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 Drivers Redundant Systems (built-in backup)

- LM80-08* Measurement of lumen maintenance for LED light sources
- LM79-08* Certified "Absolute" Photometry, including Chromaticity Color for Solid State Lighting
- L70 Values Industry Nomenclature for Hours of use to 70% of Initial Lumens
- Factory Sealed Construction no external seal required, simply wire mouting cap and threadin fixture to install

*LM-xx are Illumination Engineering Society Standards designed to promote uniformity in testing procedures among test labs and manufacturers. For more information go to www.ies.org

Catalog Number Logic

ERSD30 — Dome Reflector ERA30 — Angle Reflector













Stanchion

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 **Marine NEMA 3, 4, 4X Factory Sealed**



ORDERING INFORMATION

EML SERIES PENDANT WITH OPTIC AND GUARD®				
WATTS	HUB SIZE@	VOLTAGE ®	FLUTED GLOBE & GUARD	CLEAR GLOBE & GUARD*
40	3/4"	120-277VAC	EML4030A2G	EMLC4030A2G
45	3/4"	120-277VAC	EML4530A2G	EMLC4530A2G
50	3/4"	120-277VAC	EML5030A2G	EMLC5030A2G

EML SERIES CEILING WITH OPTIC AND GUARD ①					
WATTS	HUB SIZE@	VOLTAGE	FLUTED GLOBE & GUARD	CLEAR GLOBE & GUARD*	
40	3/4"	120-277VAC	EML4030X2G	EMLC4030X2G	
45	3/4"	120-277VAC	EML4530X2G	EMLC4530X2G	
50	3/4"	120-277VAC	EML5030X2G	EMLC5030X2G	

EML SERIES WALL WITH OPTIC AND GUARD ⊕					
WATTS	HUB SIZE@	VOLTAGE ④	FLUTED GLOBE & GUARD	CLEAR GLOBE & GUARD*	
40	3/4"	120-277VAC	EML4030B2G	EMLC4030B2G	
45	3/4"	120-277VAC	EML4530B2G	EMLC4530B2G	
50	3/4"	120-277VAC	EML5030B2G	EMLC5030B2G	

EML SERIES 25° STANCHION WITH OPTIC AND GUARD®					
WATTS	HUB SIZE®	VOLTAGE ④	FLUTED GLOBE & GUARD	CLEAR GLOBE & GUARD*	
40	1-1/4"/1-1/2"	120-277VAC	EML4030D4G	EMLC4030D4G	
45	1-1/4"/1-1/2"	120-277VAC	EML4530D4G	EMLC4530D4G	
50	1-1/4"/1-1/2"	120-277VAC	EML5030D4G	EMLC5030D4G	

- ① Catalog numbers shown are with Guard; Omit G if guard not required e.g. EML4530A2.
 ② Catalog numbers shown are with 3/4" conduit openings; change "2" to "3" for 1" e.g. EML4530A3G.
 ③ Stanchion conduit hub size supplied is 1-1/2" with 1-1/2" to 1-1/4" reducer for 1-1/4" mounting (refer to catalog logic).
 ④ 120VAC through 277VAC 50/60Hz.
 * Exclusive from KILLARK; clear globe for maximum brightness.











Pendant

Ceiling

Wall Bracket

25° Stanchion

EZ MOUNTING BRACKETS								
	CATALO	NUMBER						
PENDANT	CEILING	WALL	STANCHION	HUB SIZE				
EZA2	EZX2	EZB2	_	3/4"				
EZA3	EZX3	EZB3	_	1 "				
_	_	_	EZD4*	1-1/4" / 1-1/2"*				

^{* 1-1/2&}quot; furnished with 1-1/2" - 1-1/4" reducer

EML - EMLC LED ACCESSORIES	
DESCRIPTION	CATALOG NUMBER
Guard ①	EMG2
Dome Reflector②	ERSD30
Angle Reflector②	ERA30
CIDI C2D1 N4X Photocell 120VAC	VMHKPC1
CIDI C2D1 N4X Photocell 208-277VAC	VMHKPC2
Replacement Fluted Globe & Support	EMGS3
Replacement Clear Globe & Support	EMGS2
Adapter to old Killark "H" Series or Crouse Hinds®	EAC/EACH3

- $\ensuremath{\mathfrak{D}}$ Reflectors are aluminum with white finish.

EML(C) LED HOUSINGS & GLOBE, DRIVERS AND LEDS - ELECTRICAL RATINGS							
CAT. NO.	VOLTAGE 50/60HZ	WATTAGE	AMPS 120/277	CIL ④	WEIGHT		
EML(C)4030	120-277VAC	40	.36/.16	5490	26 LBS		
EML(C)4530	120-277VAC	49.4	.412/.178	3960	26 LBS		
EML(C)5030	120-277VAC	50	.43/.18	7656	26 LBS		

① CIL = Calculated Initial Lumens of LED component based on mfg. data and driver current INSIDE the optic. This value is provided as a reference only for comparison to traditional light sources such as incandescent, HID, or fluorescent which use initial values in "relative" photometry. KILLARK LED luminaires are tested using the Absolute photometry method (LM79-08), which calculates delivered lumens only. KILLARK's LED luminaires provide very bright white 5000K (CCT) color and can appear brighter than traditional light sources with higher lumen values under both photopic and scotopic conditions..

THERMAL PERFORMANCE DATA								
CAT. NO.	AMBIENT	C1D1/C1Z1	C2D1	L70	SUPPLY WIRE			
EML(C)4030	40°C	Т6	T4A (EFG)	60000	75° C			
EML(C)4030	55°C	T6	T4 (EFG)	60000	90° C			
EML(C)4530	40°C	T6	T4A (EFG)	55000	75° C			
EML(C)4530	55°C	T6	T4 (EFG)	50000	90° C			
EML(C)5030	40°C	T6	T4A (EFG)	72600	75° C			
EML(C)5030	55°C	T6	T4 (EFG)	72600	90° C			



EMG2



Factory Sealed Photocell VMHKPC1



ERSD30 Standard Dome



ERA30 Angle Dome



EML4530 EMLC4530

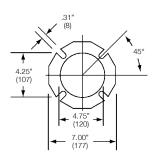


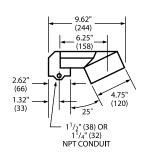
EMGS3 EMGS2

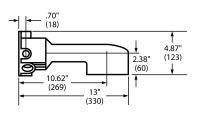


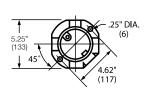
EAC/EACH

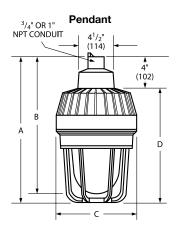


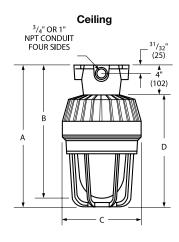




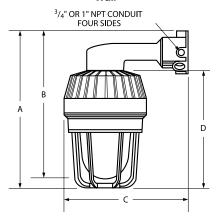




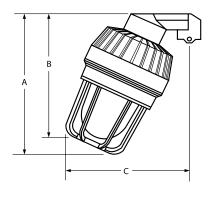




Wall



25° Stanchion



EML(C) DIMENSIONS								
TYPE	Α	В	С	D				
Pendant	15-15/16"	15-1/16"	8-13/16"	11-15/16"				
	(404)	(382)	(224)	(303)				
Ceiling	15-15/16"	15-1/16"	8-13/16"	11-15/16"				
	(404)	(382)	(224)	(303)				
Wall	16-13/16"	15-15/16"	15"	11-15/16"				
	(426)	(404)	(379)	(303)				
Stanchion	15-1/8" (384)	14" (356)	13-1/2" (343)					



Typical Weights (lbs.) with Standard Globe and Guard - EML (C) Series					
Pendant 29.33	Ceiling 31.79	Wall 33.25	Stanchion 30.94		

RETURN to Index







Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIC, IIB, IIA Class III, Div. 1 & 2, Groups E,F,G Class III **NEMA 4X**



FEATURES-SPECIFICATIONS

PETROPRIGHT® LED

Applications

LED Compact Floods are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4X areas where wind, water, snow or high ambients can be expected. They can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC.

Typical applications include spot lighting or walkways in manufacturing plants, and certain chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, garages and storage 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, Division 1; Class III
- CSA C22.2 no. 137-M1981 electric luminairies for use in hazardous locations
- Enclosed and gasketed
- NEMA 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 extra heavy-duty glass lens
- High temperature silicone gasketing
- Trunnion heavy gauge galvanized steel with painted finish

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 5000K (CCT); approx. 70 CRI
- Energy Savings High lumens per watt
- Long Life 80,000 maintenance free hours to 70% initial lumens
- Ambient suitability -40°C to 55°C
- Instant On Including after power interruption
- Solder-LESS LED Board Connections -Vibration Resistant
- LM80-08* Measurement of lumen maintenance for LED light sources
- LM79-08* Certified "Absolute" Photometry, including Chromaticity Color for Solid State Lighting
- L70 Values Industry Nomenclature for Hours of use to 70% of initial Lumens - TM-21* & calculated

Supplemental surge protection included as standard for AC models only

Catalog Number Logic



*LM-xx & TM-xx are illumination Engineering Society Standards designed to promote uniformity in testing procedures among test labs and manufacturers. For more information go to www.ies.org

KFLC - Series Constant -LED Wattage -15 - 15W 30, 27, or 34 Voltage Codes 18 - 18W 30, 27, or 34 Voltage Codes 20 - 20W 30, 27, or 34 Voltage Codes 23 - 23W 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 Voltage -**30 -** 120 **-** 277VAC 50/60Hz **27 -** 12 **-** 24VDC input Reflector R - Reflector

KFLC

N - No Reflector

34 - 120-250VDC ;120 -277 VAC

Options

X X

- LY- Less Yoke for Surface Mount
- F- Single Fuse
- FF- 2 Fuses
- **SP-** Surge Protection
- TBL- Terminal Blocks Looping
- QD- QuickDisconnect
- D75- Dual 3/4" threaded NPT entry
- M25- Single M25 Slip-hole Entry
- **D25** Two M25 Slip-hole Entry
- M20-Single M20 Slip-hole Entry
- **D20** Dual M20 Slip-hole Entry PL- Polycarbonate Lens



Ordering Information and Ambient Suitability						CID2		CID2 Simultaneous		C2D1	
Catalog No.	Watts	Voltage	Amps	Lumens*	40°C	55°C	40°C	55°C	40°C	55°C	
KFLC1527	15	12VDC	.13/.06	1331	T6	T6	T4	ТЗВ	T4A	T4A	
KFLC1827	18	through	.15/.07	1651	T6	T6	T4	T3B	T4A	T4A	
KFLC2027	20	24VDC	.17/.08	2021	T6	T6	T4	ТЗВ	T4A	T4A	
KFLC2327	23		.19/.09	2359	T6	T6	T4	T3B	T4A	T4A	
KFLC1534	15	120VDC	1.3/.63	1331	T6	T6	T4	ТЗВ	T4A	T4A	
KFLC1834	18	through	1.5/.75	1651	T6	T6	T4	ТЗВ	T4A	T4A	
KFLC2034	20	250VDC	1.7/.83	2021	T6	T6	T4	ТЗВ	T4A	T4A	
KFLC2334	23	200100	1.9/.96	2359	T6	T6	T4	ТЗВ	T4A	T4A	
KFLC3030	30	120VAC	.26/.11	2662	T6	T6	T4	ТЗВ	T4A	T4A	
KFLC3530	35		.30/.13	3302	T6	T6	T4	ТЗВ	T4A	T4A	
KFLC4030	40	through	.34/.15	4039	T6	T6	T4	ТЗВ	T4A	T4A	
KFLC4530	45	277VAC	.38/.17	4718	T6	T6	T4	ТЗВ	T4A	T4A	
Supply Wire Temperature						90°C	75°C	90°C	75°C	90°C	

*KFLC 30-45W Lumens are LM-79 absolute photometry. 15-23W are calculated based on driver output current. Highlighted are extra high Lumens per watt LED models.

Efficacy	L70 Calculated	L70 TM-21**
High L/W models	150,000+	60,100
Extra High L/W models	150,000+	72,600

**TM-21 based values require very long duration testing. IES TM-21 "official reported" is based on the # of hours of LED chip manufacturer's LM-80 Testing (minimum 36,000, but continuing) at launch.











KFS-6 Slipfitter

KFCB Cross Arm Mount

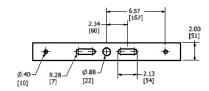
KFWB K4040 Wall/Pipe Bracket Wall Bracket

4041 Tenon Fitting

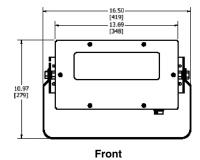
KFL Mounts and Accessories ①					
CATALOG NUMBER	DESCRIPTION				
KFLC-DARK ^②	Reflector for field addition - No uplight at 45° to 70°				
KFLCG	Guard				
KFLC-DOOR	Replacement Door Assembly				
NWP-HUBA	3/4" Aluminum Hub; Replacement or Additional (Max. 4)				
VMSC103	Safety Cable (through yoke)				
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.)				
KFWD	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.				

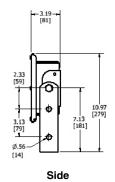
- ① Fittings available to adapt trunnion mount floodlights to crossarms, poles and walls. Must be ordered separately.
- ② Designed to eliminate uplight when aimed at 70° or below.
- 3 Drop limit 1'. Attaches to luminaire cable provision and to mounting structure.





Trunnion Mounting Detail













Class I, Div. 2, Groups A,B,C,D Class II, Div. 1&2, Groups EFG Class III Suitable for wet locations Marine **NEMA 3, 4X, IP66**

c File LR11713

IEC Ex Ratings Zone 2 and Zone 22 areas to IEC 60079-10-1 & IEC 60079-10-2 Ex nA II T* Gc

Ex to IIIC T* °C Dc IP66 Tamb -50°C to +55°C Certificate # CSA 14.0002X

[*see temp. grid] [*see temp. grid]

FEATURES-SPECIFICATIONS



Applications

LED Floods are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4X areas where wind, water, snow or high ambients can be expected. They can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC.

Typical applications include manufacturing plants, and certain chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, garages and storage 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 luminairies for use in hazardous locations
- Enclosed and gasketed
- NEMA 3, 4X, IP66
- IEX suffix Zone 2 to EN Standards

- 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
- Long Life to 150,000 maintenance free hours to 70% initial lumens
- Ambient suitability -50°C to 55°C
- Instant On Including after power interruption
- World Voltage 120 277VAC 50/60Hz
- Solder-LESS LED Board Connections -Vibration Resistant
- LM80-08* Measurement of lumen maintenance for LED light sources
- LM79-08* Certified "Absolute" Photometry, including Chromaticity Color for Solid State Lighting
- L70 Values Industry Nomenclature for Hours of use to 70% of initial Lumens -TM-21* & Calculated

Supplemental surge protection included as standard for AC models only

PATENTED LUMINAIRE DESIGN



* LM-xx & TM-xx are illumination Engineering Society Standards designed to promote uniformity in testing procedures among test labs and manufacturers. For more information go to www.ies.org

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

XX

Catalog Number Logic

060 - 60W

105 - 105W

110 - 110W

125 - 125W

KFL <u>125</u> <u>30</u> KFL - Series Constant -Fixture Wattage Voltage -

070 - 70W **075 -** 75W 30 - 120 - 277VAC 50/60Hz

085 - 85W 33 - 347 - 480VAC 60Hz (85W to 125W models) 34 - 120 - 250V DC (60W only) 090 - 90W

Options -

PL - Polycarbonate Lens

F - Single Fuse® FF - Double Fuse ①

TBL - Terminal Blocks Looping (Std. w/IEx)

P1 - 120V Photocell, factory installed

P2 - 208V-277V Photocell, factory installed

P3 - 347V Photocell, factory installed

QD - Quick Disconnect

D20 - 2x M20 entries

D25 - 2x M25 entries **D75 -** 2 x 3/4" NPT

SY - 316 SS Yoke

①Fusing not for Canadian or Marine Installations



Construction Note: Models with dual metric entries are tapped with one plugged.

Standard 3/4" NPT entry will be plugged.

Trunnion Mounting Detail

Dimensions

	Ordering Information and Ambient Suitability			C1D2 S C1D2 S Simultaneous		C2D1 ⑤		Zone 2		Zone 21			
Catalog No.①②	Watts	Amps 120/2773	Delivered Lumens	40C	55C	40C	55C	40C	55C	40C	55C	40C	55C
KFL06030	60	0.5/0.2	5800	T6	T5	T3C	T3C	EFG	EFG	T6	T6	155°C	170°C
KFL07030	70	0.6/0.3	9742④	T6	T5	T3C	T3C	EFG	EFG	T6	T6	155°C	170°C
KFL07530	75	0.6/0.3	7200	T6	T5	T3C	T3C	EFG	EFG	T6	T6	155°C	170°C
KFL08530	85	0.7/0.3	10890④	T6	T5	T3C	T3C	EFG	EFG	T6	T6	155°C	170°C
KFL09030	90	0.8/0.4	8400	T6	T5	T3C	T3C	EFG	EFG	T6	T6	155°C	170°C
KFL10530	105	0.9/0.4	9800	T4A	T4A	T3C	T3C	EFG	EFG	T4	T4	155°C	170°C
KFL11030	110	0.9/0.4	13780④	T6	T5	T3C	T3C	EFG	EFG	T6	T6	155°C	170°C
KFL12530	125	1.0/0.5	15340④	T6	T5	T3C	T3C	EFG	EFG	T6	T6	155°C	170°C

- ① Shipping weight Approx. 30lbs
- ② Cat. nos. are 120-277VAC models, models see logic for 347-480V.
- 3 Amperage measured at 120VAC; 277VAC calculated
- Extra high Lumens per Watt LED models
- \$\text{\$ Use 75° Supply Wire @40°C Ambient; 90 @55°C Ambient}\$

Efficacy	L70 Calculated	L70 TM-21**			
Extra High L/W Models	150,000 Hours to 70% Initial	72,600 Hours Official Reported			
High L/W Models	150,000 Hours to 70% Initial	60,100 Hours Official Reported			

**TM-21 based values require very long duration testing. IES TM-21 "official reported" is based on the # of hours of LED chip manufacturer's LM-80 Testing at printing.







KFCB Cross Arm Mount



KFWB Wall/Pipe Bracket

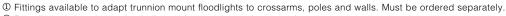


K4040 Wall Bracket

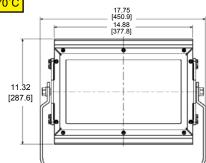


4041 Tenon Fitting

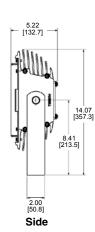
KFL Mounts and Accessories①					
CATALOG NUMBER	DESCRIPTION				
KFS-6	Steel Slipfitter for 2" Pipe (2-3/8" o.d.) Tenon. Slips 3.75" Over Pipe.				
KFCB	Heavy Duty Cast-Iron Crossarm Fitting for Horizontal Trunnion				
KFWB	Heavy Duty Wall Mount and/or Pipe Clamp Fitting Clamps 2" Pipe (2-3/8" o.d.)				
	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.				
KFLG®	Wire Guard, 316 Stainless Steel- (not used with KFL-DARK)				
VMSC10	10' Stainless Steel Safety Cable with loop grip@				
KFL-DARK®	Dark Sky Visor, White Painted Aluminum ³ - (not used with KFLG)				
KFL-DOOR Replacement Door and Lens Assembly. For units w/o internal reflectors					
KFL-DOOR2®	Replacement Door, Internal Reflector and Lens Assembly®				



- 2 Drop limit 1'. Attaches to luminaire cable provision and to mounting structure.
- $\ensuremath{\mathfrak{I}}$ Designed to eliminate uplight when aimed at 45°.
- Only for models factory supplied with internal reflector.
- Not backward compatible with units originally shipped without internal reflector.
- 6 KFLG and KFL-DARK cannot be used together.



Front









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)

c File LR11713

IEC Ex Rated model (w/IEX suffix)

Zone 1, Zone 21 areas to EN60079-10-1 & EN60079-10-2

EX II 2 GD Ex d e IIB+H2 T* Gb [*see temp.grid]

Ex tb IIIC T***°C Db IP66 [*see temp.grid]

Tamb -20°C to +55°C (Option LT, for -50°C to +55°C)

Certificate # PENDING

FEATURES-SPECIFICATIONS

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Applications

LED KF1L Series Explosion-proof Floods are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4X areas where wind, water, snow or high ambients can be expected. They can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC.

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

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 luminairies for use in hazardous locations
- · Enclosed and gasketed
- NEMA 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

- Factory Sealed Construction
- Two 3/4 NPT entries (see logic for other choices)
- Supplemental <u>surge protection</u> (AC models) and <u>looping terminals</u> are standard
- Crisp White Light for Excellent Color Rendering - Chromaticity 5000K (CCT); approx. 70 CRI
- Energy Savings High lumens per watt
- Long Life 80,000 maintenance free hours to 70% initial lumens
- Instant On Including after power interruption
- World Voltage 120 277VAC 50/60Hz
- Solder-LESS LED Board Connections -Vibration Resistant
- LM80-08* Measurement of lumen maintenance for LED light sources
- LM79-08* Certified "Absolute" Photometry, including Chromaticity Color for Solid State Lighting
- L70 Values Industry Nomenclature for Hours of use to 70% of initial Lumens - TM-21* & calculated

Patent Pending
Fixture Design

KF1L with KFS-6
Slipfitter mount
on 2" pipe

Dark Sky Visor

*LM-xx & TM-xx are illumination Engineering Society Standards designed to promote uniformity in testing procedures among test labs and manufacturers. For more information go to www.ies.org

KF1L-DÁRK

Catalog Number Logic KF1L 125 30 X KF1L - Series Constant Fixture Wattage 090 - 90W 105 - 105W 110 - 110W 125 - 125W Voltage 30 - 120 - 277VAC 50/60Hz 33 - 347 - 480VAC 60Hz 34 - 120-250VDC (60W special only)

IEX4B- Four bolt termination cover (see Note 1)
LT- For -50°C to +55°C, IEC Zone 1 (see Note 1)
F- Single Fuse (2) FF- Double Fuse (2)
D20- Dual M-20 Entries D25- Dual M-25 Entries
(2) Fusing not for Canadian or Marine Installations

① Construction/Certification Notes: KF1L units are standard with two 3/4" NPT hubs (1 plugged) and an 8-bolt factory sealed termination chamber, suitable for CID1 BCD -50°C to +55°C and IEC Zone 1 Ex de suitable for -20°C to 55°C.

Use option LT for all models needing IEC Zone 1, -50°C to +55°C suitability. Option IEX4B utilizes 4 cover bolts for Ex de and maintains all ratings EXCEPT CIDT BCD.

See logic for other entry options



Options

Ordering Information and Ambient Suitability				NEC			IEC					
Ordering Information and Ambient Suitability				CID1456 C2D1456		CIZone1 @		Zone21 ④				
Catalog No.①	Watts	Voltage@	Amps 120/277③	Lumens	40°C	55°C	40°C	55°C	40°C	55°C	40°C	55°C
KF1L09030	90	120VAC	.72/.31	7182	T6	T6	EFG	(5)	T5	T6	T4	T3
KF1L10530	105	through	.85/.37	8362	T6	T6	EFG	(3)	T5	T6	T4	T3
KF1L11030	110	277VAC	.95/.41	10590	T6	T6	EFG	(5)	T6	T6	T4	T3
KF1L12530	125	50/60Hz	1.10/.48	11560	T5	T5	EFG	(5)	T6	T6	T4	T3

- ① Shipping weight Approx. 46lbs; yellow highlighted models have extra high lumen LED's.
- 2 See logic for 347-480V availability
- 3 Amperage measured at 120VAC; 277VAC calculated
- 4 Use 75° Supply Wire @40°C Ambient; 90°@55°C Ambient
- ⑤ CID1 40°/55° & C2D1 40°C use Aiming Figure "A" below.
- © 55°C C2D1 EFG T3C Aiming Figure "B". 55° C2D1 EF T3A Aiming Figure "A"

L70	Calculated	TM-21**
90 or 105W Models	150,000+	60,100
110 or 125W Models	150,000+	72,600

**TM-21 based values require very long duration testing. IES TM-21 "official reported" is based on the # of hours of LED chip manufacturer's LM-80 Testing (minimum 36,000, but continuing) at launch.











-50°C to +55°C Suitability

Slipfitter

KFCB Cross Arm Mount

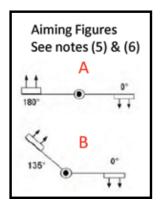
KFWB Wall/Pipe Bracket

K4040 Wall Bracket

4041 **Tenon Fitting**

KFL Mounts and Acc	KFL Mounts and Accessories ①				
CATALOG NUMBER	DESCRIPTION				
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.)				
I I I I I	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.				
KF1LG	Wire Guard, 316 Stainless Steel				
VMSC10	10' Stainless Steel Safety Cable with loop grip@				
KF1L-DARK	Dark Sky Visor, White Painted Aluminum®				
KF1L-DOOR	Replacement Door and Lens Assembly				

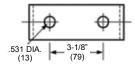
- ① Fittings available to adapt trunnion mount floodlights to crossarms, poles and walls. Must be ordered separately.
- ② Drop limit 1'. Attaches to luminaire cable provision and to mounting structure.
- 3 Designed to eliminate uplight when aimed at 45°.



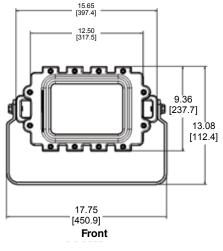


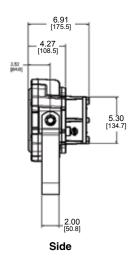


Dimensions



Trunnion Mounting Detail





Emergency Battery







The EBS23 System Requires EXACTLY 2 Heads for operation (total attached or remote); each Head is approximately 30VDC, 10Watts.

Class I, Div. 1&2, Groups B①,C,D Class I, Zone 1&2, Groups IIB+H2①, IIA Class II, Div. 1&2, Groups EFG Enclosure Type 4 (NEMA 4, 7B^① CD, 9EFG)



FEATURES-SPECIFICATIONS

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EMERGENCY

Applications

Where required by the NEC (or local "Life Safety" code) for safe egress (over doors, aisleways, 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 5000K@
- LED Head L70 value 100,000 hours for minimal maintenance
- Up to 500% brighter than competitive conventional units®
- Enclosure Type 4 (NEMA 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 enclsure 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-M1986 C1D1 **Enclosures**
- CSA 22.2 no. 25-1066 C2D1 EFG **Enclosures**
- Enclosure Type 4
- NEMA 4, 7B@CD, 9EFG

Materials

- Main Enclosure and Heads Copper Free Aluminum alloy with Baked Powder epoxy/polyester finish, electro statically 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

① 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) 2 See VSL Series Photometry Color Graphs; 5000K is typical "sunlight" 3 Based on published tungsteon/incandescent data EBSEL Heads 300% brighter; EBSHK Heads 500% brighter



EBS Unit with HK Type Heads and **Integral Push-To-Test**



EBS Unit with EL Type Heads and





Catalog Number Logic

EBS23DH Т D Series Constant 120-277V 50/60Hz 23W EBS23DH Dual-Head (Remote or Attached) **Test Options** Push-To-Test on Enclosure R Remote Push-To-Test Station (EBS-PTT shipped separately) Ν None - ordered separately or breaker controlled **Time Delay Option** Power Resumption Emergency Time-delay (Factory set approx. 15 min.) 120 thru 277V Ν No Time-Delay Luminaire Head Options ①② No heads - For Remote Heads Ordered Separately 2 EBSHK1030 Heads Factory Attached Α В 2 EBSEL1030 Heads (Less Guards) and Fittings for Attachment 2 EBSEL1030 Heads with Guards and Fittings for Attachment BE 2 EBSEL1030 Heads with 1 Guard and 1 HEXA-100 EXIT and Fittings for Attachment 1 EBSHK1030 Head Attached and 1 EBSEL1030 Head (Less Guard) and Fittings for Attachment C 1 EBSHK1030 Heads Attached and 1 EBSEL1030 Head with Guard and Fittings for Attachment CG CE 1 EBSHK1030 Heads Attached and 1 EBSEL1030 Head witn HEXA-100 EXIT and Fittings for Attachment 1 EBSHK1030 Only (2nd Head Remote - Ordered Separately) Ε 1 EBSEL1030 Only Less Guard and Fittings for Attachment (2nd Head Remote - Ordered Separately) 1 EBSEL1030 Only with Guard and Fittings for Attachment (2nd Head Remote - Ordered Separately) EG FF 1 EBSEL1030 Only with HEXA100 EXIT and Fittings for Attachment (2nd Head Remote - Ordered Separately) Drain 3 ח

Emergency Battery

Group B Drain for Wet Applications including condensation from heat <> cold cycling Not included

- ① Main Enclosure nameplate does not reflect heads ordered; unit is Dual Marked with ratings dependent on heads attached. E.g. if No heads or EBSHK only head(s) attached then unit is C1D1 Groups BCD; if an EBSEL head is attached then unit is Groups CD.
- ② Units ordered with EBSHK heads are shipped with heads attached; EBSEL heads are shipped separately.
- 3 Drain packed in enclosure with vapor capsule.



Light - Bottom Feed



Remote Push-To-Test Sta-



Factory Sealed Remote LED Spot Light - Side Feed



Remote LED Luminaire

EBS Unit - Bottom Detail



- ① Optional Push-To-Test
- ② Optional Group B Drain
- **③ Standard Pilot Light**
- **4** Entry for Remote P-T-T Station
- S Power Entry (also on top)

The EBS23 System Requires EXACTLY 2 Heads for operation (total attached or remote); each Head is approximately 30VDC, 10Watts.



Blank

Emergency Battery System





Class I, Div. 1&2, Groups B①,C,D Class I, Zone 1&2, Groups IIB+H2①, IIA Class II, Div. 1&2, Groups EFG Class III Enclosure Type 4 (NEMA 4, 7B① CD, 9EFG)



ORDERING INFORMATION



Integral P	ush-To-Test	Remote Push-To-Test		
EBS System with	Two EBSHK Heads 23		CID1BCD	
Integral PTT, Two EBSHK	Integral PTT, <mark>TDR</mark> Two EBSHK	Remote PTT, Two EBSHK	Remote PTT, TDR Two EBSHK	
EBS23DH-PNA	EBS23DH-PTA	EBS23DH-RNA	EBS23DH-RTA	





EBS System wit		CID1CD		
Integral PTT, Tw EBSEL Heads v Guards		Remote PTT, Two EBSEL Heads w/Guards	Tv	emote PTT, <mark>TDR</mark> , wo EBSEL Heads /Guards
EBS23DH-PNBG	EBS23DH-PTBG	EBS23DH-RNBG	EI	BS23DH-RTBG





EBS System with One EBSHK Head & 1 EBSEL Head with Guard ②③ CID1CD						
Integral PTT, One EBSHK & One EBSEL Head w/Guard	Integral PTT, TDR, One EBSHK & One EBSEL Head w/Guard		Remote PTT, TDR, One EBSHK & One EBSEL Head w/Guard			
EBS23DH-PNCG	EBS23DH-PTCG	EBS23DH-RNCG	EBS23DH-RTCG			





EBS System with Tw	CID1CD		
Integral PTT, Two EBSEL Heads, One w/EXIT, One w/ Guard	Integral PTT, TDR, Two EBSEL Heads One w/EXIT, One w/Guard	Remote PTT, Two EBSEL Heads, One w/EXIT, One w/Guard	Remote PTT, Two EBSEL Heads, One w/EXIT, One w/Guard
EBS23DH-PNBE	EBS23DH-PTBE	EBS23DH-RNBE	EBS23DH-RTBE

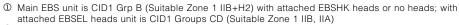




EBS System with One EBSHK Head & One EBSEL Head with EXIT ②③ CID1CD						
Integral PTT, One EBSHK Head, One EBSEL w/EXIT	Integral PTT, TDR, One EBSHK Head, One EBSEL w/EXIT		Remote PTT, One EBSHK Head, One EBSEL w/EXIT	Remote PTT, TDR, One EBSHK Head, One EBSEL w/EXIT		
EBS23DH-PNCE	EBS23DH-PTCE		EBS23DH-RNCE	EBS23DH-RTCE		



EBS System Only	CID1BCD			
Integral PTT, Integral PTT, TDR, No Heads No Heads		Remote PTT, No Heads	Remote PTT, TDR, No Heads	
EBS23DH-PNN	EBS23DH-PTN	EBS23DH-RNN	EBS23DH-RTN	



② Use catalog logic for single attached head models and order required remote 2nd head separately. Note, for EXIT applications EBSEL heads must be ordered without guards.

PTT = Push-To-Test; TDR = Time Delay Relay (prox 15 minutes after power resumption).



Emergency Battery



EBSEL1030	Remote Heads with	Mount (Factory Seale	ed) (CID1CD; C2D1EFG
10W 30VDC	Pendant 3/	4" Ceiling 3/4	4" ① Wall 3/4" ①	Stanchion 1-1/2" ②
With Guard	EBSEL103	0A2G EBSEL103	30X2G EBSEL1030	OB2G EBSEL1030D4G
Without Gua	rd③ EBSEL103	0A2 EBSEL103	30X2 EBSEL1030	OB2 EBSEL1030D4

EBSEL1030 Components & Accessories - Description	Catalog Number
EBSEL 10W 30V Head Only with LED's, Less Mount and Guard	EBSEL1030
Guard	EMG1
Red Guard - used to signify remote fixture is for Emergency	EMG1-R3
EXIT Accessory - 3-sided white painted aluminum	HEXA-1003
Dome Reflector	ERSD15
Angle Reflector	ERA15
Sealed Fittings Set for attachment of Pendant EBSEL to EBS23HD-xxx	EBS-AHFS
Replacement Globe and Support Assembly	EMGS1



Mounting Boxes				
		Catalog Number		Unib Cina
Pendant	Ceiling	Bracket	Stanchion	Hub Size
EZA2	EZX2	EZB2	-	3/4"
EZA3	EZX3	EZB3	-	1"
-	-	-	EZD4 ²	1-1/4" / 1-1/2"

- ① For 1" pendant, ceiling and wall hubs, substitute "3" for "2" in catalog number; example: EBSEL1030A3G.
- ② Stanchion conduit hub size supplied is 1-1/2" with 1-1/2" to 1-1/4" reducer for 1-1/4" mounting.
- 3 Order fixture without guard for use with HEXA-100 EXIT Accessory, or to order EMG1-R Red Guard.
- ④ For EBSEL with Mount Dimensions, see EMI15 series in lighting section.

EBSHK1030 10W 30V Heads, Components & Accessories	CID1BCD; C2D1EFG
Description	Catalog Number
EBSHK Head Only with LED's - Requires Field Seal ①	EBSHK1030
EBSHK Head with ADJUSTABLE FACTORY SEALED "C" fittings set	EBSHK1030-RFSC
EBSHK Head with ADJUSTABLE FACTORY SEALED "L" fittings set	EBSHK1030-RFSL
Sealed Fittings Set for attachment of EBSHK to EBS23DH-xxx	EBS-AHFS

① Seal purchased separately appropriate of area of use

EBS23DH Series Accessories - Description	Catalog Number
Remote Push-To-Test Station Group B 3/4" Feed-Thru w/Close Up Plug ①	EBS-PTT
Remote Push-To-Test Station with Lock Off, Group B 3/4" Feed-Thru ①	EBS-PTT-LO
Lock-Off for Integral Push-To-Test	GO10502
Sealed Fittings Set for attachment of EBSHK to GEBC-2 or GEBL-2	EBS-AHFS
Replacement Battery Pack and Electronics	KLBP01
Replacement Vapor Capsule for corrosion protection	EBS-VC

① EBS23DH requires conduit seals (purchased separately) exiting enclosure within 18"; EBS-PTT contains a N.C. contact and is Factory Sealed for C&D and up to 5' for Group B.



EBSEL Shown with Exit Accessory













EMGS1



EBSHK1030-RFSL

EBSHK1030-RFSC



EBS-PTT



Emergency Battery System



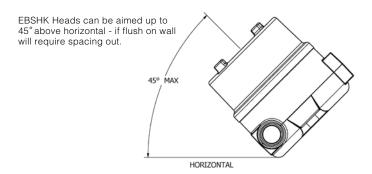
EBS System with SINGLE HEAD



EBS23DH Electrical Data						
Catalog Number	Input**			Output**		
Catalog Number	Voltage	Watts	Current	Voltage	Watts	Current
EBS23DH	120-277VAC	7.5	.1 A	33VDC	23	700mA

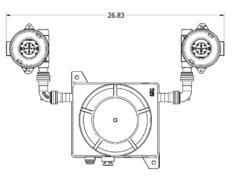
^{**} Figures nominal. Current is 350mA to each of 2 heads (2 heads are required for proper operation, remote or attached).

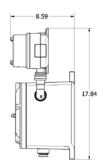
Thermal Performance Data					
Catalog Number	Ambient	CID1	CIID1	Suitability	Supply Wire
EBS23DH	45°C	T6	EFG	0-45°C	75°C
EBSEL1030	55°C	T6	EFG	-40 to 40°C	75°C
EBSHK1030	55°C	T6	EFG	-40 to 40°C	75°C



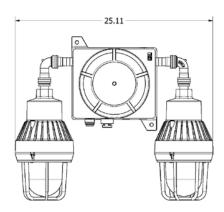


Emergency Battery System

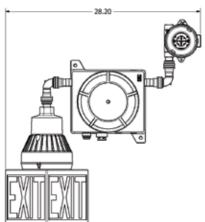




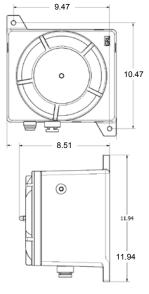
Dimensions - EBS with HK Heads



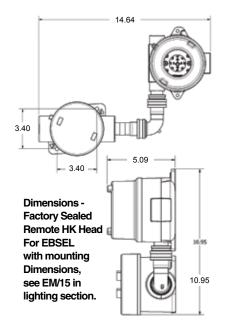
Dimensions - EBS with EL Heads

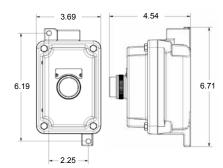


Dimensions - EBS with EL-EXIT & HK Heads



Dimensions - EBS Main Unit





Dimensions - Remote Test Station

Weights (shipping) Individual and Combinations®	Lbs.
EGS23DH Main Unit Only	36.6
EBSEL1030 Pendant Head Only w/Fittings Set	12.3
EBSHK1030 Head Only w/Fittings Set	05.0
EBSHK1030-RFSC (or RFSL)	11.0
EBS-PTT	03.0
EBS-AHFS Factory Sealed Fittings Set	00.6
EBS23DH & 1 EBSHK w/Fittings	41.6
EBS23DH & 2 EBSHK w/Fittings	46.6
EBS23DH & 1 EBSEL w/Fittings	48.9
EBS23DH & 2 EBSEL w/Fittings	61.2
EBS23DH & 1 EBSEL & 1 EBSHK w/Fittings	53.9

① EBSEL Heads ship separately



What makes Killark LED products GREEN?



Hubbell is committed to be a recognized leader in conserving natural resources to sustain our environment.





More Lumens per Watt

• Saves Energy compared to other lighting sources -

Fixture Type	Light Source	Line Wattage②	Delivered Lumens③	Lumens per Watt	Photometric Report
VM4L13030①	LED	134.71	15630	116.0	BAL17067
VM4P200①	MHP	232	18009	77.6	HK09919U
VM1L5030①	LED	55.12	5824	105.7	BAL17122
VM1S050①	HPS	62.0	3360	54.2	HPK009950
VM1H070①	MH	90.0	4536	50.4	HPK009935
VQ1F5230①	CFL	64.0	2736	42.8	LSI25349
VaporTight ④	Incan.	150.0	2699	18.0	ET442841

Saves Significant Maintenance Labor Time and \$ (fewer trips for relamping)

	Hours Life ©	# Trips
Killark LED	60,000	1.0
50HPS	24,000	2.5
70MH, 200MHP	15,000	4.0
52CFL (2 x 26W)	10,000	6.0
150 Incan.	750	80.0

- Lower facility carbon footprint (emissions) by reducing electrician maintenance trips to fixture
- Service Trucks: direct diesel or gas emissions
- Forklifts, Sissor-lifts, or Cherry Pickers: use utility electricity to charge batteries, or gas
- High Color Rendering (5000K CCT; 70 CRI) for better visibility can reduce the number of fixtures needed.
- The US DOE recognizes "Spectrally Enhanced Lighting", particularly at low light levels, as a method to maintain visual effectiveness using fewer watts, e.g. vs HPS (2100°Kelvin CCT; 21CRI). ©.
- Killark LED luminaires use RoHS compliant materials to minimize environmental contamination

The Difference Visually & Economically

High Color Rendering for better visibilty and less fixtures



125W LED Floodlight (128W Actual)

Photopic 165 Lux; Spectral 285 Lux *

Visually Effective lux 251 *



250W HPS Floodlight (280W Actual)

Photopic 267 Lux; Spectral 152 Lux *

Visually Effective lux 169 *

* Measurements using special Solar Color Sensing Light Meter. Visually Effective Lux indicates a blend of color that can be seen by the human eye. 10 Lux equals approximately 1 Footcandle

NOTES

- ① VM1 Using VMG17 standard globe; VM4 using VMG25 globe (Class I Division 2; Class II Division 1)
- $@ \ \ Wattage \ from \ Test \ Report \ or \ Ballast \ mfg. \ data \ (greater \ than \ "nominal" \ wattage)$
- ③ Delivered Lumens on LED from Absolute Photometry; for HID, Compact Fluorescent, or Incandescent data is from noted Photometric Report's Zonal Lumen Summary, which is delivered lumens.
- ① Traditional 3.18" dia. 6.68" high Clear Globe with 150A21 Lamp
- ⑤ For more information go to: http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/lieel_enhanced_longbeach2013.pdf



LED LIGHTING RANGE FROM KILLARK®

*See catalog data for complete ratings, certifications and series features

	SERIES	HIGHLIGHTS	SUITABILITY	
	VSL	LED 13 & 16W Utility retrofits for energy savings	Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIC, IIB, IIA Class II, Div. 2, Groups F,G Class III Suitable for wet locations	
	DVL	Compact size, traditional look	D Class II, Div. 1 & 2, Groups E,F,G Class I, Div. 2, Groups A,B,C,D	
	CERTITUE.	 LED 14 - 50W Compact Design Globe or Flat Lens models Pathway Reflector 	Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIC, IIB, IIA Class II, Div. 1 & 2, Groups E,F,G Class III Suitable for wet locations NEMA 3, 4X Marine	
	CERTILITE VM1L	 LED 40, 45, 50W Reduced profile Swing-barrel nut & EZ Mount Adapter for easy installation 	Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIC, IIB, IIA Class II, Div. 1 & 2, Groups E,F,G Class III Suitable for wet locations Marine NEMA 3, 4X	
VM2LB/C VM4LB/C		LED 40 - 130W Up to 115 Lumens/watt Patented Swing-barrel nut "EZ" adapter 2 internal heat sinks styles & shallow depth models	Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIC, IIB, IIA Class II, Div. 1 & 2, Groups E,F,G Class III Suitable for wet locations NEMA 3, 4X IP66 Marine	
	HOSTILE FOR	LED 40, 45, 50W Compact Explosion-proof with traditional industrial appearance Factory Sealed	Class I, Div. 1 & 2, Groups C,D Class I, Zones 1 & 2, Groups, IIA Class II, Div. 1 & 2, Groups E,F,G Class III, Div. 1 & 2 Suitable for wet locations Marine NEMA 3, 4, 4X Factory Sealed	
	PETROBRIGHT® KFLC	LED 15-45WCompact Design5000K White LightDark Sky Visor	Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIB+H2, IIA Class II, Div. 1 & 2, Groups E,F,G Class III Suitable for wet locations Marine NEMA 3, 4X, IP66	
STREET ST	PETROBRIGHT® KFL	• LED 60-125W • Up to 125 Lumens/Watt • 5000K White Light • IEC Ex model	Class I, Div. 2, Groups A,B,C,D Class I, Zone 2, Groups IIB+H2, IIA Class II, Div. 1 & 2, Groups E,F,G Class III Suitable for wet locations Marine NEMA 3, 4X, IP66	
	PETROBRIGHT® KF1L	LED 90-125W Up to 95 Lumens/Watt Explosion Proof IEC Ex model pending	Class I, Div. 1 & 2, Groups B,C,D Class I, Zones 1 & 2, Groups IIB+H2, IIA Class II, Div. 1 & 2, Groups EFG Class III Enclosure Type 4 (NEMA 4, 7B CD, 9EFG), IP66	
	HOSTILE E	 LED 10W 5000K Color Up to 5X's Brighter than comparable units Exit Sign Remote Mount Options 	Class I, Div. 1 & 2, Groups B,C,D Class I, Zones 1 & 2, Groups IIB+H2, IIA Class II, Div. 1 & 2, Groups E,F,G Class III Enclosure Type 4 (NEMA 4) NEMA 7BCD, 9EFG	

