

KILLARK®

LED SOLUTIONS

Harsh and Hazardous Products



HSI=GREENSM
HUBBELL SUSTAINABILITY INITIATIVE












www.hubbell-killark.com












Harsh & Hazardous



LIGHTING INDEX

PRODUCT	PAGE NO.	NEMA 4 (or 4X or IP66)	Class I, Div. 2 / Zone 2	Class I, Zone 2 Ex nR	Class II / III Div. 1	Class II / III Div. 2	Class I, Div. 1 C, D / Zone 1	Class I, Div. 1 A, B, C, D / Zone 1	IECEX Zone 1	ATEX Zone 1	IECEX Zone 2	ATEX Zone 2
 LAL Series.....	2-7	X	X		X	X					X	X
 LZ2NL/LZ2SL.....	8-9	X	X		X	X						
 HLLX.....	10	X	X		X	X						
 MBL Series.....	12-16	X	X		X	X						
 VM1L Series.....	17-22	X	X		X	X						
 VM2L & VM4L Series.....	23-34	X	X		X	X				X	X	
 EML Series.....	35-38	X	X		X	X	X					
 EZL Series.....	39-40	X	X		X	X	X					
 KFLC Series.....	42-43	X	X		X	X						
 KFL Series.....	44-45	X	X		X	X				X	X	
 KFLH Series.....	46-47	X	X		X	X				X	X	

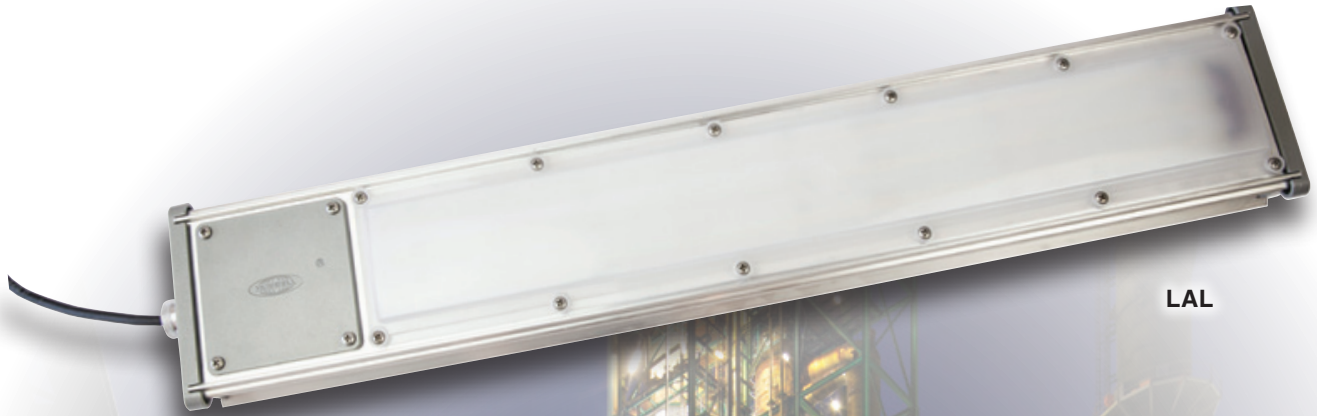
PRODUCT	PAGE NO.	NEMA 4 (or 4X or IP66)	Class I, Div. 2 / Zone 2	Class I, Zone 2 Ex nR	Class II / III Div. 1	Class II / III Div. 2	Class I, Div. 1 C, D / Zone 1	Class I, Div. 1 A, B, C, D / Zone 1	IECEX Zone 1	ATEX Zone 1	IECEX Zone 2	ATEX Zone 2
 KFL2H Series.....	48-49	X	X		X	X					X	X
 KF1L Series.....	50-51	X	X		X	X	X		X	X	X	X
 KFLP Series.....	52-53											
 KF1LP Series.....	54-55	X	X		X	X	X		X	X	X	X
 NEBS Series.....	57-58											
 EBS Series.....	59-63	X	X		X	X	X					
 LLS2 Series.....	64											
 VSL SERIES.....	65-69	X	X				X					
 DVL Series.....	70	X			X	X						

LIGHTING

LINEAR LIGHTING



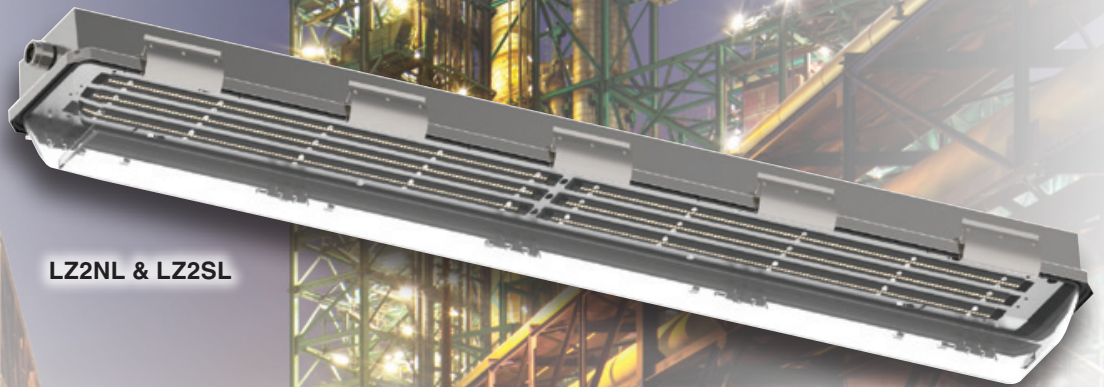
LINEAR LIGHTING



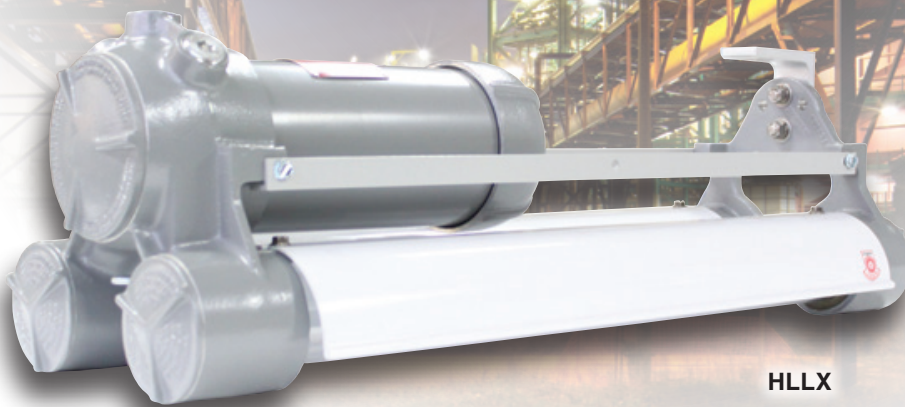
LAL



LALxE



LZ2NL & LZ2SL



HLLX



LAL/LALxE/LALC SERIES

KILLARK

LOW PROFILE LINEAR ALUMINUM LED • EXCLUSIVE DESIGN FEATURES

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



Diffused

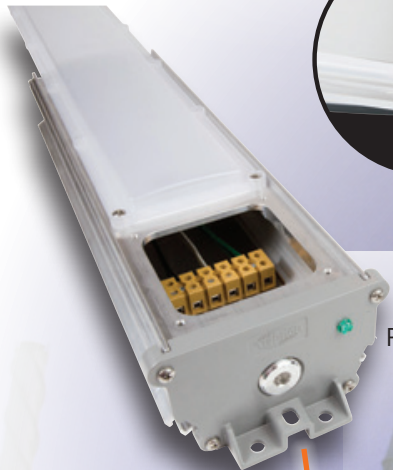


Clear

2 Lens Choices:

- Clear for maximum lumens
- Diffused for glare control

Looping Terminal Blocks under Wiring Access Plate(s).



Optional Through Wiring

2 Access Plates for feed through wiring



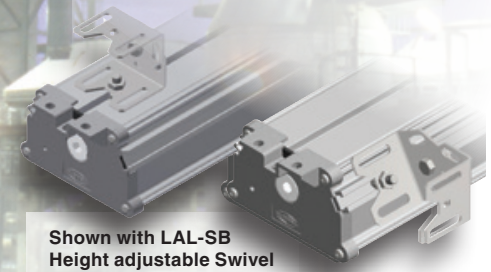
Battery

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

Surge

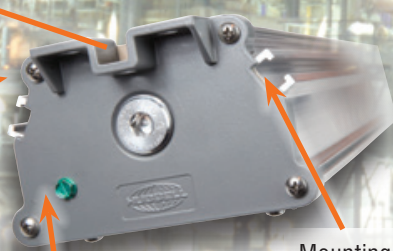
Standard with internal 20kA/10kA Supplemental Surge Protection

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



Shown with LAL-SB Height adjustable Swivel Brackets

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



Mounting Slots on back and at 45°

Earth

External Earth Ground for IECEx requirement

LIGHTING

LAL/LALxE/LALC SERIES



LINEAR LED TECHNOLOGY



LINEAR^{ITE}® *

* marca registrada MEXICO

FEATURES-SPECIFICATIONS

Applications

Linear LED Luminaires are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, and NEMA 3, 4X, IP66 areas where wind, water, snow or high ambients can be expected. They can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC/CEC/IECEX.

Typical applications include land based oil rigs, offshore oil platforms, dockside installations, chemical and petrochemical processing facilities, sewage treatment plants, garages, storage facilities, tunnels, and grain/food facilities.

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

Compliances

- UL-8750 for LED lighting
- ANSI/UL 1598(A)
- UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 2; Class II, Divisions 1 and 2; Class III
- CSA C22.2 no. 137-M1981 electric luminaires for use in hazardous locations
- IEC suffix Zone 2/21 to IEC 60079-0, 60079-15, 60079-31 Standards
- Enclosed and gasketed
- NEMA 3, 4X
- IP66

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

Materials

- NEMA 4X & IP66 rated
- Housing – one piece natural finish \leq .1% copper-free aluminum extrusion
- Endcaps & wiring – Access covers are copper-free (\leq .4%) aluminum with gray baked powder epoxy-polyester finish, electrostatically applied for complete uniform corrosion resistance.
- External screws are 316 stainless steel
- Lens – Impact resistant polycarbonate lens available in diffuse or clear

LAL & LALxE Product Features

- LALxE models have “built-in” battery backup for 90 minute emergency exit
- Shallow design minimizes profile in work areas with low ceiling heights
- Diffuse Lens Standard to minimize glare; Clear Lens available
- Polycarbonate Single Lens 18W to 60W; Double Lens model 34W – 120W
- Slot Back Design allows multiple mounting access points across length – slots can also be used with 5/16” or 8mm bolts & nuts, 3 housing slots, 1 center back and 2 at 45°.
- Variety of mounting options including swivel brackets, wall, ceiling brackets, or beam clamps

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
AEx nAll, Ex nAll
Wet Locations
NEMA 4X
IP66

Certified - File LR11713

IECEX Rated
Zone 2 and Zone 21 areas
Ex nA IIC T6 to T3, Gc
Ex tb IIC T95°C Db
Tamb -50°C < Tz < +65°C, IP66

IECEX Certificate
QPS 15.0010

ATEX Certificate
CML 15ATEX4081X (nA)
&
CML15ATEX3082X (tb)

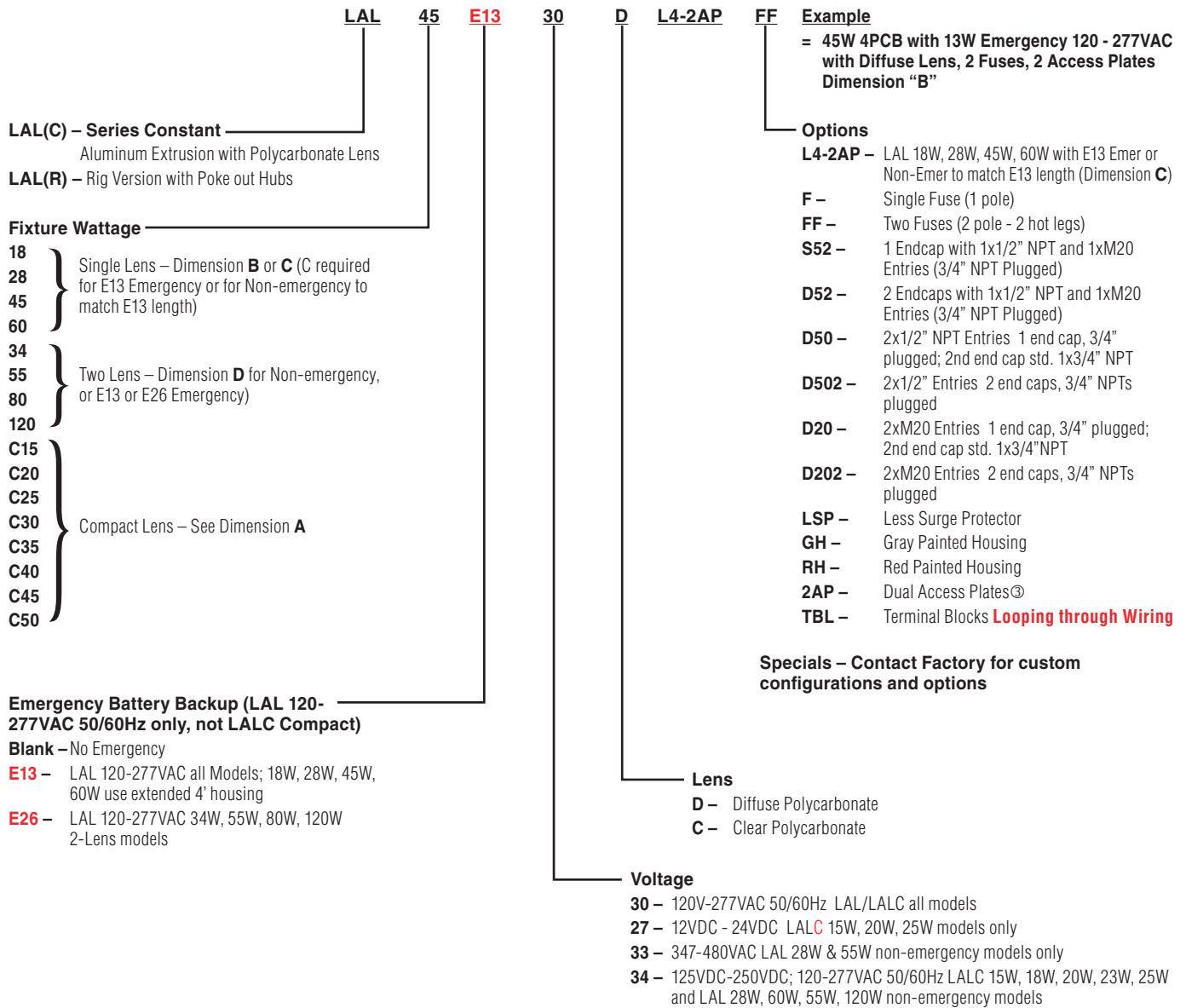
- End Caps each have 2 mounting feet built-in plus a safety strap attachment point
- Standard unit End Caps each have single a 3/4” NPT hub, and fixture is furnished with one 3/4” close-up plug and two 3/4” to 1/2” reducers – provides out of the box 1/2” dead-end to 3/4” feed-through flexibility. Metric openings are available.
- Standard LALs have one wiring Access Plate for easy access to driver leads.

LED Features and Standards

- Many Midpower LEDs blend light to simulate fluorescent tubes
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- LED Array Life – to 212,000 maintenance free hours to 70% initial lumens
- Ambient suitability -40°C to 65°C (see tables). **0°C to 50°C Ambient suitability for Emergency models.**
- Instant On – Including after power interruption
- World Voltage 120 - 277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- 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



CATALOG LOGIC



Energy Savings

LED VS FLUORESCENT WATTAGE & DELIVERED LUMENS ^{① ②}					
LED WATT	LUMENS	L/W	FLUORESCENT	LUMENS	L/W
18W	2557	150	40W 1x40W BX	2471	63
28W	3775	144	55W 1x55W BX	3766	65
34W	5075	149	56W 2x28T5	4676	71
45W	5562	137	64W 2x32T8	4772	80
55W	7577	144	108W 2x54T5HO	8088	67
60W	7618	132	120W 2x60T12HO	6965	56
80W	11140	137	162W 3x54T5HO	11619	65

① Cataloged Wattage in L22x Fluorescent or LALx LED luminaires – actual varies with driver or ballast losses – Delivered Lumens and L/W from photometry testing
 ② LAL L70 Life 99,600-212,000 hours L22x Fluorescent 10,000-60,000 hours
 ③ 2AP Length Dimensions will increase by 4.2".

LIGHTING

LAL/LALxE/LALC SERIES



ORDERING INFORMATION

ORDERING INFORMATION AND AMBIENT SUITABILITY							C1D2 ABCD/ ZONE 2 IIC, IIB, IIA②③			C1D2②③ GRPS. EFG SIMULTANEOUS			C2D1②③ GRPS. EFG			IEC ZONE 2③			IEC ZONE 21③					
CATALOG NUMBER W/ DIFFUSE LENS ①	WEIGHT LBS./KG	WATTS STD. POWER	LENGTH STYLE - INCHES (MM)	VOLTAGE	AMPS ②	DELIVERED LUMENS Diffuse/ Clear	40°C	55°C ④	65°C ④	40°C	55°C ④	65°C ④	40°C	55°C ④	65°C ④	40°C	55°C ④	65°C ④	40°C	55°C ④	65°C ④			
LAL1830D	17.9 / 8.1	18	B-32.6 (828)	120-277VAC	0.15 - 0.06	2272 / 2479	T6	T6	T5	T4A	T4A	T4A	T4A	T4A	T4A	T6	T6	T5	T4	T4	T4			
LAL1830D-L4-2AP	21.9 / 9.9		C-51 (1295)				T6	T6	T5	T4A	T4A	T4A	T4A	T4A	T4A	T6	T6	T5	T4	T4	T4			
LAL18E1330D-L4-2AP	31.9 / 14.5		C-51 (1295)				T6	T6	T5	T4A	T4A	T4A	T4A	T4A	T4A	T6	T6	T5	T4	T4	T4			
LAL2830D	17.9 / 8.1	28	B-32.6 (828)		120-277VAC	0.23 - 0.10	3321 / 3624	T6	T6	T5	T4A	T4A	T4A	T4A	T4A	T4A	T6	T6	T5	T4	T4	T4		
LAL2830D-L4-2AP	21.9 / 9.9		C-51 (1295)					T6	T6	T5	T4A	T4A	T4A	T4A	T4A	T4A	T6	T6	T5	T4	T4	T4		
LAL28E1330D-L4-2AP	31.9 / 14.5		C-51 (1295)					T6	T6	T5	T4A	T4A	T4A	T4A	T4A	T4A	T6	T6	T5	T4	T4	T4		
LAL4530D	17.9 / 8.1	45	B-32.6 (828)			120-277VAC	0.38 - 0.16	5054 / 5515	T6	T5	-	T4A	T4A	T4A	T4A	T4A	T4A	T6	T5	T5	T4	T4	T4	
LAL4530D-L4-2AP	21.9 / 9.9		C-51 (1295)						T6	T5	-	T4A	T4A	T4A	T4A	T4A	T4A	T6	T5	T5	T4	T4	T4	
LAL45E1330D-L4-2AP	31.9 / 14.5		C-51 (1295)						T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-	
LAL6030D	18.9 / 8.6	60	B-32.6 (828)				120-277VAC	0.50 - 0.22	7064 / 7709	T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL6030D-L4-2AP	22.9 / 10.4		C-51 (1295)							T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL60E1330D-L4-2AP	32.9 / 14.9		C-51 (1295)							T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL3430D	34.5 / 15.6	34	D-57.9 (1471)	120-277VAC				0.28 - 0.12	4517 / 4929	T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL34E1330D	44.5 / 20.2		D-57.9 (1471)							T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL34E2630D	54.5 / 24.7		D-57.9 (1471)							T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL5530D	34.5 / 15.6	55	D-57.9 (1471)		120-277VAC			0.46 - 0.20	6864 / 7490	T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL55E1330D	44.5 / 20.2		D-57.9 (1471)							T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL55E2630D	54.5 / 24.7		D-57.9 (1471)							T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL8030D	34.5 / 15.6	80	D-57.9 (1471)			120-277VAC		0.67 - 0.29	10110 / 11032	T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL80E1330D	44.5 / 20.2		D-57.9 (1471)							T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL80E2630D	54.5 / 24.7		D-57.9 (1471)							T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL12030D	36.5 / 16.6	120	D-57.9 (1471)				120-277VAC	1.00 - 0.43	15090 / 16467	T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL120E1330D	46.5 / 21.1		D-57.9 (1471)							T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LAL120E2630D	56.5 / 25.6		D-57.9 (1471)							T6	T5	-	T4A	T4A	-	T4A	T4A	-	T6	T5	-	T4	T4	-
LALC1527D	12.03 / 4.49	15	A-18.73 (476)	12-24VDC				1.3-0.6	1503 / 1640	T5	T4A	-	T4A	T4A	-	T4A	T4A	-	T5	T4	-	T4	T4	-
LALC1530D				120-277VAC				0.15-0.06		T5	T4A	-	T4A	T4A	-	T4A	T4A	-	T5	T4	-	T4	T4	-
LALC1534D				120-250VDC				0.2-0.1		T5	T4A	-	T4A	T4A	-	T4A	T4A	-	T5	T4	-	T4	T4	-
LALC2027D		20	A-18.73 (476)	12-24VDC	1.7-0.8			2337 / 2550	T5	T5	-	T4A	T4A	-	T4A	T4A	-	T5	T5	-	T4	T4	-	
LALC2030D				120-277VAC	0.17-0.08				T5	T5	-	T4A	T4A	-	T4A	T4A	-	T5	T5	-	T4	T4	-	
LALC2034D				120-250VDC	0.2-0.1				T5	T5	-	T4A	T4A	-	T4A	T4A	-	T5	T5	-	T4	T4	-	
LALC2527D		25	A-18.73 (476)	12-24VDC	2.1-1.0	3019 / 3294		T5	T4A	-	T4A	T4A	-	T4A	T4A	-	T5	T4	-	T4	T4	-		
LALC2530D				120-277VAC	0.18-0.08			T5	T4A	-	T4A	T4A	-	T4A	T4A	-	T5	T4	-	T4	T4	-		
LALC2534D				120-250VDC	0.2-0.1			T5	T4A	-	T4A	T4A	-	T4A	T4A	-	T5	T4	-	T4	T4	-		
LALC3030D		30	A-18.73 (476)	120-277VAC	0.26-0.11	2726 / 2974	T5	T4A	-	T4A	T4A	-	T4A	T4A	-	T5	T4	-	T4	T4	-			
LALC3530D		35	A-18.73 (476)	120-277VAC	0.30-0.13	3261 / 3558	T5	T4A	-	T4A	T4A	-	T4A	T4A	-	T5	T4	-	T4	T4	-			
LALC4030D		40	A-18.73 (476)	120-277VAC	0.34-0.15	4152 / 4530	T5	T5	-	T4A	T4A	-	T4A	T4A	-	T5	T5	-	T4	T4	-			
LALC4530D	45	A-18.73 (476)	120-277VAC	0.38-0.17	5136 / 5604	T5	T5	-	T4A	T4A	-	T4A	T4A	-	T5	T5	-	T4	T4	-				
LALC5030D	50	A-18.73 (476)	120-277VAC	0.42-0.18	6039 / 6590	T5	-	-	T4A	-	-	T4A	-	-	T5	-	-	T4	-	-				

① See Logic Notes for Options

② Use 75°C Minimum Supply Wire @ 40°C; Use 90°C Wire at 55° or 65°C

③ 55°C or 65°C where listed

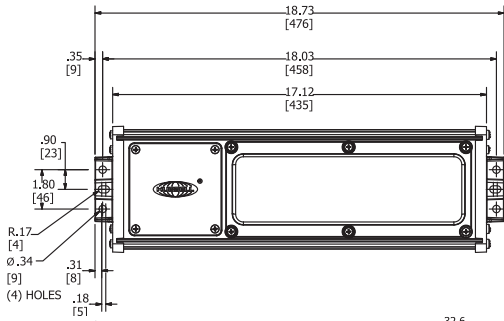
④ T-Codes for 55°C or 65°C reflect maximum internal or external temperatures. However, E13 or E26 Emergency units are limited to -20°C to 50°C ambient to protect electronics and batteries.

LAL		
LED LUMEN LIFE	L70 CALCULATED	L70 TM-21**
40°C Ambient	212,000 Hours to 70% Initial	60,600 Hours Official Reported
55°C/65°C Ambient⑥	99,600 Hours to 70% Initial	60,400 Hours Official Reported

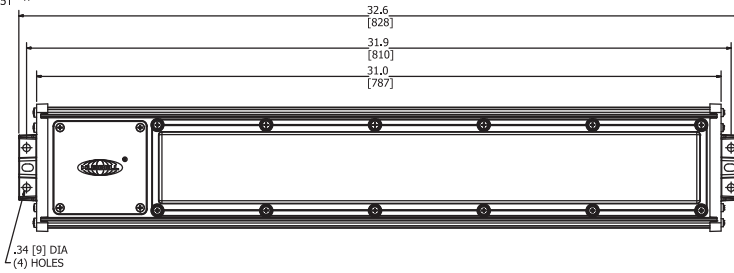
LALC		
LED LUMEN LIFE	L70 CALCULATED	L70 TM-21**
Extra High L/W Models	278,000 Hours to 70% Initial	72,600 Hours Official Reported
High L/W Models	270,000 Hours to 70% Initial	60,100 Hours Official Reported
50W High L/W Models	190,000 Hours to 70% Initial	60,300 Hours Official Reported



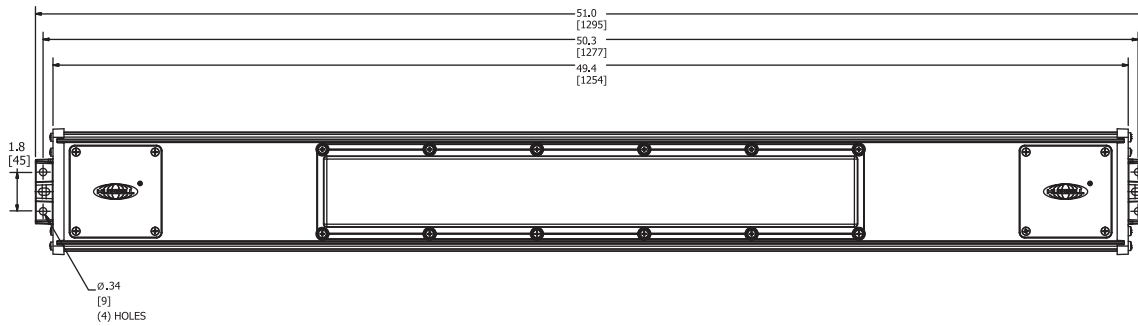
DIMENSIONS AND ACCESSORIES



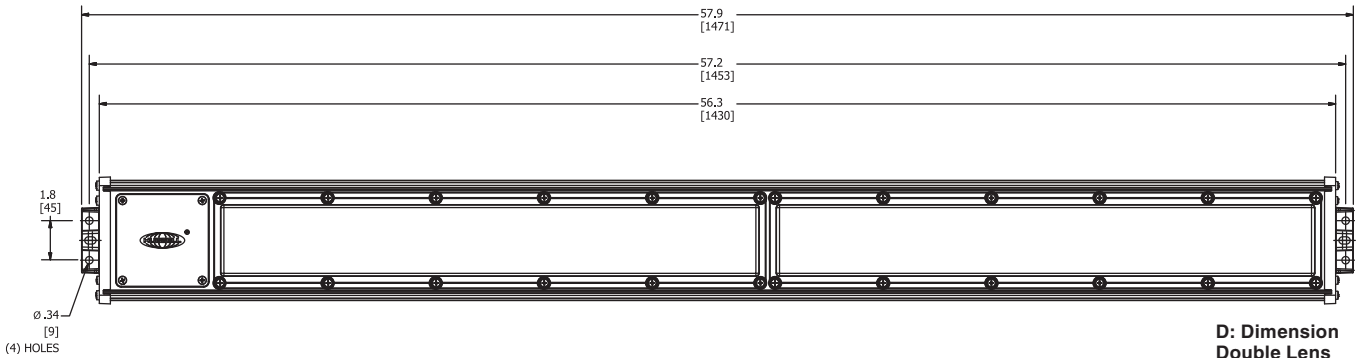
A: Dimensions for LALC



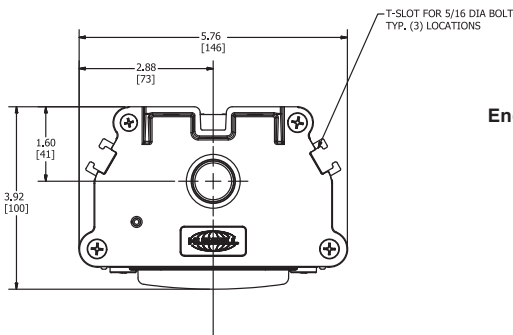
B: Dimension for Single Lens



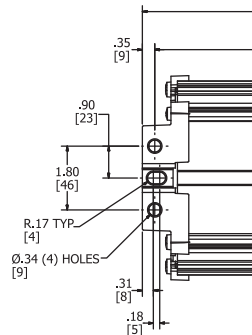
C: Dimension Single Lens with Emergency Battery or Extended Model to Match Emergency Length



D: Dimension Double Lens with or without Emergency Battery



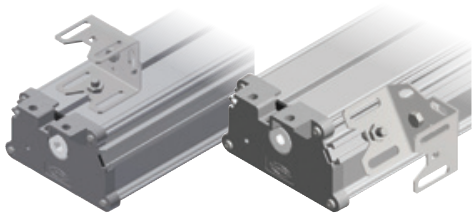
End Views





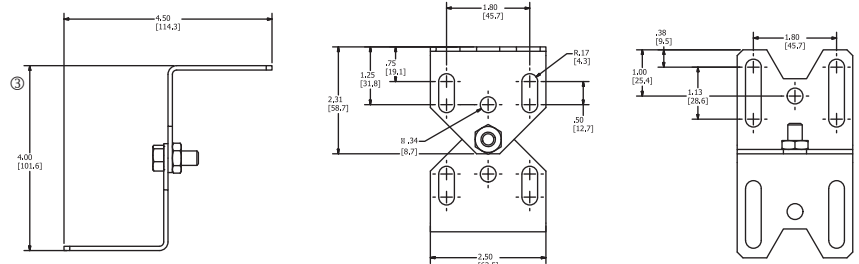
ACCESSORIES AND REPLACEMENT PARTS

ACCESSORIES AND REPLACEMENT PARTS: ① ②	
LAL-SB	Swivel Bracket Set w/ Adjustable Height; includes 5/16" bolts/nuts/lock-washers for attachment to LAL(C) "slots"; can also be attached to end cap mounting feet with FBO bolts.
LZCB	Ceiling Bracket Set with Stainless Steel Bolts to attach to LAL(C) "slots"
LZWB	Wall Bracket Set with Stainless Steel Bolts to attach to LAL(C) "slots"
LAL-BC	Steel/malleable Iron with Zinc electroplate for corrosion resistance; includes Stainless Steel Bolts to attach to LAL(C) "slots"
LAL-EB	Eyebolt Set with Stainless Steel Bolts to attach to LAL(C) "slots"
VMSC10	10' Stainless Steel Safety Cable with loop grip
LALG	Stainless Guard for 1 LAL Lens, order two for 2 lens models
LALCG	LALC Stainless Guard
LAL-LENSCLR	Single Clear Lens with Gasket for LAL Series
LAL-LENSDIF	Single Diffuse Lens with Gasket for LAL Series
LALC-LENSCLR	Single Clear Lens with Gasket for LALC Series
LALC-LENSDIF	Single Diffuse Lens with Gasket for LALC Series
LAL-RIG-CB	Rig Mounting Style Ceiling Bracket
LAL-RIG-WB	Rig Mounting Style Wall Bracket
RIG-LALC	Rig End Caps for LALC

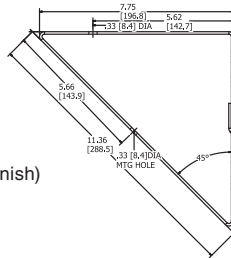


LAL-SB on Center Slot

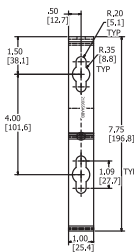
LAL-SB on 45° Slot



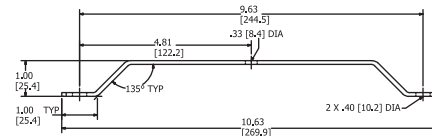
LAL-SB Dimensions – extended shown



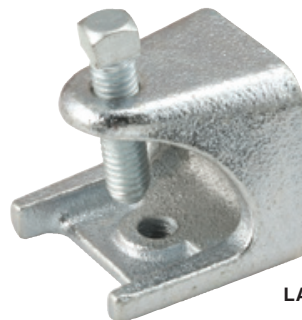
Wall Bracket Set^②
Part Number LZWB
Stainless Steel (natural finish)



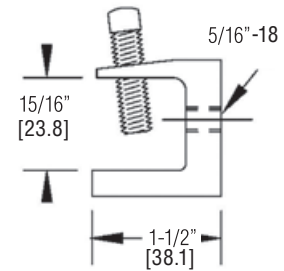
Ceiling Bracket Set^②
Part Number LZCB
Stainless Steel (natural finish)



VMSC10 Safety Cable



LAL-BC Beam Clamp



① Dimensions in () are millimeters.

② Product accessories have hardware for attachment to fixture; hardware to attach to wall/ceiling F.B.O.

③ Un-extended height 3.25" (82.6)

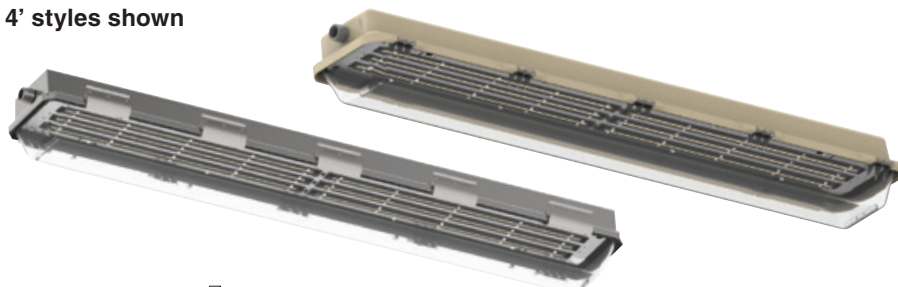


LZ2NL/LZ2SL SERIES

KILLARK

LZ LED INTRODUCTION & LOGIC

4' styles shown



Class I, Div. 2, Groups A, B, C, D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E^①, F, G
AEx nAII, Ex nAII
Wet Locations
NEMA 4X, IP66

Certified - File LR11713

ABS Type Approval (L32NL, L32SL)
NSF Food Handling (LZ2NL)

LINEAR^{lite}® *

* marca registrada MEXICO

FEATURES-SPECIFICATIONS

Applications

Linear LED Luminaires are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, and NEMA 3, 4X IP66 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.

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

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

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

Compliances

- UL-8750 for LED lighting
- ANSI/UL 1598(A)
- UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 2; Class II, Divisions 1 and 2; Class III
- CSA C22.2 no. 137-M1981 electric luminaires for use in hazardous locations
- Enclosed and gasketed
- NEMA 3, 4X, IP66

Materials

- NEMA 4X & IP66 rated enclosure
- Housing – one piece fiberglass reinforced polyester or 316 Stainless Steel
- Lens – Clear Lexan® impact resistant polycarbonate lens (Lexan is a registered trademark of SABIC)
- Two 3/4" NTP hubs – one at each end (includes one 3/4" close-up plug and two 3/4"x1/2" reducers for maximum user flexibility – LZ2NL hubs aluminum; LZ2SL hubs 316 Stainless Steel)

LED Features and Standards

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

- Many Midpower LEDs blend light to simulate fluorescent tube
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- LED Array Life – to 212,000 maintenance free hours to 70% initial lumens
- Ambient suitability -40°C to 55°C up to 120W
- Instant On – Including after power interruption
- World Voltage 120 - 277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- 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

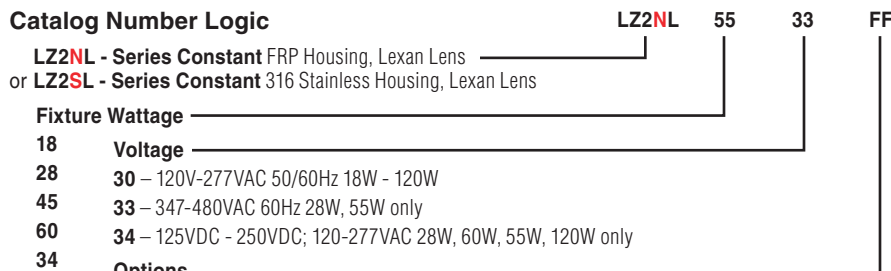
LED VS FLUORESCENT WATTAGE & DELIVERED LUMENS^{①②}

LED WATT	LUMENS	L/W	FLUORESCENT	LUMENS	L/W
18W	2557	150	40W 1x40W BX	2471	63
28W	3775	144	55W 1x55W BX	3766	65
34W	5075	149	56W 2x28T5	4676	71
45W	5562	137	64W 2x32T8	4772	80
55W	7577	144	108W 2x54T5HO	8088	67
60W	7618	132	120W 2x60T12HO	6965	56
80W	11140	137	162 3x54T5HO	11619	65

① Cataloged Wattage in LZ2x Housing & Lens – actual varies with driver or ballast losses – Delivered Lumens and L/W from photometry testing

② LZ2xL L70 Life 99,600 - 212,000
 LZ2x Fluorescent 10,000 - 60,000

Catalog Number Logic



① Group LZ2SL only for group E

② Fuses not for Canadian or Marine applications

③ LZ2xL fixtures with photocells are C1D2 only, not C2D1



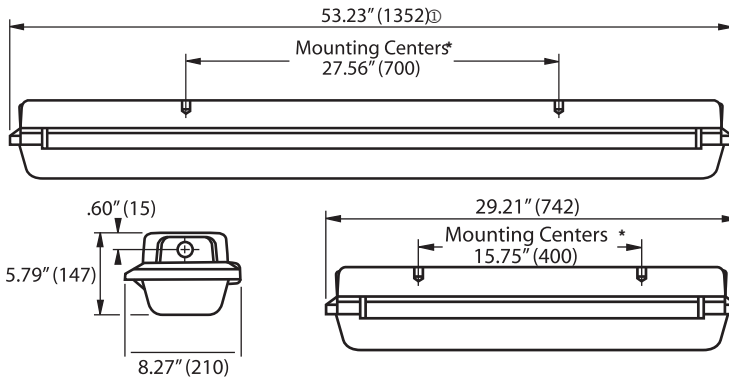
LZ SERIES – ORDERING INFORMATION & TECHNICAL DATA

ORDERING INFORMATION AND AMBIENT SUITABILITY									C1D2 ^⑤		C2D1 ^⑤ LZ2NL GRPS. FG LZ2SL GRPS. FFG		C1Z2 ^⑤ AEx nA Ex nA	
CATALOG NUMBER ^{①②}			WATTS	LENGTH ^③	VOLTAGE	AMPS ^④	DELIVERED LUMENS	40°C	55°C	40°C	55°C	40°C	55°C	
FIBERGLASS (WT.)	STAINLESS (WT.)	40°C												55°C
LZ2NL1830	12	LZ2SL1830	13	18	2'	120-277VAC	0.15 - 0.06	2557	T5	T4A	≤ 135°C	≤ 135°C	T5	T4
LZ2NL2830	12	LZ2SL2830	13	28	2'	120-277VAC	0.23 - 0.10	3775	T5	T4A	≤ 135°C	≤ 135°C	T5	T4
LZ2NL4530	12	LZ2SL4530	13	45	2'	120-277VAC	0.38 - 0.16	5562	T5	T4A	≤ 135°C	≤ 135°C	T5	T4
LZ2NL6030	14	LZ2SL6030	15	60	2'	120-277VAC	0.50 - 0.22	7618	T4A	-	≤ 135°C	-	T4	-
LZ2NL3430	23	LZ2SL3430	24	34	4'	120-277VAC	0.28 - 0.12	5075	T5	T4A	≤ 135°C	≤ 135°C	T5	T4
LZ2NL5530	23	LZ2SL5530	24	55	4'	120-277VAC	0.46 - 0.20	7577	T5	T4A	≤ 135°C	≤ 135°C	T5	T4
LZ2NL8030	23	LZ2SL8030	24	80	4'	120-277VAC	0.67 - 0.29	11140	T5	T4A	≤ 135°C	≤ 135°C	T5	T4
LZ2NL12030	25	LZ2SL12030	26	120	4'	120-277VAC	1.00 - 0.43	16010	T4A	-	≤ 135°C	-	T4	-

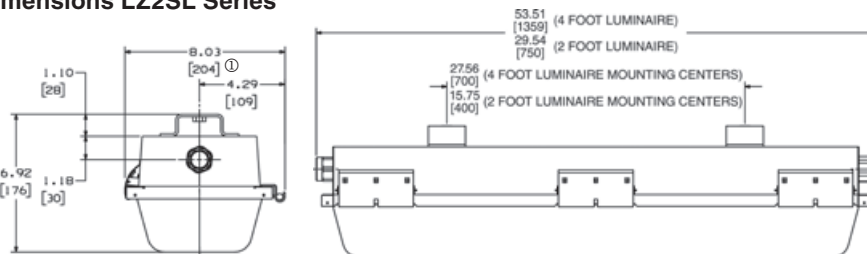
- ① See logic for additional voltages and options
- ② Shipping weights approximate
- ③ Length is nominal, see dimensional detail. PCB noted quantity used per fixture wattage
- ④ Amperage measured at 120VAC; 277VAC calculated
- ⑤ Use 60°C Minimum Supply Wire at 40°C Ambient except 120W; 75°C Wire at 55°C Ambient and all 120W

LED LUMEN LIFE	L70 CALCULATED	L70 TM-21**
40°C Ambient	212,000 Hours to 70% Initial	60,600 Hours Official Reported
55°C Ambient	99,600 Hours to 70% Initial	60,400 Hours Official Reported

Dimensions LZ2NL Series



Dimensions LZ2SL Series



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

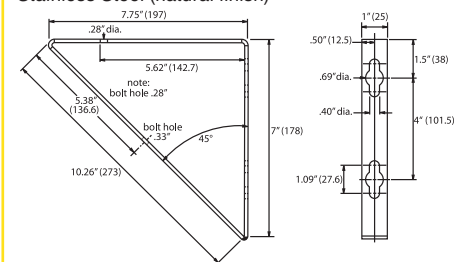
*Mounting Centers are 1/4"-20" tapped for user all thread rod or below accessories.

- ① Dimensions in () are millimeters.
 - ② Product accessories have hardware for attachment to fixture; hardware to attach to wall/ceiling F.B.O.
- NOTE: Eyebolts are 316 Series, brackets are 300 Series Stainless Steel.

Mounting Accessories

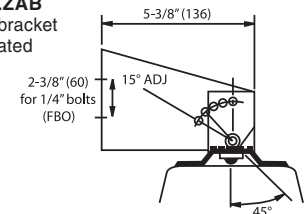
Wall Bracket Set^②

Part Number LZWB
Stainless Steel (natural finish)



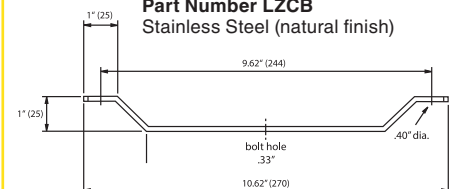
Adjustable Wall Bracket Set^②

Part Number LZAB
Stainless Steel bracket with ceramic coated pivot bolt



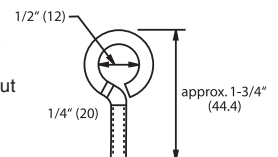
Ceiling Bracket Set^②

Part Number LZCB
Stainless Steel (natural finish)



Eyebolt Set

Part Number LZEB
Stainless Steel bolt with lockwasher & nut (natural finish)



Suspension Chains (2 required)

Part Number HFX-SC

36" length plated steel chain with snap link ends
For use with LZEB



HLLX SERIES

KILLARK

LED FIXTURES



LINEAR^{lite}® *

* marca registrada MEXICO

FEATURES-SPECIFICATIONS

Applications

HLLX Series 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 and snow can be expected. They can also be used in locations made hazardous due to the presence of flammable or explosive gases, vapors and combustible ducts as defined by the NEC.

Typical applications include classified areas such as inside paint spray booths, 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.

LED Features and Standards

- UL Listed and labeled for use inside paint spray booths and rooms
- Construction is strong lightweight corrosion resistant copper-free aluminum alloy, less than 4/10 of 1%
- Energy Savings – High efficiency LED chips
- All external hardware is corrosion resistant 316 stainless steel to provide maintenance free long life

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

- UL factory sealed construction (no external seals required). Saves installation time and cost
- Extruded aluminum reflectors are easily removable for cleaning. White baked enamel finish
- Optional 316 stainless steel wire guard for added protection
- Threaded O-Ring gasketed covers provide easy access to driver and wiring compartment
- Suitable for use in both indoor and outdoor wet locations
- Many Midpower LEDs blend light to simulate fluorescent tubes

- 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
- NEMA 3, 4X, 7(C,D) 9(E,F,G)
- Suitable for wet locations
- Suitable for paint spray booths

UL LISTED - File E12976 and E89665 (Marine)

SP Certified - File LR11713

- Crisp White Light for Excellent Color Rendering – Chromaticity 5000K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- LED Array Life – to 212,000 maintenance free hours to 70% initial lumens
- Instant On – Including after power interruption
- World Voltage 120-277VAC 50/60Hz

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, 4X, 7(C,D), 9 (E,F,G)

Catalog Number Logic	HLLX	22	304	00	Options
Constant for HLLX Series	_____				
Lumen Outputs	_____				
4 – 4000 lumens	_____				F – Single Fuse (1 pole)
6 – 6000 lumens	_____				FF – Two Fuses (2 pole - 2 hot legs)
7 – 7000 lumens	_____				LSP – Less Surge Protector
Voltage	_____				Length
27 – 12-24VDC	_____				2 – 2 foot
33 – 347-480VAC 50/60 Hz	_____				4 – 4 foot
30 – 120-277V 50/60 Hz	_____				

ORDERING INFORMATION AND AMBIENT SUITABILITY						C1D1		C2D1		L70	
CATALOG NO.	WEIGHT LBS./KG	WATTS	VOLTAGE	AMPS	DELIVERED LUMENS	40°C	55°C	40°C	55°C	TM-21	CALCULATED
HLLX4272	32.00 / 14.52	24	12-24VDC	2.0 - 4.0	3829	T6	T6	T4A	T4A	60300	199000
HLLX4302			120-277VAC	0.2 - 0.09							
HLLX4342			108-250VDC	0.2 - 0.1							
HLLX6272		35	12-24VDC	2.91 - 5.83	5756	T6	T6	T4A	T4A	60300	19900
HLLX6302			120-277VAC	0.29 - 0.67							
HLLX6342			108-250VDC	0.29 - 0.14							
HLLX7302		55	120-277VAC	0.44 - 1.02	7644	T6	T6	T4A	T4A	60300	199000
HLLX7342			108-250VDC	0.44 - 0.21							
HLLX11302			120-277VAC	0.71 - 1.64							
HLLX11342	85	108-250VDC	0.71 - 1.48	10830	T6	T6	T4A	T4A	60300	199000	
HLLX15304		120-277VAC	0.92 - 0.40								
HLLX15344		108-250VDC	1.02 - 0.44								
HLLX22304	50.00 / 22.6	170	120-277VAC	1.38 - 3.18	22540	T6	T6	T4A	T4A	60300	128000 @40C
HLLX22344			108-250VDC	1.57 - 0.68							

LIGHTING

LOWBAY & Highbay Lighting



LOWBAY & Highbay Lighting



MBL



VM2L & VM4L



VM1L



EML



EZL



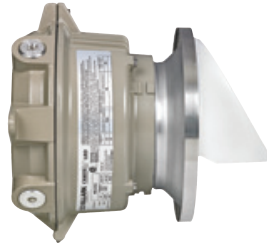
COMPACT SIZE – INTRODUCTION & LOGIC



Luminaire w/Glass Refractor and Guard



Luminaire w/Flat Lens



Wall Mount w/VZRF8PR 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
Marine Rated (US only)
NEMA 3, 4X

Certified - File LR11713

CERTILITE® LED

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

- Driver 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



Patented Design



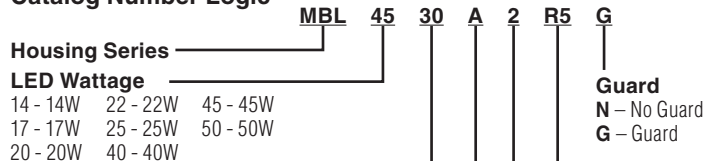
LED Luminaire Features and Standards

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

- Compact in Size with Traditional Industrial Appearance and Suitability
- Wide variety of optics including globes, globes with reflectors, all-glass refractors, and spin-top refractors
- Optional Mounting arrangements including Pendant, Wall, Ceiling, and Stanchion
- MBL LED Housings can be retrofitted to existing MB splice boxes; upgrade from Fluorescent or HID
- 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 5000°K (CCT); 70 CRI
- 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
- 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.)

Catalog Number Logic



Housing Series	MBL
LED Wattage	45
Voltage	30
Mounting Style	A
Entry	2
Optic	R5
Guard	G

- Mounting Style**
A – Pendant
X – Ceiling
B – Wall
D – Stanchion 25°

- Entry**
2 – 3/4" NPT (A, X, B)
3 – 1" NPT (A, X, B)
4 – 1-1/4" NPT (D only)
5 – 1-1/2" NPT (D only)
8 – M20 4 hub (X only)

- Optic**
GL – Globe (MBG)
R5 – Type 5 Glass Refractor
S8 – 8" Spin-top Type V Refractor
S5 – 12" Spin-top V Refractor
P5 – 12" Poly Spin-top V Refractor
GF – 8" Glass Flat LensⓄ
PF – 8" Polycarbonate Flat LensⓄ

- Options**
CP – Component Pack (housing, mount, Optic, Guard if selected)
AN – Assembled Fixture (components as selected)
DDR – Dual Driver Option
 Ⓞ 14W - 25W only for 8" flat lens
 Ⓞ Single step-down transformer feeds driver(s)

LIGHTING

MBL SERIES



COMPACT SIZE – ORDERING INFORMATION



ORDERING INFORMATION

MBL SERIES PENDANT WITH OPTIC AND GUARD							
WATTS	HUB SIZE ^②	VOLTAGE ^③	GLOBE & GUARD	8" SPIN-TOP POLYCARBONATE FLAT LENS ^④	TYPE V GLASS REFRACTOR & GUARD	8" SPIN-TOP TYPE V REFRACTOR & GUARD	12" SPIN-TOP TYPE V REFRACTOR & GUARD
14	3/4"	120-277VAC	MBL1430A2GLG	MBL1430A2PFN	MBL1430A2R5G	MBL1430A2S8G	MBL1430A2S5G
17	3/4"	120-277VAC	MBL1730A2GLG	MBL1730A2PFN	MBL1730A2R5G	MBL1730A2S8G	MBL1730A2S5G
20	3/4"	120-277VAC	MBL2030A2GLG	MBL2030A2PFN	MBL2030A2R5G	MBL2030A2S8G	MBL2030A2S5G
22	3/4"	120-277VAC	MBL2230A2GLG	MBL2230A2PFN	MBL2230A2R5G	MBL2230A2S8G	MBL2230A2S5G
25	3/4"	120-277VAC	MBL2530A2GLG	MBL2530A2PFN	MBL2530A2R5G	MBL2530A2S8G	MBL2530A2S5G
40	3/4"	120-277VAC	MBL4030A2GLG	-	MBL4030A2R5G	MBL4030A2S8G	MBL4030A2S5G
45	3/4"	120-277VAC	MBL4530A2GLG	-	MBL4530A2R5G	MBL4530A2S8G	MBL4530A2S5G
50	3/4"	120-277VAC	MBL5030A2GLG	-	MBL5030A2R5G	MBL5030A2S8G	MBL5030A2S5G
MBL SERIES CEILING WITH OPTIC AND GUARD ^①							
14	3/4"	120-277VAC	MBL1430X2GLG	MBL1430X2PFN	MBL1430X2R5G	MBL1430X2S8G	MBL1430X2S5G
17	3/4"	120-277VAC	MBL1730X2GLG	MBL1730X2PFN	MBL1730X2R5G	MBL1730X2S8G	MBL1730X2S5G
20	3/4"	120-277VAC	MBL2030X2GLG	MBL2030X2PFN	MBL2030X2R5G	MBL2030X2S8G	MBL2030X2S5G
22	3/4"	120-277VAC	MBL2230X2GLG	MBL2230X2PFN	MBL2230X2R5G	MBL2230X2S8G	MBL2230X2S5G
25	3/4"	120-277VAC	MBL2530X2GLG	MBL2530X2PFN	MBL2530X2R5G	MBL2530X2S8G	MBL2530X2S5G
40	3/4"	120-277VAC	MBL4030X2GLG	-	MBL4030X2R5G	MBL4030X2S8G	MBL4030X2S5G
45	3/4"	120-277VAC	MBL4530X2GLG	-	MBL4530X2R5G	MBL4530X2S8G	MBL4530X2S5G
50	3/4"	120-277VAC	MBL5030X2GLG	-	MBL5030X2R5G	MBL5030X2S8G	MBL5030X2S5G
MBL SERIES WALL WITH OPTIC AND GUARD ^①							
14	3/4"	120-277VAC	MBL1430B2GLG	MBL1430B2PFN	MBL1430B2R5G	MBL1430B2S8G	MBL1430B2S5G
17	3/4"	120-277VAC	MBL1730B2GLG	MBL1730B2PFN	MBL1730B2R5G	MBL1730B2S8G	MBL1730B2S5G
20	3/4"	120-277VAC	MBL2030B2GLG	MBL2030B2PFN	MBL2030B2R5G	MBL2030B2S8G	MBL2030B2S5G
22	3/4"	120-277VAC	MBL2230B2GLG	MBL2230B2PFN	MBL2230B2R5G	MBL2230B2S8G	MBL2230B2S5G
25	3/4"	120-277VAC	MBL2530B2GLG	MBL2530B2PFN	MBL2530B2R5G	MBL2530B2S8G	MBL2530B2S5G
40	3/4"	120-277VAC	MBL4030B2GLG	-	MBL4030B2R5G	MBL4030B2S8G	MBL4030B2S5G
45	3/4"	120-277VAC	MBL4530B2GLG	-	MBL4530B2R5G	MBL4530B2S8G	MBL4530B2S5G
50	3/4"	120-277VAC	MBL5030B2GLG	-	MBL5030B2R5G	MBL5030B2S8G	MBL5030B2S5G
MBL SERIES 25° STANCHION WITH OPTIC AND GUARD ^①							
14	1-1/4" ^⑤	120-277VAC	MBL1430D4GLG	MBL1430D4PFN	MBL1430D4R5G	MBL1430D4S8G	MBL1430D4S5G
17	1-1/4" ^⑤	120-277VAC	MBL1730D4GLG	MBL1730D4PFN	MBL1730D4R5G	MBL1730D4S8G	MBL1730D4S5G
20	1-1/4" ^⑤	120-277VAC	MBL2030D4GLG	MBL2030D4PFN	MBL2030D4R5G	MBL2030D4S8G	MBL2030D4S5G
22	1-1/4" ^⑤	120-277VAC	MBL2230D4GLG	MBL2230D4PFN	MBL2230D4R5G	MBL2230D4S8G	MBL2230D4S5G
25	1-1/4" ^⑤	120-277VAC	MBL2530D4GLG	MBL2530D4PFN	MBL2530D4R5G	MBL2530D4S8G	MBL2530D4S5G
40	1-1/4" ^⑤	120-277VAC	MBL4030D4GLG	-	MBL4030D4R5G	MBL4030D4S8G	MBL4030D4S5G
45	1-1/4" ^⑤	120-277VAC	MBL4530D4GLG	-	MBL4530D4R5G	MBL4530D4S8G	MBL4530D4S5G
50	1-1/4" ^⑤	120-277VAC	MBL5030D4GLG	-	MBL5030D4R5G	MBL5030D4S8G	MBL5030D4S5G

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

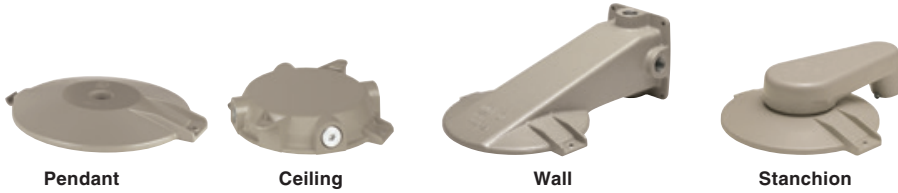
③ 120VAC through 277VAC 50/60Hz

④ Catalog numbers shown are with 1-1/4" conduit openings; change "4" to "5" for 1-1/2" e.g. MBL2230D5GLG

⑤ For Glass 8" Spin-top Flat Lens, change PFN to GFN at end of catalog number



COMPACT SIZE – COMPONENTS



MB MOUNTING BRACKETS				
CATALOG NUMBER				HUB SIZE
PENDANT	CEILING	WALL	STANCHION	
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 plugs



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



Patented Design

MBL LED OPTICS AND ACCESSORIES		
DESCRIPTION	OPTIC LOGIC	GUARD
Globe (glass)	MBG (GL)	MBAG
Reflector (all glass) Type V	VMR175 (R5)	VMAG17
Reflector (spin top) 8" Type V	VZRG1550 (S8)	VMRWG8
Reflector (spin top) 12" Type V	VZRG2550 (S5)	VMRWGS
8" Spin-top flat lens (glass)	VZRGF8 (GF)	VZRF8GRD
8" Spin-top flat lens (polycarbonate)	VZRPF8 (PF)	VZRF8GRD
Reflector polycarbonate (spin -top) 12" Type V	VZRP175 (P5)	VMRWGS
Pathway Reflector	VZRF8PR	NA
Reflector for MBG Globe - DOME	VMPSD-17	NA
Reflector for MBG Globe - ANGLE	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

14-25W only

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

LIGHTING

MBL SERIES



COMPACT SIZE – RATINGS, SPECIAL AIMING ANGLES

ORDERING INFORMATION AND AMBIENT SUITABILITY					C1D2 OPTIC ONLY ^①		ABCD W/ REFLECTOR ^①		C2D1 OPTIC ONLY ^①		EFG W/ REFLECTOR ^①	
CATALOG NO.	WEIGHT LBS./KG	WATTS	VOLTAGE	AMPS	40°C	55°C	40°C	55°C	40°C	55°C	40°C	55°C
MBL1427	10.00 / 4.54	14	12-24VDC	1.17-0.58	T5	T4A	T4	T3B	T4A	T4A	T4A	T4A
MBL1430			120-277VAC	0.12-0.05								
MBL1434			120-250VDC	0.12-0.04								
MBL1727		17	12-24VDC	1.42-0.71	T5	T5	T5	T5	T4	T4	T4	T4
MBL1730			120-277VAC	0.14-0.06								
MBL1734			120-250VDC	0.14-0.06								
MBL2027		20	12-24VDC	1.67-0.83	T5	T5	T5	T5	T4	T4	T4	T4
MBL2030			120-277VAC	0.17-0.07								
MBL2034			120-250VDC	0.17-0.06								
MBL2227		22	12-24VDC	1.83-0.92	T4A	T4	T4A	T4	T4	T4	T4	T4
MBL2230			120-277VAC	0.18-0.08								
MBL2234			120-250VDC	0.18-0.07								
MBL2527		25	12-24VDC	2.08-1.04	T5	T5	T5	T5	T4	T4	T4	T4
MBL2530			120-277VAC	0.21-0.09								
MBL2534			120-250VDC	0.21-0.08								
MBL4027	15.5 / 7.03	40	12-24VDC	3.33-1.67	T5	-	T5	-	T4	-	T4	-
MBL4030			120-277VAC	0.33-0.14								
MBL4527		45	12-24VDC	3.75-1.88	T4A	-	T4A	-	T4	-	T4	-
MBL4530			120-277VAC	0.38-0.16								
MBL4534			120-250VDC	0.38-0.14								
MBL5027		50	12-24VDC	4.17-2.08	T5	-	T5	-	T4	-	T4	-
MBL5030	120-277VAC		0.42-0.18									

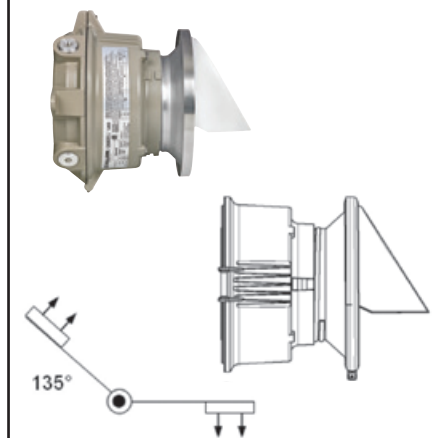
① Use 75°C minimum supply wire @ 40°C; use 90°C supply wire @ 55°C.

DELIVERED LUMENS					
WATTS	MBL + MBG	MBL + VMR	MBL + VZRXF8	L70	
				TM-21	CALCULATED
14	910	800*	980*	60100	270000
20	1785	1570*	2009*	60100	270000
22	1365	1201*	1427*	60100	270000
25	2485	2236*	3186*	72600	278000
40	3625	3821	-	60100	270000
45	2940	2955	-	60100	270000
50	5824*	6139	-	72600	278000

Extra high lumen per watt LED's

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

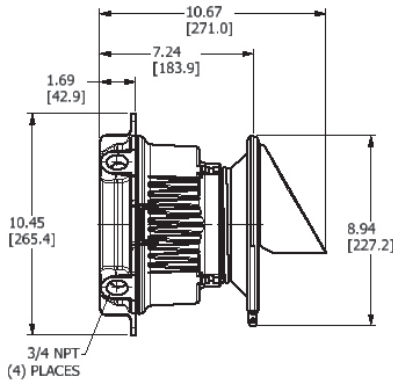
Special Aiming Angles Wall Mount MBL with Pathway Reflector



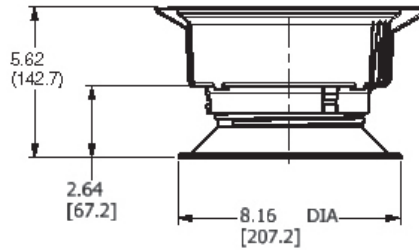
14W-25W MBL Housings with 8" Flat Spin-Top Lens may be aimed from 135° to 0° with or without the VZRF8PF Pathway Reflector. Pathway Reflector must NOT be aimed upwards in a Class II (Dust) environment, or where any contaminant may be collected. Applications include tunnels, lighting dark spots around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



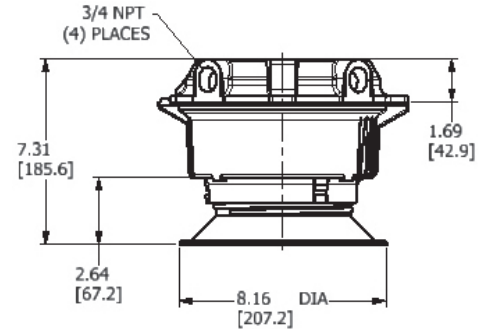
COMPACT SIZE – DIMENSIONS & WEIGHTS



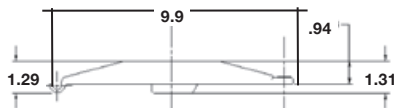
MBL Flat Lens, Pathway Reflector Wall Mount



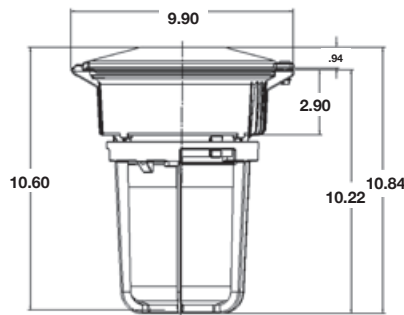
MBL Tank with Flat Lens



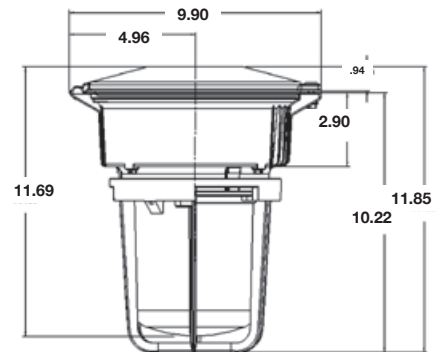
MBL Flat Lens Ceiling Mount



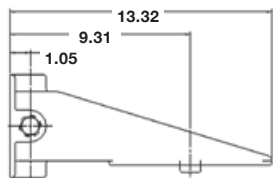
MBA Pendant



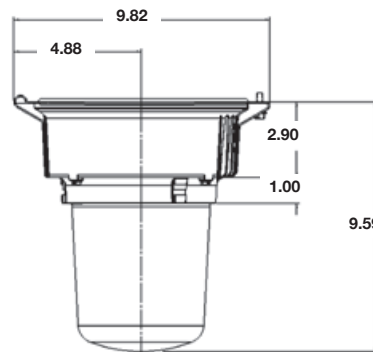
MBL Pendant, Globe, Guard



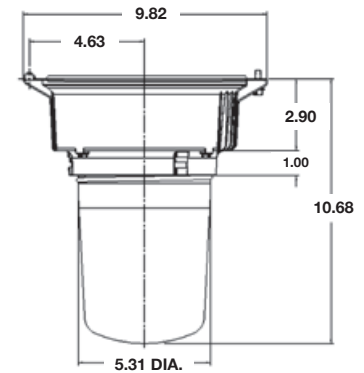
MBL Pendant, Refractor, Guard



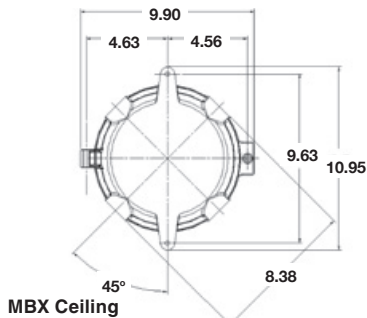
MBB Wall Mount



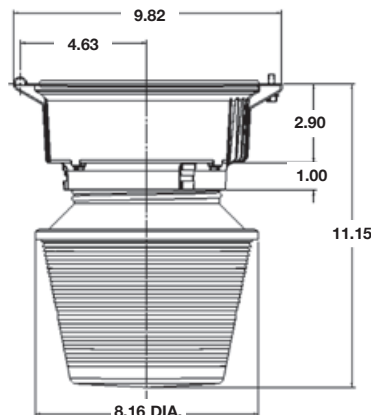
MBL & MBG Globe Only



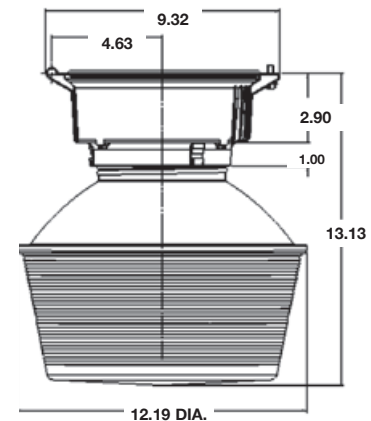
MBL & VMR Refractor



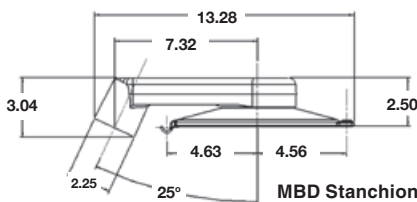
MBX Ceiling



MBL & 8" Type V Spin-top



MBL & 12" Type V Spin-top



MBD Stanchion

TYPICAL WEIGHTS (LBS.) W/STANDARD GLOBE AND GUARD - MBL SERIES			
14-25W	Pendant 14.96	Ceiling 15.96	Wall 19.30
40-50W	Pendant 20.96	Ceiling 21.69	Wall 25.30
			Stanchion 16.83
			Stanchion 22.83

LIGHTING

VM1L SERIES



REDUCED PROFILE – INTRODUCTION



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 Rated (US only)
NEMA 3, 4X

Certified - File LR11713

CERTILITE[®] V LED

FEATURES-SPECIFICATIONS

Applications

CertiLite[®] 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-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

- Driver 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

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

- Reduced profile with Traditional Industrial Appearance and Suitability
- Wide variety of optics including globes, globes with reflectors, all-glass refractors, and spin-top refractors
- Swing-Barrel Nut patented tank mounting system
- Optional Mounting arrangements including Pendant, Wall, Ceiling, Stanchion and others
- VM1L LED Housings can be retrofitted to existing VM splice boxes; upgrade from HID sources
- Energy Savings – less than 55 Watts of Power
- Long Life – 50,000 - 55,000 maintenance free hours to 70% initial lumens

- Crisp White Light for Excellent Color Rendering – Chromaticity 5000°K (CCT); 70 CRI
- Ambient suitability -40°C to 55°C
- Instant on – including after power interruption
- “World Voltage” 120-277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- Dual Driver Option (DDR) – For additional energy savings, half of the fixture can be turned off
- 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

* 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 (Patented)



Polycarbonate 12” Spin-top Refractor VZRG2550



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.

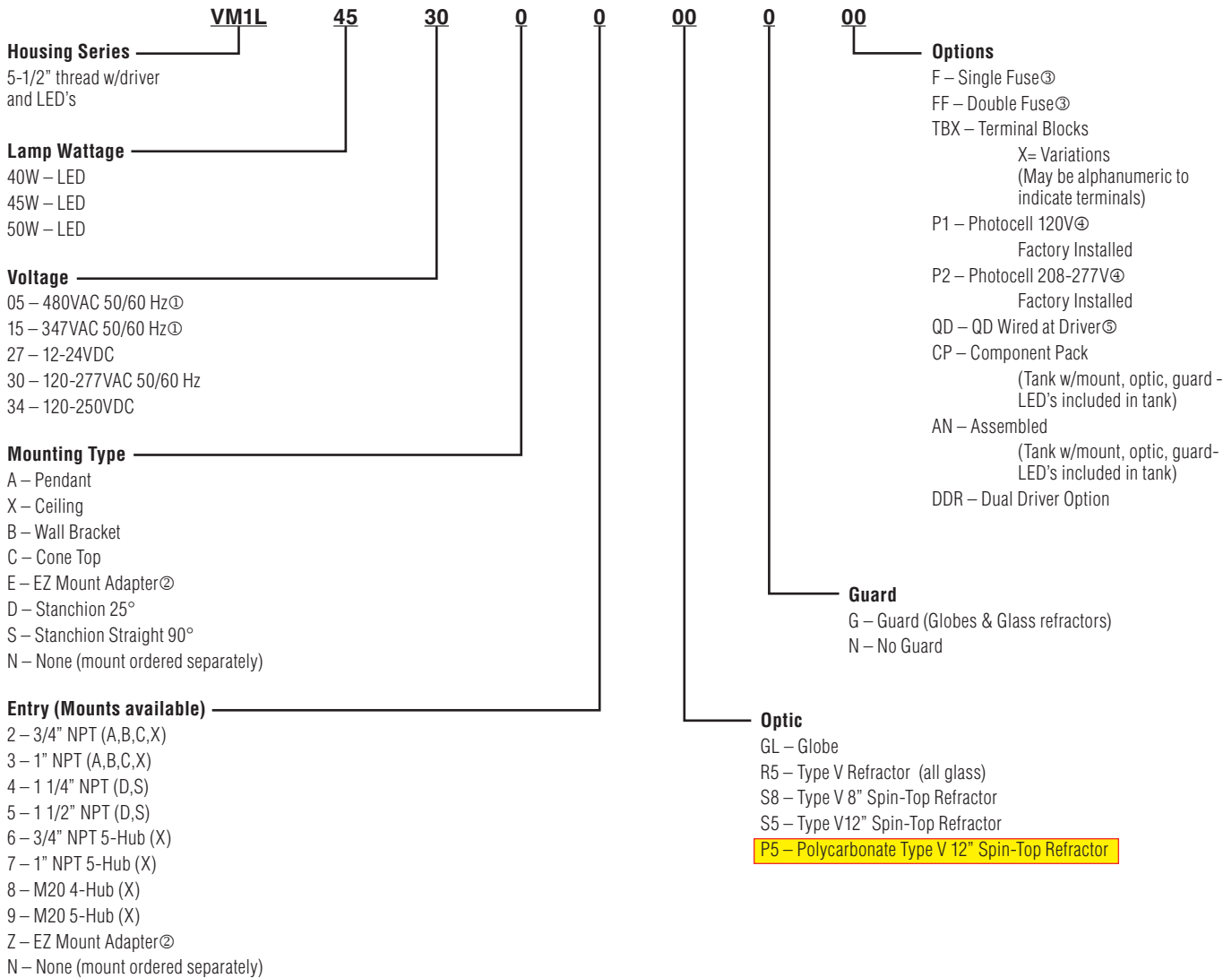
Safety: Secures fixture to structure in case of conduit failure.



REDUCED PROFILE – CATALOG LOGIC

CERTILITE[®]V LED

CertiLite[®]V LED Catalog Number Logic



ⓐ Single step-down transformer feeds driver.
 ⓑ Completes as "EZ", conduit mounting boxes ordered separately.
 ⓐ Fusing not for Marine or Canadian installations.
 ⓐ Photocells for Class I, Div. 2 only.
 ⓐ QD = Quick Disconnect. Allows easy tank removal for maintenance. Electrician unplugs tank from mount for fixture relocation or repair due to impact damage.

LIGHTING

VM1L SERIES



REDUCED PROFILE – ORDERING INFORMATION



ORDERING INFORMATION

VM1L SERIES PENDANT 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 REFRACTOR & GUARD
40	3/4"	120-277VAC	VM1L4030A2GLG	VM1L4030A2R5G	VM1L4030A2S8G	VM1L4030A2S5G
45	3/4"	120-277VAC	VM1L4530A2GLG	VM1L4530A2R5G	VM1L4530A2S8G	VM1L4530A2S5G
50	3/4"	120-277VAC	VM1L5030A2GLG	VM1L5030A2R5G	VM1L5030A2S8G	VM1L5030A2S5G

VM1L SERIES CEILING 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 REFRACTOR & GUARD
40	3/4"	120-277VAC	VM1L4030X2GLG	VM1L4030X2R5G	VM1L4030X2S8G	VM1L4030X2S5G
45	3/4"	120-277VAC	VM1L4530X2GLG	VM1L4530X2R5G	VM1L4530X2S8G	VM1L4530X2S5G
50	3/4"	120-277VAC	VM1L5030X2GLG	VM1L5030X2R5G	VM1L5030X2S8G	VM1L5030X2S5G

VM1L SERIES WALL 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 REFRACTOR & GUARD
40	3/4"	120-277VAC	VM1L4030B2GLG	VM1L4030B2R5G	VM1L4030B2S8G	VM1L4030B2S5G
45	3/4"	120-277VAC	VM1L4530B2GLG	VM1L4530B2R5G	VM1L4530B2S8G	VM1L4530B2S5G
50	3/4"	120-277VAC	VM1L5030B2GLG	VM1L5030B2R5G	VM1L5030B2S8G	VM1L5030B2S5G

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 REFRACTOR & GUARD
40	3/4"	120-277VAC	VM1L4030C2GLG	VM1L4030C2R5G	VM1L4030C2S8G	VM1L4030C2S5G
45	3/4"	120-277VAC	VM1L4530C2GLG	VM1L4530C2R5G	VM1L4530C2S8G	VM1L4530C2S5G
50	3/4"	120-277VAC	VM1L5030C2GLG	VM1L5030C2R5G	VM1L5030C2S8G	VM1L5030C2S5G

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



VM1L SERIES

KILLARK

REDUCED PROFILE – ORDERING INFORMATION



STANCHION 25°



STANCHION STRAIGHT



EZ ADAPTER

ORDERING INFORMATION

VM1L SERIES 25° STANCHION 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 REFRACTOR & GUARD
40	1-1/2"	120-277VAC	VM1L4030D5GLG	VM1L4030D5R5G	VM1L4030D5S8G	VM1L4030D5S5G
45	1-1/2"	120-277VAC	VM1L4530D5GLG	VM1L4530D5R5G	VM1L4530D5S8G	VM1L4530D5S5G
50	1-1/2"	120-277VAC	VM1L5030D5GLG	VM1L5030D5R5G	VM1L5030D5S8G	VM1L5030D5S5G

VM1L SERIES STRAIGHT STANCHION 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 REFRACTOR & GUARD
40	1-1/2"	120-277VAC	VM1L4030S5GLG	VM1L4030S5R5G	VM1L4030S5S8G	VM1L4030S5S5G
45	1-1/2"	120-277VAC	VM1L4530S5GLG	VM1L4530S5R5G	VM1L4530S5S8G	VM1L4530S5S5G
50	1-1/2"	120-277VAC	VM1L5030S5GLG	VM1L5030S5R5G	VM1L5030S5S8G	VM1L5030S5S5G

VM1L SERIES EZ ADAPTER 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 REFRACTOR & GUARD
40	NA	120-277VAC	VM1L4030EZGLG	VM1L4030EZR5G	VM1L4030EZR5G	VM1L4030EZR5G
45	NA	120-277VAC	VM1L4530EZGLG	VM1L4530EZR5G	VM1L4530EZR5G	VM1L4530EZR5G
50	NA	120-277VAC	VM1L5030EZGLG	VM1L5030EZR5G	VM1L5030EZR5G	VM1L5030EZR5G

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 BOXES FOR EZ ADAPTER				
CATALOG NUMBER				HUB SIZE
PENDANT	CEILING	BRACKET	STANCHION	
EZA2	EZX2	EZB2	—	3/4"
EZA3	EZX3	EZB3	—	1"
—	—	—	EZD4A*	1-1/4"/1-1/2"*

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



Pendant



Ceiling



Wall Bracket



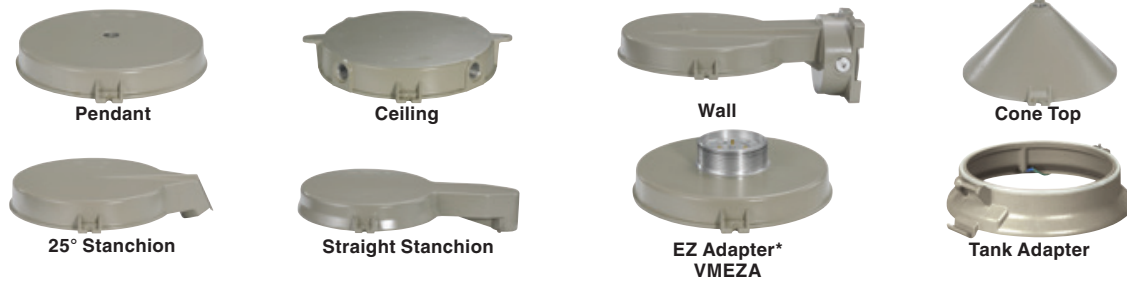
25° Stanchion

LIGHTING

VM1L SERIES



REDUCED PROFILE – COMPONENTS



CERTILITE®V VM MOUNTING SPLICE BOXES							
HUB SIZE	CATALOG NUMBER						
	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**	VMB8B**	—	—	—

* VMEZA is used between a driver tank and an EZ mount-ordered separately.

** Furnished with non-metallic plugs. Also available: VMB10B wall 4xM25 hubs, and VMB810B 2xM20 side hubs and 2xM25 top/bottom

VM1L LED OPTICS AND ACCESSORIES		
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*	VMCHVM	NA

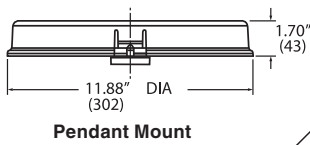


ORDERING INFORMATION AND AMBIENT SUITABILITY						C1D2		C2D1		L70		
CATALOG NO.	WEIGHT LBS./KG	WATTS	VOLTAGE	AMPS	VMG15 LUMENS	VMR175 LUMENS	40°C	55°C	40°C	55°C	TM-21	CALCULATED
VM1L4005	15.50 / 7.03	40	480 VAC	0.09	3812	4019	T6	T5	T4 (EFG)	60100	270000	
VM1L4015			347 VAC	0.13								
VM1L4027			12-24VDC	3.33-1.67								
VM1L4030			120-277VAC	0.36-0.16								
VM1L4505		48	480 VAC	0.10	2858.00	2955	T4A	T4	T4 (EFG)	60100	270000	
VM1L4515			347 VAC	0.14								
VM1L4527			12-24VDC	4.00-2.00								
VM1L4530			120-277VAC	0.42-0.18								
VM1L4534		120-250VDC	0.40-0.19									
VM1L5005		50	480 VAC	0.10	6162.00	6427	T5	T4A	T4 (EFG)	72600	278000	
VM1L5015			347 VAC	0.14								
VM1L5027			12-24VDC	4.17-2.08								
VM1L5030	120-277VAC		0.43-0.18									

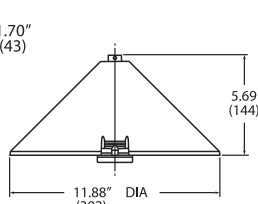
① VMRWG8 Plated Steel, VMRWGS 316 Stainless Steel.



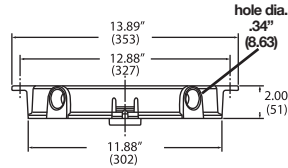
REDUCED PROFILE – DIMENSIONS & WEIGHTS



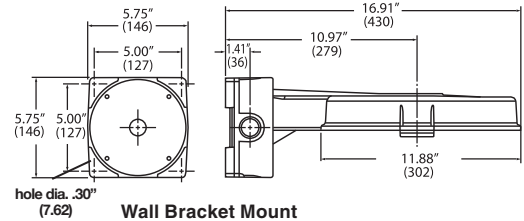
Pendant Mount



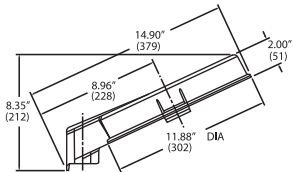
Cone Mount



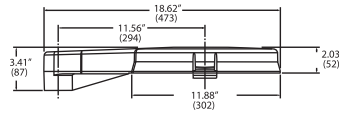
Ceiling Mount



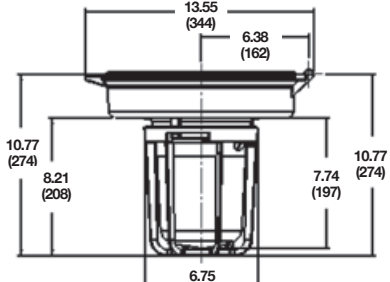
Wall Bracket Mount



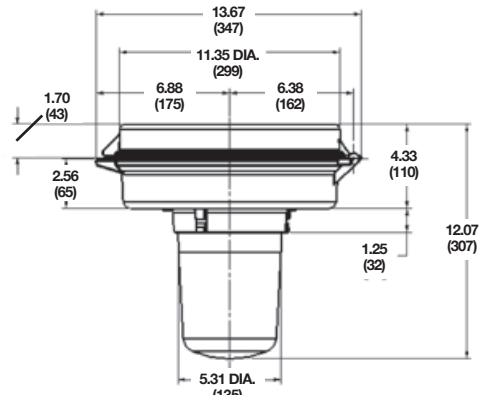
Stanchion (25°) Mount



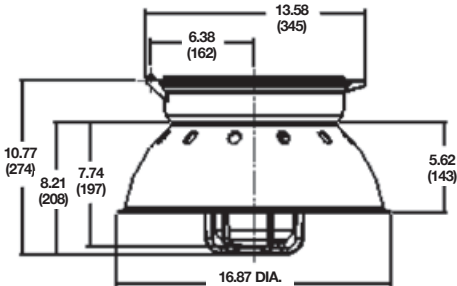
Stanchion (0°) Mount



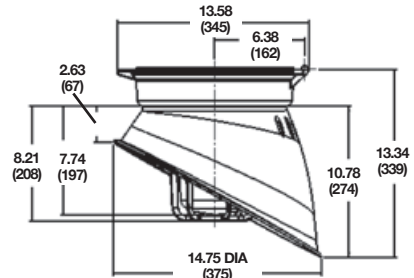
VM1L Tank Globe & Guard



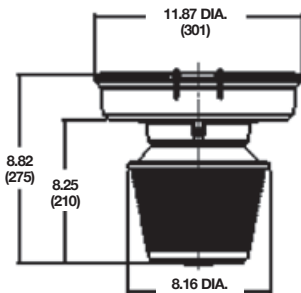
VM1L Tank w/ Pendant Mount & Globe



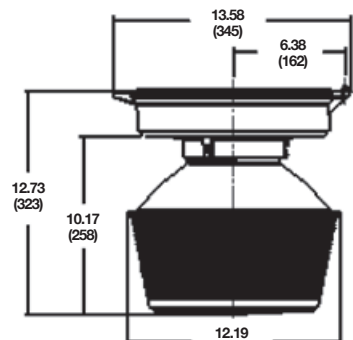
VM1L Tank with Dome Refractor



VM1L Tank with Angle Refractor



VM1L Tank with 8" Spin-top Refractor



VM1L Tank with 12" Spin-top Refractor

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

Pendant 23.00	Ceiling 24.10	Wall 27.50	Stanchion 23.90
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LIGHTING

VM2&4LB, VM2&4LC SERIES



HIGH WATTAGE – INTRODUCTION



VM2LB with Globe/
Guard



VM4LB with Globe/
Guard



VM4LC with Flat Lens



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

CSA Certified - File LR11713

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

CERTILITE[®] V LED

FEATURES-SPECIFICATIONS

Applications

CERTILITE[®] V VM4L LED fixtures are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or 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, certain chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, garages and storage facilities.

Compliances

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

Materials

- Driver 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

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

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

IECEx Certificate
QPS 15.0006

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

Contact Factory for other certification details

- Instant On – Including after power interruption
- World Voltage 120 – 277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- Dual Driver Option (DDR) – For additional energy savings, half of the fixture can be turned off.
- 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

Swing-Barrel Nut (Patented)



LED INTERNAL Heat Sinks

Bulb style (VM4LB)
Maximum lumens but has more glare at line-of-sight.

Concave style (VM4LC)
for a compact profile.
Recessed concave LED array produces less glare.



Consult website for current list of approved luminaires

Non-Glass Polycarbonate
12" Flat Lens



Patented Design



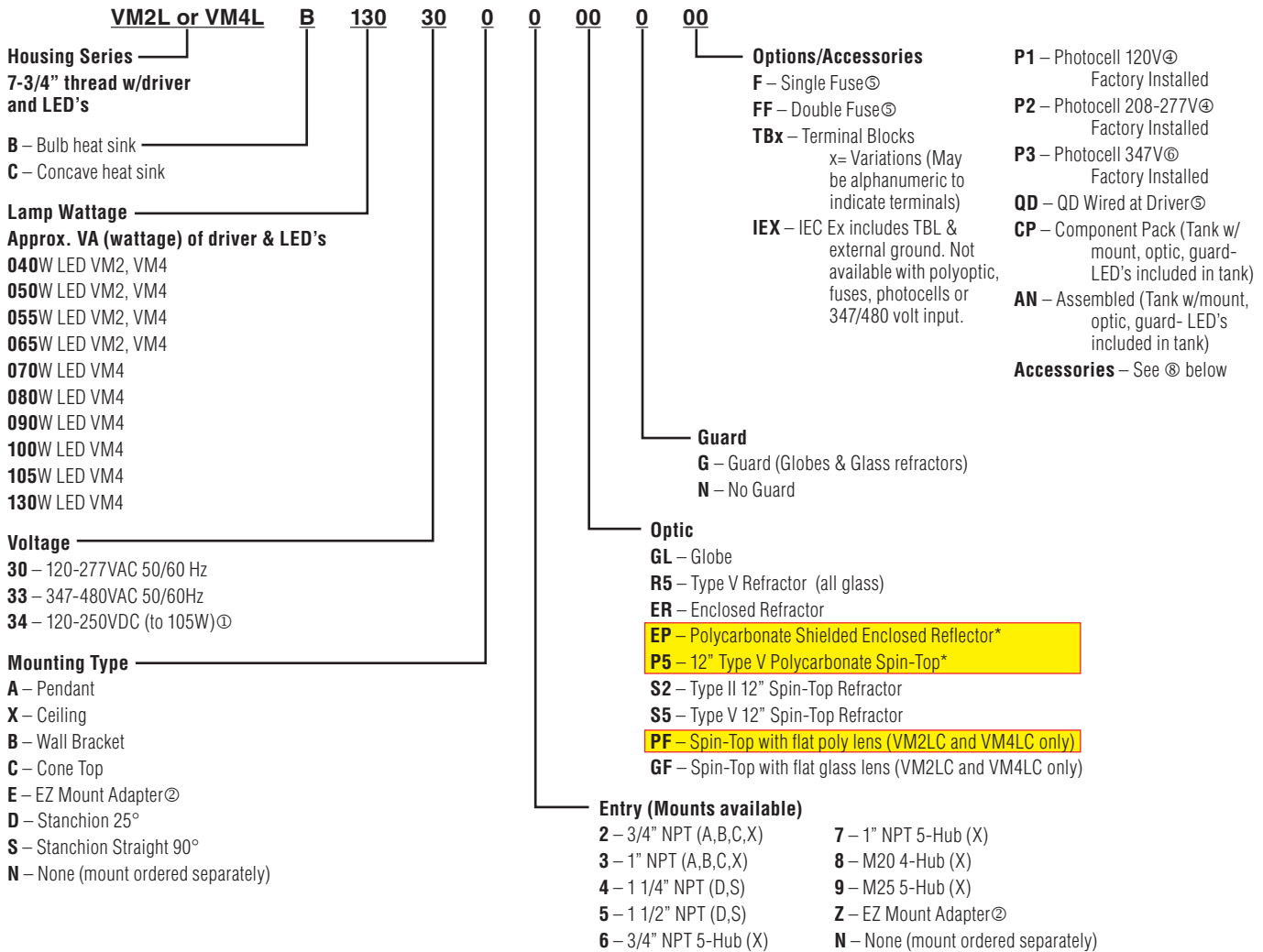
HIGH WATTAGE – CATALOG LOGIC

CERTILITE[®]V LED

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



CertiLite[®]V LED Catalog Number Logic



ⓐ 80W-105W only (also 120-277VAC 50/60HZ)
 ⓑ Completes as "EZ", conduit mounting boxes ordered separately
 ⓒ Fusing not for Marine or Canadian installations.
 ⓓ Photocells for Class I, Div. 2 only.
 ⓔ QD = Quick Disconnect. Allows easy tank removal for maintenance. Electrician 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

ⓔ IEx option only available with VM4L and requires glass optics

*Non-glass Group G Food Processing Suitability

LIGHTING

VM2&4LB, VM2&4LC SERIES



HIGH WATTAGE – ORDERING INFORMATION



Globe & Guard or Glass Refractor & Guard



Spin-Top Poly or Glass Flat Lens VM4LC only



Spin-Top Poly or Glass Refractor



Enclosed Reflector



Poly Food Optic

VM4LB SERIES PENDANT WITH OPTIC AND GUARD ①								
WATTS	HUB SIZE ②	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 ④	3/4"	120-277VAC	VM4LB04030A2GLG	VM4LB04030A2R5G	VM4LB04030A2S5G	VM4LB04030A2P5G	VM4LB04030A2ERN	VM4LB04030A2EPN
50 ④	3/4"	120-277VAC	VM4LB05030A2GLG	VM4LB05030A2R5G	VM4LB05030A2S5G	VM4LB05030A2P5G	VM4LB05030A2ERN	VM4LB05030A2EPN
55 ④	3/4"	120-277VAC	VM4LB05530A2GLG	VM4LB05530A2R5G	VM4LB05530A2S5G	VM4LB05530A2P5G	VM4LB05530A2ERN	VM4LB05530A2EPN
65 ④	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

VM4LC SERIES PENDANT WITH OPTIC AND GUARD ①								
WATTS	HUB SIZE ②	VOLTAGE ③	GLOBE & GUARD	12" SPIN-TOP POLYCARBONATE FLAT LENS* ④	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 ④	3/4"	120-277VAC	VM4LC04030A2GLG	VM4LC04030A2PFN	VM4LC04030A2R5G	VM4LC04030A2S5G	VM4LC04030A2P5G	VM4LC04030A2EPN
50 ④	3/4"	120-277VAC	VM4LC05030A2GLG	VM4LC05030A2PFN	VM4LC05030A2R5G	VM4LC05030A2S5G	VM4LC05030A2P5G	VM4LC05030A2EPN
55 ④	3/4"	120-277VAC	VM4LC05530A2GLG	VM4LC05530A2PFN	VM4LC05530A2R5G	VM4LC05530A2S5G	VM4LC05530A2P5G	VM4LC05530A2EPN
65 ④	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.

② 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.

④ 40W, 50W, 55W 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.



VM2&4LB, VM2&4LC SERIES

KILLARK

HIGH WATTAGE – ORDERING INFORMATION



Globe & Guard or Glass Refractor & Guard



Enclosed Reflector



Spin-Top Poly or Glass Flat Lens



Poly Food Optic



Spin-Top Poly or Glass Refractor

VM4LB SERIES CEILING WITH OPTIC AND GUARD ①

WATTS	HUB SIZE ②	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 ④	3/4"	120-277VAC	VM4LB04030X2GLG	VM4LB04030X2R5G	VM4LB04030X2S5G	VM4LB04030X2P5G	VM4LB04030X2ERN	VM4LB04030X2EPN
50 ④	3/4"	120-277VAC	VM4LB05030X2GLG	VM4LB05030X2R5G	VM4LB05030X2S5G	VM4LB05030X2P5G	VM4LB05030X2ERN	VM4LB05030X2EPN
55 ④	3/4"	120-277VAC	VM4LB05530X2GLG	VM4LB05530X2R5G	VM4LB05530X2S5G	VM4LB05530X2P5G	VM4LB05530X2ERN	VM4LB05530X2EPN
65 ④	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

VM4LC SERIES CEILING WITH OPTIC AND GUARD ①

WATTS	HUB SIZE ②	VOLTAGE ③	GLOBE & GUARD	12" SPIN-TOP POLYCARBONATE FLAT LENS* ④	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 ④	3/4"	120-277VAC	VM4LC04030X2GLG	VM4LC04030X2PFN	VM4LC04030X2R5G	VM4LC04030X2S5G	VM4LC04030X2P5G	VM4LC04030X2EPN
50 ④	3/4"	120-277VAC	VM4LC05030X2GLG	VM4LC05030X2PFN	VM4LC05030X2R5G	VM4LC05030X2S5G	VM4LC05030X2P5G	VM4LC05030X2EPN
55 ④	3/4"	120-277VAC	VM4LC05530X2GLG	VM4LC05530X2PFN	VM4LC05530X2R5G	VM4LC05530X2S5G	VM4LC05530X2P5G	VM4LC05530X2EPN
65 ④	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/PPF); to omit guard change ending G to N; e.g. VM4LB05530X2GLN.

② 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.

④ 40W, 50W, 55W 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.

LIGHTING

VM2&4LB, VM2&4LC SERIES



HIGH WATTAGE – ORDERING INFORMATION



Globe & Guard or Glass Refractor & Guard



Enclosed Reflector



Spin-Top Poly or Glass Flat Lens VM4LC only



Globe, Guard and Angle Reflector



Spin-Top Poly or Glass Refractor

VM4LB SERIES WALL WITH OPTIC AND GUARD ①								
WATTS	HUB SIZE ②	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	GLOBE, GUARD & ANGLE REFLECTOR ④
40 ⑤	3/4"	120-277VAC	VM4LB04030B2GLG	VM4LB04030B2R5G	VM4LB04030B2S5G	VM4LB04030B2P5G	VM4LB04030B2ERN	VM4LB04030B2GLG-A
50 ⑤	3/4"	120-277VAC	VM4LB05030B2GLG	VM4LB05030B2R5G	VM4LB05030B2S5G	VM4LB05030B2P5G	VM4LB05030B2ERN	VM4LB05030B2GLG-A
55 ⑤	3/4"	120-277VAC	VM4LB05530B2GLG	VM4LB05530B2R5G	VM4LB05530B2S5G	VM4LB05530B2P5G	VM4LB05530B2ERN	VM4LB05530B2GLG-A
65 ⑤	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

VM4LC SERIES WALL WITH OPTIC AND GUARD ①								
WATTS	HUB SIZE ②	VOLTAGE ③	GLOBE & GUARD	12" SPIN-TOP POLYCARBONATE FLAT LENS* ⑤	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 ④
40 ⑤	3/4"	120-277VAC	VM4LC04030B2GLG	VM4LC04030B2PFN	VM4LC04030B2R5G	VM4LC04030B2S5G	VM4LC04030B2P5G	VM4LC04030B2GLG-A
50 ⑤	3/4"	120-277VAC	VM4LC05030B2GLG	VM4LC05030B2PFN	VM4LC05030B2R5G	VM4LC05030B2S5G	VM4LC05030B2P5G	VM4LC05030B2GLG-A
55 ⑤	3/4"	120-277VAC	VM4LC05530B2GLG	VM4LC05530B2PFN	VM4LC05530B2R5G	VM4LC05530B2S5G	VM4LC05530B2P5G	VM4LC05530B2GLG-A
65 ⑤	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

① 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.

④ See logic for reflector ordering options or order angle reflector VMPA40 separately.

⑤ 40W, 50W, 55W 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.



VM2&4LB, VM2&4LC SERIES

KILLARK

HIGH WATTAGE – ORDERING INFORMATION



Globe & Guard or Glass Refractor & Guard



Enclosed Reflector



Spin-Top Poly or Glass Flat Lens



Poly Food Optic



Spin-Top Poly or Glass Refractor

VM4LB SERIES CONE WITH OPTIC AND GUARD ①

WATTS	HUB SIZE ②	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 ④	3/4"	120-277VAC	VM4LB04030C2GLG	VM4LB04030C2R5G	VM4LB04030C2S5G	VM4LB04030C2P5G	VM4LB04030C2ERN	VM4LB04030C2EPN
50 ④	3/4"	120-277VAC	VM4LB05030C2GLG	VM4LB05030C2R5G	VM4LB05030C2S5G	VM4LB05030C2P5G	VM4LB05030C2ERN	VM4LB05030C2EPN
55 ④	3/4"	120-277VAC	VM4LB05530C2GLG	VM4LB05530C2R5G	VM4LB05530C2S5G	VM4LB05530C2P5G	VM4LB05530C2ERN	VM4LB05530C2EPN
65 ④	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

VM4LC SERIES CONE WITH OPTIC AND GUARD ①

WATTS	HUB SIZE ②	VOLTAGE ③	GLOBE & GUARD	12" SPIN-TOP POLYCARBONATE FLAT LENS* ⑤	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 ④	3/4"	120-277VAC	VM4LC04030C2GLG	VM4LC04030C2PFN	VM4LC04030C2R5G	VM4LC04030C2S5G	VM4LC04030C2P5G	VM4LC04030C2EPN
50 ④	3/4"	120-277VAC	VM4LC05030C2GLG	VM4LC05030C2PFN	VM4LC05030C2R5G	VM4LC05030C2S5G	VM4LC05030C2P5G	VM4LC05030C2EPN
55 ④	3/4"	120-277VAC	VM4LC05530C2GLG	VM4LC05530C2PFN	VM4LC05530C2R5G	VM4LC05530C2S5G	VM4LC05530C2P5G	VM4LC05530C2EPN
65 ④	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	VM4LC09030C2PFN	VM4LC09030C2R5G	VM4LC09030C2S5G	VM4LC09030C2P5G	VM4LC09030C2EPN
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/EPI/PF); to omit guard change ending G to N; e.g. VM4LB05530C2GLN.

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.

④ 40W, 50W, 55W 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.

LIGHTING

VM2&4LB, VM2&4LC SERIES



HIGH WATTAGE – ORDERING INFORMATION



Globe & Guard or Glass Refractor & Guard



Spin-Top Poly or Glass Flat Lens



Spin-Top Poly or Glass Refractor



Enclosed Reflector



Globe Guard & Angle Reflector

VM4LB SERIES 25° STANCHION WITH OPTIC AND GUARD ①								
WATTS	HUB SIZE ②	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	GLOBE, GUARD & ANGLE REFLECTOR ④
40 ⑤	1-1/2"	120-277VAC	VM4LB04030D5GLG	VM4LB04030D5R5G	VM4LB04030D5S5G	VM4LB04030D5P5G	VM4LB04030D5ERN	VM4LB04030D5GLG-A
50 ⑤	1-1/2"	120-277VAC	VM4LB05030D5GLG	VM4LB05030D5R5G	VM4LB05030D5S5G	VM4LB05030D5P5G	VM4LB05030D5ERN	VM4LB05030D5GLG-A
55 ⑤	1-1/2"	120-277VAC	VM4LB05530D5GLG	VM4LB05530D5R5G	VM4LB05530D5S5G	VM4LB05530D5P5G	VM4LB05530D5ERN	VM4LB05530D5GLG-A
65 ⑤	1-1/2"	120-277VAC	VM4LB06530D5GLG	VM4LB06530D5R5G	VM4LB06530D5S5G	VM4LB06530D5P5G	VM4LB06530D5ERN	VM4LB06530D5GLG-A
70	1-1/2"	120-277VAC	VM4LB07030D5GLG	VM4LB07030D5R5G	VM4LB07030D5S5G	VM4LB07030D5P5G	VM4LB07030D5ERN	VM4LB07030D5GLG-A
80	1-1/2"	120-277VAC	VM4LB08030D5GLG	VM4LB08030D5R5G	VM4LB08030D5S5G	VM4LB08030D5P5G	VM4LB08030D5ERN	VM4LB08030D5GLG-A
90	1-1/2"	120-277VAC	VM4LB09030D5GLG	VM4LB09030D5R5G	VM4LB09030D5S5G	VM4LB09030D5P5G	VM4LB09030D5ERN	VM4LB09030D5GLG-A
100	1-1/2"	120-277VAC	VM4LB10030D5GLG	VM4LB10030D5R5G	VM4LB10030D5S5G	VM4LB10030D5P5G	VM4LB10030D5ERN	VM4LB10030D5GLG-A
105	1-1/2"	120-277VAC	VM4LB10530D5GLG	VM4LB10530D5R5G	VM4LB10530D5S5G	VM4LB10530D5P5G	VM4LB10530D5ERN	VM4LB10530D5GLG-A
130	1-1/2"	120-277VAC	VM4LB13030D5GLG	VM4LB13030D5R5G	VM4LB13030D5S5G	VM4LB13030D5P5G	VM4LB13030D5ERN	VM4LB13030D5GLG-A

VM4LC SERIES 25° STANCHION WITH OPTIC AND GUARD ①								
WATTS	HUB SIZE ②	VOLTAGE ③	GLOBE & GUARD	12" SPIN-TOP POLYCARBONATE FLAT LENS* ④	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 ④
40 ⑤	1-1/2"	120-277VAC	VM4LC04030D5GLG	VM4LC04030D5PFN	VM4LC04030D5R5G	VM4LC04030D5S5G	VM4LC04030D5P5G	VM4LC04030D5GLG-A
50 ⑤	1-1/2"	120-277VAC	VM4LC05030D5GLG	VM4LC05030D5PFN	VM4LC05030D5R5G	VM4LC05030D5S5G	VM4LC05030D5P5G	VM4LC05030D5GLG-A
55 ⑤	1-1/2"	120-277VAC	VM4LC05530D5GLG	VM4LC05530D5PFN	VM4LC05530D5R5G	VM4LC05530D5S5G	VM4LC05530D5P5G	VM4LC05530D5GLG-A
65 ⑤	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.

② Catalog numbers shown are with 1-1/2" conduit openings; change "5" to "4" for 1-1/4"; e.g. VM4LB05530D4GLG.

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

④ See logic for reflector ordering options or order angle reflector VMPA40 separately.

⑤ 40W, 50W, 55W 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.



VM2&4LB, VM2&4LC SERIES

KILLARK

HIGH WATTAGE – ORDERING INFORMATION



Globe & Guard or Glass Refractor & Guard



Spin-Top Poly or Glass Flat Lens



Spin-Top Poly or Glass Refractor



Enclosed Reflector



Globe, Guard and Dome Reflector

VM4LB SERIES STRAIGHT STANCHION WITH OPTIC AND GUARD ①

WATTS	HUB SIZE ②	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	GLOBE GUARD AND DOME REFLECTOR ④
40 ④	1-1/2"	120-277VAC	VM4LB04030S5GLG	VM4LB04030S5R5G	VM4LB04030S5S5G	VM4LB04030S5P5G	VM4LB04030S5ERN	VM4LB04030S5GLG-S
50 ④	1-1/2"	120-277VAC	VM4LB05030S5GLG	VM4LB05030S5R5G	VM4LB05030S5S5G	VM4LB05030S5P5G	VM4LB05030S5ERN	VM4LB05030S5GLG-S
55 ④	1-1/2"	120-277VAC	VM4LB05530S5GLG	VM4LB05530S5R5G	VM4LB05530S5S5G	VM4LB05530S5P5G	VM4LB05530S5ERN	VM4LB05530S5GLG-S
65 ④	1-1/2"	120-277VAC	VM4LB06530S5GLG	VM4LB06530S5R5G	VM4LB06530S5S5G	VM4LB06530S5P5G	VM4LB06530S5ERN	VM4LB06530S5GLG-S
70	1-1/2"	120-277VAC	VM4LB07030S5GLG	VM4LB07030S5R5G	VM4LB07030S5S5G	VM4LB07030S5P5G	VM4LB07030S5ERN	VM4LB07030S5GLG-S
80	1-1/2"	120-277VAC	VM4LB08030S5GLG	VM4LB08030S5R5G	VM4LB08030S5S5G	VM4LB08030S5P5G	VM4LB08030S5ERN	VM4LB08030S5GLG-S
90	1-1/2"	120-277VAC	VM4LB09030S5GLG	VM4LB09030S5R5G	VM4LB09030S5S5G	VM4LB09030S5P5G	VM4LB09030S5ERN	VM4LB09030S5GLG-S
100	1-1/2"	120-277VAC	VM4LB10030S5GLG	VM4LB10030S5R5G	VM4LB10030S5S5G	VM4LB10030S5P5G	VM4LB10030S5ERN	VM4LB10030S5GLG-S
105	1-1/2"	120-277VAC	VM4LB10530S5GLG	VM4LB10530S5R5G	VM4LB10530S5S5G	VM4LB10530S5P5G	VM4LB10530S5ERN	VM4LB10530S5GLG-S
130	1-1/2"	120-277VAC	VM4LB13030S5GLG	VM4LB13030S5R5G	VM4LB13030S5S5G	VM4LB13030S5P5G	VM4LB13030S5ERN	VM4LB13030S5GLG-S

VM4LC SERIES STRAIGHT STANCHION WITH OPTIC AND GUARD ①

WATTS	HUB SIZE ②	VOLTAGE ③	GLOBE & GUARD	12" SPIN-TOP POLYCARBONATE FLAT LENS* ⑤	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 ④
40 ④	1-1/2"	120-277VAC	VM4LC04030S5GLG	VM4LC04030S5PFN	VM4LC04030S5R5G	VM4LC04030S5S5G	VM4LC04030S5P5G	VM4LC04030S5GLG-S
50 ④	1-1/2"	120-277VAC	VM4LC05030S5GLG	VM4LC05030S5PFN	VM4LC05030S5R5G	VM4LC05030S5S5G	VM4LC05030S5P5G	VM4LC05030S5GLG-S
55 ④	1-1/2"	120-277VAC	VM4LC05530S5GLG	VM4LC05530S5PFN	VM4LC05530S5R5G	VM4LC05530S5S5G	VM4LC05530S5P5G	VM4LC05530S5GLG-S
65 ④	1-1/2"	120-277VAC	VM4LC06530S5GLG	VM4LC06530S5PFN	VM4LC06530S5R5G	VM4LC06530S5S5G	VM4LC06530S5P5G	VM4LC06530S5GLG-S
70	1-1/2"	120-277VAC	VM4LC07030S5GLG	VM4LC07030S5PFN	VM4LC07030S5R5G	VM4LC07030S5S5G	VM4LC07030S5P5G	VM4LC07030S5GLG-S
80	1-1/2"	120-277VAC	VM4LC08030S5GLG	VM4LC08030S5PFN	VM4LC08030S5R5G	VM4LC08030S5S5G	VM4LC08030S5P5G	VM4LC08030S5GLG-S
90	1-1/2"	120-277VAC	VM4LC09030S5GLG	VM4LC09030S5PFN	VM4LC09030S5R5G	VM4LC09030S5S5G	VM4LC09030S5P5G	VM4LC09030S5GLG-S
100	1-1/2"	120-277VAC	VM4LC10030S5GLG	VM4LC10030S5PFN	VM4LC10030S5R5G	VM4LC10030S5S5G	VM4LC10030S5P5G	VM4LC10030S5GLG-S
105	1-1/2"	120-277VAC	VM4LC10530S5GLG	VM4LC10530S5PFN	VM4LC10530S5R5G	VM4LC10530S5S5G	VM4LC10530S5P5G	VM4LC10530S5GLG-S
130	1-1/2"	120-277VAC	VM4LC13030S5GLG	VM4LC13030S5PFN	VM4LC13030S5R5G	VM4LC13030S5S5G	VM4LC13030S5P5G	VM4LC13030S5GLG-S

① Catalog numbers shown are with Guard (except ER/EPI/PF); to omit guard change ending G to N; e.g. VM4LB05530S5GLN.
 ② Catalog numbers shown are with 1-1/2" conduit openings; change "5" to "4" for 1-1/4"; e.g. VM4LB05530S4GLG.
 ③ 120VAC through 277VAC 50/60Hz. See logic for other voltages.
 ④ See logic for reflector ordering options or order dome reflector VMPSD40 separately.
 ⑤ 40W, 50W, 55W and 65W are available in VM2LB/VM2LC shallower housings. Substitute VM2L for VM4L in catalog number.
 * For Glass 12" Spin-Top Flat Lens change PRN to GFN at end of catalog number.

LIGHTING

VM2&4LB, VM2&4LC SERIES



HIGH WATTAGE – ORDERING INFORMATION



Globe & Guard or Glass Refractor & Guard



Enclosed Reflector



Spin-Top Poly or Glass Flat Lens



Poly Food Optic



Spin-Top Poly or Glass Refractor

VM4LB SERIES EZ ADAPTER WITH OPTIC AND GUARD ① ②								
WATTS	HUB SIZE ②	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Ⓞ	②	120-277VAC	VM4LB04030EZGLG	VM4LB04030EZR5G	VM4LB04030EZS5G	VM4LB04030EZP5G	VM4LB04030EZERN	VM4LB04030EZEPN
50Ⓞ	②	120-277VAC	VM4LB05030EZGLG	VM4LB05030EZR5G	VM4LB05030EZS5G	VM4LB05030EZP5G	VM4LB05030EZERN	VM4LB05030EZEPN
55Ⓞ	②	120-277VAC	VM4LB05530EZGLG	VM4LB05530EZR5G	VM4LB05530EZS5G	VM4LB05530EZP5G	VM4LB05530EZERN	VM4LB05530EZEPN
65Ⓞ	②	120-277VAC	VM4LB06530EZGLG	VM4LB06530EZR5G	VM4LB06530EZS5G	VM4LB06530EZP5G	VM4LB06530EZERN	VM4LB06530EZEPN
70	②	120-277VAC	VM4LB07030EZGLG	VM4LB07030EZR5G	VM4LB07030EZS5G	VM4LB07030EZP5G	VM4LB07030EZERN	VM4LB07030EZEPN
80	②	120-277VAC	VM4LB08030EZGLG	VM4LB08030EZR5G	VM4LB08030EZS5G	VM4LB08030EZP5G	VM4LB08030EZERN	VM4LB08030EZEPN
90	②	120-277VAC	VM4LB09030EZGLG	VM4LB09030EZR5G	VM4LB09030EZS5G	VM4LB09030EZP5G	VM4LB09030EZERN	VM4LB09030EZEPN
100	②	120-277VAC	VM4LB10030EZGLG	VM4LB10030EZR5G	VM4LB10030EZS5G	VM4LB10030EZP5G	VM4LB10030EZERN	VM4LB10030EZEPN
105	②	120-277VAC	VM4LB10530EZGLG	VM4LB10530EZR5G	VM4LB10530EZS5G	VM4LB10530EZP5G	VM4LB10530EZERN	VM4LB10530EZEPN
130	②	120-277VAC	VM4LB13030EZGLG	VM4LB13030EZR5G	VM4LB13030EZS5G	VM4LB13030EZP5G	VM4LB13030EZERN	VM4LB13030EZEPN

VM4LC SERIES EZ ADAPTER WITH OPTIC AND GUARD ① ②								
WATTS	HUB SIZE ②	VOLTAGE ③	GLOBE & GUARD	12" SPIN-TOP POLYCARBONATE FLAT LENS* ④	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
55Ⓞ	②	120-277VAC	VM4LC05530EZGLG	VM4LC05530EZPFN	VM4LC05530EZR5G	VM4LC05530EZS5G	VM4LC05530EZP5G	VM4LC05530EZEPN
65Ⓞ	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

① Catalog numbers shown are with Guard (except ER/EP/PF); to omit guard change ending G to N; e.g. VM4LB05530EZGLN.

② VMEZA tank adapters UL "classified" as an assembly for use between VM tanks and EZ mounts. Order EZ mounts separately - see page L31 on components page.

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

④ 40W, 50W, 55W 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.



VM2&4LB, VM2&4LC SERIES

KILLARK

HIGH WATTAGE – COMPONENTS



CERTILITE® VM MOUNTING SPLICE BOXES							
HUB SIZE	CATALOG NUMBER						
	PENDANT	CEILING 4 HUB	CEILING 5 HUB	WALL	CONE TOP	25 DEGREE STANCHION	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**	VMB8B**	—	—	—

* VMEZA is used between a driver tank and an EZ mount - ordered separately. See catalog grids.

** Furnished with Ⓢ non-metallic plugs. Also available: VMB10B wall 4xM25 hubs, and VMB810B 2xM20 side hubs and 2xM25 top/bottom

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)Ⓢ	—
Refractor (polycarbonate spin top) 12" Type V*	VZRP175B (P5)	VMRWGS
Refractor (glass spin top) 12" Type V	VZRG4050 (S5)	VMRWGS

* Non-glass over Food/Grain Class II Div 1 Group G Certified; VMEP40, VZRP175B, and VZRPF12

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 CoverⓈ	VMFSPC1
208-277VAC Photocell with FS Style CoverⓈ	VMFSPC2
Bottom Closure for VMAG25SⓈ	VMAGBC
4-sided EXIT Accessory (use without guard)Ⓢ	VEXA400

Ⓢ Order single-gang FS box separately. For photocell factory installed in tank, see logic.

Ⓢ For use with Generator or UPS powered fixtures

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

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



Standard Dome, Fiberglass
White Reflector, Dia: 16"



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



Fixture not included



Deep Aluminum, White
Reflector, Dia: 21"



Deep Aluminum, Anodized
Reflector, Dia: 21"

LIGHTING

VM2&4LB, VM2&4LC SERIES



HIGH WATTAGE – COMPONENTS & RATINGS



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

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

Competitive Adapters

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



Patented Design



Pendant



Ceiling



Wall Bracket



25° Stanchion

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

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

Tank adapter to Crouse-Hinds® ① 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 Tank adapter to Hazlux® ③ mounts Tank adapter mount to Holophane® ④ Petrolux™ Tank adapter H2 mount to GE® ⑤ H2 Filtr-gard™	VMCHVM VMCHVM-DEEP VMM2LP VMM3KP VMHLDS VMHPP2 VMGEH2
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① Crouse-Hinds® is a registered trademark of EATON® corporation.

④ Holophane® and Petrolux™ are registered trademarks of Acuity Brands

② Appleton® and MERCMASTER are registered trademarks of Emerson® Industrial Automation.

⑤ GE® and Filtr-gard™ are registered trademarks of General Electric®

③ Hazlux® is a registered trademark of Thomas & Betts®.

WATTS	DELIVERED LUMENS				
	GLOBE (VM4LB)	GLOBE (VM4LC)	FLAT LENS (VM4LC)	L70	
				TM-21	CALCULATED
40	4600	4180	3873	60100	270000
50	6715	6087	5556	72600	278000
55	5842	5275	4790	60100	270000
65	8577	8229	7441	72600	278000
70	7111	6524	5980	60100	270000
80	8525	7559	6923	60100	270000
90	10520	10210	9115	72600	278000
100	12220	11910	10666	60100	270000
105	10780	9600	8809	60100	270000
130	15630	15370	13780	72600	278000

* Extra high lumen per watt LED's

① VM4LC with ceiling mount approx. 17.4 lbs.
For VM2L models, deduct approx. 1.25 lbs.

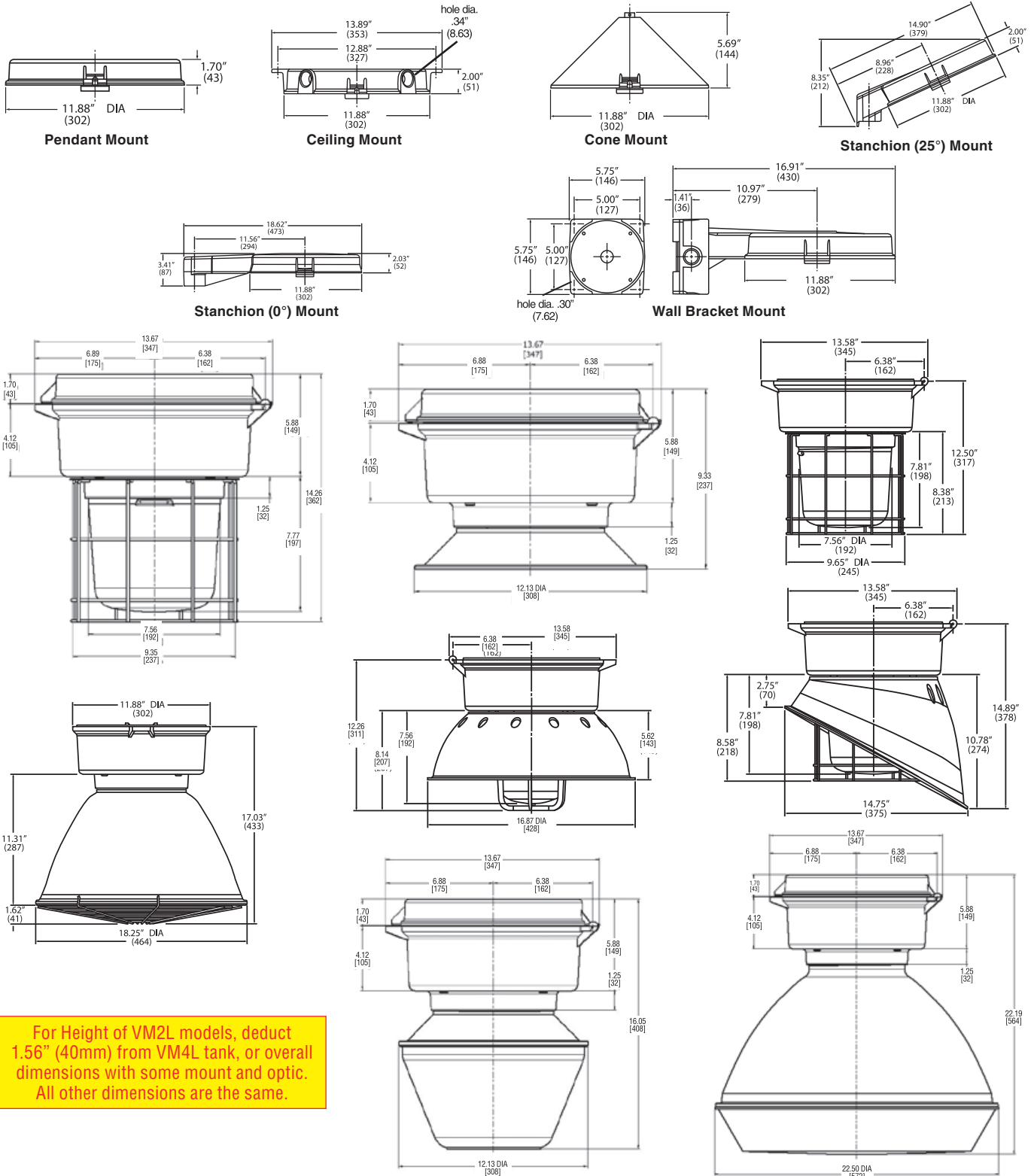
② For a given wattage current values are the same, regardless of tank type VM2LB/C or VM4LB/C.

③ Replace (x) with tank size 2 or 4 and replace (y) with heat sink style B or C.

ORDERING INFORMATION AND AMBIENT SUITABILITY					C1D2			C2D1		
CATALOG NO. ③	WEIGHT LBS./KG ①	WATTS	VOLTAGE	AMPS ②	40°C	55°C	65°C	40°C	55°C	65°C
VM(X)L(Y)04030	18.90 / 8.57	40	120-277 VAC	0.35-0.16	T4A	T4A	T4	EFG		
VM(X)L(Y)04033		40	347-480VAC	0.12-0.09						
VM(X)L(Y)04034		40	120-250VDC	0.33-0.16						
VM(X)L(Y)05030		50	120-277 VAC	0.43-0.21	T4A	T4A	T4	EFG		
VM(X)L(Y)05033		50	347-480VAC	0.15-0.12						
VM(X)L(Y)05034		50	120-250VDC	0.42-0.20	T4A	T4A	T4	EFG		
VM(X)L(Y)05530		55	120-277 VAC	0.48-0.21						
VM(X)L(Y)05533		55	347-480VAC	0.17-0.12						
VM(X)L(Y)05534		55	120-250VDC	0.46-0.22	T4A	T4A	T4	EFG		
VM(X)L(Y)06530		65	120-277 VAC	0.56-0.24						
VM(X)L(Y)06533		65	347-480VAC	0.19-0.14	T4A	T4A	T4	EFG		
VM(X)L(Y)06534		65	120-250VDC	0.54-0.26						
VM4L(Y)07030		70	120-277 VAC	0.60-0.30						
VM4L(Y)07033		70	347-480VAC	0.20-0.17	T4A	T4	-	EFG	-	-
VM4L(Y)07034		70	120-250VDC	0.58-0.28						
VM4L(Y)08030		80	120-277 VAC	0.68-0.30	T4A	T4	-	EFG	-	-
VM4L(Y)08033		80	347-480VAC	0.24-0.17						
VM4L(Y)08034		80	120-250VDC	0.67-0.32						
VM4L(Y)09030		90	120-277 VAC	0.77-0.33	T4A	T4	-	EFG	-	-
VM4L(Y)09033		90	347-480VAC	0.27-0.19						
VM4L(Y)09034		90	120-250VDC	0.75-0.36	T4A	T4	-	EFG	-	-
VM4L(Y)10030		100	120-277 VAC	0.85-0.39						
VM4L(Y)10033		100	347-480VAC	0.29-0.23						
VM4L(Y)10034		100	120-250VDC	0.83-0.40	T4A	T4	-	EFG	-	-
VM4L(Y)10530		105	120-277 VAC	0.89-0.39						
VM4L(Y)10533		105	347-480VAC	0.31-0.23	T4A	T4	-	EFG	-	-
VM4L(Y)105834		105	120-250VDC	0.88-0.42						
VM4L(Y)13030		130	120-277 VAC	1.10-0.46	T4A	T4	-	EFG	-	-
VM4L(Y)13033	130	347-480 VAC	0.38-0.27							



HIGH WATTAGE – DIMENSIONS & WEIGHTS



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

TYPICAL WEIGHTS (LBS.) W/STANDARD GLOBE AND GUARD - VM4LB/C SERIES			
Pendant 33.40	Ceiling 33.00	Wall 37.90	Stanchion 34.30



EXPLOSION-PROOF – INTRODUCTION & LOGIC



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

Certified - File LR11713

HOSTILELITE® LED

FEATURES-SPECIFICATIONS

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

- Driver tank, splice box and guards corrosion resistant copper-free aluminum alloy
- Baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware – Stainless Steel
- Reflectors are aluminum with white finish

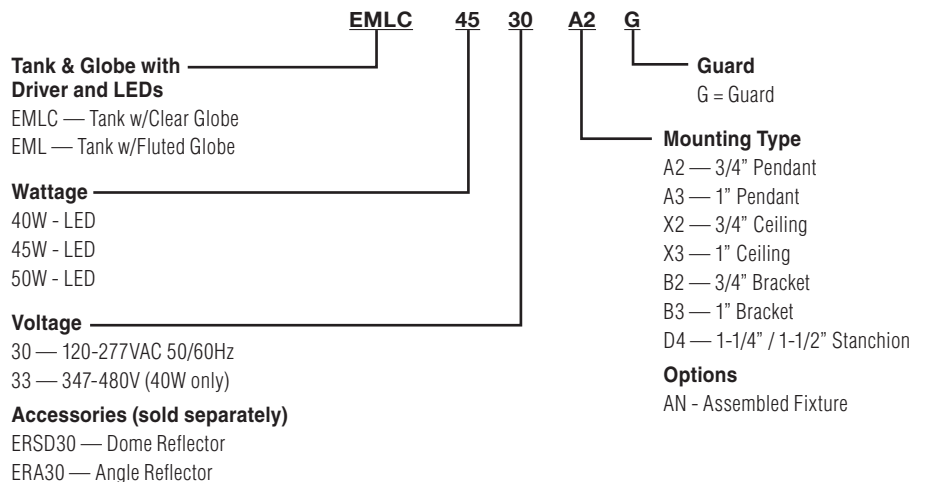
LED Luminaire Features and Standards

- Compact Explosion-proof with Traditional Industrial Appearance and Suitability
- Fluted or Exclusive Clear Globe; Dome or Angle Reflectors
- Optional Mounting arrangements including Pendant, Wall, Ceiling, and Stanchion
- EML LED Housings can be retrofitted to existing EZ splice boxes; upgrade from Incandescent, Fluorescent or HID
- Energy Savings – Less than 55 Watts of Power
- Long Life – 50,000 - 55,000 Maintenance Free Hours to 70% Initial Lumens
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000K (CCT range; approx. 70 CRI
- Ambient suitability -40°C to 55°C

- Instant on – Including after power interruption
- “World Voltage” 120-277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- 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 mounting cap and thread-in fixture to install

Suitable for Paint Spray Booth Applications

Catalog Number Logic





EXPLOSION-PROOF – ORDERING INFORMATION



Pendant



Ceiling



Wall



Stanchion

ORDERING INFORMATION

EML SERIES PENDANT WITH OPTIC AND GUARD ①				
WATTS	HUB SIZE ②	VOLTAGE ④	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 ②	VOLTAGE ④	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 ①				
WATTS	HUB SIZE ②	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 ①				
WATTS	HUB SIZE ③	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

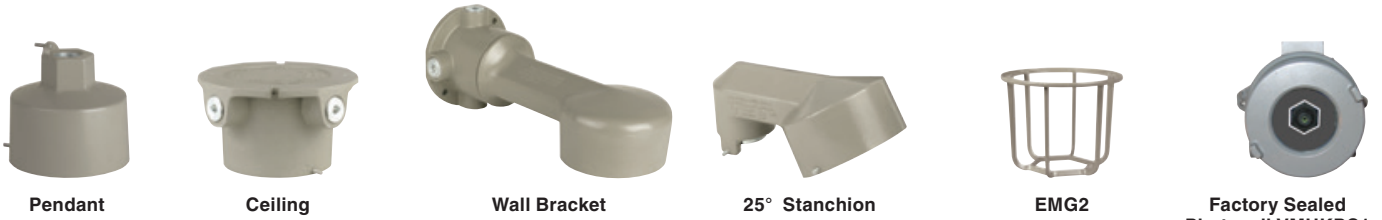
① Catalog numbers shown are with Guard; Omit G if guard not required e.g. EML4530A2.
 ② Catalog numbers shown are with 3/4" conduit openings; change "2" to "3" for 1" e.g. EML4530A3G.
 ③ Stanchion conduit hub size supplied is 1-1/2" with 1-1/2" to 1-1/4" reducer for 1-1/4" mounting (refer to catalog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

LIGHTING

EML SERIES



EXPLOSION-PROOF – COMPONENTS & RATINGS



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

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

EML - EMLC LED ACCESSORIES	
DESCRIPTION	CATALOG NUMBER
Guard ^①	EMG2
Dome Reflector ^②	ERSD30
Angle Reflector ^②	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/EACH ^③

① Guards are cast of copper-free aluminum with electrostatically applied epoxy/polyester.

② Reflectors are aluminum with white finish.

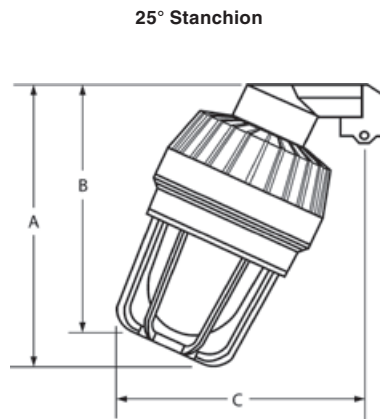
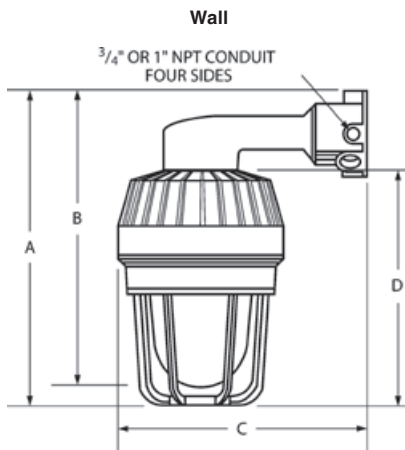
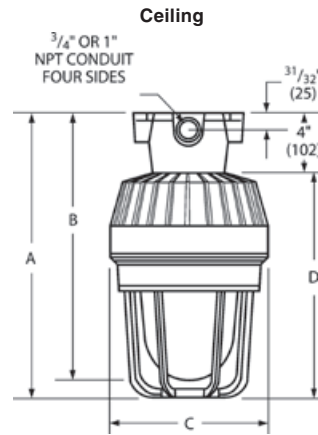
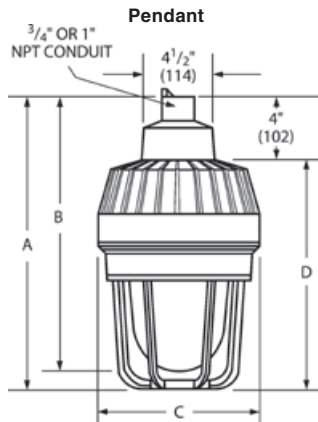
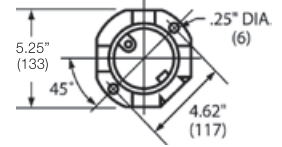
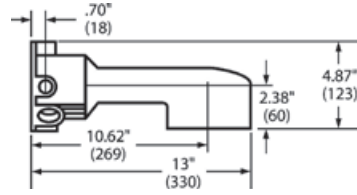
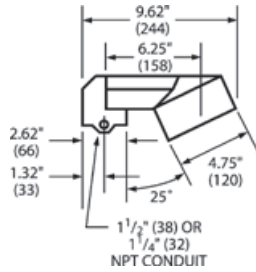
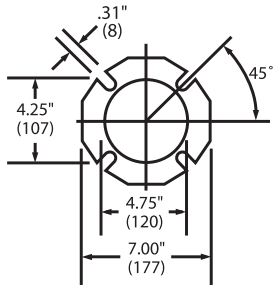
③ Adapters for discontinued Killark "H" Series and Crouse Hinds[®] available.



ORDERING INFORMATION AND AMBIENT SUITABILITY							C1D1/C1Z1		C2D1		L70	
CATALOG NO.	WEIGHT LBS./KG	WATTS	VOLTAGE	AMPS	EML FLUTTED LUMENS	EMLC CLEAR LUMENS	40°C	55°C	40°C	55°C	TM-21	CALCULATED
EML4030	26.00 / 11.79	40	120-277VAC	0.46-0.16	3479	3750	T6	T6	T4A (EFG)	T4 (EFG)	60100	270000
EML4033			347-480VAC	0.14-0.10								
EML4530		49	120-277VAC	0.41-0.18	2880	2930	T6	T6	T4A (EFG)	T4 (EFG)	60100	270000
EML5030		50	120-277VAC	0.43-0.18	5740	5741	T6	T6	T4A (EFG)	T4 (EFG)	72600	278000



EXPLOSION-PROOF – DIMENSIONS & WEIGHTS



EML(C) DIMENSIONS				
TYPE	A	B	C	D
PENDANT	15-15/16" (404)	15-1/16" (382)	8-13/16" (224)	11-15/16" (303)
CEILING	15-15/16" (404)	15-1/16" (382)	8-13/16" (224)	11-15/16" (303)
WALL	16-13/16" (426)	15-15/16" (404)	15" (379)	11-15/16" (303)
STANCHION	15-1/8" (384)	14" (356)	13-1/2" (343)	

TYPICAL WEIGHTS (LBS.) W/STANDARD GLOBE AND GUARD - EML (C) SERIES			
Pendant 29.33	Ceiling 31.79	Wall 33.25	Stanchion 30.94



LIGHTING

EXPLOSION-PROOF – INTRODUCTION & LOGIC



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

Certified - File LR11713

HOSTILELITE® LED

FEATURES-SPECIFICATIONS

Applications

HOSTILELITE® EZL Series high wattage 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 where high ambient temperatures 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.

Typical applications include classified areas such as paint manufacturing plants, paint spray, 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

- Housing, splice box, and guards corrosion resistant copper-free aluminum alloy
- Baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware – Stainless Steel
- Reflectors are aluminum with white finish

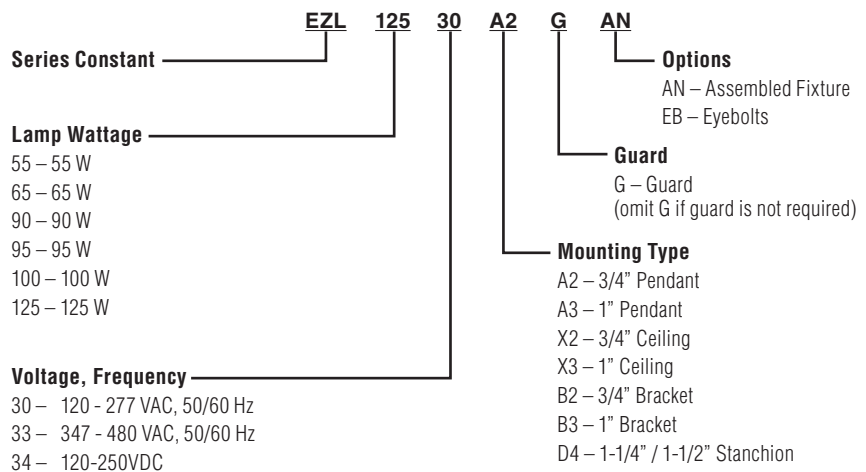
LED Luminaire Features and Standards

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

- Explosion-proof with Traditional Industrial Appearance and Suitability
- Mounting choice – Pendant, ceiling, 25° stanchion or 90° wall mount, all with “wireless” design that allows fast, easy fixture installation or removal for maintenance.
- Accessories – Available with or without guard, standard dome or angle reflector
- EZL LED Housings can be retrofitted to existing EZ splice boxes; upgrade from Incandescent, Fluorescent or HID
- Energy Savings – Less than 130 Watts of Power
- Long Life – 50,000 - 55,000 Maintenance Free Hours to 70% Initial Lumens

- Crisp White Light for Excellent Color Rendering – Chromaticity 5000K (CCT range; approx. 70 CRI)
- Ambient suitability -40°C to 55°C
- Instant on – Including after power interruption
- “World Voltage” 120-277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- 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 mounting cap and thread-in fixture to install

Catalog Number Logic





EXPLOSION PROOF – ORDERING INFORMATION, COMPONENTS & RATINGS



EZL SERIES PENDANT WITH OPTIC AND GUARD			
WATTS	HUB SIZE	VOLTAGE	GLOBE & GUARD ^{①②}
55	3/4"	120-277VAC	EZL5530A2G
65	3/4"	120-277VAC	EZL6530A2G
90	3/4"	120-277VAC	EZL9030A2G
95	3/4"	120-277VAC	EZL9530A2G
100	3/4"	120-277VAC	EZL10030A2G
125	3/4"	120-277VAC	EZL12530A2G



EZL SERIES CEILING WITH OPTIC AND GUARD			
WATTS	HUB SIZE	VOLTAGE	GLOBE & GUARD ^{①②}
55	3/4"	120-277VAC	EZL5530X2G
65	3/4"	120-277VAC	EZL6530X2G
90	3/4"	120-277VAC	EZL9030X2G
95	3/4"	120-277VAC	EZL9530X2G
100	3/4"	120-277VAC	EZL10030X2G
125	3/4"	120-277VAC	EZL12530X2G

EZL SERIES WALL BRACKET WITH OPTIC AND GUARD			
WATTS	HUB SIZE	VOLTAGE	GLOBE & GUARD ^{①②}
55	3/4"	120-277VAC	EZL5530B2G
65	3/4"	120-277VAC	EZL6530B2G
90	3/4"	120-277VAC	EZL9030B2G
95	3/4"	120-277VAC	EZL9530B2G
100	3/4"	120-277VAC	EZL10030B2G
125	3/4"	120-277VAC	EZL12530B2G



EZL SERIES STANCHION WITH OPTIC AND GUARD			
WATTS	HUB SIZE	VOLTAGE	GLOBE & GUARD ^{①③}
55	3/4"	120-277VAC	EZL5530D4G
65	3/4"	120-277VAC	EZL6530D4G
90	3/4"	120-277VAC	EZL9030D4G
95	3/4"	120-277VAC	EZL9530D4G
100	3/4"	120-277VAC	EZL10030D4G
125	3/4"	120-277VAC	EZL12530D4G



- ① Catalog numbers shown are with Guard; Omit G if guard not required e.g. EZL5530A2.
- ② Catalog numbers shown are with 3/4" conduit openings; change "2" to "3" for 1" e.g. EZL5530A2G.
- ③ Stanchion conduit hub size supplied is 1-1/2" with 1-1/2" to 1-1/4" reducer for 1-1/4" mounting.

MOUNTING BOXES				
HUB SIZE	CATALOG NUMBER			
	PENDANT	CEILING	BRACKET	STANCHION
3/4"	EZA2	EXZ2**	EZB2	—
1"	EZA3	EXZ3	EZB3	—
1-1/4"/1-1/2"	—	—	—	EZD4*

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



REFLECTORS	
CATALOG NUMBER	DESCRIPTION
VMPSD40	Standard dome. fiberglass reinforced polyester
VMPA40	30° Angle fiberglass reinforced polyester
HRD400	Deep dome. Aluminum with white finish ②
HRD400ALZ	Deep dome with specular anaodized finish ②



ORDERING INFORMATION AND AMBIENT SUITABILITY						C1D1/C1Z1		C2D1		L70	
CATALOG NO.	WEIGHT LBS./KG	WATTS	VOLTAGE	AMPS	DELIVERED LUMENS	40°C	55°C	40°C	55°C	TM-21	CALCULATED
EZL6530	36 / 16.33	65	120-277VAC	0.54/0.23	6515	T6	T6	EFG	EFG	60100	270000
EZL9030		90	120-277VAC	0.75/0.32	7818	T6	T6	EFG	EFG	60100	270000
EZL9530		95	120-277VAC	0.79/0.34	9121	T6	T6	EFG	EFG	60100	270000
EZL10030		100	120-277VAC	0.83/0.36	10903	T6	XXX	EFG	XXX	72600	278000
EZL12530		125	120-277VAC	1.04/0.45	12720	T6	XXX	EFG	XXX	72600	278000

LIGHTING

FLOODLIGHTING



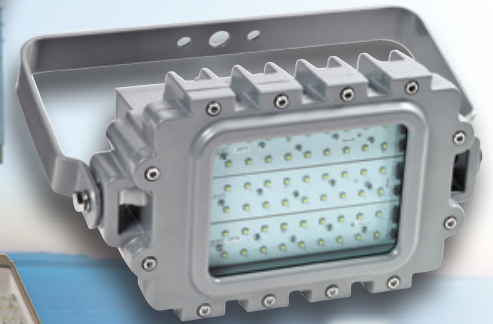
FLOODLIGHTING



KFLC



KFL



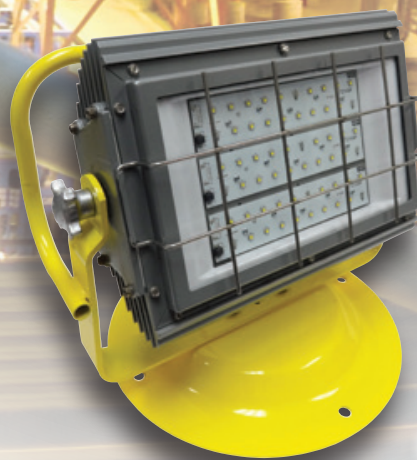
KF1L



KFL2H



KFLH



KFLP



KF1LP



COMPACT FLOOD – INTRODUCTION & LOGIC



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
 NEMA 4X

File LR11713

PETROBRIGHT® LED

FEATURES-SPECIFICATIONS 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 1; Class II, Division 1; Class III
- CSA C22.2 no. 137-M1981 electric luminaires 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

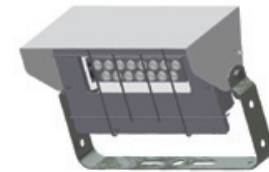
LED Flood Features and Standards

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

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

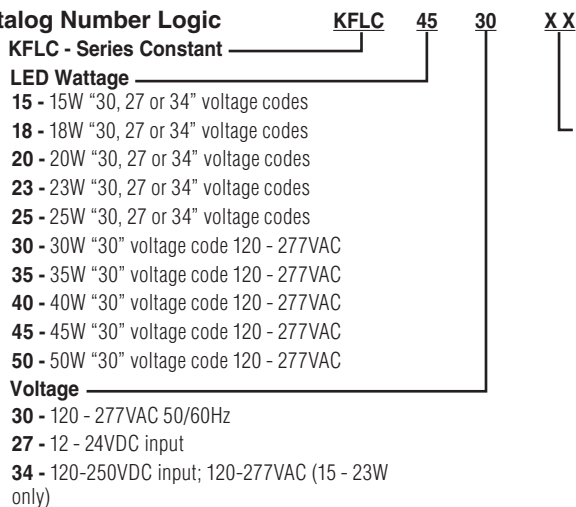
Patented Fixture Design

KFLC with KFS-6 Slipfitter mount on 2" pipe



Dark Sky Visor KFLC-DARK

Catalog Number Logic



Options

- LY-** Less Yoke for Wall Mount
- F-** Single Fuse @
- FF-** 2 Fuses @
- SP-** Surge Protection
- TBL-** Terminal Blocks Looping
- QD-** QuickDisconnect
- QD75-** 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

© Fusing not for Canadian Marine Installations

LIGHTING

KFLC SERIES



COMPACT FLOOD – ORDERING & TECHNICAL DATA

ORDERING INFORMATION AND AMBIENT SUITABILITY						C1D2		C1D2		C2D1		L70	
CATALOG NO.	WEIGHT LBS./KG	WATTS	VOLTAGE	AMPS	DELIVERED LUMENS	40°C	55°C	40°C	55°C	40°C	55°C	TM-21	CALCULATED
KFLC1527	9.50 / 4.31	15	12-24VDC	1.3-0.6	1435	T6	T6	T4	T3B	T4A	T4A	60100	270000
KFLC1530			120-277VAC	0.2-0.1									
KFLC1534			120-250VDC	0.2-0.1									
KFLC1827		18	12-24VDC	1.5-0.8	1830	T6	T6	T4	T3B	T4A	T4A	72600	278000
KFLC1830			120-277VAC	0.2-0.1									
KFLC1834			120-250VDC	0.2-0.1									
KFLC2027		20	12-24VDC	1.7-0.8	2170	T6	T6	T4	T3B	T4A	T4A	60100	270000
KFLC2030			120-277VAC	0.2-0.1									
KFLC2034			120-250VDC	0.2-0.1									
KFLC2327		23	12-24VDC	1.9-1.0	2550	T6	T6	T4	T3B	T4A	T4A	60100	270000
KFLC2330			120-277VAC	0.2-0.1									
KFLC2334			120-250VDC	0.2-0.1									
KFLC2527		25	12-24VDC	2.1-1.0	2667	T6	T6	T4	T3B	T4A	T4A	72600	278000
KFLC2530			120-277VAC	0.2-0.1									
KFLC2534			120-250VDC	0.2-0.1									
KFLC3030		30	120-277VAC	0.26-0.11	2662	T6	T6	T4	T3B	T4A	T4A	60100	270000
KFLC3530		35		0.30-0.13	3302	T6	T6	T4	T3B	T4A	T4A	60100	270000
KFLC4030		40		0.34-0.15	4039	T6	T6	T4	T3B	T4A	T4A	72600	278000
KFLC4530		45		0.38-0.17	4718	T6	T6	T4	T3B	T4A	T4A	72600	278000
KFLC5030		50		0.42-0.18	5353	T6	T6	T4	T3B	T4A	T4A	60300	190000

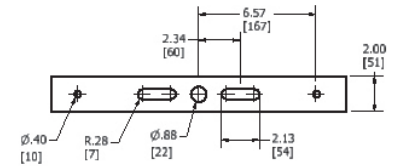
Extra high lumen per watt LED's

* KFLC 30-50w Lumens are LM-79 absolute photometry. 15-25W are calculated based on driver output current.

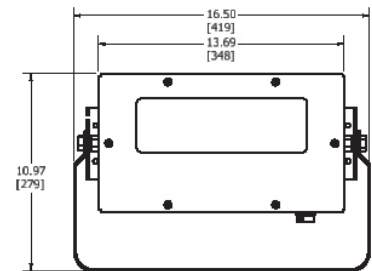
** All wattages are available as "30" voltage code 120-277VAC.

** TM-21 based values require very long duration testing. IES TM-21 "official reported" is based on at 8,000 to 10,000 hours of LED chip manufacturer's LM-80 Testing at printing.

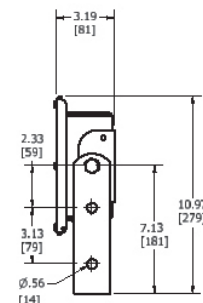
Dimensions



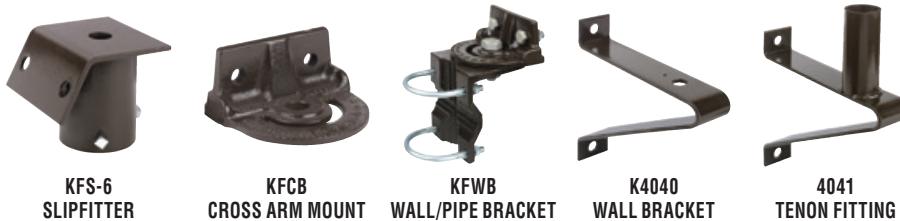
Trunnion Mounting Detail



Front



Side



KFS-6
SLIPFITTER

KFCB
CROSS ARM MOUNT

KFVB
WALL/PIPE BRACKET

K4040
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 ②	Replacement Door Assembly
NWP-HUBA	3/4" Aluminum Hub; Replacement or Additional (Max. 4)
VMSC10 ③	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
KFVB	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.

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 70°.



KILLARK

C1D2 FLOOD – INTRODUCTION & LOGIC



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

cSP^{us} File LR11713
 IEC Ex Rated model (w/IEX suffix)
 Zone 2 and Zone 21 areas
 Ex nA IIC T6...T3, Gc
 Ex tb IIIC T160°C Db
 Tamb -50°C <Ta<+55°C, IP66

IECEx Certificate
 CSA 14.0002X

ATEX Certificate
 CML 14ATEX3087/4088

PETROBRIGHT® LED

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 luminaires for use in hazardous locations
- Enclosed and gasketed
- NEMA 3, 4X
- IP66
- IEX suffix Zone 2/21 to IEC 60079-0, 60079-15, 60079-31 Standards

Materials

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

LED Flood Features and Standards

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

- Crisp White Light for Excellent Color Rendering - Chromaticity 5000K (CCT); approx. 70 CRI
- Energy Savings - High lumens per watt
- Long Life - to 100,000+ maintenance free hours to 70% initial lumens
- Ambient suitability -50°C to 55°C up to 125W[Ⓜ]
- Instant On - Including after power interruption
- World Voltage 120 - 277VAC 50/60Hz
- Solder-LESS LED Board Connections - Vibration Resistant
- 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

PATENTED LUMINAIRE DESIGN

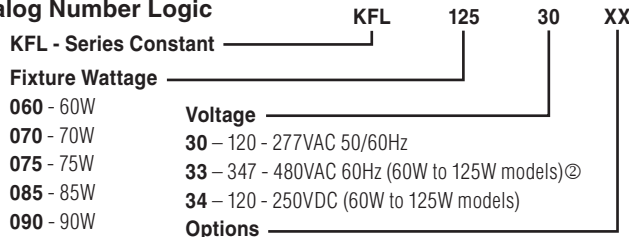


KFL with KFS-6 Slipfitter mount on 2" pipe

Dark Sky Visor KFL-DARK

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

Catalog Number Logic



- 060** - 60W
 - 070** - 70W
 - 075** - 75W
 - 085** - 85W
 - 090** - 90W
 - 105** - 105W
 - 110** - 110W
 - 125** - 125W
 - 150** - 150W
 - 165** - 165W
 - 195** - 195W
- Options**
- PL** - Polycarbonate Lens
 - F** - Single Fuse[Ⓜ]
 - FF** - Double Fuse[Ⓜ]
 - 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
 - IEX** - IECEx & ATEX includes TBL and External Ground (to 125W)

Construction Note:
 Models with dual metric entries are tapped with one plugged and the standard 3/4" NPT entry will be plugged.

[Ⓜ] Fusing not for Canadian or Marine Installations
[Ⓜ] 347V-480V +40°C Max



Consult website for current list of approved luminaires

LIGHTING

KFL SERIES

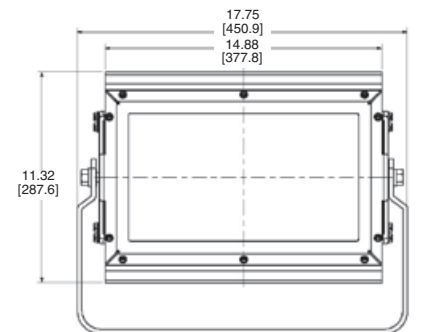


C1D2 FLOOD – ORDERING INFORMATION & TECHNICAL DATA

ORDERING INFORMATION AND AMBIENT SUITABILITY						C1D2 ^④		C1D2 ^④ SIMULTANEOUS		C2D1 ^④		IEC ZONE 2 ^④		IEC ZONE 21 ^⑤		L70	
CATALOG NO. ^①	WEIGHT LBS./KG	WATTS	VOLTAGE	AMPS ^②	DELIVERED LUMENS ^③	40°C	55°C	40°C	55°C	40°C	55°C	40°C	55°C	40°C	55°C	TM-21	CALCULATED
KFL06030	30.00 / 13.61	60	120-277VAC	0.50-0.20	6111	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	60100	270000
KFL07030		70	120-277VAC	0.60-0.30	9742	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	72600	278000
KFL07530		75	120-277VAC	0.60-0.30	7454	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	60100	270000
KFL08530		85	120-277VAC	0.70-0.30	10840	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	72600	278000
KFL08533			347-480VAC	0.24-0.17													
KFL08534		120-250VDC	0.70-0.27	9023	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	60100	270000	
KFL09030		120-277VAC	0.80-0.40														
KFL09033		90	347-480VAC	0.28-0.23	10370	T4A	T4A	T3C	T3C	T3C (EFG)	T3C (EFG)	T4	T4	145-70	160-85	60100	270000
KFL09034			120-250VDC	0.80-0.36													
KFL10530		105	120-277VAC	0.90-0.40	13780	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	72600	278000
KFL10533			347-480VAC	0.31-0.23													
KFL10534		120-250VDC	0.90-0.36	15340	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	72600	278000	
KFL11030		120-277VAC	0.90-0.40														
KFL11033		110	347-480VAC	0.31-0.23	18550	T5	-	T3C	-	T3C (EFG)	-	-	-	-	-	60300	190000
KFL11034			120-250VDC	0.90-0.36													
KFL12530		125	120-277VAC	1.00-0.50	19220	T5	-	T3C	-	T3C (EFG)	-	-	-	-	-	72600	278000
KFL12533			347-480VAC	0.35-0.29													
KFL12534		120-250VDC	1.00-0.45	21940	T5	-	T3C	-	T3C (EFG)	-	-	-	-	-	-	72600	278000
KFL15030		150	120-277VAC														
KFL16530		165	120-277VAC	1.38-0.60													
KFL19530	195	120-277VAC	1.63-0.70														

- ① Cat. nos. are 120-277VAC models, see logic for 347-480V.
- ② Amperage measured at 120VAC; 277VAC calculated
- ③ Extra high Lumens per Watt LED models
- ④ Use 75° minimum Supply Wire @40°C Ambient; 90 @55°C Ambient
- ⑤ First number is lens temperature under 25mm layer of dust; Second number is lens temp. for dust cloud.

Dimensions



KFS-6
Slipfitter



KFCB
Cross Arm Mount



KFWB
Wall/Pipe Bracket



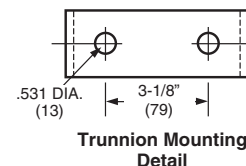
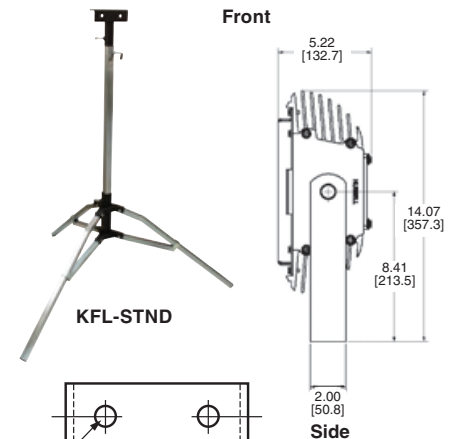
K4040
Wall Bracket



4041
Tenon Fitting

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.) 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. Uses with KFS-6.
KFLG ^⑤	Wire Guard, 316 Stainless Steel (not used with KFL-DARK)
VMSC10 ^②	10' Stainless Steel Safety Cable with loop grip
KFL-DARK ^{③⑤}	Dark Sky Visor, White Painted Aluminum (not used with KFLG)
KFL-DOOR	Replacement Door and Lens Assembly (for units w/o internal reflectors)
KFL-DOOR2 ^④	Replacement Internal Reflector and Lens Assembly
KFL-STND	8 Foot Extendable Portable Stand

- 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°.
- ④ Only for models factory supplied with internal reflector. Not backward compatible with units originally shipped without internal reflector.
- ⑤ KFLG and KFL-DARK cannot be used together.





C1D2 FLOOD – INTRODUCTION & LOGIC



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

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

IECEx Certificate
 QPS 15.0011



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

**PATENTED
 LENS and
 REFLECTOR
 DESIGN**



KFLH Luminaire

Dark Sky Visor
 KFLH-DARK

PETROBRIGHT® LED

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 luminaires for use in hazardous locations
- Enclosed and gasketed
- NEMA 3, 4X
- IP66

Materials

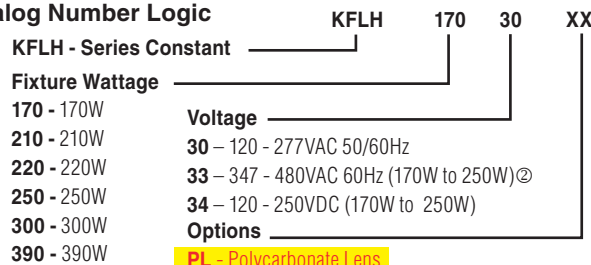
- Body and lens frame corrosion resistant copper-free aluminum alloy with baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware – stainless steel
- Thermal shock and impact resistant glass lens (Polycarbonate available)
- High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

LED Flood Features and Standards

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

- Crisp White Light for Excellent Color Rendering – Chromaticity 5000K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- Long Life – to 100,000+ maintenance free hours to 70% initial lumens
- Ambient suitability -40°C to 55°C up to 250W[Ⓜ] to -50°C for non-hazardous applications
- Instant On – Including after power interruption
- World Voltage 120 – 277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- 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

Catalog Number Logic



PL - Polycarbonate Lens

F - Single FuseⓂ

FF - Double FuseⓂ

TBL - Terminal Blocks **Looping**

P1 - 120V Photocell, factory installed

P2 - 208V-277V Photocell, factory installed

P3 - 347V Photocell, factory installed

QD - Quick Disconnect

D20 - 2x M20 entries

IEX - IEXEx includes TBL & External ground

Construction Note:

Standard with two 3/4" NPT entries with one plugged

Models for dual metric entries have slip holes with metric locknuts and certified blanking plugs

Ⓜ Fusing not for Canadian or Marine Installations

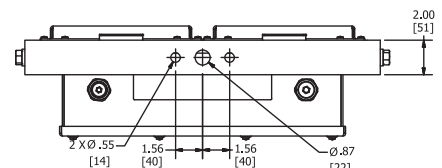
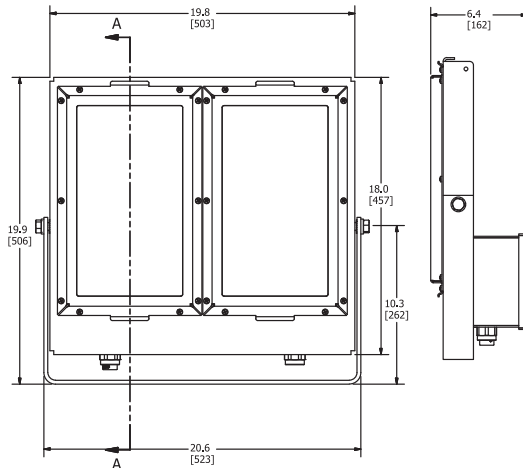
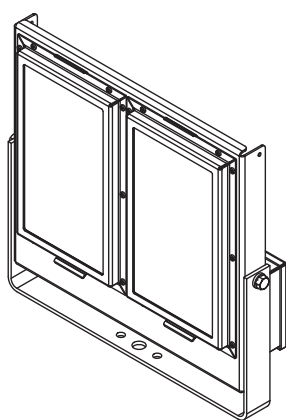
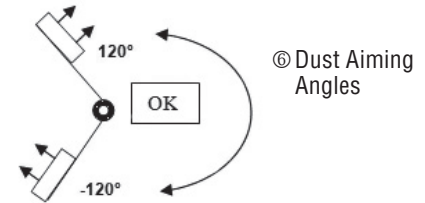
Ⓜ 347V-480V +40°C Max



C1D2 FLOOD – ORDERING INFORMATION & TECHNICAL DATA

ORDERING INFORMATION AND AMBIENT SUITABILITY						C1D2 (C1Z2)		C1D2 SIMULTANEOUS		C2D1		L70	
CATALOG NO.	WEIGHT LBS./KG	WATTS	VOLTAGE	AMPS	DELIVERED LUMENS	40°C	55°C	40°C	55°C	40°C	55°C	TM-21	CALCULATED
KFLH17030	25.00 / 11.3	170	120-277VAC	1.46-0.63	21620	T4A (T4)	T4	T4	T3C	T4	T3C	72600	278000
KFLH17033			347-480VAC	0.51-0.36									
KFLH17034			120-250VDC	1.46-0.56									
KFLH21030		210	120-277VAC	1.75-0.75	21220	T4A (T4)	T4	T4	T3C	T4	T3C	60100	270000
KFLH21033			347-480VAC	0.61-0.43									
KFLH21034			120-250VDC	1.75-0.68									
KFLH22030		220	120-277VAC	1.88-0.81	26970	T4A (T4)	T4	T4	T3C	T4	T3C	72600	278000
KFLH22033			347-480VAC	0.65-0.47									
KFLH22034			120-250VDC	1.88-0.73									
KFLH25030		250	120-277VAC	2.17-0.94	30950	T4A (T4)	T4	T4	T3C	T4	T3C	72600	278000
KFLH25033			347-480VAC	0.75-0.54									
KFLH25034			120-250VDC	2.17-0.85									
KFLH30030		300	120-277VAC	2.48-1.07	37030	T4A (T4)	T4	-	-	-	-	60300	107000
KFLH39030		390	120-277VAC	3.30-1.43	40410	T4A (T4)	T4	-	-	-	-	60300	190000

- ① Cat. Nos. are 120 through 277VAC 50/60Hz; see logic for 347-480V or 125-250VDC input
- ② Amperage measured at 120VAC; 277VAC calculated
- ③ Extra High Lumens per Watt LED Models
- ④ Use 75°C Supply Wire @ 40°C Ambient; 90°C Wire @ 55°C Ambient
- ⑤ 55°C only for 170W through 250W at 120-277VAC 50/60Hz or 125-250VDC; not 480VAC
- ⑥ For Dust Applications, limit aiming angle between 120° and -120° to minimize buildup - see figure at right



KFLH 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.) Through 2-1/2" Pipe (2-7/8" o.d.)
K4040	Heavy Duty Steel Wall Bracket. (Must be with KFCB Crossarm Fitting).
4041	Heavy Duty Steel Wall Bracket 2" Pipe (2-3/8" o.d.) Tenon Fitting. Use with KFS-6.
KFLG	Wire Guard, 316 Stainless Steel (order 2 per fixture)
VMSC10 ②	10' Stainless Steel Safety Cable with loop grip
KFLH-DARK ③	Dark Sky Visor, White Painted Aluminum
KFLH-DOOR	Replacement Internal Reflector and Lens Assembly (order 2 per fixture as required)

- 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°.



KFS-6 Slipfitter



KFCB Cross Arm Mount



KFWB Wall/Pipe Bracket



K4040 Wall Bracket



4041 Tenon Fitting



KFL2H SERIES

KILLARK

C1D2 FLOOD – INTRODUCTION & LOGIC



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

IEC Ex Rated Model (w/ IEX suffix)
 Zone 2 and Zone 21 areas
 Ex nA IIC T6...T3, Gc
 Ex tb IIC T105°C Db
 Tamb -50°C ≤ Ta ≤ +55°C, IP66

IECEX Certificate
 QPS 15.0011



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

PATENTED LENS and REFLECTOR DESIGN



Dark Sky Visor
 KFLH-DARK

- 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

* 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

PETROBRIGHT® LED

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 luminaires for use in hazardous locations
- Enclosed and gasketed
- NEMA 3, 4X
- IP66

Materials

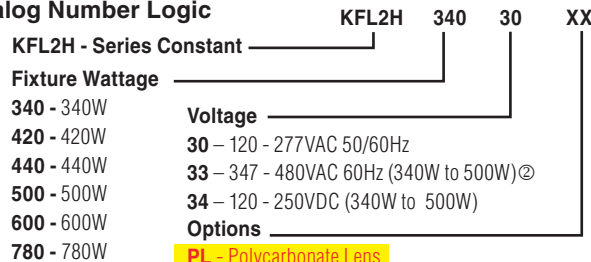
- Body and lens frame corrosion resistant copper-free aluminum alloy with baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware – stainless steel
- Thermal shock and impact resistant glass lens (Polycarbonate available)
- High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

LED Flood Features and Standards

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

- Crisp White Light for Excellent Color Rendering – Chromaticity 5000K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- Long Life – to 100,000+ maintenance free hours to 70% initial lumens
- Ambient suitability -40°C to 55°C up to 500W[Ⓞ] to -50°C for non-hazardous applications
- Instant On – Including after power interruption
- World Voltage 120 – 277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- LM80-08* Measurement of lumen maintenance for LED light sources

Catalog Number Logic



PL - Polycarbonate Lens

- F - Single Fuse[Ⓞ]
- FF - Double Fuse[Ⓞ]
- TBL - Terminal Blocks **Looping**
- P1 - 120V Photocell, factory installed
- P2 - 208V-277V Photocell, factory installed
- P3 - 347V Photocell, factory installed
- QD - Quick Disconnect
- D20 - 2x M20 entries
- IEX - IEXEx includes TBL & External ground

Construction Note:
 Standard with two 3/4" NPT entries with one plugged
 Models for dual metric entries have slip holes with metric locknuts and certified blanking plugs

[Ⓞ] Fusing not for Canadian or Marine Installations
[Ⓞ] 347V-480V +40°C Max

LIGHTING

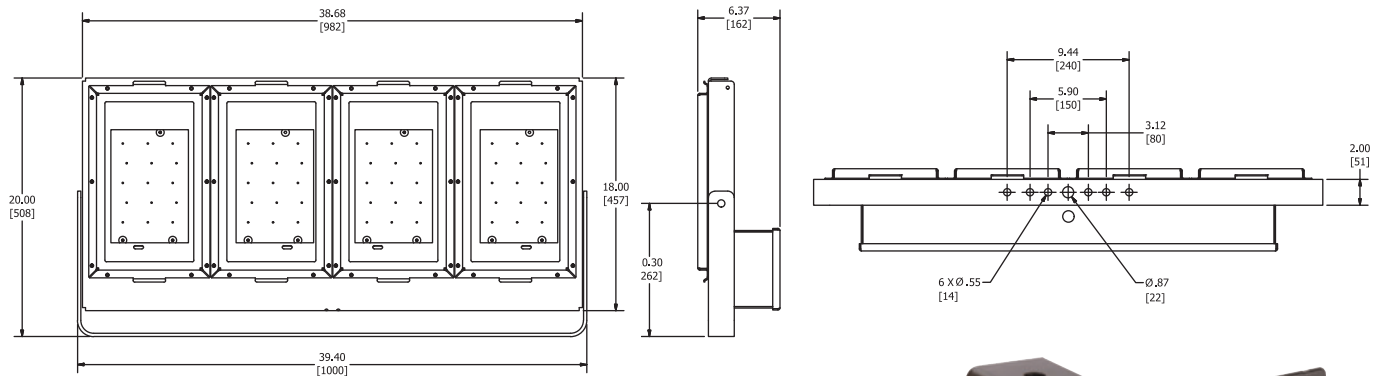
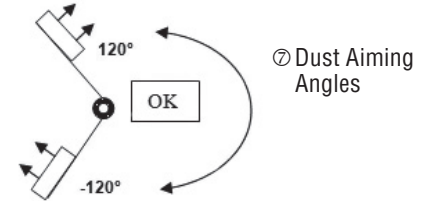
KFL2H SERIES



C1D2 FLOOD – ORDERING INFORMATION & TECHNICAL DATA

ORDERING INFORMATION AND AMBIENT SUITABILITY						C1D2 (C1Z2)		C1D2 SIMULTANEOUS		C2D1		L70	
CATALOG NO.	WEIGHT LBS./KG	WATTS	VOLTAGE	AMPS	DELIVERED LUMENS	40°C	55°C	40°C	55°C	40°C	55°C	TM-21	CALCULATED
KFL2H34030	50.00 / 22.6	340	120-277VAC	2.92-1.26	43240	T4A (T4)	T4	T4	T3C	T4	T3C	72600	278000
KFL2H34033			347-480VAC	1.02-0.72			-		-		-		
KFL2H34034			120-250VDC	2.92-1.12			T4		T3C		T3C		
KFL2H42030		420	120-277VAC	3.50-1.50	42440	T4A (T4)	T4	T4	T3C	T4	T3C	60100	270000
KFL2H42033			347-480VAC	1.22-0.86			-		-		-		
KFL2H42034			120-250VDC	3.50-1.36			T4		T3C		T3C		
KFL2H44030		440	120-277VAC	3.76-1.62	53940	T4A (T4)	T4	T4	T3C	T4	T3C	72600	278000
KFL2H44033			347-480VAC	1.30-0.94			-		-		-		
KFL2H44034			120-250VDC	3.76-1.46			T4		T3C		T3C		
KFL2H50030		500	120-277VAC	4.34-1.88	69410	T4A (T4)	T4	T4	T3C	T4	T3C	72600	278000
KFL2H50033			347-480VAC	1.50-1.08			-		-		-		
KFL2H50034			120-250VDC	4.34-1.70			T4		T3C		T3C		
KFL2H60030		600	120-277VAC	4.96-2.14	74060	T4A (T4)	T4	-	-	-	-	60300	107000
KFL2H78030			780	120-277VAC	6.60-2.86	80820	T4A (T4)	T4	-	-	-	60300	190000

- ① Cat. Nos. are 120 through 277VAC 50/60Hz; see logic for 347-480V or 125-250VDC input
- ② Amperage measured at 120VAC; 277VAC calculated
- ③ Extra High Lumens per Watt LED Models
- ④ Use 75°C Supply Wire @ 40°C Ambient; 90°C Wire @ 55°C Ambient
- ⑤ 55°C only for 340W through 500W at 120-277VAC 50/60Hz or 125-250VDC; not 480VAC
- ⑥ For Dust Applications, limit aiming angle between 120° and -120° to minimize buildup - see figure at right
- ⑦ L70 is time in hours to 70% of initial lumens remaining. TM-21 based values require very long duration testing and is denoted "official reported" and is based on at least 6,000 minimum, to 12,000 hours testing (at time of printing). "Calculated" values by the major chip vendors utilized predict L70 life up to 278,000 hours.



KFL2H 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. Use with KFS-6.
KFLG	Wire Guard, 316 Stainless Steel (order 4 per fixture)
VMSC10②	10' Stainless Steel Safety Cable with loop grip
KFLH-DARK③	Dark Sky Visor, White Painted Aluminum
KFLH-DOOR	Replacement Internal Reflector and Lens Assembly (order 4 per fixture as required)

- 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°.





C1D1 FLOOD – INTRODUCTION & LOGIC



PETROBRIGHT® LED

FEATURES-SPECIFICATIONS 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 luminaires for use in hazardous locations
- Zone 1 and Zone 21 to IEC 60079-0, 60079-1, 60079-31, 60079-7 Standards
- 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

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

- **Factory Sealed Construction**
- One 3/4" NPT & one M20 entry standard (see logic for other choices)
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000 K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- Long Life – 100,000+ 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

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)

cSP us File LR11713

IEC Ex Rated model (w/IEX or IEX4B suffix) Zone 1, Zone 21

Ex de IIB+H2 T6..T5, Gb, IP66
 Tamb -20°C ≤ Ta ≤ +55°C; Option LT for -50°C ≤ Ta ≤ +55°C

Ex de IIB T6..T5, Gb, -50°C ≤ Ta ≤ +55°C
 Ex tb IIIC T90°C Db, -50°C ≤ Ta ≤ +55°C

IECEX Certificate
 CSA 14.0010

ATEX Certificate
 SIRA14ATEX1159X

Patent Pending
 Fixture
 Design



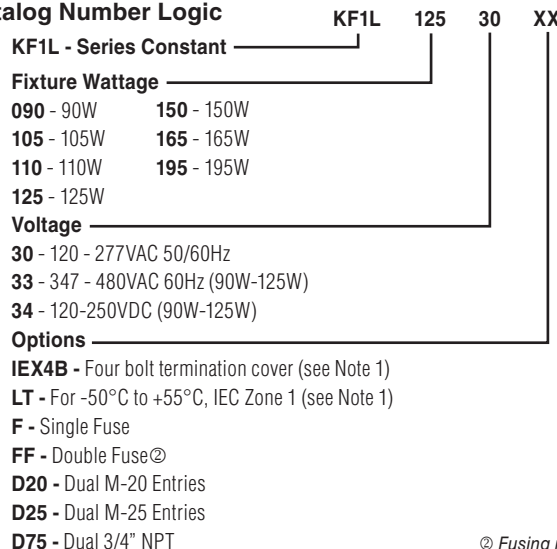
KF1L with KFS-6 Slipfitter mount on 2" pipe



Dark Sky Visor
 KF1L-DARK

Suitable for Paint
 Spray

Catalog Number Logic



Ⓞ Construction/Certification
 Notes: KF1L units are standard with one 3/4" NPT hub & one M20 hub – both plugged, with 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 models needing IEC Zone 1, -50°C to +55°C suitability for hydrogen.

Option IEX4B utilizes 4 terminal cover bolts for Ex de and maintains all ratings EXCEPT CID1 BCD.

See logic for other entry options

Ⓞ Fusing not for Canadian or Marine Installations



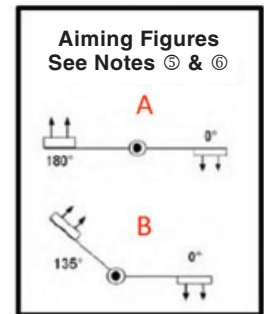
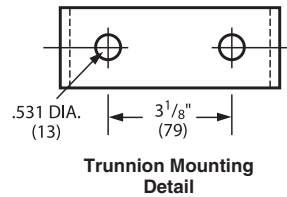
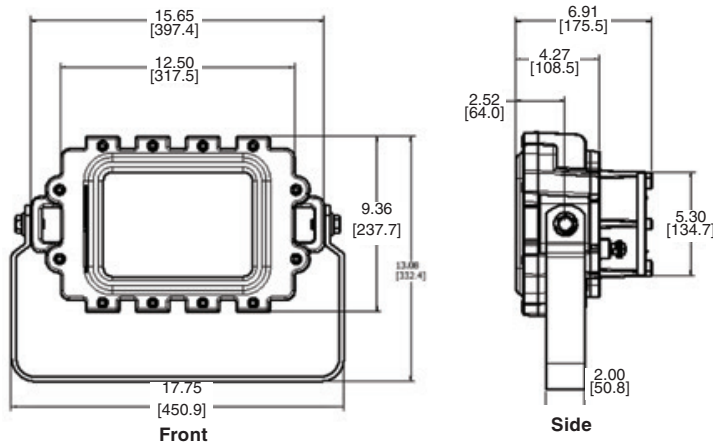
C1D1 FLOOD – ORDERING & TECHNICAL DATA

ORDERING INFORMATION AND AMBIENT SUITABILITY						C1D1		C2D1		IEC ZONE 1		IEC ZONE 21		L70													
CATALOG NO.	WEIGHT LBS./KG	WATTS	VOLTAGE	AMPS	DELIVERED LUMENS	40°C	55°C	40°C	55°C	40°C	55°C	40°C	55°C	TM-21	CALCULATED												
KF1L09030	46.00 / 20.87	90	120-277VAC	0.72-0.31	7182	T6	T6	(EFG)	⊙	T6	T5	160-75	175-90	60100	270000												
KF1L09033			347-480VAC	0.25-0.18																							
KF1L09034			120-250VDC	0.72-0.28																							
KF1L10530			120-277VAC	0.85-0.37																							
KF1L10533	105	105	347-480VAC	0.29-0.21	8362	T6	T6	(EFG)	⊙	T6	T5	160-76	175-91	60100	270000												
KF1L10534			120-250VDC	0.85-0.33																							
KF1L11030			120-277VAC	0.95-0.41																							
KF1L11033	110	110	347-480VAC	0.33-0.24	10590	T6	T6	(EFG)	⊙	T6	T5	160-77	175-92	72600	278000												
KF1L11034			120-250VDC	0.95-0.37																							
KF1L12530			120-277VAC	1.10-0.48																							
KF1L12533	125	125	347-480VAC	0.38-0.28	11590	T6	T6	(EFG)	⊙	T6	T5	160-78	175-93	72600	278000												
KF1L12534			120-250VDC	1.10-0.43																							
KF1L15030	150	150	120-277VAC	1.25-0.54	13280	T5	-	-	-	T5	-	-	-	60300	190000												
KF1L16530			165	120-277VAC												1.38-0.60	13760	T5	-	-	-	T5	-	-	-	72600	278000
KF1L19530			195	120-277VAC												1.63-0.70	15707	T5	-	-	-	T5	-	-	-	72600	278000

- ① 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 minimum 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"
- ① First number is lens temperature under 25mm layer of dust; Second number is lens temp for dust cloud.

Dimensions



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.) 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
VMSC10	10' Stainless Steel Safety Cable with loop grip ②
KF1L-DARK	Dark Sky Visor, White Painted Aluminum ③
KF1L-DOOR	Replacement Door and Lens Assembly
KFL-STND	8 Foot Extendable Portable Stand

- 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°.





KILLARK



C1D2 FLOOD – INTRODUCTION & LOGIC



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

CS US File LR11713
 IEC Ex Rated model (w/IEX suffix)
 Zone 2 and Zone 21 areas
 Ex nA IIC T6 to T3, Gc
 Ex tb IIIC T160°C Db
 Tamb -50°C ≤ Ta ≤ +55°C, IP66

IECEX Certificate
 CSA 14.0002X

ATEX Certificate
 CML 14ATEX3087/4088

PATENTED
 LUMINAIRE
 DESIGN

Available with
 cord and plug



Strain Relief
 Cord Grip

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

PETROBRIGHT® LED

FEATURES-SPECIFICATIONS

Applications

LED Portable Floods are designed for temporary applications 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 luminaires for use in hazardous locations
- Enclosed and gasketed
- NEMA 3, 4X, IP66
- IEX suffix Zone 2/21 to IEC 60079-0, 60079-15, 60079-31 Standards

Materials

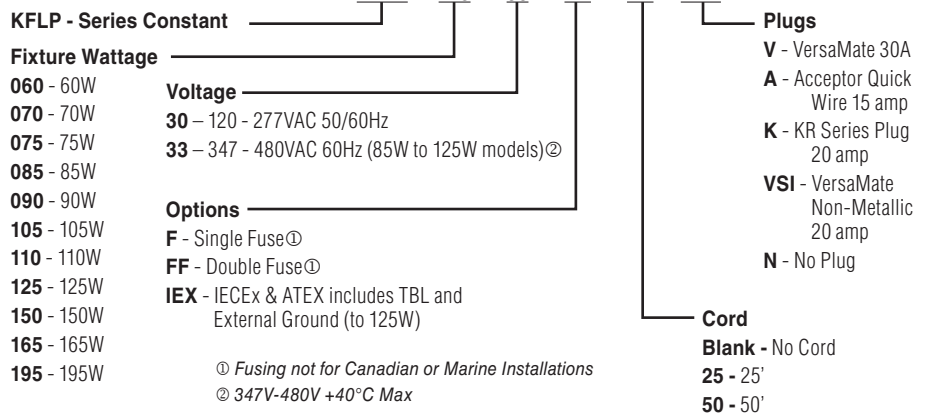
- Body, end caps and lens frame and base corrosion resistant copper-free aluminum alloy with baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware - stainless steel
- High temperature silicone gasketing
- Trunnion heavy gauge galvanized steel with painted finish
- Stand and handle epoxy pound coat
- Polycarbonate Lens
- Stainless steel wire guard

LED Flood Features and Standards

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

- 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 up to 125W
- 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

Catalog Number Logic





C1D2 FLOOD – ORDERING INFORMATION & TECHNICAL DATA

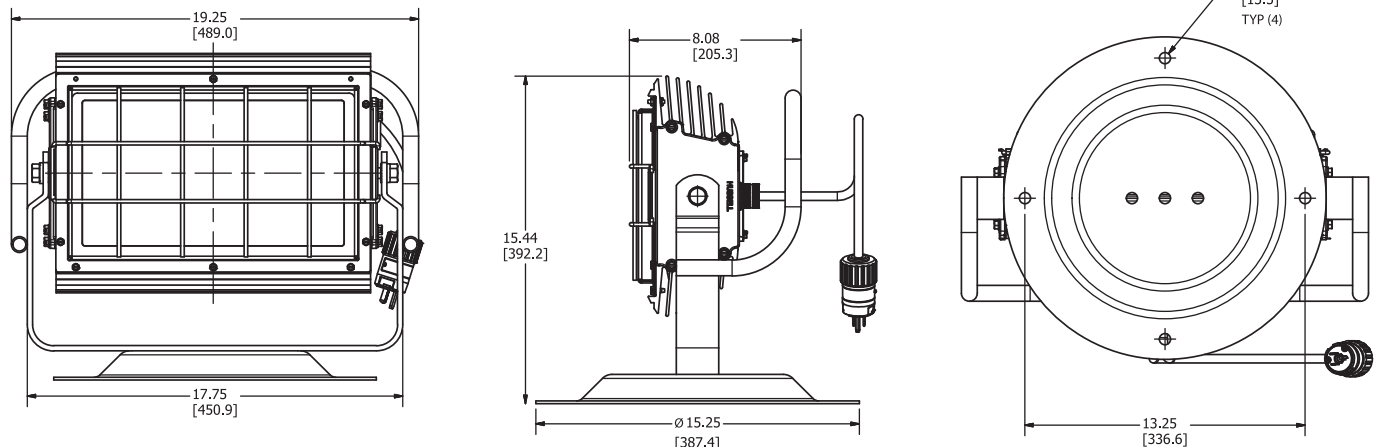
ORDERING INFORMATION AND AMBIENT SUITABILITY						C1D2		C1D2 SIMULTANEOUS		C2D1		IEC ZONE 2		IEC ZONE 21		L70	
CATALOG NO.	WEIGHT LBS./KG	WATTS	VOLTAGE	AMPS ^①	DELIVERED LUMENS	40°C	55°C	40°C	55°C	40°C	55°C	40°C	55°C	40°C	55°C	TM-21	CALCULATED
KFLP06030	33.00 / 14.97	60	120-277VAC	0.50-0.20	6111	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	60100	270000
KFLP07030		70	120-277VAC	0.60-0.30	9742	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	72600	278000
KFLP07530		75	120-277VAC	0.60-0.30	7454	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	60100	270000
KFLP08530		85	120-277VAC	0.70-0.30	10840	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	72600	278000
KFLP08533			347-480VAC	0.24-0.17		T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	72600	278000
KFLP09030		90	120-277VAC	0.80-0.40	9023	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	60100	270000
KFLP09033			347-480VAC	0.28-0.23		T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	60100	270000
KFLP10530		105	120-277VAC	0.90-0.40	10370	T4A	T4A	T3C	T3C	T3C (EFG)	T3C (EFG)	T4	T4	145-70	160-85	60100	270000
KFLP10533			347-480VAC	0.31-0.23		T4A	T4A	T3C	T3C	T3C (EFG)	T3C (EFG)	T4	T4	145-70	160-85	60100	270000
KFLP11030		110	120-277VAC	0.90-0.40	13780	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	72600	278000
KFLP11033			347-480VAC	0.31-0.23		T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	72600	278000
KFLP12530		125	120-277VAC	1.00-0.50	15340	T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	72600	278000
KFLP12533			347-480VAC	0.35-0.29		T6	T5	T3C	T3C	T3C (EFG)	T3C (EFG)	T6	T5	145-70	160-85	72600	278000
KFLP15030		150	120-277VAC	1.25-0.54	18550	T5	-	T3C	-	T3C (EFG)	-	-	-	-	-	60300	190000
KFLP16530		165	120-277VAC	1.38-0.60	19220	T5	-	T3C	-	T3C (EFG)	-	-	-	-	-	72600	278000
KFLP19530		195	120-277VAC	1.63-0.70	21940	T5	-	T3C	-	T3C (EFG)	-	-	-	-	-	72600	278000

- ① Amperage measured at 120VAC; 277VAC calculated
- ② Extra high Lumens per Watt LED models
- ③ Use 75° minimum Supply Wire @40°C Ambient; 90 @55°C Ambient
- ④ First number is lens temperature under 25mm layer of dust; Second number is lens temp. for dust cloud.

KFLP ACCESSORIES	
CATALOG NUMBER	DESCRIPTION
KFLG	Wire Guard, 316 Stainless Steel (not used with KFL-DARK)
KFL-DOOR-POLY	Replacement Door and Lens Assembly (for units w/o internal reflectors)
VP3023	VersaMate Metallic 30 amp 3W4P Plug
UGP-15231QW	Acceptor Quick Wire 15 amp NEMA 5-15P
KP-20ABC	KR Series 20 amp Plug
VSI20P304	VersaMate Non-Metallic 20 amp 125v Plug
KFL-STND	8 Foot Extendable Portable Stand



Dimensions





C1D1 FLOOD – INTRODUCTION & LOGIC



PETROBRIGHT® LED

FEATURES-SPECIFICATIONS

Applications

LED KF1L Portable Explosion-proof Floods are designed Temp App 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 luminaires for use in hazardous locations
- IEX4B suffix for Zone 1 and Zone 21 to IEC 60079-0, 60079-1, 60079-31, 60079-7 Standards
- 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
- Trunion heavy gauge 316 SS



LED Flood Features and Standards

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

- **Factory Sealed Construction**
- One 3/4" NPT & one M20 entry standard (see logic for other choices)
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000 K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- 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

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)

cSP us File LR11713

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

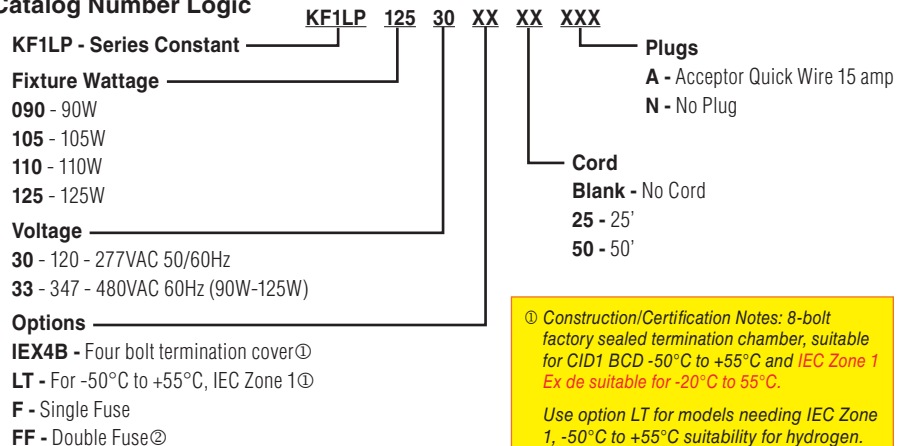
IECEX Certificate
CSA 14.0010

ATEX Certificate
SIRA 14ATEX1159X

Patent Pending
Fixture Design



Catalog Number Logic



Ⓛ Fusing not for Canadian or Marine Installations

Ⓛ Construction/Certification Notes: 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 models needing IEC Zone 1, -50°C to +55°C suitability for hydrogen.
 Option IEX4B utilizes 4 terminal cover bolts for Ex de and maintains all ratings EXCEPT CID1 BCD.



LIGHTING

C1D1 FLOOD – ORDERING & TECHNICAL DATA

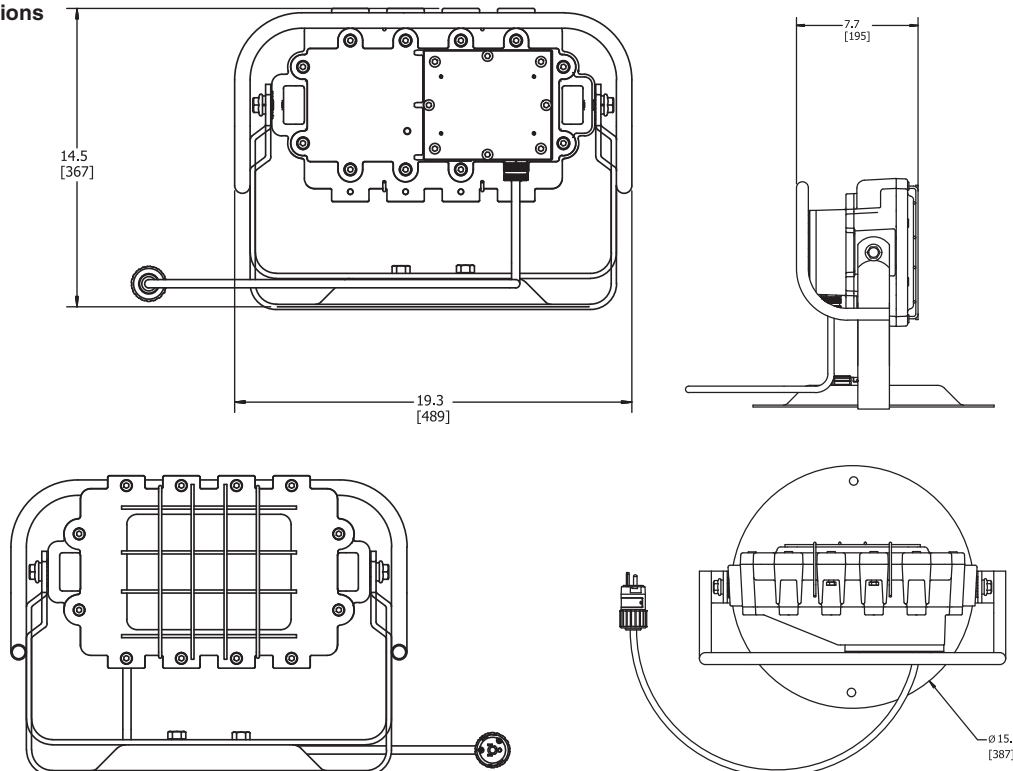
ORDERING INFORMATION AND AMBIENT SUITABILITY						C1D1②		C2D1②		IEC ZONE 1②		IEC ZONE 21②③		L70	
CATALOG NO.	WEIGHT LBS./KG	WATTS	VOLTAGE	AMPS①	DELIVERED LUMENS	40°C	55°C	40°C	55°C	40°C	55°C	40°C	55°C	TM-21	CALCULATED
KF1LP09030	49.00 / 22.22	90	120-277VAC	0.72-0.31	7182	T6	T6	(EFG)	④	T6	T5	160-75	175-90	60100	270000
KF1LP09033			347-480VAC	0.25-0.18											
KF1LP10530		105	120-277VAC	0.85-0.37	8362	T6	T6	(EFG)	④	T6	T5	160-76	175-91	60100	270000
KF1LP10533			347-480VAC	0.29-0.21											
KF1LP11030		110	120-277VAC	0.95-0.41	10590	T6	T6	(EFG)	④	T6	T5	160-77	175-92	72600	278000
KF1LP11033			347-480VAC	0.33-0.24											
KF1LP12530		125	120-277VAC	1.10-0.48	11590	T6	T6	(EFG)	④	T6	T5	160-78	175-93	72600	278000
KF1LP12533			347-480VAC	0.38-0.28											

- ① Amperage measured at 120VAC; 277VAC calculated
- ② Use minimum 75° Supply Wire @40°C Ambient; 90°@55°C Ambient
- ③ First number is lens temperature under 25mm layer of dust; Second number is lens temp for dust cloud.
- ④ 55°C C2D1 EFG T3C Aiming Figure "B", 55°C C2D1 EF T3A Aiming Figure "A"

KF1L MOUNTS AND ACCESSORIES	
CATALOG NUMBER	DESCRIPTION
KF1LG	Wire Guard, 316 Stainless Steel
KF1L-DOOR	Replacement Door and Lens Assembly
VP3023	VersaMate Metallic 30 amp 3W4P Plug
UGP-15231QW	Acceptor Quick Wire 15 amp NEMA 5-15P
KP-20ABC	KR Series 20 amp Plug
VSI20P304	VersaMate Non-Metallic 20 amp 125v Plug
KFL-STND	8 Foot Extendable Portable Stand



Dimensions





EMERGENCY BATTERY BACKUP & UTILITY LIGHTING



NEBS



LLS2



EBS



VSL



DVL



LIGHTING

EMERGENCY BATTERY SYSTEM



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

UL Sanitation Certified with FP Option

FEATURES-SPECIFICATIONS

Applications

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

Construction

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

Installation

The unit includes a universal mounting plate which facilitates mounting to a truss or I-beam, pole, column, or wall. Included is a special bracket to ensure positive pole gripping when using bands. In wet or NEMA 4X applications, use UL listed water tight conduit fittings that meet the requirements of the UL 514B Standard for Conduit Tubing and Cable Fittings when using knockouts on the side or top of unit. All fittings supplied by others. C1D2 and C2D1 listed models include 2 each hazardous location rated conduit hubs with ground provision.

Illumination

The NEBS series provides bright and uniform illumination and is specifically designed for higher mounting heights above 9'. Coverage provided by 2 sealed aluminum

lamp-heads using 3 high power LEDs each. The LEDs are located in a specially designed heat dissipating lamp-head which is fully adjustable and can be locked into position. The NEBS is designed for full lumen output across the entire 90 minutes of operation. This ensures maximum visibility of the egress path over the full 90 minute discharge period.

Spectron Includes:

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

NEBS	12	I	C1D2	06L
Model	Capacity	Self-Diagnostics	Application	Lamp
	6 – 6 Watt ^① 12 – 12 Watt ^②	Blank – None I – Spectron [®] Self-Diagnostics	FP – Food Processing Rated C1D2 – Class 1 Div. 2 ^③ C2D1 – Class 2 Div. 1 ^④	Blank – 3 Watt LED lamps 06L – 6 Watt LED lamps ^⑤

^① Only available on NEBS with 12 watt capacity

^② NEBS6 only available in the following configurations-NEBS6, NEBS6I, NEBS6I-FP

^③ NEBS12 only available in the following configurations-NEBS12, NEBS12I, NEBS12-FP, NEBS12I-FP, NEBS12-06L, NEBS12I-06L, NEBS12-06L, NEBS12-FP-06L, NEBS12I-06L, NEBS12I-FP-06L

^④ C1D2 Option only available with NEBS6-C1D2, NEBS6I-C1D2, NEBS12-C1D2, NEBS12I-C1D2, NEBS12-C1D2-06L, and NEBS12I-C1D2-06L

^⑤ C2D1 Option only available with NEBS6-C2D1, NEBS6I-C2D1, NEBS12-C2D1, NEBS12I-C2D1, NEBS12-C2D1-06L, and NEBS12I-C2D1-06L which includes shield



EMERGENCY BATTERY SYSTEM

Electronics

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

INPUT POWER CONSUMPTION			
	INPUT VOLTAGE	AMPS.	MAX. WATTS
NEBS6	120	0.03	3.40
	277	0.04	3.49
NEBS12	120	0.05	5.98
	277	0.04	6.52

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

- Maintenance Mode Power Consumption 120VAC- 0.33W
- Maintenance Mode Power Consumption 277VAC- 0.36W

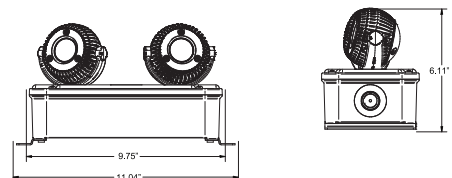
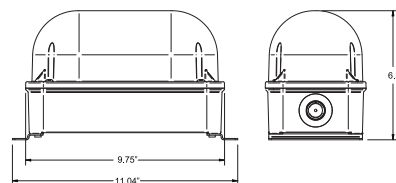
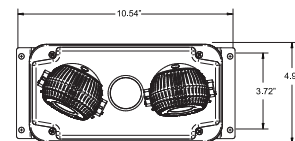
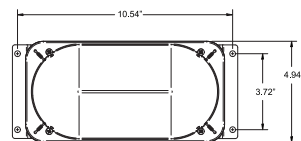
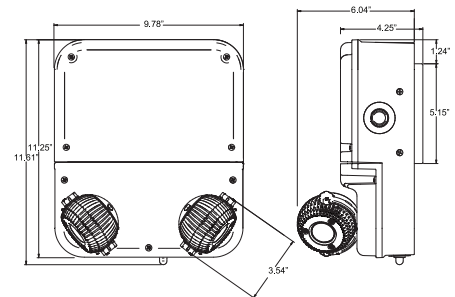
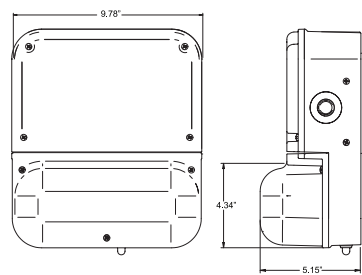
ADDITIONAL PRODUCT INFORMATION								
CATALOG NUMBER	BATTERY	CAPACITY	LAMP(W)	LUMENS PER LAMP	RUNTIME	EXTENDED RUNTIME	REMOTE CAPABLE	REMOTE PART NUMBER
NEBS61-C1D2	LiFePO4	6 watts	3 watts	331	90 min	No	No	N/A
NEBS61-C2D1								
NEBS121-C1D2		12 watts	3 watts	331	90 min	Yes	Yes	NEBSRS
NEBS121-C2D1								
NEBS121-C1D2-06L								
NEBS121-C2D1-06L	12 watts	6 watts	514	90 min	No	No	N/A	

Operating Temperature:

- C1D2 & C2D1: 50° to 122°F(10° to 50°C)

OPERATING TEMPERATURE IN °C			
AMBIENT °C	CLASS 1 DIV. 2 A, B, C, D	CLASS 2 DIV. 1 E, F, G	SUPPLY WIRE TEMP. °C MIN.
40	T6	T6	75
50	T5	T6	75

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





LIGHTING

EMERGENCY BATTERY SYSTEM – INTRODUCTION



EBS Battery Unit Only

HOSTILE^{ITE}® EBS EMERGENCY

FEATURES-SPECIFICATIONS

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 5000° Kelvin^②
- LED Head L70 value 100,000 hours for minimal maintenance
- Two head models up to 500% brighter than competitive conventional units^③
- 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 enclosure unit
- Terminal Blocks identified for incoming and outgoing connections

Compliances

- UL 1598 Standard for Luminaires
- UL 8750 for LED Lighting
- UL 844 Luminaires for Hazardous Locations
- UL 1203 Explosion-Proof/Dust-Ignition-Proof Electrical Enclosures
- UL 924 Emergency Lighting
- CSA C22.2 no. 137-M1981 Luminaires for Hazardous Locations
- CSA C22.2 no. 30-M1986 C1D1 Enclosures
- CSA 22.2 no. 25-1066 C2D1 EFG Enclosures
- Enclosure Type 4
- NEMA 4, 7B^①CD, 9EFG

Materials

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

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

CS File LR11713

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; 5000° Kelvin is typical (“sunlight”)
- ③ Based on published tungsten/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 Integral Push-To-Test



EBS Unit with EL Type Head and Exit plus HK Head with remote Push-To-Test



EMERGENCY BATTERY SYSTEM – LOGIC & COMPONENTS

Catalog Number Logic

EBS23DH - P T A D

EBS23DH Series Constant 120-277V 50/60Hz 23W
Dual-Head (Remote or Attached)

Test Options

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

Time Delay Option

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

Luminaire Head Options^{①②}

- N** – No heads - For Remote Heads Ordered Separately
- A** – 2 EBSHK1030 Heads Factory Attached
- B** – 2 EBSEL1030 Heads (Less Guards) and Fittings for Attachment
- BG** – 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
- C** – 1 EBSHK1030 Head Attached and 1 EBSEL1030 Head (Less Guard) and Fittings for Attachment
- CG** – 1 EBSHK1030 Heads Attached and 1 EBSEL1030 Head with Guard and Fittings for Attachment
- CE** – 1 EBSHK1030 Heads Attached and 1 EBSEL1030 Head with HEXA-100 EXIT and Fittings for Attachment
- D** – 1 EBSHK1030 Only (2nd Head Remote - Ordered Separately)
- E** – 1 EBSEL1030 Only Less Guard and Fittings for Attachment (2nd Head Remote - Ordered Separately)
- EG** – 1 EBSEL1030 Only with Guard and Fittings for Attachment (2nd Head Remote - Ordered Separately)
- EE** – 1 EBSEL1030 Only with HEXA100 EXIT and Fittings for Attachment (2nd Head Remote - Ordered Separately)

Drain^③

- D** – Group B Drain for Wet Applications including condensation from heat <> cold cycling
- Blank** – 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.



Factory Sealed Remote LED Spot Light - Bottom Feed



Factory Sealed Remote LED Spot Light - Side Feed



Remote Push-To-Test Station



Remote LED Luminaire

EBS UNIT - BOTTOM DETAIL



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

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



LIGHTING

EMERGENCY BATTERY SYSTEM – PRE-CONFIGURED UNITS



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)

File LR11713

ORDERING INFORMATION

INTEGRAL PUSH-TO-TEST		REMOTE PUSH-TO-TEST		
EBS SYSTEM WITH TWO EBSHK HEADS ②③				CID1BCD
Integral PTT, Two EBSHK	Integral PTT, TDR , Two EBSHK	Remote PTT, Two EBSHK	Remote PTT, TDR , Two EBSHK	
EBS23DH-PNA	EBS23DH-PTA	EBS23DH-RNA	EBS23DH-RTA	
EBS SYSTEM WITH TWO EBSEL HEADS WITH GUARDS ②③				CID1CD
Integral PTT, Two EBSEL Heads w/ Guards	Integral PTT, TDR , Two EBSEL Heads w/ Guards	Remote PTT, Two EBSEL Heads w/ Guards	Remote PTT, TDR , Two EBSEL Heads w/ Guards	
EBS23DH-PNBG	EBS23DH-PTBG	EBS23DH-RNBG	EBS23DH-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, 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 TWO EBSEL HEADS ONE WITH EXIT ②③				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, TDR , 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 FOR REMOTE HEADS (ORDER TWO SEPARATELY) ②③				CID1BCD
Integral PTT, No Heads	Integral PTT, TDR , No Heads	Remote PTT, No Heads	Remote PTT, TDR , No Heads	
EBS23DH-PNN	EBS23DH-PTN	EBS23DH-RNN	EBS23DH-RTN	



① Main EBS unit is CID1 Group 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 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.
 ③ PTT = Push-To-Test; TDR = Time Delay Relay (prox 15 minutes after power resumption).



EMERGENCY BATTERY SYSTEM – REMOTE HEADS & ACCESSORIES



EBSSEL1030 REMOTE HEADS WITH MOUNT (FACTORY SEALED)				CID1CD; C2D1EFG
10W 30VDC	PENDANT 3/4"①	CEILING 3/4"①	WALL 3/4"①	STANCHION 1-1/2"②
With Guard	EBSSEL1030A2G	EBSSEL1030X2G	EBSSEL1030B2G	EBSSEL1030D4G
Without Guard③	EBSSEL1030A2	EBSSEL1030X2	EBSSEL1030B2	EBSSEL1030D4

EBSSEL1030 COMPONENTS & ACCESSORIES – DESCRIPTION	CATALOG NUMBER
EBSSEL 10W Head Only with LED's, Less Mount and Guard	EBSSEL1030
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 EBSSEL to EBS23HD-xxx	EBS-AHFS
Replacement Globe and Support Assembly	EMGS1



EBSSEL Shown with Exit Accessory



EBSSEL1030



EMG1



EMG1-R



ERSD15



ERA15



EMGS1



MOUNTING BOXES				
CATALOG NUMBER				HUB SIZE
PENDANT	CEILING	BRACKET	STANCHION	
EZA2	EZX2	EZB2	-	3/4"
EZA3	EZX3	EZB3	-	1"
-	-	-	EZD4②	1-1/4" / 1-1/2"

① For 1" pendant, ceiling and wall hubs, substitute "3" for "2" in catalog number; example: EBSSEL1030A3G.

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 EBSSEL 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 Seal①	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 Plug①	EBS-PTT
Remote Push-To-Test Station with Lock Off, Group B 3/4" Feed-Thru①	EBS-PTT-LO
Lock-Off for Integral Push-To-Test	G010502
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.



EBSHK1030



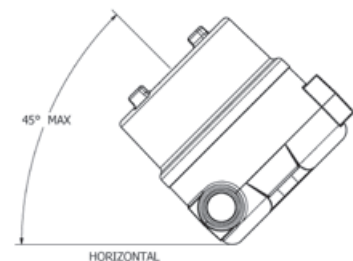
EBSHK1030-RFSL



EBSHK1030-RFSC



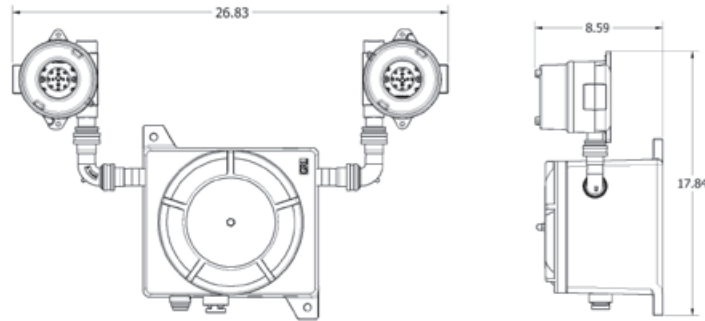
EBS-PTT



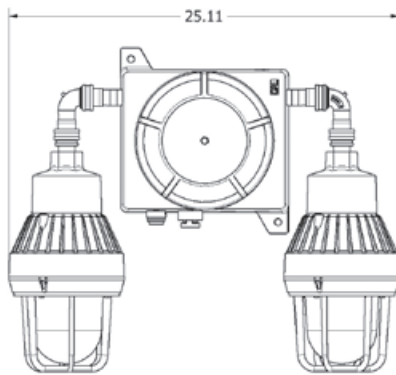
EBSHK Heads can be aimed up to 45° above horizontal – if flush on wall will require spacing out.



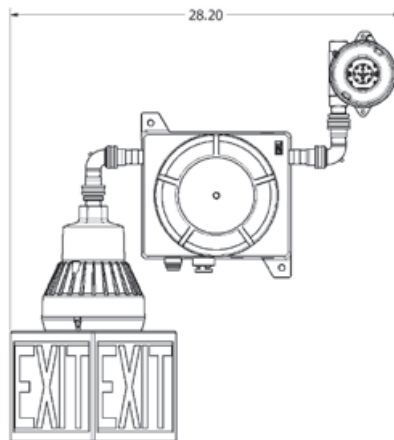
EMERGENCY BATTERY SYSTEM – DIMENSIONS & WEIGHTS



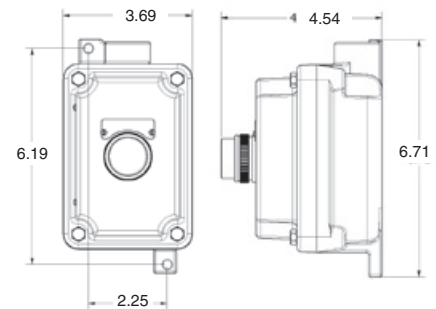
Dimensions - EBS with HK Heads



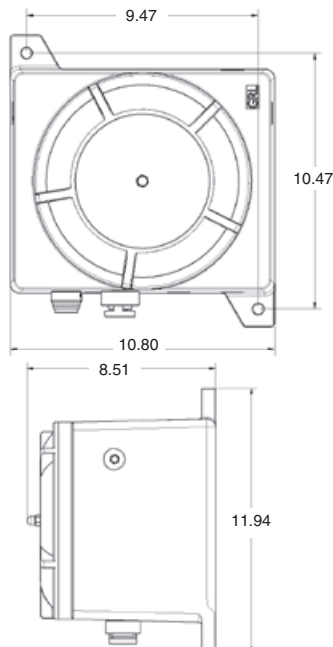
Dimensions - EBS with EL Heads



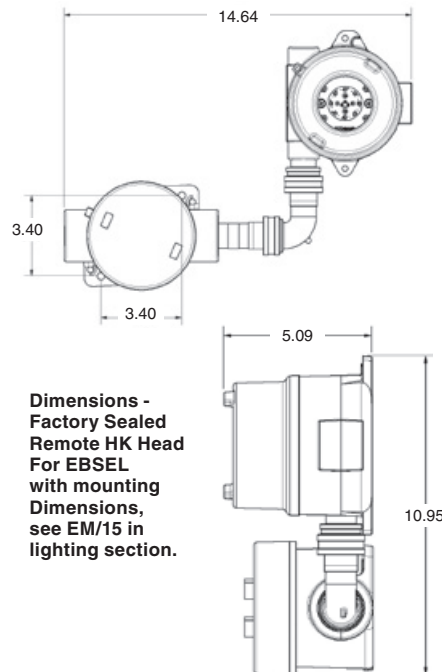
Dimensions - EBS with EL-EXIT & HK Heads



Dimensions - Remote Test Station



Dimensions - EBS Main Unit



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

WEIGHTS (SHIPPING) INDIVIDUAL AND COMBINATIONS [Ⓢ]	LBS.
EGS23DH Main Unit Only	36.6
EBSEL1030 Pendant Head Only w/ Fittings Set	12.3
EBSHK1030 Head Only w/ Fittings Set	5.0
EBSHK1030-RFSC (or RFSL)	11.0
EBS-PTT	3.0
EBS-AHFS Factory Sealed Fittings Set	0.6
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

[Ⓢ] EBSEL Heads ship separately



LED LIGHT HEAD LUMINAIRE



GR Box

LED Head Zones 0, 1, 2
Ex ia I Ma and Ex ia IIB T3 Ga
IP65
Ta = -20°C to +40°C
Certificate: IECEx TSA 15.00 28X

GR Zone 1, 2
Ex d IIB T5/T6 and Ex tDA21 T80°C or T90°C
IP66
Ta = -20°C to +60°C
Certificate: IECEx PTB 05.0029

Connectors Zone 1, 2
Ex dbe IIC and Ex tb IIIC Db T85
IP66
Ta = -40°C to +60°C
Certificate: IECEx BAS 06.0018X

FEATURES-SPECIFICATIONS

Applications

The intrinsically safe Type LLS2 LED luminaire is part of the Killark portable area lighting system that is designed to provide plant and area illumination in Group I and II harsh and hazardous areas. The LLS2 LED finds application on longwalls, around load centres and on machinery such as road headers, continuous miners and roof bolters for general area illumination.

The LLS2 LED luminaire uses high efficiency LED technology to provide both a compact low profile form factor and a long life maintenance free area illumination solution.

The luminaire is powered from a general-purpose intrinsically safe 12V power supply the Austdac AC36W installed in a GR enclosure. The AC36W is capable of powering up to 4 LLS2 LEDs. Up to 2 power supplies can be placed in a GR enclosure allowing for 8 LED's

The LLS2 LED luminaire is fitted with two power connectors which allow the LLS2 LED to be daisy chained.

The LLS2 LED can be mounted by the integral high strength magnets or may be bolted in place using the two external 12mm mounting holes. These two simple mounting alternatives and integral connector make the LLS2 LED particularly suited for use as longwall area lighting as the lighting system can be quickly removed during longwall relocations.

Compliances

- The LED luminaire type LLS2 is IECEx certified for use in Group I and II hazardous areas. The LLS2 IECEx certificate is IECEx TSA 15.0028X
- The LLS2 LED markings are Ex ia I Ma and Ex ia IIB T3 Ga.
- For Group II applications the user should refer to the User's Manual regarding potential electrostatic charging hazard.

Features and Standards

- High Intensity cool white
- High efficiency LED technology 650lm
- Low profile
- Magnetic or bolt mounting
- Intrinsically safe
- Long life
- Certified for Group I and II

Specifications

- Name – Luminaire LED
- Type – LLS2
- Mounting – M12 @ 340mm centres
- Size – 100(H)x360(W)x42(D)mm
3.93(H)x14.17(W)x1.65(D)
- Mass – 1100g
- Electrical connections – Integral connector
- Maximum cable length – 50m (164 feet)
- Ingress protection – IP65
- Operating temp range – -20°C to +40°C
-04°F to +104°F

Power Supply

- Operating Voltage – 10.0 - 12.6Vdc
- Current Consumption – 700mA max
- Ui – 12.6Vdc
- Ii – 3.3A
- Ci – 3.3uF
- Li – 0uH

Photometrics

- Luminance Flux – 650lm
- Beam angle – 90°
- Color temperature – 5000-8300°K



CATALOG NUMBER	DESCRIPTION
LLS002-01	LED Light Head Luminaire TYPE LLS2 - GROUP I
LLS002-02	LED Light Head Luminaire TYPE LLS2 - GROUP II
LLS002-C1-10	Cable LLS2 - 1 Connector – 10m
LLS002-C2-10	Cable LLS2 - 2 Connector – 10m
PSAC36W-12V-3.00A	Power Supply TYPE AC36W
GRISCB1	GR Enclosure / (1) Intrinsically-Safe Power Supply / InstrumEx Connectors
GRISCB2	GR Enclosure / (2) Intrinsically-Safe Power Supply / InstrumEx Connectors



LIGHTING

UTILITY LIGHT – INTRODUCTION



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 4^②

 Certified - File LR11713

V SERIES LED

FEATURES-SPECIFICATIONS

Introduction

Killark 'VSL' Series LED fixtures are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or 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 unit packed, order option CP
- VSL LED Housings can be retrofitted to existing V Series splice boxes; upgrade from CFL or incandescent
- Energy Savings – less than 13 Watts of Power; less than 16 Watts for VSL1630. Replaces 75W or higher incandescent
- Long Life – 60,500+ maintenance-free hours to 70% initial lumens
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000°K (CCT); 70 CRI

- Integral driver – maintains fixture's compact profile to fit in existing spaces
- Ambient suitability -40°C to 55°C
- Instant on – including after power interruption
- "World Voltage" 120-277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- 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 luminaires for use in hazardous locations
- Enclosed and gasketed
- NEMA 3, 4

Materials, Weights

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

Optic Selection Examples

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



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



UTILITY LIGHT – CATALOG LOGIC



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

Certified - File LR11713

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

V SERIES LED Catalog Number Logic

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

- Reflector**
 S – Standard Reflector (Pendant or Ceiling Use Only)^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 COMBINATIONS			
COLOR NUMBER	STANDARD GLOBE	TEMPERED GLOBE	POLYCARBONATE
AMBER	A	A	A
BLUE	B	B	—
RUBY	R	R	R
GREEN	G	—	G
PURPLE	P	—	—
BLUE-GREEN	BG	BG	—
WHITE	W	W	W



** Use tempered glass or poly globe for wet location applications.
^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.



LIGHTING

UTILITY LIGHT – COMPONENTS



VSL Body

**RETROFIT
FOR ENERGY
SAVINGS**

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 up-grade 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 FIXTURE 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.

VSL SPLICE BOXES				
CATALOG NUMBER	HUB SIZE	QTY.	LOGIC CODE	DESCRIPTION
VGA-1	1/2"	1	A1	Pendant mount
VGA-2	3/4"	1	A2	
VGH-1	1/2"	1	H1	Ceiling mount
VGH-2	3/4"	1	H2	
VGC-1	1/2"	2	C1	Ceiling mount
VGC-2	3/4"	2	C2	
VGX-1	1/2"	4	X1	Ceiling mount
VGX-2	3/4"	4	X2	
VXA-1	1/2"	5	D1	Ceiling mount, deep box
VXA-2	3/4"	5	D2	
VBC-1*	1/2"	4	F1	Ceiling mount, with 3 close-up plugs (requires VBA Adapter) or wall mount with VB elbow
VBC-2*	3/4"	4	F2	
VXAB	–	–	–	Blank close-up plate (less gasket)

*Volume cu. in. is 18

VSL Adapters



VBA



VFPS

VSL ADAPTER MOUNTING PLATES	
CATALOG NUMBER	DESCRIPTION
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



VB



VFL



VD

VSL MOUNTING 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



UTILITY LIGHT – COMPONENTS, RATINGS & WEIGHTS

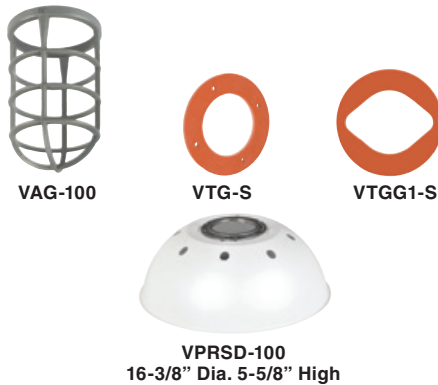
VSL Globes



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	AMG-100	A	VAMGP-100	A	VPLCG-100A	A
Blue	VBG-100	B	VBGP-100	B	-	-
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.

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



VSL Components

VSL COMPONENT PARTS AND ACCESSORIES	
CATALOG NUMBER	DESCRIPTION
VAG-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.

Typical Weights (lbs.) w/Standard Globe and Guard – VSL Series			
Pendant 7.03	Ceiling 7.51	Wall 8.09	Stanchion 7.61

VSL Thermal Ratings

VSL THERMAL PERFORMANCE DATA INCLUDING VPRSD-100 REFLECTOR								
CATALOG NUMBER	AMBIENT	C1D2		C2D2		SUPPLY WIRE	L70	
		GLASS GLOBE	POLY GLOBE	GLASS GLOBE	POLY GLOBE		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

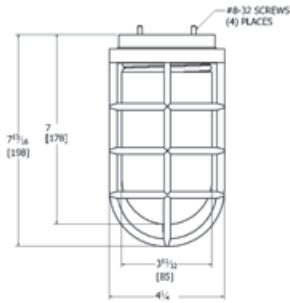
VSL LED BODY WITH DRIVERS/JAND LEDS – ELECTRICAL RATINGS					
CATALOG NUMBER	VOLTAGE 50/60HZ	WATTS	AMPS 120/277	LUMENS	WEIGHT LBS.
VSL1330	120-277VAC	12.42	.108/047	1300	5.0
VSL1630	120-277VAC	15.64	.156/067	1625	5.0

DELIVERED LUMENS			
WATTS	W/ GLOBE VCG-100	W/ GLOBE VPLCG-100	W/ GLOBE VWG100
13W	1211	1104	905
16W	1328	1308	1072

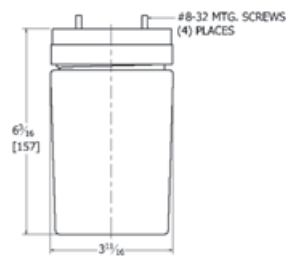
LIGHTING



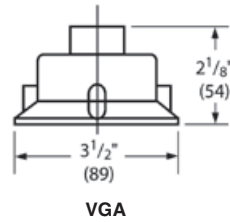
UTILITY LIGHT – DIMENSIONS



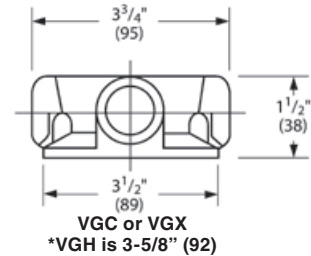
VSL Body w/Globe & Guard, No Splice Box



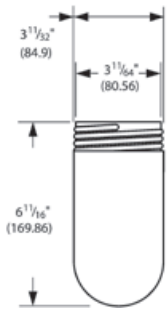
VSL Body w/Polycarbonate Globe, No Splice Box



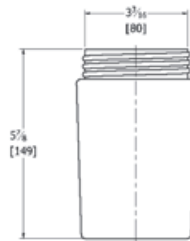
VGA



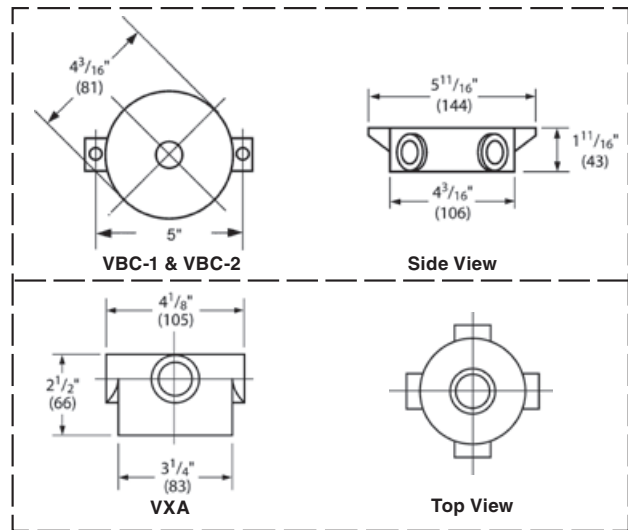
VGC or VGX
*VGH is 3-5/8" (92)



Glass Globe

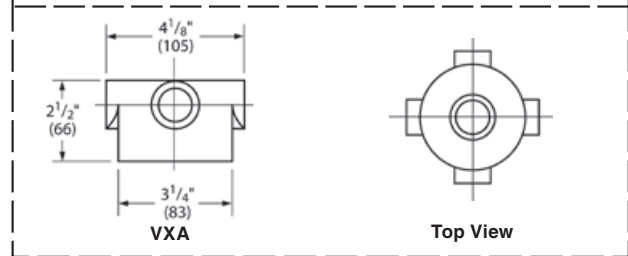


Polycarbonate Globe



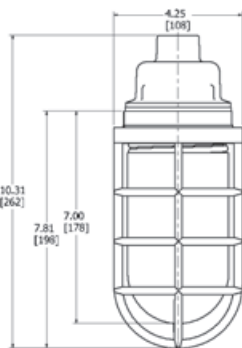
VBC-1 & VBC-2

Side View

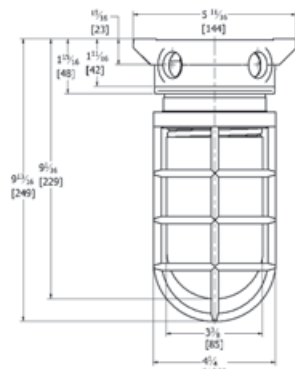


VXA

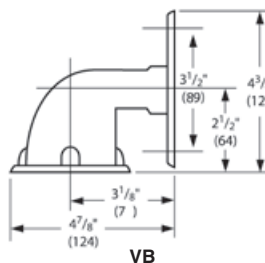
Top View



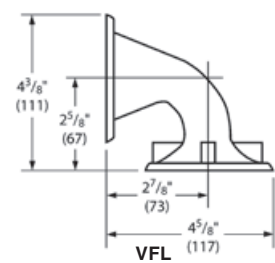
VSL Pendant Fixture w/Globe & Guard



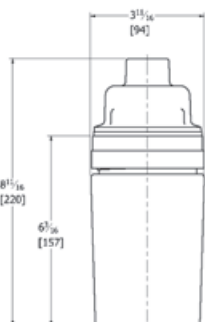
VSL Ceiling Fixture w/Globe & Guard



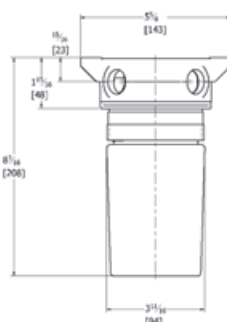
VB



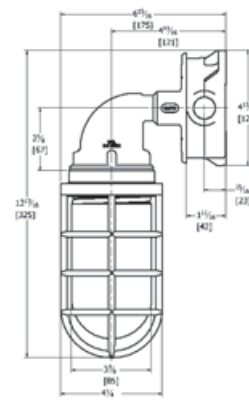
VFL



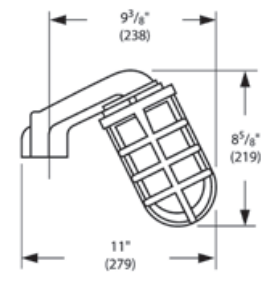
VSL Pendant Fixture w/Polycarbonate Globe



VSL Ceiling Fixture w/Polycarbonate Globe



VSL Wall Mounted Fixture w/Globe & Guard



VSL Stanchion Fixture w/Globe & Guard



CLASS II UTILITY LIGHT – INTRODUCTION & ORDERING INFORMATION



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

Certified - File LR11713

DV SERIES LED

FEATURES-SPECIFICATIONS Introduction

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

LED Luminaire Features and Standards

- Compact in Size with Traditional Industrial Appearance and Suitability
- DVL LED Housings can be retrofitted to existing DV Series splice boxes; upgrade from incandescent housing 100 Series components
- Long Life – 60,500+ maintenance-free hours to 70% initial lumens
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000°K (CCT); 70 CRI
- Integral driver – maintains fixture's compact profile to fit in existing spaces
- Instant on – including after power interruption
- "World Voltage" 120-277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant

Compliances

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

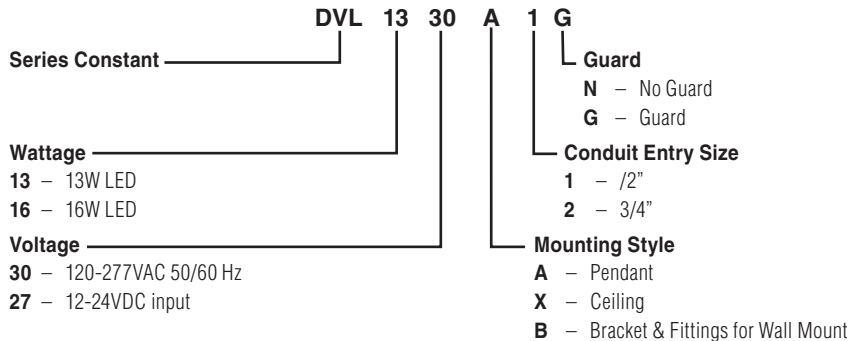
Materials, Weights

- 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

DVL 100 SERIES ①						
MODEL	LAMP	HUB	PENDANT	CEILING	WALL	DELIVERED LUMENS
Type 100 13Watt	Included	1/2"	DVL1330A1G	DVL1330X1G	DVL1330B1G	1144
		3/4"	DVL1330A2G	DVL1330X2G	DVL1330B2G	
Type 100 16Watt	Included	1/2"	DVL1630A1G	DVL1630X1G	DVL1630B1G	1355
		3/4"	DVL1630A2G	DVL1630X2G	DVL1630B2G	

① Fixtures 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
		DVB2	3/4" Wall Mount
GLOBE		GUARD	
DCGE-10		DAG-100	

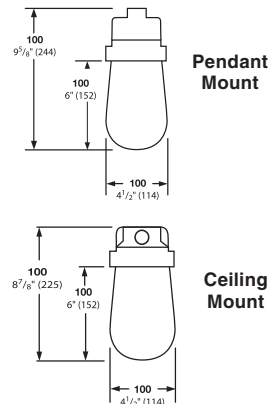
DVL THERMAL RATINGS					
CAT. NO.	AMBIENT	WATTS	C2D1 EFG	C1D2 ABCD	SUPPLY WIRE
DVL1330	40°C	13	T3B	T6	90°C
DVL1630	40°C	16	T3B	T6	90°C
DVL1330	55°C	13	-	T5	90°C
DVL1630	55°C	16	-	T5	90°C

DVL Electrical and L70 Ratings

Same as VSL Series - See page L55

Dimensions

As 100 Series incandescent



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



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Hubbell Electrical Systems

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