

Pauluhn 746D2

hazardous area spot lights

Cl. I, Div. 2, Groups A, B, C, D
Cl. I, Zone 2, Groups IIA, IIB, IIB + H₂, IIC
Type 4X
Conforms to IP66

5L

Applications:

- Marine and watertight requirements
- High vibration environments
- Oil and gas exploration and production
- Surface mining^A

Features:

- Unique lamp suspension system design absorbs vibration to extend lamp life up to 50% longer than competitive brands
- High temperature silicone gasket provides a watertight seal
- Adjustable mounting allows 360° horizontal rotation, vertical positioning down 45° and up 90°; 60° up with handle option
- Medium flood with optional narrow or wide beam pattern (lamp included)
- Field replaceable lens and gasket
- Protective guard available

Certifications and compliances:

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2, Groups IIA, IIB, IIB + H₂, IIC
- UL844 – Hazardous Locations
- UL1598A – Luminaires for Marine Vessels
- Type 4X
- Conforms to IP66
- Marine Outside Type Saltwater
- ABS

Standard materials and finishes:

- Housing – cast copper-free aluminum with an electrostatically applied white polyester powder coat finish or cast marine brass (see listings)
- Mounting base – cast copper-free aluminum with an electrostatically applied black polyester powder coat finish or cast marine brass (see listings)
- Lens – clear heat-resistant glass
- Hardware – stainless steel
- Gasket – one-piece silicone
- Optional guard – stainless steel
- Lamp holder – porcelain



Lamp suspension system



Aluminum



Brass

Technical specifications:

- Entries – one 1/2" NPT (standard); 3/4" NPT (optional)
- Lamp type – 300 watt medium floodlight PAR56 or 500 watt quartz halogen (lamp provided); narrow spot or wide beam lamps (optional)
- Lamp holder – mogul end prong; low voltage lamps wired direct
- Voltage – rated for operation on 120V; 12V and 28V (optional)
- Terminal block – 2-pole

Mounting option:

- Surface mount

Photometrics:

- Refer to www.eaton.com (under the Resources tab of each product family) for specific photometric IES files

^AApplicable for aluminum models only.

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Options:

Description	Suffix
• Guard	GRD
• Narrow spot light type.....	NSP^B
• Wide floodlight type	WFL^B
• Handle and clamp	HDL
• 12V medium floodlight type (300W).....	12
• 28V medium floodlight type (450W).....	28^C

Accessories (ordered separately):

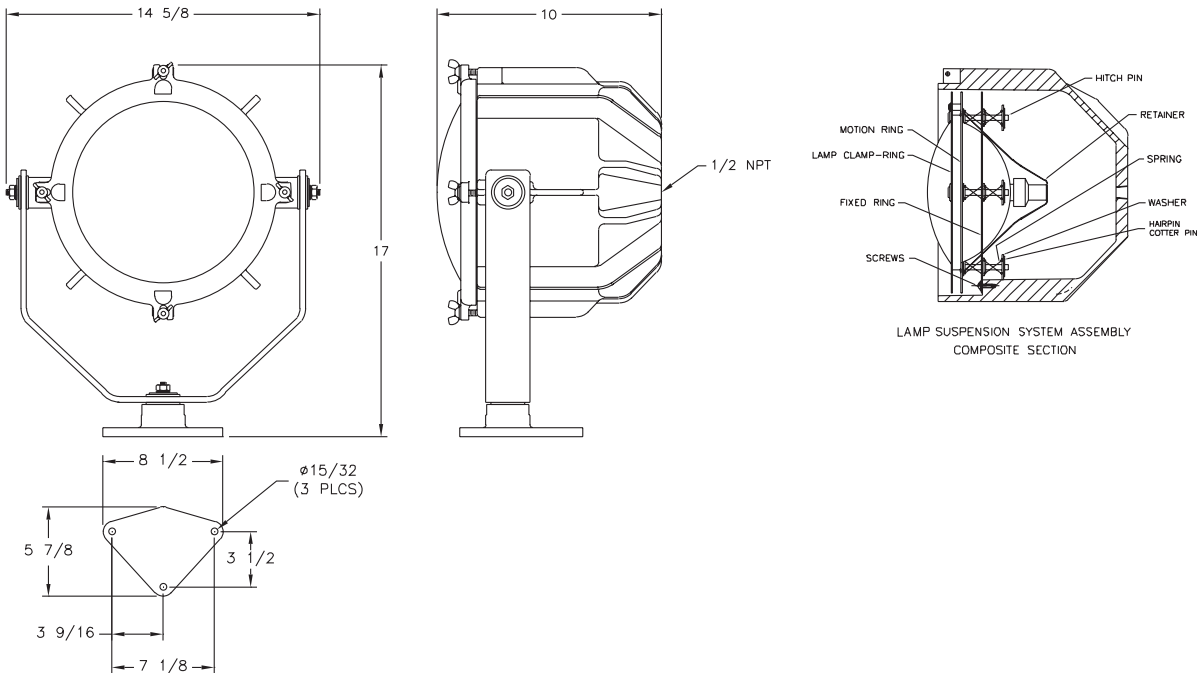
Description	Cat. #
• Replacement lamp holder.....	INX4014
• Replacement guard	INX1041
• Replacement frame gasket	GKT6095
• Replacement lens.....	INX2143
• Replacement lens and frame assembly, aluminum	INX9037A
• Replacement lens and frame assembly, brass	INX9037B
• Aluminum standard mount.....	INX7048A
• Brass standard mount	INX7048B
• Terminal block	FX3001
• Stainless steel swing bolt/nut kit.....	INX8099

Four per package

Ordering information:

Cat. #	Description	Material	Weight (lbs.)	ANSI lamp type	T-code	Ambient temperature °C	Supply wire °C
746A	300W incandescent	Aluminum	22.0	PAR56/MFL	T1	40	110
746AQ	500W quartz halogen	Aluminum	22.0	PAR56Q/ML	T1	40	110
746B	300W incandescent	Brass	56.0	PAR56/MFL	T1	40	110
746BQ	500W quartz halogen	Brass	56.0	PAR56Q/ML	T1	40	110

Dimensions (in inches):



^B For 120V only.
^C 10 hour lamp life.

Champ FMVA LED floodlights

3,000 to 7,000 lumens

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

Marine & Wet Locations
Type 4X; IP66

5L

Applications:

- For general area illumination of locations with mounting heights from 9-15 feet
- Locations requiring continuous and consistent light levels in extreme ambient temperatures
- Extremely corrosive, wet, dusty, hot and/or cold conditions
- IP66, Type 4X, marine, wet locations and hose down environments
- Classified and hazardous locations
- Oil and gas refineries, drilling rigs, petrochemical facilities, food and beverage facilities, platforms, loading docks, tunnels, outdoor wall and stanchion mounted general area lighting

Certifications and compliances:

NEC/CEC:

- Class I, Division 2, Groups A, B, C, D
- Class II, Division 1, Groups E, F, G
- Class III & Simultaneous Presence
- Marine and wet locations, Type 4X, IP66
- ABS

UL standards:

- UL844
- UL1598
- UL1598A
- UL8750

CSA standard:

- C22.2 No. 137

FCC part 15/ICES-005 ver. 5:

- CAN ICES-005 (A)/NMB-005 (A)

Standard materials:

- Lamp housing and adapter – die cast aluminum with Corro-free epoxy powder coat
- Lens – heat- and impact-resistant glass (standard); diffused glass, clear polycarbonate, diffused polycarbonate (optional)
- Gaskets – silicone
- External hardware – stainless steel
- Factory sealed, no external seals required

Electrical ratings:

Model	Weight lbs. (kg.)	Nominal lumens	Efficacy	Wattage	Voltage	Amps	Power factor	THD	Surge protection
FMVA-3-UNV1	14.70 (6.67)	3,400	111 lm/W	30.7	120-277 VAC, 50/60 Hz; 125-250 VDC	0.26	0.90	≤ 20%	6kV
FMVA-5-UNV1	14.70 (6.67)	5,200	116 lm/W	44.9	120-277 VAC, 50/60 Hz; 125-250 VDC	0.37	0.90	≤ 20%	6kV
FMVA-7-UNV1	14.70 (6.67)	6,800	115 lm/W	59.1	120-277 VAC, 50/60 Hz; 125-250 VDC	0.50	0.90	≤ 20%	6kV
FMVA-3-UNV3	14.70 (6.67)	3,400	111 lm/W	30.3	347-480 VAC, 50/60 Hz	0.09	0.90	≤ 20%	6kV
FMVA-5-UNV3	14.70 (6.67)	5,200	116 lm/W	43.7	347-480 VAC, 50/60 Hz	0.13	0.90	≤ 20%	6kV
FMVA-7-UNV3	14.70 (6.67)	6,800	115 lm/W	56.2	347-480 VAC, 50/60 Hz	0.16	0.90	≤ 20%	6kV



LED system:

- High intensity discrete power emitters
- Cool white (5000K, 70 CRI) standard; warm white (3000K, 80 CRI) or neutral white (4000K, 70 CRI) (optional)
- NEMA 6x6 optical pattern
- Dimmable driver 0-10V

Photometrics:

- Refer to www.eaton.com (under the Resources tab of each product family) for specific photometric IES files

Champ FMVA LED floodlights

3,000 to 7,000 lumens

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

Marine & Wet Locations
Type 4X; IP66

5L

Design features:

Our Champ LED floodlight is a field-proven design that helps ensure safety, reliability and performance in harsh and hazardous areas. The new form factor is engineered to deliver more operational value and better total cost of ownership.

INSTALLATION EASE

A Easy access

- Removable covers for LED engine and driver compartments enable faster installation, access to wiring and field maintenance

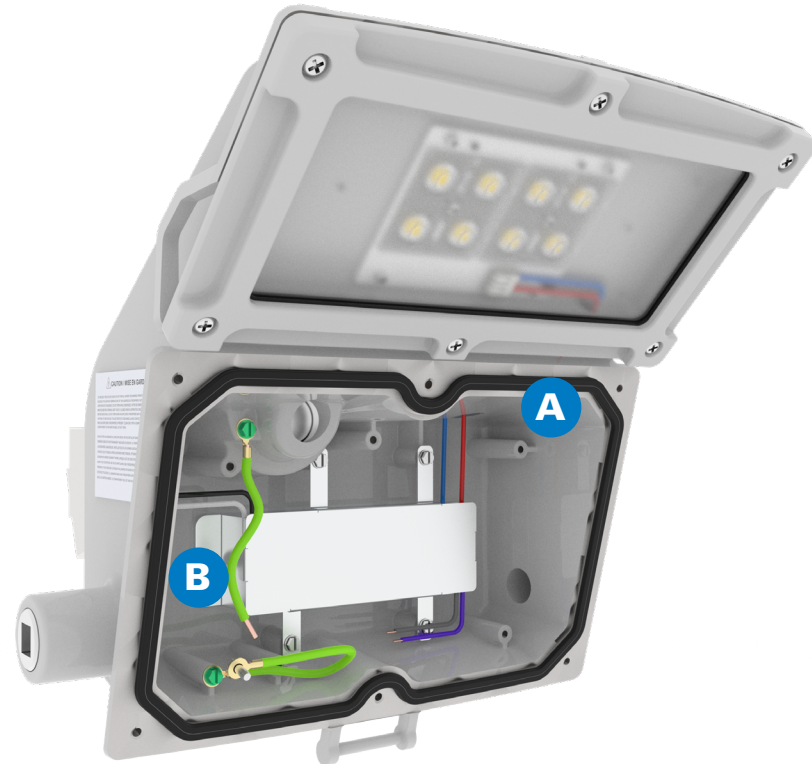
B Lever lock connectors and terminal blocks

- Plug and play wiring simplifies and speeds installations

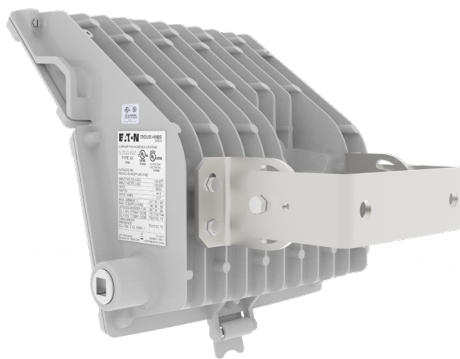


C Versatile mounting options

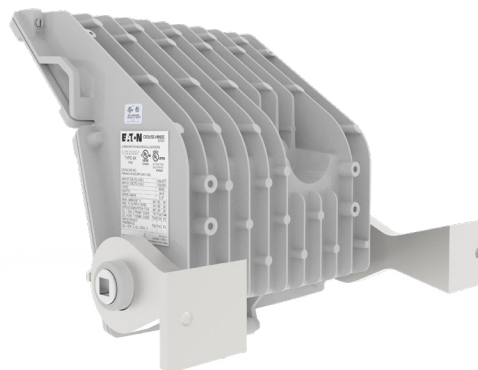
- Standard yoke mount and optional wall and hub mounts help ensure that the fixtures are installed in the correct location to properly light your facility



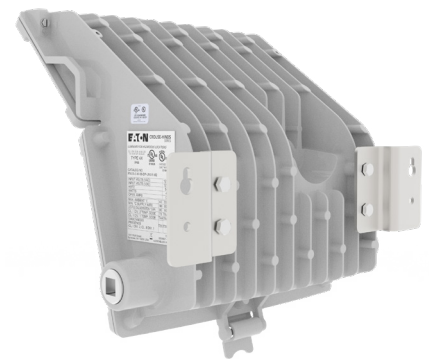
C



Yoke mount
(standard)



Hub mount



Wall mount

Champ FMVA LED floodlights

3,000 to 7,000 lumens

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

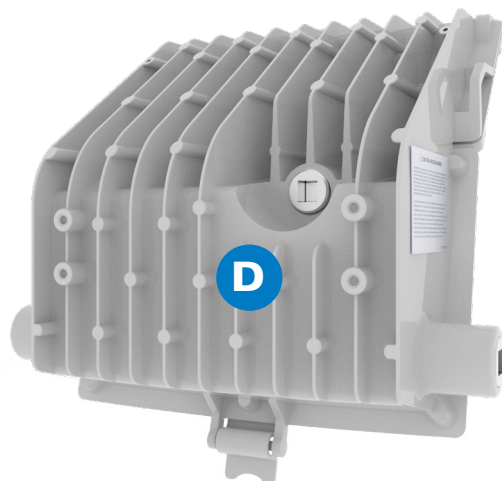
Marine & Wet Locations
Type 4X; IP66

5L

LONG-LIFE RELIABILITY

D Thermal management

- Heat fins help ensure proper air flow and facilitate dust shedding for effective heat dissipation and thermal management of LED engine



E Performance in extreme environments

- Operating ambient: -40°C to 65°C
- Type 4X, IP66
- 6kV surge protection
- Corrosion-resistant aluminum housing with Corro-free epoxy powder coating
- Vibration tested in accordance with Section 33 of UL844
- Impact tested in accordance with Section 68 of UL844



LIGHT PERFORMANCE & QUALITY

F Custom optics & colors

- Directs light where you need it, helping eliminate gaps and dark spots
- Can potentially reduce the number of light fixtures required in your application
- 3000K (warm), 4000K (neutral) and 5000K (cool) color options available



NEMA 6x6

Large circular distribution pattern for indoor and outdoor area lighting



5000K – cool
Crisp, bright white with a blue hue



3000K – warm
Warm white with a yellow hue

Ordering information:

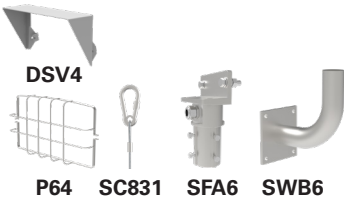
Part number example
FMVA-3-W-T-66-DP-GV-UNV1-PC2-M2

FMVA - 3 - W - T - 66 - DP - GV - UNV1 - PC2 - M2

Light source / intensity	Optics	Voltage	Sensor
3L3,400 nominal lumens	666x6 beam spread	UNV1120-277 VAC, 50/60 Hz; 125-250 VDC	BLANKNo sensor included
5L5,200 nominal lumens		UNV3347-480 VAC, 50/60 Hz	PC1ⓐⓑ120V photocell
7L6,800 nominal lumens			PC2ⓐⓑ208-277V photocell
Color temperature	Lens material	Paint	
BLANK5000K, 70 CRI (cool white)	BLANKClear glass	BLANKGray	
Nⓐ4000K, 70 CRI (neutral white)	DGDiffused glass		
W3000K, 80 CRI (warm white)	PCPolycarbonate		
	DPDiffused polycarbonate		
Mounting	Guard and visor		
BLANKYoke mount	BLANKNone		
HHub mount	GBolt-on wire guard		
TWall mount	VVisor		
	GV Bolt-on wire guard & visor		

Accessories (ordered separately):

Description	Cat. #
• Visor.....	DSV4ⓐ
• Bolt-on wire guard.....	P64
• Safety cable.....	SC831
• Floodlight slipfitter.....	SFA6
• Slipfitter wall mount adapter.....	SWB6



Replacement driver kits (ordered separately)

FMVA-3-5-7-UNV1-M2-DRIVER KIT	UNV1 M2 replacement driver kit for FMVA-3, -5 and -7
FMVA-3-5-7-UNV3-M2-DRIVER KIT	UNV3 M2 replacement driver kit for FMVA-3, -5 and -7
FMVA-3-5-7-UNV1-PC-M2-DRIVER KIT	For use in models with photocell; UNV1 M2 replacement driver kit for FMVA-3, -5 and -7

ⓐ Consult customer service for lead time.
ⓑ For use with UNV1 models only.
ⓒ For use in Class I environments only.

Champ FMVA LED floodlights

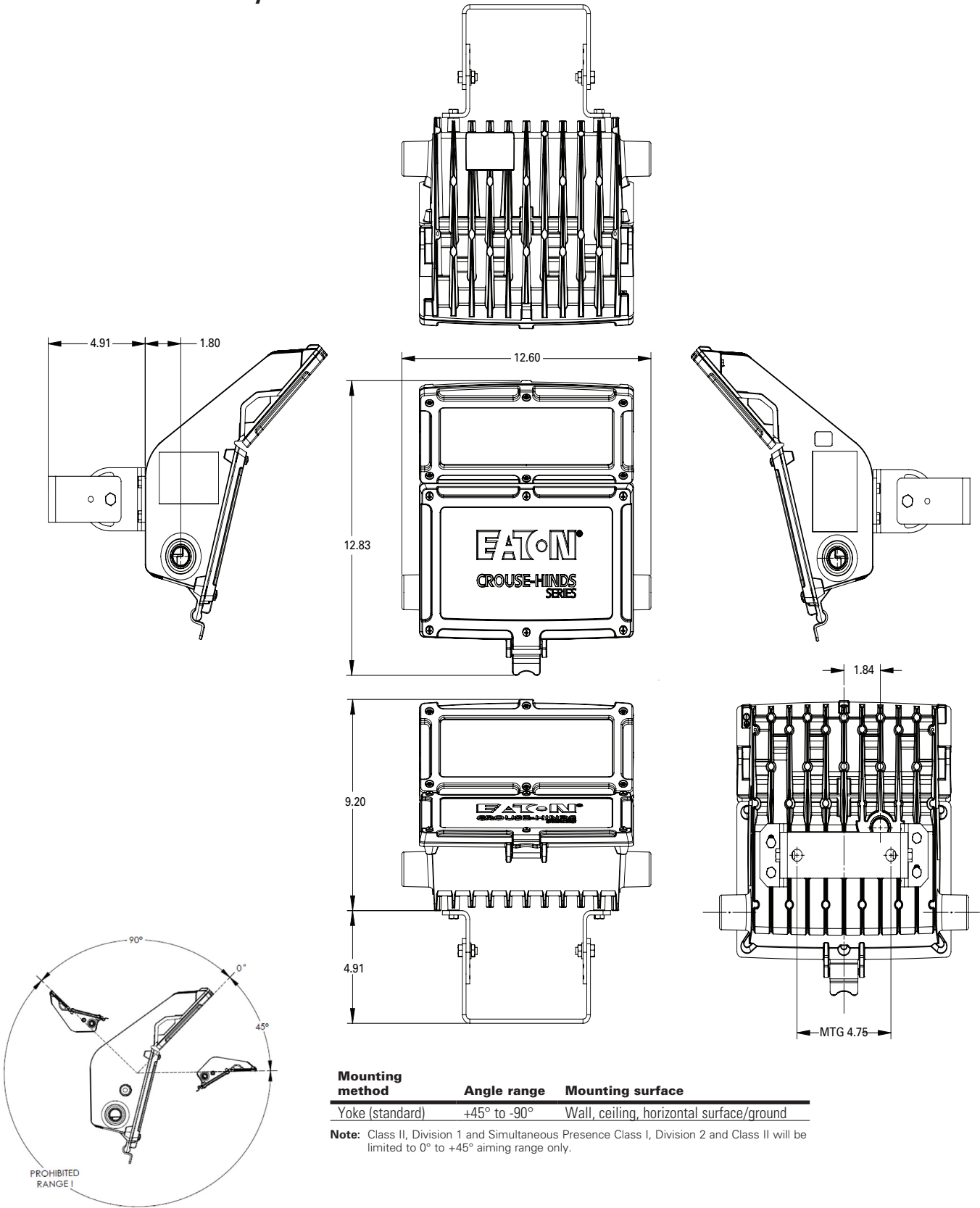
3,000 to 7,000 lumens

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

Marine & Wet Locations
Type 4X; IP66

5L

Dimensions – standard yoke mount:



Mounting method	Angle range	Mounting surface
Yoke (standard)	+45° to -90°	Wall, ceiling, horizontal surface/ground

Note: Class II, Division 1 and Simultaneous Presence Class I, Division 2 and Class II will be limited to 0° to +45° aiming range only.

Champ FMVA LED floodlights

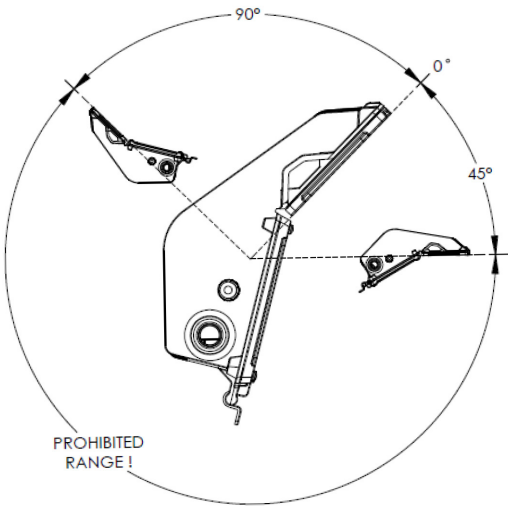
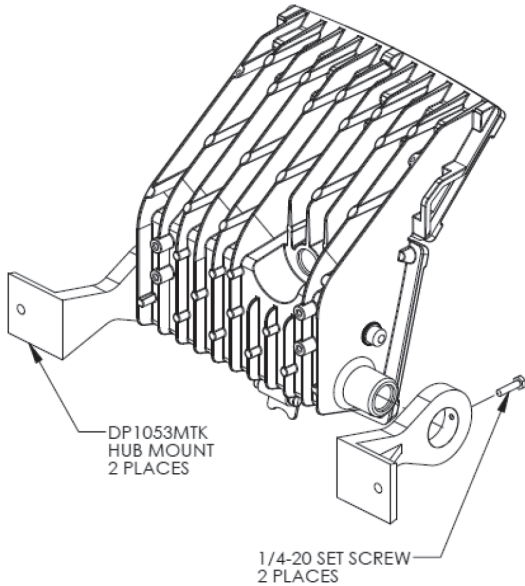
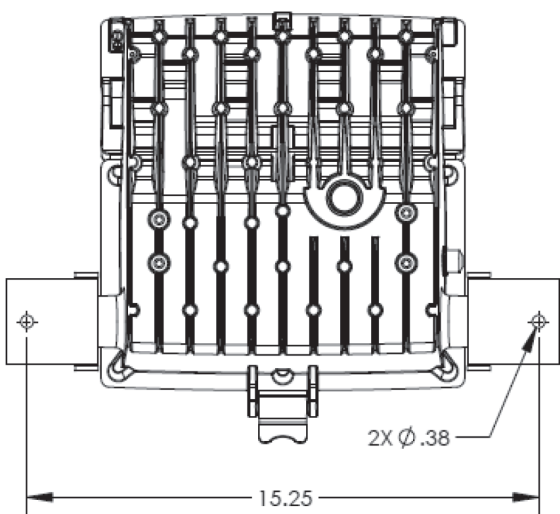
3,000 to 7,000 lumens

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

Marine & Wet Locations
Type 4X; IP66

5L

Dimensions – hub mount (optional):



Mounting method	Angle range	Mounting surface
Hub	+45° to -90°	Wall, ceiling, horizontal surface/ground

Note: Class II, Division 1 and Simultaneous Presence Class I, Division 2 and Class II will be limited to 0° to +45° aiming range only.

Champ FMVA LED
floodlights

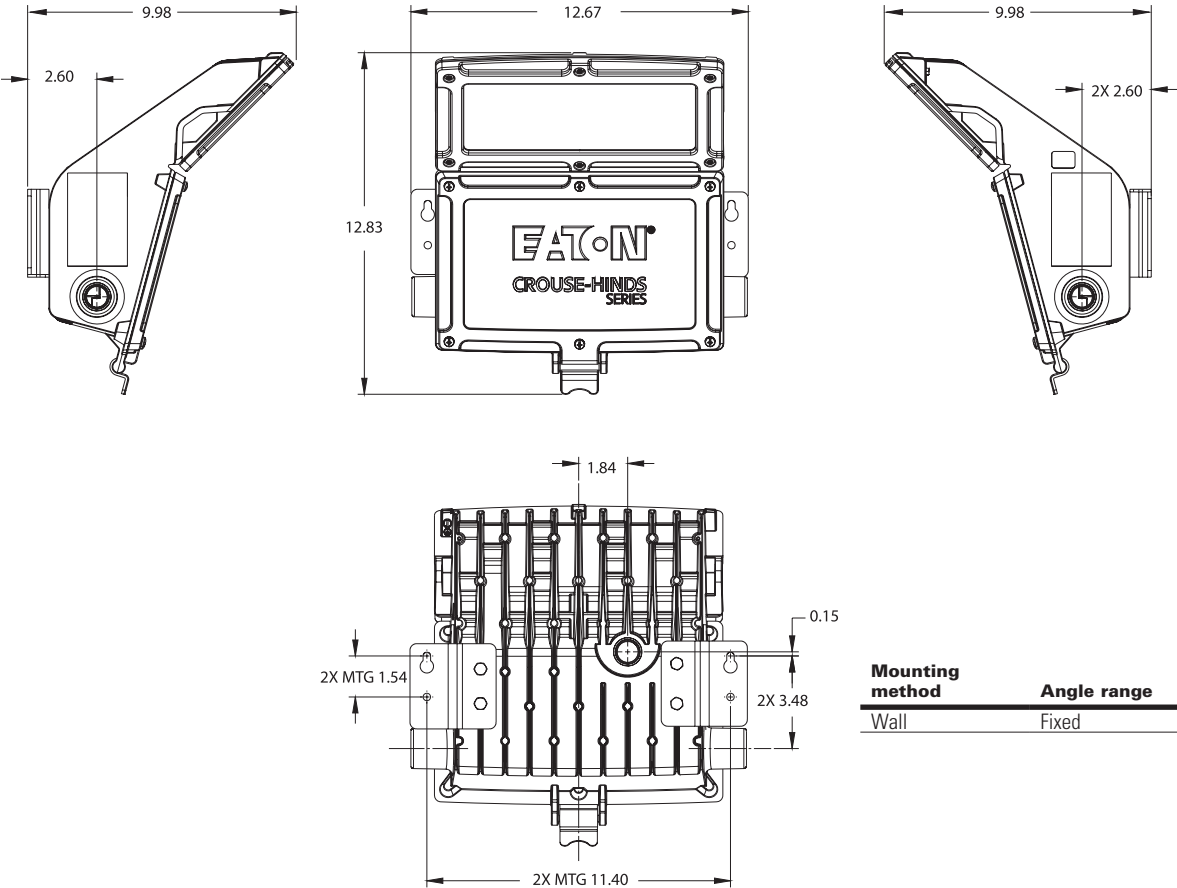
3,000 to 7,000 lumens

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

Marine & Wet Locations
Type 4X; IP66

5L

Dimensions – wall mount (optional):



Mounting method	Angle range	Mounting surface
Wall	Fixed	Wall

Champ FMVA LED floodlights

9,000 to 15,000 lumens

Cl. I, Div. 2, Groups A, B, C, D
Cl. II, Div. 2, Groups F, G

UL Listed
Type 4X; IP67

5L

Our Champ® FMVA LED floodlight is a field-proven design that helps ensure safety, reliability and performance in harsh and hazardous rated areas. Champ products are engineered to deliver more operational value and better total cost of ownership.

Applications:

- For general area illumination of locations with mounting heights from 15 to 30 feet
- Locations requiring continuous and consistent light levels where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- IP67, Type 4X, marine, wet locations and hose down environments
- Oil and gas refineries, drilling rigs, petrochemical facilities, food and beverage facilities, platforms, loading docks, tunnels

Standard materials:

- Lamp housing – die cast aluminum with Corro-free™ epoxy powder coat
- Lens – heat- and impact-resistant glass (standard); diffused glass or polycarbonate (optional)
- Gaskets – silicone
- External hardware – 316 stainless steel
- Factory sealed, no external seals required

LED system:

- High intensity discrete power emitters
- Cool white (5000K, 70 CRI) (standard); deep warm (2200K, 70 CRI), warm white (3000K, 80 CRI) or neutral white (4000K, 80 CRI) (optional)
- Dimmable driver, 0-10V
- NEMA 7x6 or 4x4 optical patterns available
- Rated life of 60,000 hours continuous operation at 55°C operating ambient temperature
- 5 year fixture warranty

Photometrics:

- Refer to www.eaton.com (under the Resources tab of each product family) for specific photometric IES files

Electrical ratings:

Model	Weight Lbs. (Kg.)	Nominal lumens	Efficacy ^B	Wattage	Voltage	Amps	Power factor	THD	Surge protection
FMVA-9-UNV1	24.92 (11.30)	9,261	162 lm/W	58.12	100-277 VAC, 50/60 Hz	0.59 - 0.22	≥ 0.90	≤ 20%	6kV
FMVA-11-UNV1	24.92 (11.30)	11,602	158 lm/W	77.35	100-277 VAC, 50/60 Hz	0.79 - 0.28	≥ 0.90	≤ 20%	6kV
FMVA-13-UNV1	24.92 (11.30)	13,581	154 lm/W	89.60	100-277 VAC, 50/60 Hz	0.91 - 0.32	≥ 0.90	≤ 20%	6kV
FMVA-15-UNV1	24.92 (11.30)	15,845	154 lm/W	106.78	100-277 VAC, 50/60 Hz	1.07 - 0.38	≥ 0.90	≤ 20%	6kV
FMVA-9-UNV3	24.95 (11.32)	9,261	162 lm/W	58.34	347-480 VAC, 50/60 Hz	0.17 - 0.12	≥ 0.90	≤ 20%	6kV
FMVA-11-UNV3	24.95 (11.32)	11,602	158 lm/W	75.01	347-480 VAC, 50/60 Hz	0.22 - 0.16	≥ 0.90	≤ 20%	6kV
FMVA-13-UNV3	24.95 (11.32)	13,581	154 lm/W	90.38	347-480 VAC, 50/60 Hz	0.26 - 0.19	≥ 0.90	≤ 20%	6kV
FMVA-15-UNV3	24.95 (11.32)	15,845	154 lm/W	105.38	347-480 VAC, 50/60 Hz	0.30 - 0.22	≥ 0.90	≤ 20%	6kV

^ANot applicable for UNV3 models.

^BConsult IES files for exact performance data.

Certifications and compliances:

NEC/CEC:

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2, IIC
- Class II, Division 2, Groups F, G
- Class II, Zone 22
- Marine and wet locations, Type 4X, IP66/67
- Class I, Zone 2, AEx ec IIC T4 Gc, Class I, Zone 2, Ex ec IIC T4 Gc X Tamb -40°C to +40°C^A, +55°C^A, +65°C^A
- Class II, Zone 21, AEx tb IIC T85°C Db; Class II, Zone 21, Ex tb IIC T85°C Db X Tamb -40°C to +40°C^A, +55°C^A, +65°C^A

IECEX/ATEX^A:

- IECEX UL24.0069X
- UL24 ATEX 3277X
- UL24 ATEX 3278X
- II 3 G Ex ec IIC T4 Gc Tamb -40°C to +40°C, +55°C, +65°C
- Ex ec IIC T4 Gc Tamb -40°C to +40°C, +55°C, +65°C
- II 2 D Ex tb IIC T85°C Db Tamb -40°C to +40°C, +55°C, +65°C
- Ex tb IIC T85°C Db Tamb -40°C to +40°C, +55°C, +65°C
-  0539
- IP66/67

UL standards:

- UL844 – Hazardous (Classified); UL1598 – Luminaires; UL1598A – Marine; UL8750



IEC standards^A:

- IEC 60079-0, Edition 7.0 (2017-12)
- IEC 60079-7, Edition 5.1 (2017-08)
- IEC 60079-31, Edition 2.0 (2013-11)
- EN IEC 60079-0:2018
- EN IEC 60079-7:2015/A1:2018
- EN 60079-31:2014
- UL 60079-0, 7th edition
- UL 60079-7, 5th edition
- UL 60079-31, 2nd edition
- CSA C22.2 No. 60079-0:19, 4th edition
- CSA C22.2 No. 60079-7:16, 2nd edition
- CSA C22.2 No. 60079-31:15, 2nd edition
- IEC 60598-1:2008/EN60598-1:2008
- IEC 60598-2:2008/EN60598-2:2008

CSA standards:

- CSA C22.2 No. 137-M1981 – The Standard for Electric Luminaires for Use in Hazardous Locations
- CSA C22.2 No. 250 – The Standard for Luminaires

FCC:

- FCC Part 15 / ICES-005 Ver. 5 CAN ICES-005 (A) / NMB-005 (A)



Champ FMVA LED floodlights

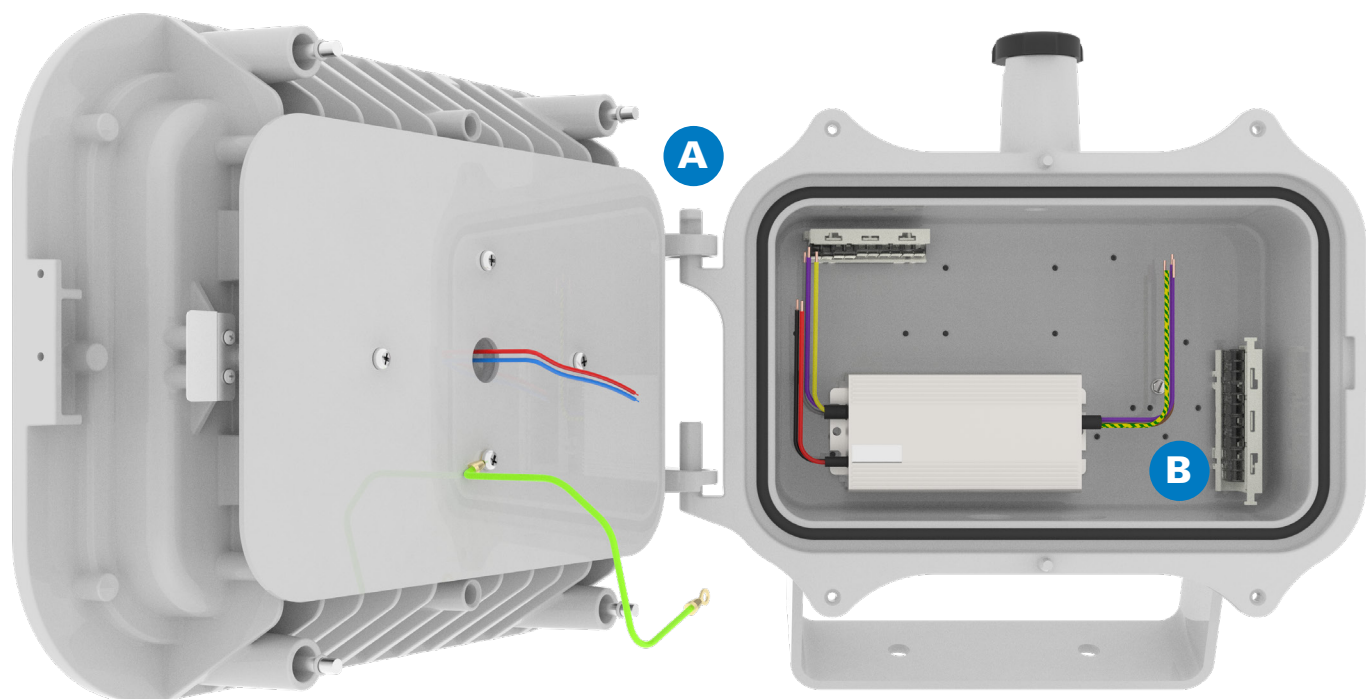
9,000 to 15,000 lumens

Cl. I, Div. 2, Groups A, B, C, D
Cl. II, Div. 2, Groups F, G

UL Listed
Type 4X; IP67

5L

INSTALLATION EASE

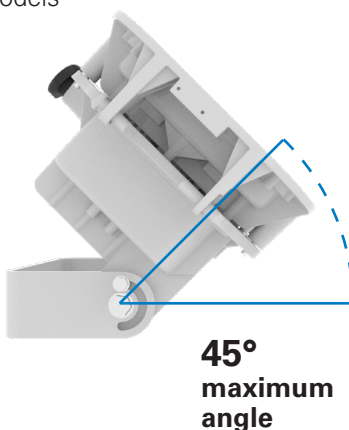
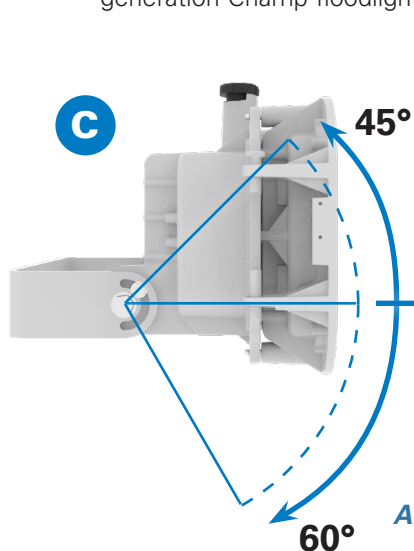


A Lightweight & easy access

- Driver and LED engine are field replaceable for extended life even beyond the warranty
- Removable cover for LED engine and hinged driver compartment enables faster installation, access to wiring and field maintenance
- 22% weight reduction from previous generation Champ floodlight models

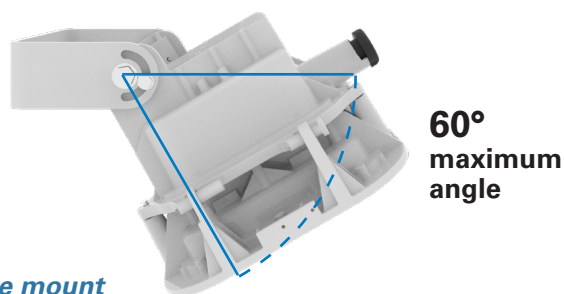
B Now supports up to 10 AWG wire for easier, less costly retrofits!

- Customers with 10 AWG wire already running through their facility from older, higher power HID fixtures can reuse the same wiring
- Plug and play wiring helps speed installation



C Versatile mounting options

- Yoke mount and accessories help ensure the fixtures are installed in the correct location to properly light your facility



All units come standard with a yoke mount

Champ FMVA LED floodlights

9,000 to 15,000 lumens

Cl. I, Div. 2, Groups A, B, C, D
Cl. II, Div. 2, Groups F, G

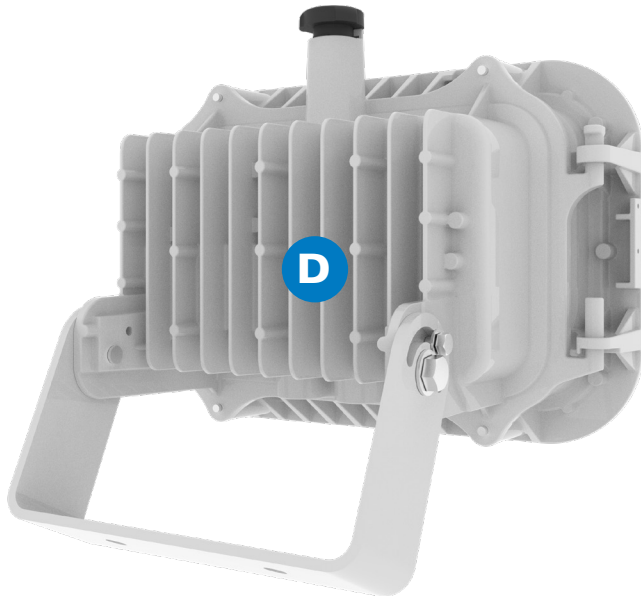
UL Listed
Type 4X; IP67

5L

RELIABLE PERFORMANCE

D Thermal management

- Heat fins help ensure proper air flow and facilitate dust shedding for effective heat dissipation and thermal management of LED engine and driver



E Performance in extreme environments

- Operating ambient: -40°C to 65°C
- Type 4X, IP67
- 6kV surge protection
- Corrosion-resistant aluminum housing with Corro-free epoxy powder coating
- Vibration tested in accordance with Section 33 of UL844
- Impact tested in accordance with IEC/EN/UL/CSA 60079-0 Section 26.4.2



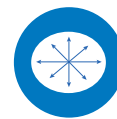
OPTIMIZED LIGHT & QUALITY

F Custom optics & colors

- Directs light where you need it, helping eliminate gaps and dark spots
- Can potentially reduce the number of light fixtures required in your application
- 2200K (deep warm), 3000K (warm), 4000K (neutral) and 5000K (cool) color options available



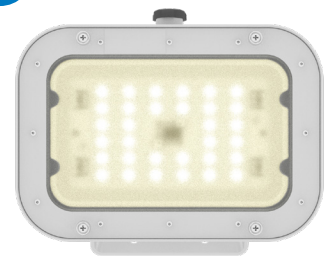
NEMA 4x4
Narrow uniform pattern for use at larger distances



NEMA 7x6
Wide flood distribution provides a large and uniform light pattern



5000K (cool)
Crisp, bright white with a blue hue



3000K (warm)
Soft, warm white with a yellow hue

G Multiple lens options

- Clear glass lens (standard)
- Diffused glass and clear polycarbonate lenses optional
- Corro-free epoxy powder coat available in gray



Champ FMVA LED floodlights

9,000 to 15,000 lumens

Cl. I, Div. 2, Groups A, B, C, D
Cl. II, Div. 2, Groups F, G

UL Listed
Type 4X; IP67

5L

Ordering information:

Part number example

FMVA-9-W-76-M20-DG-UNV1-M2

FMVA - 9 - W - 76 - M20 - DG - UNV1 - M2

Light source / intensity	
9	9,261 nominal lumens
11	11,602 nominal lumens
13	13,581 nominal lumens
15	15,845 nominal lumens

Color temperature	
BLANK	5000K, 70 CRI (cool white)
NG	4000K, 80 CRI (neutral white)
W	3000K, 80 CRI (warm white)
22G	2200K, 70 CRI (deep warm)

Beam pattern	
76	NEMA 7x6
44G	NEMA 4x4

Entries	
BLANK	3/4" NPT
M20	20mm
M25	25mm

Voltage	
UNV1	100-277 VAC, 50/60 Hz
UNV3	347-480 VAC, 50/60 Hz

Lens material	
BLANK	Clear glass lens
DG	Diffused glass lens
PCG	Clear polycarbonate lens

Epoxy powder coat	
BLANK	Gray

Accessories (ordered separately):

Description	Cat. #	Description	Cat. #
• Bull horn, 2 tenon, gray	BLHN2	• Safety cable	SC831
• Bull horn, 3 tenon, gray	BLHN3	• Floodlight slipfitter	SFA6
		• Slipfitter wall mount adapter	SWB6

Replacement driver kits (ordered separately)

FMVA-9-UNV1-M2-DRIVER KIT	UNV1 M2 replacement driver kit for FMVA-9
FMVA-11-UNV1-M2-DRIVER KIT	UNV1 M2 replacement driver kit for FMVA-11
FMVA-13-UNV1-M2-DRIVER KIT	UNV1 M2 replacement driver kit for FMVA-13
FMVA-15-UNV1-M2-DRIVER KIT	UNV1 M2 replacement driver kit for FMVA-15
FMVA-9-UNV3-M2-DRIVER KIT	UNV3 M2 replacement driver kit for FMVA-9
FMVA-11-UNV3-M2-DRIVER KIT	UNV3 M2 replacement driver kit for FMVA-11
FMVA-13-UNV3-M2-DRIVER KIT	UNV3 M2 replacement driver kit for FMVA-13
FMVA-15-UNV3-M2-DRIVER KIT	UNV3 M2 replacement driver kit for FMVA-15



Contact factory for lead time.

Champ FMVA LED
floodlights

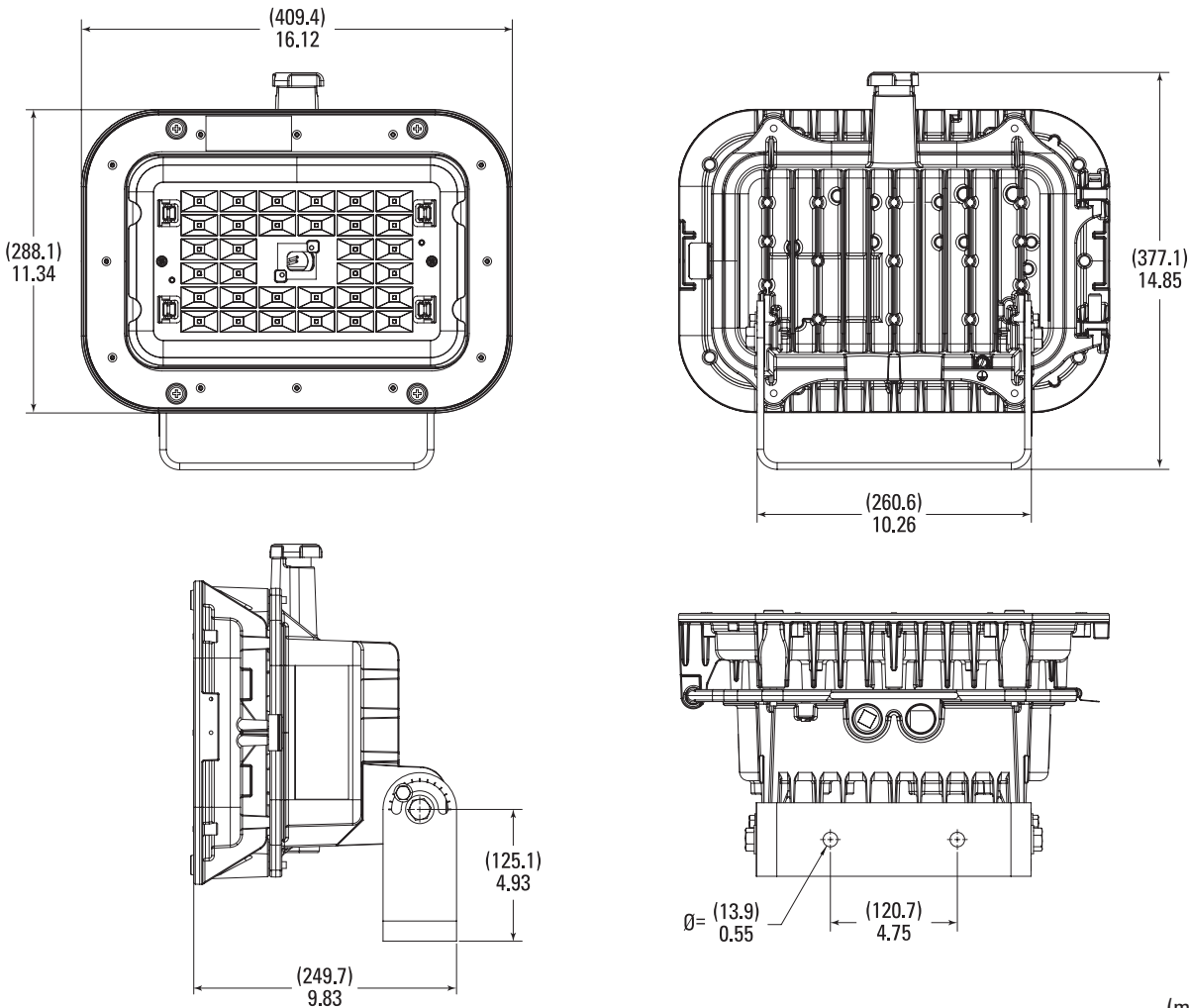
9,000 to 15,000 lumens

Cl. I, Div. 2, Groups A, B, C, D
Cl. II, Div. 2, Groups F, G

UL Listed
Type 4X; IP67

5L

Dimensions – standard yoke mount:



(mm)
All dimensions: inches

Mounting method	Angle range	Mounting surface
Yoke (standard)	+45° to -60°	Wall, ceiling, horizontal surface/ground

Temperature performance data:

Model	Ambient temp. °C	Class I, Div. 2	Class II, Div. 2	Simultaneous rating	
				Class I, Div. 2; Class II, Div. 2	Minimum supply wire temp. °C
FMVA9L-FMVA11L (UNV1 and UNV3)	40°C	T5	T4	T2D	90
	55°C	T5	T4	T2D	90
	65°C	T5	T4	T2D	90
FMVA13L-FMVA15L (UNV1)	40°C	T5	T4	T2D	90
	55°C	T5	T4	T2D	90
	65°C	T4A	T3C	T2C	90
FMVA13L-FMVA15L (UNV3)	40°C	T4A	T4	T2D	90
	55°C	T4A	T4	T2D	90
	65°C	T4A	T3C	T2C	90

Champ FMVA LED floodlights

20,000 to 50,000 lumens

Cl. I, Div. 2, Groups A, B, C, D
Cl. I, Zone 2
Cl. II, Div. 1, Groups E, F, G

UL Listed
CSA Certified
Type 4X; IP66

5L

The Champ FMVA LED family

39% lighter than the previous design with a small footprint

Champ® FMVA high lumen LED floodlights are designed to provide full-spectrum, crisp, white light. Four versions of the FMVA are available, providing ideal solutions for a wide range of applications.

Model	Nominal lumens	Watts ^A	Equivalent MH luminaire	Typical energy savings / lifetime
FMVA20L	20,500	177	600W-750W	Up to 78% reduction in energy costs and 120,000 hours of continuous operation
FMVA25L	25,500	217	750W-1000W	
FMVA40L	40,500	340	1500W+	
FMVA50L	50,500	400		

Applications:

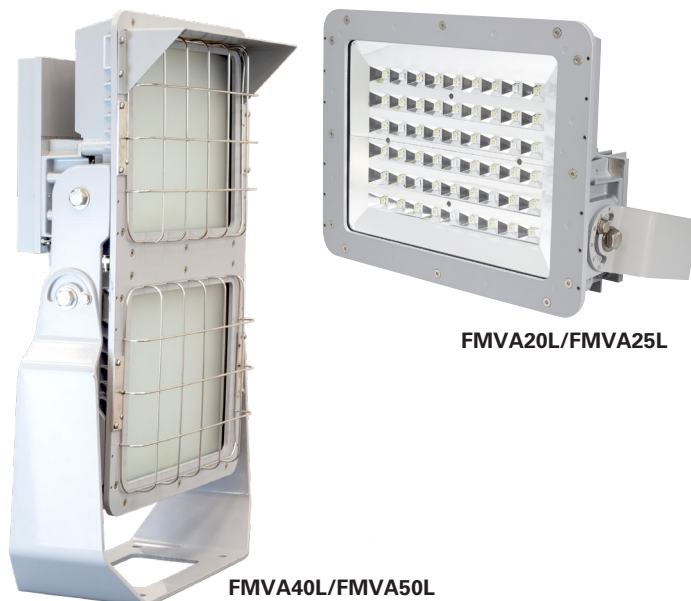
- Locations requiring continuous and consistent light levels in extreme ambient temperatures
- Areas requiring frequent on-and-off of lights
- Where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- Oil and gas refineries, drilling rigs, petrochemical facilities, food and beverage facilities, platforms, loading docks, tunnels, outdoor wall and stanchion mounted general area lighting, and where flammable vapors, gases, ignitable dusts, fibers or flyings are present

Features:

- Rugged design – engineered to perform in ambient temperatures from -40°C to 55°C
- High efficiency – engineered to deliver 117 lumens per watt
- Full frame yoke – designed to utilize the SFA6 slipfitter and SWB6 wall mount bracket, making it ideal for retrofit or new installations^B
- Custom optics – standard 7x6 pattern provides maximum light distribution
- 5 year fixture warranty

Standard materials:

- Lamp housing and adapter – die cast aluminum with Corro-free™ epoxy powder coat
- Lens – heat- and impact-resistant glass (standard)
- Gaskets – silicone and neoprene
- External hardware – stainless steel



FMVA20L/FMVA25L

FMVA40L/FMVA50L

Certifications and compliances:

NEC model:

NEC/CEC:

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2
- Class II, Division 1, Groups E, F, G
- Type 4X, IP66
- ABS

UL standards:

- UL844; UL1598; UL1598A; UL1850

CSA standard:

- CSA C22.2 No. 137

Fixture life:

- Rated life of 60,000 hours at 55°C operating ambient and 24/7 continuous operation for 365 days

Photometrics:

- Refer to www.eaton.com (under the Resources tab of each product family) for specific photometric IES files

^A UNV1 at 120 VAC.

^B SFA6 slipfitter and SWB6 wall mount bracket sold separately (20L/25L models only).

Champ FMVA LED floodlights

20,000 to 50,000 lumens

Cl. I, Div. 2, Groups A, B, C, D
Cl. I, Zone 2
Cl. II, Div. 1, Groups E, F, G

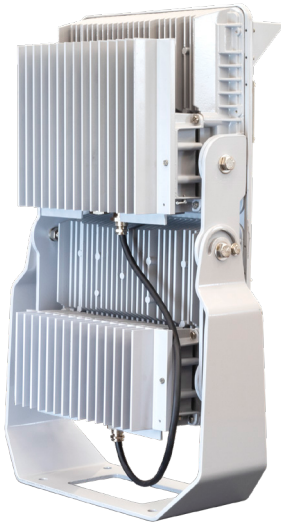
UL Listed
CSA Certified
Type 4X; IP66

5L



Smaller and lighter

- 25% smaller footprint than previous model
- 20 lbs. less weight than previous model

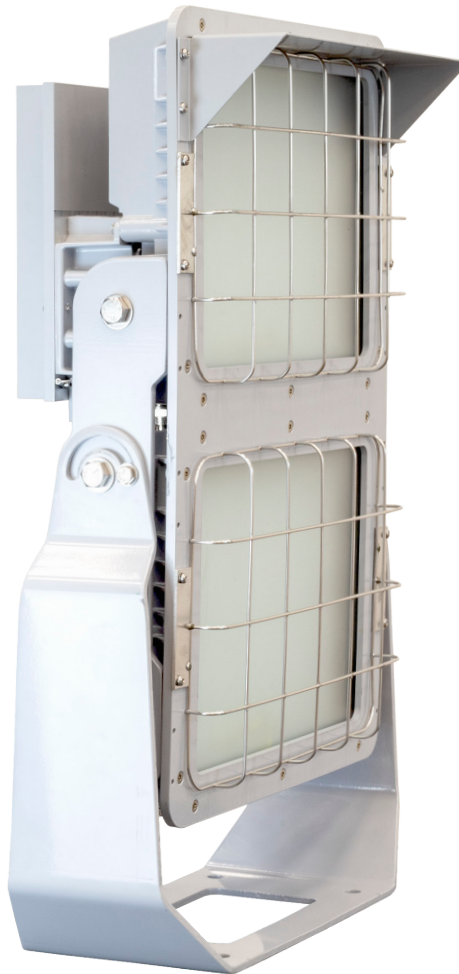


Full frame yoke

- Designed to utilize the SFA6 slipfitter and SWB6 wall mount bracket, making it ideal for retrofit or new installation (for 20L and 25L models)

Rugged heat sink

- Heat sink designed to perform and provide maximum light levels in high ambient temperatures up to +55°C and as low as -40°C
- Thick walled castings make for a tough, rugged housing that keeps the internal driver and LED temperature down



Versatile design

- Can be used for outdoor or indoor applications, and for a wide range of mounting heights depending on model and light level requirement

High lumen output

- Up to 120 lumens per watt
- Up to 78% energy savings over traditional HID fixtures (compared to 400W MH)

Multiple lens options

- Tempered clear glass lens standard
- Diffused glass lens optional



Champ FMVA LED floodlights

20,000 to 50,000 lumens

Cl. I, Div. 2, Groups A, B, C, D
Cl. I, Zone 2
Cl. II, Div. 1, Groups E, F, G

UL Listed
CSA Certified
Type 4X; IP66

5L

Electrical ratings:

Model	120-277 VAC at 50/60 Hz		347-480 VAC at 50/60 Hz	
	Input power	Input amps	Input power	Input amps
FMVA20L	177W	1.76A	177W	0.52A
FMVA25L	217W	2.18A	216W	0.63A
FMVA40L	340W	3.35A	337W	1.24A
FMVA50L	400W	4.14A	400W	1.54A

All models

Power factor >0.90

Temperature performance data:

Model	Ambient temp. °C	Class I, Division 2	Class II, Division 1	Simultaneous presence Cl. I, Div. 2; Cl. II, Div. 1	Min. supply wire temp. °C
/UNV1					
FMVA20L FMVA25L	+40	T4A	T3C	—	90
	+50	T4A	T3C	—	90
	+55	T4A	—	—	90
FMVA40L FMVA50L	+40	T4A	T4A	T4	90
	+50	T4A	T4	T3C	90
	+55	T4A	—	—	90

Model	Ambient temp. °C	Class I, Division 2	Class II, Division 1	Simultaneous presence Cl. I, Div. 2; Cl. II, Div. 1	Min. supply wire temp. °C
/UNV34					
FMVA20L FMVA25L	+40	T4A	T3C	—	90
	+50	T4A	T3C	—	90
	+55	T4A	T3C	—	90
FMVA40L FMVA50L	+40	T4A	T4A	T4	90
	+50	T4A	T4	T3C	90
	+55	T4A	T4	T3C	90



5L

Champ FMVA LED floodlights

20,000 to 50,000 lumens

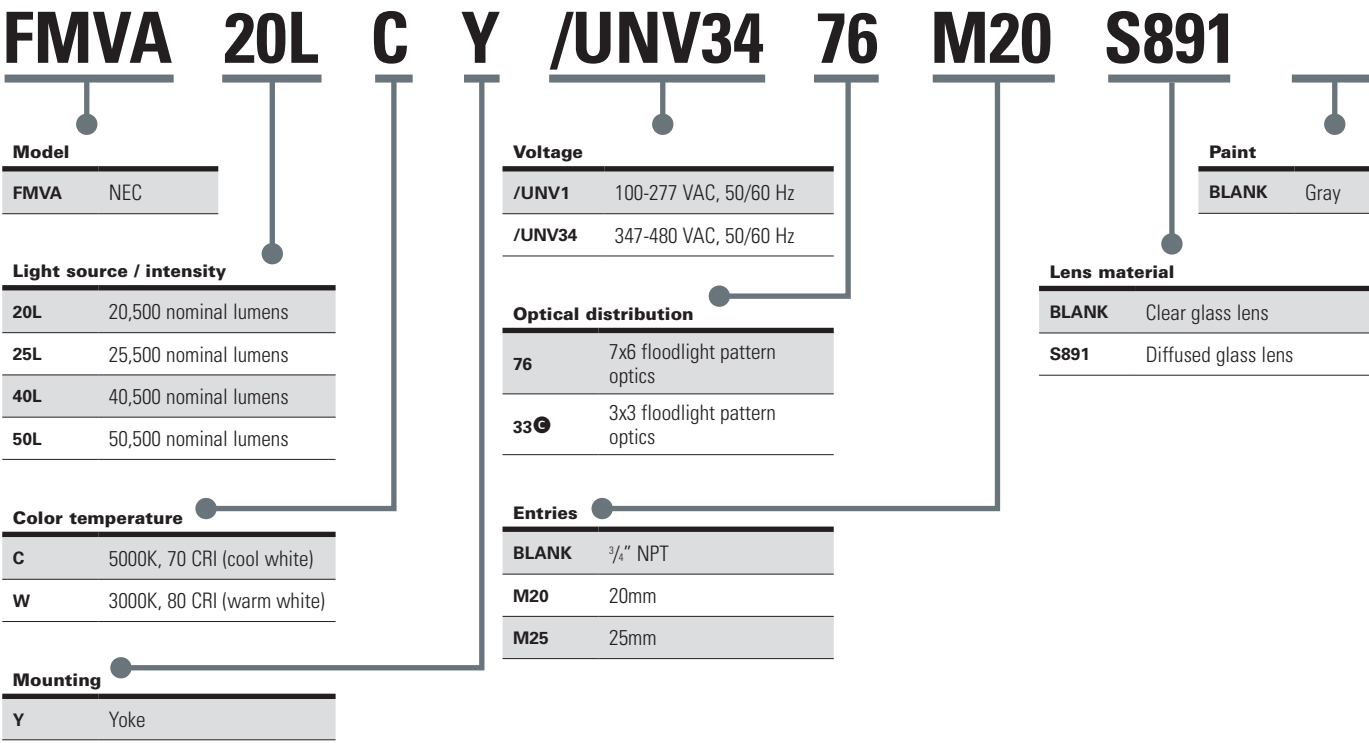
Cl. I, Div. 2, Groups A, B, C, D
Cl. I, Zone 2
Cl. II, Div. 1, Groups E, F, G

UL Listed
CSA Certified
Type 4X; IP66

5L

Ordering information:

Part number example
FMVA20LCY/UNV34 76 M20 S891



Accessories (ordered separately):

Description	Cat. #	Description	Cat. #
• Bull horn, 2 tenon, gray	BLHN2	• Bolt-on visor.....	DSV2
• Bull horn, 3 tenon, gray	BLHN3	• Bolt-on wire guard	P62
		• Safety cable	SC831
		• Slipfitter	SFA6 [Ⓢ]
		• Slipfitter wall mount adapter	SWB6 [Ⓢ]

Replacement driver kits (ordered separately)

PFMA 20L/25L UNV1 DRIVER KIT	UNV1 replacement driver kit for FMVA20L & FMVA25L models
PFMA 20L/25L UNV34 DRIVER KIT	UNV34 replacement driver kit for FMVA20L & FMVA25L models

^C 40L and 50L models can use the 3x3 optic in Class I environments. Class II environments are not permitted.

^D 20L and 25L models only.

Champ FMVA LED floodlights

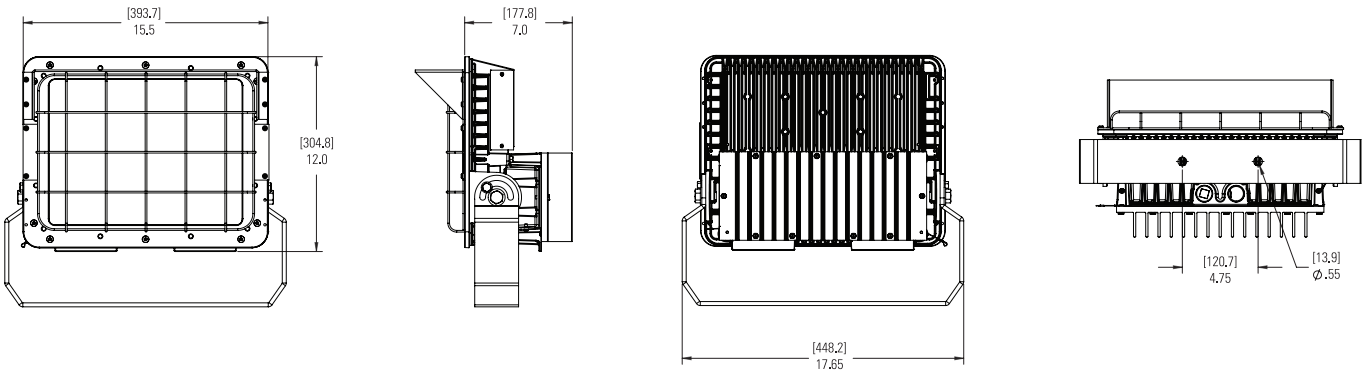
20,000 to 50,000 lumens

Cl. I, Div. 2, Groups A, B, C, D
Cl. I, Zone 2
Cl. II, Div. 1, Groups E, F, G

UL Listed
CSA Certified
Type 4X; IP66

5L

Dimensions and weights – FMVA20L/FMVA25L:

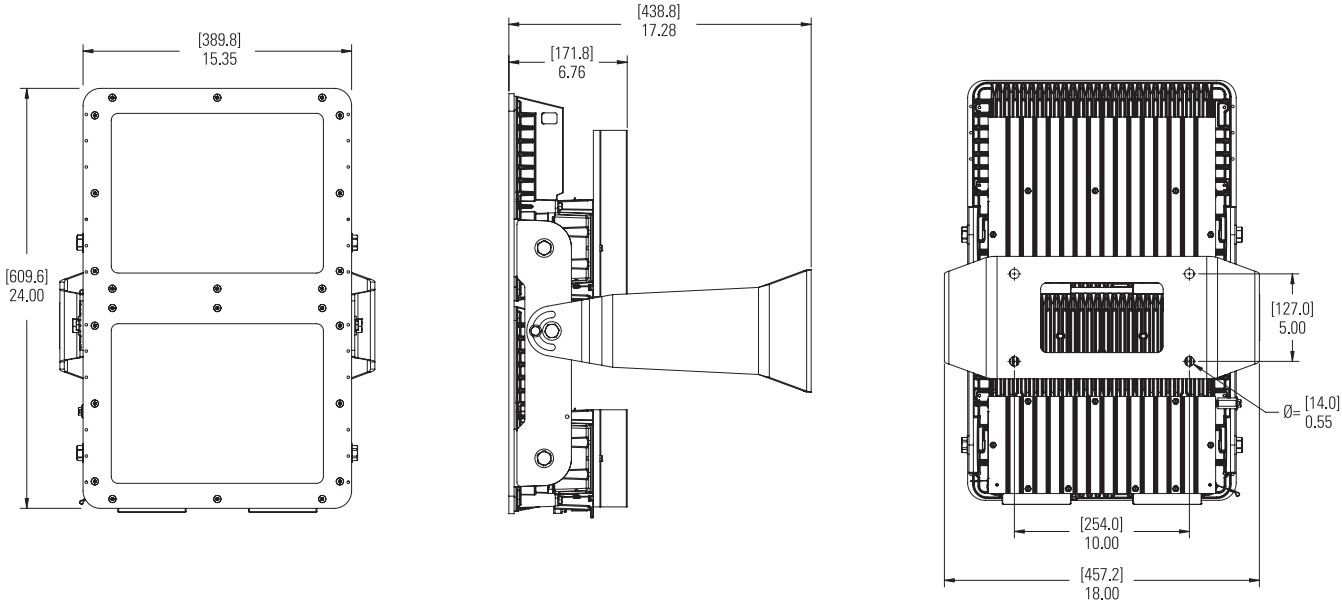


Model	Width		Height		Depth		Weight	
	in.	mm.	in.	mm.	in.	mm.	lb.	kg.
FMVA20L & 25L	15.50	393.70	12.00	304.80	7.00	177.80	34.00	15.40

Effective projected area

Position (tilt)	ft.-sq.
at 0°	1.50
at 45° backwards	1.10
at 60° forward	0.80

Dimensions – FMVA40L/FMVA50L:



Model	Width		Height		Depth		Weight	
	in.	mm.	in.	mm.	in.	mm.	lb.	kg.
FMVA40L & 50L	18.00	457.20	24.00	609.60	17.28	438.80	77.00	34.90

Effective projected area

Position (tilt)	ft.-sq.
at 0°	3.20
at 45° backwards	3.25
at 60° forward	3.62

Pauluhn DFLA LED floodlights

Cl. I, Div. 2, Groups A, B, C, D
Cl. I, Zone 2
Cl. II, Groups E, F, G
Cl. III

UL Listed
Wet Locations
Type 4X; IP66

5L

Pauluhn™ DFLA LED floodlights are designed to provide full-spectrum, crisp, white light for maximum visibility. Three versions are available, from 11,000 to 15,000 lumens, providing ideal solutions for a wide range of drilling applications.

Model	Nominal lumens ^A	Watts	Lumens per watt	Equivalent HID luminaire
DFLA11L	11,776	82	144	320W
DFLA13L	13,362	93	143	400W
DFLA15L	15,183	108	140	500W

Applications:

- Platform and perimeter lighting for land and marine drilling rigs
- Hazardous outdoor area lighting in land-based and offshore rigs; areas include: derrick, mast, SCR house, top drive, operator's house, pump and power stations

Features:

- Rugged design – engineered to perform in ambient temperatures up to +55°C and as low as -40°C
- Dimmable driver, 0-10V
- High efficiency – engineered to deliver up to 140+ lumens per watt
- Full-frame yoke – designed to utilize the SFA6 slipfitter, SWB6 wall mount bracket and SC30H safety cable, making it ideal for retrofit or new installations
- Custom optics – standard 7x6 pattern provides maximum light distribution

Certifications and compliances:

NEC/CEC:

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2
- Class II, Groups E, F, G
- Class III
- Simultaneous Presence
- Wet locations
- Type 4X, IP66

UL standards:

- UL844; UL1598; UL1598A; UL8750



Smaller footprint and reduced weight versus previous generation floodlights

Electrical ratings:

Model	Input power (watts)	Input amps at 120-277 VAC
DFLA11L	81.0 - 84.0	0.84 - 0.30
DFLA13L	91.0 - 95.0	0.95 - 0.34
DFLA15L	107.0 - 113.0	1.12 - 0.40

DFLA11L - DFLA15L

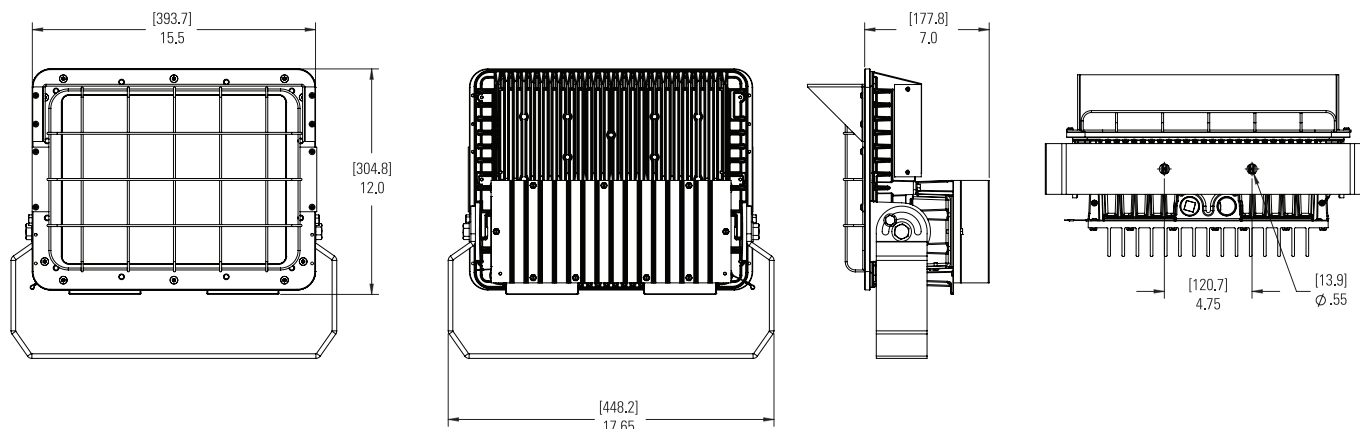
Voltage range, VAC	100-277V at 50/60 Hz; 347-480V at 50/60 Hz
Voltage range, VDC	127-250V
Power factor	>0.90

Photometrics:

- Refer to www.eaton.com (under the Resources tab of each product family) for specific photometric IES files

Weights and dimensions:

	Weight (lbs.)	Length (in.)	Width (in.)	Height (in.)
All models	32.00	15.50	7.00	12.00



^A Tolerance +/- 10%; at 120 VAC, 25°C ambient, 7x6 optics.

Pauluhn DFLA LED floodlights

Cl. I, Div. 2, Groups A, B, C, D
Cl. I, Zone 2
Cl. II, Groups E, F, G
Cl. III

UL Listed
Wet Locations
Type 4X; IP66

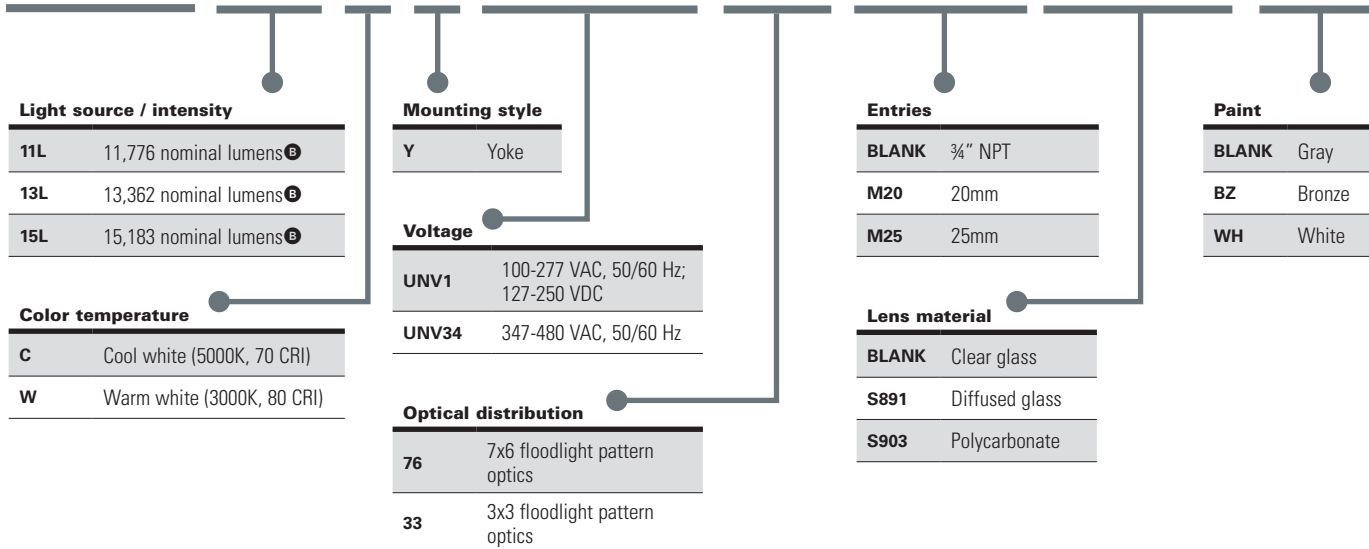
5L

Ordering information:

Part number example

DFLA11LCY-UNV1-76-M20-S891-BZ

DFLA 11L C Y -UNV1 -76 -M20 -S891 -BZ



Accessories (ordered separately):

Description

- Bull horn, gray..... **BLHN**
- Bull horn, bronze..... **BLHN-BZ**
- Bull horn, white **BLHN-WH**
- Bolt-on visor..... **DSV2**
- Bolt-on wire guard..... **P62**
- 316 stainless steel safety cable **SC831**
Can be added in the field
- Floodlight slipfitter..... **SFA6**
- Slipfitter wall mount adapter **SWB6**

Replacement driver kits (ordered separately)

FMVA 9-11-13L UNV1 DRIVER KIT	UNV1 replacement driver kit for 9L, 11L and 13L models
FMVA 15L UNV1 DRIVER KIT	UNV1 replacement driver kit for 15L model
FMVA 9L-11L UNV34 DRIVER KIT	UNV34 replacement driver kit for 9L and 11L models
FMVA 13L-15L UNV34 DRIVER KIT	UNV34 replacement driver kit for 13L and 15L models

^B 7x6 model.