Champ® FMV LED Series Floodlight Fixtures

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

UL Listed & CSA Certified
IECEx / ATEX
Simultaneous Presence
Wet Location, Type 4X, IP66

The Champ FMV LED Family

FMV LED Series Floodlights are designed to provide full-spectrum, crisp, white light. Five versions of the Champ FMV LED are available, providing ideal solutions for a wide range of applications.

FMV Model	Equivalent MH HID Lamp	Energy Savings
FMV 5L	100W-150W	
FMV 7L	150W-175W	
FMV 9L	175W-250W	Up to 62%!
FMV 11L	250W-400W	
FMV 13L	400W	

Applications:

• Five lumen outputs allow for installation in numerous mounting heights
• Locations requiring continuous and consistent light levels in extreme ambient temperatures
• Areas requiring frequent on-and-off of lights
• Where flammable vapors, gases, ignitable dusts, fibers or flyings are present; indoors or outdoors
• Where extremely corrosive, wet, dusty, hot and/or cold conditions exist
• Type 4X, marine, wet locations, and hose-down environments
• Indoor and outdoor area lighting in plants, buildings, and parking areas
• Manufacturing plants; heavy industrial, chemical, petrochemical or pharmaceutical facilities; platforms; loading docks; outdoor mounted general area lighting

Drivers:

Model	5L - 13L
Standard	90-305 VAC, 50 / 60 Hz; 108-250 VDC
Option 1	347 VAC Model
Option 2	480 VAC Model

Champ FMV LED Benefits:

Enhance safety and productivity
• Instant illumination and restrike
• Better visibility with crisp, white light
• Minimum T4 temperature rating – safely operate in the most hazardous environments and any non-hazardous location
• Cold temperature operation / no warm-up required

• "No lights out" feature – if a single LED fails, others will remain lit from other drivers – minimum 50% output maintained
• Terminals – 3 x 6 sq. mm. for IEC version

Reduce operation and maintenance costs
• Easy installation - compact modular fixture attaches onto existing SFA6 and SWB6
• Energy-efficient technology – use up to $\frac{1}{2}$ the power of standard HID luminaires
• Provides up to 60,000 hours rated life – eliminates need for frequent lamp replacement
• Contains no mercury or other hazardous substances

Reliable performance in any environment
• Shock- and vibration-resistant solid-state luminaires have no filaments or glass components that could break – greatly reduces the risk of premature failure
• Operating ambient -40°C to 55°C
• Dark sky friendly with optional visor

Certifications and Compliances:

• DesignLights Consortium® approved for select models (refer to Ordering Information for details)

NEC and 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 Luminaires, UL1598A Marine

CSA Standard
• CSA C22.2 No. 137

IECEx/ATEX
• IECEx UL 11.0054X
• Ex nA nR IIC T4 Gc Tamb -30°C to +55°C
• Ex nA nR IIC T5 Gc Tamb -30°C to +40°C
• Ex tc IIIC T68°C Dc IP66 Tamb -30°C to 40°C
• DEMKO 12 ATEX 115535X
• Ex II 3 G Ex nA nR IIC T4 Gc Tamb -30°C to +55°C
• Ex II 3 G Ex nA nR IIC T5 Gc Tamb -30°C to +40°C
• Ex II 3 D Ex tc IIIC T68°C Dc IP66 Tamb -30°C to +40°C
• CEPEL Ex-1956/10

Standard Materials:

• Housing – copper-free aluminum with Corro-free™ epoxy powder coat
• Lens – shatter-resistant glass
• Gaskets – silicone
• External hardware – stainless steel
• Factory-sealed, no external seals required

LED System:

• High brightness light emitting diode (LED) arrays
• Color temperature: 3000K (CRI 82) and 5600K (CRI 65) options available
• Advanced heat sink design ensures LED does not exceed manufacturer's temperature ratings across all specified ambient conditions
• LM-80 reports available upon request

Options:

Description	Suffix
Fused (only applies to UNV1 model, not available for 347V or 480V; NOT marine or cUL Listed) (NEC version only)	S658
Two conduit/cable glands of like thread installed	S886

Accessories (Order Separately):

Description	Cat. No.
Bolt-on visor (sold separately)	DSV1
Bolt-on wire guard (sold separately)	P61
Floodlight slipfitter (sold separately)	SFA6
Slipfitter wall mount adapter (sold separately)	SWB6

Electrical Ratings:

	FMV 5L	FMV 7L	FMV 9L	FMV 11L	FMV 13L
Voltage Range, VAC	100-277V 50 / 60 Hz				
	347 / 480V 60 Hz				
Voltage Range, VDC	108-250	108-250	108-250	108-250	108-250
Input Power (Nom.)	64	89	121	149	179
Input Amps (Max.)	0.550	0.800	1.083	1.608	1.608
Power Factor	>0.85	>0.85	>0.85	>0.85	>0.85

Crouse-Hinds
by **E·T·N**

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6L

Safe, reliable heat transfer

The heat sink was designed to perform in high ambient temperatures up to +55ºC and as low as -40ºC. The thick walls of the castings make for a tough, rugged housing that keeps the internal driver and LED temperatures down, allowing them to perform flawlessly, and protects them from damage. Separated driver and LED housing allows dust to shed from fixture.

Installation and replacement made simple

The full-frame yoke was designed to utilize the SFA6 slipfitter and SWB6 wall mount bracket (sold separately), making it ideal for retrofit or new installations. The modular design of the FMV LED allows for easy driver or LED replacement, and allows for the addition of the optional visor or guard in the field. Single cable gland provided with a second plugged cable entry, if an additional cable gland is needed.

High efficiency and lumen output

High efficiency drivers and LED arrays provide reliable low cost operation in **harsh and hazardous environments**. Components were chosen to give industry-leading light output from an LED flood. Replaceable drivers and LEDs for ease of maintenance and "no lights out" feature.

Versatile design

Suitable for hazardous location use in **gas or dust areas**. Can be used for outdoor or indoor applications, and for a wide range of mounting heights depending on model and light level requirement. Optics were specifically designed to give the familiar and industry-accepted butterfly beam light pattern.

Optional equipment

Cool (C) and Warm (W) white color temperatures available.
Optional visor offered (sold separately) to control light spill.
Optional wire guard offered (sold separately) to protect lens from damage.
Other options available - consult part numbering guide.

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6L Champ® FMV LED Series Floodlight Fixtures

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UL Listed & CSA Certified
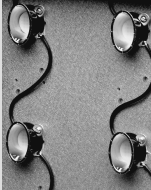IECEx / ATEX
Simultaneous Presence
Wet Location, Type 4X, IP66

Catalog Numbering System:

SERIES	LIGHT SOURCE	COLOR	MOUNT	VOLTAGE	OPTICAL DISTRIBUTION	SUFFIXES
FMV	9L	C	Y	/UNV1	76	S658

SERIES

FMV   NEC version with Class/Division ratings
NFMV   IEC version with Class/Zone ratings

LIGHT SOURCE / INTENSITY

5L   100W - 150W equivalent
7L   150W - 175W equivalent
9L   175W - 250W equivalent
11L   250W - 400W equivalent
13L   400W equivalent

COLOR TEMPERATURE

C   5600K (cool white)
W   3000K (warm white)

MOUNT

Y   Yoke

VOLTAGE

/UNV1 100 VAC to 277 VAC 50/60 Hz, 108 VDC to 250 VDC
/120   120 VAC 50/60 Hz**
/347   347 VAC 60 Hz
/480   480 VAC 60 Hz

OPTICAL DISTRIBUTION

76   Floodlight pattern optics included

SUFFIXES

M20   20mm metric threads for conduit opening (NFMV only)*
M25   25mm metric threads for conduit opening (NFMV only)*
S658   Fused; for UNV1 only; not for marine or cUL
S886   Two conduit/cable glands of like thread installed
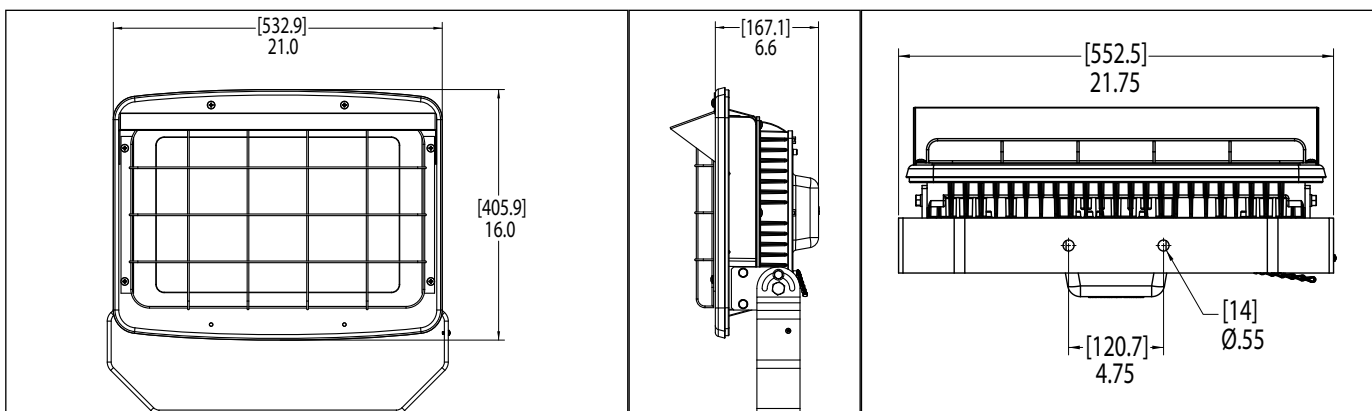
*Required for NFMV. Please specify conduit entry.
**5 year limited warranty. Refer to page 2 of the D-0413 authorized distributor price book for Eaton's Crouse-Hinds standard Terms and Conditions.
DesignLights Consortium® approved models. Cool white only.

ADDITIONAL ITEMS (SOLD SEPARATELY)

DSV1   DSV dark sky visor
P61   Wire guard factory installed
SFA6   Floodlight slipfitter
SWB6   Slipfitter wall mount adapter

Dimensions:

[532.9]
21.0

[405.9]
16.0

[167.1]
6.6

[552.5]
21.75

[14]
Ø.55

[120.7]
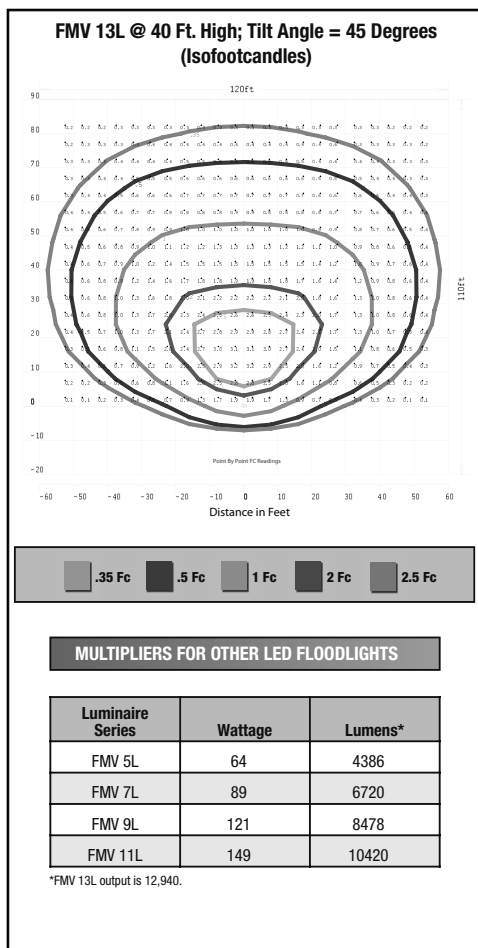4.75

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6L

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Photometric Data:

FMV 13L @ 40 Ft. High; Tilt Angle = 45 Degrees (Isofootcandles)

Distance in Feet

| .35 Fc | .5 Fc | 1 Fc | 2 Fc | 2.5 Fc |

MULTIPLIERS FOR OTHER LED FLOODLIGHTS

Luminaire Series	Wattage	Lumens*
FMV 5L	64	4386
FMV 7L	89	6720
FMV 9L	121	8478
FMV 11L	149	10420

*FMV 13L output is 12,940.

Weights:

Model	Lbs.	Kg.
5L	39.11	17.74
7L	39.16	17.76
9L	39.73	18.02
11L	40.35	18.30
13L	40.35	18.30

Ambient Temperature:

	Max. Temp. °C	Cl. I, Div. 2	Cl. I, Zone 2	Simu. Presence Div. 1 and Div. 2	Cl. II, Div. 1	Cl. III
FMV 5L	40	T3C	T5	T3A	T5	T5
	55	T3C	T4	-	-	-
FMV 7L	40	T3C	T5	T3A	T5	T5
	55	T3C	T4	-	-	-
FMV 9L	40	T3C	T5	T3A	T5	T5
	55	T3C	T4	-	-	-
FMV 11L	40	T3C	T5	T3A	T5	T5
	55	T3C	T4	-	-	-
FMV 13L	40	T3C	T5	T3A	T5	T5
	55	T3C	T4	-	-	-

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