

Champ® FMV nR Floodlights

Cl. I, Div. 2, Groups A, B, C, D
Cl. I, Zone 2, AEx nR II
Cl. II, Div. 1, Groups F, G
(up to 250W)

Marine locations
NEMA Type 4X and IP66
Wet locations

6L

The Champ FMV nR Series Floodlight offers exceptional illumination in industrial areas, both indoors and out. And, it comes standard as a restricted breathing luminaire. The Champ FMV nR Series Floodlight is easily adjusted to aim light where it's needed and is available in a wide variety of energy-saving mogul base HID light sources and wattages including:

- 150–400W High Pressure Sodium
- 175–400W Metal Halide

Applications:

The FMV is made with heavy-duty, die-cast aluminum components and stainless steel hardware. It offers superior corrosion resistance to ensure longer life, which makes the FMV floodlight the ideal choice for a wide variety of industrial applications, including wet and marine environments.

Features and Benefits:

- AEx nR, Ex nR restricted breathing rating is standard—a hazardous location luminaire without additional accessories or options; restricted breathing offers cooler T-numbers for increased hazardous locations suitability
- NEMA 7x6 butterfly beam floodlight pattern—wide, uniform and far reaching to provide excellent efficiency and more light where you need it
- NEMA Type 4X and IP66 construction is designed for use indoors and outdoors in marine and wet locations—with stainless steel external hardware suitable for saltwater and corrosive applications
- Easy wiring—standard terminal block with marked terminals saves time and eliminates wiring errors
- Vapor-tight sealing cable connector—standard
- Will accommodate existing mounting hardware—SFA6 slipfitter for pole and SWB6 wall mount
- Optional metric machining will accept M20 or M25 (must be specified on order)
- 40°C, 55°C and 65°C ambient suitability—addresses high ambients common at industrial facilities
- Low ambient capability to -40°C—perfect for colder climates
- Heavy-duty, die-cast copper-free aluminum enclosure with epoxy coating and stainless steel hardware—provides a robust design with industrial grade construction and corrosion resistance
- Hinged door frame assembly—has captive cover screws for ease of relamping
- Yoke mount design—standard construction provides the greatest mounting flexibility, can be mounted vertically (wall), horizontally (rooftop or floor), or any angle in between

- 3-axis resonance withstand and UL844 vibration compliant—can stand up to the tough jobs
- Precision formed aluminum reflector—superior beam control, distribution and efficiency
- Multi-tap ballasts—offering a choice of 120, 208, 240 and 277V; 220V 50Hz, 240V 50Hz, Tri-Tap (120, 277 and 347), and 480V ballasts are also available
- High light output with a low cost of operation—cost-effectiveness in a high wattage floodlight
- For use with SFA6 Slipfitter Adapter and SWB6 Wall Mount Bracket accessories—further enhances mounting flexibility

Certifications & Compliances:

NEC/CEC (NEC Ballast Gear and Socket):

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2, AEx nR II
- Class II, Division 1, Groups F, G (up to 250W)
- Marine locations
- NEMA Type 4X and IP66
- Wet locations

IEC (IEC Ballast Gear and Socket):

- IEC Zone 2, Ex nR II (pending)

UL/cUL Standards:

- 844—Hazardous (Divisions Classified) Locations
- 60079-15
- 1598—Luminaires
- 1598A—Supplemental Requirements for Luminaires for Installation on Marine Vessels

IEC Standards:

- 60079-15

Standard Materials:

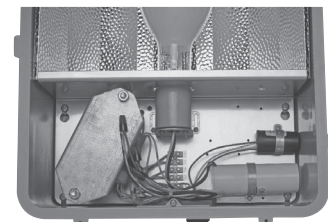
- Fixture housing and door frame assembly—die-cast aluminum
- External hardware—stainless steel
- Lens—heat- and impact-resistant tempered glass
- Yoke—aluminum

Standard Finishes:

- Enclosure and yoke—Corro-Free™ epoxy powder coat
- Stainless steel—natural



The only full frame trunnion mount floodlight with a T3 rating and a removable ballast tray assembly.



Industry Best for Ease of Installation:

1. Removable ballast tray
2. Prewired to terminal blocks
3. Substantial room for wiring

Ratings (Electrical/Size): Sources/Wattages (Mogul Base Lamps)

- HPS—150, 250, and 400W
- MH—175, 250, and 400W

Voltages

Standard Voltage Ballasts

- Multi-tap (120, 208, 240, and 277V 60Hz)
- Dual-tap (120 and 277V)
- 480V 60Hz
- Tri-tap (120, 277, 347V 60Hz)

Optional Voltage Ballasts

- 220V or 240V 50Hz (for export)
- 220V 60Hz (for export)

Isolated Ballasts

- 208, 240, or 480V (for Canada)

Hub Size

- Standard—3/4" NPT
- Optional—25 mm (M25 x 1.5) or 20 mm (M20 x 1.5)

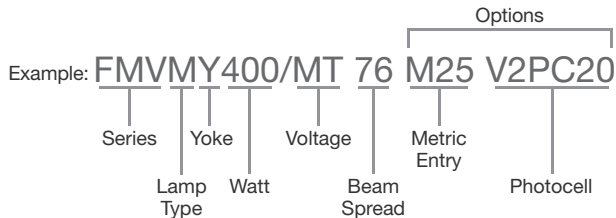
Ordering Information for Floodlight with NEC Ballast:

Lamp Type	Watts	Yoke Mount 3/4" NPT Hub
High Pressure Sodium	150	FMVSY150/MT 76
	250	FMVSY250/MT 76
	400	FMVSY400/MT 76
Metal Halide	175	FMVMY175/MT 76
	250	FMVMY250/MT 76
	400	FMVMY400/MT 76

Voltage Suffixes†

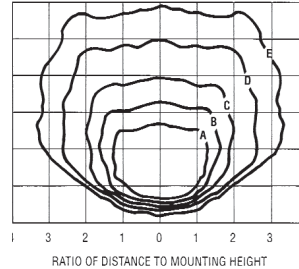
Voltage (60Hz)	Dual-Tap	Tri-Tap	Multi-Tap	480
Suffix	/DT	/TT	/MT	/480

†To complete catalog number, add voltage and options suffix(es).



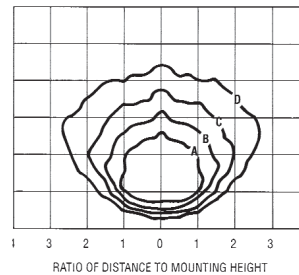
†150W HPS fixtures are furnished with ANSI spec/S55 ballasts for 55V lamps. For 100V lamps, add suffix "CE" after voltage suffix. Example: FMVSY150/MT CE 76.

Photometric Data:



Isofootcandle Chart FMV
400W High Pressure Sodium (HPS)
Catalog Number: FMVSY400-76
Lamp: 400W Clear HPS
Lumen Rating: 50,000
For 150W HPS, multiply footcandles by .32.
For 250W HPS, multiply footcandles by 0.6.
Fixture located at 0°, 0° aiming angle at 45°

(Note: See Figures 1 and 2).



Isofootcandle Chart FMV
400W Metal Halide (MH)
Catalog Number: FMVMY400-76
Lamp: 400W Clear MH
Lumen Rating: 34,000
For 250W MH, multiply footcandles by 0.6.
Fixture located a 0°, 0° aiming angle 45°

(Note: See Figures 1 and 2).

Options:

Description

Instant Restrike and Ballast Guard

Instant restrike—enables a hot HPS lamp to immediately restrike after a momentary loss of arc due to voltage fluctuation or power outage
Ballast guard starter cut out switch—prevents starter pulsing when lamp is cycling or inoperative; prolongs ballast and ignitor life.

- 150W LX HPS only.....
- Factory assembled with HID lamp installed
- Fused (not suitable for marine applications).....
- 20mm metric thread for conduit opening
- 25mm metric thread for conduit opening
- 3/4" NPT hub conduit opening
- Furnished with lamps (not installed)
- Retention chain
- Pulse-Start Metal Halide
- Enclosure machined for 2 conduit/cable entries

Suffix

- TIR
- FA
- S658
- M20
- M25
- NPT75
- S714
- S831
- S828
- S886

Options for Photocell*:

Description

- Photocell 120V, 50/60Hz installed
- Photocell 208-240V, 50/60Hz installed
- Photocell 277V, 50/60Hz installed

- Suffix
- V2PC20
- V2PC22
- V2PC27

*Photocell for Div. 2 installation only.

Accessories (Order Separately):

Slipfitter Adapter

To be mounted to yoke mount fixture
Fits onto 2" pipe/conduit

SFA6

Wall Bracket

Use with slipfitter adapter SFA6 for easy wall mounting and increased adjustability.....

SWB6

Effective Projected Area (EPA):

- For windloading
- For proper pole selection

Aiming Angle	EPA
0°	2.9 FT ²
30°	2.5 FT ²
45°	2.1 FT ²

Footcandle Table:

Mounting Height	Footcandle Values for Isotocandle Lines				
	A	B	C	D	E
15'	8.0	4.0	2.0	0.80	0.40
20'	4.5	2.3	1.1	0.50	0.23
25'	2.9	1.4	0.7	0.30	0.14
30'	2.0	1.0	0.5	0.20	0.10
35'	1.5	0.7	0.4	0.15	0.07
40'	1.1	0.6	0.3	0.11	0.06

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Weights and Dimensions:

Net Fixture Weights (Lbs.):

Fixtures	FMVS	FMVM
150W	37	37
175-250W	40	42
400W	44	44

SFA6 (Slipfitter Adapter)—Add 4 lbs., SWB6 (Wall Bracket)—Add 6 lbs.

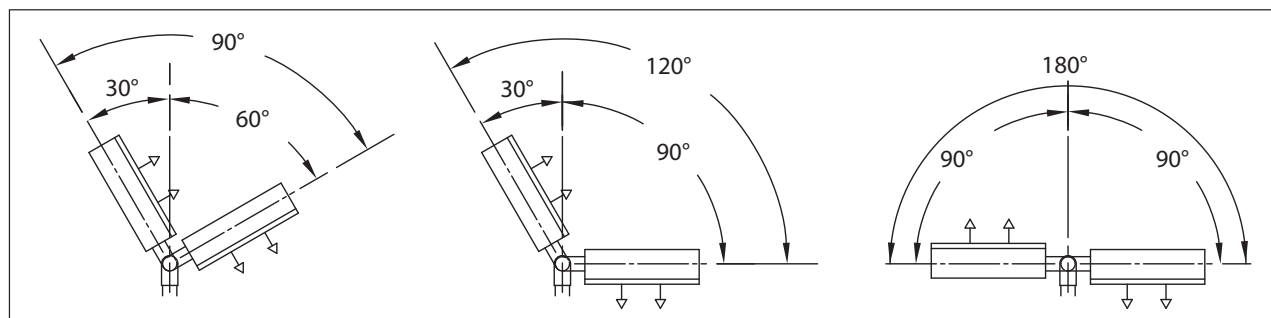
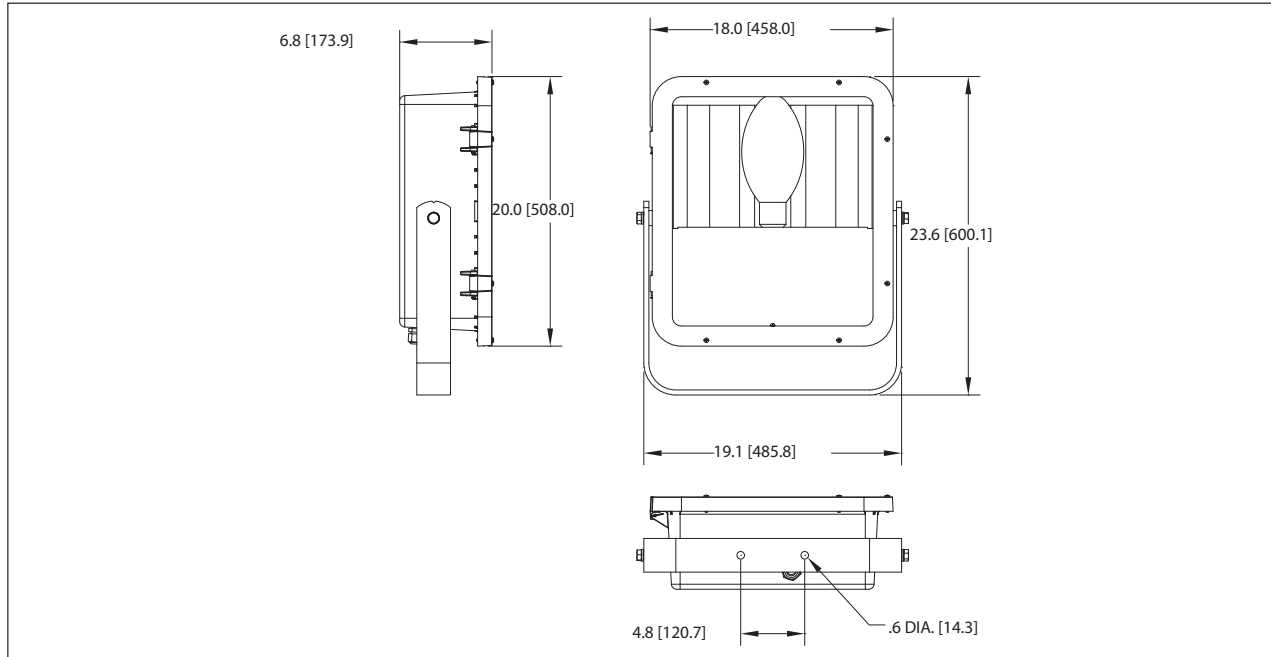


FIGURE 1

FIGURE 2

FIGURE 3

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Temperature Performance Data:

Catalog Series	Lamp		40°C Ambient			55°C Ambient			65°C Ambient			Fixture Aiming	
			Temperature Code			Temperature Code			Temperature Code			Range	Figure
	Type	Watts	Class I, Zone 2	Class I, Div. 2	Supply Wire °C	Class I, Zone 2	Class I, Div. 2	Supply Wire °C	Class I, Zone 2	Class I, Div. 2	Supply Wire °C		
FMVS	High Pressure Sodium	150	T4	325	90	T4	325	90	T3	325	105	90°	1
			T4	325	90	T3	325	105	T3	325	105	120°	2
			T3	325	90	T3	325	105	T3	325	105	180°	3
	250	T4	325	90	T4	325	90	T3	325	105	90°	1	
		T4	325	90	T3	325	105	T3	325	105	120°	2	
		T3	325	90	T3	325	105	T3	325	105	180°	3	
		T3	T1	90	T3	T1	105	-	-	-	90°	1	
		T3	T1	105	T3	T1	125	-	-	-	120°	2	
		T3	T1	105	T3	T1	125	-	-	-	180°	3	
FMVM	Metal Halide	175	T4	325	90	T4	325	90	T3	325	105	90°	1
			T4	325	90	T4	325	105	T3	325	105	120°	2
			T3	350	90	T3	350	125	T3	T1	105	180°	3
	250*	T4	325	90	T4	325	90	T3	325	105	90°	1	
		T4	325	90	T4	325	105	T3	325	105	120°	2	
		T3	350	90	T3	350	125	T3	T1	105	180°	3	
		T3	325	90	T3	325	105	-	-	-	90°	1	
		T3	325	105	T3	325	125	-	-	-	120°	2	
		T3	T1	105	T2	T1	125	-	-	-	180°	3	
	Pulse-Start Metal Halide	175	T4	325	90	T3	325	105	T3	325	105	90°	1
			T4	325	90	T3	325	105	T3	325	105	120°	2
			T3	350	90	T3	T1	105	T3	T1	105	180°	3
		250*	T4	325	90	T3	325	105	T3	325	105	90°	1
			T4	325	90	T3	325	105	T3	325	105	120°	2
			T3	350	90	T3	T1	105	T3	T1	105	180°	3
T3			350	105	T3	350	105	-	-	-	90°	1	
T3			350	105	T3	T1	125	-	-	-	120°	2	
T3			T1	105	T3	T1	125	-	-	-	180°	3	

*Suitable for use in 65°C ambient without optional fuses.

**Suitable for use in 55°C ambient without optional fuses.

Lamp Selection (Mogul Base):

Fixture	Watts		Bulb	G.E.	Osram	Philips
	Type					
FMVSY150	150 HPS		ED23 ½ BT25	LU150/55	LU150/55	C150S55
FMVSY250	250 HPS		ED18 ½ or ET18	LU250	LU250	C250S50
FMVSY400	400 HPS		ED18 or BT37	LU400	LU400	C400S51
FMVMY175	175 MH		ED28 or BT28	MVR175/U	M175/U	MH175/U
FMVMY250	250 MH		ED28 or BT28	MVR250/U	M250/U	MH250/U
FMVMY400	400 MH		ED37 or BT37	MVR400/U	M400/U	MH400/U

Photometrics are available online.