

Champ FMV nR floodlights

Cl. I, Div. 2, Groups A, B, C, D
Cl. I, Zone 2, AEx nR II

Marine & Wet Locations
NEMA Type 4X, IP66

6L

The Champ® FMV nR floodlight offers exceptional illumination in industrial areas, both indoors and out. And, it comes standard as a restricted breathing luminaire.

The Champ FMV nR 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.

Applications:

- 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
- Classified and hazardous locations or where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- IP66, Type 4X, marine, wet locations and hose down environments

Features:

- AEx nR, Ex nR restricted breathing rating is standard – a hazardous location luminaire without additional accessories or options; restricted breathing offers cooler T-codes 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 salt water and corrosive applications
- Easy wiring – standard terminal block with marked terminals saves time and eliminates wiring errors
- Vaportight sealing cable connector – standard
- Will accommodate existing mounting hardware – SFA6 slipfitter for pole and SWB6 for wall mount
- +40°C and +55°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

Features (continued):

- 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, 277V; 220V, 50 Hz; 240V, 50 Hz; tri-tap (120, 277, 347V); and 480V ballasts are also available
- For use with SFA6 slipfitter adapter and SWB6 wall mount bracket accessories – further enhances mounting flexibility

Certifications and compliances:

NEC/CEC (NEC ballast gear and socket):

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2, AEx nR II
- Marine and wet locations
- NEMA Type 4X, IP66

UL/cUL standards:

- UL844 – Hazardous (Divisions Classified) Locations
- UL60079-15
- UL1598 – Luminaires
- UL1598A – Supplemental Requirements for Luminaires for Installation on Marine Vessels

IEC standard:

- 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:

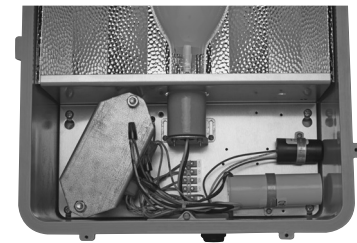
- Enclosure and yoke – Corro-free epoxy powder coat
- Stainless steel – natural

Photometrics:

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



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



Easy to install and maintain:

- Removable ballast tray
- Pre-wired to terminal blocks
- Substantial room for wiring

Electrical ratings:

Sources/wattages (mogul base lamps):

- High pressure sodium (HPS) – 150, 250, 400W
- Metal halide (MH) – 175, 250, 400W

Voltages:

Standard voltage ballasts

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

Optional voltage ballasts

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

Hub sizes:

- Standard – ¾" NPT
- Optional – 25mm (M25 x 1.5) or 20mm (M20 x 1.5)

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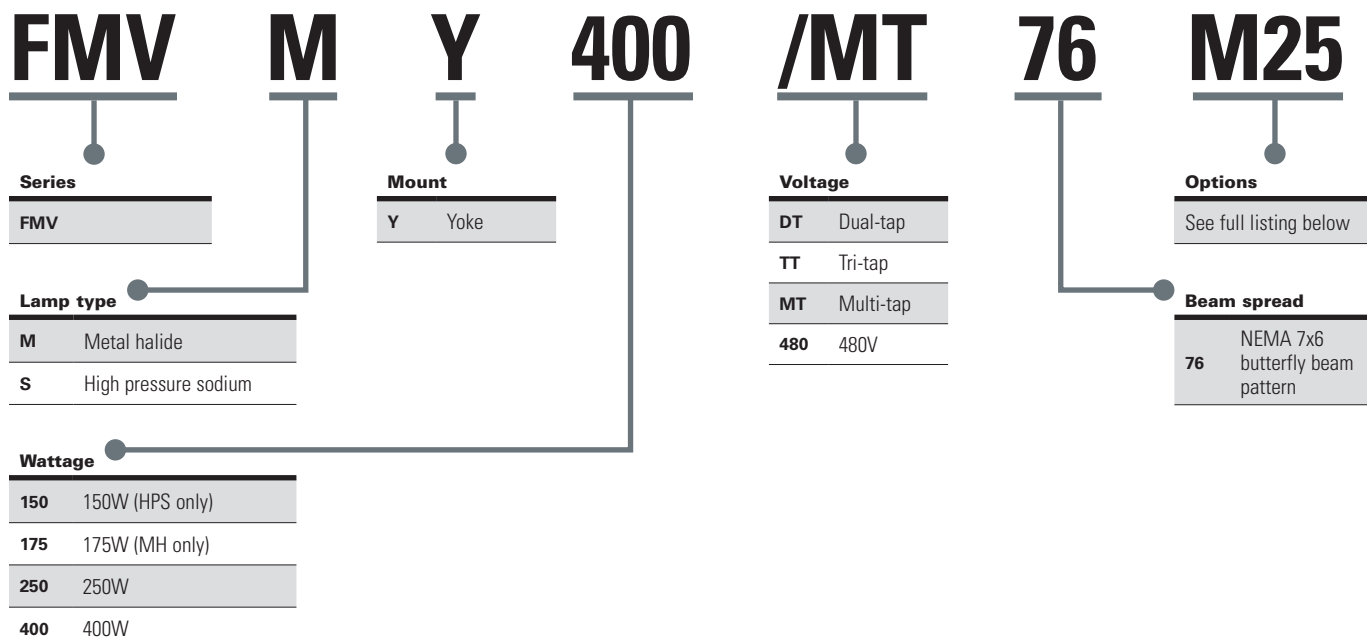
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Ordering information:

Part number example

FMVMY400/MT 76 M25



Options:

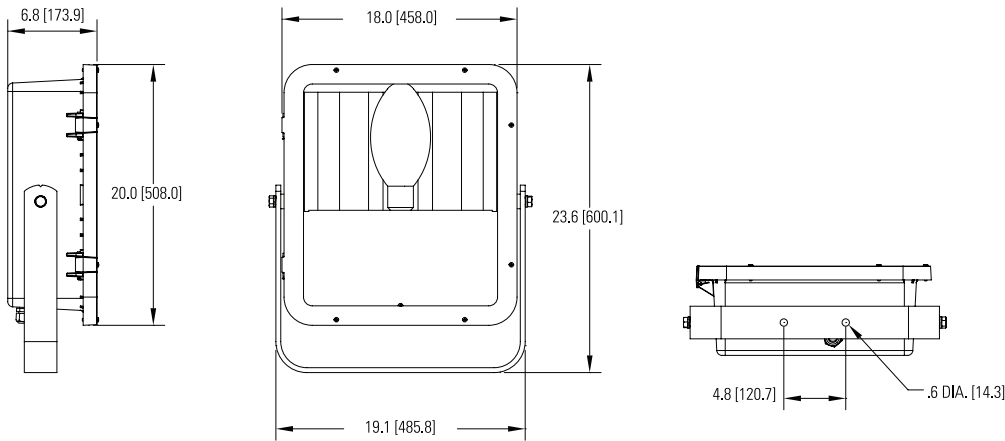
Description	Suffix
• Instant restrike and Ballast-Gard	TIR
<i>Instant restrike – enables a hot HPS lamp to immediately restrike after a momentary loss of arc due to voltage fluctuation or power outage</i>	
<i>Ballast-Gard starter cut-out switch – prevents starter pulsing when lamp is cycling or inoperative; prolongs ballast and ignitor life</i>	
<i>150W LX HPS only</i>	
• Factory assembled with HID lamp installed.....	FA
• Fused	S658
<i>Not suitable for marine applications</i>	
• 20mm metric thread for conduit opening	M20
• 25mm metric thread for conduit opening	M25
• Furnished with lamps (not installed).....	S714
• Retention chain.....	S831
• Pulse start metal halide	S828
• Enclosure machined with two conduit/cable entries	S886
Photocells installed^A:	
• 120V, 50-60 Hz	V2PC20
• 208-240V, 50-60 Hz	V2PC22
• 277V, 50-60 Hz	V2PC27

Accessories (ordered separately):

Description	Cat. #
• Slipfitter adapter	SFA6
<i>To be mounted to yoke mount fixture</i>	
<i>Fits onto 2" pipe/conduit</i>	
• Wall bracket.....	SWB6
<i>Use with slipfitter adapter SFA6 for easy wall mounting and increased adjustability</i>	
• Bull horn, 2 tenon, gray	BLHN2
• Bull horn, 3 tenon, gray	BLHN3

^A Photocell for Division 2 installation only. Not suitable for Class I, Zone 2.

Dimensions:



Net luminaire weights:

Lamp watts	FMVS weight (lbs.)	FMVM weight (lbs.)
150	37.00	37.00
175-250	40.00	42.00
400	44.00	44.00

Type	Weight (lbs.)
Add:	
SFA6 slipfitter adapter	4.00
SWB6 wall bracket	6.00

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Temperature performance data:

Series	Lamp type	Lamp watts	40°C ambient			55°C ambient			65°C ambient			Fixture aiming	
			Temperature code			Temperature code			Temperature code			Range	Figure
			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
		400 ^B	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 ^C	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
		400 ^B	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 ^C	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
		320 ^B	T3	350	105	T3	350	105	—	—	—	90°	1
			T3	350	105	T3	T1	125	—	—	—	120°	2
			T3	T1	105	T3	T1	125	—	—	—	180°	3

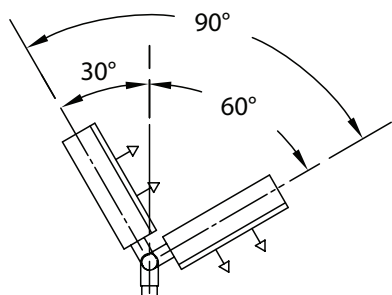


Figure 1

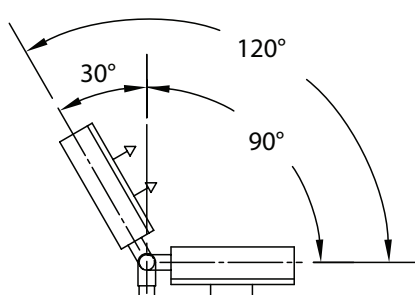


Figure 2

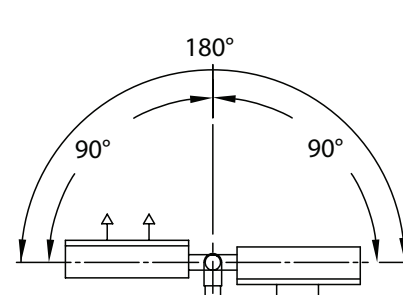


Figure 3

Lamp selection (mogul base):

Fixture	Watts / type	Bulb	GE	Osram	Philips
FMVSY150	150 HPS	ED23 1/2 BT25	LU150/55	LU150/55	C150S55
FMVSY250	250 HPS	ED18 1/2 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

^B Suitable for use in +55°C ambient without optional fuses.

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