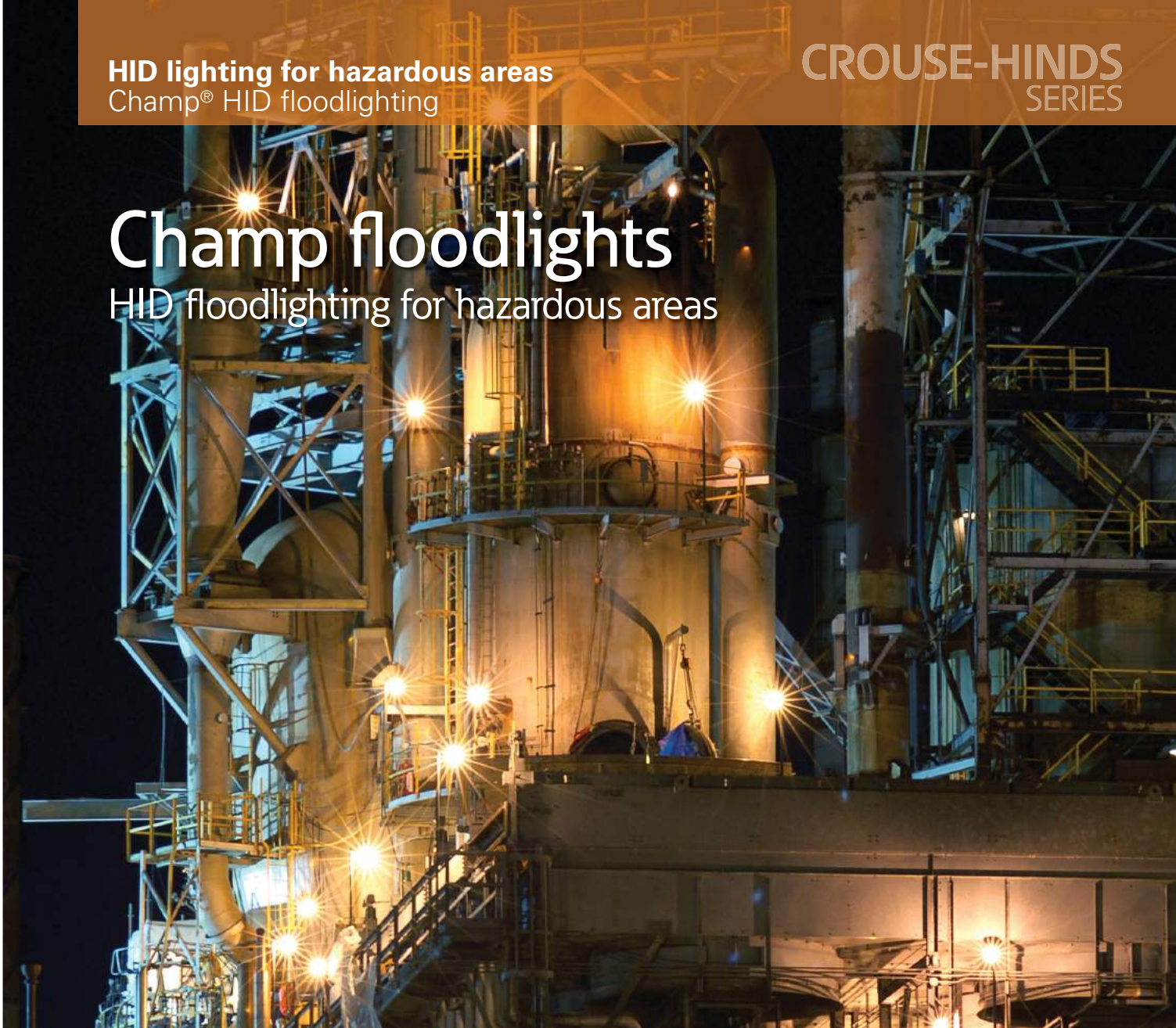


HID lighting for hazardous areas
Champ® HID floodlighting

CROUSE-HINDS
SERIES

Champ floodlights

HID floodlighting for hazardous areas



EAT•N

Powering Business Worldwide



Champ HID floodlights

Safe. Reliable. Efficient.

Featuring the industry's broadest range of luminaires for harsh and hazardous environments, Eaton's Crouse-Hinds can deliver a lighting solution that performs reliably in even the worst operating conditions. All the while reducing your energy, maintenance and manpower costs.

Why Crouse-Hinds?

- Optimal light output and beam distribution
- Easily accessible ballast assembly
- Restricted breathing standard on all floodlights
- UL marine rated, NEMA Type 4X and IP66

Why Champ HID floods?

Designed for harsh and hazardous. Champ HID floodlights are engineered to handle demanding conditions and are available in four styles to tackle all your lighting challenges.



Champ FMV nR

The Champ FMV nR offers exceptional indoor and outdoor illumination in industrial areas. Because of its superior corrosion resistance and restricted breathing being standard, the FMV is the ideal choice for diverse industrial applications that include wet and marine environments.

Features:

- Full-frame trunnion mounting bracket
- Restricted breathing standard
- 55°C ambient air suitability
- Standard with terminal blocks
- Class I, Division 2/Zone 2
- Removable ballast tray



Champ FMV1000 nR

The Champ FMV1000 nR offers restricted breathing and easy to wire terminal blocks as standard components. It is NEMA Type 4X and IP56 watertight and due to its heavy duty vaportight, copper-free aluminum housing and stainless steel hardware, it is exclusively designed for harsh and industrial areas requiring broad area lighting. The Champ FMV1000 nR provides a robust design for optimal use in the most corrosive/marine environments.

Features:

- Hazardous location high wattage floodlight for Class I, Division 2/Zone 2
- Restricted breathing standard
- T3 rating in Class I, Zone 2
- 40°C and 55°C ambient air suitability
- Hinged removable door
- Available in 600, 750, 1000 and 1500 watt systems (1500 watt for non-hazardous locations only)



Champ F2MV Mini

The F2MV is a compact floodlight that consists of a Corro-free™ epoxy coated copper-free aluminum enclosure with stainless steel external hardware and an impact-resistant glass lens. It is suitable for marine and wet locations and is ideal where space constraints restrict the use of larger floodlights.

Features:

- Small, compact size
- Easy mounting installation – only two bolts
- Powerful light distribution for floodlight and task applications
- Rated for use in 65°C ambient air for hazardous location applications



Champ Voyager nR™

The Champ Voyager nR offers the industry's coolest temperature rating and is the only mogul base Class I, Division 2 and Zone 2 stainless steel floodlight with restricted breathing as standard construction. It boasts a wide, powerful beam to deliver more light to your process, and with the standard terminal block and removable ballast component tray, the Champ Voyager is perfect for outdoor, marine, corrosive and high temperature locations.

Features:

- Housing, door and external parts are all 316 stainless steel
- Restricted breathing standard with T-ratings of T3 and T4
- Pre-wired with terminal blocks for easy wiring
- Hinged door and removable ballast tray

Product selector chart:

		F2MV Mini	FMV nR	FMV1000 nR	Voyager nR	nFMV
Hazardous	Class I, Division 2 Class I, Zone 2	•	•	•	•	
Hazardous restricted breathing (Ex nR)	NEC/CEC: Class I, Division 2 Class I, Zone 2 IEC Zone 2	•	•	•	•	
ATEX certification with IEC ballast and lamp socket	IEC Zone 2 Ex nR II ATEX				•	•
Wet		•	•	•	•	
Marine		•	•	•	•	
NEMA Type 4, 4X		•	•	•	•	
NEMA 7x6		•	•	•	•	
Corrosion-resistant		•	•	•	•	
Confined areas		•			•	
Wattage	High pressure sodium	50-150	150-400	600, 750, 1000	150-400	150-400
	Metal halide	70-175	175-400	1000, 1500	175-400	150-400

Champ FMV nR

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

Key features & benefits:

- 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
- 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:

NEC/CEC (NEC ballast gear and socket):

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

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

Easy to install & maintain:

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



Electrical & mechanical 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) 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)

Champ FMV nR – continued

Temperature ratings:

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**		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
		400**	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
		320**	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.

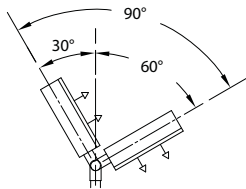


Figure 1

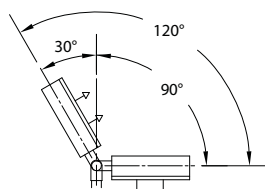


Figure 2

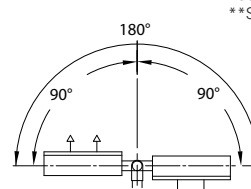
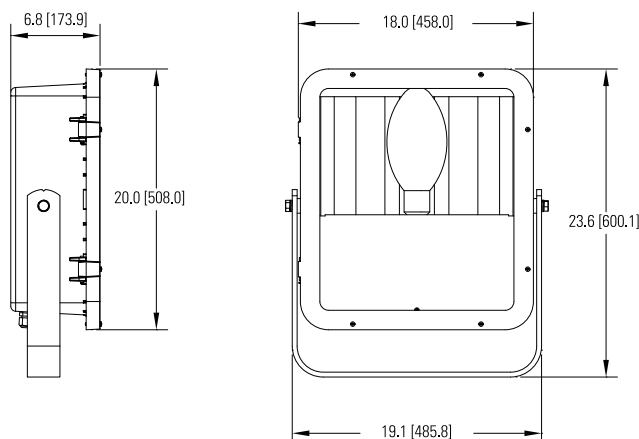


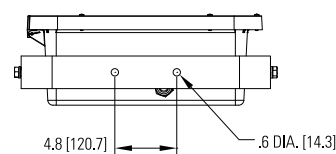
Figure 3

Weights and dimensions:



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

Accessory	Weight (lbs.)
SFA6 slipfitter adapter	4.00
SWB6 wall bracket	6.00



Champ FMV nR – continued

Part number example

FMVMY400/MT 76 S828

FMV	M	Y	400	/MT	76	S828
Model		Mount		Voltage	Beam spread	
FMV		Y Yoke		DT Dual-tap	76 NEMA 7x6 butterfly beam pattern	
				TT Tri-tap		
				MT Multi-tap		
				480 480V		
Lamp type		Wattage		Options		
M Metal halide		150 150W (HPS only)		TIR* Instant restrike and Ballast-Gard™		
S High pressure sodium		175 175W (MH only)		FA Factory assembled with HID lamp installed		
		250 250W		S658 Fused		
		400 400W		M20 20mm metric thread conduit opening		
				M25 25mm metric thread conduit opening		
				S714 Furnished with lamps (not installed)		
				S831 Retention chain		
				S828 Pulse start metal halide		
				S886 Enclosure machined with (2) conduit/cable entries		
				V2PC20‡ Installed photocell: 120V, 50-60 Hz		
				V2PC22‡ Installed photocell: 208-240V, 50-60 Hz		
				V2PC27‡ Installed photocell: 277V, 50-60 Hz		
Accessories (ordered separately)						
SFA6 Slipfitter adapter (mounted to standard yoke, fits 2" pipe/conduit)						
SWB6 Wall bracket (use with slipfitter adapter SFA6 for easy wall mounting and fine adjusting position)						

* Instant restrike – enables a hot HPS lamp to immediately restrike after a momentary loss of arc due to voltage fluctuation or power outage.

Ballast-Gard starter cut-out switch – prevents starter pulsing when lamp is cycling or inoperative; prolongs ballast and ignitor life

150W LX HPS only

‡ Photocell for Division 2 installation only.

Lamp selection (mogul base):

Fixture	Watts / type	Bulb	GE	Osram	Philips
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

Champ FMV1000 nR

The Champ FMV1000 nR high wattage floodlight is the best in its class with a heavy duty vaportight housing designed exclusively for harsh industrial areas requiring broad area lighting.

The FMV1000 boasts restricted breathing and easy to wire terminal blocks as standard. It is available in 600, 750 and 1000W high pressure sodium and 1000 and 1500W metal halide.



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

Key features & benefits:

- AEx nR, Ex nR restricted breathing rating is standard – 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 IP56 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
- Standard machining – will accept 3/4" NCGP or 3/4" Myers™ hub (Myers hub optional); optional metric machining will accept M20 or M25 (must be specified on order)
- Low and high ambient capability to -40°C – perfect for colder climates; +50°C workhorse in hot climates
- Heavy duty extruded copper-free aluminum enclosure with epoxy coating and stainless steel hardware – provides a robust design with industrial grade construction and corrosion resistance
- Precision formed aluminum reflector – superior beam control, distribution and efficiency
- High light output with a low cost of operation – cost-effectiveness in a high wattage floodlight

Certifications:

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2, AEx nR II, Group IIC
- Marine and wet locations
- IP56
- NEMA Type 4X

Standard materials:

- Housing – extruded aluminum
- External hardware – stainless steel
- Yoke – 316 stainless steel
- Lens – heat- and impact-resistant tempered glass
- Gasket – neoprene

Standard finishes:

- Aluminum – Corro-free™ epoxy powder coat
- Stainless steel – natural



Easy to install & maintain:

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

Electrical & mechanical ratings:

Sources/wattages (mogul base lamps):

- High pressure sodium (HPS) – 600, 750, 1000W
- Metal halide (MH) – 1000W; 1500W non-hazardous location rated

Voltages:

Standard voltage ballasts

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

Optional voltage ballasts

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

Hub sizes:

- Standard – 3/4" NPT
- Optional – 25mm (M25 x 1.5) or 20mm (M20 x 1.5)
- Dual entry – NPT or metric

Champ FMV1000 nR – continued

Temperature ratings:

Series	Lamp type	Lamp watts	40°C ambient			50°C ambient			Fixture aiming	
			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		
FMVS	High pressure sodium	600	T3	T1	90	T3	T1	105	90°	2
		750	T3	T1	90	T3	T1	105	90°	2
		1000	T3	T1	90	T3	T1	105	90°	2
FMVM	Metal halide	1000	T3	T1	90	T3	T1	105	90°	2
		750	T3	T1	90	T3	T1	105	75°	1
	Pulse start metal halide	750	T3	T1	90	-	-	-	90°	2
		1000	T3	T1	90	T3	T1	105	75°	1
		1000	T3	T1	90	-	-	-	90°	2

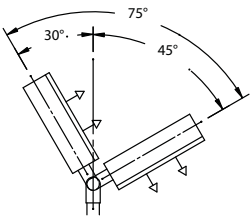


Figure 1

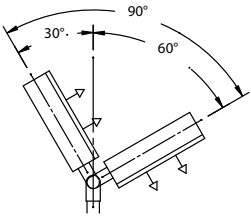
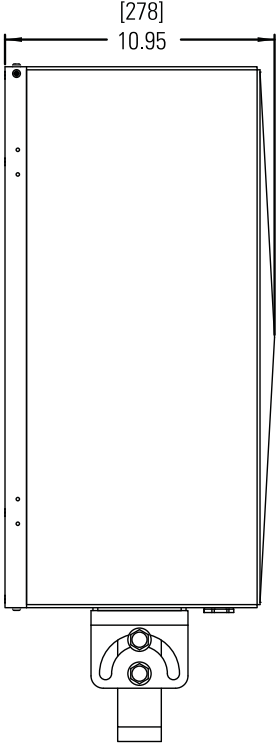
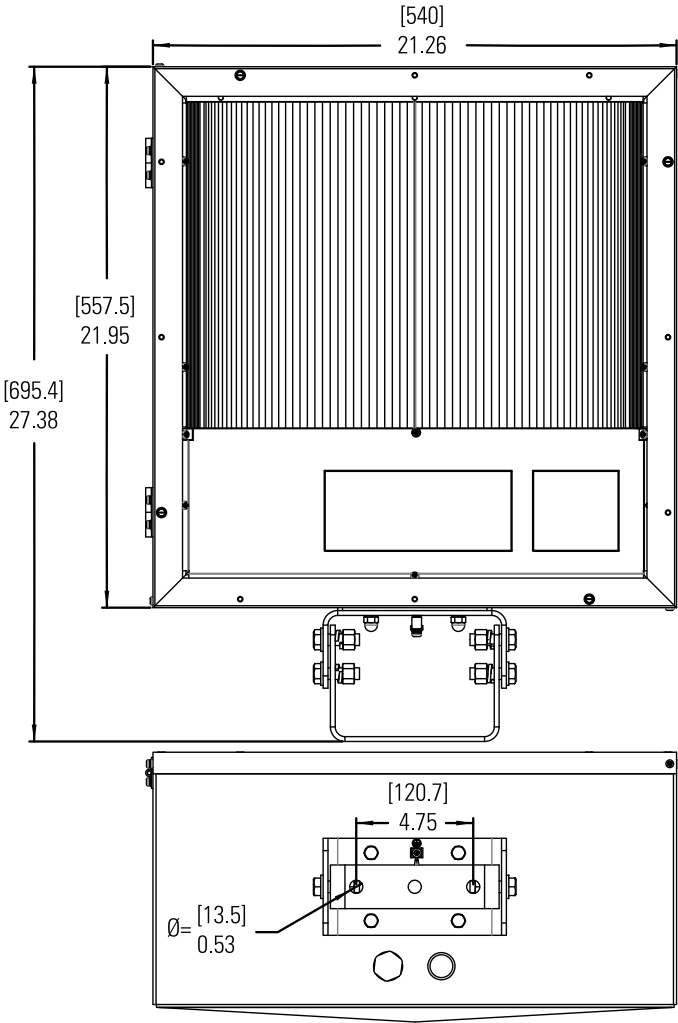


Figure 2

Weights and dimensions:

Lamp watts	FMVS weight (lbs.)	FMVM weight (lbs.)
600	78.00	—
750	76.00	—
1000	83.00	76.00
1500	—	84.00



Champ FMV1000 nR – ordering information

Part number example

FMVSY1000/MT 76 S886

FMV	S	Y	1000	/MT	76	S886
Model		Mount		Voltage	Beam spread	
FMV		Y Yoke		DT Dual-tap	76 NEMA 7x6 butterfly beam pattern	
				TT Tri-tap		
				MT Multi-tap		
				480 480V		
Lamp type		Wattage				
M Metal halide		600 600W (HPS only)				
S High pressure sodium		750 750W (HPS only)				
		1000 1000W				
		1500 1500W (MH only)				

Accessories (ordered separately)

SFA6	Slipfitter adapter (mounted to standard yoke, fits 2" pipe/conduit)
SWB6	Wall bracket (use with slipfitter adapter SFA6 for easy wall mounting and fine adjusting position)
D2S20*	Photocell: 120V, 50/60 Hz
D2S208 277*	Photocell: 208-277, 50/60 Hz

* Photocells in DS cover for use with FS/FD box.

Options

FA	Factory assembled – lamp installed in lamp holder
M20	20mm metric thread conduit opening
M25	25mm metric thread conduit opening
S714	Furnished with lamps (not installed)
S831	Retention chain
S828	Pulse start metal halide
S886	Enclosure machined with (2) conduit/cable entries

Lamp selection (mogul base):

Fixture	Watts / type	Bulb	GE	Osram	Philips
FMVSY600	600 HPS	T15	LU600/T	-	C600S106
FMVSY750	750 HPS	ED37	LU750	-	-
FMVSY1000	1000 HPS	E25	LU1000	-	C1000S52/ED37
FMVMY750	750 MH	ED37	MVR750/VBU/PA	-	-
FMVMY1000	1000 MH	BT56	MVR1000/U	-	MH1000/U
FMVMY1500	1500 MH	BT56	MVR1500/U/SPORTS	-	MH1500/U

Champ F2MV

The Champ F2MV is a compact floodlight consisting of a Corro-free epoxy coated copper-free aluminum enclosure, with stainless steel external hardware and impact-resistant glass. It is available for use with mogul base HID lamp types and wattages from 50 to 175 watts.



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

Key features and benefits:

- Small, compact size – easy to install and maintain
- 40°C and 55°C ambient suitability – addresses high ambients common in industrial facilities
- Low ambient capability to -40°C – perfect for colder climates
- Heavy duty copper-free aluminum enclosure with epoxy coating and stainless steel hardware – provides a robust design with industrial grade construction and corrosion resistance
- Continuous silicone gasketing – ensures wet and marine locations integrity
- Stainless steel tether chain and captive cover screws – secure cover to housing ensures ease of maintenance
- Trunnion (yoke) mount design – standard construction provides the greatest mounting flexibility; can be mounted vertically (wall), horizontally (rooftop or floor) or any angle in between
- Requires only two bolts to mount – simplifies installation
- Heat- and impact-resistant tempered glass lens – provides exceptional stability
- Shock-absorbing mogul base lamp socket – cushions lamp; improves lamp life in harsh environments
- 3-axis resonance withstand and UL844 vibration compliant – stands up to the tough jobs
- Precision formed aluminum reflector – superior beam control, distribution and efficiency
- NEMA 7x6 floodlight pattern with lamp orientation base down – the ideal light distribution for industrial applications
- Multi-tap ballasts – offering a choice of 120, 208, 240 and 277V; 220V, 50 Hz; 240V, 50 Hz; Tri-tap (120, 277 and 347V); and 480V ballasts are also available
- High light output with a low cost of operation – a cost-effective high wattage floodlight
- For use with SFA6 slipfitter adapter and SWB6 wall mount bracket accessories – further enhances mounting flexibility
- Restricted breathing compliance – cooler T-numbers for increased hazardous locations suitability

Standard materials:

- Enclosure (housing and lens cover) – copper-free aluminum
- Cover chain and external hardware – stainless steel
- Lens – heat- and impact-resistant glass
- Gaskets – silicone rubber
- Yoke – copper-free aluminum
- Reflector – diffused aluminum lighting sheet

Standard finishes:

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

Certifications:

NEC/CEC:

- Class I, Division 2, Groups A, B, C, D
- Marine and wet locations
- NEMA Type 4X

IEC/NEC/CEC:

- Class I, Zone 2, Group IIC
- With suffix S826 and S826TB restricted breathing (Ex nR) option
- Class I, Zone 2
- Class I, Division 2

UL standards:

- UL844 – Hazardous (Divisions Classified) Locations
- UL2279 – Hazardous (Zones Classified) Locations
- UL1572 – Ordinary and Wet Locations, Marine Outside Type

CSA standards:

- C22.2 No. 137
- CAN/CSA-E79 Series

IEC standard:

- 60079-15

Electrical & mechanical ratings:

Sources/wattages (mogul base lamps):

- High pressure sodium (HPS) – 50, 70, 100, 150W
- Metal halide (MH) – 70, 100, 175W

Voltages:

Standard voltage ballasts

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

Optional voltage ballasts

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

Hub sizes:

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

Champ F2MV – continued

Temperature ratings:

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		
F2MVS	High pressure sodium	50	T6	T3C	75	T6	T3C	75	T3B	T5	75	90°	1
		70	T6	T3A	60	T5	T3A	75	T3	T4	85	90°	1
		100	T4	T2D	75	T4	T2C	90	-	-	-	90°	1
		150**	T4	T2A	75	T4	T2A	85	T3	T2A	110	90°	1
F2MVM	Metal halide	70	T6	T3C	75	T5	T3A	75	T4	T3A	85	90°	1
		100	T4	T2D	75	T4	T2D	75	T4	T2C	85	90°	1
		175**	T3	T2A	75	T3	T2A	85	T3	T2A	110	90°	1

*Restricted breathing explosion protection requires suffix "S826" TB.

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

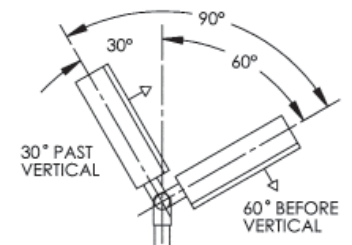
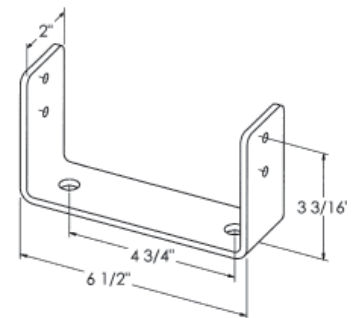
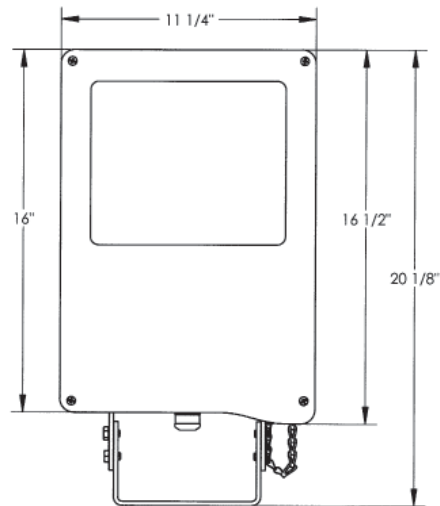
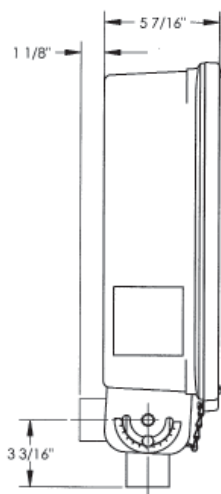


Figure 1

Weights and dimensions:

Series	Weight (lbs.)
F2MVS	26.00
F2MVM	26.00



Champ F2MV – ordering information

Part number example

F2MVSY070/MT V2PC20

F2MV	S		Y	070	/	MT	V2PC20
Model			Mount			Voltage	
F2MV			Y Yoke			DT Dual-tap	
						TT Tri-tap	
Lamp type			Wattage			MT Multi-tap	
M Metal halide			050 50W (HPS only)			480 480V	
S High pressure sodium			070 70W				
			100 100W				
			150 150W (HPS only)				
			175 175W (MH only)				
Entry						Options	
BLANK ¾" NPT thread conduit opening						TIR* Instant restrike and Ballast-Gard™	
20 20mm metric thread conduit opening						FA Factory assembled with HID lamp installed	
25 25mm metric thread conduit opening						S658 Fused	
						S714 Furnished with lamps (not installed)	
						S831 Retention chain	
						S828 Pulse start metal halide	
						V2PC20‡ Installed photocell: 120V, 50-60 Hz	
						V2PC22‡ Installed photocell: 208-240V, 50-60 Hz	
						V2PC27‡ Installed photocell: 277V, 50-60 Hz	
Accessories (ordered separately)							
SFA6 Slipfitter adapter (mounted to standard yoke, fits 2: pipe/conduit)							
SWB6 Wall bracket (Use with slipfitter adapter "SFA6" for easy wall mounting and fine adjusting position)							

* Instant restrike – enables a hot HPS lamp to immediately restrike after a momentary loss of arc due to voltage fluctuation or power outage

Ballast-Gard starter cut-out switch – prevents starter pulsing when lamp is cycling or inoperative; prolongs ballast and ignitor life

150W LX HPS only

‡ Photocell for Division 2 installation only.

Lamp selection (mogul base):

Fixture	Watts / type	Bulb	GE	Osram	Philips	Venture
F2MVSY050	50 HPS	ED23 ½ or ET23 ½	LU50	LU50	C50S68	-
F2MVSY070	70 HPS	ED23 ½ or ET23 ½	LU70	LU70	C70S62	-
F2MVSY100	100 HPS	ED23 ½ or ET23 ½	LU100	LU100	C100S54	-
F2MVSY150	150 HPS	ED23 ½ or ET23 ½	LU150/55	LU150/55	C150S55	-
F2MVMY070	70 MH	ED28	-	-	-	MH70W/U/ED28
F2MVMY100	100 MH	ED28	-	-	-	MH100/U/ED28
F2MVMY175	175 MH	ED28 or BT28	MVR175/C/U	M175/C/U	MH175/C/U	MH175/C/U

Champ Voyager nR

The Champ Voyager nR stainless steel floodlight offers the industry's coolest temperature ratings – so it can operate below the ignition temperature of vapors and gases in your classified area.

Standard terminal blocks and a removable ballast component tray bring you the best combination of easy wiring and simple maintenance in one rugged package.



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 with excellent T3 and T4 ratings without additional accessories or options
- NEMA 7x6 butterfly beam floodlight pattern – wide, uniform and far-reaching to reduce the number of luminaires you need, providing excellent luminaire efficiency – more light where you need it
- Easy wiring – standard terminal block with marked terminals saves time and eliminates wiring errors
- Removable ballast component tray – for capacitor, igniter and terminal block to simplify maintenance and save money
- Housing, hinges, door frame and mounting yoke are all 316 stainless steel for marine and wet locations – robust construction suitable for salt water and corrosive applications

Certifications:

NEC/CEC (NEC ballast gear and socket):

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2, AEx nR II, Group IIC
- NEMA Type 4X
- IP66

IEC/NEC/CEC (IEC ballast gear and socket):

- IEC Zone 2, Ex nR II ATEX

UL standards:

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

Standard materials:

- Enclosure (housing and lens frame) – 316 stainless steel
- Lens – heat- and impact-resistant tempered glass
- Gaskets – silicone rubber
- Yoke and yoke bracket – 316 stainless steel
- Reflector – formed specular (dimpled glossy surface) aluminum
- Cable gland cord grip and locknut – polyamide 6, neoprene bushing

Standard finish:

- 316 stainless steel – natural

Easy to install & maintain:

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



Electrical & mechanical 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)
- 480V, 60 Hz
- Tri-tap (120, 277, 347V, 60 Hz)

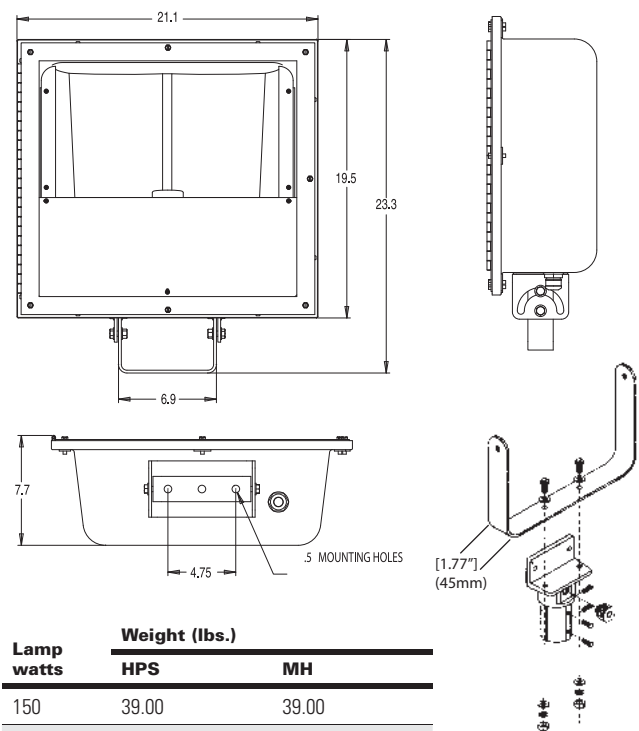
Optional voltage ballasts

- 220V or 240V, 50 Hz

Hub sizes:

- Standard – ¾" NPT with a ¾" gland sealing connector

Weight and dimensions:



Lamp watts	Weight (lbs.)	
	HPS	MH
150	39.00	39.00
175	39.00	39.00
250	43.00	41.00
400	45.00	43.00

Champ Voyager nR – ordering information

Part number example

SSFMVSY150 /MT M25

SSFMV

S

Y

150

/ MT

M25

Model

SSFMV	NEC style ballast
NSSFMV	IEC style ballast

Lamp type

M	Metal halide
S	High pressure sodium

Mount

Y	Yoke
----------	------

Wattage

150	150W
175	175W
250	250W (MH only)
400	400W

Voltage

TT	Tri-tap
MT	Multi-tap
480	480V
220 50	20V, 50 Hz
220	220V, 60 Hz
240 50	240V, 50 Hz

Accessories (ordered separately)

SFA6	Slipfitter adapter (mounted to standard yoke, fits 2" pipe/conduit)
SWB6	Wall bracket (use with slipfitter adapter SFA6 for easy wall mounting and fine adjusting position)
SFA6 SS	Slipfitter adapter – stainless steel (mounted to standard yoke, fits 2" pipe/conduit)
SWB6 SS	Wall bracket – stainless steel (use with slipfitter adapter SFA6 SS for easy wall mounting and fine adjusting position)
D2S20*	Photocell: 120V, 50/60 Hz
D2S208 277*	Photocell: 208-277, 50/60 Hz

* Photocells in DS cover for use with FS/FD box.

Options

TIR*	Instant restrike and Ballast-Gard
FA	Factory assembled with HID lamp installed
M20	20mm metric thread conduit entry
M25	25mm metric thread conduit entry
S658	Fused
S714	Furnished with lamps (not installed)
S828	Pulse start metal halide
S886	Enclosure machined for (2) conduit/cable entries

* Instant restrike – enables a hot HPS lamp to immediately restrike after a momentary loss of arc due to voltage fluctuation or power outage

Ballast-Gard starter cut-out switch – prevents starter pulsing when lamp is cycling or inoperative; prolongs ballast and ignitor life

150W LX HPS only

Temperature ratings:

Series	Lamp type	Lamp watts	40°C ambient			55°C ambient			Fixture aiming	
			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		
SSFMVS	High pressure sodium	150*	T4	T2B	90	T4	T2B	105	120°	2
		250*	T4	350	90	T3	350	105	90°	1
		400	T3	T1	90	-	-	-	90°	1
SSFMVM	Metal halide	175*	T3	T2	90	T3	T2	105	120°	2
		250*	T3	325	90	T3	325	105	90°	1
		400	T3	325	105	-	-	-	90°	1

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

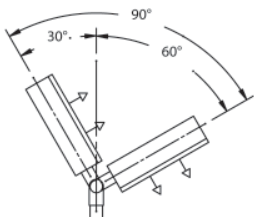


Figure 1

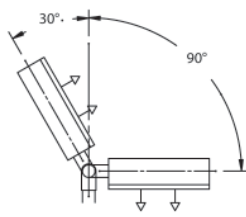


Figure 2

Notes

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