

Champ N2MV non-metallic HID luminaires

50-175W

Cl. I, Div. 2, Groups A, B, C, D
Cl. II, Groups F, G
Cl. III & Simultaneous
Presence (100W max.)

Marine & Wet Locations
3, 3R, 4, 4X; IP56

3L

Applications:

Champ® N2MV HID luminaires are used:

- In areas in which ignitable concentrations of flammable gases or vapors will be present due to abnormal, unusual or accidental conditions
- In installations where moisture, dirt, vibration, corrosion or rough usage are concerns
- Wherever the damaging effects of water, wind, snow, sleet, hot sun or any combination of these elements are found
- Ideal for marine use; resists the harmful effects of salt water
- Withstands the harshest of corrosive environments
- To provide low wattage spot and floodlighting
- For general area lighting
- In areas where the ambient temperature will get as low as 40°C (-40°F)
- In manufacturing plants, refineries, chemical, petrochemical and other industrial process facilities, wastewater and sewage treatment facilities, offshore, dockside and harbor installations as well as other heavy industrial applications

Features:

- Housing and mounting modules made of polyphenylene sulfide (PPS) for strength and maximum resistance to corrosion
- Pendant mounting module equipped with integral hub set screws for vibration resistance
- Hubs are provided with an integral bushing to help prevent damage to field wiring during installation and ground connection for positive bonding
- Guard, hub inserts, stanchion elbow and hardware made of stainless steel for maximum resistance to corrosion
- Grounding wire for safety
- Stainless steel open bottom guard permits direct access to the globe for easy relamping
- Hinged assembly allows the luminaire to hang free during installation to permit the use of both hands when wiring
- One external captive screw for ease of installation
- Handle – hinge assembly doubles as a handle for ease of installation, especially when carrying up a ladder



Certifications and compliances:

NEC/CEC:

- Class I, Division 2, Groups A, B, C, D
- 100W max. – Class II, Class III & Simultaneous Presence (Class I, Division 2 and Class III)

UL standards:

- UL844 – Hazardous (Classified) Locations
- UL1598 – Luminaires
- UL1598A – Marine Locations

CSA standard:

- C22.2 No. 137

Standard materials:

- Housing, mounting modules, component pallets – polyphenylene sulfide (PPS)
- Guard, hub inserts, stanchion elbow, hardware – stainless steel
- Globe – heat tempered
- Gaskets – silicone rubber

Electrical ratings:

- 120, multi-tap (120, 208, 240, 277), dual-tap (120, 277), tri-tap (120, 277, 347), 480, 600 and 220/240 volt, 50 Hz
- 50-150W HPS; 70-175W MH and pulse start MH

Options:

Description

Suffix

- Wall mount arm – for converting ceiling mount luminaire to wall mount **N2MV-WM1**
- Ballast-Gard starter cut-out switch – prevents starter pulsing when lamp is cycling or inoperative; prolongs ballast and ignitor life **BG**
Available for use with 50-150W HPS only
- Factory assembled with HID lamps installed **FA**
- Instant restrike – enables a hot HPS lamp to immediately restrike after a momentary loss arc due to voltage fluctuation or power outage; has no effect on the warm-up period of cold lamps **IR**
50-150W LX HPS only
- During a “failed lamp” condition, this feature discontinues the start-up operation after 1 minute **TIR**
50-150W LX HPS only
- Quartz auxiliary lighting – comes to full brightness immediately and remains lit until the HID lamp attains 60-70% of full illumination **QTZ**
For non-hazardous locations only
QTZ lamp not included; use 100W single-ended lamp – Q100DC, Q100CL/DC or 100Q/CL/DC
Consult factory for top hat limitations
- Fused – to protect ballast and capacitor against abnormal line conditions **S658**
Not available with MT ballast
Not for use in Canada
Not suitable for marine applications
- Furnished with lamps **S714**
- Teflon coated globe for additional protection against breakage **S808**
Available for use with 50-100W HPS and 70-175W MH and pulse start MH

Accessories:

- See pages 216-217 for complete listing

Photometrics:

- Complete photometrics can be found at www.crouse-hinds.com/photometrics

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50-150W high pressure sodium

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To complete the catalog number, include information in Notes 1, 2 and 3 below. For guards and other optics, see N2MV – ordering by components page.

BASIC CATALOG NUMBER

Mounting style	Hub size	Lamp watts	Cat. # With G303 globe and P33 guard	Cat. # With GR305 glass refractor ^A
Pendant mount	3/4"	50	N2MVS2A050GP	N2MVS2A050GR305
	1"		N2MVS3A050GP	N2MVS3A050GR305
	3/4"	70	N2MVS2A070GP	N2MVS2A070GR305
	1"		N2MVS3A070GP	N2MVS3A070GR305
	3/4"	100	N2MVS2A100GP	N2MVS2A100GR305
	1"		N2MVS3A100GP	N2MVS3A100GR305
	3/4"	150	N2MVS2A150GP	N2MVS2A150GR305
	1"		N2MVS3A150GP	N2MVS3A150GR305
Ceiling mount through feed	3/4"	50	N2MVS2C050GP	N2MVS2C050GR305
	1"		N2MVS3C050GP	N2MVS3C050GR305
	3/4"	70	N2MVS2C070GP	N2MVS2C070GR305
	1"		N2MVS3C070GP	N2MVS3C070GR305
	3/4"	100	N2MVS2C100GP	N2MVS2C100GR305
	1"		N2MVS3C100GP	N2MVS3C100GR305
	3/4"	150	N2MVS2C150GP	N2MVS2C150GR305
	1"		N2MVS3C150GP	N2MVS3C150GR305
Stanchion mount 25° angle	1 1/2"	50	N2MVSJ050GP	N2MVSJ050GR305
	1 1/2"	70	N2MVSJ070GP	N2MVSJ070GR305
	1 1/2"	100	N2MVSJ100GP	N2MVSJ100GR305
	1 1/2"	150	N2MVSJ150GP	N2MVSJ150GR305

^A For GR302 Type II refractor, change 'GR305' at end of catalog number to 'GR302.' Example: N2MVS2A050GR302.
For GR303 Type III refractor, change 'GR305' at end of catalog number to 'GR303.' Example: N2MVS2A050GR303.

1. Add voltage suffix to end of catalog number.

Standard voltage ballasts – 60 Hz

NEC/UL				CEC/CSA (cUL)		
Voltage	Multi-tap	Dual-tap	120V	480V	Tri-tap	Dual-tap
Suffix	/MT	/DT	/120	/480	/TT	/DT

Optional voltage ballasts – 50 or 60 Hz

CEC/CSA (cUL) – CWI isolated ballasts				Export			
Voltage	208V CWI	240V CWI	480V CWI	600V CWI	220V 60 Hz	220V 50 Hz	230V 50 Hz
Suffix	/208 CWI	/240 CWI	/480 CWI	/600 CWI	/220	/220 50	/230 50

2. 150W HPS luminaires:

- 55V lamps standard – use suffix LX; for 100V lamps – use suffix CE
- 50W HPS luminaire is dual-tap only

3. Options: Add the required option suffixes (see page 203) in alphanumeric order.

Champ N2MV non-metallic HID luminaires

150-175W pulse start metal halide

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Marine & Wet Locations
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To complete the catalog number, include information in Notes 1 and 2 below. For guards and other optics, see N2MV – ordering by components page.

BASIC CATALOG NUMBER				
Mounting style	Hub size	Lamp watts	Cat. # With G303 globe and P33 guard	Cat. # With GR305 glass refractor [®]
Pendant mount	3/4"	150	N2MVM2A150GP S828	N2MVM2A150GR305 S828
	1"		N2MVM3A150GP S828	N2MVM3A150GR305 S828
	3/4"	175	N2MVM2A175GP S828	N2MVM2A175GR305 S828
	1"		N2MVM3A175GP S828	N2MVM3A175GR305 S828
Ceiling mount through feed	3/4"	150	N2MVM2C150GP S828	N2MVM2C150GR305 S828
	1"		N2MVM3C150GP S828	N2MVM3C150GR305 S828
	3/4"	175	N2MVM2C175GP S828	N2MVM2C175GR305 S828
	1"		N2MVM3C175GP S828	N2MVM3C175GR305 S828
Stanchion mount 25° angle	1 1/2"	150	N2MVMJ150GP S828	N2MVMJ150GR305 S828
	1 1/2"	175	N2MVMJ175GP S828	N2MVMJ175GR305 S828

[®]For GR302 Type II refractor, change 'GR305' at end of catalog number to 'GR302'. Example: N2MVM2A150GR302 S828.
For GR303 Type III refractor, change 'GR305' at end of catalog number to 'GR303'. Example: N2MVM2A150GR303 S828.

1. Add voltage suffix to end of catalog number.

Standard voltage ballasts – 60 Hz

NEC/UL			CEC/CSA (cUL)	
Voltage	Multi-tap	120V	Tri-tap	120V
Suffix	/MT	/120	/TT	/120
		480V		480V

Optional voltage ballasts – 50 or 60 Hz

Export			
Voltage	220V 60 Hz	220V 50 Hz	230V 50 Hz
Suffix	/220	/220 50	/230 50
			240V 50 Hz
			/240 50

2. Options: Add the required option suffixes (see page 203) in alphanumeric order.

Champ N2MV non-metallic HID luminaires

70-175W metal halide

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Marine & Wet Locations
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To complete the catalog number, include information in Notes 1, 2 and 3 below. For guards and other optics, see N2MV – ordering by components page.

BASIC CATALOG NUMBER

Mounting style	Hub size	Lamp watts	Cat. # With G303 globe and P33 guard	Cat. # With GR305 glass refractor [Ⓒ]
Pendant mount	3/4"	70	N2MVM2A070GP	N2MVM2A070GR305
	1"		N2MVM3A070GP	N2MVM3A070GR305
	3/4"	100	N2MVM2A100GP	N2MVM2A100GR305
	1"		N2MVM3A100GP	N2MVM3A100GR305
	3/4"	175	N2MVM2A175GP	N2MVM2A175GR305
	1"		N2MVM3A175GP	N2MVM3A175GR305
Ceiling mount through feed	3/4"	70	N2MVM2C070GP	N2MVM2C070GR305
	1"		N2MVM3C070GP	N2MVM3C070GR305
	3/4"	100	N2MVM2C100GP	N2MVM2C100GR305
	1"		N2MVM3C100GP	N2MVM3C100GR305
	3/4"	175	N2MVM2C175GP	N2MVM2C175GR305
	1"		N2MVM3C175GP	N2MVM3C175GR305
Stanchion mount 25° angle	1 1/2"	70	N2MVMJ070GP	N2MVMJ070GR305
	1 1/2"	100	N2MVMJ100GP	N2MVMJ100GR305
	1 1/2"	175	N2MVMJ175GP	N2MVMJ175GR305

[Ⓒ]For GR302 Type II refractor, change 'GR305' at end of catalog number to 'GR302.' Example: N2MVM2A070GR302.
For GR303 Type III refractor, change 'GR305' at end of catalog number to 'GR303.' Example: N2MVM2A070GR303.

1. Add voltage suffix to end of catalog number.

Standard voltage ballasts – 60 Hz

NEC/UL				CEC/CSA (cUL)	
Voltage	Multi-tap	120V	480V	Tri-tap	120V
Suffix	/MT	/120	/480	/TT	/120

Optional voltage ballasts – 50 or 60 Hz

CEC/CSA (cUL) – CWI isolated ballasts				Export			
Voltage	208V CWI	240V CWI	600V CWI	220V 60 Hz	220V 50 Hz	230V 50 Hz	240V 50 Hz
Suffix	/208 CWI	/240 CWI	/600 CWI	/220	/220 50	/230 50	/240 50

2. 70W ballast not available in 480V.

3. Options: Add the required option suffixes (see page 203) in alphanumeric order.

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Ordering by components

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N2MV luminaires are available in components.

A complete luminaire consists of:

- I. N2MV cover (mounting module)
- II. N2MV ballast housing – include voltage and required option(s)
- III. Globe, guard, reflector, refractor

I. N2MV cover (mounting module):

Type	Conduit size	Cat. #
Pendant mount	3/4"	N2APM2
	1"	N2APM3
Ceiling mount	3/4"	N2CM2
	1"	N2CM3
Wall mount (use wall bracket accessory with ceiling cover)	3/4"	N2MV WM1 and N2CM2
	1"	N2MV WM1 and N2CM3
Stanchion mount – 25° angle	1 1/2"	N2JM5

II. Ballast housings:

Complete catalog number must have the **voltage suffix** (MT shown) and any **options suffixes**.

Lamp type	Lamp watts	Cat. #
High pressure sodium	50	N2MVS050/MT
	70	N2MVS070/MT
	100	N2MVS100/MT
	150	N2MVS150/MT LX
Metal halide	70	N2MVM070/MT
	100	N2MVM100/MT
	175	N2MVM175/MT

III. Globes, guards, reflectors, refractors:

Type	Cat. #
Globe	G303
Globe – Teflon coated	G303S808
Globe guard	P33
Reflector – dome	RD739
Reflector – angle	RA739
Refractor – Type II	GR302
Refractor – Type III	GR303
Refractor – Type V	GR305
Refractor guard	P23
Large plastic refractor – Type II	PGR302 ①
Large plastic refractor – Type III	PGR303 ①
Large plastic refractor – Type V	PGR305 ①

① Plastic refractors are for non-hazardous areas only (50-100W max.).

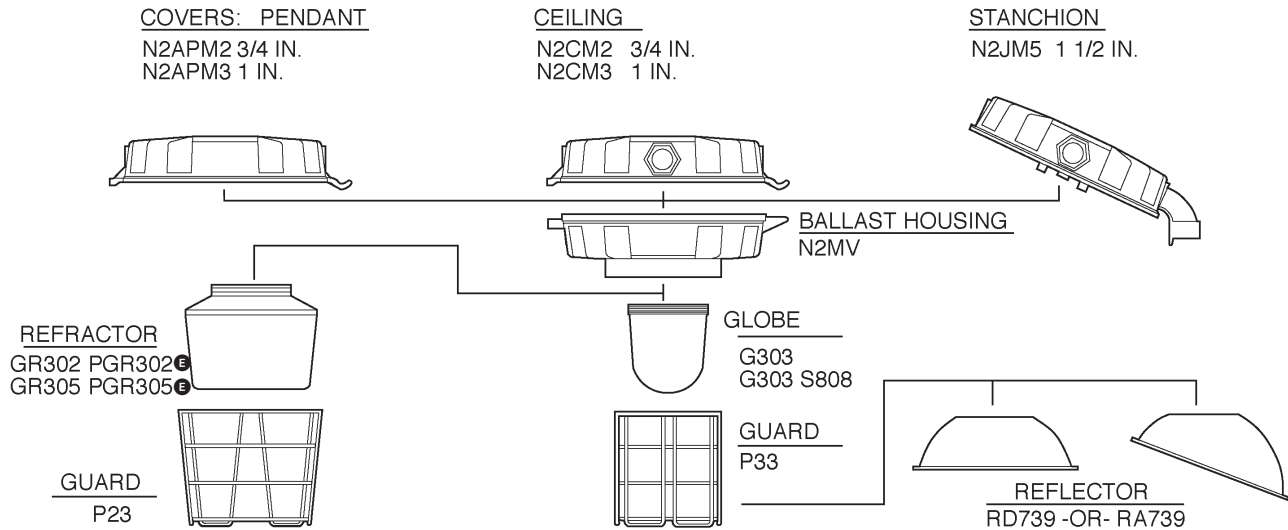
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Family tree:



^E Plastic refractors are for non-hazardous areas only (50-100W max.).

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Temperature performance data:

Lamp Watts	Ambient Temp C	Optics	Class I (Gas/Vapors)	Class II (Dust) and Class III	Simultaneous Presence Gas and Dust Present in the Same Area	Supply Wire Temp C
			Non Restricted Breathing		Non Restricted Breathing	
			Standard Product	Standard Product	Standard Product	
			Division 2		Class I, Division 2 and Class II	
		G303	X	X	X	
		GR305	X	X	X	

High pressure sodium

50	40	T3A	T4A	T2C / T4A	75
	55	T3A	—	—	85
	65	—	—	—	—
70	40	T3A	T4A	T2C / T4A	75
	55	T3A	—	—	85
	65	—	—	—	—
100	40	T2D	T4A	T2C / T4A	85
	55	T2C	—	—	100
	65	—	—	—	—
150	40	T2C	—	—	85
	55	—	—	—	—
	65	—	—	—	—

Metal halide

70	40	T3C	T4	T2B / T4	75
	55	T3B	—	—	85
	65	—	—	—	—
100	40	T2B	T4	T2B / T4	85
	55	T2B	—	—	—
	65	—	—	—	—
150 (S828)	40	T2	—	—	—
	55	—	—	—	—
	65	—	—	—	—
175 (includes S828)	40	T2	—	—	—
	55	—	—	—	—
	65	—	—	—	—

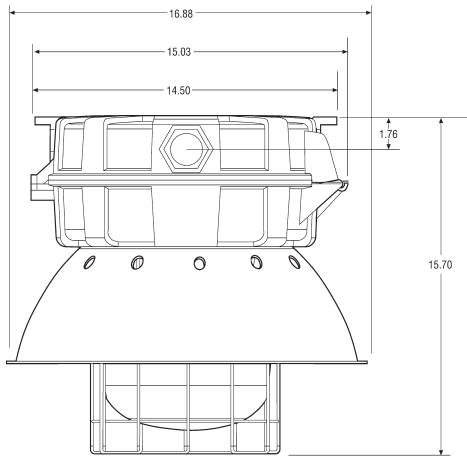
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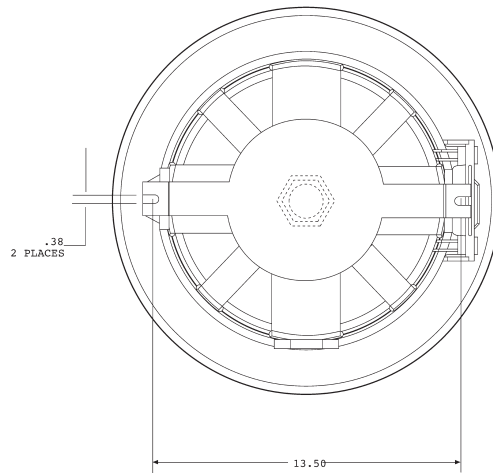
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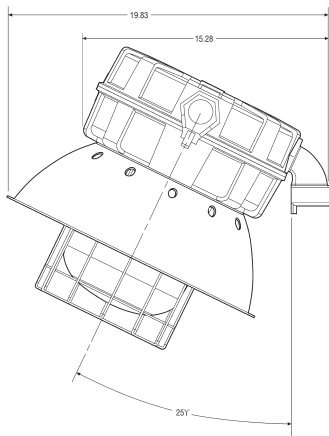
Dimensions (in inches):



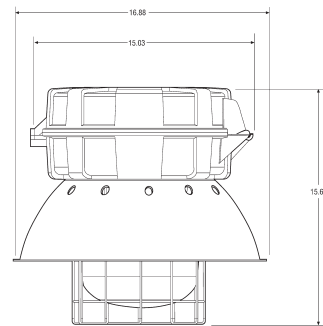
Ceiling mount



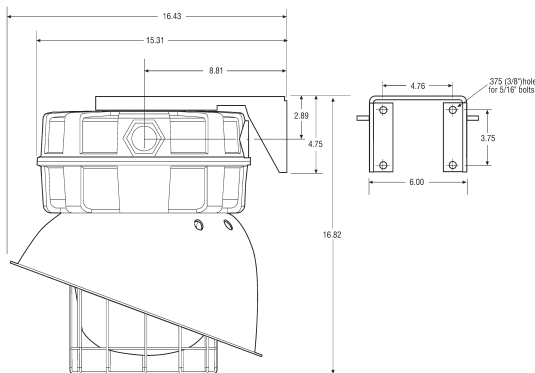
Ceiling mount – top view



Stanchion mount 25° angle



Pendant mount



Wall arm mount

Net luminaire weights:

Luminaire series	Lamp watts	Luminaire with globe, guard (lbs.)
N2MVS	50	23.00
	70	23.06
	100	24.06
	150	26.13
N2MVM	70	21.00
	100	21.06
	175	22.25
	250	24.00

Type	Weight (lbs.)
Add mounting modules:	
Pendant	1.25
Ceiling	2.75
Stanchion 25° angle	3.50
Add reflectors:	
Dome	1.25
30° angle	1.75

Deduct: 1.00 lb. for fixture without P33 guard

Add: 5.50 lbs. for fixture with GR305 refractor