

Mercmaster™ Jr. Luminaires

High Pressure Sodium. Suitable for Use in Wet Locations

UNILETS® for Use with Threaded Metal Conduit. 120 V Integral Ballast. Medium Base Socket for Medium Base Lamps.

NEC:
With Globe:
 35 W, 50 W:
 Class I, Division 2, Groups A, B, C, D
 Class II, Division 1 and 2, Groups E ②, F, G
 Class III

NEC:
 70 W: ①
 Class I, Division 2, Groups A, B, C, D
 Class II, Division 1 and 2, Groups E ②, F
 100 W, 150 W: ①
 Class I, Division 2, Groups A, B, C, D

NEC:
With Refractor (NEMA V):
 35 W, 50 W, 70 W, 100 W:
 Class I, Division 2, Groups A, B, C, D
 Class II, Division 1 and 2, Groups E ②, F, G
 Class III

NEC:
 150 W: ①
 Class I, Division 2, Groups A, B, C, D

Thermal Suitability

Table at below shows maximum operating temperatures of Mercmaster Jr. fixtures for Class I, Division 2, in a 40 °C (104 °F) ambient. Per NEC 500.8(B)(4), the temperature marking on fixtures shall not exceed the ignition temperature of the specific gas or vapor to be encountered. NEC 500.8(B)(4) states that these markings (Identification Numbers) "marked on equipment nameplates shall be in accordance with Table NEC 500.8(C)." This NEC table is duplicated, as it applies to Appleton Mercmaster Jr. fixtures, in the table below.

As shown, the higher the Temperature Identification Number, the cooler the fixture operates. Keep this in mind when selecting a fixture for a specific gas or vapor.

Example:

- Gasoline (56-60 octane)
 - Fixture with Globe and Reflector
- To determine Mercmaster Jr. thermal suitability for the above example:
- Check the Thermal Suitability on the following page for ignition temperature of gas or vapor to be encountered. It reveals that 56-60 octane gasoline has an ignition temperature of 280 °C (536 °F).
 - Look in table below for fixtures under "With Globe and Reflector" that do not exceed the 280 °C (536 °F) ignition temperature of the gasoline.
 - Select the best fixture for your purpose. The 35 W, 50 W, 70 W or 100 W fixture with globe and reflector is acceptable because none of these fixture lamp surfaces exceed the 280 °C (536 °F) ignition temperature of the gasoline.

Temperature Identification Numbers

Lamp Watts	Class I, Division 2, Groups A, B, C and D				Class II, Division 1 and 2, Groups E, F and G		
	With Globe or with Globe and Reflector		With 8" Refractor		With Globe, with Globe and Reflector, or with 8" Refractor		
	Name-plate Marking	Temperature Range °C (°F)	Nameplate Marking	Temperature Range °C (°F)	Nameplate Marking	Temperature Range °C (°F)	Groups
35	T4	121-135 (250-275)	T4	121-135 (250-275)	T4C	101-120 (214-248)	E, F, G
50	T2D	201-215 (394-419)	T3	181-200 (358-392)	T3C	136-160 (277-320)	E, F, G
70	T2B	231-260 (448-500)	T2C	216-230 (421-446)	T3B	161-165 (322-329)	E, F, G ③
100	T2A	261-280 (502-536)	T2B	231-260 (448-500)	—	—	E, F, G ④
150	T2	281-300 (538-572)	T2A	261-280 (502-536)	—	—	—

Ambient Suitability of Mercmaster Jr. Fixtures

All fixtures suitable for operation at -40 °C (-40 °F).

35W	50W	70W	100W	150W
40 °C (104 °F)	40 °C (104 °F)	25 °C (77 °F)	25 °C (77 °F)	25 °C (77 °F)

Electrical Specifications (Reactor Ballasts)

Lamp Watts	Line Voltage 60 Hz	Line Current in Amperes		Input Watts
		Starting HPF	Operating HPF	
35	120	0.41	0.38	43
50	120	0.62	0.56	60
70	120	0.70	0.73	82
100	120	1.10	1.00	115
150	120	1.70	1.50	170

Retrofits Incandescent Fixtures Easily and Quickly

- 35 W HPS Comparable to 100/150 W Incandescent Lamp
- 50 W HPS Comparable to 200 W Incandescent Lamp
- 70 W HPS Comparable to 300 W Incandescent Lamp
- 100 W HPS Comparable to 1.5 300 W Incandescent Lamp ⑤
- 150 W HPS Comparable to 2.5 300 W Incandescent Lamp ⑤

Optional Factory-Installed Fuses – Add Suffix -F

Available as a factory installed item with Mercmaster Jr. fixtures.

① The MJBW Wall Mount Fixture is suitable for Class I, Division 2, Groups A, B, C and D only.
 ② Per NEC 500.6(1), there is no such classification as Class II, Division 2, Group E.
 ③ 70W suitable for Groups E and F with globe; suitable for Groups E, F, and G with refractor.
 ④ 100W suitable for Groups E, F and G with refractor only.
 ⑤ These are guidelines only. Light distribution and other factors must be taken into consideration.

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UNILETS® for Use with Threaded Metal Conduit. 120 V Integral Ballast. Medium Base Socket for Medium Base Lamps.

<p>NEC: With Globe: 35 W, 50 W: Class I, Division 2, Groups A, B, C, D Class II, Division 1 and 2, Groups E ②, F, G Class III</p>	<p>NEC: 70 W: ① Class I, Division 2, Groups A, B, C, D Class II, Division 1 and 2, Groups E ②, F 100 W, 150 W: ① Class I, Division 2, Groups A, B, C, D</p>	<p>NEC: With Refractor (NEMA V): 35 W, 50 W, 70 W, 100 W: Class I, Division 2, Groups A, B, C, D Class II, Division 1 and 2, Groups E ②, F, G Class III</p>	<p>NEC: 150 W: ① Class I, Division 2, Groups A, B, C, D</p>
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	Description	Catalog Number
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Globes – 35 W-150 W



VPGL-1HR



VPGL-2PL

Clear Heat-Resistant Prismatic Glass
 Polycarbonate (100W lamp max.) ④

VPGL-1HR
 VPGL-2PL

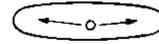
Description	Light Distribution	IES/NEMA Distribution Curves	Catalog Number
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Refractors – 35 W-150 W



Closed Prismatic Glass 8" Refractors

NEMA Type II



LPJR-2CG

NEMA Type V



LPJR-5CG

Description	Catalog Number	
	Porcelain	Polyester

Reflectors – 35 W-150 W ③



Standard



30° Angle

Standard (porcelain, 16" dia.; polyester, 16-1/4" dia.)
 30° Angle (porcelain, 12" dia.; polyester, 14-3/8" dia.)

LPR-25ST
 LPR-25AN

LPRP-25ST
 LPRP-25AN

Description	Catalog Number
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Guards – 35 W-150 W



VPGU-1



LPBG-8

Copperfree Aluminum Guard
 Steel Guard for 8" Refractors

VPGU-1
 LPBG-8

Socket



35 W-150 W (Medium Base)

JRS-100

Gasket



Globe Gasket, Silicone Rubber – 35W-150W

VPGL-GK

① The MJBW Wall Mount Fixture is suitable for Class I, Division 2, Groups A, B, C and D only.
 ② Per NEC 500.6(1), there is no such classification as Class II, Division 2, Group E.
 ③ V-51 reflectors cannot be used with Mercmaster Jr. Fixtures.
 ④ Do not use Polycarbonate Globes in ambients exceeding +25 °C (+77 °F). These globes for burning in vertical base-up position only.



Appleton

HID/AREA: NEC/CEC ENCLOSED AND GASKETED