MERCMASTER™ LED GENERATION 3 ZONE 1 SERIES LUMINAIRES

APPLICATIONS

- Enclosed and gasketed fixtures suitable for use in:
  — A wide range of industrial, chemical processing and other areas where flammable gases and vapors or combustible dusts are present
  — Marine and wet locations
  — Areas of low clearance, low ceiling heights or where fixture weights must be minimized
  — Suitability includes use where there may be simultaneous exposure to flammable gases and vapors or combustible dusts
- Typical applications include:
  — Power plants
  — Processing plants
  — Chemical plants
  — Oil refineries
  — Waste and sewage treatment
  — Other areas where dust, water, dirt and rough usage are a problem

FEATURES

- Modular design provides thousands of combinations for maximum versatility.
- Design is suited for low mounting heights, from 2m (7ft), up to 9m (30 ft).
- Seven light outputs provide up to 17,800 lumens.

Nominal Lumens ①	HID Equivalent	Model Number
3800	75-100W	MGZL3
5600	150-175W	MGZL5
7900	175-250W	MGZL7
10,000	300-350W	MGZH9
12,400	400W	MGZH1
14,800	450-500W	MGZH3
17,800	600W	MGZH6

① *Nominal lumen value for 5000K, clear glass globe Type V wide. Detailed lumen information is provided in tables.*

- Optically integrated silicone encapsulant provides Zone 1 protection and an symmetrical IES Type V Wide light distribution.
- Choice of color temperature (CCT): 5000K cool white, 4000K neutral white or 3000K warm white.

- Customize to the application requirements with three different globe options: clear and diffused polycarbonate, or clear glass.
- Six standard mounting hood designs allow for mounting in any location. Uses same mounting hoods as Mercmaster™ III and Mercmaster LED.
- Hinge has high lip for added safety during installation and servicing. Hinge and bolt construction assures 360° compression at all points on fixture housing gasket for positive sealing. Swing away design of captive bolt and nut simplifies installation.
- Rugged housing with superior thermal design translates to long luminaire life.
- Luminaire housing has wiring compartment with terminal block separate for easy wiring access.
- Standard screw-type terminal block can accept 4 to 6 mm², and UL/CSA 26-10 AWG, wire.
- Standard 6 kV surge protection.
- Heavy duty, high temperature silicone gaskets.
- Photometric data and electronic drawings available online.
- Ambient Temperature: -40°C to +65°C (-40 °F to +149 °F)
- Standard NPT threads with M20 adapters.
- LED L70B10 reported at 60,000 hours.
- Field replaceable globes and LED driver.

STANDARD MATERIALS

- Mounting hoods and bodies: cast copperfree (4/10 of 1% max. aluminum
- Gaskets: silicone
- All hardware and catch assemblies: stainless steel
- Globe: polycarbonate or glass
- Glass globe guard and safety cable: stainless steel wire

STANDARD FINISHES

- Mounting hoods and bodies: gray epoxy powder coat finish, electrostatically applied for complete uniform protection.

OPTIONS

- Globe guard available, purchase separately.
- Safety cable available, purchase separately.
- Drain is available to divert water existing in the conduit system or from condensation, purchase separately.

NEC/CEC RATINGS

- Class I, Zone 1 AEx/Ex eb mb Group IIC Gb
- Class I, Zone 21 AEx/Ex tb Group IIC Db

ATEX/IECEX RATINGS

- Zone 1, 2, 21, 22
- Ex eb mb op is IIC
- ⟨Ex⟩ II 2 GD
- IP66/67
- IK08

ATEX/IECEX CERTIFICATIONS AND COMPLIANCES

- Certification Type: Mercmaster Generation 3 LED Zone 1
  — Gas: Zone 1 and 2
    — Conforming to ATEX 2014/34/EU: II 2G
    — Type of Protection: Ex eb mb op is IIC Gb
    — Temperature Class: T6 to T4
  — Dust: Zones 21 and 22
    — Conforming to ATEX 2014/34/EU: II 2 D
    — Type of Protection: Ex op is tb IIIC Db
    — Surface Temperature: +75°C to +100°C (167°F to +212°F)
- Ambient Temperature: -40 °C to +65 °C (-40 °F to +149 °F)
- ATEX Certificate: ITS18ATEX303680X
- IECEx Certificate: IECEx ITS 18.0041X_0
- Index of Protection according to EN/IEC 60529: IP66/67
- Impact Resistance (shock): IK08
- Photobiological Safety, IEC 62778 and IEC 62471: RG0 with diffused polycarbonate, RG1 with clear glass or polycarbonate

APPLETON™

EMERSON™

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ILLUSTRATED FEATURES

Ex mb encapsulation method provides Zone 1 protection with low weight and superior component reliability.

Captive, stainless steel latch assembly (bolt and nut) closes securely while providing resistance to corrosive atmospheres.
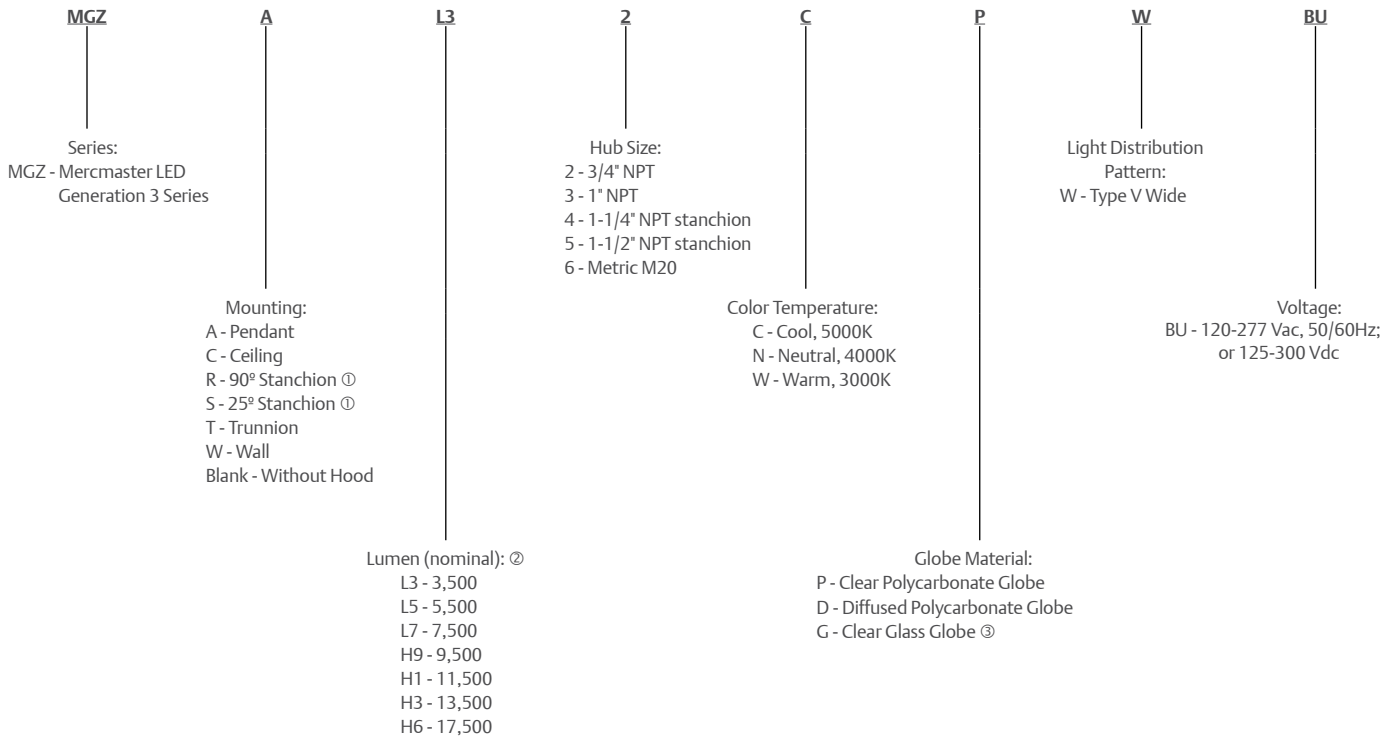

Swing-away design simplifies wiring and installation. Extra-high hinge secures housing to hood during wiring.

Safety cable is slipped around the housing through casted retention points.

CATALOG ORDERING GUIDE

Order using catalog numbering guide below.

MGZ	A	L3	2	C	P	W	BU

Series:
MGZ - Mercmaster LED Generation 3 Series

Mounting:
A - Pendant
C - Ceiling
R - 90º Stanchion ①
S - 25º Stanchion ①
T - Trunnion
W - Wall
Blank - Without Hood

Lumen (nominal): ②
L3 - 3,500
L5 - 5,500
L7 - 7,500
H9 - 9,500
H1 - 11,500
H3 - 13,500
H6 - 17,500

Hub Size:
2 - 3/4" NPT
3 - 1" NPT
4 - 1-1/4" NPT stanchion
5 - 1-1/2" NPT stanchion
6 - Metric M20

Color Temperature:
C - Cool, 5000K
N - Neutral, 4000K
W - Warm, 3000K

Globe Material:
P - Clear Polycarbonate Globe
D - Diffused Polycarbonate Globe
G - Clear Glass Globe ③

Light Distribution Pattern:
W - Type V Wide

Voltage:
BU - 120-277 Vac, 50/60Hz; or 125-300 Vdc

① 3/4" NPT, 1" NPT and Metric M20 hub entries are not offered in this mounting option
② For lumen output information, see Lumen Values Table.
③ Guards for the glass refractors and globes are ordered separately. See the product catalog pages for more information.

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