



## 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 asymmetrical 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 mm<sup>2</sup>, 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.

### 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 op 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™

For product information:  
www.masteringled.com  
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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.



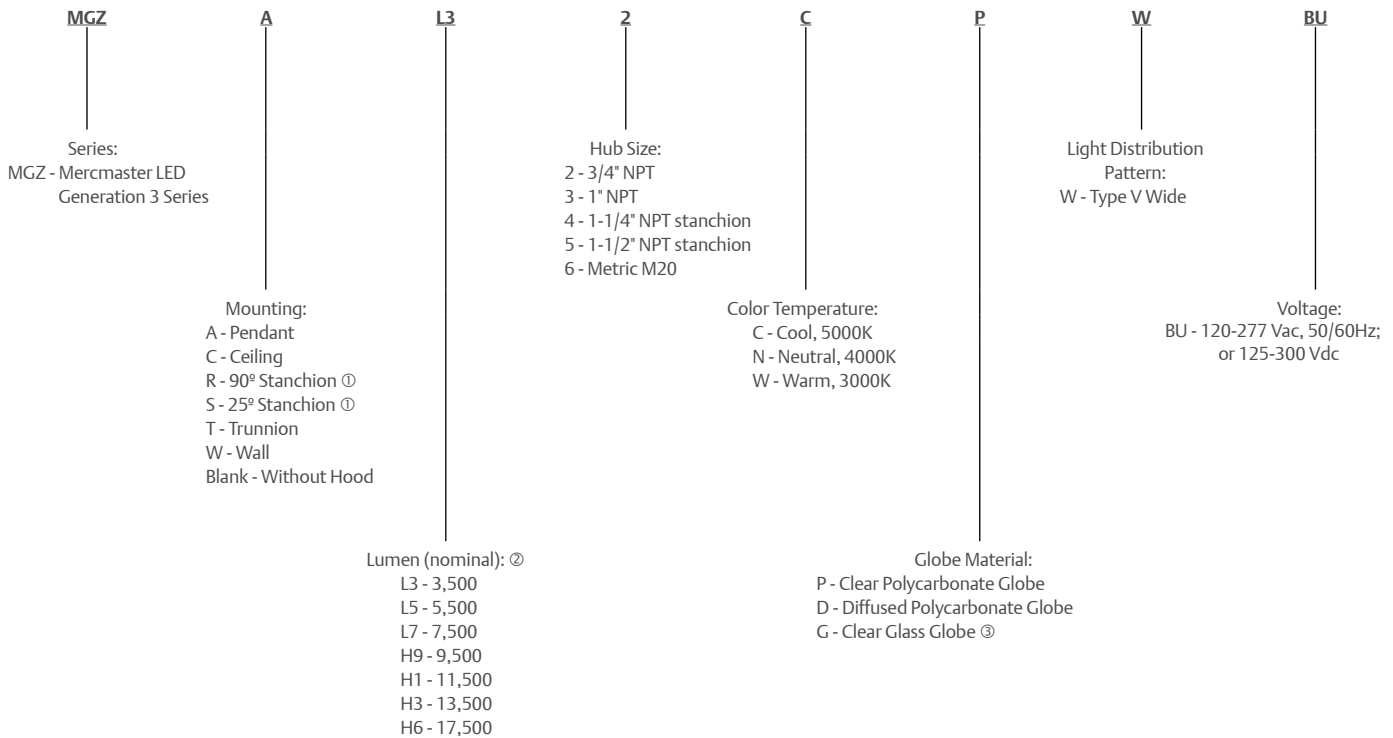
Swing-away design simplifies wiring and installation. Extra-high hinge secures housing to hood during wiring.



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

CATALOG ORDERING GUIDE

Order using catalog numbering guide below.



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.