



 **LMI**  
**MILTON ROY**  
A unit of Sundstrand Corporation

# Metering Pumps

## Excellence through Versatility

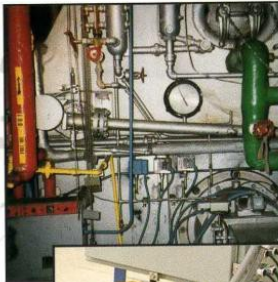


Located in the heart of New England in Acton, Massachusetts, Liquid Metronics has been providing quality products and service to the water treatment industry worldwide for over 20 years.

Leading the way in the metering pump industry, LMI introduced the first full line of electronic metering pumps and accessories. The breadth of LMI's product line extends from low-cost metering pumps for domestic potable water treatment to highly-sophisticated custom designs for specific customer applications.

Today, LMI continues to shape the future of the industry by offering the next generation of our trademark yellow and black metering pumps, the LiquiPro™ Series. This series of electronic metering pumps offers simple installation and maintenance with its unique cartridge valve design, as well as quick and easy "hands free" priming three and four function valves.

Utilizing superior designs and industry experience, as well as a state-of-the-art facility and highly trained service representatives, LMI offers Water Treatment Professionals the quality and reliability they've come to expect.



**Waste Water Treatment**

**Cooling Water Treatment**

**Boiler Water Treatment**

**Municipal Water Treatment**

**Fertilizer Injection**

**Laboratory Fluid Metering**

**Fluoridation**

**Paper Chemical Feed**

**Domestic Potable Water**

**Swimming Pool**

### Durable Stroke Adjustment Mechanism

A rigid stroke bracket and large stroke knob offer precise, repeatable performance and simple adjustment over entire output range.

### Accurate Speed Control

Provides precise stroke rate and a turndown ratio up to 1000:1 for unmatched versatility.

### NEMA 4X/ IP65 Housings

Totally enclosed, chemically resistant polypropylene housing for the ultimate protection against corrosive environments.

### Fully Encapsulated Electronics

Completely enclosed electronics provide protection against moisture, corrosive atmospheres and damage from vibration or mechanical shock.

### EPU

LMI's Electromagnetic Power Unit (EPU) is designed for efficiency and consistent performance over a wide operating and temperature range.

### Pump Status LED

Status LED provides a quick visual indication of pump speed and operation.

### Multi-Function Valves

The industry standard for over 20 years, features Fluorofilm™ diaphragms for long life and ramp style knobs for "hands free" priming with standard 3FV or optional 4FV. The Bleed 4FV option offers auto-degassing for pumping chemicals prone to gassing.

### Fluorofilm™ Liquifram™

The unique manufacturing process of LMI diaphragms ensures outstanding chemical resistance and flexibility for long life.

### Cartridge Valves

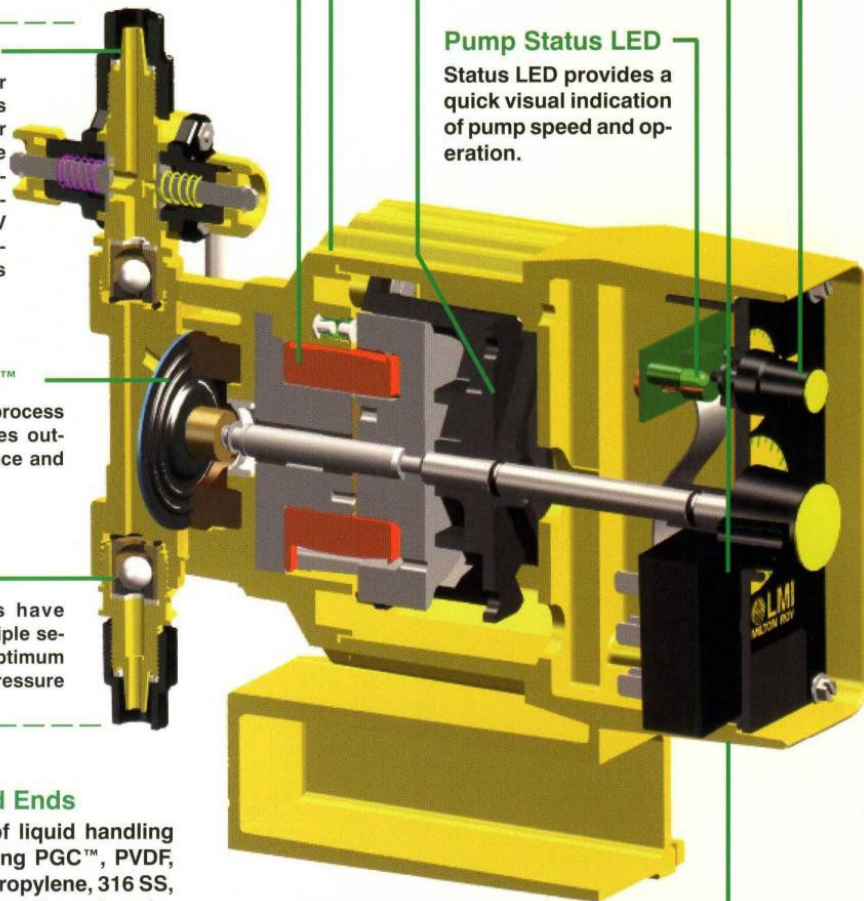
Unique cartridge valves have closely guided balls and triple sequential valve seats for optimum performance over entire pressure range.

### Variety of Liquid Ends

A wide selection of liquid handling assemblies including PGC™, PVDF, PVC, Acrylic, Polypropylene, 316 SS, UHMWPE. Configurations for viscous chemicals and slurries provide flexibility in all applications.

### Manual or External Control

Dual-manual control of speed and stroke length or external control by means of a 4-20 mA or pulse input for flow proportional applications and system integration.



# Electronic Metering Pumps

LMI's family of electronic metering pumps offer:

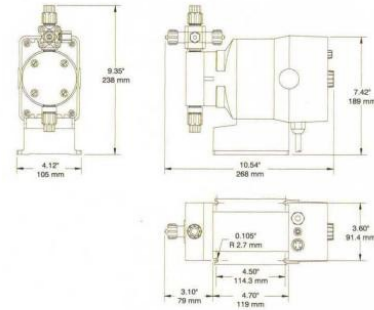
- Adjustable stroke frequency and the flexibility of up to 1000:1 turndown ratio
- Manually adjustable stroke length provides accurate pump output adjustment
- NEMA 4X / IP65 enclosures for protection against corrosive environments
- Time tested electronics for reliable, repeatable performance
- Totally encapsulated electronics for protection against moisture and corrosive conditions
- Priming valves with flourofilm™ diaphragms and ramp style knobs for "hands free" priming

## Series A



### Key Features / Benefits

- Rigid stroke bracket assembly for highly accurate/consistent dosing performance
- Advanced control options for simplified system integration (pulse multiply/divide, 4-20 mA, remote on/off)
- 5-level power control option to reduce system shock and extend the life of the pump
- External pacing for flow proportional applications



## Series B / Series C

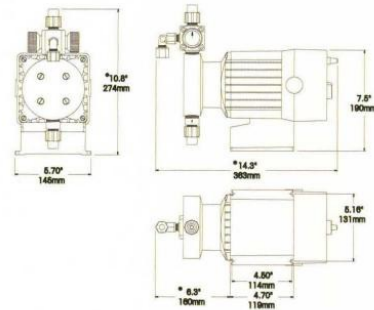


### Maximum Output

- Series A: 2.0 GPH (7.6 l/h)
- Series B: 7.0 GPH (26.5 l/h)
- Series C: 25.0 GPH (95.0 l/h)

### Maximum Pressure

- Series A: 250 psi (17.3 Bar)
- Series B: 150 psi (10.3 Bar)
- Series C: 300 psi (20.7 Bar)



## Series P

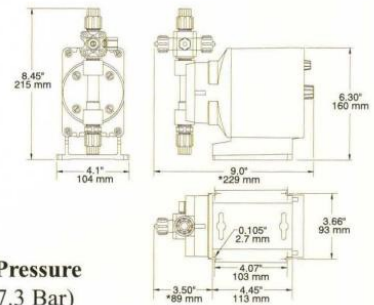


### Key Features/Benefits

- High quality construction for durability
- Compact size; ideal for OEM applications
- Fixed speed versions for simple, low cost applications

**Maximum Output**  
2.0 GPH (7.6 l/h)

**Maximum Pressure**  
250 psi (17.3 Bar)



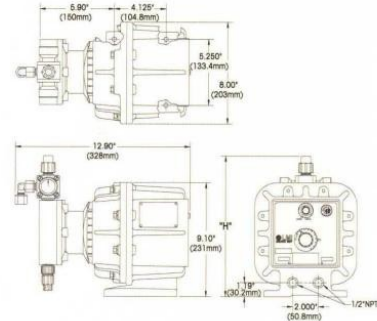
# Specialized Electronic Metering Pumps

## Series E7 - Explosion Proof



### Key Features/Benefits

- Rugged, urethane coated cast housing for applications in hazardous environments
- Manual control or external control without the need for costly motor and control options
- Designed to meet or exceed all standards for Class I, Division I, Groups C and D; Class II, Division I, Groups E, F, and G



### Maximum Output

20.0 GPH (76.0 l/h)

### Maximum Pressure

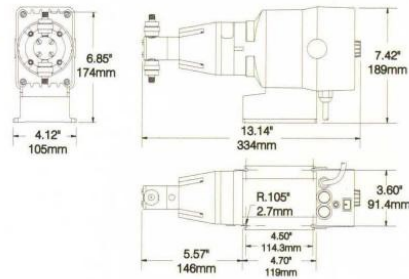
300 psi (20.7 Bar)

## Series H9 - High Pressure



### Key Features/Benefits

- Unique liquid handling assembly for low output injection into high pressure systems
- Advanced control options for system integration (pulse multiply/divide, 4-20 mA, remote on/off)
- 5-level power control option to reduce system shock and extend the life of the pump



### Maximum Output

.14 GPH (.50 l/h)

### Maximum Pressure

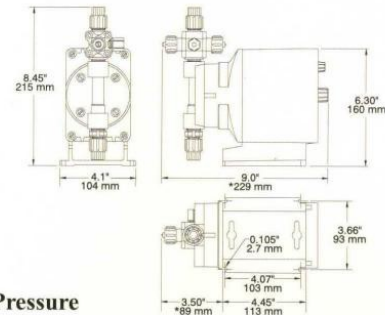
1000 psi (70.0 Bar)

## Series J5 - 12 VDC



### Key Features/Benefits

- 12VDC power for remote applications where AC electrical power is unavailable
- Low power consumption (1.6 amp average current draw or 19 watts at maximum speed)
- Manual or external control for flow proportional applications



### Maximum Output

2.0 GPH (7.6 l/h)

### Maximum Pressure

140 psi (9.7 Bar)

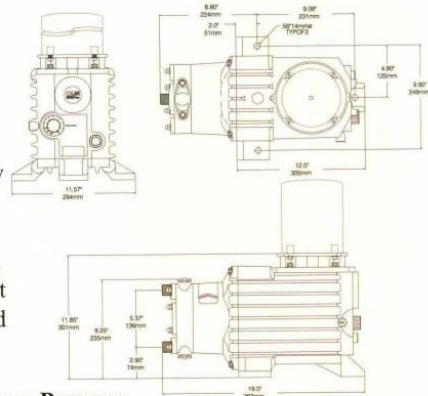
# Motor Driven Metering Pumps

## Series L



### Features / Benefits:

- Mechanically actuated diaphragm (MAD)
- Totally enclosed, fan-cooled motor
- Externally controllable for flow proportional applications or response to control instrumentation
- Rugged, chemically resistant housing of glass fiber reinforced polypropylene



**Maximum Output**  
70 GPH (265.0 l/h)

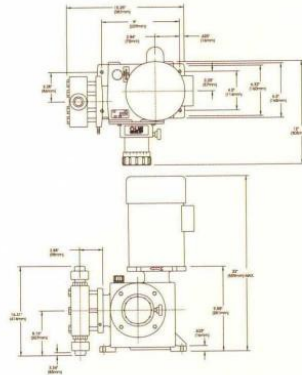
**Maximum Pressure**  
120 psi (8.6 Bar)

## Series G



### Features / Benefits:

- Mechanically actuated diaphragm (MAD)
- Variable eccentric design delivers smooth output
- Variable speed drives for external control & automation
- Durable, compact epoxy coated cast housing



**Maximum Output**  
310 GPH (1250 l/h)

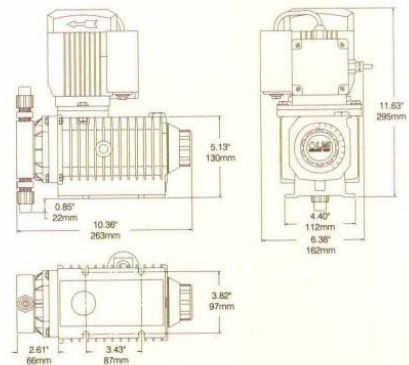
**Maximum Pressure**  
150 psi (10.0 Bar)

## Series M



### Features / Benefits:

- Mechanically actuated diaphragm (MAD)
- Totally enclosed, fan-cooled motor
- High suction lift
- Rugged, compact, urethane coated cast housing for durability in a variety of environments



**Maximum Output**  
35 GPH (133 l/h)

**Maximum Pressure**  
120 psi (8.6 Bar)

## Liquid Handling Assemblies



LMI offers a wide flexible tubing and viscous chemicals applications.

- PVC
- Acrylic
- PGC™
- Polypropy

## Repair & Preventative Maintenance



RPM Pro Pac™ kits for the LiquiPro™ easy, economical s

## Accessories



LMI offers a complete your installat

- 4FV/3FV/Bleed
- Agitators
- Back Pressure Va
- Calibration Cylind
- Conduit Connect
- Corp Stop & Nozzle Assembl
- Digi-Pulse™ Flow
- Extension Cable
- Flow Indicator
- Fluoride Saturate
- Flowmeter
- Remote Program Flowmeter



## Selected Uses of LMI Chemical Metering Pumps

Bleach Producers • Boilers • Bottling Plants • Boys' Clubs • Breweries • Camps • Car Washes • Cement Manufacturers • Cheese Plants • Citrus Plants • Coal Washing Plants • Concrete Block Manufacturers • Condensers • Cooling Tower • Dairies • Deaerating Heaters • Defense Department Bases • Die Casting Machines • Dishwashing Machines • Distilleries • Electroless Plating • Electronic Component Manufacturers • Exterminators • Feed Mills • Fishing Processing • Fishing Vessels • Flooring Manufacturers • Foundries • Fruit Packers • Fuel Oil • Furnaces • Golf Courses • Grain Storage Elevators • Greenhouses • Heat Exchanges • Highway Departments •

Please send me additional information on:

- |                                    |  |
|------------------------------------|--|
| <input type="checkbox"/> Series A  | <input type="checkbox"/> I would like information on LMI's Controllers |
| <input type="checkbox"/> Series B  | <input type="checkbox"/> I would like information on LMI's Accessories |
| <input type="checkbox"/> Series C  |  |
| <input type="checkbox"/> Series E7 |  |
| <input type="checkbox"/> Series G  |  |
| <input type="checkbox"/> Series H9 | <input type="checkbox"/> Please add me to your mailing list            |
| <input type="checkbox"/> Series J5 |  |
| <input type="checkbox"/> Series L  |  |
| <input type="checkbox"/> Series M  |  |
| <input type="checkbox"/> Series P  |  |

Name \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Country \_\_\_\_\_

Phone (\_\_\_\_) \_\_\_\_\_

Fax (\_\_\_\_) \_\_\_\_\_

Email \_\_\_\_\_

- end user     VAR/distributor     consultant  
 other \_\_\_\_\_



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