



The Pulsatron Series MP is a true microprocessor controlled instrument for precise and accurate metering control. Packed with standard features, the Series MP include automatic control via 4-20mA or 20-4 mA inputs, external pace with stop feature and 16 character LCD display with support for English, French, and German languages.

Nineteen distinct models are available, having pressure capabilities to 300 PSIG (21 BAR) @ 3 GPD (0.5 lph), and flow capacities to 504 GPD (79.5 lph) @ 20 PSIG (13 BAR), with a turndown ratio of 1000:1. Metering performance is reproducible to within ± 2% of maximum capacity.

#### **Features**

- Automatic Control, Fully scalable 4-20mA current signal.
- Flow Verification on select sizes.
- Flow Totalization.
- Relay Output for computer interface or AC power.
- Simple Prompts in plain language.
- Available in four languages, English, French, German, and Spanish.
- Alarm Signals for signal loss, full count, circuit failure, pulse overflow and pulse rate high.
- Liquid low-level indicator capability is standard.
- Timed Sequences can be set for selected intervals and rate for repetitive metering.
- Pulse Signals can be multiplied or divided by 1 to 999.
- Flow Rate is displayed as GPH, GPD, or LPH.
- Large easy to read backlit LCD display.

#### **Controls**



#### **Manual Stroke Rate**

Turn-Down Ratio 100:1

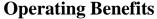
### Stroke Length

Turn-Down Ratio 10:1

#### **4-20mA or 20-4mA Input**

- Automatic Control
- Fully Scalable
- Turn-Down Ratio 100:1



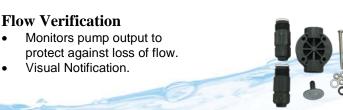


- Reliable metering performance.
- Rated "hot" for continuous duty.
- High viscosity capability.
- Leak-free, sealless, liquid end.



#### Aftermarket

- **KOPkits**
- Gauges
- Dampeners
- Pressure Relief Valves
- Pre-Engineered Systems
- **Process Controllers** (PULSAblue, MicroVision)







**PULSAtron**<sup>®</sup> Series MP **Electronic Metering Pumps** 

# **PULSAITON** Series MP

## **Specifications and Model Selection**

| MODEL     |           | LM K2 | LMB2              | LMA2 | LM D3 | LMB3 | LMA3 | LM K3 | LMF4 | LM D4 | LMB4 | LMH4 | LMG4 | LM E4     | LM K5                       | LM H5                         | LMH6 | LM K7 | LM H7 | LMH8  |  |  |
|-----------|-----------|-------|-------------------|------|-------|------|------|-------|------|-------|------|------|------|-----------|-----------------------------|-------------------------------|------|-------|-------|-------|--|--|
| Capacity  | GPH       | 0.13  | 0.21              | 0.25 | 0.50  | 0.50 | 0.50 | 0.60  | 0.85 | 0.90  | 100  | 1.70 | 1.75 | 1.85      | 2.50                        | 3.15                          | 5.00 | 8.00  | 10.00 | 21.00 |  |  |
| no minal  | GPD       | 3     | 5                 | 6    | 12    | 12   | 12   | 14    | 20   | 22    | 24   | 41   | 42   | 44        | 60                          | 76                            | 120  | 192   | 240   | 504   |  |  |
| (max.)    | LPH       | 0.5   | 0.8               | 0.9  | 1.9   | 1.9  | 1.9  | 2.3   | 3.2  | 3.4   | 3.8  | 6.4  | 6.6  | 7.0       | 9.5                         | 11.9                          | 18.9 | 30.3  | 37.9  | 79.5  |  |  |
| Pressure  | PSIG      | 300   | 250               | 150  | 250   | 150  | 100  | 100   | 250  | 150   | 100  | 250  | 150  | 100       | 150                         | 150                           | 100  | 50    | 35    | 20    |  |  |
| (max.)    | BAR       | 21    | 17                | 10   | 17    | 10   | 7    | 7     | 17   | 10    | 7    | 17   | 10   | 7         | 10                          | 10                            | 7    | 3.3   | 2.4   | 1.3   |  |  |
| Connectio |           |       | 1/4" ID X 3/8" OD |      |       |      |      |       |      |       |      |      |      |           | 3/8" ID X 1/2" OD           |                               |      |       |       |       |  |  |
|           | Tubing    |       | 3/8" ID X 1/2" OD |      |       |      |      |       |      |       |      |      |      |           |                             | 1/2" ID X 3/4" OD (LPH8 ONLY) |      |       |       |       |  |  |
|           |           |       |                   |      |       |      |      |       |      |       |      |      |      |           | FLOWVERIFICATION (See Note) |                               |      |       |       |       |  |  |
|           | Piping    |       | 1/4" FNPT         |      |       |      |      |       |      |       |      |      |      | 1/4" FNPT |                             |                               |      |       |       |       |  |  |
|           | I - ibing |       |                   |      |       |      |      |       |      |       |      |      |      |           |                             |                               | 1/2" | FNPT  |       |       |  |  |

Note: Flow Verification: Available on K3, B4 and E4 with connection code 1, H6, K7 and H7 with connection code H; 1/4" ID x 3/8" OD only.

**Engineering Data** 

Pump Head Materials Available: GFPPL

PVC PVDF 316 SS

Diaphragm: PTFE-faced CSPE-backed

Check Valves Materials Available:

Seats/O-Rings: PTFE

CSPE Viton

Balls: Ceramic

PTFE 316 SS Alloy C

Fittings Materials Available: GFPPL

PVC PVDF

Bleed Valve: Same as fitting and check valve

selected, except 316SS

Injection Valve & Foot Valve Assy: Same as fitting and check valve

selected

Tubing: Clear PVC

White PE

Important: Material Code - GFPPL=Glass-filled Polypropylene, PVC=Polyvinyl Chloride, PE=Polyethylene, PVDF=Polyvinylidene Fluoride, CSPE=Generic formulation of Hypalon, a registered trademark of E.I. DuPont Company. Viton is a registered trademark of E.I. DuPont Company. PVC wetted end recommended for sodium hypochlorite.

#### **Engineering Data**

Stroke Frequency Max SPM:

Reproducibility: +/- 2% at maximum capacity

Viscosity Max CPS:

For viscosity up to 3000 CPS, select connection size 3, 4, B or C with 316SS ball material. Flow rate will determine connection/ball size. Greater than 3000 CPS require spring loaded

ball checks. See Selection Guide for proper connection.

Controls: 6-Station Membrane Switch

Status Display: 16-Position LCD Dot Matrix Backilght

LED Indicator Lights, Panel Mount: Power On - Green

Pulsing - Green Flashing

Stop - Red 125

External Stroke Frequency Control (Automatic):

4-20 mADC, 20-4 mADC External Pacing

Output Relay (Signal Level Option): 24 VDC, 10 mA Output Relay (Power Option): 250 VAC, 50/60 HZ, 0.5A

Output Relay (Power Option): 250 V/s Stroke Frequency Turn-Down Ratio: 100:1

Stroke Length Turn-Down Ratio: 10:1

**Power Input:** 115 VAC/50-60 HZ/1 ph

230 VAC/50-60 HZ/1 ph

Average Current Draw:

 @ 115 VAC; Amps:
 1.0 Amps

 @ 230 VAC; Amps:
 0.5 Amps

 Peak Input Power:
 300 Watts

 Average Input Power @ Max SPM:
 130 Watts

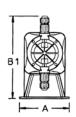
#### Custom Engineered Designs Pre-Engineered Systems

Pulsafeeder's Pre-Engineered Systems are designed to provide complete chemical feed solutions for all electronic metering applications. From stand alone simplex pH control applications to full-featured, redundant sodium hypochlorite disinfection metering, these rugged fabricated assemblies offer turn-key simplicity and industrial-grade durability. The UV-stabilized, high-grade HDPE frame offers maximum chemical compatibility and structural rigidity. Each system is factory assembled and hydrostatically tested prior to shipment.

#### **Dimensions**

| Series MP Dimensions (inches) |     |      |    |      |    |     |     |         |           |     |      |      |      |      |     |      |         |
|-------------------------------|-----|------|----|------|----|-----|-----|---------|-----------|-----|------|------|------|------|-----|------|---------|
| Model No.                     | Α   | В    | В1 | С    | C1 | D   | Е   | Shpg Wt | Model No. | Α   | В    | B1   | С    | C1   | D   | Е    | Shpg Wt |
| LMA2                          | 5.4 | 10.3 | -  | 10.8 | -  | 7.5 | 8.9 | 13      | LMH4      | 6.2 | 10.9 | 1    | 11.2 | -    | 8.2 | 9.5  | 21      |
| LMA3                          | 5.4 | 10.6 | -  | 10.7 | -  | 7.5 | 9.2 | 13      | LMH5      | 6.2 | 11.3 | ,    | 11.2 | -    | 8.2 | 9.9  | 21      |
| LMB2                          | 5.4 | 10.3 | -  | 10.8 | -  | 7.5 | 8.9 | 13      | LMH6      | 6.2 | 11.3 | -    | 11.2 | -    | 8.2 | 9.9  | 21      |
| LMB3                          | 5.4 | 10.6 | -  | 10.7 | -  | 7.5 | 9.2 | 13      | LMH7      | 6.1 | 11.7 | ,    | 11.2 | -    | 8.2 | 10.3 | 21      |
| LMB4                          | 5.4 | 10.6 | -  | 10.7 | -  | 7.5 | 9.2 | 13      | LMH8*     | 6.1 | -    | 10.9 | -    | 10.6 | 8.2 | 1    | 25      |
| LMD3                          | 5.4 | 10.6 | -  | 11.2 | -  | 7.5 | 9.2 | 15      | LMK2      | 5.4 | 10.3 | ı    | 10.8 | -    | 7.5 | 8.9  | 13      |
| LMD4                          | 5.4 | 10.6 | -  | 11.2 | -  | 7.5 | 9.2 | 15      | LMK3      | 5.4 | 10.6 | -    | 10.7 | -    | 7.5 | 9.2  | 13      |
| LME4                          | 5.4 | 10.6 | -  | 11.2 | -  | 7.5 | 9.2 | 15      | LMK5      | 5.4 | 10.9 | -    | 11.7 | -    | 7.5 | 9.5  | 18      |
| LMF4                          | 5.4 | 10.6 | -  | 11.7 | -  | 7.5 | 9.2 | 18      | LMK7      | 6.1 | 11.7 | 1    | 11.2 | -    | 8.2 | 10.3 | 21      |
| LMG4                          | 5.4 | 10.6 | -  | 11.7 | -  | 7.5 | 9.2 | 18      |           |     |      |      |      |      |     |      |         |

BLEED VALVE



NOTE: Inches X 2.54 = cm / \* the LMH8 is designed without a bleed valve available

pulsafeeder.com



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