

## **General Description**

The Encore® M series is an economical line of motor driven, mechanical diaphragm metering pumps. This versatile line offers two versions to meet a variety of applications. The intelligent Encore® MB offers stateof-the-art microprocessor control. By integrating the speed control, the Encore® MB eliminates the need for the further expense of additional variable speed controllers.

High quality mechanics, combined with the proven reliability of our Encore<sup>®</sup> M series brains, brings advanced technology to the metering pump industry.

There are two chassis sizes within the Encore® M family. The smaller size is rated for capacities up to 158.97 lph. The larger size is rated for capacities up to 348.22 lph. Pressure ranges are available to 10.34 bar, depending on pump capacity. Check valves are double ball or spring-loaded single ball design.

## Encore<sup>®</sup> MB

#### **Application Flexibility**

- Up to 1400:1 turndown provides more precision in process control
- Automatic or manual control
- NEMA 4X enclosure protects electronics in harsh environments

#### **Microprocessor Control**

- Integrated speed control allows for the selection of several control signals:
  - o pulse/contact control
  - o multiplication/division capabilities
  - o analog control 4-20 mA, 0-20 mA
- Remote start/stop capabilities
- Input signal monitoring and output alarms

#### **User Friendly**

- Touch pad and LCD display
- Self-diagnostic system for monitoring chemical feed process. Messages displayed for tank low level & loss of analog signal.



### **Options**

- Double diaphragm liquid end
- Leak detection
- Tank low level indication and alarm

### **Materials of Construction**

Liquid ends of Polypropylene, PVC, PVDF and 316 Stainless Steel. Diaphragms are PTFE-coated EPDM. Seals of Viton<sup>®</sup>, Hypalon<sup>®</sup> or PTFE are available.

# **Technical Data**

| Chassis Size        |           | 4 - 156                                  |      |      |      |           |      |       | <b>160 - 300</b> |       |      |      |
|---------------------|-----------|--|------|------|------|-----------|------|-------|------------------|-------|------|------|
| Model               |           | 4  | 8    | 15   | 26   | 50        | 76   | 110   | 156              | 160   | 200  | 300  |
| Capacity            | gph       | 1.2                                      | 2.3  | 4.7  | 6    | 15.2      | 19   | 33.8  | 42.2             | 49    | 66   | 92   |
| Capacity            | l/h       | 4.7                                      | 8.7  | 17.7 | 22.7 | 57.5      | 71.9 | 127.9 | 159.7            | 185.4 | 249  | 348  |
| Maximum pressure    | bar       | 10.34                                    |      |      |      |           |      | 5.17  | 4.13             | 10    | .34  | 8.62 |
| Capacity/stroke     | ml        | 2.6                                      |      |      | 8.   | .5        | 1    | 19    |                  | 36.5  |      |      |
| Stroke frequency    | SPM       | 32                                       | 58   | 114  | 140  | 114       | 140  | 114   | 140              | 85    | 114  | 114  |
| Diaphragm diameter  | in.       | 2.04                                     |      |      |      | 2.51 3.54 |      |       | 4.72 5.9         |       |      |      |
| Suction lift        | $MH_{2}O$ | 4  |      |      |      | 3.25      |      | 3     |                  | 2.5   |      |      |
| Stroke length       | in.       | 0.2                                      |      |      |      | 0.35      |      |       |                  | 0.393 |      |      |
| Motor - 1-phase     | Нр        | 1/6 1/3                                  |      |      |      |           |      |       |                  |       |      |      |
| Ambient temperature | ۰F        | PVC & Polypro: 40°; PVDF: 48°; 316S: 60° |      |      |      |           |      |       |                  |       |      |      |
| Gear Ratio          |           | 55:1                                     | 30:1 | 15:1 | 12:1 | 15:1      | 12:1 | 15:1  | 12:1             | 20:1  | 15:1 | 15:1 |



Mechanical Metering Pumps - Encore<sup>®</sup> M