



*first class pumps for first class science*

# Liquid Diaphragm Metering Pumps for the Laboratory and Industry

## STEPDOS® FEM Series

for precise, programmable metering of liquids

series flow range 0.03ml/min - 80ml/min

corrosion-resistant materials

maintains calibration

remote control capable

simple, easy to calibrate

self-priming up to 13ft H<sub>2</sub>O



# STEPDOS® 03/08 Series

## The precise way to dose neutral or corrosive liquids

This microprocessor-controlled diaphragm metering pump sets new standards in the area of liquid metering and dosing. STEPDOS® pumps meter continually and precisely (+/- 2%) even at low rpm. The pump is enclosed in a compact, protective splash-proof IP65 housing for long life in harsh environments. STEPDOS® is self priming, maintenance free, and can be run dry without damage to the pump.

Precise calibration is crucial for any dosing pump, and calibrating the STEPDOS® pump is easy. Following calibration, repeatability is maintained at ±1%. Available models offer flow rates of either 0.03ml/min to 30ml/min (metering volume of 50µl - 43.2L,) or 0.08ml.min (metering volume of 80µl - 115.2L.) They are effective against pressures of up to 85 psig and transfers viscous media up to 150 cST.

The integrated software permits the transfer parameters to be modified at the touch of a button. Remote control versions (RC) are available for all models.

### Specifications - All Models

| Model No.    | Flow Range ml/min | Metering Volume | Suction Head ft. water | Max Pressure psig | Max Viscosity |
|--------------|-------------------|-----------------|------------------------|-------------------|---------------|
| <b>FEM03</b> | 0.03 - 30         | 50µl - 43.2L    | 13                     | 90                | 150 cST       |
| <b>FEM08</b> | 0.08 - 80         | 80µl - 115.2L   | 10                     | 30                | 150 cST       |

Standard continuous performance ratings listed above are per head and are based on technical data and test results of nominal units at sea level with water at 70° F (21° C) and nominal electrical supply. Dimensions and performance characteristics given are for reference only. Specifications are subject to change without notice.

Dimensions ..... 180L x 115W x 80H mm    Liquid Temp Range ..... +5 to +80°C    Ambient Temp Range ..... +5 to +40°C  
 Power Supply ..... 100-230 VAC, 50-60 Hz    Power Consumption ..... 20W    Weight ..... 1.5 kg

- simple, intuitive setup and operation
- repeatable metering by volume or time
- runs dry without damage
- self-priming up to 13 ft of water
- splash-proof IP65 housing
- remote control via analog, RS-232 and RS485
- small footprint conserves benchtop space
- features premium, corrosion-resistant materials
- accuracy ±2%, repeatability ±1%

### Manual/Remote Control Details

|                      |   |
|----------------------|---|
| <b>STEPDOS .18S</b>  | Manual control thru keypad: Run mode, dispense, time and repeat metering.   |
| <b>STEPDOS .18RC</b> | Manual control plus analog control: 0-5 V, 0-10V, 0-20mA, 4-20mA from 0-100%<br>Digital control: RS232 and RS485 up to 99 pumps, Impulse operation, 2 logic inputs,<br>Output fault alarm, Windows® software, connecting cable. |

### Head Connections, Materials of Construction

| Model         | FEM03*         | FEM08         | Head Materials  | Diaphragm   | Valves |
|---------------|----------------|---------------|-----------------|-------------|--------|
| <b>FEM_KT</b> | UNF 1/4-28 (F) | 4-6 mm tubing | Polypropylene   | PTFE-coated | FFPM   |
| <b>FEM_FT</b> | UNF 1/4-28 (F) | 1/8" NPT (F)  | PTFE            | PTFE-coated | FFPM   |
| <b>FEM_ST</b> | UNF 1/4-28 (F) | 1/8" NPT (F)  | Stainless Steel | PTFE-coated | FFPM   |
| <b>FEM_TT</b> | UNF 1/4-28 (F) | 4-6 mm tubing | PVDF            | PTFE-coated | FFPM   |

\*Includes one meter length of PTFE 3.2x1.6mm tubing and two connectors.

### List Price

#### Keypad Controlled (S)

|             |      |
|-------------|------|
| FEM03KT.18S | Call |
| FEM03TT.18S | Call |
| FEM03ST.18S | Call |
| FEM03FT.18S | Call |
| FEM08KT.18S | Call |
| FEM08TT.18S | Call |
| FEM08ST.18S | Call |
| FEM08FT.18S | Call |

#### Remote and Keypad Controlled (RC)

|              |      |
|--------------|------|
| FEM03KT.18RC | Call |
| FEM03TT.18RC | Call |
| FEM03ST.18RC | Call |
| FEM03FT.18RC | Call |
| FEM08KT.18RC | Call |
| FEM08TT.18RC | Call |
| FEM08ST.18RC | Call |
| FEM08FT.18RC | Call |



### NEW! SIMDOS 10 Dosing Pump

Designed with simplicity in mind. The easy-to-read display combined with a single, touch-control knob makes programming and access of all functions very intuitive. Flow rate of 1 to 100ml/min. Doses volumes of 1 to 1000 ml. against up to 90 psig pressure.

To buy, call KNF at 609-890-8600 or your favorite lab equipment distributor.

#### KNF NEUBERGER, INC.

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