

Laboratory Liquid Diaphragm Pumps

*self-priming, can run dry
corrosion resistant materials
contamination-free operation*

*for
dosing
transfer
metering
of neutral or corrosive liquids*



STEPDOS Liquid Metering Pumps

Consider a KNF liquid diaphragm pump for quiet, precision metering without the bother of tubing maintenance. The perfect replacement for peristaltic pumps in the lab, these pumps can be used where a variety of corrosive liquids and gases are encountered.

Never be inconvenienced by worn or leaking tubing again.

The multipurpose STEPDOS metering pump features microprocessor-control for exceptional flexibility, and is protected by a case designed to withstand the harshest lab environments.

The RC model is supplied with all cables and a 3½" Win95™ software disk to allow remote control of the pump from your personal computer. The S model provides control of the pump's rate using the touch pad.

STEPDOS Liquid Metering Pumps

Model with manual keypad

| Flow Range at zero pressure head | Model Number | Wetted Materials |
|----------------------------------|--|--------------------|
| 0.08-80 milliliters/minute | FEM 08KT.18S | PP / FFPM / PTFE |
| 0.08-80 milliliters/minute | FEM 08TT.18S | PVDF / FFPM / PTFE |
| Control Function | Description | |
| Keypad Control Modes | % Flow, RPM; strokes/min. | |
| Rapid Priming/Drain | Maximum pump flow | |
| Timer Function | Will execute 1 to 30,000 strokes at 0.34sec. to 5 min. 43 sec./stroke, with a 1sec. to 100 min. pause between strokes. | |

Model with manual keypad and remote control capability

| Flow Range at zero pressure head | Model Number | Wetted Materials |
|-----------------------------------|--|--------------------|
| 0.08-80 milliliters/minute | FEM 08KT.18RC | PP / FFPM / PTFE |
| 0.08-80 milliliters/minute | FEM 08TT.18RC | PVDF / FFPM / PTFE |
| Control Function | Description | |
| Remote/Keypad Control Modes | % Flow, RPM; Strokes/min. | |
| Rapid Priming/Drain | Maximum pump flow | |
| Remote/Keypad Timer Function | Will execute 1 to 30,000 strokes at 0.34sec. to 5 min. 43 sec./stroke, with a 1sec. to 100 min. pause between strokes. | |
| Remote/Keypad Impulse I Function | 1 to 9,999 strokes delivered upon receipt of input signal. | |
| Remote/Keypad Impulse II Function | Upon receipt of 1 to 9,999 impulses, a single stroke will be delivered. | |
| Remote/Keypad Analog Control | Acceptable input signals: 0-20 mA, 4-20 mA, 0-10 VDC to control pump speed. | |
| Remote RS 232 Interface | Characteristics of a single pump may be monitored and controlled remotely. | |
| Remote RS 485 Interface | Characteristics of up to 9 pumps may be monitored and controlled remotely. | |
| Remote Flow Monitoring | Monitors flow thorough pump using customer-supplied flow meter. Panel LED | |
| Remote Level Monitoring | Monitors min or max level in a container using external sensor. Panel LED. | |
| Remote Fault Alarm Monitoring | Internal fault signal interrupts pump operation and operates dry relay contacts. | |

Pump Specifications (all models):

Maximum Pressure Head: 66 ft. H₂O (30 psig) 20 m Wg
 Motor Type: Bipolar stepper, 3Ø, 3.75°/step
 Cabinet Protection Class: IP65 Drip proof construction
 CE Mark: EN 61010/EN 55011
 Protection: Fuse and software overload protection

Power Requirement Range: 100-230 VAC, 50-60 Hz
 Environmental: +5 to 40°C ambient, +5 to 80°C medium
 Physical: 18 L x 11.5 W x 8 H cm, 1.4 kg (3 lbs.)
 Tubing Connections: 4 mm ID, 6 mm OD



Liquid Diaphragm Pumps

KNF's liquid diaphragm pumps are a convenient way to meter, dose, or transfer liquids or fill containers in the laboratory. The pumps are self-priming and maintenance free and will operate dry indefinitely without damage. Models are available featuring premium, corrosion-resistant PVDF and PTFE resins. There are no metal wetted parts to corrode nor peristaltic tubing to break or fatigue.

Flow rate is adjustable within the range specified in the selection chart. Hard-walled tubing is suggested for maximum adjustment effectiveness.

LIQUIPORT Liquid Diaphragm Pumps

| Cap. L/min. | Model Number | Wetted Materials | Maximum Pressure Head | Dimensions L X W X H cm | Barbed Connections | Shipping Wt. kg |
|--------------------------------|--------------|--------------------|---|-------------------------|--------------------|-----------------|
| Standard pressure pumps | | | | | | |
| 0.5 - 1.0 | ND100KTP | PP / PTFE / Viton® | 15 psig / 33 ft. H ₂ O / 3 mWG | 18 x 18 x 8.5 | 8 mm ID | 2.4 |
| 0.5 - 1.0 | ND100TTP | PTFE / PVDF | 15 psig / 33 ft. H ₂ O / 3 mWG | 18 x 18 x 8.5 | 8 mm ID | 2.4 |
| 1.0 - 3.0 | ND300KTP | PP / PTFE / Viton® | 15 psig / 33 ft. H ₂ O / 3 mWG | 22 x 21 x 10.5 | 12 mm ID | 2.8 |
| 1.0 - 3.0 | ND300TTP | PTFE / PVDF | 15 psig / 33 ft. H ₂ O / 3 mWG | 22 x 21 x 10.5 | 12 mm ID | 2.8 |
| High pressure pumps | | | | | | |
| 0.9 - 1.4 | ND1.100KTP | PP / PTFE / Viton® | 60 psig / 130 ft. H ₂ O / 40 mWG | 18 x 18 x 8.5 | 8 mm ID | 2.4 |
| 0.9 - 1.4 | ND1.100TTP | PTFE / PVDF | 60 psig / 130 ft. H ₂ O / 40 mWG | 18 x 18 x 8.5 | 8 mm ID | 2.4 |
| 1.0 - 3.0 | ND1.300KTP | PP / PTFE / Viton® | 60 psig / 130 ft. H ₂ O / 40 mWG | 22 x 21 x 10.5 | 12 mm ID | 2.8 |
| 1.0 - 3.0 | ND1.300TTP | PTFE / PVDF | 60 psig / 130 ft. H ₂ O / 40 mWG | 22 x 21 x 10.5 | 12 mm ID | 2.8 |

Pump Specifications (all models):

Maximum Suction Head: 9 in. Hg / 10 ft. H₂O / 6 mWG
 Motor: Shaded Pole AC, Thermal reset

Ambient Temperature Range: +5 to 40°C
 Medium Temperature Range: +5 to 80°C

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 are listed above. Dimensions and performance characteristics given are for reference only. Specifications and prices are subject to change without notice. Viton is a registered trademark of DuPont Dow.

KNF NEUBERGER, INC.
 Two Black Forest Road · Trenton, NJ 08691-1810
 Voice: 609/890-8600 · Fax: 609/890-8323
 Web: www.knf.com · E-mail: pumps@knf.com