

SECTION 500.40

Obsolete: FM15 FM1.15 FM30 FM1.30

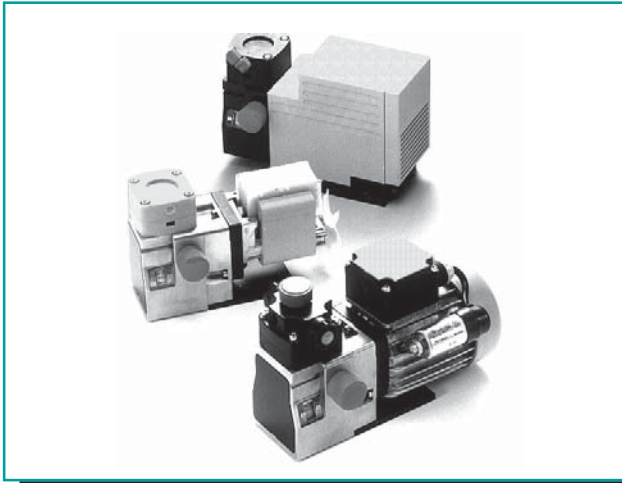
Adjustable Stroke Liquid Metering Pump

**Corrosion-Resistant
Precision, $\pm 2\%$ Accuracy
Portable and OEM Models**

Maximum Flowrate: 300 ml/min. (4.8 GPH)

Maximum Suction Head: 16 ft. H₂O (14 in. Hg)

Maximum Continuous Pressure Head: 200 ft. H₂O (90 psig)



A variety of models are available.

Description

KNF's FM series of diaphragm metering pumps feature wetted components available in PVDF/FFPM/PFA/PTFE or in Polypropylene/FPM/PTFE, combined with our unique molded diaphragm tightly bonded to a thick layer of PTFE. They are capable of pumping highly aggressive liquids without attack to the pump or contamination of the medium. The pump stroke is continuously adjustable using an external flow rate indicator, and allows for precision metering at any flow range. An integral option allows for purging of air from the pump head and allows for restart against maximum rated head pressure. The pump is classified as meeting sanitary construction. Gasketed surfaces remove the possibility of entrapment regions, thus permitting flush-cleaning for disinfection.

Pump Features

- **KNF Modular Construction** - A variety of wetted materials, head venting for restart against pressure, high-pressure models, multiple-head models, motor enclosures, motor types, voltages and frequencies are available. Selecting the pump you need has never been easier. The unique head design allows for quick access to valves for cleaning whenever necessary. KNF's Project Pump program makes a wide variety of inexpensive modifications available. We can optimize this pump to match your design requirements, rather than force a compromise with a standard product.
- **Mount it Anywhere** - Our unique disk valve system and oil-free design allows for mounting in any position with no change in performance. Portable models are available for the laboratory.
- **Externally Adjustable Self-Locking Eccentric** allows you to control the flow rates either during operation or when the pump is stationary, as required by your system design. A constant flowrate is assured and is independent of suction conditions.
- **Back Pressure Is Not Required for Accuracy** - Unlike metering pumps using common ball valves, the FM series uses high-speed, leak tight disks. This design assures $\pm 2\%$ accuracy even with minimum pressure differential.
- **Self-Priming Operation** - These pumps are self-priming to 16 feet of water when set at maximum stroke. They will start against their maximum rated head pressure.

Applications

- Medical Analyzers
- Environmental Analyzers
- Water Treatment
- Plating Processing
- Industrial Washing Machines
- Perfume/Cosmetic Production
- Chemical Analyzers
- Chromatography
- Film/Photo Processing
- Printing Apparatus
- Ice Cream/Syrup Production
- and many, many more!!

FM15, FM1.15, FM30, FM1.30

KNF Performance Specifications

Model Number	FM15KTE	FM1.15KTE	FM30KTE	FM1.30KTE
Max. Flow mliters/min.	15-150 mlit/min.	15-150 mlit/min.	15-300 mlit/min.	15-300 mlit/min.
Max. Flow GPH	0.24-2.4 GPH	0.24-2.4 GPH	0.24-4.8 GPH	0.24-4.8 GPH
Max. Suction Head	16 ft. H ₂ O (14 in. Hg)	16 ft. H ₂ O (14 in. Hg)	16 ft. H ₂ O (14 in. Hg)	16 ft. H ₂ O (14 in. Hg)
Max. Cont. Pressure Head	65 ft H ₂ O (30 psig)	200 ft H ₂ O (90 psig)	65 ft H ₂ O (30 psig)	200 ft H ₂ O (90 psig)
Motor Gear Reduction Ratio	1:37.4	1:37.4	1:18.7	1:18.7

Environmental

Maximum Ambient Temperature	+5°C to +40°C (+40°F to +105°F) All models
Maximum Medium Temperature	+5°C to +80°C (+40°F to +176°F) (Models available to 135°C)
Net Weight (KT Materials)	1.8 kg to 2.75 kg (Varies, depending on options)

Available Electrical Options

Shaded Pole Motor (IP-00)	Specify Motor Type E	Specify Motor Type E	Specify Motor Type E
Capacitor Motor (IP-54)	Specify Motor Type AA	Specify Motor Type AA	Specify Motor Type AA
Motor Voltages (Hz)	115 VAC (60 Hz)	230 VAC (50 Hz)	240 VAC (50 Hz)
Full Load Motor Current	0.6 Amps	0.3 Amps	0.3 Amps
Motor Protection	Thermal Reset	Thermal Reset	Thermal Reset

Other Options

Head Venting	Specify .31 Option
OEM Model with Motor Housing	Specify .32 Option
Portable Model with Cabinet, Cord & Switch	Specify .18 Option
Multiple-Head Configurations	Available, Contact Factory

Materials of Construction

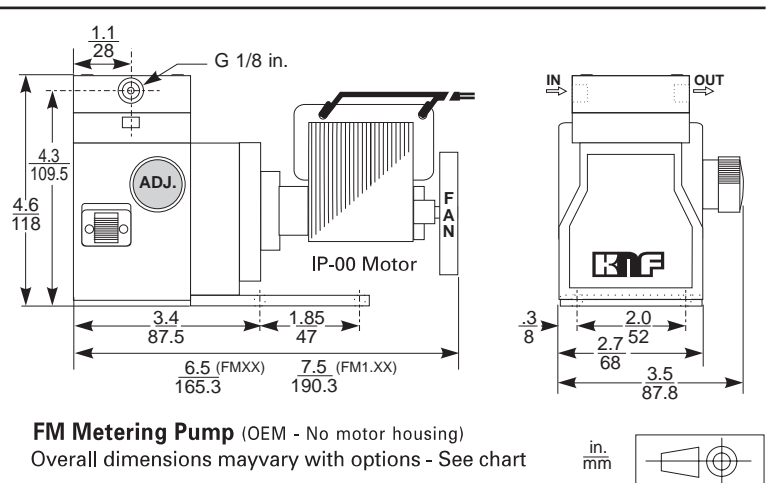
Standard Model Number	Head	Diaphragm	Valves	O-Rings/Seals
FM15KTE, FM1.15KTE	Polypropylene	PTFE-Coated Perpunan	FPM	FPM
FM15TTE, FM1.15TTE	PVDF	PTFE-Coated Perpunan	FFPM	PFA
FM30KTE, FM1.30KTE	Polypropylene	PTFE-Coated Perpunan	FPM	FPM
FM30TTE, FM1.30TTE	PVDF	PTFE-Coated Perpunan	FFPM	PFA

Notes: Standard continuous performance ratings listed above are at sea level, per head, with water at 70°F (20°C) with nominal electric supply. Minimum accuracy: ±2% of delivered flow. Dimensions and performance characteristics given are for reference only. Specifications subject to change without notice.

Accessories: Hose Connectors, Elbow Fittings, Spares Kits

Outline Dimensions: (in mm)

Model Number:	Length	Width	Height
FM 15/30 KT/TT E	165.3	87.8	118
FM 1.15/1.30 KT/TT E	190.3	87.8	118
FM 15/30 KT/TT .31E	165.3	91	138.3
FM 1.15/1.30 KT/TT .31E	190.3	91	138.3
FM15/30 KT/TT .32 E	200	86	120
FM 1.15/1.30 KT/TT .32 E	200	86	120
FM 15/30 KT/TT .31.32 E	200	86	140.3
FM 1.15/1.30 KT/TT .31.32 E	200	86	140.3
FM 1.15/1.30 KT/TT AA	210	87.8	129
FM 1.15/1.30 KT/TT .31 AA	210	91	138.3
All Portable Models	200	86	162.8



KNF NEUBERGER, INC.

Two Black Forest Road
Trenton, New Jersey 08691-9428
Fax: 609-890-8323 · Phone: 609-890-8600
www.knf.com/usa.htm

