

Diaphragm Metering Pumps

INNOVATIVE
TECHNOLOGY
WORLDWIDE

KNF NEUBERGER



STEPDOS® 03 Chemically-resistant Diaphragm Metering Pumps, Processor controlled

Technical features:

- Maintenance-free
- Silent
- Even discharge over the entire travel range
- Suitable for virtually any chemicals
- Reproducibility +/- 1%
- Integrated solenoid valve ensures the liquid does not drip or flow back during stop

Metering Pumps STEPDOS® 03: FEM 03 __.18/S, FEM 03 __.18/RC

The chemically-resistant, microprocessor-controlled series FEM 03__18/S and FEM 03__18/RC diaphragm metering pumps meter the smallest volumes continuously and evenly. Thanks to a special drive technology, these pumps feature a remarkably wide metering range of 1:1000.

Material in contact with the pumped media

Type Order No.	Pump head	Diaphragm	Valves
FEM 03 KT.18/S	PP	PTFE-coated	FFPM
FEM 03 TT.18/S	PVDF	PTFE-coated	FFPM
FEM 03 FT.18/S	PTFE	PTFE-coated	FFPM
FEM 03 ST.18/S	Stainless Steel	PTFE-coated	FFPM
FEM 03 KT.18/RC	PP	PTFE-coated	FFPM
FEM 03 TT.18/RC	PVDF	PTFE-coated	FFPM
FEM 03 FT.18/RC	PTFE	PTFE-coated	FFPM
FEM 03 ST.18/RC	Stainless Steel	PTFE-coated	FFPM

Technical data:

Flow rate ¹⁾	0.03-30 ml/min
Pressure head	60 mWg (6 bar)
Suction head	4 mWg
Metering volumes	50 µl-43.2 l
Time metering	0.34 s - 24h
Repeated metering	1-65000
Pause time	1 s-24 h
Reproducibility	+/- 1 %
Permissible liquid temperature	5-80 °C
Permissible ambient temperature	5-40 °C
Connectors	UNF 1/4"-28 inside thread
Mains	100-230V, 50/60Hz
Weight	approx. 1.5 kg
Housing	IP 65 (splash proof)
Dimensions (LxHxW)	192/115/82 mm

Supply with 1 meter tubing PTFE 3.2 x 1.6 mm, two connectors and software and PC cable.

¹⁾ Water at 20°C and zero pressure head

S version (manual control):

Operation is manual using a keypad.

- Run Mode: - For continuous metering
- Dispense Mode: - Metering according to volume
- Metering according to time
- Repeated metering with adjustable pause time
- Rapid suction feature

RC version (manual or external control):

The RC version incorporates all the functions of the S version and can also be controlled externally via analog or digital signals (PC-compatible).

External control:

- Analog signals: 0/4-20 mA, 0-5 V, 0-10 V
- Digital signals: RS 232, RS 485 (cable and software are included)
- Pulse input point: logic input I/01, I/02

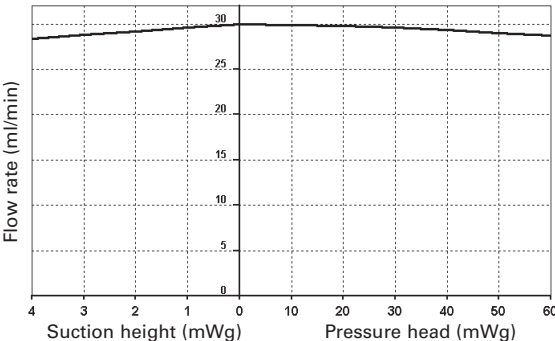
Accessories

Description	Order No.
Foot switch	069875

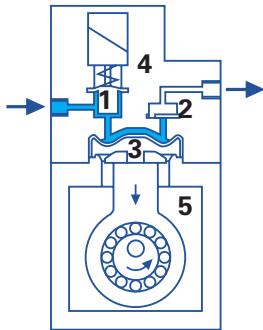
Diaphragm Metering Pumps

Dimensions and performance characteristics

Flow rate

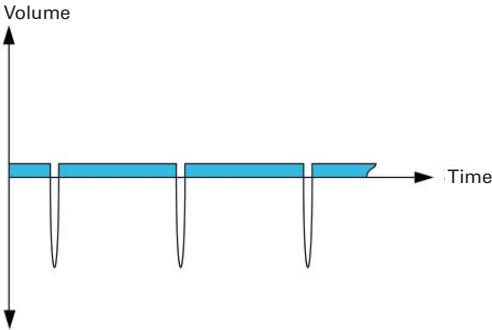


Function of the diaphragm metering pump STEPDOS 03



- 1 Solenoid valve
- 2 Outlet valve
- 3 Diaphragm
- 4 Head
- 5 Drive housing

Pump performance characteristics for a dose of 1 ml/min



Technology with long-term precision

A stepper motor and integrated solenoid valve continuously ensure controlled movement in the pump head. The result is exact, practically pulsation-free, careful metering. The liquid is released slowly and evenly, while the suction stroke always occurs at maximum speed. Thus, the liquid is metered virtually continuously and very quietly, without pressure peaks.

Dimensions (mm)

