

# Diaphragm Metering Pumps

INNOVATIVE  
TECHNOLOGY  
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**KNF** NEUBERGER



## STEPDOS® 08 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® 08: FEM 08 \_\_.18/S, FEM 08 \_\_.18/RC

The chemically-resistant, microprocessor-controlled series FEM 08\_\_18/S and FEM 08\_\_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 OrderNo.	Pump head	Diaphragm	Valves
FEM 08 KT.18/S	PP	PTFE-coated	FFPM
FEM 08 TT.18/S	PVDF	PTFE-coated	FFPM
FEM 08 FT.18/S	PTFE	PTFE-coated	FFPM
FEM 08 ST.18/S	Stainless Steel	PTFE-coated	FFPM
FEM 08 KT.18/RC	PP	PTFE-coated	FFPM
FEM 08 TT.18/RC	PVDF	PTFE-coated	FFPM
FEM 08 FT.18/RC	PTFE	PTFE-coated	FFPM
FEM 08 ST.18/RC	Stainless Steel	PTFE-coated	FFPM

### Technical data:

Flow rate <sup>1)</sup>	0.08-80 ml/min
Pressure head	20 mWg (2 bar)
Suction head	4 mWg
Metering volumes	80 µl-115.2 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	for tube 4/6 mmm (KT, TT) and NPT 1/8" inside thread (FT, ST)
Mains	100-230 V, 50/60 Hz
Weight	approx. 1.5 kg
Housing	IP 65 (splash proof)
Dimensions (LxHxW)	185/115/82 mm

Supply with software and PC cable

<sup>1)</sup> 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

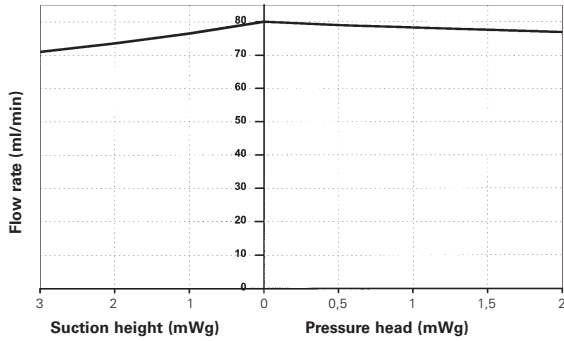
## Accessories

Description	OrderNo.
Foot switch	069875

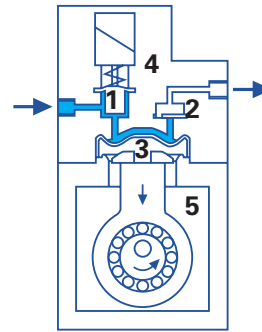
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## Dimensions and performance characteristics

### Flow rate

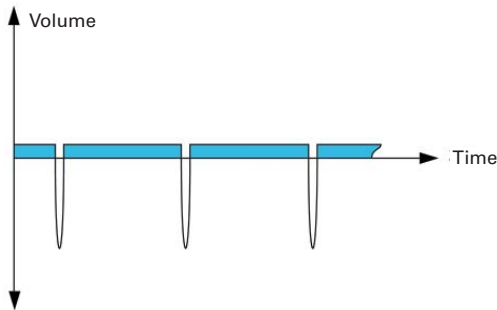


### Function of the diaphragm metering pump STEPDOS 08



- 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)

