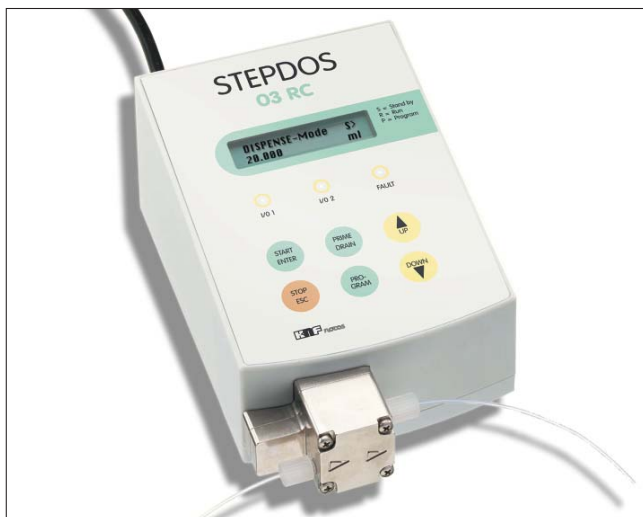


Diaphragm Metering Pumps

INNOVATIVE
TECHNOLOGY
WORLDWIDE



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	6 bar
Suction head	4 m
Metering volumes	30 µl-180 l
Time metering	0.34 s - 100h
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
Mains	100-230 V, 50/60 Hz
Weight	approx. 1.5 kg
Housing	IP 65 (splash proof)
Dimensions (LxHxW)	192/115/81.5 mm

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

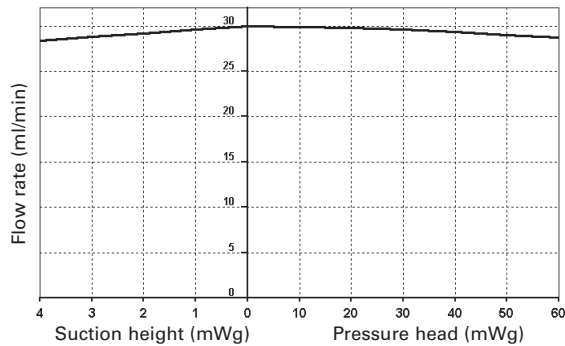
Spare parts

Description	Details	Order No.
Spares kit	for KT version	069866
Spares kit	for TT version	069867
Spares kit	for FT version	151048
Spares kit	for ST version	069868

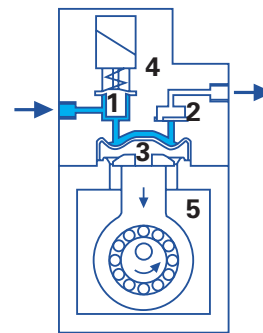
Diaphragm Metering Pumps

Dimensions and performance characteristics

Flow rate

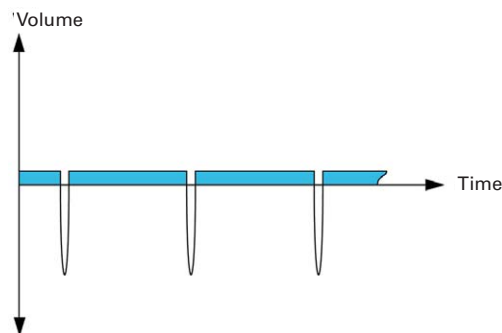


Function of the diaphragm metering pump STEPDOS 03



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

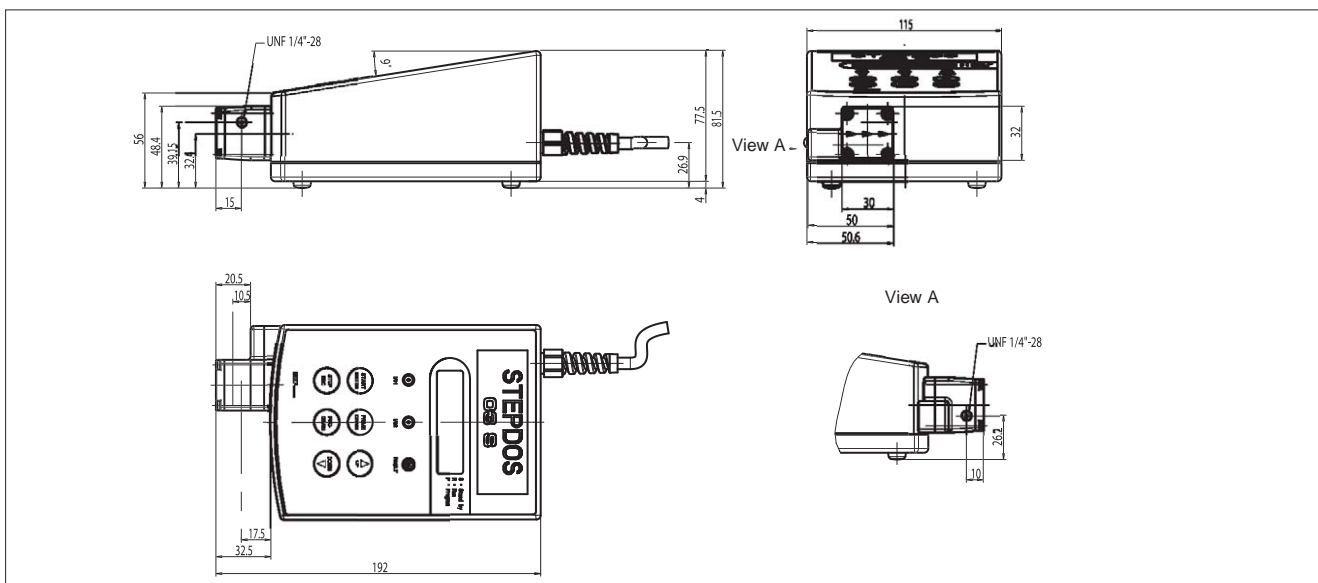
Pump performance characteristics for a dose of 1 ml/min



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)



Accessories

Description	Details	OrderNo.
Cable for external control	2 m (without connector)	063959
Foot switch		069875
Tube ID/OD 1.6/3.2mm	PTFE	069684
Flangeless fitting	for tube 1.6/3.2mm	150213