MicroInject

Piston metering system

telab

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Piston metering systems
Double-piston metering systems

Pulsation-free delivery of fluids and gases

1 µl/min - 0,15 L/h
10 µl/min - 1,5 L/h

As a key design feature, in the micro-metering / double-syringe systems metering pistons working in opposite directions with step motors acting independently of each other allow highly accurate metering of fluids, outgassing media or gases. Here dosages with continuous delivery rates from or into vacuum are likewise possible.

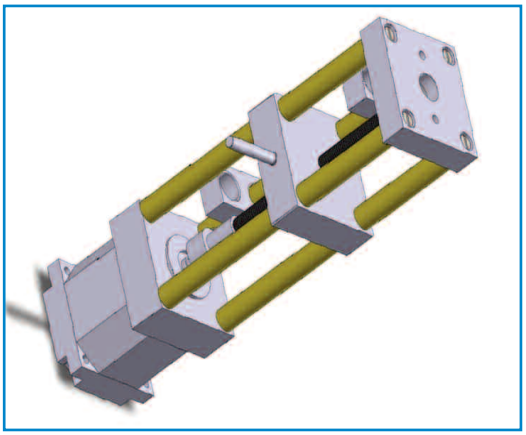
All medium-contact components of the TELAB MicroInject systems are made of PTFE and glass. Alternatively, the devices are also available in stainless steel and PTFE for higher system pressures and / or flow rates.

The metering pistons can be easily replaced with little effort and without any tools.

The metering pistons directly driven via a mechanical system ensure clearly defined working states with precisely set opening and closing times of the solenoid valves. Of course, attention was paid to pulsation-free switching of the metering pistons, too.

Alternatively, the TELAB MicroInject piston meter can also be used as a mixing device.

High precision of the components and low number of moving parts result on the one hand in extremely high precision of the meter, and on the other in very low wear.



The drive

Two or more mutually independent axles, driven by stepper motors or linear actuators, ensure highly accurate and pulsation-free meter-ing. The metering pistons can be exchanged with little effort, even during on-going operation.
All double-syringe systems are optionally available with integrated heating (up to 120 °C / 248 °F) and control for external heating hoses.

TELAB MicroInject systems with user-friendly touch screen technology

Manual settings:

Either via a high-resolution LCD display with touchscreen technology or simply via PC

- Start-stop function
- Start of an automatic and predefined metering routine
- Selection of various metering pistons
- Display of metering quantities (and temperature)

External settings:

1. Connector socket (RS232, USB)

- Metering pistons individually controllable
- Time-controlled metering
- Quantity-based metering
- Start of an automatic and predefined metering routine (metering via chute)
- Calibration and parameter setting
- Selection of various metering pistons (1 ml, 10 ml)

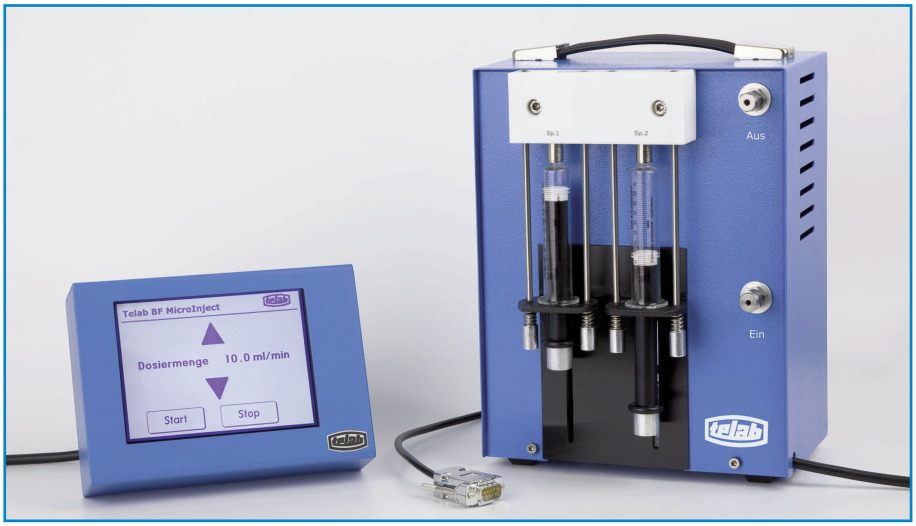
- Mixing metering (simultaneous metering from two syringes)

2. Analog interfaces (4-20 mA)

- ontrol of the stations by Start / Stop
- Specification of the metering quantity

3. Display connector

- Data exchange between handheld and station
- Direct power supply via the station



Technical Data

Pump type	volume		res.	P max.	material
MicroInject 2	1 µl -	2,5 ml/min	1:10.000	5 bar	PTFE / Glas
SS		0,15 l/h		5 bar	SS / PTFE / Glas
MicroInject 25	10 µl -	25 ml/min	1:10.000	2 bar	PTFE / Glas
SS		1,5 l/h		2 bar	SS / PTFE / Glas

Dimensions	156 x 270 x 254 mm
Setting range	0 : 100%
Stroke cycle	Single stroke / double stroke / continuous operation / mixed operation
Intake sztoke	5 m
max. Vicosity	15.000 mPa/s (special versions upon request)
Power supply	24V DC or 240V 50Hz
Accuracy	+/- 0,1 % of set value
Interfaces	RS232 / Analog 4-20 mA / 0-10V / 0-5V
Flow / return	Switching optionally
Metering pistons	Metering pistons made of glass / solid PTFE plungers / PTFE valves
Connections	Optionally made of PTFE GL14B / GL18B or stainless steel connections of type Gyrolok, Swagelok or specified by the customer
Max. pressure with glas cylinder	10 bar (5 bar for PTFE connections)
Metering head – electrically heated with / without control for heated hoses	Optional
Further accessories	
OEM- Versions	Cassette system design
Intake filter made of PTFE	Optionally with GL14B or GL18B connections
(Pre-) filter PTFE	Optionally with GL14B or GL18B connections
Modifications	Higher viscosities, dissolved solids, mixing systems, filling systems, heated or cooled version

Contact

TELAB UG
Krahenhöher Weg 21
42659 Solingen
GERMANY

Tel: +49 212 2267231
Fax: +49 212 2443672
Net: www.telab.de
Mail: info@telab.de