



Medical and Biotech
Developments, Inc.



Microliter Dispensing System

- These systems can deliver microliter volumes and switch between eight solutions in milliseconds from a single tip starting with a reservoir of only 100 microliters.
 - Minimize cross-contamination with BackStop™ back-flow prevention
Special 3-way relief valve design stops liquid flow quickly.
- Valves and pressure controls in a small box near microscope - no stand necessary
Includes pressurized large-volume reservoir for buffer.

Programmable dispensing, microinjection, perfusion or spritzing of reproducible microliter volumes. Up to eight solutions are stored in 2.5ml cryo tube reservoirs with easy syringe refill ports. Included pneumatic solenoid valves deliver regulated air pressure to push liquids out of the Smart Squirt Perfusion Pencil tip. An AutoMate Scientific (or other) valve controller offers programmable, manual or computer-controlled valve selection for switching which reagent is delivered from the tip. Pulse a valve quickly for microliter delivery, or leave it on longer for constant perfusion. The short delivery path saves expensive reagents. Integrated BackStop check valves prevent backflow found in competing micro-perfusion systems, while special three-way valve design stops liquids quickly. The 0-10psi regulator and air filter require a compressed air or other gas source -- bottle, compressor or lab air. Compare to an eight-channel, 10psi Picospritzer™ at a fraction of the price.

Order with an AutoMate ValveLink8.2® or ValveBank® controller or use your own valve controller. Can be combined with an AutoMate Scientific ThermoClamp®-1 for temperature-controlled delivery. Micromanipulator packages available.



Microliter Dispensing System Specification

For programmable dispensing, microinjection, perfusion or spritzing of reproducible microliter volumes. Pulse a valve quickly for microliter delivery, or leave it on for constant perfusion. The short delivery path saves expensive reagents.

- Deliver as little as 100 microliters of precious drugs
Switch between eight solutions in milliseconds from a single tip

- Minimize cross-contamination with BackStop™ backflow prevention

One-way check valves inside the reservoir block prevent liquid backflow from the tip.

Features:

Uses standard 2.5ml cryo-tubes as reservoirs

Special 3-way valve design stops liquid flow quickly

Convenient micromanipulator mounting (manipulator not included)

Easy ports for refilling reservoirs

Low noise design for electrophysiology

Valves and pressure controls housed in a small box near microscope - no stand necessary.
Includes one, pressurized large volume reservoir for buffer.

Can be combined with an AutoMate Scientific ThermoClamp-1™ for temperature-controlled delivery.

System includes:

- Valve controller
- SmartSquirt Valve Pressure Unit with built-in valves, pressure regulator, gauge, and 5 micron filter
- Reservoir Block with four cryo-tube reservoirs
- 4-, 8-, or 16-channel Perfusion Pencil (with choice of removable tip size)
- Instruction Manual
- One year limited warranty covering both parts and labor

