

RELIABLE SOLUTION EXCHANGE FOR TISSUE OXYGENATION OR PHARMACOLOGY EXPERIMENTS

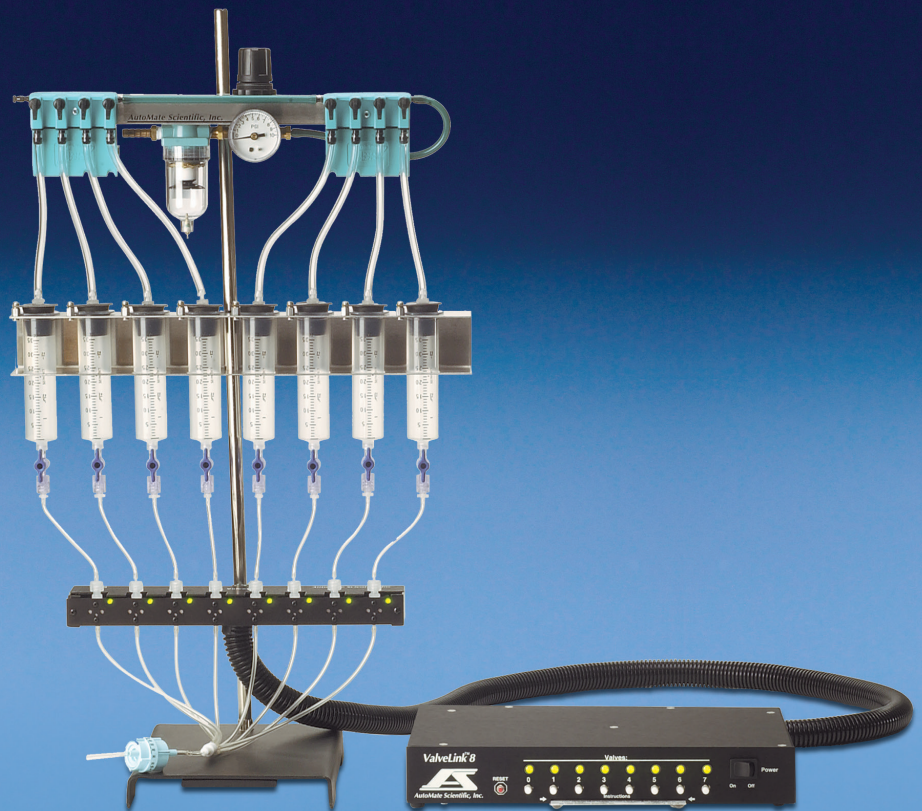
1, 4, OR 8 FLUID RESERVOIRS

AVAILABLE FOR ROOM TEMPERATURE OPERATION, INLINE-HEATED, OR WITH BOTH INLINE AND BATH CHAMBER HEATING

VALUELINK8.2® AND THERMOCLAMP CONTROLLERS COMPATIBLE WITH SUTTERPATCH® SOFTWARE

HIGH RELIABILITY THROUGH LOW-MAINTENANCE PINCH VALVES

ELECTRICALLY QUIET CIRCUITRY FOR VALVE SWITCHING AND TEMPERATURE CONTROL



(Shown: AM-PS8-PR Perfusion System)

PERFUSION SYSTEMS AND BATH CHAMBERS

An electrophysiology setup is not complete without a perfusion system. Depending on your application, the objective could be as simple as keeping the preparation alive by supplying oxygenated saline, or as complex as applying a wide range of concentrations of an ion channel modulator, complete with positive and negative controls to obtain a high-quality concentration-response curve. In addition, experiments with mammalian cells or tissues frequently require elevated temperature.

Sutter Instrument now offers the popular perfusion systems and bath chambers made by AutoMate Scientific. Our standard product portfolio consists of perfusion systems with one, four or eight reservoirs, with the option of room temperature operation, inline heating, or a heated bath chamber in addition

to inline heating. The standard bath chambers are compatible with either the Sutter platform stages, or with the MT-150 chamber column. Solution switching can be controlled by SutterPatch® software for complete integration into your data acquisition and analysis workflow. Manual operation, as well as control through other patch clamp software, or through digital (TTL) or analog signals from other sources is also possible.

The AutoMate Scientific ValveLink8.2® Controller avoids vibrations produced by switching solutions by hand. Low-noise circuitry and low-maintenance pinch valves switch in 20 ms and contribute to problem-free operation. Liquids never touch the valves. All AutoMate Scientific valves include an individual indicator LED. The aluminum enclosure

keeps the valves dry from spills and provides Luer lock ports for syringe reservoirs.

All perfusion systems include syringe reservoirs (140 mL for the one-channel systems, 60 mL each for the four- and eight-channel systems), 2-way stopcocks, a ringstand with reservoir mounts, tubing, Luer connectors and a manifold where applicable.

In addition to the standard perfusion systems which cover the most frequently required configurations, a high degree of customization is possible. Please contact Sutter Instrument for a configuration that meets your particular requirements.

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PERFUSION SYSTEMS

Standard configurations come with a chamber insert for either the Sutter Instrument MT/MP-78 and -88 stages, or the MT-150/AUTO gantry stand. Other inserts are available on request.

Single-reservoir Perfusion Systems

140 mL reservoir on a ringstand, 2-way Luer stopcock, Tygon tubing with Luer-lock fittings, horizontal perfusion chamber.

- AM-PS1** Single-reservoir Perfusion System, gravity feed, unheated
- AM-PS1-INL** Single-reservoir Perfusion System, gravity feed, inline-heated
- AM-PS1-FULL** Single-reservoir Perfusion System, gravity feed, inline-heated, heated bath chamber

Four-channel Perfusion Systems

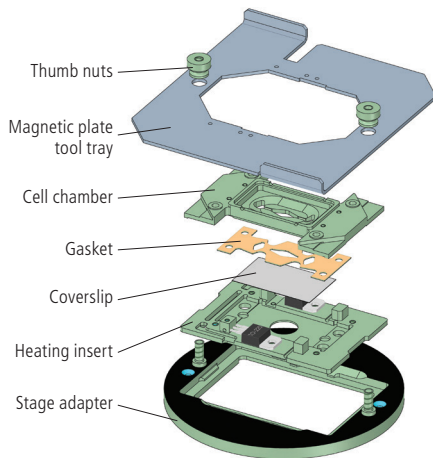
ValveLink8.2® 4-channel Pinch Valve Perfusion System, mounting, cables, ringstand set, 4-into-1 manifold, flow controller, 4 x 60 ml syringes, stopcocks, pinch fittings, 2-way Luer stopcocks, Tygon tubing with Luer-lock fittings, horizontal perfusion chamber, grounding kit.

- AM-PS4** 4-channel Perfusion System, gravity feed, unheated
- AM-PS4-PR** 4-channel Perfusion System, pressurized, Perfusion Pencil® with 250 µL removable tip
- AM-PS4-INL** 4-channel Perfusion System, pressurized, inline-heated Perfusion Pencil with 250 µL removable tip
- AM-PS4-FULL** 4-channel Perfusion System, pressurized, inline-heated Perfusion Pencil with 250 µL removable tip, heated bath chamber

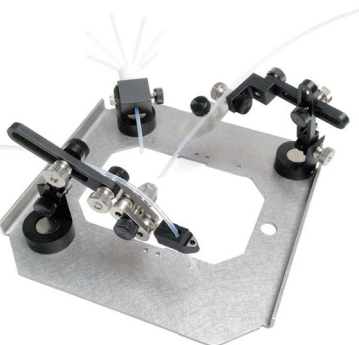
Eight-channel Perfusion Systems

ValveLink8.2® 8-channel Pinch Valve Perfusion System, mounting, cables, ringstand set, 8-into-1 manifold, flow controller, 8 x 60 ml syringes, stopcocks, pinch fittings, 2-way Luer stopcocks, Tygon tubing with Luer-lock fittings, horizontal perfusion chamber, grounding kit.

- AM-PS8** 8-channel Perfusion System, gravity feed, unheated
- AM-PS8-PR** 8-channel Perfusion System, pressurized, Perfusion Pencil with 250 µL removable tip
- AM-PS8-INL** 8-channel Perfusion System, pressurized, inline-heated Perfusion Pencil with 250 µL removable tip
- AM-PS8-FULL** 8-channel Perfusion System, pressurized, inline-heated Perfusion Pencil with 250 µL removable tip, heated bath chamber



QuickStage™ Recording Chamber – Assembly View



StageHands™ Magnetic Tool Holders

ACCESSORIES

- AM-01-17** ValveLink rack mounting brackets (to std. 19" rack) with 6-32 x 1/8" screws
- AM-01-17b** Rack mounting brackets – ThermoClamp®-1 and old ValveLink8
- AM-01-47** Rack mounting brackets – ThermoClamp-2 to standard 19" rack
- AM-01-19** BNC-ValveLink8.2 cable – 4 BNC plugs to DB-9
- AM-01-20** Full BNC-ValveLink8.2 cable – 8 BNC plugs to DB-9
- AM-04-100** 100 µm Removable Tip for Perfusion Pencil
- AM-04-250** 250 µm Removable Tip for Perfusion Pencil
- AM-04-360** 360 µm Removable Tip for Perfusion Pencil
- AM-220** 220 V Power and CE upgrade
- AM-SH-1** StageHands Magnetic tool holder
- AM-GPUMP** 2-channel peristaltic pump and tubing

COMPONENTS

- ValveLink®**
- AM-17-PP-24** ValveLink8.2 4-channel Pinch Valve Perfusion System, ValveLink8.2 controller = 4+4 solutions (expandable), 4 Pinch Valves, mounting, cables, ringstand set, 4-into-1 manifold, 1/16" tubing, flow controller, 4 x 60 ml syringes, stopcocks, pinch fittings
- AM-17-PP-54** ValveLink8.2 8-channel Pinch Valve Perfusion System, ValveLink8.2 controller = 8 solutions, 8 Pinch Valves, mounting, cables, ringstand set, 8-into-1 manifold with flow control, 1/16" tubing, 8 x 60 ml syringes, stopcocks, pinch fittings



ValveLink® Controller

QuickStage

- AM-QSH-LS-TT-ZK** QuickStage heated large slice chamber (upright), ToolTray, ThermoClamp®-1 Controller
- AM-QSU-H-TT-ZK** QuickStage unheated horizontal perfusion chamber, ToolTray

Thermoclamp® Inline Solution Heater

- AM-03-11-LL** ThermoClamp-1 – 1-Channel Controller, 1-channel heated Perfusion Pencil with bath sensor
- AM-03-14-250** ThermoClamp-1 – 4-Channel Controller, 4-channel heated Perfusion Pencil with 250 µm tip & bath sensor
- AM-03-18-250** ThermoClamp-1 – 8-Channel Controller, 8-channel heated Perfusion Pencil with 250 µm tip & bath sensor