



Column Selector
with cover.

Column Selector

LabPRO™ Column Selectors are the “faster, easier, and better” solutions to make your laboratory more productive by automating selection of multiple columns. Attractively encased in a space-saving, vertical unit, the Column Selector incorporates a variety of features to make HPLC applications easier. The Column Selector offers a broad range of solutions to common laboratory situations. *Introduction to LabPRO Fluidics Instruments* (page 31) details the benefits of the LabPRO family of precision fluidics instruments.

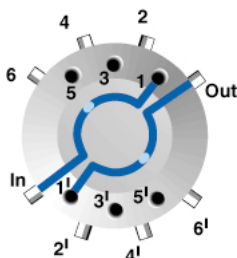


Fig. 2.3. Flow diagram of LabPRO Six Column Selector. Numbers represent valve ports. The heavy lines represent the internal TeleFLO architecture connecting passages.

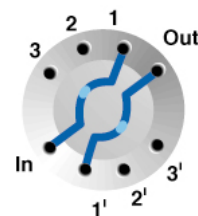


Fig. 2.4. Flow diagram of LabPRO Three Column Selector. Numbered circles represent valve ports. The heavy lines represent the internal TeleFLO architecture connecting passages.

Applications

Column Selectors automate repetitive laboratory applications for unattended methods development and routine analyses such as methods development and validation studies. With computer controlled solvent selection, autosampling, column selection, and method selection, methods development can continue overnight without the need to disconnect and reconnect columns and solvents. These separate connections save time as well as column life.

Easy-to-use time programming of column selection allows convenient, automated collection of unresolved peaks from a preparative column onto different columns for further multi-dimensional separations. Other Column Selector applications include chiral recognition, SPE sample preparation, desalting, and buffer exchange. Column quality control, system-to-system ruggedness, and other validation studies can also be performed easily. The Column Selector is ideal for multi-user/multi-methods laboratories.

Unique Features

The LabPRO Column Selector is available in three or six column models. Both models accommodate pre-columns and analytical and preparative scale columns in lengths of 5 - 35 cm (2 - 14"), and diameters of 0.6 cm (0.25") to ≥ 3.2 cm (1.25") OD. The versatile stainless steel model and the biocompatible PEEK model can both be used with a wide variety of solvents, buffers, and eluents. Columns not in use can be stored in the storage solvent of your choice.

The Rheodyne patented TeleFLO™ valve architecture distinguishes Rheodyne's selection valves from other multi-position valves. This valve design eliminates unswept volume within the valve and minimizes dispersion. See Figure 2.5 on page 34. The new TeleFLO design eliminates potential carryover problems during LabPRO switching applications. Both the Six Column Selector and the Three Column Selector incorporates TeleFLO architecture.

Other benefits include:

- Mounting or removing columns is simple using unique column clips.
- Safe and convenient solvent containment is provided by the built-in drip tray.
- Environmental isolation and ambient temperature stabilization is maintained by the magnetically secured cover.
- Tubing connections are organized with side tubing fasteners.

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Column Selector (Cont.)

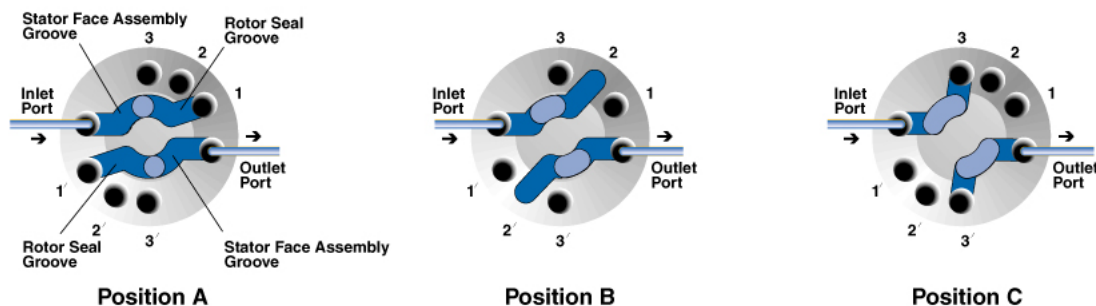


Fig. 2.5. Flow diagram of the TeleFLO architecture. Heavy blue lines represent the internal connecting passages. The light blue areas represent the overlapping internal connecting passages. This patented valve design assures no unswept volume.

Operation

Selected column is indicated by a bright digital display on the front panel. Columns can be selected remotely with a built-in instrument compatible electronic interface, or in local mode by push button. See *LabPRO Communications* (page 31) for details on remote communication control.

Specifications

Maximum Pressure: 35 MPa (345 bar, 5000 psi)

Flow Passage Diameters: Patented TeleFLO design, 0.6 mm (0.024") and 0.5 mm (0.015")

Environment: 4 - 40° C, <95% humidity (non-condensing)

Supplied with: 10-32 threaded RheFlex nuts and ferrules for all ports, 3.5 m (12 ft.) of 1/16" OD stainless steel or PEEK tubing, universal power supply, power line cord, and interface cable.

Genuine Rheodyne accessories and RheFlex fittings are listed on pages 62 and 66.

Cable and Power Line Cords

Part Number	Description
Cable	
5123-067	RS-232 Cable (for LabPRO models ending in -01 or -02)
Power Line Cords (supplied with LabPRO Column Selectors at no charge)	
5123092	Australia & New Zealand
5123093	Italy
5123094	Japan
5123095	North America
5123096	Schuko (most of Europe)
5123097	Switzerland
5123098	United Kingdom

LabPRO™ Column Selectors

Part Number	Control Logic	Stator Material
Six Column Selectors		
PR500-104-01	1 or 2 Line Level Logic Control and RS-232	Stainless Steel
PR500-104-02	1 or 2 Line Pulse Logic Control and RS-232	Stainless Steel
PR500-104-03	4 Line BCD Control and RS-485	Stainless Steel
PR550-104-01	1 or 2 Line Level Logic Control and RS-232	PEEK
PR550-104-02	1 or 2 Line Pulse Logic Control and RS-232	PEEK
PR550-104-03	4 Line BCD Control and RS-485	PEEK
Three Column Selectors		
PR500-100-01	1 or 2 Line Level Logic Control and RS-232	Stainless Steel
PR500-100-02	1 or 2 Line Pulse Logic Control and RS-232	Stainless Steel
PR500-100-03	4 Line BCD Control and RS-485	Stainless Steel
PR550-100-01	1 or 2 Line Level Logic Control and RS-232	PEEK
PR550-100-02	1 or 2 Line Pulse Logic Control and RS-232	PEEK
PR550-100-03	4 Line BCD Control and RS-485	PEEK

To order, contact your authorized Rheodyne dealer. See www.rheodyne.com for a complete list of dealers.

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