



Manual Valves

Choose a manual valve if your application involves low frequency of use, demands operator control, or involves injection of smaller sample volumes.



7725i
Manual Injection Valve
Up to 9,000 psi (600 bar)



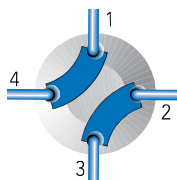
7060
Manual Switching Valve
Up to 7,000 psi (483 bar)



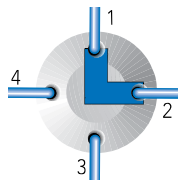
3725i-038
Manual Switching Valve
Up to 7,000 psi (483 bar)

NOTE

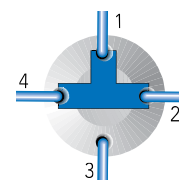
Manual Switching Valve Options



4-Way Diagonal Flow Switching Valves
(V-100D, V-101D)



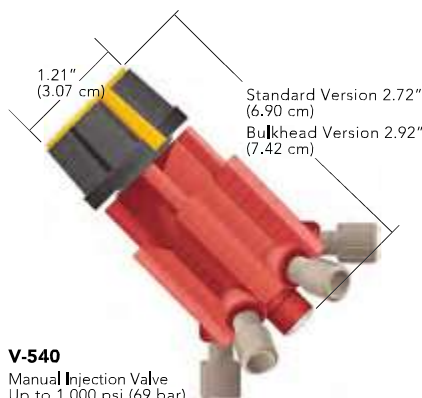
Right Angle Flow Switching Valves
(V-100L, V-101L)



3-Way Flow Switching Valves
(V-100T, V-101T)



V-101L
Manual Switching Valve
Up to 1,000 psi (69 bar)



V-540
Manual Injection Valve
Up to 1,000 psi (69 bar)

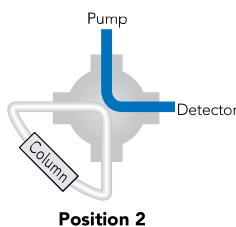
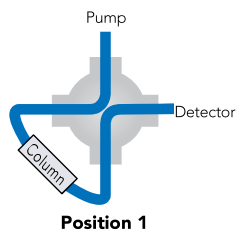
Manual Valves (Cont.)



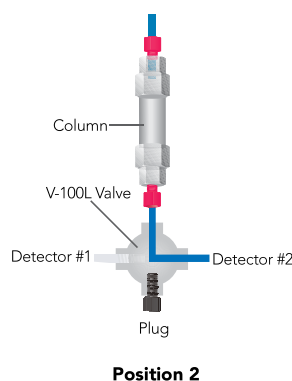
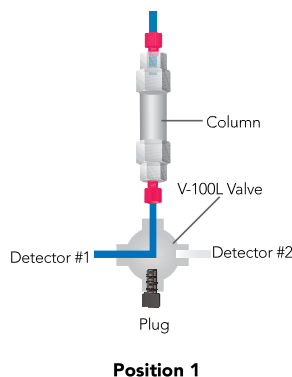
APPLICATION NOTE

Switching Valve Applications

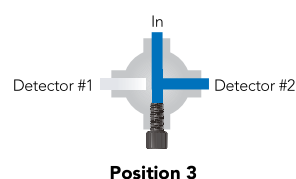
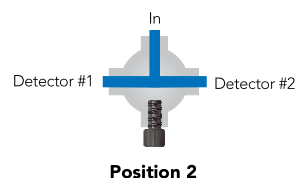
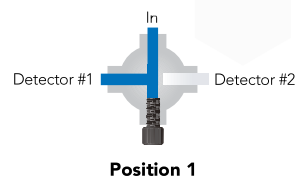
Protect sensitive system components (such as a column) during a cleaning cycle with our Diagonal Flow Switching Valve ("D"). This valve eliminates the need to remove, plug and reconnect a low pressure column (see below).



› A typical application for a Right Angle Flow Switching Valve ("L") is column switching, allowing two columns to use one detector. Detector switching is another common application for this valve (see below). Plug off the extra port with the included plug.



› Your detector switching application may require the flexibility of routing the column effluent to both detectors simultaneously while retaining the ability to isolate each detector. Use our 3-Way Flow Switching Valve ("T"), plugging off the fourth port with the included plug.



Characteristics of Manual Sample Injection Valves

Type & Capabilities	Scale	Partial Filling Volumes (Range)	Sample Loop Sizes (Range)	Wetted Materials	Max. psi (bar) ¹	Max. T (°C)	MBB ²	Model ³
Dual Mode Can load the loop by two methods: 1) Partial filling – syringe determines volume without wasting sample 2) Complete filling – loop determines volume by over filling loop	Analytical	1 µL–2.5 mL	2 µL–5.0 mL	316 SST, Vespel® PEEK, ETFE, ceramic	7,000 (483)	80°	Yes	7725, 7725i
		1 µL–5.0 mL	2 µL–10 mL		5,000 (340)	50°	Yes	9725, 9725i
	Micro	0.1 µL–500 µL	5 µL–1.0 mL	7,000 (483)	80°	No	8125	
Single Mode Can load the loop by one method: Complete filling — loop determines volume by over filling loop	Preparative	100 µL–10 mL	2.0 mL–20 mL	316 SST, PEEK PEEK	5,000 (340)	50°	Yes	3725(i)-038,
					4,000 (276)	50°	Yes	3725i
Single Mode Can load the loop by one method: Complete filling — loop determines volume by over filling loop	Analytical	Not Applicable	5 µL–5.0 mL 5 µL–10 mL	316 SST, Vespel PEEK, ETFE, Ceramic	7,000 (483)	150°	No	7010
					5,000 (340)	50°	No	9010

SST = Stainless Steel

¹ This is the maximum pressure to which the valve can be adjusted. Some models are shipped from the factory set for lower pressures.

² MBB (Make-Before-Break™) is a design that provides uninterrupted flow when switching between LOAD and INJECT. MBB also greatly reduces transient pressure shocks.

³ Models with an "i" suffix have a built-in position sensing switch. Models 8125 and 9010 also have a built-in switch.



SPECIFICATIONS & DETAILS

Part No.	Stator Passage Diameter	Factory Set Pressure	Maximum Field Set Pressure	Maximum Temperature (°C)
3000 (PEEK)	1.0 mm (0.040")	3,000 psi (207 bar)	4,000 psi (276 bar)	50°
7000, 7010 (SST)	0.6 mm (0.024")	5,000 psi (340 bar)	7,000 psi (483 bar)	150°
7000L (SST)	1.0 mm (0.040")	3,000 psi (207 bar)	5,000 psi (340 bar)	150°
7030 (SST)	0.6 mm (0.024")	5,000 psi (340 bar)	7,000 psi (483 bar)	150°
7030L (SST)	1.0 mm (0.040")	3,000 psi (207 bar)	5,000 psi (340 bar)	150°
7060 (SST)	0.4 mm (0.016")	5,000 psi (340 bar)	7,000 psi (483 bar)	80°

SST = Stainless Steel

Manual Valves

Part No.	Description	Tubing/Fitting Size	Wetted Material	Configuration	Qty.
MANUAL VALVES UP TO 9,000 PSI (600 BAR)					
INJECTION					
7725i-188	2-Position, 6-Port, 9,000 psi (600 bar)	10-32 Ports for 1/16" OD Tubing	Stainless Steel, PEEK, Ceramic	Front loading	ea.
MANUAL VALVES UP TO 6,000 PSI (410 BAR)					
SWITCHING					
3000	2-Position, 6-Port, Prep Scale	5/16-24 Ports for 1/8" OD Tubing	PEEK	—	ea.
7000	2-Position, 6-Port, Large Bore	10-32 Ports for 1/16" OD Tubing	Stainless Steel & Vespel®	—	ea.
7000L	2-Position, 6-Port, Large Bore	10-32 Ports for 1/16" OD Tubing	Stainless Steel & Vespel	—	ea.
7030	2-Position, 6-Port	10-32 Ports for 1/16" OD Tubing	Stainless Steel & Vespel	Double 3-Way	ea.
7030L	2-Position, 6-Port, Large Bore	10-32 Ports for 1/16" OD Tubing	Stainless Steel & Vespel	Double 3-Way	ea.
INJECTION*					
7010	2-Position, 6-Port Single Mode	10-32 Ports for 1/16" OD Tubing	Stainless Steel & Vespel	20 µL*	ea.
9010	2-Position, 6-Port Single Mode (Switching, Injection)	10-32 Ports for 1/16" OD Tubing	PEEK, ETFE, Ceramic	20 µL*	ea.
3725-038	2-Position, 6-Port, Prep Scale Dual Mode	5/16-24 Ports for 1/8" Tubing	Stainless Steel & PEEK	10 mL*	ea.
3725i	2-Position, 6-Port, Prep Scale Dual Mode with Switch	5/16-24 Ports for 1/8" Tubing	PEEK	10 mL*	ea.
3725i-038	2-Position, 6-Port, Prep Scale Dual Mode with Switch	5/16-24 Ports for 1/8" Tubing	Stainless Steel & PEEK	10 mL*	ea.
7725	2-Position, 6-Port, Analytical Scale Dual Mode	10-32 Ports for 1/16" OD Tubing	Stainless Steel, Ceramic, Vespel	20 µL*	ea.
7725i	2-Position, 6-Port, Analytical Scale Dual Mode with Switch	10-32 Ports for 1/16" OD Tubing	Stainless Steel, Ceramic, Vespel	20 µL*	ea.
8125**	2-Position, 6-Port, Micro Scale Dual Mode with Switch	10-32 Ports for 0.020" (0.5 mm) or 1/16" Tubing	Stainless Steel, Ceramic, Vespel	5 µL*	ea.
9725	2-Position, 6-Port, Analytical Scale Dual Mode	10-32 Ports for 1/16" OD Tubing	PEEK, ETFE, Ceramic	20 µL*	ea.
9725i	2-Position, 6-Port, Analytical Scale Dual Mode with Switch	10-32 Ports for 1/16" OD Tubing	PEEK, ETFE, Ceramic	20 µL*	ea.
SELECTION					
7060	6-Position, 7-Port	10-32 Ports for 1/16" OD Tubing	Stainless Steel & Vespel	6-Way	ea.

* Ships with a sample loop of indicated volume attached to ports 1 and 4.

** The 8125 requires special ferrules for 0.020" (0.5 mm) tubing. 8125-084-0.5 mm ferrule for 8125; 8125-086-0.5 mm ferrule for 8125 — 4-pk.

Part No.	Description	Tubing/Fitting Size	Wetted Material	Configuration	Includes	Qty.
SWITCHING						
V-100D	4-Position, 4-Port, 500 psi (34 bar)	1/4-28 Ports for 1/16" OD Tubing	PEEK, PTFE	Double Diagonal	*	ea.
V-101D	4-Position, 4-Port, Bulkhead, 500 psi (34 bar)	1/4-28 Ports for 1/16" OD Tubing	PEEK, PTFE	Double Diagonal	*	ea.
V-100L	4-Position, 4-Port, 500 psi (34 bar)	1/4-28 Ports for 1/16" OD Tubing	PEEK, PTFE	Right-Angle "L"	**	ea.
V-101L	4-Position, 4-Port, Bulkhead, 500 psi (34 bar)	1/4-28 Ports for 1/16" OD Tubing	PEEK, PTFE	Right-Angle "L"	**	ea.
V-100T	4-Position, 4-Port, 500 psi (34 bar)	1/4-28 Ports for 1/8" OD Tubing	PEEK, PTFE	Single "T"	***	ea.
V-101T	4-Position, 4-Port, Bulkhead, 500 psi (34 bar)	1/4-28 Ports for 1/16" OD Tubing	PEEK, PTFE	Single "T"	***	ea.
INJECTION For Injection, add the appropriately sized Sample Loop to the Switching valves above						
V-450	2-Position, 6-Port, 1,000 psi (69 bar)	1/4-28 Ports for 1/16" OD Tubing	Polyimide, PTFE	Injection	(6) XP-235	ea.
V-451	2-Position, 6-Port, Bulkhead Version, 1,000 psi (69 bar)	1/4-28 Ports for 1/16" OD Tubing	Polyimide, PTFE	Injection	(6) XP-235	ea.
V-540	2-Position, 6-Port, 1,000 psi (69 bar)	1/4-28 Ports for 1/8" OD Tubing	Polyimide, PTFE	Injection	(6) XP-335	ea.
V-541	2-Position, 6-Port, Bulkhead Version, 1,000 psi (69 bar)	1/4-28 Ports for 1/8" OD Tubing	Polyimide, PTFE	Injection	(6) XP-335	ea.
SELECTION						
V-240	6-Position, 7-Port, 1,000 psi (69 bar)	1/4-28 Ports for 1/16" OD Tubing	Polyimide, PTFE	Multi-port Selection	(6) XP-235	ea.
V-241	6-Position, 7-Port, Bulkhead Version, 1,000 psi (69 bar)	1/4-28 Ports for 1/16" OD Tubing	Polyimide, PTFE	Multi-port Selection	(6) XP-235	ea.
V-340	6-Position, 7-Port, 1,000 psi (69 bar)	1/4-28 Ports for 1/8" OD Tubing	Polyimide, PTFE	Multi-port Selection	(6) XP-335	ea.
V-341	6-Position, 7-Port, Bulkhead Version, 1,000 psi (69 bar)	1/4-28 Ports for 1/8" OD Tubing	Polyimide, PTFE	Multi-port Selection	(6) XP-335	ea.

* (4) P-218BLK, (4) P-240.

** (4) P-218BLK, (4) P-240, (1) P-309.

*** (4) P-218BLK, (4) P-240, (1) P-309.