

MODEL MV-6 MANUAL SAMPLE INJECT VALVE

CATALOG NUMBER 731-8320

The Model MV-6 Inject valve is a manual valve used for sample injection with either the BioLogic LP System or the Econo Gradient Pump. It is a 6-port, 2-position valve constructed of non-metallic wetted parts.

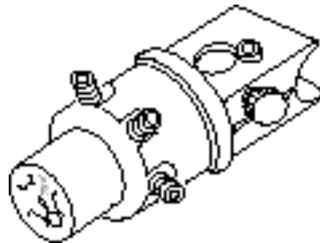


Figure 1. MV-6 Inject Valve

Injection Valve Installation

1. Install the valve onto the system rack.
 - a. Select a location which will keep tubing lengths to a minimum and still allow easy access to the inject port.
 - b. Ensure that the clamping screw is loose.
 - c. Clip the attaching bracket to a convenient place on the rack.
 - d. Tighten the clamping screw.
2. Use male luer fittings to connect a section of tubing between the pump and the injector port, as shown in Figure 2.
3. An injection loop can be formed by using a section of tubing which corresponds to the desired volume. The table below provides approximate tubing lengths corresponding to several common loop volumes.
4. Attach a male luer fitting to each end of the sample loop, then connect it to the valve.
5. Connect the pump inlet, waste and outlet line to the column as shown in Figure 2.

Table 1. Sample Injection Loop Volumes by Tubing ID

Tubing ID (mm)	Loop Volume (mL)	Tubing Length (cm)
0.8	100	14.0
0.8	200	34.0
1.6	200	8.5
1.6	500	23.5
1.6	1 mL	48.5

Note: Luer fittings and valve internal passages add approximately 30 μ L to these volumes.

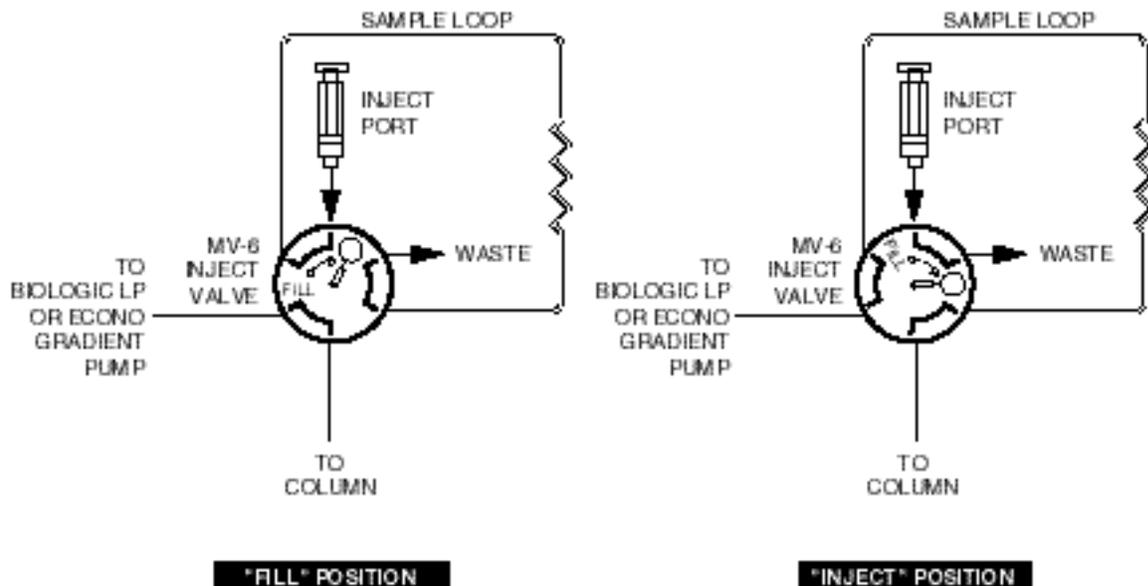


Figure 2. MV-6 Inject Valve Plumbing Configurations

The valve positions are as follows:

Fill position: With the knob turned to the left (counterclockwise), the sample loop may be filled. The sample displaces any fluid in the sample loop, so that it flows into the sample waste container.

Inject position: With the knob turned to the right (clockwise), the sample is injected into the system. Fluid from the pump carries the sample from the loop to the column.

Note: Always manually prime all precolumn valves before initiating a run. Failure to displace air with buffer can permanently damage the column.

Valve Maintenance and Repair

Flush all six ports of the valve with water. For long-term storage, store with 20%EtOH. Do not expose the valve to pressures greater than 20 psi.