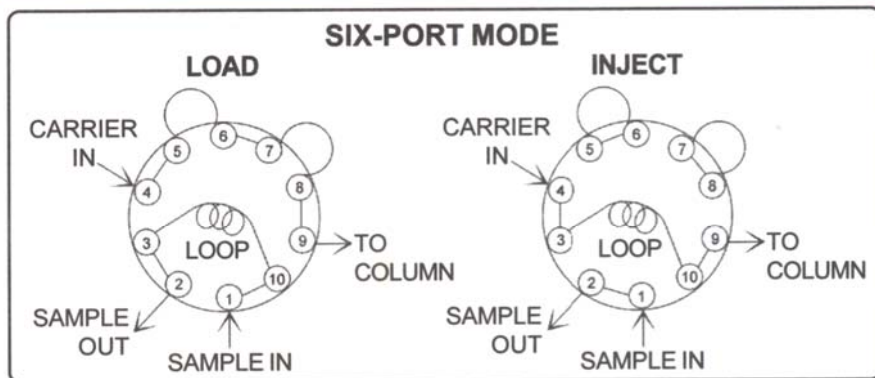
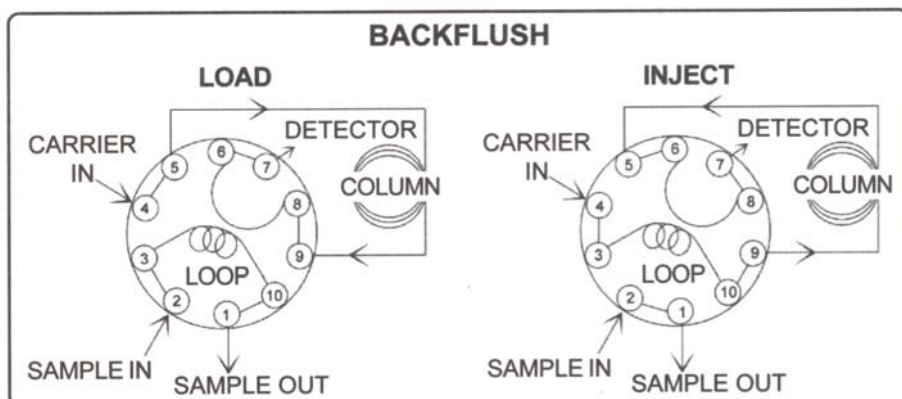


10-Port Gas Sampling Valve Plumbing Option Examples

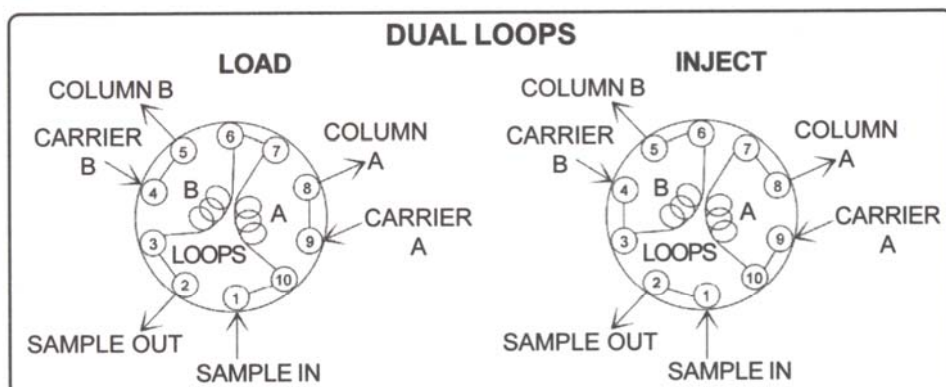
The valve plumbing configuration shown at right is the standard 6-port configuration. The sample loop connected between ports 3 and 10 is inserted into the carrier gas stream when the valve is rotated to the INJECT position.



The same 10-port valve can also be configured to backflush the column when the valve is rotated. Backflushing can often shorten the analysis by eliminating the need to program the column temperature up to elute high boiling analytes.



A single 10-port valve can be plumbed to inject the same sample onto two separate columns using two separate loops. This is especially useful where two different carrier gas types are used, or where the detectors employed have very different sensitivities and need different sample sizes injected.



The 10-port valve configuration shown at right is our Multiple Gas Analyzer #1 (MG#1) valve. In the LOAD position, the sample loop is filled with new sample gas, and the Silica Gel column is downstream of the MoleSieve column. In the INJECT position (shown), the contents of the loop are flushed into the Silica Gel column, which is now upstream. The lightest analytes blow through onto the MoleSieve for separation. The valve is then rotated back to the LOAD position, just prior to the elution of ethane for the separation of C_2-C_6 .

