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TRAPPING/FLOW-THROUGH FLOWPATH -
STF CONFIGURATION LOW PRESSURE SELECTORS
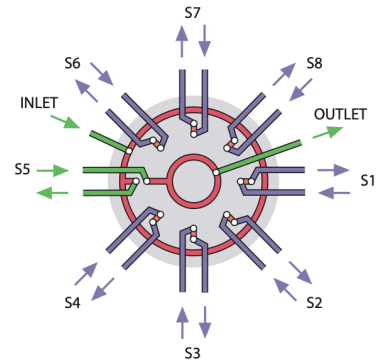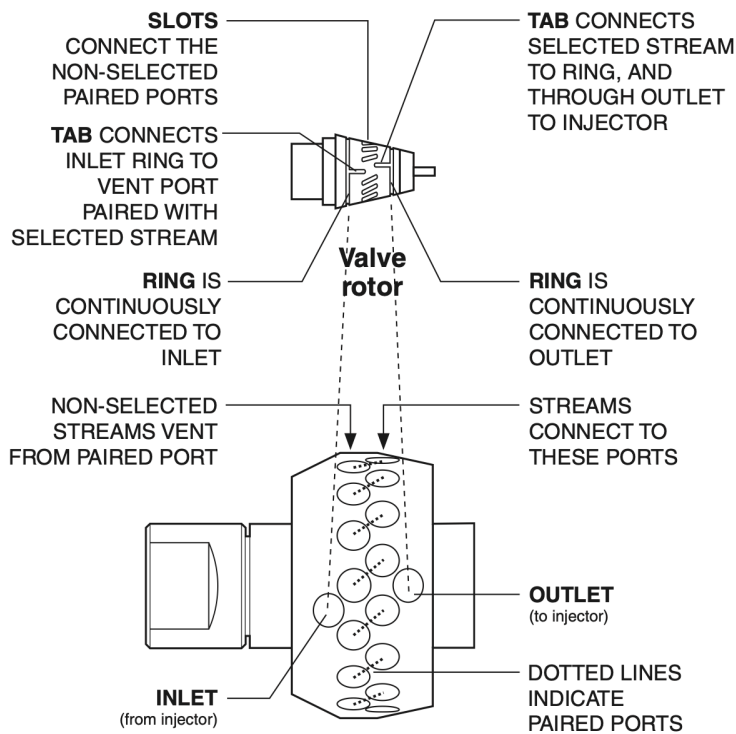
Technical Note 714

FIGURE 1: Valve body

SLOTS CONNECT THE NON-SELECTED PAIRED PORTS

TAB CONNECTS SELECTED STREAM TO RING, AND THROUGH OUTLET TO INJECTOR

TAB CONNECTS INLET RING TO VENT PORT PAIRED WITH SELECTED STREAM

RING IS CONTINUOUSLY CONNECTED TO INLET

RING IS CONTINUOUSLY CONNECTED TO OUTLET

Valve rotor

NON-SELECTED STREAMS VENT FROM PAIRED PORT

STREAMS CONNECT TO THESE PORTS

OUTLET (to injector)

INLET (from injector)

DOTTED LINES INDICATE PAIRED PORTS

FIGURE 2: As installed on Electric Actuators

POSITION 1

OUTLET

INLET

HIGHEST POSITION NUMBER

FIGURE 2: As installed on Air Actuators

HIGHEST POSITION NUMBER

OUTLET
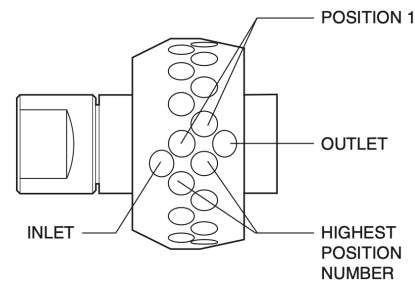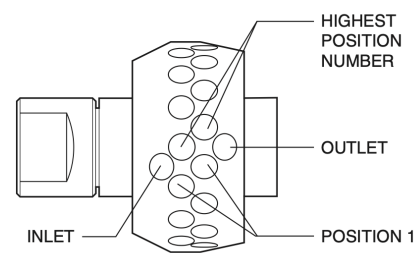
INLET

POSITION 1

The CSTF (1/16") or STF (1/8") selector is a variation of the ST flowpath, with the single difference that the non-selected streams are returned to their own vents or sources rather than being dead-ended or trapped as they are in the standard ST configuration.

Watch an animation of the STF selector flowpath at vici.com:

SAMPLE TRAPPING WITH CONTINUOUS FLOW TO INDIVIDUAL OUTLETS

The STF selector is a variation of the ST flowpath, with the single difference that the non-selected streams are returned to their own vents or sources rather than being dead-ended or trapped as they are in the standard ST configuration. This is ideal for reactor processes in which removal of substantial amounts of sample would upset the equilibrium within the reactor, or if the stream is toxic or noxious and must be isolated.

An STF selector on an air or electric actuator along with a similarly equipped 6 port valve comprise a complete sampling system for the automated analysis of up to 16 sampling points.

Watch an animation of the STF selector flowpath at vici.com:

ADDITIONAL TECHNICAL NOTES

Technical notes related to cleaning and rotor replacement and to proper valve/ actuator alignment can be found in the Support section of vici.com.

TECH TIP

Because the most common cause of valve failure is stray particulates entering the valve, we strongly recommend the use of in-line filters at sample entry points.

Our ZUFR filters feature inexpensive and easily replaceable low pressure drop filter screens (2 or 10 micron).

The filters are available in 1/16", 1/8", and 1/4" standard, reducing, and bulkhead versions.

APPLICATION - STF FLOWPATH