

Ultra-high pressure injector system

LIQUID HANDLING

40,000 psi ultra-high pressure injector system

The VICI 40K injector is comprised of six miniature air actuated needle valves, plumbed to simulate the flow path of a conventional rotor/stator injector. An integral controller sends the on/off positioning signals to each valve, coordinating them to perform load, inject, and flush functions.

There are three methods for sending positioning commands to the injector:

- Manual control with the pushbuttons on the controller
- Laboratory computer via serial port communication
- Contact closure inputs

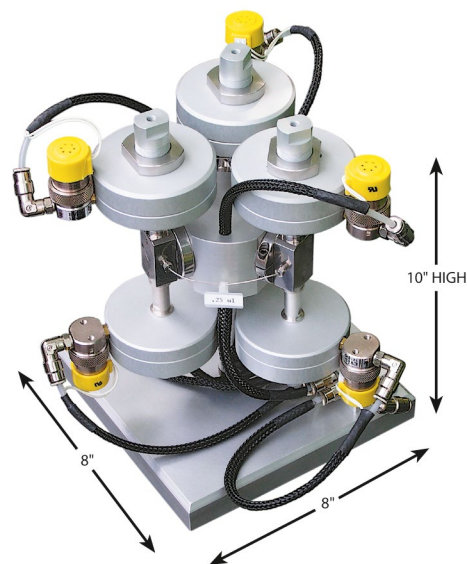
For more information, contact our technical department.

Ultra-high pressure injector system

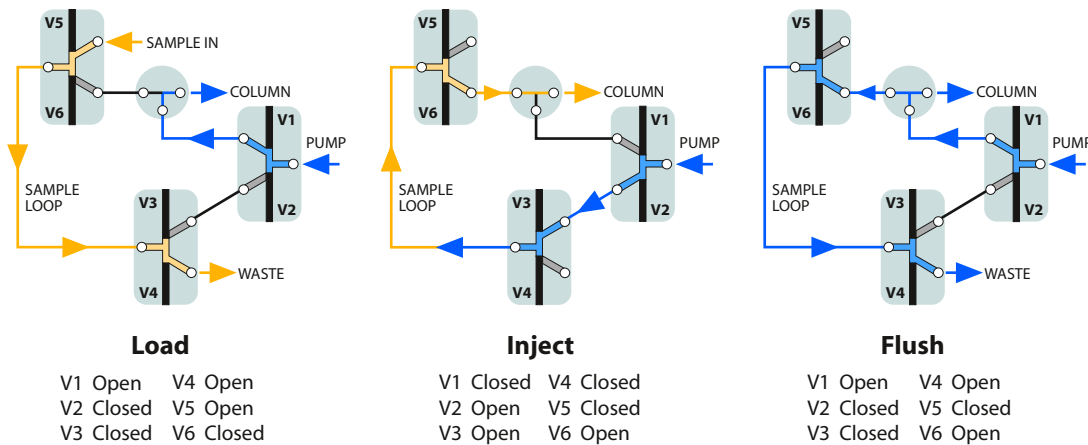
for liquids

Prod No

SPSS40



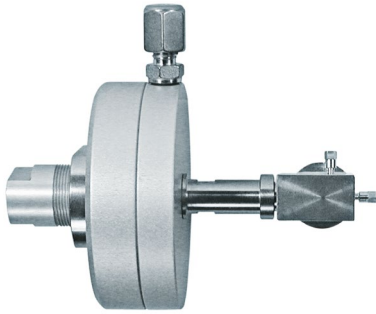
Ultra-high pressure injector system schematic



40,000 psi ultra-high pressure valves

The ultra-high pressure valves that are the heart of our SPSS40 (previous page) are now available individually, in 1/16", 1/32", and 360 micron versions. There are three types – a two port on/off valve, a dual on/off valve, and a 3-way prime/purge valve. (See page 213 for flowpath schematics.) The dual on/off configuration has two individually controlled outlets with a common inlet (or vice versa), emulating a rotary three way valve.

Implementation requires a single three-way solenoid: application of 50 psi opens the valve; venting the air allows the spring to return the valve to the closed position. A fitting for 1/8" air supply tubing is included; two fittings are included for dual valves. (Fitting: prod no EAOR21, page 219)

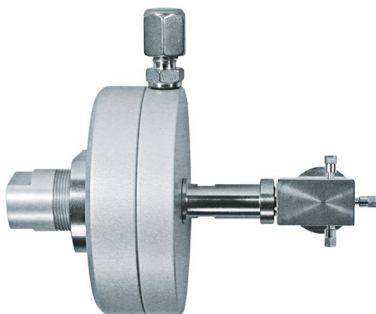


On/off valve
360 µm ZDV fittings

On/off valves

for liquids

SPECS		Fitting size	Bore	Prod No
Temp	Pressure			
50°C	40,000 psi liq	360 µm	0.15 mm	ASFVO40K360
		1/32"	0.15 mm	ASFVO40K.5
		1/16"	0.15 mm	ASFVO40K1



Prime/purge valve
360 µm ZDV fittings

Prime/purge valves

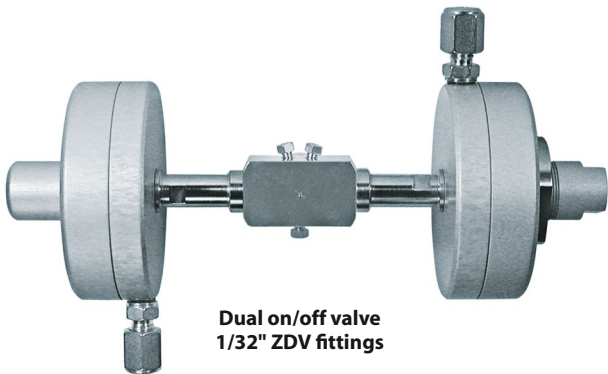
for liquids

SPECS		Fitting size	Bore	Prod No
Temp	Pressure			
50°C	40,000 psi liq	360 µm	0.15 mm	ASFV40K360
		1/32"	0.15 mm	ASFV40K.5
		1/16"	0.15 mm	ASFV40K1

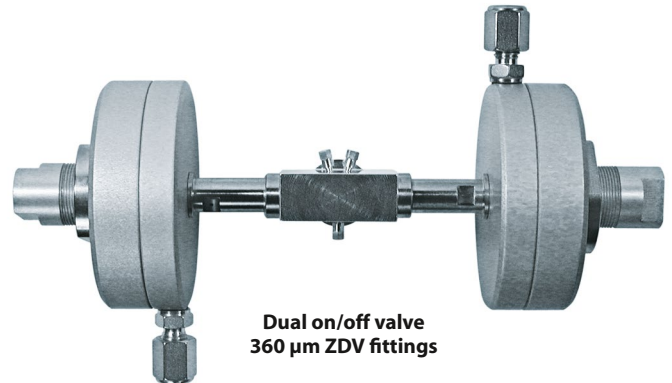
Dual on/off valves

for liquids

SPECS		Fitting size	Bore	Prod No
Temp	Pressure			
50°C	40,000 psi liq	360 µm	0.15 mm	ASFVOD40K360
		1/32"	0.15 mm	ASFVOD40K.5
		1/16"	0.15 mm	ASFVOD40K1



Dual on/off valve
1/32" ZDV fittings



Dual on/off valve
360 µm ZDV fittings

STANDARD ON/OFF AND PRIME/PURGE VALVES

2,000 psi to 10,000 psi valves pp 212-213



TECH TIP

Three dual on/off valves comprise the ultra-high pressure injector system, SPSS40, on the facing page.