

# ANALYTICAL SYRINGES

## PLUS MININERT VALVES AND MICRO SYRINGES

From VICI Precision Sampling

### MICRO VALVES FOR GC AND LC

- 200 psi helium test, .060" bore
- Compact 1" design
- Convenient panel mount
- Variety of configurations

Simplify your liquid or gas handling application with a VICI Precision Sampling Micro valve. The unique design of the fitting detail allows a leak-free seal with no potential for rotor damage from overtightening. Internal parts are PEEK and PTFE.

Order 1/4-28 fittings separately.

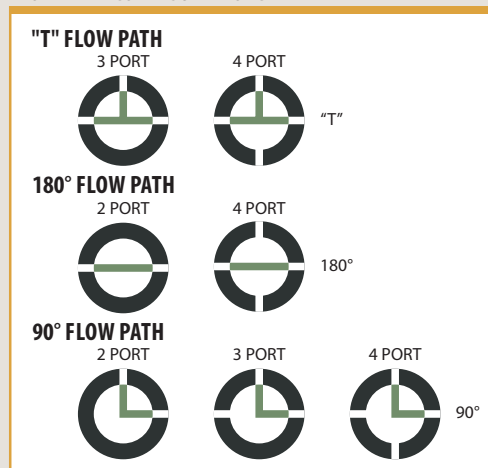
### Micro valves for GC and LC

Prod No	
<b>"T" flow path</b>	
3 ports	PS-660100
4 ports	PS-660110
<b>180° flow path</b>	
2 ports	PS-660200
4 ports	PS-660210
<b>90° flow path</b>	
2 ports	PS-660300
3 ports	PS-660310
4 ports	PS-660320

#### SPECIFICATIONS

200 psi  
.060" bore  
1/4-28 fitting detail  
All polymer-based materials

### FLOW PATH CONFIGURATIONS



#### MORE INFO

1/4-28 fittings . . . . .pages  
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## PRESSURE-LOK® GAS SYRINGES

VICI Precision Sampling's patented Pressure-Lok® syringes feature a PTFE plunger tip, stress-formed by a special process to ensure a leak-tight seal. The self-lubricating plunger tip stays smooth for the life of the syringe, with none of the seizing or residue buildup associated with conventional all-metal plungers.

The needle is sealed by a PTFE sleeve, or packing, which effectively isolates the sample from the needle cement and prevents any possible dissolution of the adhesive or contamination of the sample. All Pressure-Lok syringes feature ultra smooth bores, easily replaceable parts, low dead volume, crisp clean graduations, and precision calibration.

### Series A-2

FOR GC

The A-2 features a push-button valve for 250 psi sample storage in syringes as small as 25 µl. Small liquid samples with low-boiling components are not lost through evaporation, as often occurs with ordinary syringes.

The positive rear stop (in 250 µl and larger sizes) prevents plunger blowout at elevated pressures. The Series A-2 syringe has all the standard Pressure-Lok features such as a PTFE plunger tip, PTFE-sealed needle, and ultrasmooth bore. Replacement components are available for easy repairs.



#### SPECIFICATIONS

Removable needles  
Bevel, open end  
Needle size:  
.028" x .005" x 2"  
(25, 50, and  
100 µl)  
.029" x .012" x 2"  
(all other  
sample sizes)  
250 psi max,  
gases and liquids

Sample size	Standard Prod No	Luer lock Prod No
25 µl	PS-050023	PS-050043-LL
50 µl	PS-050024	PS-050044-LL
100 µl	PS-050025	PS-050045-LL
250 µl	PS-050031	PS-050051-LL
500 µl	PS-050032	PS-050052-LL
1 ml	PS-050033	PS-050053-LL
2 ml	PS-050034	PS-050054-LL
5 ml	PS-050035	PS-050055-LL
10 ml	PS-050036	PS-050056-LL

### Replacement needles

#### SERIES A-2

Pkg/3:	Size	Bevel, open end	Side port, taper
			
Pressure-Lok	.028" x .005" x 2"	PS-943050	—
	.029" x .012" x 2"	PS-943051	PS-943052
Luer	.028" x .005" x 2"	PS-943060	—
	.028" x .012" x 2"	PS-943061	PS-943062

**LUER LOCK**  
500 µl sample  
(PS-050052-LL)

**STANDARD**  
25 µl sample  
(PS-050023)

#### SAFETY NOTE

To prevent possible injury, proper safety precautions should always be observed when pressurizing glass cylinders such as syringes.

VICI syringes are not for medical use.

## Gas and liquid syringes

### ANALYTICAL SYRINGES

#### Series C-160

FOR GC

The C-160 offers day-in, day-out dependability at an economical price. A plunger tip of stress-formed virgin PTFE is self-lubricating and durable, and the PTFE needle seat at the rear of the needle prevents possible dissolution of the needle cement or contamination of the sample.

Choose between a fixed or removable needle version. Replacement needles are open end bevel type, sized .019" x .005" x 2.25", and come complete with an integral PTFE seal for a low dead volume connection and a leak-tight fit.

	Fixed needle	Removable needle
Sample size	Prod No	Prod No
5 µl	PS-160021	PS-160221
10 µl	PS-160022	PS-160222
25 µl	PS-160023	PS-160223
50 µl	PS-160024	PS-160224
100 µl	PS-160025	PS-160225

#### SPECIFICATIONS

Fixed and removable needles  
Bevel, open end  
Fixed needle size:  
.019" x .005" x 2"  
Removable needle size:  
.019" x .005" x 2.25"  
250 psi max,  
gases and liquids

**FIXED**  
10 µl sample  
(PS-160022)

**REMOVABLE**  
50 µl sample  
(PS-160224)

#### Replacement needles

SERIES C-160

Bevel, open end



(Pkg/3)	Prod No
.019" x .005" x 2.25"	PS-123050

#### Syringes for HPLC injectors

VALCO, CHEMINERT, AND RHEODYNE

Syringes used to fill a loop on a sample injection valve have needles with blunt, smooth ends. For a sample to be delivered with any repeatability, the end of the needle must contact the bottom of the valve's fitting detail uniformly and seal on the outside of the tip. All Precision Sampling syringes for valve injections have smooth, burr-free ends that fit the valve fitting details perfectly. The standard HPLC syringe is our basic C-160 with a 2" long 22 gauge blunt tip needle.

	Fixed needle	Removable needle
Sample size	Prod No	Prod No
5 µl	PS-160021R	PS-160221R
10 µl	PS-160022R	PS-160222R
25 µl	PS-160023R	PS-160223R
50 µl	PS-160024R	PS-160224R
100 µl	PS-160025R	PS-160225R

#### SPECIFICATIONS

Removable needles  
Blunt tip, open end  
Needle size:  
22 gauge x 2"  
250 psi max

above:  
**FIXED**  
50 µl sample  
(PS-160024R)

below:  
**FIXED**  
5 µl sample  
(PS-160021R)

#### Replacement needles

FOR HPLC INJECTORS

Blunt, open end



(Pkg/3)	Prod No
.019" x .005" x 2.25"	PS-123050R

#### SEE ALSO

Fill ports..... page 30  
Luer adapters ..... 31

## MININERT™ VALVES

Mininert™ push-button valves are highly dependable, leak-tight closures for screw-cap vials and other laboratory containers. When used with a glass vial, only PTFE and glass are in contact with the contents. Their unique features make Mininert valves the ideal closure for

calibration standards, air- or moisture-sensitive fluids, derivatizing reagents, or volatile chemicals. Operation is extremely simple – push the green button to open the valve, insert the needle through the septum and take a sample, withdraw the needle, and push the red button to close the valve.

### Valves for vials

The screw-cap Mininert is available in a variety of sizes. The crimp-top valve for 13 mm ID glassware slides into the neck of the vial and features a threaded flange which is turned to provide a leak-tight fit. Sold in packages of 12.

Cap/thread size	Prod No	Cap/thread size	Prod No
13 mm-425	PS-614158	20 mm-400	PS-614170
15 mm-425	PS-614160	24 mm-400	PS-614163
18 mm-400	PS-614161	Crimp top	PS-614250

### Valves with threaded fittings

Our threaded designs offer positive on/off fluid control as an in-line valve or syringe access as a termination valve at a sample point. In-line valves are 1/4-28 male to male or 1/4-28 female to female. Termination valves are offered in 1/4-28 male or female and 1/8" NPT male or female.

Prod No	
In-line valves	
1/4-28 male to male	PS-631205
1/4-28 female to female	PS-631206
Termination valves	
1/4-28 male	PS-631201
1/4-28 female	PS-631203
1/8" NPT male	PS-631202
1/8" NPT female	PS-631204

### Mininert syringe valves

These convenient add-on valves allow our Series C and D syringes to store samples at up to 250 psi. The valve body is all PTFE, with a stainless steel stem. Also available to fit luer-tip syringes from any manufacturer. All accept traditional luer needles.

For C or D syringe	PS-654050
For Luer-tip syringe	PS-654051

### Replacement septa and septum installation tool

These silicone septa fit all Mininert valves. The installation tool is a handy device for quickly removing and replacing needle seal septa.

Septa, pkg/50	PS-644350
Installation tool	PS-644850

#### SPECIFICATIONS

##### TEMPERATURES

Mininert valves can be used at temperature up to 40°C (105°F). However, after use at high temperatures, the valve may leak slightly when cooled to room temperature.

##### MATERIALS

PTFE is highly inert and may be used with most common materials. It is particularly useful for working with most acids and organic solvents. However, problems may be encountered when used with organometallics and some strong bases. We recommend actual exposure tests before use with any material.

##### PRESSURE

The sealing ability of Mininert valves is more than adequate for containing most volatile liquids and gases at low pressures. Mininert valves have been used as high as 120 psi without leakage, but this is **not** a recommendation for pressurizing glass containers to these levels. Such pressurization of glass containers can be extremely dangerous.

#### VALVES FOR VIALS

#### VALVES WITH THREADED FITTINGS

#### SYRINGE VALVES

#### SEPTA AND INSTALLATION TOOL