



# VICI PRECISION SAMPLING

International Product Catalog

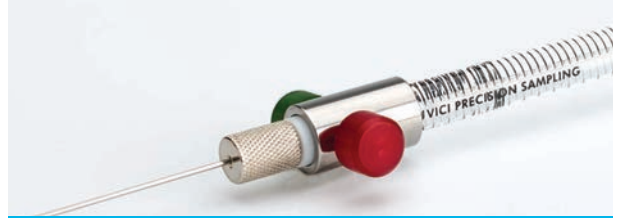
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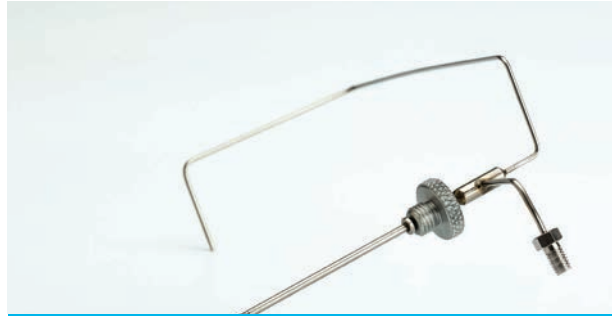
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**To Order:**

<p><b>Europe, Africa, Middle East, and Asia</b></p> <p><b>VICIAG International</b></p> <p>Phone: Int+41-41-925-6200 Fax: Int+41-41-925-6201</p>	<p><b>United States, Central &amp; South America, Japan, Australia, &amp; New Zealand</b></p> <p><b>VICI Precision Sampling</b></p> <p>Phone: (800) 828-1653 (225) 927-1128 Fax: (225) 926-4631 (225) 073-1331</p>	<p><b>Canada</b></p> <p><b>VICI Valco Canada</b></p> <p>Phone: (866) 297-2626 (613) 342-2600 Fax: (613) 342-0111</p>
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**Ordering**

**44**

## Gas Syringe Features

	<b>Series A</b>	<b>Series A-2</b>	<b>Series C</b>	<b>Series D</b>	<b>Magnum</b>
	p. 8	p. 10	p. 14	p. 16	p. 17
Removable Needle option	✓	✓	✓	✓	✓
Luer Lock Needle option		✓	✓		✓
Plunger stop	✓	✓	✓		✓
Sample Lock valve option	Twist-lock	Push-button	Mininert Syringe Valve (optional)	Mininert Syringe Valve (optional)	Twist-lock
Pressure Rating	250 psi	250 psi	250 psi	250 psi	30 psi
Sample size options	100 µl- 10 ml	25 µl- 10 ml	100 µl- 10 ml	1 ml-2 ml	20 ml - 500 ml

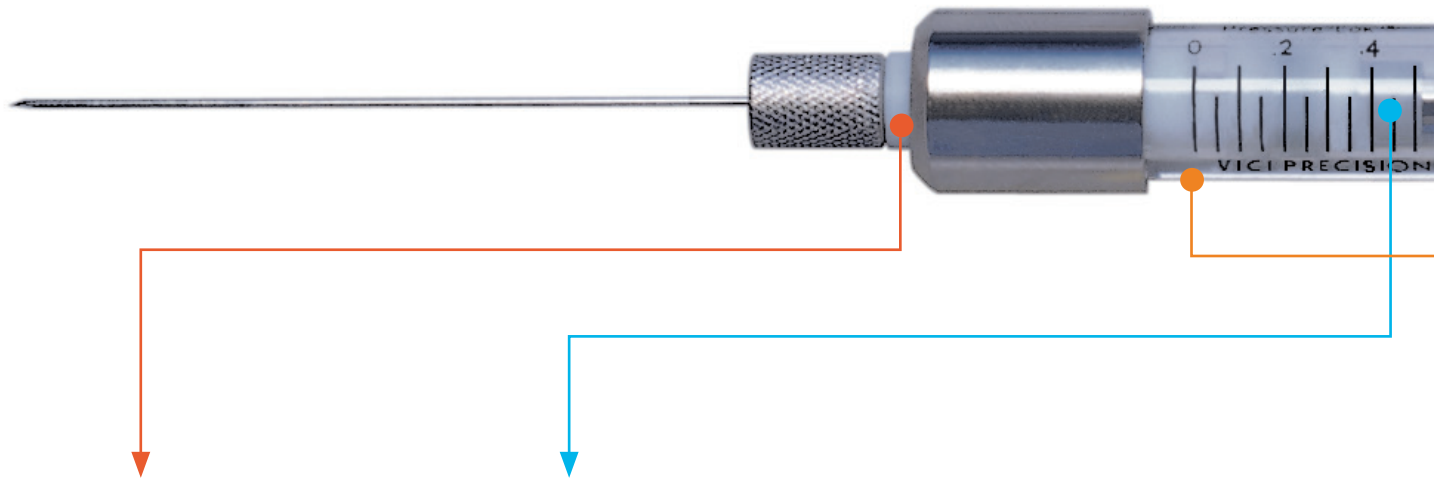
## Liquid Syringe Features

	Series C-160	Series C-120	Series CG-130	Series D-140	Mini Injector	Purge & Trap
	p. 21	p. 22	p. 23	p. 24	p. 26	p. 29
Removable Needle option	✓		✓	✓		
Fixed Needle option	✓	✓	✓		✓	
Plunger stop					✓	
Reinforced plunger			✓	✓	✓	
Pressure Rating	250 psi	250 psi	250 psi	30 psi		250 psi
Sample size options	5 µl- 100 µl	5 µl- 100 µl	5 µl- 10 µl	1 µl- 10 µl	.01 µl & .10 µl	5 ml - 10 ml
Side vent				✓		

# Pressure-Lok<sup>®</sup> Syringe Features



Easily replaceable parts. Individual parts can be easily replaced, optimizing equipment investment.



## PTFE-Sealed Needle

Our syringes have a barrier sleeve or packing of PTFE on the rear of the needle at the zero point.

Benefit:

- Sample is isolated from needle cement, thus preventing adhesive from contaminating the sample.



Pressurized Sample Storage. Built-in valve to allow sample storage at up to 250 psi.

## PTFE Plunger Tip

- PTFE Plunger Tip
- Stress-formed with our unique process.
- Insures a leak-tight seal.
- Self-lubricating plunger tip.
- Stays smooth for the life of the syringe.
- Unlike conventional all metal plungers, there is no freezing up or unwanted residue.



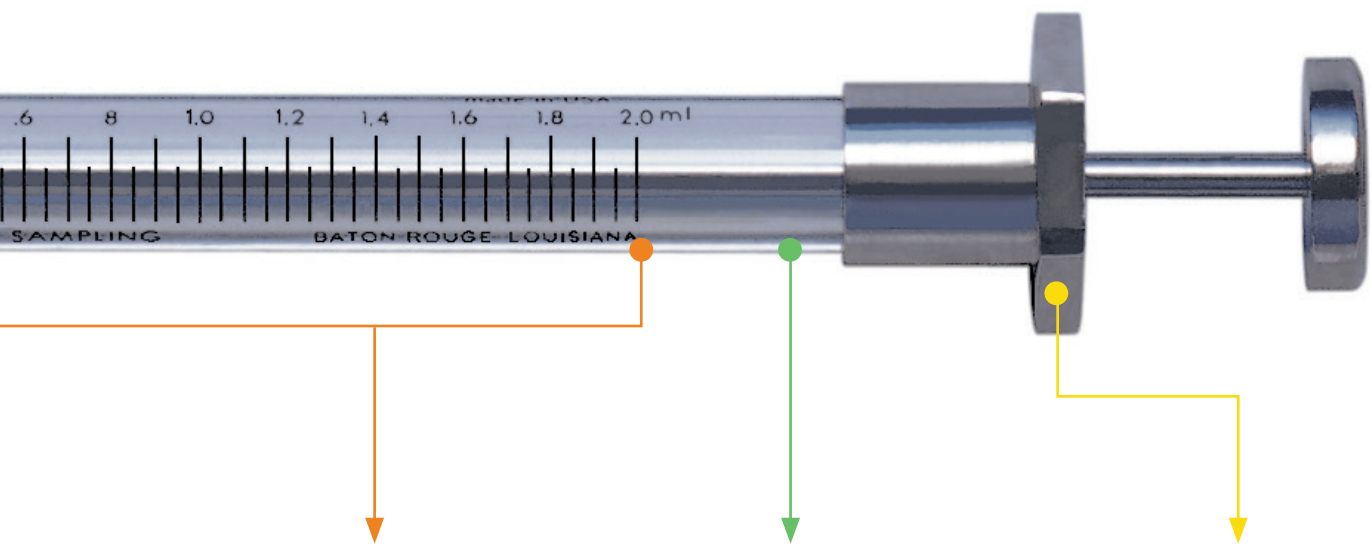
Removable Needles. Pressure-tight, low dead volume connection allow easy needle removal.

## Hand Calibration

- Hand-calibration verifies consistent volume delivery.
- Double checked volume delivery with an electronic microbalance.
- Careful quality control ensures precision and accuracy of Pressure-Lok<sup>®</sup> microsyringes.



Optional Luer Lock Tip. Luer Lock creates a leak free quick release option.



### **Crisp Clean Graduations**

Our methods insure easy reading of the sampled amount.

### **Ultra-Smooth Bore**

Syringe barrels up to 100  $\mu$ l are hand-fabricated from high quality borosilicate glass, manufactured to our specifications. The extremely smooth bore prevents undue wear of the plunger tip and insures a smooth, durable seal.

### **Shaped Rear Flange**

- Provides a secure grip.
- Prevents the syringe from rolling.



Positive Rear Plunger Stop. Prevent plunger damage due to accidental plunger removal.



Reinforced Plunger. Prevent plunger bending and reduce syringe repairs costs.

# A - Series Syringes

## A-Series Syringes

The design of the A-Series syringe eliminates carrier backflushing achieving sharper peaks and better separations.

The plunger design, along with the very small internal diameter of the needle, helps to eliminate dead volume. The modular assembly allows quick disassembly for parts cleaning or replacement.

The A-Series gas syringe has all the standard pressure-lock features including:

- PTFE plunger tip
- PTFE-sealed needle
- Ultra smooth bore

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100 $\mu$ l	.....	010025
250 $\mu$ l	.....	010031
500 $\mu$ l	.....	010032
1 ml	.....	010033
2 ml	.....	010034
5 ml	.....	010035
10 ml	.....	010036



Built-in  
**Twist-lock  
Valve**



# A - Series



Prolong the life of our A-Series syringes with a wide variety of replacement parts including needles, plunger assemblies, plunger tips and front packings.



## Replacement Needles

Bevel, open end ..... 913050



Side port, taper ..... 913052



## Plunger Assemblies

100 µl	.....	014425
250 µl	.....	014431
500 µl	.....	014432
1 ml	.....	014433
2 ml	.....	014434
5 ml	.....	014435
10 ml	.....	014436



		<b>Plunger Tips</b>		<b>Front Packings</b>
--	--	-------------------------	--	---------------------------

100 µl	.....	100017	.....	100010
250 µl	.....	100029	.....	100028
500 µl	.....	013932	.....	100042
1 ml	.....	013933	.....	100057
2 ml	.....	013934	.....	100070
5 ml	.....	013935	.....	100086
10 ml	.....	013936	.....	100100



## A-2 Series: Our Best Selling Syringe



All the advantages of the A series syringe plus a push button valve which allows instantaneous injection. Ideal for small liquid samples containing low-boiling components.

### **Allows sample storage in 25 $\mu$ l syringes**

Particularly useful when handling small liquid samples containing low-boiling components, usually lost through evaporation using ordinary syringes. In addition to sample storage capability, the push-button valve allows for pre-pressurization of samples prior to injection. By pre-pressurizing the sample gas to match or exceed the pressure in the chromatograph, the sample can be flushed instantaneously into the column as a 'slug'. The result is better resolution.

### **Always leak-tight**

The A-2 uses a special needle and needle connector designed specifically for chromatography and other analytical sampling. Significantly lower dead volume than conventional style Luer connectors.

# A-2 Series Syringes



Features a push-button valve, which allows sample storage to 250 psi in syringes as small as 25  $\mu$ l. Available for use in a variety of containers including tapered, internal and external threaded containers, and for use with vacuum bulb or line.



## Syringe with Standard Needle

Designed for tapered and internal threaded containers

$\mu$ l 25  $\mu$ l .... 050023  
50  $\mu$ l .... 050024

$\mu$ l 100  $\mu$ l .... 050025  
250  $\mu$ l .... 050031  
500  $\mu$ l .... 050032

ml 1 ml .... 050033  
2 ml .... 050034

ml 5 ml .... 050035  
10 ml .... 050036



## Syringe with Luer Lock Needle

Designed for externally threaded glass containers

$\mu$ l 25  $\mu$ l .... 050043-LL  
50  $\mu$ l .... 050044-LL

$\mu$ l 100  $\mu$ l .... 050045-LL  
250  $\mu$ l .... 050051-LL  
500  $\mu$ l .... 050052-LL

ml 1 ml .... 050053-LL  
2 ml .... 050054-LL

ml 5 ml .... 050055-LL  
10 ml .... 050056-LL



## Extended Syringe Barrel

For use with a vacuum bulb or line

$\mu$ l Standard Needle  
25  $\mu$ l ... 050023-EB

$\mu$ l Standard Needle  
50  $\mu$ l ... 050024-EB

# A-2 Series Replacement Parts



Prolong the life of our A-2 Series with plunger tips and plunger assemblies for all sample sizes.



## Plunger Tips

Replacement plunger tip for A-2 Series Syringes

$\mu\text{l}$	100 $\mu\text{l}$	.....	100017
	250 $\mu\text{l}$	.....	100029
	500 $\mu\text{l}$	.....	013932

$\text{ml}$	1 ml	.....	013933
	2 ml	.....	013934

$\text{ml}$	5 ml	.....	013935
	10 ml	.....	013936



## Plunger Assemblies

Replacement plunger assembly for A-2 Series Syringes

$\mu\text{l}$	25 $\mu\text{l}$	.....	054123
	50 $\mu\text{l}$	.....	054124

$\mu\text{l}$	100 $\mu\text{l}$	.....	014425
	250 $\mu\text{l}$	.....	014431
	500 $\mu\text{l}$	.....	014432

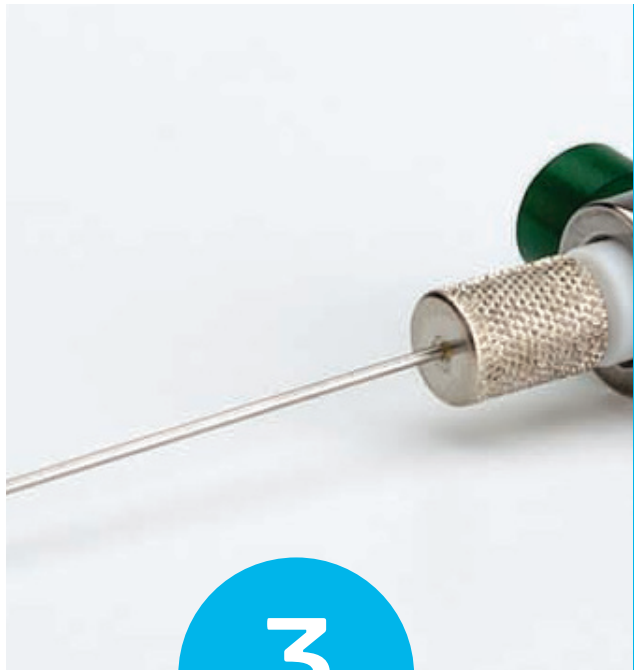
$\text{ml}$	1 ml	.....	014433
	2 ml	.....	014434

$\text{ml}$	5 ml	.....	014435
	10 ml	.....	014436

# A-2 Series & C-Series Replacement Parts



PTFE sealed needles are easily replaceable and are available in Standard Pressure-Lok<sup>®</sup> and new Luer Lock Needles.



**3**  
Pack

## Standard Pressure-Lok<sup>®</sup> Needle

Bevel, open end:



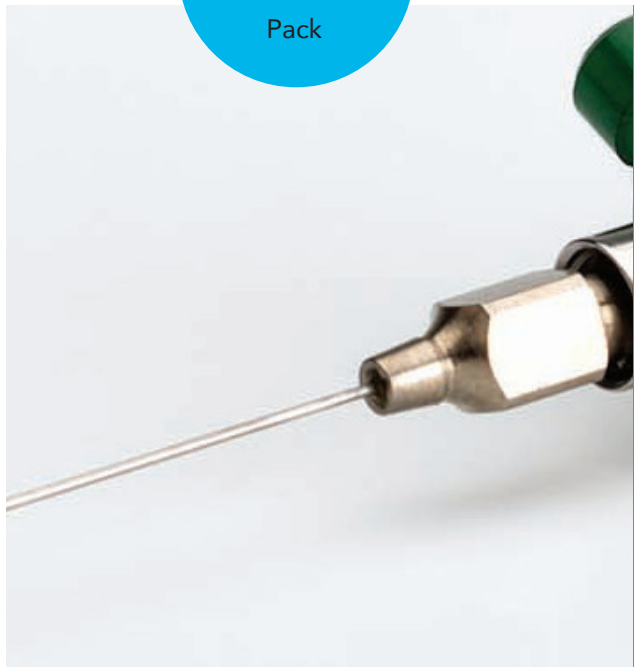
25  $\mu$ l, 50  $\mu$ l, 100  $\mu$ l  
.029" x .005" x 2" ..... 943050

250  $\mu$ l, 500  $\mu$ l, 1ml, 2ml, 5ml, 10ml  
.029" x .012" x 2" ..... 943051

Side port taper



.029" x .012" x 2" ..... 943052



## Luer Lock Needle

Bevel, open end:



25  $\mu$ l, 50  $\mu$ l, 100  $\mu$ l  
.028" x .006" x 2" ..... 943060

250  $\mu$ l, 500  $\mu$ l, 1 ml, 2 ml, 5 ml, 10 ml  
.028" x .012" x 2" ..... 943061

Side port taper



.028" x .012" x 2" ..... 943062

# C Series Syringes

The Series C syringe is perfect for everyday use, with all the standard Pressure-Lok® features such as a PTFE plunger tip, PTFE-sealed needle, and ultrasmooth bore, but without a valve for pressurized sample storage. Sample storage capability can be added with a Mininert syringe valve.

The optional Chaney adapter offers much lower dead volume than luer-style connectors.



## Syringes up to 1 ml

100 µl	Standard Needle	.....	030025
	Luer Lock Needle	.....	030045-LL
250 µl	Standard Needle	.....	030031
	Luer Lock Needle	.....	030051-LL
500 µl	Standard Needle	.....	030032
	Luer Lock Needle	.....	030052-LL
1 ml	Standard Needle	.....	030033
	Luer Lock Needle	.....	030053-LL

## Syringes up to 10 ml

2 ml	Standard Needle	.....	030034
	Luer Lock Needle	.....	030054-LL
5 ml	Standard Needle	.....	030035
	Luer Lock Needle	.....	030055-LL
10 ml	Standard Needle	.....	030036
	Luer Lock Needle	.....	030056-LL




## Syringe w/ Standard Needle & Chaney Adapter

.018" x .008" x .75" Side Port

µl	100 µl	.....	101430
	250 µl	.....	101440
	500 µl	.....	101448
ml	1 ml	.....	101455
	2 ml	.....	101463
	5 ml	.....	101470
	10 ml	.....	101478



# C Series Replacement Parts

 Lengthen the life of your C Series syringes by purchasing replacement parts.



## Plunger Tips

Replacement plunger tip for C Series Syringes

μl	100 μl	.....	100017
	250 μl	.....	100029
μl	500 μl	.....	013932
ml	1 ml	.....	013933
	2 ml	.....	013934
ml	5 ml	.....	013935
	10 ml	.....	013936



## Plunger Assemblies

Replacement plunger assembly for C Series Syringes

μl	100 μl	.....	014425
	250 μl	.....	014431
μl	500 μl	.....	014432
ml	1 ml	.....	014433
	2 ml	.....	014434
ml	5 ml	.....	014435
	10 ml	.....	014436

## Replacement Needles

Standard Pressure-Lok®	Standard Luer Lock	Chaney Adapter
.029"x.005"x2" .... 943050	.028"x.006"x2" .... 943060	.018"x.008"x.75" .... 101935
.029"x.012"x2" .... 943051	.028"x.012"x2" .... 943061	

# D Series Pressure-Lok<sup>®</sup> Syringes

## D Series Syringes

An economically priced high precision gas sampling syringe with more features than conventional gas-tight designs.

1 ml	Standard	.....	040033	2 ml	Standard	.....	040034
	Luer Lock	.....	040053		Luer Lock	.....	040054

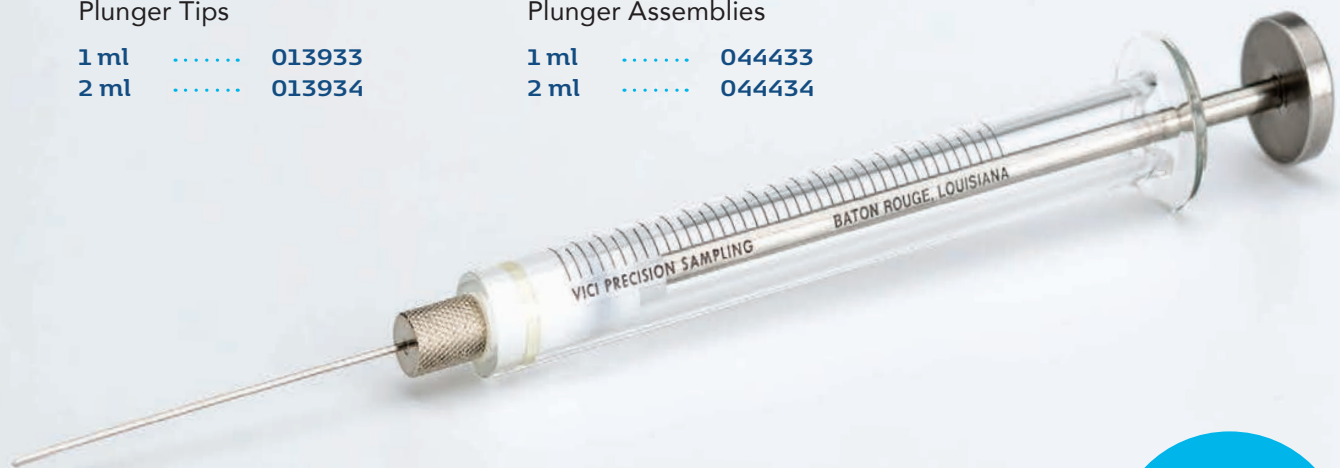
## Replacement Parts

### Plunger Tips

1 ml	.....	013933
2 ml	.....	013934

### Plunger Assemblies

1 ml	.....	044433
2 ml	.....	044434



## Replacement Needles

Standard .029"x.005"x2"

Bevel, open end	.....	943051
Side Port, taper	.....	943052

Luer .028"x.012"x2"

Bevel, open end	.....	943061
Side Port, taper	.....	943062

Leak-tight  
up to  
**250**  
psi

## Mininert Syringe Valves - For Series C and D syringes or conventional luer-tip

- Add sample storage capability: Mount a Mininert Syringe Valve on a standard syringe.
- Push button operation: Green to open, red to close.



### For a Series C or D syringe

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. .... 654050



### For a Luer-tip syringe

This model is designed to fit Luer-tip syringes from any manufacturer and accept traditional Luer needles. .... 654051





## Magnum Series Syringes



Specially formed seals permit leak-tight operation to 30 psi.

### **Built-in twist-lock valve and positive rear plunger stop**

The detection of low levels of various environmental contaminants can require extraordinarily large samples. Magnum syringes facilitate the trapping of such samples in remote locations. A built-in valve allows the sample to be sealed within the syringe, maintaining sample integrity during transportation to the analysis site.

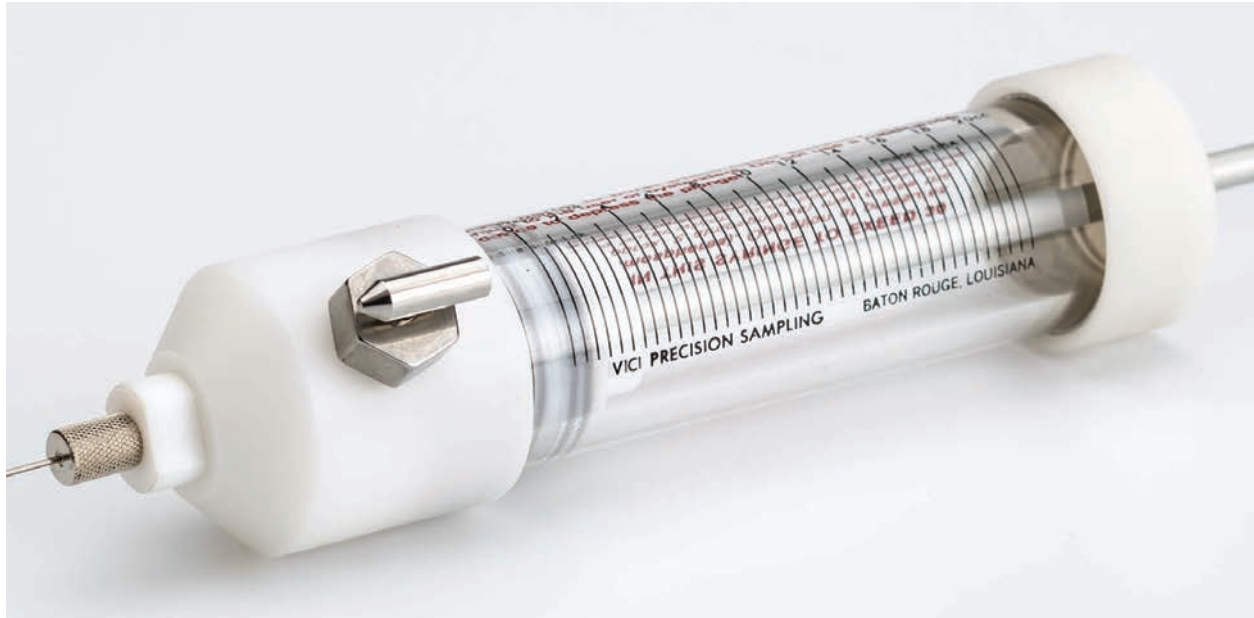
### **Up to 500 ml capacity**

Magnums have been successfully used to sample atmospheric contaminants such as sulfur dioxide and oxides of nitrogen at distant points of the earth. The positive displacement capability of the durable PTFE plunger seal permits use in a variety of subsequent procedures involving extraction or concentration of trace components. (With a cryogenic enrichment apparatus, for example).

# Magnum Series Syringes



Seals to maintain sample integrity during transport to analysis site.



## Syringe with Standard Needle

ml 20 ml ..... 060037

ml 50 ml ..... 060039

ml 100 ml ..... 060040

ml 250 ml ..... 060041

ml 500 ml ..... 060042

## Syringe with Luer Lock Needle

ml 20 ml ..... 060043


ml 50 ml ..... 060044

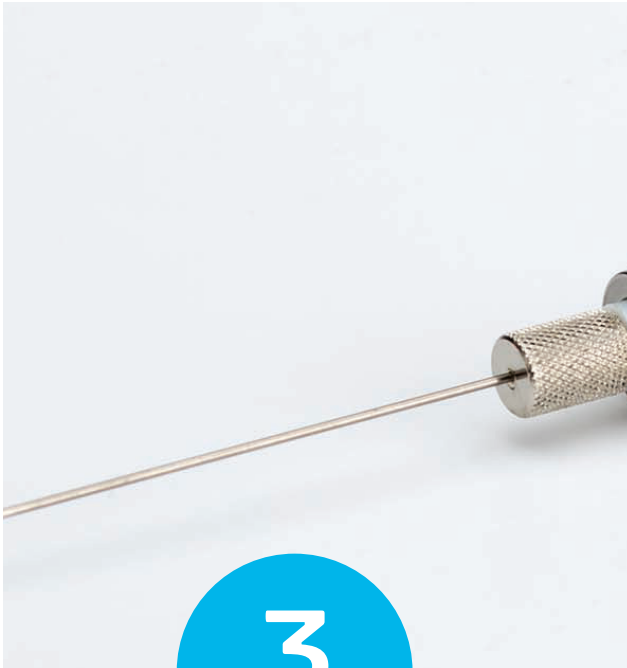
ml 100 ml ..... 060045

ml 250 ml ..... 060046

ml 500 ml ..... 060047


# Magnum Replacement Needles

 Needles are manufactured to exacting tolerances from high precision stainless steel tube stock.




**3**  
Pack

**Standard Pressure-Lok® Needle**

Bevel, open end  


.035" x .023" x 2" ..... 953050


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Side port taper  


.035" x .023" x 2" ..... 953052




**Luer Lock Needle**

Bevel, open end  



.035" x .023" x 2" ..... 953061

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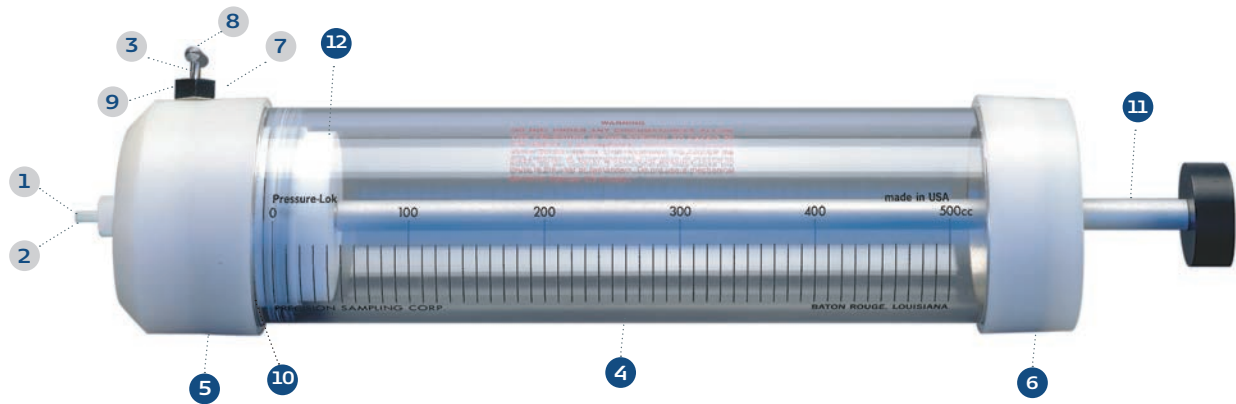
Side port taper  


.035" x .023" x 2" ..... 953062

# Magnum Replacement Parts

 Easily replaceable parts for our Magnum syringes.

<p><b>1 Standard Nosepiece</b></p> <p>20/50/100 ml .... 065037 250/500 ml ..... 065041</p>	<p><b>2 Luer Lock Nosepiece</b></p> <p>20/50/100 ml .... 065042 250/500 ml ..... 065043</p>	<p><b>3 Stem cap set screw</b></p> <p>20/50/100 ml 250/500 ml ..... 500635</p>
<p><b>4 Barrel Assembly</b></p> <p>20 ml ..... 065637 50 ml ..... 065639 100 ml ..... 065640 250 ml ..... 065641 500 ml ..... 065642</p>	<p><b>5 Front Sleeve</b></p> <p>20 ml ..... 100288 50 ml ..... 100312 100 ml ..... 100333 250 ml ..... 100352 500 ml ..... 100372</p>	<p><b>6 Rear Sleeve</b></p> <p>20 ml ..... 100289 50 ml ..... 100313 100 ml ..... 100334 250 ml ..... 100353 500 ml ..... 100373</p>



<p><b>7 Valve Stem</b></p> <p>20 ml ..... 100296 50 ml ..... 100320 100 ml ..... 100341 250 ml ..... 100360 500 ml ..... 100379</p>	<p><b>8 Stem cap</b></p> <p>20/50 ml ..... 100298  100/250/ 500 ml ..... 100343</p>	<p><b>9 Valve stem guide</b></p> <p>20 ml ..... 100297 50 ml ..... 100321 100 ml ..... 100342 250/500 ml ..... 100361</p>
<p><b>10 Front Packing</b></p> <p>20 ml ..... 065937 50 ml ..... 065939 100 ml ..... 065940 250 ml ..... 065941 500 ml ..... 065942</p>	<p><b>11 Plunger Rod</b></p> <p>20 ml ..... 065437 50 ml ..... 065439 100 ml ..... 065440 250 ml ..... 065441 500 ml ..... 065442</p>	<p><b>12 Plunger Tip</b></p> <p>20 ml ..... 065537 50 ml ..... 065539 100 ml ..... 065540 250 ml ..... 065541 500 ml ..... 065542</p>

# C-160 Series Syringes



Dependability at an economical price. Plunger tip made of stress-formed virgin PTFE is self-lubricating and durable.



## Syringe with **FIXED** Needle

PTFE needle seat at rear of needle prevents possible dissolution of needle cement or contamination of sample.

5  $\mu$ l ..... 160021

10  $\mu$ l ..... 160022

25  $\mu$ l ..... 160023

50  $\mu$ l ..... 160024

100  $\mu$ l ..... 160025

## Replacement Plunger Assembly

5  $\mu$ l ..... 163721    50  $\mu$ l ..... 163724  
 10  $\mu$ l ..... 163722    100  $\mu$ l ..... 163725  
 25  $\mu$ l ..... 163723

## Syringe with **Removable** Needle

Complete with integral PTFE seal for a low dead volume connection and a leak-tight fit.

5  $\mu$ l ..... 160221

10  $\mu$ l ..... 160222

25  $\mu$ l ..... 160223

50  $\mu$ l ..... 160224

100  $\mu$ l ..... 160225

## Replacement Needles

Bevel, open end  
 .019" x .005" x 2.25" ..... 123050

# C-120 Series Syringes

No dead volume barrel design Special low dead volume needle connector plunger tip of stress-formed virgin PTFE.

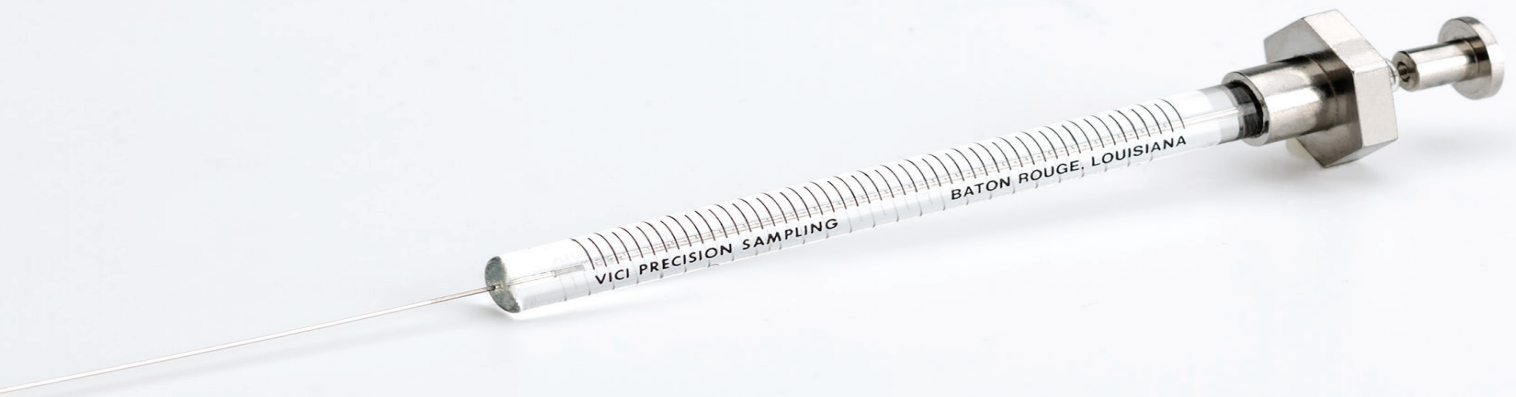
## C-120 Series Syringes

Our fixed needle, extended barrel syringe is leak-tight to 250 psi for liquids and gases. Extended design permits attachment of vacuum bulb.

5 $\mu$ l	.....	120021	50 $\mu$ l	.....	120024
10 $\mu$ l	.....	120022	100 $\mu$ l	.....	120025
25 $\mu$ l	.....	120023			

## Plunger Assembly

5 $\mu$ l	.....	123721	50 $\mu$ l	.....	054124
10 $\mu$ l	.....	123722	100 $\mu$ l	.....	054125
25 $\mu$ l	.....	054123			



Leak-tight  
up to  
**250**  
psi



## CG-130 Series Syringes



Features include a reinforced plunger to eliminate bending with optional replaceable needles.

### CG-130 Liquid Syringe

A heavy, reinforced plunger within an enlarged plunger guide section of the CG-130 barrel virtually eliminates plunger bending. The smaller front section of the plunger is confined within the guide section even when the plunger is retracted, while the sturdy upper section absorbs the force of a rapid downstroke.

#### Syringe - Fixed Needle

5  $\mu$ l ..... 130021  
10  $\mu$ l ..... 130022

#### Syringe - Removable Needle

5  $\mu$ l ..... 130221  
10  $\mu$ l ..... 130222

#### Replacement Needle - Bevel Open End



019" x .005" x 2.25" ..... 123050

#### Replacement Plunger Assembly

5  $\mu$ l ..... 133721  
10  $\mu$ l ..... 133722

# Series D-140 Syringes



The entire sample is contained in the needle, so it is totally injected when the plunger is depressed. The positive rear plunger stop eliminates accidental plunger removal and resultant damage.



Liquids only up to  
**30<sup>psi</sup>**

## D-140 Syringes

Designed for small volume injection into liquid chromatographs. Since the sample is totally contained within the needle, it is completely displaced by the plunger. The positive rear plunger stop eliminates accidental plunger removal and resultant damage. The PTFE seals, needle, plunger, and barrel are all replaceable.

Thanks to superior alignment, the D-140 can be assembled time after time without difficulty or damage.

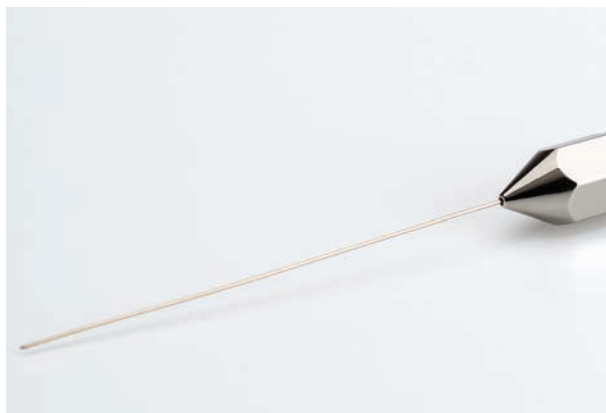
1 $\mu$ l Syringe	.....	140011
2 $\mu$ l Syringe	.....	140012
5 $\mu$ l Syringe	.....	140021
10 $\mu$ l Syringe	.....	140022



# Replacement Parts



All D-140 parts are replaceable, with easy assembly and disassembly.



## Replacement Needles

### Blunt

1  $\mu$ l .019" x .005" x 2.5" ..... 923011

2  $\mu$ l .019" x .008" x 2.5" ..... 923012

### Bevel

5  $\mu$ l .028" x .012" x 2.5" ..... 923021

### Sideport

10  $\mu$ l .028" x .019" x 2.5" ..... 923022



## Plunger Assembly

1  $\mu$ l ..... 143711

2  $\mu$ l ..... 143712

5  $\mu$ l ..... 143721

10  $\mu$ l ..... 143722



## Plunger Packing

1  $\mu$ l ..... 144011

2  $\mu$ l ..... 144012

5  $\mu$ l ..... 144021

10  $\mu$ l ..... 144022



## Barrel Assembly

1  $\mu$ l ..... 143211

2  $\mu$ l ..... 143212

5  $\mu$ l ..... 143221

10  $\mu$ l ..... 143222

# Mini Injector Series Syringes

Reproducible sample injections down to 0.01 $\mu$ l with sample carried in the plunger.

## Mini Injector Syringes

Ideal for capillary GC work. No splitter is needed because of our unique plunger-within-a-needle. Sample volume is carried in a precisely measurable groove that surrounds the wire plunger.

In use, the plunger is extended beyond the needle tip and dipped into the sample, where capillary action fills the groove. Then the plunger is drawn through a PTFE wiper and back into the needle for protection. When the needle is inserted into the inlet and the plunger is depressed, the sample carried on the plunger groove enters the heated zone, where it is flash-vaporized and swept into the column.

.01  $\mu$ l ..... 170091  
.10  $\mu$ l ..... 170001


Replacement Wipers

.01  $\mu$ l & .10  $\mu$ l ..... 100667



Samples  
down to  
**.01**  
 $\mu$ l

# Syringes for Valco, Cheminert and Rheodyne/IDEX Valves



Syringes used to fill a loop on a sample injection valve have blunt smooth ends. The end of the needle must contact the bottom of the valve's fitting detail uniformly and seal on the outside of the tip to deliver sample with any repeatability. All VICI 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 needle.

Pack of  
**3**

**Replacement Needles**

Blunt Tip Open End

---

Needle Size 22 gauge x 2" ..... 123050R

Seals at  
**250**  
psi

**Fixed Needle Syringes**

5 $\mu$ l	.....	160021R
10 $\mu$ l	.....	160022R
25 $\mu$ l	.....	160023R
50 $\mu$ l	.....	160024R
100 $\mu$ l	.....	160025R

---

**Removable Needle Syringes**

5 $\mu$ l	.....	160221R
10 $\mu$ l	.....	160222R
25 $\mu$ l	.....	160223R
50 $\mu$ l	.....	160224R
100 $\mu$ l	.....	160225R

# Special Syringes for IDEX/Rheodyne valves



PEEK tip to prolong lifetime of valves. Available with fixed or removable needle.



Leak-tight up to  
**250**<sup>psi</sup>

## Special Syringes

Many IDEX/Rheodyne valves allow the syringe needle to rub across the sealing surfaces- a trade off in a valve design which avoids having to machine small concentric holes. To prolong the lifetime of these valves, VICI Precision Sampling offers a syringe with a PEEK tip which extends beyond the end of the needle so that only PEEK contacts the valve sealing surfaces.

### Syringe with Fixed Needle

Needle size 22 gauge x 2" long

5 µl	.....	160021RT
10 µl	.....	160022RT
25 µl	.....	160023RT
50 µl	.....	160024RT
100 µl	.....	160025RT

### Syringe with Removable Needle

Needle size 22 gauge x 2" long

5 µl	.....	160221RT
10 µl	.....	160222RT
25 µl	.....	160223RT
50 µl	.....	160224RT
100 µl	.....	160225RT

### Replacement Needles

Needle size 22 gauge x 2" long

Blunt PEEK tip open end - Pkg./3	.....	123050RT
----------------------------------	-------	----------

# Purge and Trap Syringe



The heavy duty construction of our purge and trap syringe helps eliminate cost of replacement and injuries due to breakage.



## Standard Luer Lock Syringe

- For use with purge and trap analysis
- Allows easy volume reading
- Plunger tip of stress-formed virgin PTFE
- Self-lubricating and durable Heavy duty rear flange
- Flat edges keep the syringe from rolling

---

5 ml	.....	030039
10 ml	.....	030040



## Luer Lock Syringe with Push Button Valve

- All the features of the standard syringe
- Also includes push button valve to lock the sample

---

5 ml	.....	050039
10 ml	.....	050040

Leak-tight  
up to  
**500**  
psi



## Micro-Flo® Syringes



The Micro-Flo® high pressure syringe prevents evaporation of lighter components under normal laboratory temperatures at atmospheric pressure.

The syringe is encased in metal, with positive PTFE seals and positive plunger stops. The front end houses a special micro-volume annular needle with less than 0.5  $\mu\text{l}$  dead volume and a positive mechanical Sample Lock valve to seal in volatile materials (up to 500 psi).

A special locking cylinder adapter and yoke assembly ensures that the syringe contacts the sample liquid in its pure, undisturbed state. The syringe volume is variable from 0.5  $\mu\text{l}$  to 5.0  $\mu\text{l}$ .

Available replacement parts include plunger assembly, front packing, barrel and decal, rear washer, spring, and needle.

---

Micro-Flo® Syringe ..... 230051

# Micro-Flo<sup>®</sup> Accessories and Replacement Parts



Available replacement parts include plunger assembly, front packing, barrel and decal, rear washer, spring, and needle.



## Micro-Flo<sup>®</sup> Adapter & Parts

A special locking cylinder adapter and yoke assembly ensures that the syringe contacts the sample liquid in its pure, undisturbed state.

Micro-Flo<sup>®</sup> Adapter with  
Yoke Assembly ..... 230250

---

Syringe side packing ..... 100844  
Plunger pin rod assembly ..... 100846  
Plunger pin side packing ..... 100848

## Micro-Flo<sup>®</sup> Syringe Parts

Replaceable parts mean lengthening the life of the syringe.

Barrel with decal ..... 100827  
Spring ..... 100830  
Plunger assembly ..... 100854  
Front packing ..... 100828  
Rear washer ..... 100826



## Micro-Flo<sup>®</sup> Syringe Parts

Needle: .028"x.006"x1.875"  
.5 µl - 5 µl Sideport ..... 100838



# Pressure-Flo<sup>®</sup> Syringes



A classic method of taking homogeneous high pressure samples from a cylinder or "bomb".

Seals at  
**500**  
psi



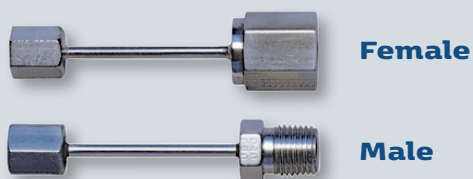
Lightweight syringe body for easy handling. The sample is contained within the calibrated needle which can be injected directly through the GC septum inlet. A special crimped PTFE packing which seals firmly at pressures up to 500 psi even under severe operating conditions.

Threads allow the syringe to make up on a cylinder via the special bomb adapters (see image, below). When the syringe is screwed tight, the cylinder valve is opened and the plunger is depressed, extending the needle into the liquid zone. Once sample is drawn into the syringe, it is stored pressure-tight while the cylinder valve is closed and the syringe is removed from the adapter.

## Pressure-Flo Syringes

.5 µl	.....	220005
1 µl	.....	220011
2 µl	.....	220012
5 µl	.....	220021
10 µl	.....	220022

**To interface with a gas cylinder,  
use syringe with our bomb adapter**



## Bomb adapters

3/8" NPT female	.....	240040
1/4" NPT female	.....	240041
3/8" NPT male	.....	240042
1/4" NPT male	.....	240043

## Needles

.5 µl	.....	220351
1 µl, 2 µl, 5 µl, 10 µl	.....	220352

## Plunger packing

.5 µl	.....	100800
1 µl, 2 µl, 5 µl, 10 µl	.....	220347

## Plunger Assembly

.5 µl	.....	220315
1 µl	.....	220311
2 µl	.....	220312
5 µl	.....	220321
10 µl	.....	220322

## Front packing Assembly


All Sample Sizes	.....	220344
------------------	-------	--------



# Specialty Syringes



Special syringes designed to make your processes more efficient.



Max  
**200**

### Hollow Plunger Syringes

The hollow plunger syringe with two integrated valves opens up a new array of application possibilities:

- Dispense a viscous sample more easily by introducing it into the rear of the syringe instead of drawing it up through the needle.
- Eliminate sample-to-sample cross contamination by giving the syringe a thorough cleaning with a rinse introduced through the plunger.
- Sample continuously without withdrawing the needle from the original point of entry. Just close the on/off valve after drawing sample through the needle; the sample is redirected out the plunger valve as the plunger is depressed.

---

100 $\mu$ l		020025
250 $\mu$ l		020031

### Syringes for Diluter/Dispensers and Automated Instrumentation

The plunger of this syringe has a 6-32 UNC female thread so that it will accept the male end fitting on Hamilton Microlab<sup>®</sup> diluters. The PTFE tipped luer lock termination is without slots.

---

250 $\mu$ l		180031
500 $\mu$ l		180032
1 ml		180033



# 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, volatile chemicals, etc.

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.



## Mininert Valves - Screw Caps

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.

13mm - 425	.....	614158
15mm - 425	.....	614160
18mm - 400	.....	614161
20mm - 400	.....	614170
24mm - 400	.....	614163
Crimp Top	.....	614250

Up to 120°F  
**50**  
psi



## Mininert Valves

The laboratory taper model brings Mininert convenience and ease to a variety of applications using standard laboratory glassware, such as reaction chambers, test tubes, and other glass systems.

### Taper Valve

14/20	.....	621102
19/22	.....	621103

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.

### Inline valve 1/4 - 28

Male to Male	.....	631205
Female to Female	.....	631206

### Termination Valve

1/4 - 28 Male	.....	631201
1/4 - 28 Female	.....	631203
1/8 - NPT Male	.....	631202
1/8 - NPT Female	.....	631204

### Syringe Valve

C or D Gas Syringe	.....	654050
Luer-tip Syringe	.....	654051



# Septum Replacement



Prolong the life of your Mininert Valves with our easy to use septum replacement.

## Mininert Septum Replacement

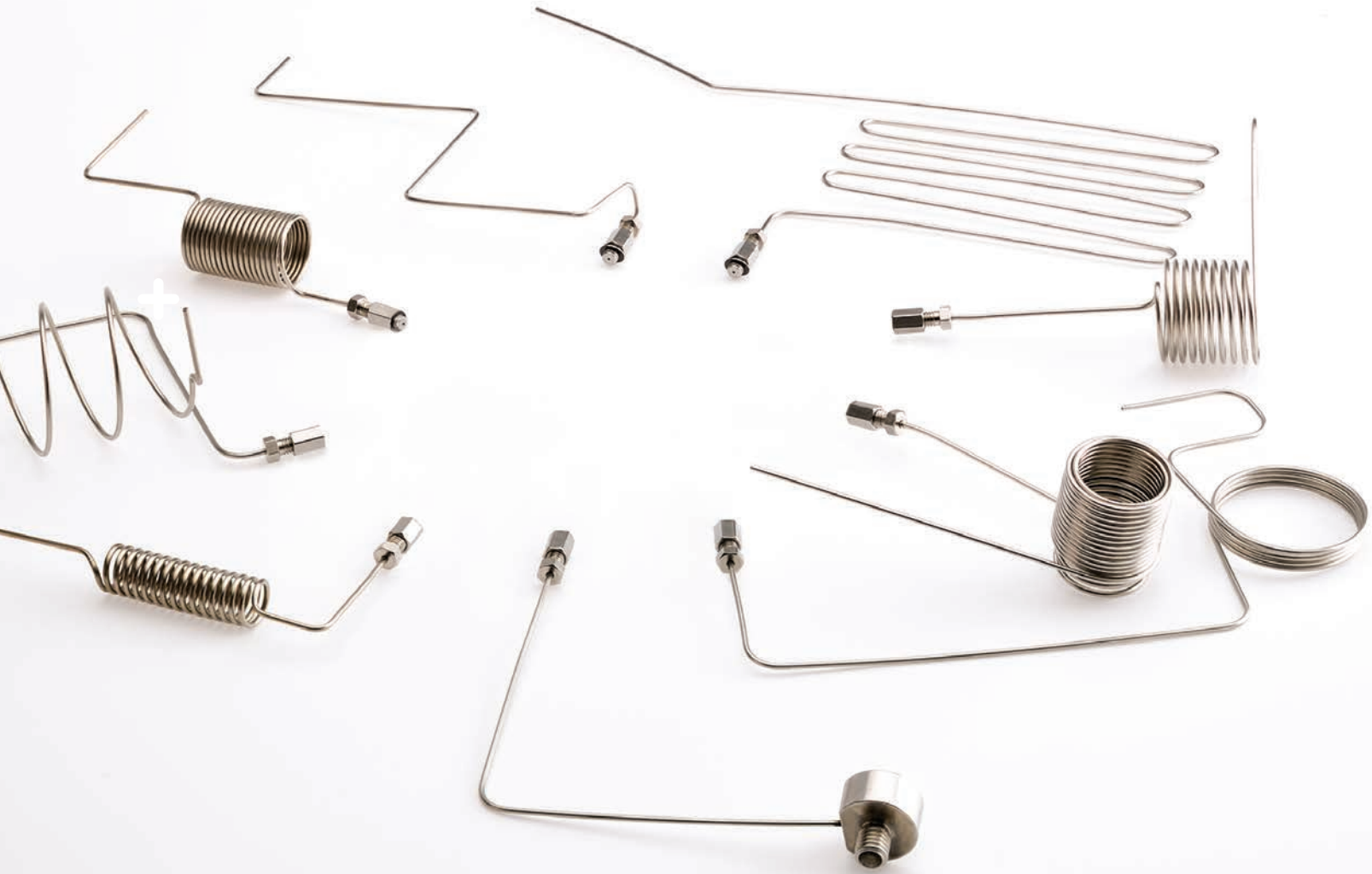
These silicone septa fit all Mininert valves. The installation tool is a handy device for quickly removing and replacing needle seal septa.



Tool Only . . . . . 644850



Septum set of 50 . . . . . 644350



## Custom Formed Tubing

### Material options for custom formed tubing

316L Stainless Steel, Titanium, Nickel, Hastelloy-C, Electroformed Nickel, and Nickel Cobalt.

### Cleaning

All tubing is electrolytically cut and specially steam-cleaned with micro-filtered steam from deionized water, which removes both organic and inorganic contaminants.

VICI Precision Sampling has extensive experience at custom tubing bending and shaping. Contact us to learn more about our custom tube bending service.

- Custom-formed to your specifications
- Streamlines instrument production
- Attractively priced

# The Sky is the Limit



Why buy tubing in bulk and try to make it work? We have the expertise to custom form tubing to your exact specifications, so you can focus on your products.



## Unique Cleaning Processes

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Precision, burr less cuts. OD and ID STEAM cleaned.

## Multiple Connections

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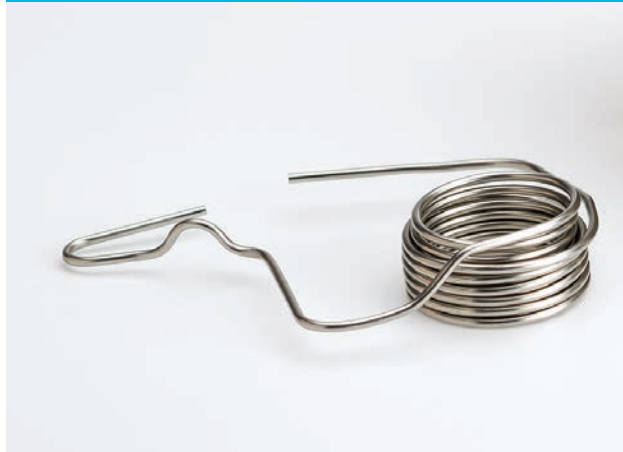
We have access to the tubing and any fittings you might need. Give us a call to discuss your specific needs.



## Bends of all Degrees

---

We can create bends to allow the tubing to navigate complex internal workings of your instruments.



# Micro Valves for GC and LC



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 over-tightening. Internal parts are PEEK and PTFE. Compact 1" design with convenient panel mount and a variety of configurations.



## 2 Port Micro Valves

Available in 2 flow paths; 180 Degree and 90 Degree.



180° Flow

Path.....660200



90° Flow

Path.....660300



### 3 Port Micro Valves

Available in 2 flow paths; "T" Flow Path and 90° Flow Path.



"T" Flow

Path.....660100



90° Flow

Path....660310



### 4 Port Micro Valves

Available in 2 flow paths.



"T" Flow

Path....660110



90° Flow

Path....660320



180° Flow

Path.....660210

# GC & LC Probes



Probes are used to transfer a liquid sample from a sample vial to the injection syringe by pressurizing the sample vial with helium.

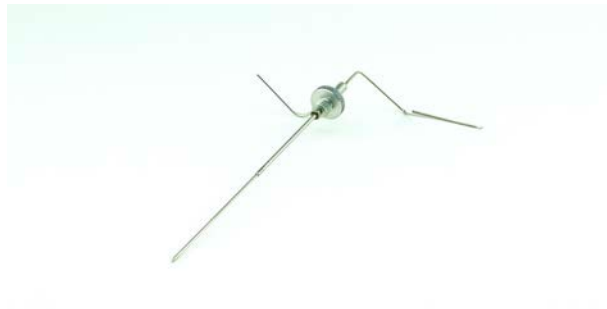
## Agilent Archon Instruments



**Water probe assembly**  
**Probe with fittings** ..... 505739  
**Probe without fittings** ..... 505828



**Square Block**  
**Probe with fittings** ..... 505841  
**Probe without fittings** ..... 505840



**Water probe (old style)**  
**Probe with fittings** ..... 505491  
**Probe without fittings** ..... 505831



**Soil probe assembly**  
**Probe with fittings** ..... 505490  
**Probe without fittings** ..... 505830



**Needle purge probe assembly**  
**Hex Block**  
**Probe with fittings** ..... 505741  
**Probe without fittings** ..... 505829



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Switzerland  
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MasterCard

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### VICI Precision Sampling

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(225) 923-1331

Email: [precision@vici.com](mailto:precision@vici.com)  
VICI Precision Sampling, Inc.  
P.O. Box 15886  
Baton Rouge, LA  
70895-5886  
F.O.B. shipping point,  
our factory,  
Baton Rouge, Louisiana.

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American Express, and  
Discover

## Canada

### VICI Valco Canada

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Canada K6V 1A1  
F.O.B. shipping point,  
our factory,  
Brockville, Canada.

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Perkin Elmer	Perkin Elmer Inc
Pressure-Flo	Valco Instruments Co. Inc.
Pressure-Lock	Valco Instruments Co. Inc.
Rheodyne	Rheodyne IDEX™
Ryton	Phillips Petroleum Co.
VICI	Valco Instruments Co. Inc. and VICI AG International
Waters	Waters Associates



#### **Conditions of Sale**

Our terms are net 30 days. F.O.B shipping, our factory, Baton Rouge, LA. Prices subject to change without notice. All prices are in U.S. dollars. In the sales territory of VICI AG International, their Conditions of sale apply which may vary from those of VICI Precision Sampling.

#### **Repair/Technical Support**

For information about factory refurbishment or for assistance with your technical questions and application needs, contact our Service Department.

Phone: + 41 41 925-6200

Fax: + 41 41 925-6201

Email: [info@vici.ch](mailto:info@vici.ch)

#### **Returns**

Returns will be accepted up to 90 days after shipment with prior authorization. If you need to make a return, please contact our Sales Department for a return authorization number along with forwarding instructions. Inspect shipments upon receipt and report shortages or incorrect or damages material to us immediately. Returned material will be subject to a minimum restocking fee of 20% for catalog items. Special orders cannot be returned unless defective.

#### **Notice**

"VICI reserves the right to correct errors and change prices, designs, or specifications without notice or liability. The information in this catalog is correct to the best of our knowledge but is not guaranteed to be so. VICI assumes no responsibility with respect thereto."

#### **Warranty**

VICI Precision Sampling warrants all products we manufacture to be free from defects in material and /or workmanship for thirty days from the time of receipt by the customer. VICI Precision Sampling's liability for defects in material or workmanship shall be limited to replacement of the defective item at no charge to the customer or refund of the purchase price paid. Bending, breakage, or other damage resulting from the shipping company. This warranty is in lieu of any other warranties, expressed or implied, including but not limited to any warranty of fitness for purpose or any warranty or merchantability. Copies of any written warranty pertaining to products shown in this catalog manufactured by a company other than VICI Precision Sampling can be obtained upon written request.



**Micro-Flo Syringes: see on page 30**

**VICI**

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Parkstrasse 2  
CH-6214 Schenkon**

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