

## Rheodyne® Stainless Steel Sample Loops

These high quality stainless steel sample loops have burr-free, square-cut ends to ensure a flush connection to valve ports. The size designations of loops are nominal. The actual volumes can differ from the theoretical designations because of the 0.001" ( $\pm 0.025$  mm) tolerance of the metal tubing bore.

Accuracy of large metal loops (1.0 mm, 0.040" bore) is about  $\pm 5\%$ , intermediate loops (0.5 mm, 0.020" bore)  $\pm 10\%$ , and small loops (0.2 mm, 0.007" bore)  $\pm 30\%$ .

Since both standards and unknowns are usually analyzed using the same sample loop, knowledge of the actual, accurate volume is rarely needed. If the sample loop volume must be known, it is best to calibrate the loop in place on the valve so the flow passages in the valve are also taken into account. An alternative to calibration is to use a dual mode injector and partial-filling method of loading. See the "Sample Loop Loading" Application Note on page 98.

Model 7725 Injector loops are not interchangeable with loops for the model 7125. The port angle for the 7725 is 30° whereas the port angle for the 7125 is 20° requiring the loops to have a different shape.

Model 8125 Micro-Scale Sample Injector requires special loops in the 5.0  $\mu$ L to 50  $\mu$ L range. The 8125 sample loops are made with 0.5 mm (0.020") OD tubing.

Stainless steel sample loops are supplied with unswaged fittings. The two ends of the loop must be completely bottomed in the injector ports before the ferrule is swaged onto the loop. Swaging each end separately and then replacing the ends in their respective ports of the same valve ensures that the loop ends are bottomed into the ports. A fitting made up in one port may leave an undesirable cavity in another port. As all ports vary in all valves, careful attention to loop installation is important. Please see the "How to Properly Install Sample Loops" Application Note on page 98 for more information.



**ORDER  
ONLINE**  
www.idex-hs.com



### RHEODYNE STAINLESS STEEL LOOPS FOR MXT715-000

Volume	Tubing
<b>7755-300</b> 5 $\mu$ L Sample Loop	0.18 mm (0.007") ID x 1/16" OD
<b>7755-301</b> 10 $\mu$ L Sample Loop	0.30 mm (0.012") ID x 1/16" OD
<b>7755-302</b> 20 $\mu$ L Sample Loop	0.30 mm (0.012") ID x 1/16" OD
<b>7755-303</b> 50 $\mu$ L Sample Loop	0.51 mm (0.021") ID x 1/16" OD
<b>7755-304</b> 100 $\mu$ L Sample Loop	0.51 mm (0.021") ID x 1/16" OD

### RHEODYNE STAINLESS STEEL LOOPS FOR 7125, 7010 INJECTORS (DO NOT USE FOR 7725)

Volume	Tubing
<b>7020</b> 5 $\mu$ L Sample Loop	0.18 mm (0.007") ID x 1/16" OD
<b>7021</b> 10 $\mu$ L Sample Loop	0.30 mm (0.012") ID x 1/16" OD
<b>7022</b> 20 $\mu$ L Sample Loop	0.51 mm (0.020") ID x 1/16" OD
<b>7023</b> 50 $\mu$ L Sample Loop	0.51 mm (0.020") ID x 1/16" OD
<b>7024</b> 100 $\mu$ L Sample Loop	0.51 mm (0.020") ID x 1/16" OD
<b>7025</b> 200 $\mu$ L Sample Loop	0.76 mm (0.030") ID x 1/16" OD
<b>7026</b> 500 $\mu$ L Sample Loop	0.76 mm (0.030") ID x 1/16" OD
<b>7027</b> 1.0 mL Sample Loop	0.76 mm (0.030") ID x 1/16" OD
<b>7028</b> 2.0 mL Sample Loop	1.0 mm (0.040") ID x 1/16" OD
<b>7029</b> 5.0 mL Sample Loop	1.0 mm (0.040") ID x 1/16" OD
<b>1876</b> 10 mL Sample Loop	2.0 mm (0.080") ID x 1/8" OD
<b>1877</b> 20 mL Sample Loop	2.0 mm (0.080") ID x 1/8" OD

### RHEODYNE STAINLESS STEEL LOOPS FOR 3725-038, 3725I-038 INJECTORS

Volume	Tubing
<b>3065-018</b> 2.0 mL Sample Loop	2.0 mm (0.080") ID x 1/8" OD
<b>3065-019</b> 5.0 mL Sample Loop	2.0 mm (0.080") ID x 1/8" OD
<b>3065-023</b> 10 mL Sample Loop	2.0 mm (0.080") ID x 1/8" OD
<b>3065-025</b> 20 mL Sample Loop	2.0 mm (0.080") ID x 1/8" OD

### RHEODYNE STAINLESS STEEL LOOPS FOR 7725, 7725i, PR/EV700-100, PR/EV703-100, MX MODULE INJECTORS (DO NOT USE FOR 7125)

Volume	Tubing
<b>7755-020</b> 5 $\mu$ L Sample Loop	0.18 mm (0.007") ID x 1/16" OD
<b>7755-021</b> 10 $\mu$ L Sample Loop	0.30 mm (0.012") ID x 1/16" OD
<b>7755-022</b> 20 $\mu$ L Sample Loop	0.30 mm (0.012") ID x 1/16" OD
<b>7755-023</b> 50 $\mu$ L Sample Loop	0.51 mm (0.020") ID x 1/16" OD
<b>7755-024</b> 100 $\mu$ L Sample Loop	0.51 mm (0.020") ID x 1/16" OD
<b>7755-025</b> 200 $\mu$ L Sample Loop	0.76 mm (0.030") ID x 1/16" OD
<b>7755-026</b> 500 $\mu$ L Sample Loop	0.76 mm (0.030") ID x 1/16" OD
<b>7755-027</b> 1.0 mL Sample Loop	0.76 mm (0.030") ID x 1/16" OD
<b>7755-028</b> 2.0 mL Sample Loop	1.0 mm (0.040") ID x 1/16" OD
<b>7755-029</b> 5.0 mL Sample Loop	1.0 mm (0.040") ID x 1/16" OD
<b>1876</b> 10 mL Sample Loop	2.0 mm (0.080") ID x 1/8" OD
<b>1877</b> 20 mL Sample Loop	2.0 mm (0.080") ID x 1/8" OD

### RHEODYNE STAINLESS STEEL LOOPS FOR 8125 INJECTOR (USE 7755-024 TO 7755-029 FOR VOLUMES > 50 $\mu$ L)

Volume	Tubing
<b>8020</b> 5 $\mu$ L Sample Loop	0.20 mm (0.008") ID x 1/16" OD
<b>8021</b> 10 $\mu$ L Sample Loop	0.20 mm (0.008") ID x 1/16" OD
<b>8022</b> 20 $\mu$ L Sample Loop	0.25 mm (0.010") ID x 0.020" OD
<b>8023</b> 50 $\mu$ L Sample Loop	0.30 mm (0.012") ID x 1/16" OD

### REPLACEMENT RHEFLEX® AND SUPER FLANGELESS™ FITTINGS

	Qty.
<b>6000-082</b> Nut/Ferrule Set, SST, 5/16-24, for 1/8" OD loops*	ea.
<b>6000-083</b> Ferrules, SST, for 1/8" OD loops*	5-pk
<b>6000-210</b> Ferrules, SST, for 1/16" OD loops	10-pk
<b>6000-211</b> Nut/Ferrule Sets, SST, 10-32, for 1/16" OD loops	10-pk
<b>P-331</b> Super Flangeless Nut, PEEK™, for 1876, 1877 loops	ea.
<b>P-350x</b> Super Flangeless Ferrules, PEEK/SST, for 1/8" OD 1876, 1877 loops	10-pk
<b>P-654</b> Adapter, PEEK, for 1/8" OD 1876 and 1877 loops	ea.

\*Except 1/8" OD 1876 and 1877 loops.

## Rheodyne® PEEK™ Sample Loops

Flexible PEEK sample loops are alternatives to stainless steel loops. PEEK loop ends are provided with clean, straight cuts for easy valve installation.

PEEK polymer is inert to almost all organic solvents and is biocompatible, giving PEEK loops added versatility. Rheodyne uses natural PEEK for these sample loops. Like metal loops, the size designations of PEEK loops are nominal. The actual volumes can differ from the theoretical designations because of the  $\pm 0.05$  mm (0.002") tolerance of the tubing bore. Accuracy of large PEEK loops (0.8 mm, 0.030" bore) is about  $\pm 14\%$ , intermediate loops (0.5 mm, 0.020")  $\pm 21\%$ , and small loops (0.2 mm, 0.007")  $\pm 65\%$ .

PEEK loops are also supplied with unswaged RheFlex® fittings but do not require the same swaging precaution. The fittings can reposition along the loop tubing when the fitting reinserts in the ports for correct loop installation.

*Please Note: Several of our PEEK Sample Loops can also be used with Valco/VICI® sample injectors. Please refer to the product listing on this page to aid selection.*

### PEEK Physical Strength Characteristics

Although PEEK material is compatible with virtually all solvents, there are many factors that affect burst pressure of PEEK tubing. Factors such as increases in inner diameter, temperature, exposure time, and concentration of organic solvents affect the degradation of PEEK. Other solvents such as THF, methylene chloride and DMSO cause PEEK tubing to swell while concentrated nitric acid and sulfuric acid weaken the tubing.

## Valco/MCI-Compatible Stainless Steel Sample Loops

Valco-Compatible Stainless Steel Loops are manufactured by Upchurch Scientific®. These loops are designed for use with Valco valve models CW6 and EC6W. Each loop has burr-free, polished ends and is passivated and flushed with reagent-grade methanol to ensure cleanliness.

Loops made with 1/16" OD tubing come complete with F-287 SealTight™ Fittings, which are pressure rated to 9,000 psi (620 bar)<sup>1</sup>. The fittings and adapters that accompany the 1/8" OD sample loops are rated to 1,000 psi (69 bar)<sup>1</sup>. Volumes are stated at  $\pm 10\%$ , with exact calibration services available. Each sample loop we calibrate is documented and supplied with a calibration certificate.

<sup>1</sup> These pressure ratings reflect the performance of the fittings, not the port or valve in which they are used.

Upchurch Scientific manufactures many products designed as direct replacements for OEM components. Reference to these manufacturers does not imply their endorsement of our products.



### PEEK LOOPS FOR 3725, 3725i INJECTORS

	Volume	Tubing
3055-018	2.0 mL Sample Loop	1.6 mm (0.062") ID x 1/8" OD
3055-019	5.0 mL Sample Loop	1.6 mm (0.062") ID x 1/8" OD
3055-023	10 mL Sample Loop	2.0 mm (0.080") ID x 1/8" OD
3055-025	20 mL Sample Loop	2.0 mm (0.080") ID x 1/8" OD

### PEEK LOOPS FOR 9725, 9010, PR/EV750-100, PR/EV753-100 INJECTORS

	Volume	Bore/Tubing	Valco No.
7123-227	1 µL Sample Loop (model PR/EV750-100 only)	internal groove	NA
7755-015	2 µL Sample Loop (9725 only)	internal groove	NA
9055-020	5.0 µL Sample Loop	0.18 mm (0.007") ID x 1/16" OD	SL5CWPK
9055-021	10 µL Sample Loop	0.25 mm (0.010") ID x 1/16" OD	SL10WPK
9055-022	20 µL Sample Loop	0.25 mm (0.010") ID x 1/16" OD	SL20WPK
9055-023	50 µL Sample Loop	0.51 mm (0.020") ID x 1/16" OD	SL50WPK
9055-024	100 µL Sample Loop	0.51 mm (0.020") ID x 1/16" OD	SL100WPK
9055-025	200 µL Sample Loop	0.51 mm (0.020") ID x 1/16" OD	NA
9055-026	500 µL Sample Loop	0.76 mm (0.030") ID x 1/16" OD	SL500WPK
9055-027	1.0 mL Sample Loop	0.76 mm (0.030") ID x 1/16" OD	SL1KCWPK
9055-028	2.0 mL Sample Loop	0.76 mm (0.030") ID x 1/16" OD	SL2KCWPK
9055-029	5.0 mL Sample Loop	0.76 mm (0.030") ID x 1/16" OD	NA
9055-033	10 mL Sample Loop	0.76 mm (0.030") ID x 1/16" OD	NA

### PEEK LOOPS FOR 7725, 7725i, PR/EV700-100

	Volume	Bore
7123-227	1 µL Sample Loop (model PR/EV700-100 only)	internal groove
7755-015	2 µL Sample Loop (models 7725 and 7725i only)	internal groove

### REPLACEMENT RHEFLEX FITTINGS FOR PEEK LOOPS

		Qty.
6000-251	Ferrules, Natural PEEK, for 1/16" OD loops	10-pk
6000-254	Nut/Ferrule Sets, Natural PEEK, 10-32, for 1/16" OD loops	10-pk
6000-078	Nut/Ferrule Set, Natural PEEK, 5/16-24, for 1/8" OD loops	ea.
6000-079	Ferrules, Natural PEEK, for 1/8" OD loops	5-pk

### VALCO/VICI-COMPATIBLE STAINLESS STEEL LOOPS FOR C6W, EC6W INJECTORS

	Volume	Tubing	Valco No.
1750	5 µL Sample Loop	0.18 mm (0.007") ID x 1/16" OD	SL5CW
1751	10 µL Sample Loop	0.25 mm (0.010") ID x 1/16" OD	SL10CW
1752	15 µL Sample Loop	0.25 mm (0.010") ID x 1/16" OD	SL15CW
1755	20 µL Sample Loop	0.51 mm (0.010") ID x 1/16" OD	SL20CW
1758	25 µL Sample Loop	0.51 mm (0.010") ID x 1/16" OD	SL25CW
1759	50 µL Sample Loop	0.51 mm (0.020") ID x 1/16" OD	SL50CW
1762	100 µL Sample Loop	0.51 mm (0.020") ID x 1/16" OD	SL100CW
1778	200 µL Sample Loop	0.76 mm (0.030") ID x 1/16" OD	NA
1763	250 µL Sample Loop	0.76 mm (0.030") ID x 1/16" OD	SL250CW
1764	500 µL Sample Loop	0.76 mm (0.030") ID x 1/16" OD	SL500CW
1770	1 mL Sample Loop	0.76 mm (0.030") ID x 1/16" OD	SL1KCW
1772	2 mL Sample Loop	1.02 mm (0.040") ID x 1/16" OD	SL2KCW
1775	5 mL Sample Loop	2.03 mm (0.080") ID x 1/8" OD	SL5KCW
1776	10 mL Sample Loop	2.03 mm (0.080") ID x 1/8" OD	SL10KCW