

Sample Loops

Stainless steel and PEEK sample loops are factory-cut and finished to the highest quality. The 316 stainless steel loop ends have a square cut and are burr-free for a flush connection to the valve. The flexible PEEK loop ends are provided with a clean and straight cut for easy installation onto the valve.

Stainless steel (and titanium) 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 ensure 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.

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.



Stainless Steel and Titanium

Stainless steel and titanium sample loops are available. The size designations of loops are nominal. The actual volumes can differ from the theoretical designations because of the ± 0.025 mm (0.001") 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 Tech Tip #5 on page 23.

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

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.

Titanium loops for Models 7125-081 and 7010-087 are available by consulting your authorized Rheodyne distributor.

Stainless Steel Loops for 3725-038 and 3725i-038 Injectors Part Numbers & Descriptions		
PART NUMBER	DESCRIPTION	BORE
3065-018	2.0 mL Sample Loop	2.0 mm (0.080")
3065-019	5.0 mL Sample Loop	2.0 mm (0.080")
3065-023	10 mL Sample Loop	2.0 mm (0.080")
3065-025	20 mL Sample Loop	2.0 mm (0.080")

Stainless Steel Loops for 7725, 7725i, PR/EV700-100 and PR/EV703-100 Injectors Part Numbers & Descriptions (Do not use for 7125).		
PART NUMBER	DESCRIPTION	BORE
7755-020	5 μ L Sample Loop	0.18 mm (0.007")
7755-021	10 μ L Sample Loop	0.30 mm (0.012")
7755-022	20 μ L Sample Loop	0.30 mm (0.012")
7755-023	50 μ L Sample Loop	0.51 mm (0.020")
7755-024	100 μ L Sample Loop	0.51 mm (0.020")
7755-025	200 μ L Sample Loop	0.76 mm (0.030")
7755-026	500 μ L Sample Loop	0.76 mm (0.030")
7755-027	1.0 mL Sample Loop	0.76 mm (0.030")
7755-028	2.0 mL Sample Loop	1.0 mm (0.040")
7755-029	5.0 mL Sample Loop	1.0 mm (0.040")

Stainless Steel Loops for 7125 and 7010 Injectors Part Numbers & Descriptions (Do not use for 7725).		
PART NUMBER	DESCRIPTION	BORE
7020	5 μ L Sample Loop	0.18 mm (0.007")
7021	10 μ L Sample Loop	0.30 mm (0.012")
7022	20 μ L Sample Loop	0.51 mm (0.020")
7023	50 μ L Sample Loop	0.51 mm (0.020")
7024	100 μ L Sample Loop	0.51 mm (0.020")
7025	200 μ L Sample Loop	0.76 mm (0.030")
7026	500 μ L Sample Loop	0.76 mm (0.030")
7027	1.0 mL Sample Loop	0.76 mm (0.030")
7028	2.0 mL Sample Loop	1.0 mm (0.040")
7029	5.0 mL Sample Loop	1.0 mm (0.040")

Stainless Steel Loops for 8125 Injector Part Numbers & Descriptions (Use 7755-024 to 7755-029 for volumes < 50 μ L).		
PART NUMBER	DESCRIPTION	BORE
8020	5 μ L Sample Loop	0.20 mm (0.008")
8021	10 μ L Sample Loop	0.20 mm (0.008")
8022	20 μ L Sample Loop	0.25 mm (0.010")
8023	50 μ L Sample Loop	0.30 mm (0.012")