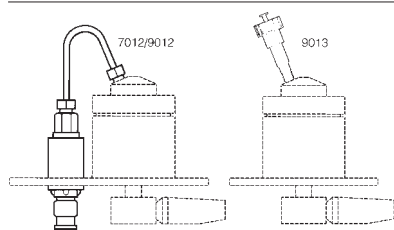


Rheodyne Accessories



Rheodyne Accessories

Needle Port Accessories



Rheodyne's adaptable loop filler ports are used to load sample from syringe needles or luer tips. The needle port conserves sample by minimizing the volume between the needle and the valve. The preferred needle diameter is 22 gauge (.028" OD), but the seal can be tightened to accommodate sizes down to 26 gauge (.018" OD).

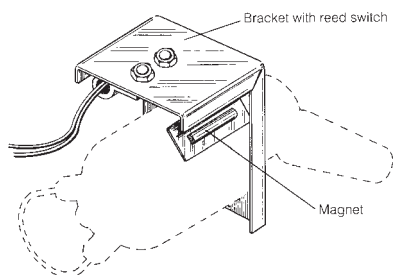
Cat. No.	Description
7012	SS Loop filler port
9012	PEEK Loop filler port
9013	PEEK Needle port
7125-054	Needle port cleaner
9125-076	Suction needle adapter (9725)
7012-009	Needle port fitting for 7012

Mounting Brackets

Rheodyne mounting brackets and panels of different shapes and sizes organize and provide a sturdy support for Rheodyne valves. The ring stand mounting bracket now allows the valves to mount onto common laboratory equipment.

Cat. No.	Description
5060	Teflon rotary valve angle mounting bracket
7160	Mounting panel
7160-010	Valve angle mounting bracket
7160-029	Ring stand mounting bracket
5060-007	"MX" Ring stand mounting bracket

Position Sensing Switch



The position sensing switch uses a magnetic reed to make a reproducible start to record the injection time in the data system of a chromatograph. This convenient, mountable switch is available for sample injectors without "i" versions.

Cat. No.	Description
7161-020	Position sensing switch: 7125
7161-016	Position sensing switch: 7010,7410,7413,7040
7165	Position sensing switch: 7520

Column Inlet Filters

Column inlet filters are useful accessories to extract particles from the sample between the injector and the column. Rheodyne offers filters and replacement filter discs of different ID sizes for low or medium dispersion. Column connecting tubes are also available.

Cat. No.	Description
7315	0.5µm Column inlet filter, 1.5mm ID
7315-010	0.5µm Replacement filter discs for 7315, 5/pk
7335	0.5µm Column inlet filter, 3.0mm ID
7335-010	0.5µm Replacement filter discs for 7335, 5/pk
7312-008	0.18mm x 60mm Connecting tube
7312-009	0.13mm x 60mm Connecting tube

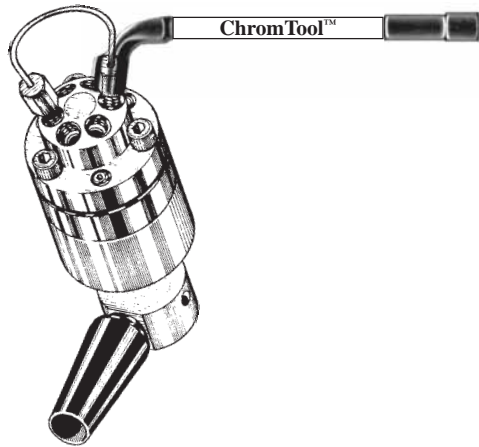
Rheodyne Wrench

The smartly designed Rheodyne wrench is a double-ended slotted socket wrench that fits over 1/16" and 1/8" ID tubing and loosens and tightens 1/4" and 5/16" stainless steel or PEEK fittings. The "Z" shape of the Rheodyne wrench provides ideal leverage for changing sample loops and fittings, and keeps one end from restricting the use of the other.

Cat. No.	Description
6810	Rheodyne wrench

Miscellaneous Replacement Parts

Cat. No.	Description
7125-008	Needle guide (for analytical front loading injectors)
7010-015	Isolation seal
7125-129	Set screw for knob, 10/pk



ChromTool™

- Great for those crowded fittings
- Slotted nut driver-fits over tubing

Have you ever tried to use an open-end wrench to tighten nuts on your HPLC injection valve? The ChromTool is a convenient slotted nut driver that fits around the nut (even on the short nuts of crowded HPLC injection valves).

The ChromTool is available in two sizes – 1/4" for standard HPLC nuts and 5/16" for Waters and SSI nuts.

Cat. No.	Description
CT-1000	ChromTool, 1/4"
CT-2000	ChromTool, 5/16"

Tech Tip: How to Find and Fix Common Leaks

Leaks cause valuable sample loss. Nobody wants this. The key to the valve holding pressure is the integrity of the sealing surfaces. If there is a scratch on the sealing surface, or the needle seal in the rotor seal is damaged, a leak may appear. It is also important to realize what appears to be a leak can instead be a result of siphoning. The following are the three most common situations in which fluid leaks occur.

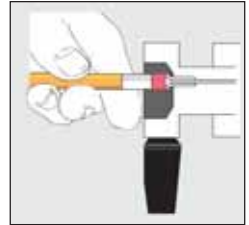
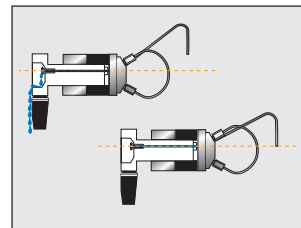


Fig 1. To reform the needle seal, push the eraser end of a pencil against the needle port.

1. If fluid leaks out of the needle port only while loading the loop, ie: while pushing down on the plunger of the syringe, the problem is most likely that the needle seal or the needle port fitting in the loop filler port is not gripping the syringe needle tightly enough to prevent leakage around the syringe needle. Tighten the needle seal grip by pushing down on the needle port or replace the needle port fitting to make a tighter grip on the needle. The tightening reduces the hole diameter of the needle seal and port fitting.
2. If fluid leaks continuously from the needle port or vent lines and/or from the stator-to-stator ring interface, the rotor seal and/or stator face assembly needs to be replaced. Scratches on the rotor seal or cracks in the stator face assembly allow mobile phase to escape and cause cross port leakage.



3. If fluid leaks from the needle port and/or vent lines but eventually stops, the cause is most likely siphoning and not a leak. Siphoning occurs if the vent lines are lower or higher than the needle port. Adjust the vent line(s) so that the outlet is at the same horizontal level as the needle port to prevent siphoning.



Syringes for Rheodyne Injection Valves

	MICROLITER 700SNR Fixed Needle	GASTIGHT 1700N Fixed Needle Small Bore	GASTIGHT 1700RNR Fixed Needle Large Bore	GASTIGHT Removable Needle	Replacement Needles, 6/pk Small Bore	Replacement Needles, 6/pk Large Bore
Volume	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.
10µL	80365			80065	7770-01	7770-02
25µL	80465	80275	80285	80265	7770-01	7770-02
50µL	80565	80975	80985	80965	7770-01	7770-02
100µL	80665	81075	81085	81065	7770-01	7770-02
250µL	80765	81175	81185	81165	7780-03	7780-04
500µL	80865		81216	81265	7780-03	7780-04
1mL			81316	81365	7780-03	7780-04
2.5mL			81416			
5.0mL			81516			

Rheodyne Fittings



ChromTRAC

- Easily track inlets and outlets of valves, columns, and detectors
- Dyed colors stay out of fluid stream



Rheodyne's innovative ChromTRAC color-coding system is the industry standard for simplifying your fluid connections. Seven ChromTRAC colors clearly identify tubing lines and visually distinguish different components in the same system. Combined with unique ChromTRAC mapped valves, the colored knobs on RheFlex fittings

allow you to coordinate port to fittings to system component without confusion. The mapping indicates the color standard of the ChromTRAC color-coded RheFlex fitting to be used in each port.

On RheFlex PEEK fittings, ChromTRAC knobs snap directly on nuts to make finger tightening easy. ChromTRAC knobs can easily fit over stainless steel nuts for visual flow path identification. These bright colors remain outside the fluid stream avoiding dye leaching into your sample.

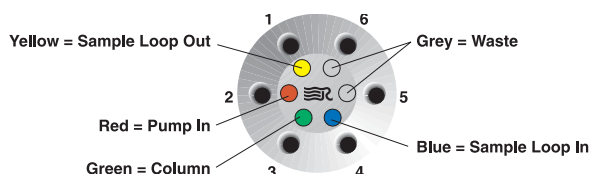
ChromTRAC is available in a fittings identification kit, a 20 pack of multicolored knobs. The fittings identification kit contains 20 ChromTRAC knobs in black (2), white (2), green (2), grey (2), yellow (4), red (4) and blue (4). These replaceable ChromTRAC knobs are compatible with RheFlex One-Piece; 10-32 1/16" RheFlex PEEK; all 1/4-28 RheFlex TF; and all 1/4-28 RheFlex flangeless fittings.

All RheFlex fittings listed above have the ChromTRAC knob option at the time of ordering by specifying the ChromTRAC two letter suffix for the color choice. ChromTRAC Suffix Codes below lists the color codes. "MC" refers to "multi-color" which includes two each of blue, green, grey, red and yellow.

Cat. No.	Description	Qty.	Price
6000-283	Identification kit, multi-color	20	

ChromTRAC Suffix Codes

Code	Color	Code	Color
BL	Blue	GN	Green
GY	Grey	RD	Red
WH	White	YL	Yellow
MC	Multi-color (for 10/pk only)		



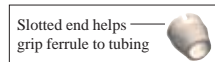
Typical 2-position, 6-port plumbing color-coded using ChromTRAC. ChromTRAC makes plumbing simple.

RheFlex One-Piece Finger Tight



RheFlex one-piece finger tight fittings for cone-bottom ports eliminates the need for separate nuts and ferrules. The convenience of one-piece fittings makes valve plumbing easier and faster. Rheodyne's 10-32, 1/16" one-piece fitting can be used with stainless steel, PEEK, and Teflon tubing. The reusable one-piece fitting can be finger tightened to hold 34MPa (345 bar, 5000 psi).

Cat. No.	Description	Qty.
6000-282*	One-piece fitting, 10-32 for 1/16"	10



RheFlex Two-Piece Fittings



RheFlex precision two-piece PEEK fittings sets for cone bottom ports provide inert, biocompatible connections for instrumentation. These dependable 1/16" PEEK fittings have a reliable, time-tested design. Three lengths of the 1/16" nut are available: Standard (24mm [0.96"]), Short (14mm[0.56"]), and Extra Long (33mm[1.32"]).

Due to the unique RheFlex gripping design, the 1/16" ferrule will hold onto PEEK and stainless steel tubing to hold 48MPa (483 bar, 7,000 psi). The RheFlex PEEK nut and ferrule can be reused.

RheFlex Two-Piece Fittings, 10-32, 1/16"

Cat. No.	Description	Qty.
6000-054*	10-32, 1/16" standard nut & ferrule	5
6000-055*	10-32, 1/16" short nut & ferrule	5
6000-066*	10-32, 1/16" extra long nut & ferrule	1
6000-051	1/16" RheFlex ferrule	5

Twist-Free Fittings for Flat-Bottom Ports



RheFlex twist-free (TF) fittings sets allow twist-free tubing connections for all flat-bottom ports. TF fittings are available in 1/16" and 1/8" with nuts containing 1/4-28 threads. The RheFlex TF fittings are capable of high pressure connections.

The nut snaps onto the ferrule while the fitting is screwed into the port. Since the nut and the ferrule snap together, the fittings remain firmly on the tubing instead of sliding down during disconnection.

RheFlex Twist Free Fittings, 1/4-28

Cat. No.	Description	Qty.
6000-274*	1/4-28, 1/8" TF fittings set	10
6000-275*	1/8" Replacement ferrules	10
6000-276*	1/4-28, 1/16" TF fittings set	10
6000-277*	1/16" Replacement ferrules	10

*ChromTRAC compatible. Specify the two letter suffix after the fitting's seven-digit catalog number for the ChromTRAC knob color of your choice. No suffix indicates black knobs.

Flangeless Fittings for Flat-Bottom Ports



RheFlex flangeless fittings sets are economical, easy-to-install fittings for all flat-bottom ports. Rheodyne's flangeless fittings are available in both 1/16" and 1/8" with nuts containing 1/4-28 threads. This two-piece fittings set contains a PEEK nut and a Tefzel ferrule which makes fittings replacement simple.

RheFlex Twist Free Fittings, 1/4-28

Cat. No.	Description	Qty.
6000-278*	1/4-28, 1/8" Flangeless fittings set	10
6000-279	1/8" Replacement ferrules	10
6000-280*	1/4-28, 1/16" Flangeless fittings set	10
6000-281	1/16" Replacement ferrules	10

*ChromTRAC compatible. Specify the two letter suffix after the fitting's seven-digit catalog number for the ChromTRAC knob color of your choice. No suffix indicates black knobs.



SS Fittings for Cone-Bottom Ports

RheFlex 316 stainless steel fittings sets can be used in Rheodyne stainless steel valve and sample loops. Each 1/16" fittings set contains a 10-32 threaded nut and a ferrule.

Three lengths of the 1/16" nut are available:

- Standard (9.7mm [0.38"])
- Long (13.5mm [0.53"])
- Extra long (17.0mm [0.67"])

Rheodyne recommends extra long nuts for fittings that are frequently disconnected especially when space is restricted. RheFlex stainless steel fittings must be wrench-tightened. Replacement stainless steel ferrules are available. ChromTRAC knobs from the ChromTRAC fittings identification kit fit over stainless steel nuts for color-coding fluid connections.



RheFlex SS Fittings, 10-32, 1/16"

Cat. No.	Description	Qty.
6000-109	10-32, 1/16" Standard fitting set	5
6000-111	10-32, 1/16" Long fitting set	5
6000-162	10-32, 1/16" Extra long fitting set	5
6000-110	1/16" Replacement ferrules	5
8125-084	0.5mm (.02") Ferrule (8125 only)	1

RheFlex Accessories

Cat. No.	Description	Qty.
6000-090	10-32 PEEK Plugs	5
6510	1/4-28 Coupling	5
6518	1/4-28 Plugs	5
6019	1/4-28 Male to female luer adapter	1
6000-076	5/16-24 M to 10-32 F Adapter, PEEK	1
6810	Rheodyne wrench	1

5/16-24, 1/8" Fittings

These 1/8" fittings sets can be used in all Rheodyne preparative scale valves. Both the 316 stainless steel fittings and RheFlex PEEK fittings must be wrench-tightened.

RheFlex Fittings, 5/16-24, 1/8"

Cat. No.	Description	Qty.
6000-082	5/16-24, 1/8" SS Fitting set	1
6000-083	1/8" Replacement SS ferrules	5
6000-078	5/16-24, 1/8" PEEK Fitting set	1
6000-079	1/8" Replacement PEEK ferrules	5

M4 Fittings for Coned-Bottomed Ports

RheFlex M4 fittings are available in PEEK. Each fitting has a one piece design that provides a dependable zero dead volume connection for micro and nano applications. Due to the unique RheFlex gripping design, the M4 fittings hold onto PEEK or fused silica tubing to hold 5,000 psi. PEEK M4 plugs are also available.

RheFlex Fittings, M4 Fittings

Cat. No.	Description	Qty.
6000-360	M4 PEEK Fittings set	10
6000-361	M4 PEEK Plugs	10

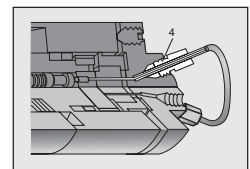
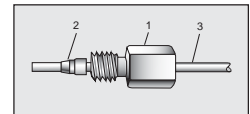
Tech Tip: How to Properly Install Fittings

RheFlex Stainless Steel

A good square-cut, burr-free end on tubing is important for use in your system. The square-cut makes a flat surface for the tube to make contact against the bottom of the valve port. Without this contact, a cavity will form which causes high dispersion and peak distortion such as fronting, tailing, or broadening.

To install the tubing:

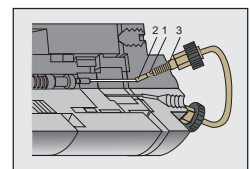
- Place the nut (1) and ferrule (2) with threaded portion of the nut and tapered portion of the ferrule onto the tubing (3).
- Insert the tubing into the valve port (4). Confirm that the tubing is bottomed in the valve port as shown.
- While firmly pressing down on the tubing, fingertighten the nut as tight as possible.
- With a wrench, tighten one 90° turn past finger tight. Remove the fitting to confirm that the ferrule is swaged onto the tube.



View of SS fittings installation

RheFlex PEEK Fittings and PEEK Tubing

PEEK tubing is flexible and easy to cut with a sharp blade. Confirm that the ends are clean and straight, and that the inner passage is fully open. To install the tubing follow steps a-c in the SS section above. Finger tightening of 1/16" PEEK fittings is adequate to make a leak-free connection. The 1/8" PEEK fittings need to be wrench-tightened.



View of PEEK fittings installation

The slotted backside of the ferrule (1) is squeezed down onto the tube (2) by the mating conical surface in the nut (3). The nut and ferrule can both be reused many times. Unlike ordinary PEEK fittings, Rheodyne's unique RheFlex PEEK design, specifically the angles and surface contacts between the ferrule and nut, prevents the nut from gripping the ferrule and twisting both the ferrule and the tube during tightening. Otherwise, such twisting stresses the PEEK tubing and lowers the pressure rating of the tubing.