

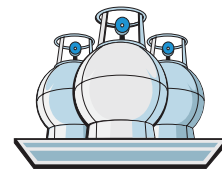
Passive Air Sampling Kits—Integrated (Stainless Steel & Siltek®-Treated)

Superior Performance—an Excellent Restek® Value

- Provide accurate integrated sampling without a sampling pump.
- Siltek®-treated components ensure accurate sampling of active components.
- Excellent for sampling times from 0.5 hour to 125 hours.

Restek's passive air sampling kit incorporates all the hardware necessary to collect air samples and is easy to assemble for field sampling.* The improved filter design greatly reduces the number of potential leak sites.

The passive air sampling kit is available in seven sampling flow ranges and in stainless steel or Siltek®-treated finish. The stainless steel kit is ideal to partner with the Restek® TO-Can® air sampling canister for TO-14A and TO-15 methods. Use the Siltek®-treated version with the Restek® SilcoCan® air sampling canister when collecting low-level volatile sulfur compounds or other active compounds.



400 cc	Canister Volume/Sampling Time				Flow	Orifice Size	Siltek-Treated cat.#	Stainless Steel cat.#
	1 Liter	3 Liter	6 Liter	15 Liter				
8 hour	24 hour	48 hour	125 hour	—	0.5–2 mL/min	0.0008"	24217	24216
2 hour	4 hour	12 hour	24 hour	60 hour	2–4 mL/min	0.0012"	24160	24165
1 hour	2 hour	6 hour	12 hour	30 hour	4–8 mL/min	0.0016"	24161	24166
—	1 hour	4 hour	8 hour	20 hour	8–15 mL/min	0.0020"	24162	24167
—	—	2 hour	3 hour	8 hour	15–30 mL/min	0.0030"	24163	24168
—	—	1 hour	1.5 hour	4 hour	30–80 mL/min	0.0060"	24164	24169
—	—	—	0.5 hour	1 hour	80–340 mL/min	0.0090"	22101	22100

also available

- ▶ See **page 434** for miniature air sampling kits.
- ▶ See **page 433** for canister and flow controller repair service.

*Vacuum/pressure gauge included in kit; air sampling canisters sold separately.

1. Veriflo® SC423XL flow controller

This flow controller is the heart of the sampling train. It is a high-quality device designed to maintain a constant mass flow as the pressure changes from –30" Hg to 7" Hg (we recommend you stop sampling at or before 7" Hg of vacuum). All wetted parts of the flow controller can be Siltek® treated.

2. Stainless steel vacuum gauge, 1/8-inch NPT

Fitted to the flow controller, the gauge monitors canister vacuum change during sampling.

3. 1/4-inch Siltek® sample inlet

The 0.3 m x 1/4" tubing includes a stainless steel nut on the inlet end to prevent water droplets from accumulating at the edge of the tubing, where they could be pulled into the sampling train.

4. 2-micron frit filter and washer

Located prior to the critical orifice to prevent airborne particles from clogging the critical orifice. Replaceable. Available in stainless steel or Siltek® treated for optimum inertness.

5. Interchangeable critical orifice

An interchangeable ruby critical orifice allows you to control the flow with very high precision.

Note: All fitting connections are 1/4" tube, except where noted.



Stock up or buy only the parts you need now!

Replacement Orifices

Use these orifices with a Veriflo® 423XL flow controller to change the flow range for alternative sampling times.



Description	Flow	Orifice Size	Siltek Treated cat.#	Stainless Steel cat.#
Replacement Orifice	0.5–2 mL/min	0.0008"	24219	24218
Replacement Orifice	2–4 mL/min	0.0012"	24233	24245
Replacement Orifice	4–8 mL/min	0.0016"	24234	24246
Replacement Orifice	8–15 mL/min	0.0020"	24235	24247
Replacement Orifice	15–30 mL/min	0.0030"	24236	24248
Replacement Orifice	30–80 mL/min	0.0060"	24237	24249
Replacement Orifice	80–340 mL/min	0.0090"	22099	22098



2 µm Frit Filters

For use in critical orifice fitting. Includes washers.

Description	qty.	Siltek Treated cat.#	Stainless Steel cat.#
Replacement Frit Filter	3-pk.	24171	24170

Veriflo® Flow Controllers

Veriflo® 423XL flow controllers are offered in a Siltek®-treated and stainless steel version. The flow device is available with or without a critical orifice. (Vacuum gauge sold separately.)

The critical orifice in a Veriflo® flow controller is interchangeable. Order orifices for alternate sampling times, or replacement orifices, separately.



Description	Flow	Orifice Size	Siltek Treated cat.#	Stainless Steel cat.#
Veriflo Flow Controller	0.5–2 mL/min	0.0008"	24232	24229
Veriflo Flow Controller	2–4 mL/min	0.0012"	24255	24260
Veriflo Flow Controller	4–8 mL/min	0.0016"	24256	24261
Veriflo Flow Controller	8–15 mL/min	0.0020"	24257	24262
Veriflo Flow Controller	15–30 mL/min	0.0030"	24258	24263
Veriflo Flow Controller	30–80 mL/min	0.0060"	24259	24264
Veriflo Flow Controller	80–340 mL/min	0.0090"	22103	22102
Veriflo Flow Controller	—	without orifice	24238	24239



7 µm In-Line Filter

This 316 stainless steel filter is designed to collect particles larger than 7 microns. We offer Siltek®-treated and stainless steel versions (1/4" compression fitting on both ends).

Description	qty.	Siltek Treated cat.#	Stainless Steel cat.#
7 µm In-Line Filter	ea.	24265	24266

Note: frit is not replaceable.

Sample Inlets

- Inlets have 1/4" stainless steel compression fitting on each end.
- One end connects to flow controller or canister; nut on other end serves as rain guard.
- Includes nuts and ferrules.
- Two different lengths for use with large canisters and miniature canisters.



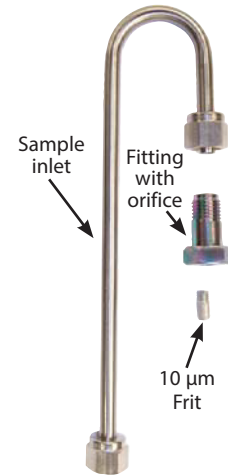
Description	qty.	Siltek Treated cat.#	Stainless Steel cat.#
Sample Inlet, 6" Length	ea.	26210	26209
Sample Inlet, 1.5" Length	ea.	26212	26211

Passive Air Sampling Kits—Grab (Stainless Steel & Siltek®-Treated)

- Use with 1, 3, or 6 L canisters for grab air sampling.
- Variety of orifice sizes for fast sampling from 5 to 60 minutes.
- Connect 1/4" compression fitting directly to canister valve inlet.
- Replaceable frit protects orifice and valve from particulates.
- Sample inlet design minimizes water entry into sampling train.
- Individual replacement components available.

Canister Volume/Sampling Time (min)			Flow	Orifice Size	Siltek-Treated	Stainless Steel
1 Liter	3 Liter	6 Liter			cat.#	cat.#
60	—	300	15 mL/min	0.0018"	26280	26263
45	—	240	20 mL/min	0.0020"	26281	26264
15	60	120	45 mL/min	0.0030"	26282	26265
10	30	60	80 mL/min	0.0040"	26283	26266
5	15	30	150 mL/min	0.0055"	26284	26267
—	—	15	300 mL/min	0.0080"	26285	26268
—	5	10	390 mL/min	0.0090"	26286	26269
—	3	5	>1,000 mL/min	0.0130"	26287	26270

Air sampling canisters sold separately.



Unassembled kit components

Replacement Fittings for Grab Sampling Kits

Includes fitting and orifice.

Description	Orifice Size	Siltek-Treated cat.#	Stainless Steel cat.#
Replacement Fitting for Grab Sampling Kit	0.0018"	26288	26271
Replacement Fitting for Grab Sampling Kit	0.0020"	26289	26272
Replacement Fitting for Grab Sampling Kit	0.0030"	26290	26273
Replacement Fitting for Grab Sampling Kit	0.0040"	26291	26274
Replacement Fitting for Grab Sampling Kit	0.0055"	26292	26275
Replacement Fitting for Grab Sampling Kit	0.0080"	26293	26276
Replacement Fitting for Grab Sampling Kit	0.0090"	26294	26277
Replacement Fitting for Grab Sampling Kit	0.0130"	26295	26278

Replacement 10 µm Frits for Grab Sampling Kits

Description	qty.	Siltek-Treated cat.#	Stainless Steel cat.#
10 µm Frit for Grab Sampling Kit	3-pk.	26296	26279

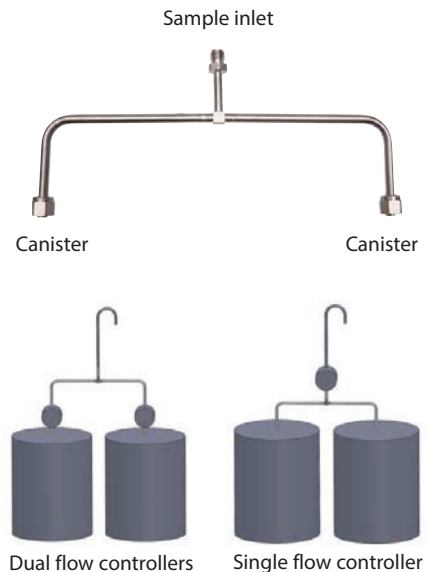


Assembled kit on canister
Air sampling canisters sold separately.

Dual Canister Sampling Manifold (Stainless Steel & Siltek®-Treated)

- Duplicate sampling with all canister sizes using one or two flow controllers.
- Precise dimensions (9.5" wide x 3.5" high) provide accurate splitting of sample between two canisters.
- One-piece design means fewer leaks.
- Thick-walled stainless steel tubing is rugged enough for field use.
- Uses 1/4" compression connections.

Field duplicates of canister samples frequently result in analyte concentrations with high relative standard deviations. In addition, field duplicates do not differentiate laboratory performance from sampling variability. Restek's dual canister sampling manifold (DCSM) minimizes sampling variability through a single sample inlet and flow controller by which the sample is evenly collected between two canisters. Use of a single flow controller eliminates flow rate variability, as well as environmental variables common with collocated samples. The DCSM may also be used with two flow controllers to monitor individual canister vacuum.



Description	qty.	Siltek-Treated cat.#	Stainless Steel cat.#
Dual Canister Sampling Manifold	ea.	24999	24998

Note: Do not use the DCSM as a handle to pick up 2 canisters!



22930



Assembled kit on canister

Air sampling canisters sold separately.

Passive Air Sampling Kits—Soil Gas (Stainless Steel & Siltek®-Treated)

This unique grab sampler is specifically designed for soil gas sampling by allowing the connection of tubing coming from the soil gas sample port. The innovative design minimizes connections and leaks and houses a critical orifice in the tee fitting. It also incorporates a vacuum gauge and 2 µm frit filter.

Assembled sampler includes:

- Stainless steel tee with orifice.
- Variety of orifice sizes for sampling from 4 minutes to 10 hours.
- 1 1/2" vacuum gauge (-30" Hg to 0" Hg).
- 2 µm frit filter for insertion into 1/4" compression sample inlet.

The 1/4" compression inlet and outlet allows easy connection to the canister valve and also to the tubing from the sample port. Several orifice sizes provide sampling times from 4 minutes to 10 hours on a 6 L canister. Individual replacement parts are available, providing a cost-effective alternative to replacing the entire sampler.

Canister Volume/Sampling Time		Flow		Orifice Size	Siltek-Treated cat.#	Stainless Steel cat.#
1 Liter	6 Liter					
4 min	20 min	210 mL/min	0.0065"	22935	22930	
6 min	30 min	150 mL/min	0.0055"	22936	22931	
10 min	1 hr	80 mL/min	0.0040"	22937	22932	
30 min	3 hr	30 mL/min	0.0025"	26337	26336	
45 min	4 hr	19 mL/min	0.0020"	22938	22933	
2 hr	10 hr	6 mL/min	0.0014"	22939	22934	

Air sampling canisters sold separately.

Replacement Tees w/Orifice for Soil Gas Sampler Kits

Description	Orifice Size	Siltek-Treated cat.#	Stainless Steel cat.#
Soil Gas Sampler Replacement Tee w/Orifice	0.0065"	22945	22940
Soil Gas Sampler Replacement Tee w/Orifice	0.0055"	22946	22941
Soil Gas Sampler Replacement Tee w/Orifice	0.0040"	22947	22942
Soil Gas Sampler Replacement Tee w/Orifice	0.0025"	26339	26338
Soil Gas Sampler Replacement Tee w/Orifice	0.0020"	22948	22943
Soil Gas Sampler Replacement Tee w/Orifice	0.0014"	22949	22944



22940

Replacement Parts for Soil Gas Sampler Kits

Description	qty.	cat.#
Vacuum Gauge, 1 1/2"	ea.	24120
Replacement Frit Filter, Stainless Steel	3-pk.	24170
Replacement Frit Filter, Siltek-Treated	3-pk.	24171
Port Connector, 1/4", Siltek/Sulfinit-Treated	ea.	21549
Port Connector, 1/4", Stainless Steel	2-pk.	21936
Nut & Ferrule Set, 1/4", Stainless Steel	5-pk.	21911
Nut, 1/4", Stainless Steel	10-pk.	21902



24120



24171

24170

(Frits do not control flow.)

also available

VCO® Fittings

- Use VCO® fittings for rapid assembly to cleaning system.
- Protect canister valves, flow controllers, and cleaning system fittings.

See **page 316**.

