

Soil Gas Sampler

cat.# 22930-22949

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: (Figure 1)

1. Stainless steel tee with orifice.
2. 1½" vacuum gauge (-30" Hg to 0" Hg).
3. 2 μm frit filter for insertion into ¼" compression sample inlet.
4. ¼" port connector to canister valve.

The ¼" 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 20 min. to 10 hours on a 6 L canister. Individual replacement parts are available, providing a cost-effective alternative to replacing the entire sampler.

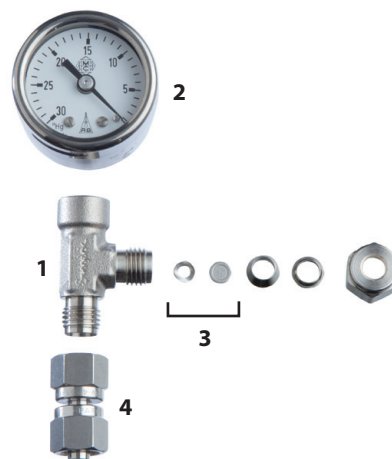


Figure 1 Sampler components

Instructions

1. Choose orifice size to deliver the desired flow rate and/or sampling time.
2. Note that the frit filter and spring washer are separate pieces that are held in place when the sample port tubing is securely attached. Use caution when assembling/disassembling as these pieces are not permanently affixed.

To assemble the sampler: (Figure 2)

- a. First, insert the spring washer, curved side first, into the tee.
 - b. Next, insert the frit filter disc, dimpled side first, into the tee.
3. Connect ¼" stainless steel or PTFE tubing by threading it through the nut and ferrules, and then tightening it on the male side port of the tee. (Figure 3)
 4. Attach port connector to canister valve.
 5. Connect tubing from sampler inlet to sampling port inlet.
 6. Open canister valve and collect sample at up to -5" Hg vacuum.

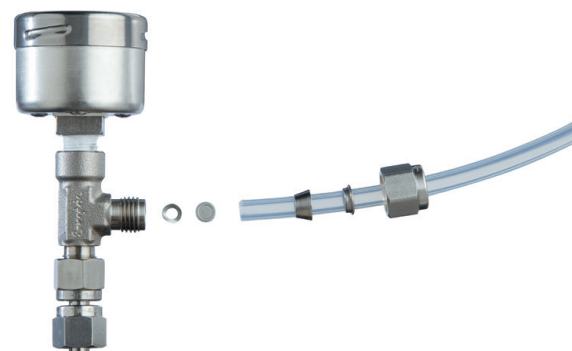


Figure 2 Assembling the sampler.

Maintenance

- Replace frit filter frequently to minimize plugging.
- After removing the gauge, rinse components with methanol and oven dry at 130 °C. (Gauge maximum temperature is 80 °C.)
- Do NOT sonicate the critical orifice, as damage may occur.



Figure 3 Sampler installed on a canister

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

Sampling Time		Flow	Orifice Size	Siltek Treated	Stainless Steel
for 1 L Canister	for 6 L Canister			Soil Gas Sampler Kit	Soil Gas Sampler Kit
				cat.#	cat.#
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
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 (Stainless Steel & Sulfinert® Treated)

Orifice Size	Siltek Treated	Stainless Steel
	Replacement Tee w/Orifice	Replacement Tee w/Orifice
	cat.#	cat.#
0.0065"	22945	22940
0.0055"	22946	22941
0.0040"	22947	22942
0.0020"	22948	22943
0.0014"	22949	22944

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/Sulfinert 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

Contact Technical Service at 1-800-356-1688, 1-814-353-1300, ext. 4, or support@restek.com (or contact your Restek representative) if you have any questions about this product or any other Restek product.



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