



Instructions for Canister Sampling with Pneumatic Flow Controllers

1. Inspect your canister shipment upon arrival. Compare the contents with the packing slip and notify Braun Intertec of any discrepancy or damage.
2. Familiarize yourself with this diagram and the equipment you received. The flow controller will be set for the appropriate sampling rate in the laboratory and will not require adjustment.
3. Remove the brass caps from the flow controller and canister. Connect the flow controller to the canister by inserting the “canister connection” into the “canister inlet” and hand tighten the Swagelock[®] nut—being careful not to cross the threads. Using two open-end wrenches (1/2 inch and 9/16 inch) tighten the nut no more than 1/8 turn past finger tight. **DO NOT** use adjustable end wrenches or pliers.
4. The fittings are Swagelock[®] compression fittings. Do not use Teflon[™] tape or other sealants; they are not necessary. **DO NOT OVERTIGHTEN** any connection. Over-tightening will cause leaks, not fix them.
5. The canister and controller are now ready for ambient air sampling. If you intend to sample a remote location or source, you will need to attach a sampling line. This should be 1/4 inch O.D. tubing of virgin Teflon[™] or cleaned 316 stainless steel.
6. If arranged with your canister order, we have provided a Swagelock[®] nut and set of nylon ferrules for connecting a sample line. Slide the nut, the back ferrule, then the front ferrule onto the tubing. Insert the tubing into the canister inlet and slide the ferrules into the fitting.
7. Secure with the nut being careful not to cross the threads. When using nylon ferrules, a snug finger tight should be sufficient for a leak free connection.
8. To begin sampling, simply open the canister valve. (There are two types of valves; rotary and toggle valves.) One full turn is sufficient. Note the vacuum gauge reading. The vacuum reading should be near the uncorrected barometric pressure.
9. If you requested a vacuum gauge, you can watch the decline in the vacuum to gauge the sampling rate. A one-hour sample should drop in vacuum at a rate of 0.5 inch Hg per minutes (i.e., 30 inches/60 min.).
10. Remember, this is a rough estimate. The sampling rate is normally set in the laboratory. Occasionally, the controller will lose calibration in shipment. If necessary, contact your Braun Intertec project manager for assistance.
11. After sampling is complete, close the canister valve. **DO NOT OVERTIGHTEN** the rotary valve as this will damage the valve.
12. Disassemble the components in reverse order of the above assembly instructions. Return all components to the original shipping containers and package them as received.
13. Verify that all parts are packed for return by referencing the packing slip. The project will be charged for all missing or damaged components.
14. Complete a Chain of Custody Record and return with the sample to Braun Intertec for analysis. Please reference the canister ID on the chain of custody.