操作手册

VAC-U-GO 采样泵
Catalog No. 228-9605 and 228-9605B

The Vac-U-Go non-compensating vacuum pump is a rotary vane-type pump that provides flows up to 30 L/min and maintains sonic flow when used with the BioSampler®. AC-powered, the Vac-U-Go Sampling Pump can be used for a variety of ambient and indoor air sampling applications including asbestos, bioaerosol, stack, VOC, and fenceline monitoring. It is ideal for sampling bioaerosols using the SKC BioSampler or the AGI-30 Impinger.

The line-operated Vac-U-Go Sampling pump has a permanently lubricated motor that is mounted in a housing with a vacuum pressure gauge to indicate sonic flow and a throttling valve to adjust flow. Both models are supplied with an extension rod for mounting media and a power cord.

Performance Profile

Flow range:	Non-compensated airflow up to 30 L/min Sonic flow with BioSampler (acts as a critical orifice) is approximately 12.5 L/min
Motor:	Oil-less rotary vane
Vane life:	Approximately 6000 to 27,000 hrs depending on application
Power:	Line power only 115 V, AC, 60 Hz (Cat. No. 228-9605) 230 V, AC, 50 Hz (Cat. No. 228-9605B)
Operating temperature range:	32 to 104 F (0 to 40 C)
Size:	5.5 x 10.5 x 6.5 ins (13.9 x 26.7 x 16.5 cm)
Weight:	12 lbs (5.4 kg)
Standards:	None. Pump is **not** intrinsically safe
Tubing:	1/4-inch ID reinforced polyurethane tubing

Not intended for use outdoors

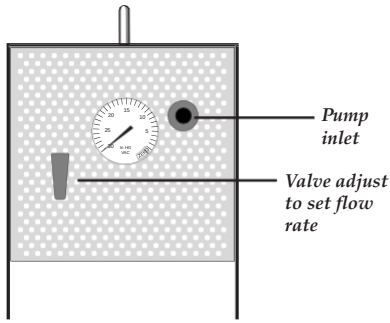
Cautions

- ***Pump only clean, dry air.***
- ***Protect pump from dirt and moisture.***
- ***Pump is not intended for use outdoors.***
- ***Protect surrounding items from pump exhaust air.***
- ***Use only a three-wire grounded cable.***
- ***Pump produces a high-pitched whine when operated.***
- ***Do not pump flammable or explosive gases.***
- ***Do not operate pump in hazardous locations; <u>not</u> UL Listed for intrinsic safety***

Operation

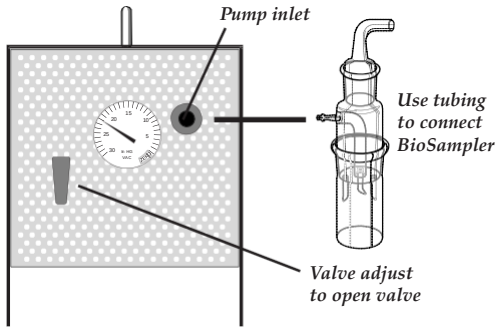
The Vac-U-Go Sampler can be operated in two different modes: non-compensating and BioSampler. Vac-U-Go is non-compensating, therefore, it is not suitable for compliance sampling in non-sonic mode. For indoor air studies, compliance, or other applications that require a quiet, compensating vacuum pump, use the QuickTake 30 or QuickTake 15 Sample Pump.

Non-compensating Mode



1. Use flexible tubing to connect the outlet of a representative sample medium to the pump inlet.
2. Connect a rotameter or calibrator to the sample medium inlet.
3. Using the provided power cable, plug the pump into a wall outlet and press the pump power switch to the "on" position.
4. Use the valve adjust to set the desired flow rate *(see rotameter/calibrator operating instructions)*.
5. Remove rotameter or calibrator and replace representative sample medium with a new unexposed medium.
6. Sample for the desired sampling period.
7. Turn off pump and unplug from wall outlet.
8. Package sample appropriately for shipment to a laboratory.

BioSampler Mode



1. Prepare BioSampler (*see BioSampler Operating Instructions*). Use flexible tubing to connect the BioSampler outlet to the pump inlet.
2. Using the provided power cable, plug the pump into a wall outlet and press the pump power switch to the "on" position.
3. Use the valve adjust to open the valve fully. The pressure gauge should indicate > 15 inches Hg vacuum.

Note: *The BioSampler features built-in critical orifices. No other orifice is needed to achieve sonic flow.*

4. Sample for the desired sampling period.
5. Turn off pump and unplug from wall outlet.
6. Package sample appropriately for shipment to a laboratory (*see BioSampler Operating Instructions*).

Note: *Sonic flow is attained when a vacuum pump pulls air through an orifice to create a condition where the downstream pressure is 52% of the upstream pressure. At this point, air velocity through the orifice has reached the speed of sound and cannot increase, therefore, the orifice becomes "critical." The fixed air velocity at the critical orifice also limits the airflow so that the condition remains constant regardless of pressure variations in the system. Airflow will remain constant at vacuum levels ≥ 15 inches Hg.*

Accessories

Description	Catalog No.
Rotameter Measures 4 to 50 L/min on a 4-inch scale at 3% accuracy (full scale)	320-440
Certificate of Compliance, optional, *must be ordered when ordering pump*	P1501
Tubing, polyurethane, 1/4-in ID, 15/32-in OD, reinforced to prevent kinking, 10 feet	225-1350

SKC Limited Warranty and Return Policy

SKC products are subject to the SKC Limited Warranty and Return Policy, which provides SKC's sole liability and the buyer 's exclusive remedy. To view the complete SKC Limited Warranty and Return Policy, go to http://www.skcinc.com/warranty.asp.

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