



PVS 4100 Portable Samplers

Easy-to-use, Accurate, Durable, Dependable

The PVS 4100 is SIRCO's most deluxe portable solution for sampling, built with the same, reliable, long-lasting vacuum technology as the stationary samplers. The vacuum system of sampling results in accurate and dependable results, even with high sediment content or rapid velocities at the sample source. Portable models feature either discrete or composite sampling and a programmable controller with 16-key intuitive touchpad.

A rugged design and precision in construction give these portable samplers the ability to be set up in one location over time, yet they are easily transportable. Over the years, we have worked at lightening the PVS 4100, until today where it weighs in at a mere 26 pounds! Internal batteries can operate seven days or more, even longer with the addition of an external battery source, or one could simply plug them into a permanent power source.

The portable samplers are designed to fit a variety of different locational challenges, and can be hung with a suspension system built with a stainless steel harness.

The enclosure of the PVS 4100 is a molded medium-density linear polyethylene, designed to handle tough environmental challenges and weathering. The hub has an insulated ring and a cavity for crushed ice, giving more control over the temperature of the samples.

* Weight does not include 15 Lbs. battery.

CODE	TYPE	CODE
C	COMPOSITE (INCLUDES SAMPLE CONTAINER CODE "B")	C
D	DISCRETE (INCLUDES SAMPLE CONTAINER CODE "D")	D
CODE MICROPROCESSOR		
M	MULTI-FUNCTION INPUT CONTROLLER (STANDARD)	M
X	SPECIAL SOFTWARE	X
CODE METERING CHAMBER ASSEMBLY - (ACRYLIC STANDARD)		
1	3/8 ID. X 500CC. (STANDARD)	1
2	5/8 ID. X 500CC. (COMPOSITE ONLY)	2
9	SPECIAL	9
CODE THIS CODE ALLOTTED FOR FUTURE DEVELOPMENTS		
S	STANDARD	S
CODE SAMPLE CONTAINER - (NALGENE STANDARD)		
B	8 LITRE (2 U.S. GALLONS) STANDARD WITH COMPOSITE	B
D	24 X 500CC. (1 U.S. PINT) STANDARD WITH DISCRETE	D
X	SPECIAL	X
CODE ENCLOSURE		
1	STANDARD	1
9	SPECIAL	9
CODE OPTIONS		
I	115 VAC ONLY	I
J	115 VAC / 12 VDC WITH INTEGRAL BATTERY CHARGER & CABLE	J
K	EXTERNAL 12 VDC SUPPLY CABLE	K
L	S.S. SUSPENSION HARNESS	L
N	S.S. INTAKE HOSE STRAINER	N
X	SPECIAL	X

Partial nomograph. For a complete listing contact Southwell.



Features

- Optional harness unit for suspending samplers (e.g. in sewage systems).
- Optional tilt wheel assembly for easy transport.
- Optional side handles for easy lifting (increases diameter).
- Controller housed in an environmentally sealed enclosure for corrosion protection, and all information is easily controlled and viewable on a 2x16 character backlit LCD.
- Rapid transport velocities of samples (over 4.5 ft/sec for sample lifts of up to 20 ft and over 5 ft/sec for horizontal draws at 75 feet), meaning more accurate samples, even of solids over high lifts.
- Composite or discrete options, taking samples into anywhere from one to twenty-four containers.
- Three-year warranty.

SIRCO PVS 4100 PORTABLE SAMPLER

Sampler		Vacuum System	
Height	31.875 inches 809 mm	Pinch Valve	Fixed – normally open
Body Case Diameter	16.85 inches 428 mm	Purge Cycle	Adjustable – 5 to 99 seconds
Weight (without battery)	26 lbs 11.8 kg	Suction cycle	Variable – adjusts automatically to double the input value of the purge time setting or until liquid contacts level electrode in metering chamber
Enclosure	Molded medium density linear polyethylene, 3 piece construction and all SS fittings.	Sample Volume	Adjustable, 50cc to 500cc
Supply Voltage	Integral Battery: 12Vdc 17AH (15 lbs) External receptacle: 12Vdc * 120 Vac/12 Vdc with integral battery charger and power cable * AC only option available	Sample Transport Velocity	Vertical: Minimum of 4.5 ft/s at 20ft of lift (3/8" ID intake) Vertical: Minimum of 3 ft/s at 16ft of lift (5/8" ID intake) Horizontal: Minimum of 5 ft/sec at 75 ft 5.5 ft/sec at 3ft of lift Exceeds EPA minimum speed of 3 ft/sec
Cooling System	Insulated container wall Cavity space for ice	Metering Chamber	Acrylic 500cc, 100cc calibration * Pyrex 500cc, 100cc calibration
Controller		Metering Chamber Cover	Nylon * Reinforced Teflon top
Display	2x16 character backlit LCD	Volume Control Tube	316 stainless steel
Touchpad	16-key, calculator-type with multi-level menus	Metering Chamber Level	316 stainless steel
Start Delay	Disabled; Time/Day; Pulse Count; 4-20mA (0-100 pulses/minute); External Contact; Level Control	Electrode	
Sample Initiation	Disabled; Interval Time; Pulse Count; 4-20mA (0 to 100 pulses/minute); External Contact	Intake Hose	Nylon reinforced PVC (3/8"ID by 25' c/w sinker) * Nylon reinforced PVC (5/8"ID by 25' c/w sinker) * Teflon lined PVC (1/2"ID by 25' c/w SS sinker)
Program Type	Composite; Multi-Composite; Consecutive; Daily Cycle; Timed Step	Discharge Hose	Latex, 3/8" ID * Latex, 5/8" ID * Silicone, 3/8" ID * Silicone, 5/8" ID
Clock	Real Time clock & operating system	Sample Containers (composite only)	* 2.3 US gallon (9 litre) high density polyethylene * 2.5 US gallon (10 litre) glass
Direct Function Keys	Manual sample; Manual purge; Manual bottle advance; Restart	Sample Container (discrete only)	24 x 500cc polyethylene
Switches	Controller "on/off" (SPST toggle)	Options	
Available displays	Real time clock; Process timing; Process totals; Pulse counting; Event response; Multi-level descriptions; Flashing prompts; Diagnostics	Extra Battery	12Vdc 17AH (15 lbs)
Automatic displays	Container Full; Fault; Power Interrupt (program resumed); Alternating Time Stamp; Cycle(s) abandoned	Tilt Wheel Assembly	For easy wheeled transport
Backup Power Source	Internal Lithium battery to maintain program settings & info in the case of power failure	Optional Side Handles	For easier carrying (increases diameter)
		Other custom options available upon request	
		Optional extended warranty (up to 5 years)	

* Optional features are marked with an asterix

Specifications

Effluent/liquid sampling unit is to be of the vacuum-type mode of operation, for the collection of liquids at user-specified criteria. Portable unit will have an enclosure of medium-density linear polyethylene or equivalent. Vacuum system is to include a pressure purge before sampling in order to keep system free from contaminants. Control pad will be able to initiate sampling based on user criteria, including but not limited to 4-20mA, interval time, external contact, and manual override. Sampler to be manufactured in Canada or the United States only, and have a three (3) year warranty. Sampling unit to be a PVS 4100 Sirco Sampler manufactured by Southwell, or approved equivalent.

SIRCO SAMPLERS

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