



SOUTHWELL SAMPLERS

BVS 4300 Outdoor Stationary Samplers

"Durable, Easy-to-use, Accurate, Dependable"

The BVS 4300 Outdoor Stationary Sampler is designed to handle extreme conditions in the toughest of environments and take samples reliably for years and years with little to no maintenance cost. Simply put, they are built tough.

The enclosure is made with durable, heavy-gauge steel or stainless steel, coated with heat-cured polyester-based powder paint for added corrosion resistance.

The sampler uses Southwell's patented vacuum sampling method of collection, the most accurate and reliable system for collecting liquid samples to date.

With a multitude of options, samplers can be made to handle the toughest of applications, including a strong pyrex metering chamber, a teflon-lined hose, a teflon reinforced cover, or a stainless steel sinker strainer.

Also available in 3/8" or 5/8" line size, for more difficult sampling situations.



Features

- Easy-to-use controller constructed to last dependably for decades through most conditions.
- Locking door & bolted down instrument panel, for added security and safety.
- Pull-out tray, useful for maintenance technicians who can easily inspect the modular components of the sampler system.
- Optional cabinet insulation and a thermostatically-controlled forced-air heater, for colder weather climates.
- Dual-system options: two metering chambers and sample containers with either single or dual controllers.
- All parts & upgrades have been designed to retro-fit previous models for easy upgrading of old samplers!
- Built to last, in our CSA-certified shop.
- Two-year warranty.

CODE	TYPE	CODE
C	COMPOSITE	C
D	DISCRETE	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
3	3/8 ID. X 1000CC.	3
4	5/8 ID. X 1000CC. (COMPOSITE ONLY)	4
9	SPECIAL	9
CODE REFRIGERATOR		
N	NON - REFRIGERATED — (STANDARD)	N
R	REFRIGERATED: COMPOSITE — (SMALL)	R
R	REFRIGERATED: DISCRETE & DUAL STATION — (LARGE)	R
W	WIRED — (FRIDGE CIRCUIT READY)	W
CODE SAMPLE CONTAINER - (NALGENE STANDARD)		
A	NONE (STANDARD)	A
B	8 LITRE (2 U.S. GALLONS)	B
C	20 LITRE (5 U.S. GALLONS)	C
D	24 X 500CC (1 U.S. PINT)	D
X	SPECIAL	X
CODE ENCLOSURE		
1	NEMA 3 (STANDARD)	1
3	NEMA 3 - INSULATED	3
5	OPEN CHASSIS - NO CABINET	5
9	SPECIAL	9
CODE OPTIONS		
B	PRESSURE/VACUUM GAUGE	B
C	HEATER C/W THERMOSTAT	C
D	OVERFLOW PROTECTION PROBES	D
F	COMMON SAMPLER FAULT OUTPUT	F
N	S.S. SINKER STRAINER	N
S	INTEGRAL BATTERY C/W CHARGER	S
V	EXTERNAL VALVE CONTROL OUTPUT	V
W	DUAL STATION	W
X	SPECIAL	X

Partial nomograph.
For a complete
listing contact
Southwell.

NOTES: SPECIAL FEATURE ("X" OR "9")

Southwell BVS 4300 Outdoor Stationary Sampler

Sampler		
Height	63 inches	1.6 m
Width	26 inches	0.66 m
Depth	26 inches	0.66 m
Weight: refrigerated	310 lbs	141 kg
Weight: non-refrigerated	240 lbs	109 kg
Enclosure	Nema 3 weatherproof 14 gauge steel enclosure with heat cured polyester-based powder paint for corrosion resistance & lockable door * Stainless Steel * Insulation with thermostatically controlled forced-air heater	
Supply Voltage	Sampling system: 115 Vac / 60Hz or 12 Vdc Refrigeration and heating units: 115 Vac / 60Hz	
Controller		
Display	2x16 character backlit LCD	
Touchpad	16-key, calculator-type with multi-level menus	
Start Delay	Disabled; Time/Day; Pulse Count; 4-20mA (0-100 pulses/minute); External Contact; Level Control	
Sample Initiation	Disabled; Interval Time; Pulse Count; 4-20mA (0 to 100 pulses/minute); External Contact	
Program Type	Composite; Multi-Composite; Consecutive; Daily Cycle; Timed Step	
Clock	Real Time clock & operating system	
Direct Function Keys	Manual sample; Manual purge; Manual bottle advance; Restart	
Alarm Outputs (Independent)	Cycle abandoned [pulse output]; Sample Fault; Container Full	
Status Outputs	Sample taken [pulse output]	
Switches	Run/off (SPST toggle) On/off (5 amp lighted breaker) * Refrigerator on/off * Heater on/off	
Available displays	Real time clock; Process timing; Process controls; Pulse counting; Event response; Multi-level desc.; Flashing prompts; Diagnostics	
Automatic displays	Container full; Fault; Interrupt; Alternating Time Stamp; Cycle(s) abandoned	

Vacuum System	
Pinch Valve	Fixed – normally open
Purge Cycle	Adjustable – 1 to 99 seconds
Suction cycle	Variable – adjusts automatically to double the input value of the purge time setting or until liquid contacts level electrode in metering chamber
Sample Volume	Adjustable, 50cc to 500cc * Adjustable, 500cc to 1000cc
Sample Transport Velocity	Minimum of 3 ft/s at 20 ft of lift (3/8" ID intake) Minimum of 3 ft/s at 16 ft of lift (5/8" ID intake)
Metering Chamber	Acrylic 500cc, 100cc calibration * Acrylic 1000cc, 100cc calibration * Pyrex 500cc, 100cc calibration * Pyrex 1000cc, 100cc calibration
Metering Chamber Cover	Nylon * Teflon reinforced top
Volume Control Tube	316 stainless steel
Metering Chamber Level	316 stainless steel
Electrode	
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)
Discharge Hose	Latex, 3/8" ID * Latex, 5/8" ID * Silicone, 3/8" ID * Silicone, 5/8" ID
Sample Containers (composite only)	* 2 US gallon (8 litre) high density polyethylene * 5 US gallon (20 litre) high density polyethylene * 2.5 US gallon (10 litre) glass
Sample Containers (discrete only)	24 x 500cc polyethylene * 3 x 1 litre glass * 4 x 1 litre glass * 6 x 1 litre glass * 8 x 1 litre glass * 12 x 1/2 litre glass
Refrigerator	* 5 cu.ft., adjustable to maintain 4° C * 7 cu.ft. (discrete)
* 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. Unit will have a protective enclosure of steel or stainless construction with a heat-cured polyester-based powder paint. 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, in a CSA-certified shop, and have a two (2) year warranty. Sampling unit to be a BVS 4300 Southwell (Sirco) Sampler manufactured by Southwell, or approved equivalent.



SOUTHWELL SAMPLERS

Tel: 604-980-3688

Fax: 604-980-6578

Toll Free: 877-984-7788

sales@southwellcontrols.com

www.southwellsamplers.com

Canada Office

857 West 3rd St.

North Vancouver, BC V7P 1E3

USA Office

PO Box 1892

Blaine, WA 98231-1892