



F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs

HIGH VOLUME AIR SAMPLER F&J MODEL DFHV-1S-2G

NOTABLE FEATURES:

- Display in English or metric units set at factory
- Choices of flow/volume units:
SLPM SL
SCMH SCM
SCFM SCF
- State of the Art microprocessor electronics
- Automatic Flow Control
- Auto Shut-off on time or volume
- Flowrate and volume totalizations displayed are corrected to a factory settable Reference Temperature and Pressure (4 options available)
- Elapsed time meter
- Auto zero calibration feature of flow sensor
- Bright LED display
- Flow rate accuracy within $\pm 4.0\%$ F.S.
- RS-232 Communication Port w/Operator selectable download frequency for real-time data
- 100 – 120 VAC, 50/60Hz; single phase



4" (102 mm) Filter Holder is standard dimension. Filter holders with different dimensions are optional.

GENERAL DESCRIPTION:

Model DFHV-1S-2G digital high volume air samplers provide simplicity of operation and improved accuracy. This model features a self-cooled motor and a cooling fan in the electronics compartment, digital flow measurement, elapsed time and accumulated volume measurement capability. It has a bright OLED display and a four button keypad. The DFHV-1S-2G has operator settable flow control.

Various flow and volume engineering units are available for selection.

The pump is mounted on a rigid base with non-skid rubber feet.

The air sampler is supplied with a 4 inch diameter filter holder. Options include an adaptor to convert from a 4 inch diameter opening to a 1.83 inch opening for standard combination filter holders (P/N: HV1SAP).

The DFHV-1S-2G air sampling system is designed for periodic indoor use. Please consult the product specifications for the design temperature range and the installation category.

Rev.: 07 October 2025

DFHV-1S-2G High Volume Air Sampler Specifications (100—120 VAC)

SPECIFICATIONS:

PUMP TYPE: Two-stage, dual ball-bearing, bypass type with an independent cooling system for the motor that provides thermal overload protection.

MAXIMUM MOTOR CAPACITY:
94 CFM at 29.92" Hg and 68°F (Free Air Flow)
Flow rate achievable will depend on the filter media utilized

HUMIDITY OPERATING RANGE: 0 – 95% RH (non-condensing)

TEMPERATURE OPERATING RANGE:
14°F to 122°F (-10°C to 50°C)

ULTIMATE VACUUM: 80" H₂O at standard temperature, pressure and zero flow restriction

POWER REQUIREMENTS: 100 – 120VAC;
50/60Hz at 9.7 amperes; single phase

CIRCUIT PROTECTION: 10 amperes

ELECTRICAL CORD: All temp, 3 wire 16 gauge

FLOW CONTROL: Electronic motor speed control

HANDLE: Durable metal/plastic

DIMENSIONS: 14"L × 8.25"W × 11.00 Height
(35.5 × 20.9 × 27.9 cm)

NOISE LEVEL: Average dB 83.3 @ 1 meter

WEIGHT: Approx 12.90 lbs. (5,8 kg)

INSTALLATION CATEGORY: Pollution Degree 2

ENCLOSURE RATING: IPX2

DIGITAL FLOWMETER DISPLAYS:
Flowrate: Corrected to Ref. T and P
Elapsed Time: hhh:mm
Volume: Corrected to Ref. T and P

FLOW CALIBRATION:

Factory calibration or calibration check recommended once per year.

AVAILABLE FLOW/VOLUME UNIT COMBINATIONS:

<u>FLOW</u>	<u>VOLUME</u>
SCFM	SCF
SLPM	SL
sm ³ /h	sm ³

NOTE:

Units are factory set. Specify desired units at the time the order is placed.

APPROXIMATE FLOW RATES THROUGH VARIOUS FILTER COMBINATIONS:

PARTICULATE FILTER (102 mm)	FLOW RATE	
	(CFM)	(LPM)
213340	45.9	1300
521140	19.9	563
FP4.0M	42.4	1200
FP40	18	509

Adaptor for 1.83" MPT Filter Holder:
P/N: HV1SAP

Factory Settable Reference T and P

Classical STP	0°C, 1 ATM
Normal T and P	20°C, 1 ATM
Modified Normal T and P	70°F, 1 ATM
Standard Ambient T and P	25°C, 1 ATM