



# F&J SPECIALTY PRODUCTS, INC.

*The Nucleus of Quality Air Monitoring Programs*

## HIGH VOLUME AIR SAMPLER F&J MODEL DFHV-1

### 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



### GENERAL DESCRIPTION:

Model DFHV-1 digital high volume air samplers provide simplicity of operation and improved accuracy for collection contaminants (particulates and iodine gases). This model features a motor cooling fan within the motor housing, digital flow measurement, elapsed time and accumulated volume measurement capability. It has a bright LED display and a four button keypad.

Various flow and volume engineering units are available for selection.

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

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

Periodic outdoor use is limited to good weather conditions. The air sampler is not designed to be operated in the rain or during snow fall conditions.

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# DFHV-1 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.

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

**FLOW SENSOR TYPE:** Volumetric Flow

**MAXIMUM FLOW CAPACITY:** 200 SLPM with FP47M Glass Fiber Filter Paper

**TEMPERATURE OPERATING RANGE:** 18 to 122°F (-8 to 50°C)

**ULTIMATE VACUUM:** 80" H<sub>2</sub>O at standard temperature, pressure and zero flow restriction

**POWER REQUIREMENTS:** 100 – 120VAC; 50/60Hz at 6 amperes; single phase

**CIRCUIT BREAKER PROTECTION:** 10 amperes, slow blow fuse

**ELECTRICAL CORD:** All temp, 3-wire, 16 gauge

**HANDLE:** Durable plastic

**DIMENSIONS:** 11 1/16" L × 9 3/8" W × 10 3/4" H (28,1 × 23,8 × 25,4 cm)

**NOISE LEVEL:** Average dB 83.8 @ 1 meter

**WEIGHT:** Approx 13.4 lbs. (6,1 kg)

**INSTALLATION CATEGORY:** Pollution Degree 2

### DIGITAL FLOWMETER DISPLAYS:

Flowrate: Corrected to STP  
Elapsed Time: hhh:mm  
Volume: Corrected to STP

### FLOW CALIBRATION:

Factory calibration recommended once per year

### STANDARD COMBINATION FILTER HOLDERS AVAILABLE:

FILTER HOLDER MODEL	CHARCOAL CARTRIDGE DIMENSIONS	PARTICULATE PAPER DIAMETER
FJ-19P	F&J Model C	2" or 50 mm
FJ-27P	F&J Model B	2" or 50 mm
FJ-34P	F&J Model C	47 mm
FJ-39P	F&J Model B	47 mm
FJ-52P	F&J Model M	2" or 50 mm
FJ-54P	F&J Model M	47 mm

### OPTIONAL FILTER HOLDERS: (Aluminum, Open-Face, 1.83" MPT)

MODEL #	DESCRIPTION
FJ-23	2" Particulate only
FJ-102	4" Particulate only

### MAXIMUM FLOW RATES THROUGH VARIOUS FILTER COMBINATIONS:

CHARCOAL CARTRIDGE 2 1/4"D × 1"H	PARTICULATE FILTER 47 mm	FLOW RATE	
		CFM	LPM
TE1C	-----	14.5	410
TE3C	-----	9.6	272
TE2C	-----	5.0	142
-----	FP47	5.4	153
-----	FP47M	10.0	283
TE3C	FP47	4.4	125
TE2C	FP47	3.5	99

### AVAILABLE FLOW/VOLUME UNIT COMBINATIONS:

FLOW	VOLUME
SCFM	SCF
SLPM	SL
SCMH	SCM

### NOTE:

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

### OPTIONS:

OPTIONS:	P/N:
Data Storage Device	232FCDS
Secure Digital Card	372239
FlashCard Reader	SDDR-199-A20

### 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