



## F&J SPECIALTY PRODUCTS, INC.

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*The Nucleus of Quality Air Monitoring Programs*

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

### 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
- 220 – 230 VAC, 50/60Hz; single phase



### GENERAL DESCRIPTION:

Model DFHV-1E digital high volume air samplers provide simplicity of operation and improved accuracy. 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.

**Rev:** 28 August 2017

# DFHV-1E High Volume Air Sampler (220-240 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:**

-8° to 50° C (18 to 122°F)

**ULTIMATE VACUUM:** 80" H<sub>2</sub>O at standard

temperature, pressure and zero flow restriction

**POWER REQUIREMENTS:** 220 – 240VAC;

50/60Hz at 4.1 amperes; single phase

**CIRCUIT BREAKER PROTECTION:**

10 amperes, slow blow fuse

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

**FLOW CONTROL:** Electronic motor speed control

**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 Ref. T and P

Elapsed Time: hhh:mm

Volume: Corrected to Ref. T and P

**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

**FLOW CALIBRATION:**

Factory calibration recommended once per year

**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	PARTICULATE FILTER	FLOW RATE	CFM	LPM
2 1/4" D × 1" H	47 mm			
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
sm <sup>3</sup> /h	sm <sup>3</sup>

**NOTE:**

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

**OPTIONS:**

232FCDS	Data Storage Device
372239	Secure Digital Card
SDDR-199-A20	FlashCard Reader

**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