F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs



DIGITAL FLOW METER HIGH VOLUME F&J MODEL DFHV-1D

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
- \geq 100 120 VAC, 50/60Hz; single phase
- ➤ Brushless motor

GENERAL DESCRIPTION:

Model DFHV-1D digital high volume air samplers provide a durable brushless motor with the 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. Model DFHV-1D has automatic flow control. The brushless motor eliminates the need to change brushes every 500 hours.

Various factory settable flow and volume engineering units are available for selection.

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

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

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DFHV-1D SPECIFICATIONS:

PUMP TYPE: Two-stage, dual ball-bearing, bypass type brushless motor with an independent cooling system. The motor has thermal overload protection.

POWER: 1100 Watts

MAXIMUM MOTOR CAPACITY: 100+ CFM at 29.92" Hg and 68°F (Free Air Flow). Actual flow rate achievable will depend on the filter media utilized

HUMIDITY OPERATING RANGE:

0-95% RH (non-condensing)

TEMPERATURE OPERATING RANGE:

18°F to 122°F (-8°C to 50°C)

ULTIMATE VACUUM: 86" H₂O at 29.92" Hg and 68°F and zero flow restriction

POWER REQUIREMENTS:

110 – 120VAC; 50/60Hz at 15 amperes; single phase

CIRCUIT BREAKER PROTECTION:

20 amperes

ELECTRICAL CORD:

All temp, 3 wire 16 gauge

FLOW CONTROL:

PWM Electronic motor speed control

HANDLE: Durable metal/plastic

DIMENSIONS: $12.7 \text{ "L} \times 10.7 \text{"W} \times 7.5 \text{ "H}$

 $(32.3 \times 27.2 \times 19 \text{ cm})$

AVERAGE dB: 86.5

WEIGHT: Approx 14 lbs.(6.4 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

FLOW CALIBRATION:

Factory calibration or calibration check recommended once per year.

AVAILABLE FLOW/VOLUME UNIT COMBINATIONS:

FLOW	VOLUME
SCFM	SCF
SLPM	SL
sm³/h	$\mathrm{sm}^{\scriptscriptstyle 3}$

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

APPROXIMATE FLOW RATES THROUGH VARIOUS FILTER COMBINATIONS:

Particulate Filter	FL	FLOW RATE	
	(CFM)	(LPM)	
FP47	4.5	125	
521147	5.0	141	
FP47M	12	340	
FP47M2	15	425	

Particulate Filter + RICF Cartridge	FLOW RATE	
	(CFM)	(LPM)
TE2C+FP47	4.0	113
TE2C+FP47M	6.0	170
TE3C+FP47M	6.3	178
TE1C+FP47M	8.5	240

OPTIONS: P/N: Data Storage Device 232FCDSD

2 GB 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