F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs



HIGH VOLUME AIR SAMPLER F&J MODEL HV-1E

NOTABLE FEATURES:

- > Single Rotometer
- ➤ Multiple Reinforcement for the Electrical Cord
- > Stable Base Plate
- ➤ Removable Controller Module to Facilitate Maintenance
- ➤ Multiple Rotometer Scales are Available
- ➤ Flow Adjustment via Motor Speed Control
- ➤ Dual Ball bearing Motor with Independent Cooling
- \geq 220 240VAC, 50/60Hz; single phase



HV-1E

GENERAL DESCRIPTION:

Models HV-1E single rotometer is a high volume air sampler. This model features electronic flow regulation, a motor cooling fan within the motor housing, flow measurement and flow calibration capability. The pump is mounted on a rigid base with non-skid rubber feet. A removable controller module unit includes a protective guard for the single rotometer and the controls. This removable module facilitates maintenance of the pump components.

REV: 15 November 2005

HV-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 CAPACITY:

94 CFM at 29.92" Hg and 68°F (Free Air Flow)

TEMPERATURE OPERATING RANGE:

18 to 122°F (-7 to 50°C)

ULTIMATE VACUUM:

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

POWER REQUIREMENTS:

220 – 240VAC; 50/60Hz at 3 amperes; single phase

FUSE PROTECTION: 6 amperes, slow blow fuse

HANDLE: Durable plastic

BASE PLATE:

Weight: 0,5 kg (1 lb.) **Dimensions:** $17.8 \times 17.8 \times 0.3$ cm

 $(7\text{"L} \times 7\text{"W} \times 1/8\text{" Thick})$

DIMENSIONS: $23,5 \times 21,0 \times 25,4 \text{ cm}$

 $(9 \frac{1}{4}\text{"L} \times 8 \frac{1}{4}\text{"W} \times 10\text{"H})$

WEIGHT: Approximately 5 kg (11 lbs.)

FLOW METER:

Various flow ranges are available in CFM or LPM.

FLOW CALIBRATION:

An adjustable needle valve at the top of the flowmeter is secured by a locking nut.

STANDARD COMBINATION FILTER HOLDERS AVAILABLE:

FILTER HOLDER	CHARCOAL CARTRIDGE	PARTICULATE PAPER
MODEL	DIMENSIONS	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 #	<u>DESCRIPTION</u>
FJ-23	2" Particulate
FJ-33	47 mm Particulate
FJ-102	4" Particulate

MAXIMUM FLOW RATES THROUGH VARIOUS FILTER COMBINATIONS:

CHARCOAL	PARTICULATE	FLOW	7
CARTRIDGE	FILTER	RATE	
$2 \frac{1}{4}$ "D × 1"H	47 mm	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 ROTOMETER SCALES:

MODEL #	RANGE	UNITS
R075	$\overline{0,7-4,8}$	CFM
R13	1,0-3,0	CFM
R1070	1,0-7,0	CFM
R195	2 - 9,5	CFM
R312	3 - 12	CFM
R420	4 - 20	CFM
R530	5 - 30	CFM
R2085	20 - 85	LPM
R20140	20 - 140	LPM
R30200	30 - 200	LPM
R30270	30 - 270	LPM
R60360	60 - 360	LPM
R14085	150 - 850	LPM
R15570	140 - 570	LPM

NOTE:

The selection of the rotometer scale(s) depends upon the filter(s) being utilized.