

# F&J SPECIALTY PRODUCTS, INC.

PO Box 2888

Ocala, Florida 34478-2888 **Tel:** (352) 680-1177 • (352) 680-1178

**Fax:** (352) 680-1454

The Nucleus of Quality Air Monitoring Programs

# LOW VOLUME AIR SAMPLER F&J MODEL LV-1E

# **NOTABLE FEATURES:**

- Constant air flow regulator adjustable by user
- > Chassis mounted On-Off switch with fuse protection
- Durable oil-less carbon vane pump designed for continuous use
- ➤ Internal intake and exhaust mufflers
- Rotometer and Vacuum gauge
- $\geq$  220 240VAC, 50/60Hz; single phase

Certified to UL, CSA and CE electrical safety standards by ETL

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Shown with Quick-disconnect and Filter Holder



#### **GENERAL DESCRIPTION:**

Model LV-1E is a low volume air sampler consisting of a ¼ HP oil-less, carbon vane vacuum pump with a flowmeter, vacuum gauge and a constant air flow regulator for use where a nearly constant air flow is desirable. The regulator holds a constant pressure drop across an in-line orifice by varying the flow through a bypass valve in to the pump. This system allows the pump to work at a minimum pressure drop at all times permitting it to run cooler; thus extending its service life. The oil-less pump requires no lubrication to maintain optimal efficiency during its service life. The pump is mounted on a base with four rubber feet. A handle is provided on the chassis to facilitate its transportation.

The LV-1E Air Sampling System is designed for continuous indoor use. Please consult the product specifications for the design temperature range and the installation category.

The typical operating flow range is 1 to 3 CFM (10 - 100 LPM).

**REV: 08 Dec 2011** 

# LV-1E Low Volume Air Sampler (220-240VAC)

# **SPECIFICATIONS:**

**PUMP TYPE:** 

Oil-less, carbon vane 1/4 HP, 1425 RPM @ 50Hz

#### **MAXIMUM CAPACITY:**

4 CFM (113 LPM) at 0" Hg Pressure drop

#### **ULTIMATE VACUUM:**

25" (635 mm) Hg at sea level

#### **VACUUM GAUGE:**

0" – 30" (0,7 to 762 mm) Hg

# **POWER REQUIREMENTS:**

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

### **ELECTRICAL CORD:**

All temperature, 3 wire, 16 gauge

**FUSE PROTECTION:** 6 ½ amperes

# THERMAL OVERLOAD PROTECTION:

Furnished as an integral part of the motor

# **CONSTANT AIRFLOW REGULATOR:**

Aluminum construction with silicone diaphragm, adjustable from 1 to 3 CFM (10-100 LPM)

**HANDLE:** Black Painted Steel

**DIMENSIONS:**  $45,7L \times 17,8A \times 33,0 \text{ cm Alt}$ 

 $(18"L \times 7"W \times 13"H)$ 

**WEIGHT:** 16,8 kg (37 lbs.)

**INSTALLATION CATEGORY:** Pollution Degree 2

# **AVAILABLE ROTOMETER SCALES:**

 MODEL
 RANGE

 R10100
 10-100 LPM

 R13
 1- 3 CFM

#### **OPTIONS**

• Elapsed Time Indicator – 9999,9 hours or minutes

#### COMBINATION FILTER HOLDER:

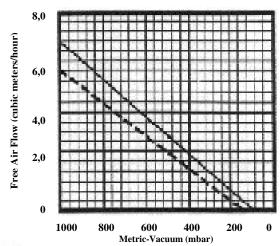
Durable plastic combination filter holders for F&J Model B, C or M charcoal cartridges and 47 mm, 2" or 50 mm diameter particulate filter paper are available. All models have quick-disconnect function.

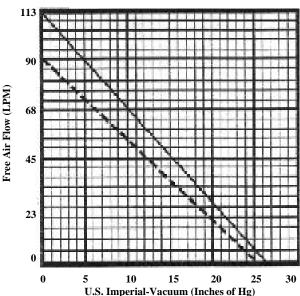
#### STANDARD COMBINATION FILTER HOLDERS:

FILTER HOLDER	CHARCOAL CARTRIDGE	PARTICULATE PAPER
<b>MODEL</b>	<u>DIMENSIONS</u>	<b>DIAMETER</b>
FJ-05P	F&J MODEL B	2" or 50 mm
FJ-21P	F&J MODEL C	2" or 50 mm
FJ-35P	F&J MODEL B	47 mm
FJ-46P	F&J MODEL C	47 mm
FJ-51P	F&J MODEL M	2" or 50 mm
FJ-53P	F&J MODEL M	47 mm

#### **PUMP CURVE**

Top line on curve is for 60-cycle performance Bottom line on curve is for 50-cycle performance





CONSTANT AIR FLOW REGULATOR CURVE TYPICAL PUMP OPERATING FLOW RANGE

