

## F&J SPECIALTY PRODUCTS, INC.

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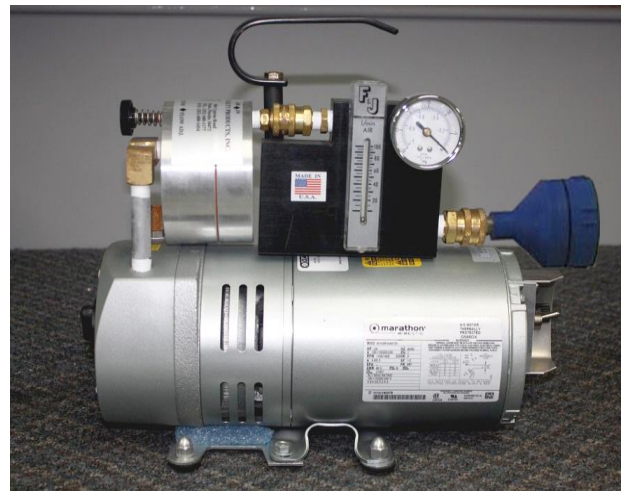
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**The Nucleus of Quality Air Monitoring Programs**

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

### 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
- 220-240 VAC, 50/60Hz; single phase



**Shown with Optional Timer**

### GENERAL DESCRIPTION:

Model LV-1DE is a low volume air sampler consisting of a 1/4 H.P. oil-less, carbon vane vacuum pump with a flow meter, a 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 into 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-1DE is distinguished from the LV-1E air sampler in that the flow meter and vacuum gauge are mounted on a quick disconnect plastic manifold on top of the motor that facilitates maintenance operations.

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

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

## SPECIFICATIONS:

- PUMP TYPE:** Oil-less, carbon vane 1/4 HP;  
50/60 Hz, 1 PH
- 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 to 762 mm) Hg
- POWER REQUIREMENTS:** 220 – 240VAC;  
50/60Hz at 3 amperes; single phase
- FUSE PROTECTION:** 6-1/4 Amperes
- ELECTRICAL CORD:** All temperature, 3 wire, 18 gauge
- 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:** 40,6L × 19,1W × 33,6 cm H  
(16"L x 6"W x 15 1/2"H)
- OPERATING TEMPERATURE:** 0° to 104° F (-18° to 40° C)

- WEIGHT:** 16 kg (36 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.

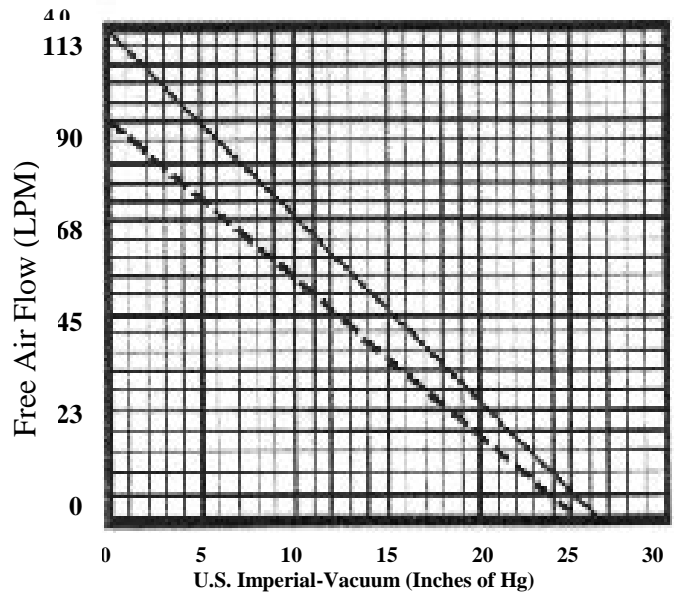
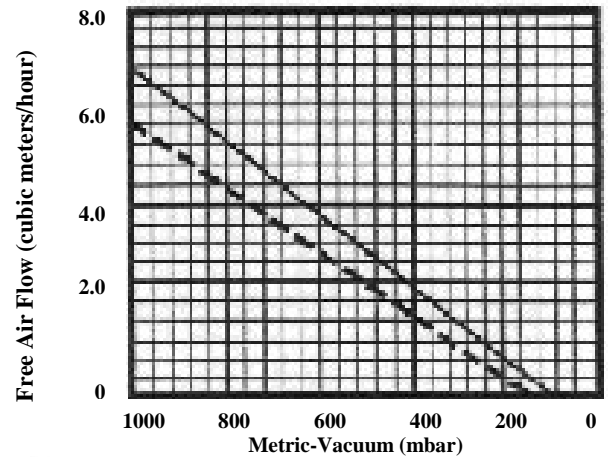
### STANDARD COMBINATION FILTER HOLDERS:

FILTER HOLDER MODEL	CHARCOAL CARTRIDGE DIMENSIONS	PARTICULATE PAPER DIAMETER
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.

- 1425 RPM @ 50 Hz  
1725 RPM @ 60 Hz



### CONSTANT AIR FLOW REGULATOR CURVE TYPICAL PUMP OPERATING FLOW RANGE

