

# 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 it 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).

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**REV:** 08 Dec 2011

# LV-1DE Low Volume Air Sampler (220 - 230 VAC)

#### **SPECIFICATIONS:**

- PUMP TYPE: Oil-less, carbon vane 1/4 HP; 1425 RPM @ 50 Hz
- 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:**  $40,6L \times 19,1W \times 33,6 \text{ cm H}$ 

(16"L x 6"W x 15 ½"H)

**WEIGHT:** 16 kg (36 lbs.)

**INSTALLATION CATEGORY:** Pollution Degree 2 **AVAILABLE ROTOMETER SCALES: MODEL RANGE** 

 MODEL
 KANGE

 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:

CHARCOAL CARTRIDGE	PARTICULATE PAPER
DIMENSIONS	<b>DIAMETER</b>
F&J Model B	2" or 50 mm
F&J Model C	2" or 50 mm
F&J Model B	47 mm
F&J Model C	47 mm
F&J Model M	2" or 50 mm
F&J Model M	47 mm
	CARTRIDGE DIMENSIONS F&J Model B F&J Model C F&J Model B F&J Model C F&J Model M

## **PUMP CURVE**

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

