

### F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs

## LOW VOLUME AIR SAMPLER F&J MODEL LV-14MHT

#### **NOTABLE FEATURES:**

- > Constant air flow regulator
- ➤ Durable 1/4 HP oil-less carbon vane pump designed for continuous use
- ➤ Instrument control box conveniently located
- > Internal intake and exhaust mufflers
- Adjustable sampling gooseneck 4' 7' (122 213 cm)
- ➤ Rotometer, elapsed time meter and vacuum gauge
- ➤ Heavy-duty hand truck with 11" pneumatic tires
- $\rightarrow$  110 120VAC, 50/60Hz; single phase



#### **GENERAL DESCRIPTION:**

Model LV-14MHT is a heavy-duty hand truck mounted low volume air sampler with an adjustable, aluminum sampling gooseneck. The adjustable gooseneck permits sampling at heights varying from 4' to 7' (122 cm - 213 cm) above floor level.

The LV-14MHT air sampler includes a 1/4 HP oil-less, carbon vane vacuum pump with a constant airflow regulator for use where a nearly constant airflow 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 head drop at all times by permitting it to run cooler; thus extending its lifetime. The oil-less pump requires no lubrication to maintain optimal efficiency during its service life. The pump is mounted on a mobile cart with two rubber wheels to permit mobile transportation of the unit.

The typical operating flow range is 1 to 3.5 CFM (10 - 100 LPM).

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### LV-14MHT Low Volume Air Sampler (110 – 120 VAC)

#### **SPECIFICATIONS:**

**PUMP TYPE:** Oil-less, carbon vane 1/4 HP;

1725 RPM @ 60Hz

**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 – 762mm) Hg **POWER REQUIREMENTS:** 110 – 120VAC;

50/60 Hz at 6 amperes; single phase

**ELECTRICAL CORD:** All temperature,

3-wire, 16 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)

**DIMENSIONS:** 21" ×14"W×84"H

 $(50.8 \times 26 \times 213 \text{cm})$ 

**WEIGHT:** 67 lbs. (30.4 Kgs.)

WHEELS: 11", pneumatic

**SAMPLING HEIGHT:** 4' to 7' (122 – 213cm)

**AVAILABLE ROTOMETERS SCALES:** 

 MODEL
 RANGE

 R10100
 10 – 100 LPM

 R13
 1 -3.5 CFM

#### **ELAPSED TIME INDICATOR:**

Resettable Type: 9999.9 minutes or hours.

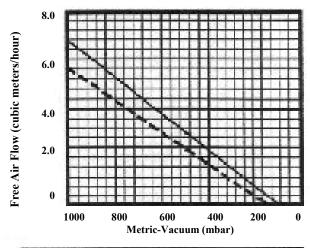
**COMBINATION FILTER HOLDER:** Durable plastic combination filter holders for F&J Model B, C or M charcoal cartridges and 47 mm, 2" or 50 mm diameter particulate filter paper are available. All models have quick-disconnect function.

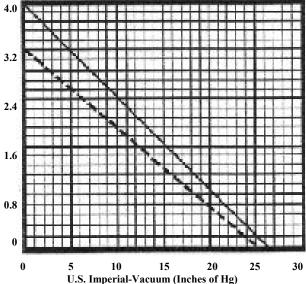
# STANDARD COMBINATION FILTER HOLDERS AVAILABLE:

<b>FILTER</b>	<b>CHARCOAL</b>	<b>PARTICULATE</b>
<b>HOLDER</b>	CARTRIDGE	<b>PAPER</b>
<b>MODEL</b>	<b>DIMENSIONS</b>	<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

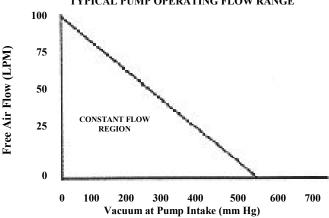
#### **PUMP CURVE**

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



Free Air Flow (CFM)