



## F&J SPECIALTY PRODUCTS, INC.

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*The Nucleus of Quality Air Monitoring Programs*

# Low Volume Mobile Air Sampler F&J Model LV-34M

### NOTABLE FEATURES:

- Constant air flow regulator adjustable by user
- Durable 3/4 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' (122cm – 213cm)
- Rotometer, elapsed time meter and vacuum gauge
- Mobile cart with 8" hard rubber wheels
- 100 – 120VAC, 50/60Hz; single phase

### General Description:

The Model LV-34M consists of a 3/4 HP oil-less vacuum pump with an 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 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.

It should be noted that as pressure varies, the flow through an orifice with a constant pressure drop varies approximately as the square root of the ratio of the absolute pressure. Thus, if

paper loading causes a pressure drop to one-half of the original, the flow will decrease to 0.7 of the original value. The orifice is adjustable, allowing flow rate adjustment from near zero up to the pump's maximum capacity. Best long-term regulation is maintained at or below 6 cfm.

The LV-34M is supplied with an adjustable aluminum sampling gooseneck adjustable between 4 – 7' (122 – 213cm).

The typical operating flow range is 1 to 8 CFM (30 – 230 LPM).

**REV: 05 March 2016**



# LV-34M Low Volume Air Sampler (100 – 120VAC)

## SPECIFICATIONS:

### PUMP TYPE:

Oil-less, carbon vane 3/4 hp; 1725 RPM @ 60Hz

### MAXIMUM CAPACITY:

10 CFM (283 LPM) at 0" Hg Pressure Drop

### ULTIMATE VACUUM:

25" (635mm) Hg at sea level

### VACUUM GAUGE:

0" – 30" (0 to 762mm) Hg; measures vacuum at outlet of rotometer

### POWER REQUIREMENTS:

100-120VAC; 50/60Hz at 10 amperes; single phase

**CIRCUIT BREAKER:** 15 amperes

### ELECTRICAL CORD:

All temperature, 3-wire, 14 gauge

### ELAPSED TIME INDICATOR:

0 – 9999.9 min. or 9999.9 hours

### THERMAL OVERLOAD PROTECTION:

Furnished as an integral part of the motor

### CONSTANT AIRFLOW REGULATOR:

Aluminum construction with silicon diaphragm; adjustable from 1 to 8 CFM (30-230 LPM)

### DIMENSIONS:

20"L × 10 1/4"W × 84"H (51×27.3 × 213 cm)

**WEIGHT:** 77 lbs. (35 Kgs.)

**WHEELS:** 8" Hard Rubber

### AVAILABLE ROTOMETERS:

<u>MODEL</u>	<u>RANGE</u>
RMB56CFM	1 – 8 CFM
RMB56LPM	20 – 240 LPM

### COMBINATION FILTER HOLDER:

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

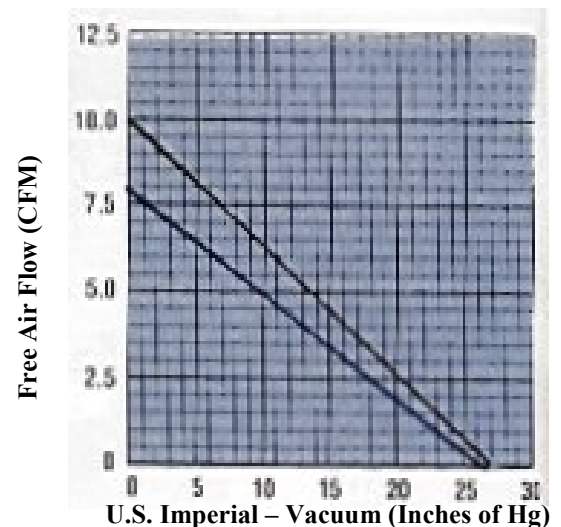
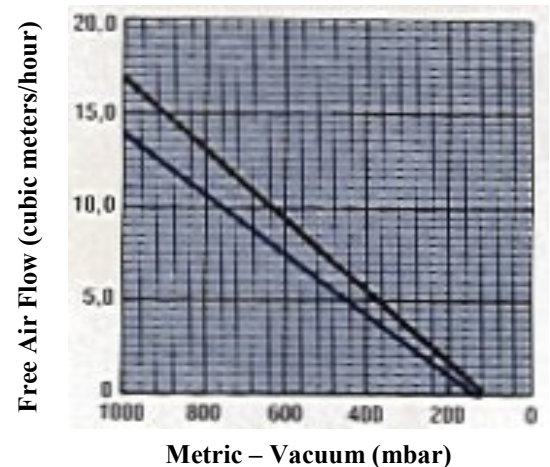
## STANDARD COMBINATION FILTER

### HOLDERS AVAILABLE:

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

### PUMP CURVE:

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



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