

# **F&J SPECIALTY PRODUCTS, INC.**

The Nucleus of Quality Air Monitoring Programs

# EMERGENCY RESPONSE SAMPLING SYSTEM AC/DC POWERED AIR SAMPLER — Digital Flowmeter Technology — F&J Model DFRV-40L-AC

### **NOTABLE FEATURES:**

- State-of-the-Art Electronics
- Operating Modes
  Line Power (100VAC 250VAC)
  12VDC External Source
- $\blacktriangleright$  Lightweight ~12 lbs. (5.4 kg)
- Maximum Flow 10 to 40 LPM with fiber glass FP47M filter media
- Bright LED Display
- Automatic Flow Control Feature
- Flowrate and Volume totalizations displayed are corrected to a factory settable Reference Temperature and Pressure (4 options)
- Auto shut-off on time or volume



Shown with optional filter holder

Brushless Motor

# **GENERAL DESCRIPTION:**

F&J Model DFRV-40L-AC is a lightweight, small footprint, brushless motor powered air sampling system operable from (1) line power, or (3) an external 12 VDC source such as a 12 VDC battery system.

The DFRV-40L-AC is well suited for indoor air sampling from line power or for remote area air sampling activities where users do have line power available.

The automatic flow control feature with the F&J Digital Flowmeter technology provides maximum flexibility for emergency response, or remote and unattended sampling responsibilities. The set flowrate is maintained automatically in case of dust loading and does not require operator attention.

Typical flow range is 10 - 40 SLPM (0.35 - 1.41 SCFM) [0.6 Sm<sup>3</sup>/hr - 2.4 Sm<sup>3</sup>/hr]. This flow rate varies by the filter media utilized. If pressure drop across the filter media is not significant lower flow will not be achievable without bypass valve option.

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# DFRV-40L-AC AC/DC Powered Air Sampler Specifications

#### Pump Type: Mini rotary vane vacuum pump

Motor: Brushless motor 12 VDC

#### Maximum Flowrate: Typical 35 - 40 SLPM with 47 mm glass fiber media (98%DOP efficiency)

#### **Power Source:**

External -Line Power; 100VAC or 250VAC Automobile Cigarette Lighter – 12VDC

**Current Draw:** 4.0 A maximum

#### **Filter Holder Fitting:**

3/8 FNPT quick disconnect

- Handle: Durable metal
- **Weight:** 10 lbs. (4.5 kg)
- **Dimensions:**  $8"\times6"\times8"$  ( $20 \times 15 \times 20 \text{ cm}$ )

#### **Operating Temperature Range:**

14°F-122°F (-10°C to 50°C)

- **Display:** Bright LED (6 character; 1.2 cm H)
- **Elapsed Time:** DD:HH:MM up to 168 hours

#### **Flow Control:**

Adjustable from keypad between 10-40 LPM

**Flow Accuracy:**  $\pm 4.0\%$  of Full Scale

#### Factory Settable Reference T and P

Classical STP0°C, 760 mm HgNormal T and P20°C, 760 mm HgModified Normal T and P21.1°C, 760 mm HgStandard Ambient T and P25°C, 760 mm Hg

#### **OPTIONS:**

- Data Storage Device (P/N: 232FCDSD)
- 2 GB Secure Digital Card (P/N: 372239)
- ➢ Flash card Reader (P/N: SDDR-199-A20)
- Bypass Needle Valve

#### **Standard Combination Filter Holders Available:**

FILTER HOLDER	CHARCOAL CARTRIDGE	PARTICULATE PAPER
MODEL	DIMENSIONS	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

#### Available Engineering Units for Flow and Volume:

sccm/ scc SLPM / SLP SCFM / SCF SCMH / SCM

## **Digital Flowmeter Keypad/Display**

