

F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs

EMERGENCY RESPONSE SAMPLING SYSTEM DIGITAL FLOW METER TECHNOLOGY F&J Model DFRV-40L-400-AC

NOTABLE FEATURES:

- State-of-the-Art Electronics
- Operating Modes
 - Line Power (100VAC – 250 VAC)
 - External 12 VDC source
- Lightweight — ~17.1 lbs. (7.8 kgs)
- Maximum Flow 30 to 35 LPM Maximum; typical
- Bright LED Display
- Automatic Flow Control Feature
- Flowrate and Volume totalizations displayed are corrected to a factory settable Reference Temperature and Pressure (4 options available)
- Auto shut-off on time or volume
- Brushless motor (12 VDC)



Displayed With Optional Rain Hood
and Filter Holder

GENERAL DESCRIPTION:

F&J Model DFRV-40L-400-AC is a lightweight, small footprint, DC voltage powered air sampling system operable from (1) line power, or (2) auxiliary DC connector (12 – 15 VDC).

The automatic flow control feature with the F&J Digital Flowmeter technology provides maximum flexibility for emergency response sampling responsibilities. The set flowrate is maintained automatically in case of dust loading and does not require operator attention. The air sampler is contained in a lightweight small dimensioned enclosure which is water tight. The unit can be carried very easily by its large, rugged plastic handle.

Typical flow range is 8 - 35 SLPM (0.3 -1.24 SCFM). 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.

REV: 17 May 2023

DFRV-40L-400-AC Battery Powered Air Sampler Specifications

Pump Type: Mini rotary vane vacuum pump

Motor: 12 VDC Brushless motor (4200 rpm)

Maximum Flowrate: 35 LPM typical
with 47mm glass fiber media (98% DOP efficiency)

Power Source:
External – Line Power; 100VAC to 240VAC
– Auxiliary 12 VDC source
– Battery Bank LIBATBANK-12V

Current Draw: 3.5 A maximum

Filter Holder Fitting: 3/8 FNPT quick disconnect

Handle: Durable plastic

Weight: 17.1 lbs. (7.8 kgs)

Dimensions: 16.8”L × 9.0”W × 14.0”H
(42.7 × 22.9 × 35.6 cm)

Average Db: 67.5

Operating Temperature Range: 0°F to 122°F
(-18°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 8-35 LPM

Flow Accuracy: ±4.0% of Full Scale

Factory Settable Reference T and P

Classical STP	0°C, 1 ATM
Normal T and P	20°C, 1 ATM
Modified Normal T and P	70°F, 1 ATM
Standard Ambient T and P	25°C, 1 ATM

OPTIONS:

- Data Storage Device (P/N: 232FCDS D)
- 2 GB Secure Digital Card (P/N: 372239)
- Flash card Reader (P/N: SDDR-199-A20)
- Combination Filter Holder with Rain Hood
 - 47mm Particulate / C Geometry – FJ-47RH
 - 50mm Particulate / C Geometry – FJ-50RH
- FJ-47RHM
- FJ-47RH
- FJ-47RHM-P
- FJ-47RH-P
- Bypass Needle Valve

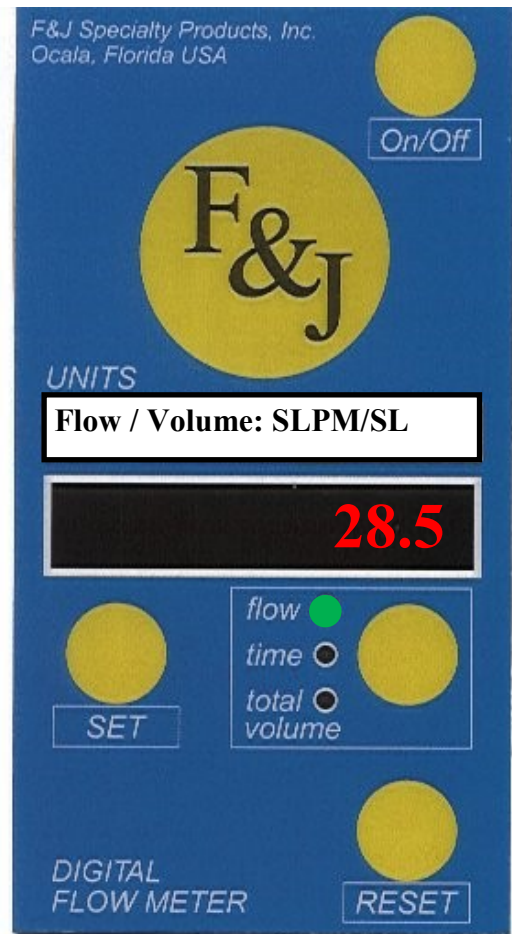
Standard Combination Filter Holders Available:

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

Available Engineering Units for Flow and Volume:

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

Digital Flow Meter Keypad/Display



DFRV-40L-400-AC Battery Powered Air Sampler Specifications

Front View Outdoor Use Configuration



Indoor Use Configuration



DFRV-40L-400-AC Battery Powered Air Sampler Specifications

Front View



DFRV-40L-400-AC connected to LIBATBANK-12V portable battery

