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## PORTABLE HEAVY DUTY DIGITAL FLOW METER KIT for ENVIRONMENTAL STYLE AIR SAMPLERS DF-100HD-XX



### **GENERAL DESCRIPTION:**

The DF-100HD Series heavy duty portable flow meter upgrade kits are designed to upgrade existing low volume analog air sampling systems utilizing motors of 1/3 HP or less. The DF-100HD Series units are connected in-line between the pump inlet and the filter holder. The DF-100HD Series upgrade eliminates the need to engage in expensive conversions of equipment or the need to purchase new air sampling systems.

The typical maximum operating flow ranges vary from 1 CFM to 9 CFM (30 - 255 LPM). Custom higher flow ranges with exterior mounted flow sensors are available upon request.

### **OPTIONS:**

Data Storage Device 2+ GB Secure Digital Card Flashcard Reader (P/N: 232FCDSD) (P/N: 372239) (P/N: SDDR-199-A20)

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### **NOTABLE FEATURES:**

- Display in English or metric units set at factory
- Choices of flow/volume units:
  - sccm scc SLPM SL
  - SCMH SCM
  - SCFM SCF
- State-of-the-Art microprocessor electronics
- Flowrate and volume totalizations displayed are corrected to a factory settable Reference Temperature and Pressure (4 options available)
  - Classical STP0°C, 760 mmHgNormal T and P20°C, 760 mmHgModified Normal T and P21,1°C, 760 mmHgStandard Ambient T and P25°C, 760 mmHg
- Elapsed time meter
- Auto zero calibration feature of flow sensor
- Bright LED display
- > Flow rate accuracy within  $\pm 4\%$  F.S.
- > RS-232 Communication Port w/Operator selectable download frequency for real-time data
- Auto Shut-off on time or volume
- **DF-100HD-XX:**

110-120VAC, 50/60Hz; single phase; < 7.20 FLA\*

#### \* FLA = Full Load Amps





### DF-100HD-XX SERIES Portable Digital Flow Meter Flow Computer for Air Samplers

SPECIFICATIONS: Flow Range Available: Power Requirements: DF-100HD Series:	Model 110–120 VAC DF-100HD-01 DF-100HD-02 DF-100HD-04 DF-100HD-09 DF-100HD-14	Flow Range (CFM) (LPM) 0.1 - 1 3 - 30 0.2 - 2 6 - 60 0.5 - 4 14 - 115 1 - 9 30 - 255 2 - 14 56 - 400 63 Hz; 0.3 amperes maximum
Maximum Motor Rating:	Model      HP        DF-100HD      1/3	<b>FLA</b> 7.20
<b>Fuse Protection (for plugged in sample):</b> 8 amp, slow blow		
Electrical Cord:	3 wire, 16 gauge	
Dimensions:	10" L x 6" W x 10" H	H. $(25,4L \times 15,23W \times 25,4 \text{ cm H})$
Weight:	6.4 lbs.	(2902 gms.)
Installation Category:	Pollution Degree 2	
ELECTRONIC SPECIFICATIONS:		
Measurement Accuracy:	Air flow Temperature Barometric Pressure	$\pm$ 4% of full scale $\pm$ 2.0° F (1.1° C) 2% over measured range
<b>Operating Temperatures:</b>	0° to 122° F	(-17° to 50° C)
Storage Temperature:	0° to 158° F	(-17° to 70° C)
Calibration:	Calibration-Verification once per year	
<b>Communications Interface:</b>	RS-232 (comma delimeted text file)	
Display:	LED; 6 characters	

#### **On-Board Calculations:**

- > Flow calculation from differential pressure value using best-fit curve method.
- Flow correction for standard temperature and pressure
- Auto-zero correction utilizing electro-pneumatic method to compensate for offset and drift (automatic once every minute).

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# F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs

## **PRODUCT PROFILE**

## **Air Sampling Systems**

- High Volume Air Samplers
  - Portable Grab Samplers
  - Environmental Systems
  - Enzyme Dust Samplers
  - PM10 Systems
- Continuous Air Samplers
  - Environmental Systems
  - Portable
  - Fixed Station
- Personal Air Samplers
- Emergency Response DC Powered Air Sampling Systems

## **Filter Paper**

- ✤ Glass Fiber
- Cellulose
- Membrane
- Quartz

## **Filter Holders**

- ✤ Open face
- In-Line
- PAS Filter Holders
- Materials
  - Plastic
  - Aluminum
  - Stainless Steel

## **Radon Detection Devices**

- 2-Day Passive Charcoal Canisters
- 7-Day Passive Charcoal Canisters
- Continuous Radon Monitors

## **Tritium Detection Systems**

- Portable and Fixed Station
  Collection Systems utilizing Silica
  Gel or Molecular Sieve Absorbents
- Continuous Tritium Monitors

### **New Products**

- ✤ Global Air Sampling Systems
- Digital Flowmeter Air Samplers
- C-14 Collection Systems
- ELITE DIGITAL LIGHT (EDL) Air Samplers
- Isokinetic Air Sampling Systems
- MEGA High Volume Air Samplers
- ULTRA High Volume (CTBTO) Air Samplers

## **Radioiodine Collection Cartridges**

- TEDA Impregnated Charcoal
- Silver Zeolite
- Custom Cartridges
- Bulk Silver Zeolite

### **Air Flow Calibrators**

- World Calibrator Series
- Compact Digital V.2 Series
- Mini-Calibrator