

## F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs

# DIGITAL MOBILE LOW VOLUME AIR SAMPLER MODEL SRS-DF28BMHT

#### **NOTABLE FEATURES:**

- > Display in English or metric units set at factory
- > Choices of flow/volume units:

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 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

- ➤ 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
- ➤ Reference or Ambient Flow Corrections are operator selectable
- ➤ Heavy-duty hand truck with 10.5" pneumatic tires
- Card Mounted Filter Holder
- ➤ 110 120 VAC, 50/60Hz; single phase



#### **GENERAL DESCRIPTION:**

The Model SRS-DF28BMHT heavy duty hand truck mounted mobile low volume air sampler designed for outdoor use with digital flowmeter and an adjustable, aluminum sampling gooseneck. The adjustable gooseneck permits sampling at heights varying from 4' to 7' above floor level. Model SRS-DF28BMHT contains state of the art microprocessor electronics, which provides for corrected flow rate measurements, volume totalizations, and an RS232 communications port. It has a large bright LED display. The air sampler is contained in a powder coat painted environmental enclosure mounted ~ 4 inches above ground level. A card mounted filter holder is included with the unit.

The SRS-DF28BMHT Air Sampler includes an 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 pressure drop at all times, 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 rugged mobile hand truck with two 10.5" diameter pneumatic tires to facilitate mobile transportation of the unit.

The SRS-DF28BMHT is designed for continuous indoor or outdoor use. Please consult the product specifications for the design operating temperature range and the installation category.

The typical operating flow range is 0.5 to 4 CFM (14 to 115 LPM) depending upon resistance of air filters utilized.

Rev.: 27 April 2018

## SRS-DF28BMHT DIGITAL LOW VOLUME AIR SAMPLER (110-120VAC)

### Mobile Unit with Adjustable Sampling Height

Free Air Flow (CFM)

#### **SPECIFICATIONS:**

**PUMP TYPE:** Oil-less, carbon vane 1/4 HP, 1725 RPM @ 60 Hz

**MAXIMUM CAPACITY:** 

4 CFM (115 LPM) at 0" Hg Pressure drop

**ULTIMATE VACUUM:** 25" (635 mm) Hg at sea level **POWER REQUIREMENTS:** 110 – 120VAC, 50/60 Hz; 6

amperes; single phase

CIRCUIT BREAKER PROTECTION: 10 amperes
ELECTRICAL CORD: All temperature, 3 wire, 14 gauge
THERMAL OVERLOAD PROTECTION: Furnished

as an integral part of the motor

**CONSTANT AIRFLOW REGULATOR:** Aluminum construction with silicone diaphragm; adjustable from 0.5 to 4 CFM (10-115 LPM)

**DIMENSIONS:** 24"L × 21"W × 55"H (61cm × 53 cm × 140 cm)

**SAMPLING GOOSENECK:** Adjustable to 7'

(213 cm) sturdy aluminum

**WHEELS:** 10.5"D, pneumatic tires **WEIGHT:** 80 lbs. (36 kg)

**OPERATING TEMPERATURE RANGE:** 

20° to 122°F (-7° to 50°C)

#### **ELECTRONIC SPECIFICATIONS:**

#### **MEASUREMENT ACCURACY:**

Air flow: +/-4.0% of full scale Temperature: +/-2.0°F (1.1°C)

Barometric Pressure: 2% over measured range **CALIBRATION:** Calibration verification 1 per year **COMMUNICATIONS INTERFACE:** RS-232

**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)

#### **OPTIONS:**

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

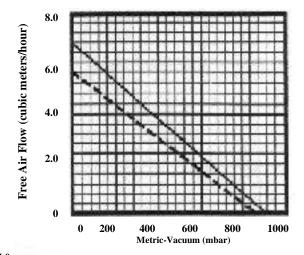
# Durable card mounted filter holder with male quick disconnect is included

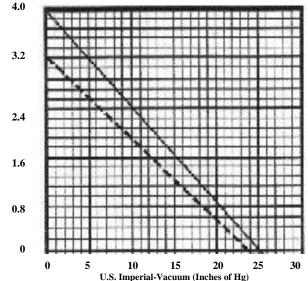




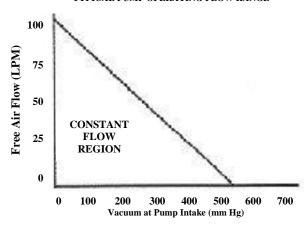
#### **PUMP CURVE**

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



Tel: (352) 680-1177 / Fax: (352) 680-1454 / Email: fandj@fjspecialty.com