

# C36 Thermal Desorption Low Flow Air Sampling Pump

## Features

- Designed for Air Sampling thru SIS Desorption Tubes
- Ultra compact size
- Ultra low flow 5 - 200 cc/min
- Back Pressure to 25" of H<sub>2</sub>O
- LCD clock display
- Fault Flow Indicator
- RFI shielding case
- UL and OSHA approved
- One year warranty
- Adapter fitting for SIS Thermal Desorption Tubes

## Standard Features

The LFS-113 provides for constant flows between 5 to 200 ml/min at variable back pressures up to 25" of H<sub>2</sub>O for use in pumping air or gas samples through the S.I.S.<sup>™</sup> Short Path<sup>™</sup> Thermal Desorption Sampling Tubes. Flows are adjustable via an external flow adjustment, and once sampling begins flow remains constant over variable back pressure from 0 to greater than 25 inches of H<sub>2</sub>O. An adapter fitting and hose for SPTD tubes and a battery charger is included with the Air Sampling Pump Kit.

### Low flow - dual modes

The LFS is an ultra low flow sampler designed for air sampling on the SIS Thermal Desorption Sample Tubes.

### Constant flow mode sampling

Ideal for single or "in-series" tube sampling providing constant flow rates from 5cc to 200 cc/min. The flow is adjusted through the sampler with an adjust flow screw.

The pump will automatically maintain the flow set over the constant flow range at back pressures up to 25" H<sub>2</sub>O.

### External flow adjust

Externally adjustable flow control valve, settable over the full range of the flow.

### Flow fault indication LED

A latching fault function is standard on all LFS-113 samplers. An LED fault indicator will light if the unit is operated outside its performance range. If the fault is not corrected within approximately 30 seconds, the pump will shut off and the LED will remain lit. The time will lock and display the time at which the fault occurred, ensuring a valid sample. If the fault condition is cleared, the LED will extinguish and the unit will continue to operate normally.

### Battery check LED

When the unit is turned on, an LED indicator signals to show that the battery will provide a minimum of eight hours service over the operating range.

### Rechargeable battery pack

The LFS has a rechargeable battery pack system which makes it completely portable. Battery packs are recharged via a standard 120V charger.

### Dual filtration system

The dual filtration system provides an internal pump filter providing a needed backup to prevent destructive gas and moisture vapors from entering and damaging the sampler. The inlet filter is easily unscrewed and filters replaced for preventive maintenance protection.

### Intrinsic safety

UL approval for use in hazardous locations Class I Groups A,B, C, D, Class II Groups E, F, G, and Class III for explosive gas and dust atmospheres.

### Warranty

The LFS sampler is guaranteed for one year against defects in parts and/or workmanship.

### Elapsed time clock

A time elapsed clock provides for accurate timing and valid sampling data. If the unit should fault, the clock will latch the time and indicate on the display. When the fault is cleared the sampler may be re-started and the clock will begin a new timing sequence.

### RFI shielding case



Model LFS-113 Sampler

See Page C46 for Applications

This sampler is provided with an EMI-RFI shielded case to dissipate electromagnetic and radio frequency interference, protecting the pump electronics and ensuring valid sampling data. Pumps have been designed to dissipate EMI between 13.5 MHz and 495 MHz at the exposure level set by ANSI C95. 1-1982.

## Specifications

### Operating range

5-200 cc/min, back pressure to 25" H<sub>2</sub>O

### Pressure range

Back Pressure up to 25" H<sub>2</sub>O

### Flow control

±5% of set point.

### Battery System

Rechargeable, plug in, 4.8V 500 MAH NiCad battery pack. Designed to meet all UL requirements. Internal charging (external charging with adapter)

### Size

2-1/2" W x 1-3/8" H x 4-5/8" L

### Weight

12 ounces

### Temperature

Operating: -20° to 45°C

Storage: -40° to 45°C

Charging: 5° to 45°C

### Flow fault indication LED

### Battery check LED

### Belt clip

### Dual filtration system

### External flow adjust

### Intrinsic safety

| Part No. | Description                                                                                                      | Price |
|----------|------------------------------------------------------------------------------------------------------------------|-------|
| 914000   | Model LFS-113 Air Sampling Pump includes Battery pack, battery charger, 3' of tubing and adapter fitting #781010 |       |
| 800086   | Replacement Battery Pack                                                                                         |       |
| 800093   | Replacement Filter Kit, Pkg of 3                                                                                 |       |
| 316TT    | 3/16" dia. Tygon <sup>™</sup> Tubing                                                                             |       |
| 781010   | Adapter Fitting                                                                                                  |       |