

# Prep 300 Pump

High-Flow Low-Pulsation Pump



*The Prep 300 is configured for use in Simulated Moving Bed Chromatography (SMBC) Applications*

## **A Variety of Uses**

The Prep 300 pump is designed to provide accurate fluid flow and low pulsation meet the needs of Simulated Moving Bed Chromatography (SMBC) applications. It performs equally well for many process/metering applications.

## **Easy Maintenance**

All Scientific Systems, Inc. pumps are known for fast, easy maintenance. Check valves, pistons, and seals are readily accessible. Automatic piston wash is also available.

## **Wide, Accurate Flow Range**

The Prep 300 is a dual-head, positive displacement (piston) pump, with stepper motor, belt drive and shaped cams for low pulsation. The unit delivers very precise flow rates up to 300 mL/min with pressures to 1,000 psi.

## **The Best Performance for the Investment**

Available in all Stainless Steel (consult factory for other materials), the Prep 300 pump provides high performance at a competitive price. Prime-Purge Valve, Pulse Dampeners, Outlet Filter, and Pressure Transducer are standard.

### **Flow Rate**

**0.1 – 300.0 mL/MIN**  
(with 0.1 mL/min resolution)

### **Pressure**

**1,000 PSI MAX**  
(across full flow range)

### **Fluid Path**

**STAINLESS STEEL**

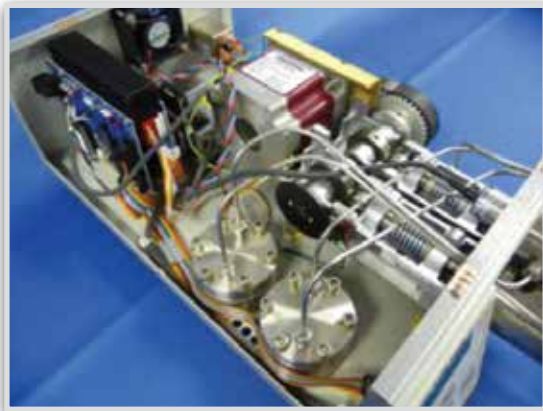
***All Pumps carry a 3-Year Warranty.***

# Prep 300 Pump

## High-Flow Low-Pulsation Pump

### Prep 300 Pump Features

- Dual-Head Design for very Consistent Flow Rates and Low Pulsation
- Stepper Motor, Belt Drive Mechanism, with Shaped Cams
- Ceramic Pistons (Ø0.375"; 0.312" stroke length; 565 µL displacement)
- Ruby/Sapphire Check Valves (3/16" ball; single capsule)
- Prime-Purge Valve with integrated Pressure Transducer and Dual Pulse Dampeners
- Bulkhead-Mount Outlet Filter (replaceable 0.5 micron element)
- Constant Flow Performance with varying Back Pressure
- Self-Washing Pump Heads (Automatic Piston Wash) Available
- Interactive Front Keypad with LED Display (Flow Settings; Pressure Readout; Upper/Lower Pressure Limits; Run/Stop; Alarms)
- RS-232 Serial Port for PC control/status (protocols to be provided)
- Run/Stop Inputs and Voltage Controls
- Universal Voltage Input: 90-260 VAC / 50-60 Hz
- Stainless Steel Fluid Path
- Motor Stall Detector
- Compact Design
- Available in Kit-Form for OEM Applications



### Prep 300 Pump Specifications

<b>Flow Rate</b> .....	0.1 - 300.0 mL/min.
<b>Max. Pressure</b> .....	1,000 psi
<b>Flow Accuracy</b> .....	≤ ± 2% of set point
<b>Flow Precision</b> .....	0.5% RSD
<b>Piston Size</b> .....	565 µL (displacement/stroke)
<b>Pulsation</b> .....	≤ 5% @ 150 mL/min. and 1,000 psi (with pulse dampener)
<b>Dimensions</b> .....	5.5" H x 10" W x 17" D (14.0 x 25.4 x 43.2 cm)
<b>Weight</b> .....	29 lbs. (13.2 kg)

### Control

Front Panel Keypad with LED Display

- Set Flow Rate
- Run/Stop
- Alarms
- Read Pressure
- Set Upper/Lower Limits

RS-232 Serial Interface

- Protocols available in manual

Remote Inputs

- Flow Control through Voltage (0-10V full scale)
- Run/Stop Inputs (5V TTL)

### Ordering Information

DESCRIPTION	PART No.
PREP 300 PUMP 0.1-300 mL/min., Constant Flow	P30SFT01
PREP 300 PUMP 0.1-300 mL/min., Constant Pressure	P30SFTP1

**All Pumps carry a 3-Year Warranty.**