

HF Series

Reciprocating Pump



High-Flow Dual Piston Pump

High Performance for Your Application

The **HF Series** pumps are specifically designed to meet the requirements of Preparative Liquid Chromatography (HPLC) and high pressure Process/Metering applications. The Stainless Steel fluid path will withstand the toughest applications.

Heavy Duty Design

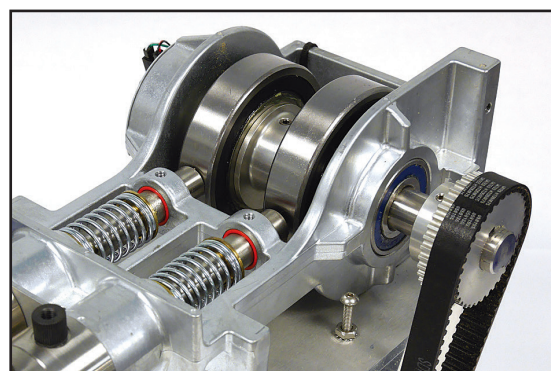
The HF Series pumps are dual-headed piston pumps with servo motors, belt drives, and reliable eccentric cams. Features include an LCD keypad with advanced HMI/PLC interface, and RS-232 for complete control and status monitoring. Prime-Purge Valve, Outlet Filter, and Pressure Transducer are also included.

Wide, Accurate Flow & Pressure Range

These pumps deliver very precise flow rates up to 300 mL/min, with pressures up to 10,000 psi.

Easy Maintenance

All Scientific Systems, Inc. pumps are known for fast, easy maintenance. Check valves, pistons, and seals are readily accessible, and Automatic Piston Wash is standard. These features contribute to reduced downtime and operating expenses.



Rugged Construction with Belt Drive and Eccentric Cams.

FLOW RATE

300 mL/min
(Dependent on supply
voltage and pressure)

PRESSURE

10,000 psi
(Dependent on supply
voltage and flow rate)

FLUID PATH

Stainless Steel

CONTROL

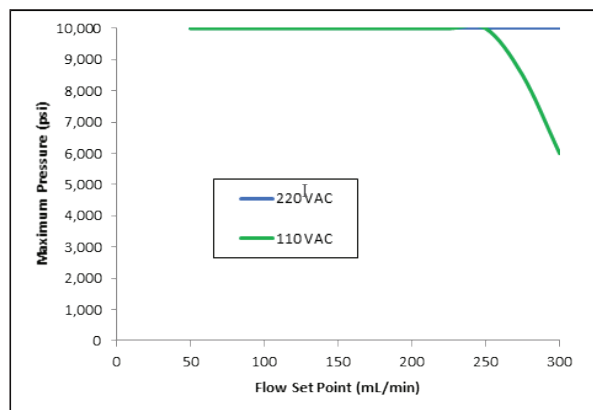
HMI/PLC Interface,
RS-232

HF Class Specifications

Flow Rate Range	0.1 – 300.0 mL/min
Flow Rate Increment	0.1 mL/min
Flow Rate Accuracy*	±5% (5.0 – 300.0 mL/min; 80:20 Water/IPA; 1,000 psi)
Flow Reproducibility	0.5% RSD (5.0 – 300.0 mL/min; 80:20 Water/IPA; 1,000 psi)
Maximum Delivery Pressure	220 VAC supply: 10,000 psi 110 VAC supply: 10,000 psi (up to 250mL/min—see chart below for pressure rating curve)
Pressure Accuracy	±50 psi
Pulsation	≤5.0% @ 150 mL/min and 80:20 Water/IPA; 3,000 psi
Piston Displacement	452 µL
Piston Wash	Self-flushing pump heads – continuous wash without auxiliary pump
Wetted Materials	316 Stainless Steel, Alumina, Zirconia, UHMWPE, PTFE, PEEK
Dimensions (H x W x D)	8.9" x 13.9" x 22.1" (22.6 x 35.3 x 56.1 cm)
Weight	50.0 lbs (22.7 kg)
Power	100 – 240 VAC (±10%), 50 – 60 Hz, 700 W
Front Panel	LCD display to monitor flow rate, pressure, and indicate parameters and alarms. Numerical keypad, Run/Stop, and Menu Navigation.
Communication	RS-232 (serial communications), Run/Stop TTL
Viscosity**	0.5 – 10.8 cP
Liquid Temperature	0 – 82 °C
Environment	Indoor use only (Pollution degree 2)
Altitude	Up to 2000 m (6500 ft)
Ambient Temperature	10 – 30 °C
Humidity	20 – 90% relative humidity

*Flow Rate is dependent on solvent selection and operating pressure.

**Range of fluid viscosities where published flow accuracy is maintained.



HF Series pumps have an open voltage input of 90–260 Volts AC. The chart above shows the capabilities at 110 Volts and 220 Volts.

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

Teledyne SSI

349 North Science Park Road, State College, PA 16803
814.234.7311 | ssi_sales@teledyne.com

teledynessi.com

Teledyne SSI is continually improving its products and reserves the right to change product specifications, replacement parts, schematics, and instructions without notice.

