Micropump® achieves a new level of accuracy and reproducibility with the Series PF Valveless Piston Pump. Designed for highly viscous fluids, the Series PF pump maintains high-volumetric efficiency at elevated pressures for precise dispensing and/or continuous metering in a compact package. With no valves, the Series PF virtually eliminates clogging and maintenance.

**Flow and Pressure Performance**
Series PF maintains accurate flow throughout the entire pressure range.

**Valveless Design**
Series PF is designed with integral active valving, resulting in the ability to pump thick and abrasive media while eliminating check valve failures.

**Reciprocating and Rotating Piston**
This piston design offers precise and reproducible dispensing and metering.

**Easy To Control**
Controllability and precise fluid delivery are assured using a stepper motor control card or electronic controller.

**Chemically Resistant**
Series PF has a long-life in aggressive environments.

**Wide Range of Options and Configurations**
Series PF can be customized to meet your individual requirements.

**Innovative Designs**
Micropump uses the latest engineering tools and manufacturing equipment to produce the most innovative pumping solutions available. Products are developed using state-of-the-art CAD, Finite Element Analysis (FEA), and rapid prototyping tools to ensure the highest level of product quality and reliability.

**Enhanced Efficiency**
As part of the IDEX Health & Science Group, Micropump now offers fully-integrated liquid subassemblies, gas management systems, and precision components. Products include Pumps, Valves, Manifolds, Tubing, Fittings, Degassing/Defoaming Systems. Air Compressors, Vacuum Generators, and HPLC Columns. Additional services are custom fluidic engineering and development, contract manufacturing, extrusion, molding, machining, and diffusion bonding.
Performance Summary
Flow Rate at 1000 rpm
- 940 mL/min (0.248 gpm)
Displacement
- 0.94 mL/rev
Maximum Rated Differential Pressure
- 6.89 Bar (100 psi)
Temperature Range
- Dependent upon material
Viscosity Range
- min 100 cps tested to 5000 cps
Self Prime (Dry Lift)
- Not Recommended
Coefficient of Variation (CV)
- CV is a measure of repeatability of dispersed volume per revolution ±2%
DC Voltage Input
- 24–72 Volt
Current Input
- 3A maximum

Wetted materials
Piston material
- Alumina Oxide
- 440C
O-ring material
- Viton®
Base material
- Nylon

Power Requirement
- 24–72 volt
- Requires stepper motor controller. Micropump offers a separate controller board with Velocity modulation (patent pending) for extremely low pulsations.

Dimensions

Pump Performance

Micropump, Inc • A Unit of IDEX Corp.
1402 NE 136th Avenue • Vancouver, WA 98684
Tel 800.671.6269 • +1.360.253.2008 • Fax +1.360.253.8294
Email info.micropump@idexcorp.com • www.micropump.com