



HIBAR
SYSTEMS LIMITED

The Liquid Dispensing Specialists

P SERIES SEALLESS CERAMIC
**SERVO MOTOR
CONTROLLED
PRECISION METERING PUMPS**



0 ~ 20 ml
Dispense
Volume

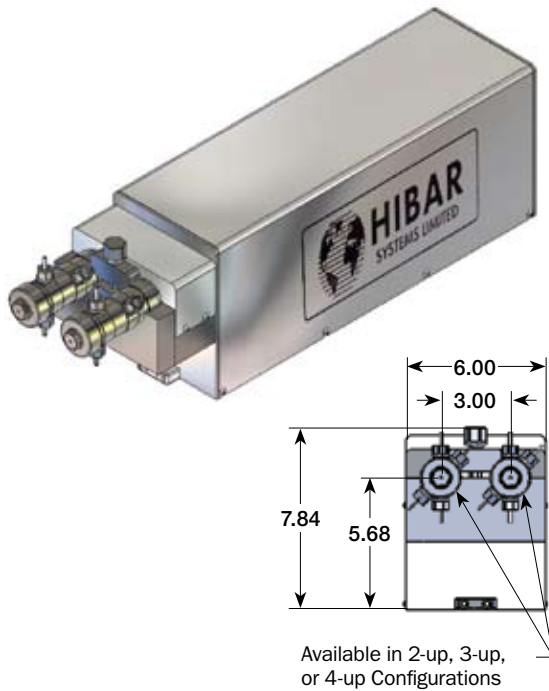
The **NEW HIBAR P SERIES SEALLESS PRECISION METERING PUMPS** are specifically designed to meet the demanding requirements of the Pharmaceutical Industry. The pumps feature close fitting sealless ceramic pistons and cylinders engineered for Pharmaceutical liquid dispensing applications.

Our unique rotary piston design with precision fit cylinder requires no dynamic seals, making the pump easy to clean and maintain. State-of-the-art servo motor drives provide full programmability of dispense volume, dispense speed profiles and automatic cleaning cycles.

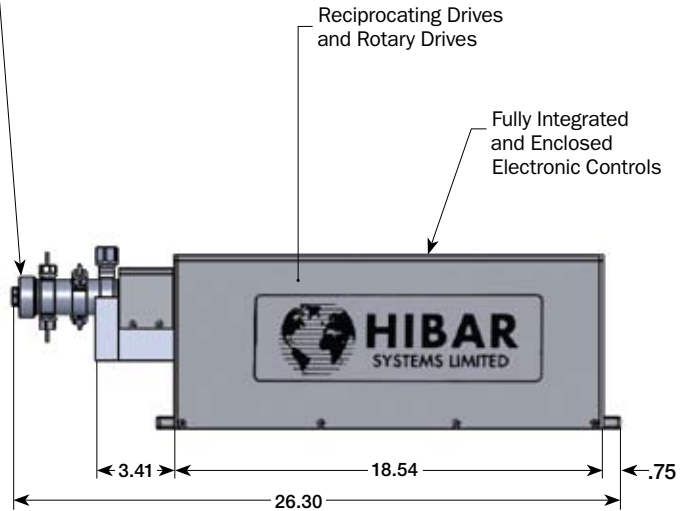
P SERIES PRECISION METERING PUMPS FEATURES

- Positive Displacement Piston Pump better than $\pm 0.5\%$ volumetric accuracy.
- No dynamic seals – Low maintenance.
- Dispense volumes from 0 to 20 ml.
- Standard 316L Stainless Steel construction.
- Modular design makes it easy to integrate with automated filling equipment.
- Wear resistant ceramic rotary piston valve handles low and high viscosity fluids with up to 100,000 cps.
- No tools required for easy disassembly, cleaning and maintenance.
- Programmable clean-in-place cycle.
- 2 Axis servo motor drives with built-in motor motion controls.
- Built-in I/O ports for easy integration with existing automated filling systems.
- Simple operation via menu driven controls.
- Pneumatic models are also available. Consult Hibar for details.
- Models are also available in various multiple configurations and drive options. Consult Hibar for details.

PRECISION METERING PUMPS SPECIFICATIONS AND APPLICATIONS



- Quick Disconnect Pump Heads with Seamless Ceramic Plunger/Sleeve Set
- A Range of Inlet and Outlet Connections available



Model	Plunger Diameter		Stroke		Maximum Dispensing Volume (cc)	Cycle Speed (cpm)	Weight lbs (kg)
	inch	mm	inch	(mm)			
1SRP-3	3/16	(4.8)	3/4	(19.05)	0.339	0-120 ^A	50 (22.7)
1SRP-7	7/16	(11.1)			1.847		
1SRP-10	5/8	(15.9)			3.770		
1SRP-12	3/4	(19.1)	1	(25.40)	7.240		
1SRP-20	1-1/4	(31.8)			20.110		

^A Maximum cycle rate is application dependant



Custom Configured 40 Pump System

APPLICATIONS

Pharmaceutical	Cosmetics		Food	General
<ul style="list-style-type: none"> • Medicine • Culture Media • Biologicals • Antibiotics • Cough Syrup 	<ul style="list-style-type: none"> • Perfume • Creams • Lotions • Shampoos • Oils 	<ul style="list-style-type: none"> • Mouthwash • Nail Lacquer • Moisturizer • Skin Cleanser • Make-up Remover 	<ul style="list-style-type: none"> • Ketchup • Vinegar • Honey • Butter • Coffee 	<ul style="list-style-type: none"> • Cream • Jelly • Sauces • Juices • Puddings
				<ul style="list-style-type: none"> • Acids • Alkalines • Reagents • Inks • Paints
				<ul style="list-style-type: none"> • Glues/ Adhesives • Battery Electrolyte • Lighter Fluids • Oils • Solvents