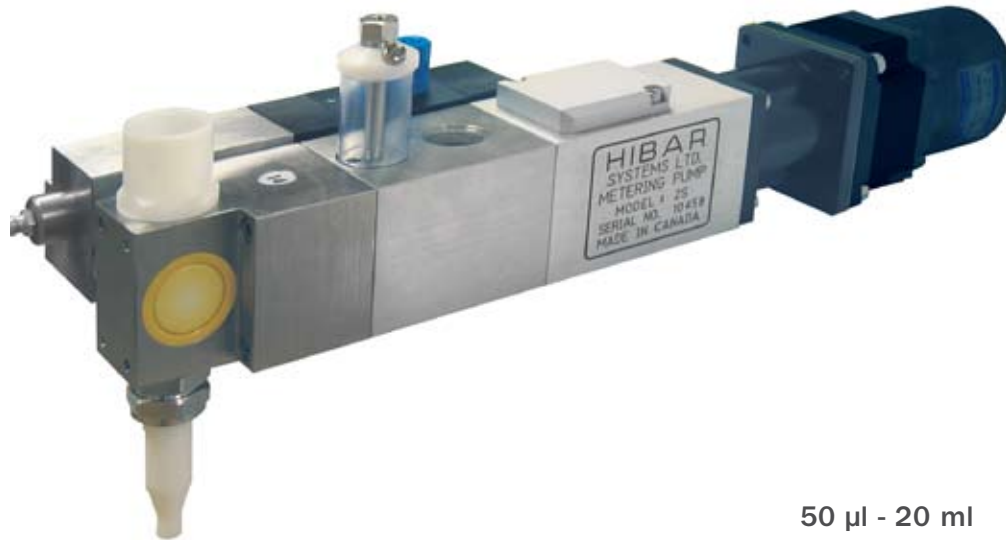




HIBAR
SYSTEMS LIMITED

The Liquid Dispensing Specialists

1S/2S SERIES PRECISION ROTARY VALVE DISPENSING PUMPS



50 μ l - 20 ml
Dispense Volume

The **HIBAR S SERIES ROTARY VALVE PUMPS** are ideally suited for higher viscosity applications (> 20,000 cps) that require dispensing of 50 μ l to 20 ml per shot. Hibar rotary valve style pumps have proven reliability and accuracy in a wide range of industries for over 30 years.

The S Series Pumps combine this proven dispensing technology with state-of-the-art servomotor drives to provide precise, programmable control over the dispense volume and speeds. The modular design and electronic control simplifies interfacing to existing filling systems.

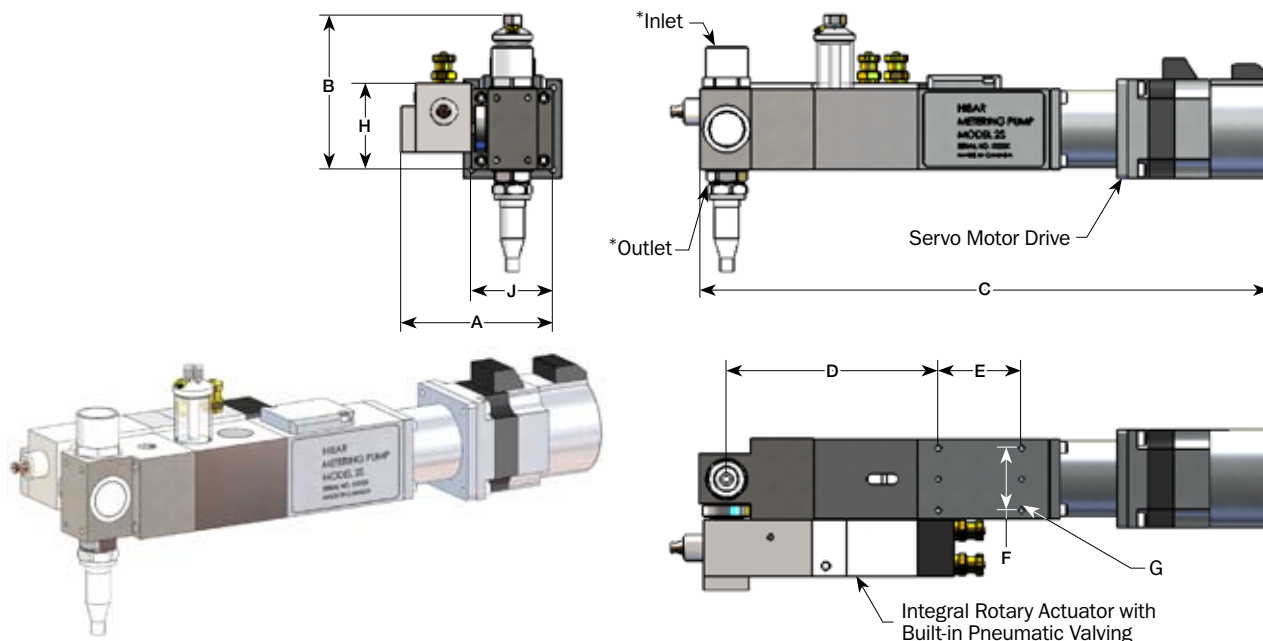
SERVOMOTOR DRIVE FEATURES

- **Accuracy** Dispensing accuracies of $\pm 0.2\%$ or better.
- **Control** Precise control of the dispense profile minimizes splashing and foaming while maximizing the cycle rate.
- **Versatility** With a simple serial connection, recipes and parameters such as acceleration, fill volume and fill speed can be downloaded to the pump with ease.
- **Compact** The motor, resolver and drive control are one integral unit mounted on the pump.
- **Simplicity** Requires only 48 VDC power and a start signal to perform a programmed dispense cycle.

S SERIES PUMP FEATURES

- Integrated check valves.
- Self contained, easily adaptable to most automated filling equipment.
- Integral servomotor drive with built-in motor controller.
- High quality Stainless Steel construction.
- Low maintenance design, long service life.

PRECISION RV DISPENSING PUMPS SPECIFICATIONS AND APPLICATIONS



* Hose style inlet and nozzle outlet shown.
Other styles available.
Consult Hibar for different product connection requirements.

Model	Plunger Diameter		Stroke	Maximum Dispensing Volume (cc)	Cycle Speed (cpm)	Drive Voltage VDC	External Dimensions inch (mm)								Weight lbs (kg)	
	inch	(mm)					A	B	C ^B	D	E	F	G	H		J
1SR-3M	3/16	(4.8)	1/2 (12.7)	0.230	0-150 ^A	48	3.39 (86)	3.45 (88)	11.72 (298)	3.97 (100)	1.63 (41)	1.25 (32)	8-32	1.93 (49)	1.70 (43)	7.0 (3.2)
1SR-4M	1/4	(6.4)		0.400												
1SR-5M	5/16	(7.9)		0.630												
1SR-7M	7/16	(11.1)		1.230												
1SR-10M	5/8	(15.9)		2.510												
2SR-8R	1/2	(12.7)	1 (25.4)	3.220	0-120 ^A	48	3.66 (93)	3.71 (94)	13.72 (348)	5.1 (130)	2 (51)	1.5 (38)	8-32	2.06 (52)	1.96 (50)	9.0 (4.1)
2SR-10R	5/8	(15.9)		5.030												
2SR-12	3/4	(19.1)		7.240												
2SR-14	7/8	(22.2)		9.850												
2SR-17	1-1/6	(27.0)		14.520												
2SR-20	1-1/4	(31.8)		20.110												

^A Maximum cycle rate is application dependant

^B Dependent on choice of servo motor model

APPLICATIONS

General	Cosmetics	Food	Pharmaceutical
<ul style="list-style-type: none"> • Toothpaste • Caulking • Glues/Adhesives • Grease/Oils • Zinc Gel 	<ul style="list-style-type: none"> • Abrasive Kitchen/Bathroom Cleaner • Paints/Inks • Tooth Whitener • Fluxes 	<ul style="list-style-type: none"> • Mascara • Exfoliant • Lipstick • Creams • Lotions 	<ul style="list-style-type: none"> • Shampoos • Antiperspirant • Lip Gloss • Nail Lacquer • Foundation
		<ul style="list-style-type: none"> • Salad Dressing • Popcorn Oil • Ketchup/Mustard • Marmalade • Sauces 	<ul style="list-style-type: none"> • Juices • Honey • Butter • Margarine • Relish
			<ul style="list-style-type: none"> • Medicine • Cough Syrup • Antibiotic • Blood Serum • Biological