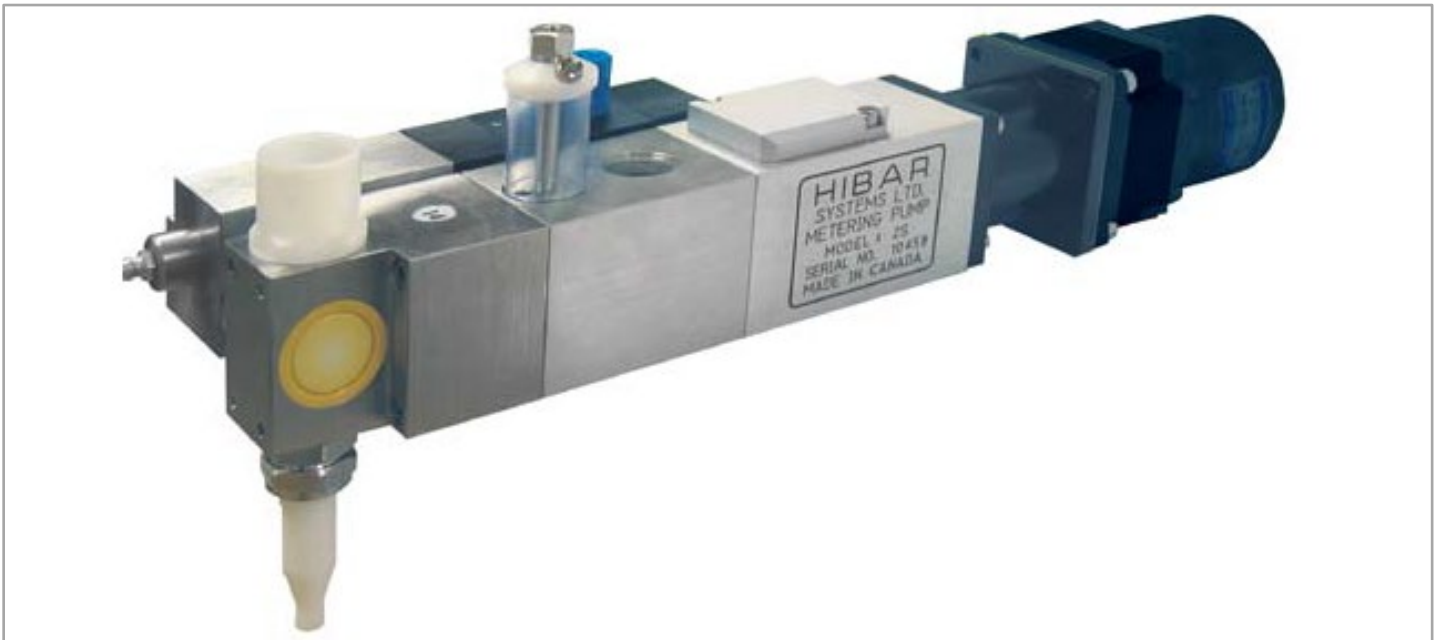


# 1S/2S Series Precision Rotary Valve Dispensing Pumps

The S Series Rotary Valve Pumps are ideally suited for higher viscosity applications (> 20,000 cps) that require dispensing of 50 µl to 20 ml per shot. 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.



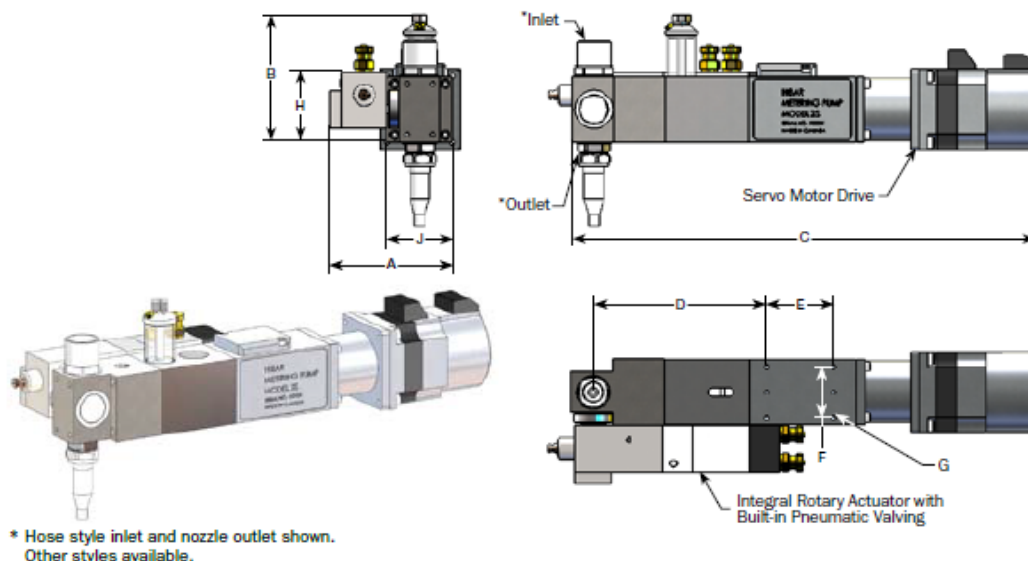
## Servomotor Drive Features:

- \* **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.*

## 5 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.*

# 1S/2S Series Precision Rotary Valve Dispensing Pumps



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

<sup>A</sup> Maximum cycle rate is application dependent <sup>B</sup> Dependent on choice of servo motor model

## Applications

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