



**HIBAR**  
SYSTEMS LIMITED

*The Liquid Dispensing Specialists*

## 1S/2S SERIES PRECISION CHECK VALVE DISPENSING PUMPS



50  $\mu$ l - 20 ml  
Dispense Volume

The **HIBAR S SERIES PRECISION DISPENSING PUMPS** are ideally suited for lower viscosity applications (< 20,000 cps) that require dispensing of 50  $\mu$ l to 20 ml per shot. Hibar check 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.

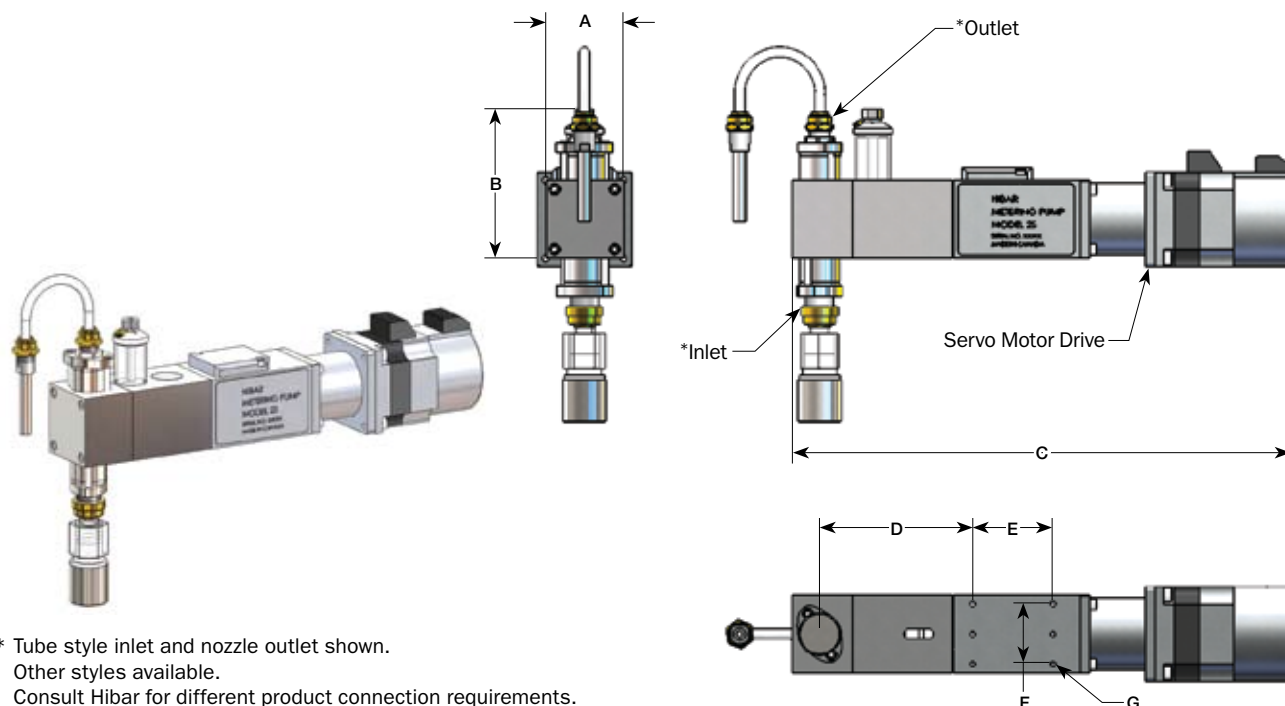
### SERVOMOTOR DRIVE FEATURES

- **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 CV DISPENSING PUMPS SPECIFICATIONS AND APPLICATIONS



\* Tube 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 <sup>B</sup>	D	E	F		G
1SC-3M	3/16	(4.8)	1/2 (12.7)	0.230	0-150 <sup>A</sup>	48	1.68 (43)	3.45 (88)	10.83 (275)	3.14 (79)	1.63 (41)	1.25 (32)	8-32	5.5 (2.5)
1SC-4M	1/4	(6.4)		0.400										
1SC-5M	5/16	(7.9)		0.630										
1SC-7M	7/16	(11.1)		1.230										
1SC-10M	5/8	(15.9)		2.510										
2SC-8R	1/2	(12.7)	1 (25.4)	3.220	0-150 <sup>A</sup>	48	1.94 (49)	3.71 (94)	12.47 (316)	3.83 (97)	2.00 (50)	1.50 (38)	8-32	8.5 (3.8)
2SC-10R	5/8	(15.9)		5.030										
2SC-12	3/4	(19.1)		7.240										
2SC-14	7/8	(22.2)		9.850										
2SC-17	1-1/16	(27.0)		14.520										
2SC-20	1-1/4	(31.8)		20.110										

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

#### APPLICATIONS

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