



**HIBAR**  
SYSTEMS LIMITED

*The Liquid Dispensing Specialists*

## **B SERIES** **PRECISION** **CHECK VALVE** **DISPENSING PUMPS**



0 ~ 20 ml  
Dispense  
Volume

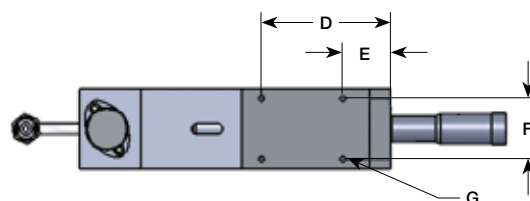
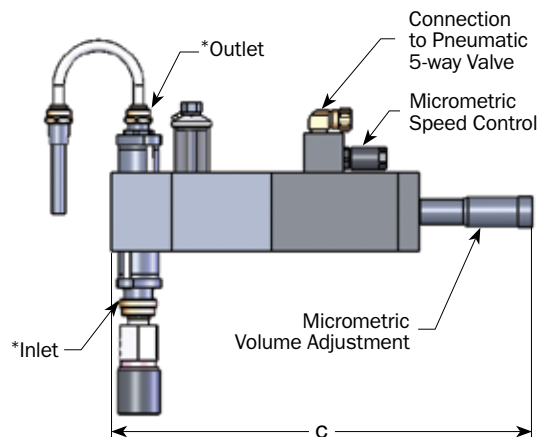
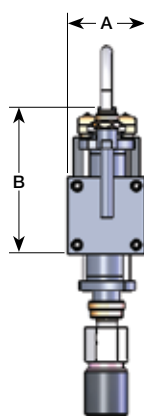
The **HIBAR B SERIES CHECK VALVE** style Dispensing Pumps have proven reliability having serviced the cosmetic, food, pharmaceutical and technical industries for over 30 years. These pumps are ideally suited for low to medium viscosity applications (<2000 cps) that require dispensing of .020 ml to 20 ml per shot.

### **B SERIES PRECISION CHECK VALVE DISPENSING PUMPS FEATURES**

- Pneumatic Piston Pump provides extremely high dispensing accuracies, typically  $\pm 1/2\%$  or better. (Some models are capable of dispensing quantities as small as 1  $\mu$ l with excellent accuracy).
- Precise dispense volume adjustment and speed control via the built-in micrometers and precision needle valves.
- Integrated check valves handle fluids with viscosities up to 20,000 cps. containing no solids.
- Easy to disassemble, clean and maintain.
- Modular design makes it easy to integrate with automated filling equipment.
- 316L Stainless Steel construction standard.
- A number of different pump construction materials are available to insure product compatibility.
- Robust design provides reliable and extended life. A service life of 20 million cycles without maintenance for some applications is not unusual. Pumps have provided continuous service for over 25 years with only routine maintenance required.
- Wide range of fill nozzles and accessories are available to suit specific applications.
- Servo motor driven models are also available. Consult Hibar for details.

[www.hibar.com](http://www.hibar.com)

### PRECISION CV DISPENSING PUMPS SPECIFICATIONS AND APPLICATIONS



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

| Model   | Plunger Diameter |        | Stroke<br>inch (mm) | Maximum Dispensing Volume (cc) | Cycle Speed (cpm)  | Air Consumption scfm (l/min) | External Dimensions inch (mm) |           |             |           |           |           | Weight lbs (kg) |           |
|---------|------------------|--------|---------------------|--------------------------------|--------------------|------------------------------|-------------------------------|-----------|-------------|-----------|-----------|-----------|-----------------|-----------|
|         | inch             | mm     |                     |                                |                    |                              | A                             | B         | C           | D         | E         | F         |                 | G         |
| 1BC-1S  | 0.079            | (2.0)  | 1/4 (6.4)           | 0.020                          | 0-300 <sup>A</sup> | 0.22 (6.2) <sup>B</sup>      | 1.68 (43)                     | 3.45 (88) | 7.77        | 2.52 (64) | 0.89 (23) | 1.25 (32) | 8-32            | 5.0 (2.3) |
| 1BC-2S  | 1/8              | (3.2)  |                     | 0.050                          |                    |                              |                               |           | 8.01 (203)  |           |           |           |                 |           |
| 1BC-3S  | 3/16             | (4.8)  |                     | 0.110                          |                    |                              |                               |           | 8.01 (203)  |           |           |           |                 |           |
| 1BC-3M  | 3/16             | (4.8)  | 1/2 (12.7)          | 0.230                          | 0-300 <sup>A</sup> | 0.44 (12.5) <sup>B</sup>     | 1.68 (43)                     | 3.45 (88) | 8.01        | 2.52 (64) | 0.89 (23) | 1.25 (32) | 8-32            | 5.0 (2.3) |
| 1BC-4M  | 1/4              | (6.4)  |                     | 0.400                          |                    |                              |                               |           | 8.01 (203)  |           |           |           |                 |           |
| 1BC-5M  | 5/16             | (7.9)  |                     | 0.620                          |                    |                              |                               |           | 8.01 (203)  |           |           |           |                 |           |
| 1BC-7M  | 7/16             | (11.1) |                     | 1.220                          |                    |                              |                               |           | 8.01 (203)  |           |           |           |                 |           |
| 1BC-10M | 5/8              | (15.9) |                     | 2.510                          |                    |                              |                               |           | 8.01 (203)  |           |           |           |                 |           |
| 2BC-8R  | 1/2              | (12.7) | 1 (25.4)            | 3.220                          | 0-150 <sup>A</sup> | 0.83 (23.5) <sup>B</sup>     | 1.94 (49)                     | 3.71 (94) | 10.53       | 3.2 (81)  | 1.2 (30)  | 1.5 (38)  | 8-32            | 7.9 (3.6) |
| 2BC-10R | 5/8              | (15.9) |                     | 5.030                          |                    |                              |                               |           | 10.53 (267) |           |           |           |                 |           |
| 2BC-12  | 3/4              | (19.1) |                     | 7.240                          |                    |                              |                               |           | 10.53 (267) |           |           |           |                 |           |
| 2BC-14  | 7/8              | (22.2) |                     | 9.850                          |                    |                              |                               |           | 10.53 (267) |           |           |           |                 |           |
| 2BC-17  | 1-1/16           | (27.0) |                     | 14.520                         |                    |                              |                               |           | 10.53 (267) |           |           |           |                 |           |
| 2BC-20  | 1-1/4            | (31.8) |                     | 20.110                         |                    |                              |                               |           | 10.53 (267) |           |           |           |                 |           |

<sup>A</sup> Maximum cycle rate is application dependant    <sup>B</sup> Calculated at full stroke at 100cpm, 75 PSI (5 Bar)

#### 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> |