Automatic Balancing Valves
Flow regulator & union with stainless steel ball and stem

Engineering GREAT Solutions
AC SBS

AutoFlow combination ball valve, AutoFlow regulator and union with up to five (5) accessory port locations. Unit is factory set to automatically limit the flow rate to within 5% of the specified amount. The flow cartridge is removable from the valve body to provide access for flow rate changes, inspection, and cleaning without breaking the main piping. The ball valve has PTFE packing, brass packing nut and blowout-proof stainless steel stem, large diameter stainless steel ball and a full size steel handle with vinyl grip. The union has an EPDM “o”-ring and tailpiece available in M, F and S connections. Ball valve end is available only in FPT or SWT. Pressure / Temperature ports are standard.

Key features

> Flow Limiting
  No wasted pumping

> Combination Valve
  Union, regulator and shut-off in one

> +/- 5%

> Tamper Resistant

Technical description

Application: Hydronic Balancing

Functions:
Flow regulator, union and shut-off

Dimensions: 1/2” - 2”

Pressure class: 400 wwp

Rating:
400 psig at 250° F (27 bar at 120° C)

Pressure range:
2-32 psi or 5-60 psi

Accuracy:
±5%

Material:
Body: DZR Brass
Flow cartridge: Series 300 stainless steel wear surfaces with stainless steel spring
### Connections

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>Fixed Conn. (Outlet)</th>
<th>Union Conn. (Inlet)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in./mm</td>
<td>in./mm</td>
<td>in./mm</td>
</tr>
<tr>
<td>ACSBS0050</td>
<td>1/2&quot;</td>
<td>1/2&quot; (15)</td>
<td>S, F</td>
</tr>
<tr>
<td>ACSBS0075</td>
<td>3/4&quot;</td>
<td>3/4&quot; (20)</td>
<td>S, F</td>
</tr>
<tr>
<td>ACSBS0100R*</td>
<td>1&quot;</td>
<td>1&quot; (25)</td>
<td>M, S</td>
</tr>
<tr>
<td>ACSBS0125</td>
<td>1 1/4&quot;</td>
<td>1 1/4&quot; (32)</td>
<td>M, S</td>
</tr>
<tr>
<td>ACSBS0150R*</td>
<td>1 1/2&quot;</td>
<td>1 1/2&quot; (40)</td>
<td>M, S</td>
</tr>
<tr>
<td>ACSBS0200</td>
<td>2&quot;</td>
<td>2&quot; (50)</td>
<td>M, S</td>
</tr>
</tbody>
</table>

**Flow Rate**

<table>
<thead>
<tr>
<th>Size</th>
<th>psid Range</th>
<th>Flow Rate (gpm)</th>
<th>Flow Rate (lps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot; - 3/4&quot;</td>
<td>2 - 32 (L)</td>
<td>0.33, 0.5, 0.67, 0.75, 0.88, 1.0, 1.1, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.28, 6.0, 7.0, 8.0, 9.0, 10, 11, 12</td>
<td>1.0, 1.1, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.28, 6.0, 7.0, 8.0, 9.0, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27</td>
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<tr>
<td>1&quot; - 1 1/4&quot;</td>
<td>2 - 32 (L)</td>
<td>0.5, 0.67, 0.75, 0.88, 1.0, 1.1, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.64, 3.0, 3.5, 4.0, 4.5, 5.0, 5.28, 6.0, 7.0, 8.0, 9.0, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27</td>
<td>1.0, 1.1, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.28, 6.0, 7.0, 8.0, 9.0, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>1 1/2&quot; - 2&quot;</td>
<td>2 - 32 (L)</td>
<td>0.063, 0.095, 0.126, 0.158, 0.189, 0.252, 0.315, 0.379, 0.442, 0.505, 0.568, 0.631, 0.694, 0.757, 0.820, 0.883, 0.946, 1.009, 1.073, 1.136, 1.199, 1.262, 1.325, 1.388, 1.451, 1.514, 1.577, 1.640, 1.703</td>
<td>5.0, 6.0, 7.0, 8.0, 9.0, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 68, 70</td>
</tr>
<tr>
<td>15 - 20 mm</td>
<td>14 - 220 (L)</td>
<td>0.021, 0.032, 0.042, 0.047, 0.056, 0.063, 0.069, 0.079, 0.095, 0.110, 0.126, 0.142, 0.158, 0.167, 0.189, 0.221, 0.252, 0.284, 0.315, 0.333, 0.379, 0.442, 0.505</td>
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<tr>
<td>25 - 32 mm</td>
<td>14 - 220 (L)</td>
<td>0.021, 0.032, 0.042, 0.047, 0.056, 0.063, 0.069, 0.079, 0.095, 0.110, 0.126, 0.142, 0.158, 0.167, 0.189, 0.221, 0.252, 0.284, 0.315, 0.333, 0.379, 0.442, 0.505, 0.568, 0.631, 0.694, 0.757, 0.820, 0.883, 0.946, 1.009, 1.073, 1.136, 1.199, 1.262, 1.325, 1.388, 1.451, 1.514, 1.577, 1.640, 1.703</td>
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<td>40 - 50 mm</td>
<td>14 - 220 (L)</td>
<td>0.021, 0.032, 0.042, 0.047, 0.056, 0.063, 0.069, 0.079, 0.095, 0.110, 0.126, 0.142, 0.158, 0.167, 0.189, 0.221, 0.252, 0.284, 0.315, 0.333, 0.379, 0.442, 0.505, 0.568, 0.631, 0.694, 0.757, 0.820, 0.883, 0.946, 1.009, 1.073, 1.136, 1.199, 1.262, 1.325, 1.388, 1.451, 1.514, 1.577, 1.640, 1.703</td>
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</tr>
</tbody>
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## Articles

### Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>Weight</th>
<th>GPM</th>
<th>Maximum Flow gpm (lps)*</th>
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<tbody>
<tr>
<td>ACSBS0050</td>
<td>1/2</td>
<td>4.1</td>
<td>2.0</td>
<td>4.8</td>
<td>6.7</td>
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<td>2.5</td>
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<td>8 - 12</td>
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<td>ACSBS0075</td>
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<td>4.1</td>
<td>2.0</td>
<td>4.9</td>
<td>6.7</td>
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<td>2.5</td>
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<td>3.3</td>
<td>15.4</td>
<td>15 - 22</td>
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<td>9.5</td>
<td>2.6</td>
<td>2.8</td>
<td>4.1</td>
<td>21.9</td>
<td>21 - 33</td>
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<td>4.4</td>
<td>2.3</td>
<td>6.4</td>
<td>9.5</td>
<td>2.6</td>
<td>2.8</td>
<td>4.1</td>
<td>29.1</td>
<td>28 - 41</td>
</tr>
</tbody>
</table>

### Notes

- Weight and dimension based on F x F connections and will vary with mixed options/connections.
- All weights and dimensions are subject to minor changes.
- Cvs based on the body only without flow regulator.
- For pump head calculations, add the indicated pressure drop of 4.6 ft or 2 psi for 2-32 psi or 11.6 ft or 5 psi for 5-60 psi to the calculated drop for other components.
- * Denotes female thread not available on union end.
- Available in ISO7 threads.

## Model Order Designation

**AC0100L** - **0075S** - **DP2&4, AV1** - **MI** - **12**

**Connections**

- Ball valve end first. See specifications for available connections. Female Sweat X 3/4" Reduced Female Sweat Shown.

**Option w/ Locations**

- Use for options that require specified locations.
- Dual P/Ts in Ports 2 & 4 and Air Vent in Port 1 Shown

**GPM**

- 12 GPM Shown

**Pressure Range**

- L = 2-32 psi

**Options**

- Use for options that have specific locations.
- Metal I.D. Tag Shown

**Options Available**

- **AA** Manual Air Vent
- **DX** Ext. P/T Ports
- **EH** Extended Handle
- **HN** Hose End Drain
- **MI** Metal ID Tag
- **PI** Plastic ID Tag
- **PL** Plug
- **PP** ProPress®
- **SE** Stem Extender
- **T4** 1/4" Tap

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