**Size**

- 1/2” - 2” (Standard Port)
- 6000 psi

**End Connections**

- NPT
- Butt Weld
- Socket Weld
- SAE Threaded Ends

**Valve Materials**

- 316 Stainless Steel
- Carbon Steel

**Ball and Stem Materials**

- 316 Stainless Steel
- 17-4 PH Stainless Steel

**Seat Materials**

- Delrin
- PEEK

**Service Applications**

- Chemical
- Offshore
- Petrochemical
- Power
- CNG
- Refining
- Oil & Gas

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3210 S. Susan St, Santa Ana, CA 92704 Tel (714) 427-0877 Fax (714) 427-6392 Website: www.avcovalve.com
About the HP1100 Series Ball Valve

The AVCO HP1100 series ball valve is designed for high pressure applications where high performance and quality are essential. The precision machined, three (3) piece design gives great flexibility for butt weld, socket weld, NPT and SAE AS5202 ends up to 6000 psi. Materials of construction are 316 stainless steel and carbon steel. The floating standard port ball sits between precision engineered Delrin® or PEEK seats to cater for harsh environment and high pressure applications. The stem is live loaded with blow out prevention and has online adjustment capability. The mount pad allows for many actuator styles (electric, pneumatic, etc.) to be mounted with ease. Whether for use in the oil, gas, chemical or power industry; this valve will deliver.

Design

- The valve body has three sections (body and two end caps).
- The three sections are bolted together with high grade bolts.
- The valve is a swing out design for inline maintenance
- Valves are available as 6000psi pressure rating
- The end to end dimensions conform to AVCO standards.
- Butt weld ends conform to ASME B16.25.
- SAE ends conform to AS5202
- Threaded ends conform to ASME B1.20.1 & B16.11
- Socket weld ends conform to ASME B16.11
- The ball is standard port.
- The valve body has an integral mounting pad.
- The stem has blow-out prevention.
- The seat is Delrin® as standard.
- The stem assembly enables online adjustment of the packing.
- The valves are tested to API 598.
- Valve sizes available are 1/2” thru 2”.

Operation

The following operators can be utilized on the valve:

- Various manual handles (Lever, Tee, Gear)
- Pneumatic actuator.
- Hydraulic actuator.
- Electric motor actuator.
**Item Description**  | **Material**  
---|---
1 Body  | Carbon Steel 316 Stainless Steel
2 End Cap  | Carbon Steel 316 Stainless Steel
3 Ball  | 316 Stainless Steel
4 Stem  | 17-4 PH Stainless Steel
5 Seat  | Delrin® PEEK
6 Body Seal  | Buna N Viton EPDM
7 Stem Seal  | TFM

**Pressure/Temperature Rating Graph**

<table>
<thead>
<tr>
<th>SIZE</th>
<th>A (in.)</th>
<th>B (in.)</th>
<th>D (in.)</th>
<th>L (in.)</th>
<th>Torque (in.lbs)</th>
<th>Cv</th>
<th>Weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>2.78</td>
<td>0.44</td>
<td>5</td>
<td>1.8</td>
<td>60</td>
<td>8</td>
<td>3.5</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>3.48</td>
<td>0.56</td>
<td>5</td>
<td>1.9</td>
<td>200</td>
<td>12</td>
<td>5.3</td>
</tr>
<tr>
<td>1&quot;</td>
<td>3.69</td>
<td>0.81</td>
<td>6</td>
<td>2.4</td>
<td>300</td>
<td>32</td>
<td>9.9</td>
</tr>
<tr>
<td>1 1/2&quot;</td>
<td>5.04</td>
<td>1.25</td>
<td>11</td>
<td>3.2</td>
<td>550</td>
<td>80</td>
<td>20.9</td>
</tr>
<tr>
<td>2&quot;</td>
<td>6.14</td>
<td>1.50</td>
<td>11</td>
<td>3.3</td>
<td>1100</td>
<td>104</td>
<td>28.9</td>
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</tbody>
</table>
# BALL VALVES

## HP1100 SERIES

### HOW TO ORDER

<table>
<thead>
<tr>
<th>HP11</th>
<th>3</th>
<th>3</th>
<th>D</th>
<th>B</th>
<th>SE</th>
<th>100</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series</td>
<td>Body &amp; End Material</td>
<td>Ball &amp; Stem Material</td>
<td>Seat Material</td>
<td>Seal Material</td>
<td>End Style</td>
<td>Size</td>
<td>Options</td>
</tr>
<tr>
<td>High Pressure 1100 Series 3 Piece Ball Valve</td>
<td>1 - Carbon Steel 3 - 316 SS</td>
<td>3 - Stainless Steel D - Delrin P - PEEK</td>
<td>B - BUNA N E - EPDM V - Viton</td>
<td>SE - NPT SW - Socket Weld BW80 - Butt Weld Sch80 BW160 - Butt Weld Sch160 SAE - SAE AS5202</td>
<td>050 - 1/2&quot; 075 - 3/4&quot; 100 - 1&quot; 150 - 1 1/2&quot; 200 - 2&quot;</td>
<td>None - Bare Stem BAHL - Hardened Ball BNIE - Emissions Bonnet BAVT - Vented Balls LH - Locking Lever Handle</td>
<td></td>
</tr>
</tbody>
</table>

Variations of the above or special ends can be supplied upon request.

Example ordering codes:

- HP1133DB-SE-100 = 1" ball valve with stainless steel body/ball/stem/ends, Delrin seats, Buna N seals, NPT ends & bare stem
- HP1113PV-BW160-200-LH = 2" ball valve with carbon steel body/ends, stainless steel ball/stem, PEEK seats, Viton Seals, SCH160 butt weld ends lever handle