2-WAY MANUAL BALL VALVES

NSF/ANSI 61 and NSF/ANSI 372
Series MBV 3/8” - 2”

FEATURES:
- Heavy-duty, large diameter shaft to eliminate flexing and breakage.
- Dual shaft seals eliminate leakage.
- PTFE bearing on shaft eliminates friction and wear; stem design is “blow-out” proof.
- PTFE seats energized with O-rings eliminate wear and improve cycle life.
- Trunnion design eliminates lateral ball stress and allow downstream piping to be disconnected under full line pressure.
- Fully concentric and mirror polished ball assures smooth, leakproof operation.
- Multi-direction flow means valve cannot be piped in backwards.
- Smooth flow path eliminates pressure loss.
- True-union ends for ease of piping installation and removal.
- Mounting lugs on body for piping support or easy attachment of True Blue Actuators.

MBV PVC and CPVC body types certified to NSF/ANSI 61 and NSF/ANSI 372

Each valve is 100% individually inspected and tested prior to shipment.

Approximate Flow Rates at 1.0 PSI (0.07 Bar) Pressure Drop

<table>
<thead>
<tr>
<th>Valve Sizes</th>
<th>1/2”</th>
<th>3/4”</th>
<th>1”</th>
<th>1 1/4”</th>
<th>1 1/2”</th>
<th>2”</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF Factor</td>
<td>12</td>
<td>24</td>
<td>25</td>
<td>50</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td>Torque in-lbs</td>
<td>25</td>
<td>35</td>
<td>45</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
</tbody>
</table>

Torque Specifications

<table>
<thead>
<tr>
<th>Body Material</th>
<th>PVC</th>
<th>PP</th>
<th>CPVC</th>
<th>PTFE</th>
<th>PVDF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connections</td>
<td>S</td>
<td>T</td>
<td>Fl</td>
<td>Fl</td>
<td>Fl</td>
</tr>
<tr>
<td>Seals</td>
<td>EPDM</td>
<td>EPDM</td>
<td>EPDM</td>
<td>EPDM</td>
<td>EPDM</td>
</tr>
</tbody>
</table>

Each valve is 100% individually inspected and tested prior to shipment.
**SANITARY CLAMP END DIMENSIONS**

<table>
<thead>
<tr>
<th>SIZE</th>
<th>L4 N</th>
<th>D3 N</th>
<th>L5 N</th>
<th>D4 N</th>
<th>D5 N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot; MINI</td>
<td>4.7</td>
<td>120</td>
<td>56</td>
<td>56</td>
<td>99</td>
</tr>
<tr>
<td>3/4&quot; MINI</td>
<td>4.9</td>
<td>133</td>
<td>56</td>
<td>44</td>
<td>99</td>
</tr>
<tr>
<td>1&quot; MAXI</td>
<td>5.2</td>
<td>123</td>
<td>86</td>
<td>22</td>
<td>1.11</td>
</tr>
<tr>
<td>1&quot; 1/4&quot;</td>
<td>5.8</td>
<td>147</td>
<td>86</td>
<td>22</td>
<td>1.32</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>7.3</td>
<td>184</td>
<td>130</td>
<td>34</td>
<td>1.61</td>
</tr>
<tr>
<td>2&quot;</td>
<td>7.3</td>
<td>184</td>
<td>136</td>
<td>47</td>
<td>2.11</td>
</tr>
</tbody>
</table>

**NOTE:** SPIGOT CONNECTIONS AVAILABLE IN PVDF AND POLYPRO, ASAHI AND GF PIPE SIZES.

ASAHI PVDF IS PURAD, SDR 21 SIZES.
ASAHI POLYPRO IS POLYPURE SDR 11 SIZES.
GF PVDF IS SYGEF SDR 21 SIZES.
GF POLYPRO IS BETA SDR 11 SIZES.
2-WAY MANUAL BALL VALVES

NSF/ANSI 61 and NSF/ANSI 372
Series MBV 3/8" - 2"

FEATURES:
- Heavy-duty, large diameter shaft to eliminate flexing and breakage.
- Dual shaft seals eliminate leakage.
- PTFE bearing on shaft eliminates friction and wear; stem design is "blow-out" proof.
- PTFE seats energized with O-rings eliminate wear and improve cycle life.
- Trunnion design eliminates lateral ball stress and allow downstream piping to be disconnected under full line pressure.
- Fully concentric and mirror polished ball assures smooth, leakproof operation.
- Multi-direction flow means valve cannot be piped in backwards.
- Smooth flow path eliminates pressure loss.
- True-union ends for ease of piping installation and removal.
- Mounting lugs on body for piping support or easy attachment of True Blue Actuators.

Each valve is 100% individually inspected and tested prior to shipment.

MATERIAL GUIDEINE FOR PRESSURE AND TEMPERATURE

ORDERING INFORMATION

Valve Sizes
- 1/2" NPT & BSP Thd. or Amer Socket
- 3/4" NPT & BSP Thd. or Amer Socket
- 1" NPT & BSP Thd. or Amer Socket
- 1 1/4" NPT & BSP Thd. or Amer Socket
- 1 1/2" NPT & BSP Thd. or Amer Socket
- 2" NPT & BSP Thd. or Amer Socket

 SEAL MATERIAL
- V PTFE

BODY MATERIAL
- PP Polypropylene (PVDF)
- CP Chlorinated Polyvinyl Chloride (CPVC)
- PP Virgin Polypropylene
- PVF Kynar®
- PVC Polyvinyl Chloride

CONNECTIONS
- S Socket Ends
- T Threaded Ends
- P Flanges
- G Sanitary
- BSP Threaded
- SP1 Asahi Spigots
- SP2 GF Spigots

Vented Ball — Add suffix -Z for sodium hypochlorite.

APPROXIMATE FLOW RATES at 1.0 PSI (0.07 Bar) Pressure Drop

<table>
<thead>
<tr>
<th>Valve Sizes</th>
<th>1/2&quot;</th>
<th>3/4&quot;</th>
<th>1&quot;</th>
<th>1 1/4&quot;</th>
<th>1 1/2&quot;</th>
<th>2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>C Factor</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>60</td>
</tr>
</tbody>
</table>

TORQUE SPECIFICATIONS

<table>
<thead>
<tr>
<th>10</th>
<th>15</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>35</td>
<td>45</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
</tbody>
</table>

The top and bottom "Trunnion" design permits flow and pressure in either direction, and eliminates the stresses inherent to a ball secured only at the top. Sizes 1/2" through 1 1/2" have a full port, size 2" has a tapered port, the ultra smooth flow path virtually eliminates turbulence and pressure loss and permits flow rates that far exceed pipe manufacturers specifications.

MBV PVC and CPVC body types certified to NSF/ANSI 61 and NSF/ANSI 372