Polyethylene Valves for Natural Gas.
Polyethylene Valves Made in the U.S.A.

The POLYBALL valve is manufactured in Mansura, Louisiana, in a facility certified to ISO 9001:2015 Quality Management System requirements. Custom, dedicated tooling and equipment have been developed for every valve size to achieve and maintain quality levels during production and minimize variation in all processes.

At assembly, each valve is assigned a unique serial number that provides complete traceability for critical components. The serial number allows complete traceability from the customer’s installation back to the raw material.

All POLYBALL valves feature the industry-standard tracking and traceability code per ASTM F2897 that allows instant access to individual valve specifications. With decoding software, simply scan the bar code to see the production date, size, material and valve type, lot code and more.

<table>
<thead>
<tr>
<th>NO.</th>
<th>COMPONENT</th>
<th>MATERIAL</th>
<th>FEATURES AND BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Body</td>
<td>POLYETHYLENE</td>
<td>PE 2708, medium density&lt;br&gt;PE 4710, high density</td>
</tr>
<tr>
<td>2</td>
<td>Ends</td>
<td>POLYETHYLENE</td>
<td>PE 2708, various SDRs&lt;br&gt;PE 4710, various SDRs</td>
</tr>
<tr>
<td>3</td>
<td>Ball</td>
<td>POLYPROPYLENE</td>
<td>High strength, long life and low operating torque</td>
</tr>
<tr>
<td>4</td>
<td>Retainer</td>
<td>POLYPROPYLENE</td>
<td>Positive restraint under any condition; retains seat under high differential pressure</td>
</tr>
<tr>
<td>5</td>
<td>Ball Seat</td>
<td>BUNA-N</td>
<td>Reliable sealing from -20°F to 140°F</td>
</tr>
<tr>
<td>6</td>
<td>Actuator</td>
<td>POLYPROPYLENE</td>
<td>2” operating square, positive position indication, over-torque protection</td>
</tr>
<tr>
<td>7</td>
<td>Weather Seal</td>
<td>BUNA-N</td>
<td>Protects from groundwater and dirt</td>
</tr>
<tr>
<td>8</td>
<td>Stem</td>
<td>ACETAL*</td>
<td>Excellent durability and strength, blowout proof</td>
</tr>
<tr>
<td>9</td>
<td>Stem Seals</td>
<td>BUNA-N</td>
<td>Redundant sealing with dual o-rings</td>
</tr>
</tbody>
</table>

* Stem is stainless steel on 2” RP, 1 1/2” FP, 1 1/4” FP sizes.
Polyethylene Valves
Made in the U.S.A.

Kerotest Manufacturing Corp. has more than a 100-year commitment to the gas distribution industry. So Polyball will always be American made, supported and distributed, with ample inventory at all times.

Made to perform and comply
- 49 CFR Part 192
- ASTM D2513
- ASTM F2897
- ASME B16.40
- CSA standard B137.4 - 02
- CSA International certified (Canadian Standard Association)

Made to meet your needs in these applications:
- Natural Gas Distribution
- Natural Gas Gathering
- Landfill Gas (Methane)
- Air
- Gaseous Propane

- **For valves manufactured after Jan 2019, using a .40 Design Factor per 49 CFR § 192.121**
The gearbox features a 6:1 ratio and is also sealed against outside contaminants, making it virtually waterproof.

12" Full Port is also available with bypass option.

Valve Sizes and Dimensions (Approx. inches)  

<table>
<thead>
<tr>
<th>SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Cv</th>
<th>WEIGHT (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2''</td>
<td>19</td>
<td>9.7</td>
<td>7.0</td>
<td>1.90</td>
<td>6.4</td>
<td>180</td>
<td>5</td>
</tr>
<tr>
<td>3''</td>
<td>21</td>
<td>12.2</td>
<td>8.7</td>
<td>2.70</td>
<td>6.4</td>
<td>400</td>
<td>10</td>
</tr>
<tr>
<td>4''</td>
<td>25</td>
<td>14.8</td>
<td>10.2</td>
<td>3.63</td>
<td>7.5</td>
<td>710</td>
<td>20</td>
</tr>
<tr>
<td>6''</td>
<td>27</td>
<td>19.6</td>
<td>13.2</td>
<td>5.25</td>
<td>7.0</td>
<td>1290</td>
<td>42</td>
</tr>
<tr>
<td>8''</td>
<td>28</td>
<td>25.5</td>
<td>17.2</td>
<td>6.70</td>
<td>5.3</td>
<td>2119</td>
<td>96</td>
</tr>
<tr>
<td>12''</td>
<td>82</td>
<td>31.3</td>
<td>19.4</td>
<td>10.10</td>
<td>28</td>
<td>5400</td>
<td>396</td>
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</tbody>
</table>

12" POLYBALL Full Port features a 10.1” port opening.

Body is high-density PE 4710 polyethylene.

Nipple extensions available in PE 4710 or PE 2708.

Available SDRs: 9, 11, 13.5, 17

All POLYBALL valves feature the industry standard tracking and traceability code per ASTM F2897 that allows instant access to individual valve specifications. With decoding software, simply scan the bar code to see the production date, size, material and valve type, lot code and more.
### Valve Sizes and Dimensions (Approx. inches)

#### Reduced Port

<table>
<thead>
<tr>
<th>SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Cv</th>
<th>WEIGHT (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3&quot;</td>
<td>19</td>
<td>9.6</td>
<td>6.9</td>
<td>1.9</td>
<td>6.8</td>
<td>180</td>
<td>5.3</td>
</tr>
<tr>
<td>4&quot;</td>
<td>21</td>
<td>12.2</td>
<td>8.7</td>
<td>2.7</td>
<td>6.5</td>
<td>450</td>
<td>11</td>
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<tr>
<td>6&quot;</td>
<td>25</td>
<td>14.8</td>
<td>10.2</td>
<td>3.6</td>
<td>7.3</td>
<td>910</td>
<td>26</td>
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<tr>
<td>8&quot;</td>
<td>27</td>
<td>19.6</td>
<td>13.2</td>
<td>5.2</td>
<td>7.2</td>
<td>1290</td>
<td>47</td>
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<tr>
<td>10&quot;</td>
<td>28</td>
<td>25.5</td>
<td>17.2</td>
<td>6.7</td>
<td>5.5</td>
<td>2119</td>
<td>102</td>
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<tr>
<td>12&quot;</td>
<td>28</td>
<td>25.5</td>
<td>17.2</td>
<td>6.7</td>
<td>5.7</td>
<td>2119</td>
<td>110</td>
</tr>
</tbody>
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#### Service Valve

<table>
<thead>
<tr>
<th>SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Cv</th>
<th>WEIGHT (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;  CTS</td>
<td>12</td>
<td>5.2</td>
<td>3.7</td>
<td>1.01</td>
<td>3.0</td>
<td>7</td>
<td>1</td>
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<tr>
<td>1/2&quot;  IPS</td>
<td>12</td>
<td>5.2</td>
<td>3.7</td>
<td>1.01</td>
<td>3.0</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>3/4&quot;  CTS</td>
<td>12</td>
<td>5.2</td>
<td>3.7</td>
<td>1.01</td>
<td>3.0</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>3/4&quot;  IPS</td>
<td>12</td>
<td>5.2</td>
<td>3.7</td>
<td>1.01</td>
<td>3.0</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>1&quot;    CTS</td>
<td>12</td>
<td>5.2</td>
<td>3.7</td>
<td>1.01</td>
<td>3.0</td>
<td>33</td>
<td>1</td>
</tr>
<tr>
<td>1&quot;    IPS</td>
<td>12</td>
<td>5.2</td>
<td>3.7</td>
<td>1.01</td>
<td>3.2</td>
<td>42</td>
<td>2</td>
</tr>
<tr>
<td>1.25&quot; CTS</td>
<td>12</td>
<td>5.2</td>
<td>3.7</td>
<td>1.01</td>
<td>3.2</td>
<td>45</td>
<td>2</td>
</tr>
<tr>
<td>1.25&quot; IPS</td>
<td>12</td>
<td>5.2</td>
<td>3.7</td>
<td>1.01</td>
<td>3.2</td>
<td>49</td>
<td>2</td>
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</tbody>
</table>

All dimensions are approximate and subject to change. Consult factory for certified dimensions.
All valves are in full compliance with ASME B16.40.

<table>
<thead>
<tr>
<th>TEST ITEM</th>
<th>TEST METHOD</th>
<th>SDR 11 MEDIUM DENSITY PE 2708</th>
<th>SDR 9.0 AND 11 HIGH DENSITY PE 4710</th>
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</thead>
<tbody>
<tr>
<td>SEAT TEST</td>
<td>Air seat test under water, both directions</td>
<td>4 psi (0.3 bar) 150 psi (10.4 bar)</td>
<td>4 psi (0.3 bar) 190 psi (13 bar)</td>
</tr>
<tr>
<td>SHELL TEST</td>
<td>Air test under water</td>
<td>4 psi (0.3 bar) 150 psi (10.4 bar)</td>
<td>4 psi (0.3 bar) 190 psi (13 bar)</td>
</tr>
<tr>
<td>OPERATIONAL TESTING</td>
<td>Valve operated 10 times at full differential pressure at -20°F and 140°F (-29°C to 60°C)</td>
<td>100 psi (6.9 bar)</td>
<td>125 psi (8.6 bar)</td>
</tr>
<tr>
<td>BEND TEST</td>
<td>20 pipe diameters bend radius at differential pressure operation, seat leakage checked</td>
<td>10 psi (0.7 bar) 100 psi (6.9 bar)</td>
<td>10 psi (0.7 bar) 125 psi (8.6 bar)</td>
</tr>
<tr>
<td>TORQUE TEST</td>
<td>Operating torque at -20°F and 100°F (-29°C to 38°C)</td>
<td>100 psi (6.9 bar)</td>
<td>125 psi (8.6 bar)</td>
</tr>
<tr>
<td>SUSTAINED PRESSURE TEST</td>
<td>Tested at 176°F (80°C)</td>
<td>134 psi (9.2 bar) DR 11</td>
<td>148 psi (10.2 bar) DR 9.0</td>
</tr>
<tr>
<td>HIGH PRESSURE TEST</td>
<td>High pressure Shell Test</td>
<td>&gt; 600 psi (41 bar)</td>
<td>&gt; 700 psi (48 bar)</td>
</tr>
</tbody>
</table>