The Original Is Still The Best!
Over 3,000,000 Sold!

Proud to be AMERICAN MADE

Andronaco Industries
Why use Polyvalve Poly-Gas® Valves?

Polyvalve Poly-Gas® valves are everything you’d expect from the company that invented polyethylene valves.

Millions of Polyvalve Poly-Gas® valves have been sold since 1976 and are in use throughout the world. Here’s why:

- Rugged and reliable Polyvalve Poly-Gas® valves are the strongest part of a polyethylene piping system.
- No metal internal parts.
- Bubble-tight shutoff from dual elastomeric seats.
- Fused body shell eliminates leak paths to atmosphere.
- High-grade polymeric materials eliminate corrosion.
- Multiple elastomeric stem seals.
- Smooth bore gives excellent flow characteristics in both full and reduced port designs.

Note: Has high-strength stainless steel stem. 2” C-style is reduced bore only.
Materials, Codes and Standards, Applications

Materials

Materials of Construction

<table>
<thead>
<tr>
<th>Item</th>
<th>½” through 2” Polyvalve II™ (C-style)</th>
<th>2” through 12”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body</td>
<td>Polyethylene</td>
<td>Polyethylene</td>
</tr>
<tr>
<td>Ball</td>
<td>Acetal</td>
<td>Polypropylene</td>
</tr>
<tr>
<td>Seat Retainer</td>
<td>Acetal</td>
<td>Polypropylene</td>
</tr>
<tr>
<td>Seat</td>
<td>Buna N</td>
<td>Buna N</td>
</tr>
<tr>
<td>Stem</td>
<td>Stainless Steel</td>
<td>Acetal</td>
</tr>
<tr>
<td>Stem Seal</td>
<td>Buna N</td>
<td>Buna N</td>
</tr>
<tr>
<td>Ground Water Seal</td>
<td>Neoprene</td>
<td>Neoprene</td>
</tr>
<tr>
<td>Wrench Adapter</td>
<td>Acetal</td>
<td>Polypropylene*</td>
</tr>
<tr>
<td>Adapter Screw</td>
<td>Stainless Steel</td>
<td></td>
</tr>
<tr>
<td>Adapter Button</td>
<td>Acetal</td>
<td></td>
</tr>
</tbody>
</table>

*Note: 12” has gear box and cast iron 2” square nut adaptor. 8” will have a choice of either gearing or wrench. 1¼” and 2” C-style is Standard Bore only. Available in Copper Tubing Standard Sizes (CTS).

Body Materials Chart

<table>
<thead>
<tr>
<th>Resin Supplier</th>
<th>Material Designation</th>
<th>Color</th>
<th>ASTM Material Designation</th>
<th>Material Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP Chem</td>
<td>TR-418 (D6500)</td>
<td>Yellow</td>
<td>PE 2708/2406</td>
<td>Medium</td>
</tr>
<tr>
<td>Dow</td>
<td>DGDA 2490 (UAC3700)</td>
<td>Black</td>
<td>PE 4710/3408</td>
<td>High</td>
</tr>
</tbody>
</table>

Note: On 8” full bore and 12” full bore only the main body section is in DGDA 2490 material. Different pipe ends are fused on to suit customer’s specific material requirements.

Codes and standards

- Polyvalve Poly-Gas® valves meet or exceed the requirements of:
  - ANSI B16.40
  - ASTM D-2513
  - U.S. Department of Transportation 49CFR, Part 192
- In addition, as required by customers, certain sizes and materials of valves meet or exceed the requirements of CSA B137.0 and B137.4.
- Certain Polyvalve Poly-Gas® valves have successfully passed 10,000-hour tests to ISO 4437.
- Polyvalve is an ISO 9001 certified company.

Applications

For use in:

- Natural gas distribution.
- Natural gas gathering.
- Landfill gas (methane).
- Hydrocarbon fuel gases.
- Hydrogen.
- Air.
- Other inert gases (helium, argon, neon).

12” Poly-Gas® valve fusion operation
Poly-Gas® Valve Availability

Poly-Gas® Valve Availability Chart (Ball Valves for Natural Gas)

Size (Inches) | Size (Metric) | Body Pieces | Port | End Configuration | C_v | K_v | Equivalent Feet of Pipe | Available SDRs
---|---|---|---|---|---|---|---|---
½ | 16-20 | 2 | full ³ | BF or SF** | 18 | 260 | 2 | 9.3
¾ | 25 | 2 | full ³ | BF | 25 | 361 | 3.2 | 9.3, 10, 11
1 | 32 | 2 | standard³ | BF | 40 | 577 | 3.8 | 9.3, 11, 13.5
1¼ | 40 | 2 | standard³ | BF | 45 | 649 | 9.6 | 9.3, 11, 13.5
2 | 55-63 | 3 | full | BF | 175 | 2528 | 3.8 | 9.3, 11, 17
3 | 90 | 3 | standard² | BF | 110 | 1586 | 9.6 | 9.3, 11, 17
4 | 100-110 | 3 | full | BF | 390 | 5624 | 5.3 | 9.3, 11, 13.5, 17
8 | 225 | 3 | standard | BF | 700 | 10094 | 5.8 | 9.3, 11, 13.5, 17
12 | 315 | 3 | full | BF | 3650 | 19467 | 40.3 | 9.3, 11, 13.5, 17

Note: C_v in US gal/min @ 1 psi ∆ P
K_v in litres/min @ 1 bar ∆ P
* Butt Fusion
** Socket Fusion
† Polyvalve II™ (C-Style) Valves

Dimension Data

ANSI Valve Dimensions

<table>
<thead>
<tr>
<th>Size</th>
<th>Port</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Weight (lbs.)</th>
</tr>
</thead>
</table>
½ | full | 10.0 | 3.4 | 4.8 | 2.8 | 0.50 | 1.2 |
¾ | full | 10.0 | 3.4 | 4.8 | 2.8 | 0.75 | 1.2 |
1 | standard | 10.0 | 3.4 | 4.8 | 2.8 | 0.90 | 1.2 |
1¼ | standard | 10.0 | 3.4 | 4.8 | 2.8 | 0.90 | 1.2 |
2 | full | 14.7 | 6.4 | 9.1 | 4.2 | 1.82 | 3.8 |
standard | 13.0 | 4.5 | 6.5 | 3.7 | 1.30 | 3.1 |
3 | full | 15.0 | 8.0 | 11.4 | 3.5 | 2.50 | 8.9 |
standard | 12.8 | 6.4 | 9.1 | 3.6 | 1.95 | 4.5 |
4 | full | 20.0 | 10.4 | 15.0 | 3.1 | 3.62 | 19.5 |
standard | 15.0 | 8.0 | 11.4 | 3.8 | 2.50 | 8.9 |
6 | full | 21.0 | 12.6 | 18.6 | 3.9 | 5.20 | 38.0 |
standard | 20.0 | 10.4 | 15.0 | 5.3 | 3.62 | 23.0 |
8 | full | 29.0 | 12.5 | 19.9 | 7.0 | 6.30 | 61.0 |
standard | 20.0 | 12.6 | 18.6 | 4.5 | 4.78 | 42.5 |

Gear Operated

8 | full | 29.0 | 14.8 | 22.2 | 7.0 | 6.30 | 61.0 |
12 | full | 83.8 | 17.5 | 27.7 | 30.0 | 9.91 | 305.0 |

Metric Valve Dimensions

<table>
<thead>
<tr>
<th>Size</th>
<th>Port</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Weight (kg)</th>
</tr>
</thead>
</table>
16-20 | full | 254 | 86 | 122 | 71 | 12.7 | 0.5 |
25 | full | 254 | 86 | 122 | 71 | 19.1 | 0.5 |
32 | standard | 254 | 86 | 122 | 71 | 22.9 | 0.5 |
40 | standard | 254 | 86 | 122 | 71 | 22.9 | 0.5 |
55-63 | full | 373 | 164 | 231 | 106 | 46.2 | 1.7 |
50-63 | standard | 330 | 115 | 165 | 94 | 33.0 | 1.4 |
90 | full | 381 | 203 | 290 | 89 | 63.5 | 4.0 |
standard | 325 | 164 | 231 | 91 | 48.0 | 2.0 |
100-110 | full | 508 | 264 | 381 | 77 | 91.9 | 8.8 |
standard | 381 | 203 | 290 | 95 | 63.5 | 4.0 |
150-160 & 180 | full | 533 | 320 | 472 | 99 | 132.1 | 17.2 |
125-160 | standard | 508 | 263 | 381 | 133 | 91.9 | 10.4 |
225 | full | 1773 | 318 | 504 | 610 | 160 | 44.5 |
standard | 508 | 320 | 472 | 102 | 121.4 | 19.3 |

Note: Valves are generally available in these metric sizes and may be available in other metric dimensions. Due to wall thickness considerations, SDRs in some sizes may not be available. Contact your Polyvalve representative for specific SDR availability.

Note: Polyvalve proudly offers pup lengths to customer specifications.
How to Order

Please provide the following information when you order:

- Valve size
- Valve body material
- Bore type (full or reduced)
- Standard Dimension Ratio (SDR) number or Copper Tubing Standard (CTS)
- End configuration (butt fusion or socket fusion)
- Special service conditions

From the ½” ball valve to the industry’s first 12-inch polyethylene ball valve, Polyvalve Poly-Gas® valves are available in the widest range of sizes on the market today. ½” through 8” standard port are shipped in cartons to shield them from ultraviolet light and to protect the valve ends from damage.

Polyvalve Poly-Gas® Valve Figure Number System

The Poly-Gas® valve figure number system utilizes a five digit number which describes the valves as shown below.

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12 - 8 X X X X
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1 Special feature ends include integral socket ends, stub end SDR, CTS wall thickness etc.
Polyvalve has established industry leadership in the design and manufacture of its products. When properly selected, this Polyvalve product is designed to perform its intended function safely during its useful life. However, the purchaser or user of Polyvalve products should be aware that Polyvalve products might be used in numerous applications under a wide variety of industrial service conditions. Although Polyvalve can (and often does) provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of Polyvalve products. The purchaser/user should read and understand the Installation Operation Maintenance (IOM) instructions included with the product, and train its employees and contractors in the safe use of Polyvalve products in connection with the specific application.

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