

Formerly known as



**NORDSTROM®**  
**POLYVALVE®**

Nordstrom® is a registered trademark of Flowserve®

**POLYVALVE POLY-GAS® VALVES**

POLYETHYLENE VALVES FOR NATURAL GAS

[www.PolyvalveUSA.com](http://www.PolyvalveUSA.com)



*The Original Is Still The Best!*

*Over 3,000,000 Sold!*



**ANDRONACO**  
INDUSTRIES



**Polyvalve®**

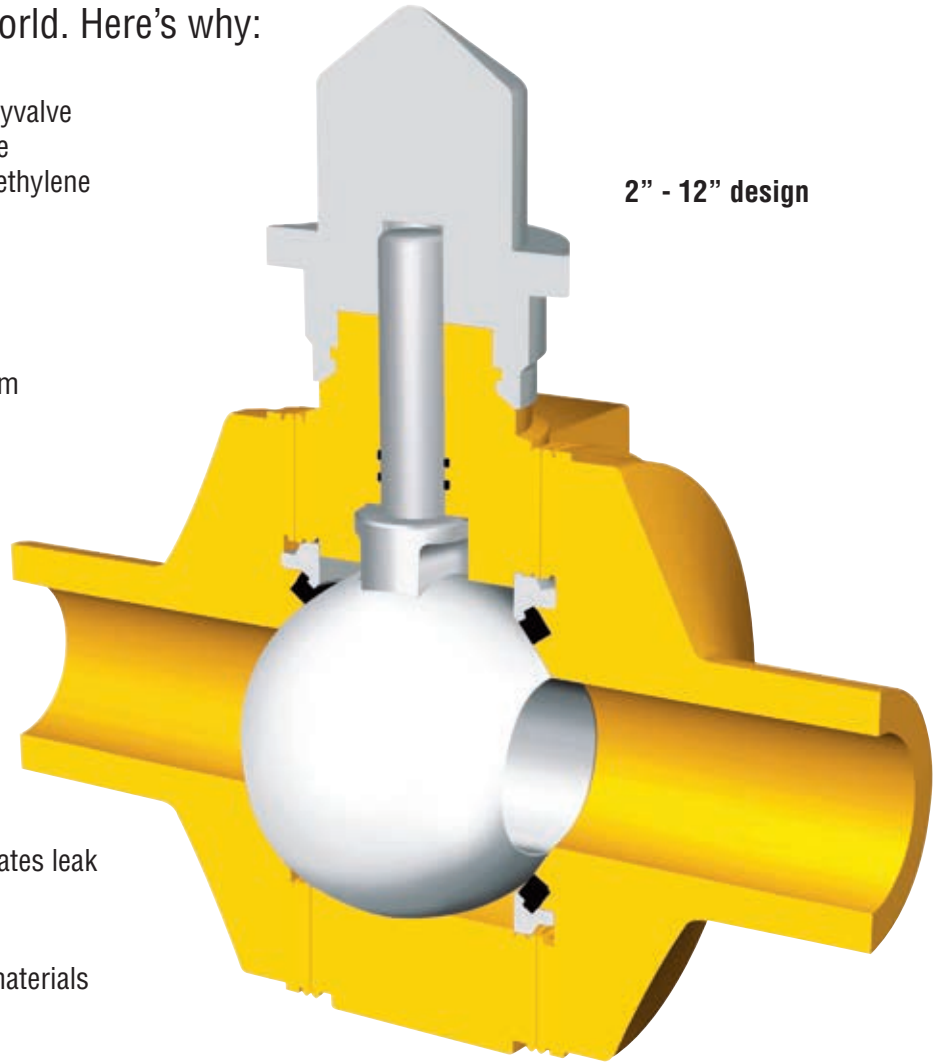
an ANDRONACO INDUSTRIES company

## Why use Polyvalve Poly-Gas<sup>®</sup> Valves?

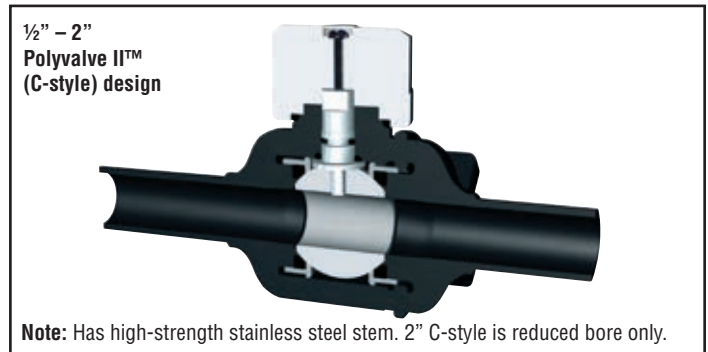
Polyvalve Poly-Gas<sup>®</sup> valves are everything you'd expect from the company that invented polyethylene valves.

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

- Rugged and reliable Polyvalve Poly-Gas<sup>®</sup> 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.



**2" - 12" design**



# Materials, Codes and Standards, Applications

## Materials

### Materials of Construction

Item	½" through 2" Polyvalve II™ (C-style)	2" through 12"
Body	Polyethylene	Polyethylene
Ball	Acetal	Polypropylene
Seat Retainer	Acetal	Polypropylene
Seat	Buna N	Buna N
Stem	Stainless Steel	Acetal
Stem Seal	Buna N	Buna N
Ground Water Seal	Neoprene	Neoprene
Wrench Adapter	Acetal	Polypropylene*
Adapter Screw	Stainless Steel	
Adapter Button	Acetal	

*\*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

Resin Supplier	Material Designation	Color	ASTM Material Designation	Material Density
CP Chem	TR-418 (D6500)	Yellow	PE 2708/2406	Medium
Dow	DGDA 2490 (UAC3700)	Black	PE 4710/3408	High

*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<sup>®</sup> Valve Availability

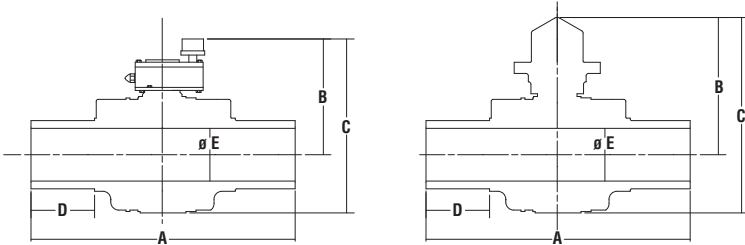
## Poly-Gas<sup>®</sup> Valve Availability Chart (Ball Valves for Natural Gas)

Size (Inches)	Size (Metric)	Body Pieces	Port	End Configuration	C <sub>v</sub>	K <sub>v</sub>	Equivalent Feet of Pipe	Available SDRs
½	16-20	2	full †	BF* or SF**	18	260	2	9.3
¾	25	2	full †	BF	25	361	3.2	9.3, 10, 11
1	32	2	standard †	BF	40	577	3.8	9.3, 11, 13.5
1¼	40	2	standard †	BF	45	649	9.6	9.3, 11, 13.5
2	55-63	3	full	BF	175	2528	3.8	9.3, 11, 17
	50-63	2	standard †	BF	110	1586	9.6	9.3, 11, 17
3	90	3	full	BF	390	5624	5.3	9.3, 11, 13.5, 17
	90	3	standard	BF	240	3461	14.1	9.3, 11, 13.5, 17
4	100-110	3	full	BF	700	10094	5.8	9.3, 11, 13.5, 17
	100-110	3	standard	BF	400	5768	17.8	9.3, 11, 13.5, 17
6	150-160-180	3	full	BF	1800	25957	6.1	9.3, 11, 13.5, 17
	125-160	3	standard	BF	900	12978	24.3	9.3, 11, 13.5, 17
8	225	3	full	BF	3650	52633	5.5	11, 13.5, 17
	225	3	standard	BF	1350	19467	40.3	9.3, 11, 13.5, 17
12	315	3	full	BF	7000	73542	10.6	11, 13.5, 17

Note: C<sub>v</sub> in US gal/min @ 1 psi Δ P  
K<sub>v</sub> in litres/min @ 1 bar Δ P

\* Butt Fusion  
\*\* Socket Fusion  
† Polyvalve II™  
(C-Style) Valves

## Dimension Data



## ANSI Valve Dimensions

Size	Port	A	B	C	D	E	Weight (lbs.)
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
<b>Gear Operated</b>							
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

Size	Port	A	B	C	D	E	Weight (kg)
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
<b>Gear Operated</b>							
225	full	1773	376	564	610	160	60.8
315	full	2129	443	704	762	251.7	138.3

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:

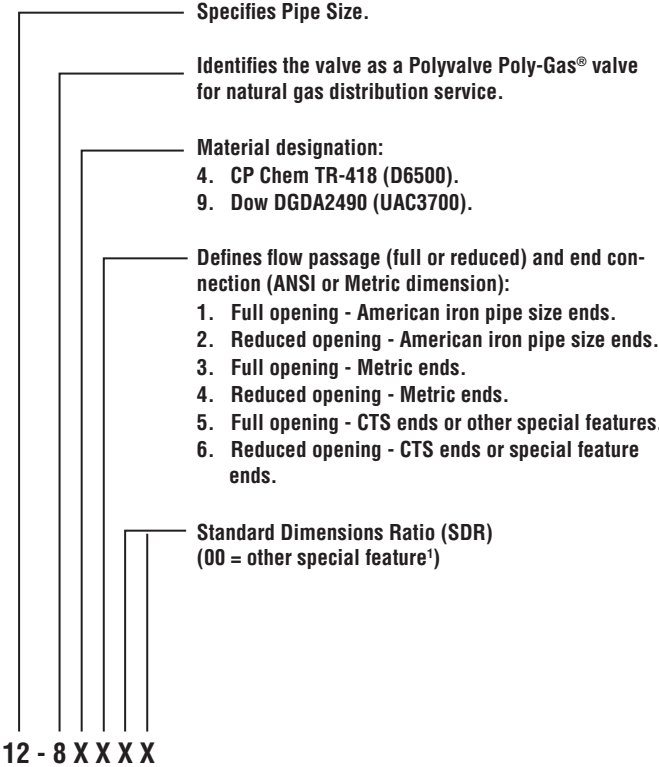
- Valve size
- Valve body material
- Bore type (full or reduced)
- Standard Dimension Ratio (SDR) number or Copper Tubing Standard (CTS)
- End configuration (butt fusion or socket fusion)
- Special service conditions



From the 1/2" 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. 1/2" 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.



<sup>1</sup> Special feature ends include integral socket ends, stub end SDR, CTS wall thickness etc.



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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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