



# **Polyvalve<sup>®</sup>**

an ANDRONACO INDUSTRIES company

## **Applications:**

For use in:

- Potable Water
- Water and Wastewater
- Irrigation
- Storm Sewer
- Gravity Sewer
- Geothermal

## **POLY-WATER<sup>®</sup> VALVES** POLYETHYLENE VALVES FOR WATER APPLICATIONS



**Made in the USA**



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



# **SECOR**

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

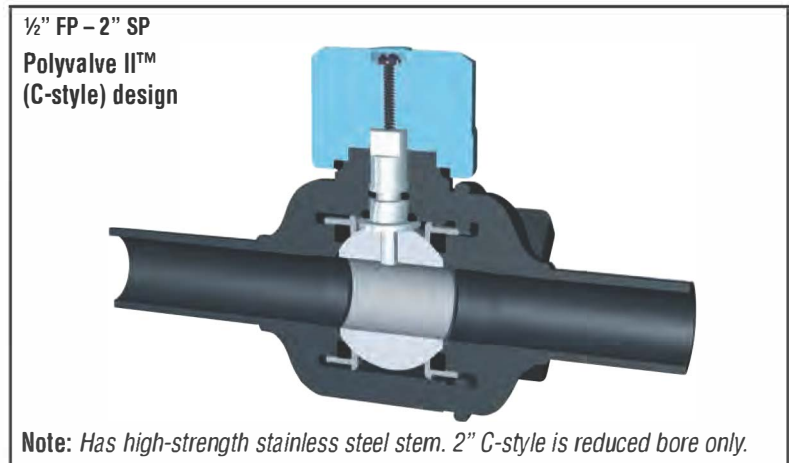
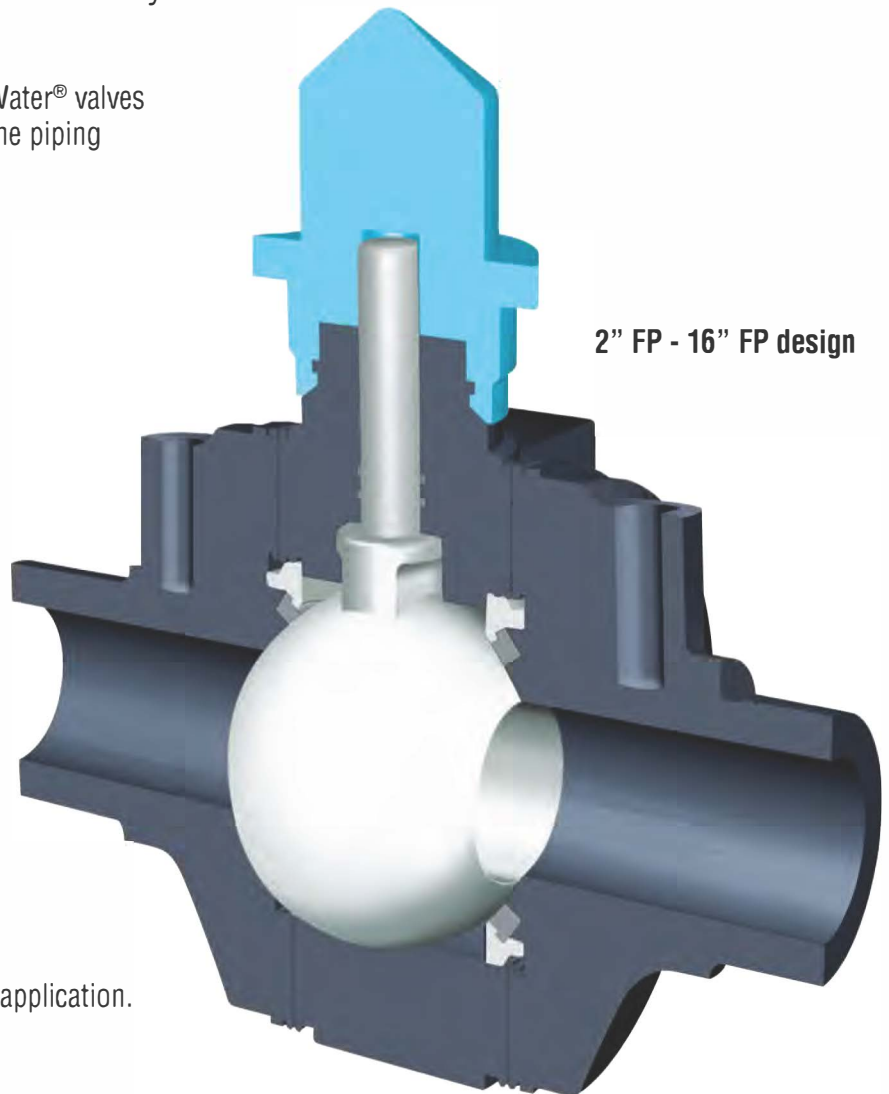
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# Why use Polyvalve Poly-Water® valves?

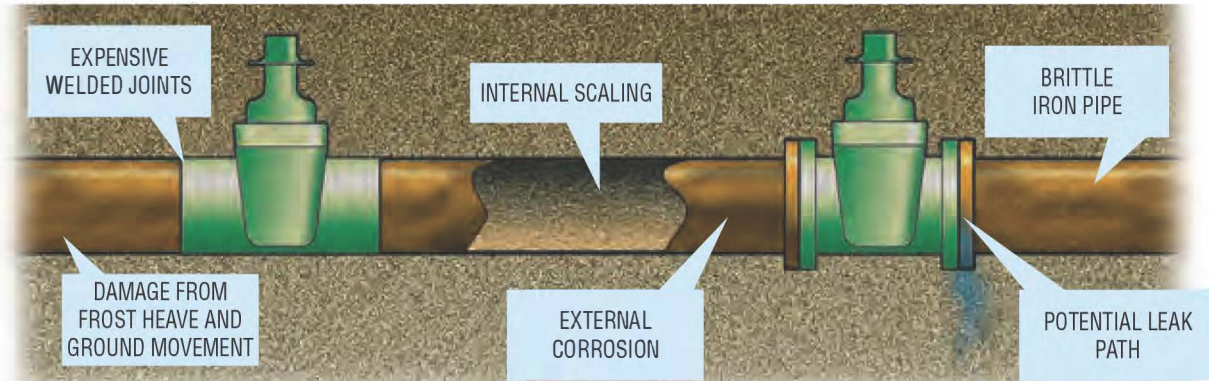
Polyvalve Poly-Water® valves are everything you'd expect from the company that invented polyethylene valves.

More than **three million** Polyvalves have been sold since 1976 and are in use throughout the world. Here's why:

- Rugged and reliable Polyvalve Poly-Water® valves are the strongest part of a polyethylene piping system.
- Drop-tight shutoff from dual elastomeric seats.
- Fused body shell removes leak paths to atmosphere.
- Multiple elastomeric stem seals.
- No metal internal parts. 2" FP-16" FP
- High-grade polymeric materials eliminate corrosion.
- Smooth full bore gives excellent flow characteristics in both full and reduced port designs.
- Wide variety of trim for your specific application.
- Flanged end configuration available.
- Temperature range 32° F to 140° F

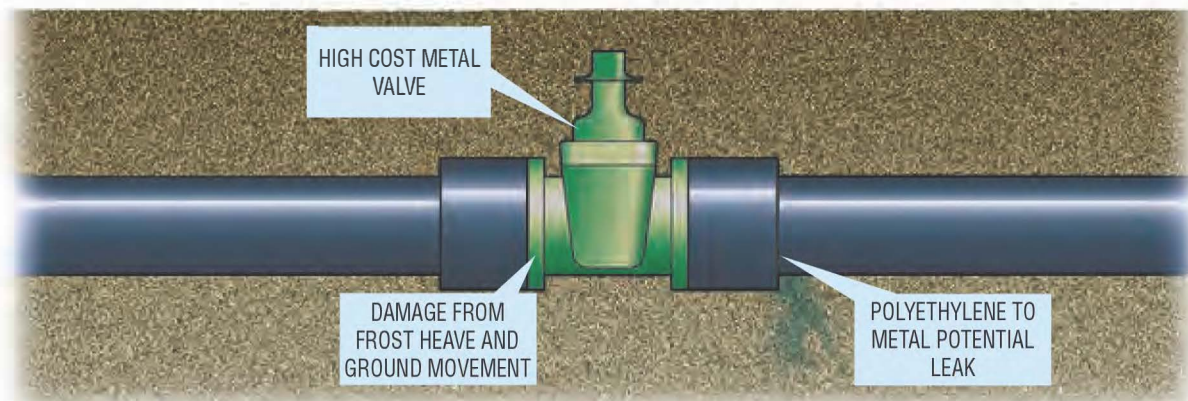


# Why use polyethylene valves?



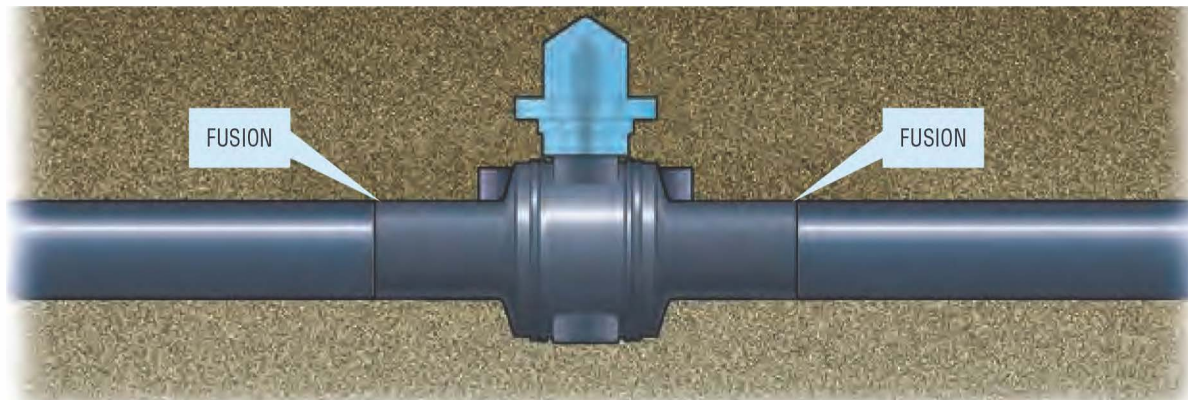
## All Metal System (Welded or Bolted)

- Subject to external corrosion, internal scaling and damage from ground movement.
- Too-rigid pipe can rupture during frost heave or heavy pressure in hot weather.
- 30% of all system water is lost to leaks.



## Polyethylene Pipe-to-Metal Valve Installation:

- Subject to the inherent weakness of combining incompatible materials.
- Vulnerable to ground movement during extremes of cold or heat.
- 30% of all systems water is lost to leaks.



## All-Polyethylene Systems:

- Inherently safe—the valve is an integral part of the pipe.
- No leak points.
- No chance of corrosion.
- Flexible polyethylene systems less susceptible to ground movement.

# Poly-Water<sup>®</sup> Valve Availability

## MATERIALS

Item	Potable Water NSF / ANSI 61		Wastewater		Irrigation	
	1/2" through 2" Standard Port	2" Full Port Through 16"	1/2" through 2" Standard Port	2" Full Port Through 16"	1/2" through 2" Standard Port	2" Full Port Through 16"
Body			Polyethylene			
Adapter			Polypropylene*			
Ground Water Seal			Neoprene			
Seat	EPDM		VKM (Viton)		Buna-N	
Stem Seal	EPDM		VKM (Viton)		Buna-N	
Ball	Acetal	Polypropylene	Acetal	Polypropylene	Acetal	Polypropylene
Seat Retainer	Acetal	Polypropylene	Acetal	Polypropylene	Acetal	Polypropylene
Stem	Stainless Steel	Modified Phenylene Oxide	Stainless Steel	Modified Phenylene Oxide	Stainless Steel	Acetal

**Note:** 10" - 16" has gear box and cast iron 2" square nut adapter.

*Available with flanged ends. Contact the factory for dimensions and pricing.*

## Body and End Resin Chart

Polyvalve Poly-Water<sup>®</sup> valves are available in HDPE only.

Resin Supplier	Material Designation	Color	ASTM Material	Material Density
<b>Dow</b>	DGDA 2490	Black	PE4710	High



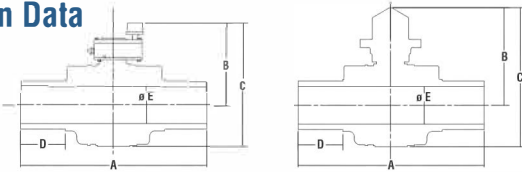
## Operating Pressures (PSI)

Pipe SDR	73°F	100°F	120°F	140°F
7	333	260	210	167
9	250	195	158	125
11	200	156	126	100
13.5	160	125	101	80

# Poly-Water<sup>®</sup> Valve Availability Chart (Ball Valves for Potable Water, Wastewater and Irrigation)

Size (inches)	Size (Metric)	Body Pieces	Bore	C <sub>v</sub>	K <sub>v</sub>	Equivalent Feet of Pipe	Available SDRs
½	16 - 20	2	full†	18	260	2	9.3, 11
¾	25	2	full†	25	361	3.2	9.3, 10, 11
1	32	2	full†	40	577	3.8	9.3, 11, 13.5
1¼	40	2	full	-	-	-	9.3, 10, 11, 13.5, 17
	40	2	standard†	45	649	9.6	9.3, 10, 11, 13.5
1½	50	2	full	-	-	-	9.3, 11, 13.5, 17
2	55 - 63	3	full	175	2528	3.8	9.3, 11, 17
	50 - 63	2	standard†	110	1586	9.6	9.3, 11, 17
3	90	3	full	390	5624	5.3	9.3, 11, 13.5, 17
	90	3	standard	240	3461	14.1	9.3, 11, 13.5, 17
4	100 - 110 - 125	3	full	700	10094	5.8	9.3, 11, 13.5, 17
	100 - 110 - 125	3	standard	400	5768	17.8	9.3, 11, 13.5, 17
6	150 - 160 - 180	3	full	1800	25957	6.1	9.3, 11, 13.5, 17
	160	3	standard	900	12978	24.3	9.3, 11, 13.5, 17
8	200 - 225	3	full	3650	52633	5.5	9.3, 11, 13.5, 17
	200 - 225	3	standard	1350	19467	40.3	9.3, 11, 13.5, 17
10	250 - 280	3	full	-	-	-	9.3, 11, 13.5, 17
12	315	3	full	7000	73542	10.6	9.3, 11, 13.5, 17
14	355	3	full	-	-	-	9.3, 11, 13.5, 17
	355	3	standard	-	-	-	9.3, 11, 13.5, 17
16	400	3	full	-	-	-	9.3, 11, 13.5, 17
	400	3	standard	-	-	-	9.3, 11, 13.5, 17

## Dimension Data



C<sub>v</sub> in US gal/min @ 1 psi ΔP † Polyvalve II (C-Style) Valves  
K<sub>v</sub> in litres/min @ 1 bar ΔP

\* Available with flanged ends.  
Contact the factory for dimensions and pricing.

## 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	full	10.0	3.4	4.8	2.8	0.90	1.2
1¼	full	13.0	4.5	6.5	3.7	1.30	3.1
	standard	10.0	3.4	4.8	2.8	0.90	1.2
1½	full	13.0	4.5	6.5	3.7	1.30	3.1
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 Oper

10	full	55.25	17.5	27.7	15.75	10	251
12	full	83.8	17.5	27.7	30.0	10	305
14	full	88.3	20.2	32.6	28.0	11.5	365
	standard	55.25	17.5	27.7	15.75	10.0	261
16	full	88.3	20.2	32.6	28.00	11.5	365
	standard	55.25	17.5	27.7	15.75	10.0	275

## 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	full	330	115	165	94	33.0	1.4
	standard	254	86	122	71	22.9	0.5
50	full	330	115	165	94	33.0	1.4
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
100-110-125	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
160	standard	508	263	381	133	91.9	10.4
200-225	full	737	318	504	610	160	44.5
	standard	508	320	472	102	121.4	19.3

### Gear Operated

250-280	full	1403	445	704	400	254	113
315	full	2129	443	704	762	251.7	138
355	full	2243	513	828	711	292	165
	standard	1403	445	704	400	254	118
400	full	2243	513	828	711	292	165.6
	standard	1403	445	704	400	254	124.7

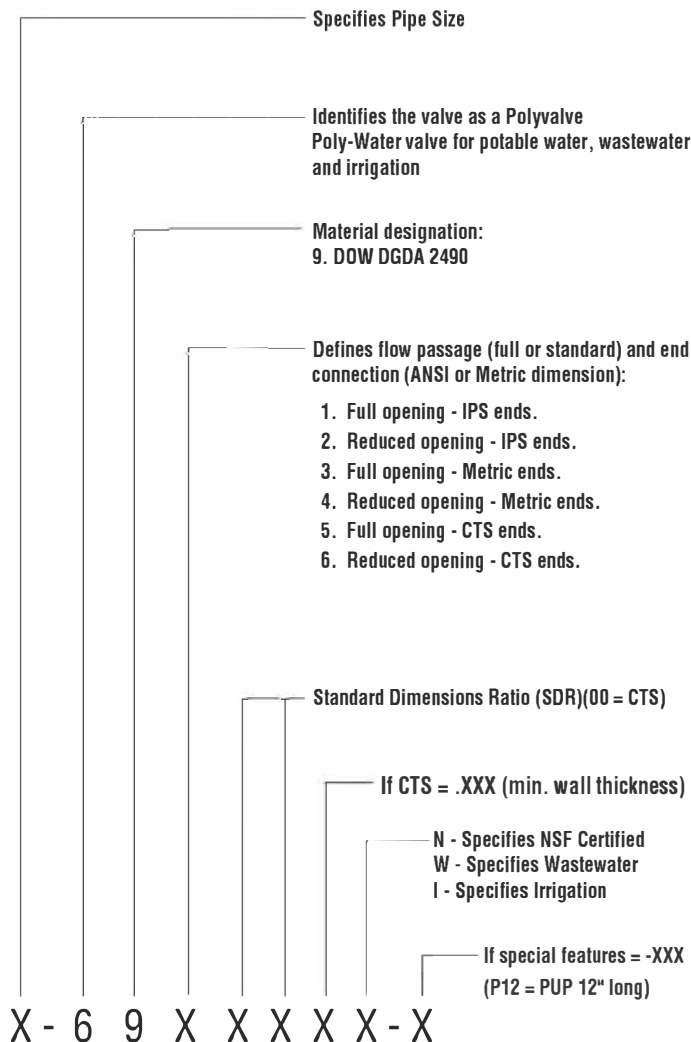
Note: Valves are generally available in these metric sizes and may be available in other metric dimensions. Due to wall thickness considerations, all SDRs in some sizes may not be available.

# How to Order

Please provide the following information when you order from your SECOR Representative:

- Valve size
- Valve body material
- Full or standard bore
- Standard Dimension Ratio (SDR) number
- Butt fusion end configuration is standard
- Flanged and transition end configuration available

## Polyvalve Poly-Water® Valve Figure Number System



Special feature ends include, flanges, transition, pups, stem extensions, etc.



### FOR USE IN:

- POTABLE WATER
- WATER AND WASTEWATER\*
- IRRIGATION
- STORM SEWER
- GRAVITY SEWER
- GEOTHERMAL

Polyvalve is an ISO 9001:2015 certified company

\* For ½" - 2" Polyvalve II (C-style), Poly-Water® valves are recommended for water with a pH range of 6 to 8. For applications with pH outside of this range consult customer service.

\* Available in Copper Tubing Standard sizes (CTS)

\* Available in ductile iron pipe standard. (DIPS)