



**FULL PORT** 

# **STANDARD PORT**

# **COMPLETE SIZE RANGE**

Superior Flow Easy Operation Full Traceability State-of-the-Art Manufacturing



An Employee-Owned Total Quality Management Company

# Made in America

The Polyball valve is manufactured in the United States in our state-of-the-art facility in Mansura, Louisiana. 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 traceability from the customer's installation back to the raw material. No other manufacturer offers a more complete traceability program.



Each molding machine uses precision closed-loop control to produce void-free components that meet all industry standards.



	NO.	COMPONENT	MATERIAL	FEATURES AND BENEFITS
Z	1	Body	POLYETHYLENE	PE 2406/PE 3408, flat base, robust design
OE	2	Ends	POLYETHYLENE	PE 2406/PE 3408, various SDR's
TRUC	3	Ball	POLYPROPYLENE	High strength, long life and low operating torque
CONS	4	Retainer	POLYPROPYLENE	Positive restraint under any condition; Retains seat under high differential pressure
L O	5	Ball Seat	NITRILE	Reliable sealing from -20°F to 140°F
IALS	6	Actuator	POLYPROPYLENE	2" operating square, positive position indication, over-torque protection
Ë	7	Weather Seal	NITRILE: BUNA-N	Protects from ground water and dirt
IAM	8	Stem	ACETAL	Excellent durability and strength, blowout proof
	9	Stem Seals	NITRILE: BUNA-N	Redundant sealing with dual o-rings

Valve components are machined via a highly automated process that leaves virtually no room for size variations.

Computer control ensures proper alignment of components for a consistent fusion joint. Producing a true monolithic structure.

# Polyethylene ball valves. Made better.

How do you make them better? You give them a higher flow capacity. You offer them in an even wider range of sizes and styles to fit customer specs. And you make it easy, so easy, to operate.

Announcing Polyball. Made better by Kerotest. We have a near 100 year commitment to the gas distribution industry. So Polyball will always be American made, supported and distributed. With ample inventory at all times.



### Equipment makes it better.

In a highly automated, computer controlled, state-of-the-art manufacturing facility with statistical process control, the Kerotest Polyball valve is made to meet or exceed all industry testing and performance standards. Some examples:

- Meets or exceeds ASME B16.40, ASTM D-2513, C.F.R. Part 192
- Available in standard and full port
- Operating pressure to 125psi
- Temperature range from -20°F to 140°F
- · Bubble-tight shut-off
- Maintenance-free, corrosion-free
- · Independent third party evaluation

Our investment is just as important to your future as it is to our own. Count on us to deliver.

### Made in America. Supported in America.

Expect quick, reliable technical and field support from Kerotest engineers and technicians. Expect prompt, efficient delivery from the Kerotest factory. And expect your Kerotest sales rep to deliver all the hassle-free service you need.

#### World-class warranty.

Each Kerotest Polyball is backed by a 5 year warranty that offers protection as good as any manufacturer. In America or worldwide.

#### Full traceability.

Kerotest Polyball valves set a new standard for documentation and full forward and backward traceability of all critical components and manufacturing processes, including individual serial number fusion joints. Talk to Kerotest about your traceability requirements.

> The Polyball™ Full Port Style

ITEM	OPERATING FEATURES		
OPERATING	PE 2406 : 80 psig (5.5 bar), SDR 11 PE 3408 : 100 psig (6.9 bar), SDR 11 PE 3408 : 125 psig (8.6 bar), SDR 9.3		
MATERIALS	Medium Density Polyethylene (PE 2406) High Density Polyethylene (PE 3408)		
TEMPERATURE	From -20°F to 140°F (-29°C to 60°C)		
PIPE CONNECTION VIA	Electrofusion or Butt Fusion		
BORE	Full Port or Standard Port		
STEM TYPE	Standard Stem or Extended Stem, length as required		
SDR	11, other SDR'S available – 13.5, 11.5, 9.3		



**The Polyball**<sup>\*\*</sup> Full Port Style



## Valve Sizes and Dimensions (Approx.) in.

SIZE	A	В	C	D	E	Cv	WEIGHT (lbs)
2"	19	9.7	7.0	1.90	6.4	180	5
3"	21	12.2	8.7	2.70	6.4	400	10
4"	25	14.8	10.2	3.63	7.6	710	20
6"	27	19.6	13.2	5.25	7.0	1900	42
8"	28	25.5	17.2	6.70	5.3	3750	96

### Large Port

10"	28	25.5	17.2	6.70	5.5	4450	102
12"	28	25.5	17.2	6.70	5.7	4950	110



### Valve Sizes and Dimensions (Approx.) in.

Valve Sizes and Dimensions (Approx.) in.

A

21

25

27

В

12.2

14.8

19.6

SIZE	A	В	C	D	E	Cv	WEIGHT (lbs)
1.25"*	11.8	6.9	5.2	1.38	3.2	100	2
1.5"*	11.8	6.9	5.2	1.38	3.2	150	2
2"	11.8	6.9	5.2	1.38	3.2	150	2

Δ

D

2.70

3.63

5.25

Е

6.5

7.3

7.2

Cv

450

910

2200

WEIGHT (lbs)

11

26

47

C

8.7

10.2

13.2

\*Full Port

SIZE

**4**"

6"

8"

The Polyball<sup>™</sup> Standard Port Style

The Polyball<sup>™</sup> Standard Port Style





#### Valve Sizes and Dimensions (Approx.) in.

SIZE	Α	В	C	D	E	Cv	WEIGHT (lbs)
1/2" CTS	11.5	5.2	3.7	0.90	3.0	7	1
1/2" IPS	11.5	5.2	3.7	0.90	3.0	21	1
3/4" CTS	11.5	5.2	3.7	0.90	3.0	22	1
3/4" IPS	11.5	5.2	3.7	0.90	3.0	30	1
1" CTS	11.5	5.2	3.7	0.90	3.0	33	1
1" IPS	12	5.2	3.7	0.90	3.2	42	2
1.25" CTS	12	5.2	3.7	0.90	3.2	45	2
1.25" IPS	12	5.2	3.7	0.90	3.2	49	2



## Metric

Valve Sizes and Dimensions (Approx.) mm

SIZE	A	В	C	D	E	Cv	WEIGHT(kgs)
20 mm	292	132	94	23	76	16	0.5
25 mm	292	132	94	23	76	22	0.5
32 mm	292	132	94	23	76	30	0.5
40 mm	305	132	94	23	81	40	0.5
50 mm	300	175	132	35	81	150	1.0
63 mm (S)	300	175	132	35	81	160	1.0
63 mm (F)	482	245	180	48	160	180	2.3
90 mm	535	310	220	69	160	400	4.6
<b>110 mm</b> (S)	535	310	220	69	160	500	4.6
<b>110 mm</b> (F)	635	375	260	92	190	710	9.1
125 mm	635	375	260	92	190	750	9.1
160 mm (S)	635	375	260	92	190	850	9.1
160 mm (F)	685	500	335	133	175	1900	19.1
180 mm	685	500	335	133	175	2100	19.1
200 mm	710	650	435	170	135	3750	43.6
225 mm (S)	685	500	335	133	175	2400	19.1
225 mm (F)	710	650	435	170	135	4000	45.0
250 mm	710	650	435	170	135	4450	46.3
280 mm	710	650	435	170	135	4700	48.0
315 mm	710	650	435	170	135	4950	50.0

(S) Standard Port (F) Full Port



The Polyball" Full Port Style

High head extensions are available in varying heights to meet specific installation requirements. These valves meet the same strict standards of all Polyball valves.

The Polyball™ High Head Style



# Pass With Flying Colors

When put to the test, Kerotest Polyball Polyethylene Ball Valves meet the requirements of ASME B16.40: Manually Operated Thermoplastic Gas Shutoffs and Valves in Gas Distribution Systems.

Independent third party evaluation. A complete report, demonstrating compliance with ASME B16.40 is available upon request. All qualification and production tests were successfully completed. Additional tests performed by Kerotest beyond the B16.40 requirements include: Burst Test, Cycle Test, Impact Test, Bend Test and Tensile Test.



# All valves in full compliance with ASME B16.40 and other international standards.

TEST ITEM	TEST METHOD	MEDIUM DENSITY	HIGH DENSITY
SEAT TEST	Air seat test under water, both directions	4 psi (0.3 bar) 150 psi (10.4 bar)	4 psi (0.3 bar), 190 psi (13 bar)
SHELL TEST	Air test under water	4 psi (0.3 bar) 150 psi (10.4 bar)	4 psi (0.3 bar) 190 psi (13 bar)
OPERATIONAL TESTING	Valve operated 10 times at full differential pressure at -20°F and 100°F (-29°C to 38°C)	100 psi (6.9 bar)	125 psi (8.6 bar)
BEND TEST	20 pipe diameters bend radius at differential pressure operation, seat leakage checked	10 psi (0.7 bar) 100 psi (6.9 bar)	10 psi (0.7 bar) 125 psi (8.6 bar)
TORQUE TEST	Operating torque at -20°F and 100°F (-29°C to 38°C)	100 psi (6.9 bar)	125 psi (8.6 bar)
1000 HOUR Sustained Pressure test	Tested at 74°F, 100°F and 176°F (23°C, 38°C and 80°C)	265 psi (18.3 bar) 215 psi (14.8 bar) 134 psi (9.2 bar)	385 psi (15 bar) 320 psi (22 bar) 165 psi (11 bar)
HIGH PRESSURE TEST	High pressure Shell Test	> 600 psi (41 bar)	> 700 psi (48 bar)



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