COSMOIND USA

BALL VALVE

COSMOIND's Ball Valves are manufactured using a bimodal high-density polyethylene (HDPE) compound, an advanced material formulation that ensures exceptional performance. This compound offers superior strength, toughness, processability, durability, impact resistance, and dimensional stability. In addition, its enhanced mechanical properties and environmental resilience provide long-term reliability and consistent performance, even under demanding conditions.

ADVANTAGE OF HDPE

HDPE offers high strength, chemical and water resistance, lightweight and impact durability, is environmentally friendly, and performs well within a specific temperature range, making it suitable for various long-term applications.

MANUFACTURED IN ACCORDANCE WITH:

AWWA C901	Polyethylene (PE) Pressure Pipe and Tubing, 3/4 In. Through 3 In. for Water Service
AWWA C906	Polyethylene (PE) Pressure Pipe and Fittings, 4 In. Through 65 In. for Waterworks
ASME B16.40	Manually Operated Thermoplastic Gas Shutoffs and Valves in Gas Distribution Systems
ASTM D2513	Standard Specifi cation for Polyethylene (PE) Gas Pressure Pipe, Tubing, Fittings
ASTM D3261	Standard Specifi cation for Butt Heat Fusion Polyethylene (PE)
ASTM D3350	Standard Specification for Polyethylene Plastics Pipe and Fittings Materials
ANSI/NSF 61	Drinking Water System Components - Health Effects
ANSI/NSF 372	Drinking Water System Components - Lead Content
ISO 4437-4	Plastics piping systems for the supply of gaseous fuels - Polyethylene (PE) - Part 4 : Valves
EN 1555-4	Plastics piping systems for the supply of gaseous fuels - Polyethylene (PE) - Part 4 : Valves
EN 12201-4	Plastics piping systems for water supply, and for drains and sewers under pressure - Polyethylene (PE) - Part 4 : Valves

TESTED IN ACCORDANCE WITH:

ASME B16.40	Manually Operated Thermoplastic Gas Shutoffs and Valves in Gas Distribution Systems
AWWA C521	Plastic Ball Valves
EN 1555-4	Plastics piping systems for the supply of gaseous fuels - Polyethylene (PE) - Part 4 : Valves
EN 1555-7	Plastics piping systems for the supply of gaseous fuels - Polyethylene(PE) - Part 7 : Guidance for the assessment of conformity
EN 12201-4	Plastics piping systems for water supply, and for drains and sewers under pressure - Polyethylene (PE) - Part 4 : Valves
EN 28233	Thermoplastics valves - Torque - Test method
ISO 1133	Determination of the melt mass-flow rate and melt volume flow rate of thermoplastics
ISO 1167-1	Determination of the resistance to internal pressure - Part 1 : General method
ISO 1167-4	Determination of the resistance to internal pressure - Part 4 : Preparation of assemblies
ISO 4437-4	Plastics piping systems for the supply of gaseous fuels - Polyethylene (PE) - Part 4 : Valves
ISO 8233	Thermoplastics valves - Torque - Test Method
ISO 11357-6	Determination of oxidation induction time and oxidation induction temperature

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RAW MATERIALS

COSMOIND's Ball Valves are produced utilizing a bimodal high-density polyethylene (HDPE) compound. This advanced material formulation not only delivers exceptional performance in aspects such as strength, toughness, processability, durability, impact resistance and stability but also exhibits superior mechanical properties and environmental resilience, thereby guaranteeing long-term reliability and performance.

PRODUCTION RANGE (SIZE / SDR)

SIZE 1/2"IPS to 8"IPS (20mm to 225mm, Standard Type), 8"IPS to 16"IPS (225mm to 400mm, Gear box Type)

SDR 11 (Other SDRs is available upon request.)

PRESSURE CLASS

SDR	PE4710 for Industrial				PE4710 for Gas
	73.4°F	100°F	120°F	140°F	73.4°F
11	200 psi	156 psi	126 psi	100 psi	125 psi
17	125 psi	98 psi	79 psi	63 psi	80 psi

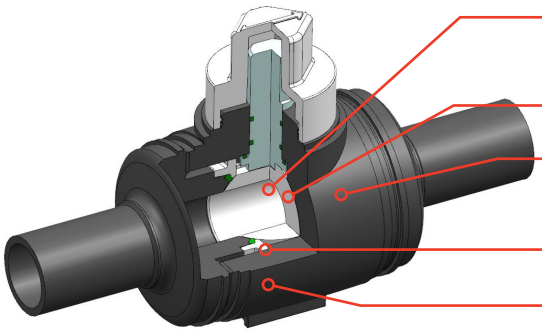
SDR	PE2708 for Industrial				PE2708 for Gas
	73.4°F	100°F	120°F	140°F	73.4°F
11	160 psi	124 psi	100 psi	80 psi	100 psi
17	100 psi	78 psi	63 psi	50 psi	62.5 psi

SDR	PE4710 for Industrial				PE100 for Gas
	20°C	30°C	40°C	50°C	20°C
11	16 bar	13.6 bar	11.68 bar	10.08 bar	10 bar
17	10 bar	8.5 bar	7.3 bar	6.3 bar	6.25 bar

SDR	PE2708 for Industrial				PE80 for Gas
	20°C	30°C	40°C	50°C	20°C
11	12.5 bar	10.62 bar	9.12 bar	7.87 bar	8 bar
17	8 bar	6.8 bar	5.84 bar	5.04 bar	5 bar

ADVANTAGE OF COSMOIND'S BALL VALVE

Unique Body-Ball and Ball Seat structure is specialized for exceptional long-term pressure performance and prevention of foreign matter.



- **Unique Ball Structure**
  (KOR Patent, Side-Cut Type reduces operating torque by 48%)
- **Optimized Ball Seat Surface** (Improved Ball Seat)
- **Maintain the flow rate with Full-Port Structure**
  (Lower flow reduction rate compared to Full-Bore Type)
- **Provides foreign matter filtration** and ensures leak-tightness
- **Anti-Ball pushed prevention function** by center fixing method
  (Ball is not pushed during pressure)