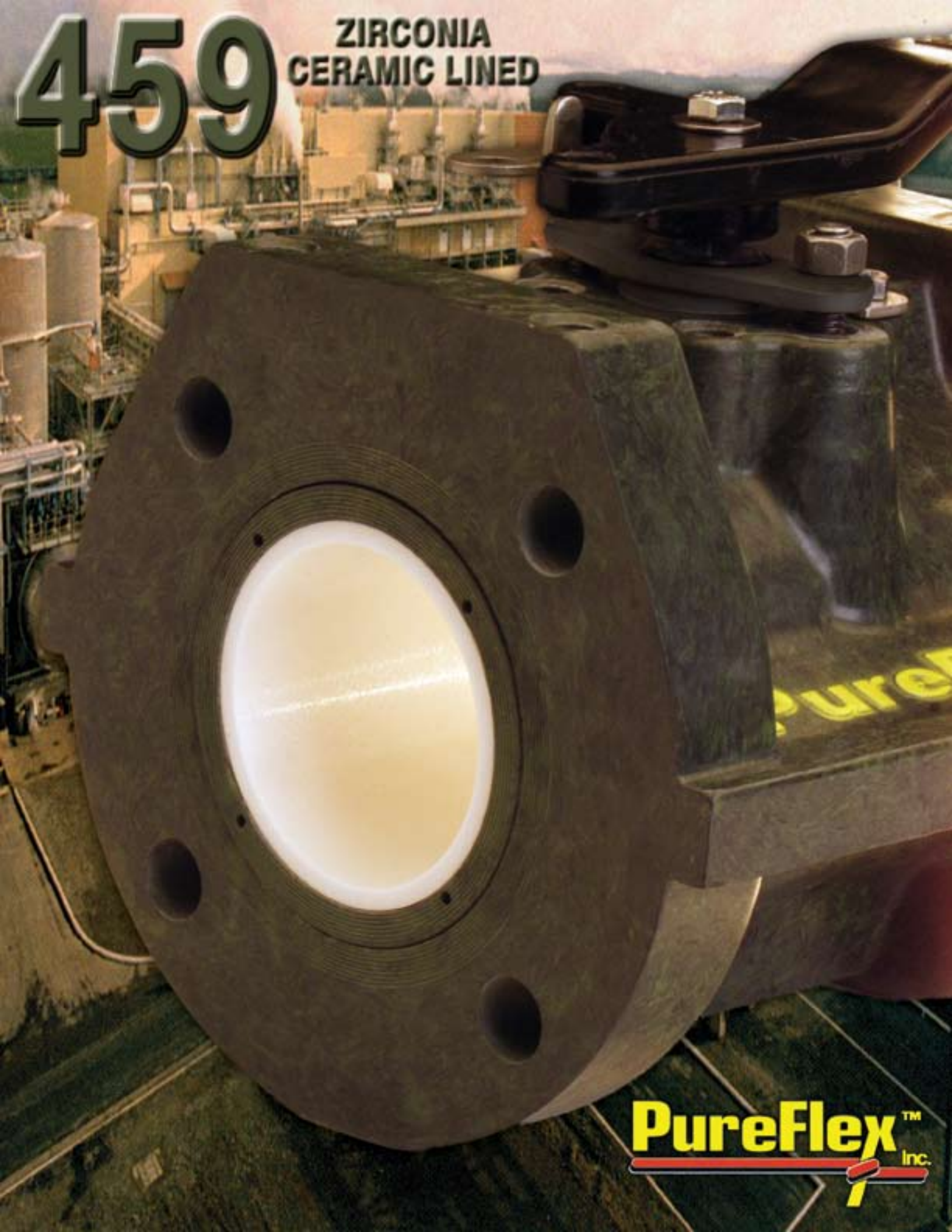


459

ZIRCONIA
CERAMIC LINED



PureFlex™
Inc.

The future of erosion co

459

Tough Valve For Tough Services

Ceramic Lined

PureFlex 459 series ceramic lined composite ball valve is a superior quality, ANSI Class 150 valve engineered with features not yet available in any other ceramic valve. The valve body is manufactured from strong, light weight advanced premium Z-Core® epoxy resin reinforced with carbon graphite. The ceramic liner / seats and ball are Ytria-partially stabilized zirconia (Y-PSZ) which provides unmatched impact resistance. The valve is able to withstand abrasion, cavitation, wear, thermal cycling and severe corrosive media and environments up to 275°F. The 459 series ball valve exceeds Class IV shut-off and its stem seal will meet your routine or most rigid service requirements. The massive one piece body meets ANSI B16.10 dimensions and its ISO 5211 universal mounting pad and flange mounting makes automation simple even with the valve in service. The 459 series valves are 1/2 the weight of competitors ceramic valves, offer maximum corrosion resistance, the elimination of product intrapment and provide the ultimate in flexibility and value.

LIMITED

2
YEAR
WARRANTY

Independent locking wrench stop and ISO-5211 universal mounting pad for actuation



Flow Control Options



Full Cv

60 Degree

30 Degree

15 Degree

Knoop Hardness Comparison

PureFlex 459 Zirconia Y-PSZ 1,200

Tungston Carbide Hardfacing 780

Porcelain 600

Glass 484

Titanium 437

Stainless 316 169

Carbon Steel Rolled 169

Stainless 304 138

Control is about to change

Locking wrench manufactured from Durcor-62™ vinyl ester and is virtually unbreakable.



Strong
Light Weight
Zero Corrosion



Features

- Hastelloy C276 Hardware
- Durcor-62™ Live-Load™ (patent pending) packing gland
- Stem Bearing - Graphite / PTFE
- Stem Sealing - PTFE Chevron type
- Thrust Bearing - Graphite / PTFE
- Ball - Yttria-Stabilized (Y-PSZ) Zirconia
- Seats / Liner - Full cavity filled Yttria-Stabilized (Y-PSZ) Zirconia
- End Cap Seal - PTFE coated Viton

Industries Served

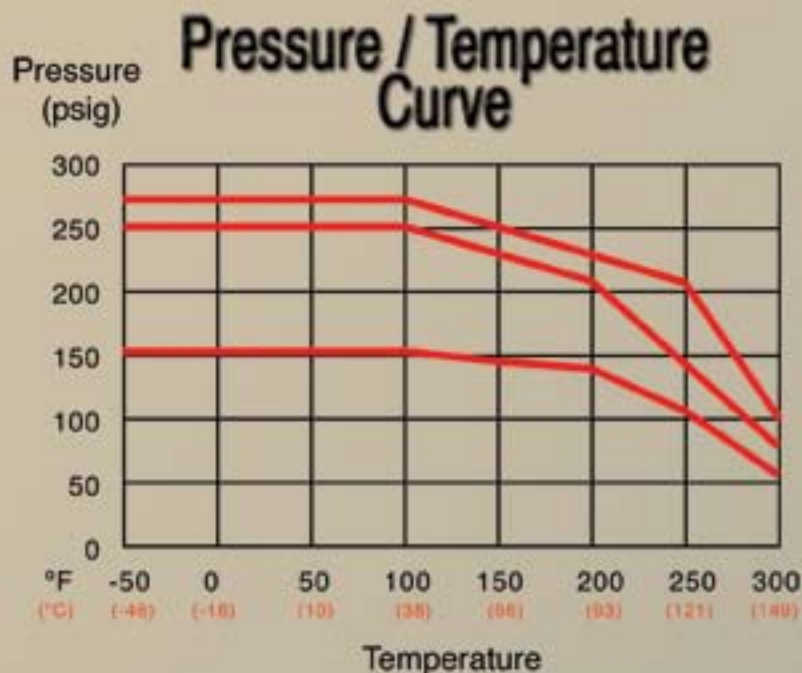
Coal-Fired Power
Pulp & Paper
Steel
Mining
Chemical Processing
Pollution Abatement



Applications

Desulfurization
Corrosive Pulps
Iron Ore Tailings
Titanium Dioxide Slurry
Fly Ash
Lime Slurry
Calcium Chloride Brine
Scrubber Liquor
Fume Scrubber
Sand Slurry
Pump Cavitation
Valve Throttling

Technical Data



Cv Data

VALVE SIZE	FULL OPEN Cv
1"	45
1 1/2"	120
2"	165
3"	350
4"	550
6"	1245

Actuator Sizing

VALVE SIZE	TORQUES @ MAX. DIFF. PSI
1"	70 in.-lbs
1 1/2"	160 in.-lbs
2"	180 in.-lbs
3"	440 in.-lbs
4"	920 in.-lbs
6"	1745 in.-lbs

Valve Data

SIZE RANGE: 1" TO 6"

CERAMIC: YTTRIA-STABILIZED ZIRCONIA

PRESSURE RANGE: FULL VACUUM TO 275psi

MAXIMUM SHOCK: INSTANTANEOUS THERMAL = 200°F

TEMPERATURE RATINGS: (-)50°F TO 275°F

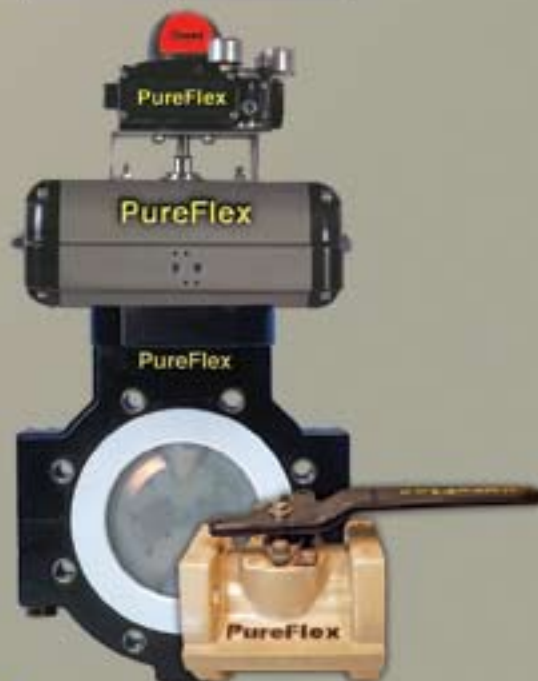
(PROCESS FLUID MAY EFFECT TEMPERATURE LIMIT, PLEASE CONSULT PUREFLEX CHEMICAL GUIDE)

FLOW: BI-DIRECTIONAL

CONFORMANCE: CONFORMS TO ALL APPLICABLE STANDARDS OF ANSI / ASME B16.10, API-598, MSS-SP72 AND ISO-5211

FLANGE ADAPTABILITY: ANSI B16.5 CLASS 150 (STD) DIN, JIS AND BS AVAILABILITY

SHUT OFF: EXCEEDS ANSI/FCI 70-2 CLASS IV



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PureFlex™

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