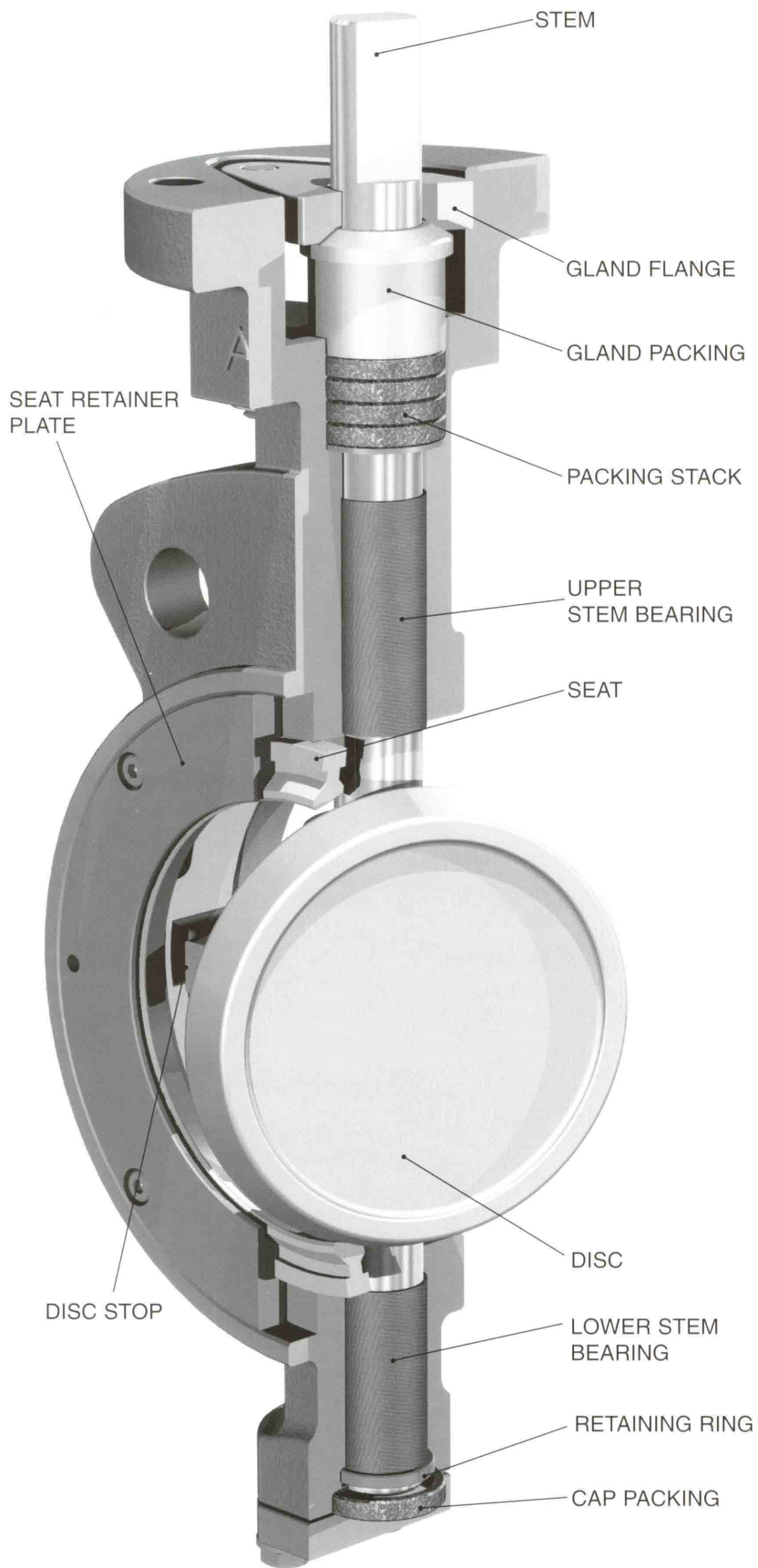


# ABZolute Seal

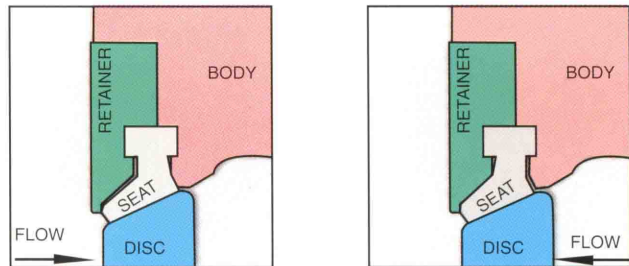


**Series 400  
Double Offset High Performance  
Butterfly Valve**



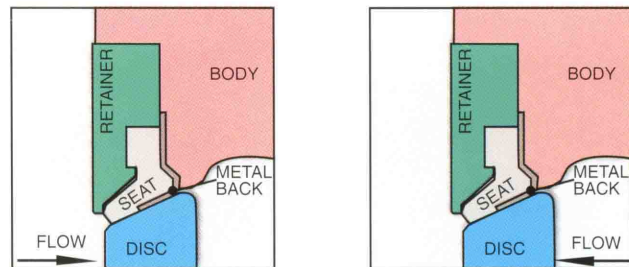


**SOFT SEAT TYPE**



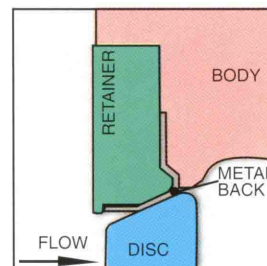
Recommended Flow Direction

**FIRE-SAFE SEAT TYPE**



Recommended Flow Direction

**METAL SEAT TYPE**



## STANDARD PRODUCTION RANGE

	ANSI Class 150	ANSI Class 300	ANSI Class 600
PSI RATING	285	740	1440
SIZE – INCH	2-48	2-48	3-24
SIZE – MM	50-1200	50-1200	80-600
TESTING	API 598 / API 607		
FACE TO FACE SPECIFICATIONS	ANSI B16.10 / API 609 / MSS-SP-68 / ISO 5752		
END FLANGE SPECIFICATIONS	ASME B16.5: Class 150, 300, 600 JIS B2210: 10K, 16K, 20K DIN ISO PN10, PN16, PN25, PN40		
CONNECTION	Wafer, Lugged, Double Flanged, Butt-Welded		
ACTUATOR – MANUAL	Lever Handle, Worm Gear Operator		
ACTUATOR – AUTOMATIC	Electric Motor, Pneumatic Double Acting, Pneumatic Spring Return		

## MAIN MATERIALS

	ANSI Class 150	ANSI Class 300	ANSI Class 600
BODY	Carbon Steel (A216-WCB) 316 SS (A351-CF8M)		
DISC	316SS (A351-CF8M)		
STEM	17/4PH (A564-630)		
SEAT	PTFE, RTFE, 316 SS, Inconel, PTFE + 316 SS, RTFE + 316SS		
SHAFT BEARING	316 SS + RTFE Impregnated, 316 SS + Graphite Impregnated		
PACKING SEAL	PTFE, Graphite		

## SEAT MATERIALS and RATING

SEAT MATERIAL	Rating
PTFE	Class VI, Bubble Tight
RTFE	Class VI, Bubble Tight
316 SS	Class V
INCONEL	Class V
PTFE + 316 SS	Class VI Bubble Tight, Class V w/ Preferred Flow After Fire
RTFE + 316 SS	Class VI Bubble Tight, Class V w/ Preferred Flow After Fire

# Features and Benefits

## 1. Body

High quality one piece casting which provides consistent uniformity. Sizes 2 inch to 6 inch are investment castings. Body is available in Wafer, Lug, Double Flanged, and Butt-welded.

## 2. Mounting Flange

Designed to direct mount actuation for ease of installation and cost savings. No bracket is needed for manual actuation or for automatic automation up to 18 inch.

## 3. Underneath Drawn Gland Packing

Allows for direct mounting of actuation and ease of user adjustment of the gland nuts while method of operation is attached. A rocker design is incorporated to compensate for uneven adjustment of the gland nuts.

## 4. Seat

An advanced design that provides a bi-directional interference and pressure assisted seal. This design achieves maximum seal at low, medium and high pressure.

## 5. Extended Neck

Allows for two inches of pipe insulation.

## 6. Packing

PTFE is a cup and cone system and Graphite is die formed rings for positive seals.

## 7. Bearings

Made of Graphite impregnated or Reinforced PTFE impregnated 316 Stainless Steel to ensure long service life.

## 8. Stem

Manufactured of high strength 17-4 ph Stainless Steel to provide maximum strength and stability for high torque applications.

## 9. Disc

Made of 316 Stainless Steel and engineered to allow for quick release from the seat. This reduces the amount of torque needed to un-seat the disc.

## 10. Disc Taper Pins

Pins are offset from the center of the stem which places them in compression rather than in shear. This gives them a yield point greater than the stem itself. Pins are welded in place after final assembly and testing.

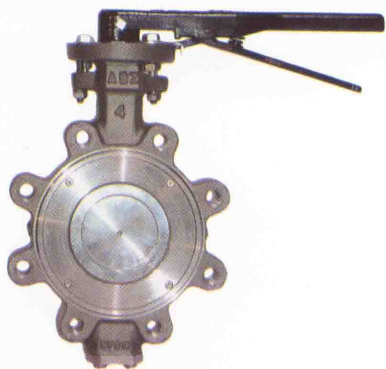
## 11. Integrally Cast Disc Position Stop

Machined position stop on the body locates the disc in the seat to achieve maximum seat and seal life.

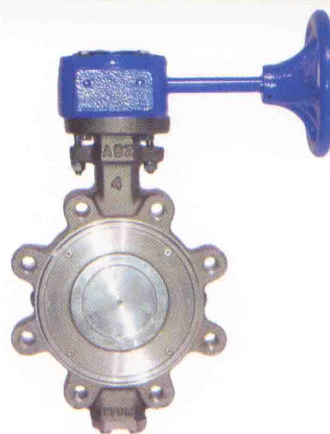
# High Performance Applications

- Construction
- Chemical / Petro – Chemical
- Liquefied Gas / Refrigeration
- Heavy Industrial
- Power / Co-Generation Plants
- Steel and Iron Works
- Commercial
- Pulp and Paper Mills
- Oil Refineries and Oil Field
- Ship Building
- Hydrocarbon Processing
- Gas Piping
- Local Area Energy Supply
- Industrial

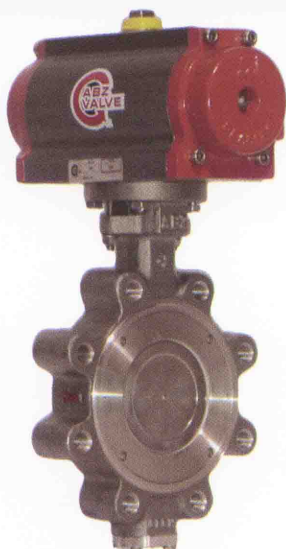




**Shown:** ABZ Handle with 10° Locking Plate  
**Available Features:** Infinite Plate



**Shown:** ABZ Worm Gear  
**Available Features:** Lock Out  
 2" Square Nut



**Shown:** ABZ 200 SR Pneumatic Actuator  
**Available Features:** Double Acting Actuators  
 Spring Return Actuators  
 Positioners  
 Solenoids  
 Limit Switches  
 Additional features available upon request



**Shown:** ABZ 9 Electric Actuator  
**Available Features:** Position Transmitter  
 Additional Auxiliary Limit Switches  
 Local Control Switches  
 90 to 270 Rotation  
 Explosion Proof Enclosures  
 Proportional Control Unit  
 Failsafe Battery Pack  
 Additional features available upon request



## ABZ VALVES & CONTROLS, INC.

A Division of ABZ Manufacturing, Inc.

P.O. Box 157 • 113 West Main • Madison, KS 66860 • (620) 437-2440 • FAX (620) 437-2435  
 website: [www.abzvalve.com](http://www.abzvalve.com) • e-mail: [abzvalve@madtel.net](mailto:abzvalve@madtel.net)

This brochure presents data which is meant for general information only. The compatibility or acceptability of these products in relation to systems requirements is not the responsibility of the manufacturer.  
 Printed in U.S.A.