Building connections that last™

ASC Engineered Solutions

ABZ Valve

Products Brochure

ABZ VALVE

An ASC Engineered Solution

ABZ Butterfly Valve Resilient Seated

ABZ Valve resilient seated butterfly valves are well-known for their reliability, performance, and low total cost of ownership – a reputation built on extensive application experience.






	101/102	201/202	090/929	909/919	709/719	396/397
Series	101/102	201/202	090/929	909/919	709/719	396/397
Pressure Rating PSI CWP, Non-Shock	175	150	150	150	150	250 (2"-6")† 200 (8"-12")‡ 150 (14" & larger)
Body Style	Wafer (101) Lug (102) Uni Body Extended Neck	Wafer (201) Lug (202) Uni Body Short Neck	Wafer (090) Lug (929) Split Body Short Neck	Wafer (909) Lug (919) Split Body Short Neck Reduced Bore*	Wafer (709) Lug (719) Split Body Extended Neck Reduced Bore*	Wafer (396) Lug (397) Uni Body Ext Neck (2"-12") Reduced Bore*
Size Range	2" - 12"	14" - 20"	2" - 12"	2" - 12"	1" - 12"	2" - 72"
Selection Guide - Standard Offering	Design: API 609 Category A; MSS SP-67					
	Flange Drilling: ASME B16.1 Class 125; ASME B16.5 Class 150					
	Top Flange Drilling (all series): Imperial Inch Drilling. Series 396 & 397 (2"-12") with dual mounting - ISO 5211 & Imperial Inch Drilling.					
	Pneumatic actuators, electric actuators, & controls are available, as are manual gear operators, lever handles, & bare stem valves.					
	Body Materials: Cast Iron, Ductile Iron (DI - lug only), Aluminum (AL - wafer only)	Body Materials: Cast Iron	Body Materials: Cast Iron, Aluminum (AL - wafer only)	Body Materials: Cast Iron, Aluminum (AL - wafer only)	Body Materials: Cast Iron, 316 Stainless Steel,	Body Material: Ductile Iron
	Resilient Seat: EPDM, Buna-N, Viton	Resilient Seat: EPDM, Buna-N, White Buna-N, Viton, Teflon (14"-18")	Resilient Seat: EPDM, Buna-N, White Buna-N, Viton, Natural Rubber, Carboxylated Nitrile	Resilient Seat: EPDM, Buna-N, White Buna-N, Viton, Teflon	Resilient Seat: EPDM, Buna-N, White Buna-N, Viton, Teflon	Resilient Seat: EPDM, Buna-N, Viton
	Disc Materials: 316 Stainless Steel Ductile Iron, Epoxy-coated DI, Aluminum-Bronze	Disc Materials: 316 Stainless Steel Ductile Iron, Epoxy-coated DI	Disc Materials: 316 Stainless Steel 17-4PH SS, Rubber coated disc	Disc Materials: 316 Stainless Steel 17-4PH SS, PFA coated	Disc Materials: 316 Stainless Steel 17-4PH SS, PFA coated	Disc Materials: 316 Stainless Steel Nickel-plated DI, Aluminum-Bronze, Nylon 11 coated DI

Standard Offering shown. Consult factory for configurations, and other materials (+4 body, +15 seat, +18 disc) that are not listed.

* Series 396/397, 709/719, and 909/919 suitable for lined pipe, and Schedule 80 or thicker wall pipe.

† 250 PSI CWP with 416 SS stem. 200 PSI CWP with 316 SS stem.

‡ 250 PSI CWP. Contact ABZ Customer Service –- Special Order.

ABZ Butterfly Valve
Double Offset, High-Performance

Optimal performance from ABZ Valve.

Robust construction, high-cycle life with quality and safety that is designed-in, ABZ Valve has your double offset butterfly valve solution.

Our high-performance, double offset butterfly valves range from general purpose to critical service and are widely used for isolation & throttling applications.

ABZolute High-Performance Butterfly Valves

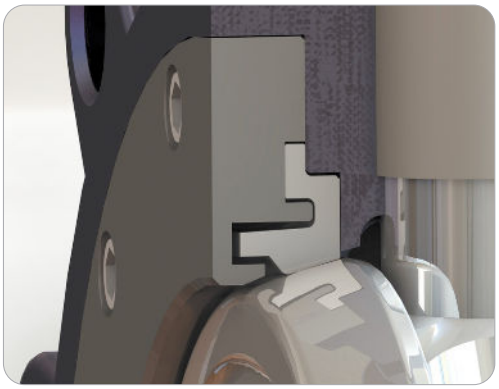
Series	401 (wafer)	402 (lug)*	421 (wafer)	422 (lug)*	451 (wafer)	452 (lug)*
Rating	ASME Class 150		ASME Class 300		ASME Class 600	
Sizes	2" - 60"		2" - 48"		3" - 24"	
Design	**Design**: ASME B16.34; API 609 Category B **Flange Drilling**: ASME B16.5 **Top Flange**: Imperial Inch Drilling					
Body Materials	Cast WCB carbon steel, Cast CF8M Stainless Steel Additional Body Materials: **Carbon Steels:** LCB; LCC; WCB/ENP **Chrome Moly Steel:** WC6 **Stainless Steels:** CN7M (Alloy 20); 310SS; CF8 (304 SS); CF3 (304L SS); CG3M (317L SS); CG8M (317 SS); CF3M (316L SS); CN7MS (904L SS); 254SMO, AL6XN **Duplex Stainless Steels:** CD3MN (2205), CD3MWCuN (2507) **Nickel Based Alloys:** Hastelloy; Inconel; Monel **Nickel-Aluminum Bronze:** C95800					

* Double Flanged Class 150 (403, 404), Class 300 (423, 424), Class 600 (453, 454) – Contact ABZ Customer Service for availability.

Elite Seal High-Performance Butterfly

Value Offering

Series	411 (wafer)	412 (lug)	431 (wafer)	432 (lug)
Rating	ASME Class 150		ASME Class 300	
Sizes	2" - 24"		2" - 24"	
Design	**Design**: ASME B16.34 **Flange Drilling**: ASME B16.5 **Top Flange**: Imperial Inch Drilling			
Body Materials	Cast WCB Carbon Steel, Cast CF8M Stainless Steel			



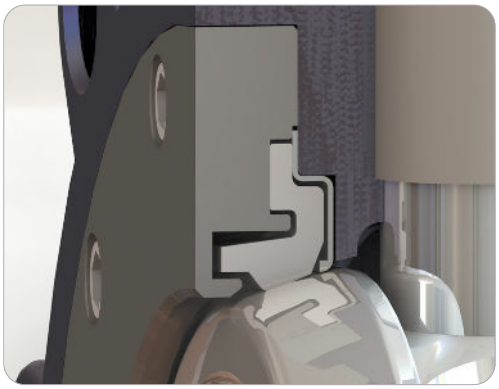
Recommended Flow Direction →

Soft Seat Design

- Solid seat, free floating, pressure assisted seal
- No additional parts are required to maintain a positive seal
- Seat and seat retainers are designed for bi-directional and double dead-end service
- Bubble-tight bi-directional shut off

Seat Materials

- RTFE
  PTFE
  MTFE (TFM)
  PCTFE
  UHMWPE
  CMTE (MTFE w/ carbon)



Recommended Flow Direction →

Fire Safe Seat Design

- API 607 7th Edition Fire Safe tested
- Solid seat with metal backup seat, free floating, pressure assisted seal
- No additional parts are required to maintain a positive seal
- Bubble-tight shut off before fire and API 607 shut off after fire

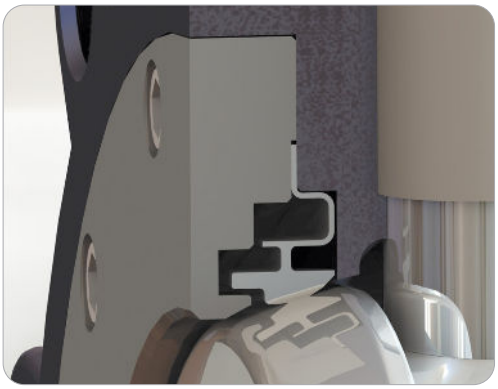
Seat Materials ‡

- RTFE
  MTFE
  PTFE
  PCTFE
  CMTE

Backup Metal Seat ‡

- 304 SS
  316 SS
  316L SS
  Alloy 20
  Duplex 2205
  Super Duplex
  Hastelloy
  Incoloy
  Inconel
  Monel

‡ Not all seat combinations are available.



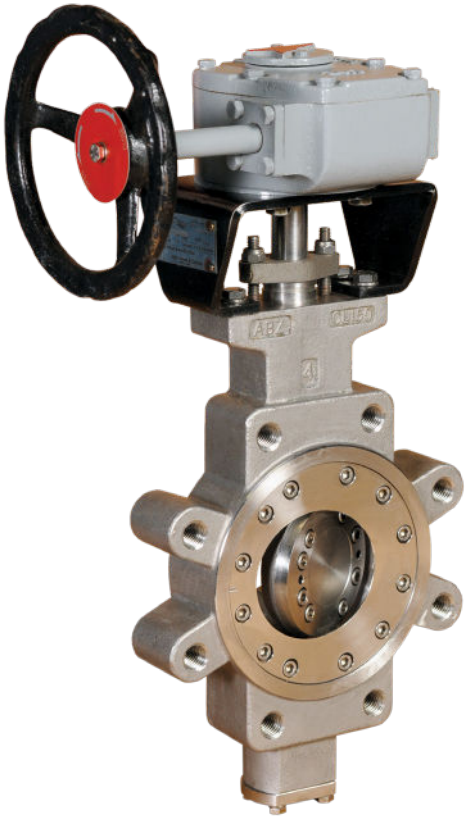
Recommended Flow Direction →

Metal Seat Design

- Machined metal seat, free floating, pressure assisted seal
- API 607 Fire Safe tested
- Class V uni-directional shut off

Seat Materials

- 304L SS
  304 SS
  310 SS
  316L SS
  316 SS
  317L SS
  410 SS
  Alloy 20
  Duplex 2205
  Duplex 2507
  Hastelloy
  Inconel
  Monel
  Nitronic



ABZ Butterfly Valve

Triple Offset, High-Performance

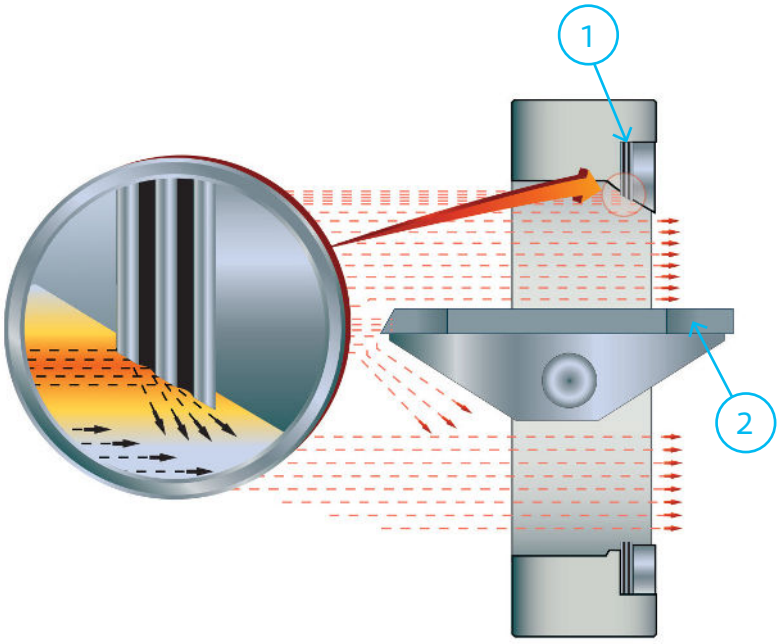
Our ABZ Valve branded triple-offset butterfly valves are engineered for superior sealing under challenging process conditions involving extreme pressures and extreme temperatures.

Design	API 609 Category B, ASME B16.34
Sizes	3" - 48" (DN80 to DN1200)
Pressure Classes	150, 300, 600, 900
Body Style	Lug, Wafer, Double-Flanged (short pattern), Double-Flanged (long pattern), Butt-weld
Standards	Fire-safe per API 607 7th edition & ISO 10497 3rd edition **Common Optional Configurations:** ISO 15848-1 & API 641 compliant (Class 150, 300, 600 valves), NACE compliance, Cryogenic valves per BS6364 and EN12567
Body Materials	WCB carbon steel, Cast CF8M Additional Body Materials: **Carbon Steels:** LCB; LCC; WCC **Chrome Moly Steels:** WC6, WC9 **Stainless Steels:** CF8 (304 SS); CF3 (304L SS); CF8C (347 SS); AL6XN **Duplex Stainless Steels:** CD3MN (2205); CD3MWCuN (2507) **Nickel Based Alloys:** Hastelloy; Inconel; Monel

Consult factory regarding other materials of construction that are not listed.

Sealing Technology

- The ABZ Valve design provides superior performance versus designs with a laminated seal on the disc's edge and directly in the media's flow path.
- The laminated seat is out of the media's direct flow path, thus reducing its susceptibility to delamination and erosion (1).
- Both the laminated seat (1) and the disc's solid sealing surface (2) are field replaceable.
- No special tools are necessary for field replacement of the laminated seat (1) or solid disc seal (2).
- Bi-directional zero leakage, near frictionless sealing, low torque.



ABZ VALVE
An ASC Engineered Solution

About ASC Engineered Solutions

ASC Engineered Solutions is defined by quality—in its products, services and support. With more than 1,400 employees, the company's portfolio of precision-engineered piping support, valves and connections provides products to more than 4,000 customers across industries, such as mechanical, industrial, fire protection, oil and gas, and commercial and residential construction. Its portfolio of leading brands includes ABZ Valve®, AFCON®, Anvil®, Anvil EPS, Anvil Services, Basic-PSA, Beck®, Catawissa, Cooplet®, FlexHead®, FPPI®, Gruvlok®, J.B. Smith, Merit®, North Alabama Pipe, Quadrant®, SCI®, Sharpe®, SlideLOK®, SPF® and SprinkFLEX®. With headquarters in Commerce, CA, and Exeter, NH, ASC also has ISO 9001:2015 certified production facilities in PA, TN, IL, TX, AL, LA, KS, and RI.

ABZ Customer Service (Madison, KS USA): (620) 437-2440 or (855) 803-6786

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