

# Resilient Seated Butterfly Valves



 AGFT COMPANY

Available At:  
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## Figures 201/202



Sizes  
14" - 20"  
Rated Up To 150 PSI

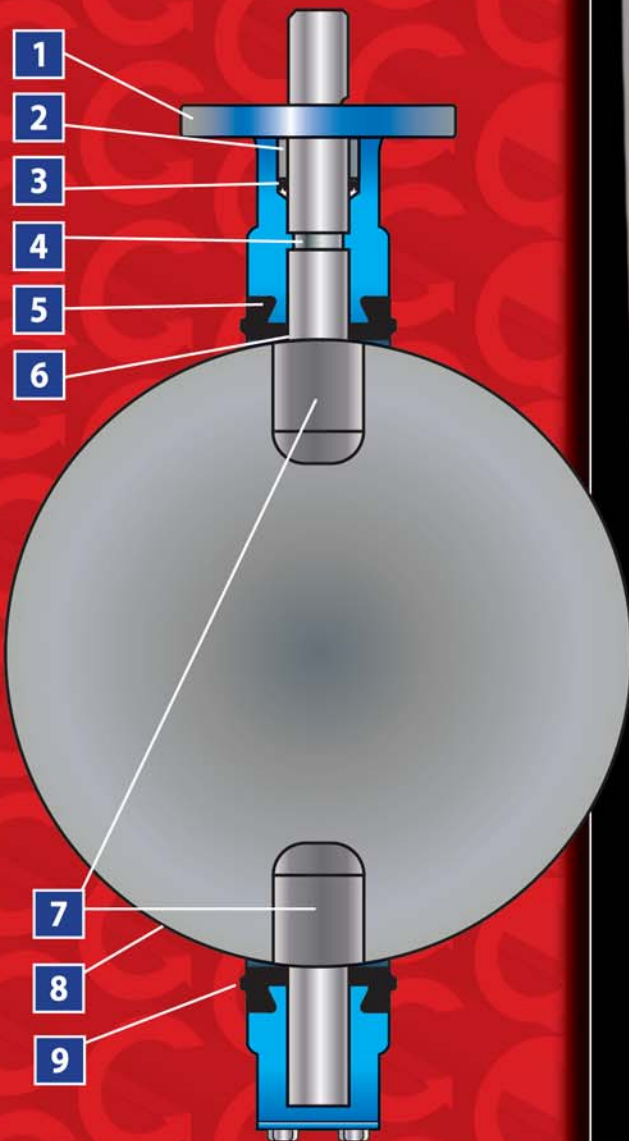


**ABZ VALVES & CONTROLS**  
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# ABZ Precision Built Butterfly Valves

Resil-O-Seat™ Seated Valves for Chemical and Abrasion Resistance Applications.

The figures 201/202 provide excellent flow characteristics with the thin profile of their one-piece disc and two-piece stem design. Various materials are available for a wide selection of applications.



**1** Bodies are machined to high tolerance. Guaranteed standard dimensions for interchangeability of parts and operators.

**2** Top and bottom bushings protect the stem from side thrust of operator. They are made of impact and corrosion resistant materials.



**3** Special double V-shape of stem seal self-adjusts to protect the stem area for either vacuum or pressure use.

**4** Pin ensures positive engagement of upper stem to disc.

**5** The special snap-in Resil-O-Seat™ design fixes seat in place without bonding. The Resil-O-Seat™ is 100% field replaceable - no special tools required.



**6** Stem and body are isolated from line media by the interference fit of the primary seal created between the disc and seat.

**7** Valve has an upper and lower stem with an internal drive with tremendous strength. This design gives you a thin profile disc for superior flow characteristics with no external connectors.



**8** Disc edge is individually processed through machining and hand buffing for a smooth edge, providing a bubble tight shutoff and maximum seat life.

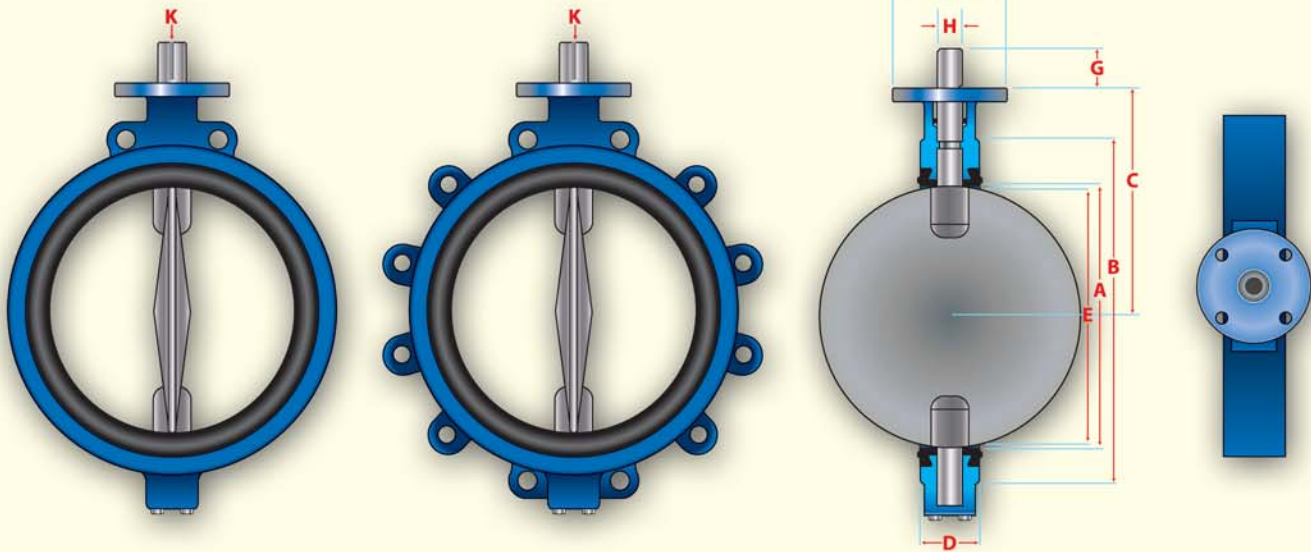
**9** Resil-O-Seat™ forms a seal against all standard ANSI 125/150 flanges. Gasketing requirements are eliminated.

**201 is a wafer style body**  
**202 is a full lug style body**



## FIGURES 201/202

# Valve Dimensions



All standard seats are Food Grade with the exception of Viton

Valve Size	DIMENSIONS									TOP PLATE DRILLING			FIG. 919 TAPPED LUG DATA			WEIGHT (POUNDS)	
	A	B	C	D	E	F	G	H	K	Bolt Circle	No. Holes	Hole Dia.	Bolt Circle	No. Holes	Tap	201	202
14	13 <sup>1/4</sup>	17 <sup>9/16</sup>	12	3	13 <sup>1/8</sup>	6	2 <sup>1/4</sup>	1 <sup>3/8</sup>	5/16x5/16	5	4	9/16	18 <sup>3/4</sup>	4	1-8 UNC	88	110
16	15 <sup>1/4</sup>	20 <sup>1/8</sup>	13	4	15	6	2 <sup>1/4</sup>	1 <sup>5/8</sup>	3/8x3/8	5	4	9/16	21 <sup>1/4</sup>	4	1-8 UNC	149	191
18	17 <sup>1/4</sup>	21 <sup>1/2</sup>	14 <sup>1/2</sup>	4 <sup>1/4</sup>	16 <sup>7/8</sup>	6	3	1 <sup>7/8</sup>	1/2x3/8	6 <sup>1/2</sup>	4	13/16	22 <sup>3/4</sup>	4	1 <sup>1/8</sup> -7 UNC	193	240
20	19 <sup>1/4</sup>	23 <sup>3/4</sup>	15 <sup>7/8</sup>	5	18 <sup>3/4</sup>	6	3	2 <sup>1/8</sup>	1/2x3/8	6 <sup>1/2</sup>	4	13/16	25	4	1 <sup>1/8</sup> -7 UNC	266	344

## STANDARD CONSTRUCTION SPECIFICATIONS:

**Body:** Cast Iron

**Disc:** 316 Stainless Steel, Ductile Iron, Epoxy Coated Ductile Iron

**Stem:** 17-4 Stainless Steel

**Resilient Seat:** EPDM, Buna-N, Viton, Teflon®. Seats with EPDM backing material, Natural Rubber, White Neoprene.

**Stem Bushing:** Teflon® – Graphite Impregnated

**Stem Packing:** Buna-N

*Additional materials are available for a wide selection of applications.*

## NOTES:

- The figures 201 and 202 cannot be used on pipe or flange with an inside diameter less than the "E" dimension.
- Valves are rated up to 150 PSI bi-directional service and 75 PSI end of line rating. Undercut disc is rated up to 50 PSI bi-directional service and 25 PSI end of line rating. Teflon® seats are not recommended with an undercut disc.
- Designed in accordance with sections of API 609 Category A, ASME 16.1/16.5, ASME 16.34 and MSS SP67. Design tested in accordance with API 598.
- Compatible with ANSI Class 125/150 flange standards.



### Rated Flow Coefficient (Cv) - Figure 201/202

Valve Size	ANGLE OF DISC OPENING								
	10°	20°	30°	40°	50°	60°	70°	80°	90°
14	61.30	326.0	765	1,380	2,216	3,497	5,999	10,397	15,105
16	81.70	426.0	1,000	1,792	2,858	4,629	7,934	13,728	19,950
18	106.00	549.0	1,294	2,290	3,668	5,952	10,243	17,874	25,970
20	124.00	684.0	1,598	2,876	4,648	7,396	12,787	22,343	32,465

Cv is defined as the volume of water in U.S.G.P.M. that will flow through a given restriction or valve opening with a pressure drop of one (1) p.s.i. at room temperature. Recommended control angles are between 20°-70° open.

### Torque Chart - Figure 201/202

Valve Size	NORMAL CONDITIONS				SEVERE CONDITIONS			
	$\Delta P=0$	$\Delta P=50$	$\Delta P=100$	$\Delta P=150$	$\Delta P=0$	$\Delta P=50$	$\Delta P=100$	$\Delta P=150$
14	5,160	6,120	7,080	8,040	7,740	8,700	9,660	10,620
16	7,680	8,040	9,480	10,920	9,900	11,340	12,780	14,220
18	8,280	10,440	12,600	14,760	12,432	14,580	16,020	18,900
20	10,200	13,200	16,200	19,200	14,604	19,500	21,300	24,300

Undercut disc available.

All torques shown in inch lbs.  
20% Safety factor already included.



## ABZ VALVES & CONTROLS, INC. A Global Flow Technologies Company

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