



AV-TEK®

VALVES THAT REDEFINE INDUSTRY STANDARDS



General Service **Butterfly Valves** Series 120, 140, 160, 300

Technical Data

Size Range:

Series 120 - 2" to 36" Wafer

Series 140 - 2" to 40" Lug

Series 160 - 4" to 32" Flanged

Series 300 - 2" to 12" Wafer/Lug

Flange Standard: ANSI Class 125/150

Pressure Rating: 150 psi - 250 psi upon request

General Application

Av-Tek® Resilient Seated Butterfly Valves are ideal for general service applications, such as water treatment, cooling systems, air control, and many other industrial uses. Additionally, you'll find our Resilient Seated Butterfly Valves provide a long service life without sacrificing ease of operation and maintenance.

Lug style butterfly valves can be used as a stopper and tap for discharging at the end of lines.

*Consult your sales representative for appropriate materials and specific services

Body Material Options

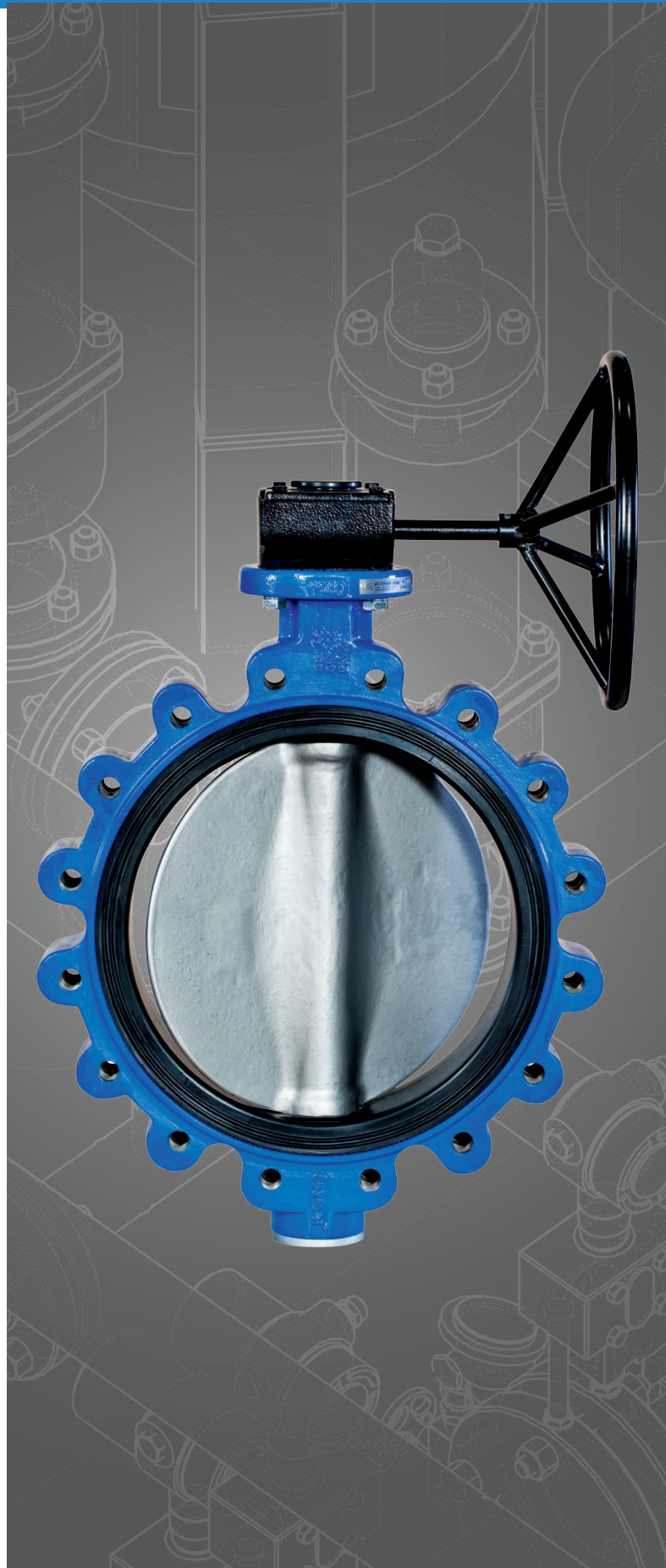
- Ductile Iron w/ FBE *
- Aluminum Bronze
- 316 Stainless Steel
- Cast Steel (A216 WCB)

Disc Material Options

- 316 Stainless Steel *
- Aluminum Bronze
- Ductile Iron w/ FBE
- Carbon Steel A216
- PTFE (Series 300)

Body Seat Material Options

- | | |
|--------------|---------------------|
| • EPDM * | • Natural Rubber |
| • NBR/Buna-N | • Silicone |
| • Viton | • PTFE (Series 300) |
| • Neoprene | |

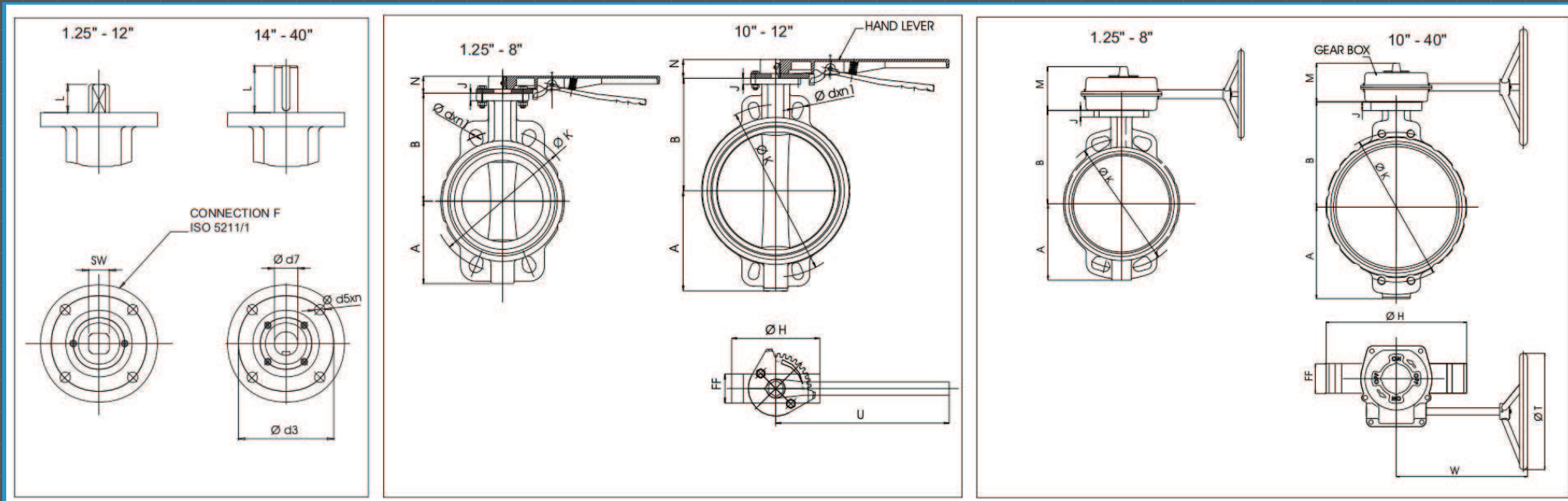


Details and Features

- Replaceable resilient seat can be easily removed and replaced without the need of special tools, or excessive downtime.
- The molded in O-ring seat design serves as flange seals, eliminating the need for gaskets between the flanges and the valve.
- The disc is not penetrated by a pin or bolt to secure it into place; thus, increasing its strength while reducing potential failures.
- Resilient seats help provide bi-directional, zero leakage shut off. This design totally isolates the valve body and stem from the line media.
- NSF Approved Fusion Bonded Epoxy (FBE) Coatings and linings.
- The lugged body design comes drilled, tapped, and is fully rated to line pressure, even if there is only a counter flange on the downstream side of the valve.
- A round disc hub provides complete concentric seating with minimal flow restriction, resulting in lower torques.
- A Carbon Steel, PTFE lined, upper bearing ensures low friction and torque while operating the valve on smaller diameter valves (8" >).
- ISO mounting flanges are an integral part of the body and are standardized to allow direct mounting to many types of actuators.

WAFER BUTTERFLY VALVE DIMENSIONAL DRAWING

Series 120, 320, 321



Sizes	A	B	FF	Ø H	J	M	N	U	W	Ø T	F	Bolt hole (mm) / # of holes	□ SW Ø d7 (mm)	L	Ø d3	Class 150		FREE SHAFT Weight (lb)	HAND LEVER		GEAR BOX						
																Ø K	Hole size (mm) d at Root		Type	Weight (lb)	150 PSI		250 PSI				
																					Type	Weight (lb)	Type	Weight (lb)			
1.25	2.44	3.77	1.57	3.42	.51	2	1.5	8.5	6.25	8	05	7/4	□ 9	.78	1.96	3.5	.62 / 4	5	92-150	1.5	7	18	7	AST-20	AST-20		
1.5	2.44	3.77	1.57	3.42	.51	2	1.5	8.5	6.25	8	05	7/4	□ 9	.78	1.96	3.88	.62 / 4	5	92-150					AST-20	AST-20		
2	2.63	4.25	1.69	3.93	.51	2	1.5	8.5	6.25	8	05	7/4	□ 9	.78	1.96	4.75	.75 / 4	5	92-150					AST-20	AST-20		
2.5	3.15	5	1.81	4.84	.51	2	1.5	8.5	6.25	8	07	9/4	□ 11	.78	2.75	5.50	.75 / 4	8	92-150					AST-20	AST-20		
3	3.89	5.19	1.81	5.39	.55	2	1.5	10	6.25	8	07	9/4	□ 14	.78	2.75	6	.75 / 8	9	92-200	1.75				AST-20	AST-20		
4	4.33	6.10	2.04	6.14	.55	2	1.5	10	6.25	8	07	9/4	□ 14	.78	2.75	7.5	.75 / 8	11.5	92-200					AST-20	AST-20		
5	4.84	6.22	2.20	7.36	.55	2	1.5	10	6.25	8	07	9/4	□ 14	.78	2.75	8.5	.875 / 8	14	92-200	2				AST-20	AST-20		
6	5.55	7.28	2.20	8.34	.55	2	1.5	14	6.25	8	07	9/4	□ 17	.86	2.75	9.5	.875 / 8	18	92-300					AST-20	AST-20		
8	6.85	8.38	2.36	10.43	.59	2	1.5	14	6.25	8	07	9/4	□ 17	.86	2.75	11.75	.875 / 8	28	92-300					AST-20	AST-20		
10	8.18	9.64	2.67	12.55	.59	3	1.85	16	9.37	10	10	11/4	□ 22	1.25	4.01	14.25	1 / 12	45	92-400					6	AST-30	AST-30	
12	9.84	11.10	3.07	14.64	.59	3	1.85	16	9.37	10	10	11/4	□ 27	1.25	4.01	17	1 / 12	66	92-400	AST-30					AST-30		
14	11.81	12.50	3.07	17.16	1.1	4	-	-	12.5	16	14	17.5/4	Ø 36	3	5.51	18.75	1.125 / 16	115	-	-	27	40	72	AST-40	AST-40		
16	12.83	14.25	4.01	19.37	1.1	4	-	-	12.5	16	14	17.5/4	Ø 36	3	5.51	21.25	1.125 / 16	176	-	-				AST-40	AST-60		
18	14.37	16.14	4.48	21.25	1	4	-	-	12.5	16	16	22/4	Ø 45	3.5	6.49	22.75	1.25 / 20	225	-	-				AST-60	AST-80		
20	16.06	17.12	5	23.62	1	4	-	-	12.5	22	16	22/4	Ø 45	3.5	6.49	25	1.25 / 20	282	-	-				AST-60	AST-80		
24	18.97	20.43	6.06	27.55	1	4	-	-	12.5	24	16	22/4	Ø 60	3.5	6.49	29.50	1.375 / 20	419	-	-	72	100	154	179	AST-80	AB1950NHR	
28	21.37	21.57	6.49	30.51	1.18	5.25	-	-	16.3	28	25	18/8	Ø 68	4.5	10	34	1.375 / 24	518	-	-					AB1950NHR	100	AB6800NLT/SP4
32	23.11	23.11	7.08	34.84	1.18	5.25	-	-	16.3	32	25	18/8	Ø 80	4.5	10	38.5	1.5 / 24	798	-	-					AB6800NLT/SP4	154	AB6800NLT/SP4
36	25.78	26.02	7.48	39.76	1.37	8.85	-	-	20.5	22	30	22/8	Ø 80	8	11.73	42.75	1.625 / 28	1130	-	-					AB6800N/SP4	154	AB6800N/SP6
40	28.93	28.54	8.50	43.70	1.37	8.85	-	-	20.5	22	30	22/8	Ø 100	8	11.73	47.75	1.625 / 28	1455	-	-					AB6800N/SP6	179	A250N/SP9

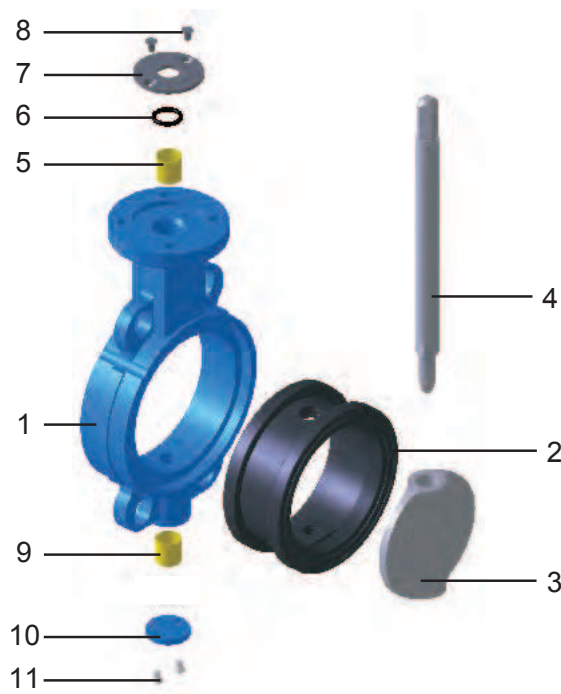
Series 120 Wafer (2" to 36")

Rated up to 150/250 psi



2" to 8"

P.No	Part Name	Material
1	Body	Ductile Iron, Aluminum-Bronze, AISI 316 Stainless Steel, A216 WCB
2	Body Seat	EPDM, NBR, Viton, HypalonNeopren, NR, Silicone
3	Disc	AISI SST 316, Al-Bz, DI, Cast Steel
4	Stem	AISI 304 SST, AISI 420 SST, Duplex SST
5	Bearing	SB (Carbon Steel + PTFE)
6	O-Ring	NBR
7	Washer	SI-37, A-2
8	Bolt	8.8, A-2



10" to 12"

P.No	Part Name	Material
1	Body	Ductile Iron, Aluminum-Bronze, AISI 316 Stainless Steel, A216 WCB
2	Body Seat	EPDM, NBR, Viton, HypalonNeopren, NR, Silicone
3	Disc	AISI SST 316, Al-Bz, DI, Cast Steel
4	Stem	AISI 304 SST, AISI 420 SST, Duplex SST
5	Bearing	SB (Carbon Steel + PTFE)
6	O-Ring	NBR
7	Washer	SI-37, A-2
8	Bolt	8.8, A-2
9	Bearing	SB (Carbon Steel + PTFE)
10	Lower Cover	SI-37
11	Bolt	8.8, A-2

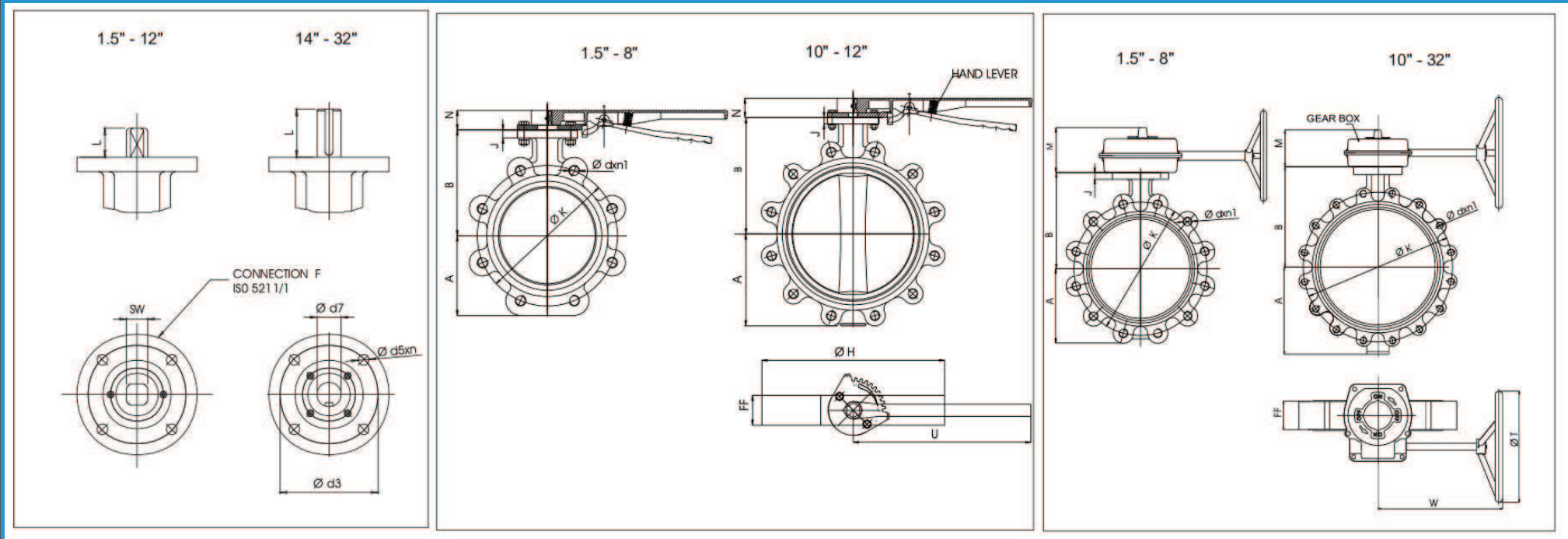


14" to 36"

P.No	Part Name	Material
1	Body	Ductile Iron, Aluminum-Bronze, AISI 316 Stainless Steel, A216 WCB
2	Body Seat	EPDM, NBR, Viton, HypalonNeopren, NR, Silicone
3	Disc	AISI SST 316, Al-Bz, DI, Cast Steel
4	Key	C 45 k
5	Upper Stem	AISI 304, AISI 316, AISI 420
6	Connecting Stud	AISI 304, AISI 316, AISI 420
7	Lower Stem	AISI 304, AISI 420, Duplex SST
8	Washer	SI-37, A-2
9	Nut	6.8, A-2
10	Bearing	SB (Carbon Steel + PTFE)
11	O-Ring	EPDM, NBR
12	Upper Cover	C 45
13	Lower Cover	C 45
14	Bolt	8.8, A-2
15	Key	C 45 k

WAFER BUTTERFLY VALVE DIMENSIONAL DRAWING

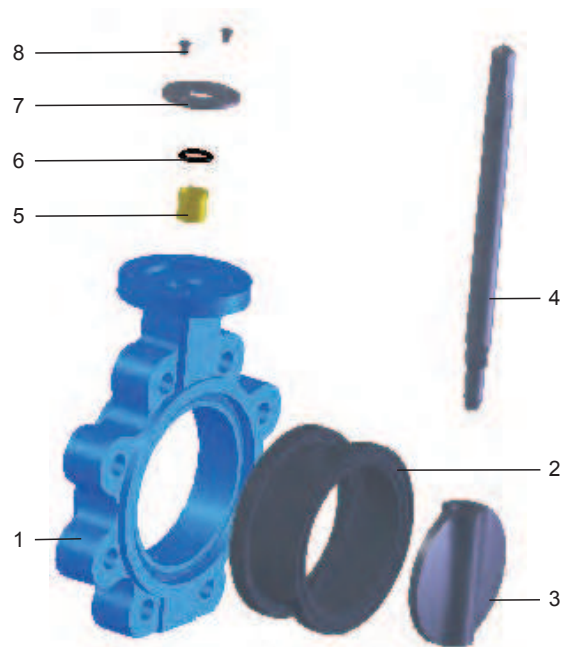
Series 120, 320, 321



Size	A	B	FF	ØH	J	M	N	U	W	ØT	F	Bolt hole (mm) / # of holes	□ SW Ø d7 (mm)	L	Ø d3	Class 150		FREE SHAFT Weight (lb)	HAND LEVER		GEAR BOX			
																			Type	Weight (lb)	125 PSI		250 PSI	
																					Type	Weight (lb)	Type	Weight (kg)
1.50	2.4	96	1.57	4.64	.51	2	1.5	8.5	6.25	8	05	7x4	□ 9	.78	1.96	3.88	1/2" / 4	8	92-150	1.5	AST-20	6.5	AST-20	6.5
2	2.63	108	1.69	5.11	.51	2	1.5	8.5	6.25	8	05	7x4	□ 9	.78	1.96	4.75	5/8" / 4	9	92-150	1.5	AST-20		AST-20	
2.5	2.95	127	1.81	6.06	.51	2	1.5	8.5	6.25	8	07	9x4	□ 11	.78	2.75	5.5	5/8" / 4	11	92-150	1.5	AST-20		AST-20	
3	3.78	132	1.81	7.04	.55	2	1.5	10	6.25	8	07	9x4	□ 14	.78	2.75	6	5/8" / 4	13	92-200	1.75	AST-20		AST-20	
4	4.37	155	2.04	8.58	.55	2	1.5	10	6.25	8	07	9x4	□ 14	.78	2.75	7.5	5/8" / 8	20	92-200	1.75	AST-20		AST-20	
5	4.84	158	2.20	9.21	.55	2	1.5	10	6.25	8	07	9x4	□ 14	.78	2.75	8.5	3/4" / 8	24	92-200	2	AST-20	18	AST-20	18
6	5.27	185	2.20	10.55	.55	2	1.5	14	6.25	8	07	9x4	□ 17	.86	2.75	9.5	3/4" / 8	26	92-300	2	AST-20		AST-20	
8	6.45	213	2.36	12.48	.60	2	1.5	14	6.25	8	07	9x4	□ 17	.86	2.75	11.75	3/4" / 8	44	92-300	2	AST-20		AST-20	
10	7.95	245	2.67	15.47	.60	3	1.85	16	9.37	10	10	11x4	□ 22	1.25	4.01	14.25	7/8" / 12	66	92-400	6	AST-30	27	AST-30	27
12	9.40	282	3.07	17.56	.60	3	1.85	16	9.37	10	10	11x4	□ 27	1.25	4.01	17	7/8" / 12	88	92-400	6	AST-30		AST-30	
14	11.81	318	3.62	20.20	1.1	4	-	-	12.5	16	14	17.5x4	Ø 36	2.95	5.51	18.75	1" / 16	145	-	-	AST-40	40	AST-40	72
16	12.83	362	4.01	22.44	1.1	4	-	-	12.5	16	14	17.5x4	Ø 36	2.95	5.51	21.25	1" / 16	178	-	-	AST-40		AST-60	
18	14.33	410	4.49	24.88	1.1	4	-	-	12.5	16	16	22x4	Ø 45	3.62	6.50	22.75	1 1/8" / 20	245	-	-	AST-60	72	AST-80	100
20	16.06	435	5	26.25	1.1	4	-	-	12.5	22	16	22x4	Ø 45	3.62	6.05	25	1 1/8" / 20	326	-	-	AST-60		AST-80	
24	18.97	519	6.06	30.23	1.1	4	-	-	12.5	24	16	22x4	Ø 60	3.62	6.50	29.50	1 1/4" / 20	496	-	-	AST-80	72	AB1950NHR	155
28	21.37	548	6.49	35.43	1.2	5.5	-	-	16	28	25	18x8	Ø 68	4.64	10	34	1 1/4" / 24	712	-	-	AB1950NHR	100	AB6800NLT/SP4	
32	23.11	587	7.08	40	1.2	5.5	-	-	16	32	25	18x8	Ø 80	4.64	10	38	1 1/2" / 24	908	-	-	AB6800NLT/SP4	155	AB6800NLT/SP4	

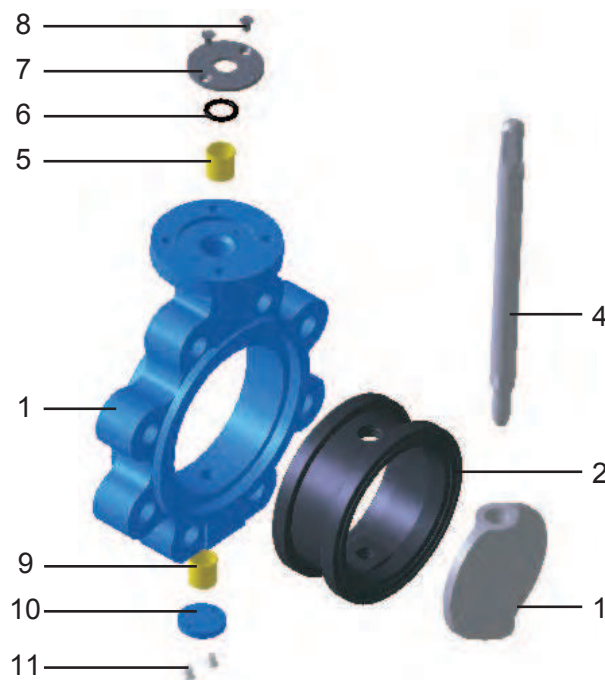
Series 140 Lug (2" to 40")

Rated up to 150/250 psi



2" to 8"

P.No	Part Name	Material
1	Body	Ductile Iron, Aluminum-Bronze, AISI 316 Stainless Steel, A216 WCB
2	Body Seat	EPDM, NBR, Viton, HypalonNeopren, NR, Silicone
3	Disc	AISI SST 316, Al-Bz, DI, Cast Steel
4	Stem	AISI 304 SST, AISI 420, Duplex SST
5	Bearing	SB (Carbon Steel + PTFE)
6	O-Ring	NBR
7	Washer	304 SST
8	Bolt	304 SST



10" to 12"

P.No	Part Name	Material
1	Body	Ductile Iron, Aluminum-Bronze, AISI 316 Stainless Steel, A216 WCB
2	Body Seat	EPDM, NBR, Viton, HypalonNeopren, NR, Silicone
3	Disc	AISI SST 316, Al-Bz, DI, Cast Steel
4	Stem	AISI 304 SST, AISI 420 SST, Duplex SST
5	Bearing	SB (Carbon Steel + PTFE)
6	O-Ring	NBR
7	Washer	304 SST
8	Bolt	304 SST
9	Bearing	SB (Carbon Steel + PTFE)
10	Lower Cover	304 SST
11	Bolt	304 SST

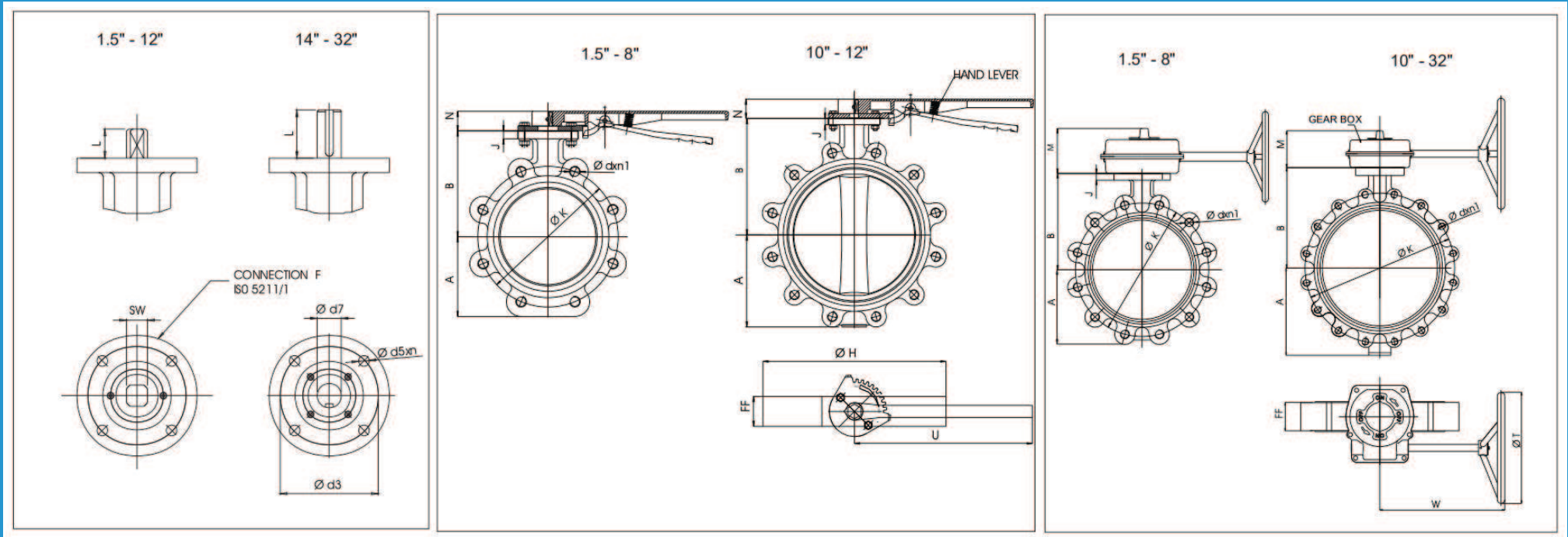


14" to 40"

P.No	Part Name	Material
1	Body	Ductile Iron, Aluminum-Bronze, AISI 316 Stainless Steel, A216 WCB
2	Body Seat	EPDM, NBR, Viton, HypalonNeopren, NR, Silicone
3	Disc	AISI SST 316, Al-Bz, DI, Cast Steel
4	Key	Carbon Steel
5	Upper Stem	AISI 304, AISI 420, Duplex
6	Connecting Stud	AISI 304, AISI 316, AISI 420
7	Lower Stem	AISI 304, AISI 316, AISI 420
8	Washer	304 SST
9	Nut	304 SST
10	Bearing	SB (Carbon Steel + PTFE)
11	O-Ring	EPDM, NBR
12	Upper Cover	Carbon Steel
13	Lower Cover	Carbon Steel
14	Bolt	304 SST
15	Key	Carbon Steel

WAFER BUTTERFLY VALVE DIMENSIONAL DRAWING

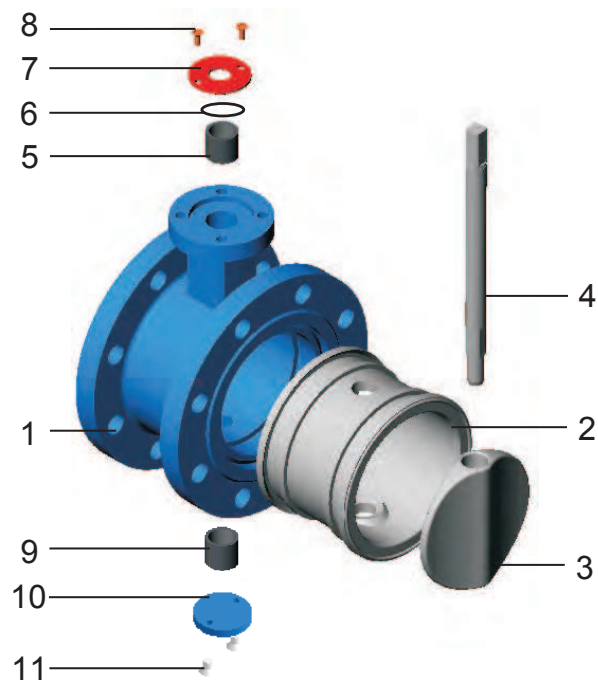
Series 120, 320, 321



Size	SW													CL 150				BARE STEM Weight (lb)	HAND LEVER		GEAR BOX					
	A	B	b	FF	Ø H	J	M	N	U	W	Ø T	F	Bolt hole (mm) / # of holes	Ø d7 (mm)	L	Ø d3	Ø K		Hole size (mm) / # of Bolts	Type	Weight (lb)	150 PSI	Weight (lb)	250 PSI	Weight (lb)	
4"	4.40	6.1	.94	5	8.66	.55	2	1.5	10	6.25	8	07	9x4	14	1.25	2.75	7.5	.75	8	30	92-200	1.75	AST-20	6.5	AST-20	6.5
5"	4.92	6.29	.94	5.5	9.84	.55	2	1.5	10	6.25	8	07	9x4	14	1.25	2.75	8.5	.88	8	31	92-200		AST-20		AST-20	
6"	5.74	7.44	1	5.5	11.18	.55	2	1.5	14	6.25	8	07	9x4	17	1.25	2.75	9.5	.88	8	38	92-300	2	AST-20		AST-20	
8"	6.69	8.38	1.11	6	13.38	.59	3	1.5	14	9	10	10	11x4	17	1.25	4.01	11.75	.88	8	77	92.400	6	AST-30	18	AST-30	18
10"	8.66	9.84	1.19	6.5	15.94	.59	3	1.85	16	9	10	10	11x4	22	1.25	4.01	14.25	.88	12	117	92.400		AST-30		AST-30	
12"	9.72	11.41	1.25	7	18.11	.59	3	1.85	16	9	10	10	11x4	27	1.25	4.01	17	1	12	207	92.400		AST-30		AST-30	
14"	11.81	12.52	1.37	7.5	20.47	1.1	4	-	-	12.5	16	14	17.5x4	Ø 36	2.95	5.51	18.75	1.12	12	308	-	-	AST-40	27	AST-40	27
16"	12.83	14.25	1.44	8.5	22.83	1.1	4	-	-	12.5	16	14	17.5x4	Ø 45	2.95	5.51	21.25	1.12	16	364	-	-	AST-40		AST-60	40
18"	14.33	16.14	1.56	8.75	25.19	1.1	4	-	-	12.5	16	16	22x4	Ø 45	3.62	6.49	22.75	1.25	16	412	-	-	AST-60	40	AST-80	72
20"	16.14	17.59	1.68	9	28.15	1.1	4	-	-	12.5	22	16	22x4	Ø 50	3.62	6.49	25	1.25	20	562	-	-	AST-60		AST-80	
24"	18.97	20.67	1.88	10.5	33.07	1.1	4	-	-	16	24	16	22x4	Ø 65	3.62	6.49	29.5	1.38	20	829	-	-	AST-80	72	AB1950NHR	100
28"	22.2	21.57	2	9	35.82	1.18	5.5	-	-	16	28	25	18x8	Ø 68	4.64	10	34	1.38	28	-	-	-	100	AB6800NLT/SP4	155	
32"	23.81	25.2	2.25	12.5	40.35	1.18	5.5	-	-	16	24	25	18x8	Ø 82	4.64	10	38.5	1.62	28	-	-	-	AB6800NLT/ SP4	155	AB6800NLT/SP4	155

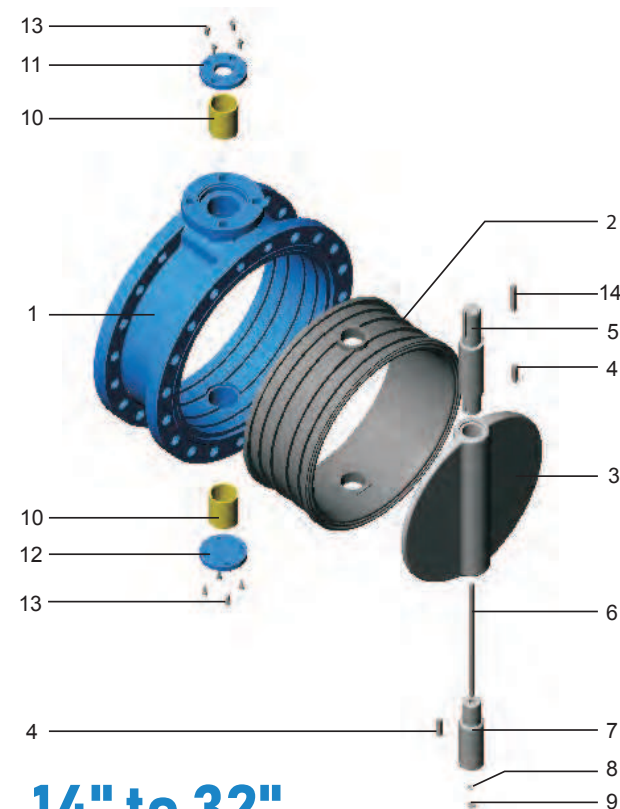
Series 160 Double Flange

(4" to 32") Rated 250 psi



4" to 12"

P.No	Part Name	Material
1	Body	Ductile Iron, Al-Bz, AISI 316 SST, Cast Steel
2	Body Seat	EPDM, NBR, Viton, Hypalon Neopren, NR, Silicone
3	Disc	316 SST, Al-Bz, DI, Carbon Steel
4	Stem	304 SST, 420 SST, Duplex SST
5	Bearing	Carbon Steel
6	O-Ring	NBR
7	Washer	304 SST
8	Bolt	304 SST
9	Bearing	Carbon Steel + PTFE
10	Lower Cover	Carbon Steel
11	Bolt	304 SST



14" to 32"

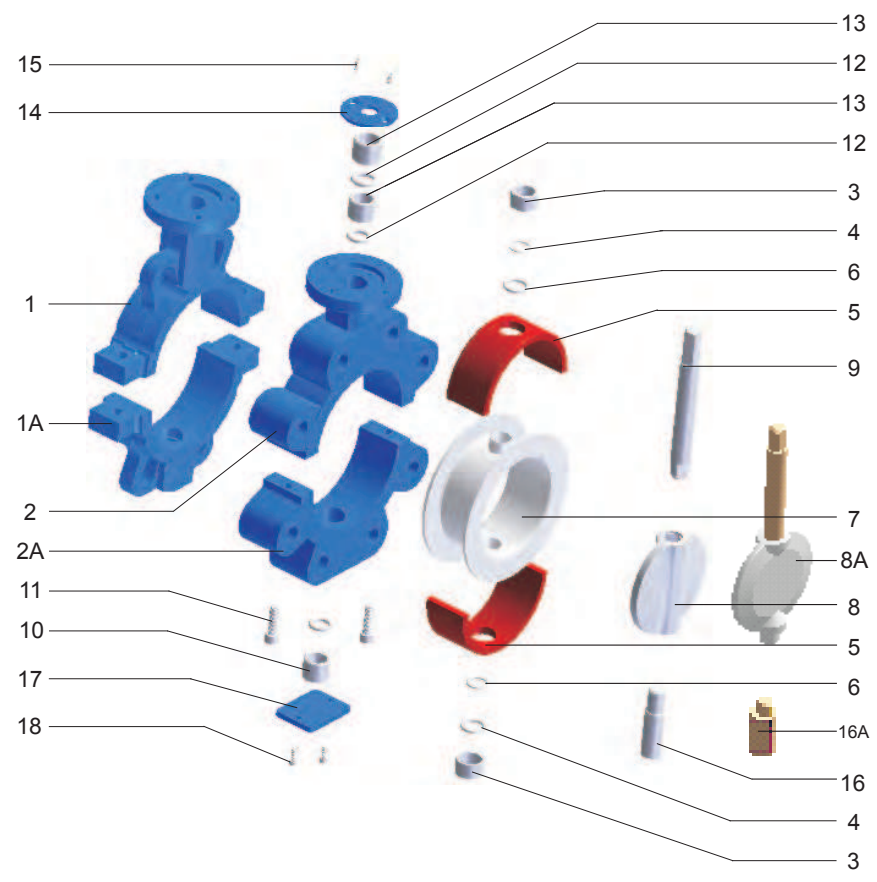
P.No	Part Name	Material
1	Body	Ductile Iron, Al-Bz, AISI 316 SST, Cast Steel
2	Body Seat	EPDM, NBR, Viton, Hypalon Neopren, NR, Silicone
3	Disc	316 SST, Al-Bz, DI, Carbon Steel
4	Key	Carbon Steel
5	Upper Stem	304 SST, 420 SST, Duplex SST
6	Connecting Stud	304 SST, 316 SST, 420 SST
7	Lower Stem	304 SST, 316 SST, 420 SST
8	Washer	304 SST
9	Nut	304 SST
10	Bearing	SB (Carbon Steel + PTFE)
11	O-Ring	EPDM, NBR
12	Upper Cover	Carbon Steel
13	Lower Cover	Carbon Steel
14	Bolt	304 SST
15	Key	Carbon Steel

Series 300 PTFE Valves Lug & Wafer (4" - 12")

Rated up to 125 psi

Series 300

- Model 320 Wafer SST Disc
- Model 321 Wafer 316 + PTFE lined Disc
- Model 340 Lug SST Disc
- Model 341 Lug 316 + PTFE lined Disc



P.No	Part Name	Material
1	Body	Ductile Iron or AISI 316 Stainless Steel
1A	Body	Ductile Iron or AISI 316 Stainless Steel
2	Body	Ductile Iron or AISI 316 Stainless Steel
2A	Body	Ductile Iron or AISI 316 Stainless Steel
3	Thrust Collar	Type AISI 316 Stainless Steel
4	O-Ring	Silicone
5	Elastomer Inset	Silicone, Viton
6	O-Ring	Viton
7	Seat	PTFE
8	Disc	Type AISI 316 Stainless Steel
8A	Disc + Stem	Type AISI 316 Stainless Steel + PTFE

P.No	Part Name	Material
9	Upper Stem	Type AISI 316 Stainless Steel
10	Bearing	PTFE
11	Bolt	Carbon Steel
12	O-Ring	Viton
13	Bearing	PTFE
14	Washer	Carbon Steel
15	Bolt	Type AISI 304 Stainless Steel
16	Lower Stem	Type AISI 316 Stainless Steel
16A	Lower Stem	Type AISI 316 Stainless Steel
17	Lower Cover	Carbon Steel
18	Bolt	Type AISI 304 Stainless Steel

Elastomer Type	Code	Applications
EPDM	E	Air, water, ethyl alcohol, sugar industry, ammonium weak acids, hot water (-20°F + 230°F)
HEATEPDM	E1	Hot water steam (Refer to EPDM) (-22° + 290°F)
NEOPRENE	C	Alkali acids, acids base (-40° + 200°F)
NBR / BUNA-N®	N	Gasoline, diesel oil, vegetable oils, machine oils, natural gas sea water, synthetic thinner (-20° + 195°F)

Elastomer Type	Code	Applications
VITON® / FKM	V	Acid, detergent, water, steam, vegetable oils (-20°F + 390°F)
HYPALON	H	Petroleum, hydroxides, alcohol, alkali (-20° + 275°F)
SILICONE	S	Vegetable oils, water, steam (-20° + 345°F)
Natural Rubber / NR	R	Abrasion resistance, cement, sand, lime stone etc.b(-10° + 185°F)

Note: These temperatures are displayed only for the valve seat.
Please also check the temperature for the other valve parts of the valve plus actuator.



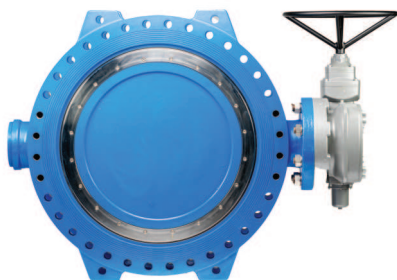
DISC OPTIONS

- 316 Stainless Steel
- 304 Stainless Steel
- Aluminum Bronze
- Ductile Iron
- Stainless Steel PTFE Lined

DISC OPTIONS

- 316 Stainless Steel
- Ductile Iron
- Carbon Steel
- 2205 Duplex Stainless Steel
- Aluminum Bronze





Av-Tek® Inc. offers modern solutions for the persistent problems facing water users, plant operators, and engineering firms. Our technology far exceeds the current options in the marketplace, and clients are quickly realizing Av-Tek® is setting a new standard for quality, performance, and craftsmanship.

The Av-Tek® DEX double eccentric butterfly valve is a primary example of superior design and quality. Exceeding the requirements of AWAA C504, this valve simply just works, even years down the road, you can rest assured there is not a better valve on the market today.

The Av-Tek® VRX Plunger Valve has been engineered and designed for absolute control; specifically, for water applications. The VRX accompanied with an electric motor operator can function as a critical isolation, pressure, and control valve without the fear of cavitation damage.

The Av-Tek® SDX, Sliding Disk Check Valve, is a globe style check valve and is truly leak tight due to its mechanically retained, resilient seat. Great for pump stations and distribution.

The Av-Tek® Model 4900 Ball Check Valve has a 100% opening port, there is virtually no head loss when the valve is fully open. Ball Check Valves are a resilient seated check valve used in wastewater lift stations. Different weighted balls allow for this to be adjusted to your application.

The Hydrant Air Exhaust or HAX, is a patent pending device that allows you to make your system more efficient by removing the air out of your lines, and easily checking line pressure through any fire hydrant!