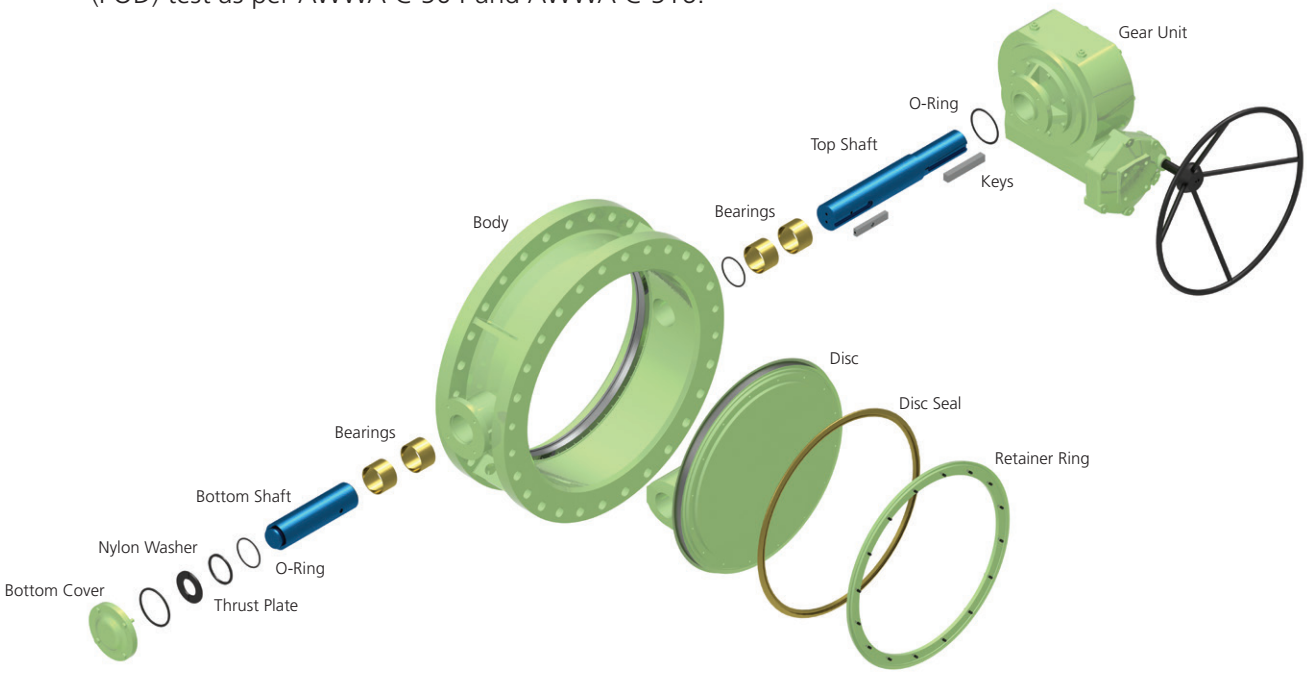
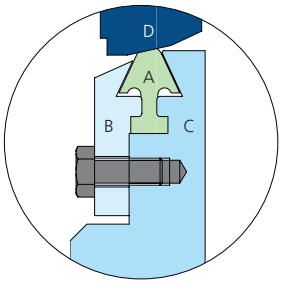
Aquaseal Max Large-size Fabricated Steel Butterfly Valve

Aquaseal Max is a fabricated steel butterfly valve developed as an ideal alternate for cast iron butterfly and sluice valves in water distribution systems. The highly reliable valve also finds application in power plants, utility and fire water lines, and HVAC systems. Customised Aquaseal Max can be used to handle air, gases and vacuum services. The valve has successfully under gone Proof of Design (POD) test as per AWWA C 504 and AWWA C 516.





Self-energising Disc Seal

The most unique feature of Aquaseal Max is Autoseal (A), a self-energising disc seal that performs consistently over a wide range of pressures without any adjustment. A retainer ring (B) bolted directly to the disc (C) holds the resilient Autoseal in place. In closed position, line pressure forces Autoseal against the body seat (D) to obtain bi-directional bubble-tight sealing.

Benefits of Autoseal

- High integrity sealing, Aquaseal Max is suited for vacuum services
- Lower break torque - Saving in valve automation costs
- Easy to replace at site

Lighter and Stronger Construction

Aquaseal Max body, fabricated from carbon steel plates, has better mechanical and structural properties compared to a cast iron body of the same size and pressure rating. The body also handles piping stresses and misalignments better. Being lighter, the valve is easier to handle, and requires less piping supports, and thus reduces valve installation cost considerably.

Assured Sealing to Atmosphere

Double O-Rings on the shaft provide reliable sealing to atmosphere. Unlike gland packing, this arrangement does not require any maintenance.

Lower Torque, Longer Life

The shaft is offset from the seat plane to provide uninterrupted seating surface through 360 degrees. The offset also ensures that disc loses contact with the seat at crack open, and thereby reduces friction and operating torque.

Maintenance-free Bearings

Self-Lubricated bearings are provided on the shafts.

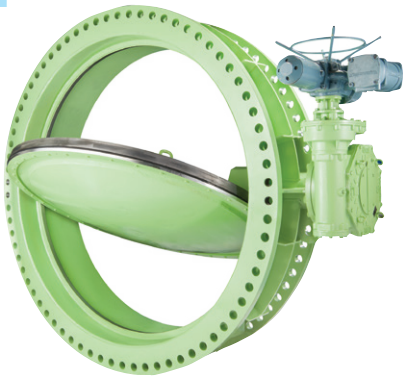
Compliance Standards

Parameter	Standard
Valve Design	AWWA C 504, AWWA C 516, EN 593, ISO 5752
Pressure Testing	EN 12266 Part 1&2, AWWA C 504, AWWA C 516, ISO 5208
Flange Drilling	AWWA C 207, BS 4504 EN 1092-1, ASME B 16.5 & 16.47 Class 150, IS 6392
Face-to-Face	AWWA C 504, AWWA C 516, EN 558

Materials of Construction

Components	Materials
Body	Carbon Steel IS 2062 Gr. B, A 36, A 516 Gr. 60/70
Disc	Carbon Steel IS 2062 Gr. B, A 36, A 516 Gr. 60/70
Retainer	Carbon Steel IS 2062 Gr. B, A 36, A 516 Gr. 60/70
Top & Bottom Shafts	Stainless Steel A 276 Type 410/ 316/ 304
Body Seat	Stainless Steel A 240/182 Type 304/ 304L/ 316
Disc Seal	Nitrile Rubber, EPDM, Viton
Bearings	Steel Backed PTFE, SS Backed PTFE, Phosphor Bronze
Thrust Plate	Cast Iron IS 210 Gr. FG260
Bottom Cover	Cast Iron, Carbon Steel

Valves in other materials available on demand.



Specials:

- EPDM/ Ebonite-lined valves for sea water applications
- Dry shaft for nuclear applications
- Special sealing systems for vacuum services
- Butt-weld ends

Ordering Information

Type	Operator	Body Material	Disc Material	Shaft Material	Seal Material	Options
TB	G - Gear Operated	2 - IS 2062	2 - IS 2062	4 - SS 410	N - Nitrile Rubber	Eb - Ebonite Lining
	E - Electric	4 - SS 304	4 - SS 304	5 - SS 304	E - EPDM	LA - Locking Arrangement
	A - Pneumatic Double Acting	6 - SS 316	6 - SS 316	6 - SS 316	V - Viton	FS&ES - Floor Stand & Extn. Spindle
	H - Pneumatic Spring Return	7 - A 516 Gr. 70	7 - A 516 Gr. 70			CW - Chain Wheel for GU
	Y - Hydraulic					

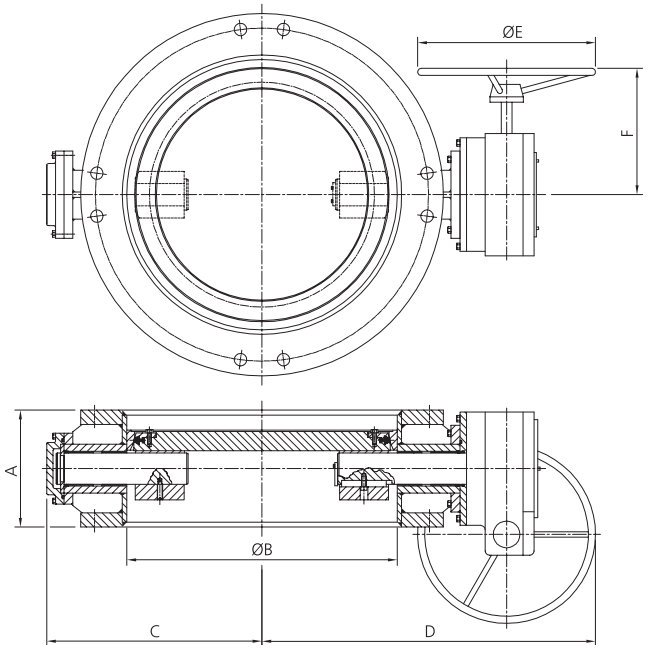
Aquaseal Max Large-size Fabricated Steel Butterfly Valve

Aquaseal Max is available in sizes up to 120" (3000 mm) in PN 6, PN 10 and PN 16 pressure ratings. Since the valves are of welded construction, the valves can be offered in intermediate sizes to suit customer requirements. Aquaseal Max welding procedures meet ASME Section IX requirements, and welding is carried out by experienced and qualified welders. All longitudinal welds in the valve are butt-welded and subjected to 100% radiography. The acceptance criteria for radiographs are as per ASME Section VIII, Division I.

Dimensions - PN 6

Valve Size		A	B	C	D	E	F	Weight
NPS	DN							
6	150	127	154	175	240	300	270	72
8	200	152	210	225	420	300	270	76
10	250	203	258	245	445	300	270	100
12	300	203	308	270	460	300	270	105
14	350	203	358	315	505	300	270	130
16	400	203	408	340	530	300	270	150
18	450	203	458	365	555	300	270	170
20	500	203	508	390	630	400	315	200
24	600	203	608	440	735	400	290	270
26	650	305	658	465	750	400	290	360
28	700	305	708	490	770	400	290	410
30	750	305	758	585	995	650	415	450
32	800	305	808	615	1020	650	415	530
36	900	305	915	680	1025	600	500	860
40	1000	305	1010	750	1150	600	500	1035
42	1050	305	1060	780	1125	600	500	1110
44	1100	381	1110	790	1360	650	620	1290
48	1200	381	1210	850	1470	650	620	1550
50	1250	381	1260	890	1505	650	620	1700
52	1300	381	1310	910	1530	650	620	1850
54	1350	381	1360	955	1575	650	620	2200
56	1400	381	1410	950	1570	650	620	2480
60	1500	381	1510	1035	1655	650	620	2745
64	1600	457	1610	1090	1665	800	610	3250
72	1800	457	1810	1200	1765	800	610	4000
78	1950	610	1960	1260	1825	900	650	4600
80	2000	610	2010	1325	2050	900	650	5000
84	2100	610	2110	1385	2150	900	650	5400
88	2200	610	2210	1400	2190	900	650	6100
92	2300	610	2310	1590	2325	900	650	6400
94	2350	610	2360	1615	2350	900	650	6730
96	2400	711	2410	1620	2405	1000	820	8950
100	2500	762	2510	1625	2410	1000	820	9300
102	2550	762	2560	1625	2410	1000	820	9600
104	2600	762	2610	1625	2410	1000	820	9750
106	2650	762	2660	1775	2560	1000	820	9900
108	2700	762	2710	1715	2500	1000	820	13200
110	2750	762	2760	1730	2515	1000	820	13520
112	2800	762	2810	1870	2655	1000	820	14840
116	2900	762	2910	2000	2820	1000	1020	16340
120	3000	813	3010	2125	2950	1000	1020	17840

All dimensions in mm and weights in kg. Please contact us for dimension details of valves in other sizes.



Dimensions - PN 10

Valve Size		A	B	C	D	E	F	Weight
NPS	DN							
6	150	127	154	175	370	300	270	72
8	200	152	210	225	420	300	270	76
10	250	203	258	245	445	300	270	100
12	300	203	308	270	460	300	270	125
14	350	203	358	315	505	300	270	150
16	400	203	408	340	530	300	270	180
18	450	203	458	365	555	300	270	185
20	500	203	508	390	630	400	315	230
24	600	203	608	510	795	400	290	385
26	650	305	658	525	825	400	290	460
28	700	305	708	535	865	400	290	540
30	750	305	758	570	975	650	415	580
32	800	305	808	595	950	600	450	750
36	900	305	915	680	1075	700	515	1070
40	1000	305	1010	750	1205	700	515	1250
42	1050	305	1060	775	1240	700	515	1400
44	1100	381	1110	800	1420	650	620	1700
48	1200	381	1210	880	1500	650	620	1950
50	1250	381	1260	890	1810	650	620	2200
52	1300	381	1310	940	1560	650	620	2500
54	1350	381	1360	955	1575	650	620	2900
56	1400	381	1410	985	1605	650	620	3200
60	1500	381	1510	1040	1660	650	620	3600
64	1600	457	1610	1100	1670	800	610	3950
72	1800	457	1810	1190	1765	800	630	4300
78	1950	610	1960	1325	1985	900	650	4865
80	2000	610	2010	1350	2090	900	650	5200
84	2100	610	2110	1400	2110	900	650	5600
88	2200	610	2210	1500	2220	900	650	6400

Dimensions - PN 16

Valve Size		A	B	C	D	E	F	Weight
NPS	DN							
6	150	140	154	202	395	300	270	76
8	200	152	210	235	430	300	270	80
10	250	203	258	265	460	300	270	110
12	300	203	308	290	470	300	270	140
14	350	203	358	315	505	300	270	185
16	400	216	408	370	560	300	270	200
18	450	222	458	385	665	400	270	250
20	500	229	508	390	670	400	270	300
24	600	267	608	510	795	400	290	430
26	650	280	658	530	835	650	415	500
28	700	292	708	545	1080	650	620	600
30	750	305	758	625	1150	650	620	700
32	800	318	808	650	1175	650	620	820
36	900	330	915	735	1355	650	620	1300
40	1000	410	1010	770	1305	650	620	1500
42	1050	425	1060	805	1335	650	620	1750
44	1100	440	1110	835	1360	650	620	1900
48	1200	470	1210	890	1430	650	620	2350
52	1300	500	1310	950	1485	650	620	2700
56	1400	530	1410	995	1405	650	620	3450
60	1500	560	1510	1040	1555	800	610	4400
64	1600	600	1610	1100	1605	800	610	5000
72	1800	670	1810	1200	1780	800	610	5500
80	2000	930	2010	1350	2090	900	650	6100

Face-to-face dimensions meet AWWA C504 for sizes DN 350 to DN 350, and DN 750. Valves in other sizes meet EN 558 Series 13.

All dimensions in mm and weights in kg. Please contact us for dimension details of valves in other sizes.