

Aquaseal Butterfly & Check Valves



L&T Valves

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L&T Valves

L&T Valves Limited (formerly Audco India Limited) is a wholly-owned subsidiary of L&T and one of the largest valve manufacturers in the world.

The company has three modern manufacturing facilities, in Chennai (Manapakkam), Coimbatore and Kancheepuram, in Tamil Nadu, India. The company leverages its world-class capabilities in design, quality assurance and manufacturing to ensure that their products consistently meet customer expectations.

Product Range:

- Gate, Globe & Check Valves
- Valves for Power
- Pipeline & Process Ball Valves
- Triple-offset Butterfly Valves
- Flanged and Wafer-type Butterfly & Check Valves
- Double Block and Bleed Plug Valves
- Control Valves
- Customised Solutions

Designs for the valves are created by an experienced team of valve experts who have a deep understanding of user-industry processes. An extensive manufacturing and quality assurance infrastructure ensure that world-class designs are transformed into high performance products. Every phase of manufacturing is governed by an institutionalised environment, health and safety policy.

L&T Valves distribution network spans the globe, partnering some of the largest valve distribution companies in the world. In India, L&T Valves has a presence in every industrial centre through a network of offices, stockists, automation centres and service franchisees.



Aquaseal Butterfly & Check Valves

L&T Valves manufactures a comprehensive range of Butterfly & Check Valves. The range primarily addresses water treatment and distribution systems, power plants, utility lines, fire water lines and HVAC.

The products portfolio comprises:

- **Aquaseal** Integrally-moulded Butterfly Valve in PN 10
- **Aquaseal Plus** Integrally-moulded Butterfly Valve in Class 150
- **Aquaseal Max** Large-size Fabricated Steel Butterfly Valve
- **Aquaseal Chek** Dual-plate Check Valve
- **Aquaseal FabChek** Fabricated Steel Check Valve

The versatile range is available in various body styles, materials, and actuation options to suit customer requirements.

Aquaseal Integrally-moulded Butterfly Valve - PN 10

Body Style	Pressure Rating	2	2.5	3	4	5	6	8	10	12	14	16	18	20	24
		50	65	80	100	125	150	200	250	300	350	400	450	500	600
Wafer	PN 10	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Aquaseal Plus Integrally-moulded Butterfly Valve - Class 150

Body Style	Pressure Rating	2	2.5	3	4	5	6	8	10	12	14	16	18	20	24	26	28	32	36
		50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	800	900
Wafer	Class 150	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Lugged		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Flanged		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

Aquaseal Chek Dual-plate Check Valve

Body Style	Pressure Rating	2	2.5	3	4	5	6	8	10	12
		50	65	80	100	125	150	200	250	300
Wafer	PN 10	●	●	●	●	●	●	●	●	●
	PN 16	●	●	●	●	●	●	●	●	●
	Class 125	●	●	●	●	●	●	●	●	●

Aquaseal Max Large-size Fabricated Steel Butterfly Valve

Aquaseal FabChek Fabricated Steel Check Valve

Body Style	Pressure Rating	Size											
		PN 6	PN 10	PN 16	Available in sizes up to 120" (3000 mm)								
Flanged, Fabricated													

GREEN SOLUTIONS FOR HVAC AND WATER DISTRIBUTION SYSTEMS, UTILITY

6 Aquaseal



10 Aquaseal Plus



AND FIREWATER LINES, PROCESS PLANTS AND POWER PLANTS...

16 Aquaseal Max

20 Aquaseal Chek

22 Aquaseal FabChek



Aquaseal Integrally-moulded Butterfly Valve - PN 10



Aquaseal Integrally-moulded Butterfly Valve is available in sizes from 50 mm (2") to 300 mm (12"), in PN 10 pressure rating. The valve was developed to provide reliable sealing in water and air lines, and is today the industry benchmark.

The most striking feature of Aquaseal Butterfly Valve is its integrally-moulded body liner. Aquaseal's elastomer body seat is vulcanised insitu onto the body using high temperature and pressure, and this provides longer life and superior performance when compared to valves with loose liners.

Aquaseal requires no maintenance, and is truly a fit-and-forget valve.

Compliance Standards

Parameter	Standard
Valve Design	EN 593 (BS 5155), API 609, MSS SP 67, ISO 5752
Pressure Testing	BS 6755 Part 1
Pipe Flange	To suit BS 10 Table D & E, ANSI 125/ 150, DIN ND 10/ 16, BS 4504 PN 10/ 16, IS 6418 Tables 6 to 9, IS 6392 Tables 10 to 20

Materials of Construction

Components	Materials
Body	Cast Iron to BS 1452 Gr. 200
Body Liner	Nitrile Rubber/ EPDM
Disc	Cast Iron to BS 1452 Gr. 250
Shaft	BS 970 - 080M40

Longer Life

The strength of the vulcanised liner as well as its strong bonding with the body ensure that it doesn't get deformed and torn by the disc during valve operations. Further, friction during operations is minimised owing to the smooth liner surface. The strong seat and reduced friction greatly enhance service life of the valve

Tight Sealing, and Consistent Low Torque

Bubble-tight sealing is obtained by the tight interference fit between liner and disc. The insitu moulded seat does not deform with age, and hence the operating torque stays low and consistent during the entire life cycle of the valve. Aquaseal is the valve of choice for actuated systems because of high reliability and consistent torque.



Assured Stem Sealing

The flat profiles on the top and bottom of Aquaseal disc engage with matching profiles on the body liner, and the large area of contact prevents leakage to atmosphere. Integrally moulded 'O' rings that compresses around the top shaft provide a secondary seal. A seal that prevents foreign particles from entering the shaft is Aquaseal's third line of defence.

Actuator Mounting Platform

The integral ISO 5211 platform facilitates direct mounting of actuators and gear units, thereby improving system reliability and efficiency.

Lower Resistance to Flow

The disc designed to provide minimum resistance to flow, and improved flow coefficients, is an Aquaseal hallmark.

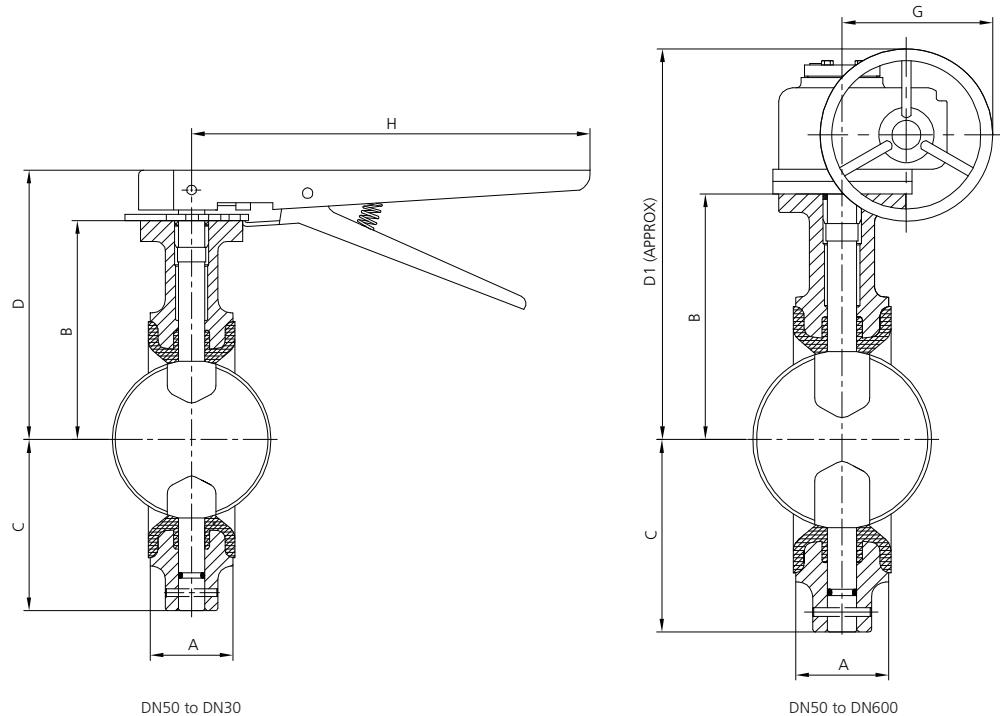
Ease of Installation

The integral liner of the valve acts as a gasket between the valve and companion flange. The liner being bonded to the body doesn't get stretched or damaged during installation unlike loose liners.

Reliable Drive

Positive shaft-disc connection is a key Aquaseal feature. The stem is Xylan-coated to reduce friction and improve wear resistance. Further, the self-lubricated Acetal Bronze bearings reduce torque and increase valve reliability and life.

Aquaseal Integrally-moulded Butterfly Valve - PN 10



DN50 to DN30

DN50 to DN600

Dimensions - PN 10

Valve Size		A	B	C	D	D1	E	F	G	H	Weight	
NPS	DN										FC (Lever)	Gear Unit
2	50	43	99	65	129	228	152	163	132	176	2.5	10.8
2.5	65	46	110	78	140	239	152	163	132	176	2.8	11.1
3	80	46	116	85	146	245	152	163	132	176	3.2	11.5
4	100	52	134	105	164	263	152	163	132	268	5.2	13.5
5	125	56	164	118	194	293	152	163	132	268	6.7	15
6	150	56	177	144	207	306	152	163	132	268	8.7	17
8	200	60	235	169	300	365	152	163	132	405	15.6	22.5
10	250	68	259	214	332	438	250	197	181	513	26.8	31.5
12	300	78	284	249	357	463	250	197	181	516	35.8	40.5
14	350	92	318	275		512	300	218	217			57
16	400	102	370	310		564	300	218	217			70
18	450	114	410	336		604	300	218	217			89
20	500	127	448	362		642	300	218	217			129
24	600	154	510	430		704	300	218	217			170

All dimensions in mm and weights in kg



Ordering Information

Body Material	Body Style	Operation	Body Lining	Disc Material	Shaft Material
I - Cast Iron	B - Wafer Flangeless	A - Pneumatic Double Acting Actuator	L - Nitrile	P - Cast Iron Coated with Nylon	C - Carbon Steel
		F - Flow Control Lever	3 - EPDM	S - SS 316	
		G - Gear Unit			
		H - Pneumatic Spring Return Actuator			
		N - None Bare Shaft			

Aquaseal Plus Integrally-moulded Butterfly Valve - Class 150



Aquaseal Plus Class 150 Butterfly Valve is a second generation valve that sets a new benchmark in performance for butterfly valves. The valve was developed to address requirements of modern process, utility and HVAC systems that demand high performance at higher pressures.

The concentric butterfly valve meets the requirements of API 609 Cat. A, EN 593 and MSS SP-67. Aquaseal Plus has successfully completed over 10,000 test cycles reinforcing its fit-and-forget reputation.

Available in sizes from 50 mm (2") to 900 mm (36"), the valve is offered in SG Iron and cast steel, in a variety of body styles, materials and actuation options. The body seat of Aquaseal Plus Butterfly Valve is vulcanised insitu onto the body using high temperature and pressure, and this provides longer life and superior performance when compared to valves with loose liners.

Aquaseal Plus delivers all benefits of its successful predecessor Aquaseal, plus a series of unique class-leading advantages.

Compliance Standards

Parameter	Standard
Valve Design	EN 593 (BS 5155), API 609 Cat A, MSS SP-67
Pressure Testing	EN 12266 Part 1&2, API 598, ISO 5208
End Connection	Wafer Flangeless, Lugged (EN 1092), ASME B16.42 & ASME B16.5 Class150/ BS 4504 PN 10/ 16
Face-to-Face	EN 558 Series 20/ API 609 Cat A, MSS SP-67 (Narrow Body), ISO 5752 (Short)

Materials of Construction

Components	Materials
Body	SG Iron to EN 1563-400/ 18, CS to A 216 Gr. WCB
Seat/ Liner	Nitrile Rubber, EPDM
Disc	SG Iron to EN 1563-400/ 18 with Nylon-coating, CF8, CF8M to A 351, AB2 to IS EN 1982
Stem	410 with Xylan Coating
Bearing	Acetal, Phosphor Bronze

Valves in other materials available on demand.

Longer Life

The strength of the vulcanised liner as well as its strong bonding with the body ensure that it doesn't get deformed and torn by the disc during valve operations. Further, friction during operations is minimised owing to the smooth liner surface. The strong seat and reduced friction greatly enhance service life of the valve.

Tight Sealing, and Consistent Low Torque

Bubble-tight sealing is obtained by the tight interference fit between liner and disc. The insitu moulded seat does not deform with age, and hence the operating torque stays low and consistent during the entire life cycle of the valve. High reliability and consistent torque make Aquaseal Plus the ideal valve for actuated systems.



Assured Stem Sealing

The flat profiles on the top and bottom of Aquaseal Plus disc engage with matching profiles on the body liner, and the large area of contact prevents leakage to atmosphere. Integrally moulded 'O' rings that compresses around the top shaft provide a secondary seal. A seal that prevents foreign particles from entering the shaft is Aquaseal's third line of defence.

Enhanced Reliability

The rugged body is designed to withstand pipeline stresses and vibrations. Further, enhanced liner thickness assures reliable performance over an extended service. Reinforcements are provided on Aquaseal Plus disc also.

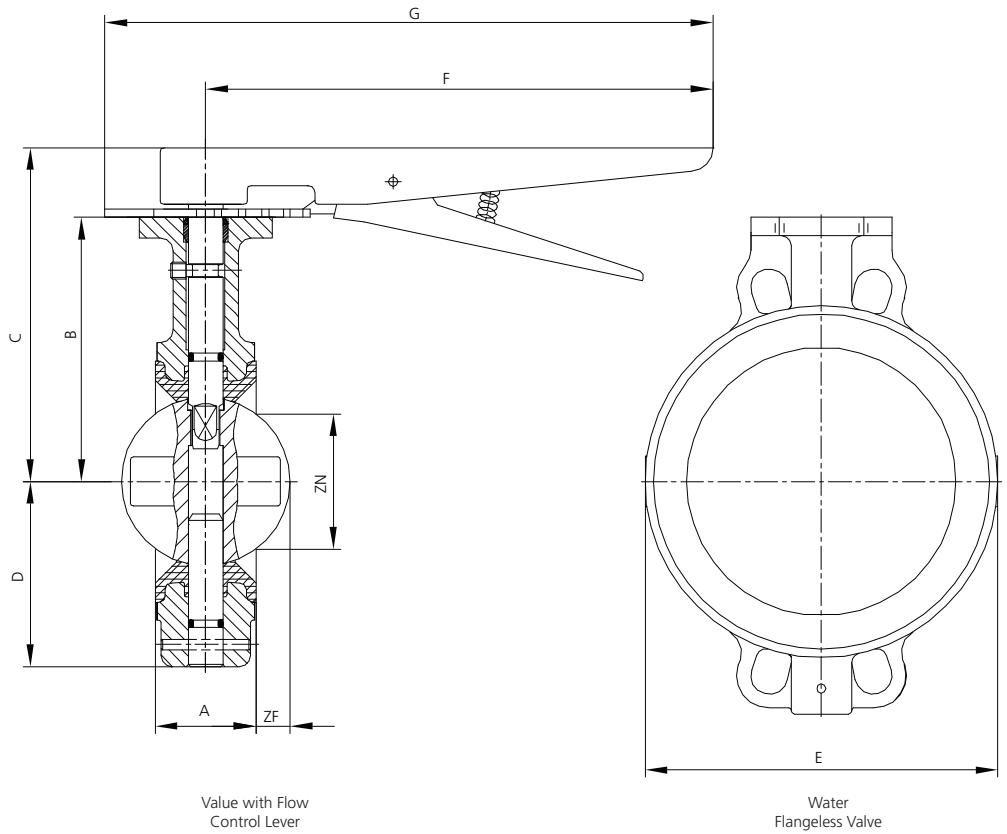
Lower Torque, Longer Life

The Aquaseal Plus disc with a hydrodynamic profile provides smoother flow and lower losses. Further the coating/ encapsulation of Nylon and EPDM on the disc helps to reduce torque and prevent disc damage.

Reliable Drive

In Aquaseal Plus a two-piece shaft is employed for closer control and smooth operation. While the square shaft provides positive drive, the bottom shaft acts as a pivot for easy operation of the disc.

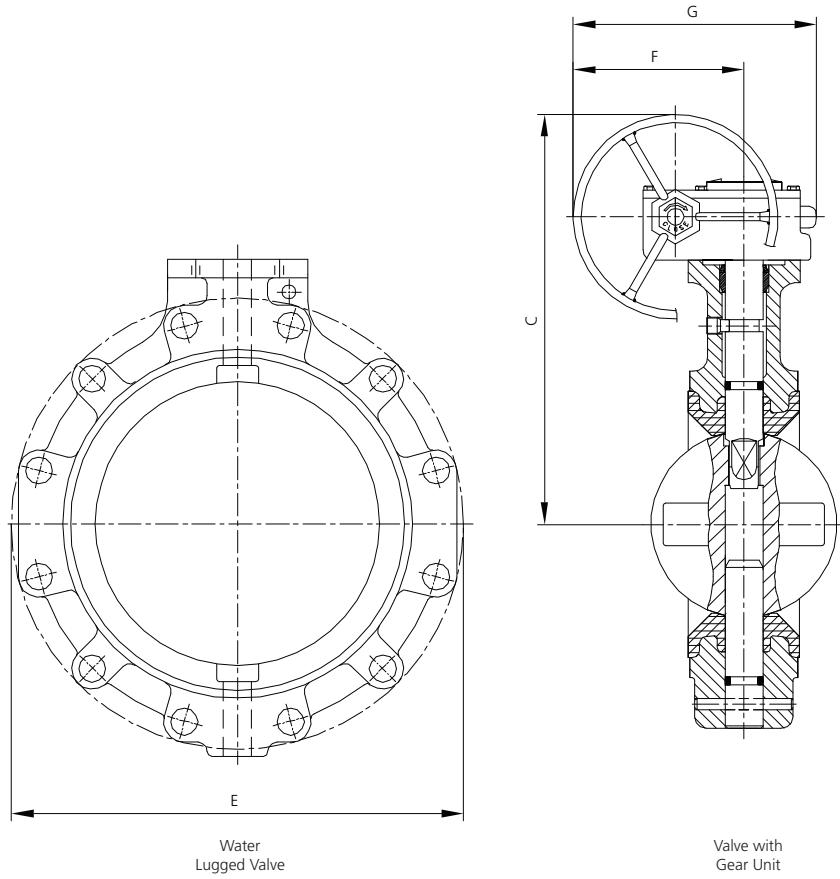
Aquaseal Plus Integrally-moulded Butterfly Valve - Class 150 (Wafer & Lugged)



Dimensions

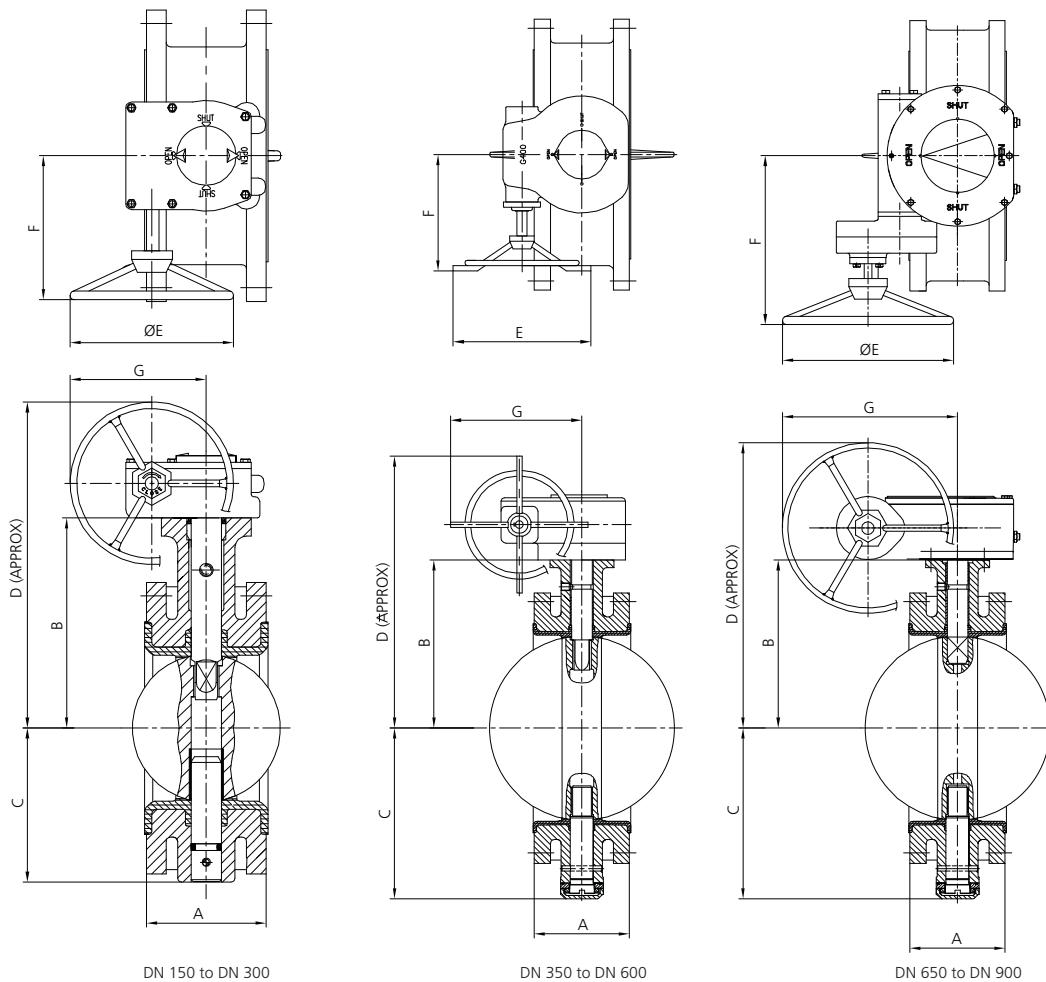
Valve Size		A	B	C			D	E	
NPS	DN			Flow Control Lever	Standard Gear Unit	Heavy Duty Gear Unit		Wafer Flangeless	Wafer Lugged
2	50	43	99	129	277		65	102	158
2.5	65	46	110	140	288		78	112	180
3	80	46	117	147	294		85	127	190
4	100	52	135	165	312		105	162	216
5	125	56	164	194	342		118	192	255
6	150	56	177	207	355		144	212	280
8	200	60	235	302	428	450	169	272	345
10	250	68	259	326	452	476	214	322	405
12	300	78	284	351	477	501	249	377	485
14	350	92	318		510	535	342	432	530
16	400	102	370			587	377	483	600
18	450	114	409			790	447	526	650
20	500	127	441			828	485	585	710
24	600	154	501			889	556	687	820

All dimensions in mm and weights in kg



Flow Control Lever	F			G			ZN	ZF	Weight					
	Standard Gear Unit	Heavy Duty Gear Unit	Flow Control Lever	Standard Gear Unit	Heavy Duty Gear Unit				Flow Control Lever		Standard Gear Unit			
									Wafer	Lugged	Wafer	Lugged		
268	181		320	242			24	4	4	5	11.5	12.5		
268	181		320	242			46	10	5	7	12.5	14.5		
268	181		320	242			62	16	5.5	9	13.5	16.5		
268	181		320	242			82	23	7.5	11	15.5	18.5		
268	181		320	242			107	32	11	15	18.5	22.5		
268	181		320	242			135	45	12.5	18.5	20.5	26.5		
508	217	255	620	290	375	184	67	27	36.5	28.5	38			
508	217	255	620	290	375	234	88	36	48.5	37.5	50			
508	217	255	620	290	375	279	106	48.5	68	50	69.5			
	217	255		290	375	324	123			82	105			
		255			375	374	144			125	168			
		437			552	423	163			160	215			
		437			552	475	183			215	300			
		437			552	573	220			320	410			

Aquaseal Plus Integrally-moulded Butterfly Valve - Class 150 (Flanged)



Dimensions (ASME B16.5)

Valve Size		A	B	C	D	E	F	G	Weight
NPS	DN								
6	150	140	177	144	306	152	163	132	35
8	200	152	235	169	429	300	218	217	52
10	250	165	259	214	453	300	218	217	66
12	300	178	284	249	478	300	218	217	106
14	350	190	318	342	512	300	218	217	150
16	400	216	370	377	587	300	271	255	215
18	450	222	410	445	788	578	338	437	225
20	500	229	440	477	820	578	338	437	278
24	600	267	500	547	880	578	338	437	370

Dimensions (B16.47 Series A & B or AWWA C207 Class E)

Valve Size		A	B	C	D	E	F	G	Weight ¹	Weight ²
NPS	DN									
26	650	292	540	587	890	500	510	513	550	450
28	700	292	600	661	950	500	510	513	680	660
30	750	318	625	686	975	500	510	513	840	720
32	800	318	670	750	1120	700	510	613	965	800
36	900	330	720	785	1170	700	510	613	1180	1075

¹ASME B16.47 Series 'A' & AWWA C207 Class E, ²ASME B16.47 Series 'B'

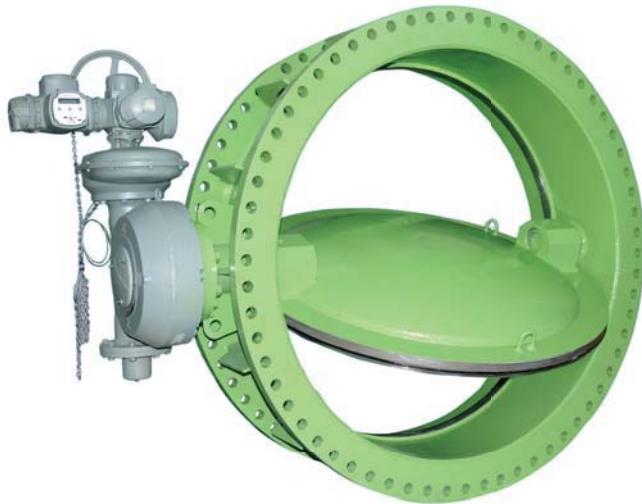
All dimensions in mm and weights in kg



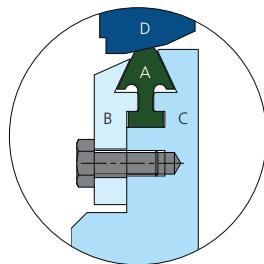
Ordering Information

Type	Body Material	Body Style	Operator	Body Liner	Disc Material	Shaft Material
A - Aquaseal Plus	C - Carbon Steel	W - Wafer Flangeless	L - Flow Control Lever	R - Black Nitrile	1 - Aluminium Bronze	Q - ASTM A 479 Type 410
	D - SG/ Ductile Iron	B - Wafer Lugged	K - Gear Box	E - EPDM	2 - SG Iron Coated with Nylon	T - ASTM A 564 Type 630
	S - CF8M	F - Double Flanged	M - Motor/ Electric Actuator	V - Viton	3 - SG Iron Encapsulated in EPDM	T - ASTM A 564 Type 630
	R - CF8		P - Pneumatic Spring Return Actuator		4 - SG Iron Encapsulated in Viton	S - SS 316
			N - Pneumatic Double Acting actuator		5 - Stainless Steel (CF8)	R - SS 304
			O - Bare Shaft		6 - Stainless Steel (CF8M)	
					7 - Carbon Steel	

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.



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.

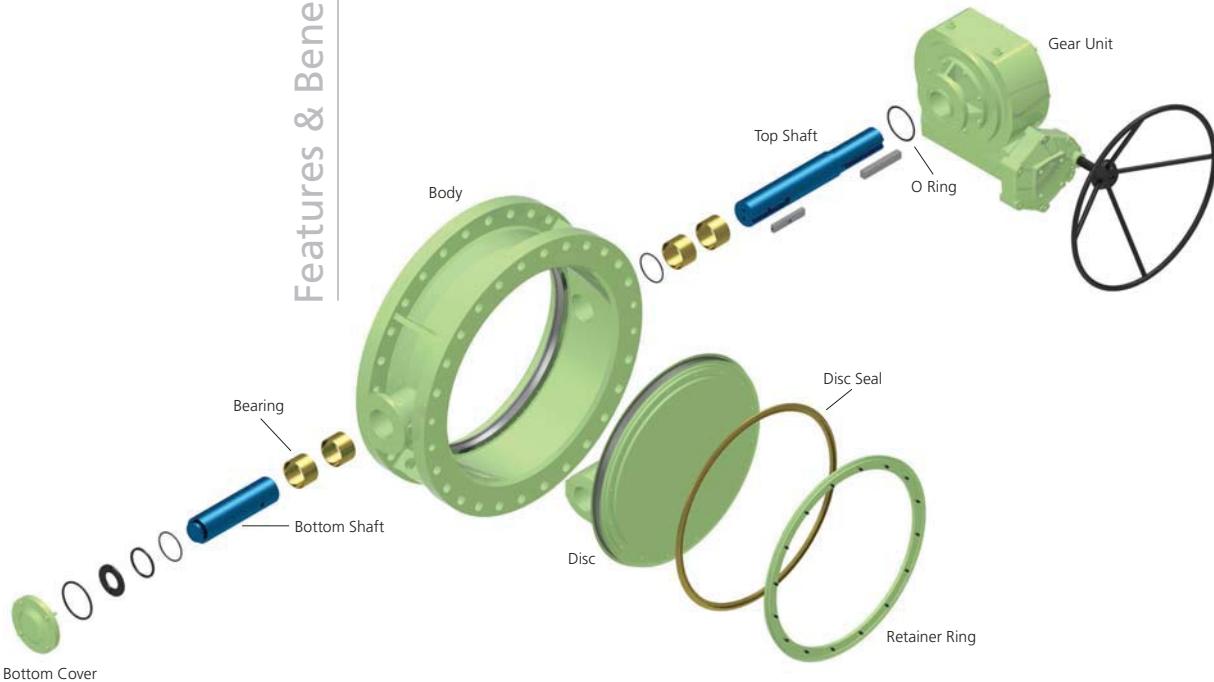
Benefits of Autoseal

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

Compliance Standards

Parameter	Standard
Valve Design	AWWA C504
Pressure Testing	EN 12266 Part 1&2/ API 598/ ISO 5208
Flange Drilling	AWWA C - 207/ BS 4504
Face-to-Face	AWWA CC - 504-94, Short Body
Wall Thickness	Meets AD Merkblatter & IS 2825

Features & Benefits



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

Aquaseal Max disc is offset from the seat plane to provide an 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-Lubricating Phosphor Bronze bearings are provided on the shafts.

Materials of Construction

Components	Materials
Body	Carbon Steel, IS 2062 Gr. B
Disc	Carbon Steel, IS 2062 Gr. B
Retainer	Carbon Steel, IS 2062 Gr. B
Top & Bottom Shafts	Stainless Steel AISI 410
Body Seat	Stainless Steel AISI 304L
Disc Seal	Nitrile Rubber/ EPDM/ Viton
Bearings	Phosphor Bronze
Thrust Plate	Cast Iron, IS 210 Gr. FG260
Bottom Cover	Cast Iron/ Carbon Steel
Bolting (Internal)	Stainless Steel AISI 304

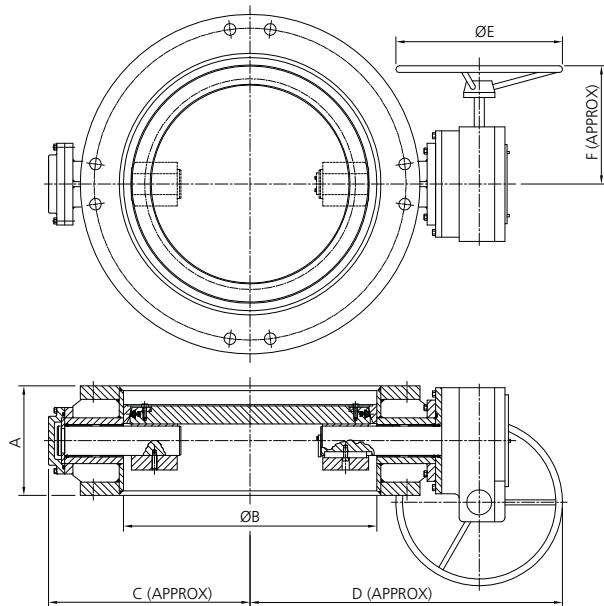
Body, Disc & Retainer also available in Stainless Steel 304 & 316

Aquaseal Max Large-size Fabricated Steel Butterfly Valve

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	1310	600	500	1110
44	1100	381	1110	790	1320	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	738	1960	1275	2000	900	650	4600
80	2000	760	2010	1325	2050	900	650	5000
84	2100	760	2110	1385	2150	900	650	5400
88	2200	760	2210	1400	2190	900	650	6100
92	2300	650	2310	1590	2325	900	650	6400
94	2350	650	2360	1615	2350	900	650	6730
96	2400	930	2410	1620	2405	1000	820	8950
100	2500	940	2510	1625	2410	1000	820	9300
102	2550	940	2560	1625	2410	1000	820	9600
104	2600	940	2610	1625	2410	1000	820	9750
106	2650	760	2660	1775	2560	1000	820	9900
108	2700	970	2710	1715	2500	1000	820	13200
110	2750	970	2760	1730	2515	1000	820	13520
112	2800	900	2810	1870	2655	1000	820	14840
116	2900	970	2910	2000	2820	1000	1020	16340
120	3000	1020	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	1130	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	887	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	610	4300
78	1950	738	1960	1325	2035	900	650	4865
80	2000	760	2010	1350	2090	900	650	5200
84	2100	760	2110	1400	2110	900	650	5600
88	2200	760	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
50	1300	500	1310	950	1485	650	620	2700
52	1400	530	1410	995	1405	650	620	3450
54	1500	560	1510	1040	1555	800	610	4400
56	1600	600	1610	1100	1605	800	610	5000
60	1800	670	1810	1200	1780	800	610	5500
64	2000	930	2010	1350	2090	900	650	6100

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

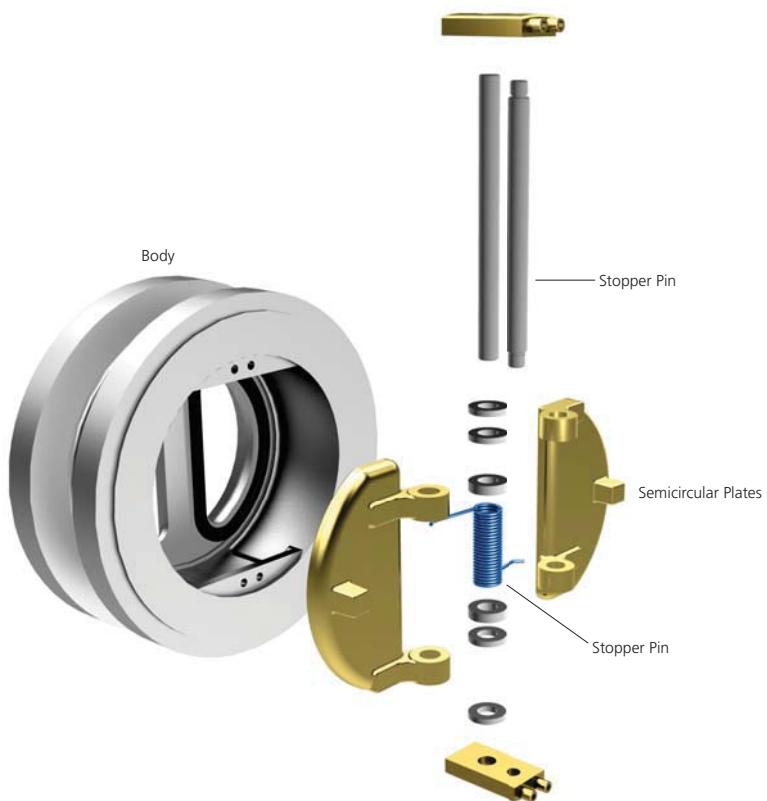
Aquaseal Chek Dual-plate Check Valve

Aquaseal Chek Valve is a soft-seated dual-plate check valve that conforms to API 594. The valve with cast iron body is available in sizes 2" (50 mm) to 8" (200 mm), in PN 10, PN 16 and ASME Class 125 pressure ratings.



Features & Benefits

- Patented retainer-less design - High integrity sealing, facilitates quick disassembly at site.
- Two independent seats - Consistent sealing even in uneven flow.
- Raised profile of the soft seat enhances sealing.
- Stopper pin prevents the discs from coming into contact with each other and thus prevents disc damage. The stopper pin also prevents spring failure by ensuring that the discs don't travel beyond the full-open position.
- For sizes 6" and above, lifting eyebolt option is provided.
- Drain connections provided on demand.

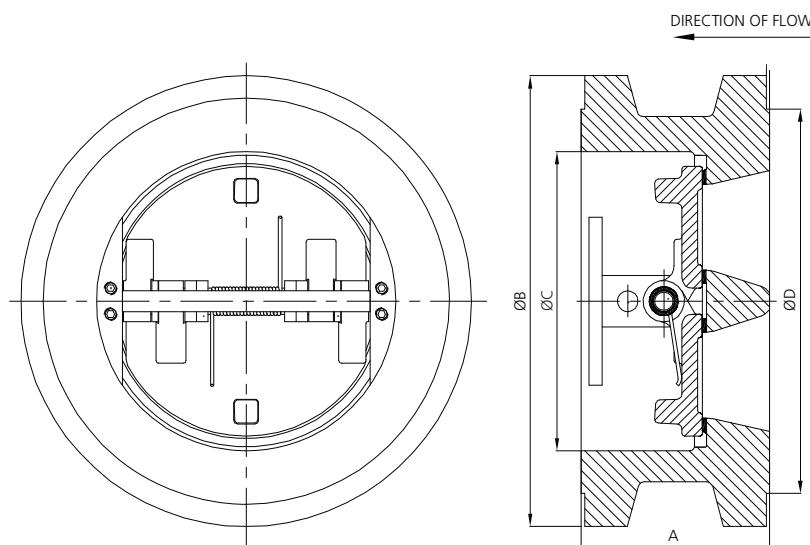


Compliance Standards

Parameter		Standard
Valve Design		API 594
Pressure Testing	PN 10 & PN 16	EN 12266 Part 1
	Class 125	API 598
End connection	PN 10 & PN 16	EN 1092
	Class 125	ASME B16.1
Face-to-Face	Class 125	API 594

Materials of Construction

Components	Materials
Body	Cast Iron BS 1452 Gr. 200
Seat	EPDM
Plate	Stainless Steel A 217 Gr. CA15
Bracket	Stainless Steel A 240 Type 410
Hinge Pin	Stainless Steel A 276 Type 410
Stopper Pin	Stainless Steel A 276 Type 410
Bearing Washer	Stainless Steel A 276 Type 410
Spring	Stainless Steel SS 316
Spring Spacer	Stainless Steel A 276 Type 410
Set Screw	Stainless Steel A 276 Type 316
Identification Plate	Steel



Dimensions

Valve Size		A	B	C	D	Weight
NPS	DN					
2	50	54	109	64	99	4
3	80	67	144	92	132	7
4	100	67	164	116	156	10
6	150	95	220	172	211	16
8	200	127	275	221	266	27

All dimensions in mm and weights in kg

Aquaseal FabChek Fabricated Steel Check Valve

Aquaseal Fab Chek Fabricated Steel Check Valve complements Aquaseal Max Large-size Fabricated Steel Butterfly in water distribution systems and power plants. The valve is fabricated from carbon steel plates, and body and disc seats are hard-faced using 13% Cr steel.

Smooth closure of the valve is ensured by using a counter weight. The valve can be supplied with hydraulic dash pot to prevent disc slamming and water hammer. Automated Fab Chek can also be used as combined shut-off and non-return valve on pump discharge lines.

The valve is available in PN 6, PN 10 and PN 16 pressure ratings, with flanged ends.

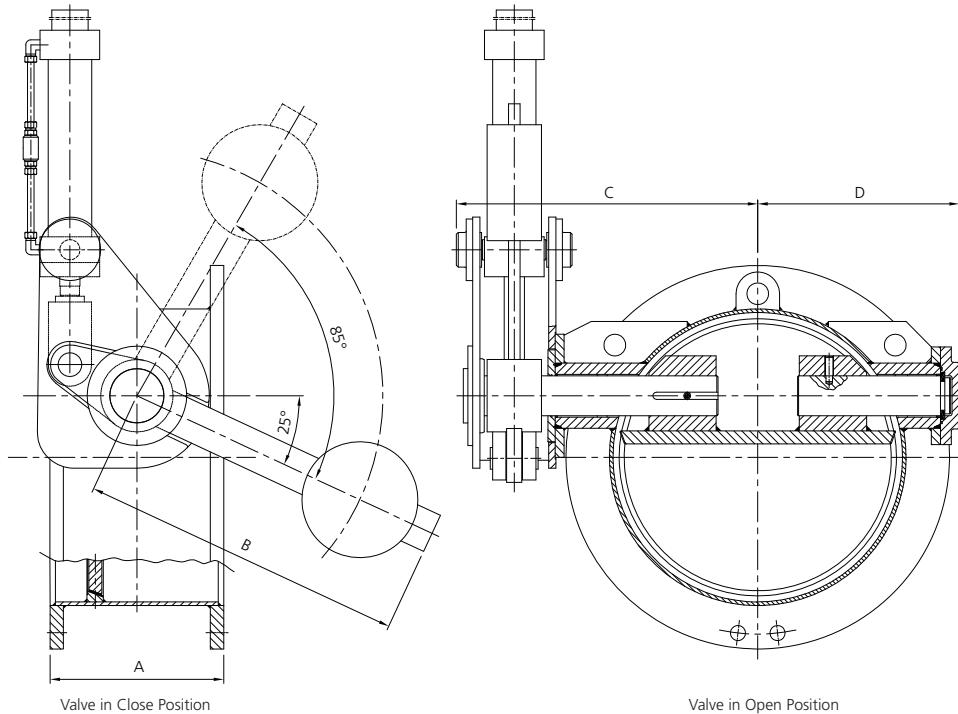


Compliance Standards

Parameter	Standard
Valve Design	Manufacturer's Standard
Leakage Rate Seat Testing	DIN 3230 Leakage Class 3
Face-to-Face	DIN 3202 F4
Flange Drilling	DIN 2501
Wall Thickness	Meets AD Merkblatter & IS 2825

Materials of Construction

Components	Materials
Body	Carbon Steel IS 2062 Gr. B with 13% Chromium Steel on Seating Surface
Disc	Carbon Steel IS 2062 Gr. B with 13% Chromium Steel on Seating Surface
Top Shaft	Stainless Steel AISI 410
Bottom Shaft	Stainless Steel AISI 410
Bearings	Phosphor Bronze
Shaft Seals	Nitrile Rubber 'O' Rings
Bottom Cover	Cast Iron IS 210 Gr. FG 260 or Carbon Steel IS 2062 Gr. B
Bolting (internal)	Stainless Steel AISI 304
Bolting (External)	Carbon Steel IS 1367 Gr. 8.8



Dimensions - PN 10

Valve Size		A	B	C	D	Weight
NPS	DN					
12	300	270	400	375	240	210
14	350	290	510	480	275	300
16	400	310	540	510	305	380
18	450	330	540	550	355	420
20	500	350	610	580	355	450
24	600	390	660	665	430	730
26	650	410	660	715	460	760
28	700	430	725	740	500	795
30	750	450	900	805	300	860
32	800	470	900	835	560	900
36	900	510	1050	850	615	960
40	1000	550	1220	970	650	1070

Dimensions - PN 16

Valve Size		A	B	C	D	Weight
NPS	DN					
12	300	270	450	425	240	240
14	350	290	540	490	310	310
16	400	310	610	560	315	325
18	450	330	610	560	360	385
20	500	350	660	650	425	450
24	600	390	725	700	440	585
26	650	410	900	775	520	690
28	700	430	1050	805	535	760
30	750	450	1050	825	555	835
32	800	470	1050	835	560	900
36	900	510	1050	850	650	1150
40	1000	550	1220	970	705	1300

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

sales@apsales.in

L&T Valves Limited (formerly Audco India Limited) is a wholly-owned subsidiary of L&T and one of the largest valve manufacturers in the world.

The company has three modern manufacturing facilities, in Chennai (Manapakkam), Coimbatore and Kancheepuram, in Tamil Nadu, India. The company leverages its world-class capabilities in design, quality assurance and manufacturing to ensure that their products consistently meet customer expectations.

Product Range:

- Gate, Globe & Check Valves
- Valves for Power
- Pipeline & Process Ball Valves
- Triple-offset Butterfly Valves
- Flanged and Wafer-type Butterfly & Check Valves
- Double Block and Bleed Plug Valves
- Control Valves
- Customised Solutions

Designs for the valves are created by an experienced team of valve experts who have a deep understanding of user-industry processes. An extensive manufacturing and quality assurance infrastructure ensure that world-class designs are transformed into high performance products. Every phase of manufacturing is governed by an institutionalised environment, health and safety policy.

L&T Valves distribution network spans the globe, partnering some of the largest valve distribution companies in the world. In India, L&T Valves has a presence in every industrial centre through a network of offices, stockists, automation centres and service franchisees.



Aquaseal Butterfly & Check Valves

L&T Valves manufactures a comprehensive range of Butterfly & Check Valves. The range primarily addresses water treatment and distribution systems, power plants, utility lines, fire water lines and HVAC.

The products portfolio comprises:

- **Aquaseal** Integrally-moulded Butterfly Valve in PN 10
- **Aquaseal Plus** Integrally-moulded Butterfly Valve in Class 150
- **Aquaseal Max** Large-size Fabricated Steel Butterfly Valve
- **Aquaseal Chek** Dual-plate Check Valve
- **Aquaseal FabChek** Fabricated Steel Check Valve

The versatile range is available in various body styles, materials, and actuation options to suit customer requirements.

Aquaseal Integrally-moulded Butterfly Valve - PN 10

Body Style	Pressure Rating	2	2.5	3	4	5	6	8	10	12	14	16	18	20	24
		50	65	80	100	125	150	200	250	300	350	400	450	500	600
Wafer	PN 10	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Aquaseal Plus Integrally-moulded Butterfly Valve - Class 150

Body Style	Pressure Rating	2	2.5	3	4	5	6	8	10	12	14	16	18	20	24	26	28	32	36
		50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	800	900
Wafer	Class 150	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Lugged		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Flanged		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

Aquaseal Chek Dual-plate Check Valve

Body Style	Pressure Rating	2	2.5	3	4	5	6	8	10	12
		50	65	80	100	125	150	200	250	300
Wafer	PN 10	●	●	●	●	●	●	●	●	●
	PN 16	●	●	●	●	●	●	●	●	●
	Class 125	●	●	●	●	●	●	●	●	●

Aquaseal Max Large-size Fabricated Steel Butterfly Valve

Aquaseal FabChek Fabricated Steel Check Valve

Body Style	Pressure Rating	Size											
		PN 6	PN 10	PN 16	Available in sizes up to 120" (3000 mm)								
Flanged, Fabricated													

AND FIREWATER LINES, PROCESS PLANTS AND POWER PLANTS...



16 Aquaseal Max

20 Aquaseal Chek

22 Aquaseal FabChek



Aquaseal Integrally-moulded Butterfly Valve - PN 10



Aquaseal Integrally-moulded Butterfly Valve is available in sizes from 50 mm (2") to 300 mm (12"), in PN 10 pressure rating. The valve was developed to provide reliable sealing in water and air lines, and is today the industry benchmark.

The most striking feature of Aquaseal Butterfly Valve is its integrally-moulded body liner. Aquaseal's elastomer body seat is vulcanised insitu onto the body using high temperature and pressure, and this provides longer life and superior performance when compared to valves with loose liners.

Aquaseal requires no maintenance, and is truly a fit-and-forget valve.

Compliance Standards

Parameter	Standard
Valve Design	EN 593 (BS 5155), API 609, MSS SP 67, ISO 5752
Pressure Testing	BS 6755 Part 1
Pipe Flange	To suit BS 10 Table D & E, ANSI 125/ 150, DIN ND 10/ 16, BS 4504 PN 10/ 16, IS 6418 Tables 6 to 9, IS 6392 Tables 10 to 20

Materials of Construction

Components	Materials
Body	Cast Iron to BS 1452 Gr. 200
Body Liner	Nitrile Rubber/ EPDM
Disc	Cast Iron to BS 1452 Gr. 250
Shaft	BS 970 - 080M40

Longer Life

The strength of the vulcanised liner as well as its strong bonding with the body ensure that it doesn't get deformed and torn by the disc during valve operations. Further, friction during operations is minimised owing to the smooth liner surface. The strong seat and reduced friction greatly enhance service life of the valve

Tight Sealing, and Consistent Low Torque

Bubble-tight sealing is obtained by the tight interference fit between liner and disc. The insitu moulded seat does not deform with age, and hence the operating torque stays low and consistent during the entire life cycle of the valve. Aquaseal is the valve of choice for actuated systems because of high reliability and consistent torque.



Assured Stem Sealing

The flat profiles on the top and bottom of Aquaseal disc engage with matching profiles on the body liner, and the large area of contact prevents leakage to atmosphere. Integrally moulded 'O' rings that compresses around the top shaft provide a secondary seal. A seal that prevents foreign particles from entering the shaft is Aquaseal's third line of defence.

Actuator Mounting Platform

The integral ISO 5211 platform facilitates direct mounting of actuators and gear units, thereby improving system reliability and efficiency.

Lower Resistance to Flow

The disc designed to provide minimum resistance to flow, and improved flow coefficients, is an Aquaseal hallmark.

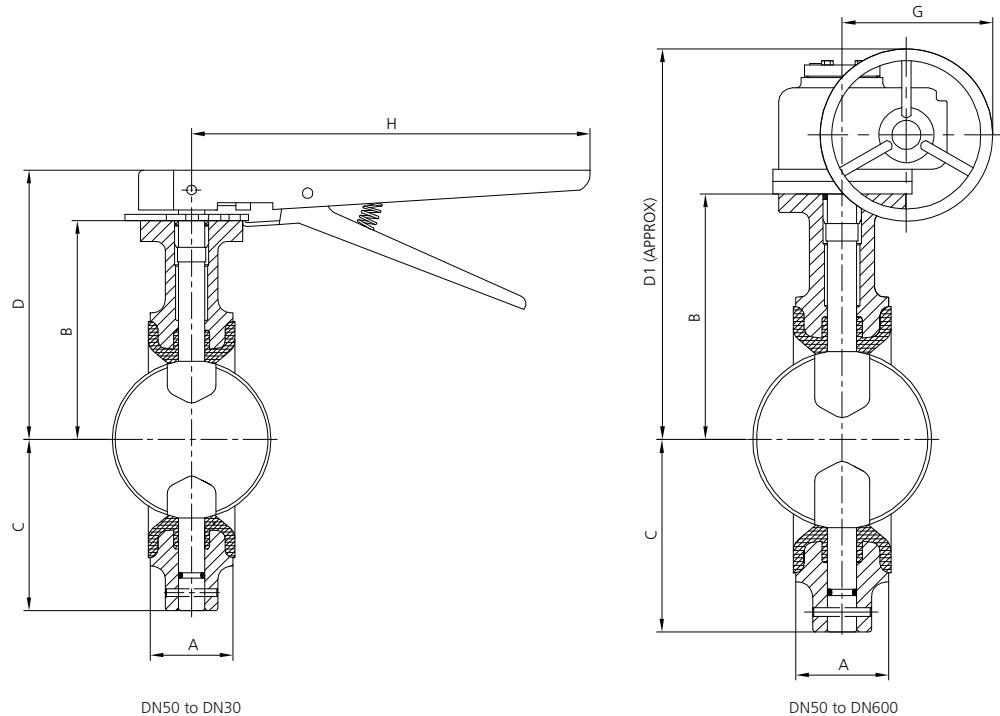
Ease of Installation

The integral liner of the valve acts as a gasket between the valve and companion flange. The liner being bonded to the body doesn't get stretched or damaged during installation unlike loose liners.

Reliable Drive

Positive shaft-disc connection is a key Aquaseal feature. The stem is Xylan-coated to reduce friction and improve wear resistance. Further, the self-lubricated Acetal Bronze bearings reduce torque and increase valve reliability and life.

Aquaseal Integrally-moulded Butterfly Valve - PN 10



Dimensions - PN 10

Valve Size		A	B	C	D	D1	E	F	G	H	Weight	
NPS	DN										FC (Lever)	Gear Unit
2	50	43	99	65	129	228	152	163	132	176	2.5	10.8
2.5	65	46	110	78	140	239	152	163	132	176	2.8	11.1
3	80	46	116	85	146	245	152	163	132	176	3.2	11.5
4	100	52	134	105	164	263	152	163	132	268	5.2	13.5
5	125	56	164	118	194	293	152	163	132	268	6.7	15
6	150	56	177	144	207	306	152	163	132	268	8.7	17
8	200	60	235	169	300	365	152	163	132	405	15.6	22.5
10	250	68	259	214	332	438	250	197	181	513	26.8	31.5
12	300	78	284	249	357	463	250	197	181	516	35.8	40.5
14	350	92	318	275		512	300	218	217		57	
16	400	102	370	310		564	300	218	217		70	
18	450	114	410	336		604	300	218	217		89	
20	500	127	448	362		642	300	218	217		129	
24	600	154	510	430		704	300	218	217		170	

All dimensions in mm and weights in kg



Ordering Information

Body Material	Body Style	Operation	Body Lining	Disc Material	Shaft Material
I - Cast Iron	B - Wafer Flangeless	A - Pneumatic Double Acting Actuator	L - Nitrile	P - Cast Iron Coated with Nylon	C - Carbon Steel
		F - Flow Control Lever	3 - EPDM	S - SS 316	
		G - Gear Unit			
		H - Pneumatic Spring Return Actuator			
		N - None Bare Shaft			

Aquaseal Plus Integrally-moulded Butterfly Valve - Class 150



Aquaseal Plus Class 150 Butterfly Valve is a second generation valve that sets a new benchmark in performance for butterfly valves. The valve was developed to address requirements of modern process, utility and HVAC systems that demand high performance at higher pressures.

The concentric butterfly valve meets the requirements of API 609 Cat. A, EN 593 and MSS SP-67. Aquaseal Plus has successfully completed over 10,000 test cycles reinforcing its fit-and-forget reputation.

Available in sizes from 50 mm (2") to 900 mm (36"), the valve is offered in SG Iron and cast steel, in a variety of body styles, materials and actuation options. The body seat of Aquaseal Plus Butterfly Valve is vulcanised insitu onto the body using high temperature and pressure, and this provides longer life and superior performance when compared to valves with loose liners.

Aquaseal Plus delivers all benefits of its successful predecessor Aquaseal, plus a series of unique class-leading advantages.

Compliance Standards

Parameter	Standard
Valve Design	EN 593 (BS 5155), API 609 Cat A, MSS SP-67
Pressure Testing	EN 12266 Part 1&2, API 598, ISO 5208
End Connection	Wafer Flangeless, Lugged (EN 1092), ASME B16.42 & ASME B16.5 Class150/ BS 4504 PN 10/ 16
Face-to-Face	EN 558 Series 20/ API 609 Cat A, MSS SP-67 (Narrow Body), ISO 5752 (Short)

Materials of Construction

Components	Materials
Body	SG Iron to EN 1563-400/ 18, CS to A 216 Gr. WCB
Seat/ Liner	Nitrile Rubber, EPDM
Disc	SG Iron to EN 1563-400/ 18 with Nylon-coating, CF8, CF8M to A 351, AB2 to IS EN 1982
Stem	410 with Xylan Coating
Bearing	Acetal, Phosphor Bronze

Valves in other materials available on demand.

Longer Life

The strength of the vulcanised liner as well as its strong bonding with the body ensure that it doesn't get deformed and torn by the disc during valve operations. Further, friction during operations is minimised owing to the smooth liner surface. The strong seat and reduced friction greatly enhance service life of the valve.

Tight Sealing, and Consistent Low Torque

Bubble-tight sealing is obtained by the tight interference fit between liner and disc. The insitu moulded seat does not deform with age, and hence the operating torque stays low and consistent during the entire life cycle of the valve. High reliability and consistent torque make Aquaseal Plus the ideal valve for actuated systems.



Assured Stem Sealing

The flat profiles on the top and bottom of Aquaseal Plus disc engage with matching profiles on the body liner, and the large area of contact prevents leakage to atmosphere. Integrally moulded 'O' rings that compresses around the top shaft provide a secondary seal. A seal that prevents foreign particles from entering the shaft is Aquaseal's third line of defence.

Enhanced Reliability

The rugged body is designed to withstand pipeline stresses and vibrations. Further, enhanced liner thickness assures reliable performance over an extended service. Reinforcements are provided on Aquaseal Plus disc also.

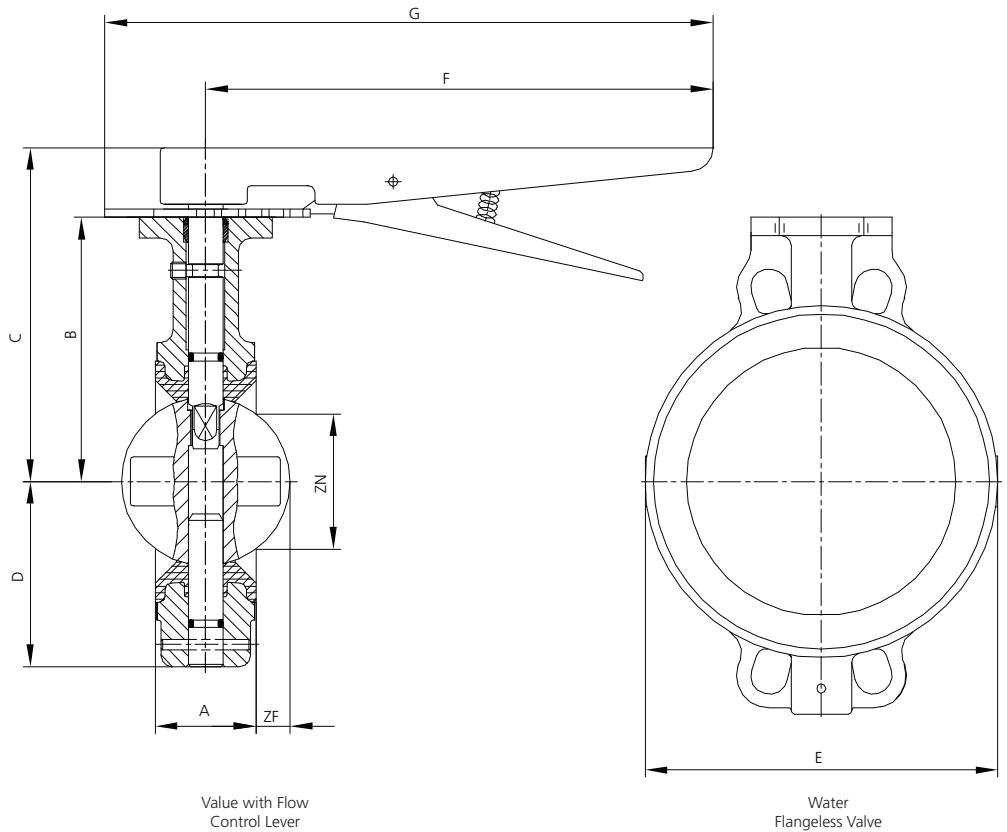
Lower Torque, Longer Life

The Aquaseal Plus disc with a hydrodynamic profile provides smoother flow and lower losses. Further the coating/ encapsulation of Nylon and EPDM on the disc helps to reduce torque and prevent disc damage.

Reliable Drive

In Aquaseal Plus a two-piece shaft is employed for closer control and smooth operation. While the square shaft provides positive drive, the bottom shaft acts as a pivot for easy operation of the disc.

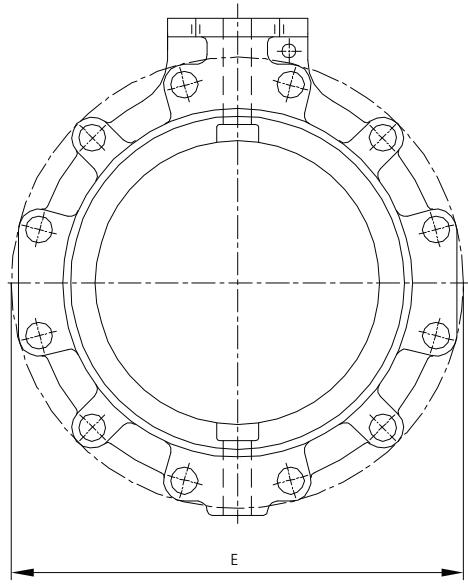
Aquaseal Plus Integrally-moulded Butterfly Valve - Class 150 (Wafer & Lugged)



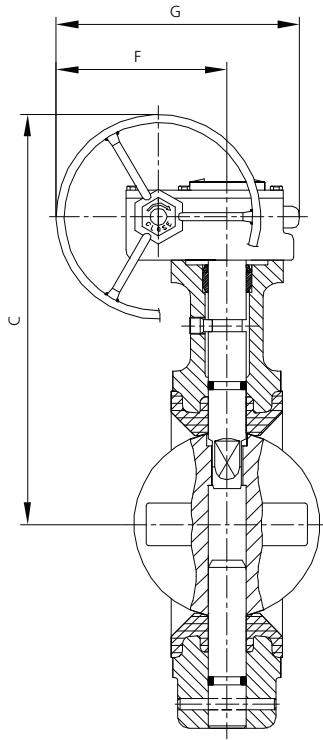
Dimensions

Valve Size		A	B	C			D	E	
NPS	DN			Flow Control Lever	Standard Gear Unit	Heavy Duty Gear Unit		Wafer Flangeless	Wafer Lugged
2	50	43	99	129	277		65	102	158
2.5	65	46	110	140	288		78	112	180
3	80	46	117	147	294		85	127	190
4	100	52	135	165	312		105	162	216
5	125	56	164	194	342		118	192	255
6	150	56	177	207	355		144	212	280
8	200	60	235	302	428	450	169	272	345
10	250	68	259	326	452	476	214	322	405
12	300	78	284	351	477	501	249	377	485
14	350	92	318		510	535	342	432	530
16	400	102	370			587	377	483	600
18	450	114	409			790	447	526	650
20	500	127	441			828	485	585	710
24	600	154	501			889	556	687	820

All dimensions in mm and weights in kg



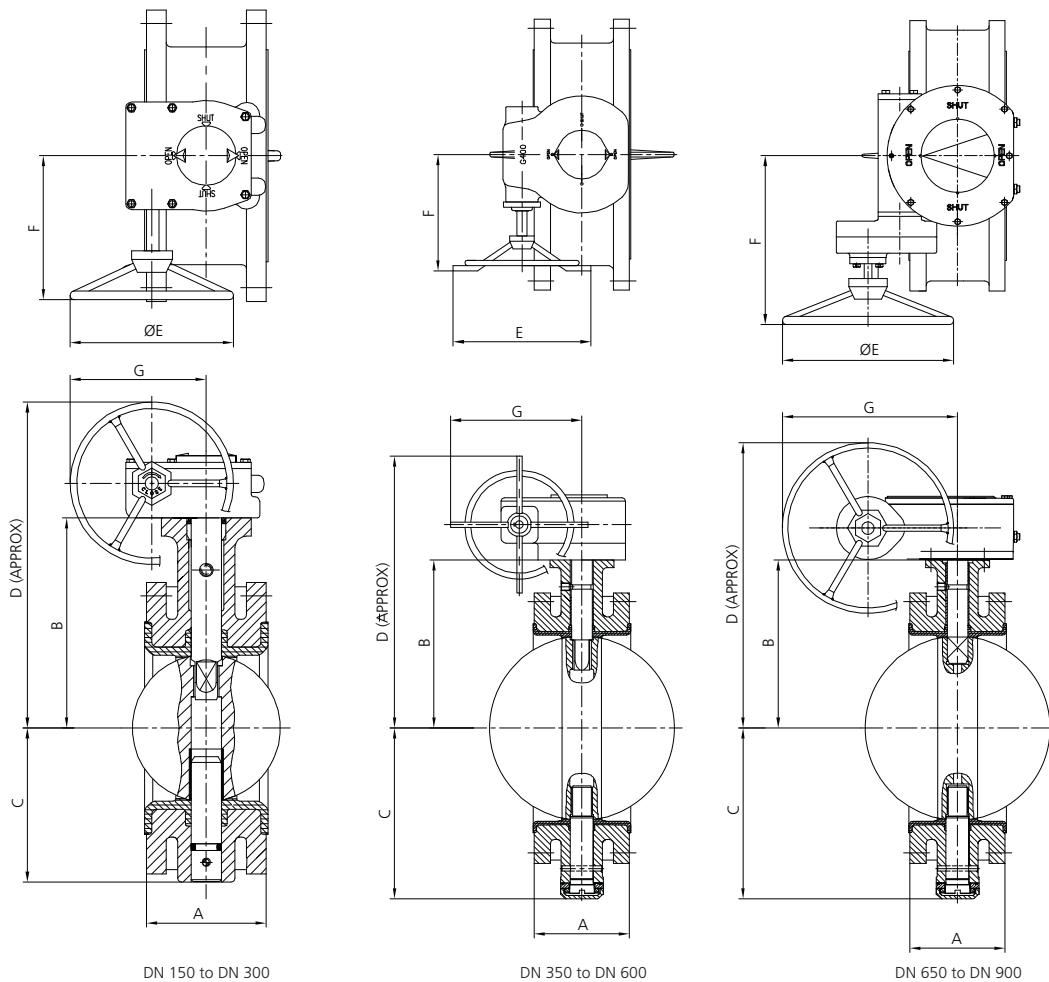
Water
Lugged Valve



Valve with
Gear Unit

F			G			ZN	ZF	Weight					
Flow Control Lever	Standard Gear Unit	Heavy Duty Gear Unit	Flow Control Lever	Standard Gear Unit	Heavy Duty Gear Unit			Flow Control Lever		Standard Gear Unit			
								Wafer	Lugged	Wafer	Lugged		
268	181		320	242		24	4	4	5	11.5	12.5		
268	181		320	242		46	10	5	7	12.5	14.5		
268	181		320	242		62	16	5.5	9	13.5	16.5		
268	181		320	242		82	23	7.5	11	15.5	18.5		
268	181		320	242		107	32	11	15	18.5	22.5		
268	181		320	242		135	45	12.5	18.5	20.5	26.5		
508	217	255	620	290	375	184	67	27	36.5	28.5	38		
508	217	255	620	290	375	234	88	36	48.5	37.5	50		
508	217	255	620	290	375	279	106	48.5	68	50	69.5		
	217	255		290	375	324	123			82	105		
		255			375	374	144			125	168		
		437			552	423	163			160	215		
		437			552	475	183			215	300		
		437			552	573	220			320	410		

Aquaseal Plus Integrally-moulded Butterfly Valve - Class 150 (Flanged)



Dimensions (ASME B16.5)

Valve Size		A	B	C	D	E	F	G	Weight
NPS	DN								
6	150	140	177	144	306	152	163	132	35
8	200	152	235	169	429	300	218	217	52
10	250	165	259	214	453	300	218	217	66
12	300	178	284	249	478	300	218	217	106
14	350	190	318	342	512	300	218	217	150
16	400	216	370	377	587	300	271	255	215
18	450	222	410	445	788	578	338	437	225
20	500	229	440	477	820	578	338	437	278
24	600	267	500	547	880	578	338	437	370

Dimensions (B16.47 Series A & B or AWWA C207 Class E)

Valve Size		A	B	C	D	E	F	G	Weight ¹	Weight ²
NPS	DN									
26	650	292	540	587	890	500	510	513	550	450
28	700	292	600	661	950	500	510	513	680	660
30	750	318	625	686	975	500	510	513	840	720
32	800	318	670	750	1120	700	510	613	965	800
36	900	330	720	785	1170	700	510	613	1180	1075

¹ASME B16.47 Series 'A' & AWWA C207 Class E, ²ASME B16.47 Series 'B'

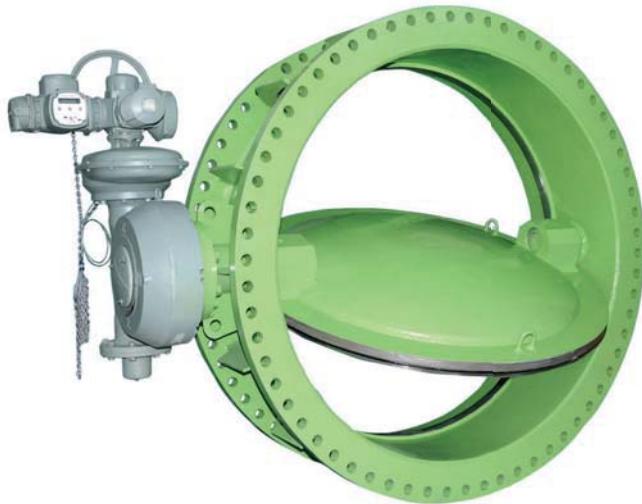
All dimensions in mm and weights in kg



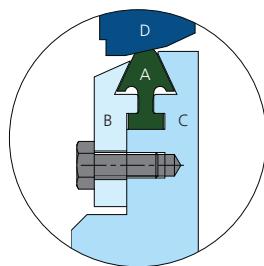
Ordering Information

Type	Body Material	Body Style	Operator	Body Liner	Disc Material	Shaft Material
A - Aquaseal Plus	C - Carbon Steel	W - Wafer Flangeless	L - Flow Control Lever	R - Black Nitrile	1 - Aluminium Bronze	Q - ASTM A 479 Type 410
	D - SG/ Ductile Iron	B - Wafer Lugged	K - Gear Box	E - EPDM	2 - SG Iron Coated with Nylon	T - ASTM A 564 Type 630
	S - CF8M	F - Double Flanged	M - Motor/ Electric Actuator	V - Viton	3 - SG Iron Encapsulated in EPDM	T - ASTM A 564 Type 630
	R - CF8	P - Pneumatic Spring Return Actuator	N - Pneumatic Double Acting actuator	4 - SG Iron Encapsulated in Viton	5 - Stainless Steel (CF8)	S - SS 316
						R - SS 304
		O - Bare Shaft			6 - Stainless Steel (CF8M)	
					7 - Carbon Steel	

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.



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.

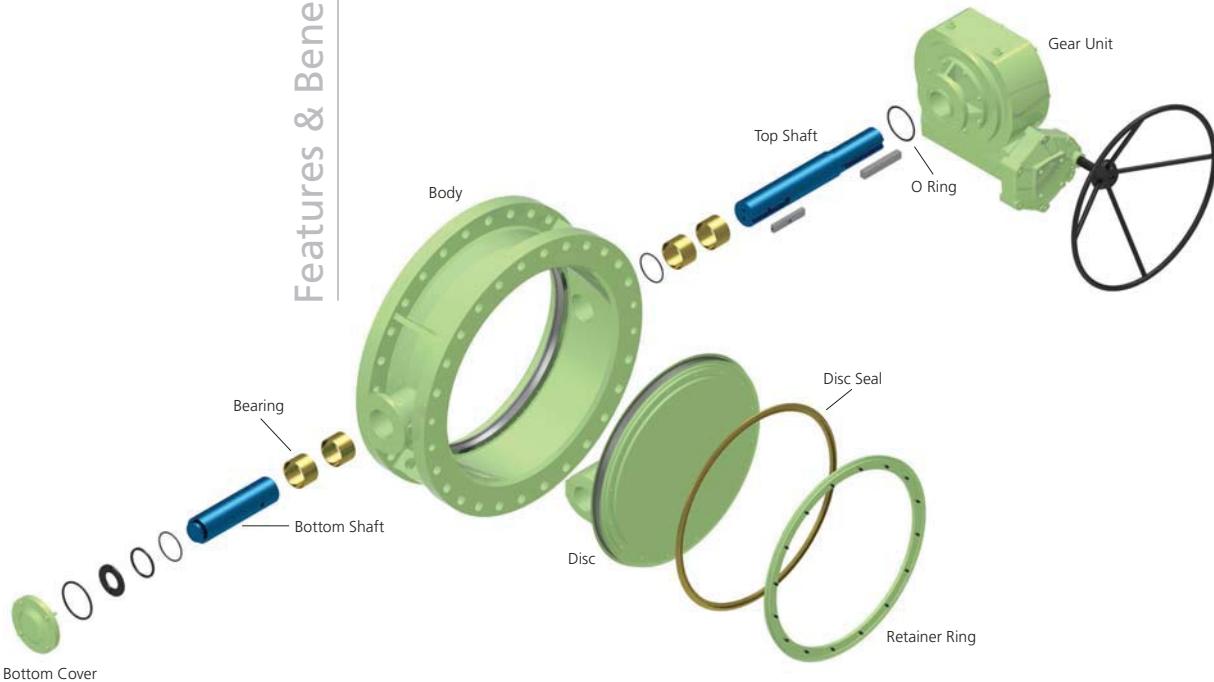
Benefits of Autoseal

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

Compliance Standards

Parameter	Standard
Valve Design	AWWA C504
Pressure Testing	EN 12266 Part 1&2/ API 598/ ISO 5208
Flange Drilling	AWWA C - 207/ BS 4504
Face-to-Face	AWWA CC - 504-94, Short Body
Wall Thickness	Meets AD Merkblatter & IS 2825

Features & Benefits



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

Aquaseal Max disc is offset from the seat plane to provide an 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-Lubricating Phosphor Bronze bearings are provided on the shafts.

Materials of Construction

Components	Materials
Body	Carbon Steel, IS 2062 Gr. B
Disc	Carbon Steel, IS 2062 Gr. B
Retainer	Carbon Steel, IS 2062 Gr. B
Top & Bottom Shafts	Stainless Steel AISI 410
Body Seat	Stainless Steel AISI 304L
Disc Seal	Nitrile Rubber/ EPDM/ Viton
Bearings	Phosphor Bronze
Thrust Plate	Cast Iron, IS 210 Gr. FG260
Bottom Cover	Cast Iron/ Carbon Steel
Bolting (Internal)	Stainless Steel AISI 304

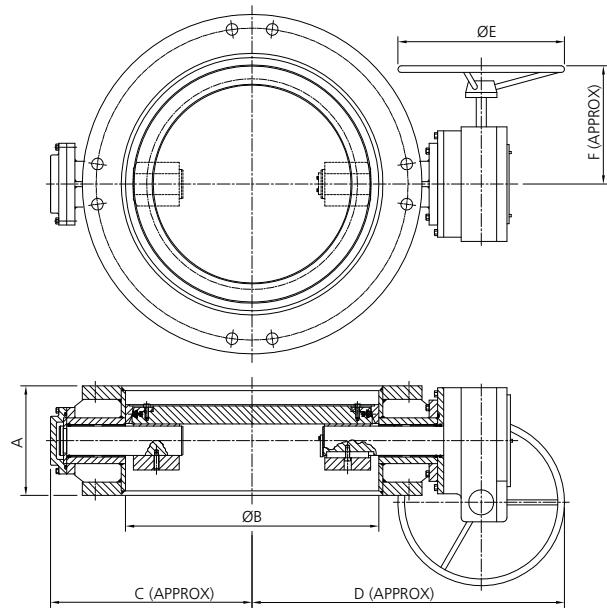
Body, Disc & Retainer also available in Stainless Steel 304 & 316

Aquaseal Max Large-size Fabricated Steel Butterfly Valve

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	1310	600	500	1110
44	1100	381	1110	790	1320	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	738	1960	1275	2000	900	650	4600
80	2000	760	2010	1325	2050	900	650	5000
84	2100	760	2110	1385	2150	900	650	5400
88	2200	760	2210	1400	2190	900	650	6100
92	2300	650	2310	1590	2325	900	650	6400
94	2350	650	2360	1615	2350	900	650	6730
96	2400	930	2410	1620	2405	1000	820	8950
100	2500	940	2510	1625	2410	1000	820	9300
102	2550	940	2560	1625	2410	1000	820	9600
104	2600	940	2610	1625	2410	1000	820	9750
106	2650	760	2660	1775	2560	1000	820	9900
108	2700	970	2710	1715	2500	1000	820	13200
110	2750	970	2760	1730	2515	1000	820	13520
112	2800	900	2810	1870	2655	1000	820	14840
116	2900	970	2910	2000	2820	1000	1020	16340
120	3000	1020	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	1130	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	887	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	610	4300
78	1950	738	1960	1325	2035	900	650	4865
80	2000	760	2010	1350	2090	900	650	5200
84	2100	760	2110	1400	2110	900	650	5600
88	2200	760	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
50	1300	500	1310	950	1485	650	620	2700
52	1400	530	1410	995	1405	650	620	3450
54	1500	560	1510	1040	1555	800	610	4400
56	1600	600	1610	1100	1605	800	610	5000
60	1800	670	1810	1200	1780	800	610	5500
64	2000	930	2010	1350	2090	900	650	6100

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

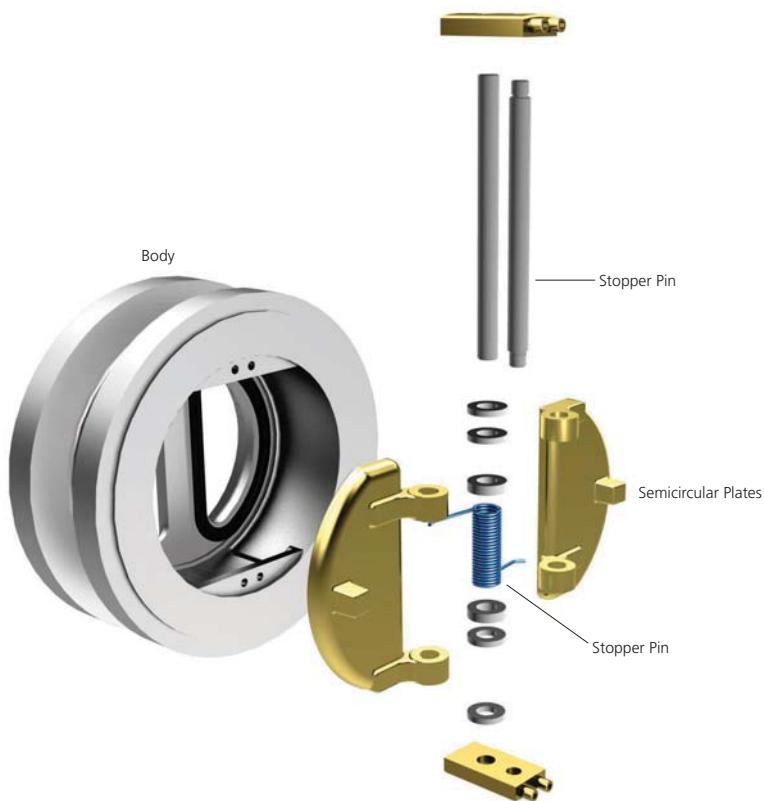
Aquaseal Chek Dual-plate Check Valve

Aquaseal Chek Valve is a soft-seated dual-plate check valve that conforms to API 594. The valve with cast iron body is available in sizes 2" (50 mm) to 8" (200 mm), in PN 10, PN 16 and ASME Class 125 pressure ratings.



Features & Benefits

- Patented retainer-less design - High integrity sealing, facilitates quick disassembly at site.
- Two independent seats - Consistent sealing even in uneven flow.
- Raised profile of the soft seat enhances sealing.
- Stopper pin prevents the discs from coming into contact with each other and thus prevents disc damage. The stopper pin also prevents spring failure by ensuring that the discs don't travel beyond the full-open position.
- For sizes 6" and above, lifting eyebolt option is provided.
- Drain connections provided on demand.

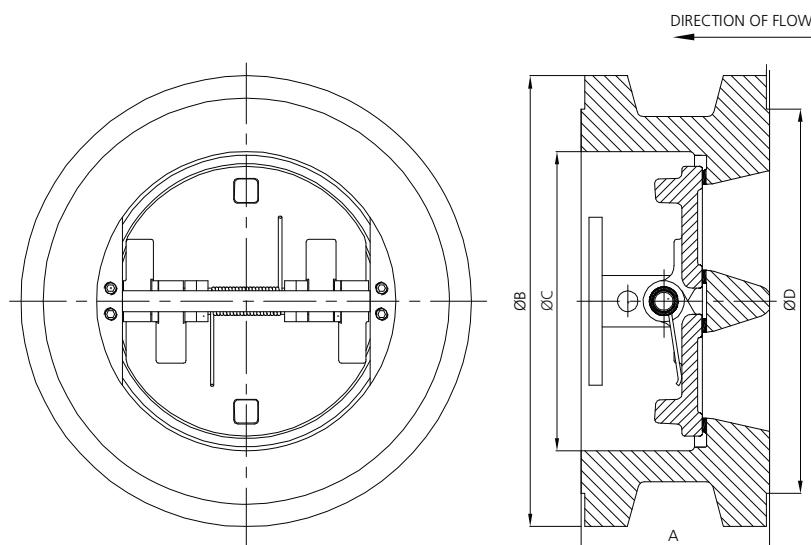


Compliance Standards

Parameter		Standard
Valve Design		API 594
Pressure Testing	PN 10 & PN 16	EN 12266 Part 1
	Class 125	API 598
End connection	PN 10 & PN 16	EN 1092
	Class 125	ASME B16.1
Face-to-Face	Class 125	API 594

Materials of Construction

Components	Materials
Body	Cast Iron BS 1452 Gr. 200
Seat	EPDM
Plate	Stainless Steel A 217 Gr. CA15
Bracket	Stainless Steel A 240 Type 410
Hinge Pin	Stainless Steel A 276 Type 410
Stopper Pin	Stainless Steel A 276 Type 410
Bearing Washer	Stainless Steel A 276 Type 410
Spring	Stainless Steel SS 316
Spring Spacer	Stainless Steel A 276 Type 410
Set Screw	Stainless Steel A 276 Type 316
Identification Plate	Steel



Dimensions

Valve Size		A	B	C	D	Weight
NPS	DN					
2	50	54	109	64	99	4
3	80	67	144	92	132	7
4	100	67	164	116	156	10
6	150	95	220	172	211	16
8	200	127	275	221	266	27

All dimensions in mm and weights in kg

Aquaseal FabChek Fabricated Steel Check Valve

Aquaseal Fab Chek Fabricated Steel Check Valve complements Aquaseal Max Large-size Fabricated Steel Butterfly in water distribution systems and power plants. The valve is fabricated from carbon steel plates, and body and disc seats are hard-faced using 13% Cr steel.

Smooth closure of the valve is ensured by using a counter weight. The valve can be supplied with hydraulic dash pot to prevent disc slamming and water hammer. Automated Fab Chek can also be used as combined shut-off and non-return valve on pump discharge lines.

The valve is available in PN 6, PN 10 and PN 16 pressure ratings, with flanged ends.

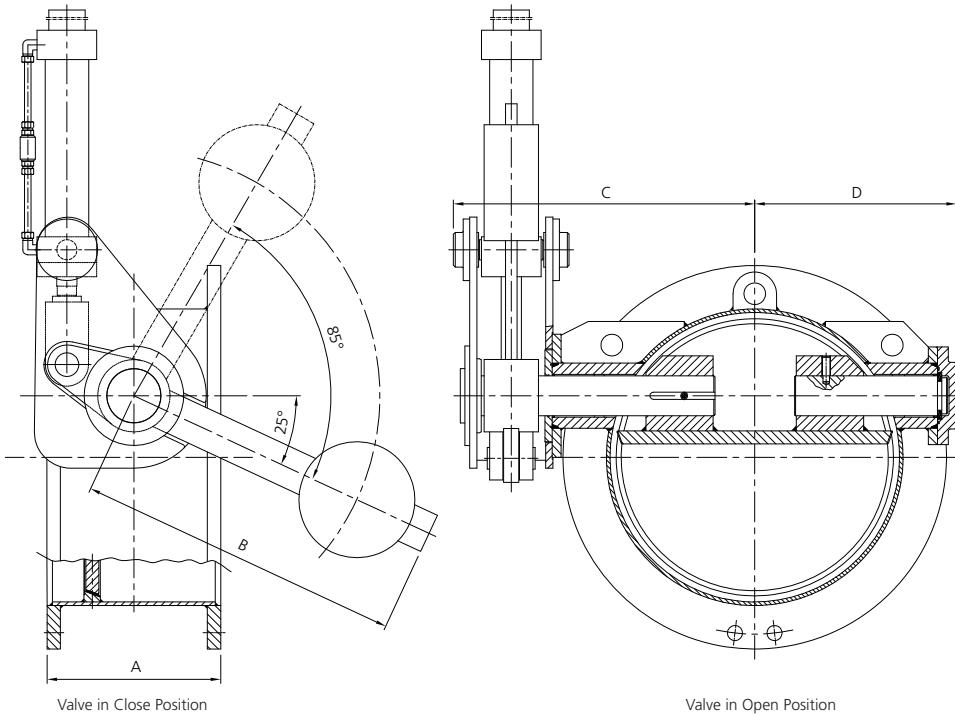


Compliance Standards

Parameter	Standard
Valve Design	Manufacturer's Standard
Leakage Rate Seat Testing	DIN 3230 Leakage Class 3
Face-to-Face	DIN 3202 F4
Flange Drilling	DIN 2501
Wall Thickness	Meets AD Merkblatter & IS 2825

Materials of Construction

Components	Materials
Body	Carbon Steel IS 2062 Gr. B with 13% Chromium Steel on Seating Surface
Disc	Carbon Steel IS 2062 Gr. B with 13% Chromium Steel on Seating Surface
Top Shaft	Stainless Steel AISI 410
Bottom Shaft	Stainless Steel AISI 410
Bearings	Phosphor Bronze
Shaft Seals	Nitrile Rubber 'O' Rings
Bottom Cover	Cast Iron IS 210 Gr. FG 260 or Carbon Steel IS 2062 Gr. B
Bolting (internal)	Stainless Steel AISI 304
Bolting (External)	Carbon Steel IS 1367 Gr. 8.8



Dimensions - PN 10

Valve Size		A	B	C	D	Weight
NPS	DN					
12	300	270	400	375	240	210
14	350	290	510	480	275	300
16	400	310	540	510	305	380
18	450	330	540	550	355	420
20	500	350	610	580	355	450
24	600	390	660	665	430	730
26	650	410	660	715	460	760
28	700	430	725	740	500	795
30	750	450	900	805	300	860
32	800	470	900	835	560	900
36	900	510	1050	850	615	960
40	1000	550	1220	970	650	1070

Dimensions - PN 16

Valve Size		A	B	C	D	Weight
NPS	DN					
12	300	270	450	425	240	240
14	350	290	540	490	310	310
16	400	310	610	560	315	325
18	450	330	610	560	360	385
20	500	350	660	650	425	450
24	600	390	725	700	440	585
26	650	410	900	775	520	690
28	700	430	1050	805	535	760
30	750	450	1050	825	555	835
32	800	470	1050	835	560	900
36	900	510	1050	850	650	1150
40	1000	550	1220	970	705	1300

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