# Aquaseal Butterfly Valves



PN 10 to 25, Class 150 | 2" (50 mm) to 24" (600 mm) EN 593, API 609, API 5752



L&T Valves Limited, a wholly-owned subsidiary of L&T, is a leader in flow-control solutions for oil & gas and power. For over fifty years, the company has leveraged technology and innovation to manufacture engineered valves for demanding services.

# **Product Range:**

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

L&T Valves is licensed to offer products monogrammed API 600, API 6D and API 609 as well as valves with CE Marking and ATEX certification. The company offers SIL-3 certified Ball and Butterfly Valves, and automation solutions including HIPPS (High Integrity Pressure Protection System) and ESDV (Emergency Shutdown Valves).

Manufacturing facilities are located at Kancheepuram, Coimbatore and Sriperumbudur. The Quality Management System of the company is certified to comply with ISO 9001 and API Spec Q1. Environment Management System and Occupational Health and Safety Management System meet the requirements of ISO 14001 and OHSAS 18001, respectively.

L&T Valves has a marketing network that spans the globe reinforced by strategic alliances with key international distributors. In India, it has a presence in every industrial centre through a network of offices, field engineers, distributors, automation centres and service franchisees.





# **Aquaseal Butterfly Valves**

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

- Aquaseal 10 Integrally-moulded Butterfly Valve in PN 10
- Aquaseal 16 Integrally-moulded Butterfly Valve in PN 16
- Aquaseal Plus Integrally-moulded Butterfly Valve in Class 150
- Aquaseal 25 Integrally-moulded Butterfly Valve in PN 25

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

# Aquaseal 10 Integrally-moulded Butterfly Valve - PN 10

Body Style	Pressure	2	2½	3	4	5	6	8	10	12	14	16	18	20	24
Body Style	Rating	50	65	80	100	125	150	200	250	300	350	400	450	500	600
Wafer	PN 10	•	•	•	•	•	•	•	•	•	•	•	•	•	•

# Aquaseal 16 Integrally-moulded Butterfly Valve - PN 16

Body Style	Pressure Rating	2	21/2	3	4	5	6	8	10	12	14	16	18	20	24	26	28	30	32	36
Body Style		50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750	800	900
Wafer	PN 16	•	•	•	•	•	•	•	•	•	•	•	•	•	•					
Lugged		•	•	•	•	•	•	•	•	•	•	•	•	•	•					
Flanged							•	•	•	•	•	•	•	•	•	•	•	•	•	•

# **Aquaseal Plus** Integrally-moulded Butterfly Valve - Class 150

Dody Style	Pressure	2	2½	3	4	5	6	8	10	12	14	16	18	20	24	26	28	30	32	36
Body Style	Rating	50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750	800	900
Wafer	Class 150	•	•	•	•	•	•	•	•	•	•	•	•	•	•					
Lugged		•	•	•	•	•	•	•	•	•	•	•	•	•	•					
Flanged							•	•	•	•	•	•	•	•	•	•	•	•	•	•

# Aquaseal 25 Integrally-moulded Butterfly Valve - PN 25

Body Style	Pressure	2	21/2	3	4	5	6	8
Body Style	Rating	50	65	80	100	125	150	200
Wafer	PN 25	•	•	•	•	•	•	•



# Aquaseal 10 Integrally-moulded Butterfly Valve - PN 10



Aquaseal10 Integrally-moulded Wafer-type Butterfly Valve is available in sizes from 50 mm (2") to 600 mm (24"), 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 Aquaseal10 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 10 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	EN 12266/ API 598
End Connection	To suit BS 10 Table D & E, ASME B 16.1 Class 125, B 16.5 Class 150, EN 1092-2 PN 10, BS 4504 PN 10, IS 6392 Table 11

# **Materials of Construction**

Components	Materials
Body	Cast Iron EN 1561 (BS 1452) Gr. 200, Gr. 250
Body Liner	Nitrile, EPDM
Disc	Cast Iron EN 1561 (BS 1452) Gr. 250, CF8M
Shaft	BS 970 - 080M40

Other material avaible on request

Rated Working Pressure (bar)	10
Shell Test Pressure (bar)	15
Seat Test Pressure (bar)	11



Top Shaft

Weather Seal

Bottom Shaft

Bearing

# **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**

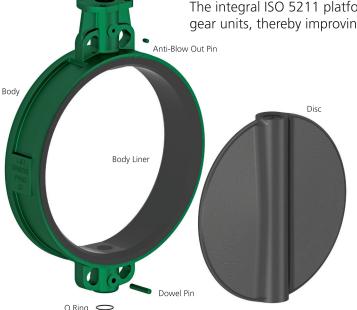
Bubble-tight sealing is obtained by the tight interference fit between liner and disc. The insitu moulded seat does not deform with age, and hence the operating torque stays low and consistent during the entire life cycle of the valve. Aquaseal is the valve of choice for actuated systems because of high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

# **Assured Shaft 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. Weather seal is provided to prevent the ingress of foreign particles on valves with flow control lever.

### **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 discs are hydrodynamically designed to provide minimum resistance to flow and improved flow coefficients.

### **Ease of Installation**

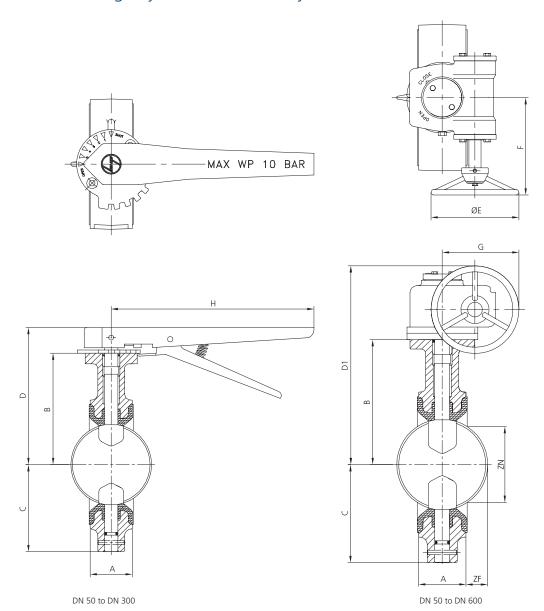
The integral liner of the valve acts as a gasket between the valve and companion flange. The liner being bonded to the body doesn't get stretched or damaged during installation unlike loose liners.



Positive shaft-disc connection with anti-blow out is a key Aquaseal feature. The shaft is Xylan-coated to reduce friction and improve wear resistance. Further, the self-lubricated bearings reduce the torque and increase valve reliability.



# Aquaseal 10 Integrally-moulded Butterfly Valve - PN 10

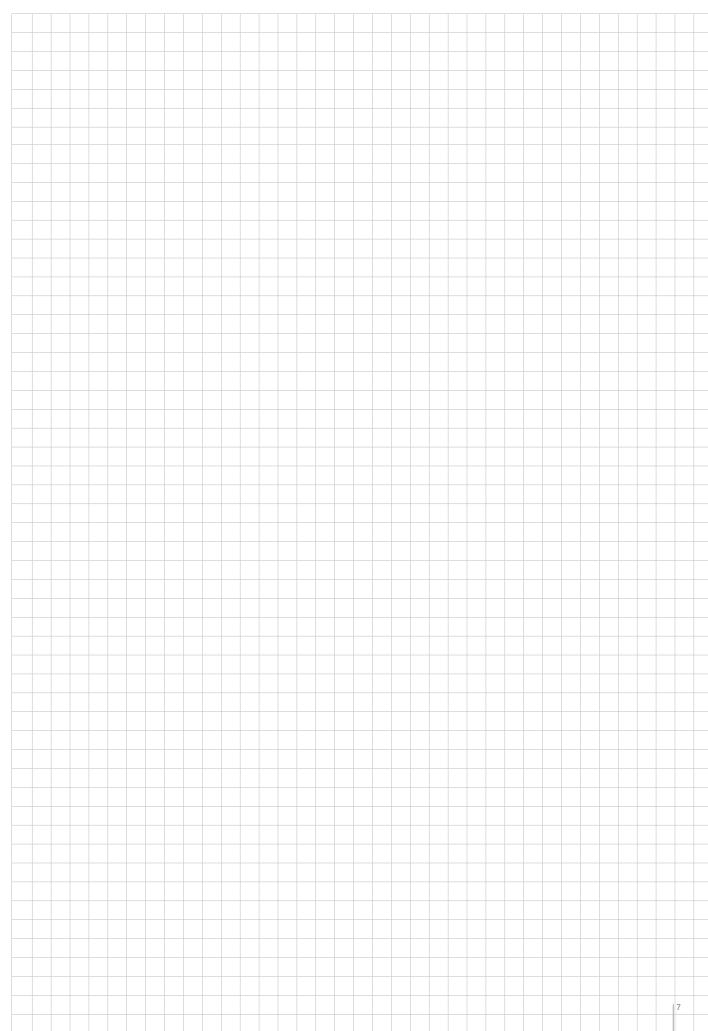


# **Dimensions - PN 10**

Valve	Size	Α	В	_	D	D1	Е	F	G	н	ZN	ZF	We	ight
NPS	DN	^	В	ر	ן ט	וט	<b>-</b>	Г	G	Г.	ZIN	ZΓ	FC Lever	Gear Unit
2	50	43	99	65	129	228	152	163	132	176	27	4	2.5	11
21/2	65	46	110	78	140	239	152	163	132	176	47	10	3	11
3	80	46	116	85	146	245	152	163	132	176	63	16	3	12
4	100	52	134	105	164	263	152	163	132	268	83	23	5	14
5	125	56	164	118	194	293	152	163	132	268	107	32	7	15
6	150	56	177	144	207	306	152	163	132	268	136	45	9	17
8	200	60	235	169	300	365	152	163	132	405	185	67	16	23
10	250	68	259	214	332	438	250	197	181	513	234	88	27	32
12	300	78	284	249	357	463	250	197	181	516	280	106	36	40
14	350	92	318	275		512	300	218	217		324	123		57
16	400	102	370	310		564	300	218	217		374	144		70
18	450	114	410	336		604	300	218	217		423	166		89
20	500	127	448	362		642	300	218	217		475	183		129
24	600	154	510	430		704	300	218	217		573	220		170

All dimensions in mm and weights in kg







# Aquaseal 16 Integrally-moulded Butterfly Valve - PN 16



Aquaseal 16 Integrally-moulded Butterfly Valve sets a new benchmark in performance for butterfly valves. The versatile valve is offered in a variety of elastomer-disc combinations to address myriad process requirements. The highly reliable butterfly valve has successfully completed over 10,000 cycles at its rated pressure.

Available in sizes from 50 mm (2") to 900 mm (36"), the valve is available in Cast Iron, SG Iron and carbon steel, in a variety of body styles, materials and actuation options. The body seat of Aquaseal16 Butterfly Valve is vulcanised insitu onto the body, which provides longer life and superior performance when compared to valves with loose liners.

# **Compliance Standards**

Parameter	Standard
Valve Design	EN 593 (BS 5155), API 609, 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 16
Face-to-Face	EN 558 Series 20 (For 350mm - EN 558 series 25)/ API 609 Cat A, MSS SP-67 (Narrow Body), ISO 5752 (Short)

### **Materials of Construction**

-	
Components	Materials
Body	Cast Iron IS 1561 EN GJL-250, SG Iron to EN 1563-400/ 18, CS to A 216 Gr. WCB
Seat/ Liner	Nitrile Rubber, EPDM, Viton
Disc	SG Iron to EN 1563-400/ 18 with Nylon-coating, CF8, CF8M to A 351, AB2 to IS EN 1982, CF3M
Stem	ASTM A479 Type 410 with Xylan® Coating, 17-4 Ph
Bearing	Acetal, PTFE, Phosphor Bronze

Valves in other materials available on demand

Rated Working Pressure (bar)	16
Shell Test Pressure (bar)	24
Seat Test Pressure (bar)	17.6



# Features & Benefits

# **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.

# Top Shaft

Weather Seal <

Bearing

O Rina

Bearing

Bottom Shaft

Anti-Blow Out Pin

# **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 16 the ideal valve for actuated systems.



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-Ring that compresses around the blowout-proof shaft provide a secondary seal.



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



### **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 16 disc also.

# **Lower Torque, Longer Life**

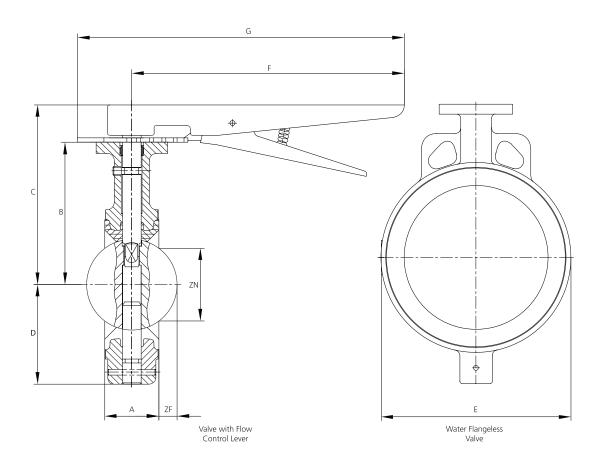
The Aquaseal 16 disc is profiled for smoother flow. Further the coating/ encapsulation of Nylon and EPDM on the disc helps to reduce torque and prevent disc damage.

# **Reliable Drive**

In Aquaseal 16 a two-piece shaft is employed for closer control and smooth operation. The shaft is Xylan-coated to reduce friction and improve wear resistance. While the square shaft provides positive drive, the bottom shaft acts as a pivot for operational ease.



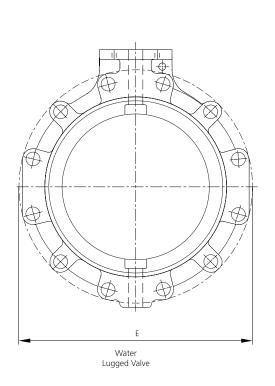
# Aquaseal 16 Integrally-moulded Butterfly Valve - PN 16 (Wafer & Lugged)

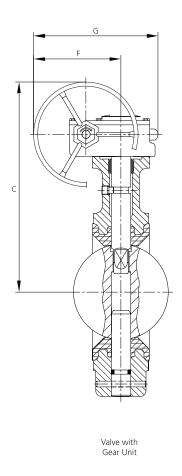


					С			Е	
Valve	e Size	А	В	Flow Control	Standard Gear Unit	Heavy Duty Gear Unit	D	Wafer Flangeless	Wafer Lugged
NPS	DN			Lever					
2	50	43	99	129	277	-	65	96	158
21/2	65	46	110	140	288	-	78	105	180
3	80	46	116	146	294	-	85	123	190
4	100	52	134	164	312	-	105	157	216
5	125	56	164	194	342	-	118	180	255
6	150	56	177	207	355	-	144	212	280
8	200	60	235	300	428	450	169	262	345
10	250	68	259	332	452	476	214	322	405
12	300	78	284	357	477	501	249	373	485
14	350	92	318	-	510	535	304	430	530
16	400	102	370	-	-	587	340	481	600
18	450	114	409	-	-	790	408	524	650
20	500	127	441	-	-	828	430	583	710
24	600	154	501	-	-	889	500	685	820

All dimensions in mm and weights in kg



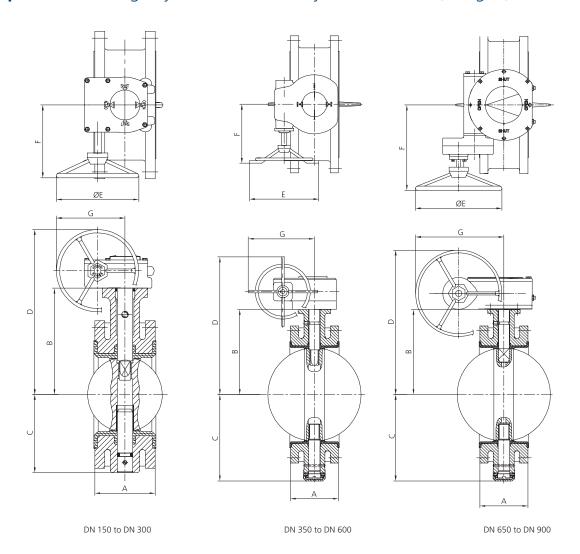




F				G				Weight			
Flow Control	Standard Gear Unit	Heavy Duty	Flow Control	Standard Gear Unit	Heavy Duty	ZN	ZF	FC Lever		ndard Gear	Unit
Lever	Gear Offic	Gear Unit	Lever	Gear Offic	Gear Unit			Wafer	Lugged	Wafer	Lugged
176	181	-	216	242	-	24	4	3	4	11	12.5
176	181	-	216	242	-	46	10	3.5	5	11.5	13
176	181	-	216	242	-	62	16	4	8	12	16
268	181	-	308	242	-	82	23	6	10.5	14	18.5
268	181	-	308	242	-	107	32	7	11.5	15	20
268	181	-	308	242	-	135	45	9.5	14.5	17.5	22.5
405	217	255	470	290	375	184	67	18	29.5	25	36
513	217	255	610	290	375	234	88	30	44	35	48.5
516	217	255	612	290	375	279	106	41	61	45	66
-	217	255	-	290	375	324	123	-	-	72	106
-	-	255	-	-	375	374	144	-	-	113	156
-	-	437	-	-	552	423	163	-	-	162	206
-	-	437	-	-	552	475	183	-	-	189	264
-	-	437	-	-	552	573	220	-	-	270	362



# Aquaseal 16 Integrally-moulded Butterfly Valve - PN 16 (Flanged)





# **Dimensions** (ASME B16.5)

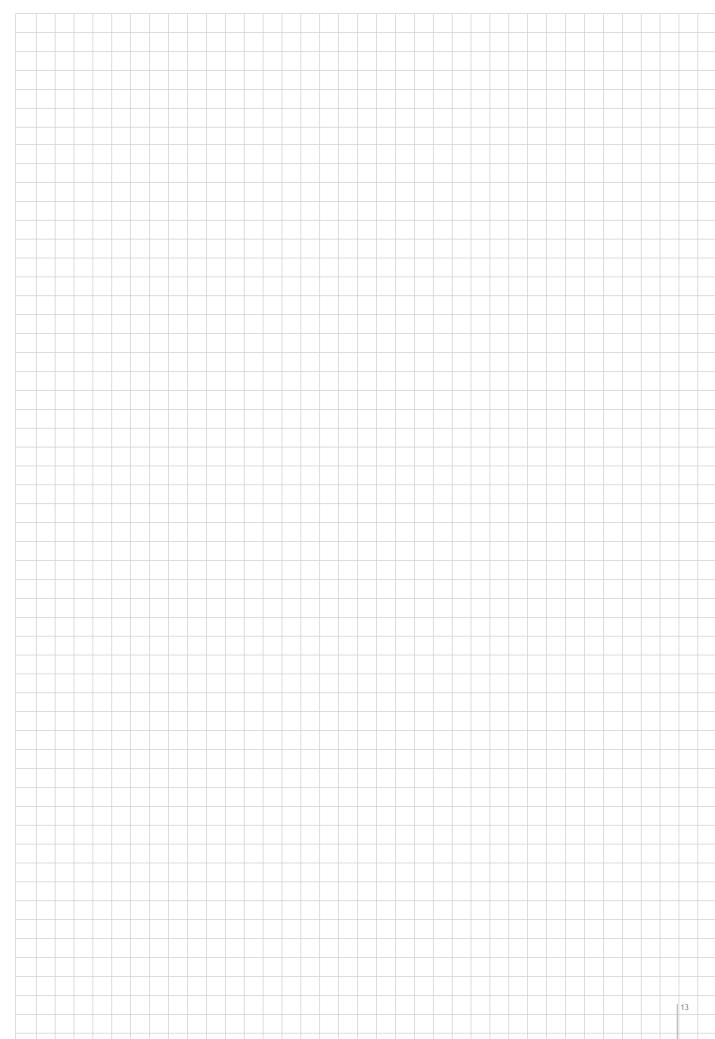
Valve	Size	_	^	^	^	^	Λ	Δ	Δ	۸	۸	^	^	٨	۸	Δ	۸	۸	٨	٨	٨	٨	А	В	С	D	Е	F	G	Mojaht
NPS	DN	A	В		U		ſ	G	Weight																					
6	150	140	177	144	306	175	163	132	35																					
8	200	152	235	169	429	300	218	217	52																					
10	250	165	259	214	453	300	218	217	66																					
12	300	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	А	В	_	D	Е	F	G	Weight <sup>1</sup>	Mojah+2
NPS	DN	A	В	٠		_	Г	G .	weight	Weight <sup>2</sup>
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

 $^{1}\text{ASME B16.47}$  Series 'A' & AWWA C207 Class E,  $^{2}\text{ASME B16.47}$  Series 'B' All dimensions in mm and weights in kg







# Aquaseal Plus Integrally-moulded Butterfly Valve - Class 150



Aquaseal Plus Class 150 Integrally-moulded Butterfly Valve is a second generation valve developed to address requirements of modern process, utility and HVAC systems that demand high performance at higher pressures. The highly reliable butterfly valve has successfully completed over 10,000 cycles at its rated pressure.

Available in sizes from 50 mm (2") to 900 mm (36"), the valve is offered in SG Iron and carbon 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, which provides longer life and superior performance when compared to valves with loose liners.

### **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, ASME B 16.47 Series A & B, AWWA C 207 Class E
Face-to-Face	EN 558 Series 20 (For 350mm - EN 558 series 25), API 609 Cat A, MSS SP-67 (Narrow Body), ISO 5752 (Short)

# **Materials of Construction**

Components	Materials
Body	SG Iron EN 1563-400/ 18, Carbon Steel A 216 Gr. WCB
Seat/ Liner	Nitrile Rubber, EPDM
Disc	SG Iron EN 1563-400/ 18 with Nylon-coating, Stainless Steel A351 CF8, CF8M to A 351, CF3M, AB2
Shaft	ASTM A479 Type 410 with Xylan® Coating, 17-4 Ph
Bearing	Acetal, PTFE, Phosphor Bronze

Valves in other materials available on demand.

Rated Working Pressure (bar)	20
Shell Test Pressure (bar)	30
Seat Test Pressure (bar)	22



Blowout-proof Shaft

O-Ring

O-Ring

Bottom Shaft

Bearings

# Benefits 80 Features

# **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**

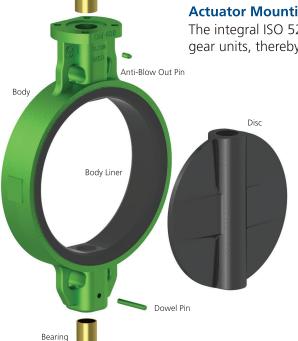
Bubble-tight sealing is obtained by the tight interference fit between liner and disc. The insitu moulded seat does not deform with age, and hence the operating torque stays low and consistent during the entire life cycle of the valve. High reliability and consistent torque make Aquaseal Plus the ideal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

# **Assured Shaft 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-Ring that compresses around the blowout-proof shaft provide a secondary seal. An additional O-Ring which provides tertiary sealing is an Aquaseal Plus hallmark.

# **Actuator Mounting Platform**

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



### **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

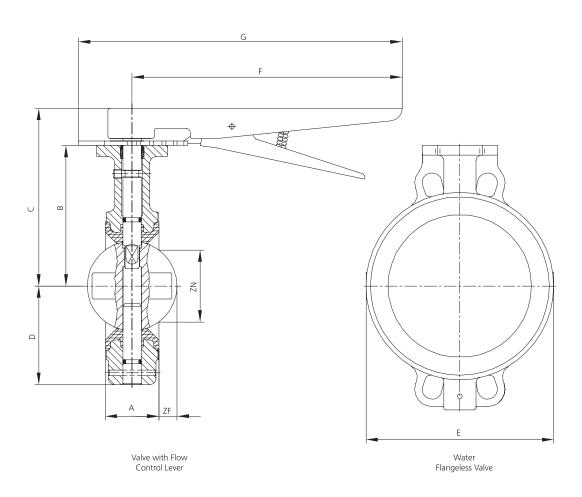
The Aguaseal Plus disc is profiled for smoother flow. Further the coating/encapsulation of Nylon and EPDM on the disc helps to reduce torque and prevent disc damage.

# **Reliable Drive**

In Aguaseal Plus a two-piece shaft is employed for closer control and smooth operation. The shaft is Xylan-coated to reduce friction and improve wear resistance. While the square shaft provides positive drive, the bottom shaft acts as a pivot for operational ease.



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

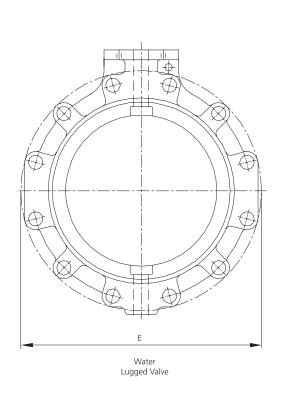


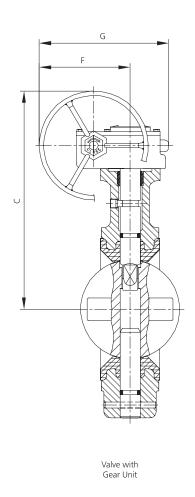
# **Dimensions**

	Wafer Lugged 158 180 190
NPS   DN   Standard   Heavy Duty   Gear Unit   Gear Unit   Gear Unit   D   Wafer   Flangeless   L	158 180
NPS         DN         Lever           2         50         43         99         129         277         65         102           2½         65         46         110         140         288         78         112           3         80         46         117         147         294         85         127	180
2½     65     46     110     140     288     78     112       3     80     46     117     147     294     85     127	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     304     432	530
16     400     102     370     587     340     483	600
18 450 114 409 790 408 526	650
20 500 127 441 828 430 585	710
24 600 154 501 889 500 687	820

All dimensions in mm and weights in kg



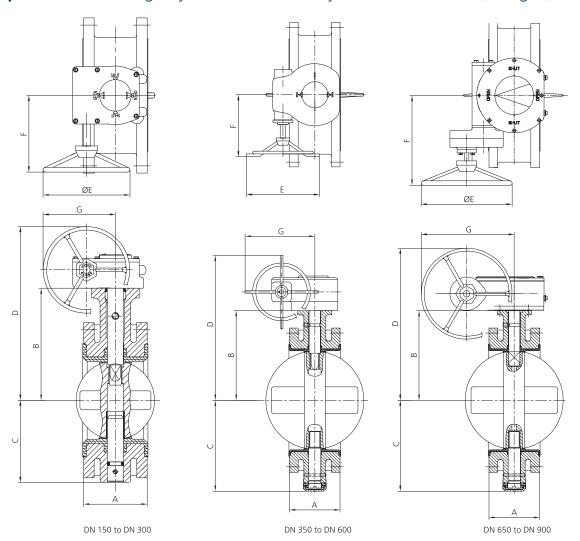




F			G					Weight			
Flow Control	Standard Gear Unit	Heavy Duty	Flow Control	Standard Gear Unit	Heavy Duty	ZN	ZF	Flow Con			Gear Unit
Lever		Gear Unit	Lever		Gear Unit			Wafer	Lugged	Wafer	Lugged
268	181		320	242		24	4	4	5	12	13
268	181		320	242		46	10	5	7	13	15
268	181		320	242		62	16	6	9	14	17
268	181		320	242		82	23	8	11	16	19
268	181		320	242		107	32	11	15	19	23
268	181		320	242		135	45	13	19	21	27
508	217	255	620	290	375	184	67	27	37	29	38
508	217	255	620	290	375	234	88	36	49	38	50
508	217	255	620	290	375	279	106	49	68	50	70
	217	255		290	375	324	123			95	120
		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	_	^	^	^	_	_	Δ	۸	۸	۸	^	Λ	^	۸	۸	٨	۸	^	۸	^	^	^	^	А	В	С	D	Е	F	G	Moight
NPS	DN	A	В		U			G	Weight																							
6	150	140	177	144	306	175	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	А	В	С	D	Е	F	G	Weight <sup>1</sup>	Weight <sup>2</sup>
NPS	DN	A	D	٠		-		G	weight	weight-
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

 $^{1}\text{ASME B16.47}$  Series 'A' & AWWA C207 Class E,  $^{2}\text{ASME B16.47}$  Series 'B' All dimensions in mm and weights in kg



# Aquaseal 25 Integrally-moulded Butterfly Valve - PN 25



Aquaseal 25 Integrally-moulded Butterfly Valve is a customised second generation valve that addresses requirements of higher pressures systems.

The wafer-type valve is available in sizes from 50 mm (2") to 200 mm (8") - in SG Iron and carbon steel, with nitrile rubber and EPDM elastomer options. The liners of Aquaseal 25 Butterfly Valve is vulcanised insitu onto the body, which provides longer life and superior performance when compared to valves with loose liners.

# **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, ASME B 16.47 Series A & B, AWWA C 207 Class E
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 EN 1563-400/ 18, Carbon Steel A 216 Gr. WCB
Seat/ Liner	Nitrile Rubber
Disc	SG Iron EN 1563-400/ 18 with Nylon-coating, Stainless Steel A351 CF8, CF8M to A 351
Shaft	ASTM A479 Type 410
Bearing	Acetal, PTFE, Phosphor Bronze

Valves in other materials available on demand.

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Rated Working Pressure (bar)	25
Shell Test Pressure (bar)	37.5
Seat Test Pressure (bar)	27.5

# **Ordering Information**

# Aquaseal Integrally-moulded Butterfly Valves

Pressure Rating	Body Material	Body Style	Liner	Disc	Shaft	Operator	Special
1 - PN 10	I - Cast Iron	W - Wafer	N - Black Nitrile	I - Cast Iron	C - Carbon Steel (EN 8)	L - Lever	Long Neck
2 - PN 16	G - SG Iron	L - Lugged	E - EPDM	G - SG Iron	S - SS 410	G - Gear Unit	Extended Stem
3 - Cl. 150	C - Carbon Steel	F - Flanged	V - Viton	4 - SS 304 (CF8)	4 - SS 304	M - Motorised	Locking Arrangement
4 - PN 25	4 - SS 304 (CF8)		H - Hypalon	6 - SS 316 (CF8M)	5 - 17-4 Ph	D - Double Acting Pn. Act.	Limit Switch
	6 - SS 316 (CF8M)		S - Silicon	A - Al Bronze	6 - SS 316	S - Spring Return Pn. Act.	Chain-wheel Operator
			W - White Nitrile	C - Carbon Steel	M - Monel	B - Bare Shaft	

Pn. Act. -Pnuematic Actuator



