



**FLOWKS**

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**FLOWKS**

How Quality Lasts!

Oil&Gas&Power&Cryogenics

**OFFSET  
BUTTERFLY VALVE**

### PRODUCT CONTENTS

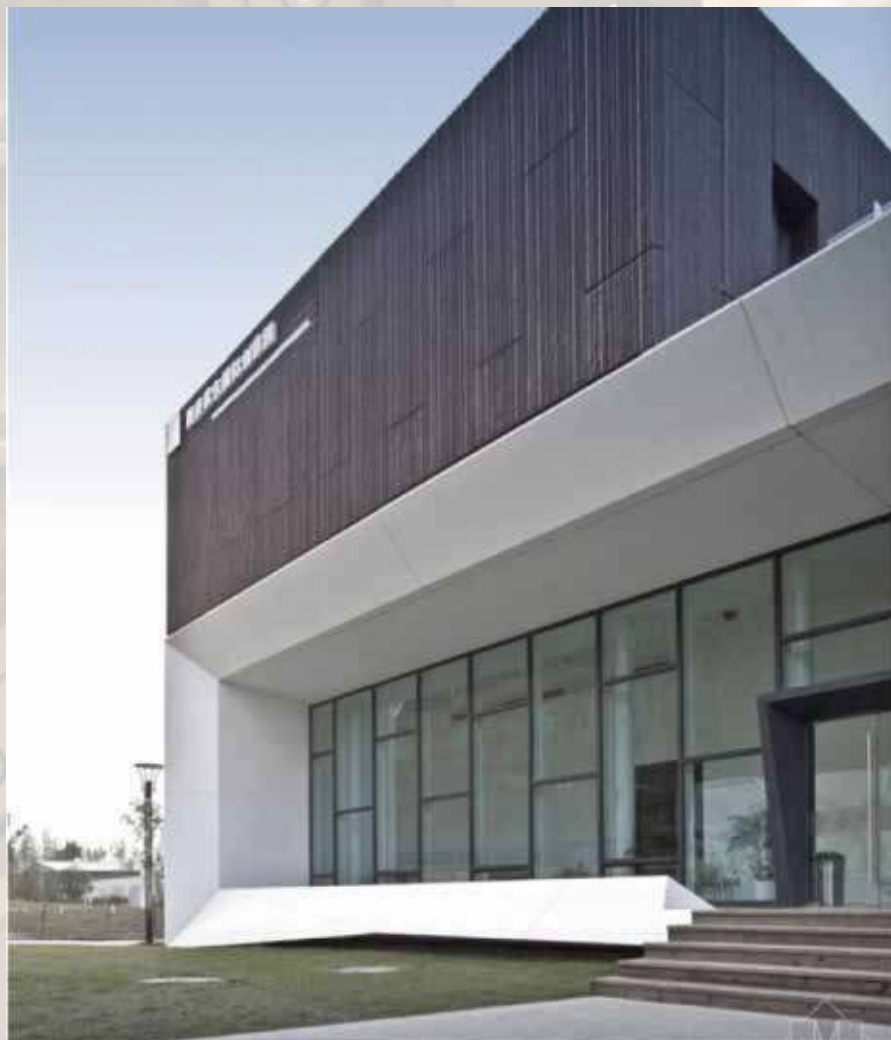
- About US
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Flowks Valve is a manufacturer specializing in all kinds of industrial valves. After years of experience in supplying valves for distributors and projects, Flowks Valve has been recognized as a skilled and responsible supplier. The reputation relies on our strict inspection procedure from CAD design, material purchasing, machining, assembling, hydraulic & air testing to packing & delivery. Each step is carried out by our experienced and dedicated craftsmen.

We offer various types of valves with different materials, including special materials like Monel, Inconel, duplex, copper, bronze, etc. We follow different standards such as API, ANSI, DIN, BS and JIS.

We are capable of supplying valves with special testings and treatments like radiographic examination (RT), ultrasonic examination (UT), liquid penetrant test (LPT), magnetic particle test (MPT), low temperature impact test and PMI. Special coating like FCC and TCC is also available. Our valves are widely used in different industries. We provide OEM service.

If you find anything interesting, please do not hesitate to contact us. What you will get is quality products with competitive prices. Look forward to having a chance to serve your esteemed company.



Flowks serves numerous domestic and foreign projects. We have good ability and experience in providing valves for severe services, designing valves for special applications, quick delivery of spare parts for replacement, etc. Our valves are widely used in different industries.

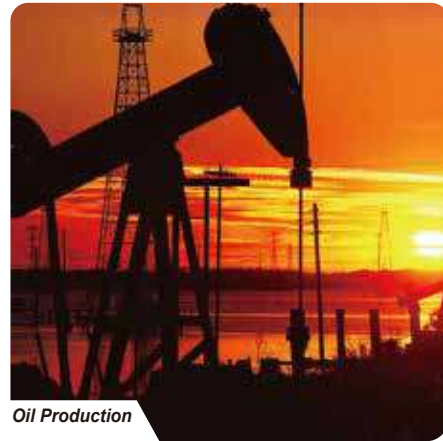
- **Onshore Oil & Gas**
- **Fine Chemicals**
- **LNG-Liquefied Natural Gas**
- **Water & Waste Water Treatment**
- **Metallurgy Industry**
- **Power Plant**
- **Marine Weapon**
- **Pulp & Paper**
- **Offshore Oil & Gas**



Ship Building



Power Plant



Oil Production



LNG



Offshore Oil & Gas

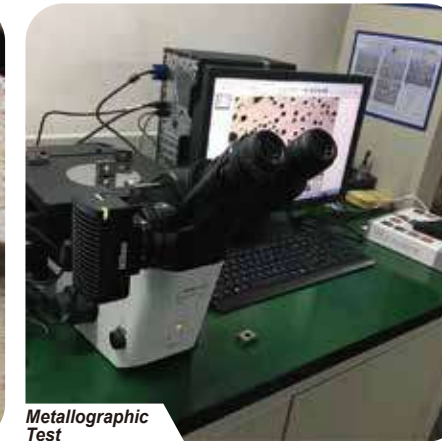


Petro-chemical

Modern and advanced testing tools with strict and scientific management, assures that each valve can be in full compliance with customer requirements.



PMI



Metallographic Test



Salt Spray Test



Tensile Test



Impact Test



Hardness Test



Ultrasonic Test (UT)



Liquid Penetrant Test (LPT)



Radiographic Test (RT)



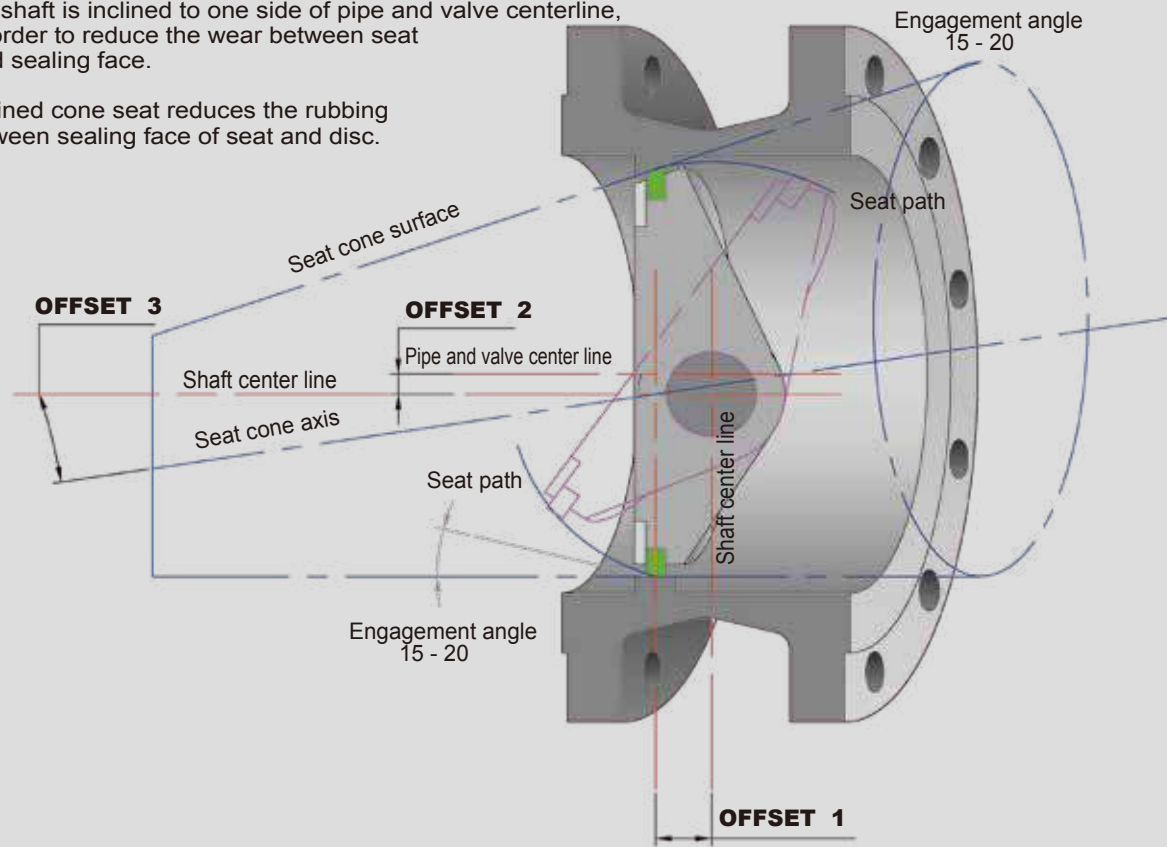
### Triple Offset

We manufacture high performance butterfly valve with triple offset design. The valve is designed with the shaft located behind the centerline of the sealing surface and pipe. The purpose of offsets is to avoid rubbing and wear between the seat and seal throughout the entire 90 degrees of rotation.

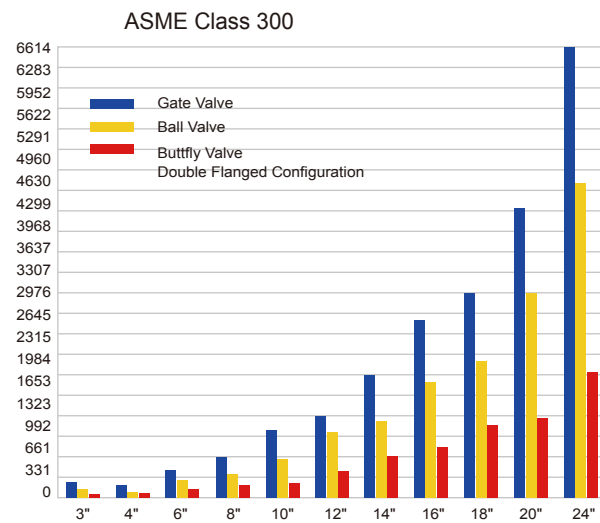
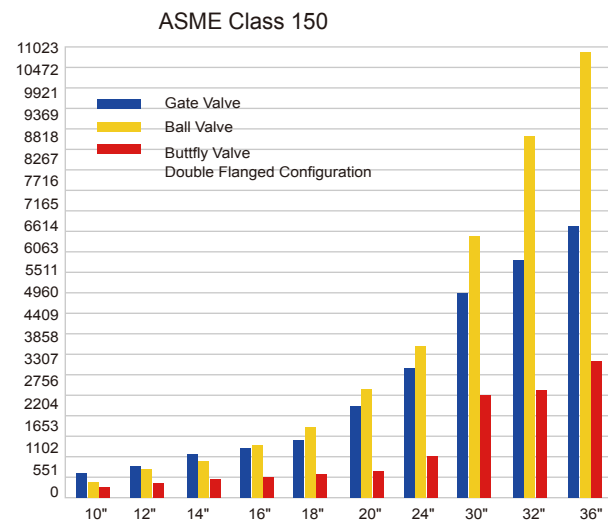
Offset 1: the shaft is located behind the centerline of seat ring, to achieve an entire sealing contact on the whole seat ring.

Offset 2: the shaft is inclined to one side of pipe and valve centerline, in order to reduce the wear between seat and sealing face.

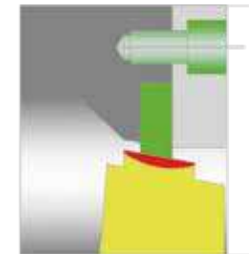
Offset 3: inclined cone seat reduces the rubbing between sealing face of seat and disc.



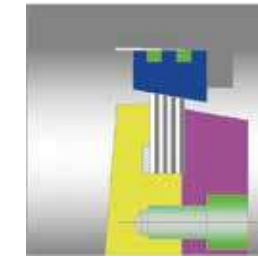
### Weight Comparison with Gate and Ball Valves



### Seat Sealing Design



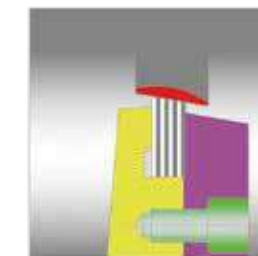
Structure 1: Seat sealing ring is on the body. This design will reduce the friction to sealing face from medium, and easier to replace the seat.



Structure 2: Floating seat ring, bi-directional seat ring. The valve can sustain the pressure from both sides of bore and ensure sealing for both directions.

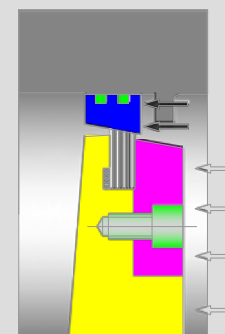


Structure 3: Common soft seat structure, with low cost and reliability under room temperature.

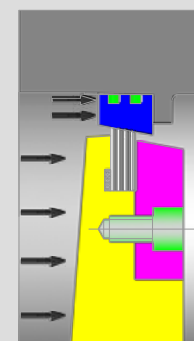


Structure 4: Multi-layered metal sealing structure, metal to metal, low cost and high temperature resistance.

### Bi-directional Sealing Design

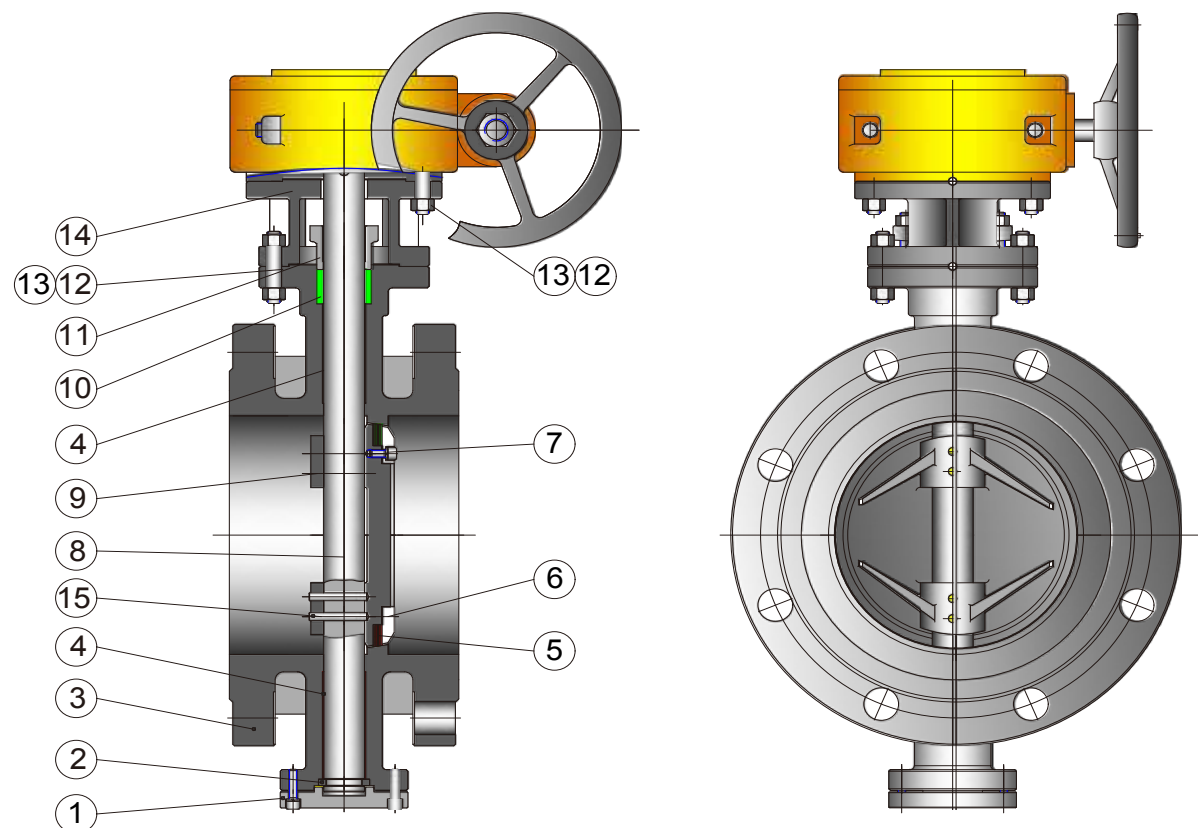


**Forward Sealing**  
When the valve is closing, medium pushes disc toward seat, and then both move to the body with the compensation of O-ring.



**Backward Sealing**  
1-With big pressure differential, disc is locked by stem, seat is pushed to disc sealing ring by medium with compensation of O-ring, to reach zero leakage.  
2-With small pressure differential, medium force is not enough to push the seat ring. In this case, continue to close the valve, push disc sealing ring to the seat to reach zero leakage.

### Structure Features



### Material list

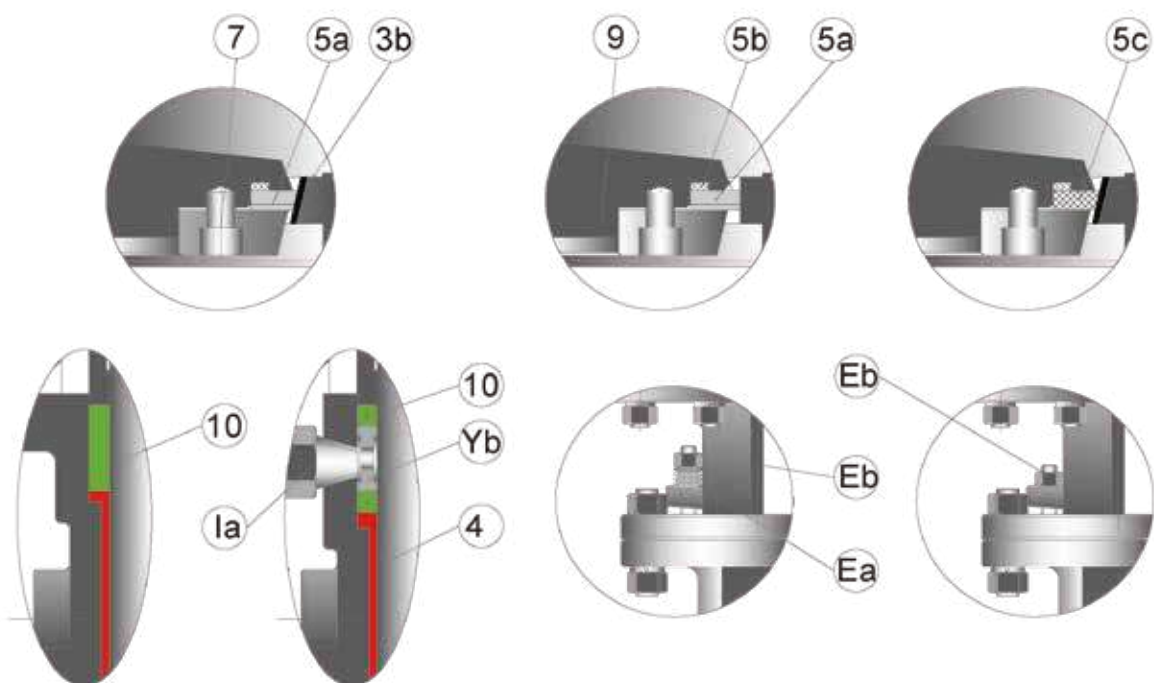
Item	Part name	Carbon steel	Stainless steel	Duplex steel	Aluminum bronze
1	Cap	ASTM A105N	A182 F316	A182 F51	B148 C95800
2	Retainer	A182 F316	A182 F316	A182 F51	Monel K500
3	Body	A216 WCB	A351 CF8M	A890 4A	B148 C95800
3b	Sealing Surface	SS316 or SS304 / STL / MONEL / INCONEL / TCC			
4	Slide Bearing	PTFE+304 or 316 / Brass / 304 or 316+Hard Faced			
5	Multi-layer seal	( SS316 or SS304 / UNS S31803 / INCONEL / MONEL ) +(Rubber / PTFE / PEEK / Graphite)			
5a	Seat 2	A182 F316 / A182 F304 / A182 F51 / MONEL / INCONEL			
5c	Seat 3	Rubber RPTFE PEEK			
5b	Seat Seal	PTFE+304 or 316 / 304 or 316 or UNS S31803 + Graphite / O-ring			
6	Plate	A182 F316	A182 F316	A182 F51	Monel K500
7	Screw	A193 B8 / A193 B8M / F51 / C63200 / MONEL / INCONEL			
8	Stem	17-4PH	A182 F316	A182 F51	Monel K500
9	Disc	A216 WCB	A182 F316	A890 4A	Monel K400
10	Packing	PTFE / Graphite / Rubber(O-ring)			
11	Gland	A216 WCB	A351 CF8M	A890 4A	B148 C95800
12	Stud Bolt	A193 B7M	A193 B8M	A193 B8M	A193 B8M
13	Nut	A194 2HM	A194 8M	A194 8M	A194 8M
14	Yoke		A216 WCB A351 CF8/CF8M		
15	Pin	A182 F316	A182 F316	A182 F51	Monel K500

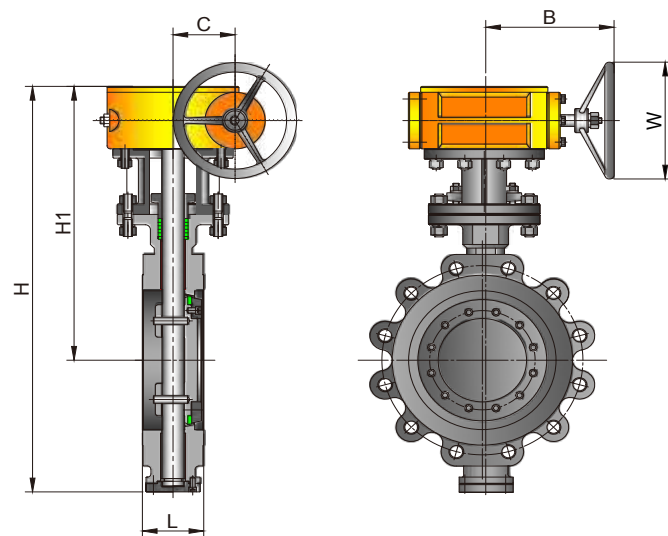
### Note:

- 1.Body can be casting or forging, based on size and working condition.
- 2.Different sealing face materials are available for different working condition, including soft seat, Monel/Inconel (corrosion resistance), and stellite/TCC (wear resistance).
- 3.Common material: carbon steel (WCB/WCC/WCA/LCB/LCC), chrome-molybdenum steel (WC6/WC9), stainless steel (CF8/CF8M/CF3M), duplex (4A/5A/6A), etc.
- 4.Special Material: Monel, Incoloy, Hastelloy, Inconel, 20# Alloy Steel, Aluminium Bronze (C95800, C95500), Titanium, etc.
- 5.Special Working Condition  
Special structure is available for special working condition. I.E. for coking pyrolysis gas service, a body jacket will be provided to avoid coking which will damage the sealing face.

### For Optional Parts

Item	Part name	Carbon steel	Stainless steel	Duplex steel	Aluminum bronze
1a	Plug		A182 F316 / A182 F51 / Monel K500		
Yb	Lantern Ring		A182 F316 / A182 F51 / Monel K500		
Eb	Belleville Spring		Alloy Steel / Inconel X750		
Ea	Nut	A194 2HM	A194 8M	A194 8M	A194 8M





### Standards

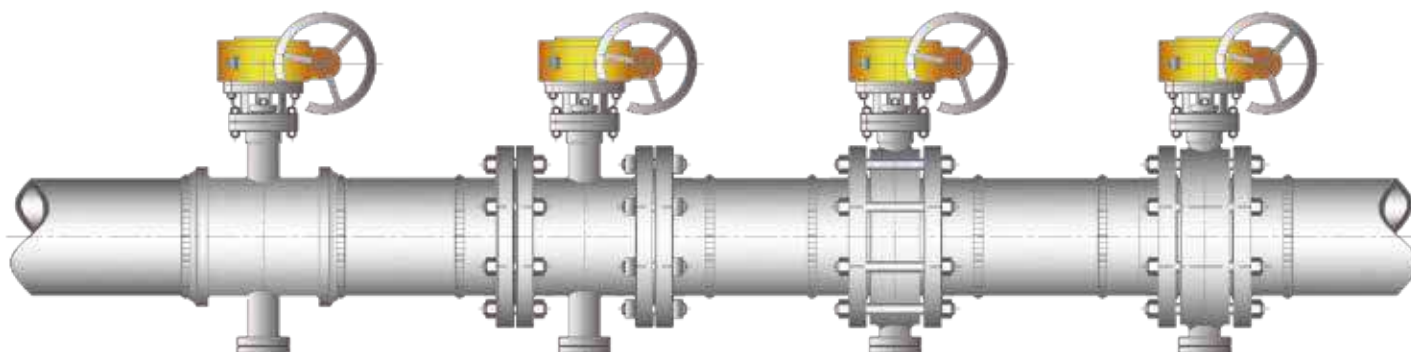
Design & Manufacture ACC to API 609.  
 Temperature & Pressure ACC to ANSI B16.34.  
 Face to Face Dimension ACC to API 609.  
 End Dimension ACC to ANSI B16.5.  
 Test & Inspection ACC to API 598.  
 FIRESAFE ACC to API 6FA.  
 NACE MR0175.

### Notes:

- Temperature: -196°C to 800°C .
- Size Range: 150lb-(2"~72")  
 300lb-(2"~72")  
 600lb-(2"~40")  
 900lb-(2"~18")  
 Please contact with us if you require sizes not in this range.
- Valve will be installed horizontally and vertically.
- Customized solution is available for special working conditons.

### Material list

Item	Part name	Carbon steel	Stainless steel	Duplex steel	Aluminum bronze
3	Body	A216 WCB	A351 CF8M	A890 4A	B148 C95800
3b	Sealing Surface	SS316 or SS304 / STL / MONEL / INCONEL / TCC			
5b	Seat Seal	PTFE+304 or 316 / 304 or 316 or UNS S31803 + Graphite / O-ring			
6	Plate	A182 F316	A182 F316	A182 F51	Monel K500
7	Screw	A193 B8 / A193 B8M / F51 / C63200 / MONEL / INCONEL			
8	Stem	17-4PH	A182 F316	A182 F51	Monel K500
9	Disc	A216 WCB	A182 F316	A890 4A	Monel K400
10	Packing	PTFE / Graphite / Rubber(O-ring)			
15	Pin	A182 F316	A182 F316	A182 F51	Monel K500



Lug Butterfly Valve - Face to Face API 609 ASME B16.5. CL150

SIZE	Dimensions										Weight Kg
	inch	mm	L	H	H2	D1	D2	D3	F	N-Z	
50	2"	51	43	300	210		120.5	92	2	4-5/8"	18
80	3"	76	49	340	230		152.5	127	2	4-5/8"	22
100	4"	102	54	400	265		190.5	157	2	8-5/8"	24
125	5"	127	57	480	325		216	186	2	8-3/4"	24
150	6"	152	58	530	345		241.5	216	2	8-3/4"	26
200	8"	203	64	620	395		298.5	270	2	8-3/4"	29
250	10"	254	71	680	425		362	324	2	12-7/8"	31
300	12"	305	81	800	495		432	381	2	12-7/8"	32
350	14"	356	92	880	555		476	413	2	12-1"	35
400	16"	407	102	950	590		540	470	2	16-1"	37
450	18"	458	114	1000	630		578	533	2	16-1-1/8"	40
500	20"	509	127	1100	680		635	584	2	20-1-1/8"	43
600	24"	610	154	1230	750		749.5	692	2	20-1-1/4"	48

Lug Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL300

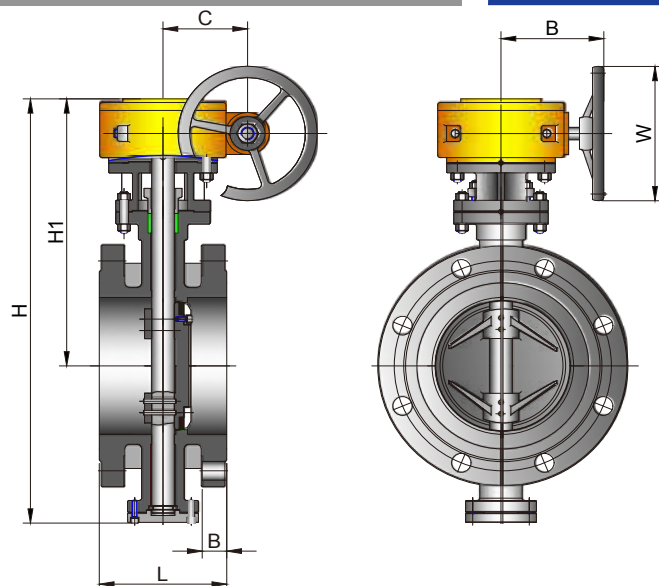
SIZE	Dimensions										Weight Kg
	inch	mm	L	H	H2	D1	D2	D3	F	N-Z	
50	2"	51	43	385	240		127	92	2	8-5/8"	23
80	3"	76	49	410	260		168.5	127	2	8-3/4"	29
100	4"	102	54	420	270		200	157	2	8-3/4"	32
125	5"	127	57	530	345		235	186	2	8-3/4"	35
150	6"	152	61	590	380		270	216	2	12-3/4"	37
200	8"	203	73	650	410		330	270	2	12-7/8"	42
250	10"	254	83	750	470		387.5	324	2	16-1"	48
300	12"	305	92	860	545		451	381	2	16-1-1/8"	51
350	14"	356	117	940	590		514.5	413	2	20-1-1/8"	54
400	16"	407	133	990	640		571.5	470	2	20-1-1/4"	58
450	18"	458	149	1100	690		628.5	533	2	24-1-1/4"	61
500	20"	509	159	1200	740		686	584	2	24-1-1/4"	64
600	24"	610	181	1360	850		813	692	2	24-1-1/2"	70

Lug Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL600

SIZE	Dimensions										Weight Kg
	inch	mm	L	H	H2	D1	D2	D3	F	N-Z	
150	6"	152	78	620	400		292.1	216	7	12-1"	48
200	8"	203	102	730	460		349.2	270	7	12-1-1/8"	56
250	10"	254	117	870	550		431.8	324	7	16-1-1/4"	64
300	12"	305	140	930	600		489	381	7	20-1-1/4"	67
350	14"	356	155	1005	630		527	413	7	20-1-3/8"	70
400	16"	407	178	1135	705		603.3	470	7	20-1-1/2"	76
450	18"	458	200	1200	750		654	533	7	20-1-5/8"	83
500	20"	509	216	1270	780		723.9	584	7	24-1-5/8"	89
600	24"	610	232	1440	880		838.2	692	7	24-1-7/8"	102

Lug Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL900

SIZE	Dimensions										Weight Kg
	inch	mm	L	H	H2	D1	D2	D3	F	N-Z	
150	6"	152	104	760	460		317.5	216	7	12-1-1/8"	56
200	8"	203	112	850	530		393.7	270	7	12-1-3/8"	64
250	10"	254	135	980	635		469.9	324	7	16-1-3/8"	70
300	12"	305	170	1050	690		533.4	381	7	20-1-3/8"	80
350	14"	356	173	1130	720		558.8	413	7	20-1-1/2"	86
400	16"	407	210	1195	740		616	470	7	20-1-5/8"	89
450	18"	458	228	1340	840		685.8	533	7	20-1-7/8"	102
500	20"	509	250	1410	865		749.3	584	7	20-2"	108
600	24"	610	275	1645	990		901.7	692	7	20-2-1/2"	140



### Standards

Design & Manufacture ACC to API 609.  
 Temperature & Pressure ACC to ANSI B16.34.  
 Face to Face Dimension ACC to API 609.  
 End Dimension ACC to ANSI B16.5.  
 Test & Inspection ACC to API 598.  
 FIRESAFE ACC to API 6FA.  
 NACE MR0175.

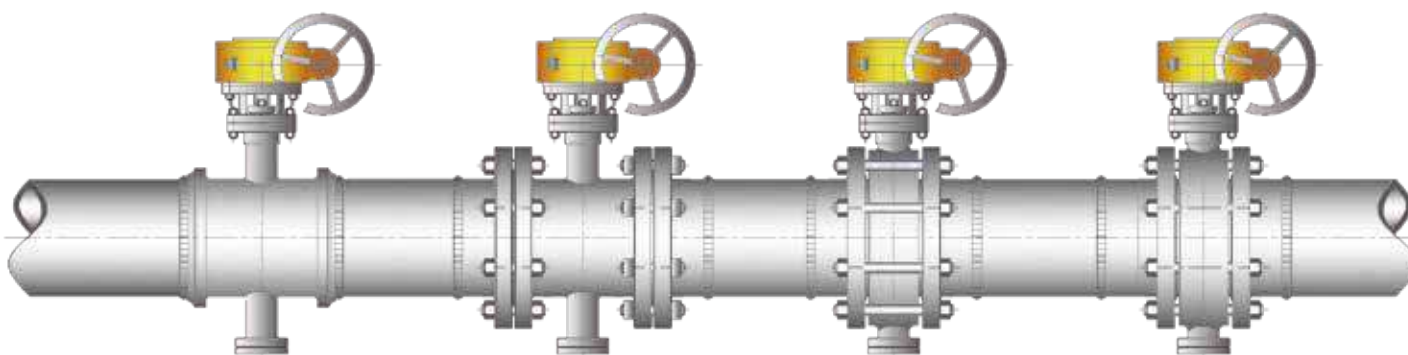


### Notes:

- Temperature: -196 °C to 800 °C .
- Size Range: 150lb-(2"~72")  
 300lb-(2"~72")  
 600lb-(2"~40")  
 900lb-(2"~18")  
 Please contact with us if you require sizes not in this range.
- Valve will be installed horizontally and vertically.
- Customerized solution is available for special working conditons.

### Material list

Item	Part name	Carbon steel	Stainless steel	Duplex steel	Aluminum bronze
3	Body	A216 WCB	A351 CF8M	A890 4A	B148 C95800
3b	Sealing Surface	SS316 or SS304 / STL / MONEL / INCONEL / TCC			
5b	Seat Seal	PTFE+304 or 316 / 304 or 316 or UNS S31803 + Graphite / O-ring			
6	Plate	A182 F316	A182 F316	A182 F51	Monel K500
7	Screw	A193 B8 / A193 B8M / F51 / C63200 / MONEL / INCONEL			
8	Stem	17-4PH	A182 F316	A182 F51	Monel K500
9	Disc	A216 WCB	A182 F316	A890 4A	Monel K400
10	Packing	PTFE / Graphite / Rubber(O-ring)			
15	Pin	A182 F316	A182 F316	A182 F51	Monel K500



### Double Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL150

SIZE		Dimensions										Weight
inch	mm	L	H	H2	D1	D2	D3	F	N-Z	B	Kg	
50	2"	108	300	210	150	120.5	92	2	4-19	18		
65	2-1/2"	112	320	220	180	139.5	105	2	4-19	20		
80	3"	114	340	230	190	152.5	127	2	4-19	22		
100	4"	127	400	265	230	190.5	157	2	8-19	24		
125	5"	140	480	325	255	216	186	2	8-22	24		
150	6"	140	530	345	280	241.5	216	2	8-22	26		
200	8"	152	620	395	345	298.5	270	2	8-22	29		
250	10"	165	680	425	405	362	324	2	12-25	31		
300	12"	178	800	495	485	432	381	2	12-25	32		
350	14"	190	880	555	535	476	413	2	12-29	35		
400	16"	216	950	590	595	540	470	2	16-29	37		
450	18"	222	1000	630	635	578	533	2	16-32	40		
500	20"	229	1100	680	700	635	584	2	20-32	43		
600	24"	267	1230	750	815	749.5	692	2	20-35	48		

### Double Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL300

SIZE		Dimensions										Weight
inch	mm	L	H	H2	D1	D2	D3	F	N-Z	B	Kg	
50	2"	108	385	240	165	127	92	2	8-19	23		
65	2-1/2"	112	400	250	190	149	105	2	8-22	26		
80	3"	114	410	260	210	168.5	127	2	8-22	29		
100	4"	127	420	270	255	200	157	2	8-22	32		
125	5"	140	530	345	280	235	186	2	8-22	35		
150	6"	140	590	380	320	270	216	2	12-22	37		
200	8"	152	650	410	380	330	270	2	12-26	42		
250	10"	165	750	470	445	387.5	324	2	16-29	48		
300	12"	178	860	545	520	451	381	2	16-32	51		
350	14"	190	940	590	585	514.5	413	2	20-32	54		
400	16"	216	990	640	650	571.5	470	2	20-35	58		
450	18"	222	1100	690	710	628.5	533	2	24-35	61		
500	20"	229	1200	740	755	686	584	2	24-35	64		
600	24"	267	1360	850	915	813	692	2	24-41	70		

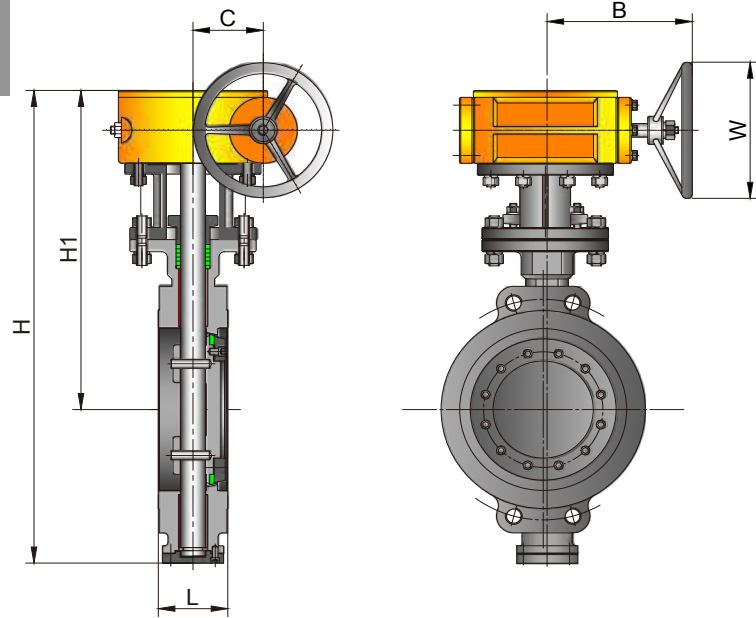
### Double Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL600

SIZE		Dimensions										Weight
inch	mm	L	H	H2	D1	D2	D3	F	N-Z	B	Kg	
150	6"	210	620	400	355	292.1	216	7	12-29	48		
200	8"	230	730	460	420	349.2	270	7	12-32	56		
250	10"	250	870	550	510	431.8	324	7	16-35	64		
300	12"	270	930	600	560	489	381	7	20-35	67		
350	14"	290	1005	630	605	527	413	7	20-39	70		
400	16"	310	1135	705	685	603.3	470	7	20-42	76		
450	18"	330	1200	750	745	654	533	7	20-45	83		
500	20"	350	1270	780	815	723.9	584	7	24-45	89		
600	24"	390	1440	880	940	838.2	692	7	24-51	102		

### Double Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL900

SIZE		Dimensions										Weight
inch	mm	L	H	H2	D1	D2	D3	F	N-Z	B	Kg	
150	6"	250	760	460	380	317.5	216	7	8-32	56		
200	8"	310	850	530	470	393.7	270	7	8-39	64		
250	10"	350	980	635	545	469.9	324	7	12-39	70		
300	12"	380	1050	690	610	533.4	381	7	16-39	80		
350	14"	400	1130	720	640	558.8	413	7	16-42	86		
400	16"	430	1195	740	705	616	470	7	16-45	89		
450	18"	460	1340	840	785	685.8	533	7	16-52	102		
500	20"	490	1410	865	855	749.3	584	7	16-54	108		
600	24"	530	1645	990	1040	901.7	692	7	16-67	140		





### Standards

Design & Manufacture ACC to API 609.  
 Temperature & Pressure ACC to ANSI B16.34.  
 Face to Face Dimension ACC to API 609.  
 End Dimension ACC to ANSI B16.5.  
 Test & Inspection ACC to API 598.  
 FIRESAFE ACC to API 6FA.  
 NACE MR0175.

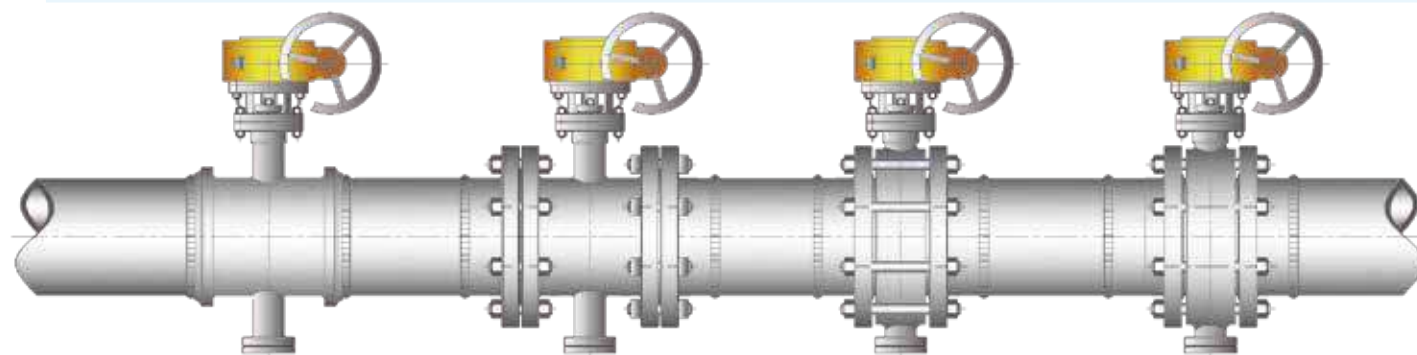


### Notes:

1. Temperature: -196 C to 800 C .
2. Size Range: 150lb-(2"~72")  
 300lb-(2"~72")  
 600lb-(2"~40")  
 900lb-(2"~18")  
 Please contact with us if you require sizes not in this range.
3. Valve will be installed horizontally and vertically.
4. Customized solution is available for special working conditons.

### Material list

Item	Part name	Carbon steel	Stainless steel	Duplex steel	Aluminum bronze
3	Body	A216 WCB	A351 CF8M	A890 4A	B148 C95800
3b	Sealing Surface	SS316 or SS304 / STL / MONEL / INCONEL / TCC			
5b	Seat Seal	PTFE+304 or 316 / 304 or 316 or UNS S31803 + Graphite / O-ring			
6	Plate	A182 F316	A182 F316	A182 F51	Monel K500
7	Screw	A193 B8 / A193 B8M / F51 / C63200 / MONEL / INCONEL			
8	Stem	17-4PH	A182 F316	A182 F51	Monel K500
9	Disc	A216 WCB	A182 F316	A890 4A	Monel K400
10	Packing	PTFE / Graphite / Rubber(O-ring)			
15	Pin	A182 F316	A182 F316	A182 F51	Monel K500



Wafer Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL150

SIZE		Dimensions										Weight
inch	mm	L	H	H2	D1	D2	D3	F	N-Z	B	Kg	
50	2"	43	300	210		120.5	92	2	4-19	18		
80	3"	49	340	230		152.5	127	2	4-19	22		
100	4"	54	400	265		190.5	157	2	4-19	24		
125	5"	57	480	325		216	186	2	4-22	24		
150	6"	58	530	345		241.5	216	2	4-22	26		
200	8"	64	620	395		298.5	270	2	4-22	29		
250	10"	71	680	425		362	324	2	4-25	31		
300	12"	81	800	495		432	381	2	4-25	32		
350	14"	92	880	555		476	413	2	4-29	35		
400	16"	102	950	590		540	470	2	4-1"	37		
450	18"	114	1000	630		578	533	2	4-1-1/8"	40		
500	20"	127	1100	680		635	584	2	4-1-1/8"	43		
600	24"	154	1230	750		749.5	692	2	4-1-1/4"	48		

Wafer Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL300

SIZE		Dimensions										Weight
inch	mm	L	H	H2	D1	D2	D3	F	N-Z	B	Kg	
50	2"	43	385	240		127	92	2	4-19	23		
80	3"	49	410	260		168.5	127	2	4-22	29		
100	4"	54	420	270		200	157	2	4-22	32		
125	5"	57	530	345		235	186	2	4-22	35		
150	6"	61	590	380		270	216	2	4-3/4"	37		
200	8"	73	650	410		330	270	2	4-7/8"	42		
250	10"	83	750	470		387.5	324	2	4-1"	48		
300	12"	92	860	545		451	381	2	4-1-1/8"	51		
350	14"	117	940	590		514.5	413	2	4-1-1/8"	54		
400	16"	133	990	640		571.5	470	2	4-1-1/4"	58		
450	18"	149	1100	690		628.5	533	2	4-1-1/4"	61		
500	20"	159	1200	740		686	584	2	4-1-1/4"	64		
600	24"	181	1360	850		813	692	2	4-1-1/2"	70		

Wafer Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL600

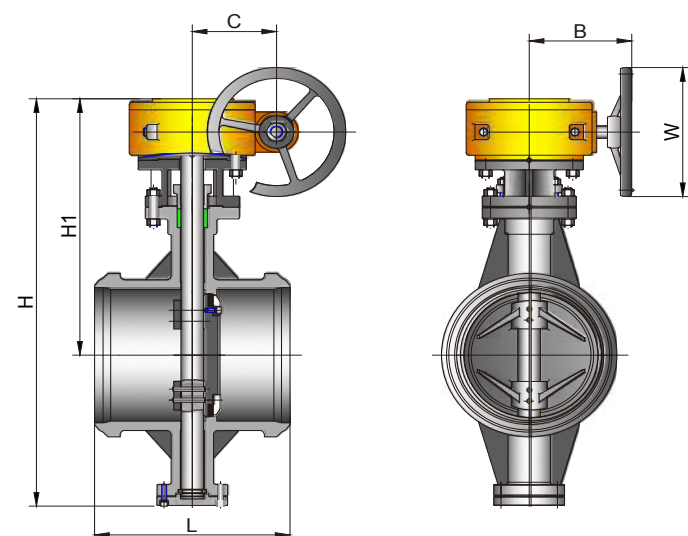
SIZE		Dimensions										Weight
inch	mm	L	H	H2	D1	D2	D3	F	N-Z	B	Kg	
150	6"	78	620	400		292.1	216	7	4-1"	48		
200	8"	102	730	460		349.2	270	7	4-1-1/8"	56		
250	10"	117	870	550		431.8	324	7	4-1-1/4"	64		
300	12"	140	930	600		489	381	7	4-1-1/4"	67		
350	14"	155	1005	630		527	413	7	4-1-3/8"	70		
400	16"	178	1135	705		603.3	470	7	4-1-1/2"	76		
450	18"	200	1200	750		654	533	7	4-1-5/8"	83		
500	20"	216	1270	780		723.9	584	7	4-1-5/8"	89		
600	24"	232	1440	880		838.2	692	7	4-1-7/8"	102		

Wafer Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL900

SIZE		Dimensions										Weight
inch	mm	L	H	H2	D1	D2	D3	F	N-Z	B	Kg	
150	6"	104	760	460		317.5	216	7	4-1-1/8"	56		
200	8"	112	850	530		393.7	270	7	4-1-3/8"	64		
250	10"	135	980	635		469.9	324	7	4-1-3/8"	70		
300	12"	170	1050	690		533.4	381	7	4-1-3/8"	80		
350	14"	173	1130	720		558.8	413	7	4-1-1/2"	86		
400	16"	210	1195	740		616	470	7	4-1-5/8"	89		
450	18"	228	1340	840		685.8	533	7	4-1-7/8"	102		
500	20"	250	1410	865		749.3	584	7	20-2"	108		
600	24"	275	1645	990		901.7	692	7	20-2-1/2"	140		

### Standards

Design & Manufacture ACC to API 609.  
 Temperature & Pressure ACC to ANSI B16.34.  
 Face to Face Dimension ACC to API 609.  
 End Dimension ACC to ANSI B16.5.  
 Test & Inspection ACC to API 598.  
 FIRESAFE ACC to API 6FA.  
 NACE MR0175.

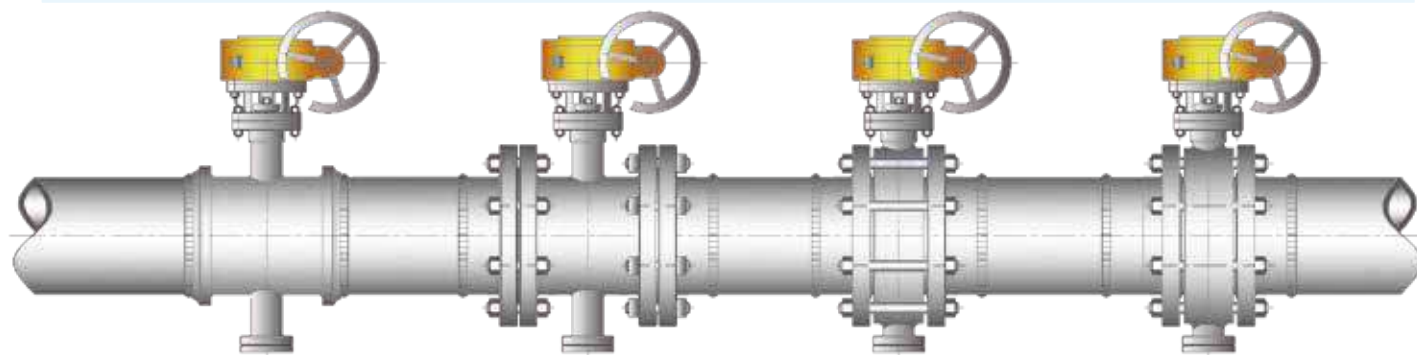


### Notes:

- Temperature: -196 °C to 800 °C .
- Size Range: 150lb-(2"~72")  
 300lb-(2"~72")  
 600lb-(2"~40")  
 900lb-(2"~18")  
 Please contact with us if you require sizes not in this range.
- Valve will be installed horizontally and vertically.
- Customerized solution is available for special working conditons.

### Material list

Item	Part name	Carbon steel	Stainless steel	Duplex steel	Aluminum bronze
3	Body	A216 WCB	A351 CF8M	A890 4A	B148 C95800
3b	Sealing Surface	SS316 or SS304 / STL / MONEL / INCONEL / TCC			
5b	Seat Seal	PTFE+304 or 316 / 304 or 316 or UNS S31803 + Graphite / O-ring			
6	Plate	A182 F316	A182 F316	A182 F51	Monel K500
7	Screw	A193 B8 / A193 B8M / F51 / C63200 / MONEL / INCONEL			
8	Stem	17-4PH	A182 F316	A182 F51	Monel K500
9	Disc	A216 WCB	A182 F316	A890 4A	Monel K400
10	Packing	PTFE / Graphite / Rubber(O-ring)			
15	Pin	A182 F316	A182 F316	A182 F51	Monel K500



BW Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL150

SIZE		Dimensions										Weight
inch	mm	L	H	H2	D1	D2	D3	F	N-Z	B	Kg	
50	2"	150	300	210								
65	2-1/2"	170	320	220								
80	3"	180	340	230								
100	4"	190	400	265								
125	5"	200	480	325								
150	6"	210	530	345								
200	8"	230	620	395								
250	10"	250	680	425								
300	12"	270	800	495								
350	14"	290	880	555								
400	16"	310	950	590								
450	18"	330	1000	630								
500	20"	350	1100	680								
600	24"	390	1230	750								

BW Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL300

SIZE		Dimensions										Weight
inch	mm	L	H	H2	D1	D2	D3	F	N-Z	B	Kg	
50	2"	150	385	240								
65	2-1/2"	170	400	250								
80	3"	180	410	260								
100	4"	190	420	270								
125	5"	200	530	345								
150	6"	210	590	380								
200	8"	230	650	410								
250	10"	250	750	470								
300	12"	270	860	545								
350	14"	290	940	590								
400	16"	310	990	640								
450	18"	330	1100	690								
500	20"	350	1200	740								
600	24"	390	1360	850								

BW Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL600

SIZE		Dimensions										Weight
inch	mm	L	H	H2	D1	D2	D3	F	N-Z	B	Kg	
150	6"	210	620	400								
200	8"	230	730	460								
250	10"	250	870	550								
300	12"	270	930	600								
350	14"	290	1005	630								
400	16"	310	1135	705								
450	18"	330	1200	750								
500	20"	350	1270	780								
600	24"	390	1440	880								

BW Flanged Butterfly Valve - Face to Face API 609 ASME B16.5. CL900

SIZE		Dimensions										Weight
inch	mm	L	H	H2	D1	D2	D3	F	N-Z	B	Kg	
150	6"	267	930	400								
200	8"	292	1050	500								
250	10"	330	1170	505								
300	12"	356	1195	580								
350	14"	381	1340	600								
400	16"	406	1430	630								
450	18"	432	1570	690								
500	20"	457	1640	730								
600	24"	508	1840	840								