

WSV[®]

SPECIAL ALLOY VALVES



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WSV2018D-01

BUTTERFLY VALVES

WEIDOU LI VALVES CO., LTD.



WEIDOU LI

The name trust for Special Alloy Valves

Brief Introduction

The history of Weidouli dates back to 1989, the initial company named Lixin established in that year with prospective view to begin with exotic material valves manufacturing. With an increase of its production capacity and satisfaction of domestic and oversea clients' requirements, Weidouli furnished with a new modern factory filled with advance and large CNC machine facilities, fabrication, inspection and test facilities, total factory occupied area to be 43500m².

Advanced manufacturing processes enable us to produce a wide range of valves from bars and forgings, castings. Valves can be designed, manufactured, assembled and tested in accordance with ANSI/API/ASME norms, DIN/ ISO/BS specifications, Norsok requirements, JIS standards and tailor-made with sizes varying from 2" up to 100". Moreover, sizeable stock allows Weidouli to offer a broad selection of exotic materials, which diversify with Titanium, Nickel alloy, Zirconium, Super Duplex, Alloy 20 etc, whilst keeping production time to a minimum.

Weidouli has worked diligently in past decades to secure our advantageous industry position and become a highly respected and valuable enterprise to the area of anti-corrosive valves application and come to being a culture: Cooperate Sincerely, Create Win-win.

Weidouli will continue to play a good role and make its unceasing efforts in the valve markets with our goals in mind: Global Quality, Total Reliability.

CEO, Chengrui Xia



Global Quality.Total Reliability.

Weidouli have ISO 9001/API 6D/ISO 14001/OHSAS 18001/API 607/API 6FA/CE/EAC/ATEX/ISO 15848-1/ TS etc. qualifications to guarantee the realizable quality. Weidouli system includes the selection of raw material from approved vendors, and rigorous oversight of our manufacturing process that is vital to quality control. Our extensive quality control system carefully monitors our manufacturing processes to assure a product that performs to the highest industry standards. Quality assurance procedures include 100% hydrostatic and pneumatic testing of all valves in full conformance to applicable API standards and industry codes.

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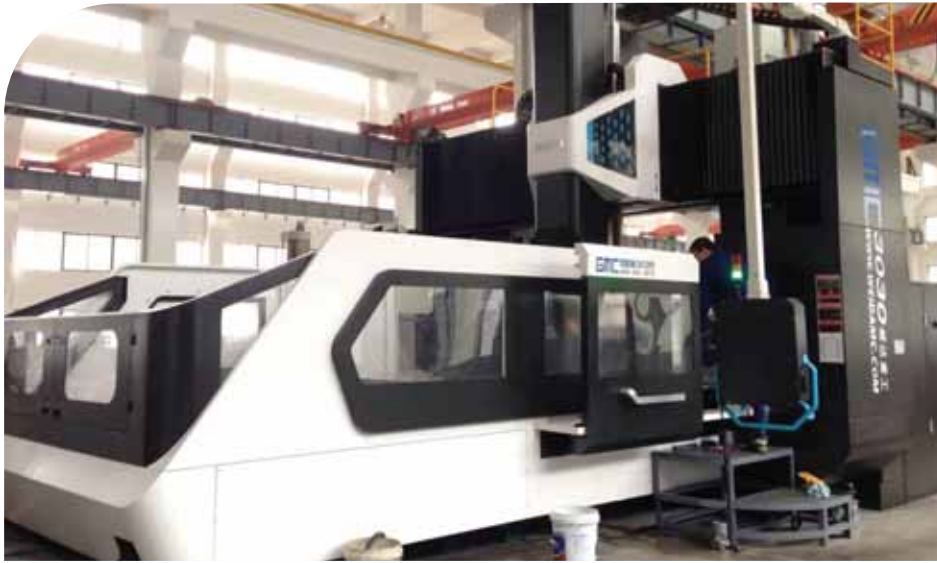
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WEIDOU LI SPECIALITY





Extensive in-house testing and laboratory facilities are available including



- Tensile/Bend/Hardness Test/Impact Test
- Dye Penetrant
- Positive Material Identification
- Direct Alloy Analysis
- Ultrasonic thickness test
- Metallographic examination
- Chemical Analysis



Coordinate Measuring Machine(CMM):

CMM is a device that measures the geometry of physical objects by sensing discrete points on the surface of the object with a probe. Weidouli qualified products are well machined and controlled typically with micrometer precision.

Customer Relationship Management (CRM) & Production MES System

All daily business actions are controlled via CRM system to ensure transaction traceability and durability. The use of series number allows Weidouli the ability to not only ensure the quality of components used but to monitor and trace the fabrication process as well.

CNC Machine

Weidouli valves manufacturing plant comprises a well and equipped huge CNC machine shop with full design fabrication, inspection and test facilities.

Dynamic Inventory

By strategically prolonged cooperation with our sub suppliers, Weidouli is advantageous in price and flexible in delivery with a large scale of stocks for casting, semi-finished parts and finished valves to meet with your urgent need.

Extensive in-house testing and laboratory facilities are available including:

Cleaning room

Weidouli establishes a Class 100000 Cleanroom facility for cleaning, assembly, testing and packing of Weidouli valves to be used in high purity applications. By performing these procedures in a cleanroom, Weidouli delivers valves which can be placed directly into high purity systems without the need for any component cleaning in the field, such as semiconductor, chemical, pharmaceutical and other industries which have standards for high purity,



Dechlorination Equipment

To avoid the iron or other metal pollution on finished valves and free of corrosion, all the testing water and cleaning water are treated and stored through a dechlorination equipment owned by Weidouli.



Special Treatment Laboratory

Vacuum hardness treatment especially for Titanium and Zirconium Treatment: Titanium stem/seat/sphere surface hardening treatment, so that a protective film formed on the surface, to improve the corrosion resistance, but also greatly relief stress and improve the surface hardness, not easy to scratch. Titanium surface with primary hardness HV_s 235 can approach to HV800 after this treatment.



DOUBLE OFFSET BUTTERFLY VALVES GENERAL HIGHLIGHTS

Applicable Seat Materials

- PTFE
- RPTFE(15% Glass Filled)
- RPTFE(25% Carbon Filled)
- Viton
- Other materials can be supplied upon request

Specifications

- Anti-static
- Blow-out proof stem
- V type packing, reliable packing seals
- Zero leakage
- Ends: Wafer, Lug
- Uni-directional/Bi-directional sealing
- Operation: Lever, Gear, Electric, Pneumatic actuator
- Bare shaft with ISO 5211 top mounting flange(when specified)



Double offset design to easily replace the seat



Lockable design available for Gear operation

ASME butterfly valve as citing	
Design	API 609
Testing	API 598
Face to face dimension	API 609
Flange ends	ASME B16.5, ASME B16.47 Series A
Pressure temperature rating	ASME B16.34
Visual inspection of casting	MSS-SP-55

Size/Pressure produce range		Operator
Pressure	Wafer/Lug	
150LB	2" up to 100"	2"~4" Lever ; 5"~100" Gear
300LB	2" up to 60"	2"~4" Lever; 5"~60" Gear
600LB	On application	

Notes:
*Other unspecified standards and sizes are upon request.

DOUBLE OFFSET BUTTERFLY VALVES DESIGN FEATURES

* Double Offset Design

- This feature keeps the valve seat away from the disc when the disc starts rotating around the stem.
- Eliminate the wear on the seat and thus increases the life of the seat.
- Offers excellent throttling capabilities, which makes it an ideal choice for flow control applications.

* Blow-Out Proof Stem

- The stem has a split ring to protect the stem from blowout.
- Whether the valve with or without pressure, release the packing bolts, stem will not blowout.

* V Type Gland Flange

- It can prevent packing shift under pressure.

* Packing Design

- Packing is online adjustment.
- Wedge shaped packing, the sealing will be more reliable.

* Double Belleville Spring Design.

- Belleville spring loaded can always protect packing sealing.

* Seat Design

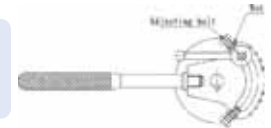
- Soft seat valve designs are Uni-directional or Bi-directional.
- The seat is retained by the seat retainer, which prevents the seat from blowing out during operation.
- Replace the seat without remove the disc and stem, it is easy to maintenance.

* Pin Design

- With a pin to eliminate gap between disc and stem, so that the disc will not be moved after pressure.

* Locking device

- Lever operation with locking device to avoid to misuse.
- Gear operation with the locking device is also available upon request.



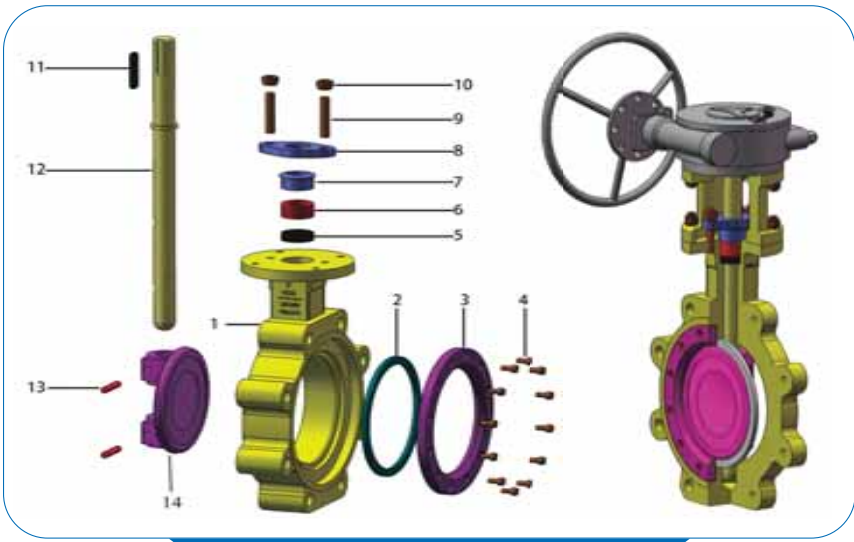
* Others

- Short face to face dimension, low cost and light weight.
- Easy for installation.

DOUBLE OFFSET BUTTERFLY VALVES CONSTRUCTION

No.	Main Parts	Example 1: (Hastelloy C276)	Example 2: (Duplex 2205)
1	Body	A494 CW12MW	A890 4A
2	Seat	PTFE/RPTFE	PTFE/RPTFE
3	Seat retainer	A494 CW12MW	A890 4A
4	Screw	B564 N10276	SS316
5	Packing washer	B564 N10276	A182 F51
6	Packing	PTFE/RPTFE/Graphite	PTFE/RPTFE/Graphite
7	Gland bushing	B564 N10276	A182 F51
8	Gland flange	A351 CF8	A351 CF8
9	Stud	A193 B8	A193 B8
10	Hex nut	A194 8	A194 8
11	Key	UNS G10450	UNS G10450
12	Stem	B564 N10276	A182 F51
13	Pin	B564 N10276	A182 F51
14	Disc	A494 CW12MW	A890 4A

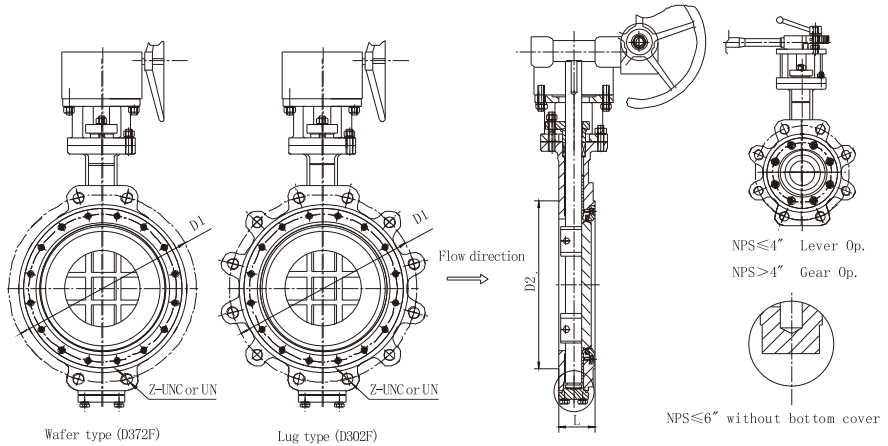
EXPLODED VIEW OF DOUBLE OFFSET BUTTERFLY VALVE



Butterfly valve D02F(Lug type)

Notes:
 Above view for size below 6" (Included 6") valves
 Size above 8" (Included 8") with additional bottom cover design, other structure same as above view.
 Weidouli reserves the right to modify our products for improvement without prior notice.

DOUBLE OFFSET BUTTERFLY VALVES DIMENSIONS



Wafer type (D372F)

Lug type (D302F)

NPS ≤ 4" Lever Op.
 NPS > 4" Gear Op.

NPS ≤ 6" without bottom cover

Size		150LB				300LB			
(inch)	(mm)	L	D1	D2	Z-UNC or UN	L	D1	D2	Z-UNC or UN
2"	50	43	120.5	92	4-UNC5/8"	43	127	92	8-UNC5/8"
2-1/2"	65	46	139.5	105	4-UNC5/8"	46	149	105	8-UNC3/4"
3"	80	48	152.5	127	4-UNC5/8"	48	168	127	8-UNC3/4"
4"	100	54	190.5	157	8-UNC5/8"	54	200	157	8-UNC3/4"
5"	125	57	216	186	8-UNC3/4"	59	235	186	8-UNC3/4"
6"	150	57	241.5	216	8-UNC3/4"	59	270	216	12-UNC3/4"
8"	200	64	298.5	270	8-UNC3/4"	73	330	270	12-UNC7/8"
10"	250	71	362	324	12-UNC7/8"	83	387.5	324	16-UN1"
12"	300	81	432	381	12-UNC7/8"	92	451	381	16-UN1-1/8"
14"	350	92	476	413	12-UN1"	117	514.5	413	20-UN-1-1/8"
16"	400	102	540	470	16-UN1"	133	571.5	470	20-UN1-1/4"
18"	450	114	578	533	16-UN1-1/8"	149	628.5	533	24-UN1-1/4"
20"	500	127	635	584	20-UN1-1/8"	159	686	584	24-UN1-1/4"
22"	550	127	692	641	20-UN1-1/4"	159	743	641	24-UN1-1/2"
24"	600	154	749.5	692	20-UN1-1/4"	181	813	692	24-UN1-1/2"
28"	700	165	863.6	800	28-UN1-1/4"	229	939.8	800	28-UN1-5/8"
30"	750	190	914.4	857	28-UN1-1/4"	230	997	857	28-UN1-3/4"
32"	800	190	977.9	914	28-UN1-1/2"	241	1054.1	914	28-UN1-7/8"
36"	900	203	1085.8	1022	32-UN1-1/2"	241	1168.4	1022	32-UN2"
40"	1000	229	1200.2	1124	36-UN1-1/2"				
42"	1050	229	1257.3	1194	36-UN1-1/2"				
48"	1200	254	1422.4	1359	44-UN1-1/2"				

Notes:
 * Other sizes & pressures are available upon request.
 * Weidouli reserves the right to change this information without notice.

TRIPLE OFFSET BUTTERFLY VALVES GENERAL HIGHLIGHTS

Applicable Seat Materials

- Metal with Graphite
- Metal with PTFE
- Other materials can be supplied upon request

Specifications

- Anti-static
- Blow-out proof stem
- Fire safe API 607
- V type packing, reliable packing seals
- Zero leakage
- Ends: Wafer, Lug, Double flanged
- Uni-directional/Bi-directional sealing
- Operation: Lever, Gear, Electric, Pneumatic actuator
- Bare shaft with ISO 5211 top mounting flange(when specified)



ASME butterfly valve as citing	
Design	API 609
Testing	API 598
Face to face dimension	API 609
Flange ends	ASME B16.5, ASME B16.47 Series A
Pressure temperature rating	ASME B16.34
Visual inspection of casting	MSS-SP-55

Size/Pressure produce range		Operator
Pressure	Wafer/Lug	
150LB	3" up to 80"	3"~4" Lever ; 5"~80" Gear
300LB	3" up to 40"	3"~4" Lever ; 5"~40" Gear
600LB	On application	

Notes:
*Other unspecified standards and sizes are upon request.

TRIPLE OFFSET BUTTERFLY VALVES DESIGN FEATURES

* Triple Offset Design

- 1st Offset: It is accomplished by moving the centerline of the shaft away from the seat surface.
 - 2nd Offset: It is accomplished by moving the centerline of the shaft offset from the centerline bore of the valve.
 - 3rd Offset: It is accomplished by adjusting the cone angle created by the 1st and 2nd offset angles at some point downstream of the valve in the center of the piping to the adjacent piping wall.
- By incorporating the 3 offsets into one design eliminates any risk of friction and jamming of the disc on the seat. This increases valve lifetime, the driving torque is very low, in comparison with other type of valves (gate valves, ball valves...).

* Blow-Out Proof Stem

- The stem is a split ring to protect the stem from blowout.
- Whether the valve with or without pressure, release the packing bolts, stem will not blowout.

* Fire Safe Design

- The fire test is conducted according to API 607 Section 5. (FIG.1)



FIG.1

* V Type Gland Flange

- It can prevent packing shift under pressure.

* Packing Design

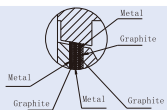
- Packing is online adjustment.
- Wedge shaped packing, the sealing will be more reliable.

* Double Belleville Spring Design

- Belleville spring loaded can always protect packing sealing.

* Seat Design

- Laminated seat design are Uni-directional or Bi-directional.
- The seat is retained by the seat retainer, which prevents the seat from blowing out during operation.



* Pin Design

- With a pin to eliminate gap between disc and stem, so that the disc will be not moved after pressure.

* Locking device

- Lever operation with locking device to avoid to misuse. (FIG.2)
- Gear operation with the locking device is also available upon request.

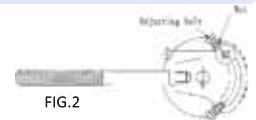


FIG.2

* Others

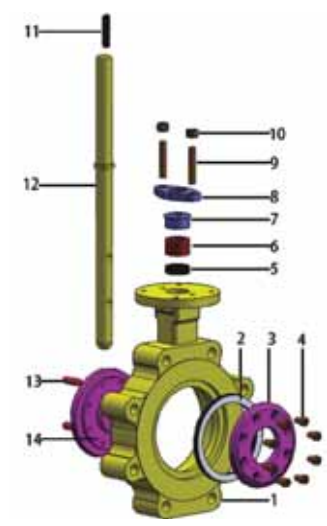
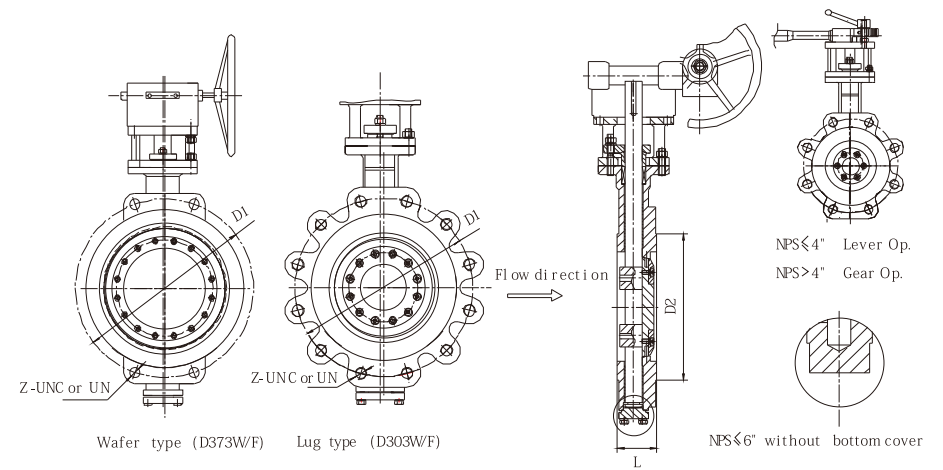
- Short pattern length, low cost and light weight.
- Easy for installation.

TRIPLE OFFSET BUTTERFLY VALVES CONSTRUCTION

No.	Main Parts	Example 1: (Titanium Gr.2)	Example 2: (Duplex 2205)
1	Body	B367 Gr.C-2	A890 4A
2	Laminated seat	Titanium+ Graphite	Duplex 2205 +Graphite
3	Seat retainer	B381 Gr.F-2	A890 4A
4	Screw	B348 Gr.2	Duplex 2205
5	Packing washer	B381 Gr.F-2	A182 F51
6	Packing	PTFE/RPTFE/Graphite	PTFE/RPTFE/Graphite
7	Gland bushing	A182 F304	A182 F51
8	Gland flange	A351 CF8	A351 CF8
9	Stud	A193 B8	A193 B8
10	Hex nut	A194 8	A194 8
11	Key	UNS G10450	UNS G10450
12	Stem	B381 Gr.F-2	A182 F51
13	Pin	B348 Gr.5	A182 F51
14	Disc	B367 Gr.C-2	A890 4A

EXPLODED VIEW OF TRIPL OFFSET BUTTERFLY VALVE

TRIPLE OFFSET BUTTERFLY VALVES DIMENSIONS

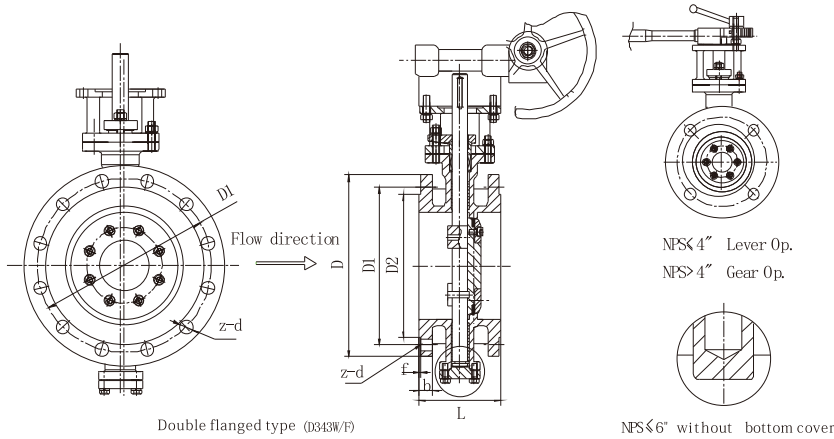


Notes:
 Above view for size below 6" (Inclued 6") valves
 Size above 8" (Inclued 8") with additional bottom cover design, other structure same as above view.
 Weidouli reserves the right to modify our products for improvement without prior notice.

Size		150LB				300LB			
(inch)	(mm)	L	D1	D2	Z-UNC or UN	L	D1	D2	Z-UNC or UN
3"	80	48	152.5	127	4-UNC5/8"	48	168	127	8-UNC3/4"
4"	100	54	190.5	157	8-UNC5/8"	54	200	157	8-UNC3/4"
5"	125	57	216	186	8-UNC3/4"	59	235	186	8-UNC3/4"
6"	150	57	241.5	216	8-UNC3/4"	59	270	216	12-UNC3/4"
8"	200	64	298.5	270	8-UNC3/4"	73	330	270	12-UNC7/8"
10"	250	71	362	324	12-UNC7/8"	83	387.5	324	16-UN1"
12"	300	81	432	381	12-UNC7/8"	92	451	381	16-UN1-1/8"
14"	350	92	476	413	12-UN1"	117	514.5	413	20-UN1-1/8"
16"	400	102	540	470	16-UN1"	133	571.5	470	20-UN1-1/4"
18"	450	114	578	533	16-UN1-1/8"	149	628.5	533	24-UN1-1/4"
20"	500	127	635	584	20-UN1-1/8"	159	686	584	24-UN1-1/4"
24"	600	154	749.5	692	20-UN1-1/4"	181	813	692	24-UN1-1/2"
28"	700	165	863.6	800	28-UN1-1/4"	229	939.8	800	28-UN1-5/8"
30"	750	190	914.4	857	28-UN1-1/4"	273	997	857	28-UN1-3/4"
32"	800	203	977.9	914	28-UN1-1/2"	273	1054.1	914	28-UN1-7/8"
36"	900	203	1085.8	1022	32-UN1-1/2"	286	1168.4	1022	32-UN2"
40"	1000	229	1200.2	1124	36-UN1-1/2"				
42"	1050	246	1257.3	1194	36-UN1-1/2"				
48"	1200	276	1422.4	1359	44-UN1-1/2"				

Notes:
 *Other sizes & pressures are available upon request.
 *Weidouli reserves the right to change this information without notice.

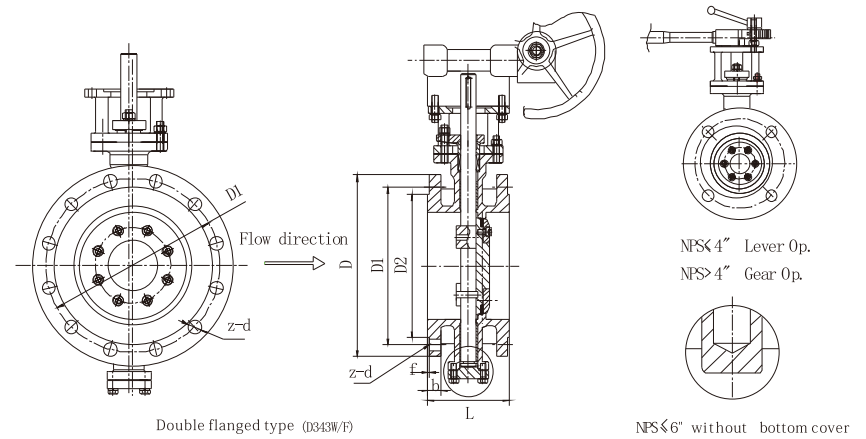
TRIPLE OFFSET BUTTERFLY VALVES DIMENSIONS



Size		150LB						
(inch)	(mm)	L	D	D1	D2	b	f	z-d
3"	80	114	190	152.5	127	19	1.6	4-19
4"	100	127	229	190.5	157	24	1.6	8-19
5"	125	140	254	216	186	24	1.6	8-22
6"	150	140	279	241.5	216	26	1.6	8-22
8"	200	152	343	298.5	270	29	1.6	8-22
10"	250	165	406	362	324	31	1.6	12-25
12"	300	178	483	432	381	32	1.6	12-25
14"	350	190	533	476	413	35	1.6	12-29
16"	400	216	597	540	470	37	1.6	16-29
18"	450	222	635	578	533	40	1.6	16-32
20"	500	229	698	635	584	43	1.6	20-32
24"	600	267	813	749.5	692	48	1.6	20-35
28"	700	292	835	795.3	762	45	2	40-22
30"	750	318	885	846.1	813	45	2	44-22
32"	800	318	940	900.1	864	46.6	2	48-22
36"	900	330	1055	1009.6	972	52.9	2	44-26
38"	950	410	1125	1070	1022	54.5	2	40-30
40"	1000	410	1175	1120.8	1080	56.1	2	44-30
42"	1050	410	1225	1171.6	1130	59.3	2	48-30
48"	1200	470	1390	1335.1	1280	65.6	2	44-33

Notes:
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TRIPLE OFFSET BUTTERFLY VALVES DIMENSIONS



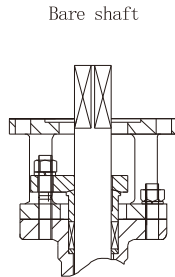
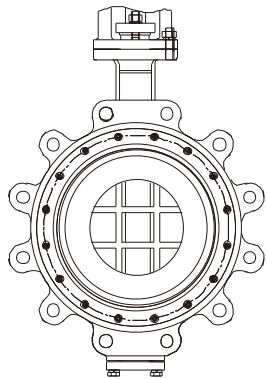
Size		300LB						
(inch)	(mm)	L	D	D1	D2	b	f	z-d
3"	80	180	210	168	127	29	1.6	8-22
4"	100	190	254	200	157	32	1.6	8-22
5"	125	200	279	235	186	35	1.6	8-22
6"	150	210	318	270	216	37	1.6	12-22
8"	200	230	381	330	270	41	1.6	12-25
10"	250	250	444	387.5	324	48	1.6	16-29
12"	300	270	521	451	381	51	1.6	16-32
14"	350	290	584	514.5	413	54	1.6	20-32
16"	400	310	648	571.5	470	57	1.6	20-35
18"	450	330	711	628.5	533	60	1.6	24-35
20"	500	350	775	686	584	64	1.6	24-35
24"	600	390	914	813	692	70	1.6	24-41
28"	700	430	920	857.2	787	89.4	2	36-36
30"	750	450	990	920.8	845	94.1	2	36-39
32"	800	470	1055	977.9	902	103.6	2	32-42
36"	900	510	1170	1089	1010	103.6	2	32-45
38"	950	530	1220	1139.8	1060	111.6	2	36-45
40"	1000	550	1275	1190.6	1114	116.3	2	40-45
42"	1050	570	1335	1244.6	1168	119.5	2	36-48
48"	1200	630	1510	1416	1327	129	2	40-51

Notes:
 *Other sizes & pressures are available upon request.
 *Weidouli reserves the right to change this information without notice.

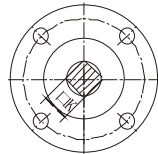
BUTTERFLY VALVES TORQUE & TOP FLANGE

Double offset butterfly valve

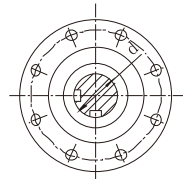
Size		150LB			300LB		
(inch)	(mm)	Torque	Top flange	Shaft ends	Torque	Top flange	Shaft ends
		N.M	ISO 5211	□K / d	N.M	ISO 5211	□K / d
2"	50	30	F07	11mm	50	F07	11mm
2-1/2"	65	34	F07	14mm	76	F07	14mm
3"	80	37	F07	14mm	78	F07	14mm
4"	100	52	F07	14mm	113	F07	17mm
5"	125	118	F10	17mm	289	F10	17mm
6"	150	136	F10	17mm	339	F10	22mm
8"	200	210	F12	22mm	599	F12	27mm
10"	250	464	F12	22mm	1130	F12	27mm
12"	300	600	F14	27mm	1695	F14	34mm
14"	350	980	F14	27mm	2486	F14	36mm
16"	400	1330	F16	34mm	4294	F16	40mm
18"	450	2486	F16	40mm	5085	F16	46mm
20"	500	3925	F25	46mm	6893	F25	50mm
24"	600	4700	F25	φ 70	10735	F30	φ 90



Top flange (ISO 5211)



Square type



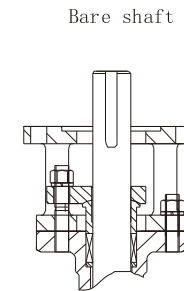
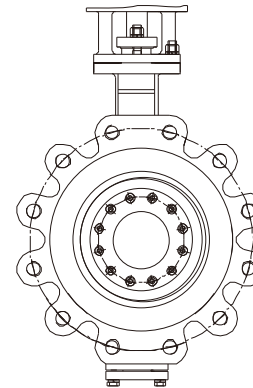
Round type

Notes:
 *Other sizes & pressures are available upon request.
 *Torque value excluded safety factor for reference.
 *Up to 20", shaft ends in square type, 24" and above valves' shaft in round type.
 *Weidouli reserves the right to change this information without notice.

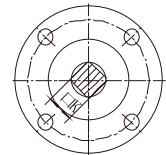
BUTTERFLY VALVES TORQUE & TOP FLANGE

Triple offset butterfly valve

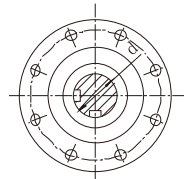
Size		150LB			300LB		
(inch)	(mm)	Torque	Top flange	Shaft ends	Torque	Top flange	Shaft ends
		N.M	ISO 5211	□K / d	N.M	ISO 5211	□K / d
3"	80	150	F07	14mm	180	F07	14mm
4"	100	230	F07	14mm	260	F07	17mm
5"	125	250	F10	17mm	380	F10	17mm
6"	150	300	F10	17mm	525	F10	22mm
8"	200	410	F12	22mm	1040	F12	27mm
10"	250	630	F12	22mm	1990	F12	27mm
12"	300	1130	F14	27mm	3125	F14	34mm
14"	350	1740	F14	27mm	4600	F14	36mm
16"	400	2810	F16	34mm	6950	F16	40mm
18"	450	3180	F16	40mm	8750	F16	46mm
20"	500	5500	F25	46mm	13000	F25	50mm
24"	600	7350	F25	φ 70	20750	F30	φ 90



Top flange (ISO 5211)



Square type



Round type

Notes:
 *Other sizes & pressures are available upon request.
 *Torque value excluded safety factor for reference.
 *Up to 20", shaft ends in square type, 24" and above valves' shaft in round type.
 *Weidouli reserves the right to change this information without notice.

BUTTERFLY VALVES SERIES SPECIAL ALLOY VALVES

BUTTERFLY VALVES HOW TO ORDER

VALVE CODE

D=BUTTERFLY VALVE

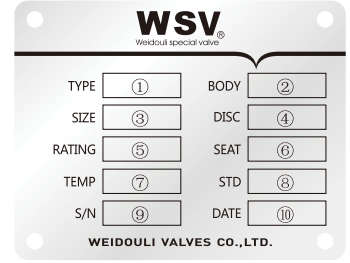
1 Operation code	2 End con. code	3 Structure code	4 Seat code	5 Pressure	6 Size
3=Gear	0=Lug	2=Double offset	F=PTFE/RPTFE	150LB~600LB	2"~100"
6=Pneumatic actuator	4=Double flanged	3=Triple offset	W/F=Metal +PTFE/Graphite	PN10~PN100	DN50~DN2500
7=Hydraulic actuator	7=Wafer				
9=Electric actuator					

EXAMPLE: Butterfly valve, Double Offset, Lug type, Gear operator, Seat : PTFE, 150LB, 6"

D302F-150LB-6"						
Valve code	Operation	Ends con.	Structure	Seat	Pressure	Size
D	3	O	2	F	150LB	6"
D	Gear Op.	Lug type	Double Offset	PTFE	150LB	6"

Notes: The figure number system outlined below is designed to cover the most common configurations. If special features are required that are not listed below, please advise the detailed description for accurate processing.

BUTTERFLY VALVES VALVE MARKINGS



Valve ID Tag

No.		
①	Type	Identifies valves type
②	Body Material	Identifies body metal material composition
③	Size	Identifies bore size
④	Disc Material	Identifies disc material composition
⑤	Rating	Identifies pressure
⑥	Seat	Identifies seat material composition
⑦	Temp.	Identifies the suitable operating temperature
⑧	Standard	Identifies design standard
⑨	Serial Number	Identifies certified manufacturer's serial number
⑩	Date	Identifies valve manufacturing date



Valve Markings

No.	Valve ID Components
1	Brand
2	Size
3	Rating
4	Flow Direction
5	Material Code
6	Heat Number

Notes: Weidouli reserves the right to modify our products for improvement without prior notice.

BUTTERFLY VALVES MATERIAL LIST

PRODUCT FIELD

Material	ASTM		
	Casting	Forging	Bars
Titanium & Titanium Alloy			
Titanium Gr.2	B367 Gr.C-2	B381 Gr.F-2	B348 Gr.2
Titanium Gr.3	B367 Gr.C-3	B381 Gr.F-3	B348 Gr.3
Titanium Gr.5	B367 Gr.C-5	B381 Gr.F-5	B348 Gr.5
Titanium Gr.6	B367 Gr.C-6	B381 Gr.F-6	B348 Gr.6
Titanium Gr.12	B367 Gr.C-12	B381 Gr.F-12	B348 Gr.12
Titanium Gr.7	B367 Pd7B	B381 Gr.F-7	B348 Gr.7
Nickel			
Nickel 200	A494 CZ100	B160 N02200	B160 N02200
Nickel 201		B160 N02201	B160 N02201
Nickel Base Alloy			
Monel 400	A494 M35-1	B564 N04400	B164 N04400
Monel K500		B865 N05500	B865 N05500
Inconel 600	A494 CY40	B564 N06600	B166 N06600
Inconel 625	A494 CW6MC	B564 N06625	B446 N06625
Incoloy 800	A351 CT15C	B564 N08800	B408 N08800
Incoloy 825	A494 CU5MCuC	B564 N08825	B425 N08825
Hastelloy B	A494 N12MV	B335 N10001	B335 N10001
Hastelloy B-2	A494 N7M	B462 N10665	B335 N10665
Hastelloy C276	A494 CW12MW	B574 N10276	B574 N10276
Hastelloy C-22	A494 CX2MW	B574 N06022	B574 N06022
Hastelloy C-4	A494 CW2M	B574 N06455	B574 N06455
Hastelloy G		B462 N06007	B581 N06007
Zirconium			
Zirconium 702	B752 702C	B493 R60702	B550 R60702
Zirconium 705	B752 705C	B493 R60705	B550 R60705
Super Austenitic Stainless Steel			
904L	904L	A182 F904L	B649 N08904
254SMO	A351 CK3MCuN	A182 F44	A276 S31254
AL-6XN	A351 CN3MN	B462 N08367	B688 N08367
ALLOY 20	A351 CN7M	B462 N08020	B473 N08020
Duplex & Super Duplex			
Duplex S31803	A890 4A	A182 F51	A276 S31803
Super Duplex S32750	A890 5A	A182 F53	A276 S32750
Super Duplex S32760	A890 6A	A182 F55	A276 S32760
Al-Bronze			
Ni-Al-Br	B148 C95800/C95500		

Notes:
 *The above materials are applicable to valve body. Contact Weidouli for the valve component material. Trademarks appeared on the book: SandvikAB for SAF 2205/SAF 2507; SPECIALS METALS for Inconel, Monel, Incoloy; Haynes for Hastelloy; Allegheny Ludium for AL-6XN; Avesta for 254SMO.
 *Other materials are available upon request, such as stainless steel, etc.

Petroleum Industry

The petroleum industry, also known as the oil industry or the oil patch, includes the global processes of exploration, extraction, refining, transporting (often by oil tankers and pipelines), and marketing of petroleum products. Weidouli designed Duplex, Ali Bronze, Titanium valves are ideal products for the downstream and upstream pipe requirements.

Coal Chemistry

Coal Chemistry includes coal coking, gasification, liquefaction, coal refinery etc. Weidouli designed valves are mostly used for coal coking, gasification.

Organic Chemistry

An organic compound is virtually any chemical compound that contains carbon, although a consensus definition remains elusive and likely arbitrary. Weidouli has abundant performance on such applications, such as acetic acid, PTA, Alkylation, Cyclohexanone, BDO, sec-Butyl Acetate.

Inorganic Chemistry

Inorganic chemistry deals with the synthesis and behavior of inorganic and organometallic compounds. This field covers all chemical compounds except the myriad organic compounds (carbon based compounds, usually containing C-H bonds), which are the subjects of organic chemistry.

New Energy

Due to worldly fast-growth, energy consumption is increasing, energy supply and demand gap is increasing as well. Therefore, development of new energy becomes the main subjects for all around the world. New energy, is based on the new technology, the system development and utilization of renewable energy, such as nuclear energy, solar energy, ocean energy and so on.

Environmental Water Treatment

Water treatment is any process that makes water more acceptable for a specific end-use. The end use may be drinking, industrial water supply, irrigation, river flow maintenance, water recreation or many other uses, including being safely returned to the environment. Water treatment removes contaminants and undesirable components, or reduces their concentration so that the water becomes fit for its desired end-use.



**WEIDOLI
PERFORMANCES**

Weidoli valves for critical applications in chemical and petrochemical process (PTA process, Acetic acid, sulfuric and nitric acid, and chlorine services, Caustic Soda etc.), Onshore/Offshore (Desalination processing, oil/water separation, Fire Fighting, Cooling system), FPSO/FSO, Oil&Gas, Water treatment, Refinery, Pulp & Paper, Mining, Power generation etc.