

KOFLOW

FIGURE NUMBER SYSTEM

Butterfly Valve Figure Number System



1	Size	Xxin; xx, mm					
2	Operation type	1-Bare Stem	3-Worm Gear Operated	6**-Air Operated	7 [□] -Hydraulic Operated	9-Electric Operated	Manual Operated (omit)
3	Valve Type	D-Butterfly Valve D _H Check Butterfly Valve D _K Vacuum Butterfly Valve D _{TF} -Aeration Butterfly Valve DS- Expansion Butterfly Valve					
4	Pressure	0a-PN0.25	0b-PN0.6	0-PN1.0	1-PN1.6 class150	2-PN2.5	3-class300
		4-PN4.0 class400	6-PN6.4 class600	9-class900	10-PN10.0	1a-class125	2a-class250
5	Connection Ends	RF-Raised Face	FF-Flat Face	MFM-Male and Female Face	RJ-Ring Joint	BW-Buttweld	WS-Wafe with 4 lugs WL-Wafe with no lug WF- Single Reinforcement Wafer Type WU-Unthreaded Hole Wafer Type LL-Full Lug Screw Wafer Type LU-U-U LU-U-U Screw Wafer Type
6	Structure Type	1-Middle eccentric structure	2-Single eccentric structure	3-Double eccentric structure	4-Veriable eccentric structure	5-eccentric structure	
7	Basic Material	C-WCB	C-C5	C6-WC6	C9-WC9	BL-LCB	CL-LCC
		8-CF8	8M-CF8M	3-CF3	3M-CF3M	ML-MONEL	H-IRON
8	Material of Seat face or Liner	H- Cr13 S.S		E-18-8 S.S		R-Mo2Ti S.S	
		D-Nitriding Steel		M-Monel Alloy		Y-Hard Face	
						F- F-PTFE	
						X- Rubber	

Note:

- 1、 Use "W" to express seat sealing surface material which is processed directly by valve body.
- 2、 When the materials of sealing surface are different, use low hardness material symbol to express.
- 3、 Special Requirements not shown ,should be indicated in the purchase order
- 4、 The models listed in the sample book have no reference to pressure、 sizes and valve material symbols, they are to bedecided by users.
- 5、 **6S Spring Return, 6A Air Operated Control
- 6、 B-Pressure Retaining Type, Q-Full Pressure Type, S-Locked Type
- 7、 PN<0.25MPa, Omit Pressure

For example

6 " -3D1RF5CH

Butterfly valve, 6 " ,Worm Gear Operated ,ANSI CLASS150, RF Flange Ends, Triple eccentric stricture, Body& Disc Cast Steel WCB, 13Cr face Seat.

150--3D1RF5CH

Butterfly valve, DN150 PN16, Worm Gear Operated, ANSI CLASS150, RF Flange Ends, Triple eccentric stricture, Body& Disc Cast Steel WCB, 13Cr face Seat.

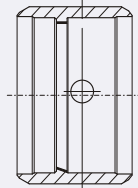
BUTTERFLY VALVE DESIGN FEATURES

Butterfly valves are used to open and close (seal type) or adjust the medium flow in pipes in the fields of food stuff, drinks, chemical, industrial water treatment, high-rise constructions, water supply and drainage etc.. They are mainly structured as following:

1、 Simple structure, small sizes, light weight and low installation dimensions. According to the types of body connection, they are basically classified to wafer type (including lug wafer type), flanged and welded.



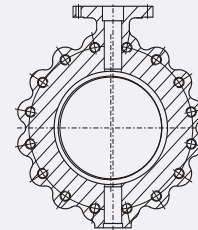
Flanged Connection



Butt-welded Connection



Wafer Connection

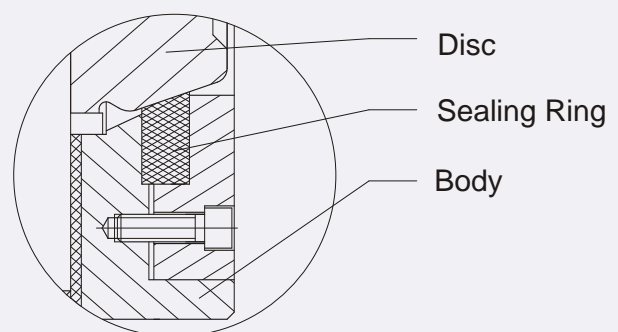
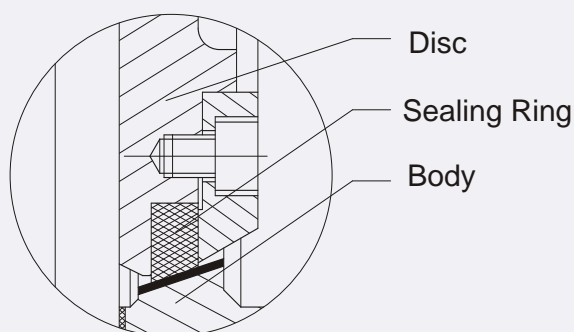


Lug Wafer Connection

2、 Sealing materials may be soft or hard, placed on body or disc, to meet different working conditions, and to effect good seal and long life.

1) Soft sealing structure (see fig. a), is applicable for single and double eccentric butterfly valves, pressure rating CLASS600. Centered sealing structure is applicable for pressure rating \leq CLASS 250. Sealing ring (PTFE) is placed on the valve body to feature the following:

- a) To effect dependable seal with no need of accessorial sealing ring or metal bracing ring.
- b) Bidirectional leakproof seal.
- c) Little maintenance and long service life.

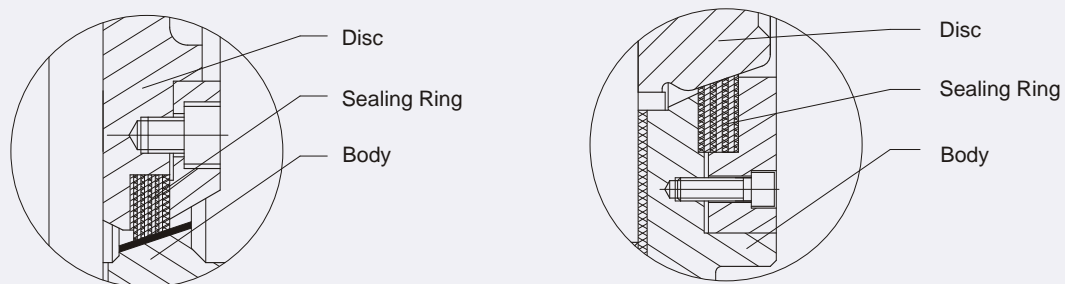


Soft Sealing Structure (fig.a)

BUTTERFLY VALVE DESIGN FEATURES

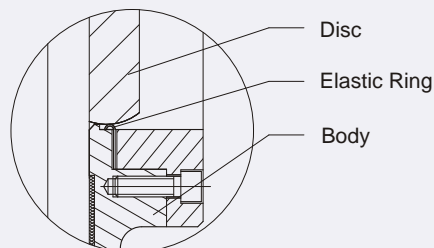
2) Multilayer Hard Seal Structure (See fig. b)

Multilayer hard seal structure is applicable for single, double and triple eccentric butterfly valves, pressure rating \leq CLASS600. And, triple eccentric butterfly valve can maintain two-way leak-tightness. Multilayer sealing ring is composite of stainless steel and nonmetal material. The nonmetal material can be flexible graphite, PTFE or nonasbestos material etc. according to the actual working conditions.



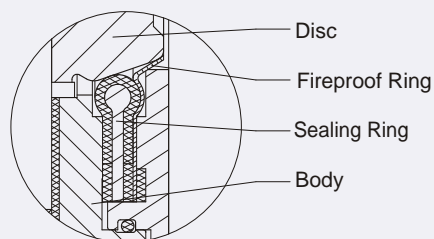
Multilayer Hard Seal Structure (fig.b)

3) Elastic ring hard seal structure (see fig. c) is of the structure of J-type metal sealing ring. It is applicable for single and double eccentric butterfly valves, pressure rating \leq CLASS 300. Provided with fireproof structure to adapt to conditions with great temperature changes, it is featured by outstanding seal, long service life and easy workmanship.



Elastic Ring Hard Seal Structure (fig.c)

3、 Fireproof butterfly valves (see fig. d) can stop the expansion of fire. Once the sealing seat of butterfly valve is on fire, the stainless Steel sealing ring will act to make butterfly valve immediately sealed.



Soft Seal Fireproof Structure (fig.d)

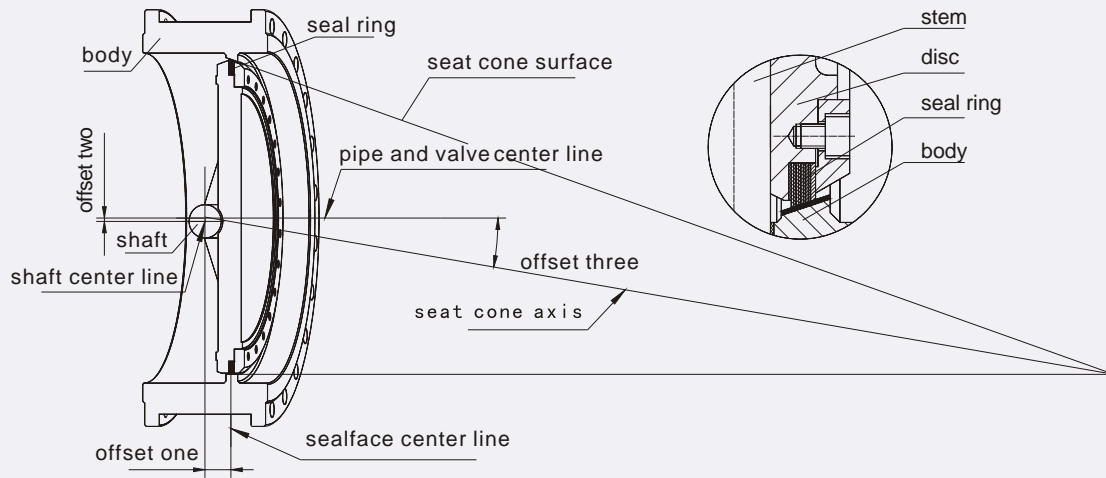
4、 When butterfly valve is fully opened, flow resistance is low.
When partially opened, it may carry out sensitive flow control.

5、 Low driving moment, easy and quick operation.

TRIPLE OFFSET BUTTERFLY VALVE

Design characteristics of triple offset butterfly valve and sealing principle

THE TRIPLE OFFSET GEOMETRY



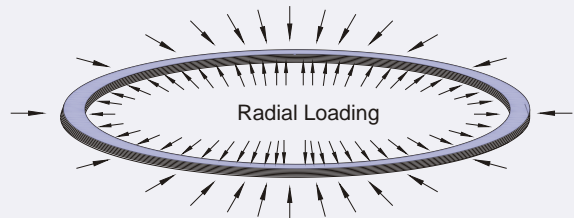
The first eccentric, shaft deviated from the centerline of sealing face.

The second eccentric, shaft deviated from the centerline of pipe and valve.

The third eccentric, the distinctive included angle between oblique taper angle of eccentric seat and centerline of pipe, thus making the seat completely disengaged from the sealing ring during the whole process of open and close. This structure not only uses cam effect, but also eliminates the possibility of abrasion and leakage.

The zero leakage of our triple eccentric butterfly valve is implemented by the composite stainless steel sealing ring mounted on the disc.

Zero leakage is implemented by the elastic sealing ring mounted on the disc. The elasticity of sealing ring (see fig. right) is produced by its radial compression and flexibility. The contact surface between the sealing ring and seat is an oblique cone. The contact angle between them gives slight 'wedge effect', making the sealing ring producing flexibility and radial compression. The even contact between the seat and sealing ring, and the elasticity of sealing ring makes the load on the seat even, thus to perform closest cutoff by the lowest torque. The elasticity produced by the torque makes the valve closely cut off, regardless of the flow direction or pressure of medium.



CHARACTERISTIC

Elastic property of composite metal sealing ring to perform zero leakage.

Torque seal to ensure persistent two-way zero leakage.

The design of right-angled rotation with zero friction is implemented by the distinctive triple eccentric principle. It eliminates the friction between the seat and sealing ring in 90° rotation.

STL one-piece hard-surface seat may adapt to many working conditions, which is featured by long service life and easy maintenance.

One-piece cast (sheet welded) body, face-to-face dimensions conforming to ISO5752, ASME B16.10 and API609, replacement to high performance butterfly valves and other types of valves, easy and flexible installation.

Intrinsic fireproof property thanks to allmetal structure and leak-tight performance.

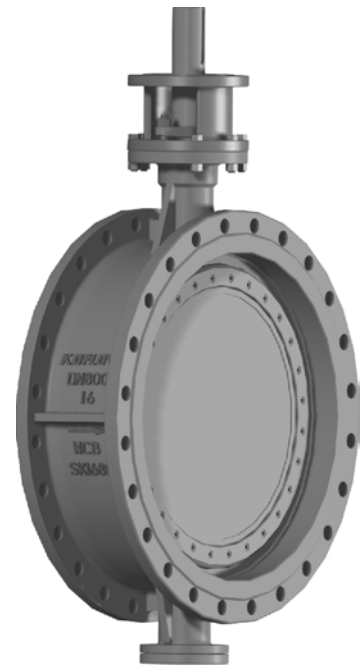
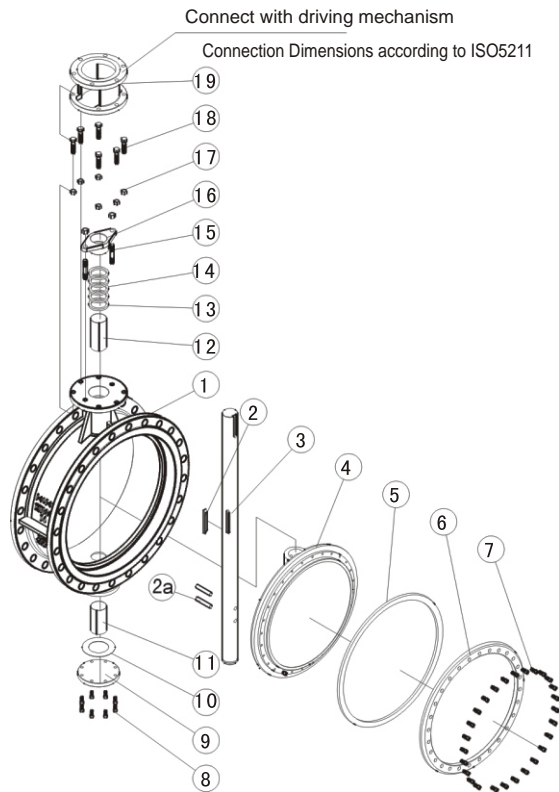
Anti-blowout stem for high dependability, completely conforming to API609.

The valve position indicator on the stem and the flange mounted at the top are in favor of the indication of disc position.

The stem of triple eccentric butterfly valve is a shaft, stem and disc are connected by key or pin-key combination.

TRIPLE OFFSET BUTTERFLY VALVE

Triple Offset Butterfly Valve Structural Drawing



Materials list(triple offset butterfly valve)

No.	Part Name	Materials	Optional Materials
1	Body	Cast Steel	SS, Monel
2	Key	SS	SS, Monel
2a	Pin	SS	Monel
3	Stem	SS	316, Monel
4	Disc	Cast Steel	SS, Monel
5	Seal Ring	PTFE+SS	SS+ Graphite
6	Retainer Flange	Carbon Steel	SS, Monel
7	Bolt	-	SS
8	Bolt	-	SS
9	Cover	Carbon Steel	SS, Monel
10	Gasket	Graphite	
11	Bushing	PTFE+Bronze	Luberized Bronze
12	Bushing	PTFE+Bronze	Luberized Bronze
13	Packing Seat	SS	SS, Monel
14	Packing	Graphite	PTFE
15	Bolt	-	SS
16	Packing Bushing	SS	SS
17	Nut	-	SS
18	Bolt	-	SS
19	Yoke	Carbon Steel	-

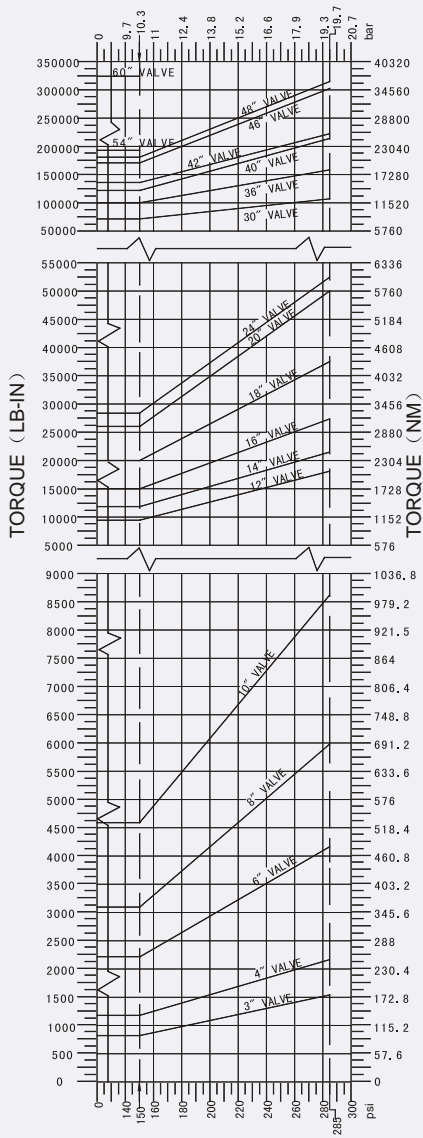
- Remarks: 1、 Pressure and temperature rating of shell material referred to Appendix F.
 2、 Chemical composition and mechanical properties of shell material referred to Appendix G.
 3、 Rated temperature of valve seat referred to Appendix E.

Type of body connection: The connection between triple eccentric butterfly valve body and pipe can be double flanged, wafer and lug wafer.

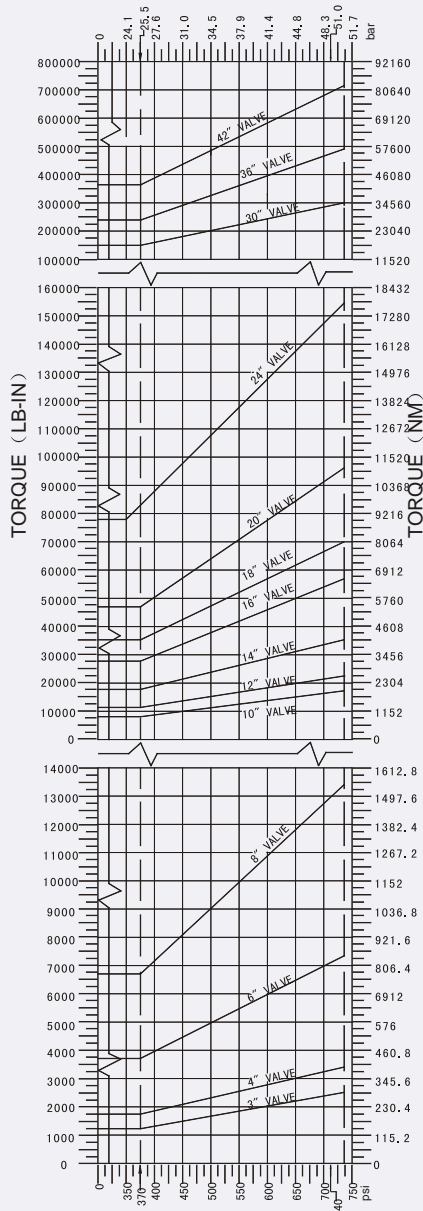
TRIPLE OFFSET BUTTERFLY VALVE

Reference Moment Diagram of Triple Eccentric Butterfly Valve

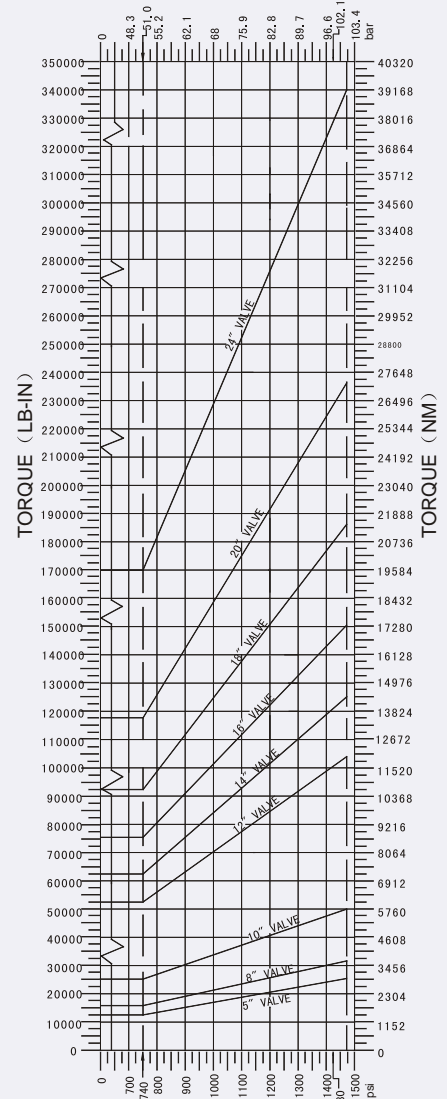
The following graphic torque is used for reference to choose the actuators of ANSI valves. According to the property of medium, trims and open-close frequency of valve shall be considered as extra factors.



CLASS 150



CLASS 300



CLASS 600

TRIPLE OFFSET BUTTERFLY VALVE

Triple Offset Butterfly Valve Torques (NM)

Size (mm)		Pressure								
DN	NPS	PN0.6MPa	PN1.0MPa	PN1.6MPa	PN2.5MPa	PN4.0MPa	PN6.3MPa	285PSI	740PSI	1480PSI
50	2"	-	-	37	-	-	-	-	-	-
65	2-1/2"	29	35	60	82	106	142	69	123	213
80	3"	34	57	81	102	148	290	174	271	460
100	4"	61	102	141	180	259	526	250	395	834
125	5"	104	165	228	289	412	641	283	548	979
150	6"	178	250	450	564	790	1060	473	825	2938
200	8"	201	400	601	800	1201	1567	674	1503	3616
250	10"	353	518	956	1250	1862	2697	983	1887	5649
300	12"	635	992	1352	1711	2428	3147	2022	2508	11863
350	14"	819	1623	2234	2844	4067	4855	2520	4158	14123
400	16"	1047	1944	2842	3738	5533	6473	3175	6271	17061
450	18"	1451	2451	3452	4412	6454	-	4239	7864	21015
500	20"	2043	3285	4527	5769	8253	-	5531	10361	26551
600	24"	2779	5548	6018	9495	13443	-	6011	17559	38415
700	28"	-	-	6890	-	-	-	-	-	-
750	30"	3230	6723	7700	16552	-	-	12654	33105	-
800	32"	-	-	8760	-	-	-	-	-	-
900	36"	5275	8474	9750	26438	-	-	18078	52877	-
1000	40"	6915	11717	13560	-	-	-	24179	-	-
1050	42"	8135	15253	16270	40110	34000	-	24857	80219	-
1200	48"	12540	20563	22360	38900	41900	-	36155	-	-
1350	54"	18300	21806	29977	-	-	-	-	-	-
1400	56"	24650	-	34900	-	-	-	-	-	-
1500	60"	26440	36155	43397	-	-	-	-	-	-
1600	64"	40850	-	48600	-	-	-	-	-	-
1800	72"	-	-	-	-	-	-	-	-	-
2000	80"	-	-	-	-	-	-	-	-	-
2200	88"	-	-	-	-	-	-	-	-	-
2400	96"	-	-	-	-	-	-	-	-	-
2600	104"	-	-	-	-	-	-	-	-	-
2800	112"	-	-	-	-	-	-	-	-	-
3000	120"	-	-	-	-	-	-	-	-	-

TRIPLE OFFSET BUTTERFLY VALVE

Flow Coefficients(Cv Values)

Flow coefficient is an index to measure the flow capacity of valve. The more the flow coefficient is, the less the pressure loss upon fluid flowing through the valve. The values of flow coefficient differ from the sizes, types and structures of valves. Valves of different types and specifications should be separately tested to make certain of its value of flow coefficient. For valves of the same structure, the value of flow coefficient differs according to the directions of fluid through the valves. This difference is usually caused by the difference in pressure recovery.

The table below is the flow coefficient of double eccentric butterfly valve, used for reference to choose valve flow coefficient. Cv means the American gallons of +60° F (+16°C) water flowing through the valve per minute under 1pound/inch² (0.006894757MPa) pressure drop.

Cv

Diameter	NPS	2"	2-1/2"	3"	4"	5"	6"	8"	10"
	DN	50	65	80	100	125	150	200	250
Class	CLASS150	93	133	188	343	400	930	1812	2750
	CLASS300	93	133	188	343	400	868	1678	2500
	CLASS600	52	78	120	228	346	744	1450	2125
	PN0.6	100	133	165	400	510	1050	2200	3300
	PN1.0	100	133	165	400	510	1050	2200	3300
	PN1.6	100	133	165	400	510	1050	2200	3300
	PN2.5	93	133	120	230	400	660	1500	2400
	PN4.0	93	133	120	230	400	660	1500	2400
Diameter	NPS	12"	14"	16"	18"	20"	24"	28"	30"
	DN	300	350	400	450	500	600	700	750
Class	CLASS150	3900	5515	8440	11285	14092	20587	-	33700
	CLASS300	3510	4942	7596	10394	12965	18962	-	29600
	CLASS600	2730	4217	6487	8874	11071	16188	-	-
	PN0.6	5100	5800	9287	11400	14000	21600	30000	34000
	PN1.0	5100	5800	9287	11400	14000	21600	30000	34000
	PN1.6	5100	5800	9287	11400	14000	21600	30000	34000
	PN2.5	3600	5500	7600	10300	13000	20200	-	28245
	PN4.0	3600	5500	7600	10300	13000	20200	-	28245
Diameter	NPS	32"	36"	40"	42"	48"	54"	56"	60"
	DN	800	900	1000	1050	1200	1350	1400	1500
Class	CLASS150	-	50470	64000	71100	95740	120750	-	147000
	CLASS300	-	42700	-	58100	-	-	-	-
	CLASS600	-	-	-	-	-	-	-	-
	PN0.6	41000	55500	8000	-	-	-	-	-
	PN1.0	41000	55500	8000	-	-	-	-	-
	PN1.6	41000	55500	8000	-	-	-	-	-
	PN2.5	-	47160	-	64190	83840	-	-	-
	PN4.0	-	47160	-	64190	83840	-	-	-
PN6.3	-	47160	-	64190	83840	-	-	-	

For sizes and classes not shown, please contact our Sales Department

TRIPLE OFFSET BUTTERFLY VALVE

Triple Offset Butterfly Valve Product Line

Size (mm)		Pressure								
DN	NPS	PN0.6MPa	PN1.0MPa	PN1.6MPa	PN2.5MPa	PN4.0MPa	PN6.3MPa	CLASS150	CLASS300	CLASS600
50	2"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
65	2-1/2"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
80	3"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
100	4"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
125	5"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
150	6"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
200	8"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
250	10"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
300	12"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
350	14"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
400	16"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
450	18"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
500	20"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
600	24"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆	△/★/☆
700	28"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	/	/	△/★/☆	/	/
750	30"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	/	/	△/★/☆	/	/
800	32"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	/	/	△/★/☆	/	/
900	36"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	/	/	△/★/☆	/	/
1000	40"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	/	/	△/★/☆	/	/
1050	42"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	/	/	△/★/☆	/	/
1200	48"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	/	/	△/★/☆	/	/
1400	56"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	/	/	△/★/☆	/	/
1500	60"	△/★/☆	△/★/☆	△/★/☆	△/★/☆	/	/	/	/	/
1600	64"	△/★/☆	△/★/☆	△/★/☆	/	/	/	/	/	/
1800	72"	△/★/☆	△/★/☆	△/★/☆	/	/	/	/	/	/
2000	80"	△/★/☆	△/★/☆	△/★/☆	/	/	/	/	/	/
2200	88"	△/★/☆	/	/	/	/	/	/	/	/
2400	96"	△/★/☆	/	/	/	/	/	/	/	/
2600	104"	△/★/☆	/	/	/	/	/	/	/	/
2800	112"	△/★/☆	/	/	/	/	/	/	/	/
3000	120"	△/★/☆	/	/	/	/	/	/	/	/

Note: ● stands for handle operated valves; ☆ stands for gear box operated valves;
 △ stands for air operated valves; ★ stands for electrically operated valves;
 / stands for no option of this.
 Those not covered in the table can be custom made to users' requirements.

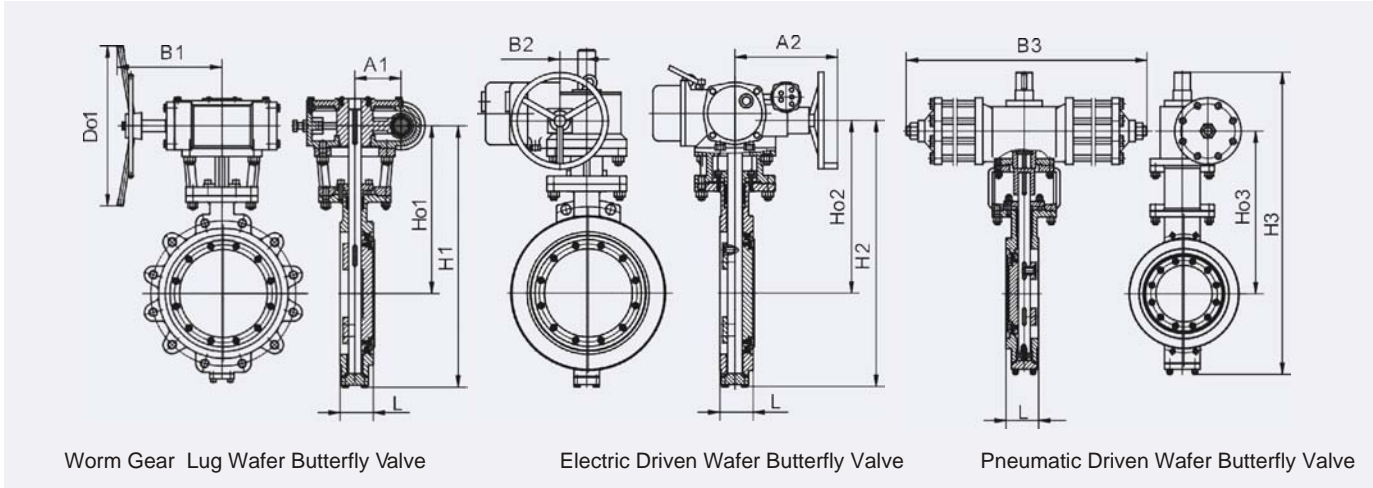
Technical Specification

Design Standard		GB/T12238					API609			
Pressure-Temperature Rating		GB/T12224					API609,ASME B16.34			
Face-Face		GB/T12221					API609,ISO5752,ASME B16.10			
Flange Ends		GB/T9113、JB/T79					ASME B16.5\B16.47			
Inspection & Test		JB/T9092、GB/T13927					API598			
Nominal Pressure(MPa)		1.0	1.6	2.5	4.0	6.3	CLASS150	CLASS300	CLASS600	
Test Pressure	Shell Test	1.5	2.4	3.75	6.0	9.45	2.93	7.58	15.0	
	High Pressure Seal Test	1.1	1.76	2.75	4.4	6.93	2.07	5.52	11.03	
	Low Pressure Seal Test	0.6					0.6			
Applicable Temperature		Different raw material for different work temperature								
Applicable Medium		Water、oil、gas and other causticity medium(Different raw material for different medium)								

Note: the experimental value of pressure in the table is subject to the pressure and temperature rating of WCB.

TRIPLE OFFSET BUTTERFLY VALVE

Wafer Type PN 0.6~1.0MPa



Main Outline Dimensions

PN 0.6MPa mm

DN	L		Pneumatic			Gear					Electric				Weight(kg)	
	Series1	Series2	H3	Ho3	B3	H1	Ho1	B1	A1	Do1	H2	Ho2	B2	A2	WF	WL
50	43	43	-	-	-	266	143	106	50	160	-	-	-	-	4.5	5.5
65	46	46	-	-	-	290	178	140	63	180	-	-	-	-	5	7
80	49	64	-	-	-	320	185	140	63	180	320	185	178	180	9	9
100	56	64	-	-	-	342	193	140	63	240	340	198	178	180	11	14
125	64	70	-	-	-	378	219	140	63	240	340	205	178	180	-	-
150	70	76	-	-	-	415	246	140	63	240	415	241	178	180	17	20
200	71	89	695	325	275	470	298	170	84	300	512	263	235	370	25	31
250	76	114	750	355	275	535	328	170	84	300	570	292	235	370	40	48
300	83	114	935	475	378	606	365	200	108	400	668	340	235	370	61	79
350	92	127	1000	510	378	695	408	200	108	400	745	385	235	370	82	107
400	102	140	1145	590	378	755	446	240	128	400	827	425	235	370	122	150
450	114	152	1205	632	530	815	475	330	152	600	915	462	235	370	150	183
500	127	152	1256	665	530	905	525	370	168	600	995	500	235	370	204	254
600	154	178	1526	830	530	1050	610	370	320	600	1183	605	245	515	300	398
700	165	229	1640	903	530	1276	795	515	237	800	1460	734	245	515	462	-
800	190	241	1786	972	680	1384	837	515	237	800	1589	803	245	515	570	-
900	203	241	1917	1052	680	1500	885	515	237	800	1856	990	360	540	762	771
1000	216	300	2600	1170	680	1620	946	570	785	600	1958	1050	360	540	975	1179
1200	254	360	-	-	-	2185	1165	570	785	600	2013	1165	360	540	1678	1927

PN 1.0MPa mm

DN	L		Pneumatic			Gear					Electric				Weight(kg)	
	Series1	Series2	H3	Ho3	B3	H1	Ho1	B1	A1	Do1	H2	Ho2	B2	A2	WF	WL
50	43	43	-	-	-	266	143	106	50	160	-	-	-	-	4.5	5.5
65	46	46	-	-	-	290	178	140	63	180	-	-	-	-	5	7
80	49	64	-	-	-	320	185	140	63	180	320	185	178	180	9	9
100	56	64	-	-	-	342	193	140	63	240	340	198	178	180	11	14
125	64	70	-	-	-	378	219	140	63	240	340	205	178	180	-	-
150	70	76	-	-	-	415	245	140	63	240	415	241	178	180	17	20
200	71	89	695	325	275	470	298	170	84	300	512	263	235	370	25	31
250	76	114	750	355	275	535	328	170	84	300	570	292	235	370	40	48
300	83	114	935	475	378	606	365	200	108	400	668	340	235	370	61	79
350	92	127	1000	510	378	695	408	200	108	400	745	385	235	370	82	107
400	102	140	1145	590	378	755	446	330	144	400	827	425	235	370	122	150
450	114	152	1205	632	530	815	475	330	144	600	915	462	235	370	150	183
500	127	152	1256	665	530	905	525	370	220	600	995	500	235	370	204	254
600	154	178	1526	830	530	1050	610	370	220	600	1183	605	245	515	300	398
700	165	229	1640	903	530	1276	795	515	279	800	1460	734	245	515	462	-
800	190	241	1786	972	680	1384	837	515	279	800	1589	803	245	515	570	-
900	203	241	1917	1052	680	1505	885	515	279	800	1856	990	360	540	762	771
1000	216	300	2600	1170	680	1620	946	570	368	600	1958	1050	360	540	975	1179
1200	254	360	-	-	-	2185	1165	570	378	600	2013	1165	360	540	1678	1927

TRIPLE OFFSET BUTTERFLY VALVE

Wafer Type PN 1.6~2.5MPa

Main Outline Dimensions

PN 1.6MPa mm

DN	L		Pneumatic			Gear					Electric				Weight(kg)	
	Series1	Series2	H3	Ho3	B3	H1	Ho1	B1	A1	Do1	H2	Ho2	B2	A2	WF	WL
50	43	43	-	-	-	266	143	160	106	50	-	-	-	-	4.5	5.5
65	46	46	-	-	-	290	175	160	140	63	-	-	-	-	7	7
80	49	64	-	-	-	320	185	160	140	63	513	265	178	180	9	9
100	56	64	-	-	-	342	195	160	140	63	538	282	178	180	20	11.5
125	64	70	-	-	-	365	209	300	140	63	560	295	178	180	23	17
150	70	76	-	-	-	415	243	300	140	63	605	300	178	180	29	22
200	71	89	695	327	275	510	263	400	150	84	749	321	235	370	40	39
250	76	114	750	355	275	567	295	400	150	84	803	330	235	370	50	47
300	83	114	955	472	378	665	342	600	200	108	880	365	235	370	68	68
350	92	127	1033	515	378	739	385	600	200	108	960	410	235	370	105	138
400	102	140	1185	595	530	825	430	600	240	152	1032	445	235	370	163	190
450	114	152	1270	632	530	910	469	330	144	600	1118	487	235	370	205	230
500	127	152	1335	665	530	990	500	370	220	600	1190	520	235	370	270	265
600	154	178	1642	829	680	1210	618	370	220	600	1380	625	235	370	390	437
700	165	229	1785	905	680	1475	746	515	279	800	1582	745	245	515	465	740
800	190	241	1915	970	680	1600	810	515	279	800	1713	810	245	515	570	920
900	203	241	-	-	-	1870	1000	515	279	800	1870	875	360	540	701	1189
1000	216	300	-	-	-	2000	1065	570	368	600	2000	940	360	540	800	1220
1200	254	360	-	-	-	2215	1170	570	378	600	2118	1060	360	540	922	1680

PN 2.5MPa mm

DN	L		Pneumatic			Gear					Electric				Weight(kg)	
	Series1	Series2	H3	Ho3	B3	H1	Ho1	B1	A1	Do1	H2	Ho2	B2	A2	WF	WL
50	43	43	-	-	-	266	143	106	50	160	-	-	-	-	6.3	6.3
65	46	46	-	-	-	290	175	140	63	160	-	-	-	-	9	9.2
80	49	64	-	-	-	513	265	63	140	160	552	265	178	180	11	11.
100	56	64	-	-	-	538	282	63	140	300	585	290	178	180	25	15
125	64	70	-	-	-	560	295	63	140	300	610	305	178	180	33	17
150	70	76	-	-	-	605	300	63	140	400	765	315	178	180	47	22
200	71	89	695	327	275	749	321	84	150	400	820	304	235	370	52	39
250	76	114	750	355	275	803	330	84	150	600	910	336	235	370	65	47
300	83	114	955	472	378	880	365	108	200	600	1000	386	235	370	68	123
350	92	127	1033	515	378	960	410	108	240	600	1055	425	235	370	138	190
400	102	140	1185	595	530	1032	445	128	240	800	1108	456	235	370	190	230
450	114	152	1270	632	530	1118	487	330	144	600	1140	490	235	370	230	265
500	127	152	1335	665	530	1190	520	370	220	600	1238	552	235	370	265	390
600	154	178	1642	829	680	1380	625	370	220	600	1399	635	245	515	437	465
700	165	229	1785	905	680	1582	745	515	279	800	1611	750	360	540	570	740
800	190	241	1915	970	680	1713	810	515	279	800	1782	820	360	540	705	920
900	203	241	-	-	-	1870	875	515	279	800	1915	886	385	565	730	1189
1000	216	300	-	-	-	2000	940	570	368	600	2040	945	385	565	927	1220
1200	254	360	-	-	-	2118	1060	570	378	600	2184	1053	400	770	953	1680

TRIPLE OFFSET BUTTERFLY VALVE

Wafer Type PN 4.0~10.0MPa

Main Outline Dimensions

PN 4.0MPa mm

DN	L		Pneumatic			Gear					Electric				Weight(kg)	
	Series1	Series2	H3	Ho3	B3	H1	Ho1	B1	A1	Do1	H2	Ho2	B2	A2	WF	WL
80	49	64	-	-	-	395	245	143	80	300	530	240	178	180	11	11.5
100	56	64	-	-	-	356	205	200	108	400	555	205	178	180	25	29
125	64	70	-	-	-	375	213	200	108	400	582	215	178	180	33	38
150	70	76	-	-	-	439	260	200	108	600	609	260	235	370	47	51
200	71	89	750	375	275	520	275	330	140	600	755	275	235	370	55	67
250	76	114	905	445	378	600	315	330	140	600	818	315	235	370	70	70
300	83	114	1085	538	503	692	365	370	220	800	912	363	245	515	135	142
350	92	127	1160	576	503	776	408	370	220	800	983	406	245	515	203	227
400	102	140	1230	609	503	864	443	370	220	800	1058	440	245	515	245	268
450	114	152	1520	765	680	1128	525	512	279	400	1135	545	360	540	283	333
500	127	152	1335	665	530	1257	664	512	279	400	1245	600	360	540	405	520
600	154	178	-	-	-	1380	625	512	279	400	1414	663	360	540	591	645
700	165	229	-	-	-	1435	712	570	368	600	-	-	-	-	723	785
800	190	241	-	-	-	1518	782	570	368	600	-	-	-	-	846	935

PN 6.3MPa mm

DN	L		Gear					Electric				Weight(kg)	
	Series1	Series2	H1	Ho1	B1	A1	Do1	H2	Ho2	B2	A2	WF	WL
80	49	64	388	192	63	140	400	543	242	178	180	11	11.5
100	56	64	395	205	63	140	400	578	204	178	180	25	29
125	64	70	420	225	84	150	600	607	214	178	180	33	38
150	70	76	498	265	108	200	600	659	259	235	370	47	56
200	71	89	540	292	152	240	600	795	285	235	370	70	94
250	76	114	638	328	168	300	800	885	325	235	370	103	141
300	83	114	725	372	192	320	800	1050	375	245	515	149	201
350	92	127	800	418	237	168	800	825	415	245	515	243	333
400	102	140	890	450	237	168	400	1205	452	245	515	318	401
450	114	152	1024	542	237	168	400	1335	545	360	540	431	575
500	127	152	1158	624	237	168	400	1470	625	360	540	472	708
600	154	178	1580	678	237	168	400	1582	675	360	540	825	1061

PN 10.0MPa mm

DN	L		Gear					Electric				Weight(kg)	
	系列1	系列2	H1	Ho1	B1	A1	Do1	H2	Ho2	B2	A2	WF	WL
80	49	64	388	192	63	140	400	608	108	178	180	11	11.5
100	56	64	395	205	63	140	400	648	108	178	180	25	29
125	64	70	420	225	84	150	600	692	120	178	180	33	38
150	70	76	498	265	108	200	600	740	135	235	370	47	56
200	71	89	540	292	152	240	600	1058	445	235	370	70	94
250	76	114	638	328	168	300	800	1175	536	235	370	103	141
300	83	114	725	372	192	320	800	1390	615	245	515	149	201
350	92	127	800	418	237	168	800	1475	675	245	515	243	333
400	102	140	890	450	237	168	400	1705	820	245	515	318	401
450	114	152	1024	542	237	168	400	1765	886	360	540	431	575
500	127	152	1158	624	237	168	400	1806	946	360	540	472	708
600	154	178	1580	678	237	168	400	1918	998	360	540	825	1061

Note: the weight in the table is that without drive unit. WF is wafer butterfly valve, and WL is lug wafer butterfly valve.

TRIPLE OFFSET BUTTERFLY VALVE

Wafer Type CLASS 150 ~600

Main Outline Dimensions

CLASS 150 mm

NPS	L	Gear			Electric					Pneumatic				Weight(kg)	
		H3	Ho3	B3	H1	Ho1	B1	A1	Do1	H2	Ho2	B2	A2	WF	WL
3"	49	-	-	-	320	185	140	63	160	513	263	178	180	9	9
4"	54	-	-	-	342	195	140	63	160	535	282	178	180	11	14
5"	57	-	-	-	365	209	140	63	300	563	293	178	180	15	18
6"	58	-	-	-	415	243	140	63	300	602	322	178	180	17	20
8"	64	690	323	275	510	263	150	84	400	745	296	235	370	25	31
10"	71	750	355	275	567	295	150	84	400	805	325	235	370	40	49
12"	81	955	475	378	665	342	200	108	600	883	365	235	370	61	79
14"	92	1032	513	378	739	385	200	108	600	965	408	235	370	82	107
16"	102	1182	598	530	825	430	240	152	600	1033	443	235	370	123	150
18"	114	1265	635	530	910	469	240	152	800	1120	485	235	370	150	182
20"	127	1335	667	530	990	500	300	168	800	1186	518	235	370	204	253
24"	154	1642	830	680	1210	618	320	192	800	1380	625	235	370	300	398
30"	165	1823	1245	680	1453	875	512	279	400	1583	1005	245	515	454	490
36"	203	2145	1329	860	1775	939	512	279	400	1905	1089	245	515	762	771
40"	217	2235	1488	860	1857	1005	512	279	400	2010	1110	360	540	975	1179
42"	214	2360	1456	860	1980	1086	512	279	400	2120	1216	360	540	1234	1338
46"	254	2445	1505	1080	2070	1110	570	368	600	2175	1260	360	540	1451	1724
48"	254	2535	1564	1080	2165	1194	570	368	600	2235	1324	360	540	1678	1928
54"	305	-	-	-	2382	1477	630	425	800	2412	1503	445	628	2223	2631
60"	333	-	-	-	2684	1617	630	425	800	2699	1687	445	628	2903	3447

CLASS 300 mm

NPS	L	Pneumatic			Gear					Electric				Weight(kg)	
		H3	Ho3	B3	H1	Ho1	B1	A1	Do1	H2	Ho2	B2	A2	WF	WL
3"	49	-	-	-	320	185	140	63	160	513	263	178	180	13.5	15.5
4"	54	-	-	-	342	195	140	63	160	535	282	178	180	18	21
5"	57	-	-	-	365	209	140	63	300	563	293	178	180	24	28
6"	59	-	-	-	415	243	140	63	300	602	322	178	180	28	34
8"	73	750	368	275	510	263	150	84	400	745	296	235	370	49	60
10"	83	909	442	378	567	295	150	84	400	805	325	235	370	68	88
12"	92	1075	535	530	665	342	200	108	600	883	365	235	370	109	117
14"	117	1158	572	530	739	385	200	108	600	965	408	235	370	186	207
16"	133	1230	610	530	825	430	240	152	600	1033	443	235	370	264	308
18"	149	1462	736	680	910	469	240	152	800	1120	485	235	370	297	408
20"	159	1328	765	680	990	500	300	168	800	1186	518	235	370	363	468
24"	181	-	-	-	1210	618	320	192	800	1380	625	235	370	454	748
30"	254	-	-	-	1937	1180	512	279	600	1516	716	360	540	816	1338
36"	305	-	-	-	2198	1298	570	368	600	1669	794	360	540	1429	2154
42"	324	-	-	-	2318	1358	570	368	600	1914	914	360	540	2155	2427

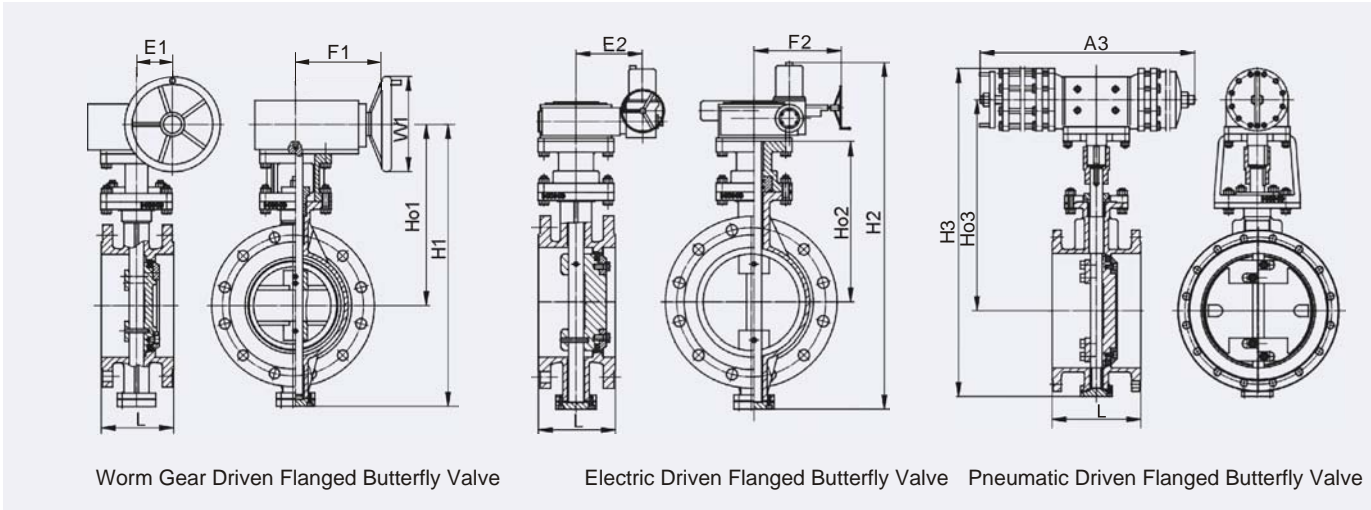
CLASS 600 mm

NPS	L	Pneumatic			Gear					Electric				Weight(kg)	
		H3	Ho3	B3	H1	Ho1	B1	A1	Do1	H2	Ho2	B2	A2	WF	WL
6"	78	-	-	-	415	243	140	63	300	602	322	178	180	45	56
8"	102	750	368	275	510	263	150	84	400	745	296	235	370	70	94
10"	117	909	442	378	567	295	150	84	400	805	325	235	370	103	141
12"	140	1075	535	530	665	342	200	108	600	883	365	235	370	149	201
14"	155	1158	572	530	739	385	200	108	600	965	408	235	370	243	333
16"	178	1230	610	530	825	430	240	152	600	1033	443	235	370	318	401
18"	200	-	-	-	910	469	240	152	800	1120	485	235	370	431	575
20"	216	-	-	-	990	500	300	168	800	1186	518	235	370	472	708
24"	232	-	-	-	1210	618	320	192	800	1380	625	235	370	826	1061

Note: the weight in the table is that without drive unit. WF is wafer butterfly valve, and WL is lug wafer butterfly valve.

TRIPLE OFFSET BUTTERFLY VALVE

Flange Type PN 0.6MPa



Main Outline Dimensions

PN 0.6MPa mm

DN	L	Gear					Electric				Pneumatic			Weight(kg)
		H1	Ho1	E1	F1	W1	H2	Ho2	E2	F2	H3	Ho3	A3	Worm wheel drive
50	108	293	218	32	130	160	316	195	156	126	-	-	-	12
65	112	313	228	32	130	160	336	205	156	126	-	-	-	13
80	114	333	238	32	130	180	353	215	156	126	-	-	-	15
100	127	345	255	50	150	180	380	220	168	126	-	-	-	17
125	140	370	270	50	150	200	413	235	168	126	-	-	-	27
150	140	425	305	62	150	200	466	275	250	126	-	-	-	29
200	152	488	362	62	150	350	554	310	250	175	695	325	275	45
250	165	575	410	80	160	350	630	365	250	175	750	355	275	69
300	178	642	444	80	160	400	693	400	290	268	935	475	378	86
350	190	731	492	94	185	400	771	460	290	268	1000	510	378	122
400	216	786	522	94	185	600	837	490	290	268	1145	590	378	129
450	222	844	552	94	185	600	892	520	290	268	1205	632	530	200
500	229	945	606	132	232	600	973	590	290	268	1256	665	530	235
600	267	1060	666	132	232	800	1098	650	410	460	1526	830	530	291
700	292	1222	726	185	295	800	1252	750	410	460	1640	903	530	382
800	318	1340	862	185	295	400	1376	810	305	610	1786	972	680	480
900	330	1391	915	234	354	400	1417	905	305	610	1917	1052	680	627
1000	410	1596	1020	234	354	400	1575	960	385	650	2015	1210	1770	886
1200	470	1861	1075	296	354	400	1734	1115	385	650	2235	1360	1770	1197
1400	530	2066	1235	296	426	600	1908	1220	535	745	2476	1476	1890	1736
1600	600	2397	1355	410	426	600	2121	1410	535	745	2601	1599	1960	2527
1800	670	2674	1600	410	550	600	2512	1515	660	820	-	-	-	3311
2000	950	2901	1725	506	550	600	2857	1710	660	820	-	-	-	4102
2200	1000	3119	1970	506	666	800	3124	1820	825	920	-	-	-	5047
2400	1110	3324	2080	506	666	800	3375	1925	825	920	-	-	-	6377
2600	1190	3780	2351	568	762	800	3830	2100	825	920	-	-	-	7000
2800	1270	3933	2425	568	762	800	4100	2235	825	920	-	-	-	8120
3000	1350	4380	2600	568	762	800	4410	2370	825	920	-	-	-	9520

Structural length of valves in the table: DN<2000, to ISO5752 13 series; DN ≥ 2000, to ISO5752 14 series.

TRIPLE OFFSET BUTTERFLY VALVE

Flange Type PN 1.0MPa

Main Outline Dimensions

PN 1.0MPa mm

DN	L	Gear					Electric				Pneumatic			Weight(kg)
		H1	Ho1	E1	F1	W1	H2	Ho2	E2	F2	H3	Ho3	A3	Worm wheel drive
50	108	295	195	32	125	160	316	218	156	126	-	-	-	12
65	112	313	205	32	125	180	336	228	156	126	-	-	-	13
80	114	330	215	32	125	180	353	238	156	126	-	-	-	15
100	127	350	225	32	150	200	380	255	168	126	-	-	-	17
125	140	408	265	44	160	200	413	270	168	126	-	-	-	27
150	140	446	285	44	160	350	466	305	250	126	-	-	-	29
200	152	527	345	64	170	350	554	362	250	175	740	367	275	45
250	165	595	375	64	170	400	630	410	250	175	900	443	378	69
300	178	679	430	64	190	400	693	444	290	268	990	493	378	86
350	190	744	465	94	190	600	771	492	290	268	1155	575	378	122
400	216	855	540	94	190	600	837	522	290	268	1205	600	530	150
450	222	910	570	132	230	600	892	552	290	268	1290	643	530	214
500	229	972	605	132	230	800	973	606	290	268	1395	705	530	263
600	267	1137	705	185	275	800	1098	666	410	460	1665	838	530	333
700	292	1255	765	185	275	400	1252	762	410	460	1882	942	680	473
800	318	1425	870	234	320	400	1575	1020	305	610	2093	1066	680	655
900	330	1531	925	234	320	400	1734	1075	305	610	2175	1210	1480	844
1000	410	1708	1035	296	370	400	1908	1235	385	650	2245	1275	1560	1078
1200	470	1941	1155	296	370	600	2121	1355	385	650	2375	1385	1830	1729
1400	530	2263	1350	410	475	600	2512	1600	535	745	2530	1510	1890	2247
1600	600	2507	1475	410	475	600	2857	1725	535	745	2779	1639	1960	3059
1800	670	2824	1670	506	570	600	3124	1970	660	820	-	-	-	3717
2000	950	3075	1780	506	570	800	3375	2080	660	820	-	-	-	4480
2200	1000	3481	2051	636	660	800	3780	2351	825	920	-	-	-	5880
2400	1110	3705	2125	636	660	800	3933	2425	825	920	-	-	-	7140

Structural length of valves in the table: DN<2000, to ISO5752 13 series; DN ≥ 2000, to ISO5752 14 series.

TRIPLE OFFSET BUTTERFLY VALVE

Flange Type PN 1.6MPa

Main Outline Dimensions

PN 1.6MPa mm

DN	L	Gear					Electric				Pneumatic			Weight(kg)
		H1	Ho1	E1	F1	W1	H2	Ho2	E2	F2	H3	Ho3	A3	
50	108	290	175	32	125	160	316	218	156	126	-	-	-	19
65	112	295	195	63	140	180	336	228	156	126	-	-	-	22
80	114	320	185	63	140	180	513	265	178	180	-	-	-	32
100	127	342	195	63	140	200	538	282	178	180	-	-	-	36
125	140	365	209	63	140	200	560	295	178	180	-	-	-	39
150	140	415	243	63	140	350	605	300	178	180	-	-	-	43
200	152	510	263	84	150	350	749	321	235	370	695	327	275	57
250	165	567	295	84	150	400	803	330	235	370	750	355	275	88
300	178	665	342	108	200	400	880	365	235	370	955	472	378	109
350	190	739	385	108	200	600	960	410	235	370	1033	515	378	144
400	216	825	430	152	240	600	1032	445	235	370	1185	595	530	200
450	222	910	469	152	240	600	1118	487	235	370	1270	632	530	238
500	229	990	500	168	300	800	1190	520	235	370	1335	665	530	326
600	267	1210	618	192	320	800	1380	625	235	370	1642	829	680	466
700	292	1475	746	338	237	400	1582	745	245	515	1785	905	680	592
800	318	1600	810	338	237	400	1713	810	245	515	1915	970	680	917
900	330	1870	1000	530	785	400	1870	875	360	540	1964	1239	1480	1078
1000	410	2000	1065	530	785	400	2000	940	360	540	2096	1306	1770	1393
1200	470	2215	1170	530	785	600	2118	1060	360	540	2333	1418	1830	1855
1400	530	2430	1319	650	865	600	2328	1325	385	565	2591	1546	1890	2457
1600	600	2700	1443	650	865	600	2550	1450	385	565	2908	1738	2210	3360
1800	670	2938	1595	650	865	600	2816	1598	300	770	-	-	-	-
2000	950	3210	1743	650	865	800	3065	1743	684	794	-	-	-	-
2200	1000	3481	2051	636	660	800	3780	2351	825	920	-	-	-	-
2400	1110	3705	2125	636	660	800	3933	2425	825	920	-	-	-	-

Structural length of valves in the table: DN<2000, to ISO5752 13 series; DN ≥ 2000, to ISO5752 14 series.

TRIPLE OFFSET BUTTERFLY VALVE

Flange Type PN 2.5~4.0MPa

Main Outline Dimensions

PN 2.5MPa mm

DN	L	Gear					Electric				Pneumatic			Weight(kg)
		H1	Ho1	E1	F1	W1	H2	Ho2	E2	F2	H3	Ho3	A3	Worm wheel drive
50	108	290	175	63	140	180	316	218	156	126	-	-	-	19
65	112	295	195	63	140	200	336	228	156	126	-	-	-	22
80	114	320	185	63	140	200	552	265	178	180	-	-	-	32
100	127	350	200	63	140	350	585	290	178	180	-	-	-	36
125	140	375	210	63	140	350	610	305	178	180	-	-	-	39
150	140	425	245	84	150	400	765	315	178	180	-	-	-	42
200	152	526	270	84	150	400	820	304	235	370	740	367	275	67
250	165	590	302	108	200	600	910	336	235	370	890	443	378	98
300	178	695	360	108	200	600	1000	386	235	370	985	495	378	116
350	190	789	420	152	240	600	1055	425	235	370	1155	575	530	175
400	216	848	435	152	240	800	1108	456	235	370	1206	603	530	228
450	222	943	475	168	300	800	1140	490	235	370	1284	643	530	312
500	229	1079	550	192	320	400	1238	552	235	370	1390	705	535	354
600	267	1352	675	338	237	400	1399	635	245	515	1660	835	680	515
700	292	1495	759	338	237	400	1611	750	360	540	-	-	-	686
800	318	1640	835	530	785	400	1782	820	360	540	-	-	-	1155
900	330	1765	886	530	785	600	1915	886	385	565	-	-	-	1337
1000	410	1885	945	530	785	600	2040	945	385	565	-	-	-	1617
1200	470	2100	1055	650	865	600	2184	1053	300	770	-	-	-	2247
1400	530	2325	1163	650	865	600	2375	1164	684	794	-	-	-	-

PN 4.0MPa mm

DN	L	Gear					Electric				Pneumatic			Weight(kg)
		H1	Ho1	E1	F1	W1	H2	Ho2	E2	F2	H3	Ho3	A3	Worm wheel drive
50	108	350	238	63	140	350	354	238	178	180	625	513	250	-
65	112	370	255	84	150	400	389	255	178	180	625	510	250	-
80	114	380	260	84	150	400	530	260	235	370	645	525	250	-
100	127	420	298	108	200	600	555	298	235	370	675	537	250	-
125	140	460	325	108	200	600	582	325	235	370	715	551	450	-
150	140	555	380	152	240	600	609	350	235	370	800	625	450	-
200	152	760	460	152	240	800	755	385	235	370	850	650	450	84
250	165	830	587	168	300	800	818	437	235	370	925	682	450	158
300	178	895	645	192	320	400	912	485	235	370	1035	785	650	200
350	190	950	670	338	237	400	983	580	245	515	1070	790	650	235
400	216	1190	810	338	237	400	1058	600	360	540	1190	840	650	382
450	222	1225	850	338	237	400	1245	610	360	540	-	-	-	427
500	229	1285	857	530	785	600	1325	660	385	565	-	-	-	511
600	267	1357	885	530	785	600	1414	710	385	565	-	-	-	826

Structural length of valves in the table: DN<2000, to ISO5752 13 series; DN ≥ 2000, to ISO5752 14 series.

TRIPLE OFFSET BUTTERFLY VALVE

Flange Type PN 6.3~10.0MPa & CLASS 150

Main Outline Dimensions

PN 6.3MPa mm

DN	L	Gear					Electric				Pneumatic			Weight(kg)
		H1	Ho1	E1	F1	W1	H2	Ho2	E2	F2	H3	Ho3	A3	Worm wheel drive
80	180	388	263	84	150	400	530	260	235	370	645	525	250	29
100	190	435	302	108	200	600	555	298	235	370	675	537	250	39
125	200	467	329	108	200	600	582	325	235	370	715	551	450	46
150	210	565	388	152	240	600	609	350	235	370	800	625	450	54
200	230	768	469	152	240	800	755	385	235	370	850	650	450	84
250	250	839	602	168	300	800	818	437	235	370	925	682	450	109
300	270	906	649	192	320	400	912	485	235	370	1035	785	650	157
350	290	959	679	338	237	400	983	580	245	515	1070	790	650	214
400	310	1205	816	338	237	400	1058	600	360	540	1190	840	650	276
450	330	1245	858	338	237	400	1245	610	360	540	-	-	-	360
500	350	1305	867	530	785	600	1325	660	385	565	-	-	-	460
600	390	1365	895	530	785	600	1414	710	385	565	-	-	-	670

PN 10.0MPa mm

DN	L	Gear					Electric				Pneumatic			Weight(kg)
		H1	Ho1	E1	F1	W1	H2	Ho2	E2	F2	H3	Ho3	A3	Worm wheel drive
80	180	388	263	84	150	400	530	260	235	370	645	525	250	32
100	190	435	302	108	200	600	555	298	235	370	675	537	250	43
125	200	467	329	108	200	600	582	325	235	370	715	551	450	51
150	210	565	388	152	240	600	609	350	235	370	800	625	450	59
200	230	768	469	152	240	800	755	385	235	370	850	650	450	82
250	250	839	602	168	300	800	818	437	235	370	925	682	450	120
300	270	906	649	192	320	400	912	485	235	370	1035	785	650	172
350	290	959	679	338	237	400	983	580	245	515	1070	790	650	235
400	310	1205	816	338	237	400	1058	600	360	540	1190	840	650	302
450	330	1245	858	338	237	400	1245	610	360	540	-	-	-	396
500	350	1305	867	530	785	600	1325	660	385	565	-	-	-	506
600	390	1365	895	530	785	600	1414	710	385	565	-	-	-	737

CLASS 150 mm

NPS	L	Gear					Electric				Pneumatic			Weight(kg)
		H1	Ho1	E1	F1	W1	H2	Ho2	E2	F2	H3	Ho3	A3	Worm wheel drive
3"	114	472	350	50	203	203	513	263	180	178	-	-	-	15.4
4"	127	520	386	60	191	203	535	282	180	178	-	-	-	23
5"	140	580	395	60	215	250	563	293	180	178	-	-	-	29
6"	140	653	475	67	289	305	602	322	180	178	-	-	-	33
8"	152	773	565	67	308	460	745	296	370	235	690	323	275	50
10"	165	880	640	86	346	460	805	325	370	235	750	355	275	73
12"	178	989	711	111	403	610	883	365	370	235	955	475	378	108
14"	190	1044	760	60	601	356	965	408	370	235	1032	513	378	143
16"	216	1142	826	60	605	457	1033	443	370	235	1182	598	530	186
18"	222	1228	887	60	652	610	1120	485	370	235	1265	635	530	234
20"	229	1337	959	60	805	762	1186	518	370	235	1335	667	530	277
24"	267	1554	1109	103	763	762	1380	625	370	235	1642	830	680	408
28"	292	1456	956	245	400	315	1587	745	515	245	1711	859	680	653
30"	308	1541	991	310	460	400	1650	777	515	245	1782	910	680	816
32"	318	1611	1036	310	460	400	1717	810	515	245	1856	942	680	914
36"	330	1743	1103	410	480	400	1870	875	540	360	1920	975	680	1157
40"	410	1868	1173	410	480	400	2030	965	540	360	-	-	-	1610
44"	450	1968	1223	410	480	400	2078	1022	540	360	-	-	-	2160
48"	470	2145	1320	520	640	400	2188	1100	540	360	-	-	-	2359
52"	490	2300	1405	520	640	400	2214	1150	565	385	-	-	-	2720
56"	530	2440	1475	520	640	400	2328	1325	565	385	-	-	-	3353
60"	570	2594	1559	450	785	630	2530	1515	565	385	-	-	-	3629

Structural length of valves in the table: DN<2000, to ISO5752 13 series; DN ≥ 2000, to ISO5752 14 series.

TRIPLE OFFSET BUTTERFLY VALVE

Flange Type CLASS 300~600

Main Outline Dimensions

CLASS 300 mm

NPS	L	Gear					Electric				Pneumatic			Weight(kg)		
		H1	Ho1	E1	F1	W1	H2	Ho2	E2	F2	H3	Ho3	A3	Worm	Electric	Pneumatic
2"	108	365	237	35	169	152	407	237	180	178	-	-	-	19	27	-
3"	114	378	253	73	229	152	530	253	180	178	-	-	-	29	43	-
4"	127	421	274	73	229	305	552	274	180	178	-	-	-	39	51	-
5"	140	482	312	73	229	305	580	312	180	178	-	-	-	48	58	-
6"	140	543	351	108	254	305	610	351	180	178	-	-	-	54	67	-
8"	152	628	392	108	254	305	755	392	370	235	750	368	275	84	107	-
10"	165	855	480	133	305	610	816	480	370	235	909	442	378	118	150	-
12"	178	812	515	133	305	610	912	515	370	235	1075	535	530	170	225	-
14"	191	885	555	194	356	610	980	555	370	235	1158	572	530	231	266	-
16"	216	951	590	194	356	356	1057	590	370	235	1230	610	530	299	369	-
18"	225	1106	636	194	356	356	1140	636	370	235	1462	736	680	390	429	-
20"	229	1308	685	194	356	356	1243	685	515	245	1328	765	680	499	590	-
24"	267	1445	934	165	686	686	1420	934	817	351	-	-	-	726	766	-
28"	292	1495	1039	165	686	686	1812	1039	817	351	-	-	-	1360	-	-
30"	292	1535	1060	165	686	686	1906	1060	817	351	-	-	-	1429	-	-
32"	318	1575	1120	165	686	686	2021	1120	817	351	-	-	-	1757	-	-
36"	330	1605	1190	165	686	686	2327	1190	973	440	-	-	-	2223	-	-
40"	410	1755	1234	165	686	686	2451	1234	973	440	-	-	-	2531	-	-
42"	430	2100	1385	429	805	903	2515	1385	973	440	-	-	-	2781	-	-
44"	450	2175	1436	429	805	903	2565	1436	973	440	-	-	-	2979	-	-
48"	470	2303	1570	399	965	903	2697	1570	973	440	-	-	-	3602	-	-

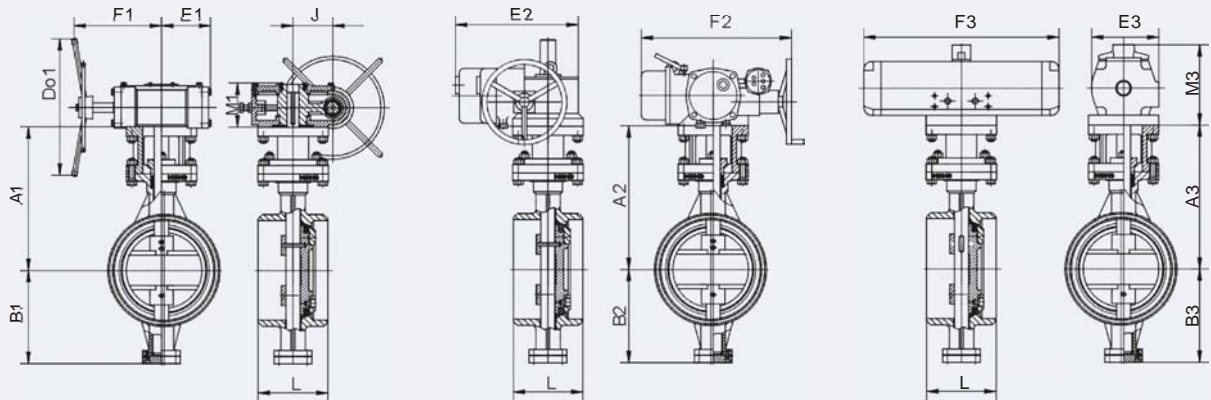
CLASS 600 mm

NPS	L	Gear					Electric				Pneumatic			Weight(kg)		
		H1	Ho1	E1	F1	W1	H2	Ho2	E2	F2	H3	Ho3	A3	Worm	Electric	Pneumatic
3"	180	541	414	63	140	250	606	295	180	178	-	-	-	82	79	-
4"	190	607	447	63	140	250	650	358	180	178	-	-	-	125	96	-
5"	200	680	395	108	200	250	695	371	180	178	-	-	-	165	154	-
6"	210	686	490	152	240	315	743	387	180	178	-	-	-	191	172	-
8"	230	757	536	168	300	315	1055	417	370	235	-	-	-	247	248	-
10"	250	867	641	192	320	315	1172	465	370	235	-	-	-	413	308	-
12"	270	1034	727	237	368	400	1392	546	515	245	-	-	-	576	467	-
14"	290	1087	757	237	368	400	1475	579	515	245	-	-	-	664	585	-
16"	310	1216	825	237	368	400	1557	643	540	360	-	-	-	971	807	-
18"	330	1240	840	269	559	400	1625	673	540	360	-	-	-	1117	1003	-
20"	350	1330	978	350	645	400	1679	701	540	360	-	-	-	1639	1139	-
24"	390	1583	1070	350	645	400	1834	775	540	360	-	-	-	2082	1767	-

Structural length of valves in the table: 300Lb, to ISO5752 13 series; 600Lb, to ISO5752 14 series.

TRIPLE OFFSET BUTTERFLY VALVE

Buttwelded Type PN0.6MPa



Worm Gear Driven Butt-welded Butterfly Valve

Electric Driven Butt-welded Butterfly Valve

Pneumatic Driven Butt-welded Butterfly Valve

Main Outline Dimensions

PN 0.6MPa mm

DN	L	Gear							Electric				Pneumatic					Weight(kg)		
		A1	B1	M1	E1	F1	J	Do1	A2	B2	E2	F2	A3	B3	E3	F3	M3	Worm	Electric	Pneumatic
80	180	203	125	75	90	205	83	200	203	125	475	505	203	125	93	282	110	27	42	29.5
100	190	208	130	75	90	205	83	200	208	130	475	505	208	130	93	282	110	34	46	36
125	200	218	140	75	90	205	83	200	218	140	475	505	218	140	115	344	140	41	48	46
150	210	285	155	95	90	205	83	200	285	155	475	505	285	155	115	344	140	43	53	51
200	230	320	180	95	90	205	83	200	320	180	475	505	320	180	150	450	187	81	84	80
250	250	349	220	95	90	205	83	200	349	220	475	505	349	220	290	762	270	102	124	122
300	270	398	250	115	90	205	83	200	398	250	475	505	398	250	290	762	270	132	138	142
350	290	417	275	115	90	205	83	250	417	275	475	505	417	275	330	900	305	164	176	192
400	310	455	315	134	90	205	83	250	455	315	475	505	455	315	370	1084	350	193	183	270
450	330	480	340	134	90	205	83	250	480	340	475	505	480	340	370	1084	350	238	270	310
500	350	512	375	159	120	265	141	250	512	375	566	505	512	375	405	1182	390	302	315	414
600	390	562	425	159	120	265	141	250	562	425	566	545	562	425	405	1182	390	415	421	484
700	430	636	490	163	185	250	115	315	636	490	615	545	636	490	500	1442	470	660	615	725
800	470	706	550	163	185	250	115	315	706	550	615	545	706	550	630	1865	500	780	705	825
900	510	756	600	185	185	250	115	315	756	600	820	520	756	600	-	-	-	820	825	-
1000	550	816	650	185	245	400	145	315	816	650	820	545	816	650	-	-	-	1265	1285	-
1200	630	944	775	220	310	460	191	400	944	775	945	545	944	775	-	-	-	1590	1655	-
1400	710	1084	895	220	310	460	191	400	1084	895	945	545	1084	895	-	-	-	2185	2255	-
1600	790	1204	1025	220	410	555	270	400	1204	1025	1140	545	1204	1025	-	-	-	3210	3330	-
1800	870	1395	1095	320	520	640	351	400	1395	1095	1337	545	1395	1095	-	-	-	4090	4350	-
2000	950	1449	1195	320	520	640	351	400	1449	1195	1337	545	1449	1195	-	-	-	5610	5680	-
2200	1000	1569	1325	320	520	640	351	400	1569	1325	1337	545	1569	1325	-	-	-	6410	6630	-
2400	1100	1704	1445	320	520	640	351	400	1704	1445	1377	715	1704	1445	-	-	-	7810	8255	-
2600	1190	1824	1565	335	450	785	440	630	1824	1565	1443	715	1824	1565	-	-	-	9450	9550	-
2800	1270	1944	1685	335	450	785	440	630	1944	1685	1443	845	1944	1685	-	-	-	10800	11030	-
3000	1350	2074	1815	335	450	785	440	630	2074	1815	1443	845	2074	1815	-	-	-	12200	12880	-

Note: 1、 The structural length of valve to ISO5752 14 series.
 2、 Welding groove to GB/T12224 specifications

TRIPLE OFFSET BUTTERFLY VALVE

Buttwelded Type PN1.0~1.6MPa

Main Outline Dimensions

PN 1.0MPa mm

DN	L	Gear							Electric				Pneumatic					Weight(kg)		
		A1	B1	M1	E1	F1	J	Do1	A2	B2	E2	F2	A3	B3	E3	F3	M3	Worm	Electric	Pneumatic
80	180	203	125	75	90	205	83	200	203	125	475	505	203	125	93	282	110	-	-	-
100	190	208	130	75	90	205	83	200	208	130	475	505	208	130	93	282	110	-	-	-
125	200	218	140	75	90	205	83	200	218	140	475	505	218	140	115	344	140	-	-	-
150	210	285	155	95	90	205	83	200	285	155	475	505	285	155	115	344	140	58	73	-
200	230	320	180	95	90	205	83	200	320	180	475	505	320	180	150	450	187	76	91	-
250	250	349	220	95	90	205	83	200	349	220	475	505	349	220	290	762	270	115	130	-
300	270	398	250	115	90	205	83	200	398	250	475	505	398	250	290	762	270	145	165	-
350	290	417	275	115	90	205	83	250	417	275	475	505	417	275	330	900	305	185	205	-
400	310	455	315	134	90	205	83	250	455	315	566	505	455	315	370	1084	350	245	265	-
450	330	480	340	134	90	205	83	250	480	340	566	545	480	340	370	1084	350	315	335	-
500	350	512	375	159	120	265	141	250	512	375	615	545	512	375	405	1182	390	375	395	-
600	390	562	425	159	120	265	141	250	562	425	615	545	562	425	405	1182	390	510	530	-
700	430	636	490	163	185	250	115	315	636	490	820	520	636	490	500	1442	470	770	790	-
800	470	706	550	163	185	250	115	315	706	550	820	545	706	550	630	1865	500	1070	1090	-
900	510	756	600	185	185	250	115	315	756	600	945	545	756	600	-	-	-	1435	1455	-
1000	550	816	650	185	245	400	145	315	816	650	945	545	816	650	-	-	-	1745	1755	-
1200	630	944	775	220	310	460	191	400	944	775	1140	545	944	775	-	-	-	2725	2745	-
1400	710	1084	895	220	310	460	191	400	1084	895	1337	545	1084	895	-	-	-	3510	3550	-
1600	790	1204	1025	220	410	555	270	400	1204	1025	1337	545	1204	1025	-	-	-	4470	4510	-
1800	870	1395	1095	320	520	640	351	400	1395	1095	1337	545	1395	1095	-	-	-	4945	-	-
2000	950	1449	1195	320	520	640	351	400	1449	1195	1377	715	1449	1195	-	-	-	6230	-	-
2200	1000	1569	1325	320	520	640	351	400	1569	1325	1443	715	1569	1325	-	-	-	-	-	-
2400	1100	1704	1445	320	520	640	351	400	1704	1445	1443	845	1704	1445	-	-	-	-	-	-

PN 1.6MPa mm

DN	L	Gear							Electric				Pneumatic					Weight(kg)		
		A1	B1	M1	E1	F1	J	Do1	A2	B2	E2	F2	A3	B3	E3	F3	M3	Worm	Electric	Pneumatic
80	180	203	125	115	90	205	83	200	203	125	475	505	203	125	115	344	140	27	45	-
100	190	208	130	115	90	205	83	200	208	130	475	505	208	130	115	344	140	34	57	-
125	200	218	140	115	90	205	83	200	218	140	475	505	218	140	150	450	187	41	63	-
150	210	285	155	115	90	205	83	200	285	155	475	505	285	155	290	762	270	43	71	-
200	230	309	180	115	90	205	83	200	309	180	475	505	309	180	290	762	270	81	83	-
250	250	343	220	134	90	205	83	250	343	220	475	505	343	220	330	900	305	102	126	-
300	270	368	245	134	90	205	83	250	368	245	475	505	368	245	370	1084	350	132	151	-
350	290	401	275	159	120	265	141	250	401	275	566	505	401	275	370	1084	350	164	195	-
400	310	443	300	159	120	265	141	250	443	300	566	545	443	300	405	1182	390	193	273	-
450	330	469	340	163	185	250	115	315	469	340	615	545	469	340	405	1182	390	238	290	-
500	350	501	375	163	185	250	115	315	501	375	615	507	501	375	500	1442	470	302	414	-
600	390	606	440	185	245	400	145	315	606	440	820	545	606	440	630	1865	500	457	545	-
700	430	684	500	185	245	400	145	315	684	500	820	545	-	-	-	-	-	810	825	-
800	470	734	550	220	310	460	191	400	734	550	945	545	-	-	-	-	-	1093	1005	-
900	510	794	625	220	310	460	191	400	794	625	945	545	-	-	-	-	-	1410	1560	-
1000	550	874	690	255	410	555	270	400	874	690	1140	545	-	-	-	-	-	1870	1910	-
1200	630	1049	795	255	410	555	270	400	1049	795	1140	545	-	-	-	-	-	2082	2450	-
1400	710	1204	945	320	520	640	351	400	1204	945	1337	545	-	-	-	-	-	2850	3250	-
1600	790	1324	1065	320	520	640	440	630	1324	1065	1423	720	-	-	-	-	-	4235	4400	-
1800	870	1395	1095	335	520	785	440	630	1395	1095	1423	720	-	-	-	-	-	5346	5670	-
2000	950	1449	1195	335	520	785	440	630	1449	1195	1423	720	-	-	-	-	-	7328	7565	-
2200	1000	1569	1325	335	450	785	440	630	1569	1325	1423	720	-	-	-	-	-	-	-	-
2400	1100	1704	1445	335	450	785	440	630	1704	1445	1423	720	-	-	-	-	-	-	-	-

Note: 1、 The structural length of valve to ISO5752 14 series.
2、 Welding groove to GB/T12224 specifications

TRIPLE OFFSET BUTTERFLY VALVE

Buttwelded Type PN 2.5~4.0MPa

Main Outline Dimensions

PN 2.5MPa mm

DN	L	Gear							Electric				Pneumatic					Weight(kg)		
		A1	B1	M1	E1	F1	J	Do1	A2	B2	E2	F2	A3	B3	E3	F3	M3	Worm	Electric	Pneumatic
80	180	203	125	115	90	205	83	200	203	125	475	505	203	125	150	450	187	38	54	-
100	190	208	130	115	90	205	83	200	208	130	475	505	208	130	290	762	270	40	55	-
125	200	218	140	115	90	205	83	200	218	140	475	505	218	140	290	762	270	60	64	-
150	210	285	155	115	90	205	83	200	285	155	475	505	285	155	330	900	305	65	71	-
200	230	317	195	134	90	205	83	250	317	195	475	505	317	195	370	1084	350	85	96	-
250	250	360	220	134	90	205	83	250	360	220	475	505	360	220	370	1084	350	135	145	-
300	270	395	250	159	120	265	141	250	395	250	566	505	395	250	405	1182	390	175	167	-
350	290	419	290	159	120	265	141	250	419	290	566	545	419	290	405	1182	390	195	220	-
400	310	468	325	163	185	250	115	315	468	325	615	545	468	325	500	1442	470	295	278	-
450	330	476	350	163	185	250	115	315	476	350	615	545	476	350	630	1865	500	350	380	-
500	350	556	390	185	245	400	145	315	556	390	820	545	556	390	-	-	-	510	496	-
600	390	644	450	185	245	400	145	315	644	450	820	545	644	450	-	-	-	625	705	-
700	430	684	500	220	310	460	191	400	684	500	945	545	684	500	-	-	-	925	1000	-
800	470	774	590	255	410	460	270	400	774	590	1140	545	774	590	-	-	-	1260	1190	-
900	510	844	645	255	410	555	270	400	844	645	1140	545	844	645	-	-	-	1790	1670	-
1000	550	894	695	255	410	555	270	400	894	695	1140	545	894	695	-	-	-	1940	2180	-
1200	630	1049	845	320	520	640	351	400	1049	845	1337	545	1049	845	-	-	-	2810	2980	-

PN 4.0MPa mm

DN	L	Gear							Electric				Pneumatic					Weight(kg)		
		A1	B1	M1	E1	F1	J	Do1	A2	B2	E2	F2	A3	B3	E3	F3	M3	Worm	Electric	Pneumatic
80	180	203	125	115	90	205	83	200	203	125	475	505	203	125	150	450	187	39	-	-
100	190	208	130	115	90	205	83	200	208	130	475	505	208	130	290	762	270	50	-	-
125	200	218	140	115	90	205	83	200	218	140	475	505	218	140	290	762	270	75	-	-
150	210	285	155	115	90	205	83	200	285	155	475	505	285	155	330	900	305	100	-	-
200	230	318	195	134	90	205	83	250	318	195	475	505	318	195	370	1084	350	135	116	-
250	250	353	225	159	120	265	141	250	353	225	566	505	353	225	370	1084	350	190	215	-
300	270	396	265	159	120	265	141	250	396	265	566	545	396	265	405	1182	390	240	263	-
350	290	426	300	162	185	250	115	315	426	300	615	545	426	300	405	1182	390	320	297	-
400	310	461	340	163	185	250	115	315	461	340	615	545	461	340	500	1442	470	450	477	-
450	330	486	365	185	245	400	145	315	486	365	820	545	486	365	630	1865	500	500	524	-
500	350	584	400	185	245	400	145	315	584	400	820	545	584	400	-	-	-	560	585	-
600	390	644	475	220	310	460	191	400	644	475	945	545	644	475	-	-	-	720	1000	-
700	430	724	540	255	410	555	270	400	724	540	1140	545	724	540	-	-	-	1250	1410	-
800	470	794	595	255	410	555	270	400	794	595	1140	545	794	595	-	-	-	1950	2110	-

Note: 1、 The structural length of valve to ISO5752 14 series.
2、 Welding groove to GB/T12224 specifications

TRIPLE OFFSET BUTTERFLY VALVE

Buttwelded Type CLASS 150

Main Outline Dimensions

CLASS 150 mm

NPS	L	Gear							Electric				Pneumatic					Weight(kg)		
		A1	B1	M1	E1	F1	J	Do1	A2	B2	E2	F2	A3	B3	E3	F3	M3	Worm	Electric	Pneumatic
3"	114	295	135	115	84	198	84	200	295	135	513	467	295	135	115	344	140	32	37	-
4"	127	305	155	115	84	198	84	200	305	155	513	467	305	155	115	344	140	35	39	-
5"	140	322	167	115	84	198	84	200	322	167	513	467	322	167	126	390	175	39	42	-
6"	140	366	170	115	94	211	84	250	366	170	525	475	366	170	150	450	187	43	43	-
8"	152	396	198	134	117	267	145	250	396	198	580	470	396	198	280	762	270	60	57	-
10"	165	429	231	134	175	254	114	315	429	231	635	560	429	231	330	900	305	90	80	-
12"	178	483	269	159	175	254	114	315	483	269	705	560	483	269	405	1182	385	107	104	-
14"	190	498	297	159	239	404	145	315	498	297	765	615	498	297	405	1182	385	153	141	-
16"	216	579	333	163	239	404	145	315	579	333	825	615	579	333	405	1182	385	207	197	-
18"	222	630	366	163	239	404	191	315	630	366	875	820	630	366	445	1292	410	267	247	-
20"	229	655	394	163	300	465	191	400	655	394	930	820	655	394	445	1292	410	327	307	-
24"	267	744	452	185	300	465	191	400	744	452	1040	820	744	452	500	1442	465	473	427	-
28"	292	790	511	185	300	465	191	400	790	511	1155	945	790	511	630	1865	500	653	667	-
30"	308	815	536	220	300	559	269	400	815	536	1225	945	815	536	630	1865	500	760	773	-
32"	318	874	577	220	300	559	269	400	874	577	1275	945	874	577	630	1865	500	1033	1047	-
36"	330	899	602	255	300	559	269	400	899	602	1375	1145	899	602	-	-	-	1200	1213	-
40"	410	1064	696	255	300	559	269	400	1064	696	1490	1145	1064	696	-	-	-	1487	1500	-
42"	430	1092	721	255	300	559	335	400	1092	721	1550	1335	1092	721	-	-	-	1640	1637	-
44"	450	1148	731	255	300	572	335	400	1148	731	1600	1335	1148	731	-	-	-	1800	1813	-
48"	470	1270	800	320	300	572	335	400	1270	800	1715	1370	1270	800	-	-	-	2007	2020	-
52"	490	1314	850	320	425	635	365	500	1314	850	1835	1370	1314	850	-	-	-	2720	2733	-
56"	530	1384	895	320	425	635	365	500	1384	895	2005	1425	1384	895	-	-	-	2980	2993	-
60"	570	1504	1025	355	425	635	365	500	1504	1025	2115	1425	1504	1025	-	-	-	3387	3420	-

Note: 1、 The structural length of valve to ISO5752 13 series.
 2、 Welding groove to ASME B16.34 specifications

TRIPLE OFFSET BUTTERFLY VALVE

Buttwelded Type CLASS 300~600

Main Outline Dimensions

CLASS 300 mm

NPS	L	Gear							Etectric				Pneumatic					Weight(kg)		
		A1	B1	M1	E1	F1	J	Do1	A2	B2	E2	F2	A3	B3	E3	F3	M3	Worm	Etectric	Pneumatic
3"	114	295	132	114	84	198	84	200	295	132	467	513	295	132	126	390	175	34	-	-
4"	127	358	150	114	84	198	84	200	358	150	467	513	358	150	150	450	187	44	-	-
5"	140	365	167	168	117	267	145	250	365	167	467	513	365	167	280	762	270	58	-	-
6"	140	389	188	163	175	254	114	315	389	188	564	523	389	188	330	900	305	73	-	-
8"	152	417	221	163	175	254	114	315	417	221	615	544	417	221	405	1182	385	132	-	-
10"	165	465	252	185	239	404	145	315	465	252	615	544	465	252	405	1182	385	151	-	-
12"	178	546	290	185	239	404	145	315	546	290	823	513	546	290	405	1182	385	257	-	-
14"	191	579	318	221	300	465	191	400	579	318	823	513	579	318	445	1292	410	286	-	-
16"	216	642	368	221	300	465	191	400	642	368	945	513	642	368	445	1292	410	416	-	-
18"	225	673	396	221	300	465	191	400	673	396	945	544	673	396	500	1442	465	497	-	-
20"	229	701	422	254	300	559	269	400	701	422	945	544	701	422	500	1442	465	571	-	-
24"	267	775	495	254	399	559	269	400	775	495	945	544	775	495	630	1865	500	881	-	-
28"	292	904	559	305	510	648	351	400	904	559	1158	826	904	559	630	1865	500	1320	-	-
30"	292	963	594	305	510	648	351	400	963	594	1158	826	963	594	-	-	-	1478	-	-
32"	318	1054	617	305	510	648	351	400	1054	617	1158	826	1054	617	-	-	-	1699	-	-
36"	330	1161	676	368	615	805	429	630	1161	676	1420	1039	1161	676	-	-	-	2379	-	-
40"	410	1242	719	368	615	805	429	630	1242	719	1420	1039	1242	719	-	-	-	2427	-	-
42"	430	1285	739	368	615	805	429	630	1285	739	1420	1039	1285	739	-	-	-	2685	-	-
44"	450	1310	764	368	615	805	429	630	1310	764	1420	1039	1310	764	-	-	-	2932	-	-
48"	470	1374	833	434	765	965	399	630	1374	833	1730	1069	1374	833	-	-	-	3545	-	-

CLASS 600 mm

NPS	L	Gear							Etectric				Pneumatic					Weight(kg)		
		A1	B1	M1	E1	F1	J	Do1	A2	B2	E2	F2	A3	B3	E3	F3	M3	Worm	Etectric	Pneumatic
3"	180	343	127	135	94	211	81	250	343	127	564	523	343	127	330	900	305	75	-	-
4"	190	371	160	170	152	267	145	250	371	160	615	544	371	160	405	1182	385	117	-	-
5"	200	388	178	163	175	254	114	315	388	178	615	544	388	178	405	1182	385	154	-	-
6"	210	401	196	163	175	254	114	315	401	196	823	513	401	196	405	1182	385	186	-	-
8"	230	447	221	163	175	254	114	315	447	221	823	513	447	221	445	1292	410	235	-	-
10"	250	544	290	185	239	404	145	315	544	290	945	513	544	290	445	1292	410	398	-	-
12"	270	610	307	220	300	465	191	400	610	307	945	544	610	307	500	1442	465	554	-	-
14"	290	640	330	220	300	465	191	400	640	330	945	544	640	330	500	1442	465	654	-	-
16"	310	701	391	254	400	559	269	400	701	391	945	544	701	391	630	1865	500	935	-	-
18"	330	716	406	254	400	559	269	400	716	406	945	544	716	406	630	1865	500	1085	-	-
20"	350	828	452	305	510	645	351	400	828	452	1158	826	828	452	630	1865	500	1610	-	-
24"	390	920	513	305	510	645	351	400	920	513	1158	826	920	513	-	-	-	1998	-	-

- Note: 1、 Structural length of valves in the table: 300Lb, to ISO5752 13 series; 600Lb, to ISO5752 14 series.
 2、 Welding groove to ASME B16.34 specifications