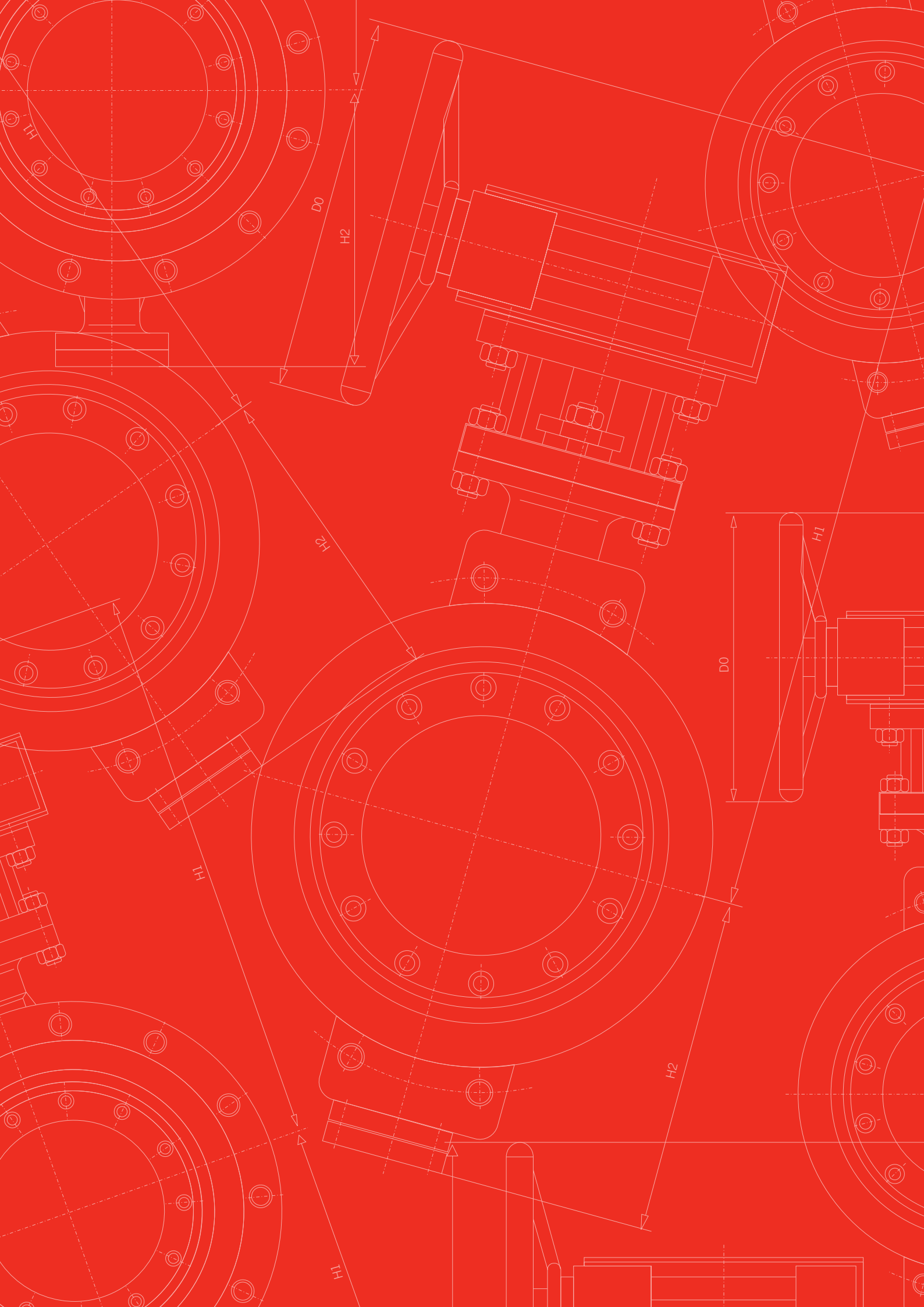
JC VALVES

The quality option

TRIPLE OFFSET BUTTERFLY VALVES


H1
D0
H2
H1
D0
H1
H2
H1

JC VALVES

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JC VALVES

The quality option

"We make valves since 1968"

JC Fábrica de Válvulas S.A., established in 1968, is a multinational company specialised in the manufacture and sale of high quality industrial valves.

The expertise and know how acquired over the years coupled with the continued investments in the design of valves, has made JC a world renowned company in the field of valve applications.

» JC World Wide

JC Valves provides world wide coverage thanks to the strategic locations of its factories and offices:

» Market sectors

JC develops and designs valves for all applications, but the main focus is in Oil & Gas, Chemical, Petrochemical, Pulp & Paper and Energy sectors.

- **Oil**
- **Chemical**
- **Gas**
- **Pulp & Paper**
- **Petrochemical**
- **Energy**

Quality assurance

JC Valves are designed and produced to meet the major international standards and we take great care and put a lot of emphasis on QUALITY, which provides our customers with a total guarantee and trouble free operation of their process.
And in addition, we take great care to make our facilities and our products Environment friendly.




Global services

JC Fábrica de Válvulas S.A. offers its customers a world wide service, from technical advice to choose the right valve up to the design and manufacture of custom built valves to meet special service requirements.

Our R+D department is always ready to find solutions for severe applications and our global distribution network offers quick availability of JC valves and an efficient after sales service.

GLOBAL SERVICE

- TECHNICAL SUPPORT
- DESIGN
- MANUFACTURE
- WORLD WIDE DISTRIBUTION
- AFTER-SALES SERVICE

JC Quality Assurance System

- ISO 9001 : 2000 certified by BVQI
- API Q1 certified by the AMERICAN PETROLEUM INSTITUTE
- PED 97 / 23 / EC certified by BVQI

Manufacturing Program

- Fire safe: ISO10947 : 2004
- API607 3rd, 4th, and 5th edition
- ATEX
- DIN3840-82
- ASME B16.34 : 2004
- API 609 - 2004
- GOST “R” certified for russian market
- ANSI B16.34 - 77
- ANSI B16.5 - 92
- ASME B16.47 - 96
- EN 1092-1 : 2001
- EN 558-1 : 1995
- API 598-96
- ISO 5208-93

Environmental Certifications

- ISO 14001 : 2004 certified by BVQI
- ISO-EN 15848-1 certified by SGS

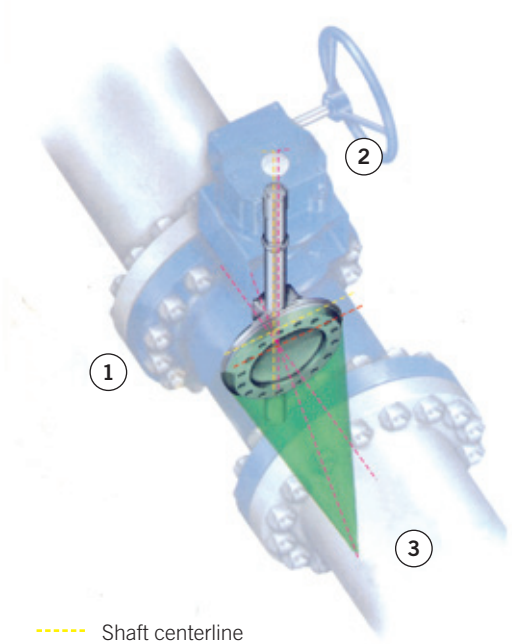
ISO 9001 · API 6D API 6A API 600 · PED 97 / 23 / EC · FUGITIVE EMISSIONS EN-ISO 15848-1

ISO 14001 · II 2 G Dc ATEX · GOST-R · FIRE SAFE ISO 10497 : 2004 API 607: 3rd, 4th, 5th edition

BUTTERFLY VALVES

JC triple offset butterfly valve design and unique sealing elements provide zero leakage through non-rubbing 90-degree rotation across a wide range of pressure and temperature conditions.

On the basis of preserving primary radical eccentric and axial eccentric, the axis of conical seal surface has been inclined with the center of valve flow path to form angle eccentric. JC tri-eccentric butterfly valve is characterized by compact structure, effective handle and long work life. It can be widely used in oil & Gas, chemical, petrochemical, power station, metallurgy, textile, food, pharmaceuticals,...



- Shaft centerline
- Sealing surface centerline
- Pipeline centerline
- Oblique cone (valve seat) centerline

1 1st eccentricity

The shaft is diverged from centerline of the sealing surface.

2 2nd eccentricity

The shaft is diverged from centerline of the pipeline and valve. These two eccentricities are designated for friction reduction between the valve seat and seal ring when opening and closing the valve.

3 3rd eccentricity

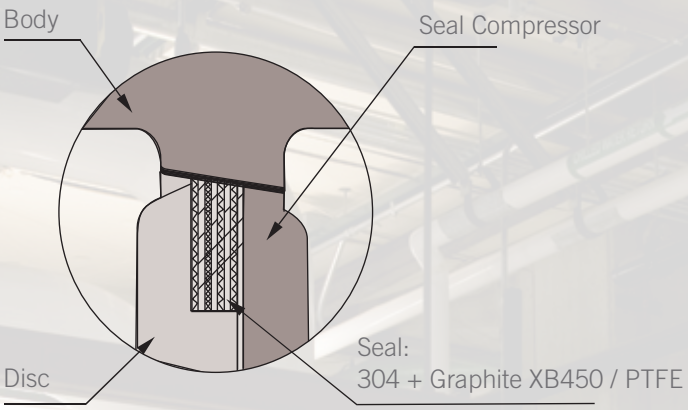
It makes the valve seat completely separated from the seal ring through the geometric shape, during the whole process of opening and dosing the valve. The special eccentric combination not only makes use of the cam effect, but also completely eliminates friction. It enables no friction between the valve seat and seal ring on the valve plate, to eliminate possible abrasion and leakage, in the 90º stroke of the valve.

PERFORMANCE SPECIFICATIONS

Nominal pressure	Maximum operating pressure under normal temperature	Casing test pressure	High pressure sealing test pressure	Air tightness test pressure
0.6	0.6	0.9	0.66	0.6
1.0	1.0	1.5	1.1	0.6
1.6	1.6	2.4	1.76	0.6
2.5	2.5	3.75	2.75	0.6
4.0	4.0	6.0	4.4	0.6
150 Lb	2.0	3.0	2.2	0.6
300 Lb	5.0	7.5	5.5	0.6

HIGHLIGHTS

Properties of multi layer sealing structure

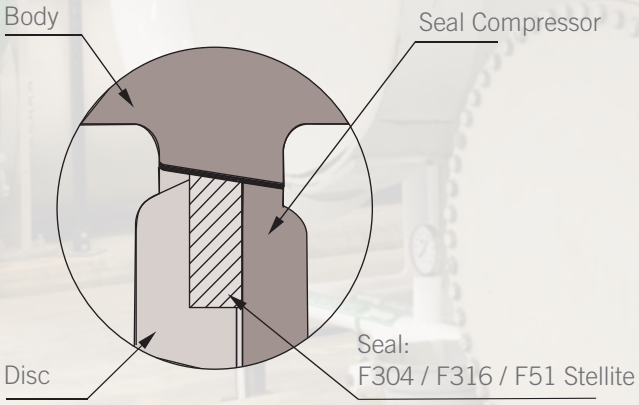


The JC Triple offset butterfly valves are designed with a metallic composite cone beveling. than takes advantage of cam effect, thus valve seat could be released from seal ring through the whole switching process and zero friction exists between valve seat and plate seal ring providing friction-free stroking throughout the valve, extends valve life, ensures no over-travel of the disc, allows for a lower torque for actuator to be fitted and ensures bubble tight closure of the valve, resulting in zero-leakage performance.

The butterfly plate seal ring is designed as multi layer seal ring. This seal compresses on a radial basis and moves flexibly and elastically.

Optional sealing materials are suitable for different temperature and medium.

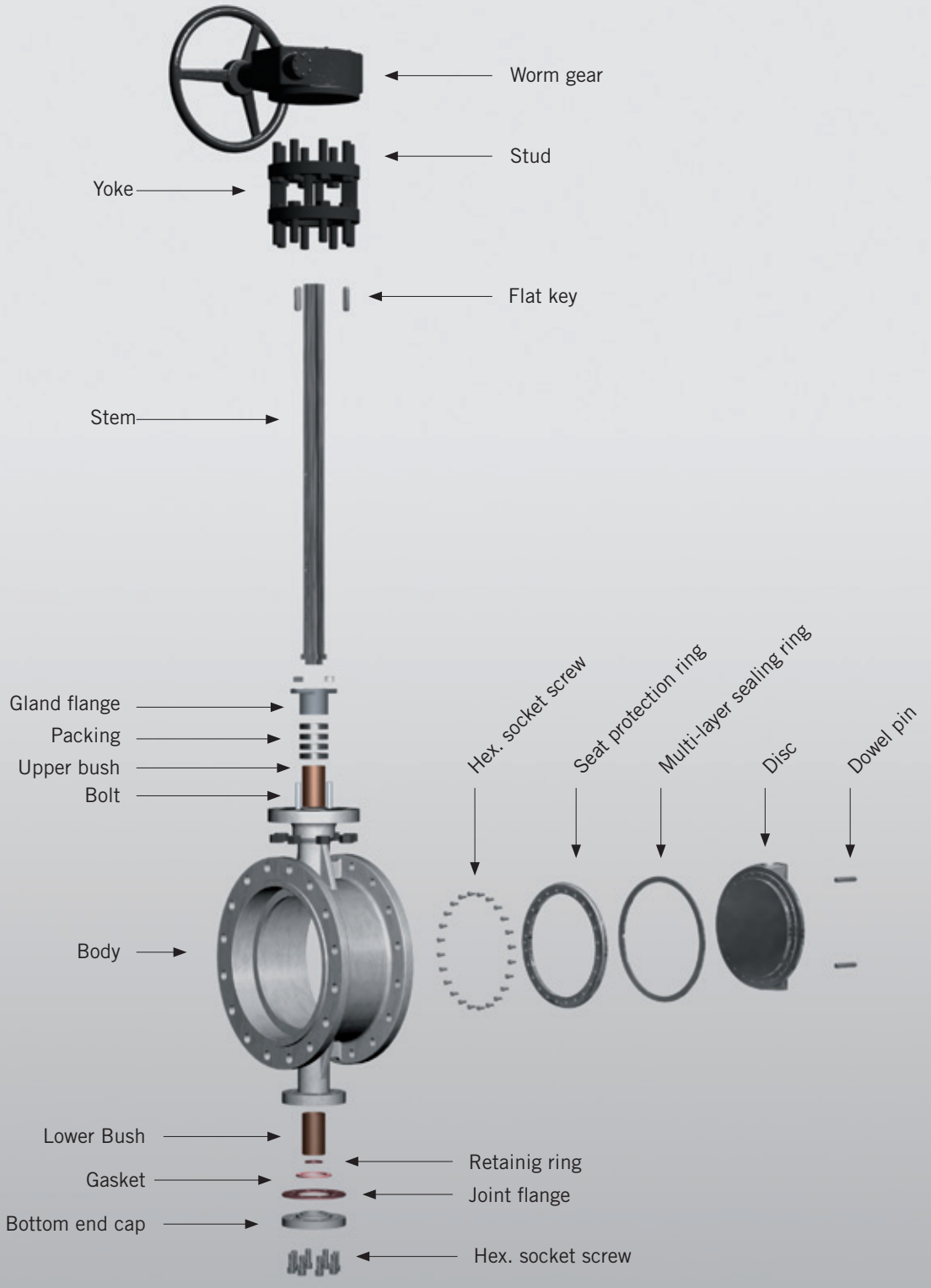
Properties of all alloy hard sealing



Triple offset JC valves are provided with three dimensional eccentric sealing structures. The valves are designed and manufactured with unique techniques and dedicated facilities for maximum machined accuracy. This ensures full cone match of sealing pair, and eliminates the intervention and abrasion between sealing faces.

The product features small switching resistance, reliable sealing performance, reduced sealing face abrasion and a vastly extended valve life. The alloy hard sealing, Allowing for higher pressure and temperature applications whilst still providing bubble-tight shut off.

The valves are tested according to procedures by API 598. The valve has the characteristic of “essential fire safety” due the metal-to-metal sealing.

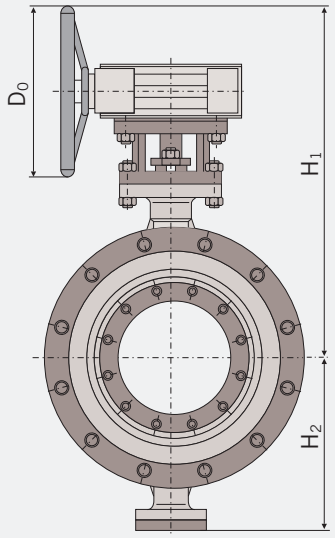


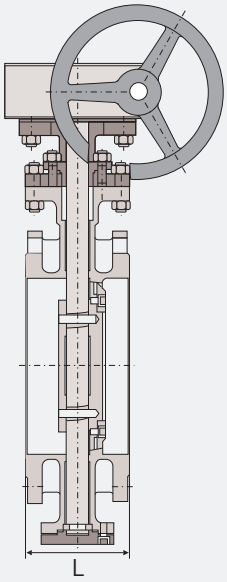
MATERIALS

Item	TR1	TR2	TR3	TR4	TR5	TR6	TR7
Body	WCB	LCB	CF8	CF3	CF8M	CF3M	WC6
Disc	WCB	LCB	CF8	CF3	CF8M	CF3M	WC6
Stem	13% Cr	304	304	310	316L	316L	F91
Sealing	A105	LF1	304	304L	316	316L	F11
Seat	304	304	310	310	316L	316L	304
Fluids	Water / steam / oil	Water / steam / oil	Nitric acid and other corrosive substances	Strong oxidizing agents	Acetic acid and other corrosive substances	Urea and other corrosive medium	Water / steam / oil
Working temperature	(-)29 ℃ ~ 425 ℃	(-)46 ℃ ~ 345 ℃	(-)196 ℃ ~ 600 ℃	(-)196 ℃ ~ 538 ℃	(-)196 ℃ ~ 600 ℃	(-)196 ℃ ~ 538 ℃	(-)29 ℃ ~ 595 ℃

API FLANGE BUTTERFLY VALVE

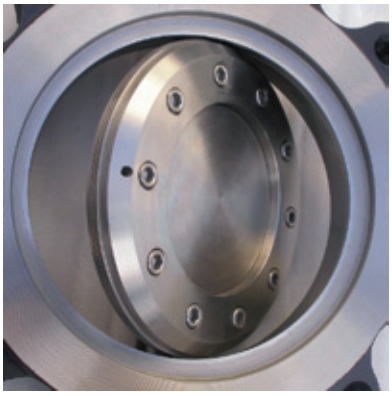
B31 - 150Lb / 300 Lb





Product information

The butterfly valve is provided with triple-eccentric multilayer metal sealing structure. It is mainly used for regulating flow rate and cutting off or connecting fluid for different mediums in the pipeline in such sectors including petroleum, natural gas, chemical industry, metallurgy, power plant, water supply and drainage, etc.



Application norms

1. Valve design and manufacture as per ASME B16.34-2004.
2. Flange connection as per ANSI BI6.5ASME BI6.47.
3. Valve body structural length as per API 1609-2004.
4. Valve check and test as per API 598.

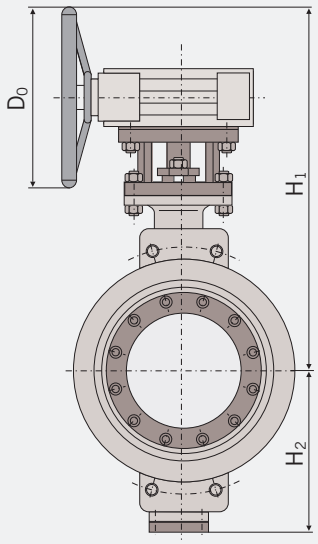
General dimensions

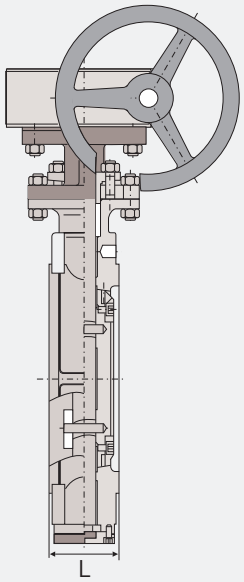
in	DN	L		H_1		H_2		D_0	
		150	300	150	300	150	300	150	300
2”	50	108	150	305	315	115	115	160	160
2.5”	65	112	170	315	325	125	125	160	160
3”	80	114	180	330	340	135	135	160	160
4”	100	127	190	360	435	140	140	160	280
5”	125	140	200	450	475	170	170	280	280
6”	150	140	210	475	510	175	220	280	280
8”	200	152	230	525	520	240	240	250	250
10”	250	165	250	570	625	270	270	250	350
12”	300	178	270	630	670	315	320	320	350
14”	350	190	290	675	765	345	370	350	350
16”	400	216	310	720	840	395	410	350	400
18”	450	222	330	805	910	405	420	350	400
20”	500	229	350	895	980	430	460	400	400
24”	600	267	390	950	1080	500	540	400	450
28”	700	292	-	1030	-	505	-	400	-
32”	800	318	-	1135	-	545	-	450	-
36”	900	330	-	1175	-	620	-	450	-
40”	1000	410	-	1270	-	670	-	500	-
48”	1200	470	-	1400	-	760	-	500	-

Note: The type of handle/worm/worm wheel/electric/pneumatic/hydraulic is customer defined.

API WAFER BUTTERFLY VALVE

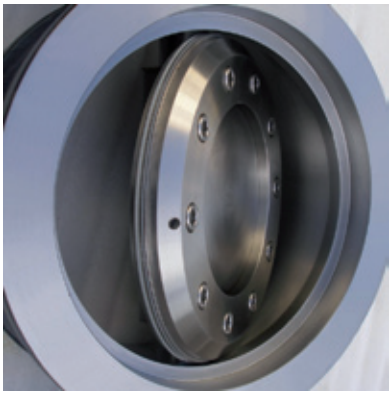
B32 - 150Lb / 300Lb





Products introduction

The butterfly valve is provided with triple-eccentric multi layer metal sealing structure. It is mainly used for regulating flow rate and cutting off or connecting fluid for different mediums in the pipeline in such sectors including petroleum, natural gas, chemical industry, metallurgy, power plant, water supply and drainage, etc.



Application norms

1. Valve design and manufacture as per API 609-2004.
2. Flange connection as per ANSI B16.5ASME B16.47.
3. Valve body structural length as per API 1609-2004.
4. Valve check and test as per API 598.

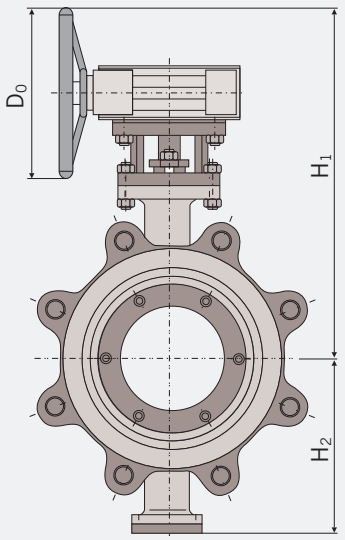
General dimensions

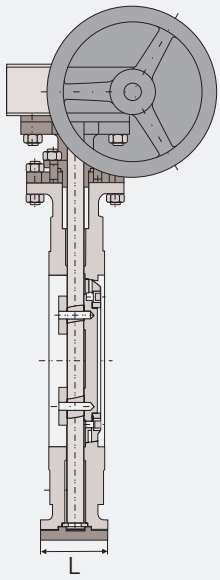
in	DN	L		H_1		H_2		D_0	
		150	300	150	300	150	300	150	300
2”	50	43	43	305	315	105	115	160	160
2.5”	65	46	46	315	325	115	125	160	160
3”	80	48	48	330	340	125	140	160	160
4”	100	54	54	360	440	150	150	160	280
5”	125	64	64	450	480	160	180	280	280
6”	150	57	59	475	515	185	220	280	280
8”	200	64	73	525	530	245	250	250	250
10”	250	71	83	520	640	275	300	250	350
12”	300	81	92	660	685	315	335	320	350
14”	350	92	117	670	780	330	375	350	350
16”	400	102	133	730	830	365	380	350	400
18”	450	114	149	810	915	390	420	350	400
20”	500	127	159	885	985	430	475	400	400
24”	600	154	181	940	1085	470	540	400	450
28”	700	165	-	1050	-	505	-	400	-
32”	800	190	-	1185	-	580	-	450	-
36”	900	203	-	1205	-	625	-	450	-
40”	1000	216	-	1260	-	685	-	500	-
48”	1200	254	-	1395	-	790	-	500	-

Note: The type of handle/worm/worm wheel/electric/pneumatic/hydraulic is customer defined.

API LUG BUTTERFLY VALVE

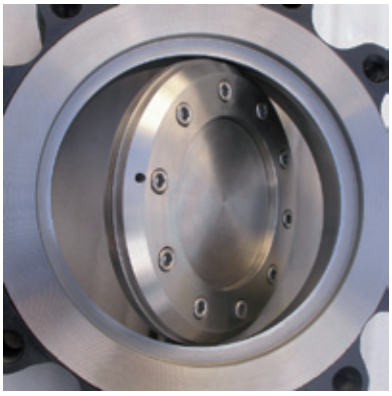
B33 - 150 Lb / 300 Lb





Product information

The butterfly valve is provided with triple-eccentric multi layer metal sealing structure. It is mainly used for regulating flow rate and cutting off or connecting fluid for different mediums in the pipeline in such sectors including petroleum, natural gas, chemical industry, metallurgy, power plant, water supply and drainage, etc.



Application norms

1. Valve design and manufacture as per API 609-2004.
2. Flange connection as per ANSI B16.5ASME 816.47.
3. Valve body structural length as per API 1609-2004.
4. Valve check and test as per API 598.

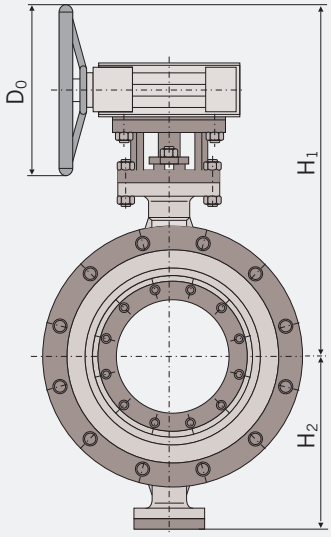
General dimensions

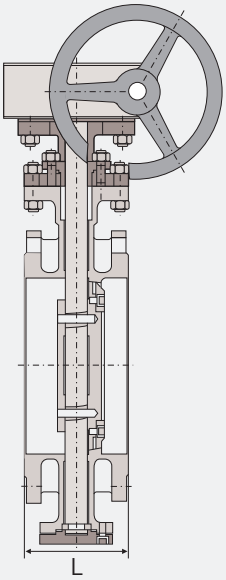
in	DN	L		H_1		H_2		D_0	
		150	300	150	300	150	300	150	300
2”	50	43	43	305	315	115	115	160	160
2.5”	65	46	46	315	325	125	125	160	160
3”	80	48	48	330	340	135	140	160	160
4”	100	54	54	360	440	150	160	160	280
6”	150	57	59	515	515	185	220	280	280
8”	200	64	73	530	530	240	260	250	250
10”	250	71	83	550	630	275	300	250	350
12”	300	81	92	660	685	315	335	320	350
14”	350	92	117	670	780	330	375	350	350
16”	400	102	133	730	840	365	405	350	400
18”	450	114	149	810	925	390	445	350	400
20”	500	127	159	890	975	430	475	400	400
24”	600	154	181	940	1075	470	540	400	450
28”	700	165	-	1030	-	510	-	400	-
32”	800	190	-	1150	-	570	-	450	-
36”	900	203	-	1215	-	640	-	450	-
40”	1000	216	-	1260	-	670	-	500	-
48”	1200	254	-	1405	-	800	-	500	-

Note: The type of handle/worm/worm wheel/electric/pneumatic/hydraulic is customer defined.

DIN FLANGE BUTTERFLY VALVE

B31 - PN10 - PN16 - PN25 - PN40





Products introduction

The butterfly valve is provided with triple-eccentric multi layer metal sealing structure. It is mainly used for regulating flow rate and cutting off or connecting fluid for different mediums in the pipeline in such sectors including petroleum, natural gas, chemical industry, metallurgy, power plant, water supply and drainage, etc.

Application norms

1. Valve design and manufacture as per DIN 3840-82.
2. Valve design and manufacture as per EN 1092-1 :2001.
3. Valve body structural length as per EN 558-1:1995.
4. Valve check and test as per ISO5208-93.

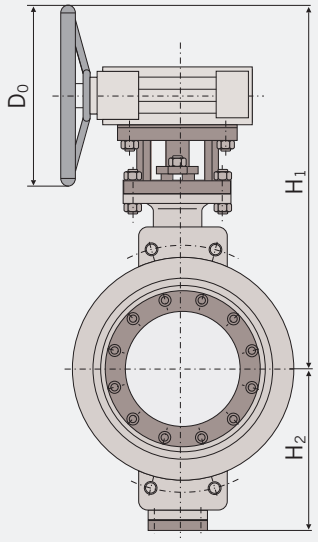
General dimensions

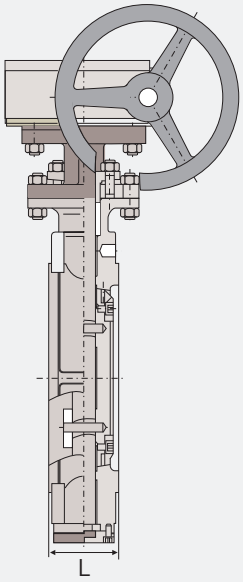
DN	L		H_1		H_2		D_0	
	10C / 16C / 25C	40C	10C / 16C / 25C	40C	10C / 16C / 25C	40C	10C / 16C / 25C	40C
50	108	150	305	315	115	115	160	160
65	112	170	315	325	125	125	160	160
80	114	180	330	340	135	135	160	160
100	127	190	360	435	140	140	160	280
125	140	200	450	475	170	170	280	280
150	140	210	475	510	175	220	280	280
200	152	230	510	520	240	240	250	250
250	165	250	600	625	270	270	320	350
300	178	270	630	670	315	320	320	350
350	190	290	690	765	345	370	350	350
400	21	310	725	840	395	410	350	400
450	222	330	805	910	405	420	350	400
500	229	350	895	980	430	460	400	400
600	267	390	960	1080	500	540	400	450
700	292	-	1070	-	530	-	400	-
800	318	-	1160	-	615	-	450	-
900	330	-	1225	-	640	-	450	-
1000	410	-	1320	-	740	-	500	-
1200	470	-	1485	-	805	-	500	-

Note: The type of handle/worm/worm wheel/electric/pneumatic/hydraulic is customer defined.

DIN WAFER BUTTERFLY VALVE

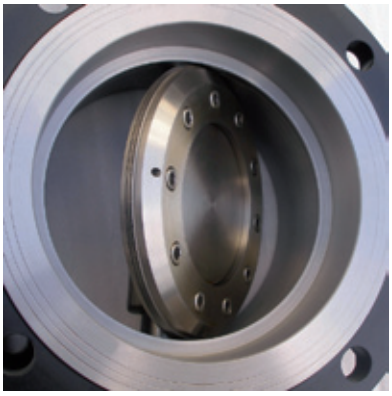
B32 - PN10 - PN16 - PN25 - PN40





Product information

The butterfly valve is provided with triple-eccentric all alloy metal sealing structure. It is applicable for throttling under special work conditions or conditions with rigorous sealing requirement, severe abrasion, low temperature (deep cooling), etc. The product is especially suitable for switching or regulating medium in pipeline of high temperature, fire resistance, acid and alkali, particle medium, etc.



Application norms

1. Valve design and manufacture as per DIN 3840-82.
2. Valve design and manufacture as per EN 1092-1 :2001.
3. Valve body structural length as per EN 558-1 :1995.
4. Valve check and test as per ISO 5208-93.

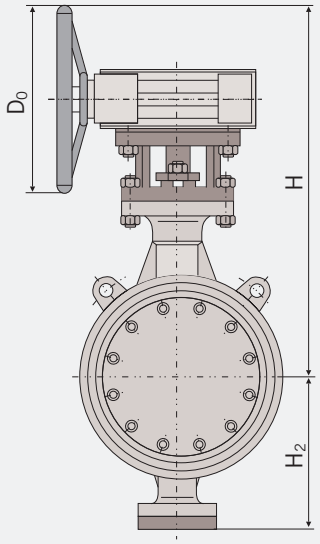
General dimensions

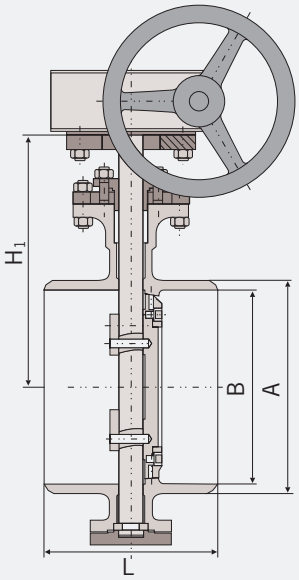
DN	L		H_1		H_2		D_0	
	10C / 16C / 25C	40C	10C / 16C / 25C	40C	10C / 16C / 25C	40C	10C / 16C / 25C	40C
50	43	43	305	315	105	115	160	160
65	46	46	315	325	115	125	150	160
80	49	64	330	340	125	140	160	160
100	56	64	360	440	150	150	160	280
125	64	70	450	480	160	180	280	280
150	76	76	475	515	195	220	280	280
200	89	89	525	530	210	250	250	250
250	114	114	580	640	245	300	320	350
300	114	114	630	685	290	335	320	350
350	127	127	675	780	320	375	350	350
400	140	140	725	830	355	380	350	400
450	152	152	850	915	390	420	350	400
500	152	152	885	985	430	475	400	400
600	154	178	940	1085	470	540	400	450
700	165	-	1080	-	540	-	400	-
800	190	-	1175	-	610	-	450	-
900	203	-	1225	-	650	-	450	-
1000	216	-	1320	-	720	-	500	-
1200	254	-	1445	-	840	-	500	-

Note: The type of handle/worm/worm wheel/electric/pneumatic/hydraulic is customer defined.

DIN BUTT-WELDING BUTTERFLY VALVE

B34 - PN10 - PN16 - PN25 - PN40





Products introduction

The butt-joint triple-eccentric metal sealing butterfly valve is provided with weld connection that ensures permanent zero leak of valve and pipeline. The design with no flange facilitates thermal insulation binding for the pipeline. The valve is smaller than general gate valve and ball valve by 70% in terms of volume and the weight is 65% lower. It features low cost and superior performance.

Application norms

1. Valve design and manufacture as per DIN 3840-82.
2. Valve design and manufacture as per EN 1092-1:2001.
3. Valve body structural length as per EN 558-1 :1995.
4. Valve check and test as per ISO 5208-93.

General dimensions

in	DN	L	A	B	H	H_1	H_2	D_0
3”	80	180	91	78	335	210	135	160
4”	100	190	117	102	360	210	140	160
5”	125	200	144	128	430	240	170	280
6”	150	210	168	154	450	260	170	280
8”	200	230	223	203	495	310	200	250
10”	250	250	278	255	520	345	235	320
12”	300	270	329	303	630	420	280	320
14”	350	290	362	339	660	455	310	320
16”	400	310	413	388	725	490	345	320
18”	450	330	464	438	760	515	380	320
20”	500	350	516	489	830	560	400	400
24”	600	390	619	591	915	670	440	400
28”	700	430	721	696	1040	745	510	400
32”	800	470	825	797	1160	835	560	450
36”	900	510	927	899	1220	880	620	450
40”	1000	550	1028	992	1340	925	670	500
48”	1200	630	1228	1192	1420	970	770	500

Note: The type of handle/worm/worm wheel/electric/pneumatic/hydraulic is customer defined.

JC VALVES
The quality option

MORE PRODUCTS

GATE, GLOBE & CHECK VALVES - BALL VALVES - STRAINERS

ACCESSORIES

CHAIN WHEELS - GEAR OPERATORS - ELECTRIC ACTUATOR - POSITION INDICATOR
LOCKING DEVICES - LANTERN RING - LIMIT SWITCH - BYPASS - DAMPER

TRIPLE OFFSET BUTTERFLY VALVES

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