

Butterfly Valve

Triple offset butterfly valve

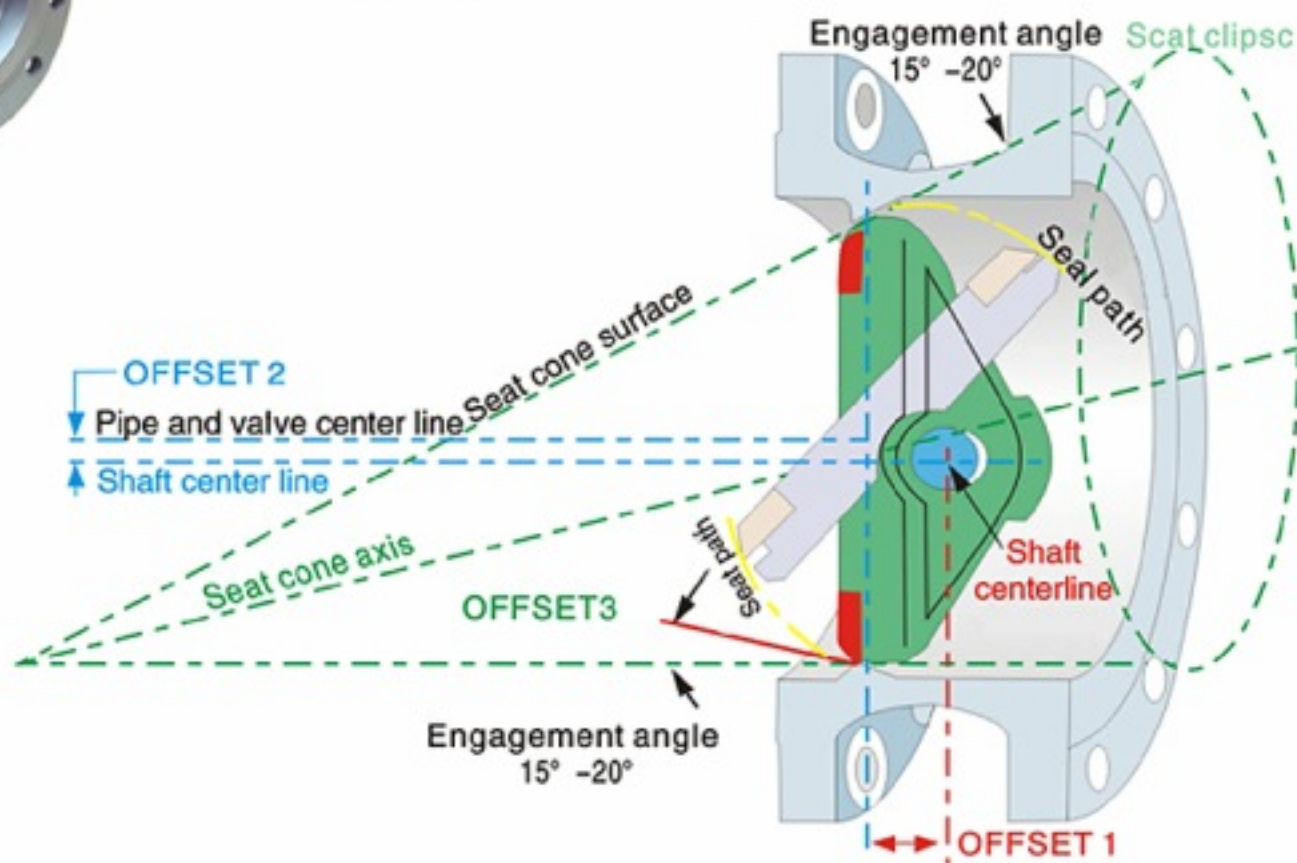
Trait and purpose:

Hard Seal Butterfly Valve triple offset series are our company's leading products, which are used in such fields as metallurgy, light industry, electric power, petrochemistry, coal gas channel etc.



The seal principle of hard Seal Butterfly Valve triple offset:

The Triple Offset Butterfly Valve provides a bi-directional bubble tight shut-off. This geometry ensures that the disc seal contacts the body seat only at the final shut-off position without rubbing or galling, providing a torque generated resilient seal with sufficient "wedging" to ensure uniform seal contact.

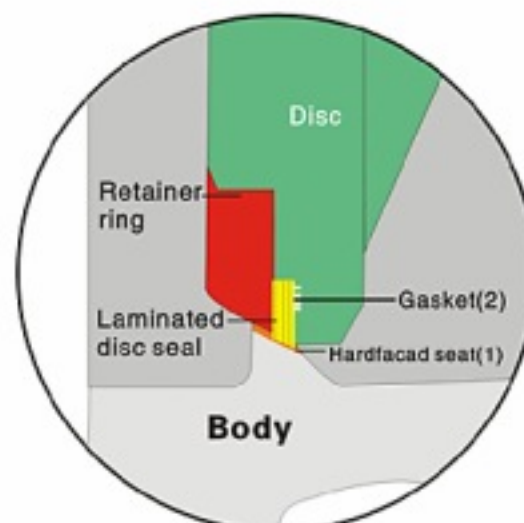


The triple offset geometry

- OFFSET1 The shaft is offset behind the seat axis to allow complete sealing contact around the entire seat
- OFFSET2 The shaft centerline is offset from the pipe and valve which provides interference free opening and closing of the valve
- OFFSET3 The seat cone axis is offset from the shaft centerline to eliminate friction during closing and opening and to achieve uniform compressive sealing around the entire seat.

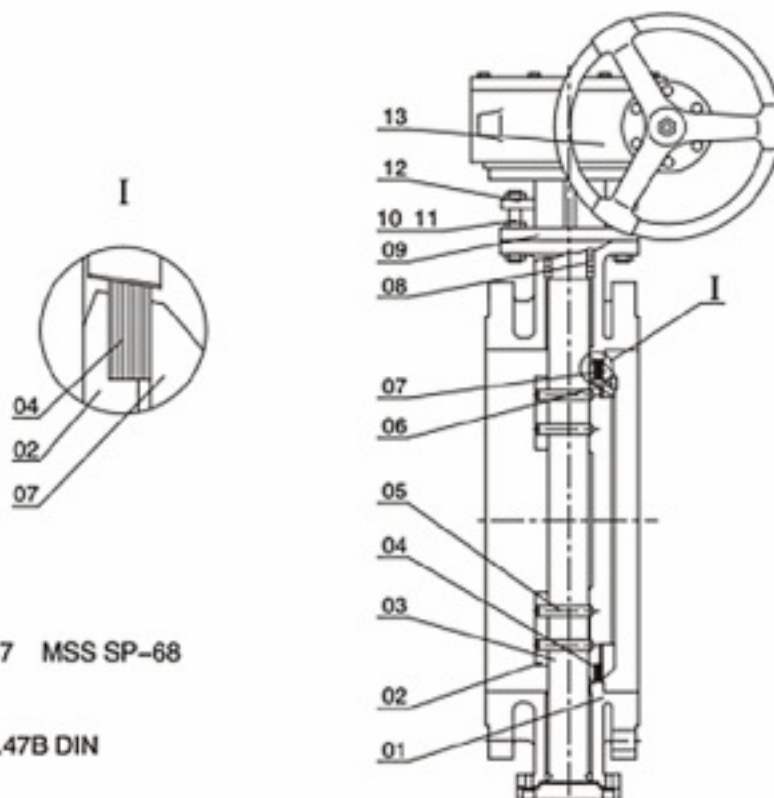
Friction free sealing for long cycle life

- (1) Seat is Cr13 Metal alloy or hardfaced with Stellite as standard.
- (2) The gasket is spiral wound SS/Graphite for zero leakage
- (3) Seat ring forces are generated by the torque during closing uniformly around the entire circumference. The resilient seal flexes and energizes, assuming the shape of the seat. The compression forces equally distributed around the perimeter provide a tight bi-directional shut off. The resiliency of the seal allows the valve body and disc to contract or expand, without the risk of jamming due to temperature fluctuations. It is self-adjusting.



Butterfly Valve

Triple offset butterfly valve main parts materials and specification



(Adopt Standard):

- 1.Design Standard :API609 MSS SP-67 MSS SP-68
- 2.Face To Face:ISO5752
- 3.Tubing Flange:ANSI B16.5 ANSI B16.47B DIN
- 4.Inspection and Test:API598

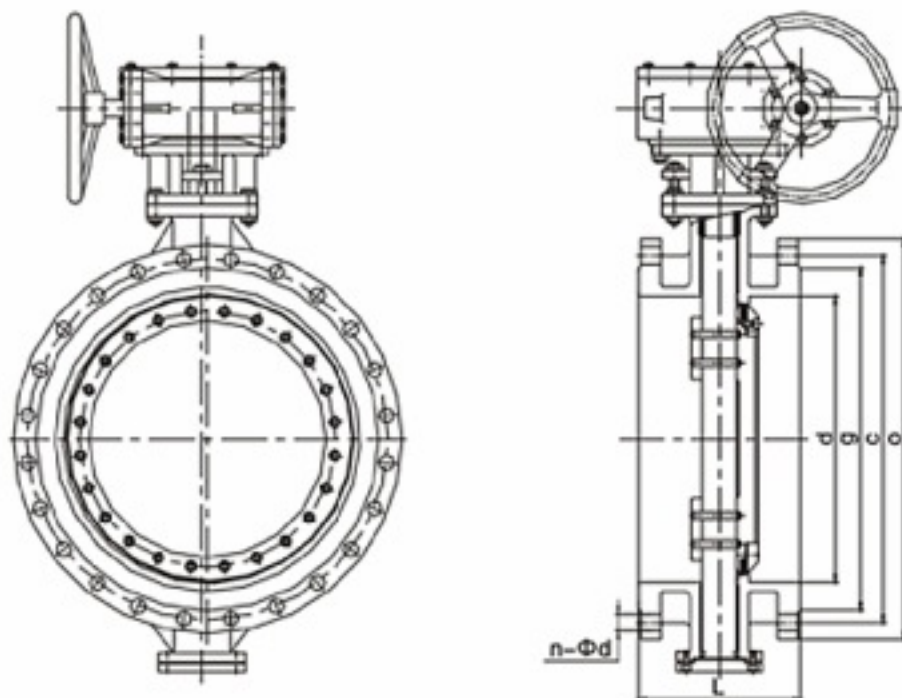
Main parts materials

Part Name		Material				
01	Body	ASTM A216 WCB	ASTM A351 CF8	ASTM A351 CF3	ASTM A351 CF8M	ASTM A351 CF3M
02	Disc	WCB	CF8	CF3	CF8M	CF3M
03	Stem	A276 420 or 304 or 316	A276 304	A276 304L	A276 316	A276 316L
04	Seal Ring	SS 304 or 316+Graphite or PTFE	SS 304+Graphite or PTFE	SS 304L+Graphite or PTFE	SS 316+Graphite or PTFE	SS 316+Graphite or PTFE
05	Spin	A276 420 or 304 or 316	A276 304	A276 304L	A276 316	A276 316L
06	Capscrew	A193 B7 or B8 or B8M	A193 B8	A193 B8	A193 B8M	A193 B8M
07	Retaining ring	A105 or A182 F304 F316	A182 F304	A182 F304L	A182 F316	A182 F316L
08	Packing	Soft graphite				
09	Yoke	WCB	WCB GALVAN CF8	WCB GALVAN CF8 or CF3	WCB GALVAN CF8 or CF8M	WCB GALVAN CF8 or CF3M
10	Bolt	A193 B7	A193 B8	A193 B8	A193 B8M or B8	A193 B8M or B8
11	Nut	A194 2H	A194 8	A194 8	A194 8M or B8	A194 8M or 8
12	Gland	WCB	CF8	CF8	CF8M	CF3M
13	Drive actuator	Hand actuator, Electric actuator, Worm gear actuator, Pneumatic actuator				

Note: The chart above only lists out some common composition of valve parts. We may provide other different parts material composition according to the customer's request or the actual valve working condition.

Butterfly Valve

Flange triple offset butterfly valve main connection dimension



Main connection dimension

Unit: mm

Type	DN (mm)	o	g	c	n-Φd	L
PN10						
	50	165	99	125	4-18	108
	65	185	118	145	4-18	112
	80	200	132	160	8-18	114
	100	220	156	180	8-18	127
D343H-PN10LbC	125	250	184	210	8-18	140
D643H-PN10LbC	150	285	211	240	8-22	140
D943H-PN10LbC	200	340	266	295	8-22	152
D343Y-PN10LbC	250	395	319	350	12-22	165
D643Y-PN10LbC	300	445	370	400	12-22	178
D943Y-PN10LbC	350	505	429	460	16-22	190
	400	565	480	515	16-26	216
D343W-PN10LbP	450	615	530	565	20-26	222
D343W-PN10LbP	500	670	582	620	20-26	229
D943W-PN10LbP	600	780	682	725	20-30	267
D343Y-PN10LbP	700	895	794	840	24-30	292
D643Y-PN10LbP	800	1015	901	950	24-33	318
D343W-PN10LbR	900	1115	1001	1050	28-33	330
D643Y-PN10LbR	1000	1230	1112	1160	28-36	410
D943Y-PN10LbR	1200	1455	1328	1380	32-39	470
D343Y-PN10LbR	1400	1675	1530	1590	36-42	530
D643Y-PN10LbR	1600	1915	1750	1820	40-48	600
	1800	2115	1950	2020	44-48	670
	2000	2325	2150	2230	48-48	760

Butterfly Valve**Main connection dimension**

Unit: mm

Type	DN (mm)	o	g	c	n-Φd	L
PN16						
	50	165	99	125	4-18	108
	65	185	118	145	4-18	112
	80	200	132	160	8-18	114
D343H-PN16LbC	100	220	156	180	8-18	127
D643H-PN16LbC	125	250	184	210	8-18	140
D943H-PN16LbC	150	285	211	240	8-22	140
D343Y-PN16LbC	200	340	266	295	12-22	152
D643Y-PN16LbC	250	405	319	355	12-26	165
D943Y-PN16LbC	300	460	370	410	12-26	178
D343W-PN16LbP	350	520	429	470	16-26	190
D343W-PN16LbP	400	580	480	525	16-30	216
D943W-PN16LbP	450	640	548	585	20-30	222
D343Y-PN16LbP	500	715	609	650	20-33	229
D643Y-PN16LbP	600	840	720	770	20-36	267
D343W-PN16LbR	700	910	794	840	24-36	292
D643Y-PN16LbR	800	1025	901	950	24-39	318
D943Y-PN16LbR	900	1125	1001	1050	28-39	330
D343Y-PN16LbR	1000	1255	1112	1170	28-42	410
D643Y-PN16LbR	1200	1485	1328	1390	32-48	470
D643Y-PN16LbR	1400	1685	1530	1590	36-48	530
	1600	1930	1750	1820	40-55	600
	1800	2130	1950	2020	44-55	670
	2000	2345	2150	2230	48-60	760
PN25						
	50	165	99	125	4-18	108
	65	185	118	145	8-18	112
	80	200	132	160	8-18	114
D343H-PN25LbC	100	235	156	190	8-22	127
D643H-PN25LbC	125	270	184	220	8-26	140
D943H-PN25LbC	150	300	211	250	8-26	140
D343Y-PN25LbC	200	360	274	310	12-26	152
D643Y-PN25LbC	250	425	330	370	12-30	165
D943Y-PN25LbC	300	485	389	430	16-30	178
D343W-PN25LbP	350	555	448	490	16-33	190
D343W-PN25LbP	400	620	503	550	16-36	216
D943W-PN25LbP	450	670	548	600	20-36	222
D343Y-PN25LbP	500	730	609	660	20-36	229
D643Y-PN25LbP	600	845	720	770	20-39	267
D343W-PN25LbR	700	960	820	875	24-42	292
D643Y-PN25LbR	800	1085	928	990	24-48	318
D943Y-PN25LbR	900	1185	1028	1090	28-48	330
D343Y-PN25LbR	1000	1320	1140	1210	28-55	410
D643Y-PN25LbR	1200	1530	1350	1420	32-55	470
D643Y-PN25LbR	1400	1755	1560	1640	36-60	530
	1600	1975	1780	1860	40-60	600
	1800	2195	1985	2070	44-68	670
	2000	2425	2210	2300	48-68	760