



RK ENGINEERING
FLOW SOLUTION

THRIPLE ECCENTRIC HIGH PERFORMANCE BUTTERFLY VALVE



RK ENGINEERING

TOBV

Triple Eccentric High Performance Butterfly valve

Wafer, Lug and Doble Flange

Size Range : 2" – 24" / DN 50 – DN 600

ASME Class 150 and 300

OVERVIEW

Featuring “RK Engineers” Triple offset high performance butterfly valve is precision engineered to deliver quality, value, and reliability in high temperature, high pressure, high cycle, and critical service applications.

SPECIFICATIONS

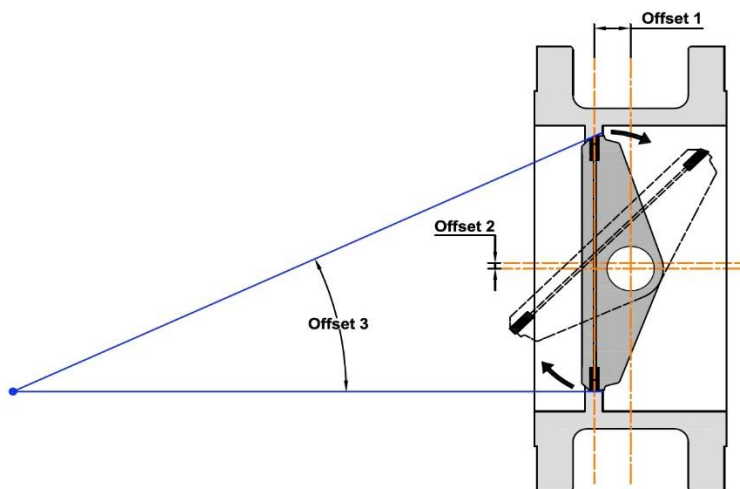
Size Range	NPS 2" – 24" (DN 50 – DN 600)
Body Style	Wafer / Lug / Double flanged
Temperature Range	Resilient Seated ➡ -62 to 500°F (-52 to 260°C)
	Firesafe ➡ -62 to 500°F (-52 to 260°C)
	Metal Seated ➡ up to 900°F (up to 482°C)
Pressure Ratings	ASME Class 150 / 300
Leakage Rate	Resilient Seated ➡ Zero Leakage at preferred Direction
	Metal Seated ➡ FCI 70-2 Class IV

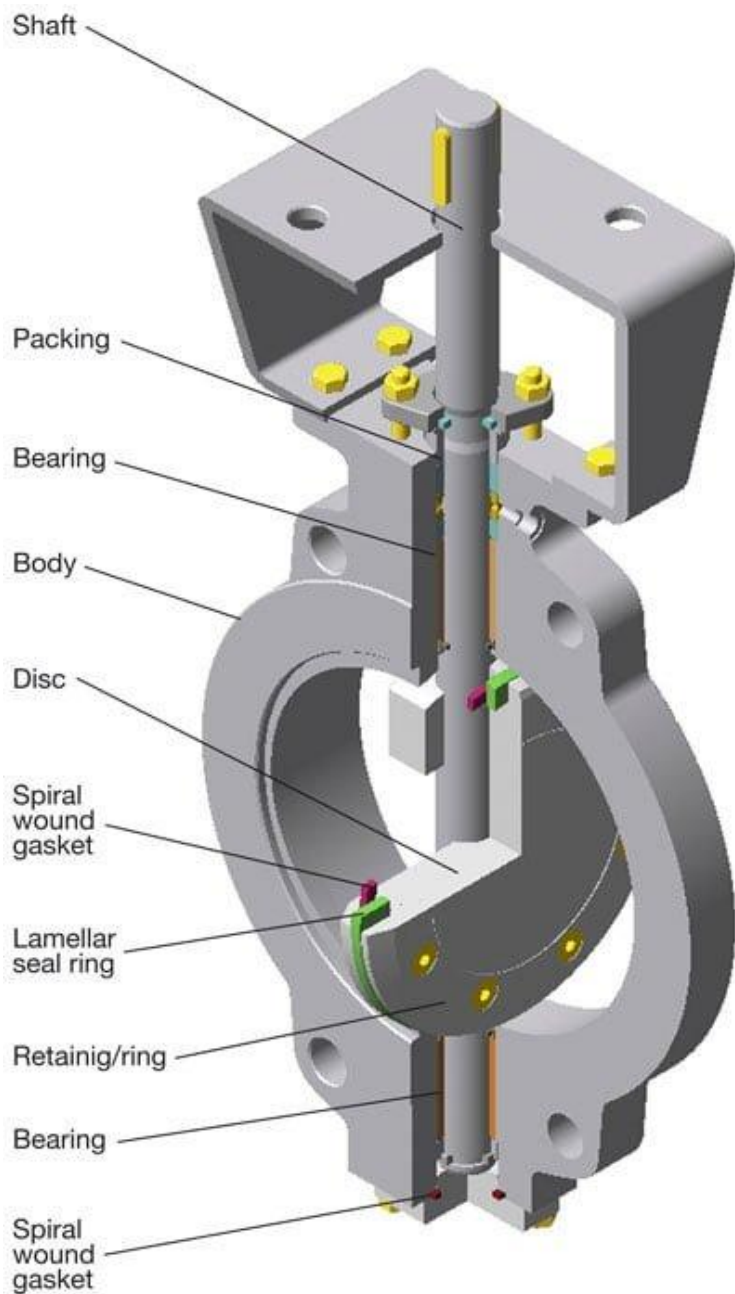
DESIGN STANDARDS

Valve Design	ASME B16.34 / API 609
Top Flange	ISO 5211
Flange Drilling	ASME B16.5 (up to 24")
Face to Face	ASME 16.10 / API 609
Testing Standards	API 598

TRIPLE OFFSET DISC DESIGN

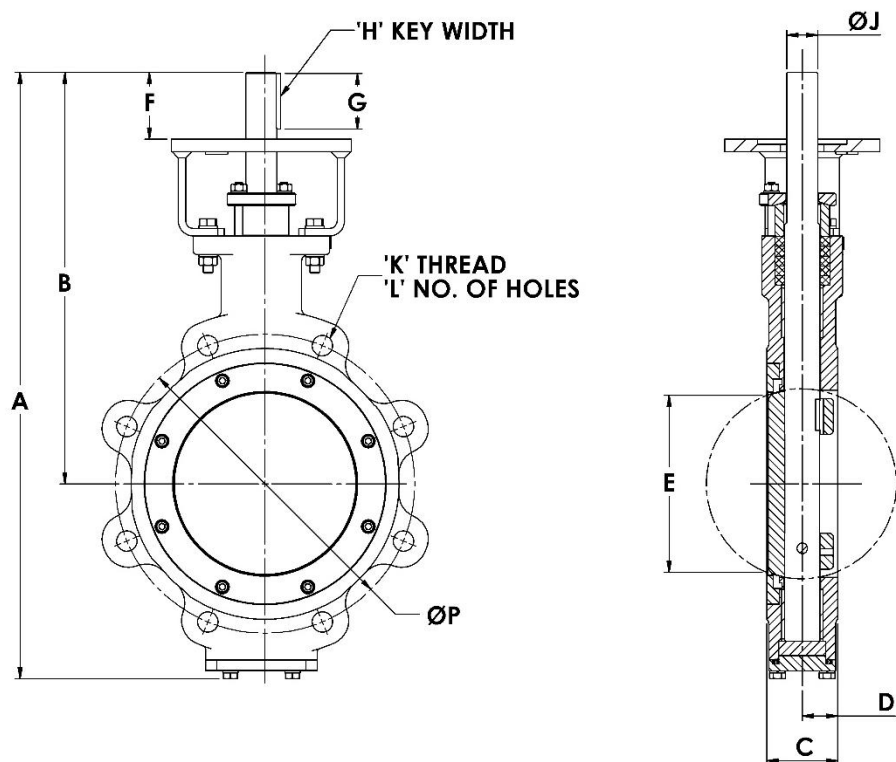
The offset disc produces a cam-like action, Pulling the disc from the seat. This action reduces seat wear and eliminates seat deformation when the disc is in the open position. The disc does not contact the seat when the valve is in the open condition. Therefore seat service life is extended and torque are reduced. As the valve closes, the cam-like action converts the rotary motion of the disc to a linear type motion effectively pushing the disc onto the seat.





DESCRIPTION	MATERIAL
Body	ASTM A356 CF8M / A216 WCB
Disc	ASTM A356 CF8M / A216 WCB
Lamellar Seat	SS316 + Graphite
Spiral wound gasket	SS316 + Graphite
Retainer Ring	ASTM A240 Gr.316
Bearing	Bronze
Shaft	ASTM A479 Gr.410
Packing	Graphite
Fasteners	A4-70 / A2-70

DIMENSIONS TABLE



ASME CLASS 150													
VALVE SIZE		A	B	C	D	E	F	G	H	ØJ	K	L	P
NPS	DN												
2	50	270	200	48	24	45	90	25	5	14	5/8-11 UNC	4	120.7
2.5	65	280	200	48	24	55	90	25	5	14	5/8-11 UNC	4	139.7
3	80	320	230	48	24	70	90	35	5	16	5/8-11 UNC	4	152.4
4	100	360	250	54	27	92	100	35	5	16	5/8-11 UNC	8	190.5
5	125	400	270	57	28.5	115	105	35	6	20	3/4-10 UNC	8	216.5
6	150	420	280	57	28.5	140	105	35	6	20	3/4-10 UNC	8	241.3
8	200	470	310	64	32	185	105	35	8	26	3/4-10 UNC	8	298.5
10	250	550	340	71	35.5	235	110	40	10	32	7/8-9 UNC	12	362
12	300	650	400	81	40.5	285	130	60	12	42	7/8-9 UNC	12	431.8
14	350	720	420	92	46	325	130	60	12	42	1-8 UNC	12	476.3
16	400	830	510	102	51	370	185	60	14	48	1-8 UNC	16	539.8
18	450	900	550	114	57	417	195	80	16	54	1 1/8 -8 UNC	16	577.8
20	500	950	590	127	63.5	467	210	80	18	58	1 1/8 -8 UNC	20	635
24	600	1080	650	154	77	555	220	80	18	63	1 1/4 -8 UNC	20	749.3
30	750	1350	760	172	86	712	240	115	22	78	1 1/4 -8 UNC	28	914.4

ASME CLASS 300													
VALVE SIZE		A	B	C	D	E	F	G	H	ØJ	K	L	P
NPS	DN												
2	50	270	200	48	24	45	90	25	5	14	5/8-11 UNC	8	127
2.5	65	280	200	48	24	55	90	25	5	14	3/4-10 UNC	8	149.4
3	80	320	230	48	24	70	90	35	5	16	3/4-10 UNC	8	168.2
4	100	360	250	54	27	92	100	35	5	16	3/4-10 UNC	8	200.2
5	125	400	270	59	29.5	115	105	35	6	20	3/4-10 UNC	8	235
6	150	420	280	59	29.5	140	105	35	8	26	3/4-10 UNC	12	269.8
8	200	480	315	73	36.5	180	105	40	10	32	7/8-9 UNC	12	330.2
10	250	570	365	83	41.5	230	125	60	12	42	1-8 UNC	16	387.4
12	300	750	460	92	46	273	180	65	14	48	1 1/8 -8 UNC	16	450.9
14	350	900	505	117	58.5	307	195	85	16	54	1 1/8 -8 UNC	20	514.4
16	400	1000	560	133	66.5	350	205	85	18	58	1 1/4 -8 UNC	20	571.5
18	450	1050	590	149	74.5	395	208	85	18	63	1 1/4 -8 UNC	24	628.7
20	500	1150	645	159	79.5	438	230	115	22	78	1 1/4 -8 UNC	24	685.8
24	600	1300	725	181	90.5	525	232	115	25	90	1 1/2 -8 UNC	24	812.8
30	750	1550	815	225	112.5	692	240	130	32	120	1 3/4 -8 UNC	28	997