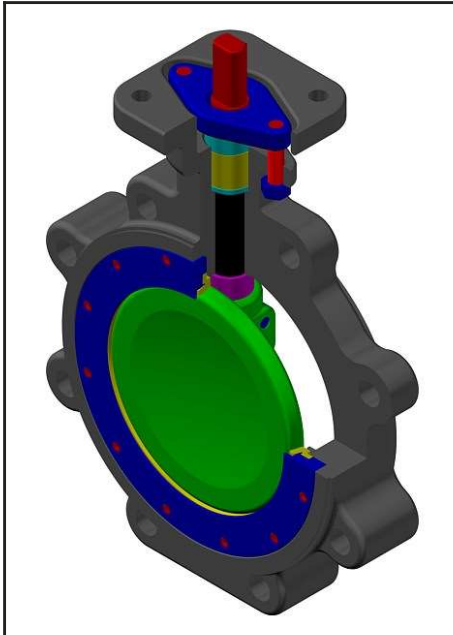


**API 609 CATEGORY B HIGH PERFORMANCE DOUBLE
OFFSET BUTTERFLY VALVES**
ASME CLASSES 150 TO 600
CAST CARBON, STAINLESS STEEL OR ALLOY STEEL
WAFER, LUG, OR DOUBLE FLANGED



Class	Fig. No.	Item	Applicable Specification
150	1572	Wall Thickness	API 609
		Pressure - Temperature Ratings	ASME B16.34 & API 609
300	3072	General Valve Design	API 609 (Cat. B) & ASME B16.34
		End to End Dimensions	ASME 609
		Flange Design	ASME B16.5
		Materials	ASTM

DESIGN FEATURES:

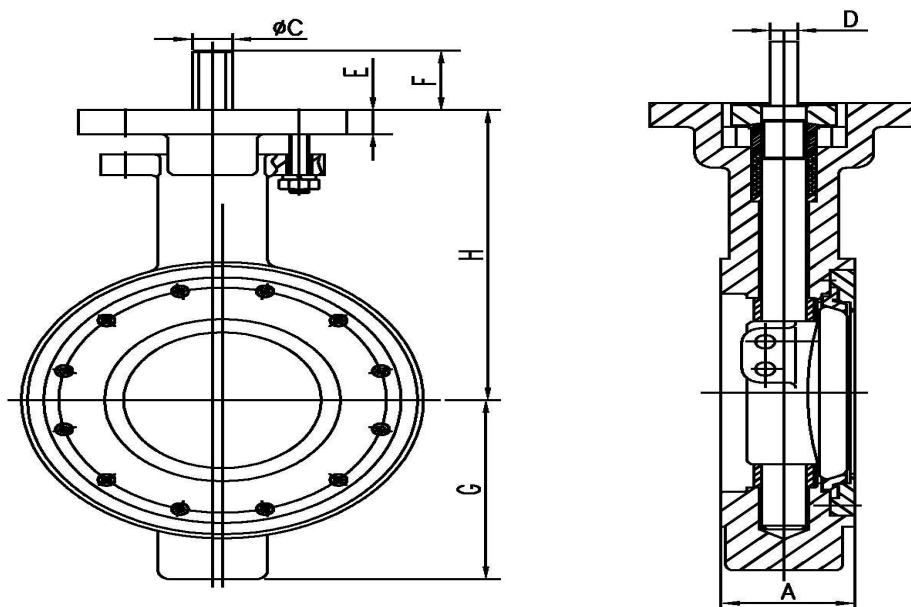
- **Upper and Lower Bearings** to maximize valve life
- **Integral ISO** mounting pad for easy valve operation no bracket needed
- **Each** valve is shell and seat pressure tested per industry standard API 598
- **Available** in Wafer and Lug styles
- **Each** valve has a unique certification number that is traceable to the valve certification sheet which includes MTR data, pressure test report, inspection report and certificate of conformance.
- **Seat Materials:** Multiple seat materials available.

PART	COMMON MATERIAL COMBINATIONS	
Body	A216 WCB	A351 CF8M
Seat Ring	PTFE/RTFE/UHMWPE	PTFE/RTFE/UHMWPE
Disc	A351 CF8M	A351 CF8M
Stem	17-4 PH	17-4 PH
Seat Retainer	Carbon Steel	316 SST
Seat Bolts	A193 B8	A193 B8M
Lower Bearing	316 SST + PTFE	316 SST + PTFE
Disc Spacers	304 SST	316 SST
Disc Pins	17-4 PH	17-4 PH
Upper Bearing	316 SS + PTFE	316 SS + PTFE
Packing Washer	304 SST	316 SST
Packing	PTFE	PTFE
Gland	304 SST	316 SS
Gland Flange	A216 WCB	A351 CF8
Gland Bolts	A193 B8	A193 B8
Gland Nuts	A194 8	A194 8
Retainer Plate*	Carbon Steel	316 SST
Gasket*	316 SST + PTFE	316 SST + PTFE
Bolts*	A193 B8	A193 B8

*Sizes 8" and up only

OTHER MATERIALS AND TRIMS AVAILABLE

HIGH PERFORMANCE DOUBLE OFFSET BUTTERFLY VALVE (WAFER STYLE) DIMENSIONS

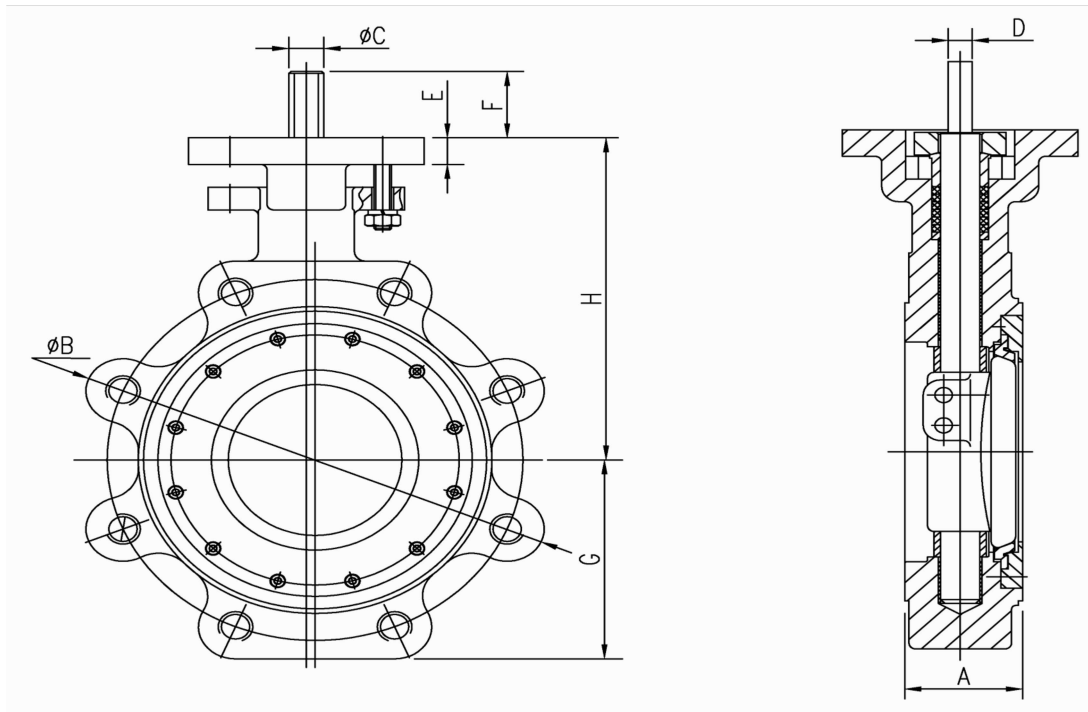


Class 150										
Size	A	C	D	E	F	G	H	M.F.L.	Cv	Weight
NPS	In	In	In	In	In	In	In	ISO		lbs
DN	mm	mm	mm	mm	mm	mm	mm			Kg
2	1.69	0.55	0.37	0.55	1.34	2.8	4.72	F10	85	11
50	43	14	9.5	14	34	72	120			5
2.5	1.88	0.55	0.37	0.55	1.34	3.2	4.96	F10	160	12
65	48	14	9.5	14	34	80	126			5.4
3	1.88	0.63	0.43	0.55	1.34	3.4	5.31	F10	200	14
80	48	16	11	14	34	86	135			6.4
4	2.12	0.63	0.43	0.55	1.42	4.13	6.7	F10	390	22
100	54	16	11	14	36	105	170			10
6	2.25	0.79	0.55	0.63	1.42	5.14	7.88	F10	960	37
150	57	20	14	16	36	130.5	200			16.8
8	2.5	0.94	0.67	0.7	1.57	6.18	9.21	F12	1600	61
200	64	24	17	18	40	157	234			27.6
10	2.81	1.1	0.79	0.7	1.57	8.4	11.1	F12	3130	95
250	71	28	20	18	40	213	282			43
12	3.19	1.42	0.98	0.87	1.57	9.9	12.72	F14	4280	150
300	81	36	25	22	40	251	323			68

Class 300										
Size	A	C	D	E	F	G	H	M.F.L.	Cv	Weight
NPS	In	In	In	In	In	In	In	ISO		lbs
DN	mm	mm	mm	mm	mm	mm	mm			Kg
3	1.88	0.63	0.43	0.55	1.34	3.78	6.3	F10	200	15
80	48	16	11	14	34	96	160			6.8
4	2.12	0.63	0.43	0.55	1.42	4.33	6.93	F10	390	23
100	54	16	11	14	36	110	176			10.5
6	2.31	0.79	0.55	0.63	1.42	5.85	8.58	F10	960	42
150	59	20	14	16	36	148.5	218			19.1
8	2.88	1.1	0.79	0.71	1.57	7.15	10.24	F12	1600	76
200	73	28	20	18	40	181.5	260			34.5
10	3.25	1.42	0.98	0.87	1.97	9.33	12.13	F14	3130	130
250	83	36	25	22	50	237	308			59
12	3.62	1.58	1.1	0.87	1.97	11.22	13.78	F14	4280	190
300	92	40	28	22	50	285	350			56.5

ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

HIGH PERFORMANCE DOUBLE OFFSET BUTTERFLY VALVE (LUG STYLE) DIMENSIONS



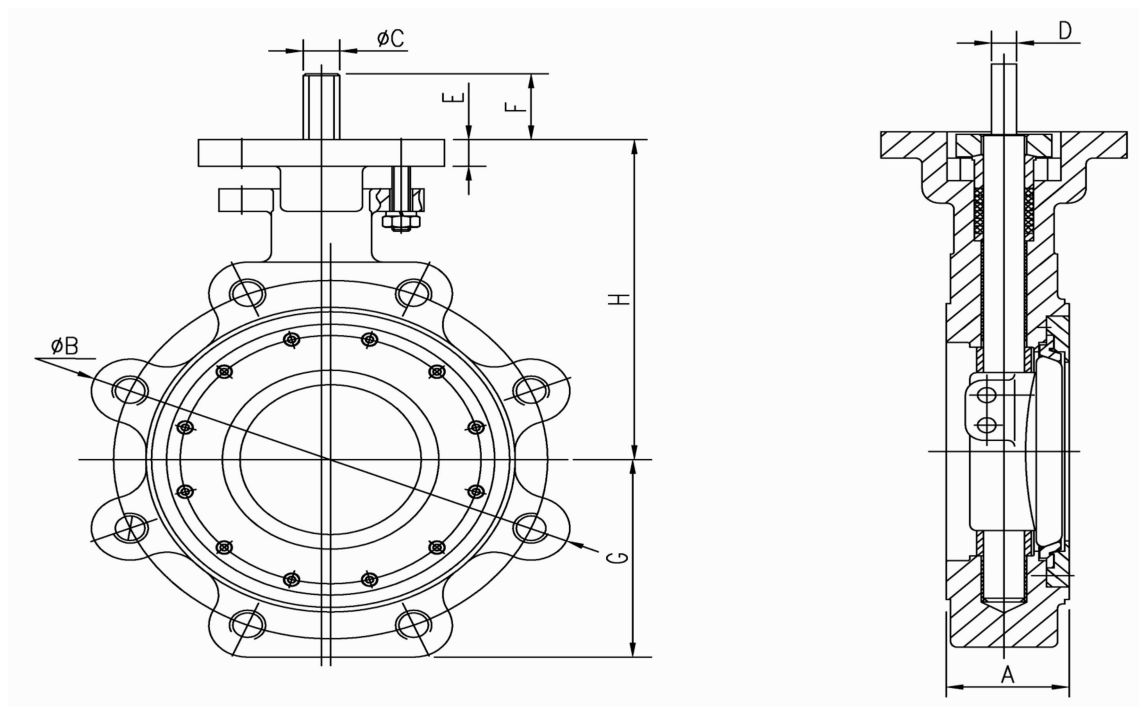
* Double key stem

Class 150

Size	A	B	C	D	E	F	G	H	M.F.L.	Cv	Weight
NPS	In	In	In	In	In	In	In	In	ISO		lbs
DN	mm	mm	mm	mm	mm	mm	mm	mm			Kg
2	1.69	6	0.55	0.37	0.55	1.34	2.8	4.72	F10	85	12
50	43	153	14	9.5	14	34	72	120			5.4
2.5	1.88	6.9	0.55	0.37	0.55	1.34	3.2	4.96	F10	160	12.8
65	48	174	14	9.5	14	34	80	126			5.8
3	1.88	7.4	0.63	0.43	0.55	1.34	3.4	5.31	F10	200	15
80	48	187	16	11	14	34	86	135			6.8
4	2.12	8.9	0.63	0.43	0.55	1.42	4.13	6.7	F10	390	26
100	54	225	16	11	14	36	105	170			11.8
6	2.25	11	0.79	0.55	0.63	1.42	5.14	7.88	F10	960	42
150	57	280	20	14	16	36	130.5	200			19.1
8	2.5	13.3	0.94	0.67	0.7	1.57	6.18	9.21	F12	1600	67
200	64	337	24	17	18	40	157	234			30.4
10	2.81	16	1.1	0.79	0.7	1.57	8.4	11.1	F12	3130	105
250	71	406	28	20	18	40	213	282			48
12	3.19	18.7	1.42	0.98	0.87	1.57	9.9	12.72	F14	4280	160
300	81	476	36	25	22	40	251	323			72.5
14	3.62	20.7	1.57	1.1	0.95	1.97	10.9	14	F14	5250	225
350	92	527	40	28	24	50	277	355			102
16	4	23.2	1.77	0.47x0.31*	1.1	3	12.75	15.75	F16	8150	345
400	102	590	45	12x8*	28	76	324	400			156.5
18	4.5	25.1	1.97	0.63x0.39*	1.1	3.35	13.6	16.7	F16	10900	460
450	114	638	50	16x10*	28	85	345	424			209
20	5	27.4	2.17	0.71x0.43*	1.26	3.75	15.1	18.7	F25	13350	640
500	127	695	55	18x11*	32	95	383	476			290
24	6.06	32	2.56	0.78x0.47*	1.34	3.95	17	21.5	F25	20150	960
600	154	814	65	20x12*	34	100	432	546			435
30	7.5	38.5	3.39	0.87x0.55*	1.65	4.75	22.45	26.4	F30	32550	1890
750	191	978	86	22x14*	42	120	570	670			857
36	8	45.7	3.94	1.10x0.63*	1.5	5.9	27.1	35.35	F30	45200	2970
900	203	1161	100	28x16*	38	150	688	898			1347

ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

HIGH PERFORMANCE DOUBLE OFFSET BUTTERFLY VALVE (LUG STYLE) DIMENSIONS



Class 300											
Size	A	B	C	D	E	F	G	H	M.FL.	Cv	Weight
NPS	In	In	In	In	In	In	In	In	ISO		lbs
DN	mm	mm	mm	mm	mm	mm	mm	mm			Kg
2	1.69	6.3	0.55	0.37	0.55	1.34	2.95	5.35	F10	85	13.7
50	43	159	14	9.5	14	34	75	136			6.2
2.5	1.88	7.3	0.55	0.37	0.55	1.34	3.4	5.91	F10	160	14.3
65	48	186	14	9.5	14	34	87	150			6.5
3	1.88	8.1	0.63	0.43	0.55	1.34	3.78	6.3	F10	200	19
80	48	205	16	11	14	34	96	160			8.6
4	2.12	9.3	0.63	0.43	0.55	1.42	4.33	6.93	F10	390	28
100	54	236	16	11	14	36	110	176			12.7
6	2.31	12	0.79	0.55	0.63	1.42	5.85	8.58	F10	960	50
150	59	306	20	14	16	36	148.5	218			22.7
8	2.88	14.8	1.1	0.79	0.71	1.57	7.15	10.24	F12	1600	90
200	73	375	28	20	18	40	181.5	260			40.8
10	3.25	17.2	1.42	0.98	0.87	1.97	9.33	12.13	F14	3130	160
250	83	438	36	25	22	50	237	308			72.5
12	3.62	20.1	1.58	1.1	0.87	1.97	11.22	13.78	F14	4280	235
300	92	511	40	28	22	50	285	350			106.5

ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.