



Valve Sizing Coefficients High Performance Butterfly Valves

Class 150										
Two-Way* Part #	Valve Size	Cv @ Various Disc Angles								
		10°	20°	30°	40°	50°	60°	70°	80°	90°
HP2B-2.5-CS (150)	2-1/2"	8	16	26	37	53	75	115	142	160
HP2B-3-CS (150)	3"	13	26	42	60	87	124	189	234	263
HP2B-4-CS (150)	4"	23	46	74	106	152	216	331	409	460
HP2B-5-CS (150)	5"	36	73	116	167	240	341	523	646	726
HP2B-6-CS (150)	6"	60	120	192	276	396	564	864	1,068	1,200
HP2B-8-CS (150)	8"	103	206	330	474	680	968	1,483	1,833	2,060
HP2B-10-CS (150)	10"	164	328	525	754	1,082	1,542	2,362	2,919	3,280
HP2B-12-CS (150)	12"	235	471	754	1,083	1,554	2,214	3,391	4,192	4,710
HP2B-14-CS (150)	14"	325	650	1,040	1,495	2,145	3,055	4,680	5,785	6,500
HP2B-16-CS (150)	16"	422	845	1,352	1,944	2,789	3,972	6,084	7,521	8,450
HP2B-18-CS (150)	18"	549	1097	1,755	2,523	3,620	5,156	7,898	9,763	10,970
HP2B-20-CS (150)	20"	679	1357	2,171	3,121	4,478	6,378	9,770	12,077	13,570
HP2B-24-CS (150)	24"	951	1901	3,042	4,372	6,273	8,935	13,687	16,919	19,010

Class 300										
Two-Way* Part #	Valve Size	Cv @ Various Disc Angles								
		10°	20°	30°	40°	50°	60°	70°	80°	90°
HP2B-2.5-CS (300)	2-1/2"	8	16	26	37	53	75	115	142	160
HP2B-3-CS (300)	3"	13	26	42	60	87	124	189	234	263
HP2B-4-CS (300)	4"	23	46	74	106	152	216	331	409	460
HP2B-5-CS (300)	5"	36	73	116	167	240	341	523	646	726
HP2B-6-CS (300)	6"	60	120	192	276	396	564	864	1,068	1,200
HP2B-8-CS (300)	8"	103	206	330	474	680	968	1,483	1,833	2,060
HP2B-10-CS (300)	10"	157	313	501	720	1,033	1,471	2,254	2,786	3,130
HP2B-12-CS (300)	12"	227	454	726	1,044	1,498	2,134	3,269	4,041	4,540
HP2B-14-CS (300)	14"	268	536	858	1,233	1,769	2,519	3,859	4,770	5,360
HP2B-16-CS (300)	16"	395	790	1,264	1,817	2,607	3,713	5,688	7,031	7,900
HP2B-18-CS (300)	18"	476	951	1,522	2,187	3,138	4,470	6,847	8,464	9,510
HP2B-20-CS (300)	20"	622	1244	1,990	2,861	4,104	5,846	8,955	11,070	12,438
HP2B-24-CS (300)	24"	876	1751	2,802	4,027	5,778	8,230	12,607	15,584	17,510

Note:

- Standard High Performance butterfly valves have Carbon Steel bodies. Option: SS = Stainless Steel Body

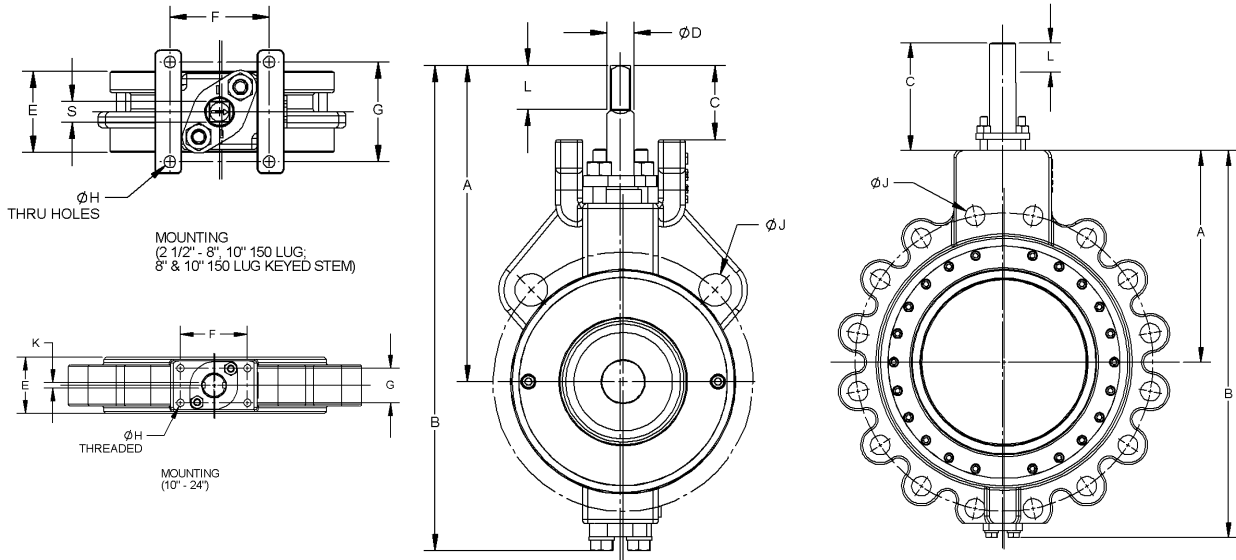
* For Three-Way valve, replace the "HP2B" with "HP3B".



High Performance Butterfly Valve Dimensions

Sizes 2 1/2" through 24" Class 150

Sizes 2 1/2" through 16" Class 300

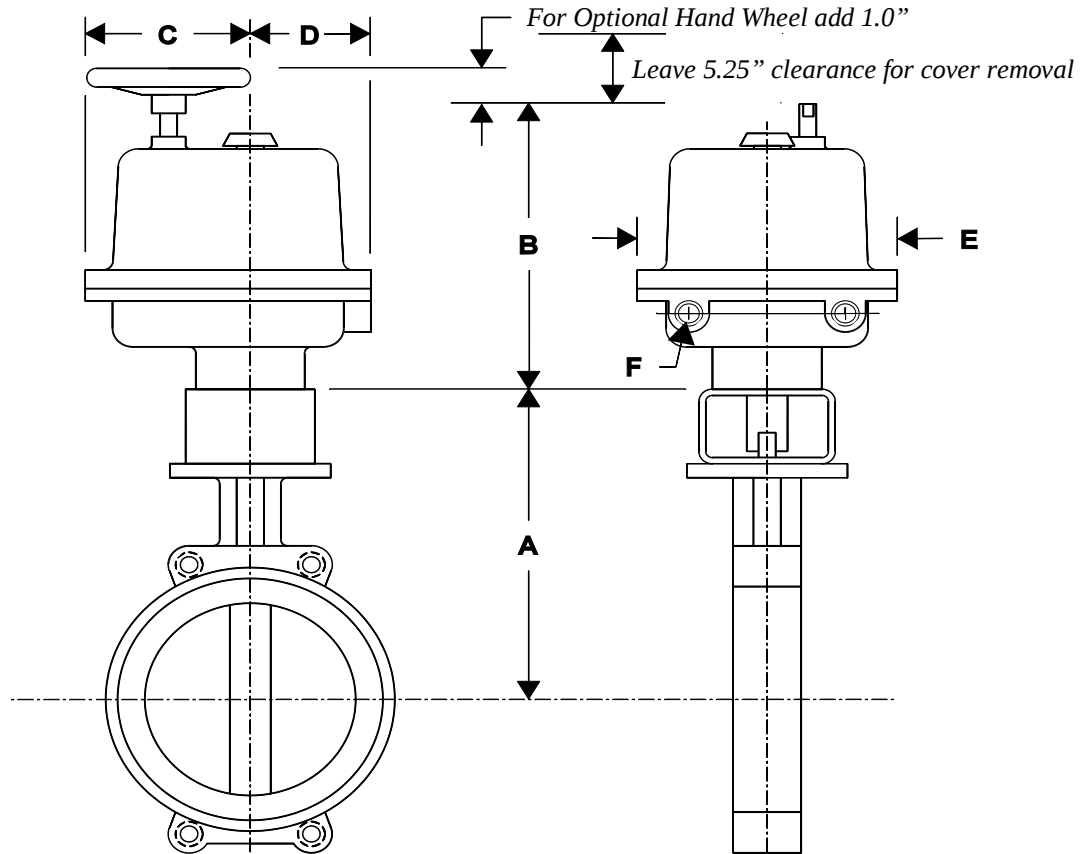


150 CLASS		Dimensions					Mounting Flange			Stem Connection		
Two-Way Part Number	Valve Size	A Height	B Height	C Stem Lg	D Stem Dia	E Face	F Width	G Width	H Fastener	S Square	K Key	L Length
HP2B-2.5-CS (150)	2.5 Lug	5.60	11.22	1.63	0.625	1.875	2.30	2.30	1/4-20	0.46		1.00
HP2B-3-CS (150)	3	5.60	11.22	1.63	0.625	1.875	2.30	2.30	1/4-20	0.46		1.00
HP2B-4-CS (150)	4	6.25	12.59	1.63	0.625	2.125	2.30	2.30	1/4-20	0.46		1.00
HP2B-5-CS (150)	5 Lug	7.70	15.22	1.69	0.875	2.125	3.00	3.00	3/8-16	0.64		1.00
HP2B-6-CS (150)	6	7.70	15.22	1.69	0.875	2.250	3.00	3.00	3/8-16	0.64		1.00
HP2B-8-CS (150)	8	9.51	19.22	1.86	1.125	2.625	3.36	3.36	1/2-13		0.250	1.50
HP2B-10(-CS 150)	10 Lug	10.54	20.75	1.82	1.125	2.812	3.36	3.36	1/2-13		0.250	1.50
HP2B-10W-CS (150)	10 Wafer	8.63	16.50	3.72	1.25	2.812	3.88	1.38	1/2-13		0.250	1.50
HP2B-12-CS (150)	12 Lug	11.62	21.72	5.50	1.375	3.188	3.88	2.00	1/2-13		0.312	1.50
HP2B-12W-CS (150)	12 Wafer	11.62	20.34	5.50	1.375	3.188	3.88	2.00	1/2-13		1.312	1.50
HP2B-14-CS (150)	14	12.00	23.09	5.50	1.500	3.625	4.50	2.00	1/2-13		0.375	1.50
HP2B-16-CS (150)	16	14.00	26.84	6.00	2.000	4.000	5.75	2.50	1/2-13		0.500	2.38
HP2B-18-CS (150)	18	15.00	29.09	6.00	2.250	4.500	5.75	2.50	1/2-13		0.500	2.38
HP2B-20-CS (150)	20	17.00	32.50	6.00	2.500	5.000	6.00	4.00	1/2-13		0.750	2.50
HP2B-24-CS(150)	24	19.50	37.88	6.50	3.000	6.062	6.00	4.00	3/4-10		0.750	2.50

300 CLASS		Dimensions					Mounting Flange			Stem Connection		
Two-Way Part Number	Valve Size	A Height	B Height	C Stem Lg	D Stem Dia	E Face	F Width	G Width	H Fastener	S Square	K Key	L Length
HP2B-2.5-CS (300)	2.5 Lug	5.60	11.88	1.63	0.625	1.875	2.30	2.30	1/4-20	0.46		1.00
HP2B-3-CS (300)	3 Lug	5.60	11.88	1.63	0.625	1.875	2.30	2.30	1/4-20	0.46		1.00
HP2B-3W-CS (300)	3 Wafer	5.60	11.25	1.63	0.625	1.875	2.30	2.30	1/4-20	0.46		1.00
HP2B-4-CS (300)	4	6.25	12.59	1.63	0.625	2.125	2.30	2.30	1/4-20	0.46		1.00
HP2B-5-CS (300)	5 Lug	7.70	15.22	1.69	0.875	2.125	3.00	3.00	3/8-16	0.64		1.00
HP2B-6-CS (300)	6 Lug	7.70	16.25	1.69	0.875	2.310	3.00	3.00	3/8-16	0.64		1.00
HP2B-6W-CS (300)	6 Wafer	7.70	15.22	1.69	0.875	2.310	3.00	3.00	3/8-16	0.64		1.00
HP2B-8-CS (300)	8	9.51	19.22	1.86	1.125	2.875	3.36	3.36	1/2-13		0.250	1.50
HP2B-10-CS (300)	10	10.81	19.75	5.50	1.375	3.250	3.88	2.00	1/2-13		0.312	1.50
HP2B-12-CS (300)	12	11.62	22.53	6.00	1.500	3.625	4.50	2.00	1/2-13		0.375	1.50
HP2B-14-CS (300)	14	13.50	26.09	6.00	2.000	4.625	5.75	2.50	1/2-13		0.500	2.38
HP2B-16-CS (300)	16	15.00	29.09	6.00	2.250	5.250	5.75	2.50	1/2-13		0.500	2.38



Dimensions for Two-Way High Performance Control Valves: 2 1/2" through 14" with RE Series Industrial NEMA Type 4/4X Actuators



Actuator Type	Dimensions				
	B	C	D	E	F
Non-Spring Return					
RE1.5-RE8.5	9.93	5.15	3.48	7.42	1/2" NPT
RE10-RE30	11.65	6.07	4.4	9.75	3/4" NPT

150 Class Valve Size	Model No.	Dimensions A*
2.5" Lug	HP2B-2.5	8.60
3"	HP2B-3	8.60
4"	HP2B-4	9.25
5" Lug	HP2B-5	10.70
6"	HP2B-6	10.70
8"	HP2B-8	12.51
10" Lug	HP2B-10	13.54
10" Wafer	HP2B-10W	11.63
12" Lug	HP2B-10	14.62
12" Wafer	HP2B-12W	14.62
14"	HP2B-14	15.06

300 Class Valve Size	Model No.	Dimensions A*
2.5" Lug	HP2B-2.5	8.60
3" Lug	HP2B-3	8.60
3" Wafer	HP2B-3W	8.60
4"	HP2B-4	9.25
5" Lug	HP2B-5	10.70
6" Lug	HP2B-6	10.70
6" Wafer	HP2B-6W	10.70
8"	HP2B-8	12.51
10"	HP2B-10	13.81
12"	HP2B-12	14.62
14"	HP2B-14	16.56

Notes:

- See page BF-B-22 for additional body information.
- Call DEI for specification on Butterfly valves 16" and larger.
- * Valves are sometimes direct mounted to the actuator (no bracket). If the "A" dimension is too long, call for details.