

WAFER TYPE HIGH PERFORMANCE BUTTERFLY VALVE ANSI 150

Model : VF-910A

Construction Details

Stem (10) - One-Piece design with ISO 5211 square drive.

Packing (7) - Multiply Rows of Teflon Chevron.

Retainer (4) - Patented design of square thread, ensures an un-interrupted sealing face. Flange face equipped with 125 - 200AARH finish and is compatible with both flat and spiral wound gaskets.

Integral Disc stop (1) - To prevent disc from over travel.

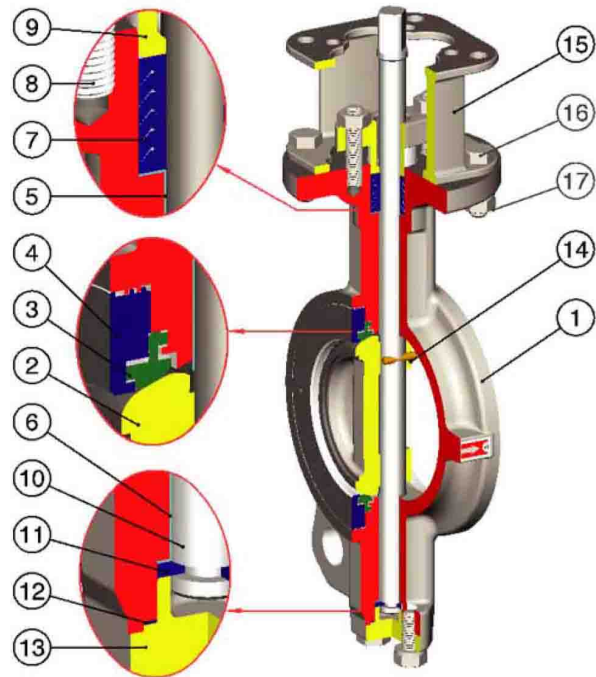
Teflon Seat (3) - Pressure assisted to give Bi - directional bubble tight shut off at all pressures. (Valve must be installed with retaining ring upstream for dead end service.)

Thrust Ring (11) - Anti blow out shaft and Anti static design.

Bearings (5&6) - Upper and Lower bearings are constructed of PTFE impregnated 316 SS.

Yoke (15) - Investment Cast, per ISO 5211.

Temperature : -29°C ~ 210°C



Material

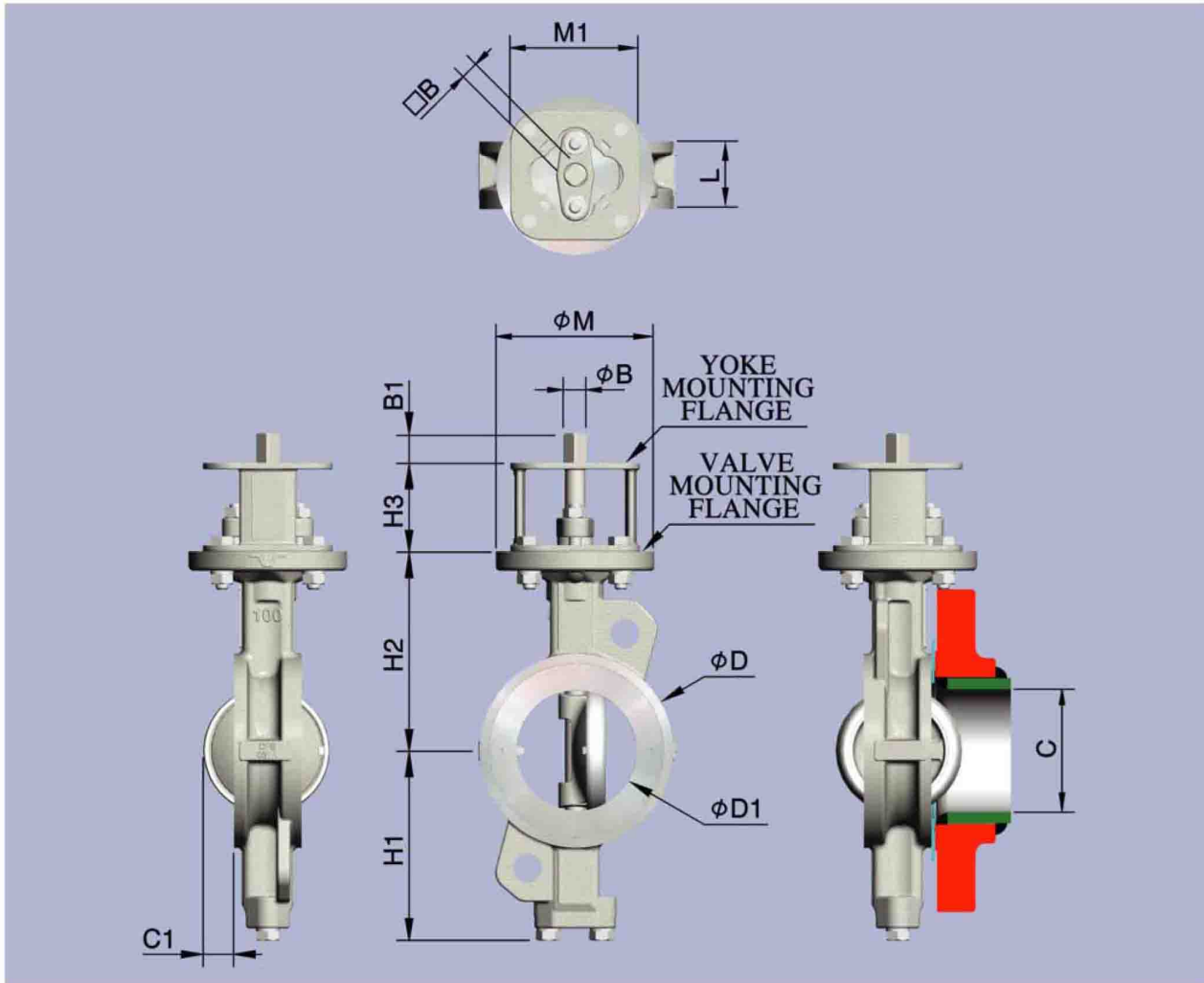
No	PART	MATERIAL
1	BODY	CARBON STEEL A216 Gr.WCB
2	DISC	STAINLESS STEEL A351 Gr.CF8
3	SEAT	PTFE+15%GRAPHITE
4	RETAINER	STAINLESS STEEL
5	BUSHING	PTFE+316SS
6	BUSHING	PTFE+316SS
7	GLAND PACKING	PTFE+15%GRAPHITE
8	STUD	STAINLESS STEEL A193 Gr.B8
9	GLAND	STAINLESS STEEL
10	STEM	STAINLESS STEEL A182 Gr.F304
11	THRUST RING	STAINLESS STEEL A240 Gr.316
12	SEAL	PTFE
13	BOTTOM COVER	STAINLESS STEEL
14	PIN	STAINLESS STEEL A182 Gr.F316
15	YOKE	CARBON STEEL A 216 Gr. WCB
16	BOLT	STAINLESS STEEL A193 Gr.B8
17	NUT	STAINLESS STEEL A194 Gr.8



UNIMECH GROUP, MALAYSIA

WAFER TYPE HIGH PERFORMANCE BUTTERFLY VALVE ANSI 150

Model : VF-910A



Unit:mm

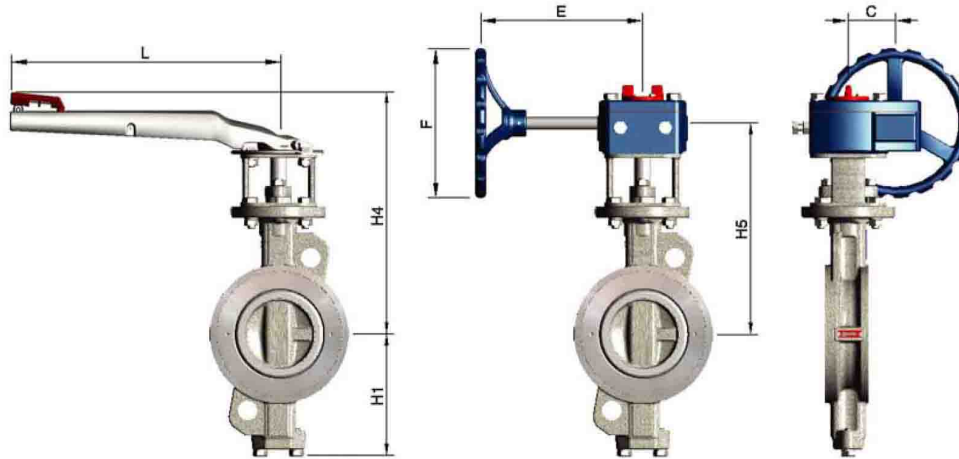
Size mm	Face to Face L	Dimensions							Mounting flange (ISO 5211)				Shaft end			Weight kg	
		H1	H2	H3	phi D	phi D1	C	C1	Valve		Yoke		phi B	square B	B1		
									Type	phi M	Type	M1					
50	43	99	118	60	92	37	49.5	2	F07	90	F07	F05	70	14	11	18	3.9
65	46	110	125	60	108	63	62.3	15	F07	90	F07	F05	70	14	11	18	4.5
80	47	128	140	70	126	78	65.9	22	F10	125	F10	F07	102	18	14	23	7
100	53	150	157	70	153	95	93	25	F10	125	F10	F07	102	18	14	23	9
125	57	163	170	70	184	118	120	36	F10	125	F10	F07	102	22	17	23	12
150	56	176	185	70	212	143	149	50	F10	125	F10	F07	102	22	17	23	13.5
200	62	206	220	80	268	188	196	70	F12	150	F12	F10	125	25	19	28	22
250	68	238	260	80	326	236	243	90	F12	150	F12	F10	125	28	22	28	32
300	78	269	290	100	375	282	289	106	F14	175	F14	F12	160	35	27	37	48
350	78/92	306	326	100	416	322	329	125	F14	175	F14	F12	160	36	27	37	66
400	102	342	370	120	476	371	377	140	F16	210	F16	F14	195	48	36	47	107
450	114	370	395	120	534	418	423	157	F16	210	F16	F14	195	48	36	47	130
500	127	399	430	120	588	466	471	177	F16	210	F16	F14	195	60	46	56	163
600	154	455	490	150	692	570	572	210	F25	300	F16	-	300	60	46	56	278
600	154	455	490	150	692	570	572	210	F25	300	F25	-	300	60	46	56	278



UNIMECH GROUP, MALAYSIA

WAFER TYPE HIGH PERFORMANCE BUTTERFLY VALVE ANSI 150

Model : VF-910A



Size		Operator Series no.	Lever operator			Gear operator				
mm	inch		H4	L	Weight (Kg) Wafer	H5	C	E	F	Weight (Kg) Wafer
50	2	L 7A	250	200	4.9	-	-	-	-	-
		C 07	-	-	-	215	41	155	150	7.2
65	2.5	L 7A	257	200	5.2	-	-	-	-	-
		C 07	-	-	-	222	41	155	150	7.8
80	3	L 7B	282	250	7.8	-	-	-	-	-
		C 07	-	-	-	247	41	155	150	10.3
100	4	L 7B	299	250	9.8	-	-	-	-	-
		C 10	-	-	-	268.5	63	195	200	16.5
125	5	L 10	318	355	13.6	-	-	-	-	-
		C 10	-	-	-	281.5	63	195	200	19.5
150	6	L 10	333	355	15.1	-	-	-	-	-
		C 10	-	-	-	296.5	63	195	200	21
200	8	L 10	378	335	23.6	-	-	-	-	-
		C 12	-	-	-	341	61	255	310	31
250	10	C 12	-	-	-	381	61	255	310	41
300	12	C 14	-	-	-	443	81	340	400	70
350	14	C 14	-	-	-	479	81	340	400	88
400	16	A2	-	-	-	546	123	307	400	142
450	18	A2	-	-	-	571	123	307	400	165
500	20	A2	-	-	-	606	123	307	400	198
600	24	A2	-	-	-	692	123	307	400	305
600	24	A3+S3	-	-	-	785	160	370	400	387

Unit:inch

Size		Operator Series no.	Lever operator			Gear operator				Handwheel turns ON/OFF N	Mounting flange (ISO 5211)			
mm	inch		H4	L	Weight (lb) Wafer	H5	C	E	F		Weight (lb) Wafer	Type	mm	inch
50	2	L 7A	9.84	7.87	10.8	-	-	-	-	-	-	F07	70	2.76
		C 07	-	-	-	8.46	1.61	6.10	5.91	16	10	-	-	-
65	2.5	L 7A	10.19	7.87	11	-	-	-	-	-	-	F07	70	2.76
		C 07	-	-	-	8.74	1.61	6.10	5.91	17	10	-	-	-
80	3	L 7B	11.10	9.84	17	-	-	-	-	-	-	F07	70	2.76
		C 07	-	-	-	9.72	1.61	6.10	5.91	23	10	-	-	-
100	4	L 7B	11.77	9.84	22	-	-	-	-	-	-	F10	102	4.02
		C 10	-	-	-	10.57	2.48	7.68	7.87	36	9	-	-	-
125	5	L 10	12.52	13.98	30	-	-	-	-	-	-	F10	102	4.02
		C 10	-	-	-	11.08	2.48	7.68	7.87	43	9	-	-	-
150	6	L 10	13.11	13.98	33	-	-	-	-	-	-	F10	102	4.02
		C 10	-	-	-	11.67	2.48	7.68	7.87	46	9	-	-	-
200	8	L 10	14.88	13.98	52.03	-	-	-	-	-	-	F12	125	4.92
		C 12	-	-	-	13.43	2.40	10.04	12.20	68	9.5	-	-	-
250	10	C 12	-	-	-	15.00	2.40	10.04	12.20	90	9.5	F12	125	4.92
300	12	C 14	-	-	-	17.44	3.19	13.39	15.75	154	12	F14	140	5.51
350	14	C 14	-	-	-	18.86	3.19	13.39	15.75	194	12	F14	140	5.51
400	16	A2	-	-	-	21.50	4.84	12.09	15.75	302	17.5	F16	165	6.50
450	18	A2	-	-	-	22.48	4.84	12.09	15.75	352	17.5	F16	165	6.50
500	20	A2	-	-	-	23.86	4.84	12.09	15.75	425	17.5	F16	165	6.50
600	24	A2	-	-	-	27.24	4.84	12.09	15.75	672	17.5	F16	165	6.50
600	24	A3+S3	-	-	-	30.91	6.30	14.57	15.75	760	52.5	F25	254	10.00



UNIMECH GROUP, MALAYSIA

WAFER TYPE HIGH PERFORMANCE BUTTERFLY VALVE ANSI 150

Model : VF-910A

VF-910 Torque data (kg-m) including 30% Safety Factor

Size		Differential pressure (kg/cm ²)					
		0	5	10	15	20	25
2"	50	0.3	0.5	1.0	2.0	2.0	2.5
2.5"	65	0.3	0.5	1.0	2.0	3.0	4.0
3"	80	0.5	1.0	2.0	3.0	4.5	6.0
4"	100	1.0	2.0	4.0	5.0	6.5	8.0
5"	125	2.0	4.5	6.5	9.0	11.0	13.0
6"	150	4.5	7.0	9.5	12.0	15.0	18.0
8"	200	7.0	11.0	15.0	18.5	21.5	24.0
10"	250	13.0	19.0	25.0	30.0	35.0	40.0
12"	300	20.0	30.0	40.0	50.0	58.0	65.0
14"	350	30.0	55.0	80.0	100.0	120.0	135.0
16"	400	45.0	70.0	100.0	120.0	140.0	160.0
18"	450	60.0	90.0	125.0	150.0	170.0	195.0
20"	500	85.0	120.0	150.0	175.0	210.0	240.0
24"	600	102.0	145.0	176.0	218.0	248.0	302.0

CV-values

Size		Valve Open Degree								
inch	mm	10°	20°	30°	40°	50°	60°	70°	80°	90°
2"	50	0.3	2	6	12	20	32	50	62	66
2.5"	65	1	11	27	40	60	83	106	133	140
3"	80	2	20	50	73	110	154	200	250	260
4"	100	4	32	80	120	180	250	320	400	420
5"	125	7	55	140	200	300	430	550	680	720
6"	150	11	90	230	340	510	710	910	1140	1200
8"	200	20	150	390	560	850	1190	1520	1900	2000
10"	250	30	240	600	870	1310	1840	2360	2940	3100
12"	300	40	360	920	1330	2000	2800	3600	4500	4750
14"	350	55	450	1130	1640	2500	3500	4500	5500	5850
16"	400	75	650	1600	2300	3500	4900	6300	7850	8300
18"	450	95	800	2000	2900	4400	6100	7900	9900	10400
20"	500	125	1000	2700	3900	5900	8200	10500	13000	13800
24"	600	200	1700	4400	6300	9500	13300	17000	21300	22500

SEAT RATING (psig)

Temperature		Class 150	
°F	°C	PTFE	RPTFE
-20 to 100	-29 to 38	285	285
150	66	273	273
200	93	260	260
250	121	245	245
300	149	230	230
350	177	140	215
400	204	50	100
410	210	39	78