



Value Valves

Cryogenic Valves

Cryogenic Valves

VALUE VALVES

VF-923AL VF-925AL VF-926AL Series

High Performance

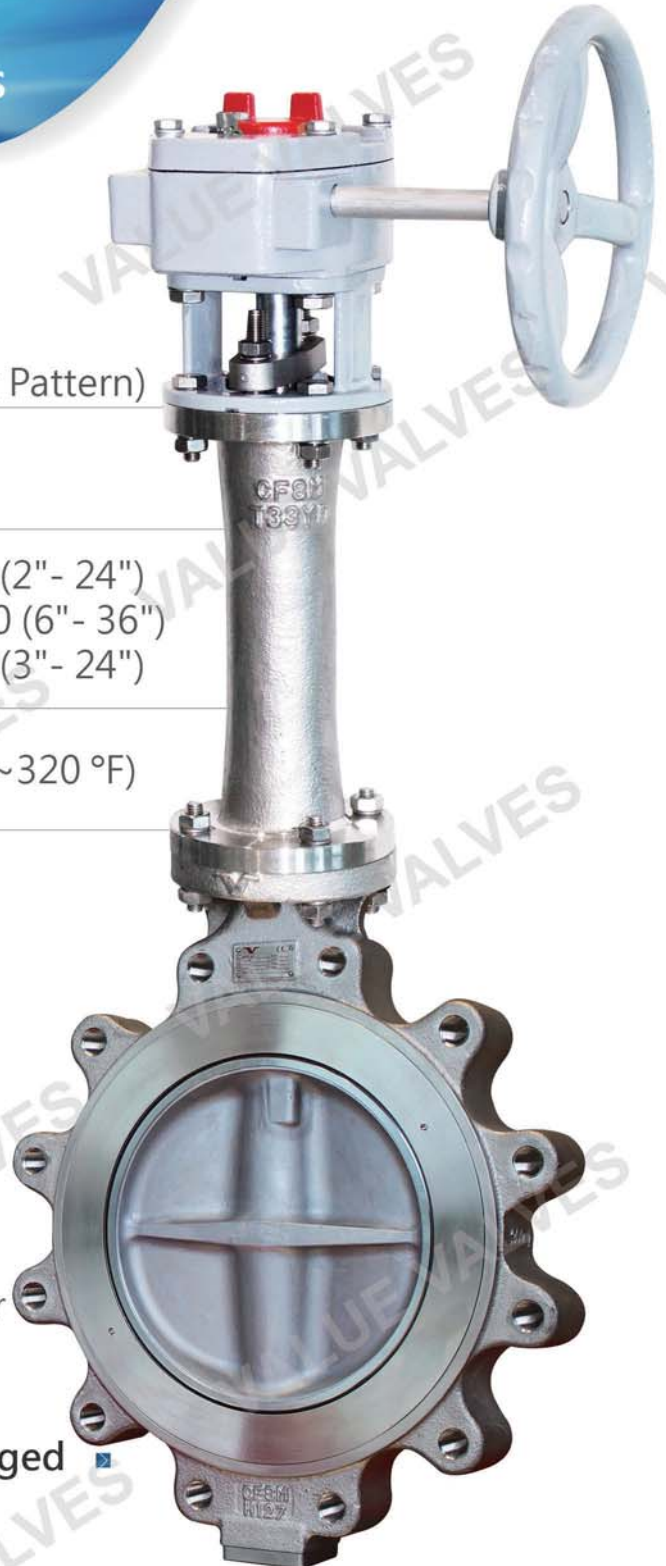
Double-Offset Butterfly Valves

END CONNECTION	VF-923AL Lugged VF-925AL Butt welding VF-926AL Flanged (Short Pattern)
ANSI CLASS	150 LB
SIZES	VF-923AL, DN50-DN600 (2" - 24") VF-925AL, DN150-DN900 (6" - 36") VF-926AL, DN80-DN600 (3" - 24")
TEMPERATURE RANGE	-196 °C ~ 160 °C (-256 °F ~ 320 °F)
APPLICATIONS	Cryogenic LNG LPG Petrochemicals Industry Nuclear Power Fossil & Cogeneration Power

Remark :

* Other dimensions and flange connections
please consult with Value Valves.

VF-923AL Lugged



APPLICABLE STANDARDS

CRYOGENIC	BS 6364
VALVE DESIGN & PRESSURE	ASME B16.34, 16.5
PRESSURE TESTING	BS 6364 ISO 5208
FLANGE DRILLING	ASME B16.5 EN 1092
MOUNTING FLANGE	ISO 5211
FACE TO FACE	API 609 ISO 5752
FIRE SAFE APPROVAL	API 607 ISO 10497
FUGITIVE EMISSION	ANSI/ISA-SP-93 ISO15848 TA LUFT
MARKING	MSS-SP-25 ASME B16.34
LEAKAGE CLASS	ISO 5208 RATE A
MANUFACTURING QUALITY	ISO 9001 PED 2014/68/EU(Module H) ATEX 2014/34/EU SIL 3 (SEE REMARK BELOW)
CERTIFICATION	API 609 Monogram API 607 ISO 15848 ISO 10497 TR CU 010 TR CU 032 TSG LR ABS CR



Remark: The valves are suitable for use in a safetyinstrumented system up to SIL 2 (low demand mode).The valves may be used in a redundant architecture up to SIL 3.

CRYOGENIC TEST



Cryogenic Valves

FEATURE



VF-925AL ■
Butt welding

Bushing
Stainless Steel+RTFE

DUST PROOF DESIGN

A set of bushing design prevents the ingress of foreign material into the shaft area.

VF-926AL ■
Flanged

Metal Seat
SS 316
Inconel 625
Copper

Soft Seat
PCTFE

Disc
Stainless Steel

Shaft
XM-19

Shaft strength

Shaft strength increased by splined shaft without drilling on the shaft for taper pin.

Blow-Out Protection

Both the shaft stop and bottom cover offers reliable blowout protection.

Stop Stud
Stainless Steel

Gland Packing
Graphite

Extension Bonnet
Stainless Steel



Anti-static structure

Body
Stainless Steel

VF-923AL VF-925AL VF-926AL Series

ANSI CLASS 150LB

FEATURE

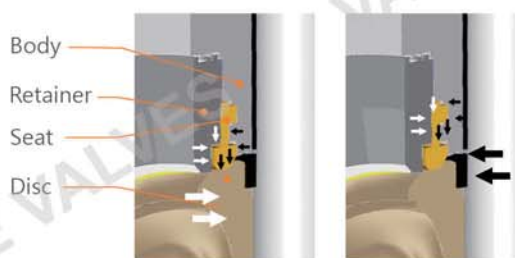
Easy Maintenance

Design feature of spline connection allows for easy repair and maintenance.



Bi-directional shutoff design

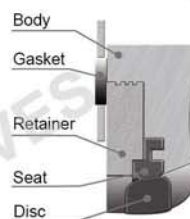
The floating sealing design is self-adjustable, this mechanism provides flawless bubble tight shutoff.



Value Valves - Patented seat and retainer ring design

Patented seat and retainer design achieves enlarged sealing surface and reaches 100% tight shutoff. The valve can be fully closed for a long time without enlarging the soft seat because of the floating retainer design.

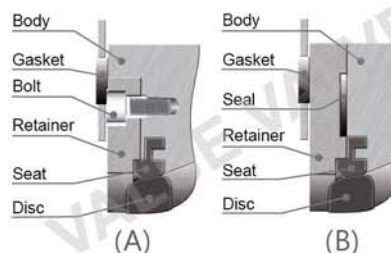
At deadend service, retainer side of valve shall be fitted at upstream to reach tight shutoff.



Conventional design

The sealing of flange surface from competitors depends on the gasket only. Furthermore, the socket bolted retainer design with higher possibility of external leakage due to the narrow sealing surface of gasket.

When valve with socket bolted retainer design closed for a period of time, the soft seat might be enlarged further leads to internal leakage because of the pressure from the retainer ring.



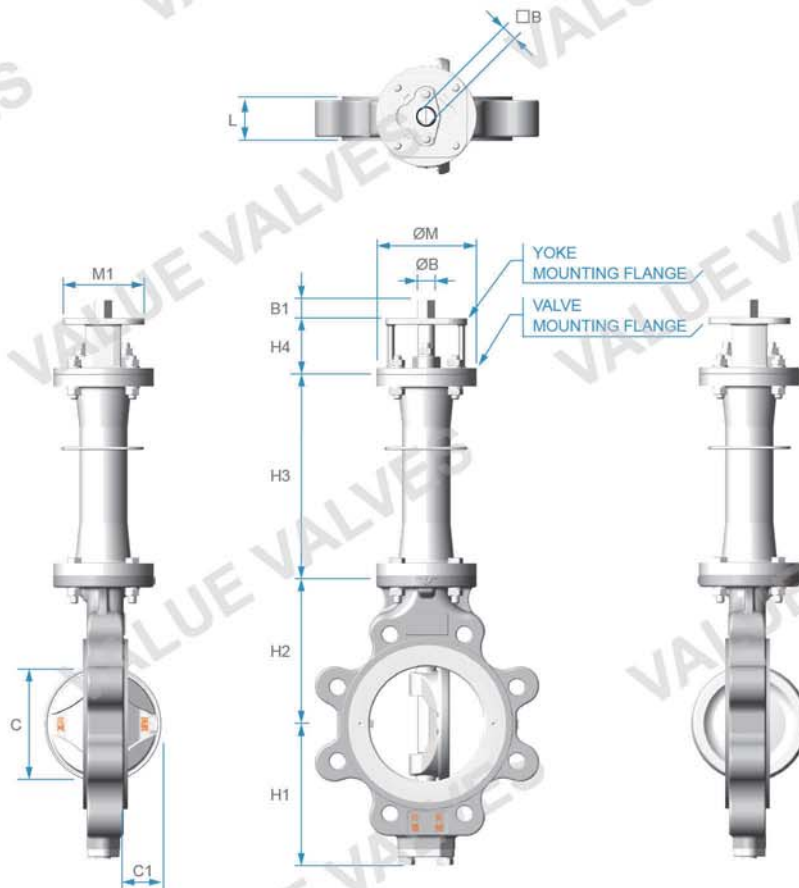
design

VF-923AL Series

ANSI CLASS 150LB

DN 50~600
INCH 2~24

DIMENSIONS



Unit : mm

Size		Face to Face	Dimension							Mounting Flange (ISO 5211)				Shaft end		
										VALVE		YOKE*				
mm	inch	L	H1	H2	H3	H4	C	C1	TYPE	φM	TYPE	M1	φB	□B	B1	
50	2	43	99	118	200	60	19	2	F07	90	F07	F05	70	14	11	18
65	2.5	46	111	125	200	60	56	15	F07	90	F07	F05	70	14	11	18
80	3	47	128	140	250	70	74	22	F10	125	F10	F07	102	18	14	23
100	4	53	150	157	250	70	86	25	F10	125	F10	F07	102	18	14	23
125	5	57	163	170	250	70	112	36	F10	125	F10	F07	102	22	17	23
150	6	56	176	185	250	70	138	49	F10	125	F10	F07	102	22	17	23
200	8	62	206	220	300	80	182	68	F12	150	F12	F10	125	25	19	28
250	10	68	238	260	300	80	230	89	F12	150	F12	F10	125	28	22	28
300	12	78	269	290	350	100	275	106	F14	175	F14	F12	160	35	27	37
350	14	78/92	306	326	350	100	314	125	F14	175	F14	F12	160	36	27	37
400	16	102	342	370	350	120	361	140	F16	210	F16	F14	195	48	36	47
450	18	114	370	395	350	120	406	157	F16	210	F16	F14	195	48	36	47
500	20	127	397	430	350	120	453	177	F16	210	F16	F14	195	60	46	56
600	24	154	455	490	450	150	550	210	F25	300	F25	-	300	60	46	56

*Other dimensions please consult with Value Valves.

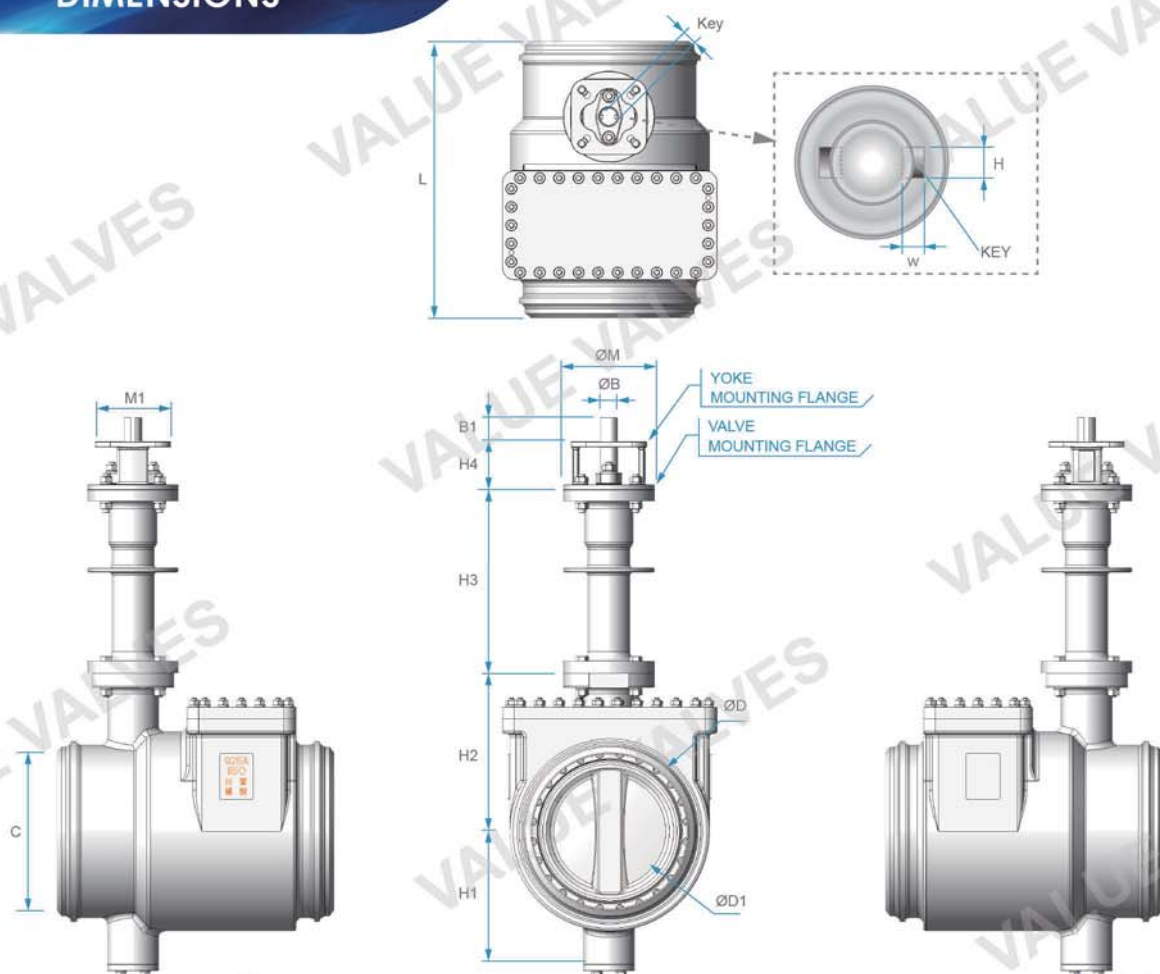
* Inside Pipe Diameter > C

DN 150~900
INCH 6~36

VF-925AL Series

ANSI CLASS 150LB

DIMENSIONS



Unit : mm

Size		Face to Face	Dimensions				Mounting Flange (ISO 5211)				Shaft End			
							VALVE		YOKE*					
mm	inch	L	H1	H2	H3	H4	Type	φM	TYPE	M1	φB	Key	B1	
150	6	395	176	185	250	70	F10	125	F10	F07	102	21.85	8*8	30
200	8	410	206	220	300	80	F12	150	F12	F10	125	24.85	8*8	30
250	10	455	238	260	300	80	F12	150	F12	F10	125	29.85	8*8	40
300	12	480	269	290	350	100	F14	175	F14	F12	160	34.85	10*8	50
350	14	530	306	326	350	100	F14	175	F14	F12	160	37.7	10*8	55
400	16	555	342	370	350	120	F16	210	F16	F14	195	44.7	16*10	65
450	18	590	370	395	350	120	F16	210	F16	F14	195	49.7	16*10	65
500	20	625	397	430	350	120	F16	210	F16	F14	195	59.7	18*12	80
550	20	625	424	470	350	120	F16	210	F16	F14	195	59.7	18*12	80
600	24	680	455	490	350	150	F25	300	F25	-	300	64.7	18*12	80
650	26	680	494	1248	450	150	F25	300	F25	-	300	69.7	18*12	90
700	28	750	514	1304	450	150	F25	300	F25	-	300	74.7	20*12	110
750	30	775	553	1330	450	150	F25	300	F25	-	300	79.5	24*16	110
800	32	830	578	1355	450	150	F25	300	F25	-	300	89.5	25*14	110
900	36	905	631	1466	450	150	F30	350	F30	-	350	99.3	28*16	180

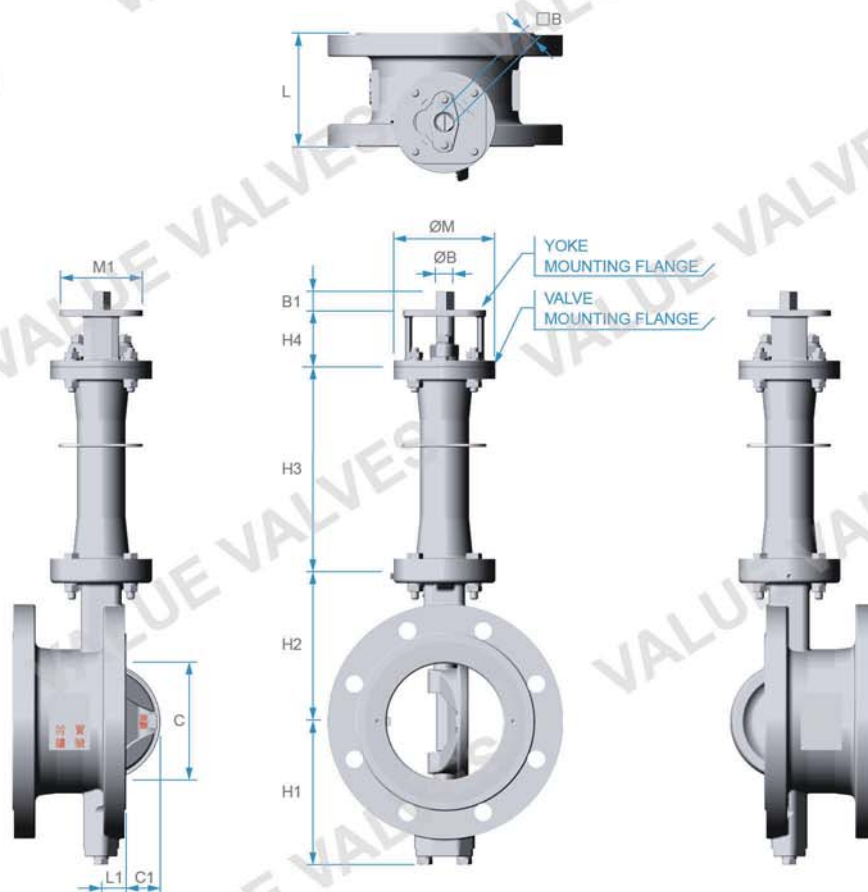
*Other dimensions please consult with Value Valves.

VF-926AL Series

ANSI CLASS 150LB

DN 80~600
INCH 3~24

DIMENSIONS



Size		Face to Face	Dimensions							Mounting Flange (ISO 5211)				Shaft End			
										VALVE		YOKE*					
mm	inch	L	H1	H2	H3	H4	C1	C	L1	Type	φM	TYPE		M1	φB	□B	B1
80	3	114	128	140	250	70	17.5	70	26	F10	125	F10	F07	102	18	14	23
100	4	127	150	157	250	70	25	89	27	F10	125	F10	F07	102	18	14	23
125	5	140	163	170	250	70	33	112	31	F10	125	F10	F07	102	22	17	23
150	6	140	176	185	250	70	45	138	31	F10	125	F10	F07	102	22	17	23
200	8	152	206	220	300	80	65	183	33	F12	150	F12	F10	125	25	19	28
250	10	165	238	260	300	80	85	232	36	F12	150	F12	F10	125	28	22	28
300	12	178	269	290	350	100	104	278	41	F14	175	F14	F12	160	35	27	37
350	14	190	306	326	350	100	123	316	40	F14	175	F14	F12	160	36	27	37
400	16	216	342	370	350	120	136	363	53	F16	210	F16	F14	195	48	36	47
450	18	222	370	395	350	120	154	409	59	F16	210	F16	F14	195	48	36	47
500	20	229	397	430	350	120	169	454	68	F16	210	F16	F14	195	60	46	56
600	24	267	455	490	450	150	211	556	77	F25	300	F25	-	300	60	46	56

*Other dimensions please consult with Value Valves.

* Inside Pipe Diameter > C

VF-923AL VF-925AL VF-926AL Series

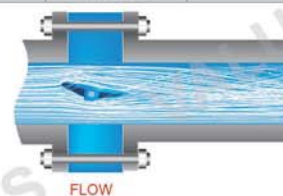
ANSI CLASS 150LB

TORQUE CHART (Nm)

Including 30% Safety Factor

Size		Differential Pressure					
mm	inch	0	5	10	15	20	25
50	2	45	49	59	65	74	89
65	2.5	56	70	92	103	125	146
80	3	75	92	115	139	161	192
100	4	115	133	155	177	211	243
125	5	177	206	255	292	336	364
150	6	221	294	339	397	441	500
200	8	265	353	441	530	633	721
250	10	383	486	633	721	853	971
300	12	500	706	824	1029	1294	1515
350	14	691	1088	1250	1485	1794	2132
400	16	985	1441	1897	2264	2529	2823
450	18	1265	1588	2044	2558	3132	3969
500	20	1617	2073	2705	3249	4381	5116
600	24	1911	2426	3337	4175	5675	7056
650	26	3617	4968	6527	6606	8309	-
700	28	4205	5763	7571	8112	10227	-
750	30	4821	6615	8688	9809	12393	-
800	32	5483	7527	9878	12305	15617	-
900	36	6953	9525	12510	17045	21695	-

*Other dimensions please consult with Value Valves.



CV FLOW COEFFICIENT

Size		Percent of Rated Travel									
mm	inch	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
50	2	1	2	5	10	15	23	35	53	64	66
65	2.5	5	9	22	32	51	70	92	112	136	140
80	3	9	16	41	59	92	128	170	212	256	260
100	4	14	26	65	97	152	210	276	339	410	420
125	5	25	45	113	162	253	350	474	582	697	720
150	6	25	77	152	226	417	728	880	1176	1340	1375
200	8	42	137	271	402	546	765	984	1303	1450	1750
250	10	125	305	492	583	923	1260	1650	2060	2440	2667
300	12	170	415	669	965	1300	1755	3059	3454	3849	4366
350	14	222	506	796	1165	1614	2241	3122	4230	5360	5964
400	16	315	537	902	1324	1904	2485	3703	5395	6887	7762
450	18	392	946	1456	2040	2816	3918	5416	7061	8535	9354
500	20	513	1197	1834	2558	3505	4943	7188	9097	11011	11824
600	24	845	1861	2752	3911	5501	7664	10840	14424	18347	19862
650	26	440	1220	2420	4110	6309	9390	14450	20100	26631	27325
700	28	484	1342	2662	4521	6736	10329	15895	22110	29294	30872
750	30	735	1658	3107	5457	8163	11878	20463	26074	34171	36913
800	32	987	1973	3552	6393	9590	13426	22853	30037	39048	42953
900	36	1442	3366	5227	7835	11634	17263	25243	35327	48138	54483

*Other dimensions please consult with Value Valves.

Cryogenic Valves

VALUE VALVES

VF-875L Series Butt welding
VF-876L Series Short Fanged
Triple Offset Butterfly Valve

END CONNECTION	VF-875L Butt welding VF-876L Short Fanged
ANSI CLASS	150 LB
SIZES	DN100-DN600 (4" - 24")
TEMPERTURE RANGE	Metal Seat -196 °C~760 °C (-320 °F~1400 °F)
APPLICATIONS	Cryogenic
	LNG
	LPG
	Petrochemicals Industry
	Nuclear Power
	Fossil & Cogeneration Power

VF-876L
Short Fanged



Remark :

* Other dimensions and flange connections
please consult with Value Valves.



APPLICABLE STANDARDS

CRYOGENIC	BS 6364
VALVE DESIGN & PRESSURE	ASME B16.34 API 609
PRESSURE TESTING	BS 6364 ISO 5208
FLANGE DRILLING (BUTT WELDING)	ASME B16.25
FLANGE DRILLING (SHORT PATTERN)	ASME B16.5 EN 1092
MOUNTING FLANGE	ISO 5211
FACE TO FACE	API 609 ISO 5752 ASME B16.10
FIRE SAFE APPROVAL	API 607 ISO 10497
FUGITIVE EMISSION	ANSI/ISA-SP-93 ISO15848 TA LUFT
MARKING	MSS-SP-25 ASME B16.34
LEAKAGE CLASS	ANSI FCI 70-2 Class V ISO 5208 RATE A
MANUFACTURING QUALITY	ISO 5208 RATE A PED 2014/68/EU(Module H) ATEX 2014/34/EU SIL 3 (SEE REMARK BELOW)
CERTIFICATION	API 609 Monogram API 607 ISO 15848 ISO 10497 TR CU 010 TR CU 032 TSG



Butt Welding ■
On Option!



Remark: The valves are suitable for use in a safety instrumented system up to SIL 2 (low demand mode). The valves may be used in a redundant architecture up to SIL 3.

Cryogenic Test



Cryogenic Valves

FEATURE

Disc Hard Face

The standard disc is built with a weld overlay plated, hard face provides increased hardness and wear resistance with long service life.

Sealing Design

The soft sealing of graphite for metal seat is placed on the body which reducing the possibility of graphite gets wear further leads to leakage.

Dust Proof Design

A set of bushing design prevents the ingress of foreign material into the shaft area.

Disc

Pin-less design provides easily maintenance work.

Shaft Strength Upgraded

Shaft strength increased by splined shaft without drilling on the shaft for taper pin.

Blow-Out Protection

Both the shaft stop and bottom cover offers reliable blowout protection.

Weld Overlay Plated

Metal Seat
Stainless Steel

Graphite

Bushing
Stainless Steel+RTFE

Disc
Stainless Steel

Shaft
XM-19

Stop Stud
Stainless Steel

Shaft Stop

Gland Packing
Griphite

Extension Bonnet
Stainless Steel

Anti-static
structure

Body
Stainless Steel

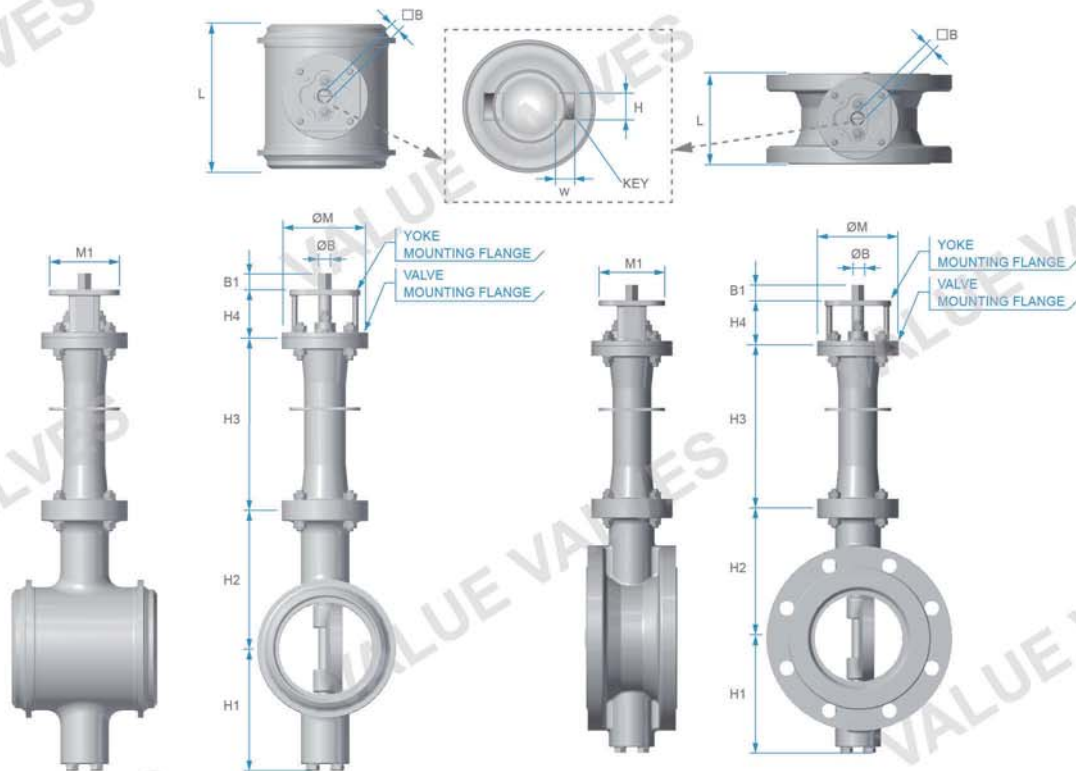
DN 100~1000
INCH 4~24

Butt Welding
VF-875L

Short Fanged
VF-876L Series

ANSI CLASS 150LB

DIMENSIONS



VF-875L Butt Wetting

VF-876L Short Pattern

Unit : mm

Size		Face to Face		Dimensions				Mounting flange (ISO 5211)				Shaft end			
mm	Inch	VF-875L	VF-876L	H1	H2	H3	H4	VALVE		Yoke*		φB	B1	Key (H*W)	□B
								Type	ØM	Type	M1				
100	4	190	127	140	155	200	60	F07	90	F07/F05	70	14	18	-	11
150	6	210	140	177	200	250	70	F10	125	F10/F07	102	18	24	-	14
200	8	230	152	204	225	250	70	F10	125	F10/F07	102	25	28	-	19
250	10	250	165	252	270	300	80	F12	150	F12/F10	125	28	28	-	22
300	12	270	178	281	300	350	100	F14	175	F14/F12	140	35	37	-	27
350	14	290	190	317	355	350	100	F14	175	F14/F12	140	41.7	55	12*8	-
400	16	310	216	352	385	350	120	F16	210	F16/F14	165	44.7	55	12*8	-
450	18	330	222	376	415	350	120	F16	210	F16/F14	165	49.7	65	16*10	-
500	20	350	229	411	455	350	120	F16	210	F16/F14	165	54.7	65	16*10	-
600	24	390	267	476	540	450	150	F25	300	F25	300	64.7	80	18*12	-

* Other dimensions please consult with Value Valves.

Butt Welding

Short Fanged

VF-875L VF-876L Series

ANSI CLASS 150LB

TORQUE CHART (Nm)

Including 30% Safety Factor

Size		Flow Direction	6.25 bar		12.5 bar		25 bar	
			End to Close	Break to Open	End to Close	Break to Open	End to Close	Break to Open
mm	inch		(Nm)	(Nm)	(Nm)	(Nm)	(Nm)	(Nm)
100	4	Shaft Side	270	270	270	270	270	330
100	4	Bidirectional	270	323	270	323	373	448
150	6	Shaft Side	468	468	468	468	468	590
150	6	Bidirectional	468	560	468	560	713	858
200	8	Shaft Side	512	512	512	512	512	846
200	8	Bidirectional	512	616	512	616	950	1140
250	10	Shaft Side	950	950	950	950	950	1500
250	10	Bidirectional	950	1140	950	1140	1728	2072
300	12	Shaft Side	1352	1352	1352	1352	1352	2244
300	12	Bidirectional	1352	1622	1352	1622	2576	3092
350	14	Shaft Side	1636	1636	1636	1664	1636	3058
350	14	Bidirectional	1636	1962	1720	2064	3438	4126
400	16	Shaft Side	2156	2156	2156	2272	2156	4198
400	16	Bidirectional	2156	2586	2358	2830	4716	5658
450	18	Shaft Side	2742	2742	2742	2996	2742	5566
450	18	Bidirectional	2742	3290	3118	3742	6238	7484
500	20	Shaft Side	2980	2980	2980	3490	2980	6554
500	20	Bidirectional	2980	3574	3660	4392	7318	8782
600	24	Shaft Side	4324	4324	4324	5762	4324	10912
600	24	Bidirectional	4324	5188	6014	7216	12028	14434
650	26	Shaft Side	7508	7508	7508	10774	7508	20784
650	26	Bidirectional	7508	9010	11512	13814	23024	27628
700	28	Shaft Side	10916	10916	10916	19086	10916	36778
700	28	Bidirectional	10916	13100	19876	23852	39752	47704
750	30	Shaft Side	12518	13950	12518	26174	12518	50622
750	30	Bidirectional	13476	16170	26952	32342	53902	64682
800	32	Shaft Side	14438	14744	14438	27764	14438	53800
800	32	Bidirectional	14462	17354	28924	34710	57850	69420
900	36	Shaft Side	21264	21264	21264	37368	21264	72638
900	36	Bidirectional	21264	25518	39522	47428	79046	94854

* Other dimensions please consult with Value Valves.

CV FLOW COFFICIENT

Size		Percent of Rated Travel									
mm	inch	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
80	3	9	21	34	50	68	90	112	124	124	117
100	4	17	38	67	107	148	194	251	300	319	296
150	6	33	78	146	231	336	461	625	795	919	893
200	8	50	138	254	377	552	770	1021	1294	1475	1525
250	10	92	230	410	620	896	1253	1677	2155	2536	2687
300	12	132	362	642	958	1377	1864	2473	3092	3671	3810
350	14	118	279	608	1036	1673	2575	3730	5015	6564	6843
400	16	348	454	856	1458	2320	3488	5082	6915	8584	9280
450	18	463	735	1336	2212	3345	4765	6274	7963	9688	11170
500	20	490	975	1645	2576	3944	5603	7837	10396	12825	13386
600	24	640	1395	2250	3636	5587	8333	11611	14717	18754	21216
700	28	440	1220	2420	4110	6160	9390	14450	20100	26631	28000
750	30	642	1568	2994	5204	8413	12976	19748	27306	30500	31500
800	32	680	1662	3172	5514	8912	13746	20922	28928	34240	36000
900	36	788	2043	3924	7221	11451	17885	26682	38300	42610	44800



VF-8 Series 136 inch
High Performance
Triple-Offset Butterfly Valves



www.valuevalves.com

VALUE VALVES CO., LTD.

TEL : +886-2-22698000

FAX : +886-2-22686600

E-MAIL : sales@valuevalves.com.tw

ADD : No.9, Chung Shan Rd., Tu-Cheng Industrial District,
New Taipei City, Taiwan 236

VALUE VALVES PTE LTD.

TEL : +65-6481 2948

FAX : +65-6481 3589

ADD : Blk 22 Woodlands Link #01-56 Woodlands
East Industrial Estate Singapore 738734

