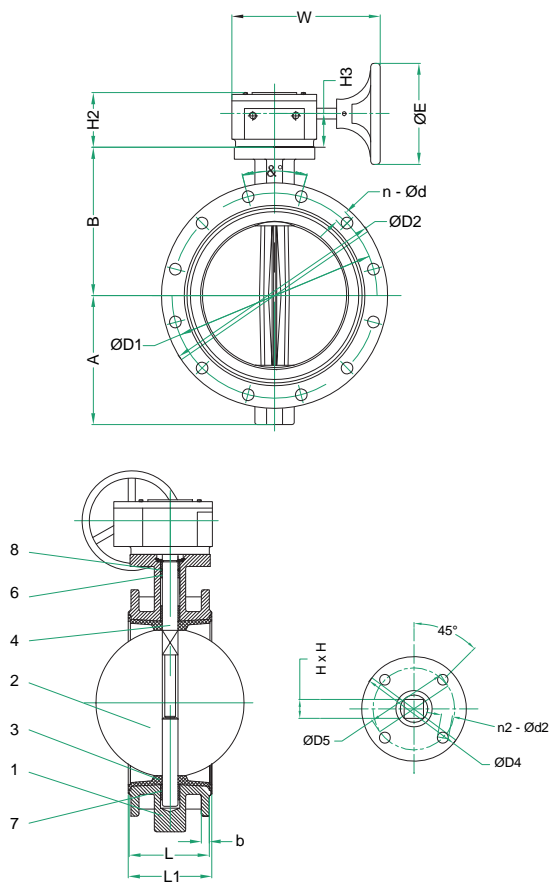




Features / Design

- 1.- **TFV 9F Series** is a double flanged butterfly valve mainly assembled by valve body, disc, shaft, seat & actuator. The valve seat is vulcanized on body and make it completely separated from medium, can be used in bad environments & have long service life.
- 2.- Des. & Mfg. Std.: API 609⁽¹⁾. Compact design results in low weight, less space in storage and installation.
- 3.- Central shaft position, 100% bidirectional bubble tight shut off - zero leakage, makes installation acceptable at any direction.
- 4.- Full bore body gives low resistance to flow. No cavities in the flow passage, easy to clean and disinfect for potable water system, etc.
- 5.- Liner creates seal with mating flanges so no media is in contact with valve body. Lining bonded to body to ensure no corrosion between body and lining, longer life, suitable for vacuum service, eg. at the suction side of a pump, suitable for end line use⁽²⁾.
- 6.- ISO 5211 top flange for easy fitting of actuators. Low operating torques results in easy operation and economical actuator sizing.
- 7.- PTFE lined bearing on shaft allows low friction & wear without using lubricants.
- 8.- Ends: Flanged RF⁽³⁾. End to end acc. to API 609.
- 9.- Inspection and Test Standard: API 598.

Design for 2" to 14" valves



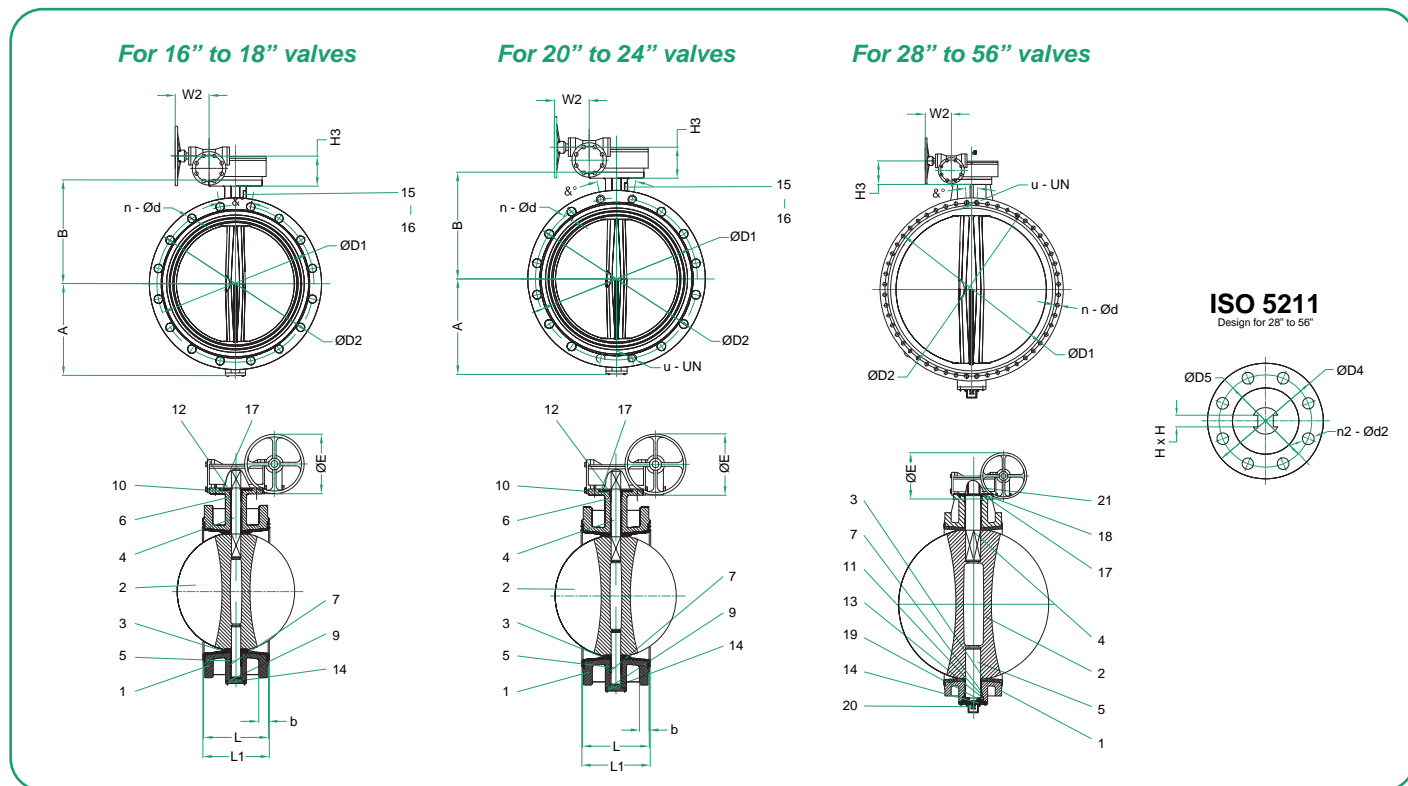
NOTES:

- (1) Pressure and temperature rating acc. to ASME B16.34.
- (2) For use and end of pipe line, max. pressure not larger than 50% of the rated pressure.
- (3) Flanged RF (ASME B16.5 from 2" to 24" & ASME B14.47 Series A from 28" to 56") - Class 150# (200 CWP from 2" to 24" & 150 CWP from 28" to 56").

Material List

NO.	DESCRIPTION	MATERIAL
1	BODY	A536 65-45-12
2	DISC	DI / ASTM A351 CF8M
3	LINER-SEAT	EPDM
4	UP SHAFT	SS410
5	DOWN SHAFT	SS410
6	SHORT BUSHING	BRASS
7	LONG BUSHING	BRASS
8	O-RING	NBR
9	O-RING	NBR
10	PACKING	NBR
11	PACKING	NBR
12	PACKING GLAND	CARBON STEEL
13	PACKING GLAND	CARBON STEEL
14	END COVER	A536 65-45-12
15	NAMEPLATE	STAINLESS STEEL
16	NAMEPLATE RIVET	STAINLESS STEEL
17	HALF RING	CARBON STEEL
18	GASKET	CARBON STEEL
19	SINGLE SIDE THRUST BEARING	ASSEMBLY
20	ADJUSTING SCREW	A2
21	KEY	#45





Dimensions (inches)

SIZE	A (in)	B (in)	ØD1 (in)	ØD2 (in)	n (in)	Ød (in)	N-UN (in)	ISO5211	ØD4 (in)	ØD5 (in)	n2	ØD5 (in)	L (in)
2"	3.150	4.331	4.752	5.906	4	0.748	/	F07	3.543	2.756	4	0.394	4.252
2 1/2"	3.228	5.394	5.500	7.087	4	0.748	/	F07	3.543	2.756	4	0.394	4.409
3"	3.858	5.748	6.000	7.480	4	0.748	/	F07	3.543	2.756	4	0.394	4.488
4"	4.528	6.102	7.500	9.055	8	0.748	/	F07	3.543	2.756	4	0.394	5.000
5"	4.528	6.732	8.500	10.039	8	0.906	/	F07	3.543	2.756	4	0.394	5.512
6"	5.591	7.165	9.500	11.024	8	0.906	/	F07	3.543	2.756	4	0.394	5.512
8"	6.929	8.346	11.752	13.583	8	0.906	/	F10	4.921	4.016	4	0.472	5.984
10"	8.268	9.843	14.252	15.945	12	1.024	/	F10	4.921	4.016	4	0.472	6.496
12"	9.528	10.945	17.000	19.094	12	1.024	/	F10	4.921	4.016	4	0.472	7.008
14"	10.000	12.323	18.752	21.063	12	1.142	/	F10	4.921	4.016	4	0.472	7.480
16"	11.732	13.740	21.252	23.425	16	1.142	/	F14	6.890	5.512	4	0.709	8.504
18"	12.992	14.961	22.752	25.039	16	1.260	/	F14	6.890	5.512	4	0.709	8.740
20"	13.701	17.638	25.000	27.559	16	1.260	4-1 1/8 - 8UN - 2B	F14	6.890	5.512	4	0.709	9.016
24"	16.929	20.472	29.500	32.087	16	1.378	4-1 1/4 - 8UN - 2B	F16	8.268	6.496	4	0.866	10.512
28"	*	*	34.000	36.417	24	1.378	4-1 1/4 - 8UN - 2B	F25	11.811	10.000	8	0.709	11.496
30"	*	*	36.000	38.780	24	1.378	4-1 1/4 - 8UN - 2B	F25	11.811	10.000	8	0.709	12.520
32"	*	*	38.500	41.732	24	1.654	4-1 1/2 - 8UN - 2B	F25	11.811	10.000	8	0.709	12.520
36"	*	*	42.752	46.063	28	1.654	4-1 1/2 - 8UN - 2B	F25	11.811	10.000	8	0.787	12.992
40"	*	*	47.252	50.787	32	1.654	4-1 1/2 - 8UN - 2B	F25	11.811	10.000	8	0.866	16.142
48"	*	*	56.000	59.449	40	1.654	4-1 1/2 - 8UN - 2B	F30	13.780	11.732	8	1.102	18.504
52"	*	*	60.500	63.976	40	1.890	4-1 1/4 - 8UN - 2B	F35	16.339	14.016	8	1.260	19.685
56"	*	*	65.000	68.701	44	1.890	4-1 1/4 - 8UN - 2B	F35	16.339	14.016	8	1.417	20.866



Dimensions (inches) - Cont.

SIZE	L1 (in)	&* (in)	b (in)	H (in)	H2 (in)	H3 (in)	W (in)	W2 (in)	ØE (in)	CV (USgpm)	Torque (lb*in)	WEIGHT (lb)
2"	4.370	90	0.748	0.433	2.795	1.378	7.677	/	5.787	135.0	88.496	24.030
2 1/2"	4.528	90	0.748	0.433	2.795	1.378	7.677	/	5.787	220.0	150.442	27.117
3"	4.606	90	0.748	0.433	2.795	1.378	7.677	/	5.787	302.0	230.088	29.101
4"	5.118	45	0.748	0.433	2.795	1.378	7.677	/	5.787	600.0	380.531	35.054
5"	5.630	45	0.748	0.551	2.795	1.378	7.677	/	5.787	1022.0	575.221	43.343
6"	5.630	45	0.748	0.551	2.795	1.378	7.677	/	5.787	1579.0	911.504	48.281
8"	6.102	45	0.787	0.669	3.228	1.575	11.220	/	11.496	3136.0	1823.009	78.926
10"	6.614	30	0.866	0.866	3.228	1.575	11.220	/	11.496	5340.0	2646.018	132.939
12"	7.165	30	0.965	0.866	3.228	1.575	11.220	/	11.496	8250.0	3690.265	146.475
14"	7.638	30	1.043	0.866	3,228	1.575	11.220	/	11.496	11917.0	6920.354	182.543
16"	8.701	22.50	1.102	1.063	/	4.409	/	6.496	11.811	16388.0	10831.858	262.350
18"	8.937	22.50	1.181	1.063	/	4.409	/	6.496	11.811	21705.0	13389.381	324.080
20"	9.213	18	1.240	1.417	/	4.409	/	6.496	11.811	27908.0	16628.319	388.014
24"	10.709	18	1.417	1.417	/	5.157	/	6.693	11.811	43116.0	29938.053	617.295
28"	/	12.85	1.555	0.709	/	6.417	/	8.268	17.717	58696.0	37008.850	857.599
30"	/	12.85	*	0.709	/	6.417	/	8.268	17.717	58696.0	52991.150	1210.339
32"	/	12.85	1.693	0.709	/	6.417	/	8.268	17.717	68250.0	58973.451	1210.339
36"	/	11.25	1.831	0.787	/	6.220	/	8.268	17.717	86375.0	73515.929	1347.026
40"	/	10	1.969	0.866	/	6.220	/	8.268	17.717	119750.0	102000.000	1684.333
48"	/	8.18	2.244	1.102	/	8.110	/	*	17.717	132888.0	159469.027	2793.259
52"	/	8.18	2.244	1.260	/	*	/	*	*	*	256637.168	*
56"	/	7.50	2.362	1.417	/	*	/	*	*	*	283185.841	*

NOTE: * Please consult with manufacturer.



How to Order

VALVE BODY DESIGN (SERIES)	MATERIAL			ENDS	CLASS	SIZE ⁽⁴⁾		OPERATION
	BODY	TRIM	SEAT					
9F Double Flanged Butterfly Valve	2 WCB	1 Bronze	E EPDM	D Double Flange	0 ANSI 150# ⁽⁵⁾	02	2"	L Manual Lever Operator
	3 A351 CF8M	3 A351 CF8M	B NBR			02.5	2 1/2"	B Bare Shaft
	4 A351 CF8	4 A351 CF8	V Viton			03	3"	G Gear Operator
	6 CI / DI	6 CI / DI				04	4"	P Peumatic Actuator
						05	5"	E Electric Actuator
						06	6"	
						08	8"	
						10	10"	
						12	12"	
						14	14"	
						16	16"	
						18	18"	
						20	20"	
			24	24"				
			28	28"				
			30	30"				
			32	32"				
			36	36"				
			40	40"				
			48	48"				
			52	52"				
			56	56"				

Example:

Double Flanged Resilient Seated Butterfly Valve, Body DI, Disc Bronze, Seat EPDM, Double Flange ANSI 150# (200 CWP), Size 20" with Gear Operator.

9F61ED020G

NOTES:

(4) Please contact us for more available sizes.

(5) CWP stands for Cold Working Pressure and is an indication of the pressure rating for valves at a temperature up to 100°F. Flanged RF (ASME B16.5 from 2" to 24" & ASME B14.47 Series A from 28" to 56") - Class 150# (200 CWP from 2" to 24" & 150 CWP from 28" to 56").

