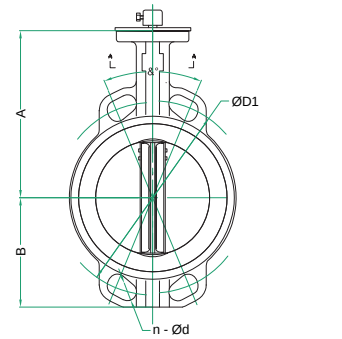
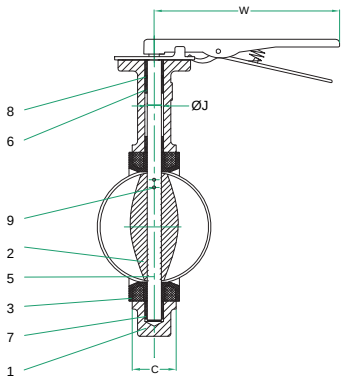
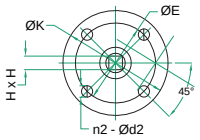
For 2" to 12" valves







ISO 5211
Design for 2" to 24"

Features / Design

1.- Butterfly valves are light in weigth, easy to install, take apart and mantain. They have simple compact structure, 90° open and close rapidly and small operation torque.

2.- Design & Manufacture Standard: API 609. Pressure & temperature rating acc. to ASME B16.34.

3.- TFV butterfly valves can be assembled together with lever, worm gear, pneumatic and electric actuators.

4.- **Phenolic-backed resilient seat** provides bubble tight shut-off up to 200 psi; It stabilizes and eliminates any elastomer movement, extending seat life by reducing tearing or fatiguing due to bunching. Control disc-to-seat interface resulting in low shut-off torques. Allows mínimum thickness of elastomer, which in turn controls seat swell.

5.- **Primary & secondary shaft seals at disc flat and shaft bore areas of the seat** eliminates chance of shaft leakage at max. shut-off pressure or unexpected pressure surges.

6.- **Friction bushings isolate shaft from body,** it eliminates shaft seizing in the body due to condensation and eliminates side loading on actuators for automated valves. Provides lower torque and longer life.

7.- **1-Pc shaft** supplies rigid disc support for constant loading.

8.- Specially designed and machined disc / stem guarantees the integrity of the primary seal.

9.- Disc seating edge is smooth finish machined, providing a precise disc-to-seat relation, thereby achieving repeatable low torques, bubble tight shut-off and maximum seal life.

10.- Wafer & lug ends (ASME B16.5) - Class 150# (200 CWP). Face to face dimensions acc. to API 609.

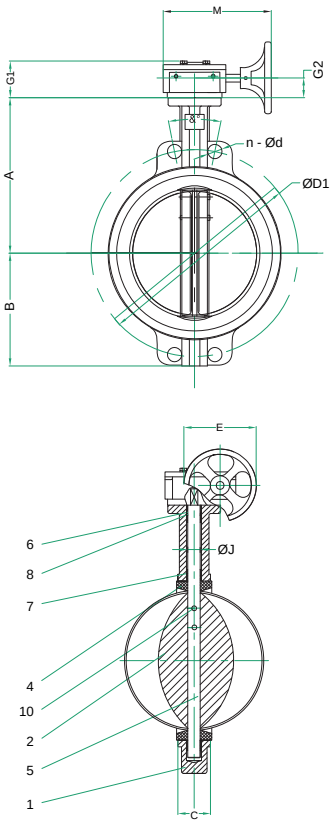
11.- Inspection and Test Standard: API 598.

Material List

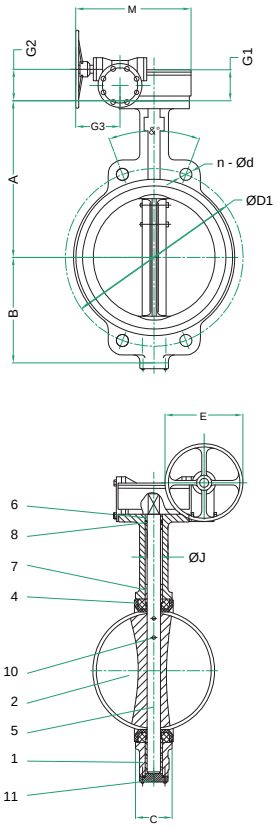
NO.	DESCRIPTION	MATERIAL
1	BODY	A536 65-45-12
2	DISC	DI / ASTM A351 CF8M
3	LINER SEAT	EPDM
4	LINER SEAT	EPDM
5	SHAFT	SS410
6	SHORT BUSHING	FRP / BRASS
7	LONG BUSHING	FRP / BRASS
8	O-RING	NBR
9	PIN (<=DN125 ONE PIN)	SS410
10	TAPER PIN	SS410B / SS316
11	END COVER	A536 65-45-12

NOTE: Material list as example - for SS body, other materials and liners available. TFV butterfly valves are available as per the needs of applications in additional sizes and other than standard materials. Please contact us.

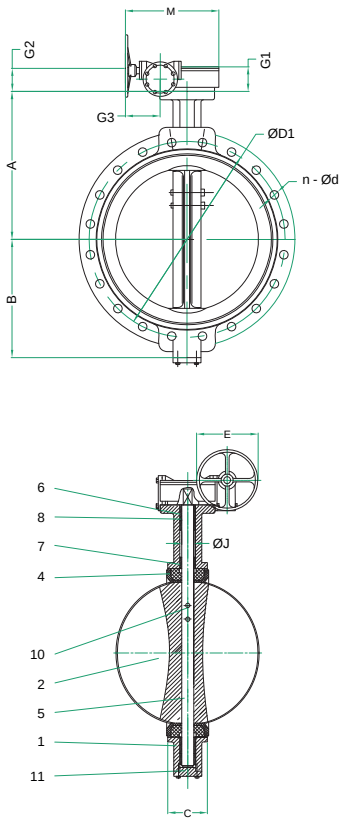
For 14" valves



For 16" to 20" valves



For 24" valves



Dimensions (inches)

SIZE	A (in)	B (in)	C (in)	ØJ (in)	ISO 5211	K (in)	E (in)	n (in)	Ød (in)	ØD1 (in)	n2 (in)	Ød2 (in)	H (in)	&°	W (in)	M (in)	G1 (in)	G2 (in)	G3 (in)	E (in)	CV (USgpm)	Torque (lb*in)	WEIGHT (lb)
1 1/2"	4.724	2.559	1.299	0.496	F05	2.559	1.969	4	0.276	3.874	4	0.629921	0.354331	90	10.236	/	/	/	/	/	110	79.646	6.834
2"	5.512	3.150	1.693	0.496	F07	3.543	2.756	4	0.394	4.752	4	0.787402	0.433071	90	10.236	/	/	/	/	/	135	88.496	8.157
2 1/2"	5.906	3.504	1.811	0.496	F07	3.543	2.756	4	0.394	5.500	4	0.787402	0.433071	90	10.236	/	/	/	/	/	220	150.442	9.039
3"	6.220	3.740	1.811	0.496	F07	3.543	2.756	4	0.394	6.000	4	0.787402	0.433071	90	10.236	/	/	/	/	/	302	230.088	9.921
4"	6.929	4.488	2.047	0.621	F07	3,543	2.756	4	0.394	7.500	8	0.787402	0.433071	45	10.236	/	/	/	/	/	600	380.531	13.889
5"	7.480	5.000	2.205	0.745	F07	3.543	2.756	4	0.394	8.500	8	0.905512	0.551181	45	10.236	/	/	/	/	/	1022	575.221	17.857
6"	8.346	5.472	2.205	0.745	F07	3.543	2.756	4	0.394	9.500	8	0.905512	0.551181	45	10.236	/	/	/	/	/	1579	911.504	20.062
8"	9.291	6.850	2.362	0.870	F10	4.921	4.016	4	0.472	11.752	8	0.95512	0.669291	45	14.173	/	/	/	/	/	3136	1823.009	34.613
10"	10.433	7.992	2.677	1.120	F10	4.921	4.016	4	0.472	14.252	12	1.023622	0.866142	30	14.173	/	/	/	/	/	5340	2646.018	53.572
12"	12.008	9.528	3.071	1.244	F10	4.921	4.016	4	0.472	17.000	12	1.023622	0.866142	30	14.173	/	/	/	/	/	8250	3690.265	71.650
14"	14.488	10.512	3.071	1.244	F10	4.921	4,016	4	0.472	18.752	12	1.141732	0.866142	30	/	11.220	3.228	1.575	/	11.496	11917	6920.354	101.413
16"	15.748	12.165	4.016	*	F14	6.890	5.512	4	0.709	21.252	16	1.141732	1.062992	30	/	*	*	4.409	6.496	11.811	16388	10831.858	196.212
18"	16.614	13.386	4.488	*	F14	6.890	5.512	4	0.709	22.717	16	1.259843	1.062992	22.50	/	*	*	4.409	6.496	11.811	21705	13389.381	224.872
20"	17.323	14.252	5.000	*	F14	6.890	5.512	4	0.709	25.000	20	1.259843	1.417323	22-50	/	*	*	4.409	6.496	11.811	27908	16628.319	279.987
24"	22.244	17.795	6.063	*	F16	8.268	6.496	4	0.866	29.500	20	1.377953	1.417323	18	/	*	*	5.157	6.496	11.811	43116	29938.053	515.882

NOTE: * Please consult with manufacturer.

How to Order

VALVE BODY DESIGN (SERIES)	MATERIAL			ENDS	CLASS	SIZE[2]	OPERATION
	BODY	TRIM	SEAT				
9RC 1 Pc Resilient Seated Phenolic Backup Butterfly Valve	2 WCB 3 CF8M 4 CF8 6 CI / DI 7 CI+Nylon 11	2 Bronze 3 316SS 4 304SS 6 CI / DI 7 CI+Nylon 11	E EPDM B NBR V Viton N Neoprene H Hypalon R R-PTFE[1] V FPM	W Wafer L LUG	0 ANSI 150#	01.5 1 1/2" 02 2" 02.5 2 1/2" 03 3" 04 4" 05 5" 06 6" 08 8" 10 10" 12 12" 14 14" 16 16" 18 18" 20 20" 24 24"	L Manual Lever 10 Pos Lever G Gear Operator[3] B Bare Shaft E Electric Actuator P Pneumatic Actuator

Example:

Resilient Seated Phenolic Backup Butterfly Valve, BodyDI, Disc DI, Seat EPDM, Wafer ANSI 150# Size 6" with Lever.

9RC66EW006L

NOTES:
(1) Aplicable far Valves Body Design 9RC from 2" to 12" only.
(2) Please contact us for more available sizes.
(3) Mandatory from 14" and larger.

Temperature limitations for seat:

NBR: -30 to 90°C.
Neoprene: -20 to 90°C.
EPDM: -40 to 120°C.
Hypalon: -32° to 120°C.
Viton: -23° to 150°C.
PTFE / NBR: 5° to 204°C.