



Features / Design

Lined Valves - Series DW / Weir Type Diaphragm Valve

- TFV lined diaphragm valve is suited for shut-off, flow control and throttling of corrosive process media in either liquid or gaseous state. Its main features are heavy -duty, robust construction, maintenance-free, easy replacement of components on site. Convenient, flexible and accurate open / close.
- It is used in chlor-alkali, organic chemicals, metal and mining, nitrogen and phosphatic fertilizers, petroleum refining, pharmaceutical, etc.
- It is not applicable for diaphragm used in medium with hard particles, which will cause diaphragm damage and leakage.

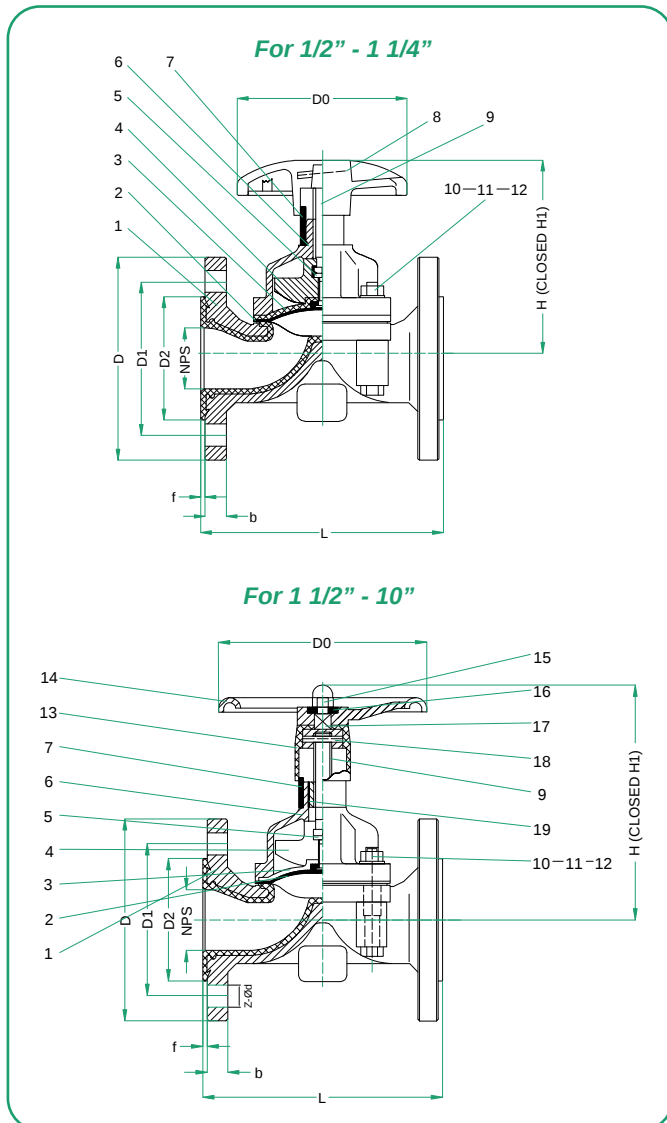
Open the diaphragm too frequent will influence the sealing performance.

- Lining material: PFA, FEP, PO, etc.
- Operation methods: manual, worm gear, electric, pneumatic and hydraulic actuator.
- Design & Manufacture Standard: MSS SP-88.
- Flange Standard: ANSI B 16.5.
- Face to Face Dimension: MSS SP-88.
- Lining Thickness: 3 to 5 mm.
- Inspection and Test Standard: MSS SP-88.
- Liner Inspection: Spark test 10-20 Kv.

Material List

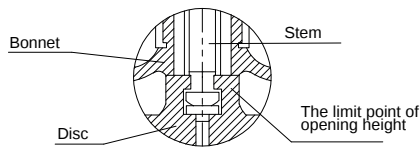
POS	DESCRIPTION	MATERIAL
1	BODY	WCB + PFA / CF8M + PFA
2	DIAPHRAGM	PFA
3	RUBBER DIAPHRAGM	EPDM
4	DISC	A216 WCB / A351 CF8M
5	SPACER	1045
6	BONNET	A216 WCB / A351 CF8M
7	INDICATOR	PE
8	HANDWHEEL	ABS
9	STEM	A276 420
10	NUT	SS304
11	GASKET	SS304
12	BOLT	SS304
13	GUIDE SLEEVE	PE
14	HANDWHEEL	1045
15	NUT	PE
16	GASKET	NYLON
17	HANDWHEEL SHAFT	1025
18	PIN	1045
19	STEM NUT	ZHMn58-2-2

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

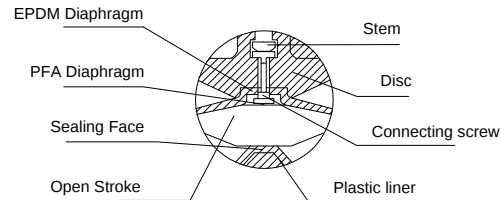


Structure Features

Limit Principle

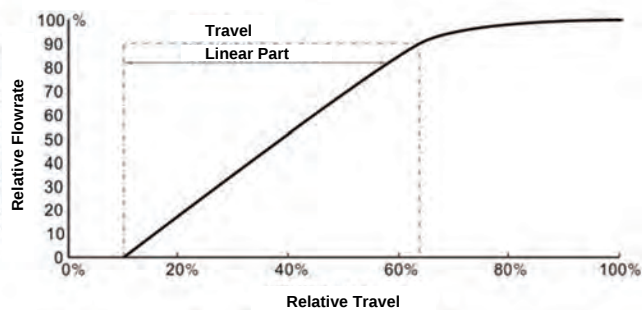


Sealing Principle

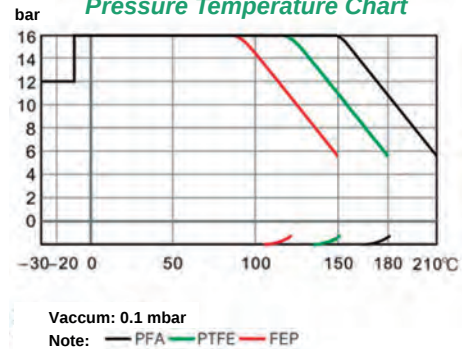


Flow Characteristic and Pressure-Temperature Chart

Classic Fixed Flow Characteristic



Pressure Temperature Chart



NOTE: The working temperature cannot exceed the specified (it depends on lining material) range.

Dimensions (inches)

NPS (in)	L (in)	D (in)	D1 (in)	D2 (in)	b (in)	Z	Ød (in)	DO (in)	H (in)	H1 (in)	Weight (lbs)	CV (USgal/min)
1/2"	4.921	3.543	2.374	1.378	0.354	4	0.630	4.724	4.567	4.961	5.071	*
3/4"	5.315	3.937	2.752	1.693	0.394	4	0.630	4.724	4.567	4.961	6.173	9.10
1"	5.709	4.331	3.126	2.008	0.433	4	0.630	5.512	5.000	5.512	8.818	19.80
1 1/4"	6.299	4.528	3.500	2.520	0.441	4	0.630	5.512	5.197	5.866	12.346	26.80
1 1/2"	7.087	4.921	3.874	2.874	0.500	4	0.630	6.299	6.102	6.890	14.771	45.00
2"	8.268	5.906	4.752	3.622	0.563	4	0.748	7.087	6.378	7.402	22.046	59.00
2 1/2"	9.843	7.087	5.500	4.134	0.626	4	0.748	8.661	7.717	9.055	38.581	83.00
3"	11.811	7.480	6.000	5.000	0.689	4	0.748	9.843	8.661	10.315	48.502	148.00
4"	13.780	9.055	7.500	6.102	0.878	8	0.748	11.024	10.709	12.795	77.162	269.00
5"	15.748	10.039	8.500	7.283	0.878	8	0.866	12.598	13.071	15.630	*	*
6"	18.110	11.024	9.500	8.504	0.941	8	0.866	14.173	14.646	17.717	165.47	505.00
8"	22.441	13.583	11.744	10.630	1.063	8	0.866	15.748	19.528	23.622	232.350	1320.00
10"	26.772	15.945	14.252	12.598	1.126	12	1.024	17.717	22.441	27.559	*	*

NOTE: * Please consult with manufacturer.

How to Order

SERIES NUMBER	BODY	DISC	MATERIAL BODY & TRIM LINER	SEAT	ENDS	CLASS	SIZE	OPERATION
DW	2 WCB	2 WCB	P PTFE	NONE	F Flanged RF	0 ANSI 150#	0.5 1/2"	H Handwheel
	3 CF8M	3 316SS	F FEP				0.75 3/4"	G Gear Operator
	4 CF8	4 304SS	F PFA				01 1"	B Bare Shaft
	6 DI / CI		E ETFE				01.25 1 1/4"	P Pneumatic Actuator
			K KYNAR				01.5 1 1/2"	E Electric Actuator
							02 2"	
							02.5 2 1/2"	X Stem Extension w/Lever
							03 3"	
							04 4"	
							05 5"	
							06 6"	
							08 8"	

Example:

Weir Type Diaphragm Valve, Body & Trim DI, FEP Liner, PFA Diaphragm, Flanged RF ANSI Class 150# Size 6" with Handwheel.

DW66FAF006H

