





## Features / Design

Lined Valves - Series 10L / Plug Valve

- TFV fully lined plug valves are cavity-free due to special body design liner is firmly locked. The lining are moulded into dovetail recesses in body to lock them in place to prevents liner collapse in vacuum conditions and blow out in high pres. conditions. Plug coating is extended over the shaft sealing.
- Two way cavity free designs prevent accumulation of particulate matter making it an ideal choice for slurry application.
- There is ideal taper design for the plug and the body cavity. When it tailures to seal as result of worn, the 3 adjusting bolts in the cover work for external adjustment of in-line seal, to assure a max. sealing capability and an extended service lite. Top sealing components form the second sealing. When the sealing surface failures to work, it prevents medium leaking through the valve stem.
- Disassemble the four bolts on the cover, all the parts in valve can be took out, and replace the parts directly without the need to remove valve from pipeline.
- It is used in chlor-alkali, organic chemicals, metal and mining, nitrogen and phosphatic fertilizers, petroleum refining, pharmaceutical, etc.
- Design & Manufacture Standard: ASME B16.34.
- Flange Standard: ANSI B 16.5.
- Face to Face Dimension: ASME B16.10.
- Lining Thickness: 3 to 5 mm.
- Inspection and Test Standard: API 598.
- Liner Inspection: Spark test 15 Kv.

### **Material List**

POS	DESCRIPTION	MATERIAL				
1	BODY	WCB + PFA / CF8M + PFA				
2	PLUG	WCB + PFA / CF8M + PFA				
3	NUT	SS304				
4	BOLT	SS304				
5	O-RING	VITON				
6	COLLAR	PTFE				
7	V-GASKET	PFA				
8	METAL DIAPHRAGM	SS304				
9	ADJUSTING BOLT	SS304				
10	HANDLE	A216 WCB				
11	WASHER	SS304				
12	BOLT	SS304				
13	HEX BONNET	SS304				
14	WORM GEAR	COMBINED PARTS				
15	COVER	A216 WCB / A351 CF8M				

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.





# **Dimensions (inches)**

NPS	L	D	D1	D2	f	f	Z	Ød	W	Н	H0	Weight	Torque <sup>(1)</sup>
(in)	(in)	(in)	(in)	(in)	(in)	(in)		(in)	(in)	(in)	(in)	(lbs)	(lbf*in)
1/2"	4.331	3.504	2.382	1.378	0.098	0.354	4	0.630	7.087	3.346	/	5.512	442.478
3/4"	4.606	3.937	2.756	1.693	0.098	0.394	4	0.630	7.087	3.465	/	6.614	530.973
1"	5.000	4.331	3.130	2.008	0.098	0.433	4	0.630	10.236	3.858	/	8.818	619.469
1 1/2"	6.496	5.000	3.878	2.874	0.118	0.500	4	0.630	12.598	5.039	/	15.432	884.956
2"	7.008	5.984	4.744	3.622	0.118	0.551	4	0.748	12.598	5.039	/	18.960	1,327.434
3"	7.992	7.480	6.004	5.000	0.118	0.630	4	0.748	15.748	/	12.677	50.706	3,008.850
4"	9.016	9.055	7.500	6.181	0.138	0.827	8	0.748	15.748	/	13.071	70.548	3,362.832
5"	10.000	10.039	8.504	7.323	0.138	0.827	8	0.866	*	/	15.157	88.185	8,849.558
6"	10.512	11.024	9.508	8.504	0.157	0.906	8	0.866	*	/	15.945	143.301	11,504.425
8"	11.496	13.583	11.752	10.630	0.157	1.024	8	0.866	*	/	17.913	264.555	22,123.894
10"	12.992	15.945	14.252	12.756	0.157	1.126	12	0.984	*	/	19.291	343.921	39,823.009
12"	14.016	19.016	17.008	15.000	0.177	1.260	12	0.984	*	/	*	*	*
-	-	-	-	-	-	-			-	-	-	-	-

NOTES:

\* Please consult with manufacturer.

(1) The torque is measured on the conditions of with 30% safety factor, with grease, at 0 bar pressure and ambient temperature.



## **How to Order**

SERIES NUMBER	BODY	<i>MA</i> PLUG	TERIAL BODY LINER	SEA	ENDS	CLASS	SIZE	OPERATION
10L	2 WCB	2 WCB	P PTFE	P PT	FE Flanged RF	0 ANSI 150#	0.5 1/2"	L Manual Lever
	3 CF8M	<b>3</b> 316SS	F FEP	F FE	Р		<b>0.75</b> 3/4"	H Handwheel
	4 CF8	<b>4</b> 304SS	F PFA	F PF	Α		01 1"	G Gear Operator
	6 DI/CI		E ETFE	E ET	FE		<b>01.5</b> 1 1/2"	B Bare Shaft
			K KYNAR	K KY	NAR		<b>02</b> 2"	P Pneumatic Actuator
							<b>03</b> 3"	E Electric
							04 4"	Actuator
							<b>05</b> 5"	X Stem Extension w/Lever
							<b>06</b> 6"	
							<b>08</b> 8"	
							<b>10</b> 10"	
							<b>12</b> 12"	

**Example:**Lined Plug Valve, Body DI + PFA Liner, Trim 304 + PFA Liner, Seat FEP,
Flanged RF ANSI Class 150# Size 6" with Lever.

10L64AFF006L