FVFT TECHNOLOGY CO., LIMITED

Lined Valve Expert

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FVFT BRAND, RELIABLE QUALITY FOR YOU
CE&ISO 9001:2015 CERTIFIED ACQUIRED
15 YEARS FLUID SOLUTION EXPERIENCES
EXPORTING TO OVER 40 COUNTRIES
EXCELLENT VALUE-ADDED SERVICE.

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We focus on Details
We Make Different
FVFT Brand, that can be trust.

FVFT Technology Founded in year 2010, we specialize in Manufacturing Various Lined Valves&Fittings, Including PTFE/PFA/FEP Lined Valve and Ceramic Lined Valve, as well as standard and customized fittings. The products are widely used in modern anti-corrosion engineering fields such as Lithium Battery, petroleum, chemical industry, pharmacy, printing and dyeing, electrical engineering, ship building, metallurgy, military industry, semiconductor chemistry, electronic phosphoric acid, Etc.

Our Principle: Pragmatic, Creative and Excellent.

FVFT Brand that you can trust.

FVFT Product Line:

Lined Valves (Lined Butterfly Valve, Lined Ball Valve, Lined Diaphragm Valve Etc.)

Lined Pipe&Fittings (Y-Type Strainer, Sight Glass, Elbow, Tee, Reducer, Expansion Joint, Pipe Etc.)

Ceramic Lined Valve (Ceramic Lined Butterfly Valve, Ceramic Lined Ball Valve, Ceramic Lined Diaphragm Valve Etc.)

Ceramic Lined Fitting (Y-Type Strainer, Sight Glass, Elbow, Tee, Reducer, Expansion Joint, Pipe Etc.)

Plastic Valve&Fitting (Plastic Globe Valve, Plastic Check Valve, Plastic Y-Type Strainer Etc.)

FVFT TECHNOLOGY CO., LIMITED

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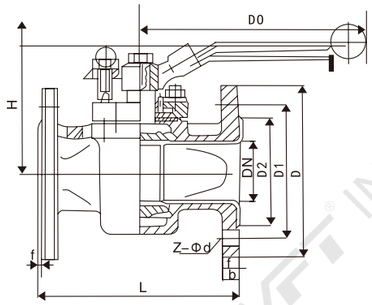
Lined Plug Valve

Lined Plug Valve Series

The lined plug valve has a plug with a through-hole. As the opening and closing part, the plug rotates with the valve stem to achieve the opening and closing action. The plug valve opens and closes quickly with low fluid resistance. The basic series includes fully lined plug valves and semi-lined plug valves. Plug valves are commonly used to cut off the flow of media and can also be use for media distribution (three-way plug valves). The lined plug valves are widely applied in pipelines containing corrosive gases or liquid media.

Lined Plug Valve DIN

Semi-lined,Fully Lined



Technical Specification

Ddesign & Manufacture Standard		HG/T 3704	
Face to face Dimension Standard		Manufacturer's standard	
Flange Standard		EN1092-1	
Inspection and Test Standard		API 598	
Nominal Pressure		1.0 MPa	1.6 MPa
Pressure Test	Shell Test	1.5MPa	1.5 MPa
	Seal Test	1.1MPa	1.1 MPa
	Air Seal Test	0.6MPa	0.6 MPa

Material List of Main Parts

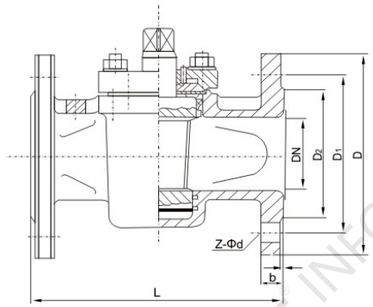
No.	Part Name	Material				
1	Body	A216 WCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
2	Plug	A216 WCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
3	Gasket	PTFE				
4	Oring	VITON				
Lining & Seat		PTFE PFA FEP				

DIMENSIONS PN16

DN	L	D	D1	D2	f	b	Z-Φd
20	150	105	75	55	3	18	4-Φ14
25	160	115	85	65	3	18	4-Φ14
32	170	140	100	70	3	18	4-Φ18
40	180	150	110	80	3	18	4-Φ18
50	210	165	125	100	3	18	4-Φ18
65	220	185	145	120	3.5	18	4-Φ18/8-Φ18
80	250	200	160	135	3.5	20	8-Φ18
100	275	220	180	155	4	20	8-Φ18
125	310	250	210	185	4	22	8-Φ18
150	350	285	240	210	4	22	8-Φ22
200	400	340	295	265	4.5	24	8-Φ22
250	460	395	350	320	4.5	26	12-Φ22

Lined Plug Valve ANSI

Semi-lined,Fully Lined



Technical Specification

Ddesign & Manufacture Standard		API 6D
Face to face Standard		ASME B16.10
Flange Standard		ASME B16.5
Inspection and Test Standard		AP1598
Nominal Pressure		150LB
Pressure Test	Shell Test	1.5MPa
	Seal Test	1.1MPa
	Air Seal Test	0.6MPa

Material List of Main Parts

No.	Part Name	Material				
1	Body	A216 WCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
2	Plug	A216 WCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
3	Gasket	PTFE				
4	Oring	VITON				
Lining & Seat		PTFE PFA FEP				

DIMENSIONS 150LB

NPS (inch)	DN (mm)	L	D	D1	D2	f	b	Z-Φd
1/2	15	108	90	60.3	34.9	3	11.6	4-Φ15.9
3/4	20	117	100	69.9	42.9	3	13.2	4-Φ15.9
1	25	127	110	79.4	50.8	3.5	14.7	4-Φ15.9
1-1/4	32	140	115	88.9	63.5	3.5	16.3	4-Φ15.9
1-1/2	40	165	125	98.4	73	3.5	17.5	4-Φ15.9
2	50	178	150	120.7	92.1	4	19.5	4-Φ19
2-1/2	65	190	180	139.7	104.8	4	24.3	4-Φ19
3	80	203	190	152.4	127	4	24.3	4-Φ19
4	100	229	230	190.5	157.2	4.5	24.3	8-Φ19
5	125	254	255	215.9	185.7	4.5	24.3	8-Φ22.2
6	150	267	280	241.3	215.9	4.5	25.9	8-Φ22.2
8	200	292	345	298.5	269.9	5	29	8-Φ22.2
10	250	330	405	362	323.8	5	30.6	12-Φ25.4

Fluorine Plastic Performance

Performance	Item / Unit / Code / Name		PTFE	PCTFE	PVDF	RE.	PFA	GXPO	PE	PP
			F4	F3	F2	F46	PFA	GXPO	PE	PP
Physical Performance	Specifc Gravity	g/cm³	2.1~2.2	2.1~2.2	1.76	2.1~2.2	2.1~2.2	0.92	0.92	0.92
	Water absorpion	%	0.001~0.005	≤ 0.005	0.04	≤ 0.01	≤ 0.01	0.005	0.005	0.005
	Shrinkage rate of finished product	%	1~5	1-2.5	2.0	2~5	1~5	1~2	1~2	1~2
	Embrittlement coefficient	10⁻⁵/K	10-12	4.5-7.0	8.5-15.3	8.3~10.5	8.3-12	-	-	-
	Embrittlemen temperature T1	℃	-180~-195	-180~-195	-62	-260	-180~-195	-40	-40	-20
	Hot resistance T2	℃	260	120-190	150	204	260	100	100	100
	Recommend working temperature T3	℃	≤ 180	≤ 120	≤ 100	≤ 150	≤ 200	≤ 85	≤ 85	≤ 85
Mechanical Performance	Hardness	SOSIXO	D50-65	D74-78	D80	(R45)	D50-65	D40	D40	D40
	Friction coefficient f	-	0.06	0.3~0.4	0.14~0.17	0.06~0.01	0.06~0.01	-	-	-
	Tensile strength σb	Mpa	13.7-24.5	31.3-39.2	45~48.3	20.0~24.5	14~28	≥ 10	6.9~14	7.5~14
	Bending strength σw	Mpa	10.7-137	53.9-68.6	-	-	15~28	-	-	-
	Compression strength σy	Mpa	111	80.3-50.9	68.6	-	111	-	-	-
	Impact strength σk	KJ/M²	16	12.7~16. 6	19.7	No breakage	1+	-55	45	50
	Ultimate elongation Δλ	%	250~350	30~190	30~300	250~270	300~500	480	300~600	600~700
	Breakdown voltage v	KV/mm	25~40	19.7	10.2	40	24~40	-	-	-
Processing Performance	compression molding		Good	Good	Good	Good	Good	Good	Good	Good
	Injection molding		-	Good	Good	Good	Good	Good	Good	Good
	Lamination		Good	Good	Good	Good	Good	Good	Good	Good
	Layer		Good	Good	Good	Good	Good	Good	Good	Good

Fluorine Plastic Performance

Corrossion Resistance Performance (only for Reference)	Medium	Concentration (%)	Temperature ° C	PTFE	PCTFE	PVDF	FEP	PFA	GXPO	PE	PP
	Sulfuric acid	10~98	Normal temperature ~100	A	A~B	A~B	A	A	Concentration ≤ 50%	Concentration ≤ 60%	A
	Ntric acid	5~98	Normal temperature ~100	A	A	A	A	A	Concentration ≤ 30%	Concentration ≤ 60%	A
	Hydrochloric acid	10~38	Normal temperature ~100	A	A	A	A	A	Concentration ≤ 38%	Concentration ≤ 60%	A~B
	Acetic acid	10~100	Normal temperature ~100	A	A~B	A~B	A	A	Concentration ≤ 10%	Concentration ≤ 60%	A
	Chromic acid	50~100	Normal temperature ~70	A	A~B	A~B	A	A	Concentration ≤ 30%	Concentration ≤ 20%	A
	phosphoric acic	50~85	Normal temperature ~100	A~B	D	D	A~B	A~B	Concentration ≤ 85%	Concentration ≤ 80%	A
	Trichloromethan	100	Normal temperature	C	B	B	C	C	X	X	X
	Coppersulfate	15	Normal temperature	A	C	C	A	A	Concentration ≤ 90%	Concentration ≤ 80%	A
	Diethy ether	100	Normal temperature	B	C	C	B	B	X	X	X
	Ethyl acetate	100	Normal temperature	B	A	A	B	B	X	X	X
	Petrol	100	Normal temperature	A	A~B	A~B	A	A	X	X	X
	Hydrogen peroxide	3~30	Normal temperature	A	A	A	A	A	Concentration ≤ 30%	Concentration ≤ 60%	A
	Nitrobenzene	100	Normal temperature	A	A~B	A~B	A	A	X	X	X
	Superalkali	10~50	Normal temperature ~100	A	A	A	A	A	Concentration ≤ 80%	Concentration ≤ 60%	A
	Sodium Hypochlorite	-	70	A	B	B	A	A	Concentration ≤ 80%	Concentration ≤ 60%	A~B
	Hydroxyl acid	40~99	-10~30	A~B	B	B	A~B	A~B	Concentration ≤ 80%	Concentration ≤ 60%	A~B
	Oleum	20	Normal temperature	A	B	B	A	A	X	X	X
	Acrylonitrile	-	Normal temperature	B	C	C	B	B	-	-	-
	Aniline	100	Normal temperature	B	B	B	B	B	Concentration ≤ 60%	Concentration ≤ 20%	B
	Benzene	100	Normal temperature	B	C	C	B	B	X	X	X
	Butyl acetate	100	Normal temperature	B	C	C	B	B	Concentration ≤ 60%	Concentration ≤ 20%	B
	Tetrachloromethane	Reagent grade	Normal temperature	B	C	C	B	B	X	X	X