Lined Plug Valve

Patent No.: ZL200520107320.3

※Product Description

- Youfumi fully lined plug valves are cavity-free due to the special body design, the liner is firmly locked.
- Plug coating is extended over the shaft sealing.
- The lining are moulded into dovetail recesses in the body to lock them in place to prevents liner collapse in vacuum conditions and blow out in high pressure conditions.
- 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 failures to seal as a result of worn in using process, the three adjusting bolts in the cover work for external adjustment of in-line seal, to assure a maximum sealing capability and an extended service life.
- 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.
- Lined three-way plug valve is the best choice for corrosive diverter valve application.
- It can sustain any corrosive medium in addition to the “molten alkali metals and fluorine elements”. It is ideal products used in chlor-alkali, industrial in organic chemicals, metal and mining, nitrogen and phosphatic fertilizers, petroleum refining, pharmaceutical etc.
- Lining material: PFA, FEP, PO etc.
- Operation methods: manual, worm gear, electric, pneumatic and hydraulic actuator.
- Youfumi lined plug valves are available as per the needs of applications in additional sizes and other than standard materials.

Lined Three-way Plug Valve

Lined Plug Valve

Lined Plug Valve

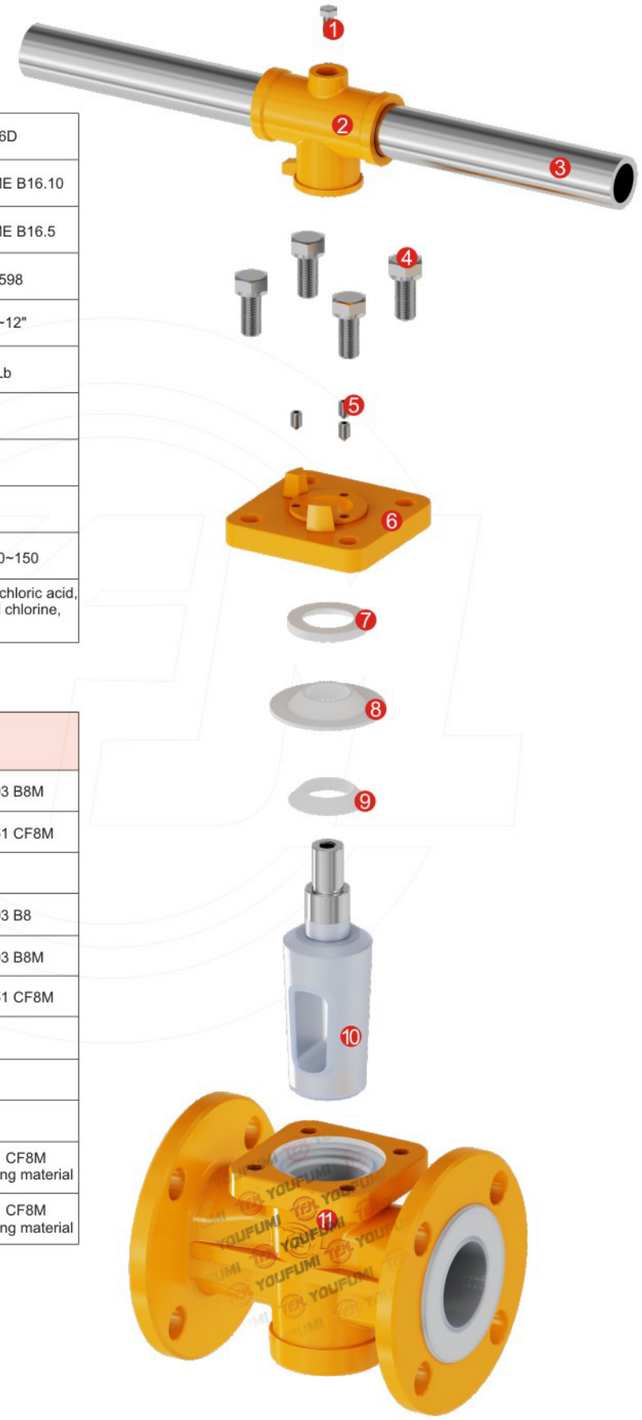
YOUFUMI

※Technical Specification

Design & Manufacture Standard		HG/T 3704, GB/T 12240		API 6D
Face-to-face Dimension Standard		HG/T 3704, GB/T 12221		ASME B16.10
Flange Standard		HG/T 20592, GB/T 9119		ASME B16.5
Inspection & Test Standard		GB/T 13927, JB/T 9092		API 598
Nominal Diameter		DN15~DN300		1/2"~12"
Nominal Pressure (MPa)		1.0	1.6	150Lb
Pressure Test (MPa)	Shell Test	1.5	1.5	1.5
	High Pressure Sealing	1.1	1.1	1.1
	Low Pressure Sealing	0.6	0.6	0.6
Temperature Range (°C)		PFA: -30~200		FEP: -30~150
Applicable Medium		Strong corrosive medium i.e. hydrochloric acid, Nitric acid, Hydrofluoric acid, Liquid chlorine, Sulfuric Acid and Aqua regia etc.		

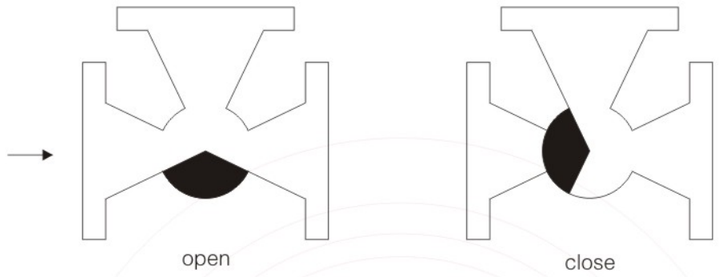
※Material Specification

No.	Name	Material		
1	Body blot	A193 B7	A320 B8	A193 B8M
2	Handle seat	A216 WCB	A351 CF8	A351 CF8M
3	Operation rod	1025 SS304		
4	Top cap bolt	A193 B7	A320 B8	A193 B8
5	Adjusting screw	A193 B7	A320 B8	A193 B8M
6	Bonnet	A216 WCB	A351 CF8	A351 CF8M
7	Metal gasket	SS304		
8	V-shape gasket	PTFE		
9	Wedge ring	PTFE		
10	Plug	A216 WCB +Lining material	A351 CF8 +Lining material	A351 CF8M +Lining material
11	Body	A216 WCB +Lining material	A351 CF8 +Lining material	A351 CF8M +Lining material

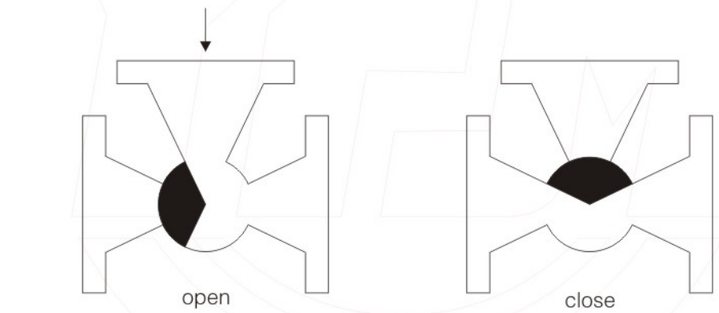


※Optional Flow Arrangements

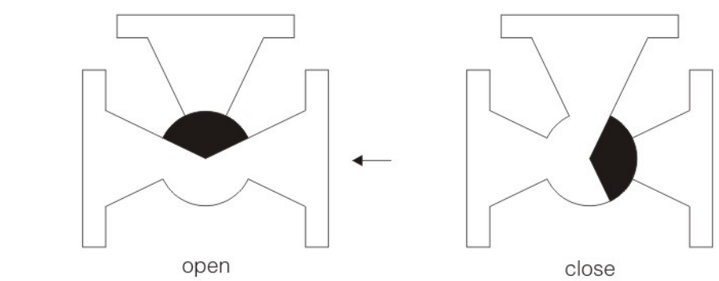
◆Option 1



◆Option 2

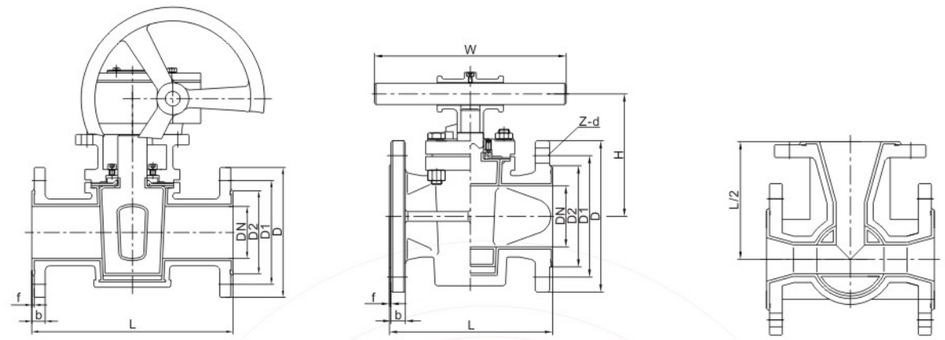


◆Option 3



Note: For more options, please consult factory.

Lined Three–way Plug Valve



HG/T 20592 PN10 Unit:mm

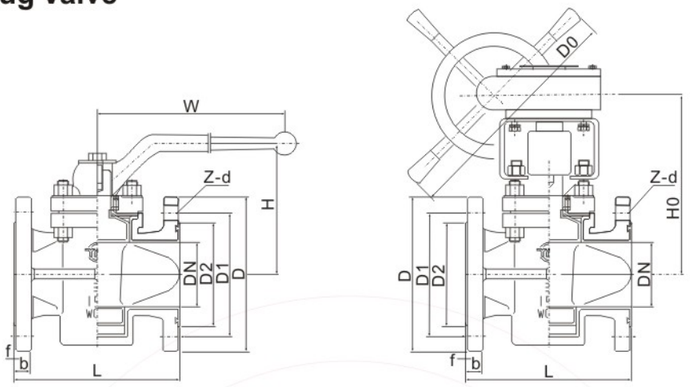
DN	L	D	D1	D2	Z-d	f	b	H	W	H0
25	160	115	85	65	4-14	2	14	98	260	-
32	180	140	100	78	4-18	3	16	101	260	-
40	200	150	110	85	4-18	3	16	128	320	-
50	230	165	125	100	4-18	3	16	128	320	-
65	290	185	145	120	4-18	3	18	135	320	-
80	310	200	160	135	8-18	3	20	164	400	322
100	350	220	180	155	8-18	3	20	178	400	332
125	400	250	210	185	8-18	3	22	205	-	385
150	480	285	240	210	8-23	3	24	220	-	405

HG/T 20592 PN16

25	160	115	85	65	4-14	2	14	98	260	-
32	180	140	100	78	4-18	3	16	101	260	-
40	200	150	110	85	4-18	3	16	128	320	-
50	230	165	125	100	4-18	3	16	128	320	-
65	290	185	145	120	4-18	3	18	135	320	-
80	310	200	160	135	8-18	3	20	164	400	322
100	350	220	180	155	8-18	3	20	178	400	332
125	400	250	210	185	8-18	3	22	205	-	385
150	480	285	240	210	8-23	3	24	220	-	405

Note: For more size please consult factory.

ANSI Lined Plug Valve



ASME B16.5 Class150

Unit:mm

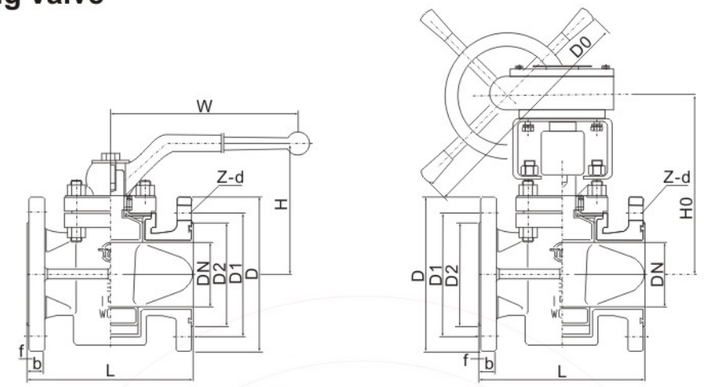
NPS	DN	L	D	D1	D2	Z-d	f	b	H	W	H0
1/2	15	110	89	60.5	35	4-16	2	11	85	180	-
3/4	20	117	98	70.0	43	4-16	2	13	88	180	-
1	25	127	108	79.5	51	4-16	2	14	98	260	-
11/4	32	140	117	89.0	64	4-16	2	15.7	101	260	-
11/2	40	165	127	98.5	73	4-16	2	17.5	128	320	-
2	50	178	152	120.5	92	4-19	2	19	128	320	-
21/2	65	190	178	139.5	105	4-19	2	22	135	320	-
3	80	203	190	152.5	127	4-19	2	24	164	400	322
4	100	229	229	190.5	157	8-19	2	24	178	400	332
5	125	254	254	216.0	186	8-22	3	24	205	-	385
6	150	267	279	241.5	216	8-22	3	25.4	220	-	405
8	200	292	343	298.5	270	8-22	3	28.5	-	-	455
10	250	330	406	362.0	324	12-25	3	30	-	-	490

ASME B16.5 Class300

1/2	15	140	95	66.5	35	4-16	2	14	85	180	-
3/4	20	152	117	82.5	43	4-19	2	15.7	88	180	-
1	25	165	124	89.0	51	4-19	2	17.5	98	260	-
11/4	32	178	133	98.5	64	4-19	2	19	101	260	-
11/2	40	190	156	114.5	73	4-22	2	20.5	128	320	-
2	50	216	165	127.0	92	8-19	2	22.4	128	320	-
21/2	65	241	190	149.0	105	8-22	2	25.4	135	320	-
3	80	283	210	168.5	127	8-22	2	28.4	164	400	322
4	100	305	254	200.0	157	8-22	2	32	178	400	332
5	125	381	279	235.0	186	8-22	3	35	205	-	385
6	150	403	318	270.0	216	12-22	3	36.6	220	-	405
8	200	419	381	330.0	270	12-25	3	41	-	-	455
10	250	457	445	387.5	324	16-29	3	47.8	-	-	490

Note: For more size please consult factory.

GB Lined Plug Valve



HG/T 20592 PN10

Unit:mm

DN	L	D	D1	D2	Z-d	f	b	H	W	H0
15	110	95	65	45	4-14	2	14	85	180	-
20	117	105	75	55	4-14	2	14	88	180	-
25	127	115	85	65	4-14	2	14	98	260	-
32	140	140	100	78	4-18	3	16	101	260	-
40	165	150	110	85	4-18	3	16	128	320	-
50	178	165	125	100	4-18	3	16	128	320	-
65	190	185	145	120	4-18	3	18	135	320	-
80	203	200	160	135	8-18	3	20	164	400	322
100	229	220	180	155	8-18	3	20	178	400	332
125	254	250	210	185	8-18	3	22	205	-	385
150	267	285	240	210	8-23	3	24	220	-	405
200	292	340	295	265	8-23	3	26	-	-	455
250	330	395	350	320	12-23	4	28	-	-	490

HG/T 20592 PN16

15	110	95	65	45	4-14	2	14	85	180	-
20	117	105	75	55	4-14	2	14	88	180	-
25	127	115	85	65	4-14	2	14	98	260	-
32	140	140	100	78	4-18	3	16	101	260	-
40	165	150	110	85	4-18	3	16	128	320	-
50	178	165	125	100	4-18	3	16	128	320	-
65	190	185	145	120	4-18	3	18	135	320	-
80	203	200	160	135	8-18	3	20	164	400	322
100	229	220	180	155	8-18	3	20	178	400	332
125	254	250	210	185	8-18	3	22	205	-	385
150	267	285	240	210	8-23	3	24	220	-	405
200	292	340	295	265	12-23	3	26	-	-	455
250	330	405	355	320	12-26	4	28	-	-	490