

Lined Ball Valve

Patent No.: ZL201430041442.1

Product Description

- Two pieces full port standard lined ball valves offer high stability, rigidity and eliminating potential leak path.
- Full port design minimizes pressure losses and increases flow capacities thus reducing energy and pumping costs.
- Full bore design almost no fluid resistance, and good shut-off performance.
- It features zero leakage, maintenance-free, one-piece stem and ball design, high sealing performance and can be used under full vacuum service.
- Lower pressure drop and high flow characterized the efficiency of Youfumi lined ball valves.
- It can work as on-off or control valve.
- 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 ball valves are available as per the needs of applications in additional sizes and other than standard materials.



JIS PFA Lined Ball Valve



ANSI PFA Lined Ball Valve



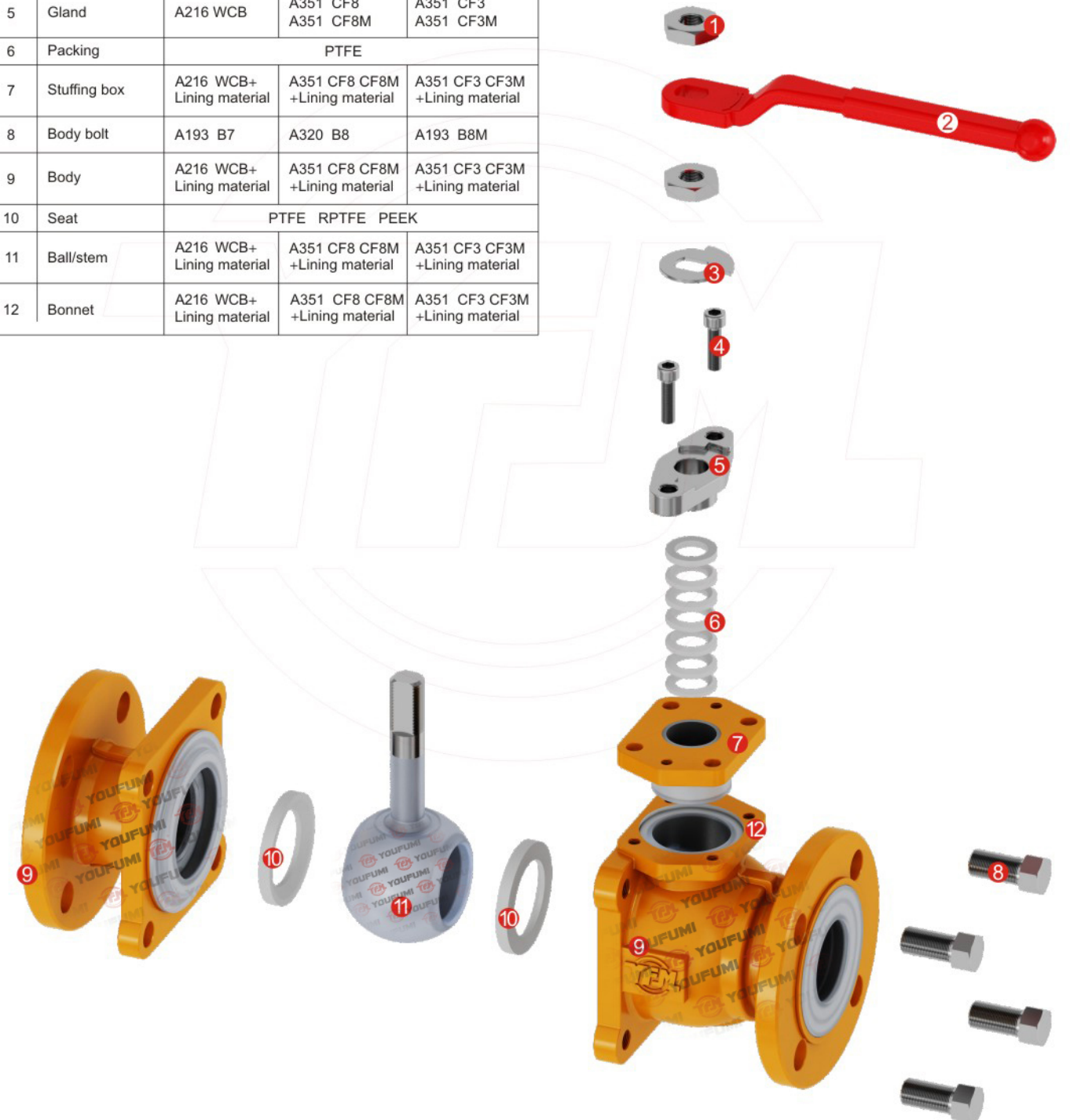
Three-Pieces Lined Ball Valve

Lined Valve Lined Ball Valve



Material Specification

Code	Name	Materials		
1	Nut	A194 2H	A194 8	A194 8M
2	Lever	A216 WCB	A351 CF8 A351 CF8M	A351 CF3 A351 CF3M
3	Locating Plate	25# SS304		
4	Body bolt	A193 B7	A320 B8	A193 B8M
5	Gland	A216 WCB	A351 CF8 A351 CF8M	A351 CF3 A351 CF3M
6	Packing	PTFE		
7	Stuffing box	A216 WCB+ Lining material	A351 CF8 CF8M +Lining material	A351 CF3 CF3M +Lining material
8	Body bolt	A193 B7	A320 B8	A193 B8M
9	Body	A216 WCB+ Lining material	A351 CF8 CF8M +Lining material	A351 CF3 CF3M +Lining material
10	Seat	PTFE RPTFE PEEK		
11	Ball/stem	A216 WCB+ Lining material	A351 CF8 CF8M +Lining material	A351 CF3 CF3M +Lining material
12	Bonnet	A216 WCB+ Lining material	A351 CF8 CF8M +Lining material	A351 CF3 CF3M +Lining material



A Lined Valve Lined Ball Valve

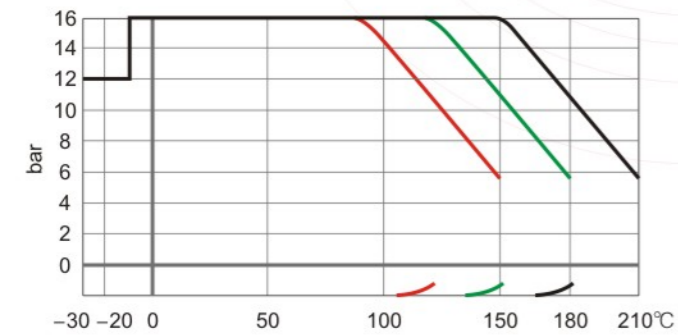


※ Technical Specification

Design & Manufacture Standard	HG/T 3704, GB/T 12237		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, JIS B2220
Inspection & Test Standard	GB/T 13927, JB/T 9092		API 598
Nominal Diameter	DN15~DN350		1/2"~14"
Nominal Pressure (MPa)	1.0	1.6	CLASS150
Pressure Test (MPa)	Shell Test	1.5	1.5
	High Pressure Sealing	1.1	1.1
	Low Pressure Sealing	0.6	0.6
Temperature Range (°C)	PFA: -30~200	FEP: -30~150	PO: -10~80
Applicable Medium	Strong corrosive medium i.e. hydrochloric acid, Nitric acid, Hydrofluoric acid, Liquid chlorine, Sulfuric Acid and Aqua regia etc.		

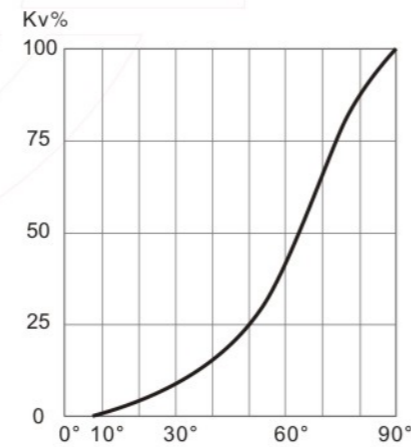
Note: Test standard refers general valve standard, high pressure should be customized for processing.

※ Pressure-Temperature Curve



Vacuum 0.1mbar
Note: — PFA — PTFE — FEP

※ Flow Characteristic

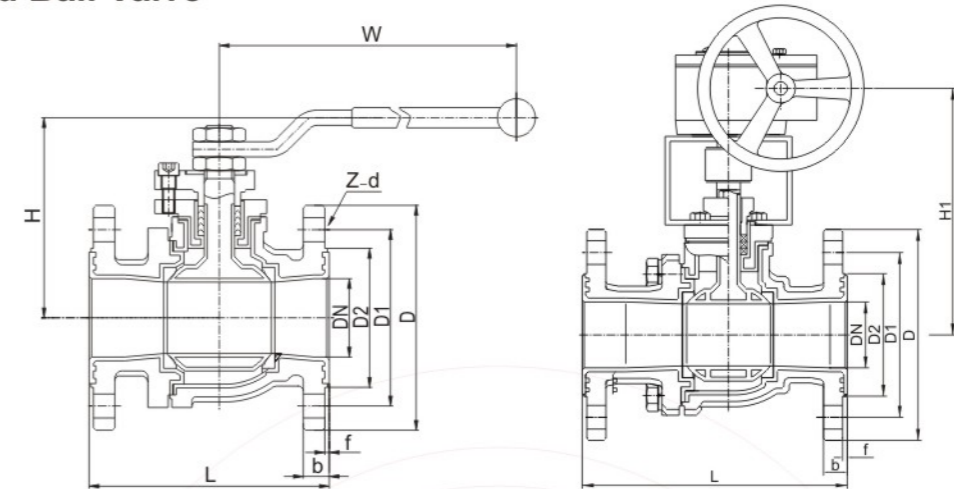


Valve Position Angle 1Cv=1.167Kv

A Lined Valve Lined Ball Valve



ANSI Lined Ball Valve



ASME B16.5 Class150

Unit:mm

NPS	L	D	D1	D2	Z-d	f	b	W	H	H1	Wt(Kg)
1/2	110	89	60.5	35	4-16	2	12	140	100	-	3.5
3/4	117	98	70.0	43	4-16	2	12	160	105	-	4
1	127	108	79.5	51	4-16	2	12	200	110	-	5.5
1 1/4	140	117	89.0	64	4-16	2	13	200	130	-	7
1 1/2	165	127	98.5	73	4-16	2	15	220	135	-	9
2	178	152	120.5	92	4-19	2	16	220	145	-	15.5
2 1/2	190	178	139.5	105	4-19	2	18	350	155	-	19.5
3	203	190	152.5	127	4-19	2	19	400	210	340	30
4	229	229	190.5	157	8-19	2	24	400	235	360	40
5	254	254	216.0	186	8-22	3	24	550	255	405	57
6	267	279	241.5	216	8-22	3	26	550	285	425	73.5
8	292	343	298.5	270	8-22	3	29	-	328	505	121
10	330	406	362.0	324	12-25	4	31	-	370	540	159

JIS B2220 10K

Unit:mm

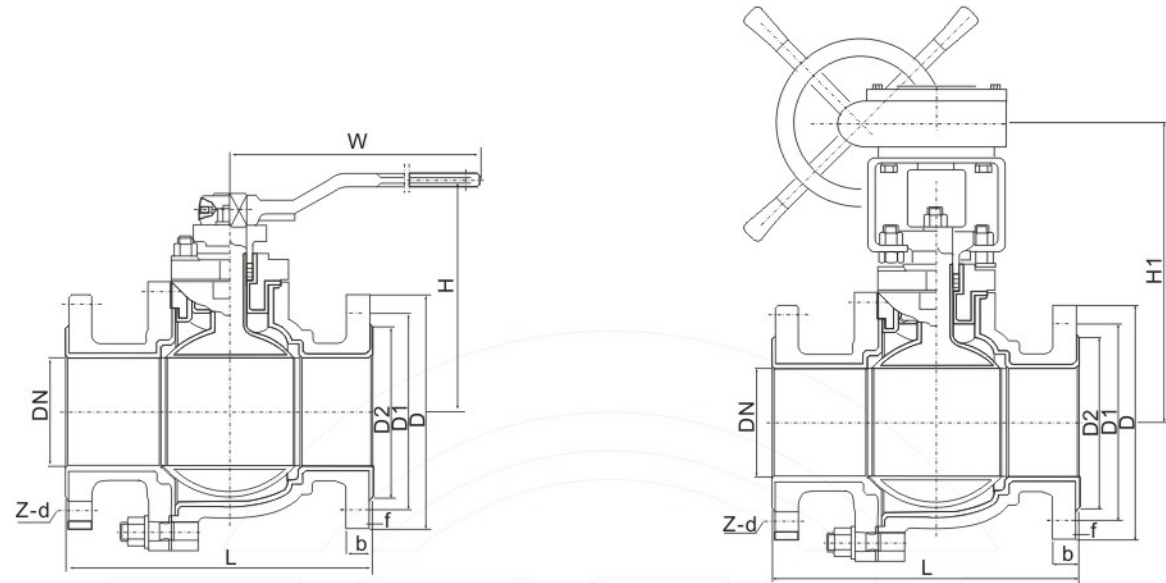
DN	L	D	D1	D2	Z-d	f	b	W	H	H1	Wt(Kg)
15	110	95	70	51	4-16	2	12	140	100	-	3.5
20	117	100	75	56	4-16	2	12	160	105	-	4
25	127	125	90	67	4-19	2	12	200	110	-	5.5
32	140	135	100	76	4-19	2	13	200	130	-	7
40	165	140	105	81	4-19	2	15	220	135	-	9
50	178	155	120	96	4-19	2	16	220	145	-	15.5
65	190	175	140	116	4-19	2	18	350	155	-	19.5
80	203	185	150	126	8-19	2	19	400	210	340	30
100	229	210	175	151	8-19	2	24	400	235	360	40
125	254	250	210	182	8-23	3	24	550	255	405	57
150	267	280	240	212	8-23	3	26	550	285	425	73.5
200	292	330	290	262	12-23	3	29	-	328	505	121
250	330	400	355	325	12-25	4	31	-	370	540	159

Note: For more size please consult factory.

A Lined Valve
Lined Ball Valve



GB Lined Ball Valve



HG/T 20592 PN6

Unit:mm

DN	L	D	D1	D2	Z-d	f	b	W	H	H1	Wt(Kg)
15	132	85	55	40	4-11	2	12	140	100	-	3.5
20	142	90	65	50	4-11	2	14	160	105	-	4
25	150	100	75	60	4-11	2	14	200	110	-	5.5
32	165	120	90	70	4-14	3	16	200	130	-	7
40	180	130	100	80	4-14	3	16	220	135	-	9
50	200	140	110	90	4-14	3	16	220	145	-	15.5
65	220	160	130	110	4-14	3	16	350	155	-	19.5
80	250	190	150	125	4-18	3	16	400	210	340	30
100	280	210	170	145	4-18	3	18	400	235	360	40
125	320	240	200	175	8-18	3	18	550	255	405	56
150	360	265	225	200	8-18	3	20	550	285	425	72
200	400	320	280	255	8-18	3	22	-	328	505	119
250	450	375	335	310	12-18	4	24	-	370	540	155
300	500	440	395	365	12-22	4	24	-	-	-	202
350	610	490	445	415	12-22	5	24	-	-	-	245

HG/T 20592 PN10

Unit:mm

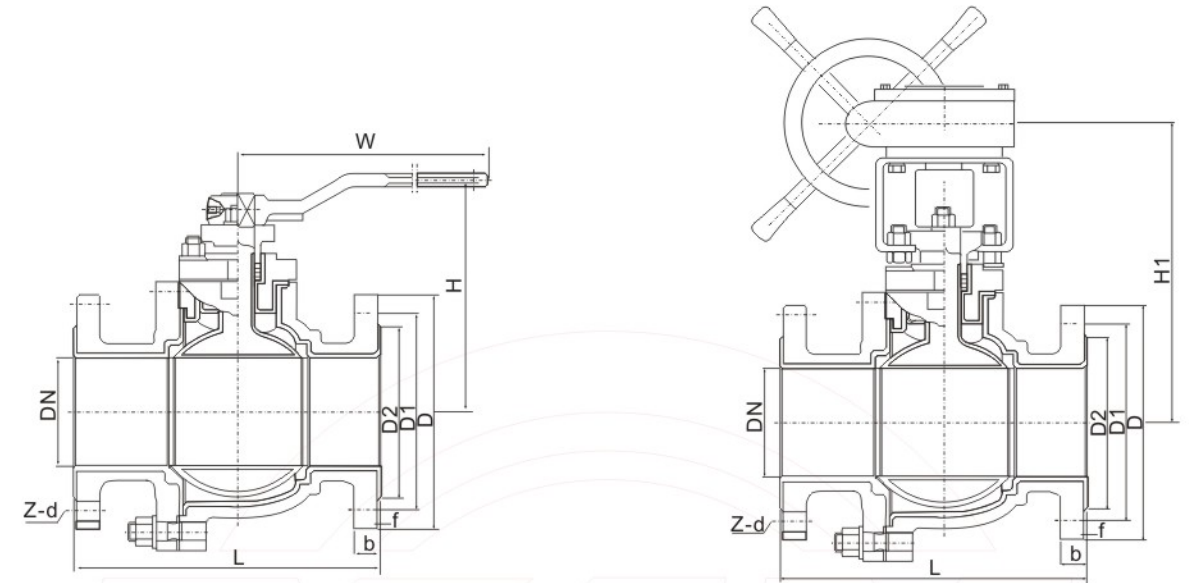
DN	L	D	D1	D2	Z-d	f	b	W	H	H1	Wt(Kg)
15	132	95	65	45	4-14	2	14	140	100	-	3.5
20	142	105	75	55	4-14	2	14	160	105	-	4
25	150	115	85	65	4-14	2	14	200	110	-	5.5
32	165	140	100	78	4-18	3	16	200	130	-	7
40	180	150	110	85	4-18	3	16	220	135	-	9
50	200	165	125	100	4-18	3	16	220	145	-	15.5
65	220	185	145	120	4-18	3	18	350	155	-	19.5
80	250	200	160	135	8-18	3	20	400	210	340	30
100	280	220	180	155	8-18	3	20	400	235	360	40
125	320	250	210	185	8-18	3	22	550	255	405	56
150	360	285	240	210	8-23	3	24	550	285	425	72
200	400	340	295	265	8-23	3	26	-	328	505	119
250	450	395	350	320	12-23	4	28	-	370	540	155
300	500	445	400	368	12-23	4	29	-	-	-	202
350	610	505	460	428	16-23	5	29	-	-	-	245

Note: For more size please consult factory.

A Lined Valve
Lined Ball Valve



GB lined Ball Valve



HG/T 20592 PN16

Unit:mm

DN	L	D	D1	D2	Z-d	f	b	W	H	H1	Wt(Kg)
15	132	95	65	45	4-14	2	15	140	100	-	3.5
20	142	105	75	55	4-14	2	16	160	105	-	4
25	150	115	85	65	4-14	2	16	200	110	-	5.5
32	165	140	100	78	4-18	3	16	200	130	-	7
40	180	150	110	85	4-18	3	17	220	135	-	9
50	200	165	125	100	4-18	3	18	220	145	-	15.5
65	220	185	145	120	4-18	3	20	350	155	-	19.5
80	250	200	160	135	8-18	3	22	400	210	340	30
100	280	220	180	155	8-18	3	24	400	235	360	40
125	320	250	210	185	8-18	3	26	550	255	405	57
150	360	285	240	210	8-23	3	28	550	285	425	73.5
200	400	340	295	265	12-23	3	30	-	328	505	121
250	450	405	355	320	12-25	4	30	-	370	540	159
300	500	460	410	375	12-25	4	30	-	-	-	202
350	610	520	470	435	16-25	5	34	-	-	-	250

HG/T 20592 PN25

Unit:mm

DN	L	D	D1	D2	Z-d	f	b	W	H	H1	Wt(Kg)
15	140	95	65	45	4-14	2	16	140	100	-	3.5
20	152	105	75	55	4-14	2	16	160	105	-	4
25	165	115	85	65	4-14	2	16	200	110	-	5.5
32	178	140	100	78	4-18	3	18	200	130	-	7
40	190	150	110	85	4-18	3	18	220	135	-	9
50	216	165	125	100	4-18	3	20	220	145	-	15.5
65	241	185	145	120	8-18	3	22	350	155	-	19.5
80	283	200	160	135	8-18	3	22	400	210	340	30
100	305	235	190	160	8-23	3	24	400	235	360	44
125	381	270	220	188	8-25	3	28	550	255	405	63
150	403	300	250	218	8-25	3	30	550	285	425	79
200	419	360	310	278	12-25	3	34	-	328	505	124
250	457	425	370	332	12-30	4	36	-	370	540	162
300	500	485	490	390	16-30	4	42	-	510	-	220