

Lined Three-Way Ball Valve

Patent No.: ZL200520107319.0

Product Description

- Lined three-way ball valve has compact structure which permits use where space constraints are a concern. It is the best choice for corrosive diverter valve applications.
- High flow capacity with minimal pressure loss through the valve, thereby reducing plant operating costs.
- Floating ball seat design for bubble-tight shutoff across the pressure range.
- Good sealing performance and easy maintenance. Besides applicable for gas and liquid, it works better for medium with high viscosity, fibriform or suspended soft particles.
- Equipped with spring return pneumatic actuator or quarter-turn actuators, it can be applicable for various applications and becomes popular in control or cut-off pipeline system.
- 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 three-way ball valves are available as per the needs of applications in additional sizes and other than standard materials.



PFA Lined Three-way Ball Valve

Lined Valve Lined Three-Way Ball Valve

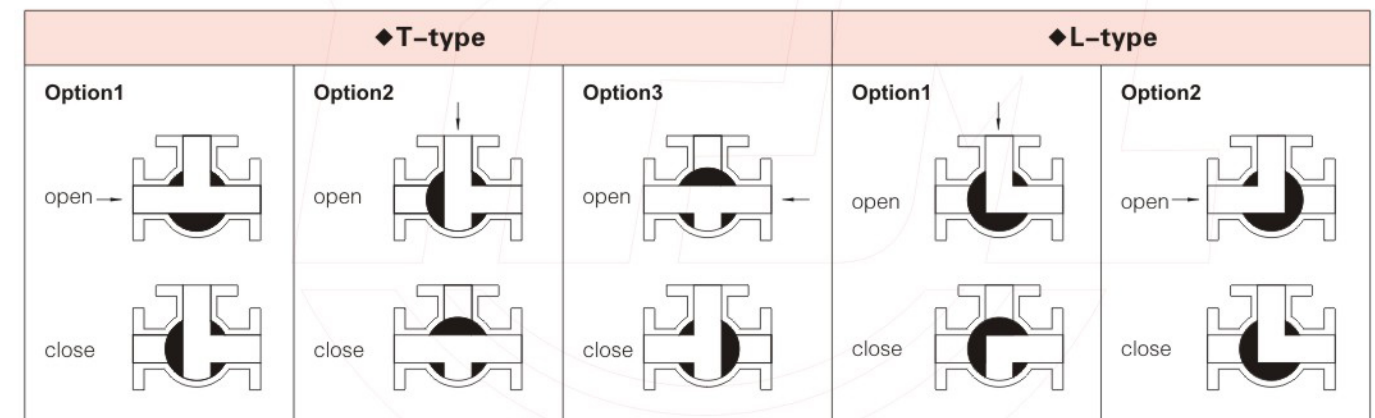


Technical Specification

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 and Test Standard		GB/T 13927, JB/T 9092	API 598
Nominal Diameter		DN25~DN350	1"~14"
Nominal Pressure (MPa)		1.0	1.6
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.	

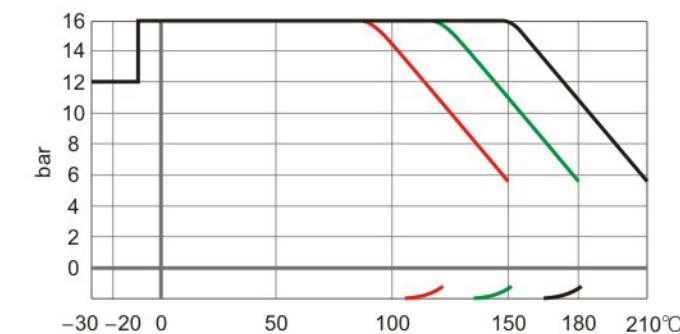
Note: Test standard refers general valve standard, high pressure should be customized for processing.

Optional Flow Arrangements



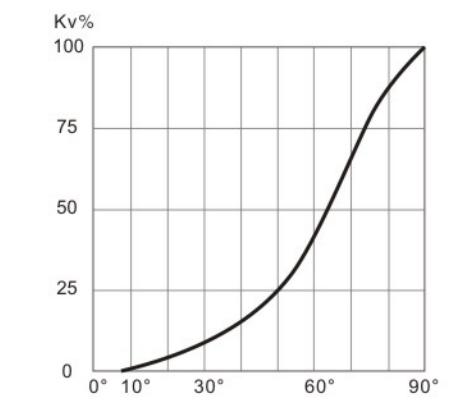
Note: For more options, please consult factory.

Pressure-Temperature Curve



Vacuum 0.1mbar
Note: — PFA — PTFE — FEP

Flow Characteristic

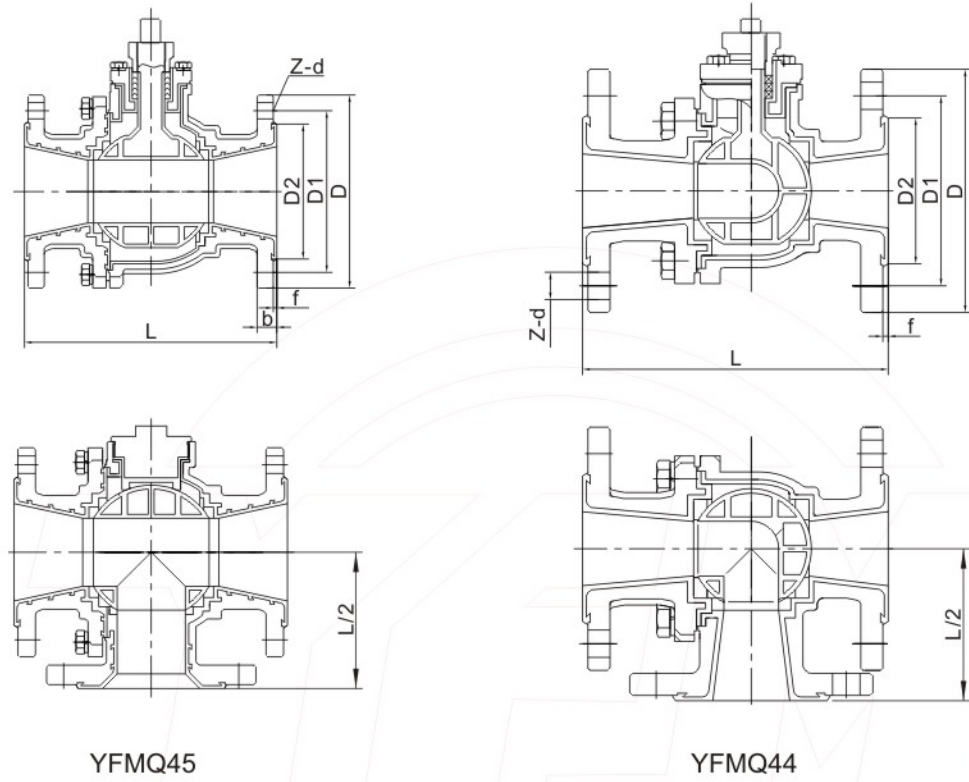


Valve Position Angle 1Cv=1.167Kv

A Lined Valve
Lined Three-Way Ball Valve



GB Lined Three-way Ball Valve



HG/T 20592 PN10/PN16

Unit:mm

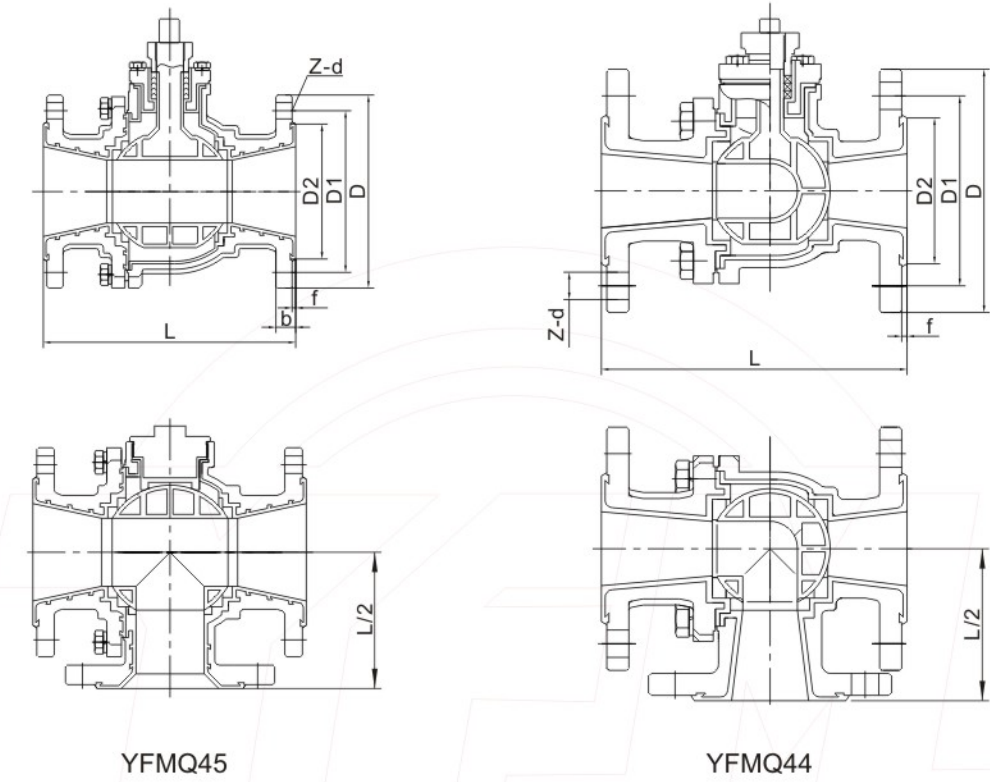
DN	L	D	D1	D2	Z-d	f	b
25	165	120	85	65	4-14	2	14
32	180	140	100	78	4-18	3	16
40	200	150	110	85	4-18	3	16
50	200	165	125	100	4-18	3	16
65	240	185	145	120	4-18	3	18
80	250	200	160	135	8-18	3	20
100	280	220	180	155	8-18	3	20
125	360	250	210	185	8-18	3	22
150	370	285	240	210	8-23	3	24

Note: For more size please consult factory.

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ANSI Lined Three-way Ball Valve



ASME B16.5 Class150

Unit:mm

NPS	L	D	D1	D2	Z-d	f	b
1	165	108	79.5	51	4-16	2	12
1 1/4	180	117	89.0	64	4-16	2	13
1 1/2	200	127	98.5	73	4-16	2	15
2	200	152	120.5	92	4-19	2	16
2 1/2	240	178	139.5	105	4-19	2	18
3	250	190	152.5	127	4-19	2	19
4	280	229	190.5	157	8-19	2	24
5	360	254	216.0	186	8-22	3	24
6	370	279	241.5	216	8-22	3	26