

Chemical Fluid Solutions



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YFM **YOUFUMI**
Corrosion Resistant Pipes & Valves

2023 VERSION



Core New Technology
Create a safer and more clean world

CONTENT

Lined Manual Valves Series

Ball Valve (O-Port, V-port; 2-way, 3-way)
Plug Valve (Fully Lined Type, Sleeve Type)
Butterfly Valve (Wafer, Lug, Double Flanged Type)
Diaphragm Valve (Weir Type)
Gate Valve
Globe Valve
Check Valve (Ball Type, Swing Type, Lift Type, Sight Glass Type)

Lined Control Valves Series

Globe Control Valve (Single Seat Type, Bellow Seal Type)
Control Ball Valve (V-port Type)
Control Butterfly Valve (Wafer, Lug, Double Flanged Type)
Control Diaphragm Valve

Ceramic Valve Series

Ceramic Lined Ball Valve (O-Port, V-port)
Ceramic Lined Knife Gate Valve
Ceramic Lined Dual-plate Valve
Ceramic Lined Slag Valve

Lined Pipe & Fittings Series

Pipe Spool
Elbow (30 degree, 45 degree, 60 degree, 90 degree)
Tee (Equal Tee, Reducing Tee, Instrument Tee)
Cross
Reducer (Concentric Type, Eccentric Type)
Flange (Blind Flange, Reducing Flange)
Spacer (Solid PTFE Type, PTFE with Steel Housing Type)

Lined Expansion Joint & Flexible Hose & Strainer & Sight Glass Series

FB Type Pure PTFE Expansion Joint
FX Type Rubber PTFE Expansion Joint
FX-1 Type Single Sphere Rubber PTFE Expansion Joint
FX-2 Type Double Sphere Rubber PTFE Expansion Joint
FW Type PTFE Braided with SS 304 Nets
FG Type PTFE Braided with SS 304 Shell
Pure PTFE Flexible Hose
PTFE Braided with SS Nets Flexible Hose
Strainer (Y Type, Basket Type)
Sight Glass (Horizontal Type, Vertical Type)

Lined Vessel & Tank & Tower & Reactor Series

General Metal Valves Series

Ball Valve
Butterfly Valve
Gate Valve
Globe Valve
Check Valve

ABOUT US

YFM (Youfumi Group) is a specialist in the fields of design and manufacture lined valves, pipelines and fittings for more than 30 years, providing flow solutions for corrosive and aggressive fluids in petroleum and chemical industries, pharmaceutical, printing and dyeing, electrical, shipbuilding, metallurgy, military, semiconductor chemistry, electronic phosphoric acid and other modern corrosion prevention fields.

Our Aim:

Tech for social good and people oriented;
To create an economic trend of positively decontamination.

Our Mission:

Well-being – develop the relationship between myself and YFM;

Profession – develop the relationship between YFM and the Society;

Environment protection – develop the relationship between YFM and the Planet;

Civilisation – develop the relationship between YFM and Life upgrading.



2022-2023

Wisdom Cloud Valley Headquarters



2019-2021

IOT Manufacture Digital Control



2011-2017

Century Artisan Spirit makes
YFM a super craftsman



2005-2011

China Intelligent Manufacture
Serve the Country through Industry



1989-2004

Rapid Expansion
Scale Development

HIGH PERFORMANCE BUTTERFLY VALVE



Pneumatic Lined Flanged Type Butterfly Valve



Pneumatic Lug Type Lined Butterfly Valve



Wafer Type Lined Butterfly Valve

Product Description

The lined butterfly valves bi-directional flow is possible at maximum operating pressure. Since the valve port corresponds to the piping diameter, a high flow capacity is guaranteed.

It features ease of maintenance, repeatable on-off, long life durability.

The concentric design is commonly used in the power generation, brewing, water and food industries and suitable for both gaseous and liquid service. Typically applied in chemical/petrochemical process, food and beverage, and pulp and paper etc.

Lining material: PTFE, PFA, FEP, PO etc.

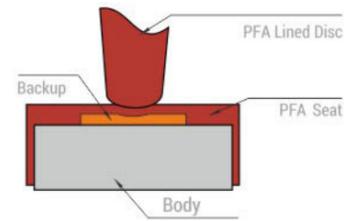
Connection type: wafer, flange, lug etc.

Operation methods: manual, worm gear, electric, pneumatic and hydraulic actuator.

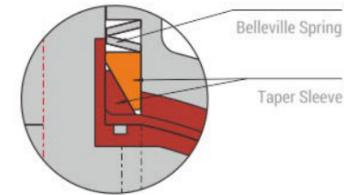
Youfumi lined butterfly valves are available as per the needs of applications in additional sizes and other than standard materials.

Structural Features

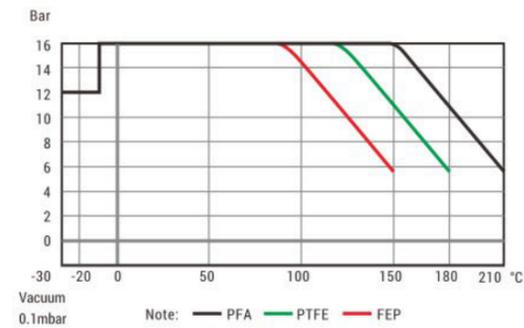
The disc is with high precision and small tolerance range after finishing processing, sealing surface is polished hemispherical, which can reduce the operating torque; By adjusting the connecting bolts of the upper and lower body, the combined elastic seats can be extended and positioned radially in the body, so that they can be adjusted under various operating conditions to maintain the best sealing performance.



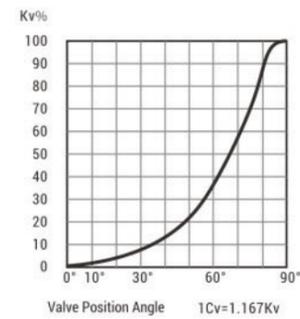
The PFA/Rubber compound O-ring combined with the pressure action of bellville spring, enhance the sealing performance and avoid the leakage.



Pressure-Temperature Curve

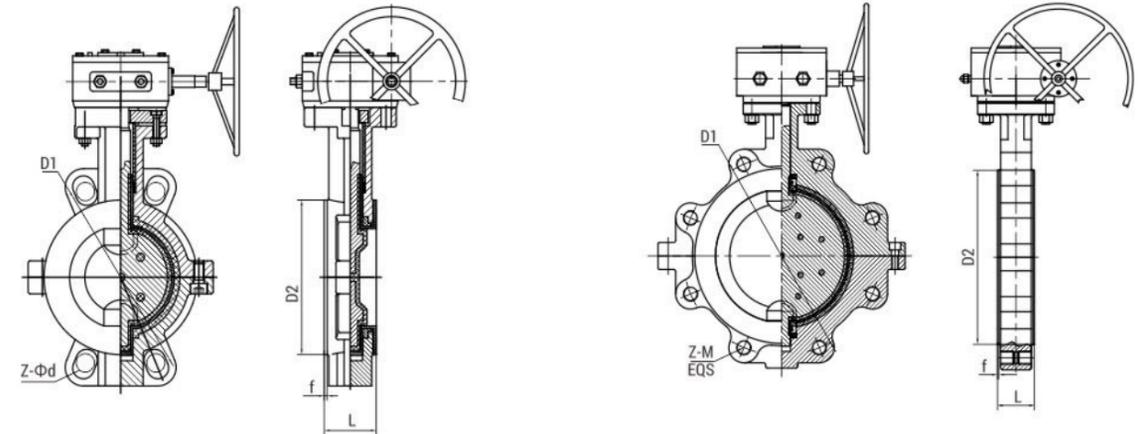


Flow Characteristic



Technical Specification

Design & Manufacture Standard	HG/T 3704		ASME B16.34 API 609
Face-to-face Dimension Standard	HG/T 3704		ASME B16.10
Flange Standard	HG/T 20592 DIN2501		ASME B16.5
Inspection & Test Standard	GB/T 13927		API 598
Nominal Diameter	DN50~DN600		2"~24"
Nominal pressure (MPa)	1.0	1.6	150Lb
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: -29~180°C		FEP: -29~150°C
Applicable Medium	Strong corrosive medium i.e. hydrochloric acid, Nitric acid, Hydrofluoric acid, Liquid chlorine, Sulfuric Acid and Aqua regia etc.		



DIN 2501 PN10/PN16

DN	L	PN10		PN16		D2	f		
		Wafer Z-Φd	Lug Z-M	Wafer Z-Φd	Lug Z-M				
50	43	125	4-Φ18	4-M16	125	4-Φ18	4-M16	94	2.5
65	46	145	8-Φ18	8-M16	145	8-Φ18	8-M16	110	3
80	46	160	8-Φ18	8-M16	160	8-Φ18	8-M16	128	3
100	52	180	8-Φ18	8-M16	180	8-Φ18	8-M16	149	3
125	56	210	8-Φ18	8-M16	210	8-Φ18	8-M16	179	3
150	56	240	8-Φ22	8-M20	240	8-Φ22	8-M20	202	3
200	60	295	8-Φ22	8-M20	295	12-Φ22	12-M20	256	3.5
250	68	350	12-Φ22	12-M20	355	12-Φ26	12-M24	308	3.5
300	78	400	12-Φ22	12-M20	410	12-Φ26	12-M24	365	4
350	78	460	16-Φ22	12-M20	470	16-Φ30	16-M24	415	4
400	102	515	16-Φ26	16-M24	525	16-Φ30	16-M27	470	4
450	114	565	20-Φ26	16-M24	585	20-Φ30	16-M27	518	4.5
500	127	620	20-Φ26	20-M24	650	20-Φ33	20-M30	565	4.5
600	154	725	20-Φ30	20-M27	770	20-Φ36	20-M33	668	5.5

ASME B16.5 Class 150LB

NPS	L	D1	D2	f	Wafer Z-Φd	Lug Z-M
					4-Φ19	4-M16
2"	43	120.7	94	2.5	4-Φ19	4-M16
2-1/2"	46	139.7	110	3	4-Φ19	4-M16
3"	46	152.4	128	3	4-Φ19	4-M16
4"	52	190.3	149	3	8-Φ19	8-M16
5"	56	215.9	179	3	8-Φ22	8-M20
6"	56	241.3	202	3	8-Φ22	8-M20
8"	60	298.5	256	3.5	8-Φ22	8-M20
10"	68	362	308	3.5	12-Φ25	12-M24
12"	78	431.8	365	4	12-Φ25	12-M24
14"	78	476.3	415	4	12-Φ29	12-M27
16"	102	539.8	470	4	16-Φ29	16-M27
18"	114	577.9	518	4.5	16-Φ29	16-M27
20"	127	635	565	4.5	20-Φ32	20-M30
24"	154	749.3	668	5.5	20-Φ35	20-M33

For more size, please consult with YFM sales team.

HIGH PERFORMANCE BALL VALVE



Three-Pieces Lined Ball Valve



Pneumatic Lined V-port Ball Valve



Pneumatic Lined Ball Valve



Pneumatic Lined 3-way Ball Valve



Product Description

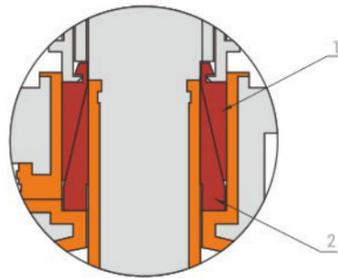
Anti-crystallization design: Valve liner adopts imported fluorine material, with better corrosion resistance and wear resistance, cavity between the body and ball is small, which minimize the accumulation of mediums.

Socket seal structure: The sealing between the valve body and bonnet adopts the socket structure, completely eliminate the possibility of leakage, dovetail groove structure is provided to prevent the lining from taking off under negative pressure.

Ball and stem anti-blowout design: One-piece ball and stem design, the dovetail will ensure the tightness between the metal parts and liner, the stem will not be blew out even under different pressure.

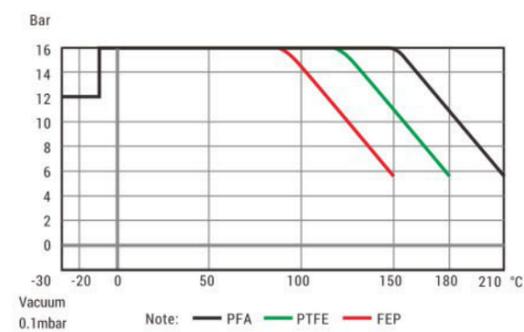
Packing with conical seal design: Packing adopts conical design, with the advantages of large sealing area and light torque

Self-compensation function seat design: The sealing surface of the valve seat is provided with a sealing groove, which can effectively lower the abrasion between the ball and the seat, When the sealing surface of the body is worn, the pre-tightening force of the seat will be released to ensure the sealing effect of the valve.

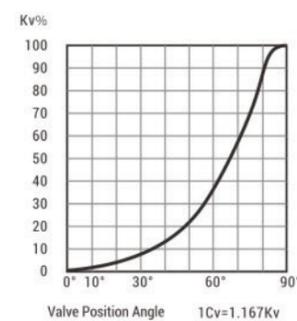


Packing with conical seal design:
Packing adopts conical design, with the advantages of large sealing area and light torque

Pressure-Temperature Curve

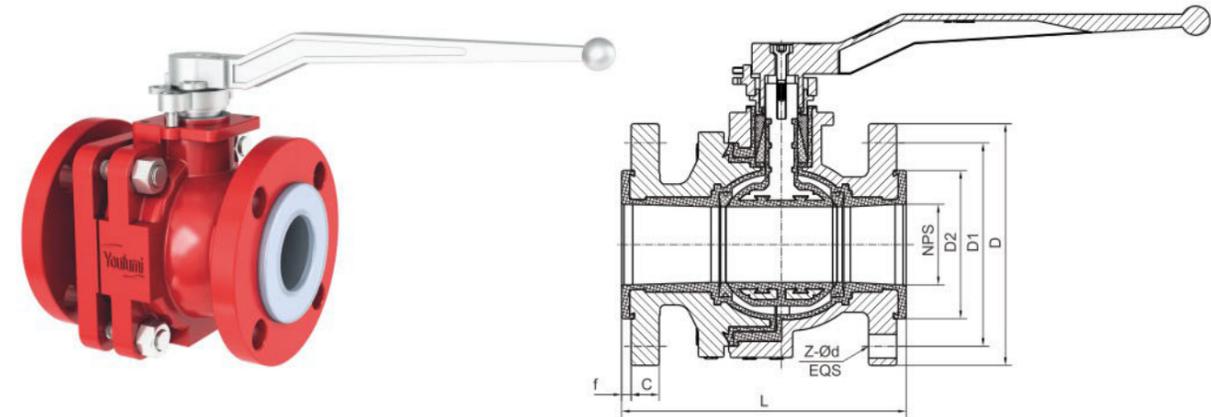


Flow Characteristic



Technical Specification

Design & Manufacture Standard	HG/T 3704		ASME B16.34 API 608
Face-to-face Dimension Standard	HG/T 3704 DIN 3202 F1		ASME B16.10
Flange Standard	HG/T 20592 DIN2501		ASME B16.5
Inspection & Test Standard	GB/T 13927		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: -29~180°C		FEP: -29~150°C
Applicable Medium	Strong corrosive medium i.e. hydrochloric acid, Nitric acid, Hydrofluoric acid, Liquid chlorine, Sulfuric Acid and Aqua regia etc.		



DIN 2501 PN10/PN16

DN	L	D	D1	D2	C	f	Z-Ød
25	160	115	85	68	16	3.5	4-Ø14
32	180	140	100	78	16	3.5	4-Ø18
40	200	150	110	88	16	3.5	4-Ø18
50	230	165	125	102	16	4	4-Ø18
65	290	185	145	122	16	4	8-Ø18
80	310	200	160	138	18	5	8-Ø18
100	350	220	180	158	18	6	8-Ø18
125	400	250	210	188	20	6	8-Ø18
150	480	285	240	212	20	6	8-Ø22

ASME B16.5 Class 150LB

NPS	L	D	D1	D2	C	f	Z-Ød
1"	127	110	79.4	51	12.7	3.5	4-Ø16
1-1/4"	140	115	88.9	64	14.3	3.5	4-Ø16
1-1/2"	165	125	98.4	73	15.9	3.5	4-Ø16
2"	178	150	120.7	92	17.5	4	4-Ø19
2-1/2"	190	180	139.7	105	20.7	4	4-Ø19
3"	203	190	152.4	127	22.3	5	4-Ø19
4"	229	230	190.3	157	22.3	6	8-Ø19
5"	254	255	215.9	186	22.3	6	8-Ø22
6"	267	280	241.3	208	23.9	6	8-Ø22

For more size, please consult with YFM sales team.

HIGH PERFORMANCE PLUG VALVE



PFA Full Lined Plug Valve

PFA Lined 3-way Plug Valve

Sleeve Type Plug Valve

Sleeve Type 3-way Plug Valve



Product Description

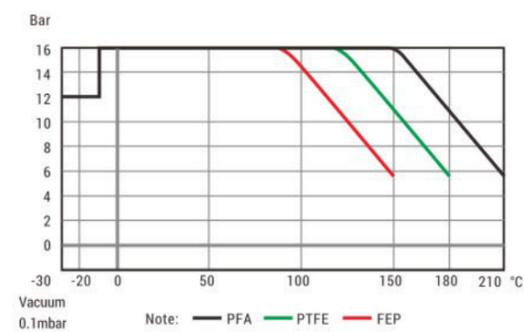
Plug works as the opening and closing part for the plug valve; Open and close quickly, fluid resistance is small.

The movement between the sealing surfaces has a wiping effect and contact of flow medium can be completely prevented when fully open, so it can also be used for medium with suspended particles.

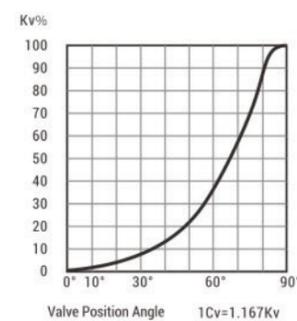
Lined three - way plug valve is a plunger - shaped rotary valve, by rotating 90 degrees make the opening on the valve plug and the opening on the valve body connected or cut off.

Suitable for cutting and switching, A single valve can provide two, three, or even four different flow channels. This can simplify the design of piping system, reduce the amount of valves.

Pressure-Temperature Curve

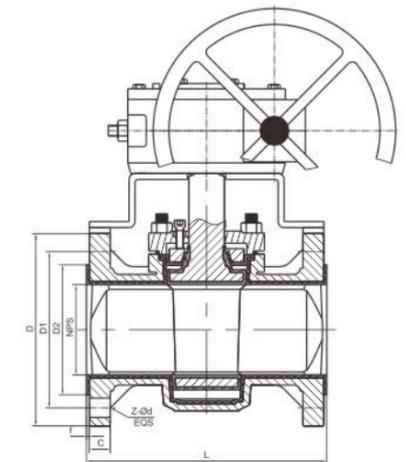
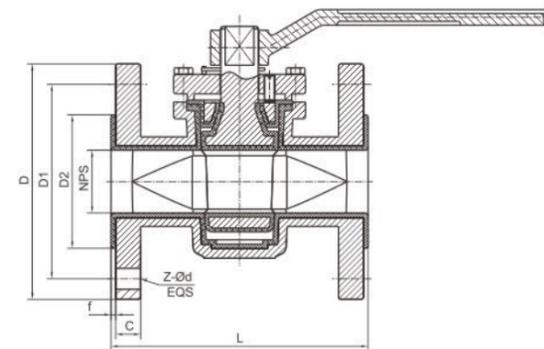


Flow Characteristic



Technical Specification

Design & Manufacture Standard	HG/T 3704	ASME B16.34	
Face-to-face Dimension Standard	HG/T 3704 DIN 3202 F1	ASME B16.10	
Flange Standard	HG/T 20592 DIN 2501	ASME B16.5	
Inspection & Test Standard	GB/T 13927	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
	High Pressure Sealing	1.1	1.1
	Low Pressure Sealing	0.6	0.6
Temperature Range (°C)	PFA: -29~180°C	FEP: -29~150°C	
Applicable Medium	Strong corrosive medium i.e. hydrochloric acid, Nitric acid, Hydrofluoric acid, Liquid chlorine, Sulfuric Acid and Aqua regia etc.		



ASME B16.5 Class 150LB

NPS	L	D	D1	D2	C	f	Z-Ød
1/2"	110	90	60.5	35	10	2	4-Ø16
3/4"	117	100	70	43	10	2	4-Ø16
1"	127	110	79.4	51	10	2	4-Ø16
1-1/4"	140	115	88.9	64	11.2	2	4-Ø16
1-1/2"	165	125	98.4	73	12.7	2	4-Ø16
2"	178	150	120.7	92	14.3	2	4-Ø19
2-1/2"	190	180	139.7	105	15.9	2	4-Ø19
3"	203	190	152.4	127	17.5	2	4-Ø19
4"	229	230	190.3	157	22.3	2	8-Ø19
5"	254	255	215.9	186	22.3	2	8-Ø22
6"	267	280	241.3	208	23.9	2	8-Ø22
8"	292	345	298.5	270	27	2	8-Ø22
10"	330	405	362	324	28.6	2	12-Ø25
12"	356	485	432	381	30.2	2	12-Ø25

ASME B16.5 Class 300LB

NPS	L	D	D1	D2	C	f	Z-Ød
1/2"	140	95	66.5	35	15	2	4-Ø16
3/4"	152	115	82.5	43	16.5	2	4-Ø19
1"	165	125	88.9	51	15.9	2	4-Ø19
1-1/4"	178	135	98.4	64	17.5	2	4-Ø19
1-1/2"	190	155	114.3	73	19.1	2	4-Ø22
2"	216	165	127	92	20.7	2	8-Ø19
2-1/2"	241	190	149.2	105	23.9	2	8-Ø22
3"	282	210	168.3	127	27	2	8-Ø22
4"	305	255	200	157	30.2	2	8-Ø22
5"	254	280	235	186	33.4	2	8-Ø22
6"	403	320	269.9	216	35	2	12-Ø22
8"	419	380	330.2	270	39.7	2	12-Ø25
10"	457	445	387.4	324	46.1	2	16-Ø29
12"	502	520	450.8	381	49.3	2	16-Ø32

For more size, please consult with YFM sales team.

HIGH PERFORMANCE DIAPHRAGM VALVE



Pneumatic Lined Diaphragm Valve



ANSI Lined Diaphragm Valve



Weir Type Rubber Lined Diaphragm Valve



EG Straight Type Rubber Lined Diaphragm Valve

Product Description

Youfumi lined diaphragm valve is ideally suited for shut-off, flow control and throttling of corrosive process media in either liquid or gaseous state.

Its main features are heavy-duty, robust construction, maintenance-free, easy replacement of components on site. Convenient, flexible and accurate open or close.

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.

It is not applicable for diaphragm used in medium with hard particles, which will cause diaphragm damage and leakage.

The working temperature cannot exceed the specified range.

Open the diaphragm too frequent will influence the sealing performance.

Lining material: PFA, FEP, PO etc.

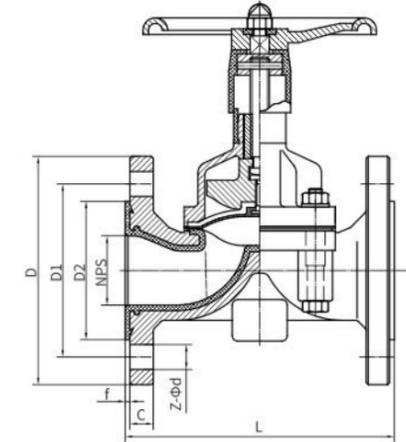
Operation methods: manual, worm gear, electric, pneumatic and hydraulic actuator.

Youfumi lined diaphragm valves are available as per the needs of applications in additional sizes and other than standard materials.

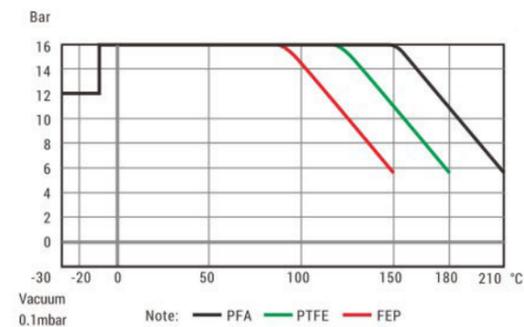


Technical Specification

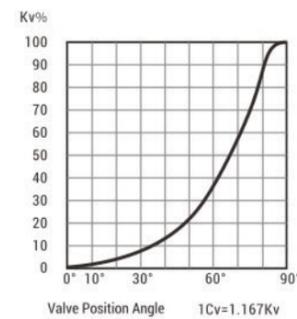
Design & Manufacture Standard	HG/T 3704		MSS-SP-88
Face-to-face Dimension Standard	HG/T 3704 DIN 3202 F1		HG/T 3704 DIN 3202 F1
Flange Standard	HG/T 20592 DIN 2501		ASME B16.5
Inspection & Test Standard	GB/T 13927		MSS-SP-88
Nominal Diameter	DN15~DN300		1/2"~12"
Nominal Pressure (MPa)	0.6	1.0	1.6
	0.9	1.5	1.5
	0.66	1.1	1.1
Pressure Test (MPa)	Shell Test	0.9	1.5
	High Pressure Sealing	0.66	1.1
	Low Pressure Sealing	0.6	0.6
Temperature Range (°C)	PFA: -29~180°C		FEP: -29~150°C
Applicable Medium	Strong corrosive medium i.e. hydrochloric acid, Nitric acid, Hydrofluoric acid, Liquid chlorine, Sulfuric Acid and Aqua regia etc.		



Pressure-Temperature Curve



Flow Characteristic



DIN 2501 PN10/PN16

DN	L	D	D1	D2	C	f	Z-φd
25	160	115	85	68	16	3.5	4-φ14
32	180	140	100	78	16	3.5	4-φ18
40	200	150	110	88	16	3.5	4-φ18
50	230	165	125	102	16	4	4-φ18
65	290	185	145	122	16	4	8-φ18
80	310	200	160	138	18	5	8-φ18
100	350	220	180	158	18	6	8-φ18
125	400	250	210	188	20	6	8-φ18
150	480	285	240	212	20	6	8-φ22
200	600	340	295	268	22	6	12-φ22
250	730	405	355	320	24	6	12-φ26
300	850	460	410	370	26	6	12-φ26

ASME B16.5 Class 150LB

NPS	L	D	D1	D2	C	f	Z-φd
1"	145	110	79.4	51	10	3.5	4-φ16
1-1/4"	160	115	88.9	64	11.2	3.5	4-φ16
1-1/2"	180	127	98.4	73	12.7	3.5	4-φ16
2"	210	150	120.7	92	14.3	4	4-φ19
2-1/2"	250	180	139.7	105	15.9	4	4-φ19
3"	300	190	152.4	127	17.5	5	4-φ19
4"	350	230	190.3	157	22.3	6	8-φ19
5"	400	255	215.9	186	22.3	6	8-φ22
6"	460	280	241.3	208	23.9	6	8-φ22
8"	570	345	298.5	240	27	4.5	8-φ22
10"	680	405	362	324	28.6	5	12-φ25
12"	790	485	432	381	30.2	2	12-φ25

For more size, please consult with YFM sales team.

LINED CONTROL VALVE



PTFE Bellow Control Valve



Pneumatic Lined Single Seat Control Valve



Single Seat Control Valve



Pneumatic V-port Ball Valve

Product Description

Lined bellow regulating valve is the implementation unit of the automatic instrument system, installed in the pipeline, supporting the use of other instruments.

All the wetted parts are with PFA / FEP liner and the bellows and packing double sealing design, completely eliminate the leakage possibility from the valve stem, it is suitable for chlorine gas and other highly toxic and highly corrosive media.

Safe and reliable sealing by O-ring between the bellow bottom and disc.

A stem guide structure is provided at the bottom of the bonnet to prevent the stem from rotating in the opening and closing process and to prevent the distortion and damage of the bellows.

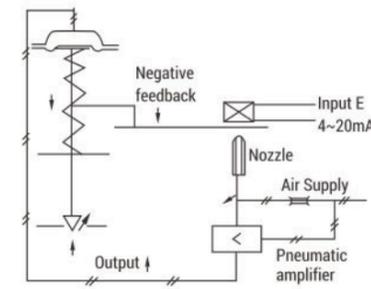
Different disc curve can achieve logarithm, straight line, fast open and other flow characteristics.

Technical Specification

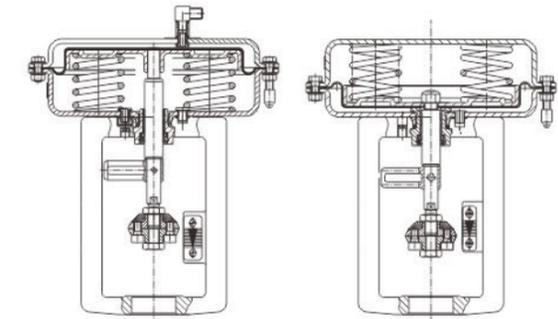
Nominal diameter DN	25	32	40	50	65	80	100	125	150	200		
Seat diameter (mm)	20	25	32	40	50	65	80	100	110	125	150	175
Rated Cv	5	10	16	24	44	68	125	165	195	330	360	460
Rated travel(mm)	16		25			38			50		60	
Actual pressure	Maximum 1.0 MPa (1.6 MPa customised)											
Nominal pressure	PN1.0, 1.6MPa											
Working temperature	-30°C ~ +180°C											
Trim	Single seat plunger valve core											
Flow characteristic	Linear, equal percentage											
Adjustable range	50:1											

Equipped with ZJHA/B Multi-springs Diaphragm Pneumatic Actuators

Model	ZJHA/B-22	ZJHA/B-23	ZJHA/B-34	ZJHA/B-45
Action mode	ZJHA type actuator refer to "air-to-close" action; ZJHB actuator refer to "air-to-open" action			
Pressure supply	According to the scope of spring: 0.02~0.10, 0.04~0.20, 0.08~0.24 Mpa, Respectly are 0.14, 0.25, 0.35 MPa			
Air supply connection	Rc1/4			
Basic error	Without positioner: ±5%; With positioner: ±1%;			
Backlash	Without positioner: 3%; With positioner: 1%;			
Dead zone	Without positioner: 3%; With positioner: 0.4%;			
End point deviation	Without positioner: opening point ±2.5%, terminal point ±5%; closing point ±5%, terminal point ±2.5%. With positioner error from beginning to end is ±1%;			
Travel deviation	±2.5%			
Leakage rate	No more than 10-5 of rated CV			
Optional accessories	positioner, air set, solenoid valve, limit switch etc. (according to the order)			



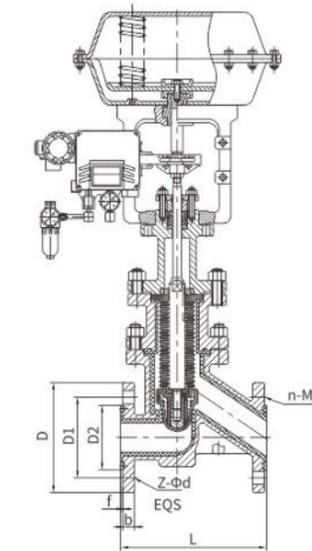
Operation Drawing



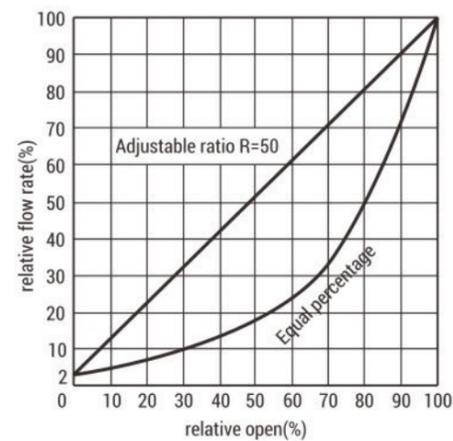
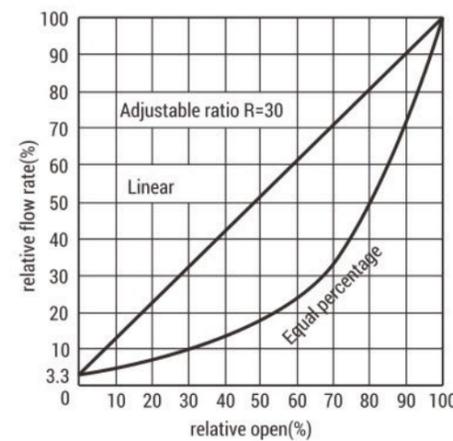
A. air to close: direct action
B. air to open: in direct action
Pneumatic Multi-spring Diaphragm Actuator



Pneumatic Lined Control Valve



Flow characteristics curve of lined control valve



DIN 2501 PN10

DN	L	D	D1	D2	b	f	Z-φd	n-M
15	160	95	65	45	16	3	2-φ14	2-M12
20	160	105	75	55	16	3	2-φ14	2-M12
25	160	115	85	68	16	3	2-φ14	2-M12
32	180	140	100	78	16	3	2-φ18	2-M16
40	200	150	110	88	16	3	2-φ18	2-M16
50	230	165	125	102	16	3	2-φ18	2-M16
65	290	185	145	122	16	3.5	6-φ18	2-M16
80	310	200	160	138	18	3.5	6-φ18	2-M16
100	350	220	180	158	18	4	6-φ18	2-M16
125	400	250	210	188	20	4	6-φ18	2-M16
150	480	285	240	212	20	4	6-φ22	2-M20
200	600	340	295	268	22	5	6-φ22	2-M20

For more size, please consult with YFM sales team.

DIN 2501 PN16

DN	L	D	D1	D2	b	f	Z-φd	n-M
15	160	95	65	45	16	3	2-φ14	2-M12
20	160	105	75	55	16	3	2-φ14	2-M12
25	160	115	85	68	16	3	2-φ14	2-M12
32	180	140	100	78	16	3	2-φ18	2-M16
40	200	150	110	88	16	3	2-φ18	2-M16
50	230	165	125	102	16	3	2-φ18	2-M16
65	290	185	145	122	16	3.5	6-φ18	2-M16
80	310	200	160	138	18	3.5	6-φ18	2-M16
100	350	220	180	158	18	4	6-φ18	2-M16
125	400	250	210	188	20	4	6-φ18	2-M16
150	480	285	240	212	20	4	6-φ22	2-M20
200	600	340	295	268	22	5	6-φ22	2-M20

LINED CHECK VALVE



Sight-glass Ball Check Valve



Wafer Swing Check Valve



Dual-plate Check Valve



Ball Type Check Valve



Piston Check Valve



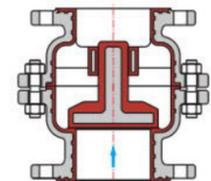
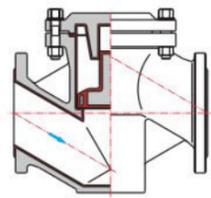
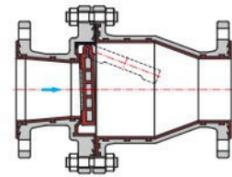
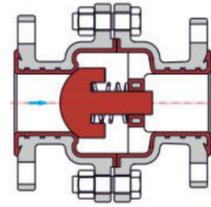
Flanged Swing Check Valve



Horizontal Through-way Lift Check Valve



Vertical Lift Type Check Valve



LINED VALVE



Lined Gate Valve



Lined Baiting Valve



Lined Baiting Valve



Lined Globe Valve



Lined Safety Valve

CERAMIC VALVE



Q41FTC
PFA Lined Ceramic
Ball Valve



Q641FTC
PFA Lined Ceramic
Ball Valve



Q11TC
Threaded Ceramic
Ball Valve



Product Description

Trim components of ceramic ball valve adopt alumina or zirconia ceramic with high chemical stability and hardness (HRC88), only inferior to diamond. The ceramic lined valve has very good performance on abrasion erosion, and corrosion resistance, and excellent heat-shielding, electric insulation. Mainly used in electric power, petroleum, chemical, metallurgy, mining, sewage treatment and other industries where the metal valve cannot be applicable.

The ball is made by advanced grinding equipment and advanced process technology that can ensure high precision ball roundness, good surface. The self-lubricating capability of ceramic ensures the good sealing after polishing, which radically changed the defects that metal hard sealing valve has such as big torque, non-corrosion-resistant sealing surface.

Ceramic valve adopts new high-tech type structural ceramic material as sealing and wearing parts, which can improve abrasion and corrosion resistance, and sealing performance, prolonging lifespan, 2~4 times of lifespan than Titanium Alloy and Monel valve. Using ceramic valve can reduce repair or replacement costs and improve safety, stability of operating system. This valve fits in granule medium of high hardness, or medium with erosion soft granule. Nominal pressure PN10~PN40, applicable temperature $\leq 200^{\circ}\text{C}$. Manufacture and design accordance to GB, JIS, API standards.

Ceramic Performance Specification

Item	Unit	Alumina (AL ₂ O ₃)			Zirconia(ZrO ₂)	
		AL ₂ O ₃ ≥95%	AL ₂ O ₃ ≥99%	AL ₂ O ₃ ≥99.5%	3Y-TZP	Ce-TZP
Density	g/cm ³	3.7	3.9~3.95	3.95	6.0~6.05	6.0
Hardness	HRA _≥	86	88	88	87	87
Flexural Strength	MPa _≥	300	350	400	1300	800
Max. temperature	°C	1200	1200	1200	900	1100
Liner Expansion Coefficient	10 ⁻⁶ /°	7.5	8.2	8.2	9.8	9.6
Permittivity	r20,1MHz	9.0	9.2	9.2	9.3	9.3
Dielectric Loss	tanδ×10 ⁴ ,1MHz	3	2	2	2	2
Volume Resistivities	Ω.cm20	10 ¹³	10 ¹⁴	10 ¹⁴	10 ¹³	10 ¹³
Puncture Strength	KV/mm,DC _≥	20	20	20	20	20
Compressive Strength	MPa _≥	2500	2500	2500	4500	4500
Rupture Strength	MPa _≤	200	350	350	1000	1000
Elastic Modulus	Gpa	300	350	350	----	----
Poisson Ratio	---	0.20	0.22	0.22	----	----
Thermal Conductivity	W/m-K(20)	20	25	25	----	----

Note: If thermal shock needed, please specify.

Corrosion Resistance Reference Table

Medium	HCL		H ₂ SO ₄		H ₃ PO ₄		HF		HNO ₃		NaOH	
	20%	20%	90	90	60%	60%	10%	46%	60	60	30%	30%
Temperature	60°C	95°C	60°C	95°C	60°C	95°C	60°C	95°C	60°C	95°C	60°C	95°C
99.0 AL ₂ O ₃	a	a	a	a	a	a	b	c	a	b	b	b
99.5 AL ₂ O ₃	a	a	a	a	a	a	b	c	a	a	a	a
ZrO ₂	a	a	a	a	a	a	a	c	a	a	a	b
SS304	c	x	c	c	c	c	c	x	a	b	a	a
SS316	c	x	c	c	c	c	c	x	a	a	a	b

a. Recommend to use because of no corrosion or corrosion can be ignored
 b. Suitable to use because of light or less corrosion
 c. Not recommend to use because of medium or high corrosion
 x. Forbid to use because of serious corrosion



Q641TC
Pneumatic Ceramic Lined
Ball Valve



Q641TC
High Pressure & Temperature
Ball Valve



PBQ640TC
Ceramic Lined Adjust Valve

CERAMIC VALVE



Q671TC
Pneumatic Wafer Type Ceramic Lined Ball Valve



Q941TC
Electric Ceramic Lined V-port Ball Valve



PBQ340TC
Offset Ceramic Lined Ball Valve



PZ41TC
Manual Ceramic Lined Discharge Valve



Z674TC
Pneumatic Dual-plate Ceramic Lined Gate Valve



Z673TC
Pneumatic Ceramic Lined Knife Gate Valve



YZ644TC
Pneumatic Ceramic Rotating Disc Valve

PTFE LINED PIPE AND FITTING



PTFE Lined Elbow



PTFE Lined Reducer



ETFE Lined Fitting



PFA Lined Fitting



PO/PP Lined Reducer



PTFE Lined Blind Flange

Technical Specification

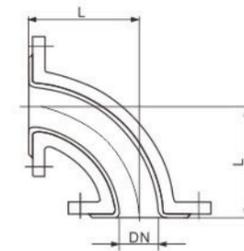
Nominal Diameter	DN15~DN1200 1/2"~48"				
Nominal Pressure	PN10, PN16, Class150				
Design & Manufacture Standard	ASTM F1545				
Flange Standard	HG/T 20592, ASME B16.5				
Inspection & Test Standard	ASTM F1545				
Liner Inspection	Spark test 10-20Kv				
Flange Material	A105, SS304, SS316, SS316L				
Liner material	PTFE	PO	PP/PE	PFA	ETFE
Temperature Range(°C)	-20~200	-15~90	-20~80	-30~200	-20~120

DN	Standard	Lined Thickness (mm)	Bearable Vacuum Ability		
			23°C	100°C	230°C
25	●	3			
40	●	3			
50	●	3			
80	●	4			
100	●	4			
150	●	6			
200	●	6			
250	●	7			
300	●	7			

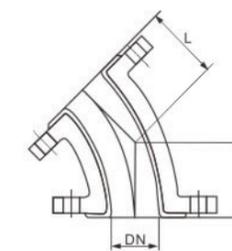
Vacuum Resistance

- = Full Vacuum
- = Limited Vacuum
- = Vacuum Intolerant

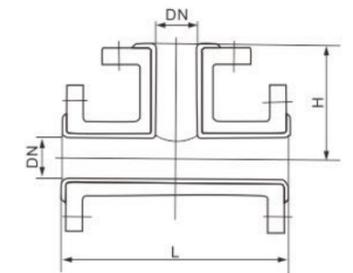
If the size you need is not in the column, please refer to the indicated nearest larger diameter.



90° Elbow



45° Elbow



Lined 90° Elbow

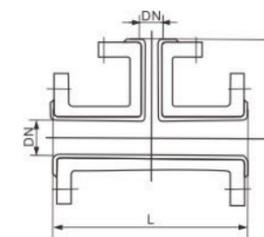
DN	NPS	L (mm)
25	1	89
32	1 1/4	95
40	1 1/2	102
50	2	114
65	2 1/2	127
80	3	140
100	4	165
125	5	190
150	6	203
200	8	229
250	10	279
300	12	305
350	14	356
400	16	406
450	18	457
500	20	508
600	24	610

Lined 45° Elbow

DN	NPS	L (mm)
25	1	45
32	1 1/4	51
40	1 1/2	57
50	2	63
65	2 1/2	76
80	3	76
100	4	102
125	5	114
150	6	127
200	8	140
250	10	165
300	12	190
350	14	221
400	16	253
450	18	284
500	20	316
600	24	374

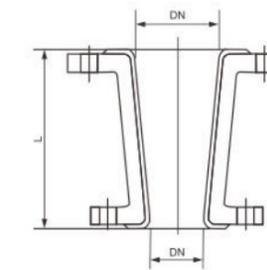
Lined Equal/Reducing Tee

DN×DN	NPS×NPS	L (mm)	H (mm)
25×25	1×1	178	89
32×32	1 1/4×1 1/4	190	95
32×25	1 1/4×1	190	95
40×40	1 1/2×1 1/2	204	102
40×32	1 1/2×1 1/4	204	102
40×25	1 1/2×1	204	102
50×50	2×2	228	114
50×40	2×1 1/2	228	114
50×32	2×1 1/4	228	114
65×65	2 1/2×2 1/2	254	127
65×50	2 1/2×2	254	127
65×40	2 1/2×1 1/2	254	127
80×80	3×3	280	140
80×65	3×2 1/2	280	140
80×50	3×2	280	140
100×100	4×4	330	165
100×80	4×3	330	165
100×65	4×2 1/2	330	165
100×50	4×2	330	165



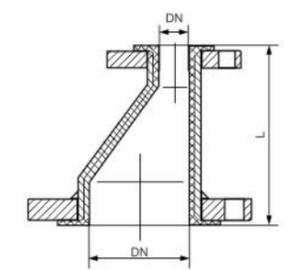
Lined Equal/Reducing Tee

DN×DN	NPS×NPS	L (mm)	H (mm)
125×125	5×5	380	190
125×100	5×4	380	190
125×80	5×3	380	190
150×150	6×6	406	203
150×125	6×5	406	203
150×100	6×4	406	203
200×200	8×8	458	229
200×150	8×6	458	229
200×125	8×5	458	229
200×100	8×4	458	229
250×250	10×10	558	279
250×200	10×8	558	279
250×150	10×6	558	279
300×300	12×12	610	305
300×250	12×10	610	305
300×200	12×8	610	305



Lined Concentric Reducer

DN×DN	NPS×NPS	L (mm)
32×25	1 1/4×1	114
40×25	1 1/2×1	114
40×32	1 1/2×1 1/4	114
50×25	2×1	127
50×32	2×1 1/4	127
50×40	2×1 1/2	127
65×40	2 1/2×1 1/2	140
65×50	2 1/2×2	140
65×25	2 1/2×1	140
80×40	3×1 1/2	152
80×50	3×2	152
80×65	3×2 1/2	152
100×50	4×2	178
100×65	4×2 1/2	178



Lined Eccentric Reducer

DN×DN	NPS×NPS	L (mm)
100×80	4×3	178
125×100	5×4	203
125×80	5×3	203
150×80	6×3	229
150×100	6×4	229
150×125	6×5	229
200×100	8×4	279
200×125	8×5	279
200×150	8×6	279
250×125	10×5	305
250×150	10×6	305
250×200	10×8	305
300×150	12×6	356
300×200	12×8	356
300×250	12×10	356

For more size, please consult with YFM sales team.

LINED STRAINER



Y Type Lined Strainer



Basket Type Lined Strainer



Basket Type Lined Strainer

Product Description

Lined strainer is an anticorrosive equipment to remove a small amount of solid particles in liquid. It is used to ensure compressor, pump, instrument and other equipment in normal operation.

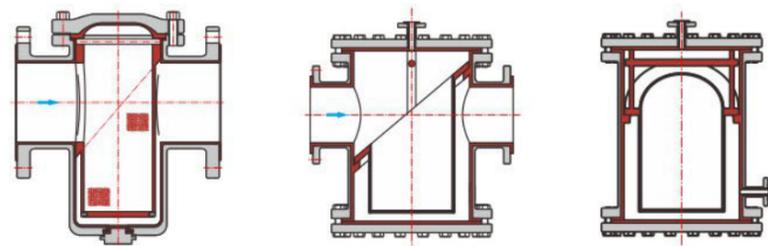
When the fluid enters the filter barrel with a certain size of screen, its impurities are blocked, the clean filtrate is discharged through the filter outlet.

When cleaning, as long as the detachable filter barrel out, processing after re-loading can, therefore, the use and maintenance is very convenient.

Integral body design with replaceable filter internals.

Multiple filter structure design, double discharge interface, standard flange connection.

PTFE screen meshes 16-100 meshes available (normally 16 meshes).



LINED VESSEL



ETFE Lined Vessel



PO Lined Vessel



PTFE LINED EXPANSION JOINT



PTFE
FB Type Expansion Joint



PTFE
FW Type Expansion Joint



PTFE
FG Type Expansion Joint



FX-1 FX-2
Type Expansion Joint

Product Description

Isostatic PTFE expansion joint braided with ss housing combined the use of one-time hydraulic molding, air pressure molding and mechanical molding technology, can meet positive and negative pressure, high temperature, strong corrosion of industrial and mining conditions, the highest temperature 180°C and vacuum 0.098mpa full vacuum.

Types of Expansion Joint

Name	Code	Dimension
PTFE Expansion Joint	FB	DN25~DN600
PTFE Rubber Expansion Joint	FX	DN25~DN3000
PTFE Stainless Steel Nets Expansion Joint	FW	DN25~DN1000
PTFE Stainless Steel Housing Expansion Joint	FG	DN25~DN3000
Metal Expansion Joint	FJ	DN25~DN3000
Single Spherical Expansion Joint	FX-1	DN25~DN1000
Double Spherical Expansion Joint	FX-2	DN25~DN1000



PTFE FX Type Expansion Joint

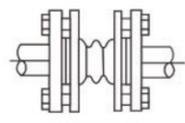


PFA Expansion Joint

Installation Instruction

Before install the expansion joints into the pipeline, the fixing sleeve on the limit rods have to be removed and adjust the nuts to the top which can make the flange move freely when thermal expansion, if the angle is bigger, also can take off the limits rods directly.

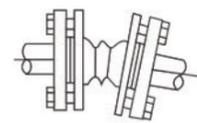
When installation, keep the expansion joint in the regular status, it can not be stretched or compressed. And the flanges have to be installed in the correct condition, also should keep the bellows and the flare surface from damage.



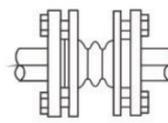
Lateral Movement



Displacement Compensator



Angle Movement



Damping Noise Reduction

FLEXIBLE HOSE



Conductive PTFE Flexible Hose



PFA Flexible Hose



PTFE Flexible Hose



SAFETY SHIELDS



PP Plastic Flange Protection Sleeve



PP Plastic Flange Protection Sleeve



PVC Transparent Flange Protection Sleeve
Acid And Alkali Protection Cover



PTFE Transparent Flange Sleeve



PP Plastic Flange Protection Sleeve

Define

It is a safety protection product applied to flange joints to prevent dangerous liquid from splashing and wounding.

Value

In the modern industrial production, there are a lot of enterprise inevitably involves the liquid transportation pipeline, and most of the pipeline are with flange connection, the spitting may happen from the flange joint during the continuous production because some unstable factors (such as aging gasket, sealing surface corrosion), and cause irreparable damage to nearby personnel. In view of this hidden danger, our production of flange protective sleeve can be very good to prevent this.

Product Performance Introduction

- Corrosion resistant**
Acid resistance, alkali resistance, partial solvent resistance
- High transparency**
Transparent visibility can be the first time to find leaks
- Radiation protection**
99.9% sputtering and flow resistance
- Heat resistance**
Has a certain flame retardant effect, long-term use temperature of -20 ~100
- Anti-aging**
Cold resistance, heat resistance, service life ≥1 years

Product Features

- Selection of good raw materials green environmental protection
- Strict in accordance with the standard manufacturing, environmental protection materials
- Convenient installation and flexible dimensions
- High standard design and exquisite craftsmanship combined
- Durable leak warning
- Industrial standard, timely repair, use more assured

GASKET



Product Description

PTFE Rubber composite gasket is made from superior EPDM or NBR, and at the sealing surface recombined 100% pure PTFE by activating treatment. This product reduces cold flow and enhances anti blow out features, which makes the gasket the better performance of rigid strength, compression, resilience, compensatory, and can meet the harsh environment condition.

It has many advantages. It can be repeatable usage, and applied in PTFE, PVDF, PP, FRP, cast iron or ductile iron flange. It is reduced by 75% of torque load from bolt to sealing surface due to the raised sealing ring surface, which enhances the sealing performance because of the high sealing load, which result from less. 100% pure PTFE provides a clean, no pollution of the sealing surface and good chemical resistance. It is widely used in the electronics, chemical and pharmaceutical industries.

PTFE Rubber Composite Gasket

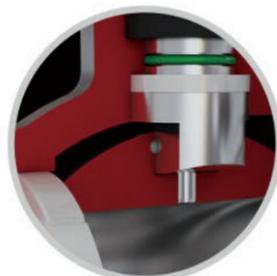
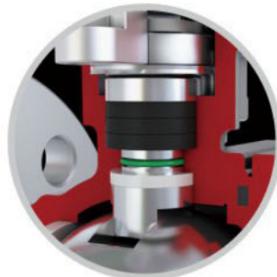
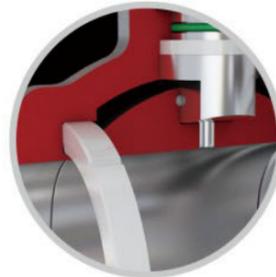


GENERAL METAL VALVE

ANTI-FIRE & ANTI-STATIC BALL VALVE



Q641F
Pneumatic Ball Valve



Q41F
Flanged Ball Valve



Q347F Large Size SS
Ball Valve



Q347F
3-Pieces Ball Valve



D343F/H
Double Flanged Butterfly Valve



D943F/H
Electric Butterfly Valve



TD373H/F
Lug Butterfly Valve



D673F/H
Wafer Butterfly Valve



Z41W/H
ANSI Gate Valve



J41W/H
ANSI Globe Valve



J41W/H
DIN Globe Valve



H44W/H
Check Valve



OUR CUSTOMERS

