FLUID SYSTEM CO.,LTD
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YOUFUMI

LINED VALVES

A 001 - 070

Butterfly Valve
Gate Valve
Ball Valve
Globe Valve
Diaphragm Valve
Check Valve
Plug Valve

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The Empire Solutions
For Global Industrial Flow Control

Compilation method for valve model

Table 7

Butterfly Valve	Code
Mono-eccentric	0
Concentric	1
Bi eccentric	2
Tri eccentric	3
Linkage	4

Table 8

Diaphragm Valve	Code
Weir type	1
Globe type	3
Wedge type	7

Table 9

Plug Valve		Code
Packing	Through-way	3
	T-type three-way	4
	Four-way	5
oil seal	Through-way	7
	T-type three-way	8

Table 10

Check Valve		Code
Lift	Through-way	1
	Vertical type	2
	Single disc	4
Swing	Multi-disc	5
	Double disc	6

5 Lining or seat material

Table 11

Lining/seat material	Code	Lining/seat material	Code
Rubber	X	Alloy steel	H
Nylon plastic	N	Cemented carbide	Y
Fluoroplastics	F	Enamel	C
Perfluoroalkoxy	PFA	FEP	F46
Polytetrafluoroethylene	F4	Modified polyolefine	PO

Note: Code "W" stands for seat sealing material directly processed on valve body; When the sealing material of the seat and disc is different, use the lower hardness material for stand (Except the diaphragm valve).

6 Nominal pressure

According to JB74-59 <Nominal pressure, test pressure and working pressure for pipe fitting>, for power station industrial valves, when the maximun temperature of medium is over 530 degree, mark the working pressure according to JB 74-59.

7 Valve body material

Table 12

Body material	Code	Body material	Code
HT25–47	Z	Cr5Mo	I
KT30–6	K	1Cr18Ni9Ti	P
QT40 25	Q	Cr18Ni12Mo2Ti	R
H62	T	12Cr1MoV	V
WCB	C		

Note: For gray cast iron valve body with Pg<=16kgf/cm^2 and Carborn steel body with Pg>=25kgf/cm^2, omit this code.
Note: Half lined valve, i.e. half lined wafer butterfly valve, the code as below: D71F4/P-PN16-DN50.

A Lined Valve
Fluorine Plastic Performance

YOUFUMI

Performance	Item / Code / Abbreviation	Unit	PTFE	PVDF	FEP	PFA	PO	PE	PP
	Abbreviation		PTFE	PVDF	FEP	PFA	PO	PE	PP
	Code		F4	F2	F46	PFA	PO	PE	PP
Physical Performance	Specifc Gravity	g/cm³	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	0.04	≤0.01	≤0.01	0.005	0.005	0.005
	Shrinkage rate of finished product	%	1~5	2.0	2~5	1~5	1~2	1~2	1~2
	Embrittlement coefficient	10^{-5}/K	10~12	8.5~15.3	8.3~10.5	8.3~12	–	–	–
	Embrittlement temperature T1	℃	−180~−195	−62	−260	−80~−195	−40	−40	−20
	Hot resistance T2	℃	260	150	204	260	100	100	100
	Recommend working temperature T3	℃	≤180	≤100	≤150	≤200	≤85	≤85	≤85
Mechanical Performace	Hardness	SOSIXO	D50~65	D80	(R45)	D50~65	D40	D40	D40
	Friction coefficient f	–	0.06	0.14~0.17	0.06~0.11	0.06~0.11	–	–	–
	Tensile strength σ b	MPa	13.7~24.5	45~48.3	20.0~24.5	14~28	≥10	6.9~14	7.5~14
	Bending strength σ w	MPa	10.7~13.7	–	–	15~28	–	–	–
	Compression strength σ y	MPa	111	68.6	–	111	–	–	–
	Impact strength σ k	KJ/m²	16	19.7	Continuous	1+	−55	45	50
	Ultimate elongation Δ λ	%	250~350	30~300	250~270	300~500	480	300~600	600~700
	Breakdown voltagev	KV/mm	25~40	10.2	40	25~40	–	–	–

Processing Performace								
Compression molding	Good	Good	Good	Good	Good	Good	Good
Injection molding	–	Good	Good	Good	Good	Good	Good
Lamination	Good	Good	Good	Good	Good	Good	Good
Layer	Good	Good	Good	Good	Good	Good	Good

A Lined Valve
Fluorine Plastic Performance

YOUFUMI fluid system

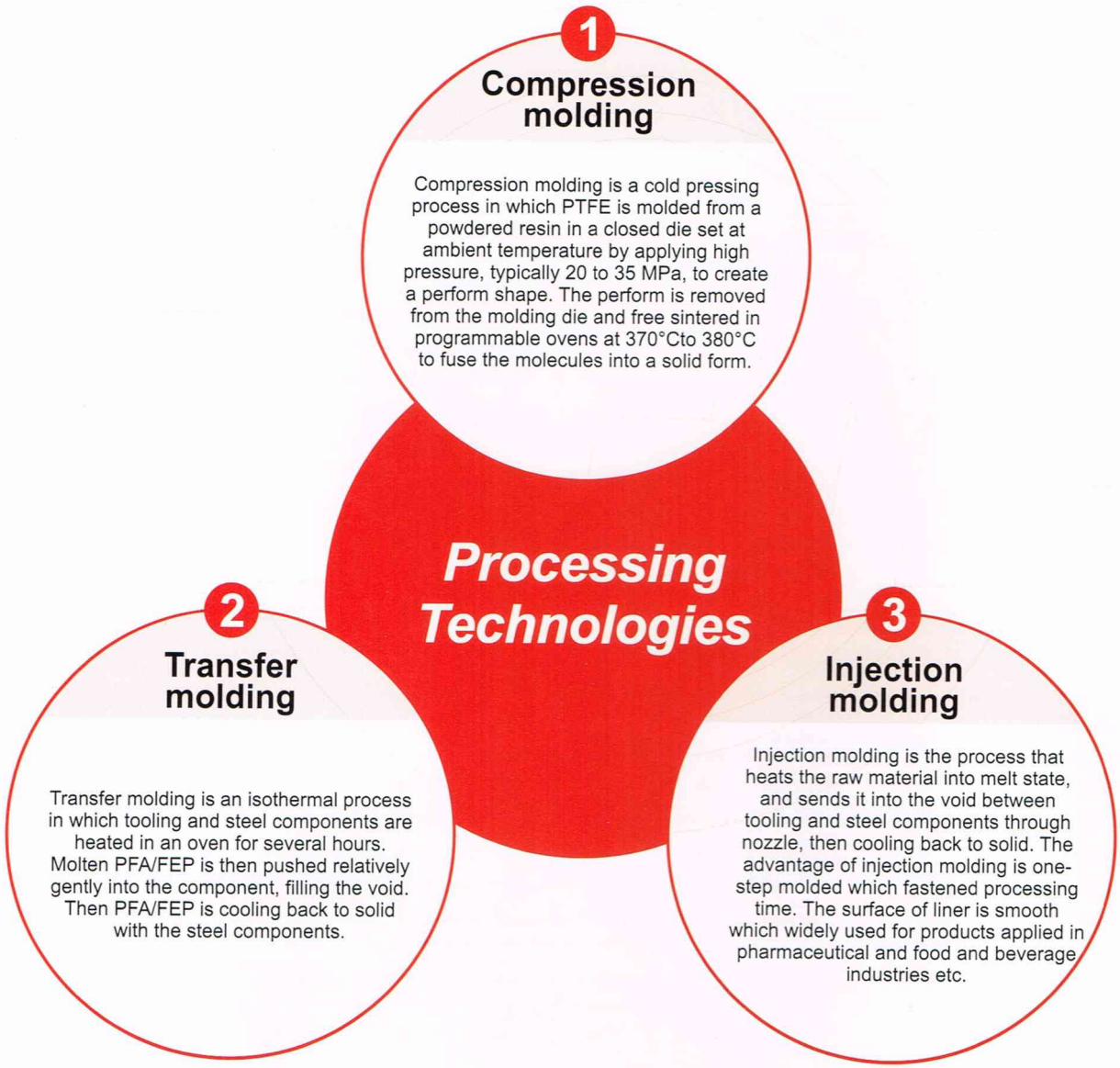
Corrosion Resistance performace (only for refer)

Medium	Concentration (%)	Temperature (°C)	PTFE	PVDF	FEP	PFA	PO	PE	PP
Sulfuric acid	10~98	Normal temperature ~100	A	A~B	A	A	Concentration ≤50%	Concentration ≤60%	A
Nitric acid	5~98	Normal temperature ~100	A	A	A	A	Concentration ≤30%	Concentration ≤60%	A
Hydrochloric acid	10~38	Normal temperature ~100	A	A	A	A	Concentration ≤38%	Concentration ≤60%	A~B
Acetic acid	10~100	Normal temperature ~100	A	A~B	A	A	Concentration ≤10%	Concentration ≤60%	A
Chromic acid	50~100	Normal temperature ~70	A	A~B	A	A	Concentration ≤30%	Concentration ≤20%	A
Phosphoric acid	50~85	Normal temperature ~100	A~B	D	A~B	A~B	Concentration ≤85%	Concentration ≤80%	A
Trichloro–methane	100	Normal temperature	C	B	C	C	X	X	X
Coppersulfate	15	Normal temperature	A	C	A	A	Concentration ≤90%	Concentration ≤80%	A
Diethyl ether	100	Normal temperature	B	C	B	B	X	X	X
Ethyl acetate	100	Normal temperature	B	A	B	B	X	X	X
Petrol	100	Normal temperature	A	A~B	A	A	X	X	X
Hydrogen peroxide	3~30	Normal temperature	A	A	A	A	Concentration ≤30%	Concentration ≤60%	A
Nitrobenzene	100	Normal temperature	A	A~B	A	A	X	X	X
Superalkali	10~50	Normal temperature ~100	A	A	A	A	Concentration ≤80%	Concentration ≤60%	A
Sodium Hypochlorite	–	70	A	B	A	A	Concentration ≤80%	Concentration ≤60%	A~B
Hydroxyl acid	40~99	–10~30	A~B	B	A~B	A~B	Concentration ≤80%	Concentration ≤60%	A~B
Oleum	20	Normal temperature	A	B	A	A	X	X	X
Acrylonitrile	–	Normal temperature	B	C	B	B	–	–	-
Aniline	100	Normal temperature	B	B	B	B	Concentration ≤60%	Concentration ≤20%	B
Benzene	100	Normal temperature	B	C	B	B	X	X	X
Butyl acetate	100	Normal temperature	B	C	B	B	Concentration ≤60%	Concentration ≤20%	B
Tetrachloro-methane	Reagent grade	Normal temperature	B	C	B	B	X	X	X

The recommended temperature for valve is just a range for refer. With different types of valve and expansion of DN, the working temperature will be reduced accordingly. For reasonable choice of working temperature please consult factory.
A.B.C.D stands for Excellent, Good, OK, bad in terms of corrossion resistance performance.
Generally, corrosion is a kind of chemiacal reaction, with temperature increasing every 10 degree, the corrosion speed is increased by 1-3 times. Corrosion rate aggravated with rising temperature and the corrosion rate in one certain temperature is not able to judge for corrosion rate under other temperature. All the data in anti-corrosion table is just a possible range, with change of medium concentration and temperature, the corrosion also changes. For reasonable choice of liner material for corrossion resistance, please consult factory.

Processing Technologies

- ◆Compression molding
- ◆Transfer molding
- ◆Hot rotomolding
- ◆Injection molding
- ◆Rotational molding
- ◆Blow molding
- ◆Ram/Paste extrusion
- ◆Tape winding
- ◆Isostatic molding



◆PTFE-Polytetrafluoroethylene (F4)

PTFE, the original fluoropolymer, is characterized by enormous electrical resistance, a very low coefficient of friction and thermal stability. PTFE is excellent chemical resistance and it could not be dissolved in aggressive chemicals and solvents over a broad temperature range. The chemical inertness and non-stick are the most useful attributes for fluoropolymer equipment supplied into industries handing corrosive materials. Safe working temperature up to 180°C, with short term use possible at temperatures well above this level.

PTFE is not melt-processable, therefore usually needs to be formed into the required shape prior to sintering. YOUFUMI adopts special polymer processing like compression molding, isostatic molding, and paste extrusion etc. for FDA approved PTFE.

◆PFA--Perfluoroalkoxy

PFA is melt processable fluoroolymer resin that provides all of the desirable properties of PTFE. It can be considered as the melt procssable alternative to PTFE in terms of its chemical service and temperature and pressure duty, and having greater permeation resistance and a better surface finish. It is FDA approved and service temperature up to 200°C. PFA is used where purity is important.

YOUFUMI uses transfer molding and injection molding techniques for PFA processing because of the high viscosity and flow characteristics of PFA resin.

◆FEP--Fluorinated Ethylene Propylene (F46)

FEP is a copolymer of tetrafluoroethylene and hexafluoropropylene, which is also melt-processable fluoroolymer, and be able to form complex shapes. FEP retains excellent thermal, electrical and chemical stability. Therefore it shows high performance in electrical, chemical and medical application. The service temperature up to 150°C. Transfer molding and injection molding techniques conform best with FEP processing requirements.

◆ETFE—Ethylene Tetrafluoroethylene (F40)

ETFE combines mechanical toughness with an exceptional chemical inertness and features easy processability and excellent mechanical properties. ETFE can be processed by transfer, rotational and blow molding processes because of its relatively high flow rate.

◆PO—Modified Polyolefine

PO is polyolefine copolymerized under high temperature up to 80°C. Under normal temperature PO could not be dissolved in aggressive chemicals and solvents. The advantage of PO is easy and economic to process. YOUFUMI processes PO by rotational molding, which makes PO liner strongly adhesive to the metal part. Therefore, in the vacuum service under its working temperature, the PO liners will not come off, bulking, or defalted.

◆PVDF—Polyvinylidene Fluoride (F2)

PVDF is a highly non-reactive and pure thermoplastic that maintains its useful mechanical and chemical resistance properties at temperatures up to 100°C. An additional advantage is that PVDF can be welded into tanks for acid and corrosive chemical processing in elevated temperature environments.

◆UHMW-PE

UHMW-PE is a linear polyethylene that differs from PE standard grades in its very high degree of polymerization. It is very high chemical resistance to acids, alkalis and corrosive gases, excellent wear resistant properties and high energy absorption capacity at high stress rate. Its service temperature up to 90°C.

Lined Butterfly Valve

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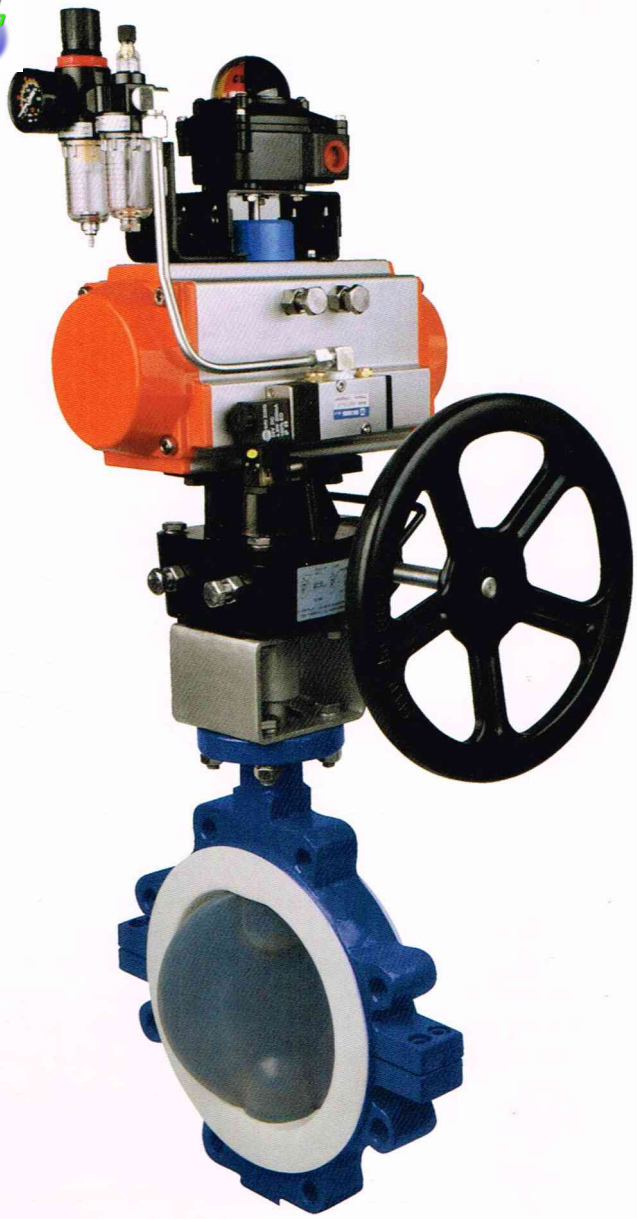
Patent No.: ZL98217159.5
ZL99333577.2

※Product Description

- The lined butterfly valves bi-directional flow is possible at maxmium 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.



Lined Lug Type Butterfly Valve

Fully PTFE Lined Butterfly Valve

Half PTFE Lined Butterfly Valve

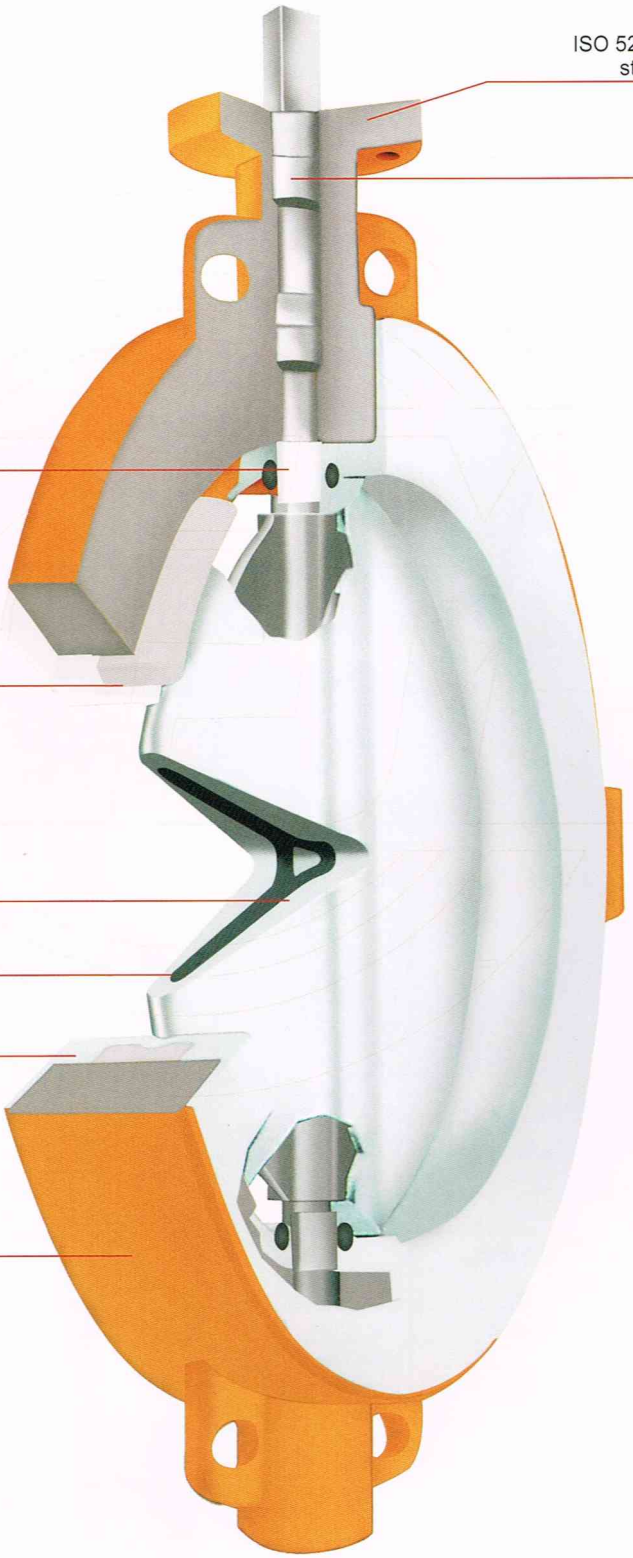
Lined Flanged Type Butterfly Valve

Lined Butterfly Valve

YOUFUMI

fluid system

※ Cutway View



Lined Butterfly Valve

YOUFUMI fluid system

※Material Specification

No.	Name	Material		
1	Body	A216 WCB	A351 CF8/A351 CF8M	A351 CF3 /A351 CF3M
2	Stem	2Cr13(SS420) SS410 17-4PH		
3	Shaft sleeve	SS304		
4	O-ring	VITON, VITON+FEP, VITON+PFA		
5	Disc	A216 WCB+Lining material	CF8/CF8M+Lining material	CF3 /CF3M+Lining material
6	Seat	PTFE RPTFE PFA FEP PO		
7	Elastomer Backing	Silicone rubber, VITON		
8	Body bolt	A193 B7	A320 B8	A193 B8M
9	Bolt	A193 B7	A320 B8	A193 B8M

※Technical Specification

Design & Manufacture Standard		HG/T 3704, GB/T 12238		API 608
Face-to-face Dimension		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		DN50~DN1600,		2"~64"
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)		PTFE: -30~180	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.		

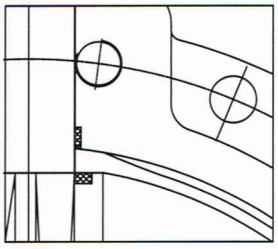
Note: Test standard refers general valve standard, high pressure should be customized for processing.

Lined Butterfly Valve

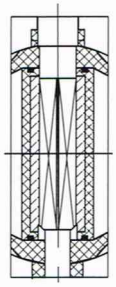
YOUFUMI

fluid system

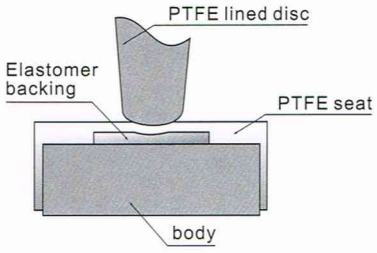
※Structure Features



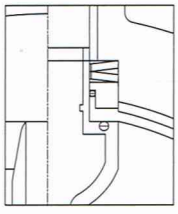
Fully lined design, all the wetted parts is completely isolated by lining, toit prevent the metal parts from corrosion.



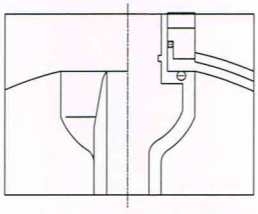
Square stem enhance the strength and reduce the opening gap.



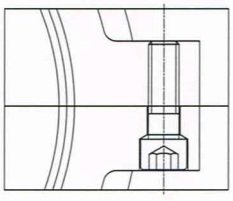
The disc sealing face is hemispherical after polishing, to reduce the operation torque. The elastomer backing provides a resilient and uniform pressure onto sealing surface for positive tight shut-off.



Four O-ring with Viton in the middle, combined with the prestress transmitted from Belleville spring washer, makes Viton expands to strengthen the sealing performance.

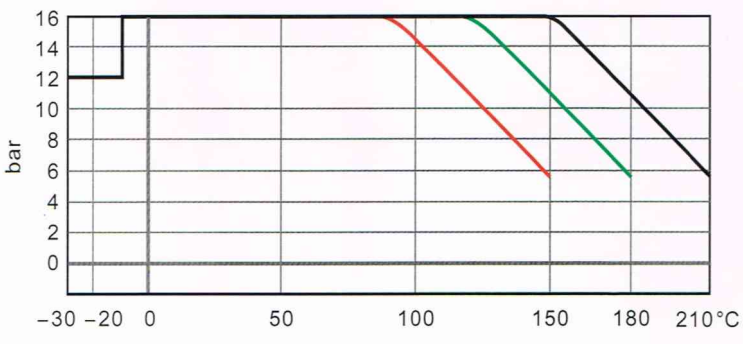


It adopts one piece disc and stem design, which prevents the stem from blow-out to reduce the installation gap.



The body is splited and connected by hexagonal screw. When the valve operated long time, the fluorine plastic worn or shrinks, regulate the inner hexagonal screw, tighten the sealing and to achieve the equal effect of new valve (1-3mm reserved for regulation).

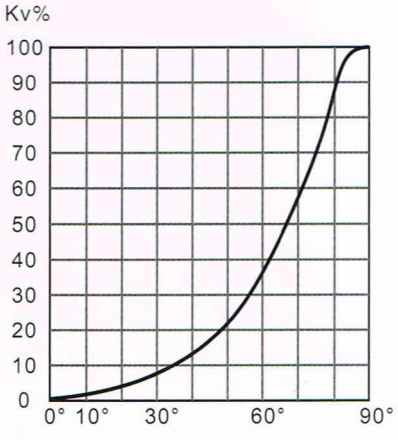
※Pressure-Temperature Curve



Vacuum
0.1mbar

Note: PFA PTFE FEP

※Flow Characteristic



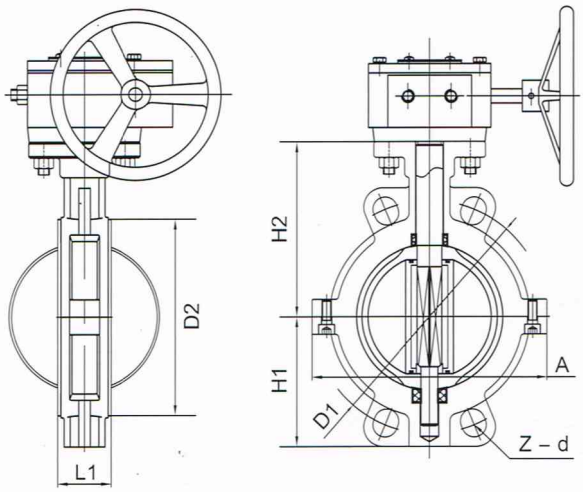
Valve Position Angle 1Cv=1.167Kv

Lined Butterfly Valve

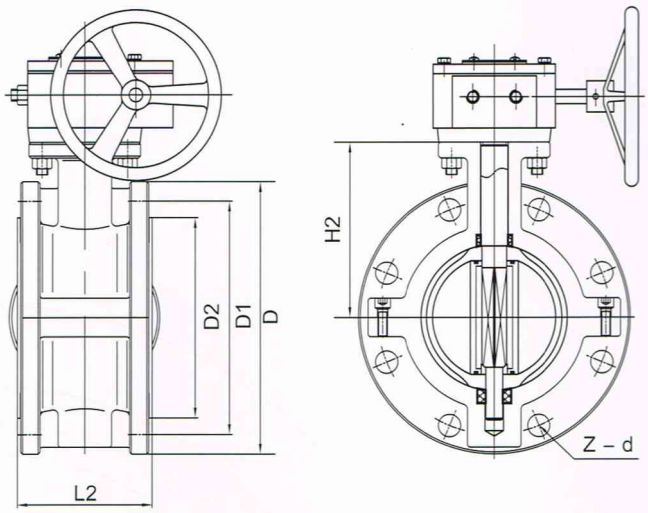
YOUFUMI

fluid system

PTFE lined Butterfly Valve



YFMD371F4



YFMD341F4

HG/T 20592

Unit:mm

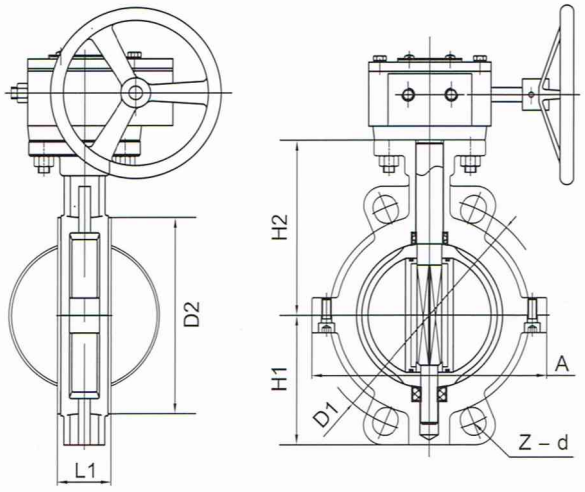
DN	NPS	L1 Wafer	L2 Flange	PN1.0MPa			PN1.6MPa			D2	H1	H2	A
				D	D1	Z-d	D	D1	Z-d				
40	1 1/2	40	106	150	110	4-18	150	110	4-18	70	60	90	78
50	2	43	108	165	125	4-18	165	125	4-18	90	70	112	96
65	2 1/2	46	112	185	145	4-18	185	145	4-18	110	80	125	112
80	3	46	114	200	160	8-18	200	160	8-18	130	89	135	130
100	4	52	127	220	180	8-18	220	180	8-18	148	105.5	142	150
125	5	56	140	250	210	8-18	250	210	8-18	181	121	165	178
150	6	56	140	285	240	8-22	285	240	8-22	202	145	180	206
200	8	60	152	340	295	8-22	340	295	12-22	263	177	228	260
250	10	68	165	395	350	12-22	405	355	12-26	313	205	278	317
300	12	78	178	445	400	12-22	460	410	12-26	368	235	295	367
350	14	78	190	505	460	16-22	520	470	16-26	415	260	341	466
400	16	102	216	565	515	16-26	580	525	16-30	484	299	390	495
450	18	114	222	615	565	20-26	640	585	20-30	519	320	442	630
500	20	127	229	670	620	20-26	715	650	20-33	569	352.5	470	694

Note: For more size please consult factory.

Lined Butterfly Valve

YOUFUMI fluid system

PTFE lined Butterfly Valve



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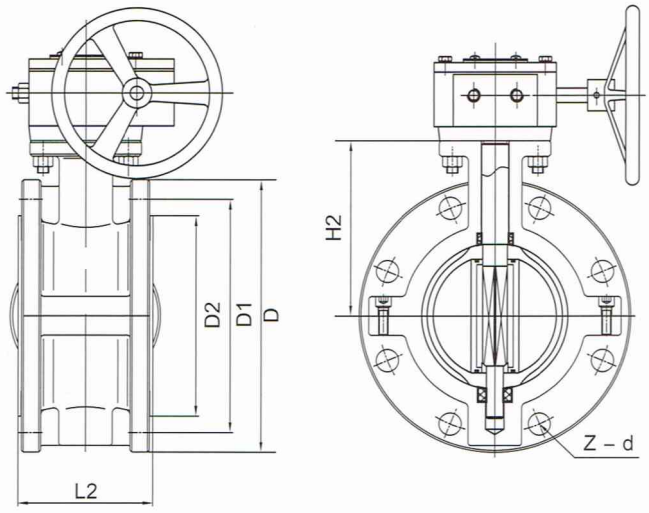


YFMD341F4

ASME B16.5 /JIS B2220

Unit:mm

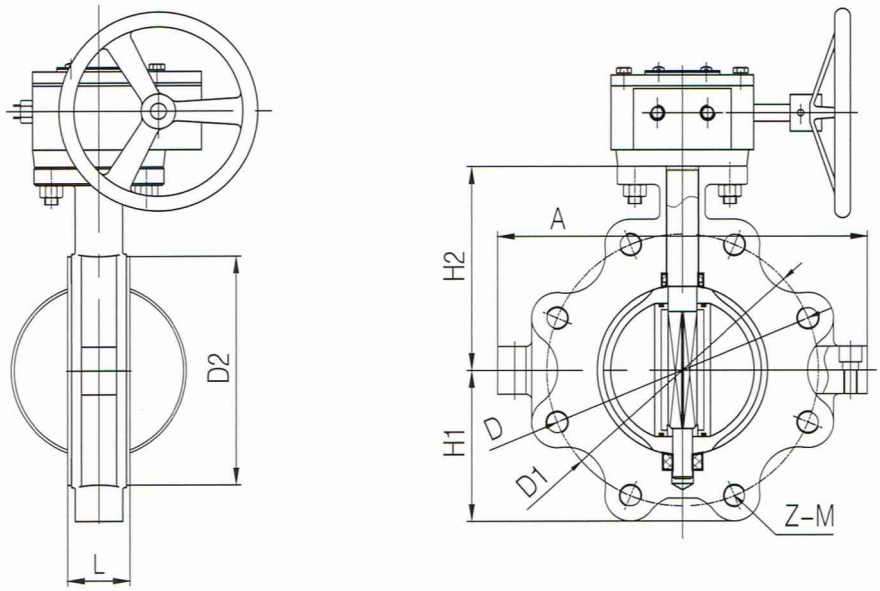
DN	NPS	L1 Wafer	L2 Flange	ASME 150LB			JIS 10K			D2	H1	H2	A
				D	D1	Z-d	D	D1	Z-d				
40	1 1/2	40	106	125	98.5	4-16	140	105	4-19	70	60	90	78
50	2	43	108	150	120.5	4-19	155	120	4-19	90	70	112	96
65	2 1/2	46	112	180	139.5	4-19	175	140	4-19	110	80	125	112
80	3	46	114	190	152.5	4-19	185	150	8-19	130	89	135	130
100	4	52	127	230	190.5	8-19	210	175	8-19	148	105.5	142	150
125	5	56	140	255	216	8-22	250	210	8-23	181	121	165	178
150	6	56	140	280	241.5	8-22	280	240	8-23	202	145	180	206
200	8	60	152	345	298.5	8-22	330	290	12-23	263	177	228	260
250	10	68	165	405	362	12-25	400	355	12-25	313	205	278	317
300	12	78	178	485	432	12-25	445	400	16-25	368	235	295	367
350	14	78	190	535	476	12-29	490	445	16-25	415	260	341	466
400	16	102	216	595	540	16-29	560	510	16-27	484	299	390	495
450	18	114	222	635	578	16-32	620	565	20-27	519	320	442	630
500	20	127	229	700	635	20-32	675	620	20-27	569	352.5	470	694

Lined Butterfly Valve

YOUFUMI

fluid system

PTFE lined Lug Type Butterfly Valve



YFM TD371

HG/T 20592

Unit: mm

DN	NPS	L	PN1.0MPa			PN1.6MPa			D2	H1	H2	A
			D	D1	Z-M	D	D1	Z-M				
50	2	43	165	125	4-M16	165	125	4-M16	90	70	112	96
65	2 1/2	46	185	145	4-M16	185	145	4-M16	110	80	125	112
80	3	46	200	160	8-M16	200	160	8-M16	130	89	135	130
100	4	52	220	180	8-M16	220	180	8-M16	148	105.5	142	150
125	5	56	250	210	8-M16	250	210	8-M16	181	121	165	178
150	6	56	285	240	8-M20	285	240	8-M20	202	145	180	206
200	8	60	340	295	8-M20	340	295	12-M20	263	177	228	260
250	10	68	395	350	12-M20	405	355	12-M24	313	205	278	317
300	12	78	445	400	12-M20	460	410	12-M24	368	235	295	367
350	14	78	505	460	16-M20	520	470	16-M24	415	260	341	466
400	16	102	565	515	16-M24	580	525	16-M27	484	299	390	495
450	18	114	615	565	20-M24	640	585	20-M27	519	320	442	630
500	20	127	670	620	20-M24	715	650	20-M30	569	352.5	470	694

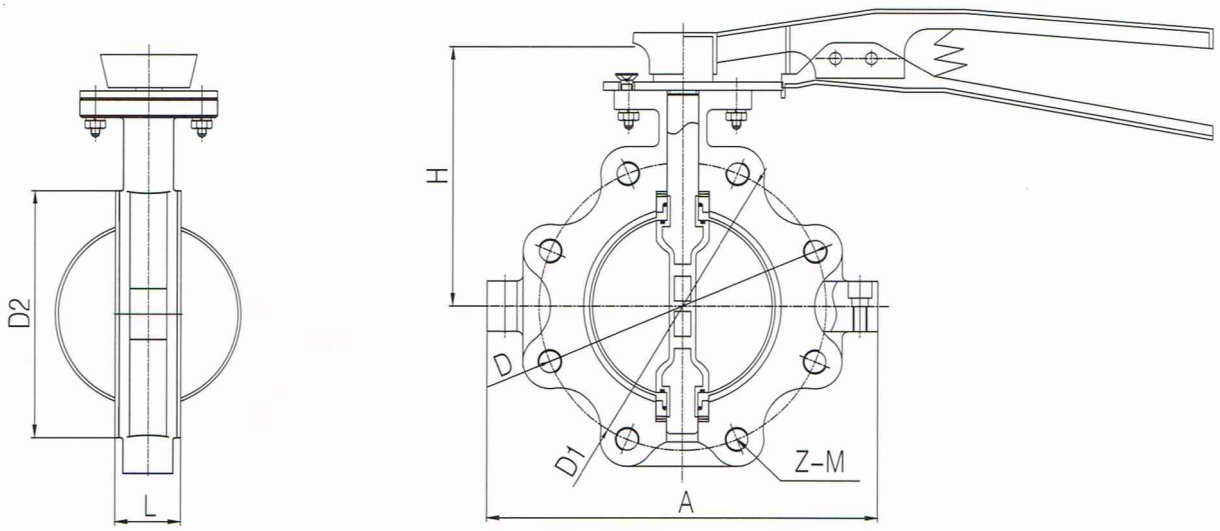
Note: For more size please consult factory.

Lined Butterfly Valve

YOUFUMI

fluid system

PTFE lined Lug Type Butterfly Valve



YFM TD71

ASME B16.5 /JIS B2220

Unit: mm

DN	NPS	L	ANSI 150LB			JIS 10K			D2	H1	H2	A
			D	D1	Z-M	D	D1	Z-M				
50	2	43	150	120.5	4-M16	155	120	4-M16	90	70	112	96
65	2 1/2	46	180	139.5	4-M16	175	140	4-M16	110	80	125	112
80	3	46	190	152.5	4-M16	185	150	8-M16	130	89	135	130
100	4	52	230	190.5	8-M16	210	175	8-M16	148	105.5	142	150
125	5	56	255	216	8-M20	250	210	8-M20	181	121	165	178
150	6	56	280	241.5	8-M20	280	240	8-M20	202	145	180	206
200	8	60	345	298.5	8-M20	330	290	12-M20	263	177	228	260
250	10	68	405	362	12-M24	400	355	12-M22	313	205	278	317
300	12	78	485	432	12-M24	445	400	16-M22	368	235	295	367
350	14	78	535	476	12-M27	490	445	16-M22	415	260	341	466
400	16	102	595	540	16-M27	560	510	16-M24	484	299	390	495
450	18	114	635	578	16-M30	620	565	20-M24	519	320	442	630
500	20	127	700	635	20-M30	675	620	20-M24	569	352.5	470	694

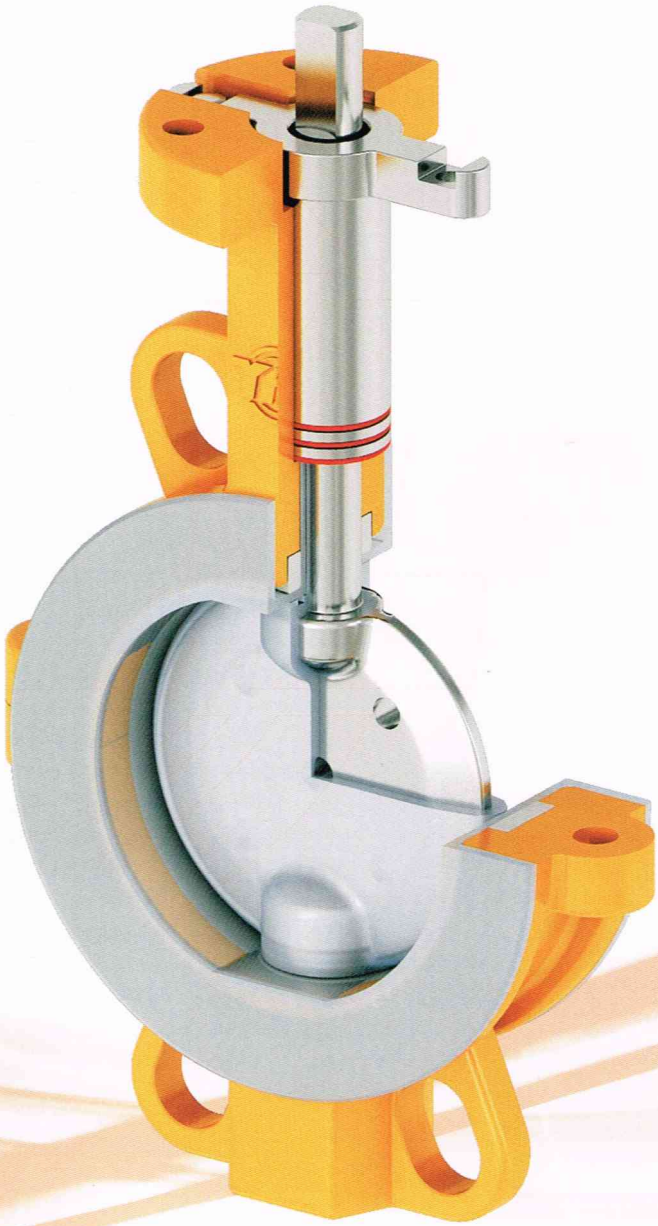
High Performance Lined Butterfly Valve

Patent No.: ZL201420018183.5
ZL201430041568.9

FLUID SYSTEM CO.,LTD.
website: www.fluidsystem.co.th
e-mail: sales@fluidsystem.co.th
tel: 0815607905

※Product Description

- The lined butterfly valves bi-directional flow is possible at maxmium 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.



PFA Lined Wafer Type Butterfly Valve

High Performance Lined Butterfly Valve

YOUFUMI

fluid system

※Material Specification

No.	Name	Material		
1	Bolt	A193 B7	A320 B8	A193 B8M
2	Plate	A351 CF8		
3	Upper body	A216 WCB	A351 CF8 A351 CF8M	A351 CF3 A351 CF3M
4	Steel sleeve	SS304		
5	O-ring	VITON, VITON+PFA		
6	Elastomer backing	Silicone rubber, VITON		
7	Stem	SS410 SS420 17-4PH		
8	Seat	PFA FEP		
9	Disc	SS304/SS316+Lining material		
10	Elastomer backing	Silicone rubber, VITON		
11	Downside body	A216 WCB	A351 CF8 A351 CF8M	A351 CF3 A351 CF3M
12	Body bolt	A193 B7	A320 B8	A193 B8M

※Technical Specification

Design & Manufacture Standard		HG/T3704, GB/T 12238		API 608
Face-to-face Dimension		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		DN50~DN500		2"~20"
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.		

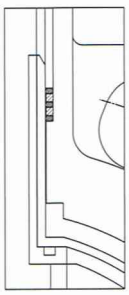
Note: Test standard refers general valve standard, high pressure should be customized for processing.

High Performance Lined Butterfly Valve

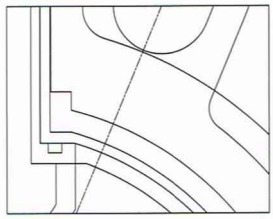
※Note

The disc should be opened from angle 5-10°if not working.
The valve should be stocked indoor, and the prior temperature range is 0-25°C(40-80°F).
If stock in house, the valve should open and close every three month.
To make sure no heavy loading on valve when transported and being stocked.
It is better to install lined butterfly valve in vertical position and make the actuator directly installed in the upside of butterfly valve, generally no inversion installed.
Lined butterfly valve when connected to check valve or pump, an expansion joint will be needed to make sure the adjacent equipment won't be affected.
When install the lined butterfly valve, the pipe should focus on center, and it will lead the disc external diameter impacting the inner diameter of pipe, causing the damage of disc edge, resulting in the torque increasing and causing leaking.

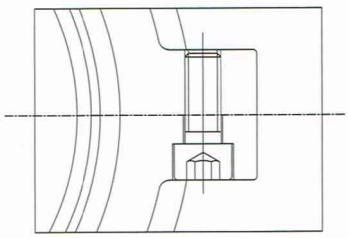
※Structure Features



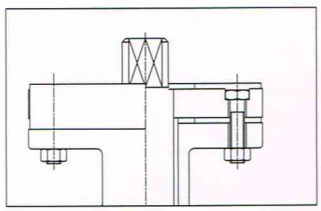
Both the disc and the shaft are lined by PFA/FEP. The shaft and the seal components are protected by PFA/FEP from the flow medium, and the bottom shaft also fully lined, assures optimum corrosion resistance and eliminates a potential path.



The in-line resilient seat assembly assures optimum pressure distribution of the body liner to the disc assembly, providing tight sealing under all operating conditions. The wider seal-band provides a broader sealing area.

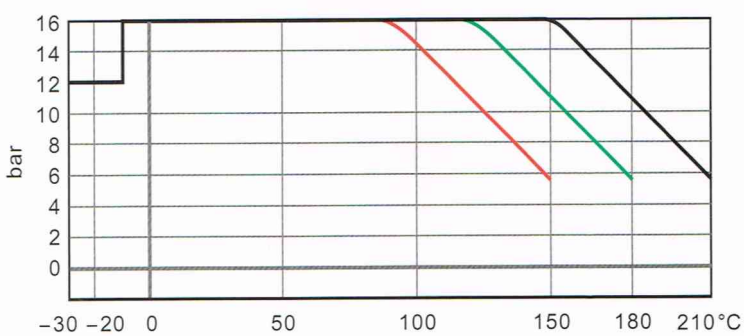


The body is splited and connected by hexagonal screw. When the valve operated long time, the fluorine plastic worn or shrinks, regulate the inner hexagonal screw, tighten the sealing and to achieve the equal effect of new valve (1-3mm reserved for regulation).



ISO 5211 actuation mounting pad ensures robust performance, while providing compact system design. Moreover, benefit of live loaded stem sealing system is atmospheric sealing integrity and no manual adjustment over the life of the valve.

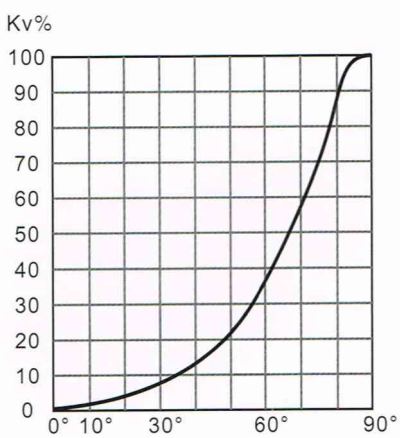
※Pressure-Temperature Curve



Vacuum
0.1mbar

Note: PFA PTFE FEP

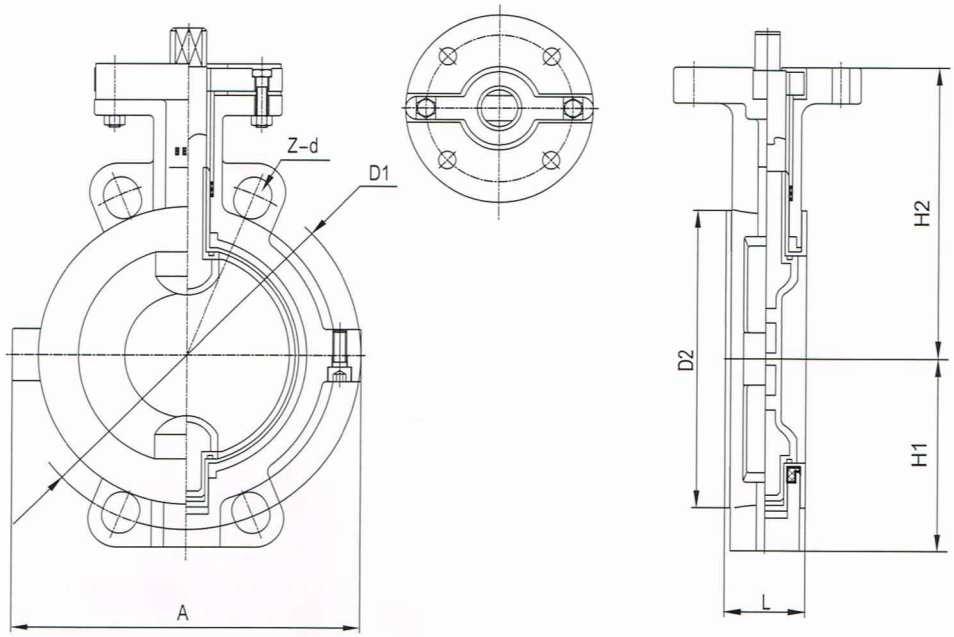
※Flow Characteristic



Valve Position Angle 1Cv=1.167Kv

A Lined Valve

High Performance Lined Butterfly Valve



HG/T 20592/ASME B16.5

Unit:mm

DN	NPS	L	PN10		PN16		Class150		D2	H1	H2	A
			D1	Z-d	D1	Z-d	D1	Z-d				
50	2	43	125	4-18	125	4-18	120.5	4-19	94	70	112	130
65	2 1/2	46	145	4-18	145	4-18	139.5	4-19	110	80	125	150
80	3	46	160	8-18	160	8-18	152.5	4-19	128	89	135	160
100	4	52	180	8-18	180	8-18	190.5	8-19	150	105.5	142	180
125	5	56	210	8-18	210	8-18	216	8-22	180	121	165	215
150	6	56	240	8-22	240	8-22	241.5	8-22	205	145	180	242
200	8	60	295	8-22	295	12-22	298.5	8-22	260	177	228	295
250	10	68	350	12-22	355	12-26	362	12-25	310	205	278	356
300	12	78	400	12-22	410	12-26	432	12-25	365	235	295	405
350	14	78	460	16-22	470	16-26	476	12-29	425	260	341	466
400	16	102	515	16-26	525	16-30	540	16-29	476	299	390	495
450	18	114	565	20-26	585	20-30	578	16-32	520	320	442	630
500	20	127	620	20-26	650	20-33	635	20-32	566	352.5	470	670

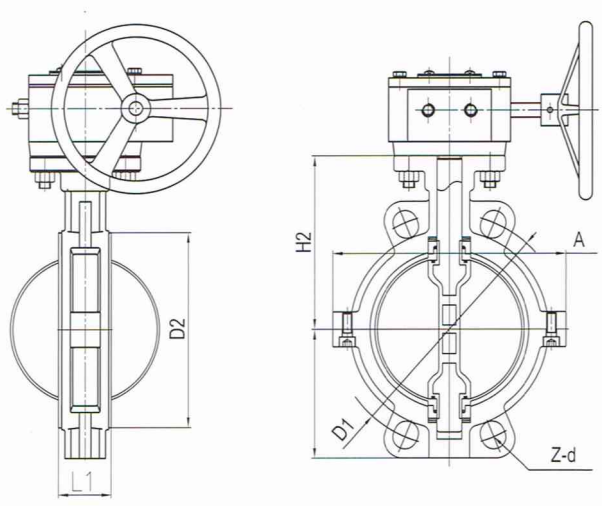
Note: For more size please consult factory.

High Performance Lined Butterfly Valve

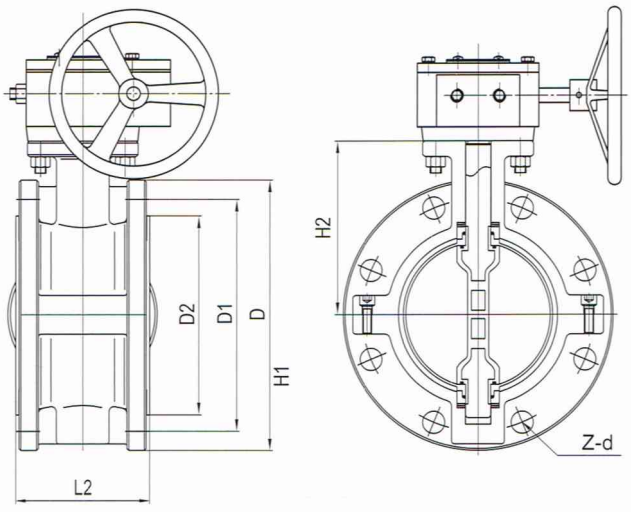
YOUFUMI

fluid system

PFA/FEP Lined Butterfly Valve



YFM D371



YFM D341

HG/T 20592

Unit:mm

DN	NPS	L1 Wafer	L2 Flange	PN10			PN16			D2	H1	H2	A
				D	D1	Z-d	D	D1	Z-d				
50	2	43	108	165	125	4-18	165	125	4-18	94	70	112	130
65	2 1/2	46	112	185	145	8-18	185	145	8-18	110	80	125	150
80	3	46	114	200	160	8-18	200	160	8-18	128	90	135	160
100	4	52	127	220	180	8-18	220	180	8-18	150	105	142	180
125	5	56	140	250	210	8-18	250	210	8-18	180	120	165	215
150	6	56	140	285	240	8-22	285	240	8-22	205	133	180	242
200	8	60	152	340	295	8-22	340	295	12-22	260	172	228	295
250	10	68	165	395	350	12-22	405	355	12-26	310	205	278	356
300	12	78	178	445	400	12-22	460	410	12-26	365	235	295	405
350	14	78	190	505	460	16-22	520	470	16-26	425	260	341	466
400	16	102	216	565	515	16-26	580	525	16-30	476	290	390	495
450	18	114	222	615	565	20-26	640	585	20-30	520	320	442	630
500	20	127	229	670	620	20-26	715	650	20-33	566	355	470	670
600	24	154	267	780	725	20-30	840	770	20-36	685	420	520	825
700	28	165	292	895	840	24-30	910	840	24-36	770	500	590	895
800	32	190	318	1015	950	24-33	1025	950	24-39	875	550	650	1015
900	36	203	330	1115	1050	28-33	1125	1050	28-39	980	580	645	1115
1000	40	216	410	1230	1160	28-36	1255	1170	28-42	1080	780	670	1230
1200	48	254	470	1455	1380	32-39	1485	1390	32-48	1280	870	775	1455
1400	56	279	530	1675	1590	36-42	1685	1590	36-48	1480	980	875	1675
1600	64	318	600	1915	1820	40-48	1930	1820	40-56	1690	1100	980	1915
1800	72	356	670	2115	2020	44-48	2130	2020	44-56	1890			2115
2000	80	406	760	2325	2230	48-48	2345	2230	48-62	2090			2325

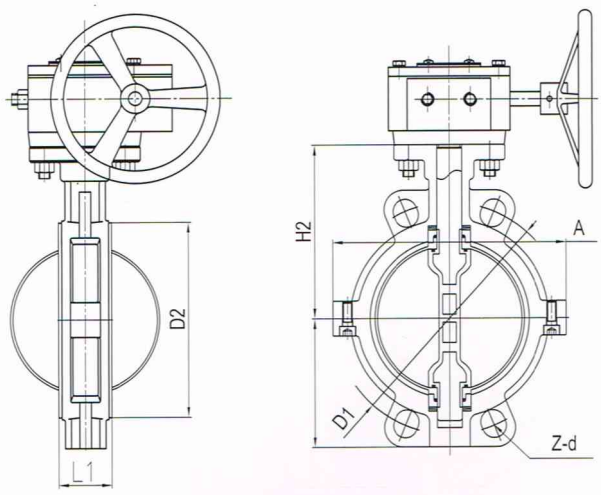
Note: For more size please consult factory.

High Performance Lined Butterfly Valve

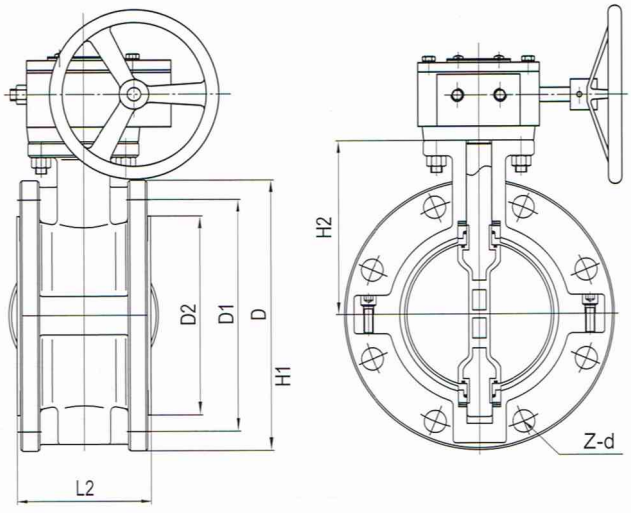
YOUFUMI

fluid system

PFA/FEP Lined Butterfly Valve



YFM D371



YFM D341

ASME B16.5 /JIS B2220

Unit:mm

DN	NPS	L1 Wafer	L2 Flange	ANSI 150LB			JIS 10K			D2	H1	H2	A
				D	D1	Z-d	D	D1	Z-d				
50	2	43	108	150	120.5	4-19	155	120	4-19	94	70	112	130
65	2 1/2	46	112	180	139.5	4-19	175	140	4-19	110	80	125	150
80	3	46	114	190	152.5	4-19	185	150	8-19	128	90	135	160
100	4	52	127	230	190.5	8-19	210	175	8-19	150	105	142	180
125	5	56	140	255	216	8-22	250	210	8-23	180	120	165	215
150	6	56	140	280	241.5	8-22	280	240	8-23	205	133	180	242
200	8	60	152	345	298.5	8-22	330	290	12-23	260	172	228	295
250	10	68	165	405	362	12-25	400	355	12-25	310	205	278	356
300	12	78	178	485	432	12-25	445	400	16-25	365	235	295	405
350	14	78	190	535	476	12-29	490	445	16-25	425	260	341	466
400	16	102	216	595	540	16-29	560	510	16-27	476	290	390	495
450	18	114	222	635	578	16-32	620	565	20-27	520	320	442	630
500	20	127	229	700	635	20-32	675	620	20-27	566	355	470	670
600	24	154	267	815	749.5	20-35	795	730	24-33	685	420	520	825
700	28	165	292	927	864	24-35	905	840	24-33	770	500	590	927
800	32	190	318	1060	978	28-35	1020	950	28-33	875	550	650	1060
900	36	203	330	1168	1086	28-35	1120	1050	28-33	980	580	645	1168
1000	40	216	410	1289	1200	28-41				1080	780	670	1289
1200	48	254	470	1500	1422	32-41				1280	870	775	1500
1400	56	279	530	1746	1651	36-41				1480	980	875	1746