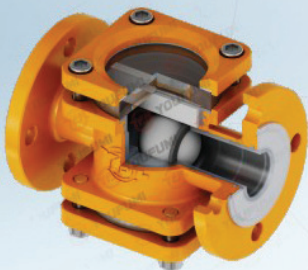


# Lined Check Valve

## ※Product Description

- Youfumi Lined check valves come in several forms, all of which fulfill the same basic purpose, namely to allow forward fluid flow, but to minimize backwards flow. They prevent the back-flow of liquids in pipelines, prevent siphoning of pumps and eliminates pump impeller rotation in opposite direction due to back-flowing media. Generally check valve is automatically working. Under the pressure function of one direction flow, the disc opens, while when the liquid backflows, the valve will cut the flow.
- Youfumi lined sight-glass ball check valve SH40 is for safe flow control, with visual flow observation.
- Youfumi lined swing check valves H44 have a disc that rotates or swings out of the fluid flow in the forwards flow direction, but that swings back against its seat to prevent backwards flow.
- Youfumi fully lined wafer swing check valve H74 is of two piece construction with only one moving part, ideal for use in totally lined piping systems in corrosion applications. The valve can be mounted horizontally or vertically with upward flow.
- Youfumi lined ball check valve H40 do not have a spring to help with valve closing, limiting their use to vertical lines with upwards forward flow. The solid PTFE ball at valve body lining guarantees that ball rolls into the seat due to gravitation. Self-cleaning effect due to permanent ball rotation, resistance against solid particles.
- 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, GXPO etc.
- Youfumi lined check valves are available as per the needs of applications in additional sizes and other than standard materials.



Sight-glass ball type  
check valve SH40



Lined swing type  
check valve H44



Lined through-way lift  
check valve H41



Lined wafer type  
check valve H74



lined vertical lift  
check valve H42



Lined ball  
check valve H40

# A Lined Valve

## Lined Check Valve

### ※Material Specification

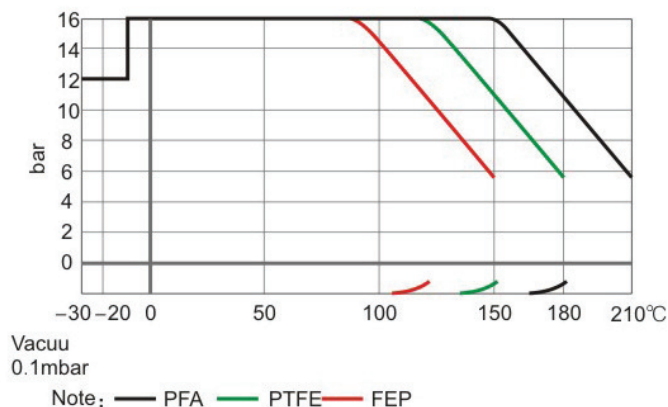
No.	Name	Material		
1	Body, disc, bonnet	A216 WCB+Lining material	A351 CF8/A351 CF8M+Lining material	A351 CF3 /A351 CF3M+Lining material
2	Ball	PTFE		
3	Lining material	FEP PFA GXPO		
4	Bolt	A193 B7	A320 B8	A193 B8M

### ※Technical Specification

Design & Manufacture Standard		HG/T 3704, GB/T 12235	API 6D
Face-to-face 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~DN400	1/2"~16"
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 GXPO: -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.

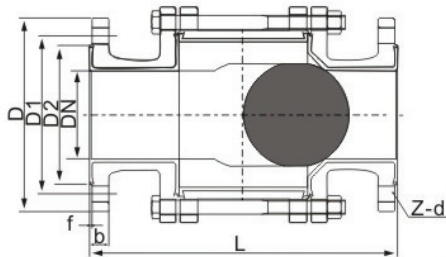
### ※Pressure-Temperature Curve



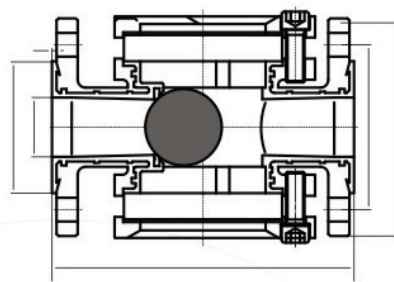
# A Lined Valve

## Lined Ball Check Valve

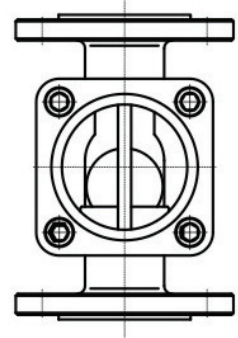
### GB Lined Ball Check Valve



YFM H40



YFM SH40



### HG/T 20592 PN10

Unit:mm

DN	L	D	D1	D2	Z-d	f	b	Wt(Kg)
15	130	95	65	45	4-14	2	14	4
20	150	105	75	55	4-14	2	14	5
25	160	115	85	65	4-14	2	14	6
32	180	140	100	78	4-18	3	16	7.5
40	200	150	110	85	4-18	3	16	9.5
50	230	165	125	100	4-18	3	16	13
65	290	185	145	120	4-18	3	18	19.5
80	310	200	160	135	8-18	3	20	27
100	350	220	180	155	8-18	3	20	35
125	400	250	210	185	8-18	3	22	56
150	480	285	240	210	8-23	3	24	75

### HG/T 20592 PN16

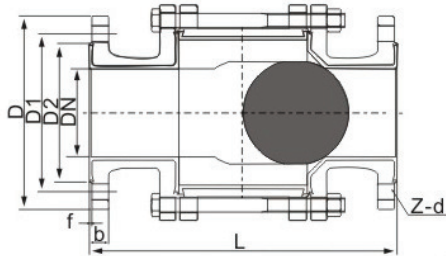
15	130	95	65	45	4-14	2	14	4
20	150	105	75	55	4-14	2	14	5
25	160	115	85	65	4-14	2	14	6
32	180	140	100	78	4-18	3	16	7.5
40	200	150	110	85	4-18	3	16	9.5
50	230	165	125	100	4-18	3	16	13
65	290	185	145	120	4-18	3	18	19.5
80	310	200	160	135	8-18	3	20	27
100	350	220	180	155	8-18	3	20	35
125	400	250	210	185	8-18	3	22	56
150	480	285	240	210	8-23	3	24	75

Note: for more size please consult factory.

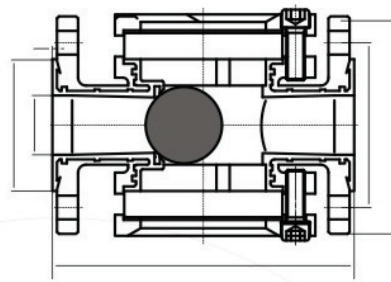
# A Lined Valve

## Lined Ball Check Valve

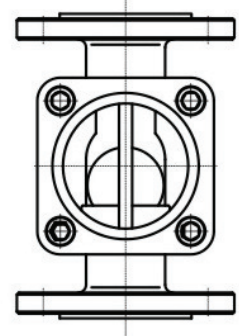
### ANSI Lined Ball Check Valve



YFM H40



YFM SH40



### HG/T 20592 PN25

Unit:mm

DN	L	D	D1	D2	Z-d	f	b	Wt(Kg)
15	130	95	65	45	4-14	2	16	6.5
20	150	105	75	55	4-14	2	16	7
25	160	115	85	65	4-14	2	16	8
32	180	140	100	78	4-18	3	18	11
40	200	150	110	85	4-18	3	18	15
50	230	165	125	100	4-18	3	20	17.5
65	290	185	145	120	8-18	3	22	26
80	310	200	160	135	8-18	3	22	36
100	350	235	190	160	8-23	3	24	44
125	400	270	220	188	8-25	3	28	60
150	480	300	250	218	8-25	3	30	81

### ASME B16.5 Class150

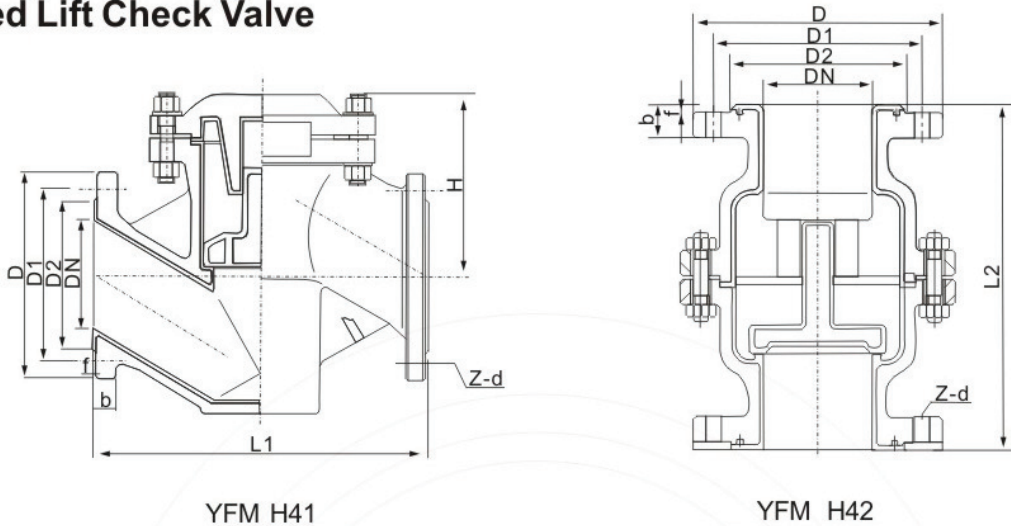
1/2	130	89	60.5	35	4-16	2	12	4
3/4	150	98	70.0	43	4-16	2	12	5
1	160	108	79.5	51	4-16	2	12	6
1 1/4	180	117	89.0	64	4-16	2	13	7.5
1 1/2	200	127	98.5	73	4-16	2	15	9.5
2	230	152	120.5	92	4-19	2	16	13
2 1/2	290	178	139.5	105	4-19	2	18	19.5
3	310	190	152.5	127	4-19	2	19	27
4	350	229	190.5	157	8-19	2	24	35
5	400	254	216.0	186	8-22	3	24	56
6	480	279	241.5	216	8-22	3	26	75

# A Lined Valve

## Lined Lift Check Valve



### GB Lined Lift Check Valve



#### HG/T 20592 PN10

Unit:mm

DN	L1	L2	D	D1	D2	Z-d	f	b	H	Wt(Kg)
15	130	80	95	65	45	4-14	2	14	82	6.5
20	150	90	105	75	55	4-14	2	14	82	5
25	160	105	115	85	65	4-14	2	14	98	6
32	180	110	140	100	78	4-18	3	16	110	7.5
40	200	125	150	110	85	4-18	3	16	118	9.5
50	230	140	165	125	100	4-18	3	16	138	13
65	290	160	185	145	120	4-18	3	18	156	19.5
80	310	185	200	160	135	8-18	3	20	160	27
100	350	210	220	180	155	8-18	3	20	185	35
125	400	250	250	210	185	8-18	3	22	208	56
150	480	300	285	240	210	8-23	3	24	245	75
200	600	460	340	295	265	8-23	3	26	298	118
250	730	520	395	350	320	12-23	4	28	342	165
300	850	700	445	400	368	12-23	4	28		210
350	980	750	505	460	428	16-23	5	28		

#### HG/T 20592 PN16

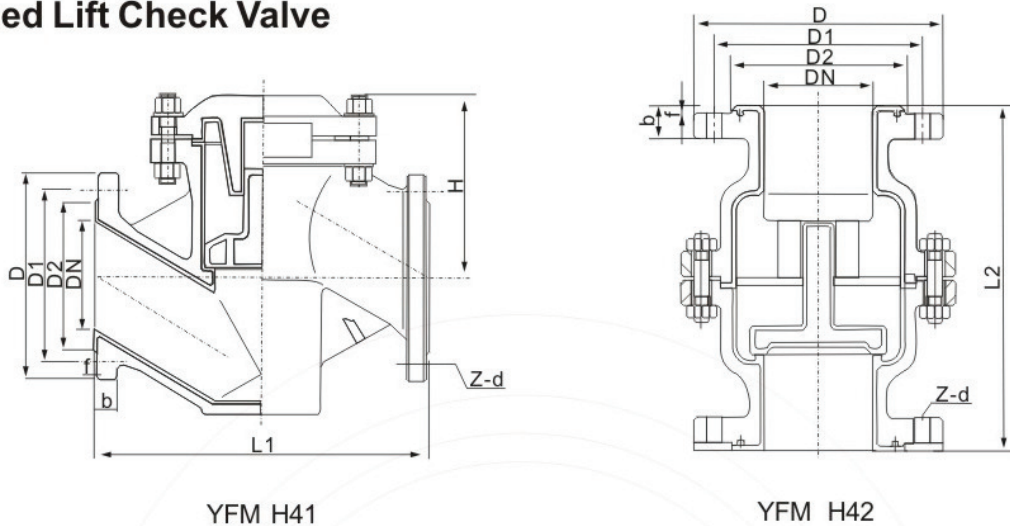
15	130	80	95	65	45	4-14	2	14	82	4
20	150	90	105	75	55	4-14	2	14	82	5
25	160	105	115	85	65	4-14	2	14	98	6
32	180	110	140	100	78	4-18	3	16	110	7.5
40	200	125	150	110	85	4-18	3	16	118	9.5
50	230	140	165	125	100	4-18	3	16	138	13
65	290	160	185	145	120	4-18	3	18	156	19.5
80	310	185	200	160	135	8-18	3	20	160	27
100	350	210	220	180	155	8-18	3	20	185	35
125	400	250	250	210	185	8-18	3	22	208	56
150	480	300	285	240	210	8-23	3	24	245	75
200	600	460	340	295	265	12-23	3	26	298	118
250	730	520	405	355	320	12-25	4	28	342	165
300	850	700	460	410	375	12-25	4	29		
350	980	750	520	470	435	16-25	5	34		

Note: for more size please consult factory.

# A Lined Valve

## Lined Lift Check Valve

### ANSI Lined Lift Check Valve



### HG/T 20592 PN25

Unit:mm

DN	L1	L2	D	D1	D2	Z-d	f	b	H	Wt(Kg)
15	130	80	95	65	45	4-14	2	16	82	6.5
20	150	90	105	75	55	4-14	2	16	82	7
25	160	105	115	85	65	4-14	2	16	98	8
32	180	110	140	100	78	4-18	3	18	110	11
40	200	125	150	110	85	4-18	3	18	118	15
50	230	140	165	125	100	4-18	3	20	138	17.5
65	290	160	185	145	120	8-18	3	22	156	26
80	310	185	200	160	135	8-18	3	22	160	36
100	350	210	235	190	160	8-23	3	24	185	44
125	400	250	270	220	188	8-25	3	28	208	60
150	480	300	300	250	218	8-25	3	30	245	81
200	600	460	360	310	278	12-25	3	34	298	137
250	730	520	425	370	332	12-30	4	36	342	173
300	850	700	485	410	375	16-30	4	39		
350	980	750	550	490	448	16-34	5	44		

### ASME B16.5 Class150

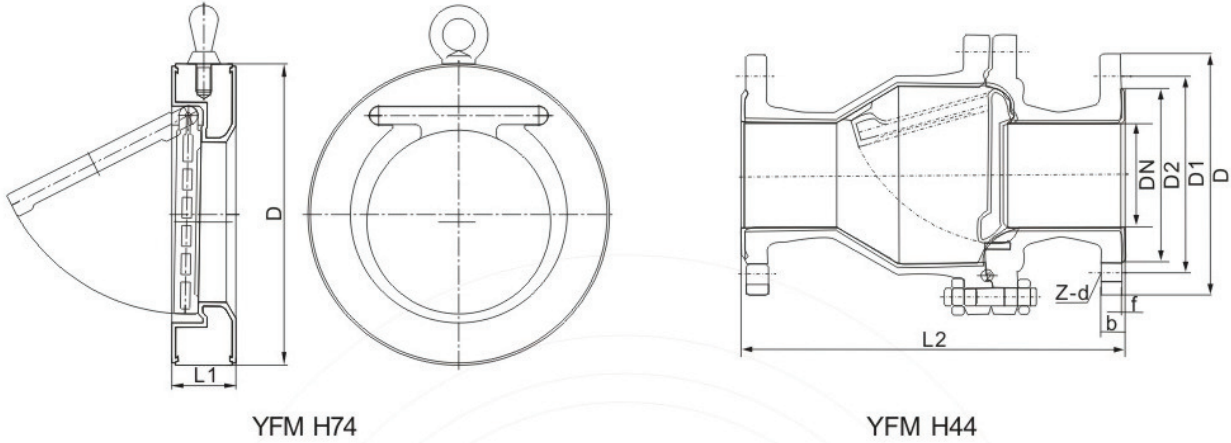
1/2	130	80	89	60.5	35	4-16	2	12	82	4
3/4	150	90	98	70.0	43	4-16	2	12	82	5
1	160	105	108	79.5	51	4-16	2	12	98	6
1 1/4	180	110	117	89.0	64	4-16	2	13	110	7.5
1 1/2	200	125	127	98.5	73	4-16	2	15	118	9.5
2	230	140	152	120.5	92	4-19	2	16	138	13
2 1/2	290	160	178	139.5	105	4-19	2	18	156	19.5
3	310	185	190	152.5	127	4-19	2	19	160	27
4	350	210	229	190.5	157	8-19	2	24	185	35
5	400	250	254	216.0	186	8-22	3	24	208	56
6	480	300	279	241.5	216	8-22	3	26	245	75
8	600	460	343	298.5	270	8-22	3	29	298	118
10	730	520	406	362.0	324	12-25	3	31	342	165
12	850	700	485	432	381	12-25	4	34.7		205
14	980	750	535	476	412.7	12-29	5	39		255

# A Lined Valve

## Lined Swing Check Valve



### GB Lined Swing Check Valve



YFM H74

YFM H44

#### HG/T 20592 PN10

Unit:mm

DN	L1	L2	D	D1	D2	Z-d	f	b	H	Wt(Kg)
15	/	130	95	65	45	4-14	2	14	82	6.5
20	/	150	105	75	55	4-14	2	14	82	5
25	/	160	115	85	65	4-14	2	14	98	6
32	/	180	140	100	78	4-18	3	16	110	7.5
40	/	200	150	110	85	4-18	3	16	118	9.5
50	43	230	165	125	100	4-18	3	16	138	13
65	46	290	185	145	120	4-18	3	18	156	19.5
80	46	310	200	160	135	4-18	3	20	160	27
100	52	350	220	180	155	8-18	3	20	185	35
125	56	400	250	210	185	8-18	3	22	208	56
150	56	480	285	240	210	8-23	3	24	245	75
200	60	495	340	295	265	8-23	3	26	298	118
250	68	550	395	350	320	12-23	4	28	342	165
300	78	620	445	400	368	12-23	4	28		210
350	78	720	505	460	428	16-23	5	28		

#### HG/T 20592 PN16

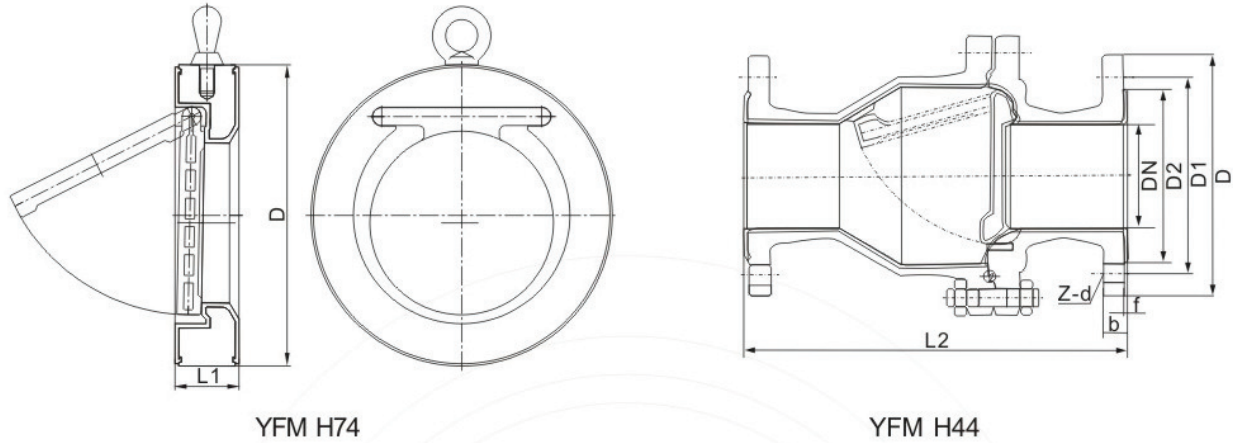
15	/	130	95	65	45	4-14	2	14	82	4
20	/	150	105	75	55	4-14	2	14	82	5
25	/	160	115	85	65	4-14	2	14	98	6
32	/	180	140	100	78	4-18	3	16	110	7.5
40	/	200	150	110	85	4-18	3	16	118	9.5
50	43	230	165	125	100	4-18	3	16	138	13
65	46	290	185	145	120	4-18	3	18	156	19.5
80	46	310	200	160	135	8-18	3	20	160	27
100	52	350	220	180	155	8-18	3	20	185	35
125	56	400	250	210	185	8-18	3	22	208	56
150	56	480	285	240	210	8-23	3	24	245	75
200	60	495	340	295	265	12-23	3	26	298	118
250	68	550	405	355	320	12-25	4	28	342	165
300	78	620	460	410	375	12-25	4	29		
350	78	720	520	470	435	16-25	5	34		

Note: for more size please consult factory.

# A Lined Valve

## Lined Swing Check Valve

### ANSI Lined Swing Check Valve



### HG/T 20592 PN25

Unit:mm

DN	L1	L2	D	D1	D2	Z-d	f	b	H	Wt(Kg)
15	/	130	95	65	45	4-14	2	16	82	6.5
20	/	150	105	75	55	4-14	2	16	82	7
25	/	160	115	85	65	4-14	2	16	98	8
32	/	180	140	100	78	4-18	3	18	110	11
40	/	200	150	110	85	4-18	3	18	118	15
50	43	230	165	125	100	4-18	3	20	138	17.5
65	46	290	185	145	120	8-18	3	22	156	26
80	46	310	200	160	135	8-18	3	22	160	36
100	52	350	230	190	160	8-23	3	24	185	44
125	56	400	270	220	188	8-25	3	28	208	60
150	56	480	300	250	218	8-25	3	30	245	81
200	60	495	360	310	278	12-25	3	34	298	137
250	68	550	425	370	332	12-30	4	36	342	173
300	78	620	485	410	375	16-30	4	39		
350	78	720	550	490	448	16-34	5	44		

### ASME B16.5 Class150

1/2	/	130	89	60.5	35	4-16	2	12	82	4
3/4	/	150	98	70.0	43	4-16	2	12	82	5
1	/	160	108	79.5	51	4-16	2	12	98	6
1 1/4	/	180	117	89.0	64	4-16	2	13	110	7.5
1 1/2	/	200	127	98.5	73	4-16	2	15	118	9.5
2	43	230	152	120.5	92	4-19	2	16	138	13
2 1/2	46	290	178	139.5	105	4-19	2	18	156	19.5
3	46	310	190	152.5	127	4-19	2	19	160	27
4	52	350	229	190.5	157	8-19	2	24	185	35
5	56	400	254	216.0	186	8-22	3	24	208	56
6	56	480	279	241.5	216	8-22	3	26	245	75
8	60	495	343	298.5	270	8-22	3	29	298	118
10	68	550	406	362.0	324	12-25	3	31	342	165
12	78	620	482.6	431.8	381	12-25	4	34.7		205
14	78	720	533.4	476.2	412.7	12-29	5	39		255