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 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, PO 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

Lined Check Valve

YOUFUMI

※Material Specification

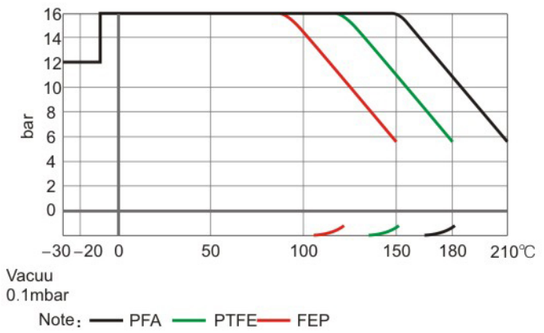
No.	Name	Material		
1	Body, disc, bonnet	A216 WCB+Lining material	A351 CF8/A351 CF8M+Lining material	A351 CF3 /A351 CF3M+Lining material
2	Ball	PTFE		
3	Lining material	FEP PFA PO		
4	Bolt	A193 B7	A320 B8	A193 B8M

※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	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	PO: −10~80
Applicable Medium		Strong corrosive medium i.e. hydrochloric acid, Nitric acid, Hydrofluoric acid, Liquid chlorine, Sulfuric Acid and Aqua regia etc.		

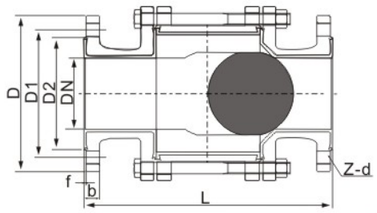
Note: Test standard refers general valve standard, high pressure should be customized for processing.

※Pressure-Temperature Curve

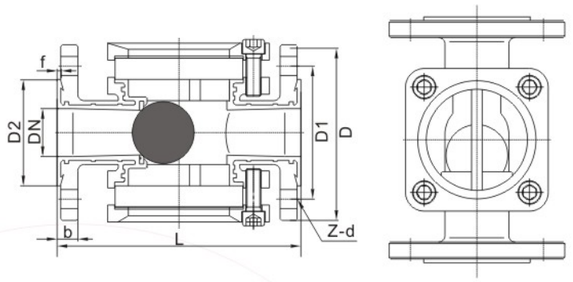


Lined Ball Check Valve

GB Lined Ball Check Valve



YFM H40



YFM SH40

HG/T 20592 PN10 Unit:mm

DN	L	D	D1	D2	Z-d	f	b
15	130	95	65	45	4-14	2	14
20	150	105	75	55	4-14	2	14
25	160	115	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	230	165	125	100	4-18	3	16
65	290	185	145	120	4-18	3	18
80	310	200	160	135	8-18	3	20
100	350	220	180	155	8-18	3	20
125	400	250	210	185	8-18	3	22
150	480	285	240	210	8-23	3	24

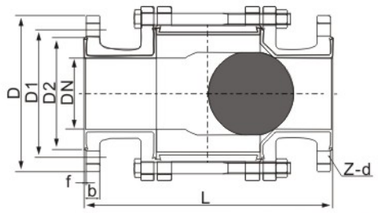
HG/T 20592 PN16

15	130	95	65	45	4-14	2	14
20	150	105	75	55	4-14	2	14
25	160	115	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	230	165	125	100	4-18	3	16
65	290	185	145	120	4-18	3	18
80	310	200	160	135	8-18	3	20
100	350	220	180	155	8-18	3	20
125	400	250	210	185	8-18	3	22
150	480	285	240	210	8-23	3	24

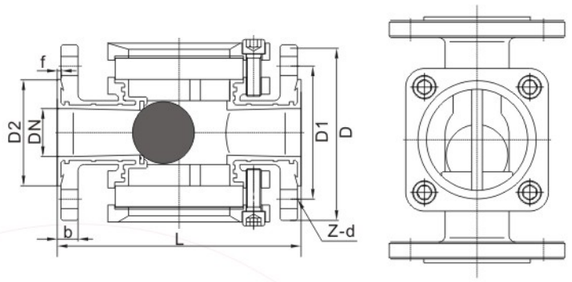
Note: For more size please consult factory.

Lined Ball Check Valve

ANSI Lined Ball Check Valve



YFM H40



YFM SH40

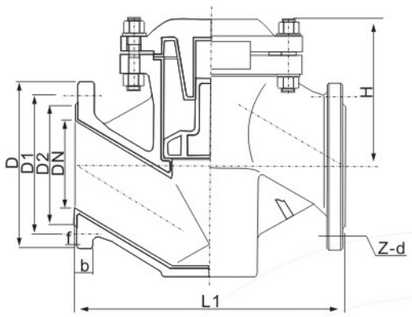
HG/T 20592 PN25 Unit:mm

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

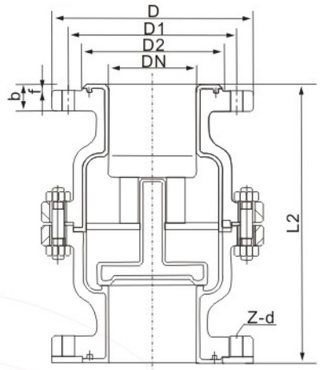
ASME B16.5 Class150

1/2	130	89	60.5	35	4-16	2	12
3/4	150	98	70.0	43	4-16	2	12
1	160	108	79.5	51	4-16	2	12
11/4	180	117	89.0	64	4-16	2	13
11/2	200	127	98.5	73	4-16	2	15
2	230	152	120.5	92	4-19	2	16
21/2	290	178	139.5	105	4-19	2	18
3	310	190	152.5	127	4-19	2	19
4	350	229	190.5	157	8-19	2	24
5	400	254	216.0	186	8-22	3	24
6	480	279	241.5	216	8-22	3	26

GB Lined Lift Check Valve



YFM H41



YFM H42

HG/T 20592 PN10

Unit:mm

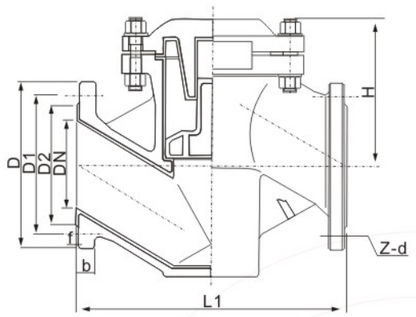
DN	L1	L2	D	D1	D2	Z-d	f	b	H
15	130	80	95	65	45	4-14	2	14	82
20	150	90	105	75	55	4-14	2	14	82
25	160	105	115	85	65	4-14	2	14	98
32	180	110	140	100	78	4-18	3	16	110
40	200	125	150	110	85	4-18	3	16	118
50	230	140	165	125	100	4-18	3	16	138
65	290	160	185	145	120	4-18	3	18	156
80	310	185	200	160	135	8-18	3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

HG/T 20592 PN16

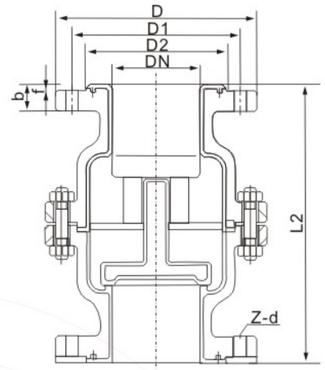
15	130	80	95	65	45	4-14	2	14	82
20	150	90	105	75	55	4-14	2	14	82
25	160	105	115	85	65	4-14	2	14	98
32	180	110	140	100	78	4-18	3	16	110
40	200	125	150	110	85	4-18	3	16	118
50	230	140	165	125	100	4-18	3	16	138
65	290	160	185	145	120	4-18	3	18	156
80	310	185	200	160	135	8-18	3	20	160
100	350	210	220	180	155	8-18	3	20	185
125	400	250	250	210	185	8-18	3	22	208
150	480	300	285	240	210	8-23	3	24	245
200	600	460	340	295	265	12-23	3	26	298
250	730	520	405	355	320	12-25	4	28	342
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.

ANSI Lined Lift Check Valve



YFM H41



YFM H42

HG/T 20592 PN25

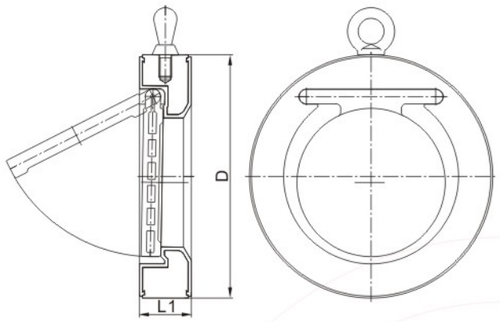
Unit:mm

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

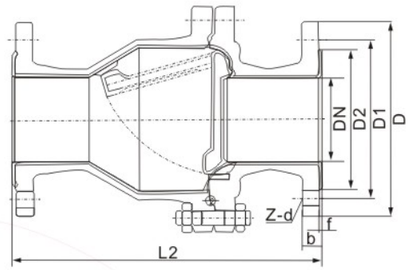
ASME B16.5 Class150

1/2	130	80	89	60.5	35	4-16	2	12	82
3/4	150	90	98	70.0	43	4-16	2	12	82
1	160	105	108	79.5	51	4-16	2	12	98
11/4	180	110	117	89.0	64	4-16	2	13	110
11/2	200	125	127	98.5	73	4-16	2	15	118
2	230	140	152	120.5	92	4-19	2	16	138
21/2	290	160	178	139.5	105	4-19	2	18	156
3	310	185	190	152.5	127	4-19	2	19	160
4	350	210	229	190.5	157	8-19	2	24	185
5	400	250	254	216.0	186	8-22	3	24	208
6	480	300	279	241.5	216	8-22	3	26	245
8	600	460	343	298.5	270	8-22	3	29	298
10	730	520	406	362.0	324	12-25	3	31	342
12	850	700	485	432	381	12-25	4	34.7	
14	980	750	535	476	412.7	12–29	5	39	

GB Lined Swing Check Valve



YFM H74



YFM H44

HG/T 20592 PN10

Unit:mm

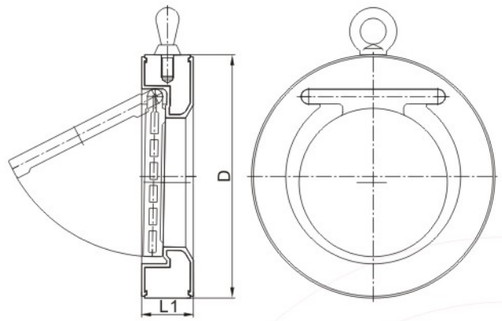
DN	L1	L2	D	D1	D2	Z-d	f	b
15	/	130	95	65	45	4-14	2	14
20	/	150	105	75	55	4-14	2	14
25	/	160	115	85	65	4-14	2	14
32	/	180	140	100	78	4-18	3	16
40	/	200	150	110	85	4-18	3	16
50	43	230	165	125	100	4-18	3	16
65	46	290	185	145	120	4-18	3	18
80	46	310	200	160	135	4-18	3	20
100	52	350	220	180	155	8-18	3	20
125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

HG/T 20592 PN16

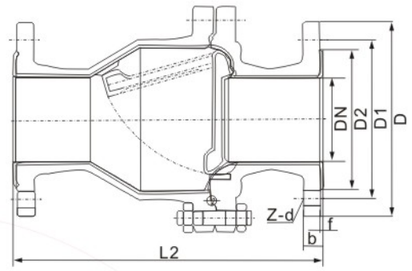
15	/	130	95	65	45	4-14	2	14
20	/	150	105	75	55	4-14	2	14
25	/	160	115	85	65	4-14	2	14
32	/	180	140	100	78	4-18	3	16
40	/	200	150	110	85	4-18	3	16
50	43	230	165	125	100	4-18	3	16
65	46	290	185	145	120	4-18	3	18
80	46	310	200	160	135	8-18	3	20
100	52	350	220	180	155	8-18	3	20
125	56	400	250	210	185	8-18	3	22
150	56	480	285	240	210	8-23	3	24
200	60	495	340	295	265	12-23	3	26
250	68	550	405	355	320	12-25	4	28
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.

ANSI Lined Swing Check Valve



YFM H74



YFM H44

HG/T 20592 PN25

Unit:mm

DN	L1	L2	D	D1	D2	Z-d	f	b
15	/	130	95	65	45	4-14	2	16
20	/	150	105	75	55	4-14	2	16
25	/	160	115	85	65	4-14	2	16
32	/	180	140	100	78	4-18	3	18
40	/	200	150	110	85	4-18	3	18
50	43	230	165	125	100	4-18	3	20
65	46	290	185	145	120	8-18	3	22
80	46	310	200	160	135	8-18	3	22
100	52	350	230	190	160	8-23	3	24
125	56	400	270	220	188	8-25	3	28
150	56	480	300	250	218	8-25	3	30
200	60	495	360	310	278	12-25	3	34
250	68	550	425	370	332	12-30	4	36
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
3/4	/	150	98	70.0	43	4-16	2	12
1	/	160	108	79.5	51	4-16	2	12
11/4	/	180	117	89.0	64	4-16	2	13
11/2	/	200	127	98.5	73	4-16	2	15
2	43	230	152	120.5	92	4-19	2	16
21/2	46	290	178	139.5	105	4-19	2	18
3	46	310	190	152.5	127	4-19	2	19
4	52	350	229	190.5	157	8-19	2	24
5	56	400	254	216.0	186	8-22	3	24
6	56	480	279	241.5	216	8-22	3	26
8	60	495	343	298.5	270	8-22	3	29
10	68	550	406	362.0	324	12-25	3	31
12	78	620	482.6	431.8	381	12-25	4	34.7
14	78	720	533.4	476.2	412.7	12-29	5	39