

Bellows seal globe valve

Fig.149

1/2" -18"

Class 600-1500 LBS

Body A105/A182 F304 (L) /A182 F316 (L) for 1/2" -2"

Body A216 WCB/A351 CF8M /A351 CF3M for 2 1/2" -18"

Design acc. : BS 5352; MSS-SP-117; ASME B16.34

Face to face (End to end) : ASME B16.10

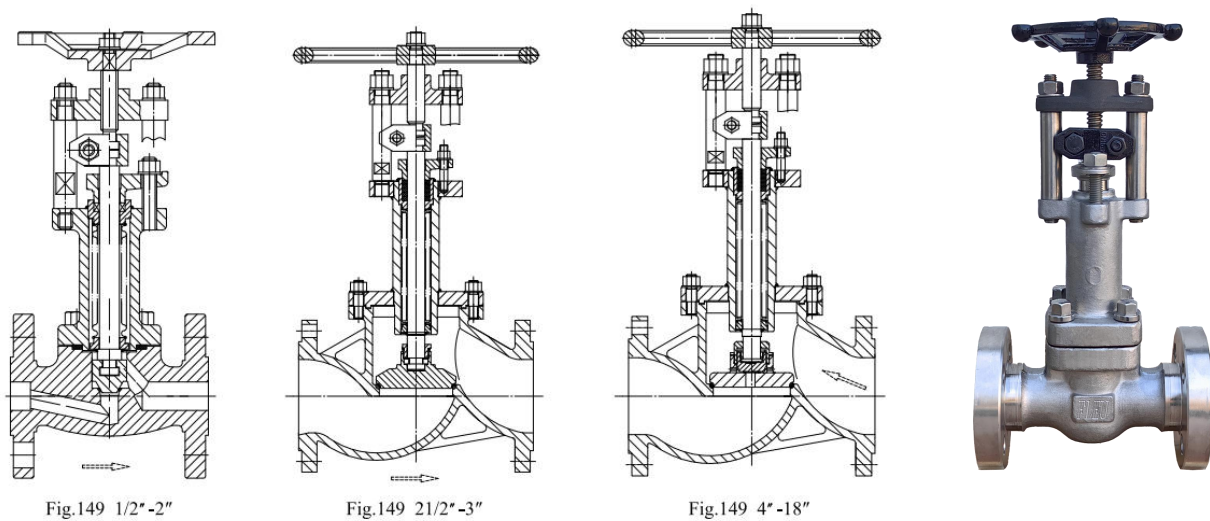
Flange end : ASME B16.5

BW end :ASME B16.25

Test acc. : API 598

Maintenance-free

10 000 cycles Witzenmann bellows 316Ti/F321/304(L)/F316/316L



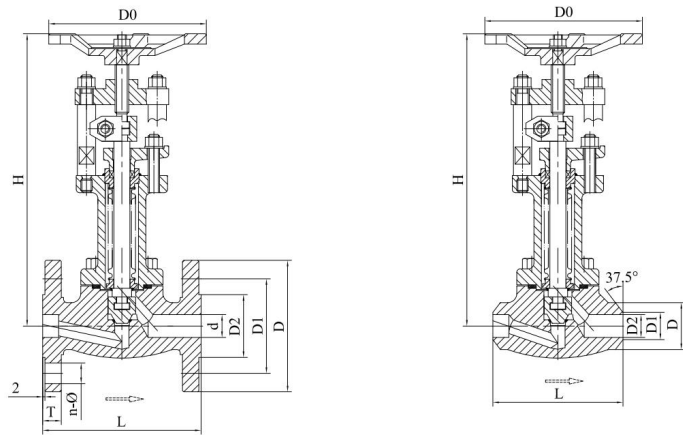
Design features

- Straight type,seat hardfaced ,conical plug
- Bellows protected in extended bonnet or by protecting plate against direct impingement from product flow
- Multiple walls and hydroformed Witzenmann bellows,and 10 000 cycles operations guaranteed
- two-piece stem protects the bellows against torque stress
- design eliminates stem bearings along with their maintenance needs
- Fire safe per EN ISO 10497 applicable
- Fugitive emissions test per EN ISO 15848 applicable

Applications

Fig.149 is design guarantees reliable and excellent protections against leaks and fugitive emissions.The stem seal requires virtually no maintenance due to leak free weld connections of the bellows with bonnet and stem. The valve is designed for critical service applications involving lethal,toxic,corrosive,inflammable,volatile,radiating,or expensive fluids.

Bellows seal globe valve Class 600
Desgin acc. to BS 5352、MSS-SP-117、ASME B16.34
Flange ends acc. to ASME B16.5 ; BW ends acc. to ASME B16.25
Standard test acc. to API 598 / ISO 5208
FTF (ETE) dimension acc. to ASME B16.10



Material List

Component	C.S.	S.S.
Body / Bonnet	A105	F316(L)
Disc	420	F316(L)
seat	420	316(L)
Lower stem/Upper stem	420	316(L)
Bellows	316Ti	316Ti
Bolts / Nuts	A193 B7 /A197 2H	A193 B8 / A194 8

Dimension List

FIG.	Material	Class	NPS	L	D FL/BW	D1 FL / BW	D2 FL / BW	d	T	n-Ø	H	D0
144.149 144.149-BW	A105	600Lb	1/2	165	95 / 32	66.7 / 22	35 / 17	15	15	4-16	306	148
			3/4	190	120 / 32	82.5 / 28	43 / 22	20	16	4-19	306	148
			1	216	125 / 38	88.9 / 34	51 / 28	25	18	4-19	310	148
234.149 234.149-BW	F316		1 1/4	229	135 / 60	98.4 / 43	64 / 37	32	21	4-19	420	196
			1 1/2	241	155 / 60	114.3 / 49	73 / 43	40	23	4-22	432	196
			2	292	165 / 70	127 / 61	92 / 51	50	26	8-19	432	196

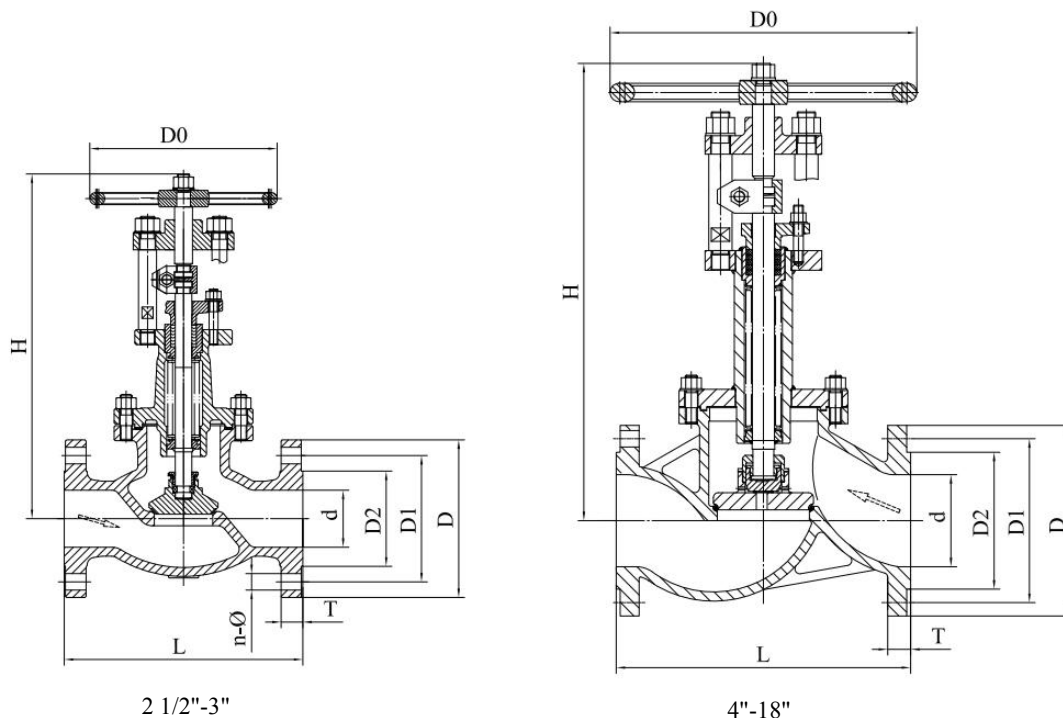
Bellows seal globe valve Class 600

Design acc. to BS 5352、MSS-SP-117、ASME B16.34

Flange ends acc. to ASME B16.5

Standard test acc. to API 598 / ISO 5208

FTF dimension acc. to ASME B16.10



Material List

Component	C.S.	S.S.
Body / Bonnet	WCB	CF8M
Disc	420	F316(L)
seat	420	316(L)
Lower stem/Upper stem	420	316(L)
Bellows	316Ti	316Ti
Bolts / Nuts	A193 B7 / A197 2H	A193 B8 / A194 8

Dimension List

FIG.	Material	Class	NPS	L	D	D1	D2	T	N-Ø	H	D0
134.149	WCB	600Lb	2 1/2	330	190	149.2	105	29	8-22	387	200
			3	356	210	168.3	127	32	8-22	411	250
			4	432	275	215.9	157	38	8-26	454	250
			5	508	330	266.7	186	45	8-29	455	355
			6	559	355	292.1	216	48	12-29	541	355
154.149	CF8M		8	660	420	349.2	270	56	12-32	651	450
			10	787	510	431.8	324	64	16-35	800	450
			12	838	560	489	381	67	20-35	1231	500
			14	889	605	527	413	70	20-39	1450	600
			16	991	685	603.2	470	77	20-42	1645	600
			18	1020	745	654	533	83	20-45	1748	850

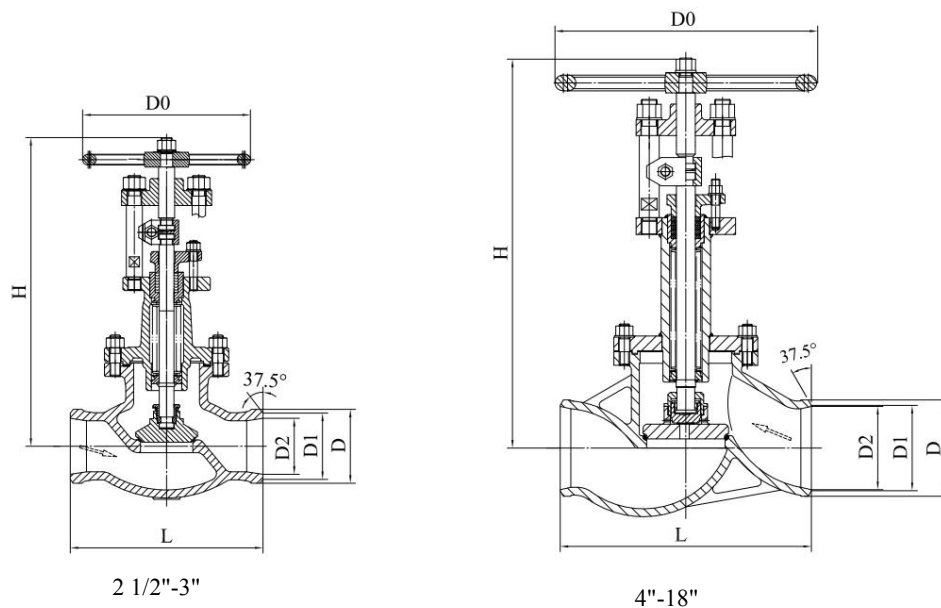
Bellows seal globe valve Class 600

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BW ends acc. to ASME B16.25

Standard test acc. to API 598 / ISO 5208

ETE dimension acc. to ASME B16.10



Material List

Component	C.S.	S.S.
Body / Bonnet	WCB	CF8M
Disc	420	F316(L)
seat	420	316(L)
Lower stem/Upper stem	420	316(L)
Bellows	316Ti	316Ti
Bolts / Nuts	A193 B7 / A197 2H	A193 B8 / A194 8

Dimension List

FIG.	Material	Class	NPS	L	D	D1	D2	H	D0
134.149-BW	WCB	600Lb	2 1/2	330	92	72	67	495	220
			3	356	106	84	80	548	250
			4	432	122	107	104	626	320
			5	508	157	135	130	710	320
			6	559	184	163	157	855	400
			8	660	238	211	206	1016	500
154.149-BW	CF8M		10	787	296	262	260	1240	600
			12	838	345	310	306	1287	600
			14	889	378	344	340	1416	600
			16	991	434	391	384	1548	850
			18	1020	491	433	429	1859	850

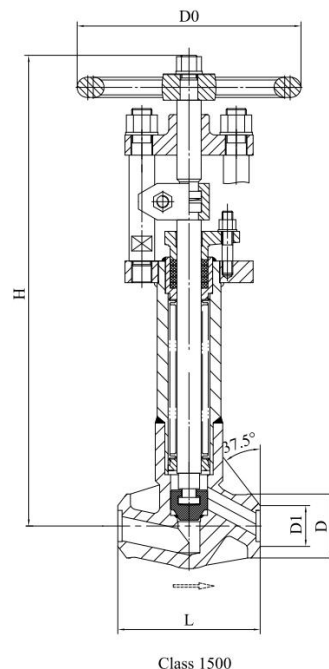
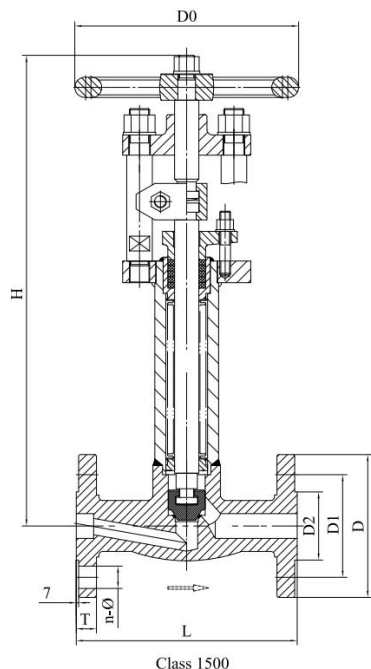
Bellows seal globe valve Class 1500

Design acc. to BS 5352、MSS-SP-117、ASME B16.34

Flange ends acc. to ASME B16.5 ; BW ends acc. to ASME B16.25

Standard test acc. to API 598 / ISO 5208

FTF (ETE) dimension acc. to ASME B16.10



Material List

Component	C.S.	S.S.
Body / Bonnet	A105	F316(L)
Disc	420	F316(L)
seat	420	316(L)
Lower stem/Upper stem	420	316(L)
Bellows	316Ti	316Ti
Bolts / Nuts	A193 B7 / A197 2H	A193 B8 / A194 8

Dimension List

FIG.	Material	Class	NPS	L	D FL / BW	D1 FL / BW	D2	H	D0
147.149 147.149-BW	A105	1500Lb	1/2	216	120 / 40	82.6 / 15	35	442	220
			3/4	229	130 / 44	88.9 / 19	43	442	220
			1	254	150 / 50	101.6 / 24	51	448	220
237.149 237.149-BW	F316		1 1/4	279	160 / 60	111 / 32	64	680	320
			1 1/2	305	180 / 60	123.8 / 37	73	680	320
			2	368	215 / 70	165 / 46	92	688	320

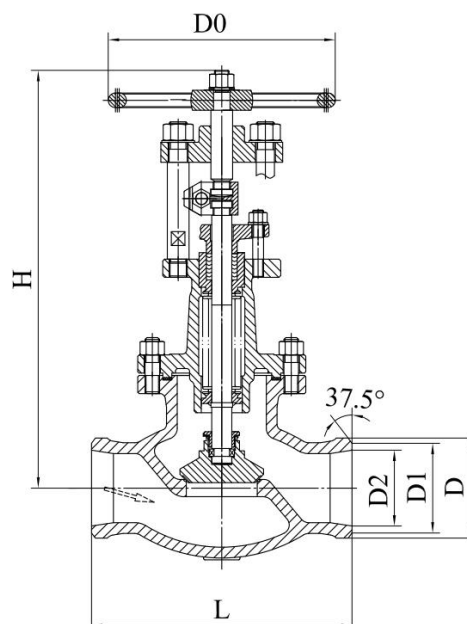
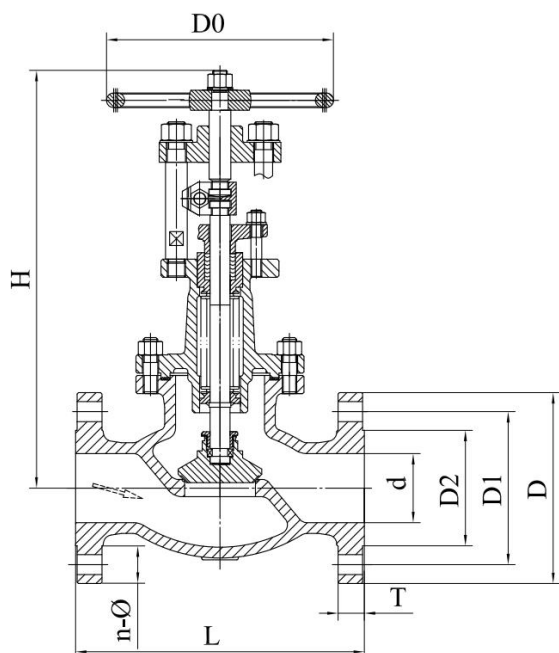
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Dimension List

FIG.	Material	Class	NPS	L	D FL / BW	D1 FL / BW	D2 FL / BW	d	T	n-Ø	H	D0
137.149 137.149-BW	WCB	1500Lb	2 1/2	419	245 / 100	190.5 / 58	105 / 54	52	48	8-30	820	400
157.149	CF8M		3	470	265 / 120	203 / 72	127 / 67	65	54	8-33	1092	500
157.149-BW			4	546	310 / 140	241.5 / 92	157 / 87	85	61	8-36	1305	500