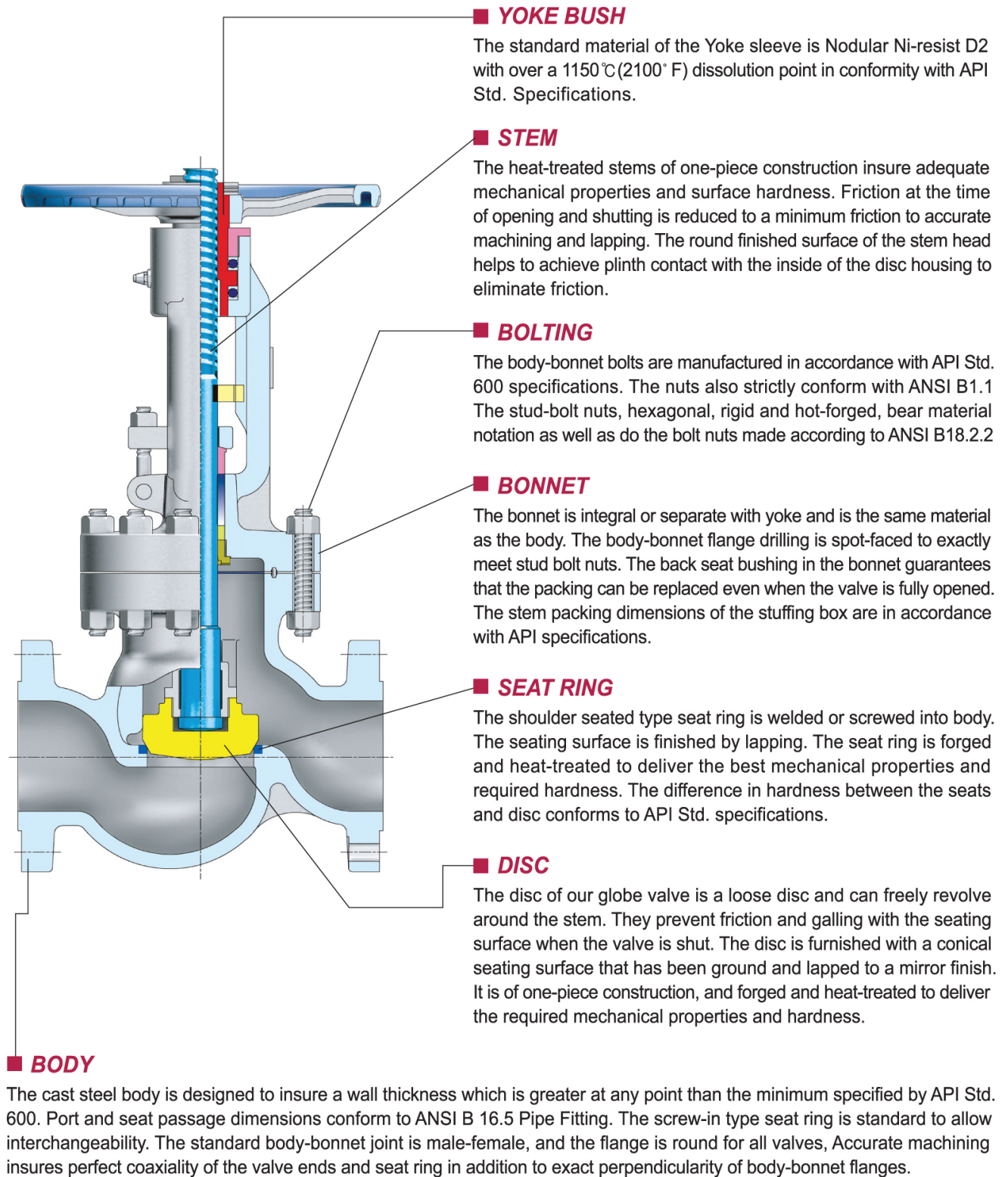


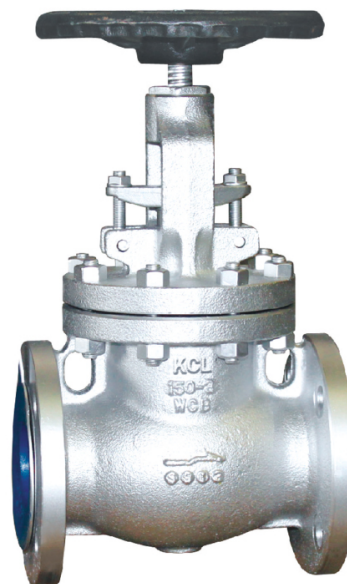
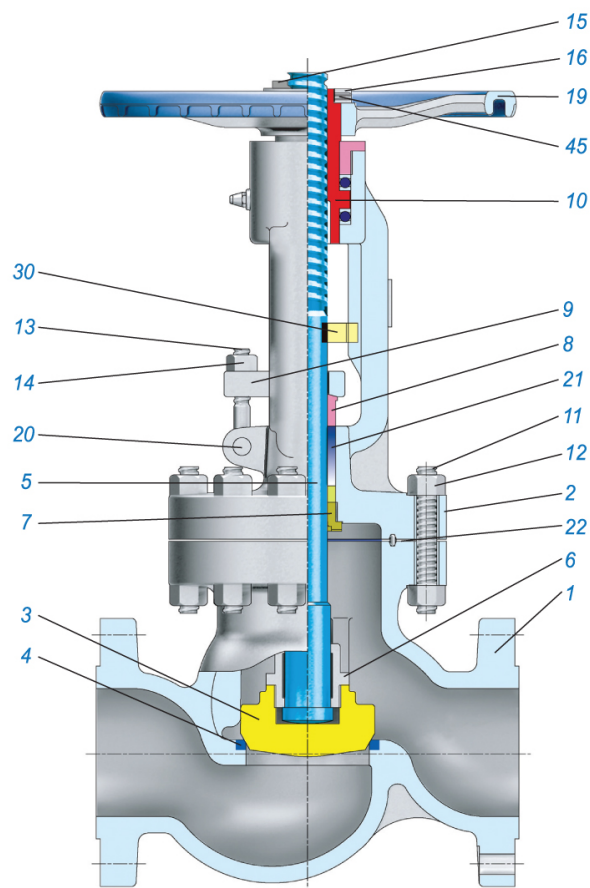
CAST CARBON STAINLESS STEEL / BOLTED BONNET

GLOBE VALVES



CAST CARBON STEEL / BOLTED BONNET

GLOBE VALVES



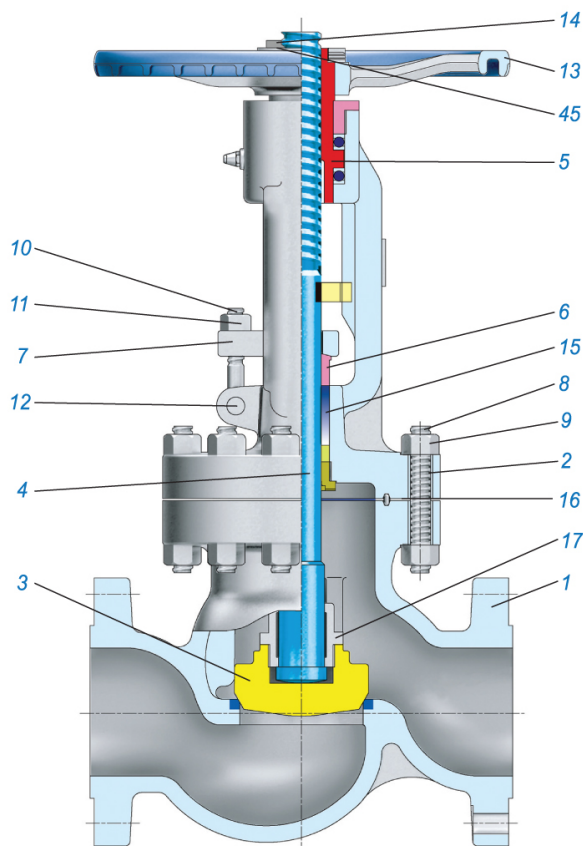
No.	NAME OF PART	ASTM SPECIFICATION
15	HANDLE NUT	A 283-C
16	SET SCREW	A 307.B
19	HANDWHEEL	A 395
21	PACKING	SEE PAGE 44
22	GASKET	SEE PAGE 44
30	STOPPER(for Gear)	A 283-D
45	WASHER	STEEL

No.	NAME OF PART	ASTM SPECIFICATION						KS SPECIFICATION
		STANDARD	HIGH TEMPERATURE SERVICE			LOW TEMPERATURE SERVICE		STANDARD
1	BODY	A216-WCB	A217-WC1	A217-WC6	A217-WC9	A217-C5	A352-LCB	SCPH2
2	BONNET	A216-WCB	A217-WC1	A217-WC6	A217-WC9	A217-C5	A352-LCB	SCPH2
3	*DISC	A217-CA15	A217-WC1	A217-WC6	A217-WC9	A217-C5	A352-LCB	SSC1
4	BODY SEAT RING	C/S1020+HF	A182-F1	A182-F11	A182-F22	A182-F5a	A182-F304	STEEL+HF
5	STEM	A276-410	A276-410	A276-410	A276-410	A276-410	A276-304	STS410
6	DISC GLAND	A276-410	A276-410	A276-410	A276-410	A276-410	A276-304	STS410
7	BONNET BUSH	A276-410	A276-410	A276-410	A276-410	A276-410	A276-304	STS410
8	PACKING GLAND	A276-410	A276-410	A276-410	A276-410	A276-410	A276-304	STS410
9	GLAND FLANGE	A105/A283-D	A105/A283-D	A105/A283-D	A105/A283-D	A105/A283-D	A105/A283-D	SF45
10	YOKE BUSH	A439-D2	A439-D2	A439-D2	A439-D2	A439-D2	A439-D2	FCD45
11	BONNET BOLT	A193-B7	A193-B7	A193-B16	A193-B16	A193-B16	A320-L7	SNB7
12	BONNET NUT	A194-2H	A194-2H	A194-4	A194-4	A194-4	A194-4	SM45C
13	GLAND BOLT	A307.B	A307.B	A307.B	A307.B	A307.B	A307.B	SM45C
14	GLAND NUT	A307.B	A307.B	A307.B	A307.B	A307.B	A307.B	SM45C
20	HINGE PIN	A108-1020	A108-1020	A108-1020	A108-1020	A108-1020	A108-1020	STS410

*Note : In case of 12" and larger size, We'll use trim material overlayed one on the same or equivalent material of the Body

CAST STAINLESS STEEL / BOLTED BONNET

GLOBE VALVES



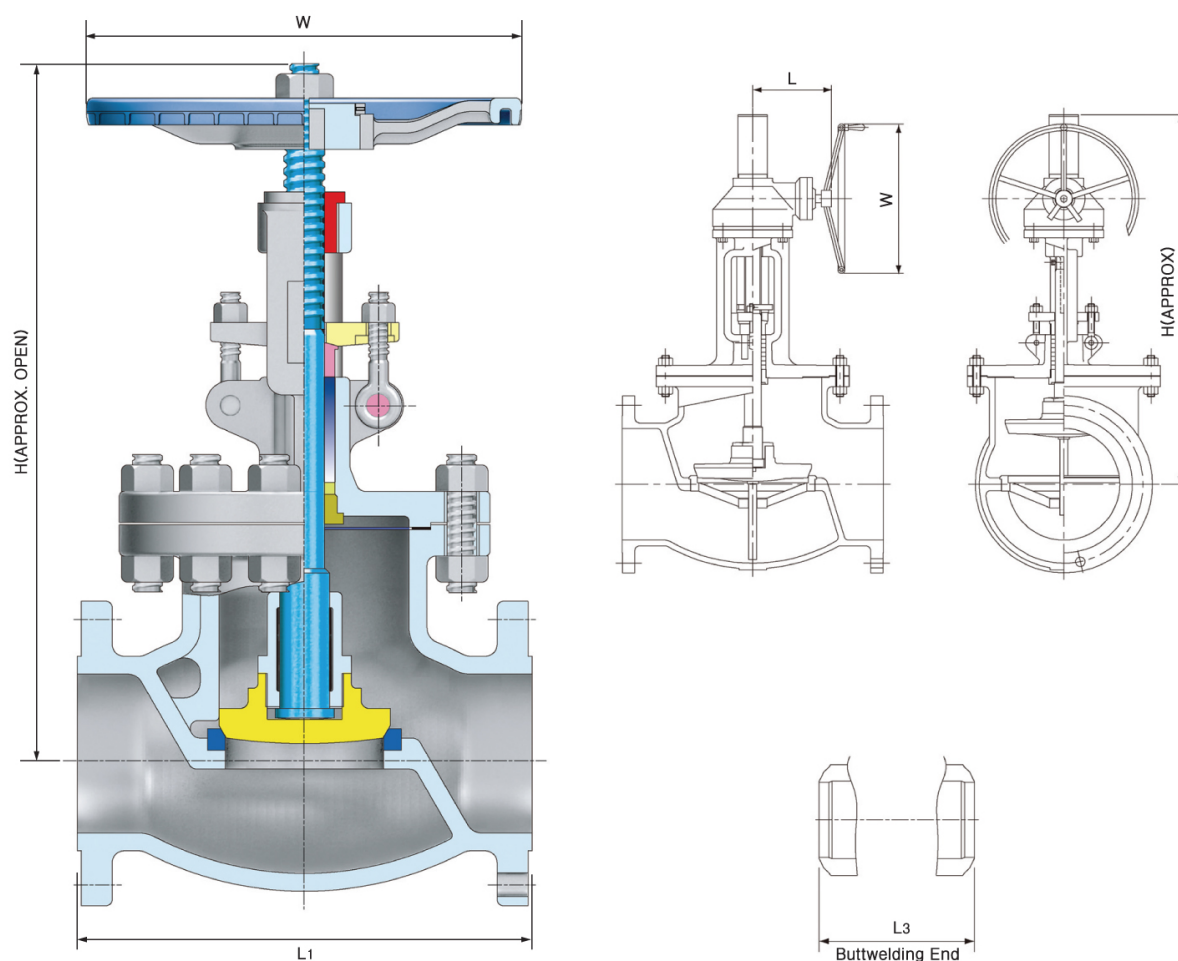
No.	NAME OF PART	ASTM SPECIFICATION				REMARKS
		CORROSION SERVICE				
1	BODY	A351-CF8	A351-CF8M	A351-CF3	A351-CF3M	
2	BONNET	A351-CF8	A351-CF8M	A351-CF3	A351-CF3M	
3	DISC	A351-CF8	A351-CF8M	A351-CF3	A351-CF3M	NOTE1
4	STEM	A276-304	A276-316	A276-304L	A276-316L	
5	YOKE BUSH	A439-D2	A439-D2	A439-D2	A439-D2	
6	PACKING GLAND	A276-304	A276-316	A276-304L	A276-316L	
7	GLAND FLANGE	A351-CF8/A240-304	A351-CF8/A240-304	A351-CF8/A240-304	A351-CF8/A240-304	
8	BONNET BOLT	A193-B8	A193-B8	A193-B8	A193-B8	
9	BONNET NUT	A194-8	A194-8	A194-8	A194-8	
10	GLAND BOLT	A193-B8	A193-B8	A193-B8	A193-B8	
11	GLAND NUT	A194-8	A194-8	A194-8	A194-8	
12	HINGE PIN	A276-304	A276-304	A276-304	A276-304	
13	HAND WHEEL	A395	A395	A395	A395	
14	HAND WHEEL NUT	A283-C	A283-C	A283-C	A283-C	
15	PACKING	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	NOTE2
16	GASKET	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	NOTE2
17	DISC GLAND	A276-304	A276-316	A276-304L	A276-316L	
45	WASHER	A283-C	A283-C	A283-C	A283-C	

*Note1. Size 8" & larger : bottom guide type

*Note2. Packing & gasket material : customer's requirements, see page 44

CAST STEEL / BOLTED BONNET

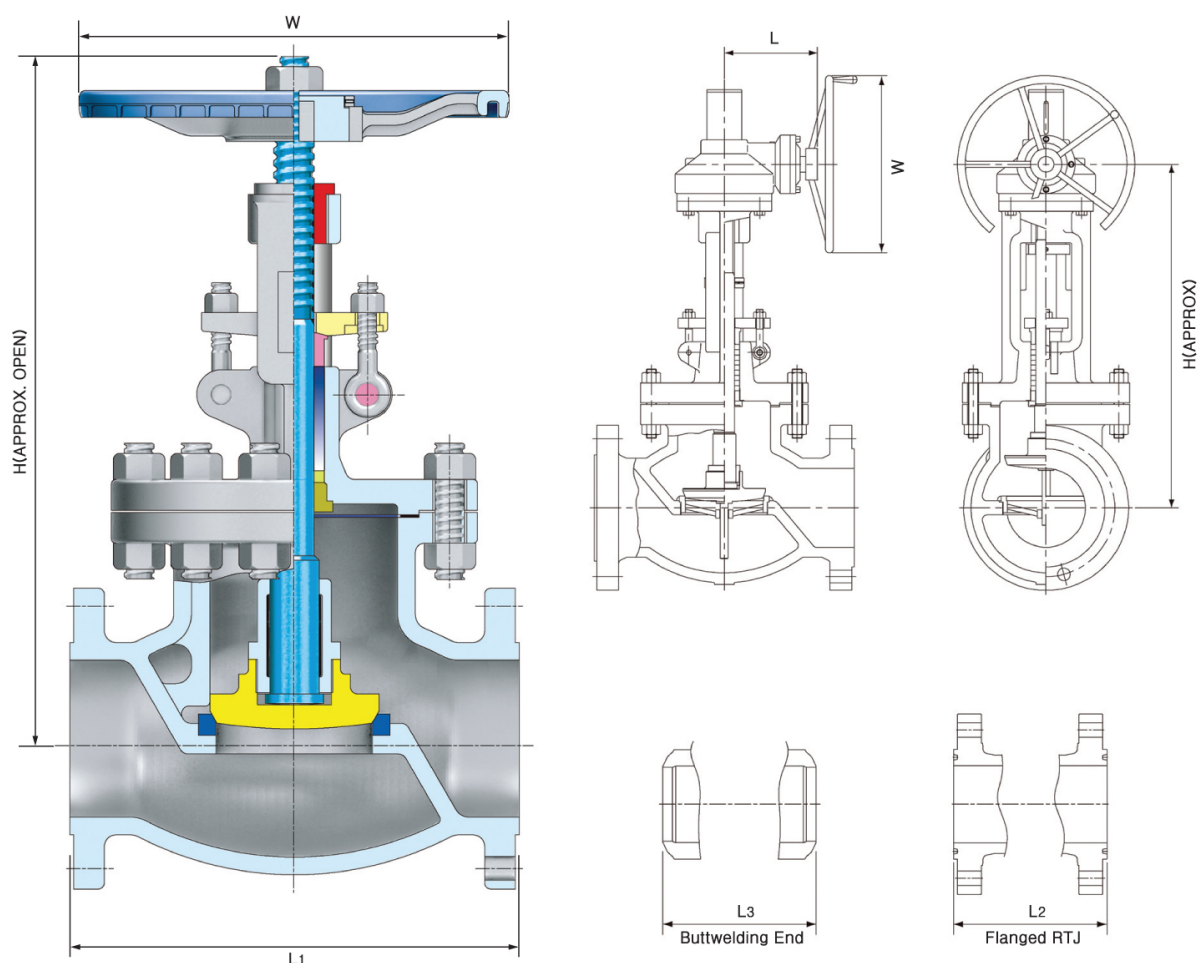
ASME CLASS 150LB



VALVE SIZE	inch	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24
	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L1 & L3	inch	8.0	8.5	9.5	11.5	14.0	16.0	19.5	24.5	27.5	31.0	36.0	38.5	38.5	51.0
	mm	203	216	241	292	356	406	495	622	699	787	914	978	978	1295
H	inch	10.8	11.4	12.5	13.7	15.6	17.3	22.0	26.4	29.1	54.7	62.6	71.7	80.7	90.6
	mm	275	290	320	350	400	440	560	670	740	1390	1590	1820	2050	2300
W	inch	7.7	7.7	8.5	9.4	11.0	11.8	14.0	15.7	17.7	22.0	22.0	24.0	27.6	27.6
	mm	195	195	215	240	280	300	355	400	450	560	560	610	700	700
L	inch	-	-	-	-	-	-	-	-	-	16.3	16.3	17.0	17.0	17.0
	mm	-	-	-	-	-	-	-	-	-	414	414	432	432	432
WEIGHT	LB	46.3	59	72.8	116.9	163.2	209.5	410.1	524.8	804.8	1364.9	1808.1	2154.3	2712.2	3472.9
	Kg	21	27	33	53	74	95	186	238	365	619	820	977	1230	1575

CAST STEEL / BOLTED BONNET

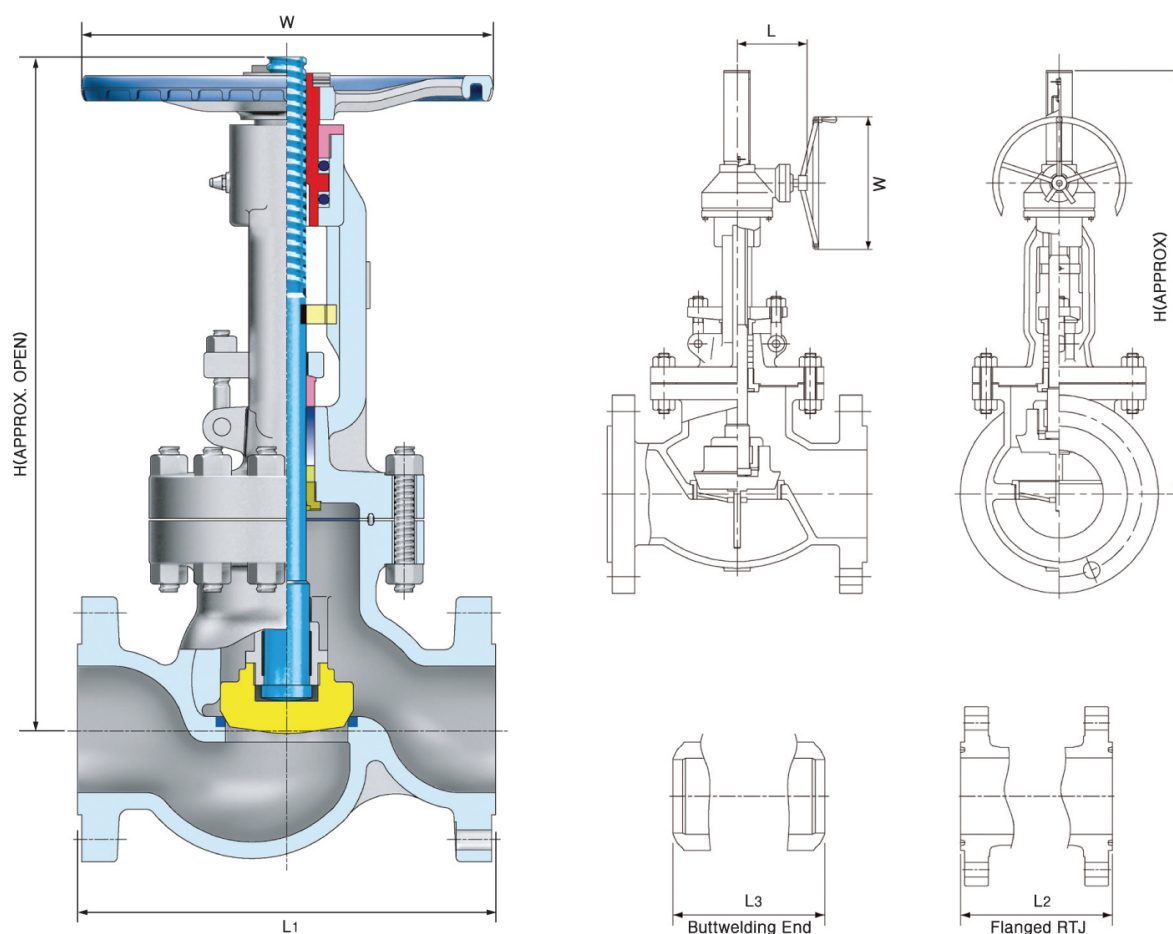
ASME CLASS 300LB



VALVE SIZE	inch	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	32
	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	800
L1 & L3	inch	10.5	11.5	12.5	14.0	15.75	17.5	22.0	24.5	28.0	33.0	34	38.5	40	53	62.75
	mm	267	292	318	356	400	445	559	622	711	838	864	978	1016	1346	1594
L2	inch	11.12	12.12	13.12	14.62	16.38	18.12	22.62	25.12	28.62	33.6	34.6	39.12	40.75	53.88	63.4
	mm	283	308	333	371	416	460	575	638	727	854	879	994	1035	1369	1610
H	inch	14.4	15.7	16.1	18.9	26.6	27.6	29.5	31.5	37.6	54.7	62.6	71.7	80.7	90.6	122.0
	mm	365	400	410	480	676	700	750	800	955	1390	1590	1820	2050	2300	3100
W	inch	7.7	8.5	9.4	10.6	12.4	14.0	15.7	17.7	19.7	22.1	27.6	27.6	27.6	31.5	31.5
	mm	195	215	240	270	315	355	400	450	500	560	700	700	700	800	800
L	inch	-	-	-	-	-	-	-	-	-	16.3	18.4	18.4	18.4	20.7	20.7
	mm	-	-	-	-	-	-	-	-	-	414	468	468	468	526	526
WEIGHT	LB	61.7	86.0	99.2	189.6	253.6	330.8	621.8	809.2	1045.2	1907.3	2529.1	3014.2	3572.1	5159.7	7364.7
	Kg	28	39	45	86	115	150	282	367	474	865	1147	1367	1620	2340	3340

CAST STEEL / BOLTED BONNET

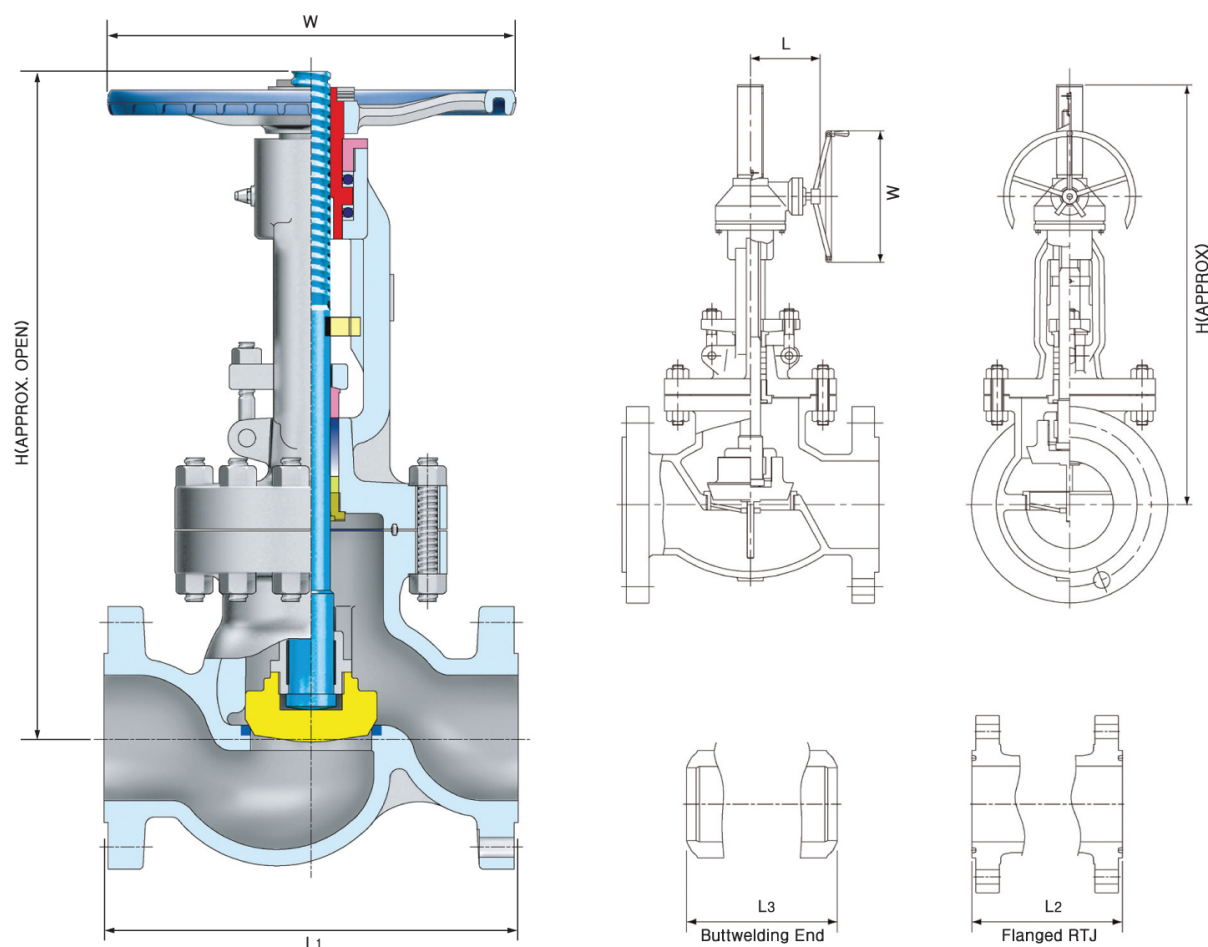
ASME CLASS 600LB



VALVE SIZE	inch	2	2 1/2	3	4	5	6	8	10	12	14	16
	mm	50	65	80	100	125	150	200	250	300	350	400
L1 & L3	inch	11.5	13.0	14.0	17.0	20.0	22.0	26.0	31.0	33.0	35.0	39.0
	mm	292	330	356	432	508	559	660	787	838	889	991
L2	inch	11.62	13.12	14.12	17.12	20.12	22.12	26.12	31.12	33.12	35.12	39.12
	mm	295	333	359	435	511	562	664	791	841	892	994
H	inch	16.0	19.8	19.9	22.4	31.8	37.8	51.8	59.5	96.9	70.9	76.0
	mm	407	502	505	568	807	959	1315	1511	1775	1800	1930
W	inch	7.7	8.5	10.6	11.8	14.0	15.7	28.0	31.5	35.4	35.4	35.4
	mm	195	215	270	300	355	400	710	800	900	900	900
L	inch	-	-	-	-	-	-	18.4	20.7	26.4	26.4	26.4
	mm	-	-	-	-	-	-	468	526	670	670	670
WEIGHT	LB	114.5	141.1	187.4	330.8	551.3	714.4	1234.8	1741.9	2264.5	2932.7	3825.7
	Kg	52	65	85	150	250	324	560	790	1027	1330	1735

CAST STEEL / BOLTED BONNET

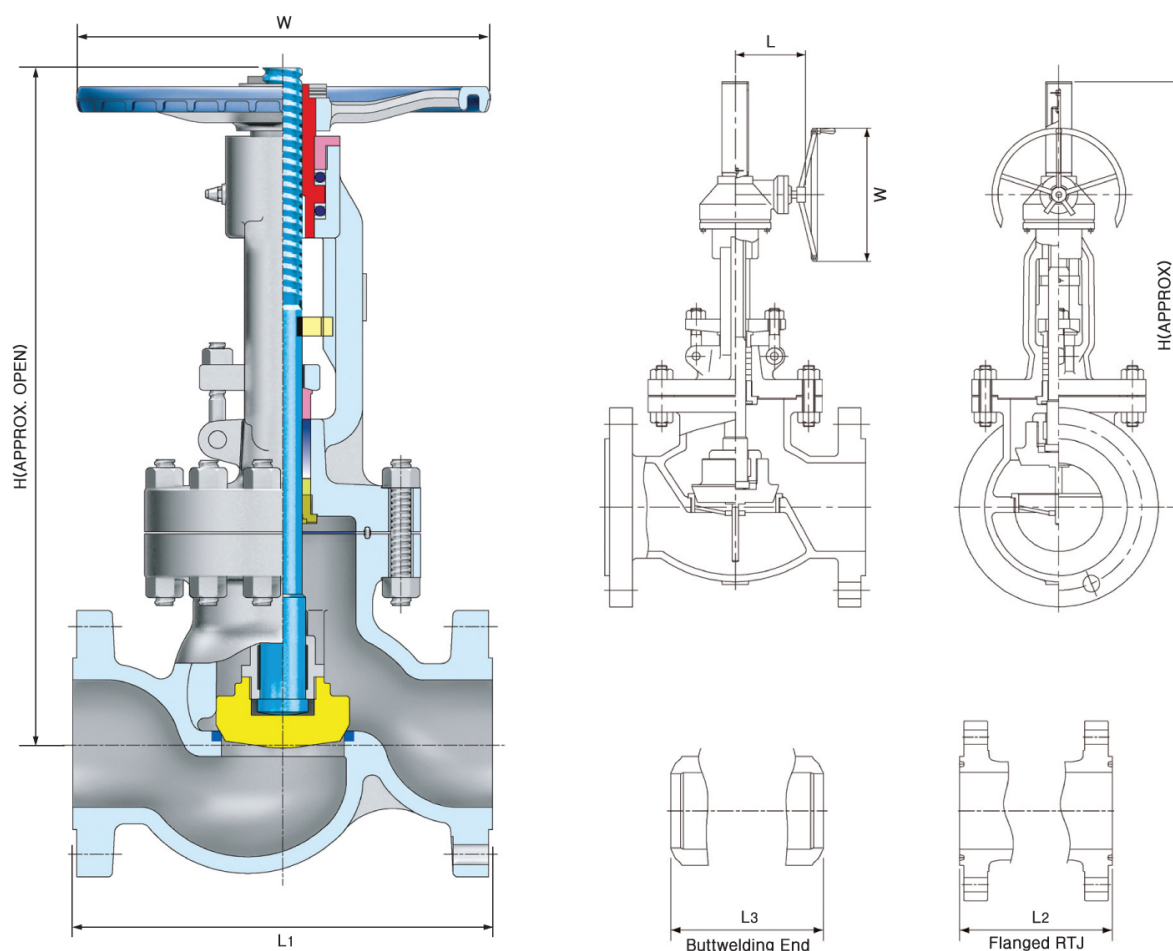
ASME CLASS 900LB



VALVE SIZE	inch	2	2 1/2	3	4	5	6	8	10	12	14
	mm	50	65	80	100	125	150	200	250	300	350
L1 & L3	inch	14.5	16.5	15.0	18.0	22.0	24.0	29.0	33.0	38.0	40.5
	mm	368	419	381	457	559	610	737	838	965	1029
L2	inch	14.62	16.62	15.12	18.12	22.13	24.12	29.12	33.12	38.12	40.88
	mm	371	422	384	460	562	613	740	841	968	1038
H	inch	27.4	27.4	30.5	33.7	53.1	58.6	65.69	63.0	67.1	87.0
	mm	695	695	775	855	1350	1488	1665	1600	1705	2210
W	inch	15.7	15.7	15.7	15.7	19.7	22.0	31.5	31.5	35.4	35.4
	mm	400	400	400	400	500	560	800	800	900	900
L	inch	-	-	-	-	-	16.3	20.7	20.7	26.4	26.4
	mm	-	-	-	-	-	414	526	526	670	670
WEIGHT	LB	176.4	271.2	154	441	815.9	1101.5	2756.3	4520.3	5843.3	8048.3
	Kg	80	123	161	200	370	500	1250	2050	2650	3650

CAST STEEL / BOLTED BONNET

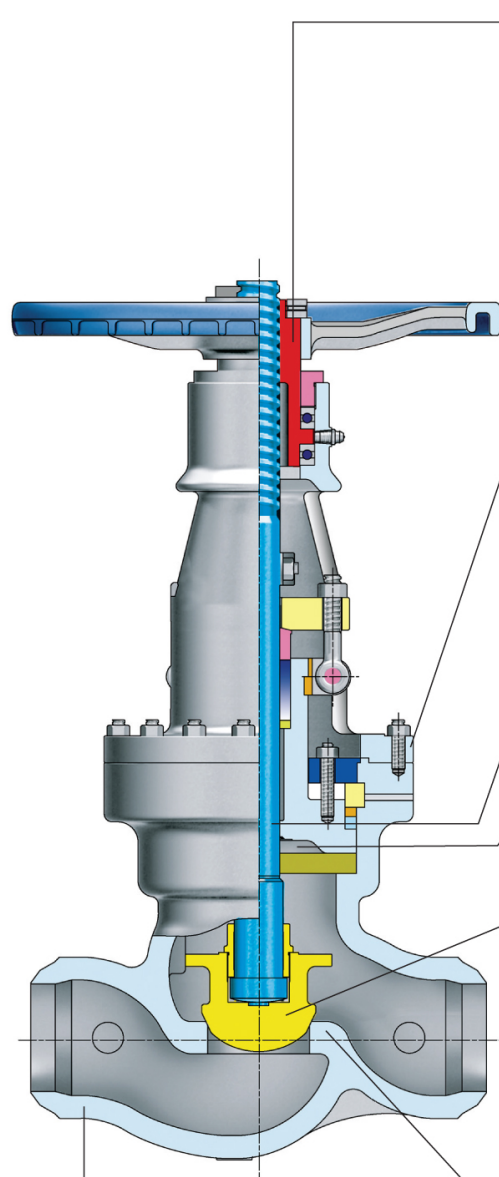
ASME CLASS 1500LB



VALVE SIZE	inch	2	2 1/2	3	4	5	6	8	10	12	14
	mm	50	65	80	100	125	150	200	250	300	350
L1 & L3	inch	14.5	16.5	18.5	21.5	26.5	27.75	32.75	39.0	44.5	49.5
	mm	368	419	470	546	673	705	832	991	1130	1257
L2	inch	14.62	16.62	18.62	21.62	26.61	28.0	33.13	39.38	45.12	50.25
	mm	371	422	473	549	676	711	842	1000	1146	1276
H	inch	27.4	27.4	31.5	40.0	57.1	64.8	77.2	91.0	105.1	126.0
	mm	695	695	799	1015	1450	1645	1960	2310	2670	3200
W	inch	15.7	15.7	19.7	19.7	24.8	28.0	28.0	30.0	30.0	30.0
	mm	400	400	500	500	630	710	710	760	760	760
L	inch	-	-	-	-	-	18.4	18.4	20.2	20.2	22.3
	mm	-	-	-	-	-	468	468	512	512	567
WEIGHT	LB	271.2	341.8	396.9	749.7	1124.6	1482	4630.5	7055.0	9702.0	11907.0
	Kg	123	155	180	340	510	627	2100	3200	4400	5400

CAST STEEL / PRESSURE SEAL BONNET

GLOBE VALVES



■ YOKE SLEEVE

The standard material of the Yoke Sleeve is Nodular Ni-resist D2 with over 1150°C (2100° F) dissolution point in conformity with API Std. Specifications.

■ BONNET

The bonnet is of a steel forging identical to the body to insure high reliability. The bonnet has a perfect body-bonnet seal and both ease of dismantling and reassembly are ensured. The body and bonnet of our valves are carefully machined to achieve perfect coaxiality and eliminate any misalignment which may cause damage to stems.

■ STEM

The stem, of one-piece construction, is heat treated to secure the adequate mechanical properties and surface, hardness. Accurate machining and grinding insure that there is minimized friction during valve opening/shutting. The round head of the stem gives a point contact with the inside of the disc housing and thus prevents galling.

■ BACK SEAT

All of our valves are equipped with a backseat to allow packing replacement with the valve fully opened. The conical shape contact seat in the bonnet assembly is integrally stellite faced.

■ DISC

The disc of our globes is a loose disc which freely revolves around the stem, thereby preventing friction and galling with the seating surface when the valve is shut.

The outside diameter of the disc is accurately finished and cylindrical on shape to travel along the body guides.

A stellite 6 layer is applied to the conical seating surface of the disc. The deposit Undergoes a special heat treatment to secure the required hardness and soundness. In addition, the lapped finish insures a perfect mating with the seats.

■ SEAT

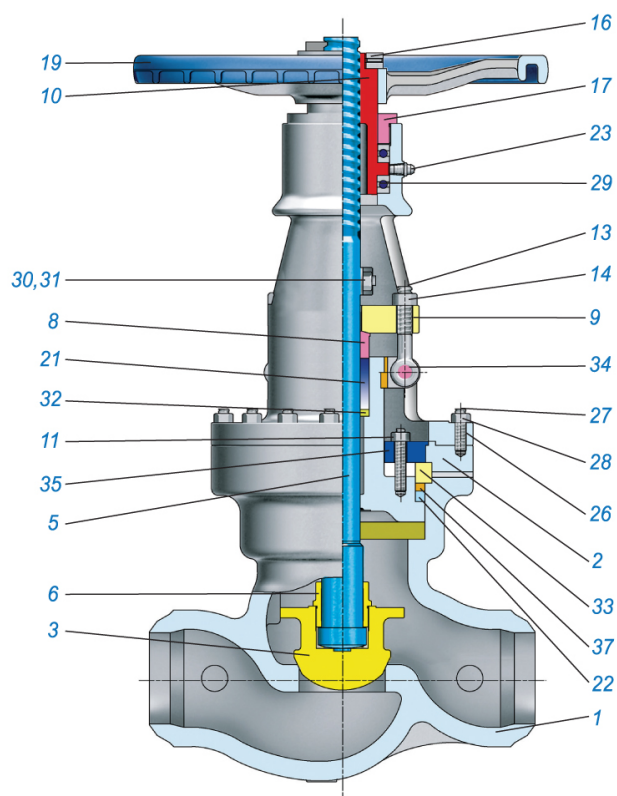
The stellite 6 seating surface is integrally applied to the body by means of welding in all valve sizes. Perfect mating the disc surfaces is achieved by lapping applied to the seating surface.

■ BODY

The cylindrically shaped valve body prevents distortion or undue stress under extreme working conditions. In addition, adequate padding ensures a sound cast structure in the critical areas. The wall thickness is greater than, or in accordance with API, ANSI and ASME requirements. The area contacting the pressure seal gasket has a stainless steel 18/8 inlay to eliminate corrosion or wire drawing. The close tolerances of the inside diameter of this area are attained by accurate machining and honing finish.

CAST STEEL / PRESSURE SEAL BONNET

GLOBE VALVES

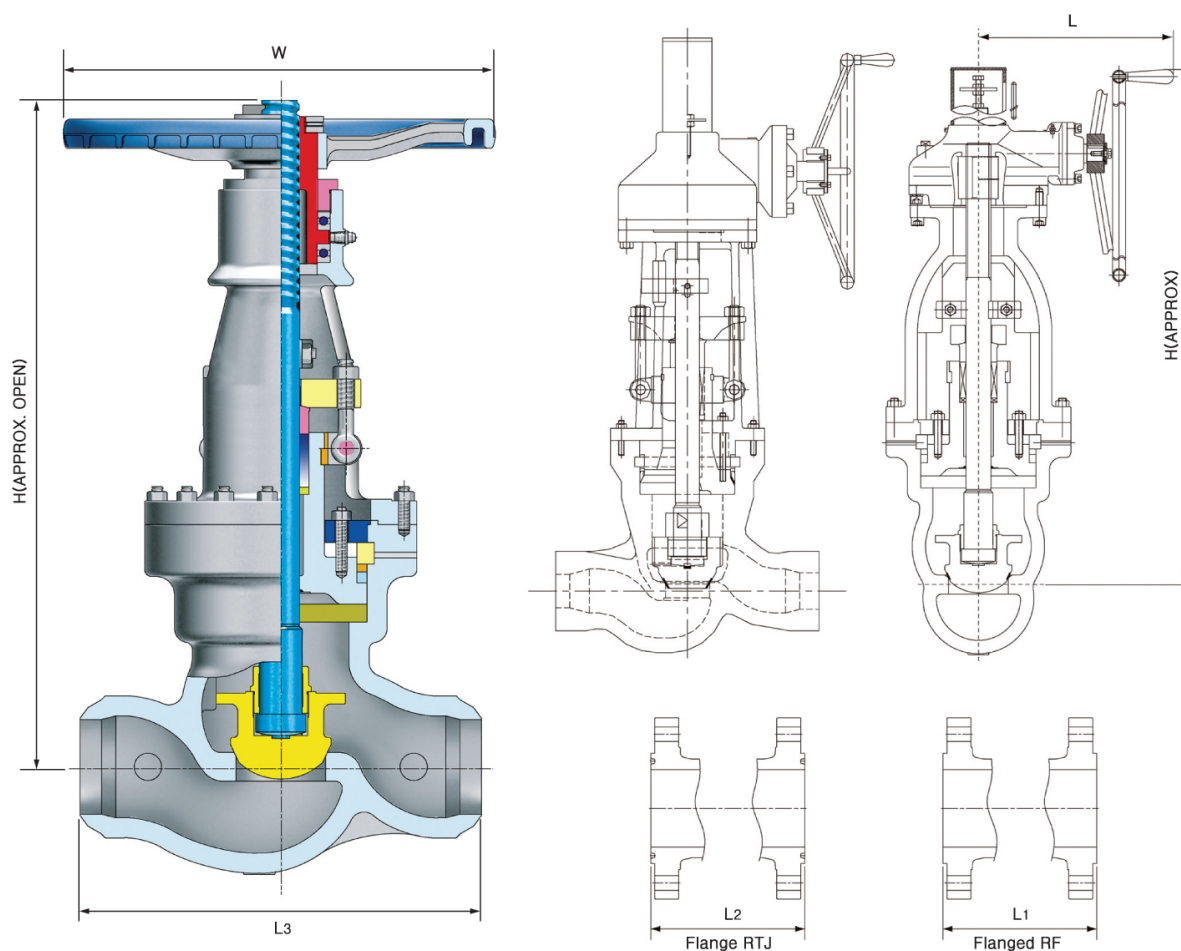


No.	NAME OF PART	ASTM SPECIFICATION
15	HANDLE NUT	STEEL
16	SET SCREW	STEEL
19	HANDWHEEL	A395
21	PACKING	SEE PAGE 44
22	GASKET	SEE PAGE 44
30	STOPPER	A283-D

No.	NAME OF PART	STANDARD	ASTM SPECIFICATION					KS SPECIFICATION
			HIGH TEMPERATURE SERVICE				LOW TEMPERATURE SERVICE	
1	BODY	A216-WCB	A217-WC1	A217-WC6	A217-WC9	A217-C5	A352-LCB	A352-LC1/LC2/LC3
2	BONNET	A216-WCB	A217-WC1	A217-WC6	A217-WC9	A217-C5	A352-LCB	A352-LC1/LC2/LC3
3	DISC	A216-WCB+HF	A217-WC1+HF	A217-WC6+HF	A217-WC9+HF	A217-C5+HF	A352-LCB+304	A352-LC1/LC2/LC3
5	STEM	A276-410	A276-410	A276-410	A276-410	A276-410	A276-304	A276-304
6	DISC GLAND	A276-410	A276-410	A276-410	A276-410	A276-410	A276-304	A276-304
8	PACKING GLAND	A276-410	A276-410	A276-410	A276-410	A276-410	A276-304	A276-304
9	GLAND FLANGE	A283-D	A283-D	A283-D	A283-D	A283-D	A283-D	A283-D
10	YOKE SLEEVE	A439-D2	A439-D2	A439-D2	A439-D2	A439-D2	A439-D2	A439-D2
11	BONNET FLANGE BOLT	A193-B7	A193-B7	A193-B16	A193-B16	A193-B16	A320-L7	A320-L7
13	GLAND BOLT	A307-B	A307-B	A307-B	A307-B	A307-B	A307-B	A307-B
14	GLAND NUT	A307-B	A307-B	A307-B	A307-B	A307-B	A307-B	A307-B
26	YOKE	A216-WCB	A216-WCB	A216-WCB	A216-WCB	A216-WCB	A216-WCB	A216-WCB
27	YOKE BOLT	A193-B7	A193-B7	A193-B7	A193-B7	A193-B7	A193-B7	A193-B7
28	YOKE NUT	A194-2H	A194-2H	A194-2H	A194-2H	A194-2H	A194-2H	A194-2H
31	STOPPER PIN	A307-B	A307-B	A307-B	A307-B	A307-B	A307-B	A307-B
32	PACKING WASHER	A276-410	A276-410	A276-410	A276-410	A276-410	A276-304	A276-304
33	RETAINER	A276-410	A276-410	A276-410	A276-410	A276-410	A276-304	A276-304
34	HINGE CLAMP	A216-WCB	A216-WCB	A216-WCB	A216-WCB	A216-WCB	A216-WCB	A216-WCB
35	BONNET CLAMP	A108-1045	A108-1045	A108-1045	A108-1045	A108-1045	A108-1045	A108-1045
37	GASKET SPACER	A276-410	A276-410	A276-410	A276-410	A276-410	A276-304	A276-304

CAST STEEL / PRESSURE SEAL BONNET

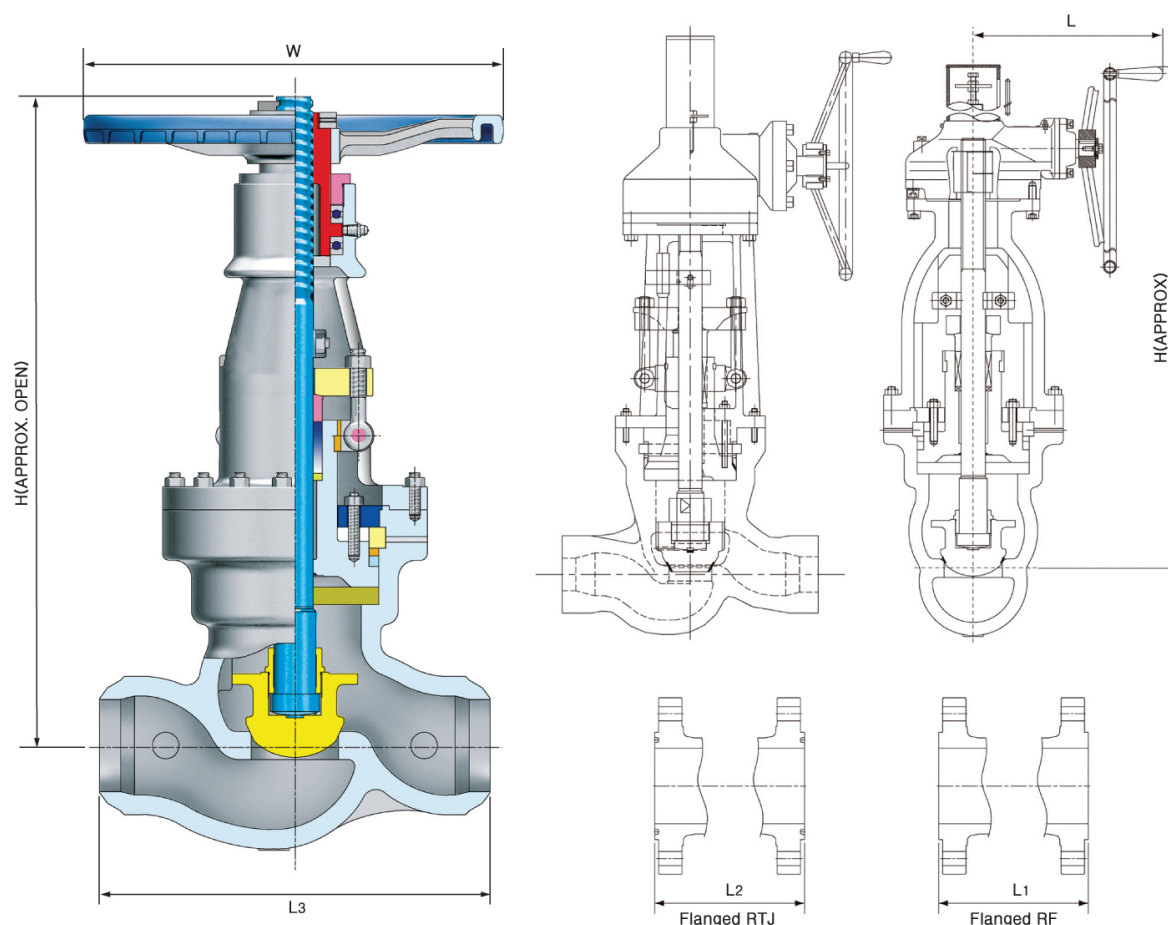
ASME CLASS 600LB



VALVE SIZE	inch	2	2 1/2	3	4	6	8	10	12	14	16
	mm	50	65	80	100	150	200	250	300	350	400
L3	inch	7.0	8.5	10.0	12.0	18.0	23.0	28.0	32.0	35.0	39.0
	mm	178	216	254	305	457	584	711	813	889	991
L2	inch	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12	35.12	39.12
	mm	295	333	359	435	562	664	791	841	892	994
L1	inch	11.5	13.0	14.0	17.0	22.0	26.0	31.0	33.0	35.0	39.0
	mm	292	330	356	432	559	660	787	838	889	991
H	inch	21.7	24.8	26.8	29.5	45.3	49.2	55.1	61.0	70.9	85.0
	mm	550	630	680	750	1150	1250	1400	1550	1800	2160
W	inch	9.8	11.8	11.8	17.7	18.1	23.6	24.0	24.0	24.0	29.9
	mm	250	330	300	450	460	600	610	610	610	760
L	inch	-	-	-	-	-	20.2	17.0	20.2	20.2	22.3
	mm	-	-	-	-	-	512	432	512	512	567
WEIGHT	LB	992	121.2	187.4	297.7	672.5	1367.1	2883.6	4189.5	5997.6	6945.8
	Kg	45	55	85	135	305	620	1310	1900	2720	3150

CAST STEEL / PRESSURE SEAL BONNET

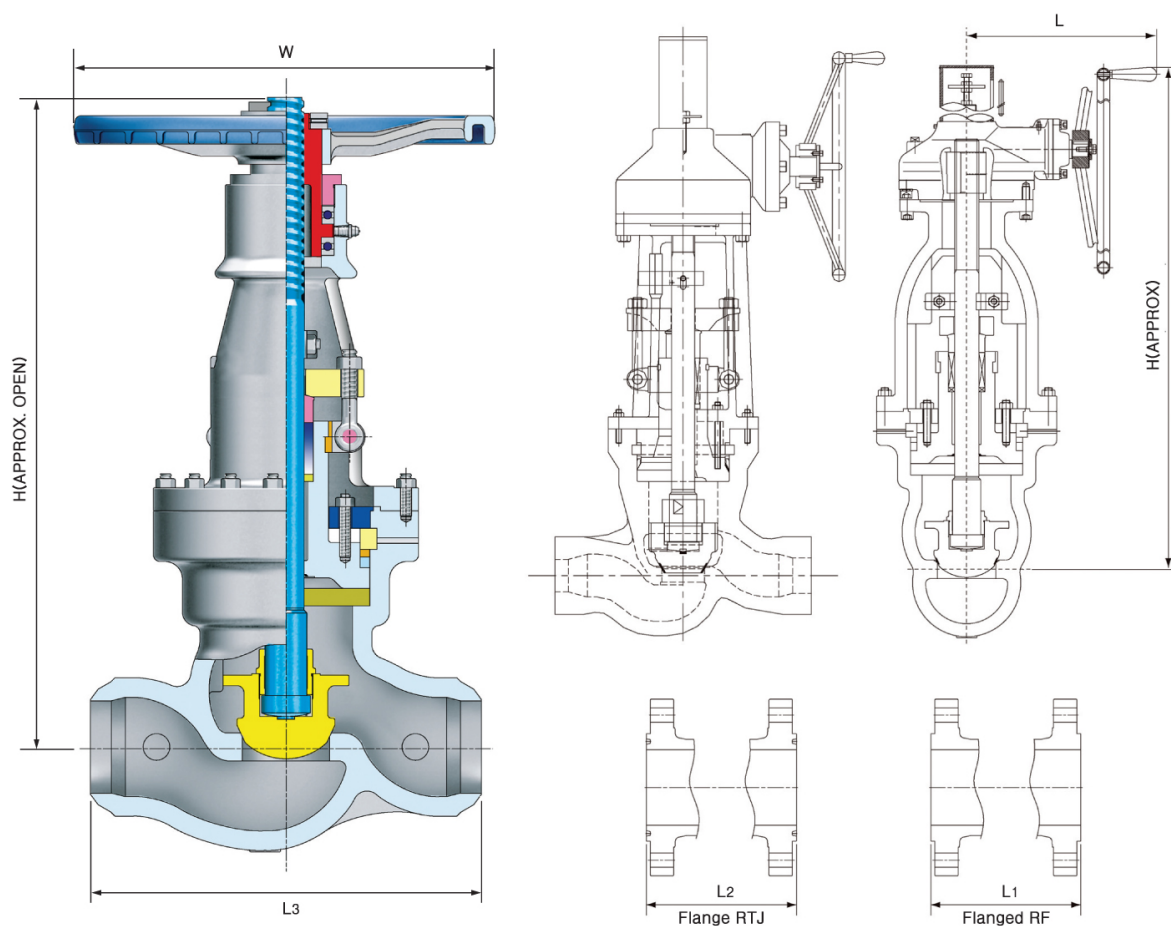
ASME CLASS 900LB



VALVE SIZE	inch	2	2 1/2	3	4	6	8	10	12	14	16
	mm	50	65	80	100	150	200	250	300	350	400
L3	inch	8.5	10.0	12.0	14.0	20.0	26.0	31.0	36.0	39.0	43.0
	mm	216	254	305	356	508	660	787	914	991	1092
L2	inch	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88
	mm	371	422	384	460	613	740	841	968	1038	1140
L1	inch	14.5	16.5	15.0	18.0	24.0	29.0	33.0	38.0	40.5	44.5
	mm	368	419	381	457	610	737	838	965	1029	1130
H	inch	24.4	25.3	28.4	33.5	48.2	53.1	61.0	68.9	78.7	90.9
	mm	619	641	721	850	1225	1350	1550	1750	2000	2310
W	inch	15.7	15.7	15.7	19.7	24.0	24.0	24.0	24.0	29.9	29.9
	mm	400	400	400	500	610	610	610	610	760	760
L	inch	-	-	-	-	20.2	17.0	20.2	20.2	22.3	22.3
	mm	-	-	-	-	512	432	512	512	567	567
WEIGHT	LB	176.4	242.6	231.5	374.9	926.1	2205.0	3792.6	5071.5	7386.8	8820.0
	Kg	80	110	105	170	420	1000	1720	2300	3350	4000

CAST STEEL / PRESSURE SEAL BONNET

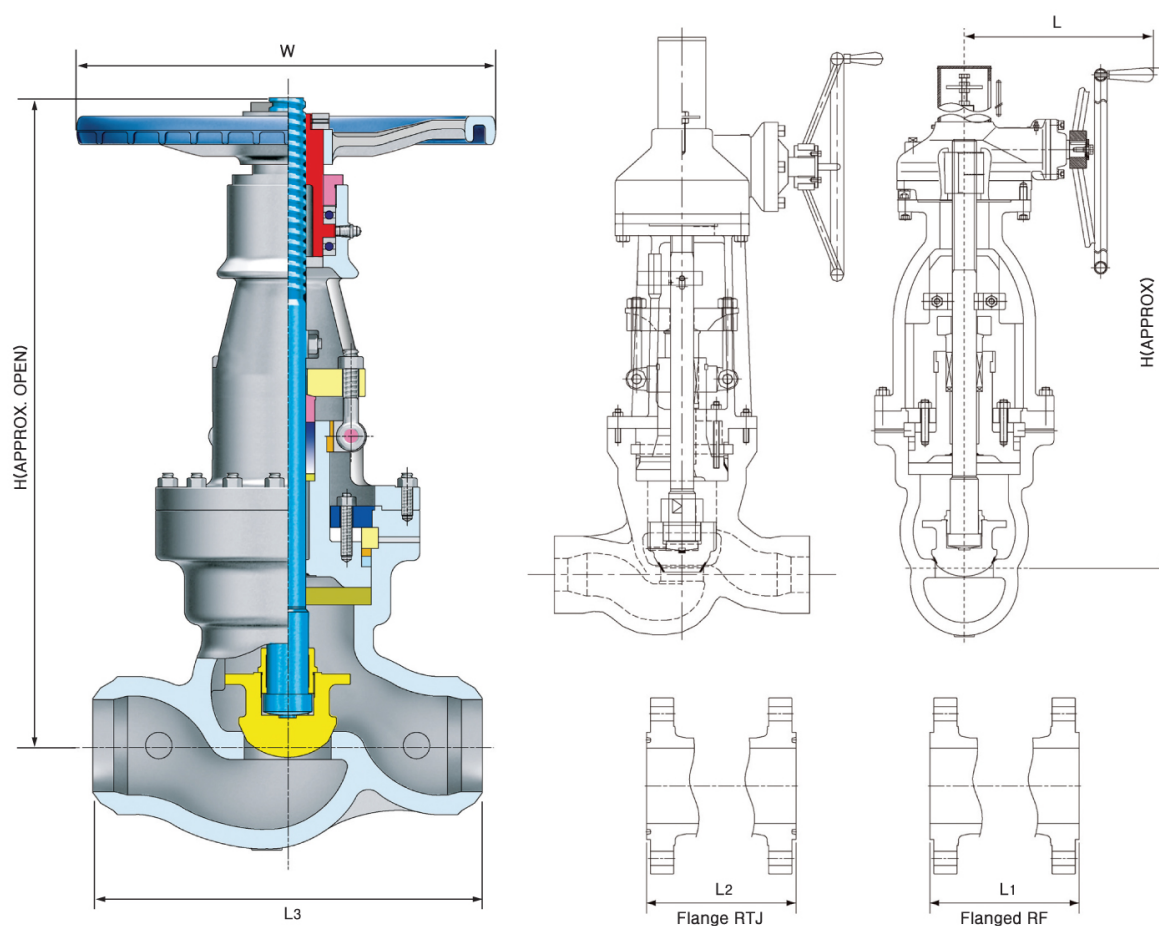
ASME CLASS 1500LB



VALVE SIZE	inch	2	2 1/2	3	4	6	8	10	12	14
	mm	50	65	80	100	150	200	250	300	350
L3	inch	8.5	10.0	12.0	16.0	22.0	28.0	34.0	39.0	42.0
	mm	216	254	305	406	559	711	864	991	1067
L2	inch	14.62	16.62	18.62	21.62	28.0	33.13	39.38	45.12	50.25
	mm	371	422	473	549	711	842	1000	1146	1276
L1	inch	14.5	16.5	18.5	21.5	27.75	32.75	39.0	44.5	49.5
	mm	368	419	470	546	705	832	991	1130	1257
H	inch	24.4	25.3	32.9	33.7	48.4	70.9	78.7	91.0	105.9
	mm	619	641	835	857	1230	1800	2000	2311	2691
W	inch	15.7	15.7	19.7	19.7	24.0	24.0	29.9	29.9	29.9
	mm	400	400	500	500	610	610	760	760	760
L	inch	-	-	-	-	20.2	20.2	20.2	20.2	22.3
	mm	-	-	-	-	512	512	512	512	567
WEIGHT	LB	176.4	242.6	299.9	496.1	1433.3	3704.4	5909.4	7497	9481.5
	Kg	80	110	136	225	650	1680	2680	3400	4300

CAST STEEL / PRESSURE SEAL BONNET

ASME CLASS 2500LB



VALVE SIZE	inch	2	2 1/2	3	4	6	8	10	12
	mm	50	65	80	100	150	200	250	300
L3	inch	11.0	13.0	14.5	18.0	24.0	30.0	36.0	41.0
	mm	279	330	368	457	610	762	914	1041
L2	inch	17.87	20.25	23.0	26.88	36.5	40.87	50.88	56.88
	mm	454	514	584	683	927	1038	1292	1445
L1	inch	17.75	20.0	22.75	26.5	36.0	40.25	50.0	56.0
	mm	451	508	578	673	914	1022	1270	1422
H	inch	24.3	30.7	31.5	51.2	53.9	85.0	100.0	106.0
	mm	616	781	800	1300	1370	2160	2540	2692
W	inch	15.7	19.7	19.7	24.0	24.0	29.9	29.9	29.9
	mm	400	500	500	610	610	760	760	760
L	inch	-	-	-	20.2	17.0	22.3	22.3	22.3
	mm	-	-	-	512	432	567	567	567
WEIGHT	LB	220.5	341.8	463.1	1102.5	2756.3	5292.0	7276.5	9261.0
	Kg	100	155	210	500	1250	2400	3300	4200