

# Rising Stem Ball Valves

## Carbon & Stainless Steel

**Sizes 2" - 24"**  
**Class 150 - 900**



### Design and Manufacturing Standards

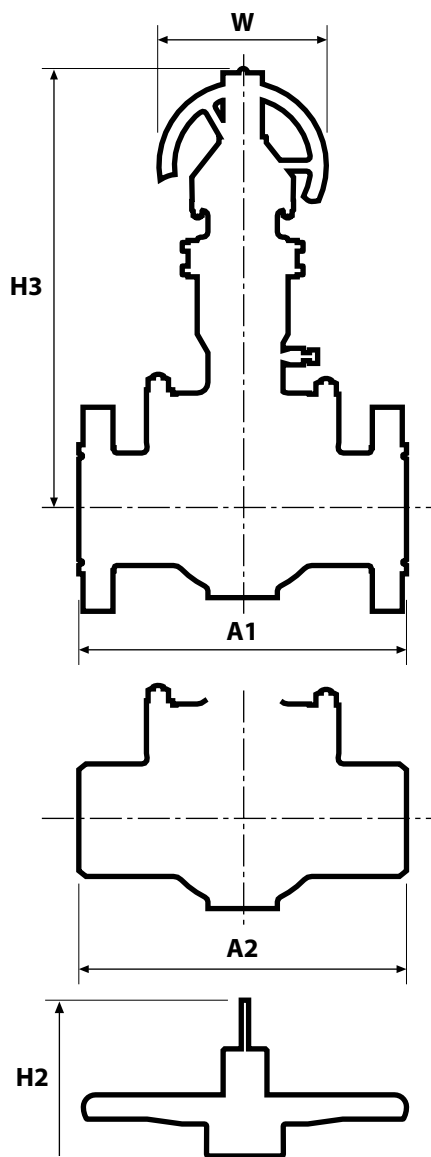
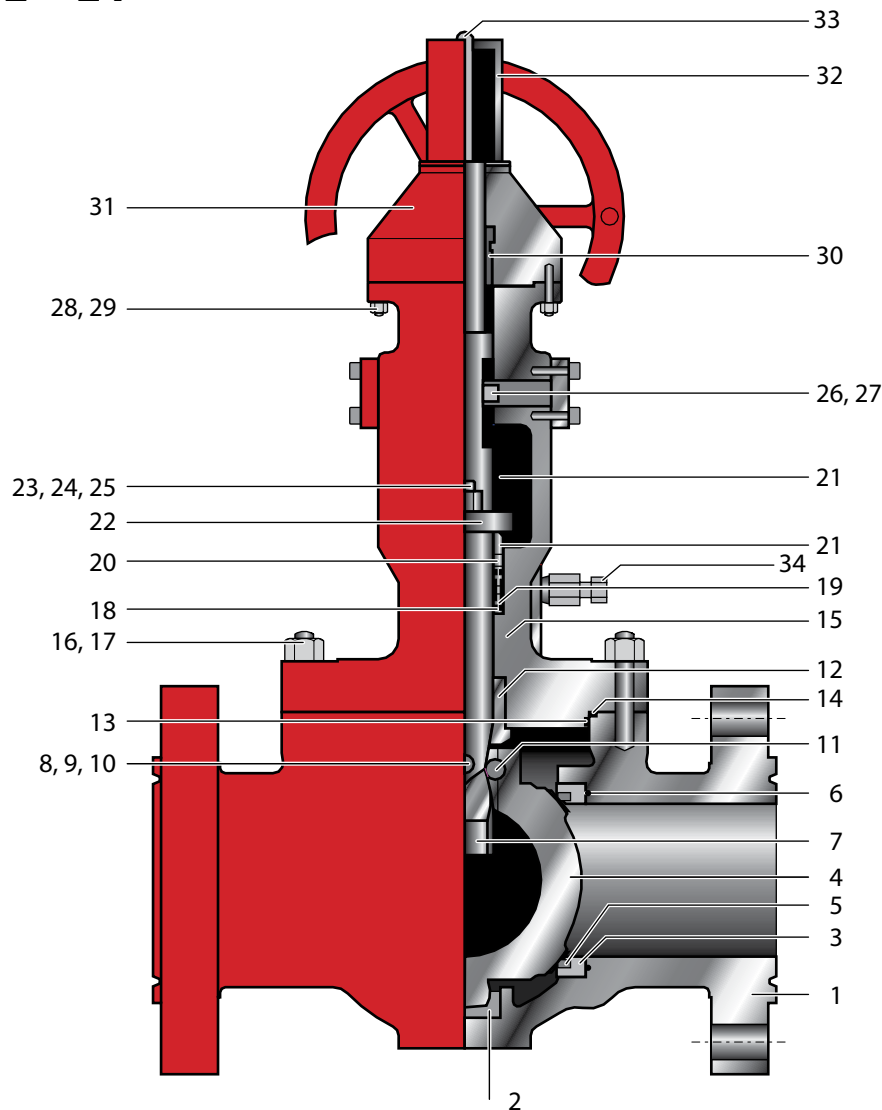
<b>Basic Design</b>	<b>API 6D</b>
<b>Shell Wall Thickness</b>	<b>API 6D</b>
<b>Face to Face Dimension</b>	<b>API 6D</b>
<b>Flange End Dimension</b>	<b>ANSI B16.5 (1/2" TO 24") &amp; ANSI B16.47 (26" AND UP)</b>
<b>Butt-Weld End Dimension</b>	<b>ANSI B16.25</b>
<b>Inspection &amp; Testing</b>	<b>API 6D</b>
<b>Fire Safe Design</b>	<b>API 6FA/BS 6755</b>



Rising Stem Ball Valves

Class 150 - 900

2" - 24"



BILL OF MATERIAL

NO	NAME OF PART	MATERIAL	NO	NAME OF PART	MATERIAL
1	BODY	A216-WCB	18	O-RING	VITON
2	SLEEVE	A102 F304	19	PACKING WASHER	A276 410
3	SEAT	F316	20	ANTI-FIRE RING	GRAPHITE + 304
4	BALL	A105 + 316	21	PACKING BUSHING	A276 410
5	SEAT RING	PTFE	22	PACKING GLAND	A216-WCB
6	O-RING	VITON	23	SWING BOLT	AISI 1035
7	STEM	F316 + N	24	PIN	AISI 1035
8	GLAND	A36	25	TIGHT PIN	AISI 1045
9	TIGHT BOLT	65Mn	26	BOLT	AISI 1045
10	NUT	AISI 1035	27	GUIDE PIN	17 - 4PH
11	SLIP PIN	17 - 4PH	28	BOLT	A193 B7
12	YOKE	A276 410	29	NUT	A194 2H
13	O-RING	VITON	30	STEM NUT	C95200
14	ANTI-FIRE RING	GRAPHITE + 304	31	DRIVE DEVICE	ASSEMBLY
15	BONNET	A216-WCB	32	COVER	A216 410
16	STUD BOLT	A193 B7	33	INDICATOR ROD	A36
17	NUT	A194 2H	34	INJECTION	ASSEMBLY

**CLASS 150 - RISING STEM BALL VALVES****DIMENSIONS**

VALVE	in	2	2.5	3	4	6	8	10	12	14	16	18	20	24
SIZE	mm	51	64	76	102	152	203	254	305	356	406	457	508	610
A1	in	7	7.5	8	12	15.5	18	26.5	30	27	35.5	34	36	42
(RF)	mm	178	190	203	306	394	457	673	762	686	902	864	914	1067
A2	in	8.5	9.5	11	12	18	20.5	22	25	30	33	36	39	45
(BW)	mm	216	241	283	305	457	521	559	635	762	838	914	991	1143
H2	in	15.2	15.5	15.8	20	27.2	31	39	46.5	49.4	61.6	64.4	67.1	74.1
(HW)	mm	385	393	402	510	690	785	995	1183	1254	1565	1637	1705	1883
H3	in	18.3	18.9	19.7	20	26.8	32.3	35.8	42.9	52.4	54.3	57	72.4	73.6
(GO)	mm	465	480	500	510	680	820	910	1090	1330	1380	1450	1840	1870
W1	in	8	12	12	12	16	20	24	24	26	26	28	28	32
(HW)	mm	200	300	300	300	400	500	600	600	650	650	700	700	800
W2	in	8	8	122	12	12	16	16	16	24	24	32	32	32
(GO)	mm	200	200	300	300	300	400	400	400	600	600	800	800	800
WGT	lb	59.1	67.2	80.7	121.0	228.1	360.5	542.9	779.6	995.5	1435.9	1799.5	2178.9	3846.7
	kg	27	31	37	55	104	164	247	354	453	653	818	990	1749

**CLASS 300 - RISING STEM BALL VALVES****DIMENSIONS**

VALVE	in	2	2.5	3	4	6	8	10	12	14	16	18	20	24
SIZE	mm	51	64	76	102	152	203	254	305	356	406	457	508	610
A1	in	8.5	9.5	11	14.5	20	23.33	26.5	30	32.5	39	36	39	45
(RF)	mm	216	241	283	368	508	594	673	762	826	991	914	991	1143
A2	in	8.5	9.5	11	12	18	20.5	22	25	30	33	36	39	45
(BW)	mm	216	241	283	305	457	521	559	635	762	838	914	991	1143
H2	in	15.2	15.5	15.8	20	27.2	31	39	46.5	49.4	61.6	64.4	67.1	74.1
(HW)	mm	385	393	402	510	690	785	995	1183	1254	1565	1637	1705	1883
H3	in	18.3	18.9	19.7	20	26.8	32.3	35.8	42.9	52.4	54.3	57	72.4	73.6
(GO)	mm	465	480	500	510	680	820	910	1090	1330	1380	1450	1840	1870
W1	in	8	12	12	12	16	20	24	24	26	26	28	28	32
(HW)	mm	200	300	300	300	400	500	600	600	650	650	700	700	800
W2	in	8	8	122	12	12	16	16	16	24	24	32	32	32
(GO)	mm	200	200	300	300	300	400	400	400	600	600	800	800	800
WGT	lb	77.9	107.6	129.1	199.1	381.9	591.8	879.6	1334.7	1866.6	2674.4	3513.6	4159.0	6348.9
	kg	35	49	59	91	174	269	400	607	848	1216	1597	1890	2886

**CLASS 600 - RISING STEM BALL VALVES****DIMENSIONS**

VALVE SIZE	in	2	2.5	3	4	6	8	10	12	14	16	18	20	24
	mm	51	64	76	102	152	203	254	305	356	406	457	508	610
A1 (RF)	in	11.5	13	14	17	22	26	31	33	35	39	43	47	55
	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
A2 (BW)	in	11.5	13	14	17	22	26	31	33	35	39	43	47	55
	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
H2 (HW)	in	17.0	18.3	20.3	22.5	30.4	38	48.2	53.1	58.6	62.6	67.7	71	76.6
	mm	430	465	515	572	773	967	1225	1350	1490	1590	1720	1805	1945
H3 (GO)	in	19.7	21	22.6	24.6	31.1	35.4	42.9	53.1	58.6	64.5	68.5	76	78.9
	mm	501	535	575	625	790	900	1090	1350	1490	1640	1740	1930	2005
W1 (HW)	in	12	16	20	24	24	26	26	28	28	30	30	32	32
	mm	300	400	500	600	600	650	650	700	700	750	750	800	800
W2 (GO)	in	12	12	12	16	16	16	24	24	24	32	32	32	32
	mm	300	300	300	400	400	400	600	600	600	800	800	800	800
WGT	lb	115.7	161.4	188.4	360.5	766.2	1205.4	1828.8	2871.1	3459.9	4952.0	6954.0	8360.7	12611.1
	kg	53	73	86	164	348	548	831	1306	1573	2251	3161	3800	5732

**CLASS 900 - RISING STEM BALL VALVES****DIMENSIONS**

VALVE SIZE	in	2	2.5	3	4	6	8	10	12	14	16	18	20
	mm	51	64	76	102	152	203	254	305	356	406	457	508
A1 (RF)	in	14.5	16.5	15	18	24	29	33	38	40.5	44.5	48	52
	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321
A2 (BW)	in	14.5	16.5	15	18	24	29	33	38	40.5	44.5	48	52
	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321
H2 (HW)	in	18.9	19.7	22	22.6	30.7	38.6	46.1	52.4	59.8	68.1	72.4	75.6
	mm	480	500	560	575	780	980	1170	1330	1520	1730	1840	1920
H3 (GO)	in	22	23.2	24	27.2	27.8	36.6	44.5	52.4	58.3	67.3	75.6	81.9
	mm	560	590	610	690	705	930	1130	1330	1480	1710	1920	2080
W1 (HW)	in	12	12	14	16	18	20	22	22	24	26	28	32
	mm	300	300	350	400	450	500	550	550	600	650	700	800
W2 (GO)	in	12	12	12	16	16	24	24	32	32	32	32	32
	mm	300	300	300	400	400	600	600	800	800	800	800	800
WGT	lb	220.8	417.2	444.1	468.4	1218.8	2098.4	3357.4	4148.0	5972.0	7460.3	10410.7	19637.7
	kg	100	190	202	213	554	954	1526	1885	2716	3391	4732	8926