



Calvary Valve, Inc

Cast Steel Gate Valves

CAST STEEL GATE VALVES - Bolted Bonnet - API 600/B16.34

Products: Gate Valve

Size Range: ½" to 24"

Pressure Class: 150, 300, 600, 900, 1500, and 2500

Materials: WCB, WC6, WC9, C5, C12, C12A, LCC, LCB,

Trims Available: Common types of trim that Calvary manufactures include API Trim Numbers #1, #2 (304SS), #3, #4, #5 (Full Stellite), #6, #7, #8 (Half Stellite), #8A, #9 (Monel), #10 (316SS), #11 (Monel/Stellite), #12 (316SS / Stellite), #13, #14, #15, #16, #17, #18, NACE. The Calvary Valve Company routinely manufactures special (custom) trim configurations per our customer's request.

Emergency Service is available 24 hours a day, seven days a week.



Calvary Valve Inc.
(903) 729-0485

CAST STEEL GATE VALVE

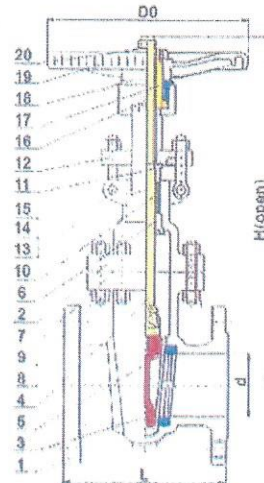
150Lb

Applicable standards:

STEEL GATE VALVES, API 600/API 6D
STEEL GATE VALVES, ISO 10434/ISO 14313
STEEL VALVES, ASME B 16.34
FACE TO FACE, ASME B 16.10
END FLANGES, ASME B 16.5
BUTTWELDING ENDS, ASME B 16.25
INSPECTION AND TEST, API 598/API 6D

Design description:

FULL PORT DESIGN
OS & Y, OUTSIDE SCREW AND YOKE
BB, BOLTED BONNET
FLEXIBLE WEDGE, FULLY GUIDED
CHOICE OF SOLID OR SPLIT WEDGE
RENEWABLE SEAT RINGS
FORGED T-HEAD STEM
RISING STEM AND NON-RISING HANDWHEEL
FLANGED OR BUTTWELDING ENDS
AVAILABLE WITH BG OPERATOR



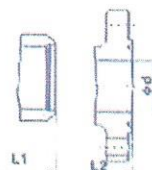
NPS ≥ 1 1/2



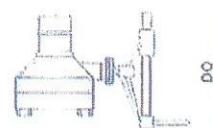
For NPS 10 & Larger



Yoke For NPS 10 & Larger



RTJ End



Materials of parts

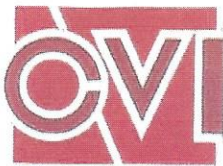
No	Part Name	ASTM Material		
		Carbon Steel	1 1/4 Cr-1/2 Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Wedge	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Stem	A182-F8a	CR-MC-V	A182-F8a
5	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
6	Stem Back Seat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Spiral Wound (Graphite+304)		
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing	Graphite		
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Grease Fitting	Brass+Steel		
17	Yoke Sleeve	Aluminum-Bronze		
18	Yoke Sleeve Jam Nut	Carbon Steel		
19	Handwheel	Malleable Iron		
20	Handwheel Nut	Carbon Steel		

Note: 1) Ductile Ni-Resist optional

2) Wedge and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

Dimensions data

NPS	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	40	42	48	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200	mm
ANSI Class 150Lb																						
L (RF)	7.00	7.50	8.00	9.00	10.50	11.50	13.00	14.00	15.00	16.00	17.00	18.00	20.00	22.00	24.00	24.00	26.00	28.00	32.00	32.00	42.00	in
	178	191	203	229	267	292	330	356	381	406	432	457	508	559	610	610	711	711	813	813	1067	mm
L1 (BW)	8.5	9.50	11.12	12.00	15.88	16.50	18.00	19.75	22.50	24.00	26.00	28.00	32.00	34.00	36.00	36.00	38.00	40.00	42.00	45.00	53.97	in
	216	241	283	305	403	419	457	502	572	610	660	711	813	864	914	914	965	1016	1067	1143	1371	mm
L2 (RTJ)	7.48	7.99	8.50	9.48	10.98	12.00	13.50	14.48	15.51	16.49	17.51	18.50	20.51	-	-	24.48	-	28.50	-	-	-	in
	190	203	216	241	279	305	343	368	394	419	445	470	521	-	-	622	-	724	-	-	-	mm
H (OPEN)	15.25	17.00	18.88	23.00	30.50	37.62	45.50	53.12	59.38	67.00	74.50	83.50	98.25	110.50	116.50	124.00	129.00	148.60	130.00	136.96	161.70	in
	386	434	480	584	765	956	1149	1350	1508	1703	1892	2119	2500	2806	2960	3150	3280	3720	3302	3479	3962	mm
(d)	50	63	76	100	150	200	250	300	336	387	438	488	590	641	692	743	781	876	-	-	-	mm
D0	8	8	10	12	12	14	16	18	20	22	24	26	29	29	32	32	38	40	40.15	40.15	40.15	in
	200	200	250	300	300	350	400	450	500	550	600	640	720	720	800	800	950	1000	1020	1020	1020	mm
WT (kg)	18	25	32	50	77	121	178	265	363	463	621	792	1190	1521	1838	2261	2490	3310	4650	5100	6500	RF
	15	18	26	41	69	108	156	248	330	424	587	752	1144	1570	1900	2310	2540	3380	-	-	-	BW
Toqure	13	13	15	27	36	63	84	131	151	235	285	341	602	-	-	1079	-	1497	-	-	-	mm



Calvary Valve Inc.
(903) 729-0485

CAST STEEL GATE VALVE

300lb

Applicable standards:

STEEL GATE VALVES, API 600/API 6D
STEEL GATE VALVES, ISO 10434/ISO 14313
STEEL VALVES, ASME B 16.34
FACE TO FACE, ASME B 16.10
END FLANGES, ASME B 16.5
BUTTWELDING ENDS, ASME B 16.26
INSPECTION AND TEST, API 598/API 6D

Design description:

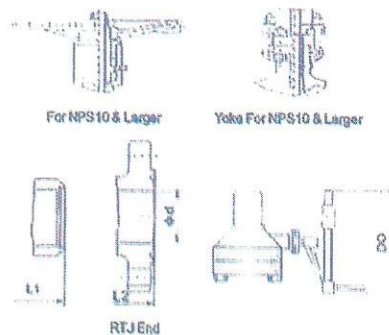
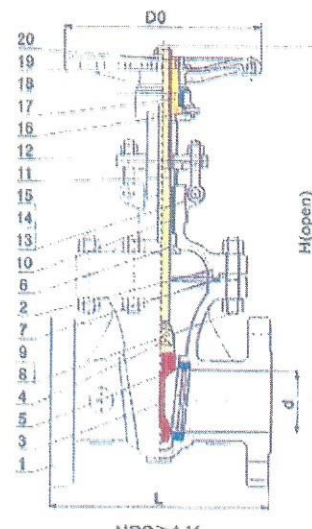
FULL PORT DESIGN
OS & Y, OUTSIDE SCREW AND YOKE
BB, BOLTED BONNET
FLEXIBLE WEDGE, FULLY GUIDED
CHOICE OF SOLID OR SPLIT WEDGE
RENEWABLE SEAT RINGS
FORGED T-HEAD STEM
RISING STEM AND NON-RISING HANDWHEEL
FLANGED OR BUTTWELDING ENDS
AVAILABLE WITH BG OPERATOR

Materials of parts

No	Part Name	ASTM Material		
		Carbon Steel	1 1/4Cr-1/2Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Wedge	A216-WCB+CR13	A217-WC9+HF	A352-LCB+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
6	Stem Back Seat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Spiral Wound (Graphite+304)		
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing	Graphite		
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Grease Fitting	Brass+Steel		
17	Yoke sleeve	Aluminum-Bronze"		
18	Yoke sleeve Jam Nut	Carbon Steel		
19	Handwheel	Malleable Iron		
20	Handwheel Nut	Carbon Steel		

Note: 1) Ductile Ni-Resist optional

2) Wedge and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

NPS	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	40	42	48	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200	mm
ANSI Class 300Lb																						
LL1 (RF/BW)	8.50	9.50	11.12	12.00	15.88	16.50	18.00	19.75	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	68.00	76.98	80.00	90.00	in
	216	241	283	305	403	419	457	502	762	838	914	991	1143	1245	1346	1397	1524	1727	1955	2032	2286	mm
L2 (RTJ)	9.12	10.12	11.75	12.82	16.50	17.12	18.62	20.38	30.62	33.62	36.62	39.75	45.88	50.00	54.00	56.00	61.12	69.12	-	-	-	in
	232	257	298	321	419	435	473	518	778	854	930	1010	1165	1270	1372	1422	1553	1756	-	-	-	mm
H (OPEN)	16.12	17.88	20.00	24.00	31.75	59.38	47.62	55.75	62.25	67.88	77.12	86.38	102.00	117.00	122.00	128.00	130.00	152.00	146.18	154.17	177.20	in
	410	453	509	612	805	1000	1210	1415	1580	1725	1960	2195	2590	2975	3100	3200	3300	3880	3713	3916	4501	mm
(d)	50	63	76	100	150	200	250	300	336	387	431	482	584	635	686	737	781	876	-	-	-	mm
	8	8	10	12	14	16	18	20	22	24	26	29	29	32	32	38	40	28.34	28.34	28.34	28.34	in
D0	200	200	250	300	350	400	450	500	550	550	600	640	720	720	800	800	950	1000	720	720	720	mm
WT (kg)	23	36	50	71	144	209	322	482	683	950	1145	1635	2660	3090	3310	3695	3720	3685	8160	9750	13050	RF/RTJ
Toqure	16	18	21	42	86	128	216	289	423	637	649	1009	1451	-	-	3140	-	4239	-	-	-	mm



Calvary Valve Inc.
(903) 729-0485

CAST STEEL GATE VALVE

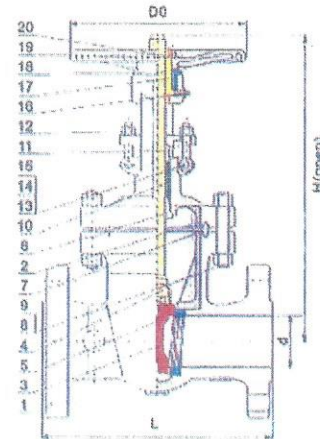
600Lb

Applicable standards:

STEEL GATE VALVES, API 600/API 6D
STEEL GATE VALVES, ISO 10434/ISO 14313
STEEL VALVES, ASME B 16.34
FACE TO FACE, ASME B 16.10
END FLANGES, ASME B 16.5
BUTTWELDING ENDS, ASME B 16.25
INSPECTION AND TEST, API 598/API 6D

Design description:

FULL PORT DESIGN
OS & Y, OUTSIDE SCREW AND YOKE
BB, BOLTED BONNET
FLEXIBLE WEDGE, FULLY GUIDED
CHOICE OF SOLID OR SPLIT WEDGE
RENEWABLE SEAT RINGS
FORGED T-HEAD STEM
RISING STEM AND NON-RISING HANDWHEEL
FLANGED OR BUTTWELDING ENDS
AVAILABLE WITH BG OPERATOR





Calvary Valve Inc.
(903) 729-0485

CAST STEEL GATE VALVE 900Lb

Applicable standards:

STEEL GATE VALVES, API 600/API 6D
STEEL GATE VALVES, ISO 10434/ISO 14313
STEEL VALVES, ASME B 16.34
FACE TO FACE, ASME B 16.10
END FLANGES, ASME B 16.5
BUTTWELDING ENDS, ASME B 16.25
INSPECTION AND TEST, API 598/API 6D

Design description:

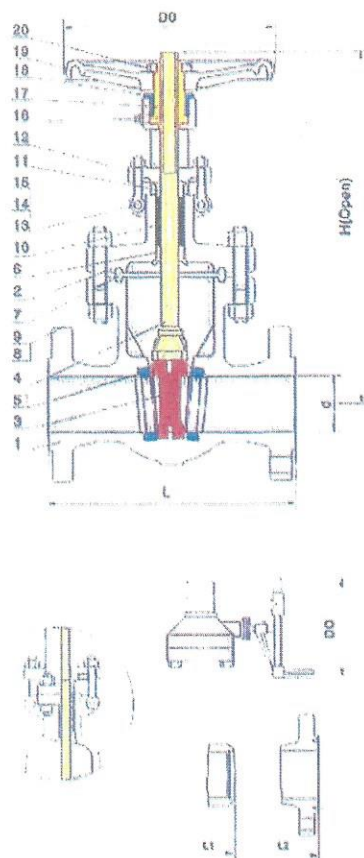
FULL PORT DESIGN
OS & Y, OUTSIDE SCREW AND YOKE
BB, BOLTED BONNET
FLEXIBLE WEDGE, FULLY GUIDED
CHOICE OF SOLID OR SPLIT WEDGE
RENEWABLE SEAT RINGS
FORGED T-HEAD STEM
RISING STEM AND NON-RISING HANDWHEEL
FLANGED OR BUTTWELDING ENDS
AVAILABLE WITH BG OPERATOR

Materials of parts

No	Part Name	ASTM Material		
		Carbon Steel	1 1/4Cr-1/2Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Wedge	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat Ring	A105+CR13	A162-F11+HF	A350-LF2+CR13
6	Stem Back Seat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Steel Ring	304SS Ring	Steel Ring
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing		Graphite	
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Grease Fitting		Brass+Steel	
17	Yokeleave		Aluminum-Bronze ¹	
18	Yokeleave Jam Nut		Carbon Steel	
19	Handwheel		Malleable Iron	
20	Handwheel Nut		Carbon Steel	

Note: 1) Ductile NI-Resist optional

2) Wedge and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

NPS	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	mm
ANSI Class 900Lb														
L/L1 (RF/BW)	14.50	16.50	15.50	18.00	24.00	29.00	33.00	38.00	40.50	44.50	48.00	52.00	61.00	in
	368	419	391	457	610	737	838	965	1029	1130	1219	1321	1549	mm
L2 (RTJ)	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	48.60	52.60	61.75	in
	371	422	384	460	613	740	841	968	1038	1140	1232	1334	1568	mm
H (OPEN)	19.62	21.60	22.50	26.62	35.60	43.60	53.00	60.00	74.88	81.00	87.00	101.00	104.00	in
	498	547	573	678	900	1103	1346	1625	1900	2055	2215	2565	2640	mm
(d)	47	57	72	98	146	190	238	282	311	355	400	444	533	mm
D0	10	10	12	18	20	24	26	29	32	32	38	38	40	in
	250	250	300	450	500	600	640	720	800	800	950	950	1000	mm
WT (kg)	74	131	101	172	335	640	1100	1600	2250	2850	3060	3935	4900	RF/RTJ
Boqure	54	105	70	135	260	515	920	1380	2010	2565	2485	3250	4065	BW
	39	56	64	118	243	427	783	1163	1331	-	-	-	-	mm



Calvary Valve Inc.
(903) 729-0485

CAST STEEL GATE VALVE 1500Lb

Applicable standards:

STEEL GATE VALVES, API 600/API 6D
STEEL GATE VALVES, ISO 10434/ISO 14313
STEEL VALVES, ASME B 16.34
FACE TO FACE, ASME B 16.10
END FLANGES, ASME B 16.5
BUTTWELDING ENDS, ASME B 16.25
INSPECTION AND TEST, API 598/API 6D

Design description:

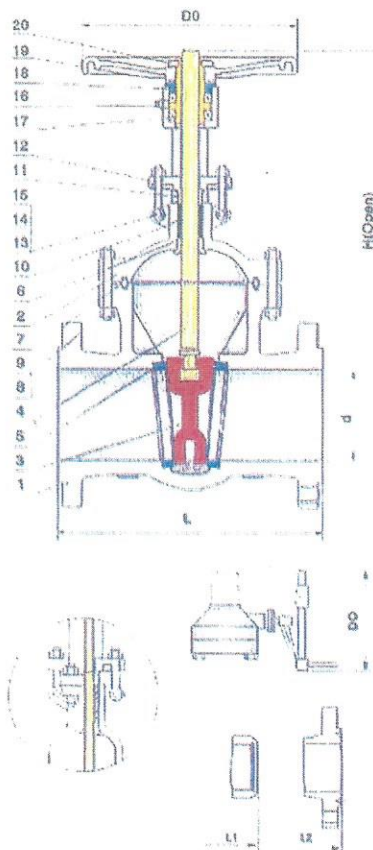
FULL PORT DESIGN
OS & Y, OUTSIDE SCREW AND YOKE
BB, BOLTED BONNET
FLEXIBLE WEDGE, FULLY GUIDED
CHOICE OF SOLID OR SPLIT WEDGE
RENEWABLE SEAT RINGS
FORGED T-HEAD STEM
RISING STEM AND NON-RISING HANDWHEEL
FLANGED OR BUTTWELDING ENDS
AVAILABLE WITH BG OPERATOR

Materials of parts

No	Part Name	ASTM Material		
		Carbon Steel	1 1/2Cr-1/2Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Wedge	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
6	Stem Back Seat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Steel Ring	304SS Ring	Steel Ring
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing		Graphite	
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Grease Fitting		Brass+Steel	
17	Yokesleeve		Aluminum-Bronze	
18	Yokesleeve Jam Nut		Carbon Steel	
19	Handwheel		Malleable Iron	
20	Handwheel Nut		Carbon Steel	

Note: 1) Ductile Ni-Resist optional

2) Wedge and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

NPS	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	mm
ANSI Class 1500Lb														
L1.1 (RF/BW)	14.50	16.50	18.50	21.50	27.75	32.75	39.00	44.50	49.50	54.50	60.50	65.50	76.50	in
	368	419	470	548	705	832	991	1130	1257	1384	1537	1664	1943	mm
L2 (RTJ)	15.50	16.62	18.62	21.62	28.00	33.12	39.38	45.12	50.25	55.38	61.38	66.38	77.62	in
	371	422	473	549	711	841	1000	1146	1276	1407	1559	1686	1972	mm
H (OPEN)	24.25	26.00	30.00	34.12	39.60	45.00	54.00	61.00	74.88	80.60	93.75	101.50	114.75	in
	615	658	760	868	1005	1145	1370	1550	1900	2050	2380	2580	2915	mm
(d)	47	57	69	92	136	177	222	263	288	330	371	415	498	mm
	10	12	18	20	24	18	18	24	24	24	24	24	24	in
D0	250	300	450	500	600	460	460	600	600	600	600	600	600	mm
WT (kg)	116	166	209	296	510	920	1910	3145	4100	6200	8965	13100	18660	RF/RTJ
Toque	105	150	188	265	412	760	1640	2755	3200	5300	8070	11790	14275	BW
	54	76	108	167	428	801	1268	2078	2392	-	-	-	-	mm



Calvary Valve Inc.
(903) 729-0485

CAST STEEL GATE VALVE 2500Lb

Applicable standards:

STEEL GATE VALVES, API 600/API 6D
STEEL GATE VALVES, ISO 10434/ISO 14313
STEEL VALVES, ASME B 16.34
FACE TO FACE, ASME B 16.10
END FLANGES, ASME B 16.5
BUTT WELDING ENDS, ASME B 16.25
INSPECTION AND TEST, API 598/API 6D

Design description:

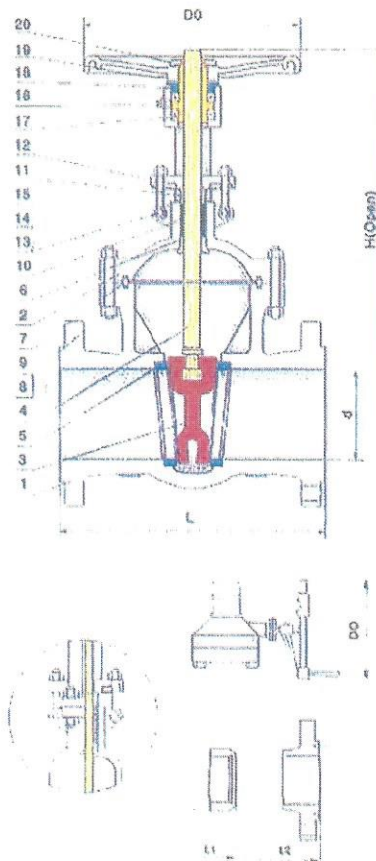
FULL PORT DESIGN
OS & Y, OUTSIDE SCREW AND YOKE
BB, BOLTED BONNET
FLEXIBLE WEDGE, FULLY GUIDED
CHOICE OF SOLID OR SPLIT WEDGE
RENEWABLE SEAT RINGS
FORGED T-HEAD STEM
RISING STEM AND NON-RISING HANDWHEEL
FLANGED OR BUTT WELDING ENDS
AVAILABLE WITH BG OPERATOR

Materials of parts

No	Part Name	ASTM Material		
		Carbon Steel	1 1/4 Cr-1/2 Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Wedge	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
6	Stem Back Seat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Steel Ring	304SS Ring	Steel Ring
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing		Graphite	
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Grease Fitting		Brass+Steel	
17	Yokesleeve		Aluminum-Bronze"	
18	Yokesleeve Jam Nut		Carbon Steel	
19	Handwheel		Malleable Iron	
20	Handwheel Nut		Carbon Steel	

Note: 1) Ductile NI-Resist optional

2) Wedge and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

NPS DN	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	in mm
ANSI Class 2500Lb									
L/L1 (RF/BW)	17.75 451	20.00 508	22.75 578	26.50 673	30.00 762	40.25 1022	50.00 1270	56.00 1422	in mm
L2 (RTJ)	17.88 454	20.50 514	23.00 584	26.88 683	36.50 927	40.88 1038	50.88 1292	56.88 1445	in mm
H (OPEN)	24.88 631	29.00 736	35.00 890	41.50 1055	57.00 1450	63.38 1610	81.75 2075	89.75 2280	in mm
(d)	38 12	47 18	57 20	72 20	111 24	146 24	184 24	218 24	in mm
D0	300 155	450 210	500 310	500 580	600 1600	600 2450	600 4570	600 7150	in mm
WT (kg)	124 124	160 160	245 245	460 460	1310 1310	2010 2010	3800 3800	6000 6000	RF/RTJ BW



Calvary Valve Inc.
(903) 729-0485

PRESSURE SEAL CAST STEEL GATE VALVE 900Lb

Applicable standards:

STEEL GATE VALVES, API 600/API 6D
STEEL GATE VALVES, ISO 10434/ISO 14313
STEEL VALVES, ASME B 16.34
FACE TO FACE, ASME B 16.10
END FLANGES, ASME B 16.5
BUTTWELDING ENDS, ASME B 16.25
INSPECTION AND TEST, API 598/API 6D

Design description:

PSB, PRESSURE SEAL BONNET
FLEXIBLE WEDGE, FULLY GUIDED
CHOICE OF SOLID OR SPLIT WEDGE
RENEWABLE SEAT RINGS
FORGED T-HEAD STEM
RISING STEM AND NON-RISING HANDWHEEL
FLANGED OR BUTTWELDING ENDS
AVAILABLE WITH BG OPERATOR

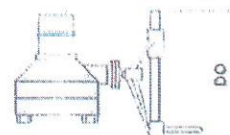
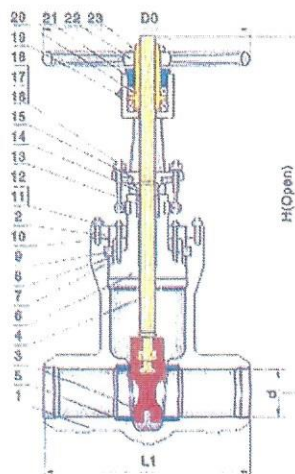
Materials of parts

No	Part Name	Carbon Steel	ASTM Material 1 1/4Cr-1/2Mo	18Cr-9Ni-2Mo
1	Body	A216-WCB	A217-WC8	A351-CF8M
2	Yoke	A216-WCB	A217-WC8	A351-CF8M
3	Wedge	A216-WCB+HF	A217-WC8+HF	A351-CF8M+HF
4	Stem	A182-F6a	CR-MO-V	A182-316
5	Seat Ring	A105+HF	A182-F11+HF	A240-316+HF
6	Bonnet	A105	A182-F11	A240-316
7	Bonnet Gasket ¹		304+Graphite	
8	Adapter Ring	Carbon Steel	A276-420	A276-316
9	Retainer	Carbon Steel	A276-420	A276-316
10	Yoke Cap	Carbon Steel	Alloy Steel	Stainless Steel
11	Bonnet Stud	A193-B7	A193-B16	A193-B8M
12	Bonnet Stud Nut	A194-2H	A194-7	A194-8M
13	Packing		Graphite	
14	Gland	A276-420	A276-304	A276-316L
15	Gland Flange	A216-WCB	A217-WC8	A351-CF8M
16	Eyebolt Pin	Carbon Steel	A276-420	A276-316
17	Eyebolt	Carbon Steel	A193-B7	A193-B8
18	Eyebolt Nut	Carbon Steel	A194-2H	A194-8
19	Grease Fitting		Brass+Steel	
20	Yokesleeve		Aluminum-Bronze ²	
21	Yokesleeve Jam Nut		Carbon Steel	
22	Handwheel		Malleable iron	
23	Handwheel Nut		Carbon Steel	

Note: 1) Graphite optional

2) Ductile NI-Resist optional

3) Wedge and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

NPS	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	32	34	36	In
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	800	850	900	mm
ANSI Class 900Lb																			
L1 (BW)	8.50	10.00	12.00	14.00	20.00	26.00	31.00	36.00	39.00	43.00	47.99	52.00	60.98	61.96	65.47	70.00	72.99	80.00	In
	216	254	305	356	508	660	787	914	991	1092	1219	1321	1549	1574	1663	1778	1854	2032	mm
L (RF)	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.50	44.50	47.99	52.00	60.98	61.96	65.47	70.00	72.99	80.00	In
	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	1574	1663	1778	1854	2032	mm
L2 (RTJ)	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	48.50	52.51	61.73	-	-	-	-	-	In
	371	422	384	460	613	740	841	968	1038	1140	1232	1334	1568	-	-	-	-	-	mm
H (OPEN)	17.62	17.62	19.5	22.88	32.62	67.62	45.5	53.12	59	70.5	93.74	96.49	116.98	131.96	145.47	157.48	163.97	180.98	In
	448	448	496	580	830	956	1155	1350	1500	1790	2381	2451	2971	3352	3695	4000	4165	4597	mm
DO	14	14	14	14	14	18	24	28	34	34	29.92	29.92	35.43	35.43	35.43	35.43	35.43	35.43	In
	350	350	350	350	450	600	700	850	850	850	760	760	900	900	900	900	900	900	mm
WT (kg)	39	39	48	69	158	289	482	710	998	1390	2340	2800	3420	4270	5454	7392	9042	10874	BW
	69	69	72	110	253	430	710	1025	1452	1980	2750	3400	4400	5500	6900	9000	11000	13500	RF/RT



Calvary Valve Inc.
(903) 729-0485

PRESSURE SEAL CAST STEEL GATE VALVE 1500Lb

Applicable standards:

STEEL GATE VALVES, API 600/API 6D
STEEL GATE VALVES, ISO 10434/ISO 14313
STEEL VALVES, ASME B 16.34
FACE TO FACE, ASME B 16.10
END FLANGES, ASME B 16.5
BUTT WELDING ENDS, ASME B 16.25
INSPECTION AND TEST, API 598/API 6D

Design description:

PSB, PRESSURE SEAL BONNET
FLEXIBLE WEDGE, FULLY GUIDED
CHOICE OF SOLID OR SPLIT WEDGE
RENEWABLE SEAT RINGS
FORGED T-HEAD STEM
RISING STEM AND NON-RISING HANDWHEEL
FLANGED OR BUTT WELDING ENDS
AVAILABLE WITH BG OPERATOR

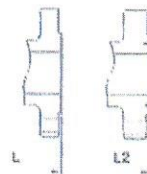
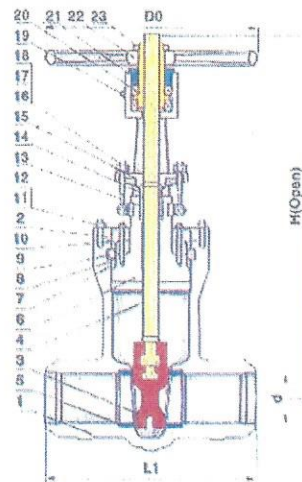
Materials of parts

No	Part Name	Carbon Steel	ASTM Material 1 1/2Cr-1/2Mo	18Cr-9Ni-2Mo
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Yoke	A216-WCB	A217-WC6	A351-CF8M
3	Wedge	A216-WCB+HF	A217-WC6+HF	A351-CF8M+HF
4	Stem	A182-F6a	CR-MO-V	A182-316
5	Seat Ring	A105+HF	A182-F11+HF	A240-316+HF
6	Bonnet	A105	A182-F11	A240-316
7	Bonnet Gasket ¹⁾		304+Graphite	
8	Adapter Ring	Carbon Steel	A276-420	A276-316
9	Retainer	Carbon Steel	A276-420	A276-316
10	Yoke Cap	Carbon Steel	Alloy Steel	Stainless Steel
11	Bonnet Stud	A193-B7	A193-B16	A193-B8M
12	Bonnet Stud Nut	A194-2H	A194-7	A194-8M
13	Packing		Graphite	
14	Gland	A276-420	A276-304	A276-316L
15	Gland Flange	A216-WCB	A217-WC6	A351-CF8M
16	Eyebolt Pin	Carbon Steel	A276-420	A276-316
17	Eyebolt	Carbon Steel	A193-B7	A193-B8
18	Eyebolt Nut	Carbon Steel	A194-2H	A194-8
19	Grease Fitting		Brass+Steel	
20	Yokesleeve		Aluminum-Bronze ²⁾	
21	Yokesleeve Jam Nut		Carbon Steel	
22	Handwheel		Malleable Iron	
23	Handwheel Nut		Carbon Steel	

Note: 1) Graphite optional

2) Ductile Ni-Resist optional

3) Wedge and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

NPS DN	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	26 650	28 700	32 800	34 850	36 900	In mm
ANSI Class 1500Lb																			
L1 (BW)	8.50	10.00	12.00	16.00	22.00	28.00	34.00	39.00	42.00	47.00	52.99	57.99	76.49	80.00	86.96	90.00	95.00	100.98	In
L	216	254	305	406	559	711	864	991	1067	1194	1346	1473	1943	2033	2209	2286	2413	2565	mm
L (RF)	14.50	16.50	18.50	21.50	27.75	32.75	39.00	44.50	49.50	54.50	60.51	65.51	76.49	80.00	86.96	90.00	95.00	100.98	In
L2	368	419	470	646	705	832	991	1130	1257	1384	1537	1664	1943	2033	2209	2286	2413	2565	mm
L2 (RTJ)	14.62	16.62	18.62	21.62	28.00	33.12	39.38	45.12	50.25	55.38	61.37	66.37	77.63	-	-	-	-	-	In
H	371	422	473	649	711	841	1000	1146	1276	1407	1559	1686	1972	-	-	-	-	-	mm
H (OPEN)	17.62	17.62	21.62	25.25	33.5	36.62	46.5	62.25	70.5	78	86.96	93.97	110.00	121.96	133.97	147.48	120.00	127.99	In
D0	448	448	550	640	850	980	1180	1580	1790	1980	2209	2387	2794	3098	3403	3746	3048	3251	mm
WT	14	14	14	18	24	28	34	34	34	34	33.85	33.85	33.85	40.15	40.15	40.15	-	-	In
(kg)	350	350	350	450	600	700	850	850	850	850	860	880	860	1020	1020	1020	-	-	mm
	39	45	55	77	175	323	540	795	1115	1558	4000	4800	7500	8900	10000	13500	16000	18900	BW
	69	80	95	123	283	481	795	1148	1626	2195	5225	6310	9050	9934	11174	14852	17443	21246	RF/RTJ

Calvary Valve Inc.
(903) 729-0485

**PRESSURE SEAL
CAST STEEL GATE VALVE
2500lb**

Applicable standards:

STEEL GATE VALVES, API 600/API 6D
STEEL GATE VALVES, ISO 10434/ISO 14313
STEEL VALVES, ASME B 16.34
FACE TO FACE, ASME B 16.10
END FLANGES, ASME B 16.5
BUTT WELDING ENDS, ASME B 16.25
INSPECTION AND TEST, API 598/API 6D

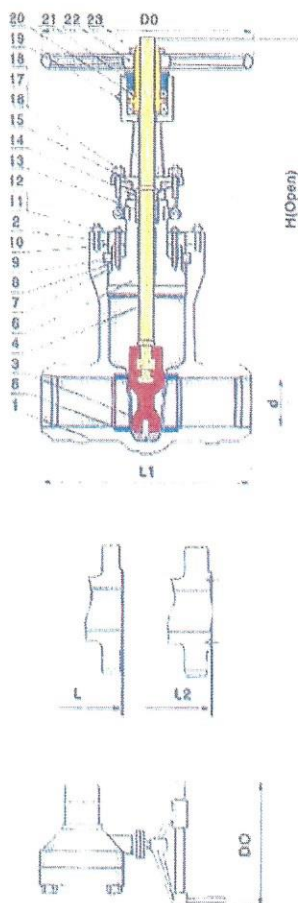
Design description:

PSB, PRESSURE SEAL BONNET
FLEXIBLE WEDGE, FULLY GUIDED
CHOICE OF SOLID OR SPLIT WEDGE
RENEWABLE SEAT RINGS
FORGED T-HEAD STEM
RISING STEM AND NON-RISING HANDWHEEL
FLANGED OR BUTTWELDING ENDS
AVAILABLE WITH BG OPERATOR

Materials of parts

No	Part Name	Carbon Steel	ASTM Material 1 $\frac{1}{2}$ %Cr- $\frac{1}{2}$ %Mo	18Cr-9Ni-2Mo
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Yoke	A216-WCB	A217-WC6	A351-CF8M
3	Wedge	A216-WCB+HF	A217-WC6+HF	A351-CF8M+HF
4	Stem	A182-F6a	CR-MO-V	A182-316
5	Seal Ring	A105+HF	A182-F11+HF	A240-316+HF
6	Bonnet	A105	A182-F11	A240-316
7	Bonnet Gasket ¹⁾		304+Graphite	
8	Adaptor Ring	Carbon Steel	A276-420	A276-316
9	Retainer	Carbon Steel	A276-420	A276-316
10	Yoke Cap	Carbon Steel	Alloy Steel	Stainless Steel
11	Bonnet Stud	A193-B7	A193-B16	A193-B8M
12	Bonnet Stud Nut	A194-2H	A194-7	A194-8M
13	Packing		Graphite	
14	Gland	A276-420	A276-304	A276-316L
15	Gland Flange	A216-WCB	A217-WC6	A351-CF8M
16	Eyebolt Pin	Carbon Steel	A276-420	A276-316
17	Eyebolt	Carbon Steel	A193-B7	A193-B8
18	Eyebolt Nut	Carbon Steel	A194-2H	A194-8
19	Grease Fitting		Brass+Steel	
20	Yokesleeve		Aluminum-Bronze ²⁾	
21	Yokesleeve Jam Nut		Carbon Steel	
22	Handwheel		Malleable Iron	
23	Handwheel Nut		Carbon Steel	

Note: 1). Graphite optional
2). Ductile Ni-Resist optional
3). Wedge and seal ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Dimensions data

[illegible]



Calvary Valve Inc.
(903) 729-0485

PRESSURE SEAL FORGED STEEL GATE VALVE 900lb/1500lb/2500lb

Technical Specification

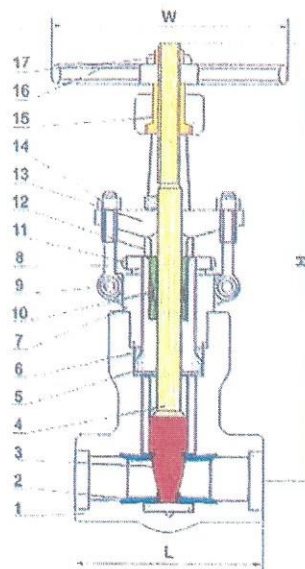
STEEL GATE VALVES, API 602
STEEL VALVES, ASME B16.34
END TO END, MANUFACTURER STANDARD
FACE TO FACE, FLANGED, ASME B 16.10
END FLANGES, ASME B16.5
BUTT WELDING ENDS, ASME B16.25
SOCKET-WELDING ENDS, ASME B16.11
SCREWED ENDS, ASME B 1.20.1
INSPECTION AND TEST, API 598

Design description:

OUTSIDE SCREW AND YOKE (OS&Y)
PRESSURE SEAL BONNET
SINGLE WEDGE, FULLY GUIDED
RENEWABLE SEAT RINGS
RISING STEM AND NON-RISING HANDWHEEL
SW, SOCKET-WELDING ENDS
SC, SCREWED ENDS
BW, BUTT WELDING ENDS
FLANGED ENDS

Form of Major Part Material

NO.	Part Name	CS to ASTM	AS to ASTM	SS to ASTM	
		Type A 105N	Type F22	Type F304(L)	Type F316(L)
1	Body	A105N	A182 F22	A182 F304(L)	A182 F316(L)
2	Seat Ring	A276 420	A276 304	A276 304(L)	A276 316(L)
3	Wedge	A182 F430+STL	A182 F304+STL	A182 F304(L)+STL	A182 F316(L)+STL
4	Stem	A182 F6a A276-410	A182 F22	A182 F304(L)	A182 F316(L)
5	From Seal Place	A105N	A182 F304	A182 F304(L)	F316(L)
6	From Packing Ring	F182 F304	A182 F304 F22	A276 304(L)	A276 316L
7	Bonnet	A105N	A182 F22	A182 F304(L)	A182 F316(L)
8	Gland Eyebolt	A193 B7	A193 B16	A193 B8	A193 B8M
9	Cylindrical Pin	A276 F420	A276 F420	A182 F304	A182 F304
10	Stem Packing	Graphite+304	Graphite+304	Graphite+316	Graphite+316
11	Promotes the Nut	A194 2H	A194 4	A194 8	A194 8M
12	Gland	A276 F420	A276 F420	A182 F304	A182 F304
13	Gland Flange	A105	F22	A182 F304	A182 F304
14	Gland Nut	A194 2H	A194 4	A194 8	A194 8M
15	Yoke Nut	A276-410	A276-410	A276 F410	A276 F410
16	Hand Wheel	A197	A197	A197	A197
17	Lock Nut	A194 2H	A194 4	A194 8	A194 8M



Class 900~2500 Main Outline Dimension & Weight
Pressure seal bonnet, outside screw stem & yoke (OS&Y).
Designs according to ASME B16.34

NPS	Class	3/8	1/2	3/4	1	1 1/4	1 1/2	2
L	900-1500	140	140	140	140	178	178	216
	2500	186	186	186	186	232	232	279
W	900-1500	200	200	200	200	280	280	300
	2500	200	200	200	200	280	280	300
H	900-1500	318	318	318	322	467	468	540
	2500	325	325	325	327	467	468	540
d	900-1500	14	14	14	19	25	30	36.5
	2500	14	14	14	19	25	30	36.5
Weight(kg)	900-1500	11.5	11.5	10.8	10.5	19.6	21.0	55.4
	2500	12.3	12.3	11.6	10.8	26.0	28.4	60.0



Calvary Valve Inc.
(903) 729-0485

FORGED STEEL GATE VALVE 800LB

Applicable standards:

STEEL GATE VALVES, API 602
STEEL VALVES, ASME B16.34
END TO END, MANUFACTURER STANDARD
FACE TO FACE, FLANGED, ASME B 16.11
END FLANGES, ASME B16.5
BUTTWELDING ENDS, ASME B16.25
SOCKET-WELDING ENDS, ASME B16.11
SOREWED ENDS, ASME B 1.20.1
INSPECTION AND TEST, API 598

Design description:

OUTSIDE SCREW AND YOKE (OS&Y)
BOLTED BONNET
CHOICE OF WB, WELDING BONNET
SINGLE WEDGE, FULLY GUIDED
RENEWABLE SEAT RINGS
YOKE INTEGRAL WITH BONNET
RISING STEM AND NON-RISING HANDWHEEL
SW, SOCKET-WELDING ENDS
SC, SCREWED ENDS
BW, BUTTWELDING ENDS
FLANGED ENDS

Materials of parts

No	Part Name	ASTM Material		
		C-SI	16Cr-12Ni-2Mo	1 1/4Cr-1/2Mo-SI
1	Body	A105	A182-F316	A182-F11
2	Bonnet	A105	A182-F316	A182-F11
3	Wedge	A182-F6a	A182-F316	A182-F6a+HF
4	Stem	A276-410	A276-316	A276-410
5	Seat Ring	A276-410	A182-F316	A276-410+HF
6	Bonnet Gasket ¹⁾	Graphite+304	Graphite+316	Graphite+304
7	Bonnet Stud	A193-B7	A193-B8M	A193-B16
8	Packing		Graphite	
9	Gland	A276-410	A276-316	A276-410
10	Gland Flange	A105	A182-F316	A182-F11
11	Eyebolt Pin	A276-410	A276-316	A276-410
12	Eyebolt	A193-B7	A193-B8M	A193-B16
13	Eyebolt Nut	A194-2H	A194-8M	A194-2H
14	Yoke sleeve		A276-410	
15	Handwheel		Malleable Iron	
16	Handwheel Nut		Carbon Steel	

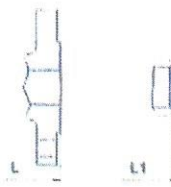
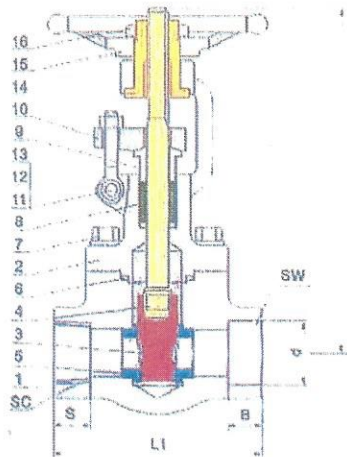
Note: 1). Spiral wound construction.

Dimensions data

NPS DN	Unit	L1 ¹⁾	L (Flanged Ends)			d	SW		SC		H (Open)	D0	WT ²⁾ (Kg)
			150Lb	300Lb	600Lb		D	B	NPT	S			
3/8	in	3.12	4.00	5.50	6.50	0.304	0.693	0.378	3/8	0.540	6.00	4.00	4.5/4
10	mm	79	102	140	165	10	17.6	9.6		13.6	151	100	
1/2	in	3.12	4.25	5.50	6.50	0.394	0.858	0.378		0.535	6.00	4.00	5.1/4
15	mm	79	108	140	165	10	21.8	9.6	1/2	13.6	151	100	
3/4	in	2.63	4.62	6.00	7.50	0.531	1.067	0.500		0.547	6.25	4.00	6.2/4.3
20	mm	92	117	152	190	13.5	27.1	12.7	3/4	13.9	158	100	
1	in	4.38	6.00	6.50	8.50	0.709	1.331	0.500		0.681	7.25	5.00	10.5/6.6
25	mm	111	127	165	216	18	33.8	12.7	1	17.3	185	125	
1 1/4	in	4.75	5.50	7.00	9.00	0.945	1.677	0.500		0.709	9.38	6.25	12.4/9.5
32	mm	120	140	178	229	24	42.6	12.7	1 1/4	18	239	160	
1 1/2	in	4.75	6.50	7.50	9.50	1.181	1.917	0.500		0.724	9.50	6.25	20.1/11
40	mm	120	165	190	241	30	48.7	12.7	1 1/2	18.4	243	160	
2	in	5.50	7.00	8.50	11.50	1.437	2.406	0.826		0.756	11.00	7.00	28/14.5
50	mm	140	178	216	292	36.5	61.1	15.9	2	19.2	279	180	

Notes: 1) BW, SW or SC.

2) 600Lb-RF/800Lb-(BW/SW/SC).



150-600Lb



HOW TO ORDER AND SPECIFY API 600 CAST STEEL GATE VALVES

A	TYPE
G	CAST BODY GATE VALVE

B	DN
01	1" 10 10"
02	2" 12 12"
03	3" 16 16"
06	6" 24 24" etc.

C	PRESSURE CLASS
15	Class 150 90 Class 900
30	Class 300 150 Class 1500
60	Class 600 250 Class 2500
80	800 20 2 M

D	END
RJ	Ring joint
BW	Butt weld
RF	Raised face
SE	Screwed In

E	BODY
A1	WCB A5 CF8M B1 F316
A2	WCC A6 CF8 B2 F304
A3	LCB A7 WC6
A4	LCC A8 WC9

F	TRIM
G1	410 G10 316
G2	304 G11 Monel – Hard Faced
G3	310 G12 316 – Hard Faced
G4	410-Hard (Hard F6) G13 Alloy 20
G5	410-Full Hard Faced G14 Alloy 20 – Hard Faced
G6	410 (F6) And Cu-Ni G15 304 – Full Hard Faced
G7	410 (F6) Hard F6 G16 316 – Full Hard Faced
G8	F6 (410) – Hard Faced G17 347 – Full Hard Faced
G9	Monel G18 Alloy 20 – Full Hard Faced

G	SOFT GOODS
E1	VITON
E2	HNBR
E3	BUNA
E4	GRAPHITE + SS

H	OPERATION
0	Bare Stem 4 Pneumatic
1	Hand Wheel 5 Hydraulic
2	Gear 6 Gas Over Oil
3	Electric

A	B	C	D	E	F	G	H
TYPE	DN	CLASS	END	BODY	TRIM	SOFT GOODS	OPERATION

EXAMPLE	DESCRIPTION
G-06-30-RF-A1-G5-E4-1	CAST STEEL API 600 GATE VALVE, 6" 300 CLASS, RAISED FACE, BODY WCB, TRIM #5 FULL STELLITE, SOFT GOODS GRAPHITE SS, OPERATION HAND WHEEL