



ACHECH VALVE

# GATE VALVE

- BOLTED BONNET
- PRESSURE SEAL BONNET
- BELLOWS SEAL BONNET
- CRYOGENIC SERVICE

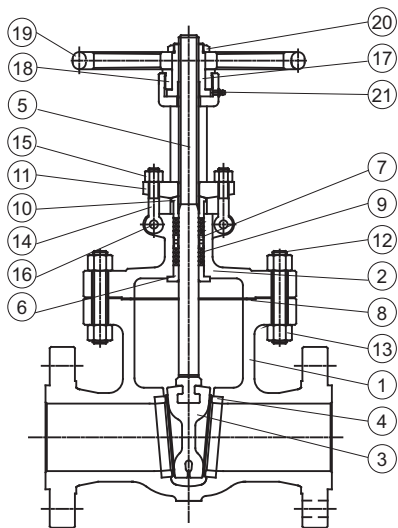


# GATE VALVE

API.CE.ISO CERTIFIED

## GATE VALVE - BOLTED BONNET - ANSI CL. 150.300.600.900.1500

## GATE VALVE DIMENSIONS - BOLTED BONNET



### FEATURES & STANDARDS

- ◆ OUTSIDE SCREW & YOKE-OS&Y
- ◆ BOLTED BONNET-B.B
- ◆ NON-RISING HANDWHEEL-RISING STEM
- ◆ HORIZONTAL OR VERTICAL INSTALLATION
- ◆ FULL BORE OPENING
- ◆ DESIGN STANDARDS: API600
- ◆ FACE TO FACE: ANSI B16.10
- ◆ FLANGE FACE: ANSI B16.5 & ANSI B16.47-A&B
- ◆ BUTT WELD ENDS: ANSI B16.25
- ◆ P-T RATING: ANSI B16.34
- ◆ PRESSURE TEST: API598 & ANSI B16.34

### TRIM NO. TABLE

NO	STEM/ BACK SEAT	WEDGE / DISC	SEAT
1	13Cr	13Cr	13Cr
2	304	304	304
5	13Cr	Stellite No.6	Stellite No. 6
8	13Cr	13Cr	Stellite No. 6
9	Monel	Monel	Monel
10	316	316	316
12	316	316	Stellite No. 6
16	316	Stellite No.6	Stellite No. 6
20	304	304	Stellite No. 6
15	304	Stellite No.6	Stellite No. 6

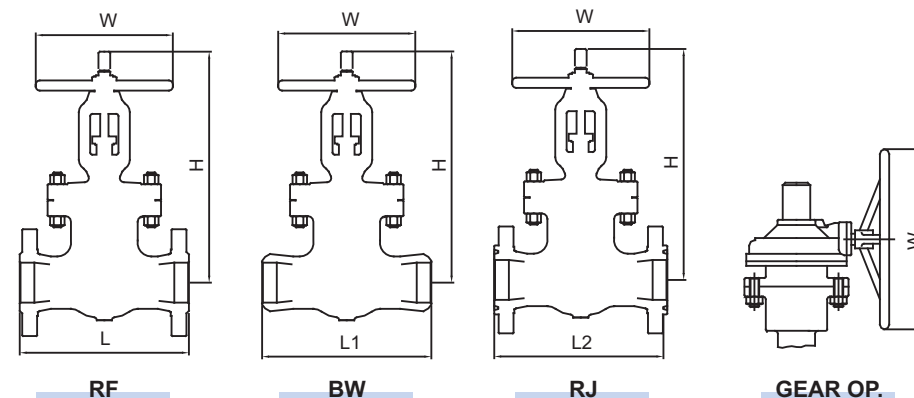
### MATERIAL LIST

NO	PART NAME	WCB	LCB	WC6	WC9	C5	C12	CF8	CF8M
1	Body	A216-WCB	A352-LCB	A217-WC6	A217-WC9	A217-C5	A217-C12	A351-CF8	A351-CF8M
2	Bonnet	A216-WCB	A352-LCB	A217-WC6	A217-WC9	A217-C5	A217-C12	A351-CF8	A351-CF8M
3	Wedge	A216-WCB	A352-LCB	A217-WC6	A217-WC9	A217-C5	A217-C12	A351-CF8	A351-CF8M
4	Seat	A105	A350-LF2	A182-F11	A182-F22	A182-F5	A182-F9	A182-F304	A182-F316
7	Lantern ring	A276TP304	A276TP304	A276TP304	A276TP304	A276TP304	A276TP304	A276TP304	A276TP316
10	Gland	A276TP410	A276TP410	A276TP410	A276TP410	A276TP410	A276TP410	A276TP304	A276TP316
11	Gland Flange	A216-WCB	A216-WCB	A217-WC6	A217-WC9	A217-C5	A217-C12	A351-CF8	A351-CF8M
12	Bonnet Stud	A193-B7	A320-L7	A193-B16	A193-B16	A193-B16	A193-B16	A193-B8	A193-B8
13	Bonnet Nut	A194-2H	A194-4	A194-4	A194-4	A194-4	A194-4	A194-8	A194-8
14	Gland Stud	A193-B7	A320-L7	A193-B16	A193-B16	A193-B16	A193-B16	A193-B8	A193-B8
15	Gland Nut	A194-2H	A194-4	A194-4	A194-4	A194-4	A194-4	A194-8	A194-8
16	Pin	A276TP410	A276TP410	A276TP410	A276TP410	A276TP410	A276-410	A276TP304	A276TP304
17	Yoke Sleeve	A493-D2C	A493-D2C	A493-D2C	A493-D2C	A493-D2C	A493-D2C	A493-D2C	A493-D2C
18	Yoke Cap	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	A351-CF8	A351-CF8
19	Handwheel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
20	Wheel Nut	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	A351-CF8	A351-CF8
21	Grease Nipple	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel

### GLAND PACKING & GASKET MATERIAL LIST

- 8 GASKET :  F304+GRAPHOIL  F316+GRAPHOIL  F304+TEFLON  F316+TEFLON  
 SOFT IRON (RJ)  F304 (RJ)  F316 (RJ)  ALLOY STEEL (RJ)  \_\_\_\_\_
- 9 GLAND PACKING :  GRAPHOIL / GRAPHOIL + 304/316 WIRE  TEFLON  \_\_\_\_\_

● SOUR OIL AND GAS SERVICE - NACE MR-01-75 : A193-B7M STUDS & A194-2HM NUTS ARE AS STANDARD.



### CLASS 150 - FIG NO :1GA

SIZE	in	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	36"	40"	42"
d	mm	38	51	64	76	102	127	152	203	254	305	337	387	438	489	540	591	641	692	743	793	895	997	1048
L	in	6.50	7.00	7.50	8.00	9.00	10.00	10.50	11.50	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00	22.00	24.00	24.00	25.98	28.00	30.00	32.00
(RF)	mm	165	178	190	203	229	254	267	292	330	356	381	406	432	457	483	508	559	609	609	660	711	762	813
L1	in	6.50	8.50	9.50	11.13	12.00	15.00	15.88	16.50	18.00	19.75	22.50	24.00	26.00	28.00	30.00	32.00	34.00	36.00	36.00	38.00	40.00	42.00	44.02
(BW)	mm	165	216	241	283	305	381	403	419	457	502	572	610	660	711	762	813	864	915	915	965	1016	1067	1118
L2	in	7.00	7.50	8.00	8.50	9.50	10.50	11.00	12.00	13.50	14.50	15.50	16.50	17.50	18.50	-	20.50	-	-	-	-	-	-	-
(RJ)	mm	178	191	203	216	241	267	279	305	343	368	394	419	445	470	-	521	-	-	-	-	-	-	-
H	in	14.57	15.20	17.13	19.02	23.11	26.50	30.20	37.60	45.12	52.28	59.80	67.76	74.80	83.31	91.34	97.64	99.61	102.36	106.89	110.83	136.22	156.69	165.35
(OPEN)	mm	370	386	435	483	587	673	767	955	1146	1328	1519	1721	1900	2116	2320	2480	2530	2600	2715	2815	3460	3980	4200
W	in	6.30	7.87	9.84	9.84	9.84	11.81	11.81	13.78	15.74	17.72	18.11*	18.11*	24.02*	24.02*	24.02*	24.02*	27.95*	27.95*	27.95*	27.95*	27.95*	31.49*	31.49*
	mm	160	200	250	250	250	300	300	350	400	450	460*	460*	610*	610*	610*	610*	710*	710*	710*	710*	710*	800*	800*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

### CLASS 300 - FIG NO : 3GA

SIZE	in	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
d	mm	38	51	64	76	102	127	152	203	254	305	337	387	432	483	585	635	686	737
L-L1	in	7.50	8.50	9.50	11.13	12.00	15.00	15.88	16.50	18.00	19.75	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00
(RF-BW)	mm	191	216	241	283	305	381	403	419	457	502	762	838	914	991	1143	1244	1346	1397
L2	in	7.99	9.12	10.12	11.74	12.62	15.62	16.50	17.12	18.62	20.37	30.62	33.62	36.62	39.75	45.88	50.00	54.00	56.00
(RJ)	mm	203	232	257	298	321	397	419	435	473	518	778	854	930	1010	1165	1270	1372	1422
H	in	15.94	16.42	18.11	20.71	25.59	27.32	32.44	38.86	46.93	56.34	61.38	69.21	76.46	84.45	88.86	105.91	112.28	117.32
(OPEN)	mm	405	417	460	526	650	694	824	987	1192	1431	1559	1758	1942	2145	2257	2690	2852	2980
W	in	7.87	7.87	9.84	9.84	9.84	11.81	13.78	15.75	18.11*	18.11*	18.11*	18.11*	24.02*	24.02*	27.95*	31.49*	31.49*	31.49*
	mm	200	200	250	250	250	300	350	400	460*	460*	460*	460*	610*	610*	710*	800*	800*	800*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

# GATE VALVE

## GATE VALVE DIMENSIONS - BOLTED BONNET

### CLASS 600 - FIG NO : 6GA

SIZE	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
d	mm	51	64	76	102	152	200	248	298	327	375	419	464	559
L-L1	in	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00	35.00	39.00	43.00	47.00	55.00
(RF-BW)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L2	in	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12	35.12	39.12	43.12	47.25	55.35
(RJ)	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	1406
H	in	16.81	18.62	21.18	25.87	34.33	43.35	50.35	58.50	64.69	70.79	82.72	88.94	109.45
(OPEN)	mm	427	473	538	657	872	1101	1279	1486	1643	1798	2101	2259	2780
W	in	9.84	9.84	11.81	13.78	17.72	18.11*	24.02*	24.02*	27.95*	27.95*	27.95*	27.95*	31.49*
	mm	250	250	300	350	450	460*	610*	610*	710*	710*	710*	710*	800*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

### CLASS 900 - FIG NO : 9GA

SIZE	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"
d	mm	47	57	73	98	146	190	238	282	311	356	400	445
L-L1	in	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.50	44.50	48.00	52.00
(RF-BW)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321
L2	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	48.50	52.52
(RJ)	mm	371	422	384	460	613	740	841	968	1038	1140	1232	1334
H	in	21.54	27.56	25.51	28.70	40.98	49.61	62.60	70.67	79.72	85.43	100.24	113.98
(OPEN)	mm	547	700	648	729	1041	1260	1590	1795	2025	2170	2546	2895
W	in	11.81	13.78	15.75	17.72	24.02*	24.02*	27.95*	27.95*	31.49*	31.49*	31.49*	31.49*
	mm	300	350	400	450	610*	610*	710*	710*	800*	800*	800*	800*

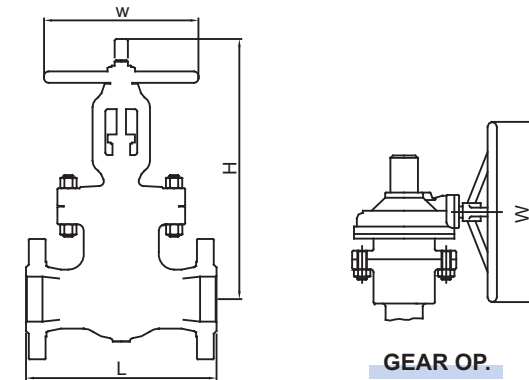
\*BEVEL GEAR OPERATOR IS RECOMMENDED.

### CLASS 1500 - FIG NO : 15GA

SIZE	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"
d	mm	47	57	70	92	136	178	222	263	289	330	372
L-L1	in	14.50	16.50	18.50	21.50	27.75	32.75	39.00	44.50	49.50	54.50	60.50
(RF-BW)	mm	368	419	470	546	705	832	991	1130	1257	1384	1537
L2	in	14.62	16.62	18.62	21.62	28.00	33.13	39.38	45.12	50.25	55.38	61.38
(RJ)	mm	371	422	473	549	711	841	1000	1146	1276	1407	1559
H	in	22.60	27.56	31.73	34.92	42.48	53.94	59.84	65.00	76.57	88.58	99.80
(OPEN)	mm	574	700	806	887	1079	1370	1520	1651	1945	2250	2535
W	in	13.78	15.75	17.72	22.05	18.11*	27.95*	27.95*	31.49*	31.49*	31.49*	31.49*
	mm	350	400	450	560	460*	710*	710*	800*	800*	800*	800*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

## DIN - GATE VALVE DIMENSIONS - BOLTED BONNET



### PN 16 - FIG NO : P1GA

UNIT:mm

DN	50	65	80	100	125	150	200	250	300	350	400	500	600
L	250	270	280	300	325	350	400	450	500	550	600	700	800
H	438	452	530	620	756	845	1041	1244	1474	1663	1886	2181	2430
W	200	200	250	250	300	300	350	400	450	500	560	640	720

### PN 25 - FIG NO : P2GA

UNIT:mm

DN	50	65	80	100	125	150	200	250	300	350	400	500	600
L	250	270	280	300	325	350	400	450	500	550	600	700	800
H	438	452	530	620	756	845	1041	1244	1474	1663	1886	2181	2430
W	200	200	250	250	300	300	350	400	450	500	560	640	720

### PN 40 - FIG NO : P3GA

UNIT:mm

DN	50	65	80	100	125	150	200	250	300	350	400	500	600
L	250	290	310	350	400	450	550	650	750	850	950	1150	1350
H	438	473	550	669	776	883	1086	1298	1531	1663	1900	2100	2650
W	200	200	250	250	300	350	400	450	500	560	640	720	720

### PN 64 - FIG NO : P4GA

UNIT:mm

DN	50	65	80	100	125	150	200	250	300	350
L	250	290	310	350	400	450	550	650	750	850
H	468	503	580	699	806	923	1130	1332	1610	2066
W	200	200	250	250	300	350	400	450	500	560

### PN 100 - FIG NO : P5GA

UNIT:mm

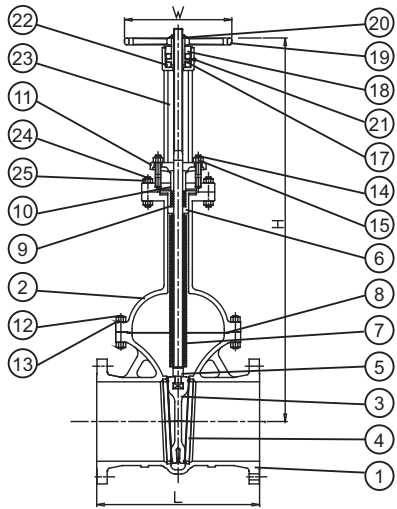
DN	50	65	80	100	125	150	200	250	300	350
L	250	290	310	350	400	450	550	650	750	
H	500	560	620	770	845	980	1170	1410	1670	
W	250	250	300	350	350	450	500	640	640	

# GATE VALVE

**ZERO LEAK!!**



## BELLOWS SEAL GATE VALVE - BOLTED BONNET - ANSI CL. 150.300.600



### FEATURES & STANDARDS

- ◆ OUTSIDE SCREW & YOKE-OS&Y
- ◆ BOLTED BONNET-B.B
- ◆ NON-RISING HANDWHEEL-RISING STEM
- ◆ BELLOWS SEAL LIFE: OVER 20000 TIMES
- ◆ HORIZONTAL OR VERTICAL INSTALLATION
- ◆ FULL BORE OPENING
- ◆ DESIGN STANDARDS: API600 & MSS-SP-117
- ◆ FACE TO FACE: ANSI B16.10
- ◆ FLANGE FACE: ANSI B16.5 & ANSI B16.47-A & B
- ◆ BUTT WELD ENDS: ANSI B16.25
- ◆ P-T RATING: ANSI B16.34
- ◆ PRESSURE TEST: API598 & ANSI B16.34



### TRIM NO. TABLE

NO	STEM/ BACK SEAT	WEDGE / DISC	SEAT
5	13Cr	Stellite No.6	Stellite No. 6
9	Monel	Monel	Monel
H1	Hastelloy-C	Hastelloy-C	Hastelloy-C
16	316	Stellite No.6	Stellite No. 6
15	304	Stellite No.6	Stellite No. 6

### MATERIAL LIST

NO	PART NAME	WCB	LCB	WC6	WC9	C5	C12	CF8	CF8M
1	Body	A216-WCB	A352-LCB	A217-WC6	A217-WC9	A217-C5	A217- C12	A351-CF8	A351-CF8M
2	Bonnet	A216-WCB	A352-LCB	A217-WC6	A217-WC9	A217-C5	A217-C12	A351-CF8	A351-CF8M
3	Wedge	A216-WCB	A352-LCB	A217-WC6	A217-WC9	A217-C5	A217-C12	A351-CF8	A351-CF8M
4	Seat	A105	A350-LF2	A182-F11	A182-F22	A182-F5	A182-F9	A182-F304	A182-F316
7	Bellows	A182-F316L	A182-F316L	A182-F316L	A182-F316L	A182-F316L	A182-F316L	A182-F316L	A182-F316L
10	Gland	A276TP410	A276TP410	A276TP410	A276TP410	A276TP410	A276TP410	A276TP304	A276TP316
11	Gland Flange	A216-WCB	A216-WCB	A217-WC6	A217-WC9	A217-C5	A217-C12	A351-CF8	A351-CF8M
12	Bonnet Stud	A193-B7	A320-L7	A193-B16	A193-B16	A193-B16	A193-B16	A193-B8	A193-B8
13	Bonnet Nut	A194-2H	A194-4	A194-4	A194-4	A194-4	A194-4	A194-8	A194-8
14	Gland Stud	A193-B7	A320-L7	A193-B16	A193-B16	A193-B16	A193-B16	A193-B8	A193-B8
15	Gland Nut	A194-2H	A194-4	A194-4	A194-4	A194-4	A194-4	A194-8	A194-8
17	Yoke Sleeve	A493-D2C	A493-D2C	A493-D2C	A493-D2C	A493-D2C	A493-D2C	A493-D2C	A493-D2C
18	Yoke Cap	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	A351-CF8	A351-CF8
19	Handwheel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
20	Wheel Nut	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	A351-CF8	A351-CF8
21	Grease Nipple	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
22	Bearing	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
23	Yoke	A216-WCB	A352-LCB	A217-WC6	A217-WC9	C5	C12	CF8	CF8M
24	Yoke stud	A193-B7	A320-L7	A193-B16	A193-B16	A193-B16	A193-B16	A193-B8	A193-B8
25	Yoke Nut	A194-2H	A194-4	A194-4	A194-4	A194-4	A194-4	A194-8	A194-8

### GLAND PACKING & GASKET MATERIAL LIST

- 8 GASKET :  F304+GRAPHOIL  F316+GRAPHOIL  F304+TEFLON  F316+TEFLON  
 SOFT IRON (RJ)  F304 (RJ)  F316 (RJ)  ALLOY STEEL (RJ)  \_\_\_\_\_
- 9 GLAND PACKING :  GRAPHOIL / GRAPHOIL + 304/316 WIRE  TEFLON  \_\_\_\_\_

## GATE VALVE DIMENSIONS - BELLOWS SEAL TYPE

### CLASS 150 - FIG NO :1BGA

SIZE	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"
d	mm	51	64	76	102	127	152	203	254	305	337	387	438	489	540	591	641	692	743
L	in	7.00	7.50	8.00	9.00	10.00	10.50	11.50	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00	22.00	24.00	24.00
(RF)	mm	178	190	203	229	254	267	292	330	356	381	406	432	457	483	508	559	609	609
L1	in	8.50	9.50	11.13	12.00	15.00	15.88	16.50	18.00	19.75	22.50	24.00	26.00	28.00	30.00	32.00	34.00	36.00	36.00
(BW)	mm	216	241	283	305	381	403	419	457	502	572	610	660	711	762	813	864	915	915
L2	in	7.50	8.00	8.50	9.50	10.50	11.00	12.00	13.50	14.50	15.50	16.50	17.50	18.50	-	20.50	-	-	-
(RJ)	mm	191	203	216	241	267	279	305	343	368	394	419	445	470	-	521	-	-	-
H	in	25.04	26.97	30.43	36.97	42.24	48.31	60.16	72.17	83.66	95.67	108.27	119.68	133.31	150.39	156.22	162.60	173.23	185.63
(OPEN)	mm	636	685	773	939	1073	1227	1528	1833	2125	2430	2750	3040	3386	3820	3968	4130	4400	4715
W	in	7.87	9.84	9.84	9.84	11.81	11.81	13.78	15.74	17.72	18.11*	18.11*	24.02*	24.02*	24.02*	24.02*	27.95*	27.95*	27.95*
	mm	200	250	250	250	300	300	350	400	450	460*	460*	610*	610*	610*	610*	710*	710*	710*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

### CLASS 300 - FIG NO : 3BGA

SIZE	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
d	mm	51	64	76	102	127	152	203	254	305	337	387	432	483	585	635	686	737
L-L1	in	8.50	9.50	11.13	12.00	15.00	15.88	16.50	18.00	19.75	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00
(RF-BW)	mm	216	241	283	305	381	403	419	457	502	762	838	914	991	1143	1244	1346	1397
L2	in	9.12	10.12	11.74	12.62	15.62	16.50	17.12	18.62	20.37	30.62	33.62	36.62	39.75	45.88	50.00	54.00	56.00
(RJ)	mm	232	257	298	321	397	419	435	473	518	778	854	930	1010	1165	1270	1372	1422
H	in	24.29	28.98	33.15	40.94	43.70	51.89	62.20	75.12	90.16	98.23	110.75	122.32	135.12	142.17	172.83	183.15	196.06
(OPEN)	mm	617	736	842	1040	1110	1318	1580	1908	2290	2495	2813	3107	3432	3611	4390	4652	4980
W	in	7.87	9.84	9.84	9.84	11.81	13.78	15.75	18.11*	18.11*	18.11*	18.11*	24.02*	24.02*	27.95*	31.49*	31.49*	31.49*
	mm	200	250	250	250	300	350	400	460*	460*	460*	460*	610*	610*	710*	800*	800*	800*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

### CLASS 600 - FIG NO : 6BGA

SIZE	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
d	mm	51	64	76	102	152	200	248	298	327	375	419	464	559
L-L1	in	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00	35.00	39.00	43.00	47.00	55.00
(RF-BW)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L2	in	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12	35.12	39.12	43.12	47.25	55.35
(RJ)	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	1406
H	in	26.89	29.76	33.86	41.38	54.92	69.29	80.55	93.58	103.50	113.27	132.36	142.32	172.44
(OPEN)	mm	683	756	860	1051	1395	1760	2046	2377	2629	2877	3362	3615	4380
W	in	9.84	9.84	11.81	13.78	17.72	18.11*	24.02*	24.02*	27.95*	27.95*	27.95*	27.95*	31.49*
	mm	250	250	300	350	450	460*	610*	610*	710*	710*	710*	710*	800*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

OTHER PRESSURE CLASS ARE AVAILABLE ON REQUEST.

# GATE VALVE

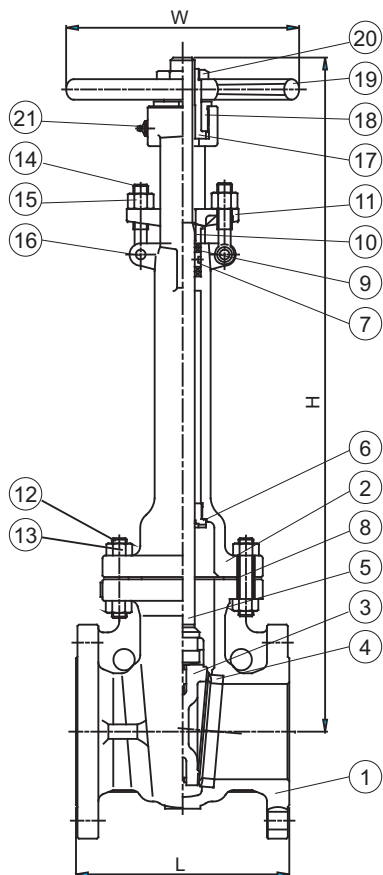
**LOW TEMP!!**



## CRYOGENIC GATE VALVE - BOLTED BONNET - ANSI CL. 150.300.600

### FEATURES & STANDARDS

- ◆ OUTSIDE SCREW & YOKE-OS&Y
- ◆ BOLTED BONNET-B.B
- ◆ NON-RISING HANDWHEEL & RISING STEM
- ◆ HORIZONTAL OR VERTICAL INSTALLATION
- ◆ FULL BORE OPENING
- ◆ DESIGN STANDARDS: API600 & BS6364
- ◆ FACE TO FACE: ANSI B16.10
- ◆ FLANGE FACE: ANSI B16.5 & ANSI B16.47-A & B
- ◆ BUTT WELD ENDS: ANSI B16.25
- ◆ P-T RATING: ANSI B16.34
- ◆ PRESSURE TEST: API598 & ANSI B16.34



TRIM NO. TABLE			
NO	STEM / BACK SEAT	WEDGE / DISC	SEAT
1	13Cr	13Cr	13Cr
2	304	304	304
5	13Cr	Stellite No.6	Stellite No. 6
8	13Cr	13Cr	Stellite No. 6
9	Monel	Monel	Monel
10	316	316	316
12	316	316	Stellite No. 6
16	316	Stellite No.6	Stellite No. 6
20	304	304	Stellite No. 6
15	304	Stellite No.6	Stellite No. 6

MATERIAL LIST				
NO	PART NAME	LCB	CF8	CF8M
1	Body	A352-LCB	A351-CF8	A351-CF8M
2	Bonnet	A352-LCB	A351-CF8	A351-CF8M
3	Wedge	A352-LCB	A351-CF8	A351-CF8M
4	Seat	A350-LF2	A182-F304	A182-F316
7	Lantern ring	A276TP304	A276TP304	A276TP316
10	Gland	A276TP410	A276TP304	A276TP316
11	Gland Flange	A216-WCB	A351-CF8	A351-CF8M
12	Bonnet Stud	A320-L7	A193-B8	A193-B8
13	Bonnet Nut	A194-4	A194-8	A194-8
14	Gland Stud	A320-L7	A193-B8	A193-B8
15	Gland Nut	A194-4	A194-8	A194-8
16	Pin	A276TP410	A276TP304	A276TP304
17	Yoke Sleeve	A493-D2C	A493-D2C	A493-D2C
18	Yoke Cap	Carbon Steel	A351-CF8	A351-CF8
19	Handwheel	Carbon Steel	Carbon Steel	Carbon Steel
20	Wheel Nut	Carbon Steel	A351-CF8	A351-CF8
21	Grease Nipple	Carbon Steel	Carbon Steel	Carbon Steel

### GLAND PACKING & GASKET MATERIAL LIST

- 8 GASKET :  F304+GRAPHOIL  F316+GRAPHOIL  F304+TEFLON  F316+TEFLON  
 SOFT IRON (RJ)  F304 (RJ)  F316 (RJ)  ALLOY STEEL (RJ)
- 9 GLAND PACKING :  GRAPHOIL / GRAPHOIL + 304/316 WIRE  TEFLON

## GATE VALVE DIMENSIONS - CRYOGENIC SERVICE

### CLASS 150 - FIG NO :1CGA

SIZE	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	36"	40"
d	mm	51	64	76	102	127	152	203	254	305	337	387	438	489	540	591	641	692	743	793	914	1016
L	in	7.00	7.50	8.00	9.00	10.00	10.50	11.50	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00	22.00	24.00	24.00	25.98	28.00	30.00
(RF)	mm	178	190	203	229	254	267	292	330	356	381	406	432	457	483	508	559	609	609	660	711	762
L1	in	8.50	9.50	11.13	12.00	15.00	15.88	16.50	18.00	19.75	22.50	24.00	26.00	28.00	30.00	32.00	34.00	36.00	36.00	38.00	40.00	42.00
(BW)	mm	216	241	283	305	381	403	419	457	502	572	610	660	711	788	813	864	915	915	965	1016	1067
L2	in	7.50	8.00	8.50	9.50	10.50	11.00	12.00	13.50	14.50	15.50	16.50	17.50	18.50	-	20.50	-	-	-	-	-	-
(RJ)	mm	191	203	216	241	267	279	305	343	368	394	419	445	470	-	521	-	-	-	-	-	-
H	in	32.91	34.84	36.73	40.83	44.21	47.91	55.31	62.83	70.00	77.52	85.47	92.52	101.02	108.27	115.35	120.47	124.02	130.51	134.45	181.50	184.25
(OPEN)	mm	836	885	933	1037	1123	1217	1405	1596	1778	1969	2171	2350	2566	2750	2930	3060	3150	3315	3415	4610	4680
W	in	7.87	9.84	9.84	9.84	11.81	11.81	13.78	15.74	17.72	18.11*	18.11*	24.02*	24.02*	24.02*	24.02*	27.95*	27.95*	27.95*	27.95*	27.95*	31.49*
	mm	200	250	250	250	300	300	350	400	450	460*	460*	610*	610*	610*	610*	710*	710*	710*	710*	710*	800*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

### CLASS 300 - FIG NO : 3CGA

SIZE	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
d	mm	51	64	76	102	127	152	203	254	305	337	387	432	483	585	635	686	737
L-L1	in	8.50	9.50	11.13	12.00	15.00	15.88	16.50	18.00	19.75	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00
(RF-BW)	mm	216	241	283	305	381	403	419	457	502	762	838	914	991	1143	1244	1346	1397
L2	in	9.12	10.12	11.74	12.62	15.62	16.50	17.12	18.62	20.37	30.62	33.62	36.62	39.75	45.88	50.00	54.00	56.00
(RJ)	mm	232	257	298	321	397	419	435	473	518	778	854	930	1010	1165	1270	1372	1422
H	in	34.13	35.83	38.43	43.31	45.04	50.16	56.57	64.65	73.35	79.09	86.93	94.17	102.17	108.54	121.65	128.03	137.01
(OPEN)	mm	867	910	976	1100	1144	1274	1437	1642	1863	2009	2208	2392	2595	2757	3090	3252	3480
W	in	7.87	9.84	9.84	9.84	11.81	13.78	15.75	18.11*	18.11*	18.11*	18.11*	24.02*	24.02*	27.95*	31.49*	31.49*	31.49*
	mm	200	250	250	250	300	350	400	460*	460*	460*	460*	610*	610*	710*	800*	800*	800*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

### CLASS 600 - FIG NO : 6CGA

SIZE	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
d	mm	51	64	76	102	152	200	248	298	327	375	419	464	559
L-L1	in	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00	35.00	39.00	43.00	47.00	55.00
(RF-BW)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L2	in	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12	35.12	39.12	43.12	47.25	55.35
(RJ)	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	1406
H	in	34.53	36.34	38.90	43.58	52.05	61.06	68.07	76.22	82.40	88.50	100.43	106.65	127.17
(OPEN)	mm	877	923	988	1107	1322	1551	1729	1936	2093	2248	2551	2709	3230
W	in	9.84	9.84	11.81	13.78	17.72	18.11*	24.02*	24.02*	27.95*	27.95*	27.95*	27.95*	31.49*
	mm	250	250	300	350	450	460*	610*	610*	710*	710*	710*	710*	800*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

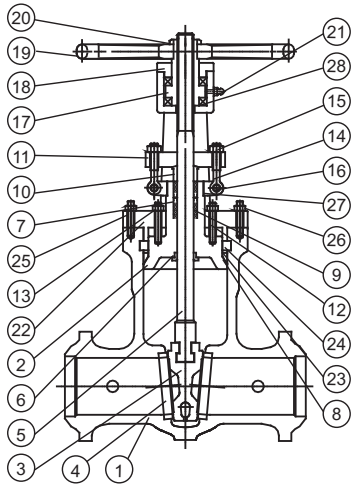
OTHER PRESSURE CLASS ARE AVAILABLE ON REQUEST.

# GATE VALVE

## GATE VALVE - PRESSURE SEAL BONNET - ANSI CL600. 900.1500.2500.4500

### FEATURES & STANDARDS

- ◆ OUTSIDE SCREW & YOKE - OS&Y
- ◆ PRESSURE SEAL BONNET-PSB
- ◆ HORIZONTAL OR VERTICAL INSTALLATION
- ◆ FULL BORE OPENING
- ◆ DESIGN STANDARDS: ANSI B16.34
- ◆ FACE TO FACE: ANSI B 16.10
- ◆ FLANGE FACE: ANSI B 16.5
- ◆ BUTT WELD ENDS: ANSI B16.25
- ◆ P-T RATING: ANSI B16.34
- ◆ PRESSURE TEST: API 598 & ANSI B16.34
- ◆ 100% X-RAY TEST AS PER ANSI B16.34



TRIM NO. TABLE			
NO	STEM/ BACK SEAT	WEDGE / DISC	SEAT
1	13Cr	13Cr	13Cr
2	304	304	304
5	13Cr	Stellite No.6	Stellite No. 6
8	13Cr	13Cr	Stellite No. 6
9	Monel	Monel	Monel
10	316	316	316
12	316	316	Stellite No. 6
16	316	Stellite No.6	Stellite No. 6
20	304	304	Stellite No. 6
15	304	Stellite No.6	Stellite No. 6

### MATERIAL LIST

NO	PART NAME	WCB	LCB	WC6	WC9	C5	C12	CF8	CF8M
1	Body	A216-WCB	A352-LCB	A217-WC6	A217-WC9	A217-C5	A217-C12	A351-CF8	A351-CF8M
2	Bonnet	A216-WCB	A352-LCB	A217-WC6	A217-WC9	A217-C5	A217-C12	A351-CF8	A351-CF8M
3	Wedge	A216-WCB	A352-LCB	A217-WC6	A217-WC9	A217-C5	A217-C12	A351-CF8	A351-CF8M
4	Seat	A105	A350-LF2	A182-F11	A182-F22	A182-F5	A182-F9	A182-F304	A182-F316
7	Lantern ring	A276TP304	A276TP304	A276TP304	A276TP304	A276TP304	A276TP304	A276TP304	A276TP316
10	Gland	A276TP410	A276TP410	A276TP410	A276TP410	A276TP410	A276TP410	A276TP304	A276TP316
11	Gland Flange	A216-WCB	A352-LCB	A217-WC6	A217-WC9	A217-C5	A217-C12	A351-CF8	A351-CF8M
12	Bonnet Stud	A193-B7	A320-L7	A193-B16	A193-B16	A193-B16	A193-B16	A193-B8	A193-B8
13	Bonnet Nut	A194-2H	A194-4	A194-4	A194-4	A194-4	A194-4	A194-8	A194-8
14	Gland Stud	A193-B7	A320-L7	A193-B16	A193-B16	A193-B16	A193-B16	A193-B8	A193-B8
15	Gland Nut	A194-2H	A194-4	A194-4	A194-4	A194-4	A194-4	A194-8	A194-8
16	Pin	A276TP410	A276TP410	A276TP410	A276TP410	A276TP410	A276TP410	A276TP304	A276TP304
17	Yoke Sleeve	A493-D2C	A493-D2C	A493-D2C	A493-D2C	A493-D2C	A493-D2C	A493-D2C	A493-D2C
18	Yoke Cap	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	A351-CF8	A351-CF8
19	Handwheel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
20	Wheel Nut	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	AISI 304	AISI 304
21	Grease Nipple	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
22	Yoke	A216-WCB	A352-LCB	A217-WC6	A217-WC9	A217-C5	A217-C12	A351-CF8	A351-CF8M
23	Thrust Ring	A182-F304	A182-F304	A182-F304	A182-F304	A182-F304	A182-F304	A182-F304	A182-F316
24	Back Up Ring	A217-CA15	A351-CF8	A217-CA15	A217-CA15	A217-CA15	A217-CA15	A351-CF8	A351-CF8M
25	Yoke Stud	A193-B7	A320-L7	A193-B16	A193-B16	A193-B16	A193-B16	A193-B8	A193-B8
26	Yoke Nut	A194-2H	A194-4	A194-4	A194-4	A194-4	A194-4	A194-8	A194-8
27	Clamp	A216-WCB	A352-LCB	A217-WC6	A217-WC9	A217-C5	A217-C12	A351-CF8	A351-CF8M
28	Bearing	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel

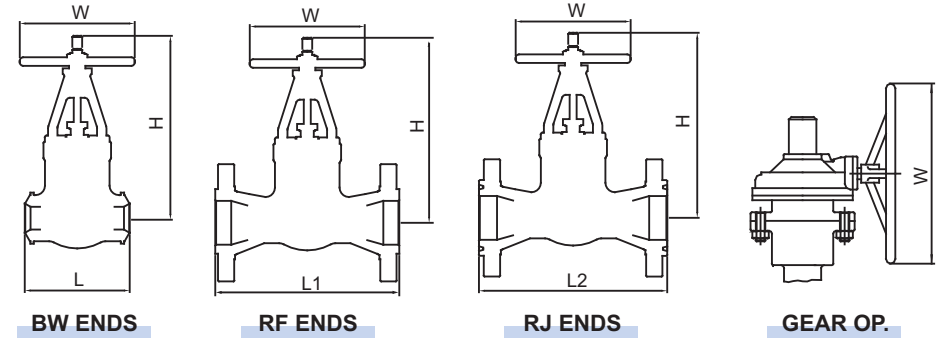
### GLAND PACKING & GASKET MATERIAL LIST

- 8 GASKET :  GRAPHOIL  F304  F316  ALLOY STEEL  \_\_\_\_\_
- 9 GLAND PACKING :  GRAPHOIL / GRAPHOIL + 304/316 WIRE  TEFLON  \_\_\_\_\_

SOUR OIL AND GAS SERVICE - NACE MR-01-75 : A193-B7M STUDS & A194-2HM NUTS ARE AS STANDARD.

API.CE.ISO CERTIFIED

## GATE VALVE DIMENSIONS - PRESSURE SEAL



### CLASS 600-FIG NO: 6PGA

SIZE	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
L	mm	178	216	254	305	457	584	711	813	889	991	1092	1194	1397
L1	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L2	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	1406
H	mm	407	533	598	717	972	1201	1379	1586	1743	1898	2201	2359	2980
W	mm	250	250	300	350	450	460*	610*	610*	710*	710*	710*	710*	710*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

### CLASS 900-FIG NO: 9PGA

SIZE	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
L	mm	216	254	305	356	508	660	787	914	991	1092	1181	1283	1511
L1	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549
L2	mm	371	422	384	460	612	740	841	968	1038	1140	1232	1333	1568
H	mm	594	753	698	779	1091	1360	1690	1895	2125	2261	2470	2750	3242
W	mm	250	350	400	450	610*	610*	710*	710*	800*	800*	800*	800*	800*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

### CLASS 1500-FIG NO: 15PGA

SIZE	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
L	mm	216	254	305	406	559	711	864	991	1067	1194	1346	1473	1626
L1	mm	368	419	470	546	705	832	991	1130	1257	1384	1536	1664	1943
L2	mm	371	422	473	549	711	841	1000	1146	1276	1406	1559	1686	1972
H	mm	624	753	853	964	1219	1411	1645	1875	2216	2331	2823	3102	3766
W	mm	300	400	450	560	460*	710*	710*	800*	800*	800*	800*	800*	800*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

### CLASS 2500-FIG NO: 25PGA

SIZE	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"
L	mm	279	330	368	457	610	762	914	1041	1118	1245	1397
L1	mm	451	508	578	673	914	1022	1270	1422	-	-	-
L2	mm	454	514	584	683	927	1038	1292	1445	-	-	-
H	mm	753	853	930	1119	1350	1601	1805	2096	2391	2570	3050
W	mm	400	450	560	560	710*	710*	710*	800*	800*	800*	800*

\*BEVEL GEAR OPERATOR IS RECOMMENDED.

CLASS 4500 - FIG NO : 45PGA-OFFER DIMENSIONS ON REQUEST



# GATE VALVE

## OPTIONAL DEVICES FOR GATE VALVE

