

GATE VALVES

PRESSURE SEAL GATE VALVES

series 50P (API 600) & 51P (API 603)



FEATURES

- OS&Y
- SOLID AND FLEXIBLE WEDGE DESIGN
- RENEWABLE WELDED SEAT RINGS
- CAST & STAINLESS STEEL
- SIZE 2" - 24" ANSI CLASS 600 - 2500
- BASIC DESIGN ANSI B 16.34
- FACE TO FACE DIMENSION ANSI B16.10
- END FLANGES DIMENSION ANSI B 16.5
- BUTT-WELD END DIMENSION ANSI B16.25
- INSPECTION & TESTING API 598 / API6D



TRIM MATERIAL

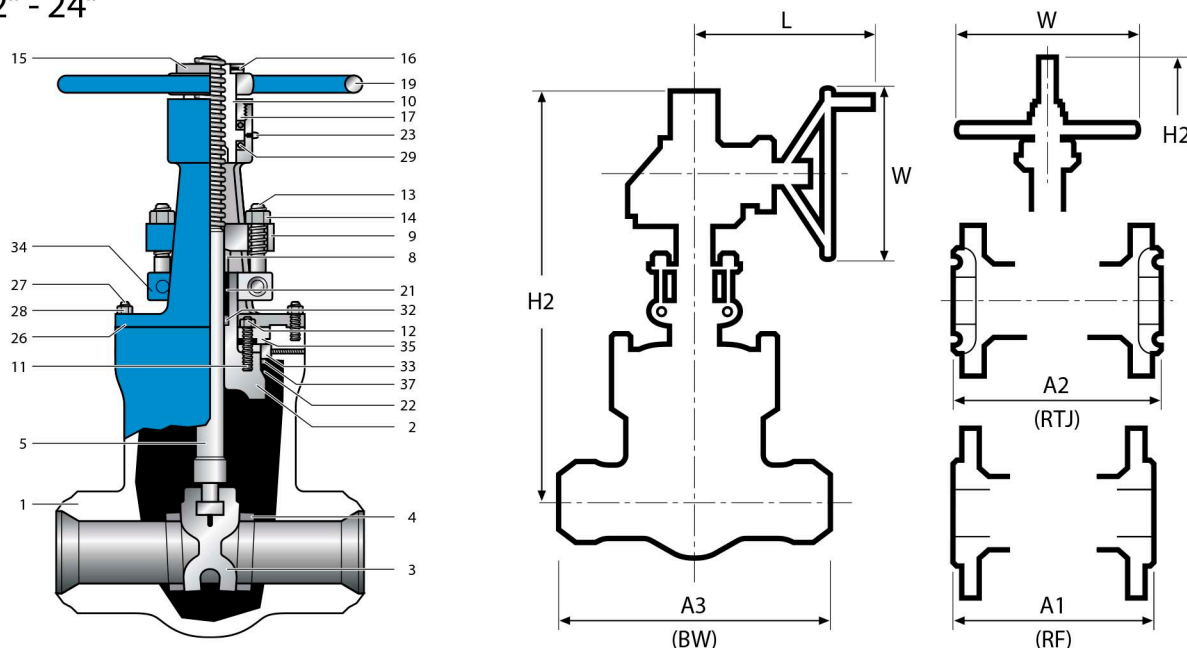
Trim No.	Seat ring surface	Wedge seat surface	Stem	Backseat bushing
1	F6 (13% CR)	F6 (13% CR)	F6 (13% CR)	F6 (13% CR)
2	F304	F304	F304	F304
5	Stellite 6	Stellite 6	F6 (13% CR)	F6 (13% CR)
6	Cu-Ni	F6 (13% CR)	F6 (13% CR)	F6 (13% CR)
8	Stellite 6	F6 (13% CR)	F6 (13% CR)	F6 (13% CR)
9	Monel	Monel	Monel	Monel
10	F316	F316	F316	F316
13	Alloy 20	Alloy 20	Alloy 20	Alloy 20

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CAST & STAINLESS STEEL PRESSURE SEAL GATE VALVES CLASS 600 - 2500

2" - 24"



BILL OF MATERIAL

NO	NAME OF PART	ASTM SPECIFICATION						
		CARBON STEEL	HIGH TEMPERATURE SERVICE			LOW TEMPERATURE SERVICE	STAINLESS STEEL	
1	BODY	A216-WCB	A217-WC6	A217-WC9	A217-C5	A352-LCB/LC2/LC3	CF8M	CF8C
2	BONNET	A216-WCB	A217-WC6	A217-WC9	A217-C5	A352-LCB/LC2/LC3	CF8M	CF8C
3	DISC	A217-CA15	A217-WC6	A217-WC9	A217-C5	A352-LCB/LC2/LC3	CF8M	CF8C
4	BODY SEAT RING	A 105+ HARD FACE	A182-F11	A182-F22	A182-F50	A182-F304	F316	F347
5	STEM	A182-F6d	A182-F60	A182-F6Q	A182-F6Q	A182-F304	F316	F347
8	PACKING GLAND	A276-410	A276-410	A276-410	A276-410	A276-304	F316	F347
9	GLAND FLANGE	A105	A105	A105	A105	A350 - LF2	CF8M	CF8C
10	YOKE SLEEVE	A439-D2C	A439-D2C	A439-D2C	A439-D2C	B147-B8	F316	F347
11	BONNET BOLT	A193-B7	A193-B16	A193-B16	A193-B16	A320-L7	A193-B8	A193-B8
12	BONNET NUT	A194-2H	A194-4	A194-4	A194-4	A194-4	A194-8	A194-8
13	GLAND BOLT	A193-B7	A193-B7	A193-B7	A193-B7	A320-L7	A193-B8	A193-B8
14	GLAND NUT	A194-2H	A194-2H	A194-2H	A194-2H	A194-4	A194-8	A194-8
15	HANDLE NUT	STEEL						
16	SET SCREW	STEEL						
17	SLEEVE GLAND	STEEL						
19	HANDWHEEL	A395						
21	PACKING	COMMERCIAL						
22	GASKET	COMMERCIAL						
23	GREASE NIPPLE	STEEL					BRONZE	BRONZE
26	YOKE	A216-WCB	A217-WC6	A217-WC9	A217-C5	A352-LC1/LC2/LC3	CF8M	CF8C
27	YOKE BOLT	A193-B7	A193-B16	A193-B16	A193-B16	A320-L7	A193-B8	A193-B8
28	YOKE NUT	A194-2H	A194-4	A194-4	A194-4	A194-4	A194-8	A194-8
29	BEARING	COMMERCIAL						
32	PACKING WASHER	A276-410	A276-410	A276-410	A276-410	A276-304	F316	F347
33	RETAINER	A276-410	A276-410	A276-410	A276-410	A276-304	F316	F347
34	HINGE CLAMP	A216-WCB	A217-WC6	A217-WC9	A217-C5	A352-LC1/LC2/LC3	CF8M	CF8C
35	BONNET CLAMP	A216-WCB	A217-WC6	A217-WC9	A217-C5	A352-LC1/LC2/LC3	CF8M	CF8C
37	GASKET SPACER	A276-410	A276-410	A276-410	A276-410	A276-304	F316	F347

 OTHER MATERIAL AVAILABLE UPON REQUEST INCLUDING NACE MR0175
 HARD FACE STANDARD STELLITE 6 (OTHER OPTIONS AVAILABLE UPON REQUEST)


GATE VALVES

PRESSURE SEAL GATE VALVES

CLASS 600 - CAST & STAINLESS STEEL PRESSURE SEAL GATE VALVES

DIMENSIONS & WEIGHTS

VALVE SIZE	in	2	2.5	3	4	6	8	10	12	14	16	18	20	24
A1 (RF)	in	7.0	8.5	10.0	12.0	18.0	23.0	28.0	32.0	35.0	39.0	43.0	47.0	55.0
A2 (RTJ)	in	11.5	13.0	14.0	17.0	22.0	26.0	31.0	33.0	35.0	39.0	43.0	47.0	55.0
A3 (BW)	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	55.38
H2	in	23.2	24.8	26.3	36.0	42.5	49.9	59.5	70.5	73.1	85.1	88.6	97.2	118.1
W	in	7.9	9.8	9.8	11.8	19.7	22.0	27.2	35.8	24.0	24.0	24.0	24.0	30.0
L	in	-	-	-	-	-	-	-	17.0	17.0	20.2	20.2	20.2	21.8
WGT (RF)	lb	154.4	209.5	220.5	326.3	540.2	705.6	948.2	1135.6	1477.4	1995.5	2535.8	3186.2	4586.4
WGT (BW)	lb	136.7	176.4	185.2	253.6	377.1	474.1	590.9	701.2	959.2	1256.9	1587.6	1962.5	2833.4

CLASS 900 - CAST & STAINLESS STEEL PRESSURE SEAL GATE VALVES

DIMENSIONS & WEIGHTS

VALVE SIZE	in	2	2.5	3	4	6	8	10	12	14	16	18	20	24
A1 (RF)	in	8.5	10.0	12.0	14.0	20.0	26.0	31.0	36.0	39.0	43.0	46.5	50.5	59.5
A2 (RTJ)	in	14.5	16.5	15.0	18.0	24.0	29.0	33.0	38.0	40.5	44.5	48.0	52.0	61.0
A3 (BW)	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	48.5	52.5	61.75
H2	in	23.4	29.6	29.8	34.0	39.9	50.2	60.7	70.1	79.8	89.0	97.2	108.3	127.6
W	in	11.8	17.7	17.7	19.7	22.0	18.1	24.0	24.0	24.0	24.0	29.9	29.9	24.0
L	in	-	-	-	-	-	16.8	17.0	20.2	20.2	20.2	21.8	21.8	20.1
WGT (RF)	lb	132.3	207.3	224.9	330.8	617.4	1455.3	2116.8	2976.8	3748.5	5292	7320.6	9702.0	14927.9
WGT (BW)	lb	88.2	141.1	176.4	220.5	407.9	1091.5	1620.7	2315.3	3087.0	4299.8	6019.7	8125.4	11973.2



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CLASS 1500 - CAST & STAINLESS STEEL PRESSURE SEAL GATE VALVES

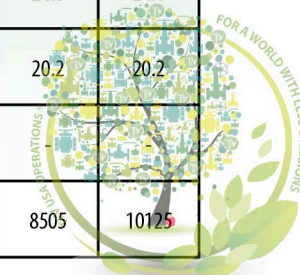
DIMENSIONS & WEIGHTS

VALVE SIZE	in	2	2.5	3	4	6	8	10	12	14	16	18	20	24
A1 (RF)	in	8.5	10.0	12.0	16.0	22.0	28.0	34.0	39.0	42.0	47.0	53.0	58.0	64.0
A2 (RTJ)	in	14.5	16.5	18.5	21.5	27.75	32.75	39.0	44.5	49.5	54.5	60.5	65.5	76.5
A3 (BW)	in	14.62	16.62	18.62	21.62	28.0	33.13	39.38	45.12	50.25	55.38	61.38	66.38	77.62
H2	in	23.4	29.6	29.6	34.0	48.0	51.6	64.8	77.8	87.2	91.8	111.1	122.1	148.3
W	in	11.8	17.7	17.7	19.7	24.0	24.0	24.0	24.0	29.9	29.9	29.9	24.0	24.0
L	in	-	-	-	-	17.0	17.0	20.2	20.0	21.8	21.8	21.8	20.2	20.2
WGT (RF)	lb	132.3	207.3	264.6	458.6	1058.4	2006.6	3109.1	4586.4	5755.1	7938	13141.8	16250.9	23395.1
WGT (BW)	lb	88.2	141.1	176.4	326.3	749.7	1499.4	2249.1	3197.3	3969	6063.8	10209.2	12612.6	18169.2

CLASS 2500 - CAST & STAINLESS STEEL PRESSURE SEAL GATE VALVES

DIMENSIONS & WEIGHTS

VALVE SIZE	in	2	2.5	3	4	6	8	10	12	14	16	18
A1 (RF)	in	11.0	13.0	14.5	18.0	24.0	30.0	36.0	41.0	44.0	49.0	55.0
A2 (RTJ)	in	17.75	20.0	22.75	26.5	36.0	40.25	50.0	56.0	-	-	-
A3 (BW)	in	17.87	20.25	23.0	26.8	36.5	40.87	50.88	56.88	-	-	-
H2	in	23.4	29.6	29.6	34.3	47.3	57.1	63.4	82.5	90.2	97.2	116.1
W	in	14.0	17.7	19.7	23.6	24.0	24.0	24.0	29.9	29.9	24.0	24.0
L	in	-	-	-	-	17.0	20.2	20.2	21.8	21.8	20.2	20.2
WGT (RF)	lb	172.1	273.4	334.1	702.7	1640.3	2673	48074	6925.5	-	-	-
WGT (BW)	lb	101.3	182.3	1924	384.8	1053	1498.5	3240	6075	6885	8505	10125



GATE VALVES

PRESSURE SEAL GATE VALVES

HOW TO ORDER

VALVE TYPE			FEATURES		MATERIAL		ENDS	CLASS	SIZE ⁽⁴⁾	OPERATION	
SERIES		Wedge/Disc Design			BODY	TRIM (Stem/Wedge seat/seat Ring)					
Body Design	Bonnet Design										
50 Gate Valve OS&Y API 600	P Pressure Seal	F Flexible Wedge	NONE	NONE	20 A216 WCB	01 13CR	F Flanged RF	0 ANSI 150#	02 2"	H	Hand wheel
		S Solid Wedge	6D	API 6D	21 A216 WCC	02 304SS	R Flanged RTJ	3 ANSI 300#	02.5 2 1/2"		
51 Gate Valve OS&Y API 603		P Parallel Slide w/ Spring	N	NACE	22 A350 LCB ⁽¹⁾	05 13CR / HF / HF	B Butt Weld	6 ANSI 600#	03 3"	G	Gear Operator
		R Parallel Slide w/ Spreaders	ND	NACE/API 6D	23 A352 LC3 ⁽¹⁾			9 ANSI 900#	04 4"	E	Electric Actuator
			F	Fire Safe	24 A217 WC1	13CR / 13CR / CuNi		1 ANSI 1500#	05 5"	P	Pneumatic Actuator
			O	Oxygen Service	25 A217 WC6 ⁽²⁾			2 ANSI 2500#	06 6"	B	Bare Shaft
			FE	Fugitive Emmissions	26 A217 WC9 ⁽²⁾	13CR / 13CR / HF			08 8"		
			BS	Bellows Seal	27 A217 C5 ⁽²⁾				10 10"		
			CR	Criogenic Service	28 A217 C12 ⁽¹⁾	09 Monel			12 12"		
					30 A351 CF8M ⁽³⁾	10 316SS			14 14"		
					31 A351 CF3M ⁽³⁾	11 AB C61300			16 16"		
					32 A351 CF8 ⁽³⁾	316SS / 316SS / HF			18 18"		
					33 A351 CF3 ⁽³⁾				20 20"		
					40 Monel	13 CN7M			24 24"		
					41 Alloy 20	14 CN7M / CN7M HF			26 26"		
					42 Hastelloy	15 AB C95500			28 28"		
					43 A182 Gr321	16 316 + HF / 316 + HF / 316 + HF			30 30"		
					44 A182 Gr347	17 316L SS			36 36"		
					45 Duplex	18 Monel / Monel / HF			40 40"		
					46 Triballoy 900				42 42"		
					47 Incolloy 800				48 48"		
					48 Incolloy 825				52 52"		

Example

Gate Valve OS&Y API 603, Pressure Seal Flexible Wedge Body WCB Trim 5 (Stem 13% Cr, Wedge and Seat Harfacing Stellite)
 Flanged ANSI Class 150# Size 6" with Handwheel.

51PF-2005-F006H

(1) Low temperature Service

(2) High temperature Service

(3) Stainless Steel

(4) Available Sizes: ANSI Class 150# - from 2" to 52"
 300# - from 2" to 48", 600, 900 & 1500# - from 2" to 24"
 2500# - from 2" to 12"

General Notes:

*API 603 Light Wall (ANSI/ASME B16.34)

**API 600 Heavy Wall

***HF = Usually Stellite 6 other available under request

