

● Foreword

SWI Valve Co., Ltd. (SWI) stands for three values – quality, innovation and service. We know that the world's Oil, Chemical, Petrochemical and Process industries require high-quality precision flow control products. Since its foundation in 1987, SWI has dedicated to supplying that need with an extensive range of industrial valves, manufactured in its own factories and designed for environmental sensitivity.

Today, SWI is a leading manufacturer of Ball, Gate, Globe, Check, Cryogenic, Bellows Seal and Double Block & Bleed valves. Our facilities incorporate all aspects of valve design, development and manufacture ensuring that SWI can offer a degree of flexibility rarely encountered elsewhere.

The Quality Policy of SWI is to consistently provide products which satisfy customer and applicable regulatory requirements, with the aim of enhancing customer satisfaction by providing exactly what has been agreed contractually, to the required quality and within the time stated. In order to achieve this aim, SWI operates under the Quality Assurance Scheme which is in accordance with ISO 9001 and API Monogram.

We are pleased to introduce our range of Forged Steel Valves and trust this catalogue will assist our customers in the selection and application of SWI products.



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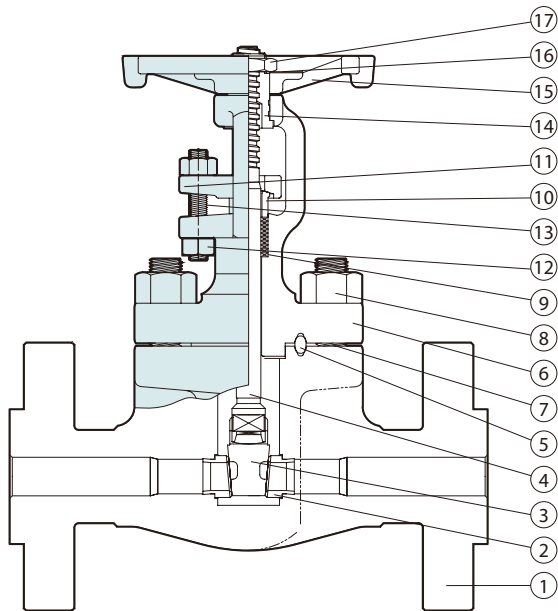
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**Critical Service
Valves for the
World's Industries**

GATE VALVES – RING JOINT BONNET – REDUCED / FULL PORT



No.	Parts	Material	A.S.T.M.
1	Body	Forged Steel	A105N
2	Seat Ring	Stellite 6 faced A276-410	
3	Wedge	13Cr Stainless Steel	A217-CA15
4	Stem	13Cr Stainless Steel	A276-410
5	Gasket	Soft Iron	
6	Bonnet	Forged Steel	A105N
7	Bonnet Bolt	Alloy Steel	A193-B7
8	Bonnet Nut	Carbon Steel	A194-2H
9	Gland Packing	Graphoil	
10	Gland	Stainless Steel	A276-316
11	Gland Flange	Forged Steel	A105
12	Gland Nut	Carbon Steel	A194-2H
13	Gland Bolt	Stainless Steel	A193-B6
14	Yoke Sleeve	13Cr Stainless Steel	A582-416
15	Handwheel	Malleable Iron	A47
16	Name Plate	Aluminum	
17	Handwheel Nut	Carbon Steel	A563A

CLASS 1500 - API 602 / ASME B16.34

Unit: mm (inch)

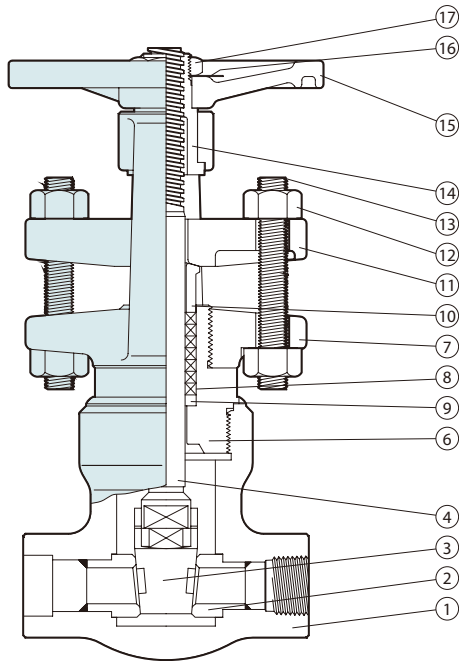
Port	Valve Size	Handwheel Diameter	Face to Face	Center to Top (Open)	Dia. of Port Openings	Weight Kg (Lb)
Reduced	1/2	124 (4.88)	216 (8.50)	284 (11.18)	12.7 (0.50)	10 (22)
	3/4	124 (4.88)	229 (9.00)	284 (11.18)	12.7 (0.50)	14 (31)
	1	124 (4.88)	254 (10.00)	332 (13.07)	18.0 (0.71)	17 (38)
	1 1/2	200 (7.88)	305 (12.00)	390 (15.35)	31.8 (1.25)	33 (73)
	2	250 (9.84)	368 (14.25)	480 (18.90)	31.8 (1.25)	55 (121)

CLASS 2500 - ASME B16.34

Unit: mm (inch)

Port	Valve Size	Handwheel Diameter	Face to Face	Center to Top (Open)	Dia. of Port Openings	Weight Kg (Lb)
Full	1/2	124 (4.88)	264 (10.38)	311 (12.24)	12.7 (0.50)	18 (40)
	3/4	124 (4.88)	273 (10.75)	311 (12.24)	12.7 (0.50)	19 (42)
	1	200 (7.88)	308 (12.12)	388 (15.27)	18.0 (0.71)	35 (77)
	1 1/2	200 (7.88)	384 (15.12)	430 (16.93)	25.4 (1.00)	54 (119)
	2	250 (9.84)	451 (17.75)	480 (18.90)	31.8 (1.25)	82 (181)

GATE VALVES – SEAL WELDED BONNET – REDUCED / FULL PORT



No.	Parts	Material	A.S.T.M.
1	Body	Forged Steel	A105N
2	Seat Ring	Stellite 6 faced A105	
3	Wedge	Stellite 6 faced A276-410	
4	Stem	13Cr Stainless Steel	A276-410
6	Bonnet	Forged Steel	A105N
7	Yoke	Forged Steel	A105N
8	Gland Packing	Graphoil	
9	Packing Ring	Stainless Steel	A276-316
10	Gland	Stainless Steel	A276-316
11	Gland Flange	Forged Steel	A105
12	Gland Nut	Carbon Steel	A194-2H
13	Gland Bolt	Alloy Steel	A193-B7
14	Yoke Sleeve	High Tension Brass	
15	Handwheel	Malleable Iron	A47
16	Name Plate	Aluminum	
17	Handwheel Nut	Carbon Steel	A563A

CLASS 1500 - ASME B16.34

Unit: mm (inch)

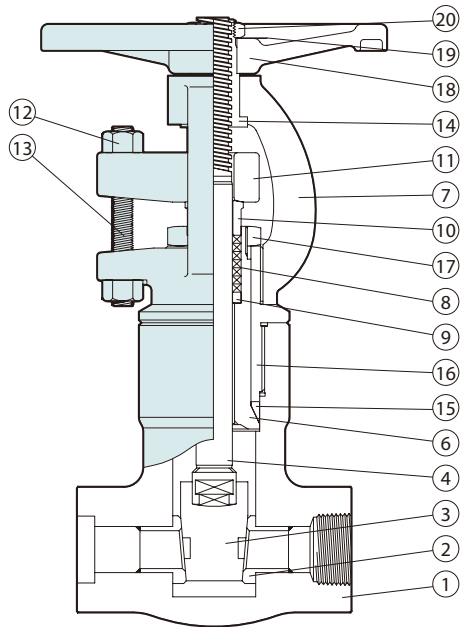
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Weight Kg (Lb)
Reduced	1/2	140 (5.51)	110 (4.33)	235 (9.25)	12 (0.47)	5 (11)
	3/4	140 (5.51)	110 (4.33)	235 (9.25)	12 (0.47)	5 (11)
	1	140 (5.51)	127 (5.00)	267 (10.51)	16 (0.63)	7 (15)
	1 1/4	200 (7.87)	155 (6.10)	320 (12.60)	20 (0.79)	13 (29)
	1 1/2	200 (7.87)	155 (6.10)	320 (12.60)	20 (0.79)	13 (29)
	2	230 (9.06)	210 (8.27)	361 (14.21)	32 (1.26)	23 (51)
Full	1/2	140 (5.51)	110 (4.33)	235 (9.25)	12 (0.47)	5 (11)
	3/4	140 (5.51)	127 (5.00)	267 (10.51)	16 (0.63)	7 (15)
	1	200 (7.87)	155 (6.10)	320 (12.60)	20 (0.79)	13 (29)
	1 1/4	230 (9.06)	210 (8.27)	361 (14.21)	32 (1.26)	23 (51)
	1 1/2	230 (9.06)	210 (8.27)	361 (14.21)	32 (1.26)	23 (51)
	2	250 (9.84)	229 (9.02)	468 (18.43)	43 (1.69)	37 (82)

CLASS 2500 - ASME B16.34

Unit: mm (inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Weight Kg (Lb)
Full	1/2	140 (5.51)	110 (4.33)	227 (8.94)	12 (0.47)	5 (11)
	3/4	200 (7.87)	127 (5.00)	270 (10.63)	16 (0.63)	8 (18)
	1	230 (9.06)	155 (6.10)	324 (12.76)	21 (0.83)	13 (30)
	1 1/4	250 (9.84)	210 (8.27)	390 (15.35)	32 (1.26)	23 (52)
	1 1/2	250 (9.84)	210 (8.27)	390 (15.35)	32 (1.26)	23 (52)
	2	315 (12.4)	229 (9.02)	487 (19.17)	38 (1.50)	38 (84)

GATE VALVES – PRESSURE SEAL BONNET – FULL PORT



No.	Parts	Material	A.S.T.M.
1	Body	Forged Steel	A105N
2	Seat Ring	Stellite 6 faced A105	
3	Wedge	Stellite 6 faced A276-410	
4	Stem	13Cr Stainless Steel	A276-410
6	Bonnet	Forged Steel	A105N
7	Yoke	Forged Steel	A105N
8	Gland Packing	Graphoil	
9	Packing Ring	Stainless Steel	A276-316
10	Gland	Stainless Steel	A276-316
11	Gland Flange	Forged Steel	A105
13	Gland Nut	Carbon Steel	A194-2H
12	Gland Bolt	Alloy Steel	A193-B7
14	Yoke Sleeve	High Tension Brass	
15	Gasket	Soft Iron	
16	Bonnet Guide	Forged Steel	A105N
17	Bonnet Nut	Carbon Steel	
18	Handwheel	Malleable Iron	A47
19	Name Plate	Aluminum	
20	Handwheel Nut	Carbon Steel	A563A

CLASS 1500 / 2500 - ASME B16.34

Unit: mm (inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Weight Kg (Lb)
Full	1/2	200 (7.87)	155 (6.10)	311 (12.24)	12 (0.47)	14 (31)
	3/4	200 (7.87)	155 (6.10)	311 (12.24)	16 (0.63)	14 (31)
	1	230 (9.06)	210 (8.27)	364 (14.33)	20 (0.79)	23 (51)
	1 1/2	250 (9.84)	229 (9.02)	428 (16.85)	32 (1.26)	34 (75)
	2	315 (12.4)	235 (9.25)	473 (18.62)	43 (1.69)	43 (95)

Valve Type	Class	Port	1/2	3/4	1	1-1/4	1-1/2	2
Gate	150~800	Reduced	7	14	29	84	93	155
	1500	Reduced	13	15	29	81	100	148
	150~800	Full	17	33	57	154	154	288
	1500	Full	15	28	45	122	122	220
	2500	Full	14	27	48	113	116	172
Globe	150~800	Reduced	2	3	4	8	15	30
	1500	Reduced	2	3	5	10	18	28
	150~800	Full	3	5	9	15	21	38
	1500	Full	3	4	7	12	18	28
	2500	Full	1	2	4	9	12	22
	4500	Full	1	2	3	8	8	11
Lift Check	150~800	Reduced	1.5	2	4	6	13	24
	1500	Reduced	1.4	2	4	8	19	23
	150~800	Full	2	4	7	11	16	28
	1500	Full	2	3	5	9	13	21
	2500	Full	1	2	3	7	9	17
	4500	Full	1	2	3	6	7	8
Swing Check	150~800	Reduced	8	10	22	50	66	84
	1500	Reduced	8	9	19	40	52	80
	800	Full	10	25	48	70	92	115
Y Pattern Globe	150~800	Reduced	3	6	11	19	34	48
	1500/1690	Reduced	3	5	10	15	29	41
	800	Full	6	12	21	35	51	90
	1500/1690	Full	5	10	16	30	43	66
	2500/2680	Full	4	7	10	22	25	53
	4500	Full	2	5	8	19	20	35
Y Pattern Lift Check	150~800	Reduced	3	6	11	19	34	48
	1500/1690	Reduced	3	5	10	15	29	41
	800	Full	6	9	15	28	41	78
	1500/1690	Full	4	8	12	24	35	58
	2500/2680	Full	3	4	8	18	23	46
	4500	Full	2	3	6	16	16	21

CODE TABLE 1 2 3 4 5 6 7 8
SAMPLE VALVE AA F 24 AN A B 1 C
 GATE, CLASS 800, 316/L BODY, 316FHF TRIM, SOCKET WELD ENDS, WELDED BONNET RED.PORT, GRAPHOIL PACKING

1 VALVE TYPE		2 CLASS		3 SHELL MATERIAL				4 TRIM MATERIAL			
AA	GATE	A	125	11	A105N, WCB	32	F91, C12A		STEM	WEDGE/DISC	SEAT
AB	GLOBE	B	150	13	LF2, LC2	33	MONEL	AB	CR13	CR13	STELLITE 6
AC	PISTON CHECK	C	200	14	LF3, LC3	34		AC	CR13	CR13+ST 6	STELLITE 6
AD	SWING CHECK	D	300	15	F5, C5	35	ALLOY 625 NO6625	AF	304	304/CF8	STELLITE 6
AE	BALL CHECK	E	600	16	F9, C12	36	ALLOY 825 NO8825	AG	304	304/CF8+ST 6	STELLITE 6
AF	NEEDLE GLOBE	F	800	17	F11, WC6	37	ALLOY 800 NO8800	AL	316	316/CF8M	316/CF8M
AG	ANGLE GLOBE	G	900	18	F22, WC9	38	ALLOY 800H NO8810	AM	316	316/CF8M	STELLITE 6
AH	GLOBE STOP CHECK	H	1500	21	F304L, CF3	39	ALLOY-20	AN	316	316/CF8M+ST 6	STELLITE 6
AJ	PISTON CHECK (SPRING LOADED)	J	2500	22	F304H	41	TITANIUM	AO	316L	316L+ST 6	STELLITE 6
AK	BALL CHECK (SPRING LOADED)	K	4500	24	F316/F316L	42	F317, CG8M	AQ	317	317+ST 6	STELLITE 6
AL	BOILER BLOWDOWN	L	1690	25	F316H	43	F317L, CG3M	AR	317L	317L+ST 6	STELLITE 6
BA	GATE (321 STAINLESS BELLOWS)	M	2680	26	F321	48	F304/F304L	AT	321	321+ST 6	STELLITE 6
BB	GLOBE (321 STAINLESS BELLOWS)	Z	SPECIAL	27	F321H	50	LCC	AU	347	347+ST 6	STELLITE 6
BG	GATE (INCONEL 625 BELLOWS)			28	F347, CF8C	51	F347H	AW	DUPLEX	DUPLEX+ST 6	STELLITE 6
BH	GLOBE (INCONEL 625 BELLOWS)			29	F51			BC	MONEL	MONEL+ST 6	MONEL
BI	Y GLOBE (321 STAINLESS BELLOWS)			31	F53			BD	MONEL	MONEL	STELLITE 6
BJ	Y GLOBE (INCONEL 625 BELLOWS)							BE	INCOLOY	INCOLOY	INCOLOY
CG	ANGLE GLOBE STOP CHECK					99	SPECIAL	BH	HASTELLOY-B	HASTELLOY-B	HASTELLOY-B
DB	Y GLOBE							BJ	HASTELLOY-C	HASTELLOY-C	HASTELLOY-C
DC	Y PISTON CHECK (SPRING LOADED)							BK	ALLOY 20	ALLOY 20	ALLOY 20
DD	Y NEEDLE GLOBE							BL	TITANIUM	TITANIUM	TITANIUM
DE	Y BALL CHECK (SPRING LOADED)							CA	ALLOY 825	ALLOY 825+ST 6	STELLITE 6
DF	Y GLOBE STOP CHECK							CB	ALLOY 825	ALLOY 825	ALLOY 825
ZZ	SPECIAL							SB	CR13 (1)	CR13	STELLITE 6
								SC	CR13 (1)	CR13+ST 6	STELLITE 6
								SN	316 (1)	316+ST 6	STELLITE 6
								SY	MONEL (1)	MONEL	MONEL
								SZ	MONEL (1)	MONEL	STELLITE 6
								ZZ	SPECIAL	SPECIAL	SPECIAL

(1) NACE MR01-75 SERVICE

5 END CONNECTION		6 BONNET STYLE		7 BORE TYPE		8 GASKET AND PACKING		
A	SOCKET WELD (ASME)	A	BOLTED BONNET	1	REDUCED	A	304 SPIRAL WOUND+GRAPHITE	GRAPHOIL
B	BW (SPECIFY BORE)	B	WELDED BONNET	2	FULL	B	304L SPIRAL WOUND+GRAPHITE	GRAPHOIL
C	NIPPLE STUB ENDS	C	SEAL WELDED BONNET	9	SPECIAL	C	316 SPIRAL WOUND+GRAPHITE	GRAPHOIL
G	EXTENDED BODY MSW x FNPT	D	PRESSURE SEAL BONNET			D	316L SPIRAL WOUND+GRAPHITE	GRAPHOIL
H	EXTENDED BODY MSW x FSW	E	RING JOINT BONNET			E	MONEL SPIRAL WOUND+GRAPHITE	GRAPHOIL
J	SW x NIPPLE (STUB END)	F				F	A20 SPIRAL WOUND+GRAPHITE	GRAPHOIL
K	NPT x NIPPLE (STUB END)	G	COMPACT BOLTED BONNET BELLOWSEAL (GLOBE ONLY)			G	304 SPIRAL WOUND+TEFLON	TEFLON
L	EXTENDED BODY MNPT x FNPT	H	BONNETLESS			H	304L SPIRAL WOUND+TEFLON	TEFLON
M	EXTENDED BODY MNPT x FSW	J	EXTENDED BOLTED BONNET			J	316 SPIRAL WOUND+TEFLON	TEFLON
N	FNPT THREADED BOTH ENDS	K	EXTENDED WELDED BONNET			K	316L SPIRAL WOUND+TEFLON	TEFLON
P	PT	L	CRYOGENIC BOLTED BONNET			L	MONEL SPIRAL WOUND+TEFLON	TEFLON
Q	FLAT FACE	M	CRYOGENIC WELDED BONNET			M	A20 SPIRAL WOUND+TEFLON	TEFLON
R	RAISED FACE					N	304 SPIRAL WOUND+TEFLON	BRAIDED TFE
S	SOCKET WELD x FNPT					P	304L SPIRAL WOUND+TEFLON	BRAIDED TFE
T	RING TYPE JOINT FACE					Q	316 SPIRAL WOUND+TEFLON	BRAIDED TFE
V	SW (JIS)					R	316L SPIRAL WOUND+TEFLON	BRAIDED TFE
X	SW (JIS) x PT					S	MONEL SPIRAL WOUND+TEFLON	BRAIDED TFE
2	INTEGRALLY REINFORCED EXTENDED BODY (BW x FNPT)	Z	SPECIAL			T	A20 SPIRAL WOUND+TEFLON	BRAIDED TFE
3	INTEGRALLY REINFORCED EXTENDED BODY (BW x FSW)					Z	SPECIAL	SPECIAL
4	INTEGRALLY REINFORCED EXTENDED BODY (LIP END X FNPT)							
5	INTEGRALLY REINFORCED EXTENDED BODY (LIP END X FSW)							
Z	SPECIAL							



Products Manufactured by SWI Include :

- Ball Valves, Soft & Metal Seated
- Forged Steel Gate, Globe & Check Valves
- Cast & Forged Bellows Seal Gate and Globe Valves
- Cryogenic Valves down to minus 196°C
- Positive Isolation Block & Bleed Valves
- High Alloy Valves
- Top Entry Valves
- Fully Automated Valves, Pneumatic, Electric, Hydraulic & Gas Over Oil Systems

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