SWI

FORGED STEEL VALVES

SWI Valve Co.,Ltd.

SWI

It is our pleasure to present our 2005 catalog edition of SWI forged steel valves.
This catalog edition includes the latest API 602 and ASME valve products engineered, designed and manufactured by SWI.

SWI Valve Company Ltd. Is committed to manufacturing product which meets and exceeds industry standards.

In the interest of continuous product development we conduct R&D studies within our plant and with consumers to ensure SWI maintains our position within the evolving requirements of our industry.

SWI forged valves have a proven track record of providing superior performance in various applications within the chemical, petrochemical, gas and various industrial applications.

Our commitment of utilizing the latest production equipment and adhering to the highest quality standards assures SWI products to be of world class quality with competitive prices and outstanding delivery performance.

Please contact SWI directly or through our worldwide network of stocking distributors.
Visit our website at swivalve.com for a review of our complete product line, including bellowseal valves, ball valves and special application products.

We thank you for your interest in SWI Valve Products.

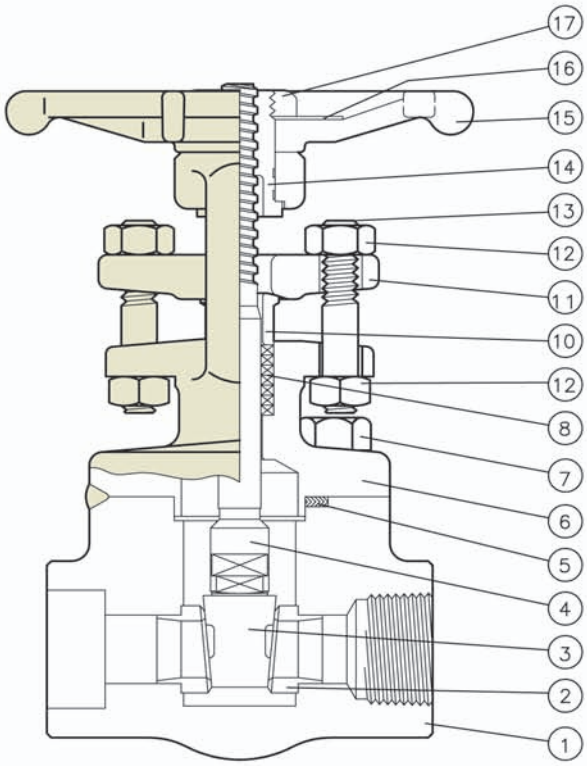
Sincerely yours.

Y. S. Choi
President

Certified to ISO 9001, DNV, API and Canadian Boiler Code (CRN)

CONTENTS

API 602 / ASME B16.34 – BOLTED / WELDED 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	304 Spiral Wound Graphite	
6	Bonnet	Forged Steel	A105N
7	Bonnet Bolt	Alloy Steel	A193–B7
8	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 600 / 800

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	86 (3.39)	76 (2.99)	145 (5.71)	9.8 (0.39)	1.5 (3.3)
	3/4	86 (3.39)	86 (3.39)	151 (5.95)	13.0 (0.51)	2.0 (4.4)
	1	99 (3.90)	102 (4.02)	190 (7.48)	18.0 (0.71)	2.8 (6.2)
	11/4	124 (4.88)	117 (4.61)	241 (9.49)	31.0 (1.22)	5.2 (11.5)
	11/2	124 (4.88)	117 (4.61)	241 (9.49)	31.0 (1.22)	5.2 (11.5)
	2	138 (5.43)	133 (5.24)	271 (10.67)	37.0 (1.46)	8.2 (18.8)
Full	1/2	86 (3.39)	86 (3.39)	151 (5.95)	13.0 (0.51)	2.0 (4.4)
	3/4	99 (3.90)	102 (4.02)	190 (7.48)	18.0 (0.71)	2.8 (6.2)
	1	124 (4.88)	117 (4.61)	241 (9.49)	23.0 (0.91)	5.2 (11.5)
	11/4	138 (5.43)	133 (5.24)	271 (10.67)	37.0 (1.46)	8.2 (18.8)
	11/2	138 (5.43)	133 (5.24)	271 (10.67)	37.0 (1.46)	8.2 (18.8)
	2	157 (6.18)	218 (8.58)	318 (12.52)	50.8 (2.00)	12.7 (28.0)

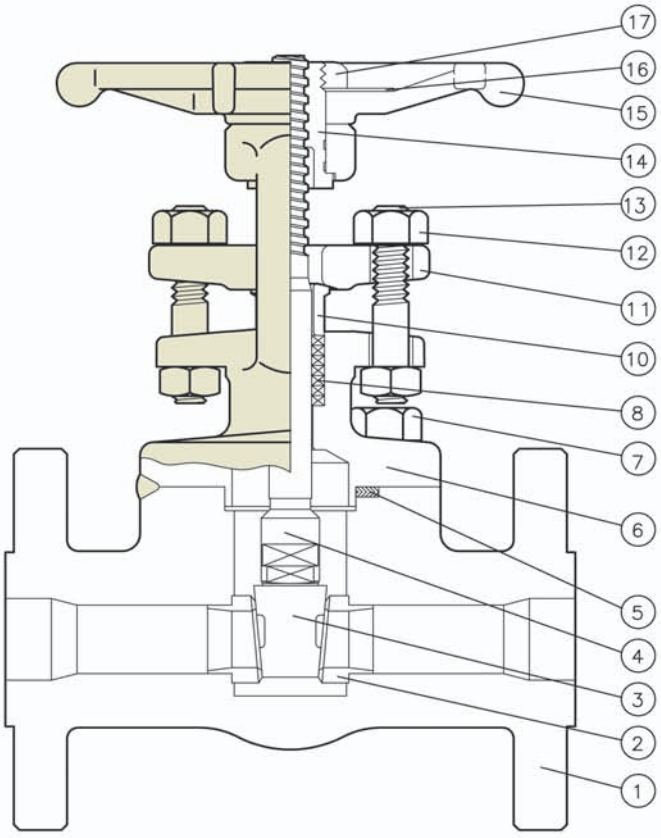
CLASS 1500

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	86 (3.39)	86 (3.39)	151 (5.95)	9.8 (0.39)	2.0 (4.4)
	3/4	99 (3.90)	102 (4.02)	190 (7.48)	13.0 (0.51)	3.4 (7.5)
	1	124 (4.88)	117 (4.61)	241 (9.49)	18.0 (0.71)	5.8 (12.8)
	11/4	138 (5.43)	133 (5.24)	271 (10.67)	31.0 (1.22)	8.5 (18.7)
	11/2	138 (5.43)	133 (5.24)	271 (10.67)	31.0 (1.22)	8.5 (18.7)
	2	157 (6.18)	210 (8.27)	325 (12.80)	37.0 (1.46)	11.7 (25.8)

SWI GATE VALVE AA SERIES

API 602 / ASME B16.34 – BOLTED / WELDED BONNET – REDUCED 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	304 Spiral Wound Graphite	
6	Bonnet	Forged Steel	A105N
7	Bonnet Bolt	Alloy Steel	A193–B7
8	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 150 – 300 – 600

Unit : mm(inch)

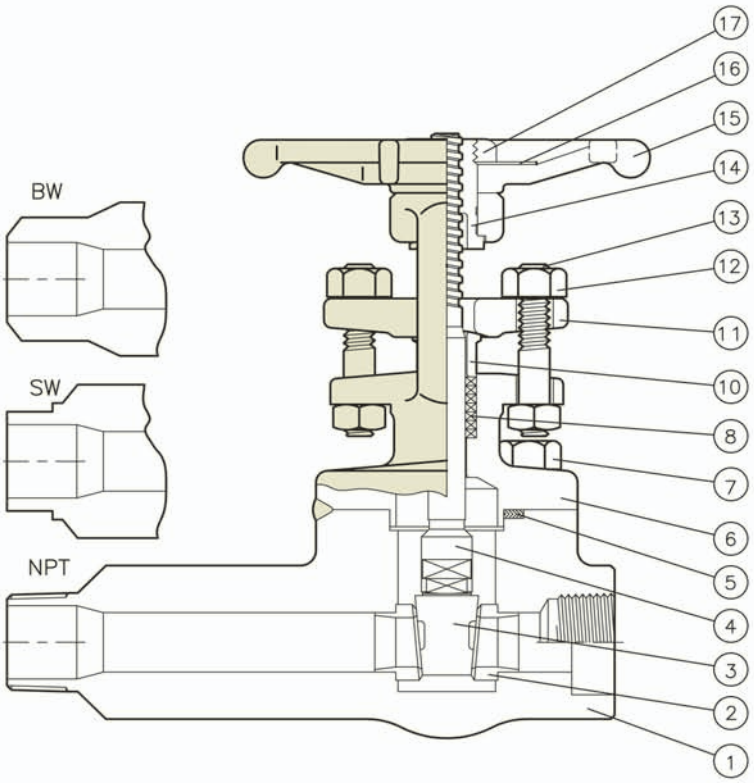
Port	Valve Size	Handwheel Diameter	Center to Top (Open)	Dia. of Port Openings	End to End			Approx. Wt , Kg(Lb)		
					Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
Reduced	1/2	86 (3.39)	145 (5.71)	9.8 (0.39)	108 (4.25)	140 (5.50)	165 (6.50)	2.5 (5.5)	3.0 (6.6)	3.3 (7.3)
	3/4	86 (3.39)	151 (5.95)	13.0 (0.51)	117 (4.62)	152 (6.00)	190 (7.50)	3.1 (6.8)	4.0 (8.8)	4.6 (10.1)
	1	99 (3.90)	190 (7.48)	18.0 (0.71)	127 (5.00)	165 (6.50)	216 (8.50)	4.7 (10.4)	6.0 (13.2)	6.6 (14.6)
	11/2	124 (4.88)	241 (9.49)	31.0 (1.22)	165 (6.50)	190 (7.50)	241 (9.50)	8.7 (19.2)	11.0 (24.3)	12.2 (26.9)
	2	138 (5.43)	271 (10.67)	37.0 (1.46)	178 (7.00)	216 (8.50)	292 (11.50)	12.2 (26.9)	14.0 (30.9)	15.8 (34.8)

CLASS 1500

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	Center to Top (Open)	Dia. of Port Openings	End to End	Approx. Wt , Kg(Lb)
Reduced	1/2	86 (3.39)	153 (6.02)	9.8 (0.39)	216 (8.50)	6.5 (14.3)
	3/4	99 (3.90)	190 (7.58)	13.0 (0.51)	229 (9.00)	9.0 (19.9)
	1	124 (4.88)	230 (9.06)	18.0 (0.71)	254 (10.00)	13.8 (30.4)
	11/2	138 (5.43)	272 (10.71)	31.0 (1.22)	305 (12.00)	22.2 (49.0)
	2	157 (6.18)	325 (12.80)	37.0 (1.46)	368 (14.25)	33.2 (73.2)

API 602 / ASME B16.34 – BOLTED / WELDED BONNET – REDUCED 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	304 Spiral Wound	Graphite
6	Bonnet	Forged Steel	A105N
7	Bonnet Bolt	Alloy Steel	A193–B7
8	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 600 / 800

Unit : mm(inch)

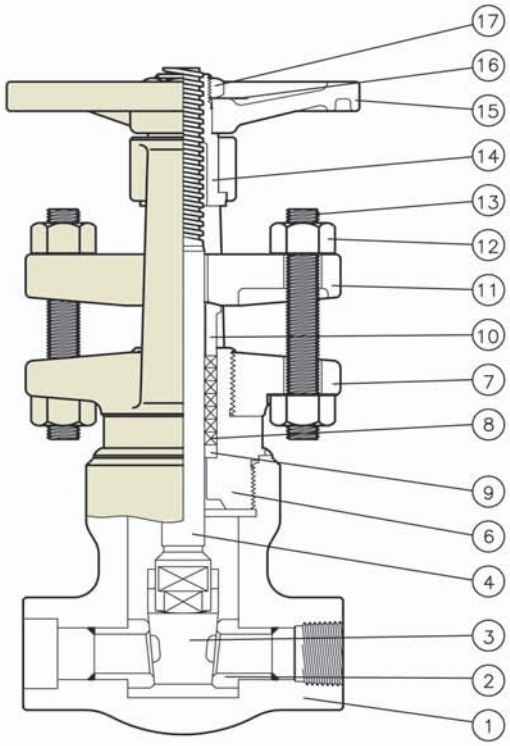
Port (Class)	Valve Size	Handwheel Diameter	End to End	Center to Male End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	86 (3.39)	142 (5.59)	104 (4.10)	145 (5.71)	9.8 (0.39)	2.0 (4.4)
	3/4	86 (3.39)	157 (6.18)	114 (4.49)	151 (5.95)	13.0 (0.51)	3.4 (7.5)
	1	99 (3.90)	165 (6.50)	114 (4.49)	190 (7.48)	18.0 (0.71)	5.8 (12.8)
	11/2	124 (4.88)	193 (7.60)	135 (5.32)	241 (9.49)	31.0 (1.22)	8.5 (18.7)
	2	138 (5.43)	212 (8.35)	146 (5.75)	271 (10.67)	37.0 (1.46)	11.7 (25.8)

CLASS 1500

Unit : mm(inch)

Port (Class)	Valve Size	Handwheel Diameter	End to End	Center to Male End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	86 (3.39)	157 (6.18)	114 (4.49)	153 (6.02)	9.8 (0.39)	3.4 (7.5)
	3/4	99 (3.90)	165 (6.50)	114 (4.49)	190 (7.58)	13.0 (0.51)	5.8 (12.8)
	1	124 (4.88)	193 (7.60)	135 (5.32)	230 (9.06)	18.0 (0.71)	8.5 (18.7)
	11/2	138 (5.43)	212 (8.35)	146 (5.75)	272 (10.71)	31.0 (1.22)	11.7 (25.8)
	2	157 (6.18)	264 (10.39)	189 (7.44)	325 (12.80)	37.0 (1.46)	22.5 (50.0)

ASME B16.34 – 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	13Cr Stainless Steel	A276–410
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

Unit : mm(inch)

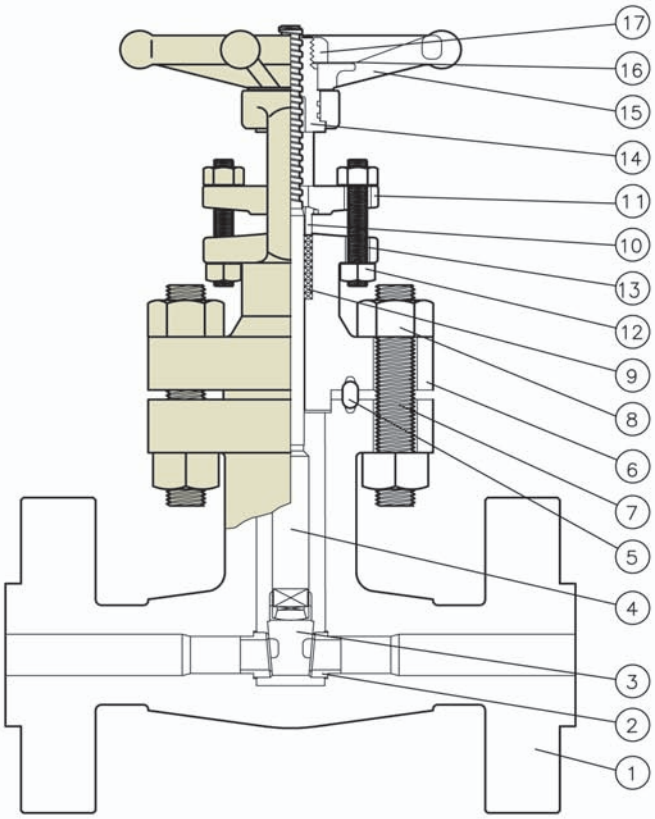
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	140 (5.51)	110 (4.33)	235 (9.25)	12 (0.47)	5 (11)
	3/4	140 (5.51)	110 (4.33)	235 (9.25)	12 (0.47)	5 (11)
	1	140 (5.51)	127 (5.00)	267 (10.51)	16 (0.63)	7 (15)
	11/4	200 (7.87)	155 (6.10)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

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt 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)
	11/4	250 (9.84)	210 (8.27)	390 (15.35)	32 (1.26)	23 (52)
	11/2	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)

ASME B16.34 – 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	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

Unit : mm(inch)

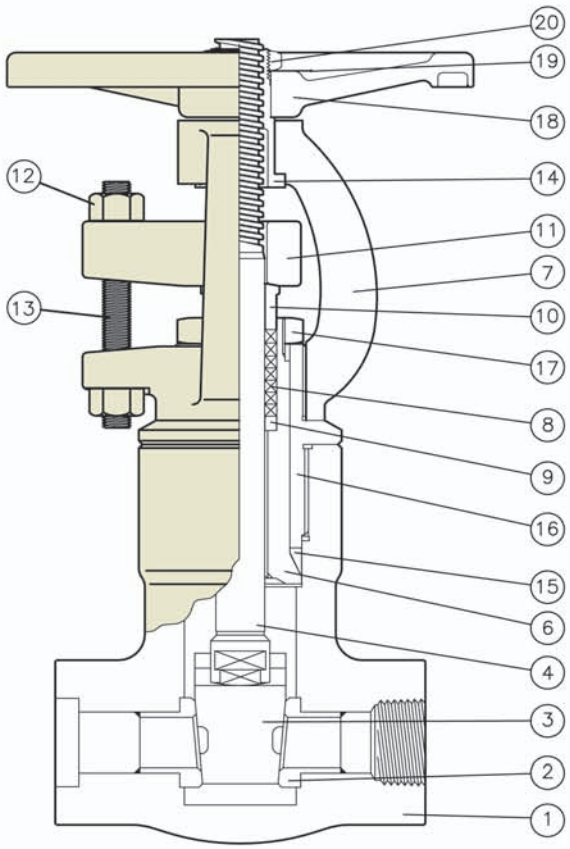
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	124 (4.88)	216 (8.50)	284 (11.18)	12.7 (0.50)	10 (22)
	3/4	124 (4.88)	229 (9.00)	284 (11.18)	12.7 (0.50)	14 (31)
	1	124 (4.88)	254 (10.00)	332 (13.07)	18.0 (0.71)	17 (38)
	11/2	200 (7.88)	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

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt 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)
	11/2	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)

ASME B16.34 – PRESSURE SEAL BONNET – FULL PORT



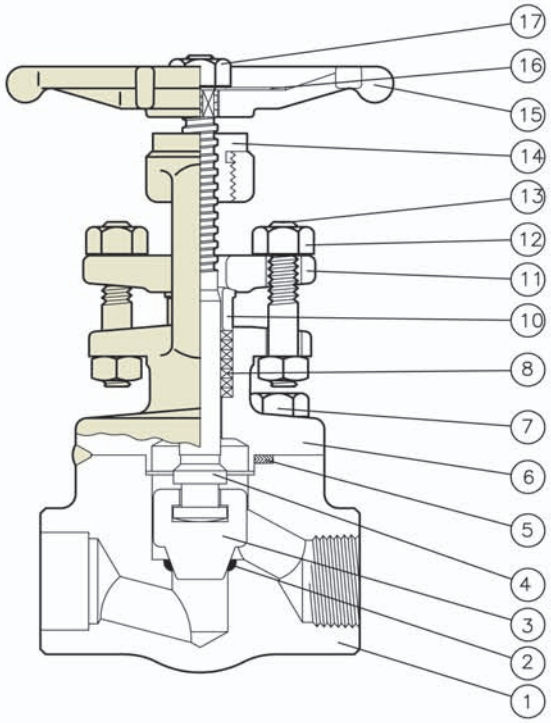
No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat Ring	Stellite 6 faced A105	
3	Wedge	Stellite 6 faced A276–410	
4	Stem	13Cr Stainless Steel	A276–410
6	Bonnet	Forged Steel	A105N
7	Yoke	Forged Steel	A105N
8	Gland Packing	Graphoil	
9	Packing Ring	13Cr Stainless Steel	A276–410
10	Gland	13Cr Stainless Steel	A276–410
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	Gasket	Soft Iron	
16	Bonnet Guide	Forged Steel	A105N
17	Bonnet Nut	13Cr Stainless Steel	A276–410
18	Handwheel	Malleable Iron	A47
19	Name Plate	Aluminum	
20	Handwheel Nut	Carbon Steel	A563A

CLASS 1500 – 2500

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt 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)
	11/2	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)

ASME B16.34 / BS 5352 – BOLTED / WELDED BONNET – REDUCED / FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	13Cr Stainless Steel	A217–CA15
4	Stem	13Cr Stainless Steel	A276–410
5	Gasket	304 Spiral Wound Graphite	
6	Bonnet	Forged Steel	A105N
7	Bonnet Bolt	Alloy Steel	A193–B7
8	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 Bush	13Cr Stainless Steel	A582–416
15	Handwheel	Malleable Iron	A47
16	Name Plate	Aluminum	
17	Handwheel Nut	Carbon Steel	A194–2H

CLASS 600 / 800

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	86 (3.39)	76 (2.99)	146 (5.75)	9.5 (0.37)	1.8 (4.0)
	3/4	86 (3.39)	86 (3.39)	152 (5.98)	12.7 (0.50)	2.1 (4.6)
	1	99 (3.90)	102 (4.02)	188 (7.40)	17.5 (0.69)	2.9 (6.4)
	11/4	124 (4.88)	152 (5.98)	219 (8.62)	22.5 (0.89)	6.4 (14.1)
	11/2	124 (4.88)	152 (5.98)	219 (8.62)	29.5 (1.16)	6.4 (14.1)
	2	138 (5.43)	172 (6.77)	260 (10.24)	35.0 (1.38)	9.7 (21.4)
Full	1/2	86 (3.39)	86 (3.39)	157 (6.18)	12.7 (0.50)	2.1 (4.6)
	3/4	99 (3.90)	102 (4.02)	190 (7.48)	17.5 (0.69)	2.9 (6.4)
	1	124 (4.88)	152 (5.98)	225 (8.86)	23.0 (0.91)	6.4 (14.1)
	11/4	138 (5.43)	172 (6.77)	267 (10.51)	29.5 (1.16)	9.7 (21.4)
	11/2	138 (5.43)	172 (6.77)	267 (10.51)	35.0 (1.38)	9.7 (21.4)
	2	157 (6.18)	218 (8.58)	324 (12.76)	45.5 (1.79)	14.0 (30.9)

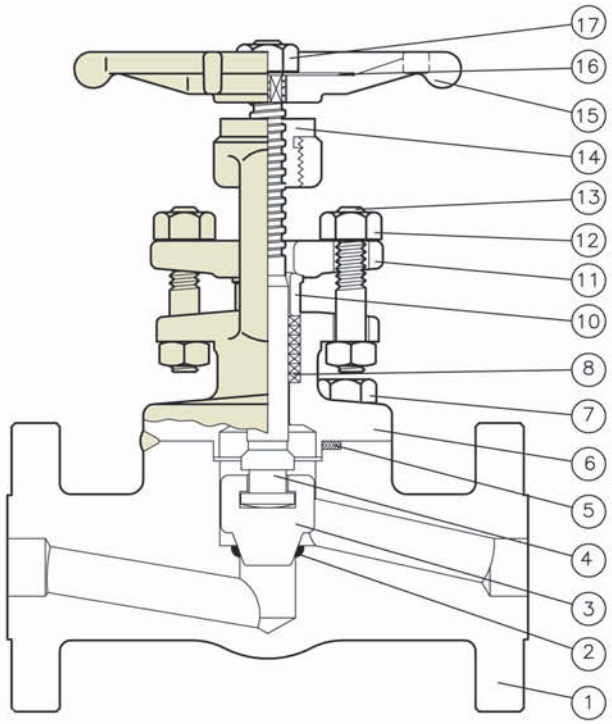
CLASS 1500

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	86 (3.39)	86 (3.39)	147 (5.79)	9.5 (0.37)	2.0 (4.4)
	3/4	99 (3.90)	102 (4.02)	185 (7.28)	12.7 (0.50)	3.4 (7.5)
	1	124 (4.88)	152 (5.98)	210 (8.27)	17.5 (0.69)	6.5 (14.3)
	11/4	138 (5.43)	172 (6.77)	245 (9.65)	22.5 (0.89)	9.6 (21.2)
	11/2	138 (5.43)	172 (6.77)	245 (9.65)	29.5 (1.16)	9.6 (21.2)
	2	157 (6.18)	210 (8.27)	308 (12.13)	35.0 (1.38)	14.0 (30.9)

SWI GLOBE VALVE AB SERIES

ASME B16.34 / BS 5352 – BOLTED / WELDED BONNET – REDUCED PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	13Cr Stainless Steel	A217–CA15
4	Stem	13Cr Stainless Steel	A276–410
5	Gasket	304 Spiral Wound Graphite	
6	Bonnet	Forged Steel	A105N
7	Bonnet Bolt	Alloy Steel	A193–B7
8	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 Bush	13Cr Stainless Steel	A582–416
15	Handwheel	Malleable Iron	A47
16	Name Plate	Aluminum	
17	Handwheel Nut	Carbon Steel	A194–2H

CLASS 150 – 300 – 600

Unit : mm(inch)

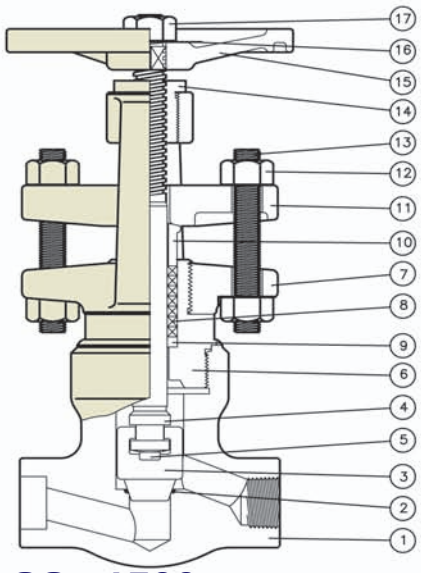
Port	Valve Size	Handwheel Diameter	Center to Top (Open)	Dia. of Port Openings	End to End			Approx. Wt , Kg(Lb)		
					Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
Reduced	1/2	86 (3.39)	146 (5.75)	9.5 (0.37)	108 (4.25)	152 (6.00)	165 (6.50)	2.5 (5.5)	3.0 (6.6)	3.3 (7.3)
	3/4	86 (3.39)	152 (5.98)	12.7 (0.50)	117 (4.62)	178 (7.00)	190 (7.50)	3.1 (6.8)	4.0 (8.8)	4.6 (10.1)
	1	99 (3.90)	188 (7.40)	17.5 (0.69)	127 (5.00)	203 (8.00)	216 (8.50)	4.9 (10.8)	6.2 (13.7)	6.8 (15.0)
	11/2	124 (4.88)	219 (8.62)	29.5 (1.16)	165 (6.50)	229 (9.00)	241 (9.50)	9.2 (20.3)	11.4 (25.1)	12.7 (28.0)
	2	138 (5.43)	260 (10.24)	35.0 (1.38)	203 (8.00)	267 (10.50)	292 (11.50)	13.9 (30.7)	15.4 (34.0)	16.3 (35.9)

CLASS 1500

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	Center to Top (Open)	Dia. of Port Openings	End to End	Approx. Wt , Kg(Lb)
Reduced	1/2	86 (3.39)	147 (5.79)	9.5 (0.37)	216 (8.50)	6.5 (14.3)
	3/4	99 (3.90)	185 (7.28)	12.7 (0.50)	229 (9.00)	9.0 (19.9)
	1	124 (4.88)	210 (8.27)	17.5 (0.69)	254 (10.00)	14.5 (32.0)
	11/2	138 (5.43)	245 (9.65)	29.5 (1.16)	305 (12.00)	23.3 (51.4)
	2	157 (6.18)	308 (12.13)	35.0 (1.38)	368 (14.25)	35.5 (78.3)

ASME B16.34 – SEAL WELDED BONNET – REDUCED / FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	Stellite 6 faced A276–410	
4	Stem	13Cr Stainless Steel	A276–410
5	Disc Pad	Stainless Steel	A276–316
6	Bonnet	Forged Steel	A105N
7	Yoke	Forged Steel	A105N
8	Gland Packing	Graphoil	
9	Packing Ring	13Cr Stainless Steel	A276–410
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 Bush	High Tension Brass	
15	Handwheel	Malleable Iron	A47
16	Name Plate	Aluminum	
17	Handwheel Nut	Carbon Steel	A194–2H

CLASS 1500

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	140 (5.51)	110 (4.33)	232 (9.13)	9.5 (0.37)	5 (11)
	3/4	140 (5.51)	110 (4.33)	232 (9.13)	12 (0.47)	5 (11)
	1	140 (5.51)	127 (5.00)	269 (10.59)	16 (0.63)	7 (15)
	11/4	200 (7.87)	155 (6.10)	280 (11.02)	20 (0.79)	12 (27)
	11/2	200 (7.87)	155 (6.10)	280 (11.02)	27 (1.06)	12 (27)
	2	230 (9.06)	210 (8.27)	390 (15.35)	32 (1.26)	21 (46)
Full	1/2	140 (5.51)	110 (4.33)	232 (9.13)	12 (0.47)	5 (11)
	3/4	140 (5.51)	127 (5.00)	269 (10.59)	16 (0.63)	7 (15)
	1	200 (7.87)	155 (6.10)	322 (12.68)	20 (0.79)	12 (27)
	11/4	230 (9.06)	210 (8.27)	390 (15.35)	27 (1.06)	21 (46)
	11/2	230 (9.06)	210 (8.27)	390 (15.35)	32 (1.26)	21 (46)
	2	250 (9.84)	229 (9.02)	471 (18.54)	39 (1.54)	35 (77)

CLASS 2500

Unit : mm(inch)

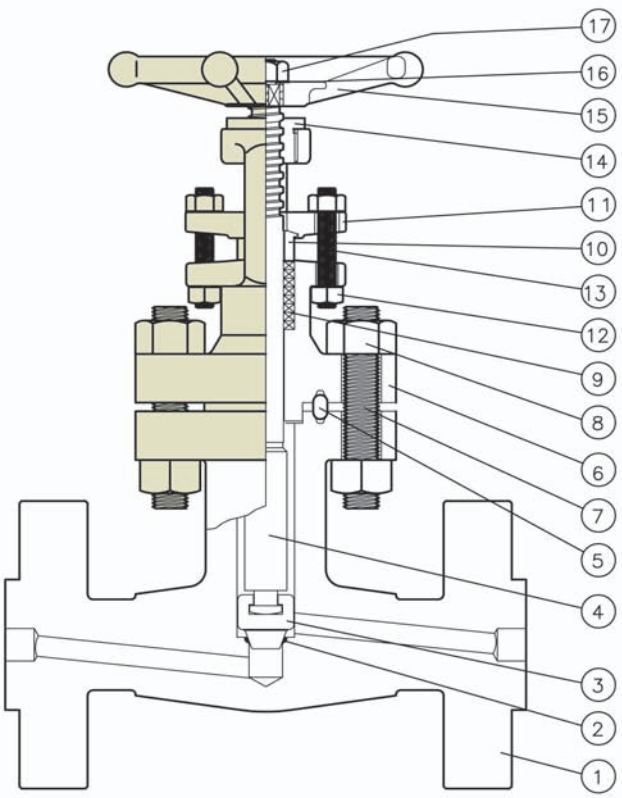
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	140 (5.51)	110 (4.33)	238 (9.37)	10 (0.39)	5 (11)
	3/4	200 (7.87)	127 (5.00)	282 (11.10)	13 (0.51)	8 (18)
	1	230 (9.06)	155 (6.10)	322 (12.68)	18 (0.71)	13 (29)
	11/4	250 (9.84)	210 (8.27)	395 (15.55)	23 (0.91)	22 (49)
	11/2	250 (9.84)	210 (8.27)	395 (15.55)	26 (1.02)	22 (49)
	2	315 (12.4)	229 (9.02)	483 (19.02)	35 (1.38)	37 (82)

CLASS 4500

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	200 (7.87)	127 (5.00)	282 (11.10)	7 (0.28)	8 (18)
	3/4	230 (9.06)	155 (6.10)	322 (12.68)	11 (0.43)	13 (29)
	1	250 (9.84)	210 (8.27)	395 (15.55)	14 (0.55)	22 (49)
	11/4	315 (12.4)	229 (9.02)	475 (18.70)	22 (0.87)	37 (82)
	11/2	315 (12.4)	229 (9.02)	475 (18.70)	22 (0.87)	37 (82)
	2	315 (12.4)	250 (9.84)	493 (19.41)	25 (0.98)	48(106)

ASME B16.34 – RING JOINT BONNET – REDUCED / FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	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	Alloy Steel	A193–B7
14	Yoke Bush	High Tension Brass	
15	Handwheel	Malleable Iron	A47
16	Name Plate	Aluminum	
17	Handwheel Nut	Carbon Steel	A194–2H

CLASS 1500

Unit : mm(inch)

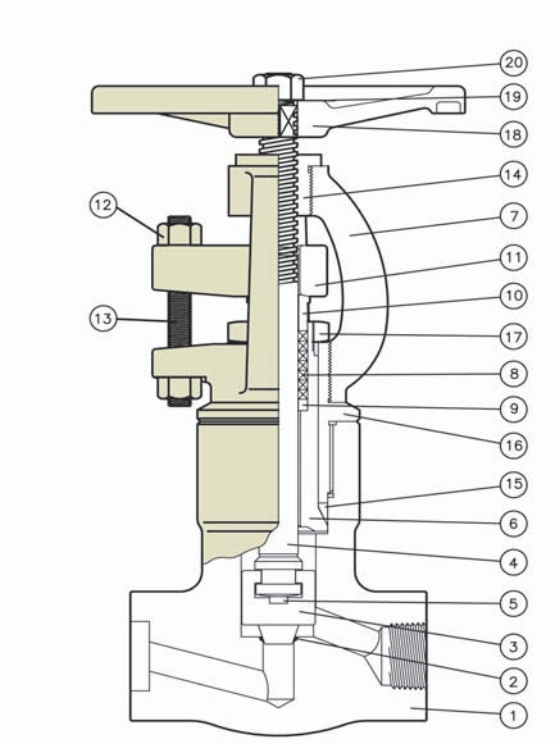
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	124 (4.88)	216 (8.50)	286 (11.26)	10 (0.39)	11 (24)
	3/4	124 (4.88)	229 (9.00)	286 (11.26)	15 (0.59)	15 (33)
	1	200 (7.88)	254 (10.00)	339 (13.35)	18 (0.71)	18 (40)
	11/2	200 (7.88)	305 (12.00)	386 (15.20)	28 (1.10)	35 (77)
	2	250 (9.84)	368 (14.25)	480 (18.90)	35 (1.38)	57 (126)

CLASS 2500

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	124 (4.88)	264 (10.38)	339 (13.35)	10 (0.39)	19 (42)
	3/4	124 (4.88)	273 (10.75)	339 (13.35)	15 (0.59)	20 (44)
	1	200 (7.88)	308 (12.12)	386 (15.20)	18 (0.71)	37 (82)
	11/2	200 (7.88)	384 (15.12)	439 (17.29)	28 (1.10)	57 (126)
	2	250 (9.84)	451 (17.75)	480 (18.90)	35 (1.38)	83 (183)

ASME B16.34 – PRESSURE SEAL BONNET – FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	Stellite 6 faced A276–410	
4	Stem	13Cr Stainless Steel	A276–410
5	Disc Pad	Stainless Steel	A276–316
6	Bonnet	Forged Steel	A105N
7	Yoke	Forged Steel	A105N
8	Gland Packing	Graphoil	
9	Packing Ring	13Cr Stainless Steel	A276–410
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 Bush	High Tension Brass	
15	Gasket	Soft Iron	
16	Bonnet Guide	Forged Steel	A105N
17	Bonnet Nut	13Cr Stainless Steel	A276–410
18	Handwheel	Malleable Iron	A47
19	Name Plate	Aluminum	
20	Handwheel Nut	Carbon Steel	A194–2H

CLASS 1500

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	140 (5.51)	155 (6.10)	312 (12.28)	12 (0.47)	11 (24)
	3/4	140 (5.51)	155 (6.10)	312 (12.28)	16 (0.63)	11 (24)
	1	200 (7.87)	210 (8.27)	373 (14.69)	20 (0.79)	17 (38)
	11/2	230 (9.06)	229 (9.02)	444 (17.48)	32 (1.26)	29 (64)
	2	250 (9.84)	235 (9.25)	504 (19.84)	39 (1.54)	43 (95)

CLASS 2500

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	140 (5.51)	155 (6.10)	312 (12.28)	10 (0.39)	11 (24)
	3/4	140 (5.51)	210 (8.27)	312 (12.28)	13 (0.51)	17 (38)
	1	200 (7.87)	229 (9.02)	373 (14.69)	18 (0.71)	29 (64)
	11/2	230 (9.06)	235 (9.25)	444 (17.48)	26 (1.02)	43 (95)
	2	250 (9.84)	235 (9.25)	477 (18.78)	35 (1.38)	43 (95)

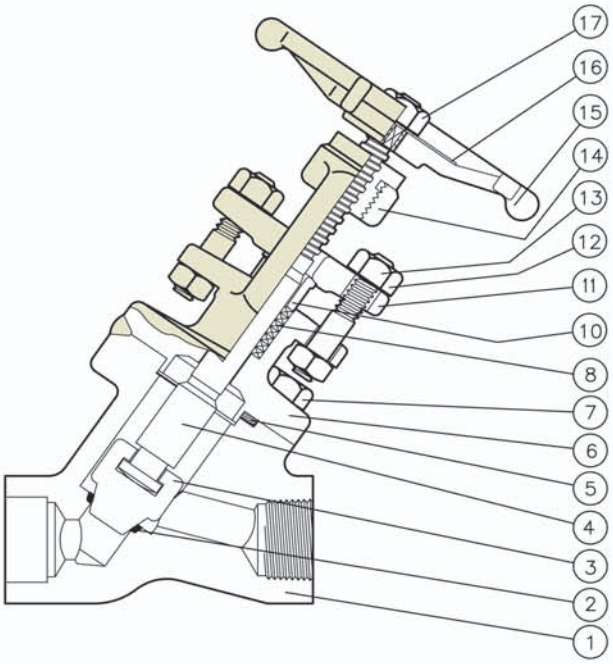
CLASS 4500

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	200 (7.87)	210 (8.27)	312 (12.28)	7 (0.28)	17 (38)
	3/4	200 (7.87)	210 (8.27)	373 (14.69)	11 (0.43)	18 (40)
	1	230 (9.06)	229 (9.02)	444 (17.48)	14 (0.55)	29 (64)
	11/2	250 (9.84)	235 (9.25)	477 (18.78)	22 (0.87)	43 (95)
	2	315 (12.4)	250 (9.84)	546 (21.50)	25 (0.98)	50 (110)

Y-GLOBE VALVE DB SERIES

ASME B16.34 / BS 5352 – BOLTED / WELDED BONNET – REDUCED / FULL PORT



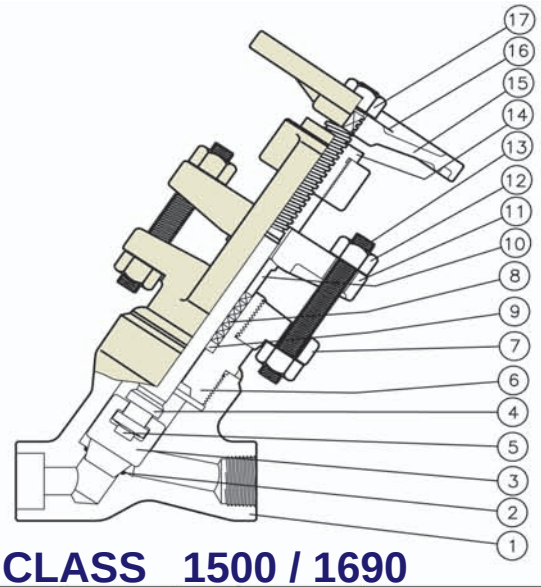
No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	13Cr Stainless Steel	A217–CA15
4	Stem	13Cr Stainless Steel	A276–410
5	Gasket	304 Spiral Wound Graphite	
6	Bonnet	Forged Steel	A105N
7	Bonnet Bolt	Alloy Steel	A193–B7
8	Gland Packing	Graphoil	
10	Gland	Stainless Steel	A276–316
11	Gland Flange	Forged Steel	A105
12	Gland Nut	Carbon Steel	A194–2H
13	Gland Bolt	Alloy Steel	A193–B7
14	Yoke Bush	13Cr Stainless Steel	A276–410
15	Handwheel	Malleable Iron	A47
16	Name Plate	Aluminum	
17	Handwheel Nut	Carbon Steel	A194–2H

CLASS 600 / 800

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	86 (3.39)	84 (3.31)	171 (6.73)	9.5 (0.37)	1.8 (4.0)
	3/4	86 (3.39)	95 (3.74)	183 (7.21)	12.7 (0.50)	2.1 (4.6)
	1	99 (3.90)	106 (4.17)	213 (8.39)	17.5 (0.69)	3.4 (7.5)
	11/4	124 (4.88)	137 (5.39)	259 (10.20)	22.5 (0.89)	6.4 (14.1)
	11/2	124 (4.88)	137 (5.39)	259 (10.20)	29.5 (1.16)	6.4 (14.1)
	2	138 (5.43)	172 (6.77)	329 (12.95)	35.0 (1.38)	9.7 (21.4)
Full	1/2	86 (3.39)	95 (3.74)	171 (6.73)	12.7 (0.50)	2.0 (4.4)
	3/4	99 (3.90)	106 (4.17)	220 (8.66)	17.5 (0.69)	4.4 (9.7)
	1	124 (4.88)	137 (5.39)	251 (9.88)	23.0 (0.91)	7.4 (16.3)
	11/4	138 (5.43)	172 (6.77)	325 (12.80)	29.5 (1.16)	10.9 (24.0)
	11/2	138 (5.43)	172 (6.77)	325 (12.80)	35.0 (1.38)	10.7 (23.6)
	2	157 (6.18)	200 (7.87)	358 (14.10)	45.5 (1.79)	15.0 (33.1)

ASME B16.34 – SEAL WELDED BONNET – FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	Stellite 6 faced A276–410	
4	Stem	13Cr Stainless Steel	A276–410
5	Disc Pad	Stainless Steel	A276–316
6	Bonnet	Forged Steel	A105N
7	Yoke	Forged Steel	A105N
8	Gland Packing	Graphoil	
9	Packing Ring	13Cr Stainless Steel	A276–410
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 Bush	High Tension Brass	
15	Handwheel	Malleable Iron	A47
16	Name Plate	Aluminum	
17	Handwheel Nut	Carbon Steel	A194–2H

CLASS 1500 / 1690

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	140 (5.51)	110 (4.33)	230 (9.06)	9.5 (0.37)	5 (11)
	3/4	140 (5.51)	110 (4.33)	230 (9.06)	12 (0.47)	5 (11)
	1	140 (5.51)	127 (5.00)	273 (10.75)	16 (0.63)	8 (18)
	11/4	200 (7.87)	155 (6.10)	328 (12.91)	20 (0.79)	21 (46)
	11/2	200 (7.87)	155 (6.10)	328 (12.91)	27 (1.06)	21 (46)
	2	230 (9.06)	210 (8.27)	400 (15.75)	32 (1.26)	21 (46)
Full	1/2	140 (5.51)	110 (4.33)	230 (9.06)	12 (0.47)	5 (11)
	3/4	140 (5.51)	127 (5.00)	273 (10.75)	16 (0.63)	7 (15)
	1	200 (7.87)	155 (6.10)	328 (12.91)	20 (0.79)	12 (27)
	11/4	230 (9.06)	210 (8.27)	400 (15.75)	27 (1.06)	21 (46)
	11/2	230 (9.06)	210 (8.27)	400 (15.75)	32 (1.26)	21 (46)
	2	250 (9.84)	229 (9.02)	480 (18.90)	39 (1.54)	35 (77)

CLASS 2500 / 2680

Unit : mm(inch)

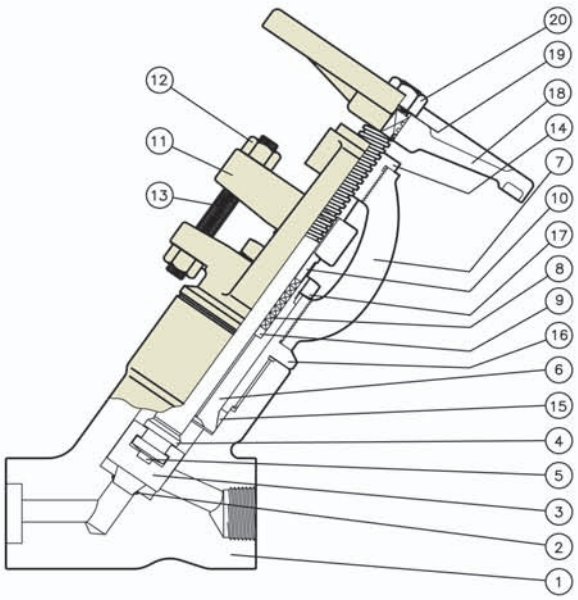
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	140 (5.51)	110 (4.33)	248 (9.76)	10 (0.39)	5 (11)
	3/4	200 (7.87)	127 (5.00)	291 (11.46)	13 (0.51)	8 (18)
	1	230 (9.06)	155 (6.10)	333 (13.11)	18 (0.71)	13 (29)
	11/4	250 (9.84)	210 (8.27)	413 (16.26)	23 (0.91)	22 (49)
	11/2	250 (9.84)	210 (8.27)	413 (16.26)	26 (1.02)	22 (49)
	2	315 (12.4)	229 (9.02)	507 (19.96)	35 (1.38)	37 (82)

CLASS 4500

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	200 (7.87)	127 (5.00)	291 (11.46)	7 (0.28)	8 (18)
	3/4	230 (9.06)	155 (6.10)	333 (13.11)	11 (0.43)	13 (29)
	1	250 (9.84)	210 (8.27)	413 (16.26)	14 (0.55)	22 (49)
	11/4	315 (12.4)	229 (9.02)	507 (19.96)	22 (0.87)	37 (82)
	11/2	315 (12.4)	229 (9.02)	507 (19.96)	22 (0.87)	37 (82)
	2	315 (12.4)	250 (9.84)	510 (20.08)	25 (0.98)	48(106)

ASME B16.34 – PRESSURE SEAL BONNET – FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	Stellite 6 faced A276–410	
4	Stem	13Cr Stainless Steel	A276–410
5	Disc Pad	Stainless Steel	A276–316
6	Bonnet	Forged Steel	A105N
7	Yoke	Forged Steel	A105N
8	Gland Packing	Graphoil	
9	Packing Ring	13Cr Stainless Steel	A276–410
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 Bush	High Tension Brass	
15	Gasket	Soft Iron	
16	Bonnet Guide	Forged Steel	A105N
17	Bonnet Nut	13Cr Stainless Steel	A276–410
18	Handwheel	Malleable Iron	A47
19	Name Plate	Aluminum	
20	Handwheel Nut	Carbon Steel	A194–2H

CLASS 1500 / 1690

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	140 (5.51)	155 (6.10)	231 (9.10)	12 (0.47)	11 (24)
	3/4	140 (5.51)	155 (6.10)	274 (10.79)	16 (0.63)	11 (24)
	1	200 (7.87)	210 (8.27)	330 (12.99)	20 (0.79)	17 (38)
	11/2	230 (9.06)	229 (9.02)	401 (15.79)	32 (1.26)	29 (64)
	2	250 (9.84)	229 (9.02)	480 (18.90)	39 (1.54)	31 (68)

CLASS 2500 / 2680

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	140 (5.51)	155 (6.10)	322 (12.68)	10 (0.39)	11 (24)
	3/4	200 (7.87)	210 (8.27)	390 (15.35)	13 (0.51)	18 (40)
	1	230 (9.06)	229 (9.02)	471 (18.54)	18 (0.71)	31 (68)
	11/2	250 (9.84)	235 (9.25)	511 (20.12)	26 (1.02)	43 (95)
	2	315 (12.4)	250 (9.84)	580 (22.84)	35 (1.38)	50 (110)

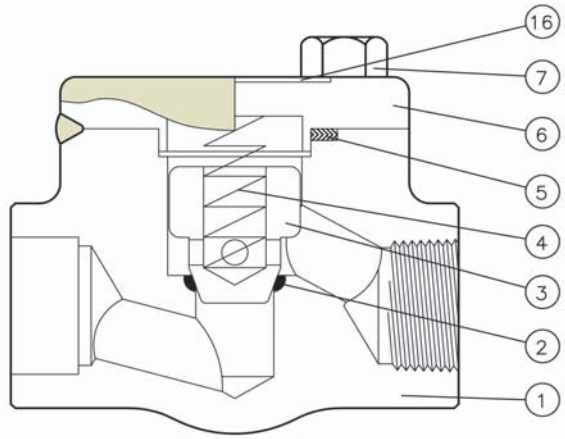
CLASS 4500

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	140 (5.51)	155 (6.10)	312 (12.28)	7 (0.28)	11 (24)
	3/4	200 (7.87)	210 (8.27)	373 (14.69)	11 (0.43)	18 (40)
	1	230 (9.06)	229 (9.02)	444 (17.48)	14 (0.55)	31 (68)
	11/2	250 (9.84)	235 (9.25)	477 (18.78)	22 (0.87)	43 (95)
	2	315 (12.4)	250 (9.84)	546 (21.50)	25 (0.98)	50 (110)

SWI CHECK VALVE AJ SERIES

ASME B16.34 / BS 5352 – BOLTED / WELDED COVER – REDUCED / FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	13Cr Stainless Steel	A276–410
4	Spring	Stainless Steel	A276–316
5	Gasket	304 Spiral Wound Graphite	
6	Cover	Forged Steel	A105N
7	Cover Bolt	Alloy Steel	A193–B7
16	Name Plate	Aluminum	

* Also available Ball type Check Valves

CLASS 600 / 800

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	76 (2.99)	48 (1.89)	9.5 (0.37)	1.0 (2.2)
	3/4	86 (3.39)	54 (2.13)	12.7 (0.50)	1.3 (2.9)
	1	102 (4.02)	63 (2.48)	17.5 (0.69)	2.3 (5.1)
	11/4	152 (5.98)	81 (3.19)	22.5 (0.89)	5.0 (11.0)
	11/2	152 (5.98)	81 (3.19)	29.5 (1.16)	5.0 (11.0)
	2	172 (6.77)	105 (4.13)	35.0 (1.38)	7.0 (15.4)
Full	1/2	86 (3.39)	54 (2.13)	12.7 (0.50)	1.3 (2.9)
	3/4	102 (4.02)	63 (2.48)	17.5 (0.69)	2.3 (5.1)
	1	152 (5.98)	81 (3.19)	23.0 (0.91)	5.0 (11.0)
	11/4	172 (6.77)	105 (4.13)	29.5 (1.16)	7.0 (15.4)
	11/2	172 (6.77)	105 (4.13)	35.0 (1.38)	6.8 (15.0)
	2	218 (8.58)	147 (5.79)	45.5 (1.79)	10.6 (23.4)

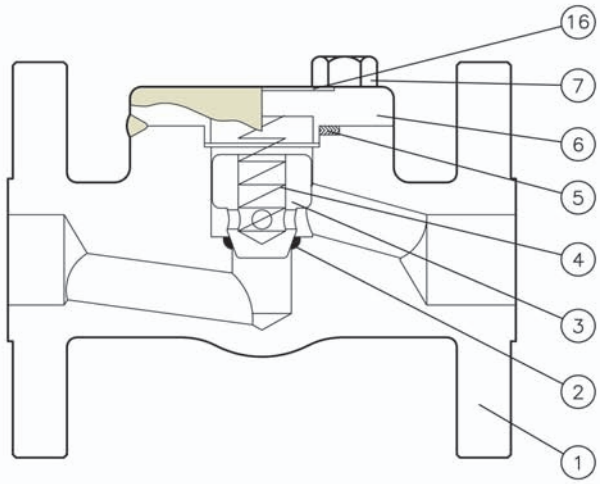
CLASS 1500

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	86 (3.39)	54 (2.13)	9.5 (0.37)	1.3 (2.9)
	3/4	102 (4.02)	63 (2.48)	12.7 (0.50)	2.3 (5.1)
	1	152 (5.98)	81 (3.19)	17.5 (0.69)	5.0 (11.0)
	11/4	172 (6.77)	105 (4.13)	22.5 (0.89)	7.0 (15.4)
	11/2	172 (6.77)	105 (4.13)	29.5 (1.16)	7.0 (15.4)
	2	210 (8.27)	128 (5.04)	35.0 (1.38)	9.1 (20.1)

CHECK VALVE AJ SERIES

ASME B16.34 / BS 5352 – BOLTED / WELDED COVER – REDUCED PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	13Cr Stainless Steel	A276–410
4	Spring	Stainless Steel	A276–316
5	Gasket	304 Spiral Wound Graphite	
6	Cover	Forged Steel	A105N
7	Cover Bolt	Alloy Steel	A193–B7
16	Name Plate	Aluminum	

* Also available Ball type Check Valves

CLASS 150 – 300 – 600

Unit : mm(inch)

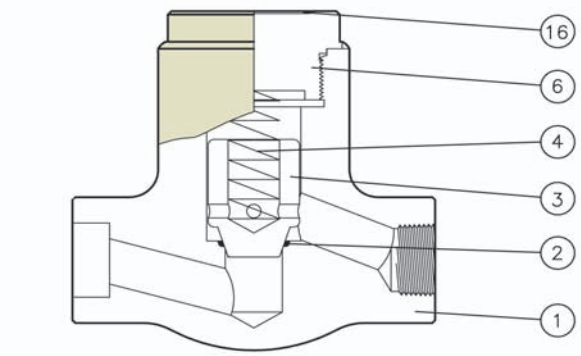
Port	Valve Size	Center to Top	Dia. of Port Openings	End to End			Approx. Wt , Kg(Lb)		
				Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
Reduced	1/2	48 (1.89)	9.5 (0.37)	108 (4.25)	152 (6.00)	165 (6.50)	1.7 (3.8)	2.2 (4.9)	2.5 (5.5)
	3/4	54 (2.13)	12.7 (0.50)	117 (4.62)	178 (7.00)	190 (7.50)	2.4 (5.3)	3.3 (7.3)	3.9 (8.6)
	1	63 (2.48)	17.5 (0.69)	127 (5.00)	203 (8.00)	216 (8.50)	3.8 (8.4)	5.1 (11.3)	5.7 (12.6)
	11/2	81 (3.19)	29.5 (1.16)	165 (6.50)	229 (9.00)	241 (9.50)	7.7 (17.0)	9.9 (21.8)	11.5 (25.4)
	2	105 (4.13)	35.0 (1.38)	203 (8.00)	267 (10.50)	292 (11.50)	11.4 (25.1)	13.0 (28.7)	13.8 (30.4)

CLASS 1500

Unit : mm(inch)

Port	Valve Size	Center to Top	Dia. of Port Openings	End to End	Approx. Wt , Kg(Lb)
Reduced	1/2	54 (2.13)	9.5 (0.37)	216 (8.50)	5.8 (12.8)
	3/4	63 (2.48)	12.7 (0.50)	229 (9.00)	7.8 (17.2)
	1	81 (3.19)	17.5 (0.69)	254 (10.00)	13.0 (28.7)
	11/2	105 (4.13)	29.5 (1.16)	305 (12.00)	20.7 (45.6)
	2	128 (5.04)	35.0 (1.38)	368 (14.25)	30.6 (67.5)

ASME B16.34 – SEAL WELDED COVER – REDUCED / FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	Stellite 6 faced A276–410	
4	Spring	Stainless Steel	A276–316
6	Cover	Forged Steel	A105N
16	Name Plate	Aluminum	

CLASS 1500

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	110 (4.33)	81 (3.19)	9.5 (0.37)	2 (5)
	3/4	110 (4.33)	81 (3.19)	12 (0.47)	2 (5)
	1	127 (5.00)	96 (3.78)	16 (0.63)	3.5 (8)
	11/4	155 (6.10)	116 (4.57)	20 (0.79)	6 (13)
	11/2	155 (6.10)	116 (4.57)	27 (1.06)	6 (13)
	2	210 (8.27)	147 (5.79)	32 (1.26)	13 (29)
Full	1/2	110 (4.33)	81 (3.19)	12 (0.47)	2 (5)
	3/4	127 (5.00)	96 (3.78)	16 (0.63)	3.5 (8)
	1	155 (6.10)	116 (4.57)	20 (0.79)	6 (13)
	11/4	210 (8.27)	147 (5.79)	27 (1.06)	13 (29)
	11/2	210 (8.27)	147 (5.79)	32 (1.26)	13 (29)
	2	229 (9.02)	178 (7.01)	39 (1.54)	19 (42)

CLASS 2500

Unit : mm(inch)

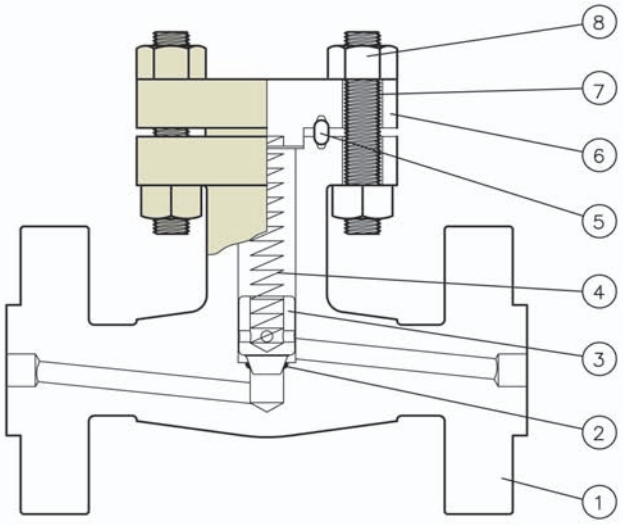
Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	110 (4.33)	86 (3.39)	10 (0.39)	3 (7)
	3/4	127 (5.00)	101 (3.98)	13 (0.51)	4 (9)
	1	155 (6.10)	121 (4.76)	18 (0.71)	8 (18)
	11/4	210 (8.27)	157 (6.18)	23 (0.91)	14 (31)
	11/2	210 (8.27)	157 (6.18)	26 (1.02)	14 (31)
	2	229 (9.02)	190 (7.48)	35 (1.38)	20 (44)

CLASS 4500

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	127 (5.00)	101 (3.98)	7 (0.28)	4 (9)
	3/4	155 (6.10)	121 (4.76)	11 (0.43)	8 (18)
	1	210 (8.27)	157 (6.18)	14 (0.55)	14 (31)
	11/4	229 (9.02)	190 (7.48)	18 (0.71)	20 (44)
	11/2	229 (9.02)	190 (7.48)	22 (0.87)	20 (44)
	2	250 (9.84)	208 (8.19)	25 (0.98)	22 (49)

ASME B16.34 – RING JOINT COVER – REDUCED / FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	13Cr Stainless Steel	A217–CA15
4	Spring	Stainless Steel	A276–316
5	Gasket	Soft Iron	
6	Cover	Forged Steel	A105N
7	Cover Bolt	Alloy Steel	A193–B7
8	Cover Nut	Carbon Steel	A194–2H

CLASS 1500

Unit : mm(inch)

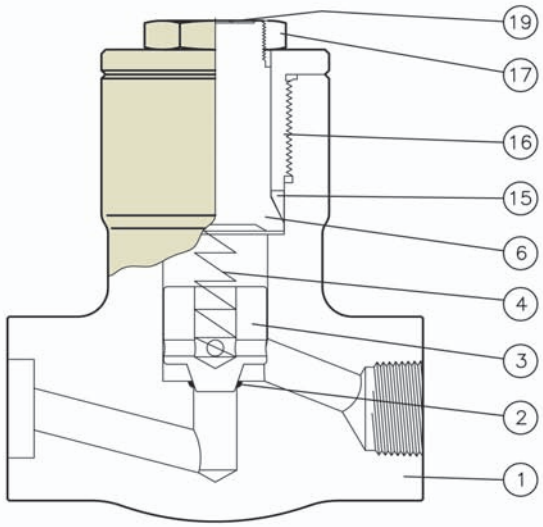
Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	216 (8.50)	157 (6.18)	10 (0.39)	8 (18)
	3/4	229 (9.00)	180 (7.09)	15 (0.59)	13 (29)
	1	254 (10.00)	185 (7.28)	18 (0.71)	16 (35)
	11/2	305 (12.00)	210 (8.27)	28 (1.10)	29 (64)
	2	368 (14.25)	250 (9.84)	35 (1.38)	33 (73)

CLASS 2500

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	264 (10.38)	180 (7.09)	10 (0.39)	17 (38)
	3/4	273 (10.75)	180 (7.09)	15 (0.59)	18 (40)
	1	308 (12.12)	200 (7.87)	18 (0.71)	23 (51)
	11/2	384 (15.12)	230 (9.06)	28 (1.10)	40 (88)
	2	451 (17.75)	250 (9.84)	35 (1.38)	54 (119)

ASME B16.34 – PRESSURE SEAL COVER – FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	Stellite 6 faced A276–410	
4	Spring	Stainless Steel	A276–316
6	Bonnet	Forged Steel	A105N
15	Gasket	Soft Iron	
16	Bonnet Guide	Forged Steel	A105N
17	Bonnet Nut	13Cr Stainless Steel	A276–410
19	Name Plate	Aluminum	

CLASS 1500

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	155 (6.10)	96 (3.78)	12 (0.47)	10 (22)
	3/4	155 (6.10)	116 (4.57)	16 (0.63)	10 (22)
	1	210 (8.27)	147 (5.79)	20 (0.79)	15 (33)
	11/2	229 (9.02)	178 (7.01)	32 (1.26)	22 (49)
	2	235 (9.25)	213 (8.39)	39 (1.54)	30 (66)

CLASS 2500

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	155 (6.10)	116 (4.57)	10 (0.39)	10 (22)
	3/4	210 (8.27)	147 (5.79)	13 (0.51)	15 (33)
	1	229 (9.02)	178 (7.01)	18 (0.71)	24 (53)
	11/2	235 (9.25)	213 (8.39)	26 (1.02)	33 (73)
	2	235 (9.25)	213 (8.39)	35 (1.38)	32 (71)

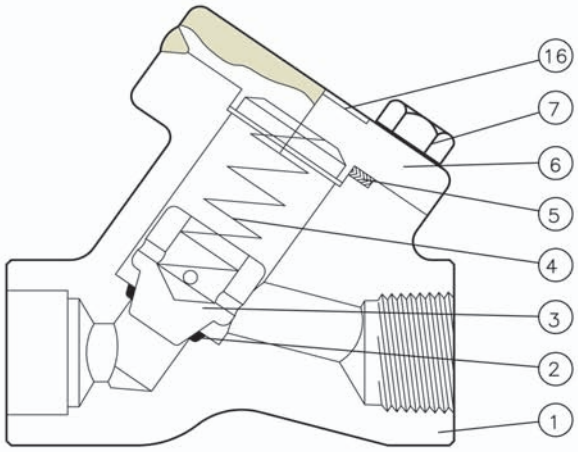
CLASS 4500

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	210 (8.27)	147 (5.79)	7 (0.28)	16 (35)
	3/4	210 (8.27)	178 (7.01)	11 (0.43)	16 (35)
	1	229 (9.02)	213 (8.39)	14 (0.55)	27 (60)
	11/2	235 (9.25)	239 (9.41)	22 (0.87)	34 (75)
	2	250 (9.84)	252 (9.92)	25 (0.98)	40 (88)

SWI Y-CHECK VALVE DC SERIES

ASME B16.34 / BS 5352 – BOLTED / WELDED COVER – REDUCED / FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	13Cr Stainless Steel	A276–410
4	Spring	Stainless Steel	A276–316
5	Gasket	304 Spiral Wound Graphite	
6	Cover	Forged Steel	A105N
7	Cover Bolt	Alloy Steel	A193–B7
16	Name Plate	Aluminum	

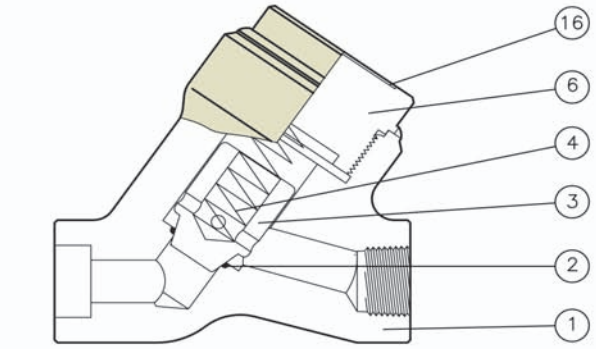
* Also available Ball type Check Valves

CLASS 600 / 800

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	84 (3.31)	73 (2.87)	9.5 (0.37)	1.2 (3)
	3/4	95 (3.74)	85 (3.35)	12.7 (0.50)	1.6 (4)
	1	106 (4.17)	88 (3.47)	17.5 (0.69)	2.5 (6)
	11/4	137 (5.39)	121 (4.76)	22.5 (0.89)	5.5 (12)
	11/2	137 (5.39)	121 (4.76)	29.5 (1.16)	5.4 (12)
	2	172 (6.77)	174 (6.85)	35.0 (1.38)	7.8 (17)
Full	1/2	95 (3.74)	85 (3.35)	12.7 (0.50)	1.3 (3)
	3/4	106 (4.17)	88 (3.47)	17.5 (0.69)	2.3 (5)
	1	137 (5.39)	121 (4.76)	23.0 (0.91)	5.0 (11)
	11/4	172 (6.77)	174 (6.85)	29.5 (1.16)	7.0 (15)
	11/2	172 (6.77)	174 (6.85)	35.0 (1.38)	6.8 (15)
	2	200 (7.87)	208 (8.19)	45.5 (1.79)	10.6 (23)

ASME B16.34 – SEAL WELDED COVER – REDUCED / FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	Stellite 6 faced A276–410	
4	Spring	Stainless Steel	A276–316
6	Cover	Forged Steel	A105N
16	Name Plate	Aluminum	

CLASS 1500 / 1690

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	110 (4.33)	91 (3.58)	9.5 (0.37)	2 (5)
	3/4	110 (4.33)	91 (3.58)	12 (0.47)	2 (5)
	1	127 (5.00)	105 (4.13)	16 (0.63)	3.5 (8)
	11/4	155 (6.10)	127 (5.00)	20 (0.79)	6 (13)
	11/2	155 (6.10)	127 (5.00)	27 (1.06)	6 (13)
	2	210 (8.27)	166 (6.54)	32 (1.26)	13 (29)
Full	1/2	110 (4.33)	86 (3.39)	12 (0.47)	2 (5)
	3/4	127 (5.00)	99 (3.90)	16 (0.63)	3.5 (8)
	1	155 (6.10)	122 (4.80)	20 (0.79)	6 (13)
	11/4	210 (8.27)	156 (6.14)	27 (1.06)	13 (29)
	11/2	210 (8.27)	156 (6.14)	32 (1.26)	13 (29)
	2	229 (9.02)	186 (7.32)	39 (1.54)	19 (42)

CLASS 2500 / 2680

Unit : mm(inch)

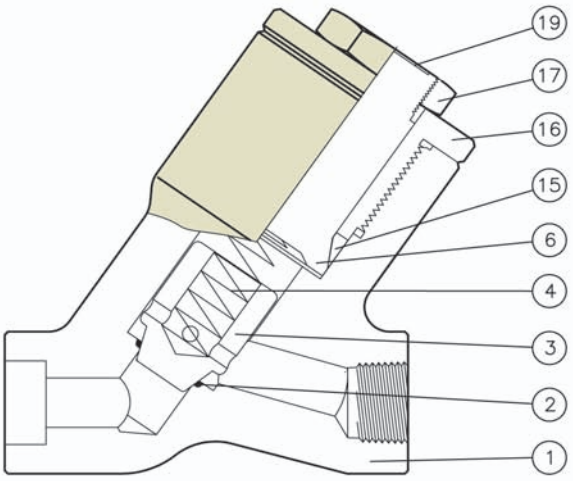
Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	110 (4.33)	91 (3.58)	10 (0.39)	3 (7)
	3/4	127 (5.00)	105 (4.13)	13 (0.51)	4 (9)
	1	155 (6.10)	127 (5.00)	18 (0.71)	8 (18)
	11/4	210 (8.27)	166 (6.54)	23 (0.91)	14 (31)
	11/2	210 (8.27)	166 (6.54)	26 (1.02)	14 (31)
	2	229 (9.02)	198 (7.80)	35 (1.38)	20 (44)

CLASS 4500

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	127 (5.00)	105 (4.13)	7 (0.28)	4 (9)
	3/4	155 (6.10)	127 (5.00)	11 (0.43)	8 (18)
	1	210 (8.27)	166 (6.54)	14 (0.55)	14 (31)
	11/4	229 (9.02)	198 (7.80)	18 (0.71)	20 (44)
	11/2	229 (9.02)	198 (7.80)	22 (0.87)	20 (44)
	2	250 (9.84)	210 (8.27)	25 (0.98)	22 (49)

ASME B16.34 – PRESSURE SEAL COVER – FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	Stellite 6 faced A276–410	
4	Spring	Stainless Steel	A276–316
6	Bonnet	Forged Steel	A105N
15	Gasket	Soft Iron	
16	Bonnet Guide	Forged Steel	A105N
17	Bonnet Nut	13Cr Stainless Steel	A276–410
19	Name Plate	Aluminum	

CLASS 1500 / 1690

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	155 (6.10)	101 (3.98)	12 (0.47)	10 (22)
	3/4	155 (6.10)	119 (4.69)	16 (0.63)	10 (22)
	1	210 (8.27)	153 (6.02)	20 (0.79)	15 (33)
	11/2	229 (9.02)	187 (7.36)	32 (1.26)	22 (49)
	2	229 (9.02)	187 (7.36)	39 (1.54)	30 (66)

CLASS 2500 / 2680

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	155 (6.10)	119 (4.69)	10 (0.39)	10 (22)
	3/4	210 (8.27)	153 (6.02)	13 (0.51)	15 (33)
	1	229 (9.02)	187 (7.36)	18 (0.71)	24 (53)
	11/2	235 (9.25)	221 (8.70)	26 (1.02)	33 (73)
	2	250 (9.84)	252 (9.92)	35 (1.38)	32 (71)

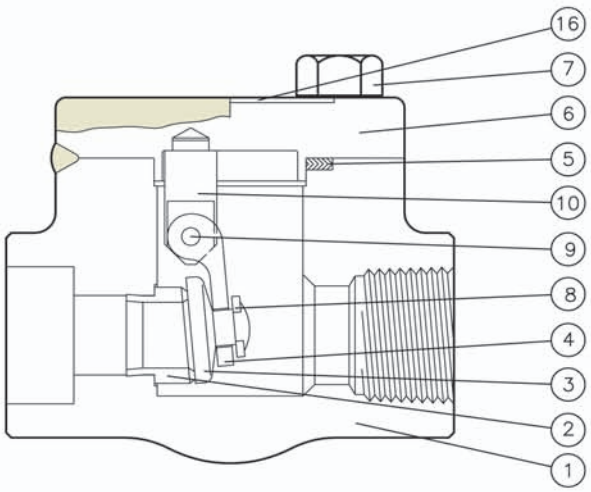
CLASS 4500

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Full	1/2	155 (6.10)	119 (4.69)	7 (0.28)	10 (22)
	3/4	210 (8.27)	153 (6.02)	11 (0.43)	16 (35)
	1	229 (9.02)	187 (7.36)	14 (0.55)	27 (60)
	11/2	235 (9.25)	221 (8.70)	22 (0.87)	34 (75)
	2	250 (9.84)	252 (9.92)	25 (0.98)	40 (88)

SWI CHECK VALVE AD SERIES

ASME B16.34 / BS 5352 – BOLTED / WELDED COVER – REDUCED / FULL PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat Ring	Stellite 6 faced A276–410	
3	Disc	13Cr Stainless Steel	A276–410
4	Hinge	Stainless Steel	A351–CF8M
5	Gasket	304 Spiral Wound Graphite	
6	Cover	Forged Steel	A105N
7	Cover Bolt	Alloy Steel	A193–B7
8	Ret. Washer	Stainless Steel	A276–316
9	Support Pin	Stainless Steel	A276–316
10	Support	Stainless Steel	A276–316
16	Name Plate	Aluminum	

CLASS 600 / 800

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	76 (2.99)	48 (1.89)	9.8 (0.39)	0.9 (2.0)
	3/4	86 (3.39)	54 (2.13)	13.0 (0.51)	1.1 (2.4)
	1	102 (4.02)	63 (2.48)	18.0 (0.71)	2.0 (4.4)
	11/4	117 (4.61)	89 (3.50)	31.0 (1.22)	4.4 (9.7)
	11/2	117 (4.61)	89 (3.50)	31.0 (1.22)	4.4 (9.7)
	2	133 (5.24)	105 (4.13)	37.0 (1.46)	6.2 (13.7)
Full	1/2	86 (3.39)	54 (2.13)	13.0 (0.51)	1.1 (2.4)
	3/4	102 (4.02)	63 (2.48)	18.0 (0.71)	2.0 (4.4)
	1	117 (4.61)	89 (3.50)	23.0 (0.91)	4.4 (9.7)
	11/4	133 (5.24)	105 (4.13)	37.0 (1.46)	6.2 (13.7)
	11/2	133 (5.24)	105 (4.13)	37.0 (1.46)	6.2 (13.7)
	2	218 (8.58)	147 (5.79)	50.8 (2.00)	9.1 (20.1)

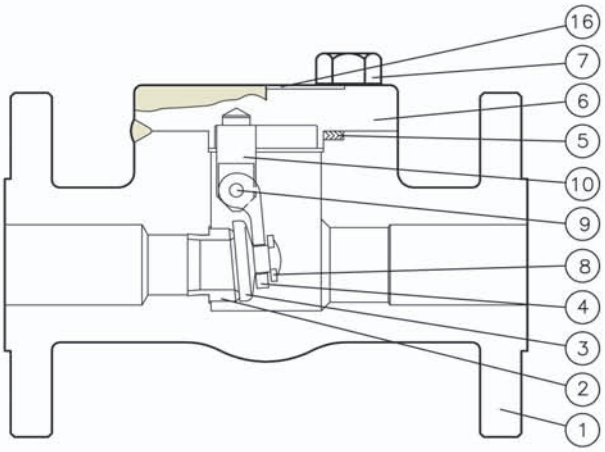
CLASS 1500

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Approx. Wt Kg(Lb)
Reduced	1/2	86 (3.39)	54 (2.13)	9.8 (0.39)	1.1 (2.4)
	3/4	102 (4.02)	63 (2.48)	13.0 (0.51)	2.0 (4.4)
	1	117 (4.61)	89 (3.50)	18.0 (0.71)	4.4 (9.7)
	11/4	133 (5.24)	105 (4.13)	31.0 (1.22)	6.2 (13.7)
	11/2	133 (5.24)	105 (4.13)	31.0 (1.22)	6.2 (13.7)
	2	210 (8.27)	147 (5.79)	37.0 (1.46)	9.1 (20.1)

CHECK VALVE AD SERIES

ASME B16.34 / BS 5352 – BOLTED / WELDED COVER – REDUCED PORT



No.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat Ring	Stellite 6 faced A276–410	
3	Disc	13Cr Stainless Steel	A276–410
4	Hinge	Stainless Steel	A351–CF8M
5	Gasket	304 Spiral Wound Graphite	
6	Cover	Forged Steel	A105N
7	Cover Bolt	Alloy Steel	A193–B7
8	Ret. Washer	Stainless Steel	A276–316
9	Support Pin	Stainless Steel	A276–316
10	Support	Stainless Steel	A276–316
16	Name Plate	Aluminum	

CLASS 150 – 300 – 600

Unit : mm(inch)

Port	Valve Size	Center to Top	Dia. of Port Openings	End to End			Approx. Wt , Kg(Lb)		
				Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
Reduced	1/2	48 (1.89)	9.8 (0.39)	108 (4.25)	140 (5.50)	165 (6.50)	1.3 (2.9)	1.7 (3.8)	2.5 (5.5)
	3/4	54 (2.13)	13.0 (0.51)	117 (4.62)	152 (6.00)	190 (7.50)	1.9 (4.2)	2.8 (6.2)	3.9 (8.6)
	1	63 (2.48)	18.0 (0.71)	127 (5.00)	216 (8.50)	216 (8.50)	3.1 (6.8)	4.6 (10.1)	5.7 (12.6)
	11/2	89 (3.50)	31.0 (1.22)	165 (6.50)	241 (9.50)	241 (9.50)	6.4 (14.1)	9.1 (20.1)	11.5 (25.4)
	2	105 (4.13)	37.0 (1.46)	203 (8.00)	267 (10.50)	292 (11.50)	9.1 (20.1)	11.8 (26.0)	13.8 (30.4)

CLASS 1500

Unit : mm(inch)

Port	Valve Size	Center to Top	Dia. of Port Openings	End to End	Approx. Wt , Kg(Lb)
Reduced	1/2	54 (2.13)	9.8 (0.39)	216 (8.50)	5.3 (11.7)
	3/4	63 (2.48)	13.0 (0.51)	229 (9.00)	7.9 (17.4)
	1	89 (3.50)	18.0 (0.71)	254 (10.00)	12.7 (28.0)
	11/2	105 (4.13)	31.0 (1.22)	305 (12.00)	17.6 (38.8)
	2	128 (5.04)	37.0 (1.46)	368 (14.25)	23.2 (51.2)

A105 (a)
A350-LF2 (a)

NOTE: (a) Permissible, but not recommended for prolonged usage above about 800°F (427°C).

STANDARD CLASS

Working Pressure by Classes, psig

CLASS		150	300	600	800	900	1,500	1,690	2,500	2,680	4,500
Shell Test,psig		450	1,125	2,225	2,975	3,350	5,575	6,275	9,275	9,925	16,675
Seat Test,psig		325	825	1,650	2,175	2,450	4,100	4,600	6,800	7,300	12,225
-20 to 100 °F	-29 to 38 °C	285	740	1,480	1,975	2,220	3,705	4,175	6,170	6,615	11,110
200	93.5	260	675	1,350	1,800	2,025	3,375	3,805	5,625	6,030	10,120
300	149.0	230	655	1,315	1,750	1,970	3,280	3,695	5,470	5,865	9,845
400	204.5	200	635	1,270	1,690	1,900	3,170	3,570	5,280	5,660	9,505
500	260.0	170	600	1,200	1,595	1,795	2,995	3,375	4,990	5,350	8,980
600	315.5	140	550	1,095	1,460	1,640	2,735	3,080	4,560	4,890	8,210
650	343.5	125	535	1,075	1,430	1,610	2,685	3,025	4,475	4,795	8,055
700	371.0	110	535	1,065	1,420	1,600	2,665	3,000	4,440	4,760	7,990
750	399.0	95	505	1,010	1,345	1,510	2,520	2,840	4,200	4,500	7,560
800	426.5	80	410	825	1,100	1,235	2,060	2,320	3,430	3,675	6,170
850	454.5	65	270	535	715	805	1,340	1,510	2,230	2,390	4,010
900	482.0	50	170	345	460	515	860	970	1,430	1,535	2,570
950	510.0	35	105	205	275	310	515	580	860	920	1,545
1000	538.0	20	50	105	140	155	260	290	430	460	770

A182-F11 CL.2 (a)

NOTE: (a) Permissible, but not recommended for prolonged usage above about 1100°F (593°C).

STANDARD CLASS

Working Pressure by Classes, psig

CLASS		150	300	600	800	900	1,500	1,690	2,500	2,680	4,500
Shell Test,psig		450	1,125	2,250	3,000	3,375	5,625	6,350	9,375	10,050	16,875
Seat Test,psig		325	825	1,650	2,200	2,475	4,125	4,650	6,875	7,375	12,375
-20 to 100 °F	-29 to 38 °C	290	750	1,500	2,000	2,250	3,750	4,225	6,250	6,700	11,250
200	93.5	260	750	1,500	2,000	2,250	3,750	4,225	6,250	6,700	11,250
300	149.0	230	720	1,445	1,925	2,165	3,610	4,065	6,015	6,450	10,830
400	204.5	200	695	1,385	1,850	2,080	3,465	3,905	5,775	6,190	10,400
500	260.0	170	665	1,330	1,775	1,995	3,325	3,745	5,540	5,940	9,965
600	315.5	140	605	1,210	1,615	1,815	3,025	3,410	5,040	5,405	9,070
650	343.5	125	590	1,175	1,570	1,765	2,940	3,315	4,905	5,260	8,825
700	371.0	110	570	1,135	1,515	1,705	2,840	3,200	4,730	5,070	8,515
750	399.0	95	530	1,065	1,420	1,595	2,660	2,995	4,430	4,750	7,970
800	426.5	80	510	1,015	1,355	1,525	2,540	2,860	4,230	4,535	7,610
850	454.5	65	485	975	1,300	1,460	2,435	2,745	4,060	4,350	7,305
900	482.0	50	450	900	1,200	1,350	2,245	2,530	3,745	4,015	6,740
950	510.0	35	320	640	850	955	1,595	1,795	2,655	2,845	4,785
1000	538.0	20	215	430	575	650	1,080	1,215	1,800	1,930	3,240
1050	565.5	20(1)	145	290	385	430	720	810	1,200	1,285	2,160
1100	593.5	20(1)	95	190	255	290	480	540	800	860	1,440
1150	621.0	20(1)	60	125	165	185	310	350	515	550	925
1200	649.0	15(1)	40	75	100	115	190	215	315	340	565

NOTE: (1) For welding end valves only. Flanged end ratings terminate at 1000°F (538°C).

A182-F22 CL.3 (a)

NOTE: (a) Permissible, but not recommended for prolonged usage above about 1100°F (593°C).

STANDARD CLASS

Working Pressure by Classes, psig

CLASS		150	300	600	800	900	1,500	1,690	2,500	2,680	4,500
Shell Test,psig		450	1,125	2,250	3,000	3,375	5,625	6,350	9,375	10,050	16,875
Seat Test,psig		325	825	1,650	2,200	2,475	4,125	4,650	6,875	7,375	12,375
-20 to 100 °F	-29 to 38 °C	290	750	1,500	2,000	2,250	3,750	4,225	6,250	6,700	11,250
200	93.5	260	750	1,500	2,000	2,250	3,750	4,225	6,250	6,700	11,250
300	149.0	230	730	1,455	1,940	2,185	3,640	4,100	6,070	6,505	10,925
400	204.5	200	705	1,410	1,880	2,115	3,530	3,975	5,880	6,305	10,585
500	260.0	170	665	1,330	1,775	1,995	3,325	3,745	5,540	5,940	9,965
600	315.5	140	605	1,210	1,615	1,815	3,025	3,410	5,040	5,405	9,070
650	343.5	125	590	1,175	1,570	1,765	2,940	3,315	4,905	5,260	8,825
700	371.0	110	570	1,135	1,515	1,705	2,840	3,200	4,730	5,070	8,515
750	399.0	95	530	1,065	1,420	1,595	2,660	2,995	4,430	4,750	7,970
800	426.5	80	510	1,015	1,355	1,525	2,540	2,860	4,230	4,535	7,610
850	454.5	65	485	975	1,300	1,460	2,435	2,745	4,060	4,350	7,305
900	482.0	50	450	900	1,200	1,350	2,245	2,530	3,745	4,015	6,740
950	510.0	35	375	755	1,005	1,130	1,885	2,125	3,145	3,370	5,665
1000	538.0	20	260	520	695	780	1,305	1,470	2,170	2,325	3,910
1050	565.5	20(1)	175	350	465	525	875	985	1,455	1,560	2,625
1100	593.5	20(1)	110	220	295	330	550	620	915	980	1,645
1150	621.0	20(1)	70	135	180	205	345	390	570	610	1,030
1200	649.0	20(1)	40	80	110	125	205	230	345	370	615

NOTE: (1) For welding end valves only. Flanged end ratings terminate at 1000°F (538°C).

A182-F5

STANDARD CLASS

Working Pressure by Classes, psig

CLASS		150	300	600	800	900	1,500	1,690	2,500	2,680	4,500
Shell Test,psig		450	1,125	2,250	3,000	3,375	5,625	6,350	9,375	10,050	16,875
Seat Test,psig		325	825	1,650	2,200	2,475	4,125	4,650	6,875	7,375	12,375
-20 to 100 °F	-29 to 38 °C	290	750	1,500	2,000	2,250	3,750	4,225	6,250	6,700	11,250
200	93.5	260	745	1,490	1,985	2,235	3,725	4,195	6,205	6,650	11,170
300	149.0	230	715	1,430	1,910	2,150	3,580	4,035	5,965	6,395	10,740
400	204.5	200	705	1,410	1,880	2,115	3,530	3,975	5,880	6,305	10,585
500	260.0	170	665	1,330	1,775	1,995	3,325	3,745	5,540	5,940	9,965
600	315.5	140	605	1,210	1,615	1,815	3,025	3,410	5,040	5,405	9,070
650	343.5	125	590	1,175	1,570	1,765	2,940	3,315	4,905	5,260	8,825
700	371.0	110	570	1,135	1,515	1,705	2,840	3,200	4,730	5,070	8,515
750	399.0	95	530	1,055	1,410	1,585	2,640	2,975	4,400	4,715	7,920
800	426.5	80	510	1,015	1,355	1,525	2,540	2,860	4,230	4,535	7,610
850	454.5	65	485	965	1,290	1,450	2,415	2,720	4,030	4,320	7,250
900	482.0	50	370	740	985	1,110	1,850	2,085	3,085	3,305	5,555
950	510.0	35	275	550	735	825	1,370	1,545	2,285	2,450	4,115
1000	538.0	20	200	400	530	595	995	1,120	1,655	1,775	2,985
1050	565.5	20(1)	145	290	385	430	720	810	1,200	1,285	2,160
1100	593.5	20(1)	100	200	265	300	495	560	830	890	1,490
1150	621.0	20(1)	60	125	165	185	310	350	515	550	925
1200	649.0	15(1)	35	70	95	105	170	190	285	305	515

NOTE: (1) For welding end valves only. Flanged end ratings terminate at 1000°F (538°C).

A182-F9

STANDARD CLASS

Working Pressure by Classes, psig

CLASS		150	300	600	800	900	1,500	1,690	2,500	2,680	4,500
Shell Test,psig		450	1,125	2,250	3,000	3,375	5,625	6,350	9,375	10,050	16,875
Seat Test,psig		325	825	1,650	2,200	2,475	4,125	4,650	6,875	7,375	12,375
-20 to 100 °F	-29 to 38 ℃	290	750	1,500	2,000	2,250	3,750	4,225	6,250	6,700	11,250
200	93.5	260	750	1,500	2,000	2,250	3,750	4,225	6,250	6,700	11,250
300	149.0	230	730	1,455	1,940	2,185	3,640	4,100	6,070	6,505	10,925
400	204.5	200	705	1,410	1,880	2,115	3,530	3,975	5,880	6,305	10,585
500	260.0	170	665	1,330	1,775	1,995	3,325	3,745	5,540	5,940	9,965
600	315.5	140	605	1,210	1,615	1,815	3,025	3,410	5,040	5,405	9,070
650	343.5	125	590	1,175	1,570	1,765	2,940	3,315	4,905	5,260	8,825
700	371.0	110	570	1,135	1,515	1,705	2,840	3,200	4,730	5,070	8,515
750	399.0	95	530	1,065	1,420	1,595	2,660	2,995	4,430	4,750	7,970
800	426.5	80	510	1,015	1,355	1,525	2,540	2,860	4,230	4,535	7,610
850	454.5	65	485	975	1,300	1,460	2,435	2,745	4,060	4,350	7,305
900	482.0	50	450	900	1,200	1,350	2,245	2,530	3,745	4,015	6,740
950	510.0	35	375	755	1,005	1,130	1,885	2,125	3,145	3,370	5,655
1000	538.0	20	255	505	675	760	1,270	1,430	2,115	2,265	3,805
1050	565.5	20(1)	170	345	460	515	855	965	1,430	1,535	2,570
1100	593.5	20(1)	115	225	300	340	565	635	945	1,015	1,695
1150	621.0	20(1)	75	150	200	225	375	425	630	675	1,130
1200	649.0	20(1)	50	105	140	155	255	290	430	460	770

NOTE: (1) For welding end valves only. Flanged end ratings terminate at 1000℉(538℃).

A182-F91

STANDARD CLASS

Working Pressure by Classes, psig

CLASS		150	300	600	800	900	1,500	1,690	2,500	2,680	4,500
Shell Test,psig		450	1,125	2,250	3,000	3,375	5,625	6,350	9,375	10,050	16,875
Seat Test,psig		325	825	1,650	2,200	2,475	4,125	4,650	6,875	7,375	12,375
-20 to 100 °F	-29 to 38 ℃	290	750	1,500	2,000	2,250	3,750	4,225	6,250	6,700	11,250
200	93.5	260	750	1,500	2,000	2,250	3,750	4,225	6,250	6,700	11,250
300	149.0	230	730	1,455	1,940	2,185	3,640	4,100	6,070	6,505	10,925
400	204.5	200	705	1,410	1,880	2,115	3,530	3,975	5,880	6,305	10,585
500	260.0	170	665	1,330	1,775	1,995	3,325	3,745	5,540	5,940	9,965
600	315.5	140	605	1,210	1,615	1,815	3,025	3,410	5,040	5,405	9,070
650	343.5	125	590	1,175	1,570	1,765	2,940	3,315	4,905	5,260	8,825
700	371.0	110	570	1,135	1,515	1,705	2,840	3,200	4,730	5,070	8,515
750	399.0	95	530	1,065	1,420	1,595	2,660	2,995	4,430	4,750	7,970
800	426.5	80	510	1,015	1,355	1,525	2,540	2,860	4,230	4,535	7,610
850	454.5	65	485	975	1,300	1,460	2,435	2,745	4,060	4,350	7,305
900	482.0	50	450	900	1,200	1,350	2,245	2,530	3,745	4,015	6,740
950	510.0	35	385	775	1,030	1,160	1,930	2,175	3,220	3,450	5,795
1000	538.0	20	365	725	970	1,090	1,820	2,050	3,030	3,250	5,450
1050	565.5	20(1)	360	720	960	1,080	1,800	2,030	3,000	3,215	5,400
1100	593.5	20(1)	300	605	805	905	1,510	1,700	2,515	2,695	4,525
1150	621.0	20(1)	225	445	595	670	1,115	1,255	1,855	1,990	3,345
1200	649.0	20(1)	145	290	385	430	720	810	1,200	1,285	2,160

NOTE: (1) For welding end valves only. Flanged end ratings terminate at 1000℉(538℃).

A182-F304 (a)

NOTE: (a) At Temperatures over 1000°F, use only when the carbon content is o.o4% or higher.

STANDARD CLASS

Working Pressure by Classes, psig

CLASS		150	300	600	800	900	1,500	1,690	2,500	2,680	4,500
Shell Test,psig		425	1,100	2,175	2,900	3,250	5,400	6,100	9,000	9,650	16,200
Seat Test,psig		325	800	1,600	2,125	2,400	3,975	4,475	6,600	7,075	11,900
-20 to 100 °F	-29 to 38 °C	275	720	1,440	1,920	2,160	3,600	4,056	6,000	6,432	10,800
200	93.5	230	600	1,200	1,600	1,800	3,000	3,380	5,000	5,360	9,000
300	149.0	205	540	1,080	1,440	1,620	2,700	3,040	4,500	4,825	8,100
400	204.5	190	495	995	1,325	1,490	2,485	2,800	4,140	4,440	7,450
500	260.0	170	465	930	1,240	1,395	2,330	2,625	3,880	4,160	6,985
600	315.5	140	435	875	1,165	1,310	2,185	2,460	3,640	3,900	6,550
650	343.5	125	430	860	1,145	1,290	2,150	2,420	3,580	3,840	6,445
700	371.0	110	425	850	1,135	1,275	2,125	2,395	3,540	3,795	6,370
750	399.0	95	415	830	1,105	1,245	2,075	2,340	3,460	3,710	6,230
800	426.5	80	405	805	1,075	1,210	2,015	2,270	3,360	3,600	6,050
850	454.5	65	395	790	1,055	1,190	1,980	2,230	3,300	3,540	5,940
900	482.0	50	390	780	1,035	1,165	1,945	2,190	3,240	3,475	5,830
950	510.0	35	380	765	1,020	1,145	1,910	2,150	3,180	3,410	5,725
1000	538.0	20	320	640	855	965	1,605	1,810	2,675	2,870	4,815
1050	565.5	20(1)	310	615	820	925	1,545	1,740	2,570	2,755	4,630
1100	593.5	20(1)	255	515	685	770	1,285	1,450	2,145	2,300	3,855
1150	621.0	20(1)	200	400	530	595	995	1,120	1,655	1,775	2,985
1200	649.0	20(1)	155	310	415	465	770	870	1,285	1,380	2,315
1250	676.5	20(1)	115	225	300	340	565	635	945	1,015	1,695
1300	704.5	20(1)	85	170	225	255	430	485	715	765	1,285
1350	732.0	20(1)	60	125	165	185	310	350	515	550	925
1400	760.0	20(1)	50	95	130	145	240	270	400	430	720
1450	788.0	15(1)	35	70	95	105	170	190	285	305	515
1500	815.5	10(1)	25	55	70	80	135	155	230	245	410

NOTE: (1) For welding end valves only. Flanged end ratings terminate at 1000°F (538°C).

A182-F316 (a)

NOTE: (a) At Temperatures over 1000°F, use only when the carbon content is o.o4% or higher.

STANDARD CLASS

Working Pressure by Classes, psig

CLASS		150	300	600	800	900	1,500	1,690	2,500	2,680	4,500
Shell Test,psig		425	1,100	2,175	2,900	3,250	5,400	6,100	9,000	9,650	16,200
Seat Test,psig		325	800	1,600	2,125	2,400	3,975	4,475	6,600	7,073	11,900
-20 to 100 °F	-29 to 38 °C	275	720	1,440	1,920	2,160	3,600	4,055	6,000	6,430	10,800
200	93.5	235	620	1,240	1,655	1,860	3,095	3,485	5,160	5,530	9,290
300	149.0	215	560	1,120	1,495	1,680	2,795	3,150	4,660	4,995	8,390
400	204.5	195	515	1,025	1,370	1,540	2,570	2,895	4,280	4,590	7,705
500	260.0	170	480	955	1,275	1,435	2,390	2,690	3,980	4,265	7,165
600	315.5	140	450	900	1,205	1,355	2,255	2,540	3,760	4,030	6,770
650	343.5	125	445	890	1,185	1,330	2,220	2,500	3,700	3,965	6,660
700	371.0	110	430	870	1,160	1,305	2,170	2,445	3,620	3,880	6,515
750	399.0	95	425	855	1,140	1,280	2,135	2,405	3,560	3,815	6,410
800	426.5	80	420	845	1,125	1,265	2,110	2,380	3,520	3,775	6,335
850	454.5	65	420	835	1,115	1,255	2,090	2,355	3,480	3,730	6,265
900	482.0	50	415	830	1,105	1,245	2,075	2,340	3,460	3,710	6,230
950	510.0	35	385	775	1,030	1,160	1,930	2,175	3,220	3,450	5,795
1000	538.0	20	350	700	935	1,050	1,750	1,970	2,915	3,125	5,245
1050	565.5	20(1)	345	685	915	1,030	1,720	1,940	2,865	3,070	5,155
1100	593.5	20(1)	305	610	815	915	1,525	1,720	2,545	2,730	4,575
1150	621.0	20(1)	235	475	630	710	1,185	1,335	1,970	2,110	3,550
1200	649.0	20(1)	185	370	495	555	925	1,045	1,545	1,655	2,775
1250	676.5	20(1)	145	295	390	440	735	830	1,230	1,320	2,210
1300	704.5	20(1)	115	235	310	350	585	660	970	1,040	1,750
1350	732.0	20(1)	95	190	255	290	480	540	800	860	1,440
1400	760.0	20(1)	75	150	200	225	380	430	630	675	1,130
1450	788.0	20(1)	60	115	155	175	290	325	485	520	875
1500	815.5	20(1)	40	85	110	125	205	230	345	370	620

NOTE: (1) For welding end valves only. Flanged end ratings terminate at 1000°F (538°C).

A182-F304L (a), A182-F316L

NOTE: (a) Not to be used over 800°F(427°C).

STANDARD CLASS

Working Pressure by Classes, psig

CLASS		150	300	600	800	900	1,500	1,690	2,500	2,680	4,500
Shell Test,psig		350	900	1,800	2,400	2,700	4,500	5,075	7,500	8,050	13,500
Seat Test,psig		275	675	1,325	1,775	2,000	3,300	3,725	5,500	5,900	9,900
-20 to 100 °F	-29 to 38 °C	230	600	1,200	1,600	1,800	3,000	3,380	5,000	5,360	9,000
200	93.5	195	505	1,015	1,350	1,520	2,530	2,850	4,220	4,525	7,595
300	149.0	175	455	910	1,210	1,360	2,270	2,555	3,780	4,050	6,805
400	204.5	160	415	825	1,100	1,240	2,065	2,325	3,440	3,690	6,190
500	260.0	145	380	765	1,020	1,145	1,910	2,150	3,180	3,410	5,725
600	315.5	140	360	720	960	1,080	1,800	2,030	3,000	3,215	5,400
650	343.5	125	350	700	935	1,050	1,750	1,970	2,920	3,130	5,255
700	371.0	110	345	685	915	1,030	1,715	1,935	2,860	3,065	5,150
750	399.0	95	335	670	895	1,010	1,680	1,895	2,800	3,000	5,040
800	426.5	80	330	660	875	985	1,645	1,855	2,740	2,935	4,930
850	454.5	65	320	645	860	965	1,610	1,815	2,680	2,875	4,825

A182-F321 (a)

NOTE: (a) Not to be used over 1000°F(538°C).

STANDARD CLASS

Working Pressure by Classes, psig

CLASS		150	300	600	800	900	1,500	1,690	2,500	2,680	4,500
Shell Test,psig		413	1,080	2,160	2,880	3,240	5,400	6,083	9,000	9,645	16,200
Seat Test,psig		303	792	1,584	2,112	2,376	3,960	4,461	6,600	7,073	11,880
-20 to 100 °F	-29 to 38 °C	275	720	1,440	1,920	2,160	3,600	4,055	6,000	6,430	10,800
200	93.5	245	645	1,290	1,720	1,935	3,230	3,640	5,380	5,765	9,685
300	149.0	230	595	1,190	1,585	1,785	2,975	3,350	4,960	5,315	8,930
400	204.5	200	550	1,105	1,470	1,655	2,760	3,110	4,600	4,930	8,280
500	260.0	170	515	1,030	1,375	1,545	2,570	2,895	4,285	4,595	7,715
600	315.5	140	485	975	1,300	1,460	2,435	2,745	4,060	4,355	7,310
650	343.5	125	480	955	1,275	1,435	2,390	2,690	3,980	4,265	7,165
700	371.0	110	465	930	1,240	1,395	2,330	2,625	3,880	4,160	6,985
750	399.0	95	460	915	1,220	1,375	2,290	2,580	3,820	4,095	6,875
800	426.5	80	450	900	1,205	1,355	2,255	2,540	3,760	4,030	6,770
850	454.5	65	445	895	1,290	1,340	2,230	2,515	3,720	3,990	6,695
900	482.0	50	440	885	1,180	1,325	2,210	2,490	3,680	3,945	6,625
950	510.0	35	385	775	1,030	1,160	1,930	2,175	3,220	3,450	5,795
1000	538.0	20	355	715	950	1,070	1,785	2,010	2,970	3,185	5,350
1050	565.5	20(1)	315	625	835	940	1,565	1,765	2,605	2,795	4,690
1100	593.5	20(1)	270	545	725	815	1,360	1,530	2,265	2,430	4,075
1150	621.0	20(1)	235	475	630	710	1,185	1,335	1,970	2,110	3,550
1200	649.0	20(1)	185	370	495	555	925	1,045	1,545	1,655	2,775
1250	676.5	20(1)	140	280	375	420	705	795	1,170	1,255	2,110
1300	704.5	20(1)	110	220	295	330	550	620	915	980	1,645
1350	732.0	20(1)	85	170	225	255	430	485	715	765	1,285
1400	760.0	20(1)	65	130	175	195	325	365	545	585	975
1450	788.0	20(1)	50	105	140	155	255	290	430	460	770
1500	815.5	20(1)	40	75	100	115	190	215	315	340	565

NOTE: (1) For welding end valves only. Flanged end ratings terminate at 1000°F(538°C).

A182-F347 (a)

NOTE: (a) Not to be used over 1000°F(538°C).

STANDARD CLASS

Working Pressure by Classes, psig

CLASS		150	300	600	800	900	1,500	1,690	2,500	2,680	4,500
Shell Test,psig		413	1,080	2,160	2,880	3,240	5,400	6,083	9,000	9,645	16,200
Seat Test,psig		303	792	1,584	2,112	2,376	3,960	4,461	6,600	7,073	11,880
-20 to 100 °F	-29 to 38 °C	275	720	1,440	1,920	2,160	3,600	4,055	6,000	6,430	10,800
200	93.5	255	660	1,320	1,760	1,980	3,300	3,720	5,500	5,895	9,900
300	149.0	230	615	1,230	1,640	1,845	3,070	3,460	5,120	5,490	9,215
400	204.5	200	575	1,145	1,530	1,720	2,870	3,235	4,780	5,125	8,605
500	260.0	170	540	1,080	1,440	1,620	2,700	3,040	4,500	4,825	8,100
600	315.5	140	515	1,025	1,370	1,540	2,570	2,895	4,280	4,590	7,705
650	343.5	125	505	1,010	1,345	1,510	2,520	2,840	4,200	4,500	7,560
700	371.0	110	495	990	1,320	1,485	2,470	2,785	4,120	4,415	7,415
750	399.0	95	490	985	1,310	1,475	2,460	2,770	4,100	4,395	7,380
800	426.5	80	485	975	1,300	1,460	2,435	2,745	4,060	4,355	7,310
850	454.5	65	485	970	1,295	1,455	2,425	2,730	4,040	4,330	7,270
900	482.0	50	450	900	1,200	1,350	2,245	2,530	3,745	4,015	6,740
950	510.0	35	385	775	1,030	1,160	1,930	2,175	3,220	3,450	5,795
1000	538.0	20	365	725	970	1,090	1,820	2,050	3,030	3,250	5,450
1050	565.5	20(1)	360	720	960	1,080	1,800	2,030	3,000	3,215	5,400
1100	593.5	20(1)	325	645	860	965	1,610	1,815	2,685	2,880	4,835
1150	621.0	20(1)	275	550	735	825	1,370	1,545	2,285	2,450	4,115
1200	649.0	20(1)	170	345	460	515	855	965	1,430	1,535	2,570
1250	676.5	20(1)	125	245	330	370	615	695	1,030	1,105	1,850
1300	704.5	20(1)	95	185	250	280	465	525	770	825	1,390
1350	732.0	20(1)	70	135	180	205	345	390	570	610	1,030
1400	760.0	20(1)	55	110	145	165	275	310	455	490	825
1450	788.0	15(1)	40	80	110	125	205	230	345	370	615
1500	815.5	15(1)	35	70	95	105	170	190	285	305	515

NOTE: (1) For welding end valves only. Flanged end ratings terminate at 1000°F(538°C).

GATE VALVE – API 602 / ASME B16.34

No.	ASTM Designation / Parts	A105N	A350		A182					A182				
			LF2	LF3	F304/L	F316/L	F321	F347	F51	F5	F9	F11	F22	F91
1	Body	A105N	LF2	LF3	F304/L	F316/L	F321	F347	F51	F5	F9	F11	F22	F91
2	Seat Ring	A276-410+STL		A276-316+STL			A276 -321 +STL	A276 -347 +STL	UNS S31803 +STL	A276-410+STL				
		A105 +STL*	LF2 +STL*							F5 +STL*	F9 +STL*	F11 +STL*	F22 +STL*	F91 +STL*
3	Wedge	A217-CA15		A351-CF8M+STL			A276 -321 +STL	A276 -347 +STL	UNS S31803 +STL	A217-CA15				
		A276-410*		A276-316+STL*						A276-410+STL*				
4	Stem	A276-410		A276-304		A276 -316	A276 -321	A276 -347	UNS S31803	A276-410				
				A276-316*										
5	Gasket	304 Spiral Wound Graphite				316 SWG	321 SWG	347 SWG	Duplex SWG	304 Spiral Wound Graphite				
6	Bonnet	A105N	LF2	LF3	F304/L	F316/L	F321	F347	F51	F5	F9	F11	F22	F91
7	Bonnet Bolt	A193-B7	A320-L7		A193-B8					A193-B16				
8	Gland Packing	Graphoil												
10	Gland	316 Stainless Steel												
11	Gland Flange	A105		A182-F304						A105				
				A105*										
12	Gland Nut	A194-2H		A194-8						A194-2H				
				A194-2H*										
13	Gland Bolt	A193-B6		A193-B8						A193-B6				
		A193-B7*		A193-B7*						A193-B7*				
14	Yoke Sleeve	A582-416												
		High Tension Brass*												
15	Handwheel	A47												
16	Name Plate	Aluminium			304 Stainless Steel					Aluminium				
17	Handwheel Nut	A563-A												
20	Yoke	A105												

STL: Stellite 6 faced
SWG : Spiral Wound Graphite
A182-F304/L : Dual Certificate Material for A182-F304 & A182-F304L
A182-F316/L : Dual Certificate Material for A182-F316 & A182-F316L
DUPLEX : Duplex Stainless Steel
* ASME CLASS 1500 and Above

* Other materials also available on request

GLOBE VALVE – ASME B16.34 / BS 5352

No.	ASTM Designation / Parts	A105N	A350		A182					A182				
			LF2	LF3	F304/L	F316/L	F321	F347	F51	F5	F9	F11	F22	F91
1	Body	A105N	LF2	LF3	F304/L	F316/L	F321	F347	F51	F5	F9	F11	F22	F91
2	Seat	Integral Hardfaced Stellite 6												
3	Disc	A217-CA15		A351-CF8M+STL			A276 -321 +STL	A276 -347 +STL	UNS S31803 +STL	A217-CA15				
		A276-410+STL*		A276-316+STL*						A276-410+STL*				
4	Stem	A276-410		A276-304		A276 -316	A276 -321	A276 -347	UNS S31803	A276-410				
				A276-316*										
5	Gasket	304 Spiral Wound Graphite				316 SWG	321 SWG	347 SWG	Duplex SWG	304 Spiral Wound Graphite				
6	Bonnet	A105N	LF2	LF3	F304/L	F316/L	F321	F347	F51	F5	F9	F11	F22	F91
7	Bonnet Bolt	A193-B7	A320-L7		A193-B8					A193-B16				
8	Gland Packing	Graphoil												
9	Packing Ring	A276-410		A276-316						A276-410				
10	Gland	316 Stainless Steel												
11	Gland Flange	A105		A182-F304						A105				
				A105*										
12	Gland Nut	A194-2H		A194-8						A194-2H				
				A194-2H*										
13	Gland Bolt	A193-B6		A193-B8						A193-B6				
		A193-B7*		A193-B7*						A193-B7*				
14	Yoke Sleeve	A582-416												
		High Tension Brass*												
15	Handwheel	A47												
16	Name Plate	Aluminium			304 Stainless Steel					Aluminium				
17	Handwheel Nut	A194-2H												
20	Yoke	A105												
39	Disc Pad	316 Stainless Steel												

STL: Stellite 6 faced
SWG : Spiral Wound Graphite
A182-F304/L : Dual Certificate Material for A182-F304 & A182-F304L
A182-F316/L : Dual Certificate Material for A182-F316 & A182-F316L
DUPLEX : Duplex Stainless Steel
* ASME CLASS 1500 and Above

* Other materials also available on request

PISTON CHECK VALVE – ASME B16.34 / BS 5352

No.	ASTM Designation / Parts	A105N	A350		A182					A182				
			LF2	LF3	F304/L	F316/L	F321	F347	F51	F5	F9	F11	F22	F91
1	Body	A105N	LF2	LF3	F304/L	F316/L	F321	F347	F51	F5	F9	F11	F22	F91
2	Seat	Integral Hardfaced Stellite 6												
3	Disc	A276-410		A276-316+STL			A276 -321 +STL	A276 -347 +STL	UNS S31803 +STL	A276-410				
4	Spring	A276-316					Inconel X-750			A276-316				
5	Gasket	304 Spiral Wound Graphite				316 SWG	321 SWG	347 SWG	Duplex SWG	304 Spiral Wound Graphite				
6	Cover	A105N	LF2	LF3	F304/L	F316/L	F321	F347	F51	F5	F9	F11	F22	F91
7	Cover Bolt	A193-B7	A320-L7		A193-B8					A193-B16				
16	Name Plate	Aluminium			304 Stainless Steel					Aluminium				

SWING CHECK VALVE – ASME B16.34 / BS 5352

No.	ASTM Designation / Parts	A105N	A350		A182					A182				
			LF2	LF3	F304/L	F316/L	F321	F347	F51	F5	F9	F11	F22	F91
1	Body	A105N	LF2	LF3	F304/L	F316/L	F321	F347	F51	F5	F9	F11	F22	F91
2	Seat Ring	A276-410		A276-316+STL			A276 -321 +STL	A276 -347 +STL	UNS S31803 +STL	A276-410+STL				
3	Disc	A276-410		A276-316+STL			A276 -321 +STL	A276 -347 +STL	UNS S31803 +STL	A276-410				
4	Hinge	A351-CF8M												
5	Gasket	304 Spiral Wound Graphite				316 SWG	321 SWG	347 SWG	Duplex SWG	304 Spiral Wound Graphite				
6	Cover	A105N	LF2	LF3	F304/L	F316/L	F321	F347	F51	F5	F9	F11	F22	F91
7	Cover Bolt	A193-B7	A320-L7		A193-B8					A193-B16				
8	Retaining Washer	316 Stainless Steel												
9	Support Pin	316 Stainless Steel												
10	Support	316 Stainless Steel												
16	Name Plate	Aluminium			304 Stainless Steel					Aluminium				

STL: Stellite 6 faced
SWG : Spiral Wound Graphite
A182-F304/L : Dual Certificate Material for A182-F304 & A182-F304L
A182-F316/L : Dual Certificate Material for A182-F316 & A182-F316L
DUPLEX : Duplex Stainless Steel

* Other materials also available on request

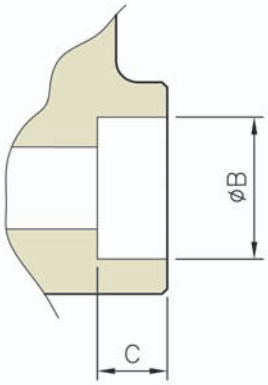
SWI

CV VALUES OF SWI VALVES

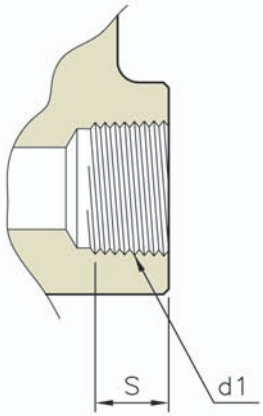
No.	Valve Type	Class	Port Size	1/2	3/4	1	1-1/4	1-1/2	2
1	Gate	150-800	Reduced	7	14	29	84	93	155
		1500	Reduced	13	15	29	81	100	148
		800	Full	17	33	57	154	154	288
		1500	Full	15	28	45	122	122	220
		2500	Full	14	27	48	113	116	172
2	Globe	150-800	Reduced	2	3	4	8	15	30
		1500	Reduced	2	3	5	10	18	28
		800	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
3	Lift Check	150-800	Reduced	1.5	2	4	6	13	24
		1500	Reduced	1.4	2	4	8	19	23
		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
4	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
5	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
6	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

DIMENSIONS OF END CONNECTIONS

Socket Weld End



Screwed End



DIMENSIONAL SPECIFICATIONS

SOCKET WELD

Unit : mm(inch)

NPS	ASME B16.11			JIS B2316		
	SOCKET BORE DIA. B		SOCKET DEPTH	SOCKET BORE DIA. B		SOCKET DEPTH
	MIN.	MAX.	MIN. C	MIN.	MAX.	MIN. C
1/4	14.2 (0.555)	14.35 (0.565)	10.0 (0.38)	14.3 (0.563)	14.6 (0.574)	9.6 (0.38)
3/8	17.6 (0.690)	17.75 (0.700)	10.0 (0.38)	17.8 (0.701)	18.1 (0.712)	9.6 (0.38)
1/2	21.8 (0.855)	21.95 (0.865)	10.0 (0.38)	22.2 (0.875)	22.5 (0.885)	9.6 (0.38)
3/4	27.2 (1.065)	27.30 (1.075)	13.0 (0.50)	27.7 (1.091)	28.0 (1.102)	12.7 (0.50)
1	33.9 (1.330)	34.00 (1.340)	13.0 (0.50)	34.5 (1.359)	34.8 (1.370)	12.7 (0.50)
11/4	42.7 (1.675)	42.75 (1.685)	13.0 (0.50)	43.2 (1.701)	43.5 (1.172)	12.7 (0.50)
11/2	48.8 (1.915)	48.85 (1.925)	13.0 (0.50)	49.1 (1.934)	49.4 (1.944)	12.7 (0.50)
2	61.2 (2.406)	61.35 (2.416)	16.0 (0.62)	61.1 (2.406)	61.4 (2.417)	15.9 (0.63)

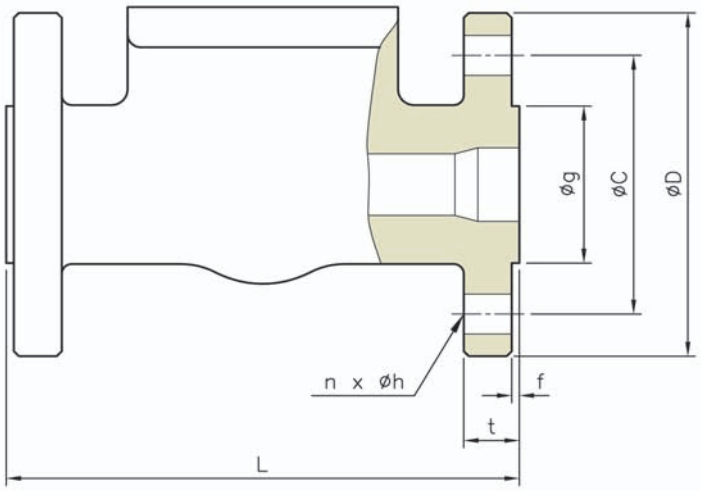
SCREWED

Unit : mm(inch)

NPS	ASME B16.11/ASME B1.20.1		JIS B0203	
	LENGTH OF USEFUL THREAD, MIN. S	THREAD d1	LENGTH OF USEFUL THREAD, MIN. S	THREAD d1
1/4	10.2 (0.4018)	1/4 – 18 NPT	9.4 (0.370)	PT 1/4 – 19
3/8	10.4 (0.4078)	3/8 – 18 NPT	9.7 (0.382)	PT 3/8 – 19
1/2	13.6 (0.5337)	1/2 – 14 NPT	12.7 (0.500)	PT 1/2 – 14
3/4	13.9 (0.5457)	3/4 – 14 NPT	14.1 (0.555)	PT 3/4 – 14
1	17.4 (0.6828)	1 – 11 1/2 NPT	16.2 (0.638)	PT 1 – 11
11/4	18.0 (0.7068)	1 1/4 – 11 1/2 NPT	18.5 (0.729)	PT 1 1/4 – 11
11/2	18.4 (0.7235)	1 1/2 – 11 1/2 NPT	18.5 (0.729)	PT 1 1/2 – 11
2	19.2 (0.7565)	2 – 11 1/2 NPT	22.8 (0.898)	PT 2 – 11

SWI DIMENSIONS OF END CONNECTIONS (CONT'D)

Flanged End (Raised Face) ASME B16.5 & B16.10



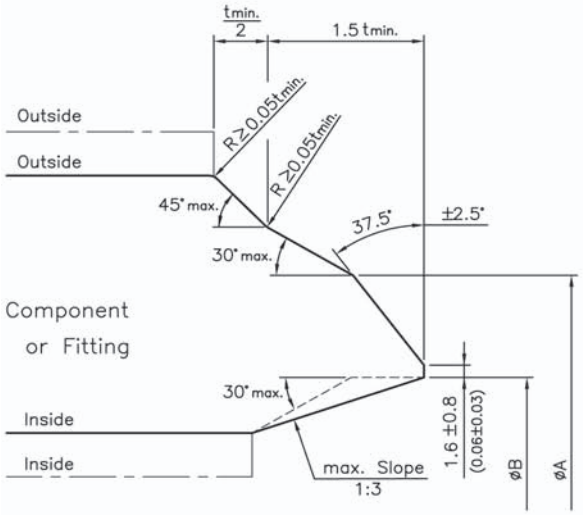
DIMENSIONAL SPECIFICATIONS

Unit : mm(inch)

CLASS	NPS	Face to Face L			D	C	g	t min.	f	n	h
		GATE	GLOBE/CHECK	SWING CHECK							
150	1/2	108 (4 1/4)			89 (3.50)	60.5 (2.38)	35 (1.38)	11.2 (0.44)	1.5 (0.06)	4	15.8 (0.62)
	3/4	117 (4 5/8)			99 (3.88)	69.9 (2.75)	43 (1.69)	12.7 (0.50)			
	1	127 (5)			108 (4.25)	79.2 (3.12)	51 (2.00)	14.3 (0.56)			
	11/4	140 (5 1/2)			117 (4.62)	88.9 (3.50)	64 (2.50)	15.8 (0.62)			
	11/2	165 (6 1/2)			127 (5.00)	98.5 (3.88)	73 (2.88)	17.6 (0.69)			
	2	178 (7)	203 (8)	203 (8)	152 (6.00)	120.7 (4.75)	92 (3.62)	19.1 (0.75)			19.1 (0.75)
300	1/2	140 (5 1/2)	152 (6)	140 (5 1/2)	95 (3.75)	66.5 (2.62)	35 (1.38)	14.3 (0.56)	1.5 (0.06)	4	15.8 (0.62)
	3/4	152 (6)	178 (7)	152 (6)	117 (4.62)	82.6 (3.25)	43 (1.69)	15.8 (0.62)			19.1 (.075)
	1	165 (6 1/2)	203 (8)	216 (8 1/2)	124 (4.88)	88.9 (3.50)	51 (2.00)	17.6 (0.69)			
	11/4	178 (7)	216 (8 1/2)	229 (9)	133 (5.25)	98.5 (3.88)	64 (2.50)	19.1 (0.75)			
	11/2	190 (7 1/2)	229 (9)	241 (9 1/2)	155 (6.12)	114.3 (4.50)	73 (2.88)	20.6 (0.81)			22.3 (0.88)
	2	216 (8 1/2)	267 (10 1/2)	267 (10 1/2)	165 (6.50)	127.0 (5.00)	92 (3.62)	22.4 (0.88)		8	19.1 (0.75)
600	1/2	165 (6 1/2)			Same as Class 300			20.6 (0.81)	6.4 (0.25)	Same as Class 300	
	3/4	190 (7 1/2)						22.1 (0.87)			
	1	216 (8 1/2)						23.9 (0.94)			
	11/4	229 (9)						27 (1.06)			
	11/2	241 (9 1/2)						28.8 (1.13)			
	2	292 (11 1/2)						31.8 (1.25)			
900 & 1500	1/2	216 (8 1/2)			121 (4.75)	82.6 (3.25)	35 (1.38)	28.8 (1.13)	6.4 (0.25)	4	22.3 (0.88)
	3/4	229 (9)			130 (5.12)	88.9 (3.50)	43 (1.69)	31.8 (1.25)			22.3 (0.88)
	1	254 (10)			149 (5.88)	101.6 (4.00)	51 (2.00)	34.8 (1.37)			25.4 (1.00)
	11/4	279 (11)			159 (6.25)	111.2 (4.38)	64 (2.50)	34.8 (1.37)			25.4 (1.00)
	11/2	305 (12)			178 (7.00)	123.9 (4.88)	73 (2.88)	38.1 (1.50)			28.5 (1.12)
	2	368 (14 1/2)			216 (8.50)	165.1 (6.50)	92 (3.62)	44.5 (1.75)		8	25.4 (1.00)
2500	1/2	264 (10 3/8)			133 (5.25)	88.9 (3.50)	35 (1.38)	36.6 (1.44)	6.4 (0.25)	4	22.3 (0.88)
	3/4	273 (10 3/4)			140 (5.50)	95.3 (3.75)	43 (1.69)	38.1 (1.50)			22.3 (0.88)
	1	307 (12 1/8)			159 (6.25)	108.0 (4.25)	51 (2.00)	41.5 (1.63)			25.4 (1.00)
	11/4	349 (13 3/4)			185 (7.25)	130.0 (5.12)	64 (2.50)	44.5 (1.75)			28.5 (1.12)
	11/2	384 (15 1/8)			204 (8.00)	146.0 (5.75)	73 (2.88)	50.8 (2.00)			31.8 (1.25)
	2	451 (17 3/4)			235 (9.25)	171.5 (6.75)	92 (3.62)	57,2 (2.25)		8	28.5 (1.12)

Butt Welding End

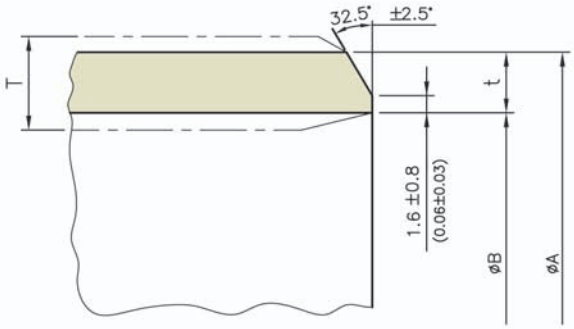
ASME B16.25
(Without Backing Ring)



For wall thickness not over 22mm (0.88 in.)

NPS	Pipe Schedule	Outside Diameter A	Inside Diameter B	Wall Thickness t
1/2	40	21.0 (0.84)	16.0 (0.62)	2.8 (0.11)
	80		14.0 (0.55)	3.7 (0.15)
	160		12.0 (0.47)	4.8 (0.19)
	XXS		6.0 (0.25)	7.5 (0.29)
3/4	40	27.0 (1.05)	21.0 (0.82)	2.9 (0.11)
	80		19.0 (0.74)	3.9 (0.15)
	160		16.0 (0.61)	5.6 (0.22)
	XXS		11.0 (0.43)	7.8 (0.31)
1	40	33.0 (1.32)	27.0 (1.75)	3.4 (0.13)
	80		24.0 (0.96)	4.6 (0.18)
	160		21.0 (0.82)	6.4 (0.25)
	XXS		15.0 (0.60)	9.1 (0.36)
1 1/4	40	42.0 (1.66)	35.0 (1.38)	3.6 (0.14)
	80		33.0 (1.28)	4.9 (0.19)
	160		30.0 (1.16)	6.4 (0.26)
	XXS		23.0 (0.90)	9.7 (0.38)
1 1/2	40	48.0 (1.90)	41.0 (1.61)	3.7 (0.15)
	80		38.0 (1.50)	5.1 (0.20)
	160		34.0 (1.39)	7.1 (0.28)
	XXS		28.0 (1.10)	10.2 (0.40)
2	40	60.0 (2.38)	52.0 (2.07)	3.9 (0.15)
	80		49.0 (1.94)	5.5 (0.22)
	160		43.0 (1.69)	8.7 (0.34)
	XXS		38.0 (1.50)	11.1 (0.44)

JIS B2312



T : Actual Thickness of Component or Fitting

NPS	Pipe Schedule	Outside Diameter A	Inside Diameter B	Wall Thickness t
1/2	40	21.7 (0.85)	16.1 (0.63)	2.8 (0.11)
	80		14.3 (0.56)	3.7 (0.15)
	160		12.3 (0.47)	4.7 (0.19)
3/4	40	27.2 (1.07)	21.4 (0.84)	2.9 (0.11)
	80		19.4 (0.76)	3.9 (0.15)
	160		16.2 (0.63)	5.5 (0.22)
1	40	34.0 (1.34)	27.2 (1.07)	3.4 (0.13)
	80		25.0 (0.98)	4.5 (0.18)
	160		21.2 (0.84)	6.4 (0.25)
1 1/4	40	42.7 (1.68)	35.5 (1.40)	3.6 (0.14)
	80		32.9 (1.30)	4.9 (0.19)
	160		29.9 (1.18)	6.4 (0.25)
1 1/2	40	48.6 (1.91)	41.2 (1.62)	3.7 (0.15)
	80		38.4 (1.51)	5.1 (0.20)
	160		34.4 (1.35)	7.1 (0.28)
2	40	60.5 (2.38)	52.7 (2.07)	3.9 (0.15)
	80		49.5 (1.95)	5.5 (0.22)
	160		43.1 (1.70)	8.7 (0.34)

HOW TO ORDER

CODE TABLE	1	2	3	4	5	6	7	8
SAMPLE VALVE	BG	F	- 24	SN	- A	B	1	A

GATE INCONEL 625 BELLOWS, CLASS 800, 316L, 316FHF TRIM NACE, SOCKET WELD, WELDED BONNET, RED. PORT, GRAPHOIL PACKING

1 VALVE TYPE

AA	GATE
BA	GATE (321 STAINLESS BELLOWS)
BG	GATE (INCONEL 625 BELLOWS)
AG	ANGLE GLOBE
CG	ANGLE GLOBE STOP CHECK
AL	BOILER BLOWDOWN
AB	GLOBE
AH	GLOBE STOP CHECK
AF	NEEDLE GLOBE
DD	Y NEEDLE GLOBE
DB	Y GLOBE
DF	Y GLOBE STOP CHECK
BB	GLOBE (321 STAINLESS BELLOWS)
BH	GLOBE (INCONEL 625 BELLOWS)
BI	Y GLOBE (321 STAINLESS BELLOWS)
BJ	Y GLOBE (INCONEL 625 BELLOWS)
AC	PISTON CHECK
AJ	PISTON CHECK (SPRING LOADED)
AE	BALL CHECK
AK	BALL CHECK (SPRING LOADED)
AD	SWING CHECK
DC	Y PISTON CHECK (SPRING LOADED)
DE	Y BALL CHECK (SPRING LOADED)
ZZ	SPECIAL

2 CLASS

A	125
B	150
C	200
D	300
E	600
F	800
G	900
H	1500
J	2500
K	4500
L	1690
M	2680
Z	SPECIAL

3 SHELL MATERIAL

11	A105N, WCB	32	F91, C12A
13	LF2, LC2	33	MONEL
14	LF3, LC3	34	
15	F5, C5	35	ALLOY 625 NO6625
16	F9, C12	36	ALLOY 825 NO8825
17	F11, WC6	37	ALLOY 800 NO8800
18	F22, WC9	38	ALLOY 800H NO8810
21	F304L, CF3 *	39	ALLOY-20
22	F304H,	41	TITANIUM
24	F316L, CF3M *	42	F317, CG8M
25	F316H	43	F317L, CG3M
26	F321	50	LCC
27	F321H	51	F347H, CF8C
28	F347, CF8C		
29	F51		
31	F53		
		99	SPECIAL

*304/304L, 316/316L DUAL CERTIFIED

4 TRIM MATERIAL

	STEM	WEDGE/DISC	SEAT
AB	CR13	CR13	STELLITE 6
AC	CR13	CR13+ST 6	STELLITE 6
AF	304	304	STELLITE 6
AG	304	304+ST 6	STELLITE 6
AL	316	316	316
AM	316	316	STELLITE 6
AN	316	316+ST 6	STELLITE 6
AO	316L	316L+ST 6	STELLITE 6
AR	317	317+ST 6	STELLITE 6
AS	317L	317L+ST 6	STELLITE 6
AT	321	321+ST 6	STELLITE 6
AU	347	347+ST 6	STELLITE 6
AW	DUPLEX	DUPLEX+ST 6	STELLITE 6
BC	MONEL	MONEL	MONEL
BD	MONEL	MONEL	STELLITE 6
BE	INCOLOY	INCOLOY	INCOLOY
BH	HASTELLOY-B	HASTELLOY-B	HASTELLOY-B
BJ	HASTELLOY-C	HASTELLOY-C	HASTELLOY-C
BK	ALLOY 20	ALLOY 20	ALLOY 20
BL	TITANIUM	TITANIUM	TITANIUM
CA	ALLOY 825	ALLOY 825+ST6	STELLITE 6
CB	ALLOY 825	ALLOY 825	ALLOY 825
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

5 END CONNECTION

A	SOCKET WELD (ASME)
N	FNPT THREADED BOTH ENDS
S	SOCKET WELD x FNPT
B	BW (SPECIFY BORE)
G	EXTENDED BODY MSWxFNPT
H	EXTENDED BODY MSWxFSW
L	EXTENDED BODY MNPTxFNPT
M	EXTENDED BODY MNPTxFSW
C	NIPPLE STUB ENDS
J	SW x NIPPLE (STUB END)
K	NPT x NIPPLE (STUB END)
Q	FLAT FACE
R	RAISED FACE
T	RING TYPE JOINT FACE
P	PT
V	SW (JIS)
X	SWXPT (JIS)
Z	SPECIAL

6 BONNET STYLE

A	BOLTED BONNET
B	WELDED BONNET
C	SEAL WELDED BONNET
D	PRESSURE SEAL BONNET
E	RING JOINT BONNET
F	
G	COMPACT BOLTED BONNET BELLOWSEAL (globe only)
H	
J	EXTENDED BOLTED BONNET
K	EXTENDED WELDED BONNET
L	CRYOGENIC BOLTED BONNET
M	CRYOGENIC WELDED BONNET
Z	SPECIAL

7 BORE TYPE

1	REDUCED
2	FULL
3	SPECIAL

8 GASKET AND PACKING

A	304 SPIRAL WOUND+GRAPHITE	GRAPHOIL
B	304L SPIRAL WOUND+GRAPHITE	GRAPHOIL
C	316 SPIRAL WOUND+GRAPHITE	GRAPHOIL
D	316L SPIRAL WOUND+GRAPHITE	GRAPHOIL
E	MONEL SPIRAL WOUND+GRAPHITE	GRAPHOIL
F	A20 SPIRAL WOUND+GRAPHITE	GRAPHOIL
G	304 SPIRAL WOUND+TEFLON	TEFLON
H	304L SPIRAL WOUND+TEFLON	TEFLON
J	316 SPIRAL WOUND+TEFLON	TEFLON
K	316L SPIRAL WOUND+TEFLON	TEFLON
L	MONEL SPIRAL WOUND+TEFLON	TEFLON
M	A20 SPIRAL WOUND+TEFLON	TEFLON
N	304 SPIRAL WOUND+TEFLON	BRAIDED TFE
P	304L SPIRAL WOUND+TEFLON	BRAIDED TFE
Q	316 SPIRAL WOUND+TEFLON	BRAIDED TFE
R	316L SPIRAL WOUND+TEFLON	BRAIDED TFE
S	MONEL SPIRAL WOUND+TEFLON	BRAIDED TFE
T	A20 SPIRAL WOUND+TEFLON	BRAIDED TFE
Z	SPECIAL	SPECIAL

1. NACE MR01-75 SERVICE

SWI CROSS REFERENCE CHART

API 602 AND ASME B16.34

NOTE : THIS CHART COVERS A105 MATERIAL ADDITIONAL MATERIALS ARE AVAILABLE

SWI	VELAN	EDWARD	VOGT	BONNEY	SMITH
AAF-11AB-BA1A	B2054B02TY		BW363		
AAF-11AN-BA1A	B2054B02MY		BW363F8M		
AAF-11BC-BA1A	B2054B02XY		BW363MM		
AAB-11AB-RA1A	F0054B02TY		353	L1-11	81500000
AAB-11AN-RA1A	F0054B02MY		353F8M	L1-13	8150S000
AAB-11BC-RA1A	F0054B02XY		353MM	L1-14	8150D000
AAD-11AB-RA1A	F1054B02TY		363	L3-11	83000000
AAD-11AN-RA1A	F1054B02MY		363F8M	L3-13	8300S000
AAD-11BC-RA1A	F1054B02XY		363MM	L3-14	8300D000
AAE-11AB-RA1A	F2054B02TY		373	L6-11	86000000
AAE-11AN-RA1A	F2054B02MY		373F8M	L6-13	8600S000
AAE-11BC-RA1A	F2054B02XY		373MM	L6-14	8600D000
AAF-11AB-AA1A	W2054B02TY		SW12111		80000000
AAF-11AB-GB1A	C2184W02TY		ST2801		87500000
AAF-11AB-LB1A	C2184W02TY		TT2801	MFL-11	87500000
AAF-11AB-NA1A	S2054B02TY		12111	HL-11	80000000
AAF-11AB-NA2A	S2064B02TY		13111	H-11	88800000
AAF-11AB-NB1A	W2054W02TY		2801	WL-11	87000000
AAF-11AB-NB2A	S2064W02TY			W-11	587000000
AAF-11AC-NA1A	S2054B02TS		12111FHF		8000L000
AAF-11AN-NA1A	S2054B02MY		12111F8M	HL-13	8000S000
AAF-11AN-NB1A	S2054W02MY			WL-13	8700S000
AAF-11AN-NB2A	S2064W02MY			W-13	58700S000
AAF-11BC-NA1A	S2054B02XY		12111MM	HL-14	8000D000
AAF-11BC-NA2A	S2064B02XY			H-14	8880D000
AAF-11BC-NB1A	S2054W02XY		2801MM	WL-14	8700D000
AAF-11BC-NB2A	S2064W02XY			W-14	58700D000
AAH-11AB-NA1A	S3054B02TY		15111	9HL-11	150000000
AAH-11AB-NA2A			1033		158800000
AAH-11AB-NB1A	S3054W02TY		15801	9W-11	157000000
AAH-11AB-RA1A	F3054B02TY		15373	9HLF-11	150000000
AAH-11AN-NA1A	S3054B02MY		15111F8M	9HL-13	15000S000
AAH-11BC-NB1A	S3054B02XY		15801MM	9HL-14	15700D000
ABB-11AB-RA1A	F0074B02TY		473	L1-31	G8100000
ABD-11AB-RA1A	F1074B02TY		483	L3-31	G8300000
ABD-11AN-RA1A	F1074B02MY			L3-33	G830S000
ABD-11BC-RA1A	F1074B02XY			L3-34	G830D000
ABE-11AB-RA1A	F2074B02TY		493	L6-31	G8600000
ABE-11AC-RA1A	F2074B02TS	828		L6-32	G860L000
ABE-11AN-RA1A	F2074B02MY			L6-33	G860S000
ABE-11BC-RA1A	F2074B02XY			L6-34	G860D000
ABF-11AB-NA1A	S2074B02TY		12141	HL-31	G8000000
ABF-11AB-NA2A			13141	H-31	G8000000
ABF-11AB-NB1A	S2074W02TY		2821	WL-31	G8700000
ABF-11AC-NA1A	S2074B02TS		12141FHF	HL-32	G800L000
ABF-11AN-NA1A	S2074B02MY		12141F8M	HL-33	G800S000
ABF-11BC-NA1A	S2074B02XY		12141MM	HL-34	G800D000
ABH-11AB-NA1A	S3074B02TY		15141		G15000000
ABH-11AB-NA2A			1003		G15000000

SWI CROSS REFERENCE CHART

SWI	VELAN	EDWARD	VOGT	BONNEY	SMITH
ABH-11AB-NB1A	S3074W02TY		15821		G15700000
ABH-11AB-RA1A	F3074B02TY		15493	9HLF-31	G15000000
ABH-11AN-NA1A	S3074B02MY		15141F8M		G1500S000
ABJ-11AB-AC2A			SW66723		
ADE-11AB-NA1A	S2114B02TY		4835		
AFF-11AB-NA1A			22461		
AGF-11AB-NA1A			1971		
AHE-11AB-RA1A		846			
AJB-11AB-RA1A	F0034B02TY		573	L1-41	C8100000
AJB-11AN-RA1A	F0034B02MY				
AJB-11BC-RA1A	F0034B02XY				
AJD-11AB-RA1A	F1034B02TY		583	L3-41	C8300000
AJD-11AN-RA1A	F1034B02MY			L3-43	C830S000
AJD-11BC-RA1A	F1034B02XY			L3-44	C830D000
AJE-11AB-RA1A	F2034B02TY	858	593	L6-41	C8600000
AJE-11AN-RA1A	F2034B02MY			L6-43	C860S000
AJE-11BC-RA1A	F2034B02XY			L6-44	C860D000
AJF-11AB-NA1A	S2034B02TY		701	HL-41	SC8000000
AJF-11AB-NA2A			13701	H-41	SC8000000
AJF-11AN-NA1A	S2034B02MY			HL-43	SC800S000
AJF-11BC-NA1A	S2034B02XY			HL-44	SC800D000
AJH-11AB-NA1A	S3034B02TY		15701		C15000000
AJH-11AB-RA1A	F3034B02TY		15593	9HLF-41	C15000000
AJH-11AC-RA1A	F3034B02TS	1058		9HLF-42-SL	C1500L000
CGE-11AB-RA1A		847			
DBF-11AB-AA1A		848Y			
DBF-11AB-NA1A		848			
DBH-11AC-AA1A		1048Y			
DBH-11AC-BC1A		36128			
DBH-11AC-NA1A		1048			
DBH-11AC-RC1A		36122			
DBK-11AC-AC2A		96124			
DBK-11AC-BC2A		96128			
DBL-11AC-AC1A		36124			
DBL-11AC-NC1A		36120			
DBM-11AC-AC2A		66124			
DBM-11AC-BC2A		66128			
DBM-11AC-NC2A		66120			
DCF-11AB-AA1A		838Y			
DCF-11AB-NA1A		838			
DCF-11AB-NA2A		838			
DCK-11AC-AC2A		96174			
DCK-11AC-BC2A		96178			
DCL-11AC-AC1A		36174			
DCL-11AC-BC1A		36178			
DCL-11AC-NC1A		36170			
DCM-11AC-AC2A		66174	SW2610		
DCM-11AC-BC2A		66178			
DCM-11AC-NC2A		66170			
DEF-11AB-AA1A		832Y			
DEF-11AB-NA1A		832			
DFL-11AC-AC1A		36164			
DFL-11AC-BC1A		36168			
DFL-11AC-NC1A		36160			

SWI Valve Co., Ltd.

1023-2, KWANYANG-DONG, DONGAN-KU,
ANYANG, KYOUNGKI-DO, KOREA

FACTORY TEL: 82-31-422-7495~7
FAX: 82-31-422-7498

SALES OFFICE TEL: 82-2-2273-6601
82-31-421-1831~3
FAX: 82-2-2273-6605
82-31-421-1834