

A background image of a warehouse filled with tall metal shelving units. The shelves are stocked with various industrial valve components, including flanges, elbows, and full valves. Some shelves have white labels with letters like 'B', 'C', 'D', and 'E'. A sign on the top of the shelving units reads "NO STORAGE ABOVE TOP OF THIS BEAM".

SWI VALVES

Forged Steel Valves

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● SWI Global Footprint

Wherever industrial valves are needed in the world, SWI is nearby. We maintain strong partnerships with authorized stocking distributors on every continent. For your nearest authorized stocking distributor or representative, full contact details can be obtained from our web site: www.swivalve.com



● Foreword

SWI Valve Co., Ltd. is a leading industrial valve manufacturing company, specializing in the design and manufacture of Ball, Gate, Globe, Check, Cryogenic and Bellows Seal valves.

Our facilities incorporate all aspects of valve design, development and manufacture ensuring that SWI can offer a degree of flexibility rarely encountered elsewhere.

At SWI, we stand for three values - quality, innovation and service. We know the worlds Oil, Chemical, Petrochemical and Process industries require precision flow control products. We have dedicated ourselves to supplying that need with an extensive range of industrial valves, manufactured in our own factories and designed for environmental sensitivity.

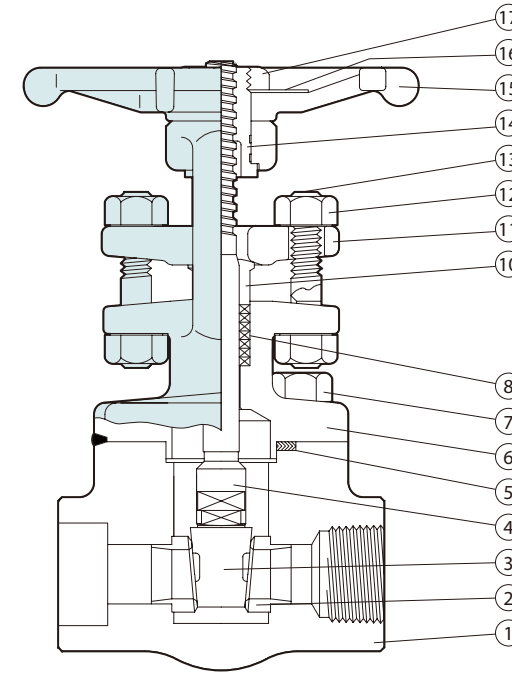
The Quality Policy of SWI Valve Co., Ltd. is to consistently provide product that meets customer and applicable regulatory requirements, with the aim to enhance customer satisfaction by providing exactly what has been agreed contractually, to the required quality and time stated.

The company 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 product.



GATE VALVES – 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 - API 602 / ASME B16.34

Unit : mm(inch)

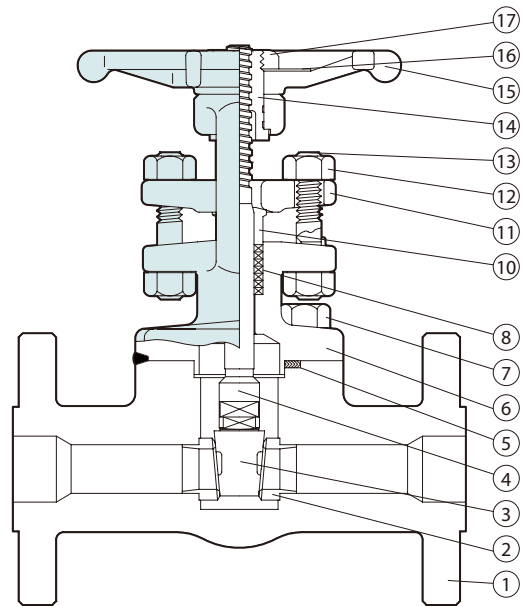
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Weight Kg(Lb)
Reduced	1/2	86 (3.39)	76 (2.99)	145 (5.71)	9.8 (0.39)	1.5 (3.3)
	3/4	86 (3.39)	86 (3.39)	151 (5.95)	13.0 (0.51)	2.0 (4.4)
	1	99 (3.90)	102 (4.02)	190 (7.48)	18.0 (0.71)	2.8 (6.2)
	1 1/4	124 (4.88)	117 (4.61)	241 (9.49)	31.0 (1.22)	5.2 (11.5)
	1 1/2	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)
	1 1/4	138 (5.43)	133 (5.24)	271 (10.67)	37.0 (1.46)	8.2 (18.8)
	1 1/2	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 - API 602 / 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	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)
	1 1/4	138 (5.43)	133 (5.24)	271 (10.67)	31.0 (1.22)	8.5 (18.7)
	1 1/2	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)

GATE VALVES – 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 - API 602 / ASME B16.34

Unit : mm(inch)

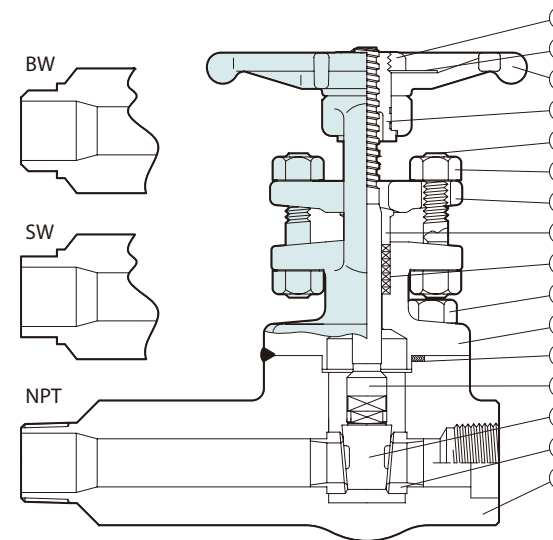
Port	Valve Size	Handwheel Diameter	Center to Top (Open)	Dia. of Port Openings	End to End			Weight Kg(Lb)		
					Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
Reduced	1/2	86 (3.39)	145 (5.71)	9.8 (0.39)	108 (4.25)	140 (5.50)	165 (6.50)	2.5 (5.5)	3.0 (6.6)	3.3 (7.3)
	3/4	86 (3.39)	151 (5.95)	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)
	1 1/2	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 - API 602 / ASME B16.34

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	Center to Top (Open)	Dia. of Port Openings	End to End	Weight 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)
	1 1/2	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)

GATE VALVES – 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 - API 602 / ASME B16.34

Unit : mm(inch)

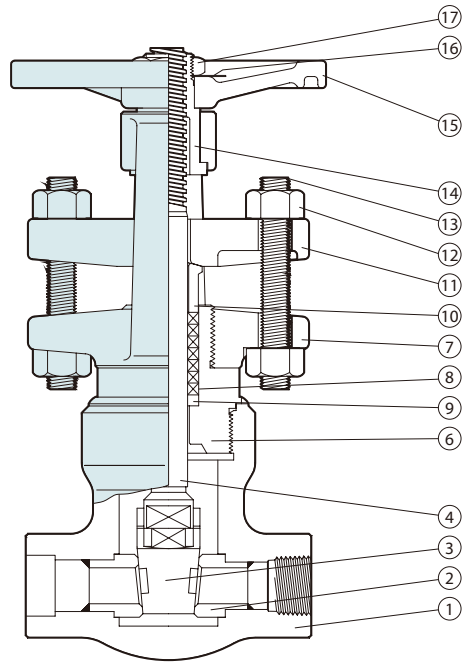
Port	Valve Size	Handwheel Diameter	End to End	Center to Male End	Center to Top (Open)	Dia. of Port Openings	Weight Kg(Lb)
Reduced	1/2	86 (3.39)	142 (5.59)	104 (4.10)	145 (5.71)	9.8 (0.39)	2.0 (4.4)
	3/4	86 (3.39)	157 (6.18)	114 (4.49)	151 (5.95)	13.0 (0.51)	3.4 (7.5)
	1	99 (3.90)	165 (6.50)	114 (4.49)	190 (7.48)	18.0 (0.71)	5.8 (12.8)
	1 1/2	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 - API 602 / ASME B16.34

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	End to End	Center to Male End	Center to Top (Open)	Dia. of Port Openings	Weight 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)
	1 1/2	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)

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)

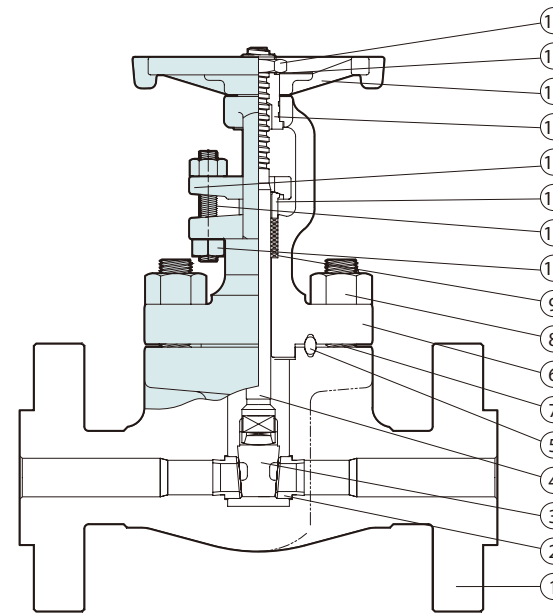
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Weight Kg(Lb)
Reduced	1/2	140 (5.51)	110 (4.33)	235 (9.25)	12 (0.47)	5 (11)
	3/4	140 (5.51)	110 (4.33)	235 (9.25)	12 (0.47)	5 (11)
	1	140 (5.51)	127 (5.00)	267 (10.51)	16 (0.63)	7 (15)
	1 1/4	200 (7.87)	155 (6.10)	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 – 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)

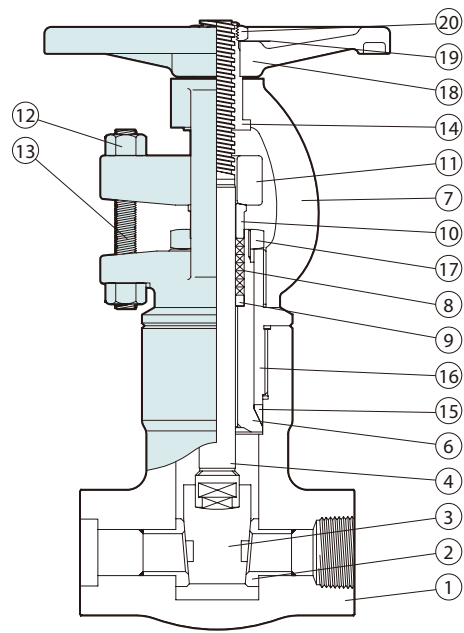
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Weight Kg(Lb)
Reduced	1/2	124 (4.88)	216 (8.50)	284 (11.18)	12.7 (0.50)	10 (22)
	3/4	124 (4.88)	229 (9.00)	284 (11.18)	12.7 (0.50)	14 (31)
	1	124 (4.88)	254 (10.00)	332 (13.07)	18.0 (0.71)	17 (38)
	1 1/2	200 (7.88)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



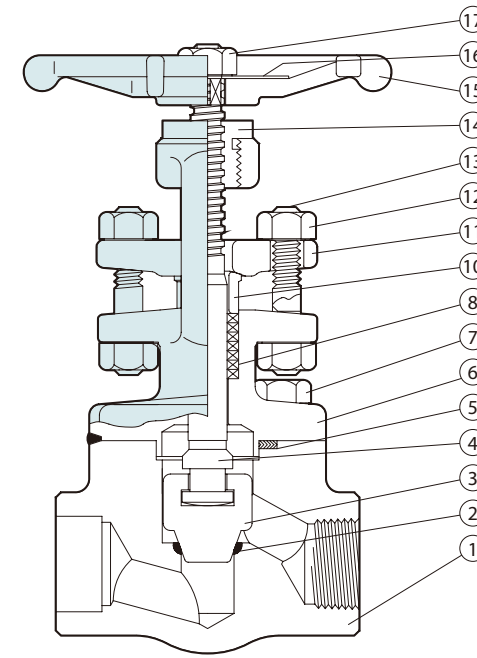
NO.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat Ring	Stellite 6 faced A105	
3	Wedge	Stellite 6 faced A276-410	
4	Stem	13Cr Stainless Steel	A276-410
6	Bonnet	Forged Steel	A105N
7	Yoke	Forged Steel	A105N
8	Gland Packing	Graphoil	
9	Packing Ring	Stainless Steel	A276-316
10	Gland	Stainless Steel	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)

GLOBE VALVES - 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 - API 602 / ASME B16.34 / BS 5352

Unit : mm(inch)

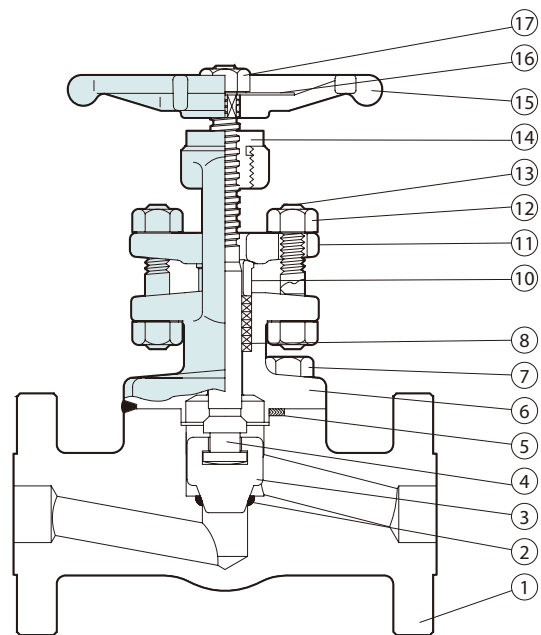
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Weight Kg(Lb)
Reduced	1/2	86 (3.39)	76 (2.99)	146 (5.75)	9.5 (0.37)	1.8 (4.0)
	3/4	86 (3.39)	86 (3.39)	152 (5.98)	12.7 (0.50)	2.1 (4.6)
	1	99 (3.90)	102 (4.02)	188 (7.40)	17.5 (0.69)	2.9 (6.4)
	1 1/4	124 (4.88)	152 (5.98)	219 (8.62)	22.5 (0.89)	6.4 (14.1)
	1 1/2	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)
	1 1/4	138 (5.43)	172 (6.77)	267 (10.51)	29.5 (1.16)	9.7 (21.4)
	1 1/2	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 - API 602 / ASME B16.34 / BS 5352

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	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)
	1 1/4	138 (5.43)	172 (6.77)	245 (9.65)	22.5 (0.89)	9.6 (21.2)
	1 1/2	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)

GLOBE VALVES – 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 - API 602 / ASME B16.34 / BS 5352

Unit : mm(inch)

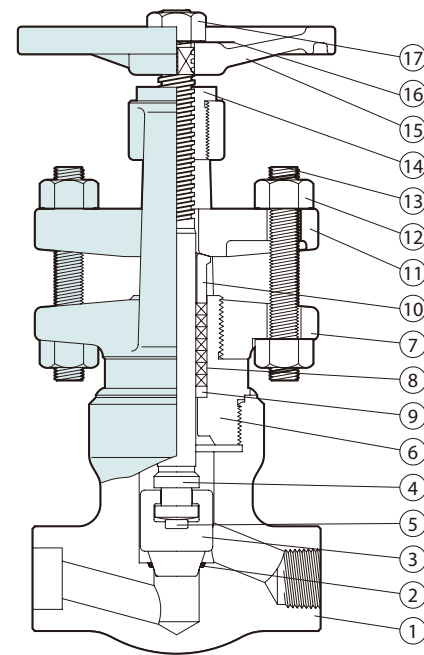
Port	Valve Size	Handwheel Diameter	Center to Top (Open)	Dia. of Port Openings	End to End			Weight Kg(Lb)		
					Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
Reduced	1/2	86 (3.39)	146 (5.75)	9.5 (0.37)	108 (4.25)	152 (6.00)	165 (6.50)	2.5 (5.5)	3.0 (6.6)	3.3 (7.3)
	3/4	86 (3.39)	152 (5.98)	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)
	1 1/2	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 - API 602 / ASME B16.34 / BS 5352

Unit : mm(inch)

Port	Valve Size	Handwheel Diameter	Center to Top (Open)	Dia. of Port Openings	End to End	Weight 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)
	1 1/2	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)

GLOBE VALVES – 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	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 Bush	High Tension Brass	
15	Handwheel	Malleable Iron	A47
16	Name Plate	Aluminum	
17	Handwheel Nut	Carbon Steel	A194-2H

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)	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)
	1 1/4	200 (7.87)	155 (6.10)	280 (11.02)	20 (0.79)	12 (27)
	1 1/2	200 (7.87)	155 (6.10)	280 (11.02)	27 (1.06)	12 (27)
Full	2	230 (9.06)	210 (8.27)	390 (15.35)	32 (1.26)	21 (46)
	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)
	1 1/4	230 (9.06)	210 (8.27)	390 (15.35)	27 (1.06)	21 (46)
	1 1/2	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 - ASME B16.34

Unit : mm(inch)

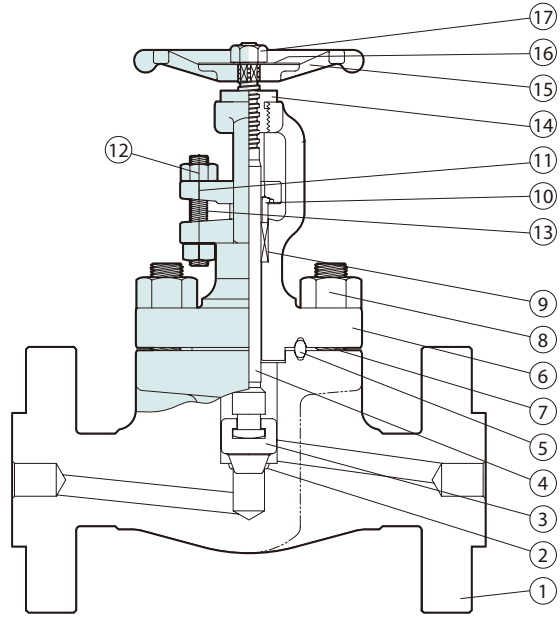
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Weight Kg(Lb)
Full	1/2	140 (5.51)	110 (4.33)	238 (9.37)	10 (0.39)	5 (11)
	3/4	200 (7.87)	127 (5.00)	282 (11.10)	13 (0.51)	8 (18)
	1	230 (9.06)	155 (6.10)	322 (12.68)	18 (0.71)	13 (29)
	1 1/4	250 (9.84)	210 (8.27)	395 (15.55)	23 (0.91)	22 (49)
	1 1/2	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 - 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)	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)
	1 1/4	315 (12.4)	229 (9.02)	475 (18.70)	22 (0.87)	37 (82)
	1 1/2	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)

GLOBE VALVES – 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	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 1500 - API 602 / ASME B16.34 / BS 5352

Unit : mm(inch)

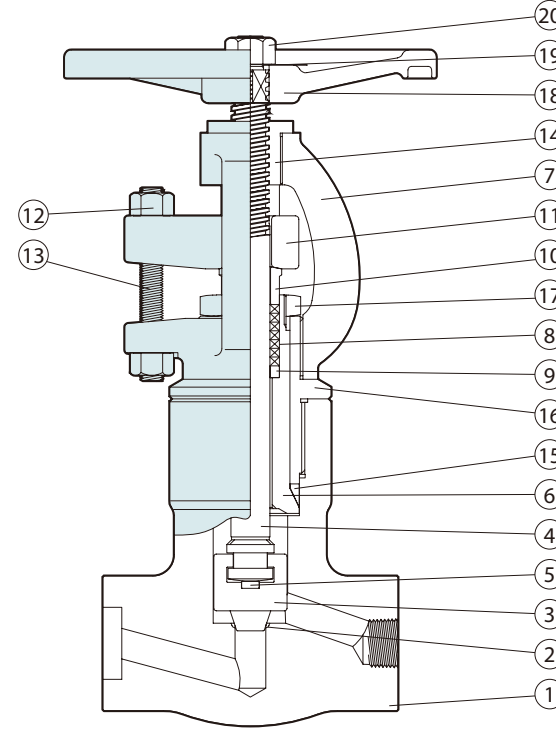
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Weight Kg(Lb)
Reduced	1/2	124 (4.88)	216 (8.50)	286 (11.26)	10 (0.39)	11 (24)
	3/4	124 (4.88)	229 (9.00)	286 (11.26)	15 (0.59)	15 (33)
	1	200 (7.88)	254 (10.00)	339 (13.35)	18 (0.71)	18 (40)
	1 1/2	200 (7.88)	305 (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 - ASME B16.34 / BS 5352

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	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)
	1 1/2	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)

GLOBE VALVES – 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	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 Bush	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	A194-2H

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)
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)
	1 1/2	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 - ASME B16.34

Unit : mm(inch)

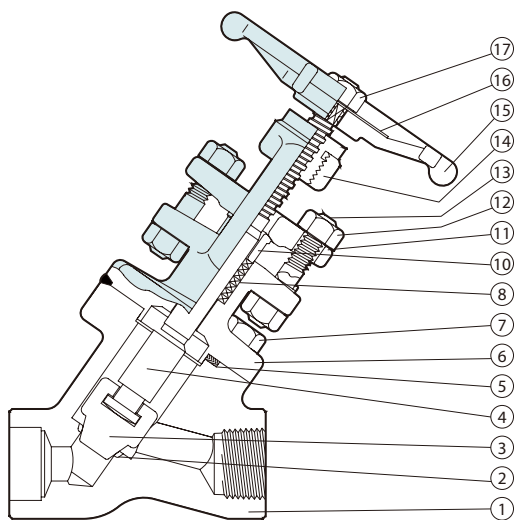
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Weight Kg(Lb)
Full	1/2	140 (5.51)	155 (6.10)	312 (12.28)	10 (0.39)	11 (24)
	3/4	140 (5.51)	210 (8.27)	312 (12.28)	13 (0.51)	17 (38)
	1	200 (7.87)	229 (9.02)	373 (14.69)	18 (0.71)	29 (64)
	1 1/2	230 (9.06)	235 (9.25)	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 - 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)	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)
	1 1/2	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 VALVES – BOLTED / WELDED BONNET – REDUCED / FULL PORT



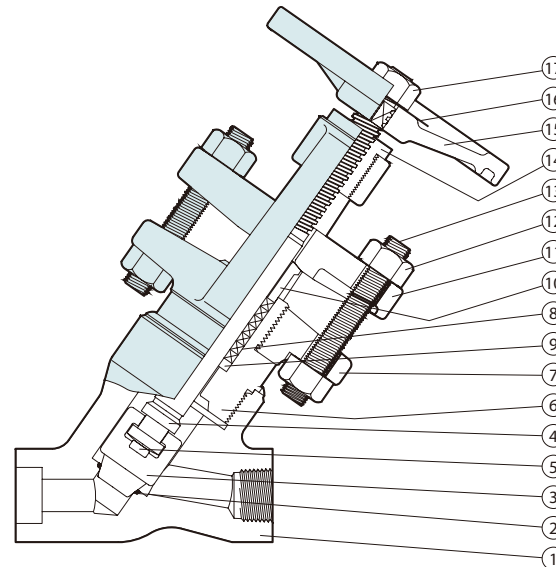
NO.	Parts	Material	A.S.T.M
1	Body	Forged Steel	A105N
2	Seat	Integral Hardfaced Stellite 6	
3	Disc	13Cr Stainless Steel	A217-CA15
4	Stem	13Cr Stainless Steel	A276-410
5	Gasket	304 Spiral Wound Graphite	
6	Bonnet	Forged Steel	A105N
7	Bonnet Bolt	Alloy Steel	A193-B7
8	Gland Packing	Graphoil	
10	Gland	Stainless 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 - API 602 / ASME B16.34 / BS 5352

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	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)
	1 1/4	124 (4.88)	137 (5.39)	259 (10.20)	22.5 (0.89)	6.4 (14.1)
	1 1/2	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)
	1 1/4	138 (5.43)	172 (6.77)	325 (12.80)	29.5 (1.16)	10.9 (24.0)
	1 1/2	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)

Y-GLOBE VALVES – 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	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 Bush	High Tension Brass	
15	Handwheel	Malleable Iron	A47
16	Name Plate	Aluminum	
17	Handwheel Nut	Carbon Steel	A194-2H

CLASS 1500 / 1690 - 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)	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)
	1 1/4	200 (7.87)	155 (6.10)	328 (12.91)	20 (0.79)	21 (46)
	1 1/2	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)
	1 1/4	230 (9.06)	210 (8.27)	400 (15.75)	27 (1.06)	21 (46)
	1 1/2	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 - ASME B16.34

Unit : mm(inch)

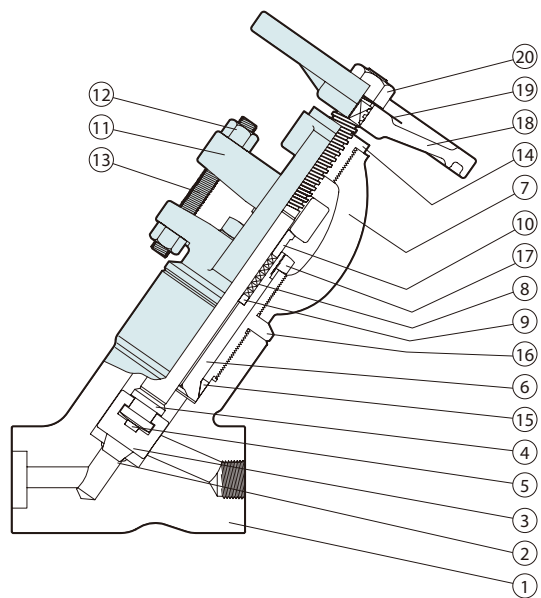
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Weight Kg(Lb)
Full	1/2	140 (5.51)	110 (4.33)	248 (9.76)	10 (0.39)	5 (11)
	3/4	200 (7.87)	127 (5.00)	291 (11.46)	13 (0.51)	8 (18)
	1	230 (9.06)	155 (6.10)	333 (13.11)	18 (0.71)	13 (29)
	1 1/4	250 (9.84)	210 (8.27)	413 (16.26)	23 (0.91)	22 (49)
	1 1/2	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 - 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)	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)
	1 1/4	315 (12.4)	229 (9.02)	507 (19.96)	22 (0.87)	37 (82)
	1 1/2	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)

Y-GLOBE VALVES - 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	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 Bush	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	A194-2H

CLASS 1500 / 1690 - 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)	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)
	1 1/2	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 - ASME B16.34

Unit : mm(inch)

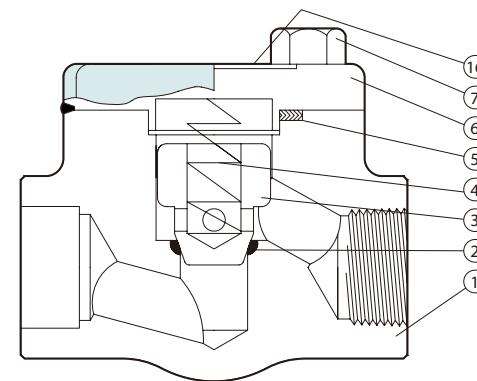
Port	Valve Size	Handwheel Diameter	End to End	Center to Top (Open)	Dia. of Port Openings	Weight Kg(Lb)
Full	1/2	140 (5.51)	155 (6.10)	322 (12.68)	10 (0.39)	11 (24)
	3/4	200 (7.87)	210 (8.27)	390 (15.35)	13 (0.51)	18 (40)
	1	230 (9.06)	229 (9.02)	471 (18.54)	18 (0.71)	31 (68)
	1 1/2	250 (9.84)	235 (9.25)	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 - 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)	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)
	1 1/2	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)

LIFT CHECK VALVES – 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 - API 602 / ASME B16.34 / BS 5352

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/4	152 (5.98)	81 (3.19)	22.5 (0.89)	5.0 (11.0)
	1 1/2	152 (5.98)	81 (3.19)	29.5 (1.16)	5.0 (11.0)
Full	2	172 (6.77)	105 (4.13)	35.0 (1.38)	7.0 (15.4)

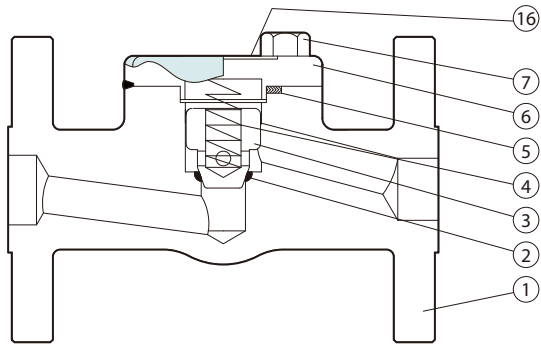
Full	1/2	86 (3.39)	54 (2.13)	12.7 (0.50)	1.3 (2.9)
	3/4	102 (4.02)	63 (2.48)	17.5 (0.69)	2.3 (5.1)
	1	152 (5.98)	81 (3.19)	23.0 (0.91)	5.0 (11.0)
	1 1/4	172 (6.77)	105 (4.13)	29.5 (1.16)	7.0 (15.4)
	1 1/2	172 (6.77)	105 (4.13)	35.0 (1.38)	6.8 (15.0)
Full	2	218 (8.58)	147 (5.79)	45.5 (1.79)	10.6 (23.4)

CLASS 1500 - API 602 / ASME B16.34 / BS 5352

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/4	172 (6.77)	105 (4.13)	22.5 (0.89)	7.0 (15.4)
	1 1/2	172 (6.77)	105 (4.13)	29.5 (1.16)	7.0 (15.4)
Full	2	210 (8.27)	128 (5.04)	35.0 (1.38)	9.1 (20.1)

LIFT CHECK VALVES – 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 - API 602 / ASME B16.34 / BS 5352

Unit : mm(inch)

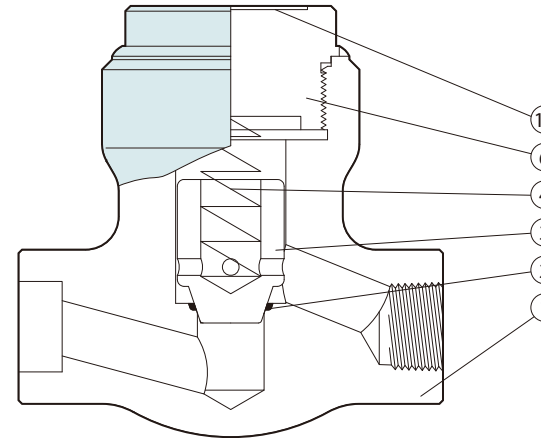
Port	Valve Size	Center to Top	Dia. of Port Openings	End to End			Weight Kg(Lb)		
				Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
Reduced	1/2	48 (1.89)	9.5 (0.37)	108 (4.25)	152 (6.00)	165 (6.50)	1.7 (3.8)	2.2 (4.9)	2.5 (5.5)
	3/4	54 (2.13)	12.7 (0.50)	117 (4.62)	178 (7.00)	190 (7.50)	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)
	1 1/2	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 - API 602 / ASME B16.34 / BS 5352

Unit : mm(inch)

Port	Valve Size	Center to Top	Dia. of Port Openings	End to End	Weight 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)
	1 1/2	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)

LIFT CHECK VALVES – 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 - ASME B16.34

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/4	155 (6.10)	116 (4.57)	20 (0.79)	6 (13)
	1 1/2	155 (6.10)	116 (4.57)	27 (1.06)	6 (13)
Full	2	210 (8.27)	147 (5.79)	32 (1.26)	13 (29)
	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)
	1 1/4	210 (8.27)	147 (5.79)	27 (1.06)	13 (29)
	1 1/2	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 - ASME B16.34

Unit : mm(inch)

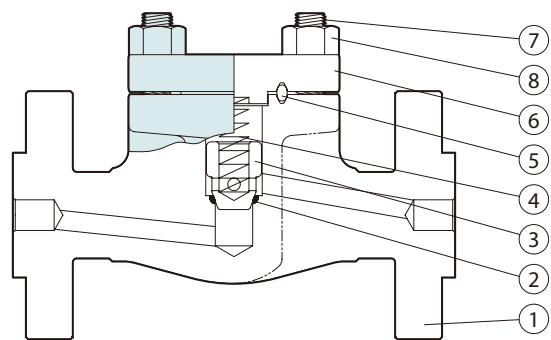
Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight Kg(Lb)
Full	1/2	110 (4.33)	86 (3.39)	10 (0.39)	3 (7)
	3/4	127 (5.00)	101 (3.98)	13 (0.51)	4 (9)
	1	155 (6.10)	121 (4.76)	18 (0.71)	8 (18)
	1 1/4	210 (8.27)	157 (6.18)	23 (0.91)	14 (31)
	1 1/2	210 (8.27)	157 (6.18)	26 (1.02)	14 (31)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

CLASS 4500 - ASME B16.34

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/4	229 (9.02)	190 (7.48)	18 (0.71)	20 (44)
	1 1/2	229 (9.02)	190 (7.48)	22 (0.87)	20 (44)
	2	250 (9.84)	108 (8.19)	25 (0.98)	22 (49)

LIFT CHECK VALVES – 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 - API 602 / ASME B16.34

Unit : mm(inch)

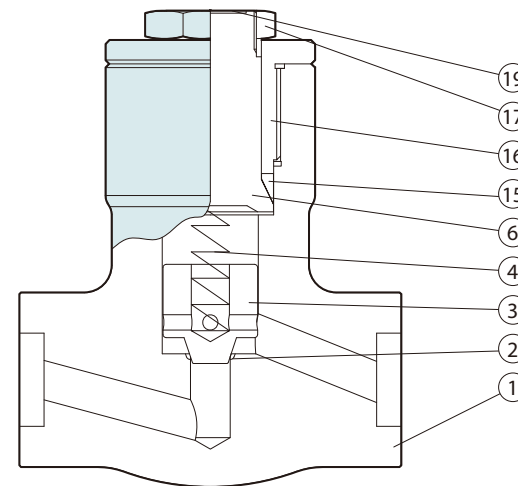
Port	Valve Size	End To End	Center to Top	Dia. of Port Openings	Weight Kg(Lb)
Reduced	1/2	216 (8.50)	157 (6.18)	10 (0.39)	8 (18)
	3/4	229 (9.00)	180 (7.09)	15 (0.59)	13 (29)
	1	254 (10.00)	185 (7.28)	18 (0.71)	16 (35)
	1 1/2	305 (12.00)	210 (8.27)	28 (1.10)	29 (64)
	2	368 (14.25)	250 (9.84)	35 (1.38)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

CLASS 2500 - ASME B16.34

Unit : mm(inch)

Port	Valve Size	End To End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/2	384 (15.12)	230 (9.06)	28 (1.10)	40 (88)
	2	451 (17.75)	250 (9.84)	35 (1.38)	54 (119)

LIFT CHECK VALVES – 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	Carbon Steel	A276-410
19	Name Plate	Aluminum	

CLASS 1500 - ASME B16.34

Unit : mm(inch)

Port	Valve Size	End To End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/2	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 - ASME B16.34

Unit : mm(inch)

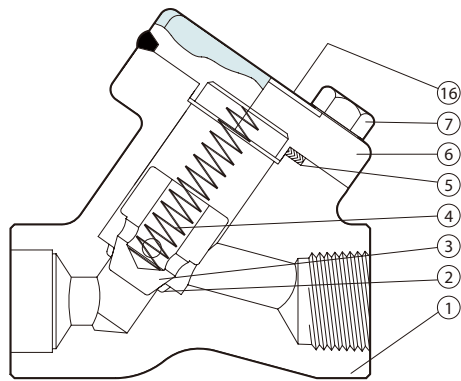
Port	Valve Size	End To End	Center to Top	Dia. of Port Openings	Weight Kg(Lb)
Full	1/2	155 (6.10)	116 (4.57)	10 (0.39)	10 (22)
	3/4	210 (8.27)	147 (5.79)	13 (0.51)	15 (33)
	1	229 (9.02)	178 (7.01)	18 (0.71)	24 (53)
	1 1/2	235 (9.25)	213 (8.39)	26 (1.02)	33 (73)
	2	235 (9.25)	213 (8.39)	35 (1.38)	32 (71)

CLASS 4500 - ASME B16.34

Unit : mm(inch)

Port	Valve Size	End To End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/2	235 (9.25)	239 (9.41)	22 (0.87)	34 (75)
	2	250 (9.84)	252 (9.92)	25 (0.98)	40 (88)

Y-CHECK VALVES – 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	

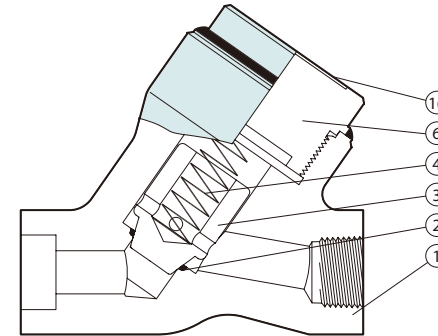
* Also available Ball type Check Valves

CLASS 600 / 800 - API 602 / ASME B16.34 / BS 5352

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/4	137 (5.39)	121 (4.76)	22.5 (0.89)	5.5 (12)
	1 1/2	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)
	1 1/4	172 (6.77)	174 (6.85)	29.5 (1.16)	7.0 (15.5)
	1 1/2	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)

Y-CHECK VALVES – 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 - ASME B16.34

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/4	155 (6.10)	127 (5.00)	20 (0.79)	6 (13)
	1 1/2	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)
	1 1/4	210 (8.27)	156 (6.14)	27 (1.06)	13 (29)
	1 1/2	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 - ASME B16.34

Unit : mm(inch)

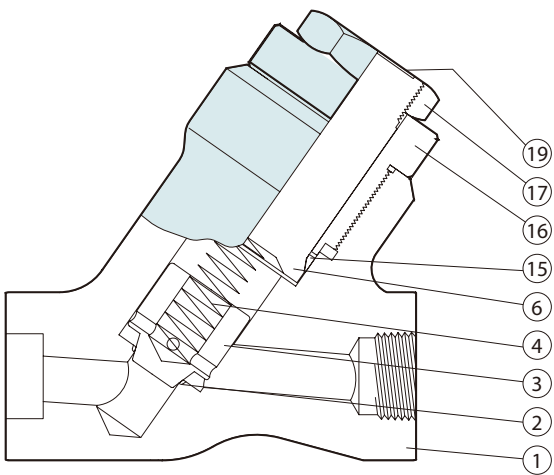
Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight Kg(Lb)
Full	1/2	110 (4.33)	91 (3.58)	10 (0.39)	3 (7)
	3/4	127 (5.00)	105 (4.13)	13 (0.51)	4 (9)
	1	155 (6.10)	127 (5.00)	18 (0.71)	8 (18)
	1 1/4	210 (8.27)	166 (6.54)	23 (0.91)	14 (31)
	1 1/2	210 (8.27)	166 (6.54)	26 (1.02)	14 (31)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

CLASS 4500 - ASME B16.34

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/4	229 (9.02)	198 (7.80)	18 (0.71)	20 (44)
	1 1/2	229 (9.02)	198 (7.80)	22 (0.87)	20 (44)
	2	250 (9.84)	210 (8.27)	25 (0.98)	22 (49)

Y-CHECK VALVES – 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	Carbon Steel	A276-410
19	Name Plate	Aluminum	

CLASS 1500 / 1690 - ASME B16.34

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/2	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 - ASME B16.34

Unit : mm(inch)

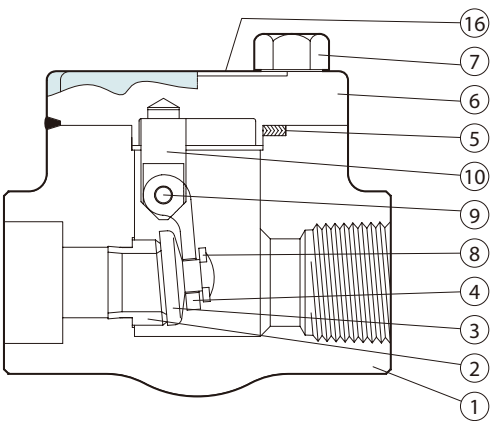
Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight Kg(Lb)
Full	1/2	155 (6.10)	119 (4.69)	10 (0.39)	10 (22)
	3/4	210 (8.27)	153 (6.02)	13 (0.51)	15 (33)
	1	229 (9.02)	187 (7.36)	18 (0.71)	24 (53)
	1 1/2	235 (9.25)	221 (8.70)	26 (1.02)	33 (73)
	2	250 (9.84)	252 (9.92)	35 (1.38)	32 (71)

CLASS 4500 - ASME B16.34

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/2	235 (9.25)	221 (8.70)	22 (0.87)	34 (75)
	2	250 (9.84)	252 (9.92)	25 (0.98)	40 (88)

SWING CHECK VALVES – 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	Stellite 6 faced A276-316	
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 - API 602 / ASME B16.34 / BS 5352

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/4	117 (4.61)	89 (3.50)	31.0 (1.22)	4.4 (9.7)
	1 1/2	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)

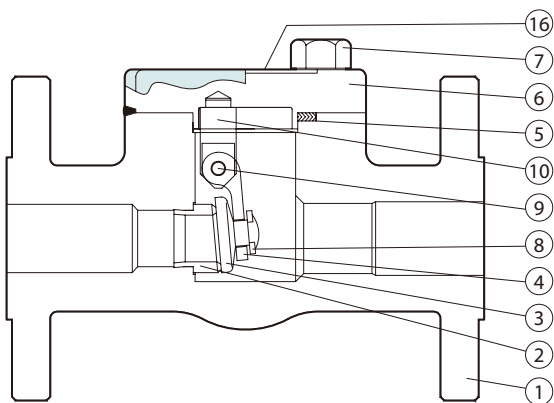
Full	1/2	86 (3.39)	54 (2.13)	13.0 (0.51)	1.1 (2.4)
	3/4	102 (4.02)	63 (2.48)	18.0 (0.71)	2.0 (4.4)
	1	117 (4.61)	89 (3.50)	23.0 (0.91)	4.4 (9.7)
	1 1/4	133 (5.24)	105 (4.13)	37.0 (1.46)	6.2 (13.7)
	1 1/2	133 (5.24)	105 (4.13)	37.0 (1.46)	6.2 (13.7)
	2	218 (8.58)	147 (5.79)	50.8 (2.00)	9.1 (20.1)

CLASS 1500 - API 602 / ASME B16.34 / BS 5352

Unit : mm(inch)

Port	Valve Size	End to End	Center to Top	Dia. of Port Openings	Weight 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)
	1 1/4	133 (5.24)	105 (4.13)	31.0 (1.22)	6.2 (13.7)
	1 1/2	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)

SWING CHECK VALVES – 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	Stellite 6 faced A276-316	
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 - API 602 / ASME B16.34 / BS 5352

Unit : mm(inch)

Port	Valve Size	Center to Top	Dia. of Port Openings	Face to Face			Weight 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)
	1 1/2	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 - API 602 / ASME B16.34 / BS 5352

Unit : mm(inch)

Port	Valve Size	Center to Top	Dia. of Port Openings	Face of Face	Weight 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)
	1 1/2	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)

STANDARD CLASS

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

		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	680	1,360	1,810	2,035	3,395	3,825	5,655	6,065	10,185
300	149.0	230	655	1,310	1,745	1,965	3,270	3,685	5,845	5,845	9,815
400	204.5	200	635	1,265	1,690	1,900	3,170	3,570	5,280	5,660	9,505
500	260.0	170	605	1,205	1,610	1,810	3,015	3,395	5,025	5,385	9,040
600	315.5	140	570	1,135	1,515	1,705	2,840	3,195	4,730	5,070	8,515
650	343.5	125	550	1,100	1,465	1,650	2,745	3,095	4,575	4,905	8,240
700	371.0	110	530	1,060	1,415	1,590	2,665	2,995	4,425	4,745	7,960
750	399.0	95	505	1,015	1,350	1,520	2,535	2,855	4,230	4,535	7,610
800	426.5	80	410	825	1,100	1,235	2,055	2,315	3,430	3,675	6,170
850	454.5	65	320	640	850	955	1,595	1,795	2,655	2,845	4,785
900	482.0	50	230	460	615	690	1,150	1,295	1,915	2,055	3,455
950	510.0	35	135	275	365	410	685	775	1,145	1,225	2,055
1000	538.0	20	85	170	225	255	430	485	715	765	1,285

A182-F11 CL.2(a)

STANDARD CLASS

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

		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)	65	130	175	195	325	385	545	585	975
1200	649.0	15 (1)	40	80	110	125	205	235	345	365	615

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

A182-F22 CL.3(a)

STANDARD CLASS

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

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	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	385	755	1,025	1,160	1,930	2,175	3,220	3,455	5,795
1000	538.0	20	265	535	710	800	1,335	1,695	3,230	3,300	4,010
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	15 (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	2,225	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	735	1,470	1,965	2,210	3,680	4,145	6,135	6,575	11,040
300	149.0	230	700	1,400	1,865	2,100	3,495	3,935	5,830	6,245	10,490
400	204.5	200	670	1,335	1,780	2,005	3,345	3,765	5,570	5,975	10,030
500	260.0	170	645	1,290	1,725	1,940	3,230	3,635	5,385	5,775	9,690
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	4,745	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	4,355	7,305
900	482.0	50	375	745	995	1,120	1,870	2,105	3,115	3,335	5,605
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)	95	190	255	290	480	540	800	855	1,440
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	2,225	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	5,655
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°F (538°C)

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	2,225	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	1,945	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	1,035	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°F (538°C)

A182-F304(a) STANDARD CLASS

NOTE: (a) At Temperatures over 1000 °F, use only when the carbon content is 0.04% or higher. (427°C)

		Working Pressure by Classes, psig									
CLASS		150	300	600	800	900	1,500	1,690	2,500	2,680	4,500
Seat Test, psig		425	1,100	2,175	2,900	3,250	5,400	6,100	9,000	9,650	16,200
Shell 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	1,075	1,435	1,615	3,690	3,030	4,480	4,805	8,065
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	440	885	1,180	1,325	2,210	2,480	3,680	3,945	6,625
650	343.5	125	430	865	1,150	1,295	2,160	2,435	3,600	3,855	6,480
700	371.0	110	420	845	1,125	1,265	2,110	2,375	3,520	3,775	6,335
750	399.0	95	415	825	1,100	1,240	2,065	2,325	3,440	3,685	6,190
800	426.5	80	405	810	1,080	1,215	2,030	2,285	3,380	3,625	6,085
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	355	710	945	1,065	1,770	1,995	2,950	3,165	5,315
1050	565.5	20(1)	325	650	865	975	1,630	1,835	2,715	2,915	4,885
1100	593.5	20(1)	255	515	685	770	1,285	1,450	2,145	2,300	3,855
1150	621.0	20(1)	205	410	545	615	1,030	1,160	1,715	1,835	3,085
1200	649.0	20(1)	165	330	440	495	825	925	1,370	1,465	2,470
1250	676.5	20(1)	135	265	355	400	670	755	1,115	1,195	2,005
1300	704.5	20(1)	115	225	300	340	565	635	945	1,015	1,695
1350	732.0	20(1)	95	185	250	280	465	525	770	825	1,390
1400	760.0	20(1)	75	150	200	225	380	425	630	675	1,130
1450	788.0	20(1)	60	115	155	175	290	325	485	520	875
1500	815.5	15(1)	40	85	110	125	205	235	345	365	620

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

A182-F316(a) STANDARD CLASS

NOTE: (a) At Temperatures over 1000 °F, use only when the carbon content is 0.04% or higher. (427°C)

		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	4,055	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	440	885	1,180	1,325	2,210	2,485	3,680	3,945	6,625
700	371.0	110	435	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	365	725	970	1,090	1,820	2,045	3,030	3,245	5,450
1050	565.5	20(1)	360	720	960	1,080	1,800	2,025	3,000	3,215	5,400
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	15(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 STANDARD CLASS

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

		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	510	1,020	1,365	1,535	2,555	2,875	4,260	4,565	7,670
300	149.0	175	455	910	1,215	1,370	2,280	2,565	3,800	4,075	6,840
400	204.5	160	420	840	1,120	1,260	2,100	2,365	3,500	3,755	6,300
500	260.0	150	395	785	1,050	1,180	1,970	2,215	3,280	3,515	5,905
600	315.5	140	370	745	990	1,115	1,860	2,095	3,100	3,325	5,580
650	343.5	125	365	730	975	1,095	1,825	2,055	3,040	3,255	5,470
700	371.0	110	360	720	960	1,080	1,800	2,025	3,000	3,215	5,400
750	399.0	110	355	705	940	1,060	1,765	1,985	2,940	3,155	5,290
800	426.5	80	345	690	920	1,035	1,730	1,945	2,880	3,085	5,185
850	454.5	65	340	675	900	1,015	1,690	1,905	2,820	3,025	5,075

A182-F321(a) STANDARD CLASS

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

		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	4,056	6,000	6,430	10,800
200	93.5	250	650	1,295	1,730	1,945	3,240	3,650	5,400	5,785	9,720
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	1,550	2,580	2,905	4,300	4,605	7,740
600	315.5	140	485	975	1,300	1,460	2,435	2,745	4,060	4,355	7,310
650	343.5	125	475	950	1,265	1,425	2,375	2,675	3,960	4,245	7,130
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	1,190	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	365	725	970	1,090	1,820	2,045	3,030	3,235	5,450
1050	565.5	20(1)	360	720	960	1,080	1,800	2,025	3,000	3,215	5,400
1100	593.5	20(1)	310	625	830	935	1,560	1,755	2,600	2,785	4,680
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	990	1,645
1350	732.0	20(1)	185	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	15(1)	40	75	100	115	190	215	315	340	565

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	A276	UNS	A276-410+STL					
		A105 +STL*	LF2 +STL*	LF3 +STL*	A276-316 +STL*		-321 +STL	-347 +STL	S31803 +STL	F5 +STL*	F9 +STL*	F11 +STL*	F22 +STL*	F91 +STL*
3	Wedge	A217-CA15		A351-CF8M+STL			A276	A276	UNS	A217-CA15				
		A276-410*		A276-316+STL*			-321 +STL	-347 +STL	S31803 +STL	A276-410+STL*				
4	Stem	A276-410		A276-304		A276 -316	A276 -321	A276 -347	UNS S31803	A276-410				
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	A276-316												
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	A276-316+STL					A276 -321 +STL	A276 -347 +STL	UNS S31803 +STL	A276-316+STL				
4	Hinge	A351-CF8M												
5	Gasket	304 Spiral Wound Graphite				316 SWG	321 SWG	347 SWG	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 · Other materials also available on request

SWG : Spiral Wound Graphite

A182-F304/L : Dual Certificate Material for A182-F304 & A182-F304L

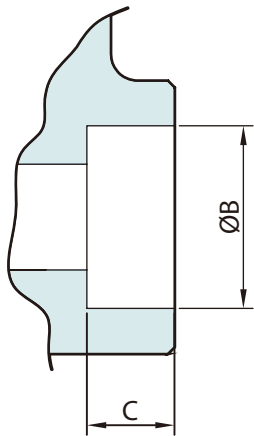
A182-F316/L : Dual Certificate Material for A182-F316 & A182-F316L

DUPLEX : Duplex Stainless Steel

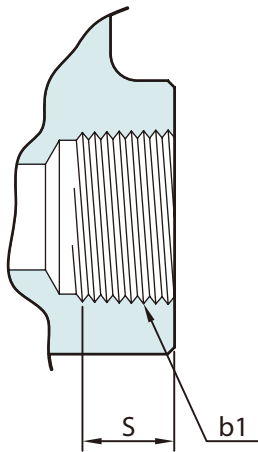
* ASME CLASS 1500 and Above

Valve Type	Class	Port Size	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
	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
	800	Full	3	5	9	15	21	38
	1500	Full	3	4	7	12	18	28
	2500	Full	1	2	4	9	12	22
Lift Check	4500	Full	1	2	3	8	8	11
	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
Swing Check	2500	Full	1	2	3	7	9	17
	4500	Full	1	2	3	6	7	8
	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
Y Pattern Lift Check	4500	Full	2	5	8	19	20	35
	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

SOCKET WELD END



SCREWED END



DIMENSIONAL SPECIFICATIONS

• SOCKET WELD

Unit : mm(inch)

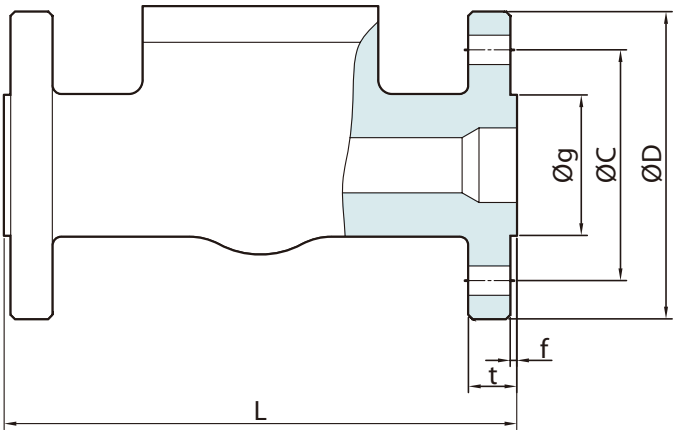
NPS	ASME B16.11			JIS B2316		
	SOCKET BORE DIA. B		SOCKET DEPTH	SOCKET BORE DIA. B		SOCKET DEPTH
	MIN.	MAX.	MIN. C	MIN.	MAX.	MIN. C
1/4	14.2 (0.555)	14.35 (0.565)	10.0 (0.38)	14.3 (0.563)	14.6 (0.574)	9.6 (0.38)
3/8	17.6 (0.690)	17.75 (0.700)	10.0 (0.38)	17.8 (0.701)	18.1 (0.712)	9.6 (0.38)
1/2	21.8 (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)
1 1/4	42.7 (1.675)	42.75 (1.685)	13.0 (0.50)	43.2 (1.701)	43.5 (1.172)	12.7 (0.50)
1 1/2	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 - 14
1 1/4	18.0 (0.7068)	1 1/4 - 11 1/2 NPT	18.5 (0.729)	PT 1 1/4 - 11
1 1/2	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

FLANGED END (RAISED FACE) ASME B16.5 & B16.10

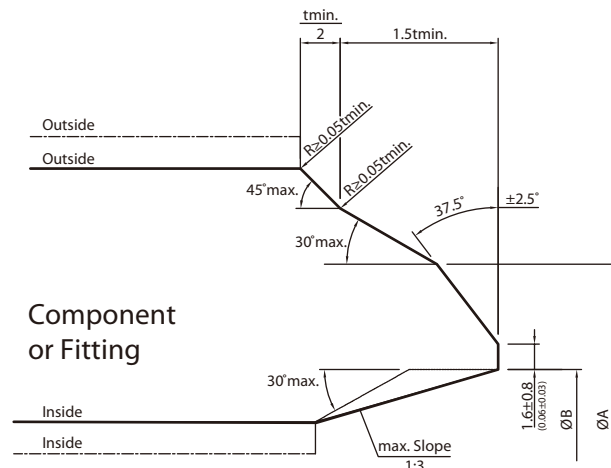


DIMENSIONAL SPECIFICATIONS

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)			
	1 1/4	140 (5 1/2)			117 (4.62)	88.9 (3.50)	64 (2.50)	15.8 (0.62)			
	1 1/2	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 (0.75)
	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)			
	1 1/4	178 (7)	216 (8 1/2)	229 (9)	133 (5.25)	98.5 (3.88)	64 (2.50)	19.1 (0.75)			
	1 1/2	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
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)			
	1 1/4	229 (9)						27 (1.06)			
	1 1/2	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)
	1 1/4	279 (11)			159 (6.25)	111.2 (4.38)	64 (2.50)	34.8 (1.37)			25.4 (1.00)
	1 1/2	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
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)
	1 1/4	349 (13 3/4)			185 (7.25)	130.0 (5.12)	64 (2.50)	44.5 (1.75)			28.5 (1.12)
	1 1/2	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

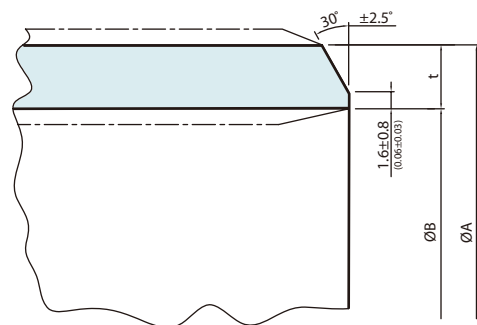
BUTT WELDING END ASME B16.25 (Without Backing Ring)

Component
or Fitting

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)

BUTT WELDING END 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)	4.8 (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)	4.6 (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)

CODE TABLE

SAMPLE VALVE

CODE TABLE	1	2	3	4	5	6	7	8
SAMPLE VALVE	AA	F	24	AN	A	B	1	C

GATE, CLASS 800, 316L BODY, 316FHF TRIM, SOCKET WELD ENDS, WELDED BONNET RED.PORT, GRAPHOIL PACKING

1

2

3

4

VALVE TYPE		CLASS	SHELL MATERIAL		TRIM MATERIAL					
AA	GATE	A 125	11	A105N, WCB	32	F91, C12A				
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	F316L, CF3M	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	47	F316/F316L	AT	321	321+ST 6	STELLITE 6
BB	GLOBE (321 STAINLESS BELLOWS)	Z SPECIAL	27	F321H	48	F304/F304L	AU	347	347+ST 6	STELLITE 6
BG	GATE (INCONEL 625 BELLOWS)		28	F347, CF8C	50	LCC	AW	DUPLEX	DUPLEX+ST 6	STELLITE 6
BH	GLOBE (INCONEL 625 BELLOWS)		29	F51	51	F347H	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

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END CONNECTION	
A	SOCKET WELD (ASME)
B	BW (SPECIFY BORE)
C	NIPPLE STUB ENDS
G	EXTENDED BODY MSW x FNPT
H	EXTENDED BODY MSW x FSW
J	SW x NIPPLE (STUB END)
K	NPT x NIPPLE (STUB END)
L	EXTENDED BODY MNPT x FNPT
M	EXTENDED BODY MNPT x FSW
N	FNPT THREADED BOTH ENDS
P	PT
Q	FLAT FACE
R	RAISED FACE
S	SOCKET WELD x FNPT
T	RING TYPE JOINT FACE
V	SW (JIS)
X	SW (JIS) x PT
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
9	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 SPIRA; 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