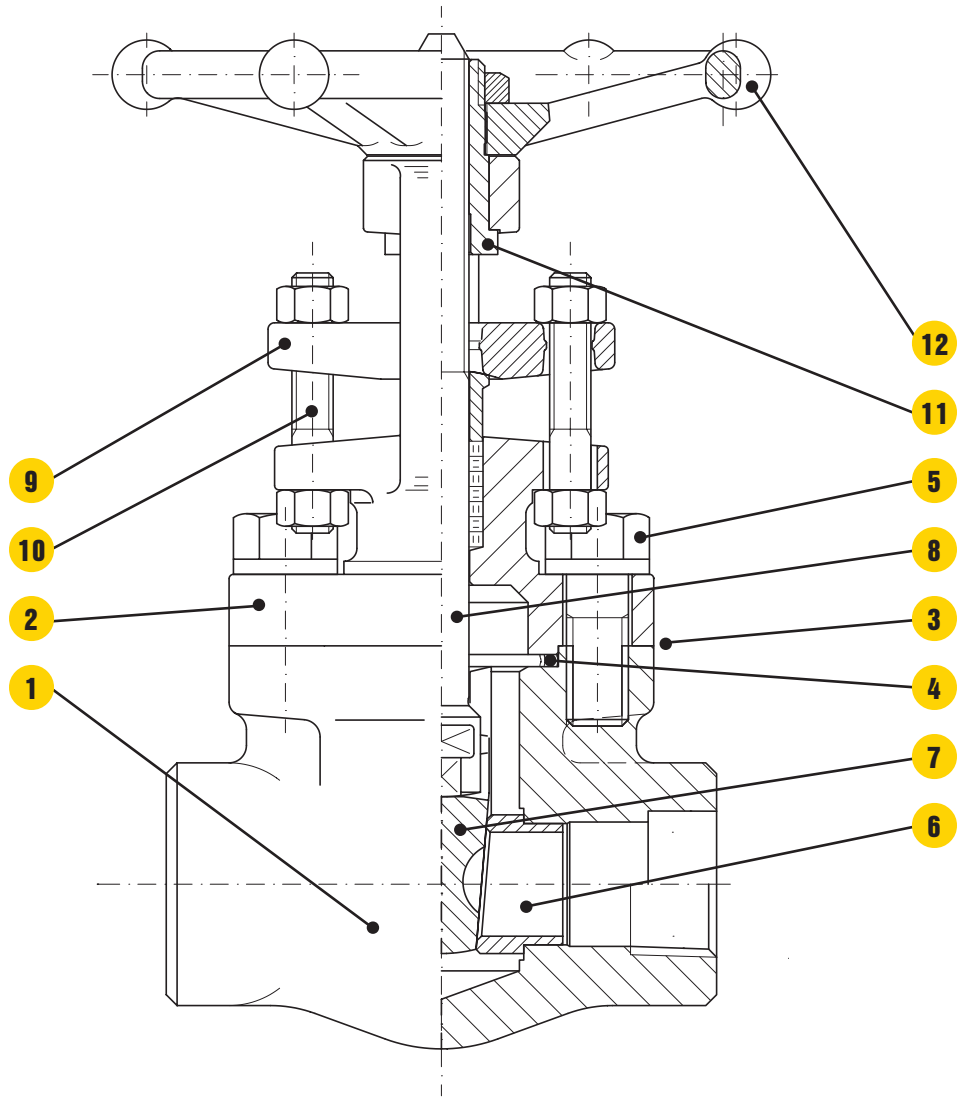

Overview	10
Bolted Bonnet Gate- 800 lb. & 1500 lb. valves	11
Bolted Bonnet Gate- 1500 lb. & 2500 lb. valves	12
Welded Bonnet Gate- 800 lb. & 1500 lb. valves	13
Welded Bonnet Gate- 2500 lb. & 4500 lb. valves	14

GATE VALVES



GATE VALVES

Forged steel, outside screw and yoke (OS&Y), rising stem, non-rising handwheel. Full or conventional port. Bolted or welded bonnet joint. Integral backseat.



- 1. BODY.** The body is forged steel and designed to the basic dimensional requirements of the applicable specifications such as API 602 and ASME B16.34. The body is available in both the full or conventional port design.
- 2. BONNET.** The bonnet is forged steel, has an integral backseat and incorporates the stuffing box, which has dimensions per the applicable specifications such as API 602.
- 3. BODY-BONNET JOINT.** Two different bonnet joint designs are available. These are either the bolted bonnet or the threaded and seal welded type.
- 4. GASKET.** The bolted bonnet joint design valve uses a contained, controlled compression, spiral wound type gasket.
- 5. BONNET BOLTING.** The bonnet bolting is manufactured of alloy steel in accordance with the requirements of the applicable specifications such as API 602 and ASME B16.34.
- 6. SEAT RINGS.** The seat rings are steel and makeup part of the valve trim. They are pressed into the valve body and wedged into place, forming a seal with the body. The seating surfaces are ground and lapped.
- 7. WEDGE.** The wedge, which is solid design, is forged or investment cast steel and is part of the valve trim. The seating surfaces are ground and lapped.
- 8. STEM.** The stem is forged steel and part of the valve trim. It contains an integral back seat shoulder, which mates with the integral backseat of the bonnet. The stem is designed to the basic dimensional requirements of the applicable specifications such as API 602.
- 9. GLAND AND FLANGE.** The gland, gland flange assembly utilizes a separate, two piece design. This self aligning design allows the flange to be unevenly tightened while the gland maintains it's parallel alignment with the stem and stuffing box.
- 10. GLAND BOLTS AND NUTS.** The steel/stainless steel gland bolt and nut assembly is a stud, double nut arrangement. This design allows complete removal from the valve when service is required. The use of industry standard thread full length studs and nuts also allows easy replacement should these items be lost or in need of replacement.
- 11. YOKE SLEEVE.** The yoke sleeve is of forged stainless steel material having a high melting point and is resistant to wear and corrosion.
- 12. HANDWHEEL.** The handwheel is forged carbon steel of an open spoke design. This robust construction along with appropriate sizing allows for ease of operation.

B[®] GATE VALVES- BOLTED BONNET- FULL & REDUCED PORT

BONNEY FORGE

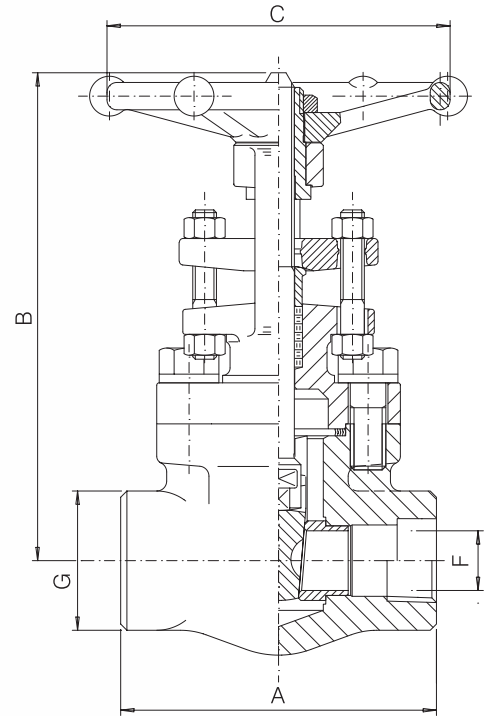
800 LB.

1500 LB.

Design construction:

API 602 - ASME B16.34 - BS 5352
 Testing according to API 598
 Marking MSS SP25
 Outside Screw and Yoke (OS&Y)
 Self aligning two piece packing gland
 Spiral-wound gasket
 Integral backseat
 Socket Weld Ends to ASME B16.11
 Screwed Ends (NPT) to ASME B1.20.1
 Butt Welding Ends to ASME B16.25

- Ratings:
- carbon steel class 800 1975 psig @ 100°F
 138 bar + 38°C
 - carbon steel class 1500 3705 psig @ 100°F
 255 bar + 38°C



800 LB.		FULL PORT – FIG. H 10								
SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	2 50	
A	inch mm	3.15 80	3.15 80	3.54 90	4.33 110	5 127	5 127	5.28 134	6 152	
B open	inch mm	5.98 152	5.98 152	6.22 158	7.72 196	8.86 225	10.04 255	11.42 290	14.09 358	
C	inch mm	3.46 88	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	5.43 138	6.77 172	
F	inch mm	.31 8	.38 9.6	.55 14	.71 18	.94 24	1.18 30	1.48 36.5	1.83 46.5	
G	inch mm	1.26 32	1.26 32	1.50 38	1.89 48	2.20 56	2.52 64	3.07 78	3.35 85	
Weight	lb. kg	4.5 2.1	4.5 2.1	5 2.3	8.25 3.7	13 5.9	16.25 7.4	18.3 8.3	27.5 12.5	
PACKING		BH2	BH2	BH2	BH4	BH5	BH6	BY5	BH8	
GASKET		G2	G2	G2	G3	G4	G6	G11	G10	

800 LB.		REDUCED PORT – FIG. HL 10					
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50	
A	inch mm	3.15 80	3.54 90	4.33 110	5 127	5.28 134	
B open	inch mm	5.98 152	6.22 158	7.72 196	10.04 255	11.42 290	
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	
F	inch mm	.38 9.6	.55 14	.71 18	1.18 30	1.48 36.5	
G	inch mm	1.26 32	1.5 38	1.89 48	2.52 64	3.07 78	
Weight	lb. kg	4.25 1.9	5 2.3	7.75 3.6	16 7.3	16.75 7.6	
PACKING		BH2	BH2	BH4	BH6	BY5	
GASKET		G2	G2	G3	G6	G11	

1500 LB.		FULL PORT – FIG. 9H 10								
SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	2 50	
A	inch mm	3.54 90	3.54 90	4.33 110	5 127	5 127	5 127	5 127	8.27 210	
B open	inch mm	6.02 153	6.02 153	7.48 190	8.66 220	9.84 250	11.10 282	11.42 290	13.58 345	
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	5.43 138	5.43 138	6.77 172	
F	inch mm	.31 8	.38 9.6	.55 14	.71 18	.94 24	1.18 30	1.48 36.5	1.89 48	
G	inch mm	1.50 38	1.50 38	1.89 48	2.20 56	2.52 64	3.07 78	3.07 78	3.35 85	
Weight	lb. kg	5.25 2.4	5.25 2.4	9 4.1	13.75 6.2	17.5 8	23 10.5	24.25 11	44 20	
PACKING		BH3	BH3	BH5	BH6	2B4	BY7	2B5	9B8	
GASKET		G1	G1	G2	G3	G4	G5	G7	G8	

1500 LB.		REDUCED PORT – FIG. 9HL 10					
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50	
A	inch mm	3.54 90	4.33 110	5 127	5 127	8.27 210	
B open	inch mm	5.98 152	7.48 190	8.66 220	11.10 282	13.58 345	
C	inch mm	3.46 88	3.82 97	5.43 138	5.43 138	5.43 138	
F	inch mm	.38 9.6	.55 14	.71 18	1.18 30	1.48 36.5	
G	inch mm	1.5 38	1.89 48	2.20 56	3.07 78	3.35 85	
Weight	lb. kg	5.25 2.4	8.5 3.9	13.25 6.1	23.75 10.8	45.25 20.5	
PACKING		BH3	BH5	BH6	2B5	BH8	
GASKET		G1	G2	G3	G5	G7	

B[®] GATE VALVES- BOLTED BONNET- FULL PORT

BONNEY FORGE

1500 LB.

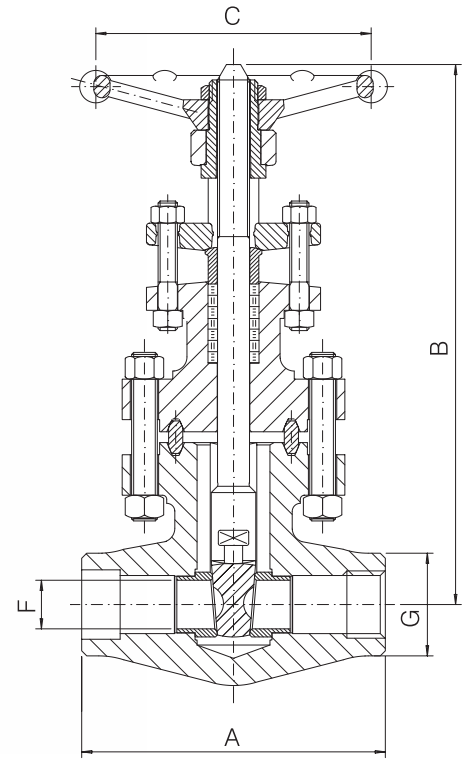
2500 LB.

Design construction:

- ASME B16.34 - BS 5352
- Outside Screw and Yoke (OS&Y)
- Self aligning two piece packing gland
- Integral backseat
- Oval ring joint gasket
- Socket Weld Ends to ASME B16.11
- Screwed Ends (NPT) to ASME B1.20.1
- Butt Welding Ends to ASME B16.25

Ratings standard class:

- carbon steel class 1500 3705 psig @ 100°F
255 bar + 38°C
- carbon steel class 2500 6170 psig @ 100°F
425 bar + 38°C



		FULL PORT – FIG. H9R 10					
SIZE	inch mm	1/2	3/4	1	1 1/4	1 1/2	2
		15	20	25	32	40	50
A	inch	4.33	5.91	5.91	8.27	8.27	9.06
	mm	110	150	150	210	210	230
B open	inch	9.17	11.38	11.54	14.06	14.41	17.76
	mm	233	289	293	357	366	451
C	inch	5.43	5.43	5.43	6.77	6.77	9.21
	mm	138	138	138	172	172	234
F	inch	.55	.71	.94	1.16	1.44	1.89
	mm	14	18	24	29,5	36,6	48
G	inch	1.5	2.17	2.17	2.95	2.95	3.62
	mm	38	55	55	75	75	92
Weight	lb.	11	20.25	20.25	44	44	79.25
	kg	5	9,2	9,2	20	20	36
PACKING		2B3	2B4	2B4	2B5	2B5	9B8
GASKET		R12	R17	R17	R20	R20	R24

		FULL PORT – FIG. 25HR 10					
SIZE	inch mm	1/2	3/4	1	1 1/2	2	
		15	20	25	40	50	
A	inch	5.91	5.91	8.27	9.06	9.06	
	mm	150	150	210	230	230	
B open	inch	11.10	11.3	13.70	15.98	17.20	
	mm	282	287	348	406	437	
C	inch	5.43	5.43	6.77	9.21	9.21	
	mm	138	138	172	234	234	
F	inch	.45	.59	.77	1.10	1.38	
	mm	11,5	15	19,5	28	35	
G	inch	2.17	2.17	2.95	3.62	3.62	
	mm	55	55	75	92	92	
Weight	lb.	22	22	48,5	81,5	79,25	
	kg	10	10	22	37	36	
PACKING		2B4	BH8	BH8	9B8	25B8	
GASKET		R16	R16	R17	R20	R22	

B[®] GATE VALVES- WELDED BONNET- FULL & REDUCED PORT

BONNEY FORGE

800 LB.

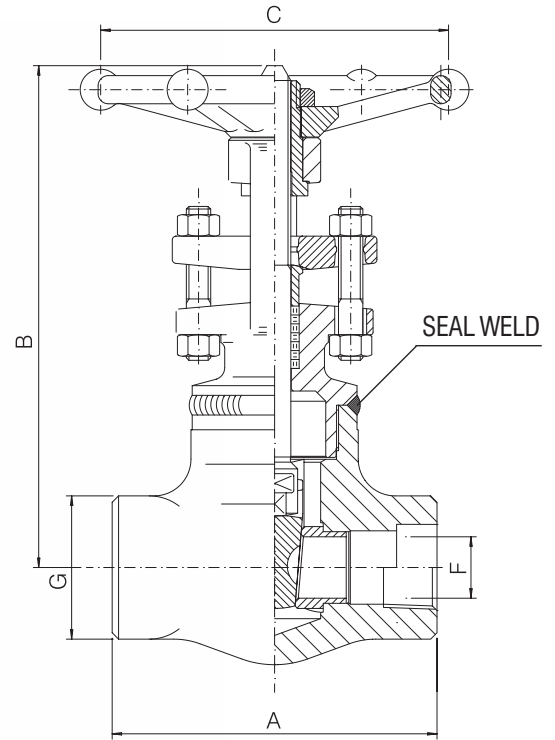
1500 LB.

Design construction:

- API 602 - ASME B16.34 - BS 5352
- Testing according to API 598
- Marking MSS SP25
- Outside Screw and Yoke (OS&Y)
- Self aligning two piece packing gland
- Integral backseat
- Body Bonnet Weld to ASME IX
- Socket Weld Ends to ASME B16.11
- Screwed Ends (NPT) to ASME B1.20.1
- Butt Welding Ends to ASME B16.25

Ratings:

- carbon steel class 800 1975 psig @ 100°F
138 bar + 38°C
- carbon steel class 1500 3705 psig @ 100°F
255 bar + 38°C



800 LB.		FULL PORT – FIG. W 10								
SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	2 50	
A	inch mm	3.15 80	3.15 80	3.54 90	4.33 110	5 127	5 127	5 127	8.27 210	
B open	inch mm	5.98 152	5.98 152	6.22 158	7.72 196	8.86 225	10.04 255	11.42 290	14.09 358	
C	inch mm	3.46 88	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	5.43 138	6.77 172	
F	inch mm	.31 8	.38 9.6	.55 14	.71 18	.94 24	1.18 30	1.44 36.6	1.89 48	
G	inch mm	1.26 32	1.26 32	1.5 38	1.89 48	2.20 56	2.52 64	3.07 78	3.35 85	
Weight	lb. kg	3.25 1.5	3.25 1.5	4.25 2	7.75 3.5	11 5	14.25 6.5	20.75 9.5	35.25 16	
PACKING		BH2	BH2	BH2	BH4	BH5	BH6	BY5	BH8	

800 LB.		REDUCED PORT – FIG. WL 10					
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50	
A	inch mm	3.15 80	3.54 90	4.33 110	5 127	5 127	
B open	inch mm	5.98 152	6.22 158	7.72 196	10.04 255	11.42 290	
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	
F	inch mm	.38 9.6	.55 14	.71 18	1.18 30	1.44 36.6	
G	inch mm	1.26 32	1.5 38	1.89 48	2.52 64	3.07 78	
Weight	lb. kg	3.5 1.6	3.75 1.8	6.25 2.9	13.25 6.1	18 8.2	
PACKING		BH2	BH2	BH4	BH6	BY5	

1500 LB.		FULL PORT – FIG. 9W 10								
SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	2 50	
A	inch mm	3.54 90	3.54 90	4.33 110	5 127	5 127	5 127	5 127	8.27 210	
B open	inch mm	6.02 153	6.02 153	7.48 190	8.66 220	9.84 250	11.10 282	11.42 290	13.58 345	
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	5.43 138	5.43 138	6.77 172	
F	inch mm	.31 8	.38 9.6	.55 14	.71 18	.94 24	1.18 30	1.44 36.6	1.89 48	
G	inch mm	1.5 38	1.5 38	1.89 48	2.20 56	2.52 64	3.07 78	3.07 78	3.35 85	
Weight	lb. kg	4.25 2.0	4.25 2.0	7.5 3.4	11.25 5.1	15.25 7	22 10	23 10.5	41.75 19	
PACKING		BH3	BH3	BH5	BH6	2B4	BY7	2B5	2B8	

1500 LB.		REDUCED PORT – FIG. 9WL 10					
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50	
A	inch mm	3.54 90	4.33 110	5 127	5 127	8.27 210	
B open	inch mm	6.02 153	7.48 190	8.66 220	11.10 282	13.58 345	
C	inch mm	3.46 88	3.82 97	5.43 138	5.43 138	5.43 138	
F	inch mm	.38 9.6	.55 14	.71 18	1.18 30	1.44 36.6	
G	inch mm	1.5 38	1.89 48	2.20 56	3.07 78	3.35 85	
Weight	lb. kg	4.25 2	7.25 3.3	11.5 5.3	21.5 9.8	40.25 18.3	
PACKING		BH3	BH5	BH6	2B5	BH8	

B[®] GATE VALVES- WELDED BONNET- FULL PORT

BONNEY FORGE

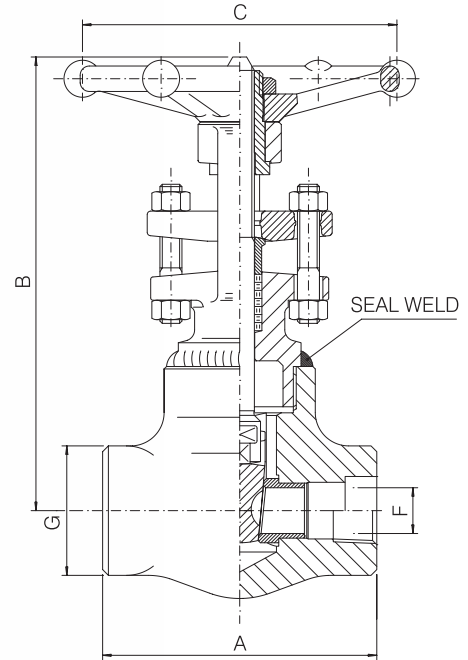
2500 LB.

4500 LB.

Design construction:

- ASME B16.34
- Outside Screw and Yoke (OS&Y)
- Self aligning two piece packing gland
- Integral backseat
- Body Bonnet Weld to ASME IX
- Socket Weld Ends to ASME B16.11
- Screwed Ends (NPT) to ASME B1.20.1
- Butt Welding Ends to ASME B16.25
- Ratings standard class:

- carbon steel class 2500 6170 psig @ 100°F
425 bar + 38°C
- carbon steel class 4500 11100 psig @ 100°F
765 bar + 38°C



		FULL PORT – FIG. 25W 10								
SIZE	inch	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	
	mm	6	10	15	20	25	32	40	50	
A	inch mm	4.33 110	4.33 110	5 127	5 127	5 127	5 127	8.27 210	9.06 230	
B open	inch mm	7.20 183	7.20 183	8.43 214	9.61 244	10.87 276	10.87 276	13.27 337	15.91 404	
C	inch mm	3.82 97	3.82 97	5.43 138	5.43 138	5.43 138	5.43 138	6.77 172	9.21 234	
F	inch mm	.31 8	.31 8	.45 11.5	.59 15	.77 19.5	.98 25	1.10 28	1.38 35	
G	inch mm	1.89 48	1.89 48	2.20 56	2.52 64	3.07 78	3.07 78	3.35 85	3.74 95	
Weight	lb. kg	11.25 5.2	11.5 5.3	11.75 5.4	15.75 7.2	21.5 9.8	21.5 9.8	43 19.5	63.75 29	
PACKING		2B4	2B4	2B4	BH8	BH8	2B5	2B5	2B8	

		FULL PORT – FIG. 45W 10				
SIZE	inch	1/2	3/4	1	1 1/2	2
	mm	15	20	25	40	50
A	inch mm	5 127	5 127	9.06 230	9.06 230	17.76 451
B open	inch mm	10.39 264	10.83 275	14.37 365	15.75 400	17.56 446
C	inch mm	5.43 138	6.61 168	9.21 234	12.60 320	12.60 320
F	inch mm	.30 7.5	.45 11.5	.59 15	1.02 26	1.02 26
G	inch mm	3.07 78	3.07 78	3.74 95	3.74 95	4.72 120
Weight	lb. kg	22 10	26.5 12	40.8 18.5	59.5 27	81.5 37
PACKING		2B3	BH6	BY7	2B8	4B8

Available with Socket Weld or Butt-Weld Ends Only.
Materials and trim specifications Page 91

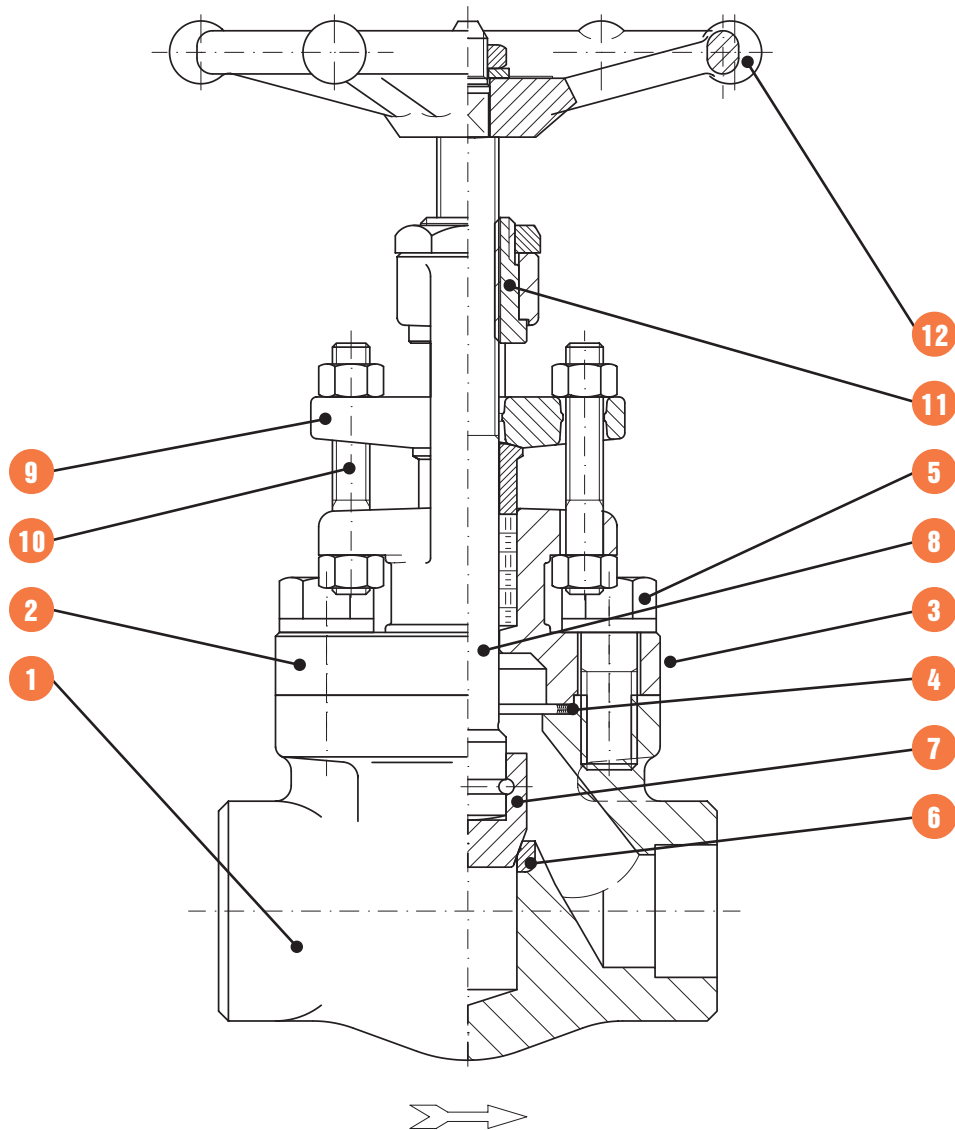
Overview	16
Bolted Bonnet- 800 lb. & 1500 lb. valves	17
Bolted Bonnet- 1500 lb. & 2500 lb. valves	18
Welded Bonnet- 800 lb. & 1500 lb. valves	19
Welded Bonnet- 2500 lb. & 4500 lb. valves	20
Welded Bonnet (Y type)- 800 lb. & 1690 lb. valves	21
Welded Bonnet (Y type)- 2680 lb. & 4500 lb. valves	22

GLOBE VALVES



GLOBE VALVES

Forged steel, outside screw and yoke (OS&Y), rotating rising stem, rising handwheel. Full or conventional port. Bolted or welded bonnet joint. T-Pattern or Y-Pattern. Integral backseat. Integral body seat.



- 1. BODY.** The body is forged steel and designed to the basic dimensional requirements of the applicable specifications such as API 602 and ASME B16.34. The body is available in both the full or conventional port design. It is also available in either T-pattern or Y-pattern configuration.
- 2. BONNET.** The bonnet is forged steel, has an integral backseat and incorporates the stuffing box, which has dimensions per the applicable specifications such as API 602.
- 3. BODY-BONNET JOINT.** Two different bonnet joint designs are available. These are either the bolted bonnet or the threaded and seal welded type.
- 4. GASKET.** The bolted bonnet joint design valve uses a contained, controlled compression, spiral wound type gasket.
- 5. BONNET BOLTING.** The bonnet bolting is manufactured of alloy steel in accordance with the requirements of the applicable specifications such as API 602 and ASME B16.34.
- 6. SEAT.** The body seat is an integral weld overlay and is part of the valve trim.
- 7. DISC.** The disc is forged steel and is part of the valve trim. The disc seating surface is of the tapered or plug type design. The disc is attached to the stem using a loose or swivel disc arrangement.
- 8. STEM.** The stem is forged steel and part of the valve trim. It contains an integral back seat shoulder, which mates with the integral backseat of the bonnet. The stem is designed to the basic dimensional requirements of the applicable specifications such as API 602.
- 9. GLAND AND FLANGE.** The gland, gland flange assembly utilizes a separate, two piece design. This self aligning design allows the flange to be unevenly tightened while the gland maintains its parallel alignment with the stem and stuffing box.
- 10. GLAND BOLTS AND NUTS.** The steel/stainless steel gland bolt and nut assembly is a stud, double nut arrangement. This design allows complete removal from the valve when service is required. The use of industry standard thread full length studs and nuts also allows easy replacement should these items be lost or in need of replacement.
- 11. YOKE SLEEVE.** The yoke sleeve is of forged stainless steel material having a high melting point and is resistant to wear and corrosion.
- 12. HANDWHEEL.** The handwheel is forged carbon steel of an open spoke design. This robust construction along with appropriate sizing allows for ease of operation.

B[®] GLOBE VALVES- BOLTED BONNET- FULL & REDUCED PORT

BONNEY FORGE

800 LB.

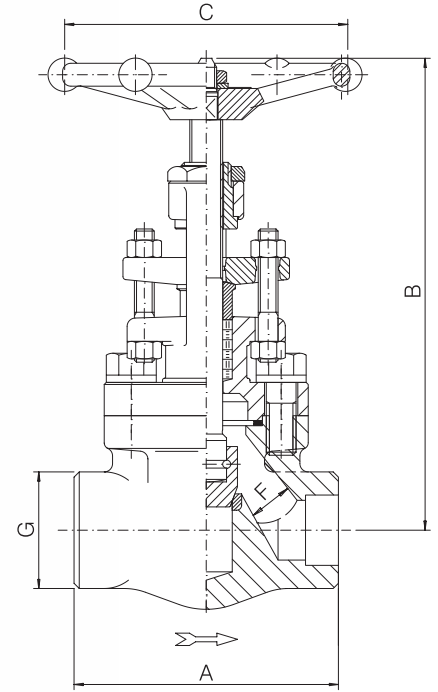
1500 LB.

Design construction:

- ASME B16.34 - BS 5325
- Testing according to API 598
- Marking MSS SP25
- Outside Screw and Yoke (OS&Y)
- Self aligning two piece packing gland
- Spiral-wound gasket
- Integral backseat
- Loose solid disc
- Socket Weld Ends to ASME B16.11
- Screwed Ends (NPT) to ASME B1.20.1
- Butt Welding Ends to ASME B16.25

Ratings:

- carbon steel class 800 1975 psig @ 100°F
138 bar + 38°C
- carbon steel class 1500 3705 psig @ 100°F
255 bar + 38°C



		FULL PORT – FIG. H 30								
		SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40
800 LB.	A	inch mm	3.15 80	3.15 80	3.54 90	4.33 110	5 127	6 150	7.09 180	8.27 210
	B open	inch mm	6.54 166	6.54 166	6.73 171	8.39 213	9.72 247	10.16 258	11.81 300	14.76 375
	C	inch mm	3.46 88	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	6.77 172	6.77 172
	F	inch mm	.28 7	.35 9	.51 13	.69 17.5	.89 22.5	1.16 29.5	1.38 35	1.79 45.5
	G	inch mm	1.26 32	1.26 32	1.5 38	1.89 48	2.20 56	2.52 64	3.07 78	3.35 85
	Weight	lb. kg	4.75 2.2	4.75 2.2	5.25 2.4	8.25 3.8	13.25 6.1	16.75 7.6	27.5 12.5	43.25 19.6
	PACKING		BH3	BH3	BH3	BH5	BY5	BY5	BY7	BH8
	GASKET		G2	G2	G2	G3	G4	G6	G7	G9

		REDUCED PORT – FIG. HL 30					
		SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40
800 LB.	A	inch mm	3.15 80	3.54 90	4.33 110	6 150	7.09 180
	B open	inch mm	6.54 166	6.73 171	8.39 213	10.16 258	11.81 300
	C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	6.77 172
	F	inch mm	.35 9	.51 13	.69 17.5	1.16 29.5	1.38 35
	G	inch mm	1.26 32	1.5 38	1.89 48	2.52 64	3.07 78
	Weight	lb. kg	4.5 2.1	5 2.3	8 3.7	16.25 7.4	26.25 11.9
	PACKING		BH3	BH3	BH5	BY5	BY7
	GASKET		G2	G2	G3	G6	G7

		FULL PORT – FIG. 9H 30								
		SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40
1500 LB.	A	inch mm	3.54 90	3.54 90	4.33 110	5 127	6 150	7.09 180	8.27 210	9.06 230
	B open	inch mm	6.54 166	6.54 166	8.27 210	9.72 247	10.08 256	11.81 300	14.76 375	16.85 428
	C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	6.77 172	6.77 172	9.21 234
	F	inch mm	.28 7	.35 9	.47 12	.59 15	.79 20	1.06 27	1.26 32	1.57 40
	G	inch mm	1.5 38	1.5 38	1.89 48	2.20 56	2.52 64	3.07 78	3.35 85	3.74 95
	Weight	lb. kg	5.75 2.6	5.75 2.6	9.25 4.2	14.25 6.5	18.75 8.5	27.5 12.5	49 22.3	79.25 36
	PACKING		BH3	BH3	BH5	2B4	2B4	2B5	BH8	9B8
	GASKET		G1	G1	G2	G3	G4	G5	G7	G8

		REDUCED PORT – FIG. 9HL 30					
		SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40
1500 LB.	A	inch mm	3.54 90	4.33 110	5 127	7.09 180	8.27 210
	B open	inch mm	6.54 166	8.27 210	9.84 250	11.81 300	14.76 375
	C	inch mm	3.46 88	3.82 97	5.43 138	6.77 172	6.77 172
	F	inch mm	.35 9	.47 12	.59 15	1.06 27	1.26 32
	G	inch mm	1.5 38	1.89 48	2.20 56	3.07 78	3.35 85
	Weight	lb. kg	5.25 2.4	8.75 4	14.25 6.5	28.5 13	48.5 22
	PACKING		BH3	BH5	2B4	2B5	BH8
	GASKET		G1	G2	G3	G5	G7

B[®] GLOBE VALVES- BOLTED BONNET- FULL PORT

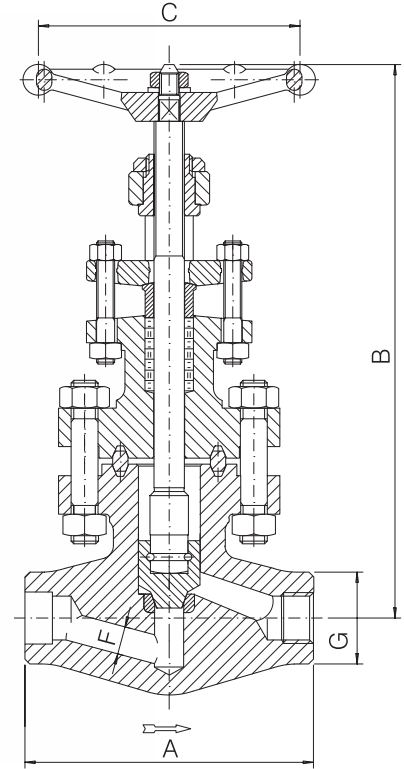
BONNEY FORGE

1500 LB.

2500 LB.

Design construction:

- ASME B16.34 - BS 5352
- Testing according to API 598
- Marking MSS SP55
- Outside Screw and Yoke (OS&Y)
- Self aligning two piece packing gland
- Integral backseat
- Oval ring joint gasket
- Loose solid disc
- Socket Weld Ends to ASME B16.11
- Screwed Ends (NPT) to ASME B1.20.1
- Butt Welding Ends to ASME B16.25
- Ratings standard class:
 - carbon steel class 1500 3705 psig @ 100°F
255 bar + 38°C
 - carbon steel class 2500 6170 psig @ 100°F
425 bar + 38°C



FULL PORT – FIG. H9R 30						
SIZE	inch	1/2	3/4	1	1 1/2	2
	mm	15	20	25	40	50
A	inch	4.33	5.91	5.91	8.27	9.06
	mm	110	150	150	210	230
B open	inch	9.53	12.20	12.20	14.57	18.31
	mm	242	310	310	370	465
C	inch	5.43	5.43	5.43	6.77	9.21
	mm	138	138	138	172	234
F	inch	.47	.59	.75	1.26	1.57
	mm	12	15	19	32	40
G	inch	1.5	2.17	2.17	2.95	3.74
	mm	38	55	55	75	95
Weight	lb.	11	22	22	46.25	79.25
	kg	5	10	10	21	36
PACKING		2B3	2B4	2B4	2B5	2B8
GASKET		R12	R17	R17	R20	R24

FULL PORT – FIG. 25HR 30						
SIZE	inch	1/2	3/4	1	1 1/2	2
	mm	15	20	25	40	50
A	inch	5.91	5.91	8.27	9.06	9.06
	mm	150	150	210	230	230
B open	inch	11.97	11.97	14.25	17.17	17.17
	mm	304	304	362	436	436
C	inch	5.43	5.43	5.43	9.21	9.21
	mm	138	138	138	234	234
F	inch	.43	.57	.75	1.10	1.5
	mm	11	14.5	19	28	38
G	inch	2.17	2.17	2.95	3.74	3.74
	mm	55	55	75	95	95
Weight	lb.	22	22	48.5	83.75	83.75
	kg	10	10	22	38	38
PACKING		2B4	2B4	BH8	2B8	4B8
GASKET		R16	R16	R17	R20	R20

GLOBE VALVES- WELDED BONNET- FULL & REDUCED PORT

BONNEY FORGE

800 LB.

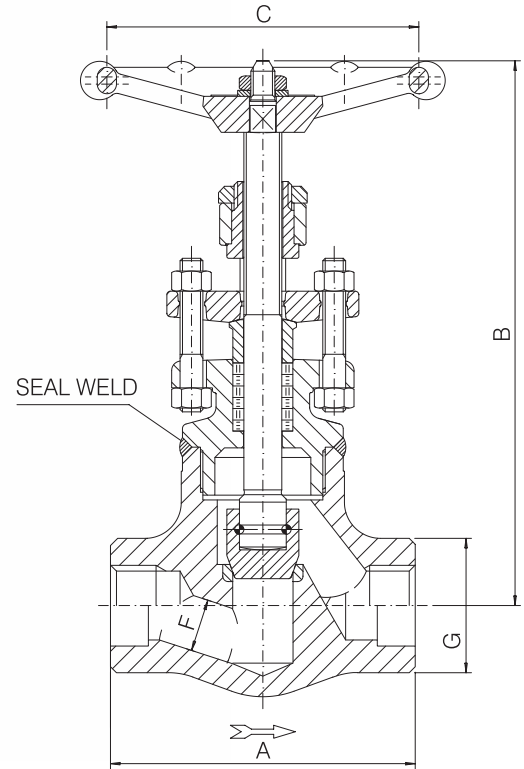
1500 LB.

Design construction:

- ASME B16.34 - BS 5352
- Testing according to API 598
- Marking MSS SP25
- Outside Screw and Yoke (OS&Y)
- Self aligning two piece packing gland
- Integral backseat
- Body bonnet weld to ASME IX
- Loose solid disc
- Socket Weld Ends to ASME B16.11
- Screwed Ends (NPT) to ASME B1.20.1
- Butt Welding Ends to ASME B16.25

Ratings:

- carbon steel class 800 1975 psig @ 100°F
138 bar + 38°C
- carbon steel class 1500 3705 psig @ 100°F
255 bar + 38°C



800 LB.		FULL PORT – FIG. W 30								
SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	2 50	
A	inch mm	3.15 80	3.15 80	3.54 90	4.33 110	5 127	5.91 150	7.09 180	8.27 210	
B open	inch mm	6.54 166	6.54 166	6.73 171	8.39 213	9.72 247	10.12 258	11.81 300	14.76 375	
C	inch mm	3.46 88	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	6.77 172	6.77 172	
F	inch mm	.28 7	.35 9	.51 13	.69 17.5	.89 22.5	1.16 29.5	1.38 35	1.77 45	
G	inch mm	1.26 32	1.26 32	1.5 38	1.89 48	2.20 56	2.52 64	3.07 78	3.35 85	
Weight	lb. kg	3.75 1.7	3.75 1.8	4.25 2	6.5 3	11 5	14.75 6.8	24.25 11	36.25 16.5	
PACKING		BH3	BH3	BH3	BH5	BY5	BY5	BY7	BH8	

800 LB.		REDUCED PORT – FIG. WL 30					
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50	
A	inch mm	3.15 80	3.54 90	4.33 110	5.91 150	7.09 180	
B open	inch mm	6.54 166	6.73 171	8.39 213	10.12 258	11.81 300	
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	6.77 172	
F	inch mm	.35 9	.51 13	.69 17.5	1.16 29.5	1.38 35	
G	inch mm	1.26 32	1.5 38	1.89 48	2.52 64	3.07 78	
Weight	lb. kg	3.75 1.7	4.25 2	6.5 3	14.5 6.6	22.75 10.4	
PACKING		BH3	BH3	BH5	BY5	BY7	

1500 LB.		FULL PORT – FIG. 9W 30								
SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	2 50	
A	inch mm	3.54 90	3.54 90	4.33 110	5 127	5.91 150	7.09 180	8.27 210	9.06 230	
B open	inch mm	6.54 166	6.54 166	8.27 210	9.72 247	10.08 256	11.81 300	14.76 375	16.85 428	
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	6.77 172	6.77 172	9.21 234	
F	inch mm	.28 7	.35 9	.47 12	.59 15	.79 20	1.06 27	1.26 32	1.57 40	
G	inch mm	1.5 38	1.5 38	1.89 48	2.20 56	2.52 64	3.07 78	3.35 85	3.74 95	
Weight	lb. kg	4.75 2.2	4.75 2.2	7.75 3.5	12 5.5	16.75 7.6	22 10	44 20	66 30	
PACKING		BH3	BH3	BH5	2B4	2B4	2B5	BH8	2B8	

1500 LB.		REDUCED PORT – FIG. 9WL 30					
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50	
A	inch mm	3.54 90	4.33 110	5 127	7.09 180	8.27 210	
B open	inch mm	6.54 166	8.27 210	9.72 247	11.81 300	14.76 375	
C	inch mm	3.46 88	3.82 97	5.43 138	6.77 172	6.77 172	
F	inch mm	.35 9	.47 12	.59 15	1.06 27	1.26 32	
G	inch mm	1.5 38	1.89 48	2.20 56	3.07 78	3.35 85	
Weight	lb. kg	4.25 2	7.75 3.5	12 5.5	26.25 12	41.75 19	
PACKING		BH3	BH5	2B4	2B5	BH8	

B[®] GLOBE VALVES- WELDED BONNET- FULL PORT

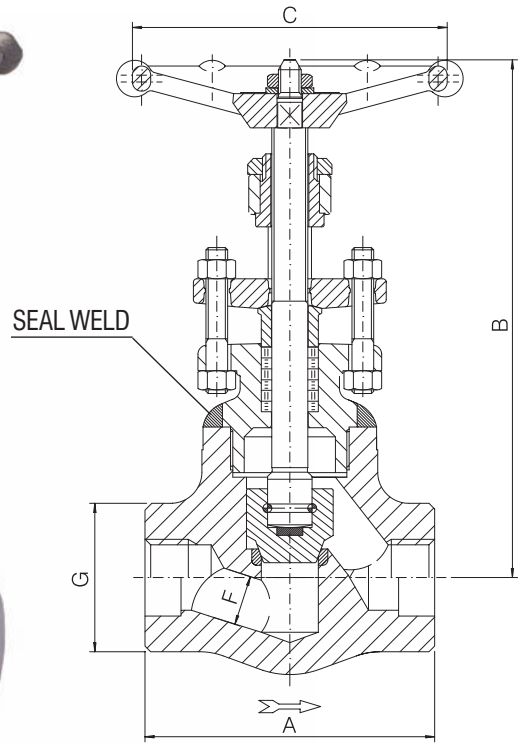
BONNEY FORGE

2500 LTD.

4500 LTD.

Design construction:

- ASME B16.34 Limited Class
- Testing according to API 598
- Marking MSS SP25
- Outside Screw and Yoke (OS&Y)
- Self aligning two piece packing gland
- Integral backseat
- Body bonnet weld to ASME IX
- Loose solid disc
- Socket Weld Ends to ASME B16.11
- Screwed Ends (NPT) to ASME B1.20.1
- Butt Welding Ends to ASME B16.25
- Ratings standard class:
 - carbon steel class 2500 6250 psig @ 100°F
431 bar + 38°C
 - carbon steel class 4500 11250 psig @ 100°F
776 bar + 38°C



		FULL PORT – FIG. 25W 30								
SIZE	inch	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	
	mm	6	10	15	20	25	32	40	50	
A	inch	4.33	4.33	5	5.91	7.09	7.09	8.27	9.06	
	mm	110	110	127	150	180	180	210	230	
B open	inch	7.48	7.48	8.9	9.72	11.34	11.34	14.17	16.54	
	mm	190	190	226	247	288	288	360	420	
C	inch	3.46	3.46	5.43	5.43	5.43	5.43	6.77	9.21	
	mm	88	88	138	138	138	138	172	234	
F	inch	.28	.35	.43	.57	.75	.87	1.10	1.38	
	mm	7	9	11	14.5	19	22	28	35	
G	inch	1.89	1.89	2.20	2.52	3.07	3.07	3.35	3.74	
	mm	48	48	56	64	78	78	85	95	
Weight	lb.	9.75	10.25	12	17.5	28.5	28.5	43.5	66	
	kg	4.5	4.7	5.5	8	13	13	19.8	30	
PACKING		BH4	BH4	2B3	2B4	2B5	2B5	2B5	2B8	

		FULL PORT – FIG. 45W 30								
SIZE	inch	1/4	3/8	1/2	3/4	1	1 1/2	2		
	mm	6	10	15	20	25	40	50		
A	inch	5	5	5	7.09	7.09	9.06	9.06		
	mm	127	127	127	180	180	230	230		
B open	inch	9.06	9.06	9.25	11.81	11.81	14.57	15.75		
	mm	230	230	235	300	300	370	400		
C	inch	5.43	5.43	5.43	6.77	6.77	9.21	15.75		
	mm	138	138	138	172	172	234	400		
F	inch	.28	.28	.31	.43	.55	.98	1.26		
	mm	7	7	8	11	14	25	32		
G	inch	2.20	2.20	2.20	3.07	3.07	3.74	4.72		
	mm	56	56	56	78	78	95	120		
Weight	lb.	14.25	14.25	14.25	33	33	55	66		
	kg	6.5	6.5	6.5	15	15	25	30		
PACKING		2B3	2B3	2B3	4B5	4B5	2B8	4B8		

Available with Socket Weld or Butt-Weld Ends only.

Materials and trim specifications Page 91

B[®] GLOBE VALVES- WELDED BONNET- FULL PORT (Y TYPE)

BONNEY FORGE

2680 LTD.

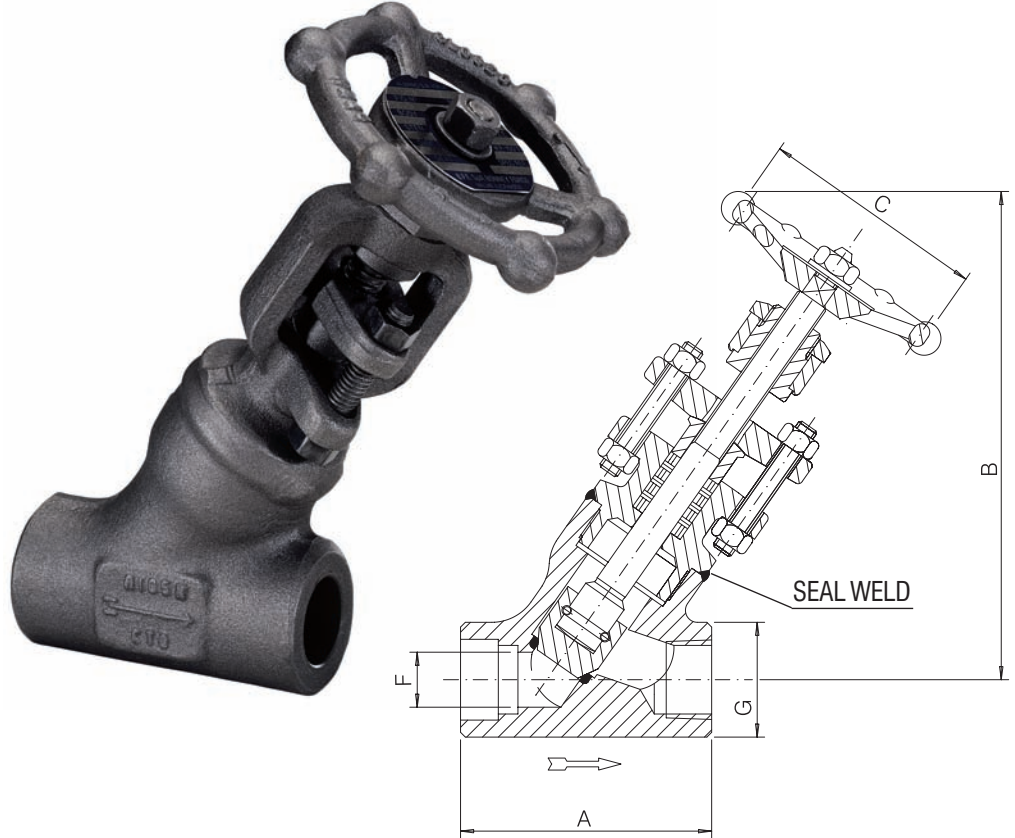
4500 LTD.

Design construction:

- ASME B16.34 Limited Class
- Testing according to API 598
- Marking MSS SP25
- Outside Screw and Yoke (OS&Y)
- Self aligning two piece packing gland
- Integral backseat
- Body bonnet weld to ASME IX
- Loose solid disc
- Socket Weld Ends to ASME B16.11
- Screwed Ends (NPT) to ASME B1.20.1
- Butt Welding Ends to ASME B16.25

Ratings:

- carbon steel class 2680 6700 psig @ 100°F
462 bar + 38°C
- carbon steel class 4500 11250 psig @ 100°F
776 bar + 38°C



		FULL PORT – FIG. 2680Y 30							
SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/2 40	2 50	
A	inch mm	4.13 105	4.13 105	4.72 120	6.5 165	6.5 165	7.48 190	8.66 220	
B open	inch mm	8.66 220	8.66 220	9.45 240	10.83 275	12.20 310	14.17 360	17.32 440	
C	inch mm	3.46 88	3.46 88	5.43 138	5.43 138	5.43 138	6.77 172	9.21 234	
F	inch mm	.28 7	.35 9	.43 11	.57 14.5	.75 19	1.10 28	1.38 35	
G	inch mm	1.89 48	1.89 48	2.20 56	3.07 78	3.07 78	3.35 85	3.74 95	
Weight	lb. kg	7.75 3.5	7.75 3.5	11 5	25.25 11.5	27.5 12.5	37.25 17	57.25 26	
PACKING		BH4	BH4	2B3	2B4	2B5	2B5	2B8	

Note: Thread End Valves are limited to ASME B16.34, 2500 Pressure Class.

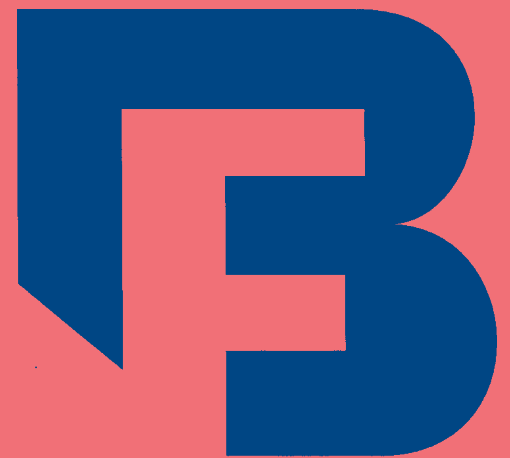
		FULL PORT – FIG. 45Y 30							
SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/2 40	2 50	
A	inch mm	4.72 120	4.72 120	4.72 120	6.5 165	6.5 165	8.66 220	9.06 230	
B open	inch mm	9.45 240	9.45 240	9.65 245	12.01 305	12.20 310	16.54 420	17.72 450	
C	inch mm	5.43 138	5.43 138	5.43 138	6.77 172	6.77 172	9.21 234	15.75 400	
F	inch mm	.28 7	.28 7	.31 8	.43 11	.55 14	.98 25	1.26 32	
G	inch mm	2.20 56	2.20 56	2.20 56	3.07 78	3.07 78	3.74 95	4.72 120	
Weight	lb. kg	12 5.5	12 5.5	12.25 5.6	30.75 14	30.75 14	61.75 28	70.5 32	
PACKING		2B3	2B3	2B3	2B4A	4B5	2B8	4B8	

Available with Socket Weld or Butt-Weld Ends only.

Materials and trim specifications Page 91

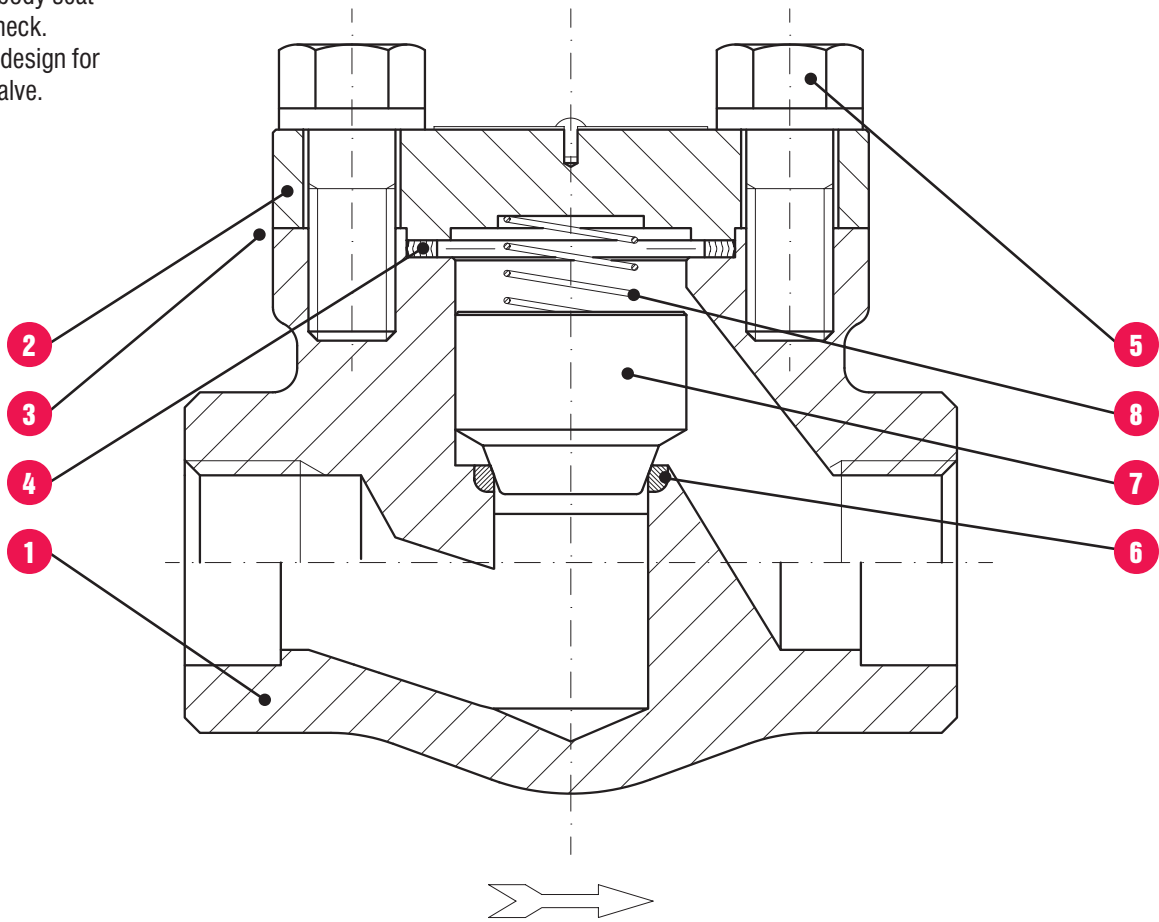
Overview	24
Bolted Bonnet- 800 lb. & 1500 lb. valves	25
Bolted Bonnet- 1500 lb. & 2500 lb. valves	26
Welded Bonnet- 800 lb. & 1500 lb. valves	27
Welded Bonnet- 2500 lb. & 4500 lb. valves	28
Welded Bonnet (Y type)- 800 lb. & 1690 lb. valves	29
Welded Bonnet (Y type)- 2680 lb. & 4500 lb. valves	30

CHECK VALVES



CHECK VALVES

Forged steel, piston, ball or swing check. Full or conventional port. Bolted or welded cover joint. T-Pattern or Y-Pattern. Integral body seat for piston or ball check. Separate seat ring design for the swing check valve.



- 1. BODY.** The body is forged steel and designed to the basic dimensional requirements of the applicable specifications such as API 602 and ASME B16.34. The body is available in both the full or conventional port design. It is also available in either T-Pattern or Y-Pattern configurations.
- 2. COVER.** The cover is forged steel and designed to the basic dimensional requirements of the applicable specifications such as API 602 and ASME B16.34.
- 3. BODY-COVER JOINT.** Two different cover joint designs are available. These are either the bolted cover or the threaded and seal welded type.
- 4. GASKET.** The bolted cover joint design valve uses a contained, controlled compression, spiral wound type gasket.

- 5. COVER BOLTING.** The cover bolting is manufactured of alloy steel in accordance with the requirements of the applicable specifications such as API 602 and ASME B16.34.
- 6. SEAT.** The body seat for the piston and ball check valves is an integral weld overlay and is part of the valve trim. The swing check valve is supplied with a separate seat ring which is pressed into the valve body and wedged into place, forming a seal with the body.
- 7. PISTON, BALL OR DISC.** The piston, ball or disc is forged steel and is part of the valve trim. The seating surface of the piston and ball check is of the tapered or plug type design. The seating surface of the swing check is of the flat seat design.
- 8. SPRING.** The spring is optional and supplied only upon request.

B[®] CHECK VALVES- BOLTED BONNET- FULL & REDUCED PORT

BONNEY FORGE

800 LB.

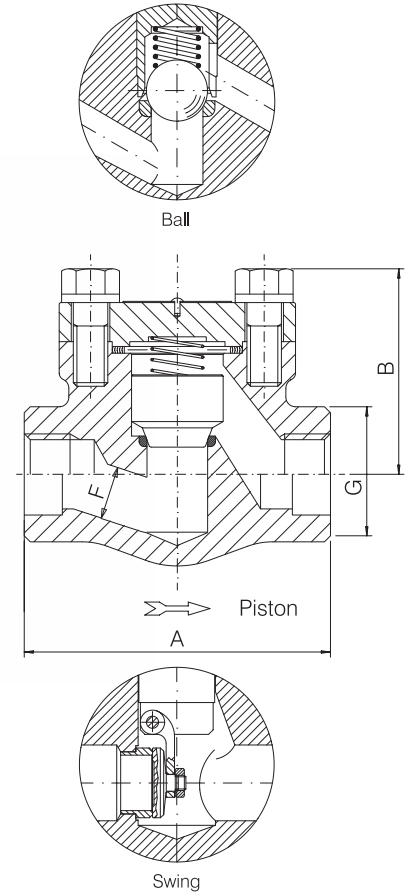
1500 LB.

Design construction:

- ASME B16.34 - BS 5352
- Testing according to API 598
- Marking MSS SP25
- Spring on request only
- Spiral-wound gasket
- Socket Weld Ends to ASME B16.11
- Screwed Ends (NPT) to ASME B1.20.1
- Butt Welding Ends to ASME B16.25

Ratings:

- carbon steel class 800 1975 psig @ 100°F
138 bar + 38°C
- carbon steel class 1500 3705 psig @ 100°F
255 bar + 38°C



800 LB.		FULL PORT — FIG. H 40 - H 50 - H 60								
SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	2 50	
A	inch mm	3.15 80*	3.15 80	3.54 90	4.33 110	5 127	5.91 150	7.09 180	8.27 210	
B	inch mm	2.17 55	2.17 55	2.36 60	3.07 78	3.46 88	3.62 92	4.25 108	5.71 145	
F Piston/ F Ball	inch mm	.28 7	.35 9	.51 13	.69 17.5	.89 22.5	1.16 29.5	1.38 35	1.77 45	
F Swing	inch mm	.31 8	.38 9.6	.55 14	.71 18	.94 24	1.18 30	1.44 36.6	1.89 48	
G	inch mm	1.26 32	1.26 32	1.50 38	1.89 48	2.20 56	2.52 64	3.07 78	3.35 85	
Weight	lb. kg	3 1.4	3 1.4	3.5 1.6	6.5 3	9.5 4.3	12.25 5.6	22 10	35.25 16	
GASKET		G2	G2	G2	G3	G4	G6	G7	G9	

800 LB.		REDUCED PORT — FIG. HL 40 - HL 50 - HL 60					
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50	
A	inch mm	3.15 80	3.54 90	4.33 110	5.91 150	7.09 180	
B	inch mm	2.17 55	2.36 60	3.07 78	3.62 92	4.25 108	
F Piston/ F Ball	inch mm	.35 9	.51 13	.69 17.5	1.16 29.5	1.38 35	
F Swing	inch mm	.38 9.6	.55 14	.71 18	1.18 30	1.44 36.6	
G	inch mm	1.26 32	1.5 38	1.89 48	2.52 64	3.07 78	
Weight	lb. kg	2.75 1.3	3.5 1.6	6.25 2.8	12.25 5.6	19.75 9.0	
GASKET		G2	G2	G3	G6	G7	

*For swing type only A=90mm 3.54inch

1500 LB.		FULL PORT — FIG. 9H 40 - 9H 50 - 9H 60								
SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	2 50	
A	inch mm	3.54 90	3.54 90	4.33 110	5 127	5.91 150	7.09 180	8.27 210	8.27 210	
B	inch mm	2.36 60	2.36 60	3.07 78	3.46 88	3.62 92	4.25 108	5.71 145	5.91 150	
F Piston/ F Ball	inch mm	.28 7	.35 9	.47 12	.59 15	.79 20	1.06 27	1.26 32	1.57 40	
F Swing	inch mm	- -	- -	.55 14	.71 18	.94 24	1.18 30	1.44 36.6	1.89 48	
G	inch mm	1.5 38	1.5 38	1.89 48	2.20 56	2.52 64	3.07 78	3.35 85	3.74 95	
Weight	lb. kg	3.75 1.7	3.75 1.7	6.75 3.1	10 4.6	14.25 6.5	23.25 10.6	41.75 19	41.75 19	
GASKET		G1	G1	G2	G3	G4	G5	G7	G8	

1500 LB.		REDUCED PORT — FIG. 9HL 40 - 9HL 50 - 9HL 60					
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50	
A	inch mm	3.54 90	4.33 110	5 127	7.09 180	8.27 210	
B	inch mm	2.36 60	3.07 78	3.46 88	4.25 108	5.71 145	
F Piston/ F Ball	inch mm	.35 9	.47 12	.59 15	1.06 27	1.26 32	
F Swing	inch mm	.38 9.6	.55 14	.71 18	1.18 30	1.44 36.6	
G	inch mm	1.5 38	1.89 48	2.20 56	3.07 78	3.35 85	
Weight	lb. kg	3.75 1.7	6.5 3	9.75 4.4	22 10	39.5 18	
GASKET		G1	G2	G3	G5	G7	



CHECK VALVES- BOLTED BONNET- FULL PORT

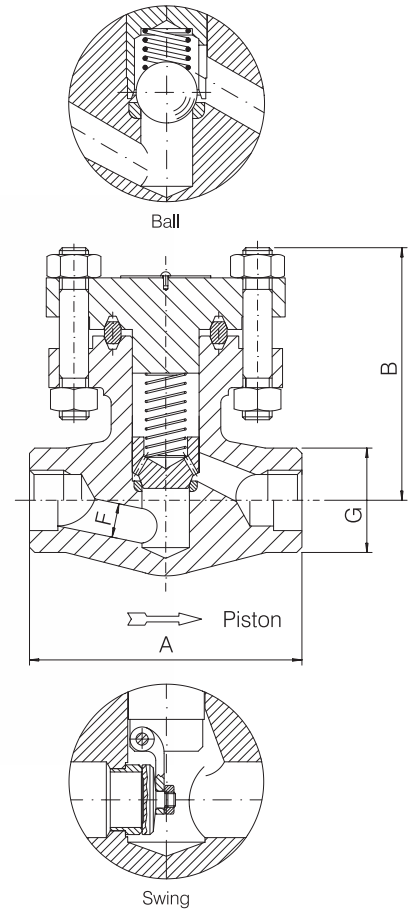
BONNEY FORGE

1500 LB.

2500 LB.

Design construction:

- ASME B16.34 - BS 5352
- Testing according to API 598
- Marking MSS SP25
- Spring on request only
- Oval ring joint gasket
- Socket Weld Ends to ASME B16.11
- Screwed Ends (NPT) to ASME B1.20.1
- Butt Welding Ends to ASME B16.25
- Ratings standard class:
- carbon steel class 1500 3705 psig @ 100°F
255 bar + 38°C
- carbon steel class 2500 6170 psig @ 100°F
425 bar + 38°C



FULL PORT – FIG. H9R 40 - H9R 50 - H9R 60						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	4.33 110	5.91 150	5.91 150	8.27 210	9.06 230
B	inch mm	3.78 96	5.04 128	5.04 128	6.10 155	7.68 195
F Piston/ F Ball	inch mm	.47 12	.59 15	.75 19	1.26 32	1.5 38
F Swing	inch mm	.55 14	.71 18	.94 24	1.44 36,6	1.89 48
G	inch mm	1.5 38	2.17 55	2.17 55	2.95 75	3.62 92
Weight	lb. kg	7 3,2	16 7,3	16 7,3	37.5 17	63.75 29
GASKET		R12	R17	R17	R20	R24

FULL PORT – FIG. 25HR 40 - 25HR 50 - 25HR 60						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	5.91 150	5.91 150	8.27 210	9.06 230	9.06 230
B	inch mm	5.04 128	5.04 128	5.98 152	7.48 190	7.48 190
F Piston/ F Ball	inch mm	.43 11	.57 14,5	.75 19	1.10 28	1.38 35
F Swing	inch mm	.45 11,5	.59 15	.77 19,5	1.10 28	1.38 35
G	inch mm	2.17 55	2.17 55	2.95 75	3.74 95	3.74 95
Weight	lb. kg	16.5 7,5	16,5 7,5	40,75 18,5	66 30	66 30
GASKET		R16	R16	R17	R20	R20

B[®] CHECK VALVES- WELDED BONNET- FULL & REDUCED PORT

BONNEY FORGE

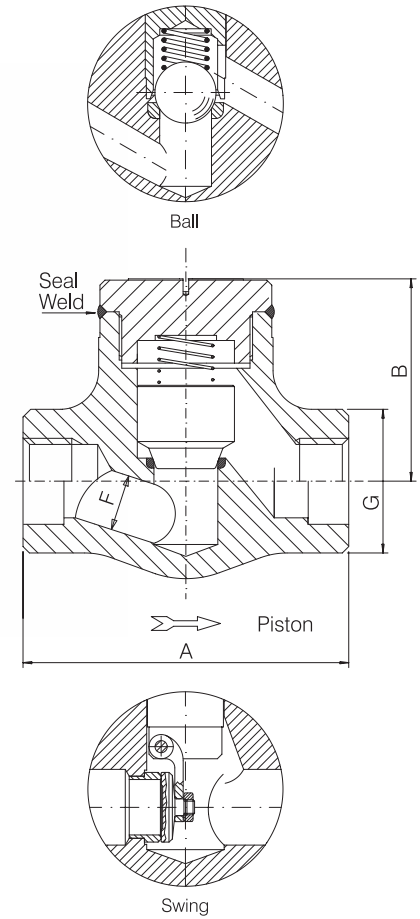
800 LB.

1500 LB.

Design construction:

ASME B16.34 - BS 5352
 Testing according to API 598
 Marking MSS SP25
 Spring on request only
 Body bonnet weld to ASME IX
 Socket Weld Ends to ASME B16.11
 Screwed Ends (NPT) to ASME B1.20.1
 Butt Welding Ends to ASME B16.25
 Ratings:

- carbon steel class 800 1975 psig @ 100°F
 138 bar + 38°C
- carbon steel class 1500 3705 psig @ 100°F
 255 bar + 38°C



		FULL PORT – FIG. W 40 - W 50 - W 60								
SIZE	inch	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	
	mm	6	10	15	20	25	32	40	50	
A	inch	3.15	3.15	3.54	4.33	5	5.91	7.09	8.27	
	mm	80	80	90	110	127	150	180	210	
B	inch	2.17	2.17	2.36	3.07	3.46	3.62	4.33	5.91	
	mm	55	55	60	78	88	92	110	150	
F Piston/ F Ball	inch	.28	.35	.51	.69	.89	1.16	1.38	1.77	
	mm	7	9	13	17.5	22.5	29.5	35	45	
F Swing	inch	.31	.38	.55	.71	.94	1.18	1.44	1.89	
	mm	8	9.6	14	18	24	30	36.6	48	
G	inch	1.26	1.26	1.50	1.89	2.20	2.52	3.07	3.35	
	mm	32	32	38	48	56	64	78	85	
Weight	lb.	2	2	2.5	5	7.25	11.5	19	30.75	
	kg	1	1	1.2	2.3	3.3	5.2	8.7	14	

		REDUCED PORT – FIG. WL 40 - WL 50 - WL 60					
SIZE	inch	1/2	3/4	1	1 1/2	2	
	mm	15	20	25	40	50	
A	inch	3.15	3.54	4.33	5.91	7.09	
	mm	80	90	110	150	180	
B	inch	2.13	2.36	3	3.62	4.33	
	mm	54	60	76	92	110	
F Piston/ F Ball	inch	.35	.51	.69	1.16	1.38	
	mm	9	13	17.5	29.5	35	
F Swing	inch	.38	.55	.71	1.18	1.44	
	mm	9.6	14	18	30	36.6	
G	inch	1.26	1.50	1.89	2.52	3.07	
	mm	32	38	48	64	78	
Weight	lb.	1.75	2.25	5	11	18.25	
	kg	0.9	1.1	2.3	5	8.3	

		FULL PORT – FIG. 9W 40 - 9W 50 - 9W 60								
SIZE	inch	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	
	mm	6	10	15	20	25	32	40	50	
A	inch	3.54	3.54	4.33	5	5.91	7.09	8.27	9.06	
	mm	90	90	110	127	150	180	210	230	
B	inch	2.17	2.17	3	3.31	3.54	4.33	5.91	9.06	
	mm	55	55	76	84	90	110	150	230	
F Piston/ F Ball	inch	.28	.35	.47	.59	.79	1.06	1.26	1.57	
	mm	7	9	12	15	20	27	32	40	
F Swing	inch	.31	.38	.55	.71	.94	1.18	1.44	1.89	
	mm	8	9.6	14	18	24	30	36.6	48	
G	inch	1.50	1.50	1.89	2.20	2.52	3.07	3.35	3.74	
	mm	38	38	48	56	64	78	85	95	
Weight	lb.	3	3	5.5	8	13.25	22	34.25	48.5	
	kg	1.4	1.4	2.5	3.7	6	10	15.5	22	

		REDUCED PORT – FIG. 9WL 40 - 9WL 50 - 9WL 60					
SIZE	inch	1/2	3/4	1	1 1/2	2	
	mm	15	20	25	40	50	
A	inch	3.54	4.33	5	7.09	8.27	
	mm	90	110	127	180	210	
B	inch	2.13	3	3.39	4.33	5.91	
	mm	54	76	86	110	150	
F Piston/ F Ball	inch	.35	.47	.59	1.06	1.26	
	mm	9	12	15	27	32	
F Swing	inch	.38	.55	.71	1.18	1.44	
	mm	9.6	14	18	30	36.6	
G	inch	1.5	1.89	2.20	3.07	3.35	
	mm	38	48	56	78	85	
Weight	lb.	3	4.75	6.5	21	35.25	
	kg	1.4	2.2	3	9.6	16	

BONNEY FORGE® CHECK VALVES- WELDED BONNET- FULL PORT

BONNEY FORGE

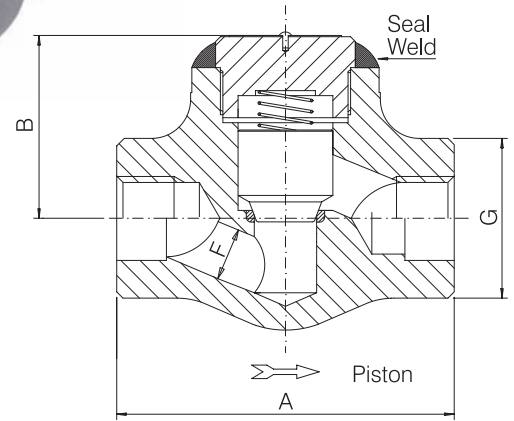
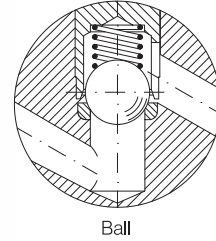
2500 LTD.

4500 LTD.

Design construction:

- ASME B16.34 Limited Class
- Testing according to API 598
- Marking MSS SP25
- Spring on request only
- Body bonnet weld to ASME IX
- Socket Weld Ends to ASME B16.11
- Screwed Ends (NPT) to ASME B1.20.1
- Butt Welding Ends to ASME B16.25

- Ratings:
- carbon steel class 2500 6250 psig @ 100°F
431 bar + 38°C
 - carbon steel class 4500 11250 psig @ 100°F
776 bar + 38°C



		FULL PORT – FIG. 25W 40 - 25W 50							
SIZE	inch	1/4	3/8	1/2	3/4	1	1 1/2	2	
	mm	6	10	15	20	25	40	50	
A	inch	4.33	4.33	5	5.91	7.09	8.27	9.06	
	mm	110	110	127	150	180	210	230	
B	inch	2.76	2.76	3.39	3.62	4.33	5.91	7.09	
	mm	70	70	86	92	110	150	180	
F	inch	.28	.35	.43	.57	.75	1.10	1.38	
	mm	7	9	11	14.5	19	28	35	
G	inch	1.89	1.89	2.20	2.52	3.07	3.35	3.74	
	mm	48	48	56	64	78	85	95	
Weight	lb.	7	7	8.25	12.25	22	35.25	46.25	
	kg	3.2	3.2	3.8	5.6	10	16	21	

		FULL PORT – FIG. 45W 40 - 45W 50							
SIZE	inch	1/4	3/8	1/2	3/4	1	1 1/2	2	
	mm	6	10	15	20	25	40	50	
A	inch	5	5	5	7.09	7.09	9.06	9.06	
	mm	127	127	127	180	180	230	230	
B	inch	3.54	3.54	3.54	4.33	4.33	7.09	7.68	
	mm	90	90	90	110	110	180	195	
F	inch	.28	.28	.31	.43	.55	.98	1.26	
	mm	7	7	8	11	14	25	32	
G	inch	2.20	2.20	2.20	3.07	3.07	3.74	4.72	
	mm	56	56	56	78	78	95	120	
Weight	lb.	8.5	8.5	8.5	23	23	55.5	59.5	
	kg	3.9	3.9	3.9	10.5	10.5	25.2	27	

Available with Socket Weld or Butt-Weld Ends only.
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CHECK VALVES- WELDED BONNET- FULL PORT (Y TYPE)

BONNEY FORGE

800 LTD.

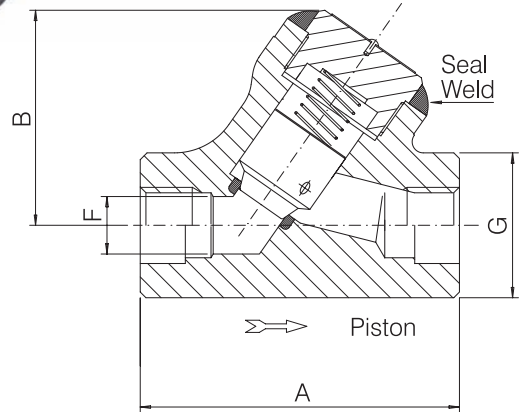
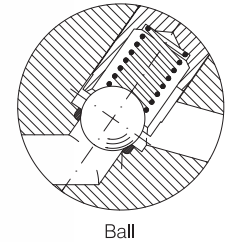
1690 LTD.

Design construction:

- ASME B16.34 Limited Class - BS 5352
- Testing according to API 598
- Marking MSS SP25
- Body bonnet weld to ASME IX
- Spring on request only
- Socket Weld Ends to ASME B16.11
- Screwed Ends (NPT) to ASME B1.20.1
- Butt Welding Ends to ASME B16.25

Ratings:

- carbon steel class 800 2000 psig @ 100°F
 138 bar + 38°C
- carbon steel class 1690 4225 psig @ 100°F
 291 bar + 38°C



SIZE	inch mm	FULL PORT – FIG. Y 40 - Y 50							
		1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	2 50
A	inch mm	3.35 85	3.35 85	3.35 85	4.13 105	4.72 120	6.5 165	6.5 165	7.48 190
B	inch mm	2.76 70	2.76 70	2.76 70	3.54 90	3.93 100	5.12 130	5.12 130	6.3 160
F	inch mm	.28 7	.35 9	.51 13	.69 17.5	.89 22.5	1.16 29.5	1.38 35	1.77 45
G	inch mm	1.50 38	1.50 38	1.50 38	1.89 48	2.20 56	3.07 78	3.07 78	3.35 85
Weight	lb.	2.5	2.5	2.5	5	6.5	17.5	17.5	26.25
	kg	1.2	1.2	1.2	2.3	3	8	8	12

SIZE	inch mm	FULL PORT – FIG. 1690Y 40 - 1690Y 50							
		1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	2 50
A	inch mm	3.35 85	3.35 85	4.13 105	4.72 120	6.5 165	6.5 165	7.48 190	8.66 220
B	inch mm	2.76 70	2.76 70	3.54 90	3.93 100	5.12 130	5.12 130	6.3 160	7.68 195
F	inch mm	.28 7	.35 9	.47 12	.59 15	.79 20	1.06 27	1.26 32	1.57 40
G	inch mm	1.50 38	1.50 38	1.89 48	2.20 56	3.07 78	3.07 78	3.35 85	3.74 95
Weight	lb.	2.5	2.5	5.25	7.75	20.5	28.5	29.75	39.5
	kg	1.2	1.2	2.4	3.6	9.3	13	13.5	18

CHECK VALVES- WELDED BONNET- FULL PORT (Y TYPE)

BONNEY FORGE

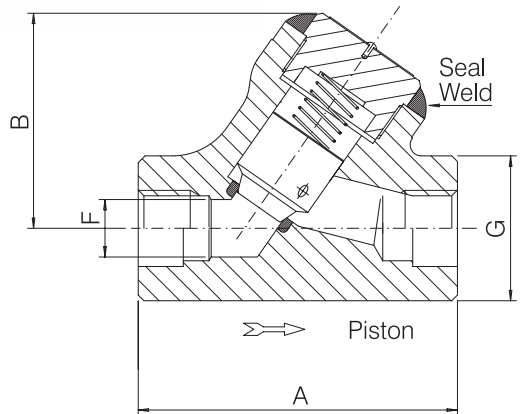
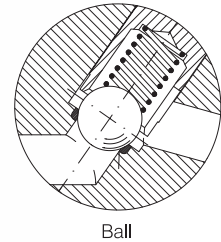
2680 LTD.

4500 LTD.

Design construction:

ASME B16.34 Limited Class - BS 5352
 Testing according to API 598
 Marking MSS SP25
 Body bonnet weld to ASME IX
 Spring on request only
 Socket Weld Ends to ASME B16.11
 Screwed Ends (NPT) to ASME B1.20.1
 Butt Welding Ends to ASME B16.25
 Ratings:

- carbon steel class 2680 6700 psig @ 100°F
 462 bar + 38°C
- carbon steel class 4500 11250 psig @ 100°F
 776 bar + 38°C



		FULL PORT — FIG. 2680Y 40 - 2680Y 50							
SIZE	inch	1/4	3/8	1/2	3/4	1	1 1/2	2	
	mm	6	10	15	20	25	40	50	
A	inch	4.13	4.13	4.72	6.5	6.5	7.48	8.66	
	mm	105	105	120	165	165	190	220	
B	inch	3.35	3.35	3.74	4.53	4.72	5.71	7.28	
	mm	85	85	95	115	120	145	185	
F	inch	.28	.35	.43	.57	.75	1.10	1.38	
	mm	7	9	11	14.5	19	28	35	
G	inch	1.89	1.89	2.20	3.07	3.07	3.35	3.74	
	mm	48	48	56	78	78	85	95	
Weight	lb.	7	7	8	19.75	19.75	29.75	44	
	kg	3.2	3.2	3.7	9	9	13.5	20	

Note: Thread End Valves are limited to ASME B16.34 2500 Pressure Class.

		REDUCED PORT — FIG. 45Y 40 - 45Y 50							
SIZE	inch	1/4	3/8	1/2	3/4	1	1 1/2	2	
	mm	6	10	15	20	25	40	50	
A	inch	4.72	4.72	4.72	6.5	6.5	8.66	9.06	
	mm	120	120	120	165	165	220	230	
B	inch	3.74	3.74	3.74	4.53	4.72	7.28	7.68	
	mm	95	95	95	115	120	185	195	
F	inch	.28	.28	.31	.43	.55	.98	1.26	
	mm	7	7	8	11	14	25	32	
G	inch	2.20	2.20	2.20	3.07	3.07	3.74	4.72	
	mm	56	56	56	78	78	95	120	
Weight	lb.	8	8	8	19.75	19.75	44	50.5	
	kg	3.7	3.7	3.7	9	9	20	23	

Available with Socket Weld or Butt-Weld Ends only.

Materials and trim specifications Page 91