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Overview62

Valvolet® End- Bolted & Welded
Bonnet- 800 lb. & 1500 lb. valves63

Lip End- Bolted & Welded Bonnet-
800 lb. & 1500 lb. valves63

Socket Weld End- Bolted & Welded
Bonnet- 800 lb. & 1500 lb. valves64

Butt Weld End- Bolted & Welded
Bonnet- 800 lb. & 1500 lb. valves64

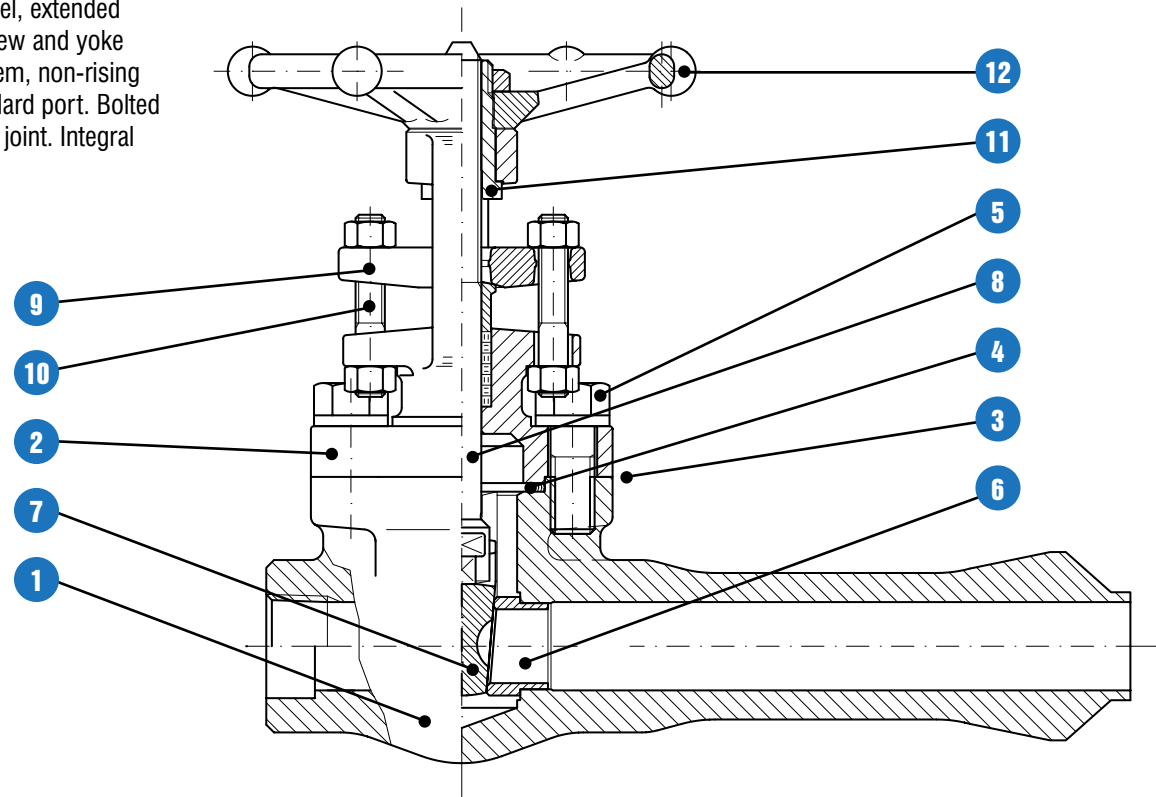
Threaded End- Bolted & Welded
Bonnet- 800 lb. & 1500 lb. valves64

EXTENDED BODY GATE VALVES



**EXTENDED BODY
GATE VALVES**

Typical forged steel, extended body, outside screw and yoke (OS&Y), rising stem, non-rising handwheel. Standard port. Bolted or welded bonnet joint. Integral backseat.



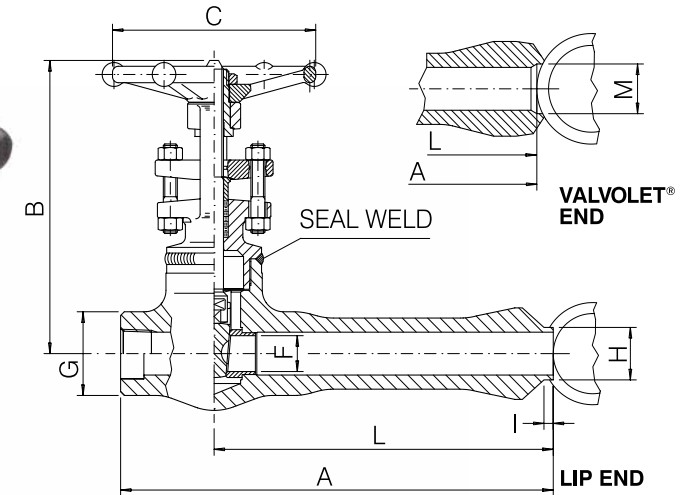
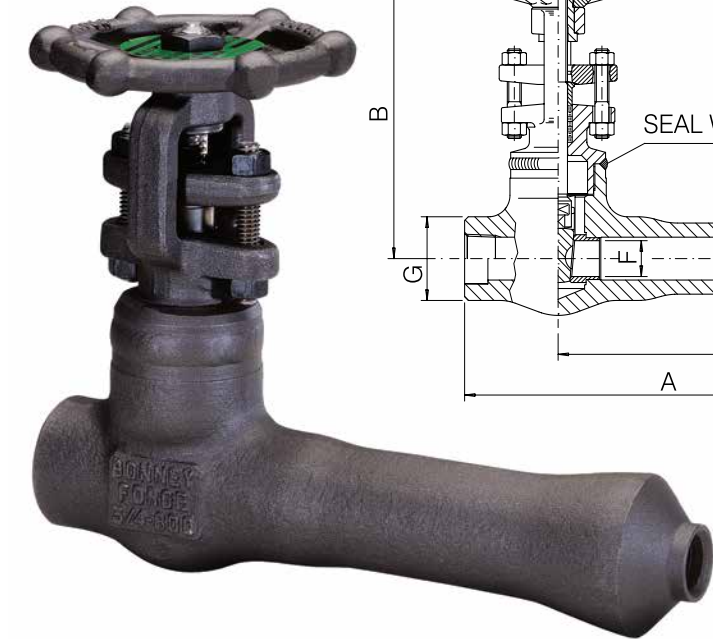
- 1. BODY.** The body is forged steel and designed to the basic dimensional requirements of the applicable specifications such as API 602 and ASME B16.34. The body is available in standard port design with Plane End (Socket Weld), Threaded End, Lip End and Weld-O-Let End.
- 2. BONNET.** The bonnet is 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 threaded and seal welded or bolted bonnet 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 make up 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 a 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 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.

**GATE VALVES- EXTENDED BODY- STANDARD PORT-
INTEGRAL REINFORCED - VALVOLET® END & LIP
END WELDED & BOLTED BONNET**

**800 LB.
1500 LB.**

Design construction:
API 602 - ASME B16.34
Testing according to API 598
Marking MSS-SP-25
Integral extended body
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Spiral-wound gasket
Body-bonnet weld to ASME IX
Integral backseat
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Butt Welding Ends to ASME B16.25
Rating:
-carbon steel class 800 1975 psig @ 100°F
138 bar + 38°C
-carbon steel class 1500 3705 psig @ 100°F
255 bar + 38°C



BOLTED BONNET – FIG. VLL 10 / WELDED BONNET – FIG. VOLL 10						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	8.15 207	8.60 218.5	9.62 244.5	10.37 263.5	10.53 267.5
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	1.50 38	1.89 48	2.52 64	3.07 78
H	inch mm	.69 17.5	.87 22	1.12 28.5	1.61 41	1.81 46
I	inch mm	.16 4	.19 4.8	.19 4.8	.25 6.3	.31 8
L	inch mm	6.57 167	6.81 173	7.48 190	7.87 200	8.03 204
M	inch mm	.87 22	1.18 30	1.44 36.5	1.99 50.5	2.56 65
Weight Bolted B.	lb. kg	5.75 2.6	6.75 3.1	11.25 5.1	21 9.5	28.5 13
Weight Welded B.	lb. kg	5 2.3	6.25 2.9	9.5 4.3	19.5 8.8	25.75 11.7
PACKING		BH2	BH2	BH4	BH6	BY5
GASKET*		G2	G2	G3	G6	G7

BOLTED BONNET – FIG. 9VLL 10 / WELDED BONNET – FIG. 9VOLL 10					
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40
A	inch mm	8.60 218.5	9.62 244.5	10.37 263.5	10.53 267.5
B open	inch mm	6.02 153	7.48 190	8.66 220	11.10 282
C	inch mm	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
G	inch mm	1.50 38	1.89 48	2.20 56	3.07 78
H	inch mm	.69 17.5	.87 22	1.12 28.5	1.61 41
I	inch mm	.16 4	.19 4.8	.19 4.8	.25 6.3
L	inch mm	6.81 173	7.48 190	7.87 200	8.03 204
M	inch mm	1.18 30	1.44 36.5	1.99 50.5	2.56 65
Weight Bolted B.	lb. kg	8 3.6	12.25 5.6	23 10.5	32 14.5
Weight Welded B.	lb. kg	6.25 2.9	10.25 4.7	19.75 9	27.5 12.5
PACKING		BH3	BH5	BH6	2B5
GASKET*		G1	G2	G3	G5



GATE VALVES- EXTENDED BODY- REDUCED PORT- SOCKET WELDED- PLAIN END, SCREWED END & BUTT WELD END - WELDED & BOLTED BONNET

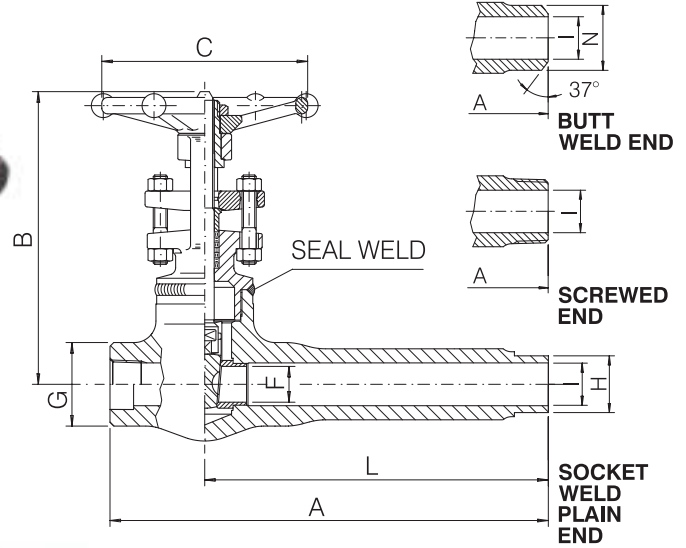
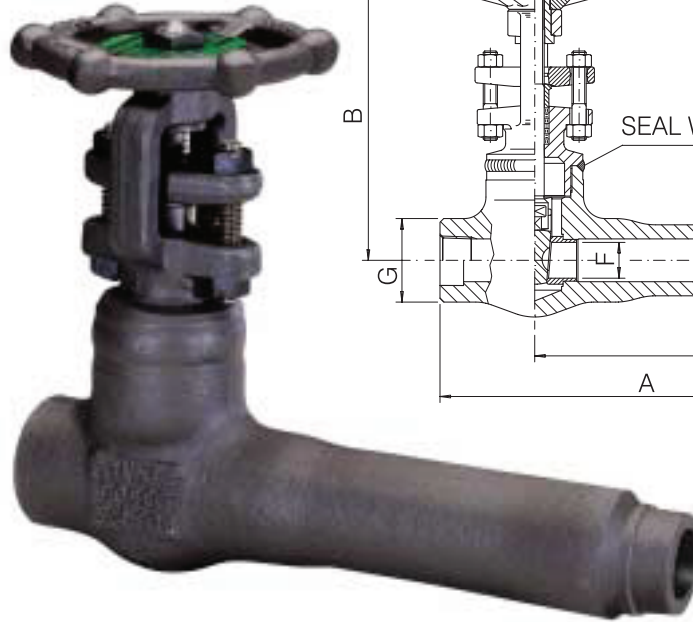
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Design construction:

- API 602 - ASME B16.34
- Testing according to API 598
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- Rating:
- carbon steel class 800 1975 psig @ 100°F
138 bar + 38°C
 - carbon steel class 1500 3705 psig @ 100°F
255 bar + 38°C



BOLTED BONNET — FIG. ML 10 / WELDED BONNET — FIG. MFL 10						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	5.57 141,5	5.77 146,5	6.53 166	7.50 190,5	8.50 216
B open	inch mm	5.98 152	6.14 156	7.72 196	10.08 256	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	1.50 38	1.89 48	2.52 64	3.07 78
H	inch mm	.84 21,3	1.05 26,7	1.31 33,4	1.90 48,3	2.37 60,3
I	inch mm	.51 13	.63 16	.83 21	1.34 34	1.65 42
L	inch mm	4.01 102	4.01 102	4.37 111	5 127	6.02 153
N	inch mm	.90 23	1.10 28	1.42 36	2.05 52	2.44 62
Weight	lb.	5.25	5.75	9.25	17.75	26
Bolted B.	kg	2,4	2,6	4,2	8,1	11,8
Weight	lb.	3.75	4.5	7	15.75	22.75
Welded B.	kg	1,7	2,1	3,2	7,2	10,3
PACKING		BH2	BH2	BH4	BH6	BY5
GASKET*		G2	G2	G3	G6	G7

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L	inch mm	4.02 102	4.37 111	5 127	6.02 153
N	inch mm	.90 23	1.10 28	1.42 36	2.05 52
Weight	lb.	5.75	10	20	28.5
Bolted B.	kg	2,6	4,6	9,1	13
Weight	lb.	4.5	8.25	17.75	26.5
Welded B.	kg	2,1	3,8	8,1	12
PACKING		BH3	BH5	BH6	2B5
GASKET*		G1	G2	G3	G5

