



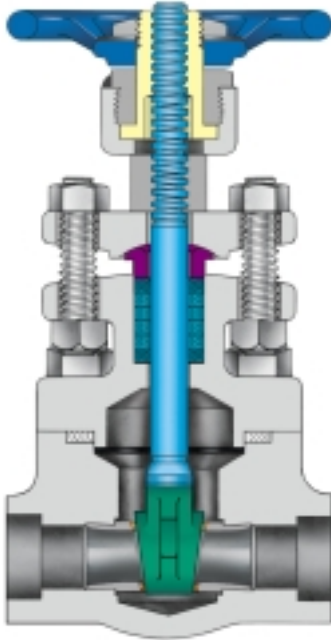
FORGED STEEL GATE VALVES, 1/4–2" (8–50 mm)

THREADED, SOCKET WELD & FLANGED

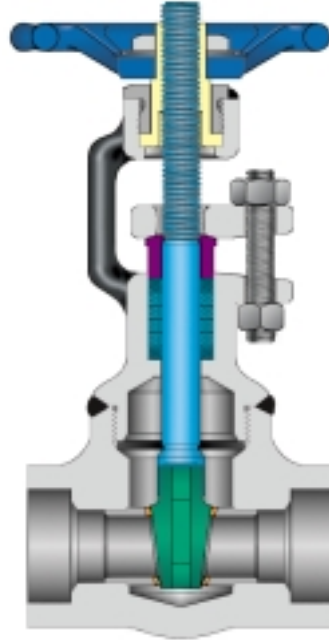
ASME CLASS 800: 1975 psi @ 100°F

ASME CLASS 1500: 3705 psi @ 100°F

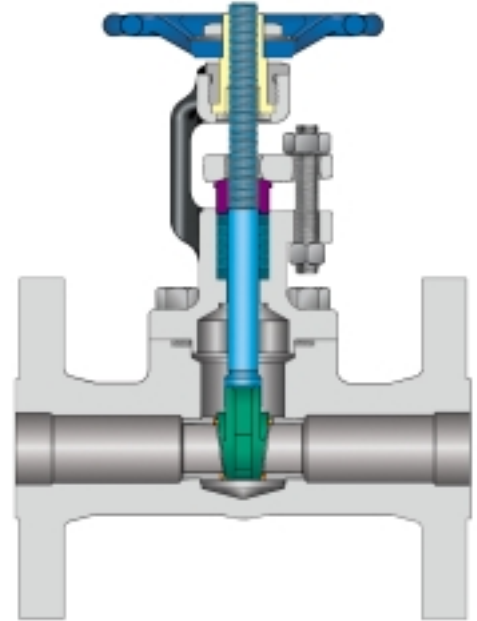
FLANGED ASME CLASSES 150, 300, 600, 1500



BOLTED BONNET
2054B–Class 800
3054B–Class 1500



WELDED BONNET
2054W–Class 800
3054W–Class 1500



FLANGED BOLTED BONNET
0054B–Class 150 2054B–Class 600
1054B–Class 300 3054B–Class 1500

DESIGN FEATURES

- A compact but extremely sturdy design for high pressure-temperature service.
- Solid Stellite 6 wedge (optional) ensures low friction and long service life.
- For Class 1500 valves and for steam service, seats are seal-welded to the body.
- Packing rings are precompressed to 4000 psi to provide a high integrity seal.
- For welded bonnet valves, the bonnet is threaded in and torqued to an engineered torque value and the body bonnet joint is strength-welded, offering double protection against leakage. (Body/bonnet threads and strength-weld).
- Fully guided wedge reduces wear on seating surfaces.
- Repairable 2-piece stem drive.

OPTIONAL FEATURES (SPECIAL APPLICATIONS)

- A special design is also available with double packing, leak-off connection, live-loading and a packing blowout for easy removal of old packing.
- Bolted Bonnet Gate Valves for Alkylation service (HF Acid service see page 19).
- Parallel Slide Gate Valves.
- API 603 1/2–1 1/2" (15–40 mm), for ASME Classes 150, 300 & 600.

PART	STANDARD MATERIALS
Body	A105N
Bonnet	A105N
Gasket	Gr. 304 (stainless & graphite)
Packing flange	A105
Seat	Gr. 410 (stainless) HF Stellite 6
Wedge	CA15 HT or Stellite 6
Stem	Gr. 410 (stainless)
Stem nut	Gr. 416 (stainless)
Yoke bushing	12L14 steel
Gland	Gr. 416 (stainless)
Packing	Graphite
Gland bolt	Gr. B6
Gland nut	Gr. 2H
Cap screw	Gr. B7
Handwheel	Malleable iron
Handwheel nut	Steel
Handwheel lockwasher	Steel
Name plate	Aluminum

For other materials, trim and engineering data, see pages 21–25.

BOLTED BONNET GATE DIMENSIONS AND WEIGHTS

FLANGED FACE-TO-FACE

Size in mm	A Port		B End to End		C Center to Top Closed		D Center to Top Open		H Handwheel		K Socket Weld Bore		L Socket Weld Depth		Weight lb kg	
	800	1500	800	1500	800	1500	800	1500	800	1500	800	1500	800	1500	800	1500
	1/4 8	0.25 6	0.25 6	2.88 73	4.00 102	4.69 119	7.13 181	5.19 132	7.75 197	2.50 64	3.50 89	0.555 14.10	0.38 9.7	3.30 1.5	11.00 5.0	
3/8 10	0.25 6	0.35 9	2.88 73	4.00 102	4.69 119	7.13 181	5.19 132	7.75 197	2.50 64	3.50 89	0.690 17.53	0.38 10	3.30 1.5	11.00 5.0		
1/2 15	0.38 10	0.50 13	2.88 73	4.00 102	4.69 119	7.13 181	5.19 132	7.75 197	2.50 64	3.50 89	0.855 21.72	0.38 10	3.30 1.5	11.00 5.0		
3/4 20	0.50 13	0.69 18	3.25 83	5.00 127	5.91 150	7.25 184	6.75 171	7.88 200	3.50 89	3.50 89	1.065 27.05	0.50 13	5.30 2.4	13.00 5.9		
1 25	0.69 18	0.96 24	3.50 89	6.00 152	6.38 162	8.70 221	7.38 188	9.63 244	3.50 89	5.00 127	1.330 33.78	0.50 13	6.40 2.9	26.00 11.8		
1 1/4 32	1.25 32	1.25 32	5.00 127	7.00 178	7.77 197	9.12 232	9.12 232	10.63 270	5.00 127	6.00 152	1.675 42.55	0.50 13	15.00 6.8	34.00 15.4		
1 1/2 40	1.25 32	1.25 32	5.00 127	7.00 178	7.77 197	9.12 232	9.12 232	10.63 270	5.00 127	6.00 152	1.915 48.64	0.50 13	15.00 6.8	34.00 15.4		
2 50	1.50 38	2.00 ⁽¹⁾ 51	5.25 133	9.00 229	8.70 221	10.56 268	10.40 264	12.30 312	6.00 152	10.00 254	2.406 61.11	0.63 16	19.00 8.6	58.00 26.3		

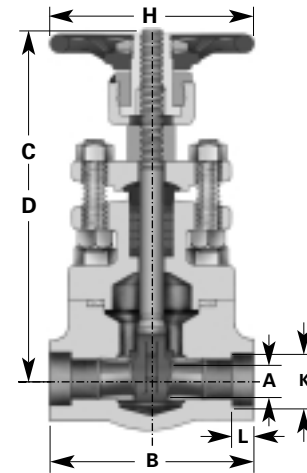
Size in mm	Flanged face-to-face					Weight lb kg
	150	300	600	1500	2500	
	1/4 8	4.00 102	5.50 139	6.50 165	8.50 216	
3/8 10	4.00 102	5.50 139	6.50 165	8.50 216	—	
1/2 15	4.25 108	5.50 139	6.50 165	8.50 216	10.38 264	
3/4 20	4.62 117	6.00 152	7.50 191	9.00 229	10.75 273	
1 25	5.00 127	6.50 165	8.50 216	10.00 254	12.12 308	
1 1/4 32	5.50 140	7.00 178	9.00 229	11.00 279	13.75 349	
1 1/2 40	6.50 165	7.50 191	9.50 241	12.00 305	15.12 384	
2 50	7.00 178	8.50 216	11.50 292	14.50 368	17.75 451	

Bolted bonnet available with live-loading, double packing and leak-off or bellows seal for emission-free service.

BOLTED BONNET GATE FULL PORT DIMENSIONS AND WEIGHTS

Size in mm	A Port		B End to End		C Center to Top Closed		D Center to Top Open		H Handwheel		K Socket Weld Bore		L Socket Weld Depth		Weight lb kg	
	800	1500	800	1500	800	1500	800	1500	800	1500	800	1500	800	1500	800	1500
	1/4 8	0.25 6	—	4.00 102	—	7.10 180	—	7.8 198	—	3.50 89	3.50 89	0.555 14.10	0.38 10	—	—	10 4.5
3/8 10	0.35 9	—	4.00 102	—	7.10 180	—	7.8 198	—	3.50 89	3.50 89	0.690 17.53	0.38 10	—	—	10 4.5	—
1/2 15	0.50 13	3.25 83	4.00 102	5.90 150	8.7 221	6.63 168	7.88 200	3.50 89	3.50 89	3.50 89	0.855 21.72	0.38 10	6.20 2.8	12.00 5.4	—	—
3/4 20	0.69 18	3.50 89	5.00 127	6.40 162	9.10 231	7.40 188	9.60 244	5.00 127	5.00 127	5.00 127	1.065 27.05	0.50 13	6.60 3.0	24.00 10.9	—	—
1 25	0.96 24	5.00 127	7.00 178	7.80 198	9.10 231	9.10 231	10.60 269	6.00 152	6.00 152	6.00 152	1.330 33.78	0.50 13	15.00 6.8	32.00 14.5	—	—
1 1/4 32	1.25 32	5.00 127	7.00 178	7.80 198	9.10 231	9.10 231	10.60 269	6.00 152	6.00 152	6.00 152	1.675 42.55	0.50 13	15.00 6.8	32.00 14.5	—	—
1 1/2 40	1.50 38	5.25 133	9.00 229	8.60 218	10.60 269	10.40 264	12.30 312	6.00 152	10.00 254	10.00 254	1.915 48.64	0.50 13	20.00 9.1	50.00 22.7	—	—
2 50	2.00 ⁽¹⁾ 51	6.00 152	9.00 229	10.90 277	11.50 292	13.12 333	13.75 349	8.00 203	10.00 254	10.00 254	2.406 61.11	0.62 16	24.00 10.9	60.00 27.2	—	—

(1) 1.89" (48 mm) Class 1500



WELDED BONNET GATE VALVE DIMENSIONS AND WEIGHTS⁽²⁾

Size in mm	A Port				B End to End				C Center to Top Closed				D Center to Top Open				H Handwheel				K Socket Weld Bore	L Socket Weld Depth	Weight lb kg			
	800	1500	2500	4500	800	1500	2500	4500	800	1500	2500	4500	800	1500	2500	4500	800	1500	2500	4500			800	1500	2500	4500
	1/4 8	0.25 6	0.25 6	—	—	2.88 73	3.50 89	—	—	4.63 117	6.40 163	—	—	5.13 130	7.10 180	—	—	2.50 64	3.50 89	—			—	0.555 14.10	0.38 10	2.50 1.1
3/8 10	0.25 6	0.25 6	—	—	2.88 73	3.50 89	—	—	4.63 117	6.40 163	—	—	5.13 130	7.10 180	—	—	2.50 64	3.50 89	—	—	0.690 17.53	0.38 10	2.50 1.1	6.50 2.9	—	—
1/2 15	0.38 10	0.35 9	0.50 13	—	2.88 73	3.50 89	5.00 127	—	4.63 117	6.40 163	9.00 229	—	5.13 130	7.10 180	9.80 249	—	2.50 64	3.50 89	6.00 152	—	0.855 21.72	0.38 10	2.50 1.1	6.50 2.9	21.00 9.5	—
3/4 20	0.50 13	0.50 13	0.50 13	0.58 15	3.25 83	3.50 89	5.00 127	7.00 178	5.90 150	6.40 163	9.00 229	11.82 300	6.63 168	7.10 180	9.80 249	12.62 321	3.50 89	3.50 89	6.00 152	8.00 203	1.065 27.05	0.50 13	4.40 2.0	6.80 3.1	20.00 9.1	62 28
1 25	0.69 18	0.69 18	0.69 18	0.69 15	3.50 89	5.00 127	5.00 127	8.00 203	6.30 160	8.10 206	9.10 231	11.82 300	7.20 182	8.90 226	10.00 254	12.62 321	3.50 89	5.00 127	6.00 152	8.00 203	1.330 33.78	0.50 13	5.30 2.4	13.00 5.9	19.00 8.6	66 30
1 1/4 32	1.25 32	1.25 32	0.96 24	0.88 22	5.00 127	5.25 133	10.00 254	11.00 279	7.77 197	9.40 239	11.30 287	16.50 419	9.12 231	10.80 274	12.50 318	17.72 450	5.00 127	6.00 152	8.00 203	12.00 305	1.675 42.55	0.50 13	11.00 5.0	20.00 9.1	68.00 30.8	127 58
1 1/2 40	1.25 32	1.25 32	0.96 24	0.88 22	5.00 127	5.25 133	10.00 254	11.00 279	7.77 197	9.40 239	11.30 287	16.50 419	9.12 231	10.80 274	12.50 318	17.72 450	5.00 127	6.00 152	8.00 203	12.00 305	1.915 48.64	0.50 13	11.00 5.0	20.00 9.1	68.00 30.8	127 58
2 50	1.50 38	1.50 38	1.50 38	1.20 31	5.25 133	5.25 133	10.00 254	11.00 279	8.50 216	12.40 315	12.40 315	17.00 432	10.40 264	14.10 358	14.15 358	18.6 472	6.00 152	10.00 254	10.00 254	12.00 305	2.406 61.11	0.62 16	16.00 7.3	50.00 22.7	77.00 34.9	151 69

(2) Full bore also available for Classes 800 & 1500