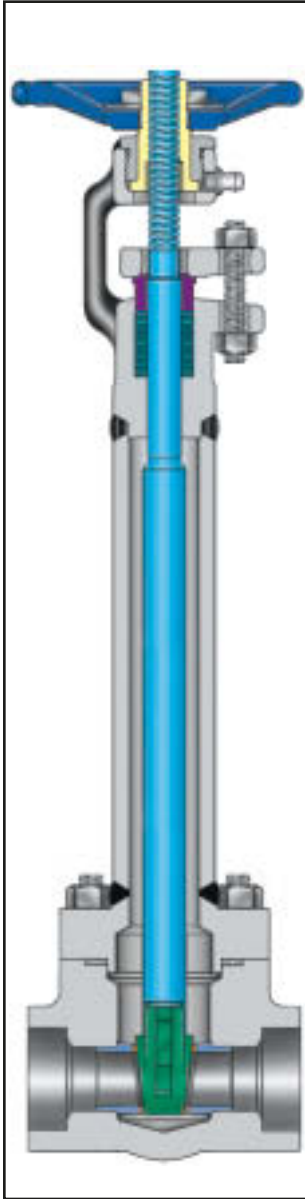




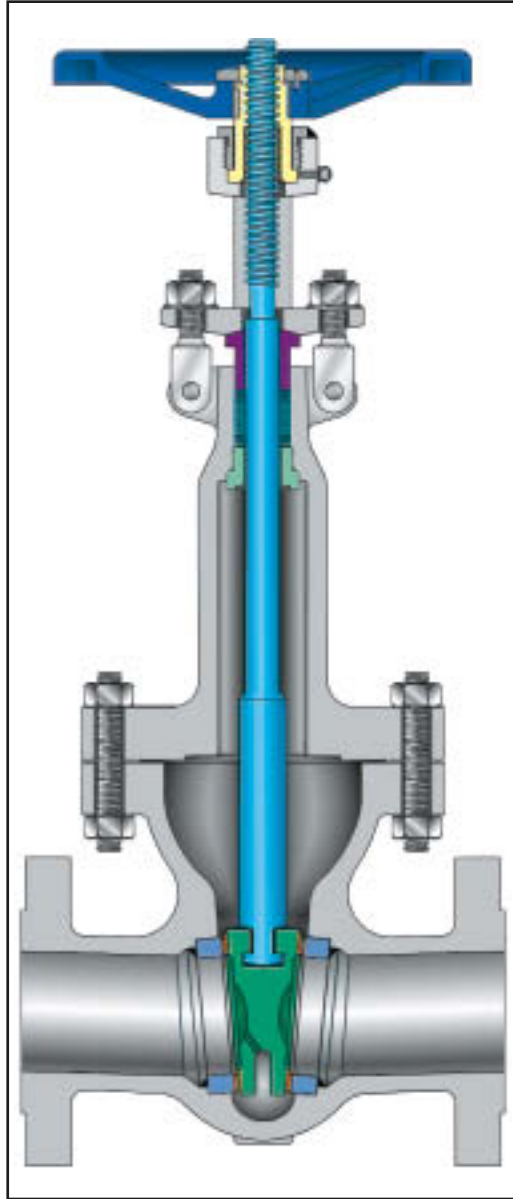
**FORGED AND CAST CRYOGENIC GATE VALVES,  
AUSTENITIC STAINLESS STEEL ½–48" (15–1200 mm)  
PRESSURE ASME CLASSES 150–2500**

SHOWN CLASS 600



**FORGED ½–2"**  
ASME Class 150–2500

SHOWN CLASS 150



**CAST 2–48"**  
ASME Class 150–600

**FORGED 2–24"**  
ASME Class 600–2500

STANDARD MATERIALS

PART	FORGED ½–2"	CAST 2–48"	
Body <sup>(1)</sup>	SS 316	CF8M	
Bonnet <sup>(1)</sup>	SS 316	CF8M	
Stem <sup>(1)(3)</sup>	SS 316 or Nimonic		
Wedge <sup>(1)</sup>	CF8M or Stellite 6		
Seat <sup>(1)(2)</sup>	Stellite 6 faced, F 316		
Packing flange	SS 316		
Gland bushing	SS 316		
Packing ring <sup>(1)</sup>	TFE, RTFE and Graphite		
Gland stud	F 316, B8M	F 316, B8M	
Gland nut	Gr. 8M		
Body/bonnet nut	Gr. 8M		
Body/bonnet stud	B8M		
Back seat <sup>(1)(3)</sup>	N/A	SS 316	
Gasket <sup>(1)</sup>	SS spiral wound/ TFE or graphite		
Key	N/A	Carbon steel	
Yoke bushing	N/A	Stainless steel	
Bearing	N/A	Steel	
Handwheel nut	Malleable iron		
Handwheel <sup>(1)</sup>	Malleable iron		
Grease fitting	N/A	Steel	
Groove pin		Stainless steel	
Bushing		Stainless steel	
Washer		Stainless steel	
Name plate		Stainless steel	
Identification tag		Stainless steel	
Rivet		Stainless steel	
Stem nut		SS or Bronze	Ni-resist type DZC

(1) Other materials available

(2) Stellite

**DESIGN PARAMETERS**

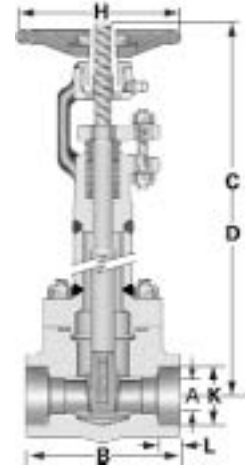
**Class 900–2500  
forged gate valves  
also available  
on request.**

ITEM	APPLICABLE SPECIFICATION
Wall thickness and general valve design	API 602 (forged), API 600 (cast)
Pressure–temperature rating	ASME B16.34
Face-to-face dimensions for butt weld and flanged valves	ASME B16.10
Flange design	ASME B16.5
Butt welding design	ASME B16.25
Materials	ASTM

**SMALL FORGED GATE DIMENSIONS\***

\* Add height of extension 12–16" to C, D.

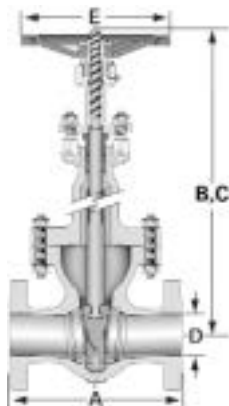
Size in mm	A Port		B End to End		C Center-Top Closed		D Center-Top Open		H Handwheel		K Socket Weld Bore	L Socket Weld Depth	Flanged Valves Face to Face			
	800	1500	800	1500	800	1500	800	1500	800	1500			150	300	600	1500
	¼ 8	0.25 6	0.25 6	2.88 73	4.00 102	4.69 119	7.10 180	5.20 132	7.80 198	2.50 64	3.50 89	0.555 14.10	0.38 10	4.00 102	5.50 139	6.50 165
⅜ 10	0.25 6	0.35 9	2.88 73	4.00 102	4.69 119	7.10 180	5.20 132	7.80 198	2.50 64	3.50 89	0.690 17.53	0.38 10	4.00 102	5.50 139	6.50 165	8.50 216
½ 15	0.38 10	0.50 13	2.88 73	4.00 102	4.69 119	7.10 180	5.20 132	7.80 198	2.50 64	3.50 89	0.855 21.72	0.38 10	4.25 107	5.50 139	6.50 165	8.50 216
¾ 20	0.50 13		3.25 83	5.00 127	5.88 150	7.25 184	6.80 173	7.90 201	3.50 89	3.50 89	1.065 27.05	0.50 13	4.62 117	6.00 152	7.50 190	9.00 229
1 25	0.69 18		3.50 89	6.00 152	6.38 162	8.70 221	7.40 188	9.60 244	3.50 89	5.00 127	1.330 33.78	0.50 13	5.00 127	6.50 165	8.50 216	10.00 254
1¼ 32	1.25 32		5.00 127	7.00 178	7.62 193	9.10 231	9.30 236	10.60 269	5.00 127	6.00 152	1.675 42.55	0.50 13	5.50 140	7.00 178	9.00 227	11.00 279
1½ 40	1.25 32		5.00 127	7.00 178	7.62 193	9.10 231	9.30 236	10.60 269	5.00 127	6.00 152	1.915 48.64	0.50 13	6.50 165	7.50 191	9.50 241	12.00 305
2 50	1.50 38		5.25 133	9.00 229	8.69 221	10.60 269	10.40 264	12.30 312	6.00 152	10.00 254	2.406 61.11	0.62 16	7.00 178	8.50 221	11.50 292	14.50 368



**CAST STEEL GATE VALVE DIMENSIONS\* (CLASSES 150–600)**

\* Add height of extension to B, C.

SIZE in mm	ASME 150 (PN 20)						ASME 300 (PN 50)					ASME 600 (PN 100)				
	A		B <sup>(1)</sup>	C <sup>(1)</sup>	D	E	A	B <sup>(1)</sup>	C <sup>(1)</sup>	D	E	A	B <sup>(1)</sup>	C <sup>(1)</sup>	D	E
	BW	FL														
2 50	8.50 216	7.00 178	15.25 387	20.06 510	2.00 51	8.00 203	8.50 216	15.25 387	20.06 510	2.00 51	8.00 203	11.50 292	15.38 391	20.06 510	2.00 51	8.00 203
2½ 65	9.50 241	7.50 191	16.62 422	20.75 527	2.50 64	8.00 203	9.50 241	16.62 422	21.81 554	2.50 64	8.00 203	13.00 330	18.75 476	24.18 614	2.50 64	10.00 254
3 80	11.12 282	8.00 203	18.88 480	24.18 614	3.00 76	10.00 254	11.12 283	20.00 508	26.18 665	3.00 76	10.00 254	14.00 356	21.62 549	27.75 705	3.00 76	10.00 254
4 100	12.00 305	9.00 229	22.13 562	28.25 718	4.00 102	10.00 254	12.00 305	23.38 594	30.37 771	4.00 102	10.00 254	17.00 432	25.87 657	32.87 835	4.00 102	14.00 356
6 150	15.88 403	10.50 267	31.00 787	37.87 962	6.00 152	14.00 356	15.87 403	32.25 819	40.25 1022	6.00 152	14.00 356	22.00 559	36.37 924	44.31 1125	6.00 152	20.00 508
8 200	16.50 419	11.50 292	37.62 956	45.75 1162	8.00 203	18.00 457	16.50 419	40.81 1037	50.00 1270	8.00 203	18.00 457	26.00 660	43.87 1114	53.12 1349	8.00 203	24.00 610
10 250	18.00 457	13.00 330	46.88 1191	56.12 1425	10.00 254	20.00 508	18.00 457	49.12 1248	59.25 1505	10.00 254	20.00 508	31.00 787	49.00 1245	59.50 1511	10.00 254	30.00 762
12 300	19.75 502	14.00 356	56.75 1441	67.75 1721	12.00 305	20.00 508	19.75 502	59.38 1508	71.00 1803	12.00 305	20.00 508	33.00 838	60.87 1546	72.50 1842	12.00 305	30.00 762
14 350	22.50 572	15.00 381	61.38 1559	75.00 1905	13.25 337	24.00 610	30.00 762	61.38 1559	70.00 1778	13.25 337	24.00 610	35.00 889	72.50 1842	85.00 2159	12.88 327	(2)
16 400	24.00 610	16.00 406	68.75 1746	85.00 2159	15.25 387	24.00 610	33.00 838	68.75 1746	80.00 2032	15.25 387	30.00 762	39.00 991	82.25 2089	95.00 2413	14.75 375	(2)
18 450	26.00 660	17.00 432	73.25 1861	90.00 2286	17.25 438	24.00 610	36.00 914	77.88 1978	94.00 2388	17.00 432	(2)	43.00 1092	87.06 2211	100.00 2540	16.50 419	(2)
20 500	28.00 711	18.00 457	82.88 2105	100.00 2540	19.25 489	30.00 762	39.00 991	86.50 2197	100.00 2540	19.00 483	(2)	47.00 1194	102.50 2604	120.00 3048	18.25 464	(2)
24 600	32.00 813	20.00 508	96.00 2438	115.00 2921	23.25 591	30.00 762	45.00 1143	101.25 2572	125.00 3175	23.00 584	(2)	55.00 1397	114.75 2915	135.00 3429	22.00 559	(2)
30 750	36.00 914	24.00 610	124.25 3156	140.00 3556	29.25 743	(2)	55.00 1397	123.81 3145	145.00 3683	29.25 743	(2)	56.00 1422	122.50 3112	150.00 3810	24.75 629	(2)
36 900	40.00 1016	28.00 711	146.68 3726	166.00 4216	35.25 895	(2)	68.00 1727	147.81 3754	170.00 4318	35.25 895	(2)	68.00 1727	145.13 3686	170.00 4318	29.00 737	(2)
42 1050	44.00 1118	31.00 787	166.50 4229	190.00 4826	40.25 1022	(2)	-	-	-	-	-	-	-	-	-	-
48 1200	-	36.00 914	189.81 4821	214.00 5436	46.00 1168	(2)	-	-	-	-	-	-	-	-	-	-



B = Center to Top Open  
C = Dismantling Height

BW = Butt weld  
FL = Flanged

(1) Height does not include actuators.

(2) Gear actuators.

**CLASSES 900-1500**

\* Add height of extension 12–18" to B, C.

SIZE in mm	ASME 900 (PN 150)					ASME 1500 (PN 250)				
	A	B <sup>(1)</sup>	C <sup>(1)</sup>	D	E	A	B <sup>(1)</sup>	C <sup>(1)</sup>	D	E
2 50	14.50 368	20.88 530	30.00 762	1.88 48	10.00 254	14.50 368	20.88 530	30.00 762	1.88 48	10.00 254
3 80	15.00 381	25.31 643	35.00 889	2.88 73	14.00 356	18.50 470	25.25 641	35.00 889	2.75 70	14.00 356
4 100	18.00 457	28.38 721	40.00 1016	3.88 99	18.00 457	21.50 546	28.38 721	40.00 1016	3.63 92	18.00 457
6 150	24.00 610	38.56 979	50.00 1270	5.75 146	20.00 508	27.75 705	38.56 979	50.00 1270	5.38 137	(2)
8 200	-	-	-	-	-	32.75 832	45.12 1046	60.00 1524	7.00 178	(2)