

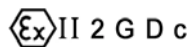


Gate Valves Type Pressure Seal Class 1500 DN 50-450 (2" – 18") Carbon, Alloy and Stainless Steel



Fig. VC1500PS

Design:
ASME B16.34

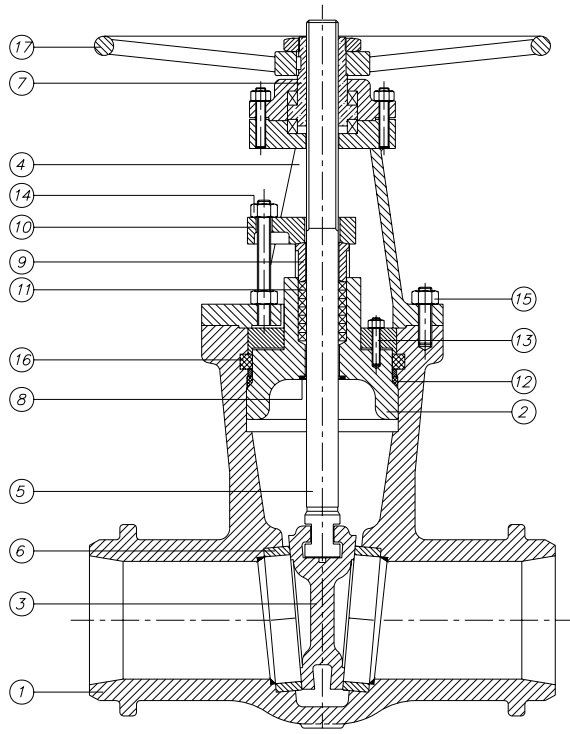




Gate Valves Class 1500

Type Pressure Seal

Parts and materials



Trim Material

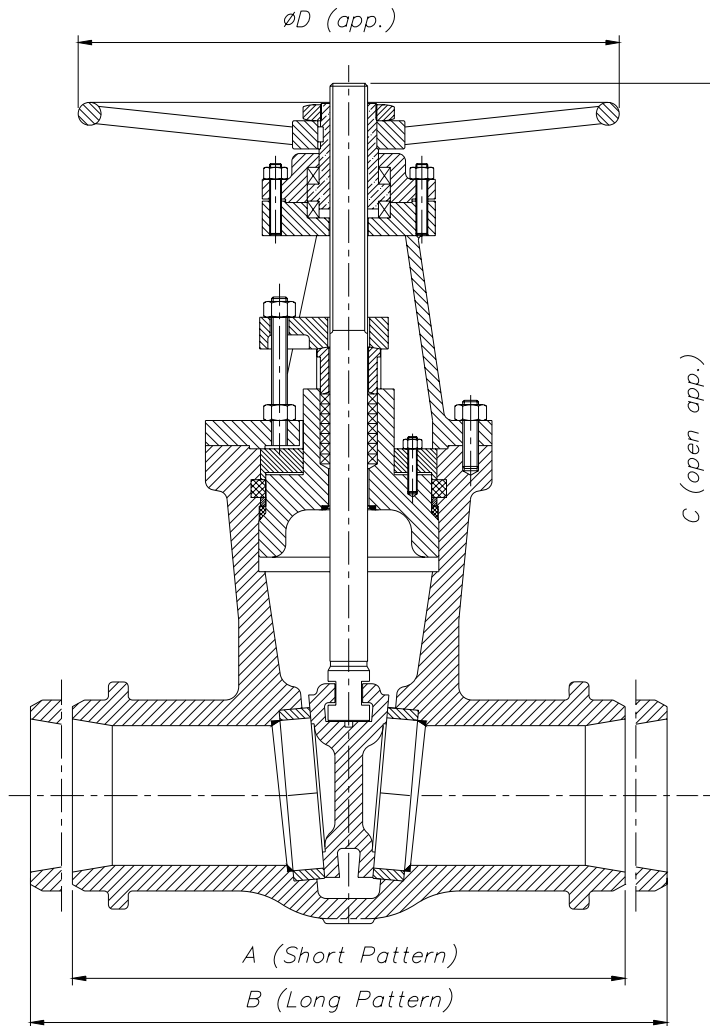
API 600 Trim No.	Stem / Backseat	Seating Surface Body / Wedge
1	13% Cr	13% Cr
2	SS 304	SS 304
3	SS310	SS310
4	13% Cr	13% Cr (Hard)
5 or 5A	13% Cr	HF
6	13% Cr	13% Cr / Cu Ni
7	13% Cr	13% Cr / 13% Cr (Hard)
8 or 8A	13% Cr	HF / 13% Cr
9	Monel	Monel
10	SS 316	SS 316
11 or 11A	Monel	HF / Monel
12 or 12A	SS 316	HF / SS 316
13	Alloy 20	Alloy 20
14 or 14A	Alloy 20	HF / Alloy 20

HF: Hard Facing using CoCr welding alloy (Stellite)

Item	Description	Material			
		Carbon Steel	Carbon Steel (Low Temp.)	Alloy Steel	Stainless Steel
1	Body	A 216 Gr.WCB	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
2	Bonnet	A 216 Gr.WCB	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
3	Wedge	A 216 Gr.WCB + Stellite	A 352 Gr.LCB + Stellite	A 217 Gr.C5 + Stellite	A 351 Gr.CF8M + Stellite
4	Yoke	A 216 Gr.WCB	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
5	Stem	A 182 Gr.F6a	A 182 Gr.F304	A 182 Gr.F6a	A 182 Gr.F316
6	Seat Ring	A 105 + Stellite	A 182 Gr.F304 + Stellite	A 182 Gr.F6a + Stellite	A 182 Gr.F316 + Stellite
7	Stem Nut	B 148 / A 439 Gr.D2	B 148 / A 439 Gr.D2	B 148 / A 439 Gr.D2	B 148 / A 439 Gr.D2
8	Backseat	Stellite	Stellite	Stellite	Stellite
9	Gland	A 105	A 105	A 182 Gr.F6a	A 182 Gr.F316
10	Gland Flange	A 105	A 105	A 105	A 182 Gr.F304
11	Stem Packing	Graphited	Graphited	Graphited	Graphited
12	Gasket	A 182 Gr.F304	A 182 Gr.F304	A 182 Gr.F304	A 182 Gr.F316
13	Bonnet Bolt & Nut	A 193 Gr.B7 / A 194 Gr.2H	A320 Gr. L7 / A194 Gr. 7	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H
14	Bolt & Nut	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H
15	Yoke Bolt & Nut	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H
16	Segmental Ring	A 515 Gr.70	A 182 Gr.F304	A 182 Gr.F304	A 182 Gr.F316
17	Handwheel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel



Gate Valves Class 1500 Type Pressure Seal Dimensions



DN	A	B	C	$\varnothing D$	WEIGHT
50 (2")	216	368	545	250	55
65 (2½")	254	419	590	350	72
80 (3")	305	470	625	350	85
100 (4")	406	546	900	400	160
125 (5")	483	673	995	500	310
150 (6")	559	705	1085	600	440
200 (8")	711	832	1290	680	760
250 (10")	863	991	1420	910	1050
300 (12")	991	1130	1580	965	1350
350 (14")	1067	1257	2100	1015	1890
400 (16")	1194	1384	2457	1065	2830
450 (18")	1346	1537	2910	1065	3910

(*) Dimensions in mm and weight in kg.



Gate Valves Class 1500

Type Pressure Seal

General Characteristics, Cv, P&T Rating

GENERAL CHARACTERISTICS		Fig. VC1500PS			
DESIGN STANDARDS					
Valves design	ASME B16.34				
End to End Dimensions	ASME B16.10 & ISO 5752				
Flanged Dimensions	ASME B16.5 & ISO 7005-1 Part. 1	ASME B16.47	BS 3293	MSS SP-44	
Buttweld Dimensions	ASME B16.25				
Visual Inspection	MSS SP- 55				
Marking	MSS SP-25 & ISO 5209				
TESTS AND CERTIFICATES					
Pressure testing	API 598 & ISO 5208	BS 6755 Part. 1	MSS SP-61		
Other	ATEX, CE				

Cv Values in U.S. Gallons/min.

DN	Cv	DN	Cv
50 (2")	225	200 (8")	3000
65 (2½")	350	250 (10")	4750
80 (3")	480	300 (12")	6500
100 (4")	750	350 (14")	8500
125 (5")	1250	400 (16")	10200
150 (6")	1700	450 (18")	13500

Pressure-Temperature (STANDARD CLASS According to ASME B16.34)

Temp °C	MATERIAL			
	A216 WCB Bar	A352 LCB Bar	A217 C5 Bar	A351 CF8M (**) Bar
-29 to 38	255,3	239,1	258,4	248,0
95	232,5	226,0	256,7	213,2
150	226,0	219,8	246,7	192,6
205	218,4	212,6	243,2	177,1
260	206,4	200,5	229,1	164,7
315	188,4	183,6	208,4	155,4
345	185,0	180,2	202,6	153,0
375	183,6		195,7	149,5
400	173,6		181,9	147,1
425	141,9		175,0	145,4
450	92,3		166,4	144,0
485	59,3		127,5	143,0
510	35,5		94,4	133,0
540	17,9		68,6	120,6
565			49,6 *	118,5 *
595			34,1 *	105,1 *
620			21,4 *	81,6 *
650			11,7 *	63,7 *
675				50,6 *
705				40,3 *
735				33,1 *
760				26,2 *
790				20,0 *
815				14,1 *

* FOR WELD END VALVES ONLY. FLANGED END RATINGS TERMINATE AT 540°C

** A351 CF8M at temperatures over 538°C (1000°F) to be used only if Carbon contents is 0,04% or higher.