



Gate Valves Type Pressure Seal
Class 2500 DN 50-300 (2" – 12")
 Carbon, Alloy and Stainless Steel



Fig. VC2500PS

Design:
API 600 & ISO 10434
ASME B16.34 and BS 1414

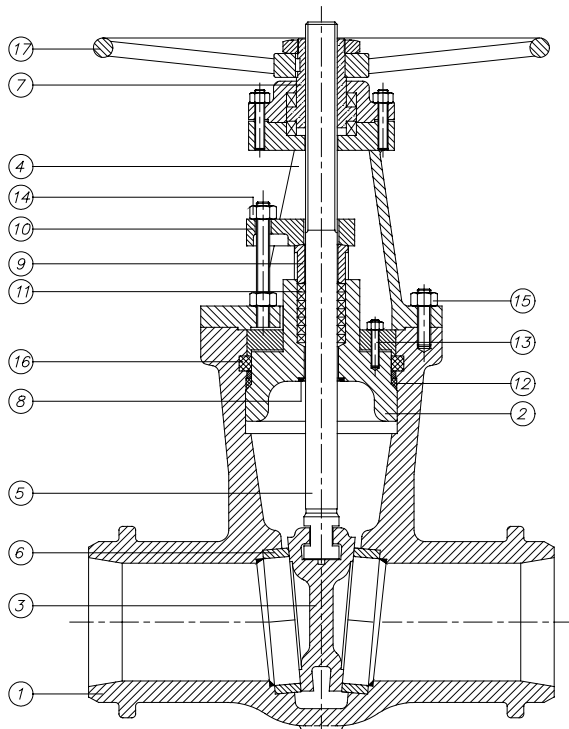




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Type Pressure Seal

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

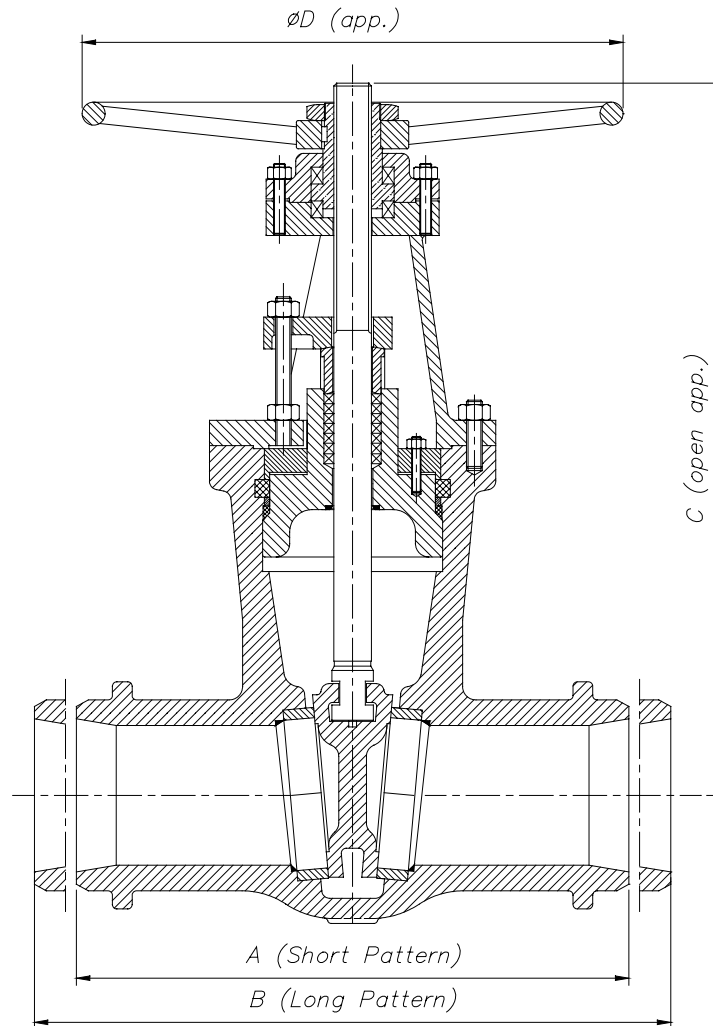
HF: Hard Facing using Co Cr welding alloy (Stellite)

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	Gate	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 Flanged	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	A 193 Gr.B7 / A 194 Gr.2H	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	Handw heel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel

Item 6 and 8 only in Carbon Steel and Alloy Steel construction



Gate Valves Class 2500 Type Pressure Seal Dimensions



DN	A	B	C	ØD	WEIGHT
50 (2")	279	451	590	250	85
65 (2½")	330	508	710	350	105
80 (3")	368	578	800	350	120
100 (4")	457	673	865	400	190
125 (5")	533	794	960	500	365
150 (6")	610	914	950	600	520
200 (8")	762	1022	1050	680	980
250 (10")	914	1270	1345	910	1600
300 (12")	1041	1422	1655	1065	2305

(*) Dimensions in mm and weight in kg.



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General Characteristics, Cv, P&T Rating

GENERAL CHARACTERISTICS		Fig. VC2500PS		
DESIGN STANDARDS				
Valves design	API 600 & ISO 10434	ASME B16.34	BS 1414	
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	

Cv Values in U.S. Gallons/min.

DN	Cv	DN	Cv
50 (2")	170	150 (6")	1550
65 (2½")	290	200 (8")	2400
80 (3")	400	250 (10")	4000
100 (4")	570	300 (12")	5900
125 (5")	1070		

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	425,1	398,6	430,6	413,4
95	387,6	376,9	427,5	355,5
150	376,9	366,2	411,0	321,1
205	363,8	354,5	405,1	294,9
260	343,8	334,2	381,7	274,2
315	314,2	305,9	347,3	259,1
345	308,3	300,1	338,0	254,9
375	305,9		325,9	249,4
400	289,4		303,2	245,3
425	236,3		291,4	242,5
450	153,6		277,7	239,8
485	98,5		212,6	238,4
510	59,3		157,4	221,9
540	29,6		114,0	200,8
565			82,7 *	197,4 *
595			57,2 *	175,4 *
620			35,5 *	135,7 *
650			19,6 *	106,5 *
675				84,7 *
705				66,8 *
735				55,1 *
760				43,4 *
790				33,4 *
815				23,8 *

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