JC® Gate Valves Type Pressure Seal Class 900 DN 50-500 (2” – 20”)

Carbon, Alloy and Stainless Steel

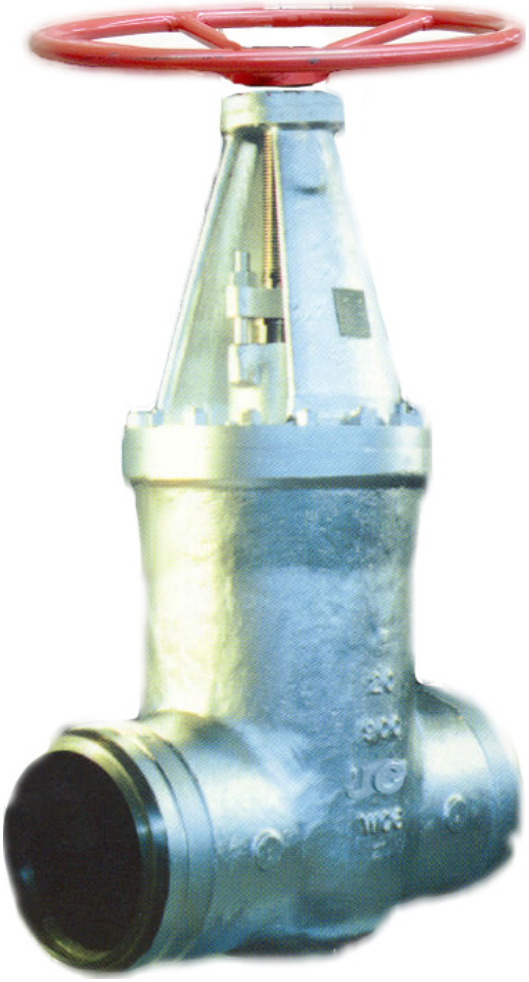

Fig. VC900PS

Design:

ASME B16.34

Certificado ISO 14001 por BVQI

CE

Ex II 2 G D c

Certificado ISO 9001 por BVQI

JC Fábrica de válvulas, s.a.
E-Mail: jc@jc-valves.com
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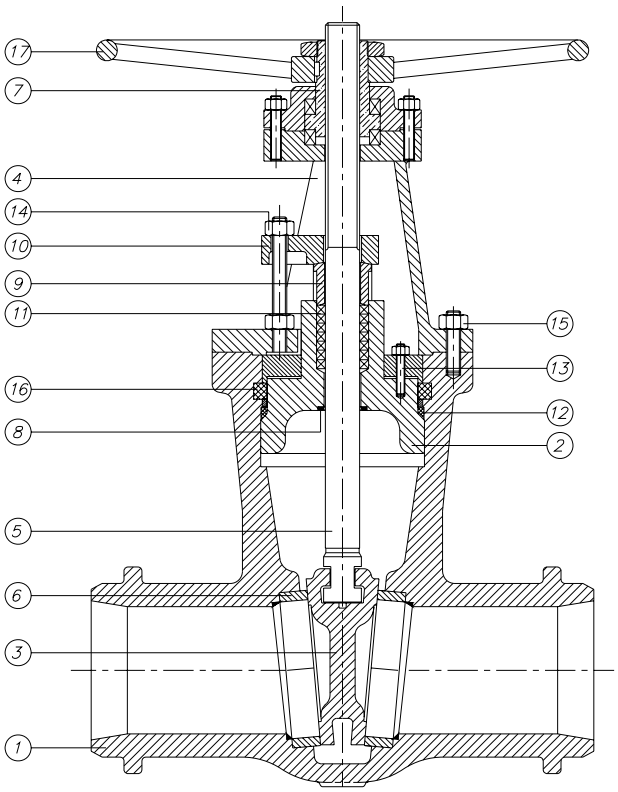
SERIES VC

Gate Valves Class 900
Type Pressure Seal
Parts and materials



Trim Material

API 600 Trim No.	Nominal Trim	Stem / Backseat (1)	Seating Surface Body / Wedge
1	F6	13Cr	13Cr
2	304	18Cr-8Ni	18Cr-8Ni
3	F310	25Cr-20Ni	25Cr-20Ni
4	Hard F6	13Cr	Hard 13Cr
5	Hardfaced	13Cr	Co-Cr A (2)
5A	Hardfaced	13Cr	Ni-Cr
6	F6 and Cu-Ni	13Cr	13Cr and Cu-Ni
7	F6 and Hard F6	13Cr	13Cr and Hard 13Cr
8	F6 and Hardfaced	13Cr	13Cr and Co-Cr A (2)
8A	F6 and Hardfaced	13Cr	13Cr and Ni-Cr
9	Monel	Ni-Cu Alloy	Ni-Cu Alloy
10	316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	Monel and Hardfaced	Ni-Cu Alloy	Ni-Cu Alloy and Trim 5 or 5A
12	316 and Hardfaced	18Cr-8Ni-Mo	18Cr-8Ni-Mo and Trim 5 or 5A
13	Alloy 20	19Cr-29Ni	19Cr-29Ni
14	Alloy 20 and Hardfaced	19Cr-29Ni	19Cr-29Ni and Trim 5 or 5A
15	Hardfaced	18Cr-8Ni	Co-Cr A (2)
16	Hardfaced	18Cr-8Ni-Mo	Co-Cr A (2)
17	Hardfaced	18Cr-10Ni-Cb	Co-Cr A (2)
18	Hardfaced	19Cr-29Ni	Co-Cr A (2)

(1) „and small internal parts that normally contact the service fluid

(2) Trademark material Stellite 6

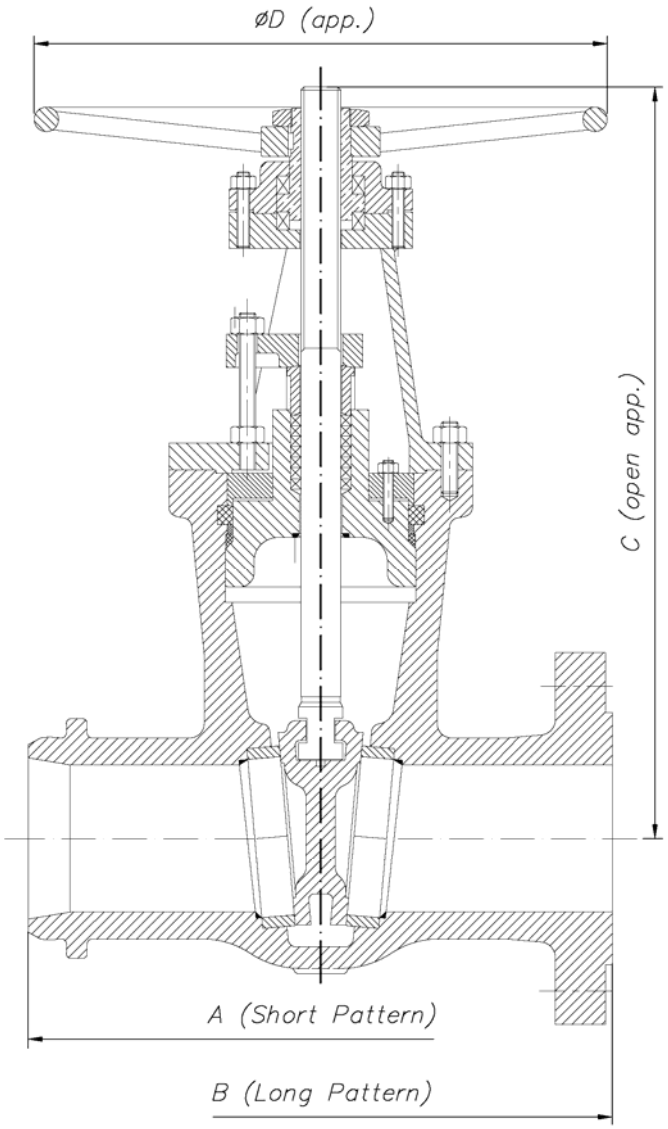
Item	Description	Material of construction*			
		Carbon Steel	Carbon Steel (Low Temp.)	Alloy Steel	Stainless Steel
1	Body	A 216 Gr.WCB	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
2	Bonnet	A 216 Gr.WCB	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
3	Wedge	A 216 Gr.WCB + Stellite	A 352 Gr.LCB + Stellite	A 217 Gr.C5 + 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	Graphite	Graphite	Graphite	Graphite
12	Gasket	Graphite	Graphite	Graphite	Graphite
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(3)
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

(3) Zinc coating

** Standard constructions with Trim 5, other options are available*

SERIES VC

® Gate Valves Class 900
Type Pressure Seal
Dimensions



DN	A	B	C	ØD	WEIGHT
50 (2”)	216	368	570	250	55
65 (2½")	254	419	680	250	65
80 (3”)	305	381	795	350	80
100 (4”)	356	457	870	350	215
125 (5")	432	559	975	400	275
150 (6”)	508	610	1070	460	320
200 (8”)	660	737	1360	400	580
250 (10”)	787	838	1505	400	890
300 (12”)	914	965	1630	460	1105
350 (14")	991	1029	1795	500	1370
400 (16")	1092	1130	1945	610	2050
450 (18")	-	1219	2155	610	2780
500 (20")	-	1321	2305	710	3420

(*) Dimensions in mm and weight in kg
For other sizes consult to the technical department.

SERIES VC

® Gate Valves Class 900
Type Pressure Seal
General Characteristics, Cv, P&T Rating

GENERAL CHARACTERISTICS	Fig. VC900PS			
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	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	EN 12266-1	MSS SP-61	
Other	ATEX, CE			

Cv Values in U.S. Gallons/min.

DN	Cv	DN	Cv
50 (2”)	225	250 (10”)	5450
65 (2½")	350	300 (12”)	7450
80 (3”)	480	350 (14")	9500
100 (4”)	750	400 (16")	11900
125 (5")	1300	450 (18")	14500
150 (6”)	1850	500 (20")	18500
200 (8”)	4300		

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

Temp	MATERIAL			
	A216 WCB	A352 LCB	A217 C5	A351 CF8M (**)
ºC	Bar	Bar	Bar	Bar
-29 to 38	153,0	143,7	155,0	148,8
95	139,5	135,7	154,0	128,2
150	135,7	131,9	148,1	115,8
205	130,9	127,5	145,7	106,1
260	123,7	120,2	137,5	98,9
315	113,0	110,2	125,1	93,4
345	110,9	108,2	121,6	91,6
375	110,2		117,5	89,9
400	104,0		109,2	88,2
425	85,1		105,1	87,2
450	55,5		99,9	86,5
485	35,5		76,5	85,8
510	21,4		56,8	79,9
540	10,7		41,0	72,3
565			29,6 *	71,0 *
595			20,7 *	63,0 *
620			12,7 *	48,9 *
650			7,2 *	38,2 *
675				30,3 *
705				24,1 *
735				20,0 *
760				15,5 *
790				12,1 *
815				8,6 *

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

*** A351 CF8M at temparetures over 538ºC (1000ºF) to be used only if Carbon contents is 0,04% or higher.*

SERIES VC

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

Fig. VC1500PS

Design:
ASME B16.34

Certificado ISO 14001 por BVQI

CE

II 2 G D c

Certificado ISO 9001 por BVQI

JC Fábrica de válvulas, s.a.
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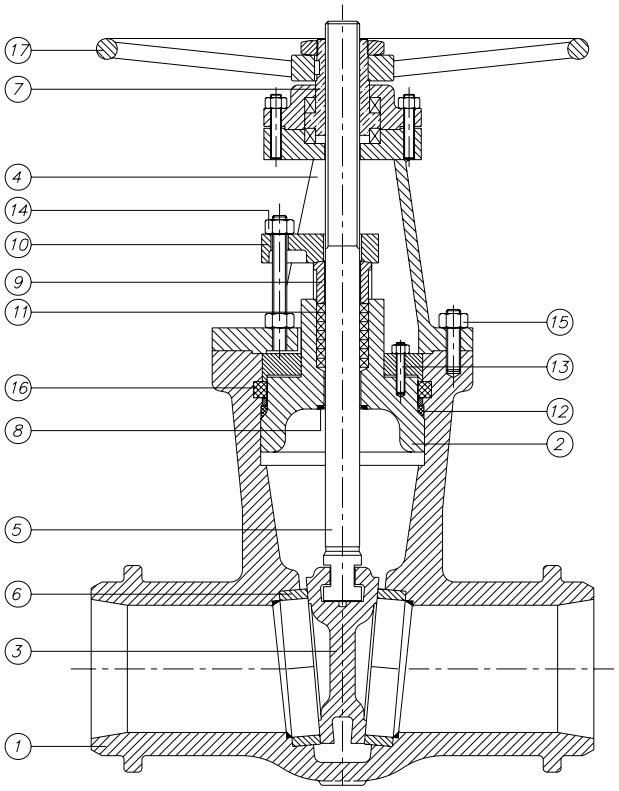
Internet: www.jc-valves.com

SERIES VC

Gate Valves Class 1500
Type Pressure Seal
Parts and materials



Trim Material

API 600 Trim No.	Nominal Trim	Stem / Backseat (1)	Seating Surface Body / Wedge
1	F6	13Cr	13Cr
2	304	18Cr-8Ni	18Cr-8Ni
3	F310	25Cr-20Ni	25Cr-20Ni
4	Hard F6	13Cr	Hard 13Cr
5	Hardfaced	13Cr	Co-Cr A (2)
5A	Hardfaced	13Cr	Ni-Cr
6	F6 and Cu-Ni	13Cr	13Cr and Cu-Ni
7	F6 and Hard F6	13Cr	13Cr and Hard 13Cr
8	F6 and Hardfaced	13Cr	13Cr and Co-Cr A (2)
8A	F6 and Hardfaced	13Cr	13Cr and Ni-Cr
9	Monel	Ni-Cu Alloy	Ni-Cu Alloy
10	316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	Monel and Hardfaced	Ni-Cu Alloy	Ni-Cu Alloy and Trim 5 or 5A
12	316 and Hardfaced	18Cr-8Ni-Mo	18Cr-8Ni-Mo and Trim 5 or 5A
13	Alloy 20	19Cr-29Ni	19Cr-29Ni
14	Alloy 20 and Hardfaced	19Cr-29Ni	19Cr-29Ni and Trim 5 or 5A
15	Hardfaced	18Cr-8Ni	Co-Cr A (2)
16	Hardfaced	18Cr-8Ni-Mo	Co-Cr A (2)
17	Hardfaced	18Cr-10Ni-Cb	Co-Cr A (2)
18	Hardfaced	19Cr-29Ni	Co-Cr A (2)

(1) „„and small internal parts that normally contact the service fluid

(2) Trademark material Stellite 6

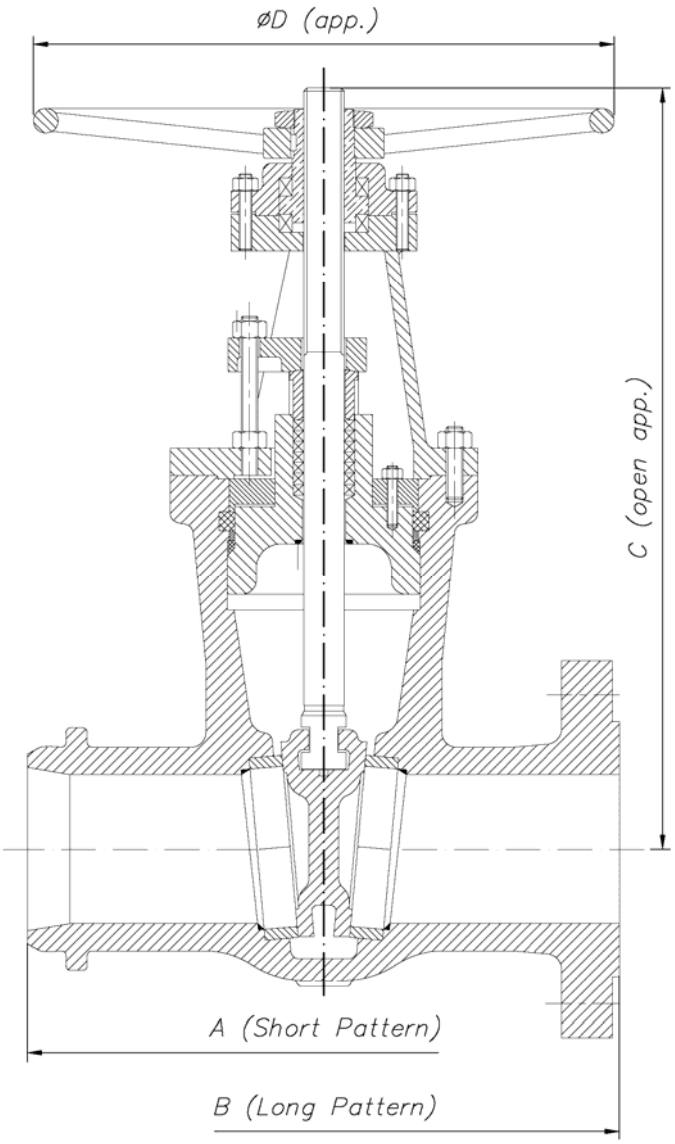
Item	Description	Material of construction*			
		Carbon Steel	Carbon Steel (Low Temp.)	Alloy Steel	Stainless Steel
1	Body	A 216 Gr.WCB	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
2	Bonnet	A 216 Gr.WCB	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
3	Wedge	A 216 Gr.WCB + Stellite	A 352 Gr.LCB + Stellite	A 217 Gr.C5 + 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	Graphite	Graphite	Graphite	Graphite
12	Gasket	Graphite	Graphite	Graphite	Graphite
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(3)
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

(3) Zinc coating

** Standard constructions with Trim 5, other options are available*

SERIES VC

® Gate Valves Class 1500
Type Pressure Seal
Dimensions



DN	A	B	C	ØD	WEIGHT
50 (2”)	216	368	574	250	67
65 (2½")	254	419	700	350	95
80 (3”)	305	470	806	350	119
100 (4”)	406	546	887	400	280
125 (5")	483	673	990	460	370
150 (6”)	559	705	1079	460	475
200 (8”)	711	832	1370	710	855
250 (10”)	863	991	1520	710	1222
300 (12”)	991	1130	1650	710	1470
350 (14")	1067	1257	1820	710	1990
400 (16")	1194	1384	1990	760	2850
450 (18")	1346	1537	2180	760	3905

(*) Dimensions in mm and weight in kg
For other sizes consult to the technical department.

SERIES VC

® 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	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	EN 12266-1	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	MATERIAL			
	A216 WCB	A352 LCB	A217 C5	A351 CF8M (**)
ºC	Bar	Bar	Bar	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 540ºC*

*** A351 CF8M at temparetures over 538ºC (1000ºF) to be used only if Carbon contents is 0,04% or higher.*

SERIES VC

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

Fig. VC2500PS

Design:
ASME B16.34

Certificado ISO 14001 por BVQI

CE

Ex II 2 G D c

Certificado ISO 9001 por BVQI

JC Fábrica de válvulas, s.a.
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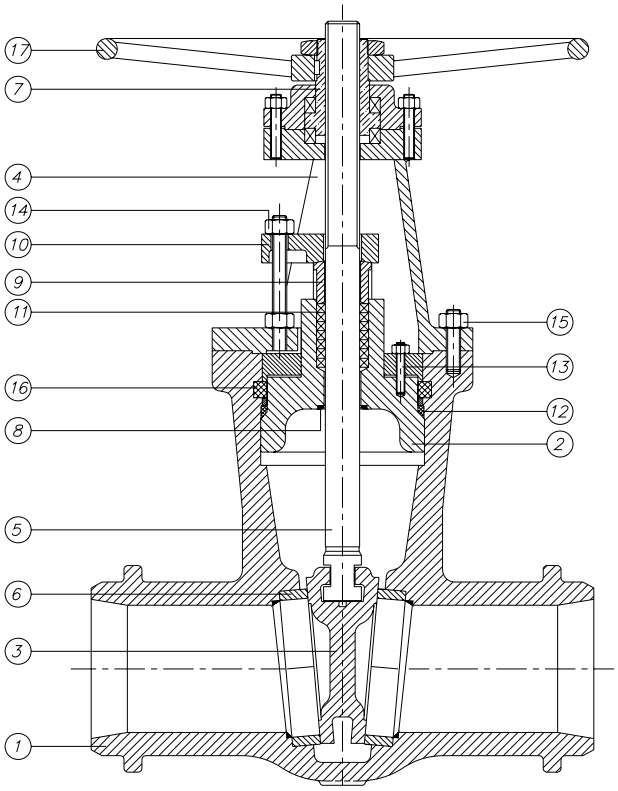
Internet: www.jc-valves.com

SERIES VC

Gate Valves Class 2500
Type Pressure Seal
Parts and materials



Trim Material

API 600 Trim No.	Nominal Trim	Stem / Backseat (1)	Seating Surface Body / Wedge
1	F6	13Cr	13Cr
2	304	18Cr-8Ni	18Cr-8Ni
3	F310	25Cr-20Ni	25Cr-20Ni
4	Hard F6	13Cr	Hard 13Cr
5	Hardfaced	13Cr	Co-Cr A (2)
5A	Hardfaced	13Cr	Ni-Cr
6	F6 and Cu-Ni	13Cr	13Cr and Cu-Ni
7	F6 and Hard F6	13Cr	13Cr and Hard 13Cr
8	F6 and Hardfaced	13Cr	13Cr and Co-Cr A (2)
8A	F6 and Hardfaced	13Cr	13Cr and Ni-Cr
9	Monel	Ni-Cu Alloy	Ni-Cu Alloy
10	316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	Monel and Hardfaced	Ni-Cu Alloy	Ni-Cu Alloy and Trim 5 or 5A
12	316 and Hardfaced	18Cr-8Ni-Mo	18Cr-8Ni-Mo and Trim 5 or 5A
13	Alloy 20	19Cr-29Ni	19Cr-29Ni
14	Alloy 20 and Hardfaced	19Cr-29Ni	19Cr-29Ni and Trim 5 or 5A
15	Hardfaced	18Cr-8Ni	Co-Cr A (2)
16	Hardfaced	18Cr-8Ni-Mo	Co-Cr A (2)
17	Hardfaced	18Cr-10Ni-Cb	Co-Cr A (2)
18	Hardfaced	19Cr-29Ni	Co-Cr A (2)

(1) „„and small internal parts that normally contact the service fluid

(2) Trademark material Stellite 6

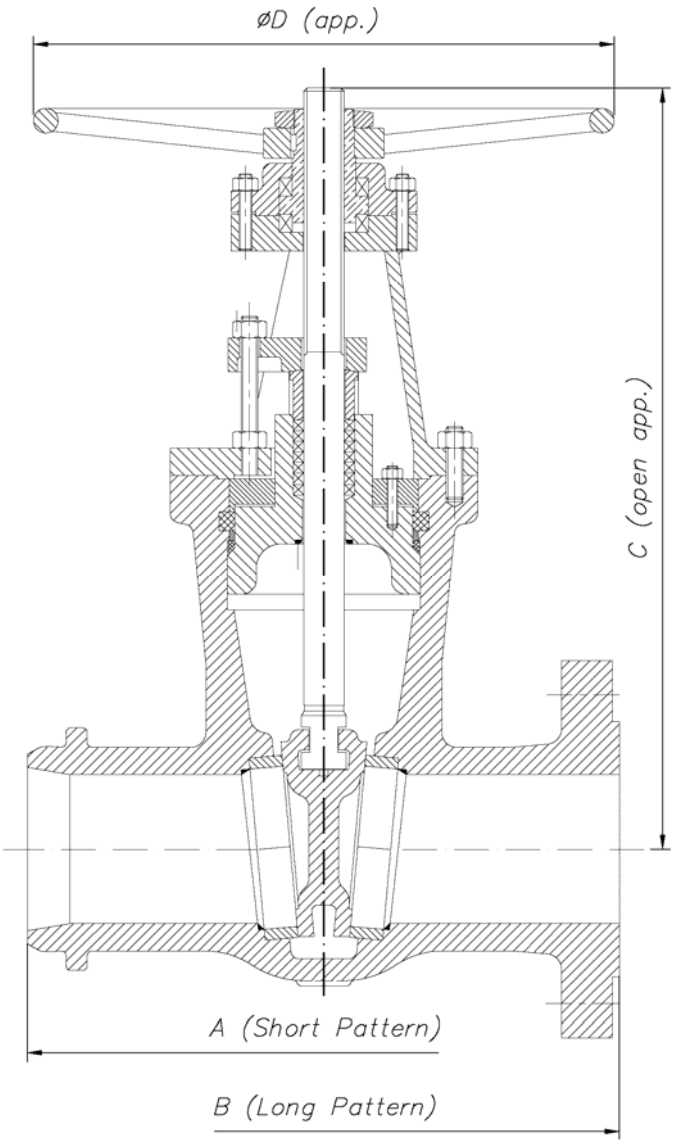
Item	Description	Material of construction*			
		Carbon Steel	Carbon Steel (Low Temp.)	Alloy Steel	Stainless Steel
1	Body	A 216 Gr.WCB	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
2	Bonnet	A 216 Gr.WCB	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
3	Wedge	A 216 Gr.WCB + Stellite	A 352 Gr.LCB + Stellite	A 217 Gr.C5 + 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	Graphite	Graphite	Graphite	Graphite
12	Gasket	Graphite	Graphite	Graphite	Graphite
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(3)
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

(3) Zinc coating

** Standard constructions with Trim 5, other options are available*

SERIES VC

Gate Valves Class 2500
Type Pressure Seal
Dimensions



DN	A	B	C	ØD	WEIGHT
50 (2”)	279	451	585	250	90
65 (2½")	330	508	710	350	120
80 (3”)	368	578	820	350	155
100 (4”)	457	673	895	400	315
125 (5")	533	794	980	500	395
150 (6”)	610	914	1060	500	525
200 (8”)	762	1022	1310	710	980
250 (10”)	914	1270	1480	710	1315
300 (12”)	1041	1422	1520	760	1850

(*) Dimensions in mm and weight in kg
For other sizes consult to the technical department.

SERIES VC

Gate Valves Class 2500
Type Pressure Seal
General Characteristics, Cv, P&T Rating

GENERAL CHARACTERISTICS	Fig. VC2500PS			
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	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	EN 12266-1	MSS SP-61	
Other	ATEX, CE			

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	MATERIAL			
	A216 WCB	A352 LCB	A217 C5	A351 CF8M (**)
ºC	Bar	Bar	Bar	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 540ºC*

*** A351 CF8M at temparetures over 538ºC (1000ºF) to be used only if Carbon contents is 0,04% or higher.*

SERIES VC