Gate Valves Type Bolted Bonnet
Class 150 DN 50-900 (2” – 36”)
Carbon, Alloy and Stainless Steel

Index

Fig. VC150BB

Design:
API 600, API 603,
ASME B16.34 and BS 1414

Certificado ISO 14001 por BVQI

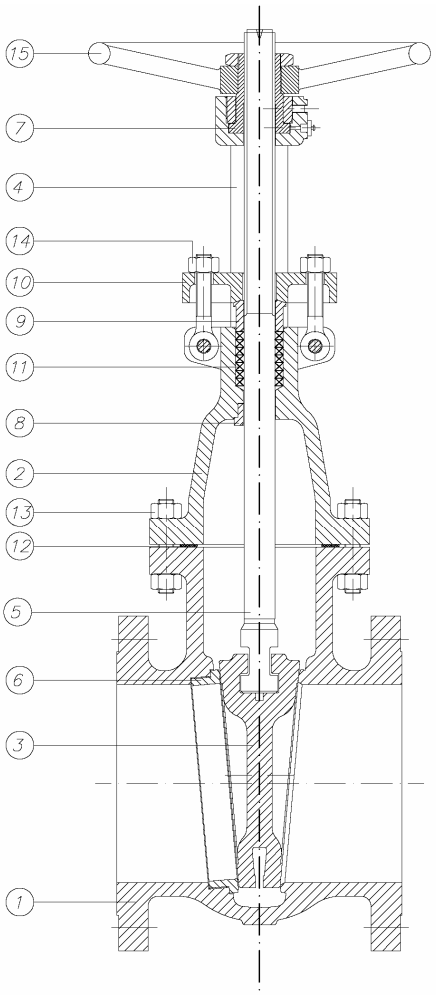
IPQ 600-0016

CE

Ex II 2 G D c

Certificado ISO 9001 por BVQI

Gate Valves Class 150
Type Bolted Bonnet
Parts and materials



Carbon & Alloy Steel Construction ◄► ***Stainless Steel Construction***

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

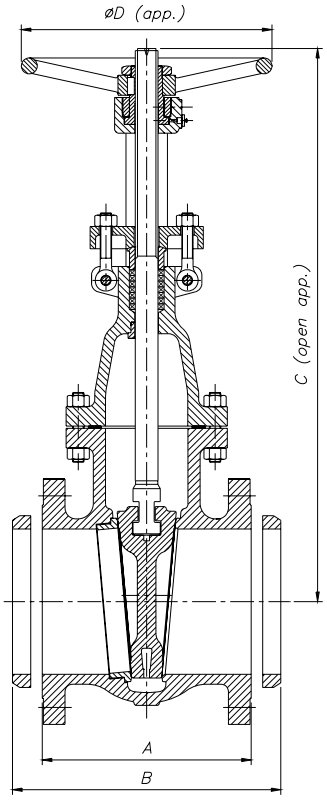
(2) Trademark material Stellite 6

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 + ER410	A 352 Gr.LCB + ER308	A 217 Gr.C5 + ER410	A 351 Gr.CF8M
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	A 182 Gr.F6a + 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	A182 Gr.F6a	A182 Gr.F304	A 182 Gr.F6a	-----
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	SS 304 / Graphite	SS 304 / Graphite	SS 304 / Graphite	SS 316 / 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	Eye 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	Handw heel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel

(3) Zinc coating

** Standard constructions with Trim 8, 2 and 10, other options are available*

Gate Valves Class 150
Type Bolted Bonnet
Dimensions



DN	A	B	C	ØD	WEIGHT
50 (2”)	178	216	386	200	17
65 (2½")	190	241	435	200	27
80 (3”)	203	282,5	483	250	33
100 (4”)	229	305	587	250	48
125 (5")	254	381	673	300	65
150 (6”)	267	403	767	300	78
200 (8”)	292	419	955	350	120
250 (10”)	330	457	1146	450	176
300 (12”)	356	502	1328	500	260
350 (14")	381	572	1519	460	380
400 (16")	406	610	1721	460	530
450 (18")	432	660	1900	460	620
500 (20")	457	711	2116	610	810
550 (22")	483	762	2315	610	1050
600 (24")	508	813	2480	610	1150
650 (26")	559	--	2700	610	1380
700 (28")	610	--	2975	610	1980
750 (30")	610	--	3102	610	2200
900 (36")	711	--	3668	710	2800

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

Data given can be changed without notice.

Gate Valves Class 150
Type Bolted Bonnet
General Characteristics, Cv, P&T Rating

GENERAL CHARACTERISTICS	Fig. VC150BB			
DESIGN STANDARDS				
Valves design	API 600, API 603, ASME B16.34 & EN ISO 10434			
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	EN 12266-1	MSS SP-61	
Other	ATEX, CE			

Cv Values in U.S. Gallons/min.

DN	Cv	DN	Cv
50 (2”)	250	400 (16")	20300
65 (2½")	450	450 (18")	26100
80 (3”)	620	500 (20")	33500
100 (4”)	1160	550 (22")	42000
125 (5")	1900	600 (24")	50000
150 (6”)	2700	650 (26")	59500
200 (8”)	5100	700 (28")	69200
250 (10”)	8050	750 (30")	79000
300 (12”)	12050	900 (36")	115500
350 (14")	15100		

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	19,6	18,3	20,0	18,9
95	17,9	17,2	17,9	16,2
150	15,8	15,8	15,8	14,8
205	13,8	13,8	13,8	13,4
260	11,7	11,7	11,7	11,7
315	9,6	9,6	9,6	9,6
345	8,6	8,6	8,6	8,6
375	7,6		7,6	7,6
400	6,5		6,5	6,5
425	5,5		5,5	5,5
450	4,5		4,5	4,5
485	3,4		3,4	3,4
510	2,4		2,4	2,4
540	1,4		1,4	1,4
565			1,4 *	1,4 *
595			1,4 *	1,4 *
620			1,4 *	1,4 *
650			1,4 *	1,4 *
675				1,4 *
705				1,4 *
735				1,4 *
760				1,4 *
790				1,4 *
815				1,4 *

** 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.*

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