



Globe Valves Type Bolted Bonnet
Class 300 DN 50-300 (2" – 12")
Carbon, Alloy and Stainless Steel



Fig. VG300BB

Design:
BS 1873 and ASME B16.34

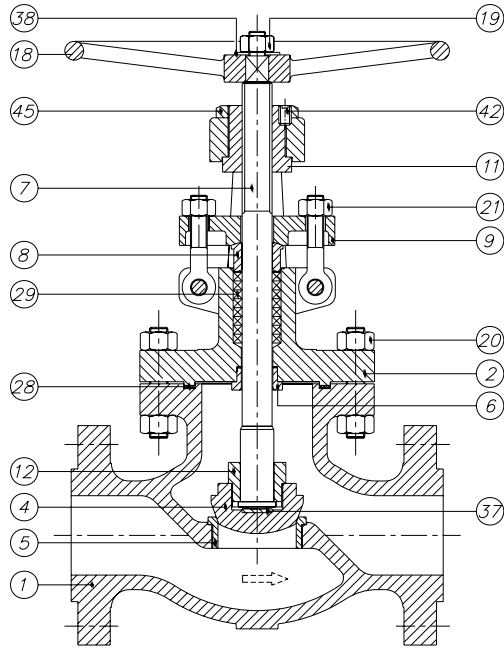




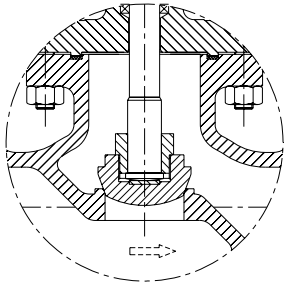
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Parts and materials



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
4	Disc	A 105 + ER 410	A 182 Gr.F304	A 217 Gr.C5 + ER 410	A 351 Gr.CF8M
5	Seat Ring	A 105 + Stellite	A 182 Gr.F304	A 182 Gr.F6a + Stellite	-----
6	Backseat	A 182 Gr.F6a	A 182 Gr.F304	A 182 Gr.F6a	-----
7	Stem	A 182 Gr.F6a	A 182 Gr.F304	A 182 Gr.F6a	A 182 Gr.F316
8	Gland	A 105	A 105	A 182 Gr. F6a	A 182 Gr.F316
9	Gland Flange	A 105	A 105	A 105	A 182 Gr.F304
11	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
12	Disc Nut	A 182 Gr.F6a	A 182 Gr.F304	A 182 Gr.F6a	A 182 Gr.F316
18	Handw heel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
19	Handw heel Nut	Steel	Steel	Steel	Steel
20	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)
21	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
28	Gasket	SPW S.S. 304 / Graphite	SPW S.S. 304 / Graphite	SPW S.S. 304 / Graphite	SPW S.S. 316 / Graphite
29	Stem Packing	Graphite	Graphite	Graphite	Graphite
37	Thrust Washer	A 182 Gr.F6a	A 182 Gr.F304	A 182 Gr.F6a	A 182 Gr.F316
38	Washer	Steel	Steel	Steel	Steel
42	Grub Screw	A 193 Gr.B7	A 193 Gr.B7	A 193 Gr.B7	A 193 Gr.B7
45	Lock Nut	Steel	Steel	A 182 Gr.F6a	A 182 Gr.F316

(3) Zinc coating

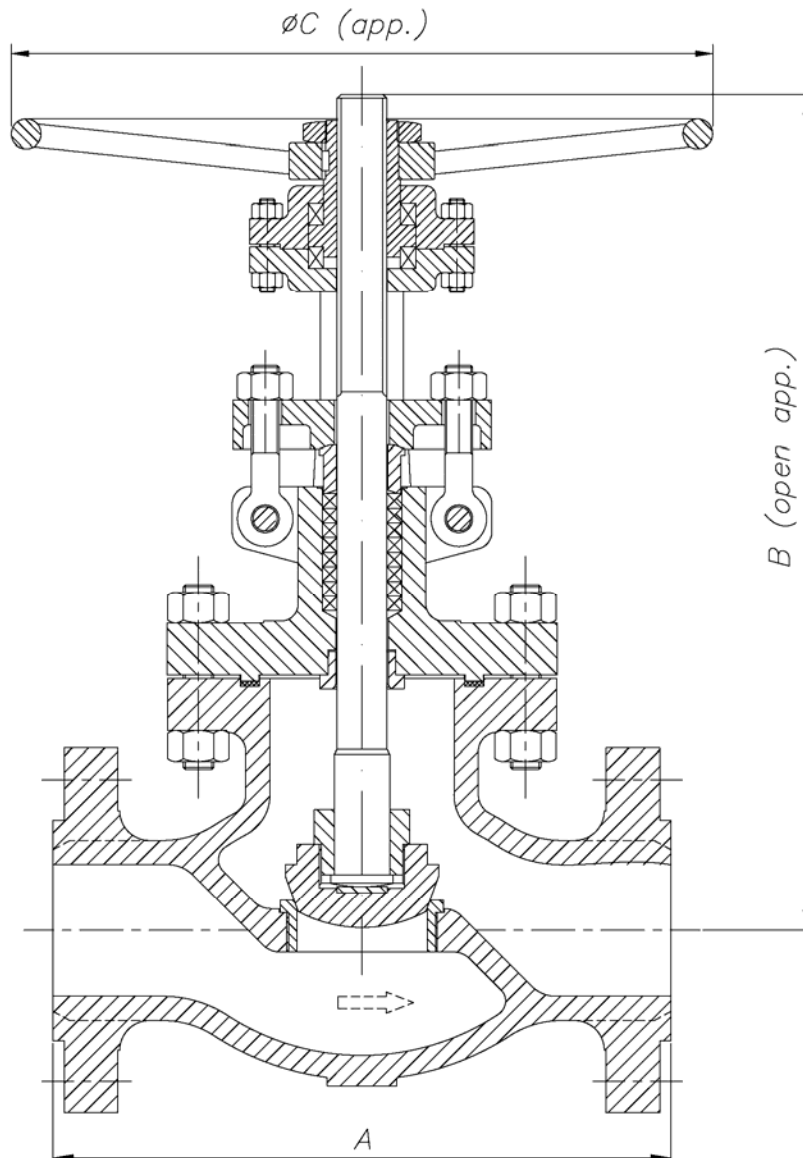
* Standard constructions with Trim 8, 2 and 10, other options are available



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Dimensions



DN	A (RF/BW)	B	ØC	WEIGHT
50 (2")	267	349	200	31
65 (2½")	292	376	250	43
80 (3")	318	430	250	57
100 (4")	356	486	350	86
125 (5")	400	560	400	130
150 (6")	444	618	450	168
200 (8")	559	937	560	280
250 (10")	622	949	640	385
300 (12")	711	995	460	671

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



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General Characteristics, Cv, P&T Rating

GENERAL CHARACTERISTICS	Fig. VG300BB		
DESIGN STANDARDS			
Valves design	BS 1873	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")	55	150 (6")	425
65 (2½")	80	200 (8")	790
80 (3")	105	250 (10")	1250
100 (4")	190	300 (12")	1900
125 (5")	305		

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	51,0	47,9	51,7	49,6
95	46,5	45,1	51,3	42,7
150	45,1	44,1	49,3	38,6
205	43,8	42,7	48,6	35,5
260	41,3	40,3	45,8	33,1
315	37,9	36,9	41,7	31,0
345	36,9	36,2	40,7	30,7
375	36,9		39,3	29,6
400	34,8		36,5	29,3
425	28,2		35,1	28,9
450	18,6		33,4	28,9
485	11,7		25,5	28,6
510	7,2		18,9	26,5
540	3,4		13,8	24,1
565			10,0 *	23,8 *
595			6,9 *	21,0 *
620			4,1 *	16,2 *
650			2,4 *	12,7 *
675				10,0 *
705				7,9 *
735				6,5 *
760				5,2 *
790				4,1 *
815				2,8 *

* 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.