



Globe Valves Type Bolted Bonnet

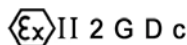
Class 300 DN 50-500 (2" – 20")

Carbon, Alloy and Stainless Steel



Fig. VG300BB

Design:
BS 1873 and ASME B16.34

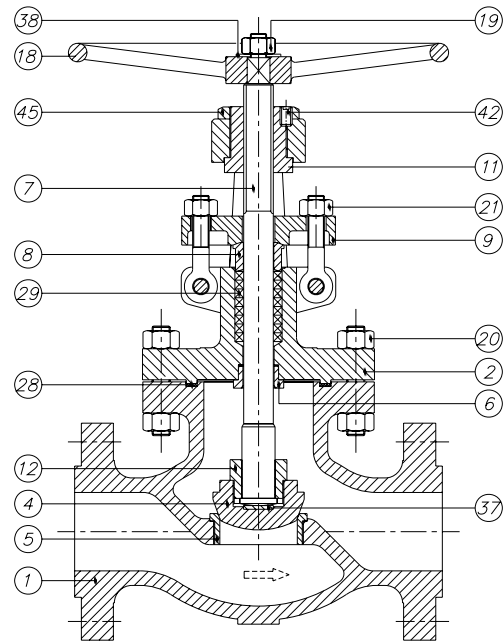




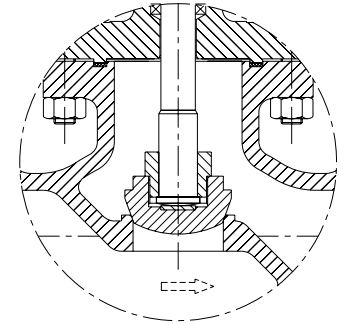
JC® Globe Valves Class 300

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Parts and materials



**Stainless Steel
Construction**



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
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 320 Gr. L7 / A 194 Gr. 7	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H
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 / Graphited	SPW S.S. 304 / Graphited	SPW S.S. 304 / Graphited	SPW S.S. 316 / Graphited
29	Stem Packing	Graphited	Graphited	Graphited	Graphited
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

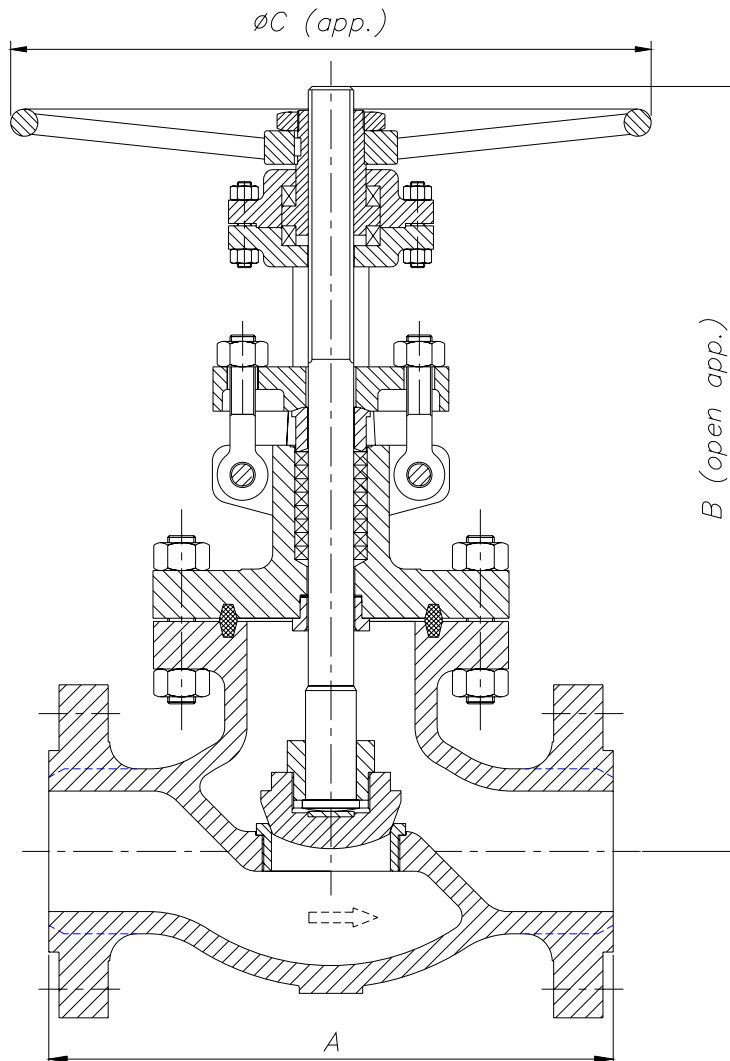
Item 5 and 6 only in Carbon Steel and Alloy Steel construction



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Dimensions



DN	A (RF/BW)	B	ØC	WEIGHT
50 (2")	267	360	200	30
65 (2½")	292	410	250	45
80 (3")	318	450	300	60
100 (4")	356	530	350	95
125 (5")	400	590	400	125
150 (6")	444	650	450	150
200 (8")	559	735	600	235
250 (10")	622	825	700	390
300 (12")	711	950	750	590
350 (14")	838	1145	800	965
400 (16")	864	1370	800	1115
450 (18")	978	1422	850	1400
500 (20")	1016	1475	900	1800

(*) Dimensions in mm and weight in kg.



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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	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")	55	250 (10")	1250
65 (2½")	80	300 (12")	1900
80 (3")	105	350 (14")	2350
100 (4")	190	400 (16")	3300
125 (5")	305	450 (18")	4100
150 (6")	425	500 (20")	5200
200 (8")	790		

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.