



# Globe Valves Type Bolted Bonnet

## Class 900 DN 50-200 (2" – 8")

### Carbon, Alloy and Stainless Steel



# Fig. VG900BB

**Design:**  
**BS 1873 and ASME B16.34**

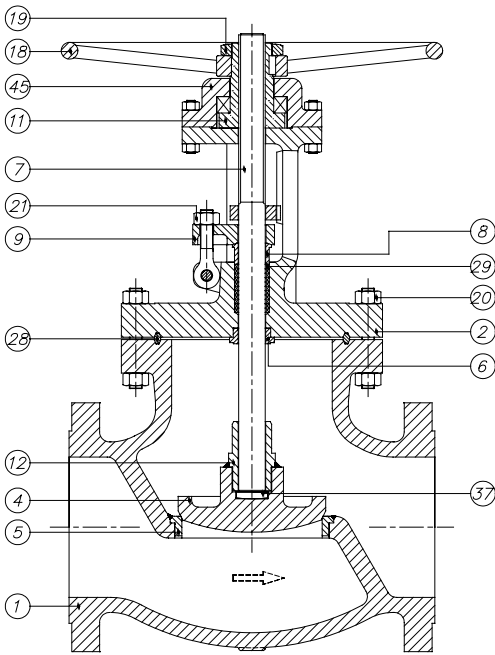




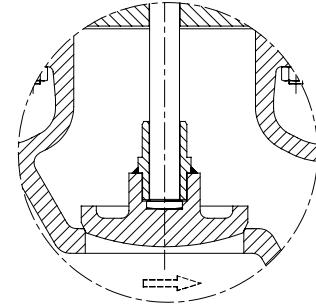
# Globe Valves Class 900

## Type Bolted Bonnet

### 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 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
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	Handwheel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
19	Handwheel 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
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	Soft Iron	SS 304	SS 304	SS 316
29	Gland Packing	Graphited	Graphited	Graphited	Graphited
37	Thrust Washer	A 182 Gr.F6a	A 182 Gr.F304	A 182 Gr.F6a	A 182 Gr.F316
45	Lock Nut	Steel	Steel	A 182 Gr.F6a	A 182 Gr.F316

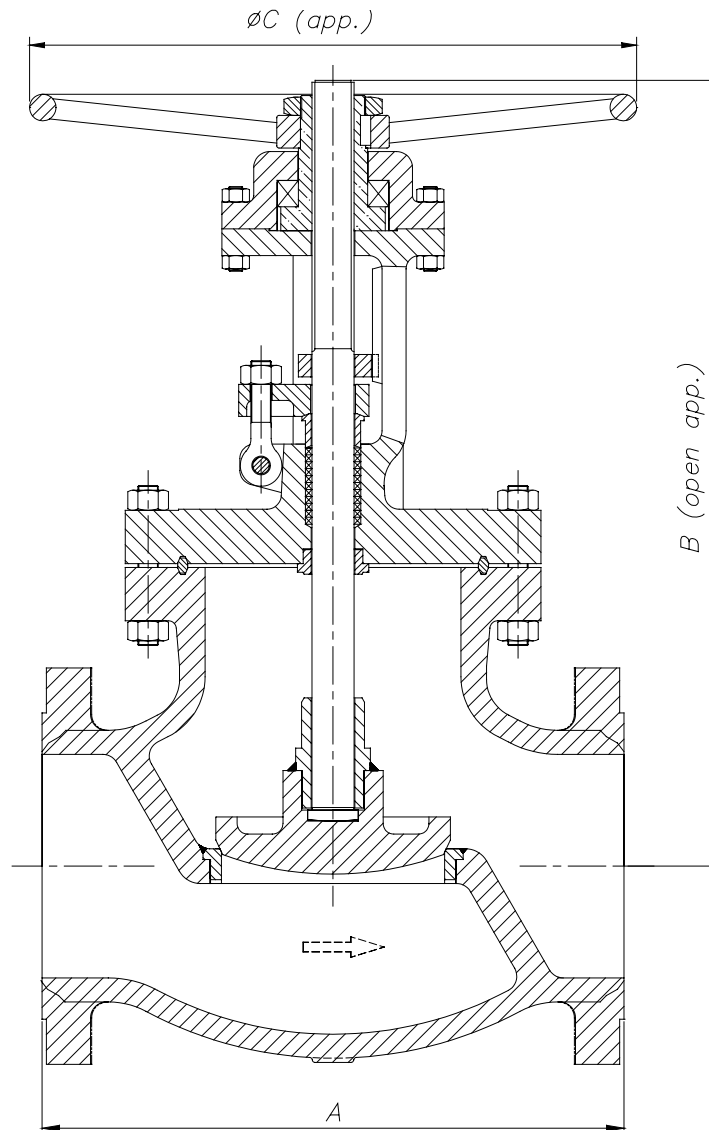
Item 5 and 6 only in Carbon Steel and Alloy Steel construction



# JC® Globe Valves Class 900

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### Dimensions



DN	A (RF/BW)	B	ØC	WEIGHT
50 (2")	368	505	300	85
65 (2½")	419	560	400	120
80 (3")	381	605	400	140
100 (4")	457	710	500	240
125 (5")	559	805	600	350
150 (6")	610	895	600	450
200 (8")	737	980	700	810

(\* ) Dimensions in mm and weight in kg.



# Globe Valves Class 900

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### General Characteristics, Cv, P&T Rating

GENERAL CHARACTERISTICS		Fig. VG900BB		
<b>DESIGN STANDARDS</b>				
Valves design	BS 1873	ASME B16.34	MSS SP- 42	
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			
<b>TESTS AND CERTIFICATES</b>				
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")	45	125 (5")	280
65 (2½")	70	150 (6")	400
80 (3")	90	200 (8")	700
100 (4")	150		

#### 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	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 540°C