

ASME B16.34



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	A105 + Stellite	A 182 Gr.F304 + Stellite	A 217 Gr.C5 + Stellite	A 182 Gr.F316 + Stellite
5	Seat Ring	A105 + Stellite	A 182 Gr.F304 + Stellite	A 182 Gr.F6a + Stellite	A 182 Gr.F316 + Stellite
6	Backseat	Stellite	Stellite	Stellite	Stellite
7	Stem	A182 Gr.F6a	A 182 Gr.F304	A 182 Gr.F6a	A 182 Gr.F316
8	Gland	A105	A105	A 182 Gr. F6a	A 182 Gr.F316
9	Gland Flange	A 105	A 105	A 105	A 182 Gr.F304
10	Yoke	A 216 Gr.WCB	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
11	Stem Nut	B148 / A 439 Gr.D2	B148 / A 439 Gr.D2	B148 / A 439 Gr.D2	B148 / A 439 Gr.D2
12	Disc Nut	A182 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	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
22	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
28	Gasket	Graphite	Graphite	Graphite	Graphite
29	Stem Packing	Graphite	Graphite	Graphite	Graphite
37	Thrust Washer	A182 Gr.F6a	A 182 Gr.F304	A 182 Gr.F6a	A 182 Gr.F316
42	Segmental Ring	A 105	A 182 Gr.F304	A 182 Gr.F6a	A 182 Gr.F316
45	Lock Nut	Steel	A 182 Gr.F304	A 182 Gr.F6a	A 182 Gr.F316

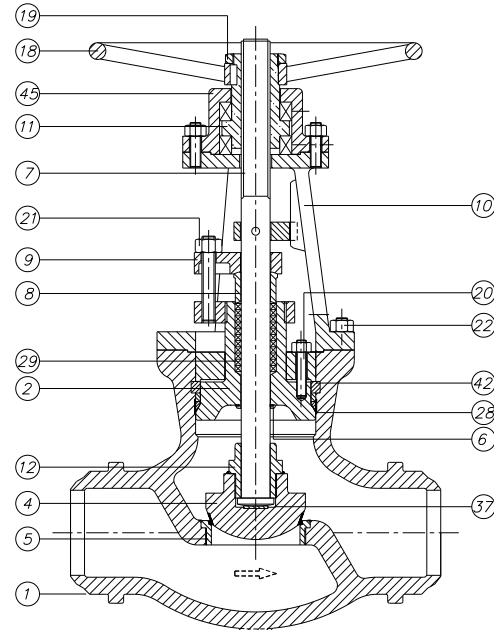
(3) Zinc coating

* Standard constructions with Trim 5, other options are available

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)

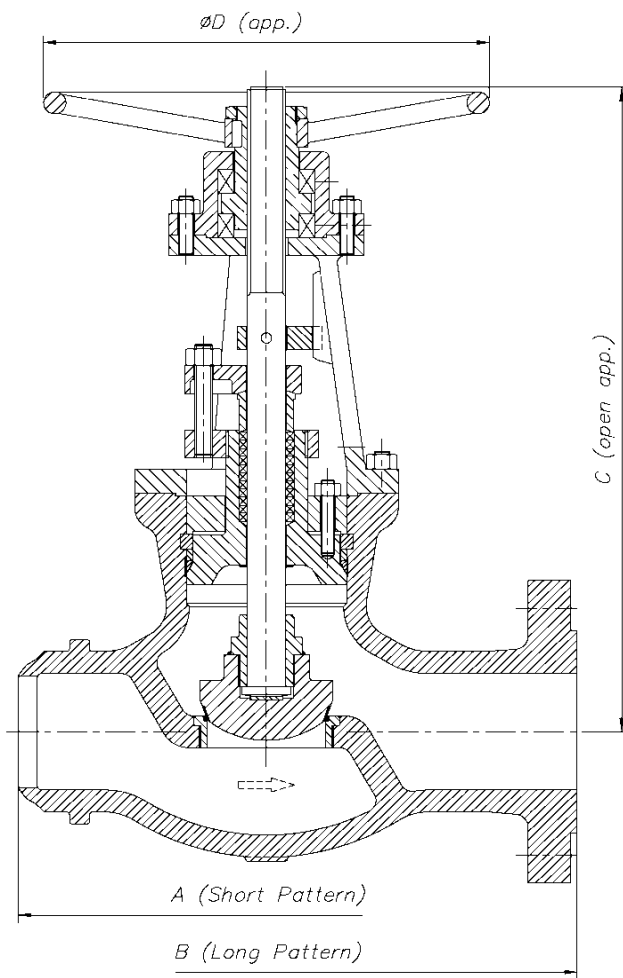
(1) and small internal parts that normally contact the service fluid

(2) Trademark material Stellite 6



DN	A	B	C	ØD	WEIGHT
50 (2")	216	368	460	350	90
65 (2½")	254	419	535	350	105
80 (3")	305	381	605	400	120
100 (4")	356	457	750	450	195
125 (5")	432	559	815	450	230
150 (6")	508	610	875	500	355
200 (8")	660	737	930	500	630
250 (10")	787	838	1095	640	885
300 (12")	914	965	1205	640	1135
350 (14")	991	1029	1310	710	1580
400 (16")	1092	1130	1425	710	2295

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



DESIGN STANDARDS				
Valves design	ASME B16.34			
End to End Dimensions	ASME B16.10	ISO 5752		
Flanged Dimensions	ASME B16.5	ISO 7005- Pat. 1	BS 3293	MSS SP-44
Buttweld Dimensions	ASME B16.25			
Visual Inspection	MSS SP- 55			
Marking	MASS SP-25	ISO 5209		
TESTS AND CERTIFICATES				
Pressure testing	API 598	ISO 5208	EN 12266-1	MSS SP-61
Others	CE			

Cv VALUES IN US Gallons/min			
DN	Cv	DN	Cv
50 (2")	45	200 (8")	650
65 (2½")	60	250 (10")	850
80 (3")	90	300 (12")	1000
100 (4")	145	350 (14")	1400
125 (5")	270	400 (16")	2100
150 (6")	380		

PRESSURE - TEMPERATURE (Standard Class According to ASME B16.34)				
Temp	MATERIAL			
	A216 WCB	A352 LCB	A217 C5	A351 CF8M (**)
°C	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 540°C

** A351 CF8M at temperatures over 538°C (1000°F) to be used only if Carbon contents is 0,04% or higher