

**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

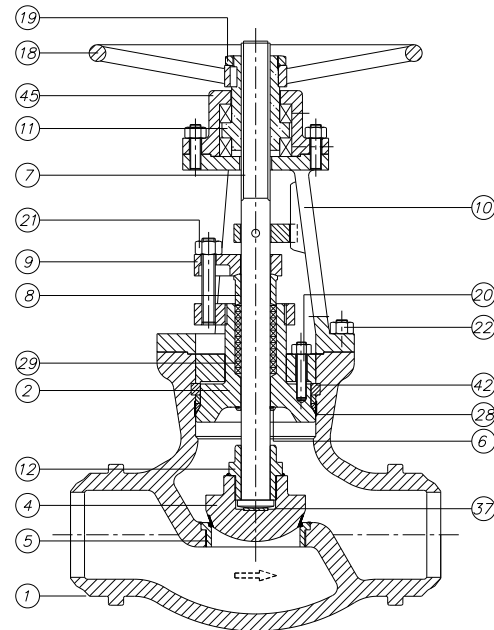
(3) Zinc coating

\* 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)

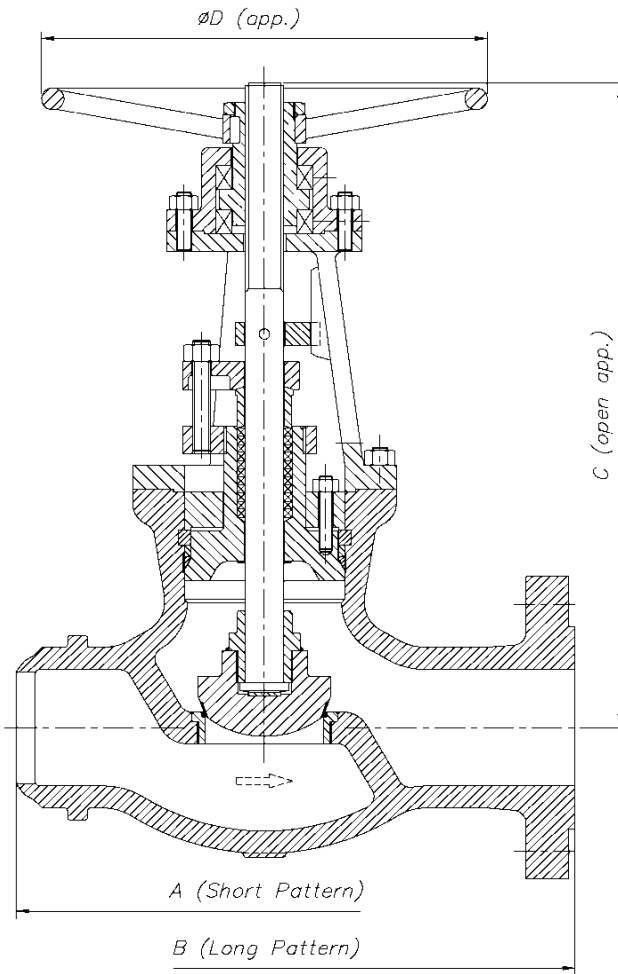
(1) and small internal parts that normally contact the service fluid

(2) Trademark material Stellite 6



DN	A	B	C	ØD	WEIGHT
50 (2")	279	451	620	350	95
65 (2½")	330	508	705	400	175
80 (3")	368	578	750	450	265
100 (4")	457	673	980	500	385
125 (5")	533	794	1060	500	480
150 (6")	610	914	1130	640	685
200 (8")	762	1022	1285	710	870
250 (10")	914	1270	1490	710	1450
300 (12")	1041	1422	1680	760	2105

(\*) 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")	25	200 (8")	350
65 (2½")	45	250 (10")	500
80 (3")	60	300 (12")	850
100 (4")	90		
125 (5")	170		

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	425,1	398,6	430,6	413,4
95	387,6	376,9	427,5	355,5
150	376,9	366,2	411,0	321,1
205	363,8	354,5	405,1	294,9
260	343,8	334,2	381,7	274,2
315	314,2	305,9	347,3	259,1
345	308,3	300,1	338,0	254,9
375	305,9		325,9	249,4
400	289,4		303,2	245,3
425	236,3		291,4	242,5
450	153,6		277,7	239,8
485	98,5		212,6	238,4
510	59,3		157,4	221,9
540	29,6		114,0	200,8
565			82,7 *	197,4 *
595			57,2 *	175,4 *
620			35,5 *	135,7 *
650			19,6 *	106,5 *
675				84,7 *
705				66,8 *
735				55,1 *
760				43,4 *
790				33,4 *
815				23,8 *

\* 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.