GATE VALVE
VC150BB SERIES

JC VALVES

GENERAL FEATURES:

- Gate valve
- ANSI class 150
- Diam. 2” ~ 36”

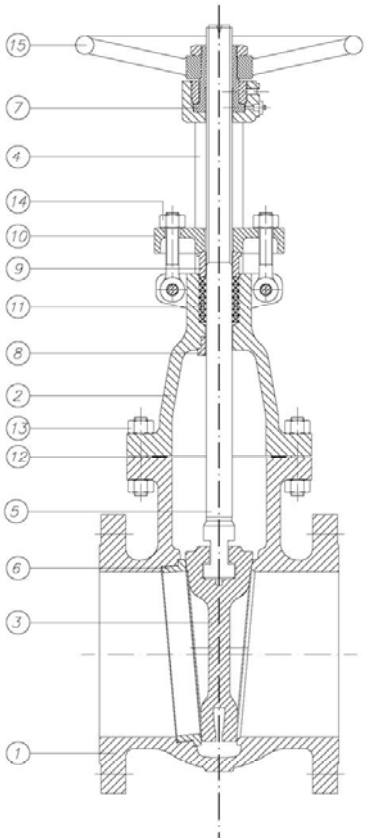


CE

Ex ATEX

DESIGN STANDARDS	
Valve design	API 600 & ISO 10434, ASME B 16.34, BS 1414
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

Subject to changes



Carbon & Alloy Steel Construction ◄► ***Stainless Steel Construction***

Item	Description	Materials			
		Carbon Steel	Carbon Steel (Low Temp.)	Alloy Steel	Stainless Steel
1	Body	A 216 Gr. WCB	A 352 Gr. LCC	A 217 Gr. C5	A 351 Gr. CF8M
2	Bonnet	A 216 Gr. WCB	A 352 Gr. LCC	A 217 Gr. C5	A 351 Gr. CF8M
3	Gate	A 216 Gr. WCB + ER410	A 352 Gr. LCC + ER308	A 217 Gr. C5 + ER410	A 351 Gr. CF8M
4	Yoke	A 216 Gr. WCB	A 352 Gr. LCC	A 217 Gr. C5	A 351 Gr. CF8M
5	Stem	A 182 Gr. F6a	A 182 Gr. F304	A 182 Gr. F6a	A 182 Gr. F316
6	Seat ring	A 105 + Stellite	A 182 Gr. F304	A 182 Gr. F6a + Stellite	-----
7	Stem nut	B 148 / A 439 Gr. D2			
8	Backseat	A 182 Gr. F6a	A 182 Gr. F304	A 182 Gr. F6a	-----
9	Gland	A 105		A 182 Gr. F6a	A 182 Gr. F316
10	Gland flange	A 105			A 182 Gr. F304
11	Stem packing	Graphite			
12	Gasket	304 / Graphite			316 / Graphite
13	Bonnet bolt & nut	A 193 Gr. B7 / A 194 Gr. 2H	A 320 Gr. L7 / A194 Gr. 7	A 193 Gr. B7 / A 194 Gr. 2H	A 193 Gr. B7 / A 194 Gr. 2H
14	Eye bolt & nut	A 193 Gr. B7 / A 194 Gr. 2H			
15	Handwheel	Carbon Steel			

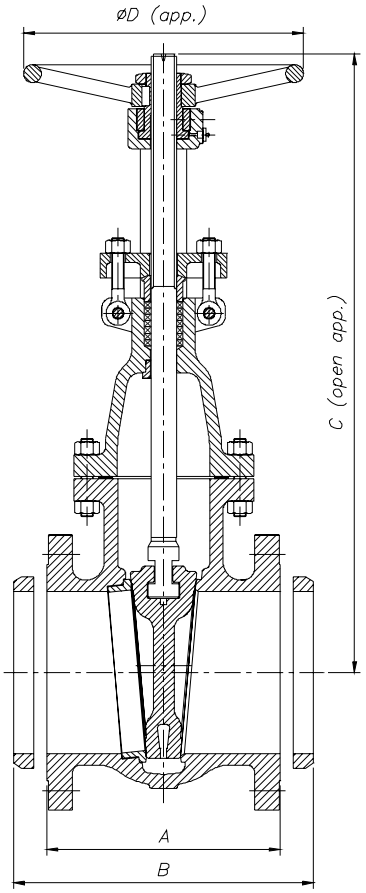
Subject to changes

GATE VALVE
VC150BB SERIES - Dimensions

API 600 Trim N°	Nominal Trim	Stem / Backseat	Seating Surface Body / Gate
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
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
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-CRr A
16	Hardfaced	18Cr-8Ni-Mo	Co-CRr A
17	Hardfaced	18Cr-10Ni-Cb	Co-CRr A
18	Hardfaced	19Cr-29Ni	Co-CRr A

DIMENSIONS: (mm)

Diam.	DN	A	B	C	ØD	Kg
2"	50	178	216	386	200	17
21/2"	65	190	241	435	200	27
3"	80	203	282,5	483	250	33
4"	100	229	305	587	250	48
5"	125	254	381	673	300	65
6"	150	267	403	767	300	78
8"	200	292	419	955	350	120
10"	250	330	457	1146	450	176
12"	300	356	502	1328	500	260
14"	350	381	572	1519	460	380
16"	400	406	610	1721	460	530
18"	450	432	660	1900	460	620
20"	500	457	711	2116	610	810
22"	550	483	762	2315	610	1050
24"	600	508	813	2480	610	1150
26"	650	559	-	2700	610	1380
28"	700	610	-	2975	610	1980
30"	750	610	-	3102	610	2200
36"	900	711	-	3668	710	2800



Subject to changes

PRESSURE-TEMPERATURE CHART:

Temp.	Materials			
	A216 WCB	A352 LCB	A217 C5	A351 CF8M (**)
°C	Bar	Bar	Bar	Bar
-29 ~ 38	19,6	18,3	20,0	18,9
95	17,9	17,2	17,9	16,2
150	15,8	15,8	15,8	14,8
205	13,8	13,8	13,8	13,4
260	11,7	11,7	11,7	11,7
315	9,6	9,6	9,6	9,6
345	8,6	8,6	8,6	8,6
375	7,6		7,6	7,6
400	6,5		6,5	6,5
425	5,5		5,5	5,5
450	4,5		4,5	4,5
485	3,4		3,4	3,4
510	2,4		2,4	2,4
540	1,4		1,4	1,4
565			1,4*	1,4*
595			1,4*	1,4*
620			1,4*	1,4*
650			1,4*	1,4*
675				1,4*
705				1,4*
735				1,4*
760				1,4*
790				1,4*
815				1,4*

**** 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***

Cv VALUE: (US Gallons/min) - Kv VALUE: (m³/h)

Diam.	DN	Cv	Kv
2"	50	250	289
21/2"	65	450	520
3"	80	620	717
4"	100	1160	1341
5"	125	1900	2197
6"	150	2700	3121
8"	200	5100	5896
10"	250	8050	9306
12"	300	12050	13931
14"	350	15100	17457
16"	400	20300	23468

Diam.	DN	Cv	Kv
18"	450	26100	30173
20"	500	33500	38728
22"	550	42000	48555
24"	600	50000	57803
26"	650	59500	68786
28"	700	69200	80000
30"	750	79000	91329
36"	900	115500	133526

Subject to changes

GATE VALVE
VC150BB SERIES

Type	Class	Execution	Material	Trim	Operation
VC	150	BB	A	8	-

Type	
VC	Gate valve
VG	Globe valve
VR	Check valve

Class	
150	ANSI 150
300	ANSI 300
600	ANSI 600

Execution	
BB	Bolted bonnet
BC	Bolted cover

Material	
A	A 216 Gr. WCB
L	A 352 Gr. LCB
I	A 351 Gr. CF8M
X	A 217 Gr. C5

Trim n°	
	1 ~ 18

Operation	
-	Handwheel
R	Gearbox

Subject to changes