



Swing Check Valves Type Bolted Cover
Class 150 DN 50-900 (2" – 36")
 Carbon, Alloy and Stainless Steel



Fig. VR150BC

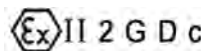
Design:

BS 1868 & API 6D / ISO 14313

ASME B16.34 and MSS SP- 42



6D-0197



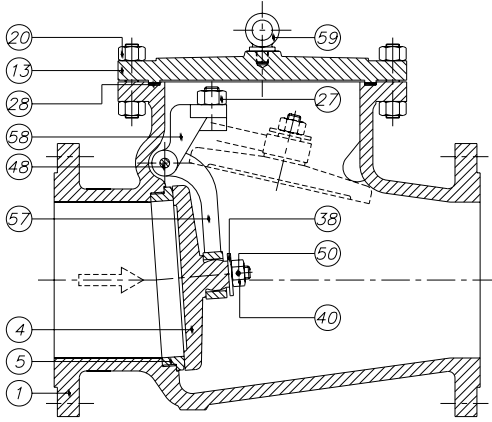
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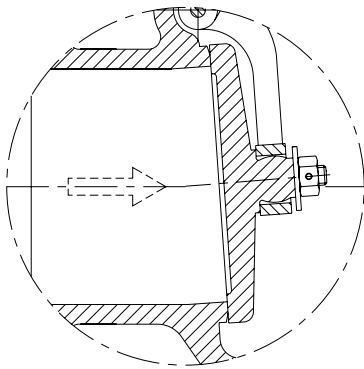
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Parts and materials



Stainless Steel Construction



Trim Material

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

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
4	Disc	A105 + ER 410	A 182 Gr.F304	A 182 Gr.F6a	A 182 Gr.F316
5	Seat Ring	A105 + Stellite	A 182 Gr.F304	A 182 Gr.F6a + Stellite	-----
13	Cover	A 216 Gr.WCB / A 515 Gr.70	A 352 Gr.LCB / A 182 Gr.F304	A 217 Gr.C5	A 351 Gr.CF8M
20	Cover 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)
27	Bracket Stud & Nut	A 193 Gr.B8 / A 194 Gr.8	A 193 Gr.B8 / A 194 Gr.8	A 193 Gr.B8 / A 194 Gr.8	A 193 Gr.B8M / A 194 Gr.8M
28	Gasket	S.S. 304 / Graphite	S.S. 304 / Graphite	S.S. 304 / Graphite	S.S. 316 / Graphite
38	Washer	AISI 410	AISI 304	AISI 410	AISI 316
40	Disc Nut	AISI 304	AISI 304	AISI 304	AISI 316
48	Hinge Pin *	A 182 Gr.F6a	A182 Gr.F304	A182 Gr.F6a	A 182 Gr.F316
50	Split Pin	AISI 304	AISI 304	AISI 304	AISI 316
57	Hinge	A 216 Gr.WCB / A 515 Gr.70	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
58	Hinge Bracket	A 216 Gr.WCB / A 515 Gr.70	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
59	Lifting Hook	A105	A105	A105	A105

(3) Zinc coating

* It's also manufactured with Hinge Pin Passing through Body with Plug

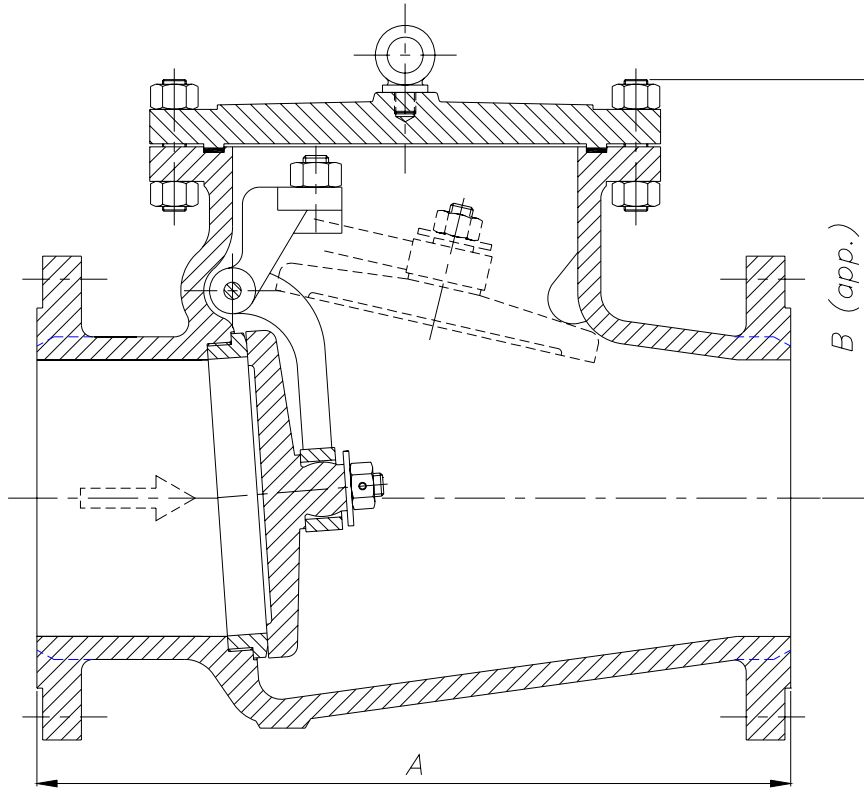
** Standard constructions with Trim 8, 2 and 10, other options are available



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Dimensions



DN	A (RF/BW)	B	WEIGHT
50 (2")	203	135	17
65 (2½")	216	155	21
80 (3")	241	168	29
100 (4")	292	235	42
125 (5")	330	249	59
150 (6")	356	277	68
200 (8")	495	339	118
250 (10")	622	398	197
300 (12")	698	525	302
350 (14")	787	553	372
400 (16")	864	584	570
450 (18")	978	668	665
500 (20")	978	712	900
550 (22")	1067	725	1100
600 (24")	1295	740	1359
650 (26")	1295	780	1850
700 (28")	1448	810	2000
750 (30")	1524	1050	2400
900 (36")	1956	1390	3380

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



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General Characteristics, Cv, P&T Rating

GENERAL CHARACTERISTICS	Fig. VR150BC		
DESIGN STANDARDS			
Valves design	BS 1868 & API 6D	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	BS 3293	MSS SP-44
Butt weld Dimensions	ASME B16.25		
Visual Inspection	MSS SP- 55		
Marking	MSS SP-25 & ISO 5209		
TESTS AND CERTIFICATES			
Pressure testing	API 598 & ISO 5208	EN 12266-1	MSS SP-61
Other	ATEX, CE		

Cv Values in U.S. Gallons/min.

DN	Cv	DN	Cv
50 (2")	125	400 (16")	8700
65 (2½")	190	450 (18")	11900
80 (3")	280	500 (20")	14800
100 (4")	490	550 (22")	17500
125 (5")	800	600 (24")	21000
150 (6")	1150	650 (26")	24000
200 (8")	2250	700 (28")	27400
250 (10")	3400	750 (30")	31000
300 (12")	4900	900 (36")	52000
350 (14")	6100		

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	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.