



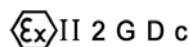
Swing Check Valves Type Bolted Cover
Class 300 DN 50-500 (2" – 20")
 Carbon, Alloy and Stainless Steel



Fig. VR300BC

Design:

BS 1868 & API 6D / ISO 14313
ASME B16.34

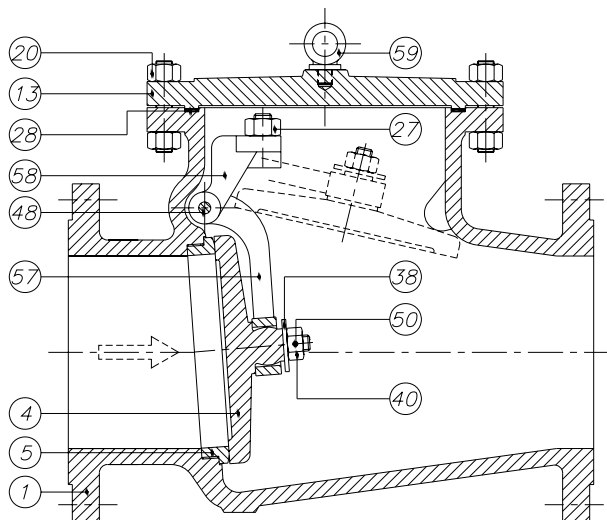




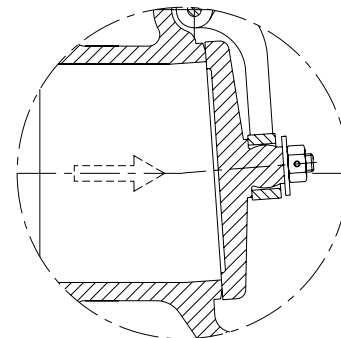
Swing Check Valves Class 300

Type Bolted Cover

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 CoCr 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
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	A320 Gr. L7 / A194 Gr. 7	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H
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	SPW S.S. 304 / Graphited	SPW S.S. 304 / Graphited	SPW S.S. 304 / Graphited	SPW S.S. 316 / Graphited
38	Washer	AISI 410	AISI 304	AISI 410	AISI 316
40	Disc Nut	AISI 304	AISI 304	AISI 304	AISI 316
48	Hinge Pin *	A182 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

Item 5 only in Carbon Steel and Alloy Steel construction

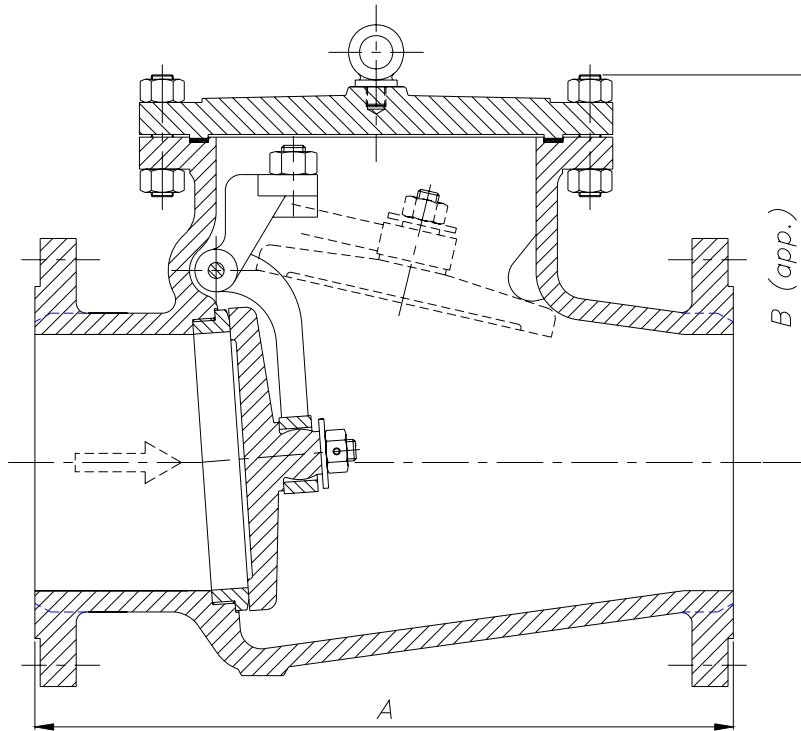
* It's also manufactured with Hinge Pin passing through Body with Plug



Swing Check Valves Class 300

Type Bolted Cover

Dimensions



DN	A (RF/BW)	B	WEIGHT
50 (2")	267	155	25
65 (2½")	292	215	40
80 (3")	318	185	60
100 (4")	356	220	80
125 (5")	400	245	105
150 (6")	444	275	130
200 (8")	533	300	215
250 (10")	622	375	345
300 (12")	711	430	470
350 (14")	838	520	685
400 (16")	864	560	998
450 (18")	978	686	1050
500 (20")	1016	610	1220

(*) Dimensions in mm and weight in kg.



Swing Check Valves Class 300

Type Bolted Cover

General Characteristics, Cv, P&T Rating

GENERAL CHARACTERISTICS		Fig. VR300BC			
DESIGN STANDARDS					
Valves design	BS 1868 & API 6D	ASME B16.34			
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		
Other	ATEX, CE				

Cv Values in U.S. Gallons/min.

DN	Cv	DN	Cv
50 (2")	125	250 (10")	3400
65 (2½")	190	300 (12")	4900
80 (3")	280	350 (14")	6100
100 (4")	490	400 (16")	8700
125 (5")	800	450 (18")	11550
150 (6")	1150	500 (20")	14000
200 (8")	2250		

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	51,0	47,9	51,7	49,6
95	46,5	45,1	51,3	42,7
150	45,1	44,1	49,3	38,6
205	43,8	42,7	48,6	35,5
260	41,3	40,3	45,8	33,1
315	37,9	36,9	41,7	31,0
345	36,9	36,2	40,7	30,7
375	36,9		39,3	29,6
400	34,8		36,5	29,3
425	28,2		35,1	28,9
450	18,6		33,4	28,9
485	11,7		25,5	28,6
510	7,2		18,9	26,5
540	3,4		13,8	24,1
565			10,0 *	23,8 *
595			6,9 *	21,0 *
620			4,1 *	16,2 *
650			2,4 *	12,7 *
675				10,0 *
705				7,9 *
735				6,5 *
760				5,2 *
790				4,1 *
815				2,8 *

* 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.