CHECK VALVE
VR150BC SERIES

JC VALVES

GENERAL FEATURES:

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

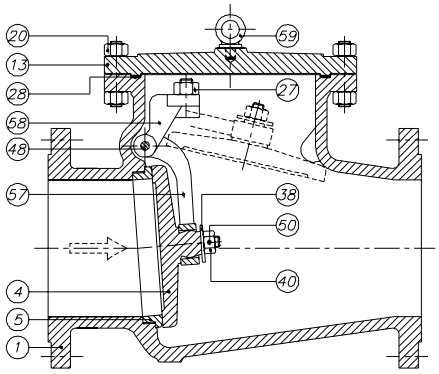


CE

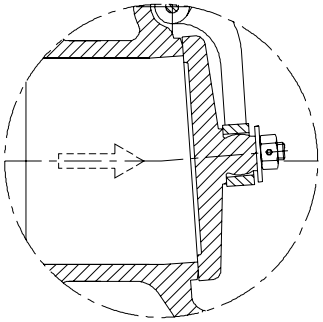
Ex ATEX

DESIGN STANDARDS	
Valve 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, 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



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. LCB	A 217 Gr. C5	A 351 Gr. CF8M
4	Disc	A 105 + ER410	A 182 Gr. F304	A 182 Gr. F6a	A 182 Gr. F316
5	Seat ring	A 105 + 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			
27	Bracket stud & nut	A 193 Gr. B8 / A 194 Gr. 8			A 193 Gr. B8M / A 194 Gr. 8M
28	Gasket	SS 304 / graphite			SS 316 / graphite
38	Washer	AISI 410	AISI 304	AISI 410	AISI 316
40	Disc nut	AISI 304			AISI 316
48	Hinge pin	A 182 Gr. F6a	A 182 Gr. F304	A 182 Gr. F6a	A 182 Gr. F316
50	Split pin	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	A 105			

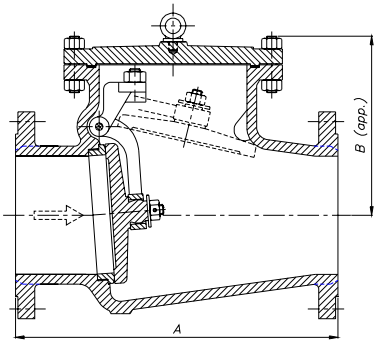
Subject to changes

CHECK VALVE
VR150BC 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 (RF/BW)	B	Kg
2"	50	203	135	17
21/2"	65	216	155	21
3"	80	241	168	29
4"	100	292	235	42
5"	125	330	249	59
6"	150	356	277	68
8"	200	495	339	118
10"	250	622	398	197
12"	300	698	525	302
14"	350	787	553	372
16"	400	864	584	570
18"	450	978	668	665
20"	500	978	712	900
22"	550	1067	725	1100
24"	600	1295	740	1359
26"	650	1295	780	1850
28"	700	1448	810	2000
30"	750	1524	1050	2400
36"	900	1956	1390	3380



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	125	108
21/2"	65	190	164
3"	80	280	242
4"	100	490	424
5"	125	800	692
6"	150	1150	995
8"	200	2250	1946
10"	250	3400	2941
12"	300	4900	4239
14"	350	6100	5277

Diam.	DN	Cv	Kv
16"	400	8700	7526
18"	450	11900	10294
20"	500	14800	12802
22"	550	17500	15138
24"	600	21000	18165
26"	650	24000	20760
28"	700	27400	23701
30"	750	31000	26815
36"	900	52000	44980

Subject to changes

CHECK VALVE
VR150BC SERIES

Type	Class	Execution	Material	Trim
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

Subject to changes