# Swing Check Valves Type Bolted Cover
# Class 2500 DN 50-200 (2” – 8”)
## Carbon, Alloy and Stainless Steel


# Fig. VR2500BC

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

Certificado ISO 14001 por BVQI

6D-0197

II 2 G D c

Certificado ISO 9001 por BVQI

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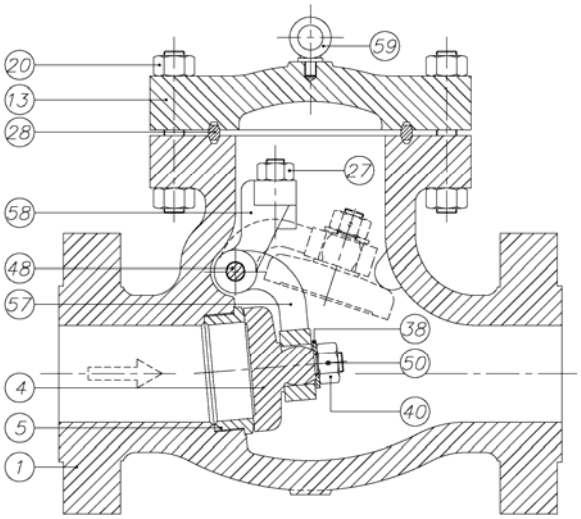
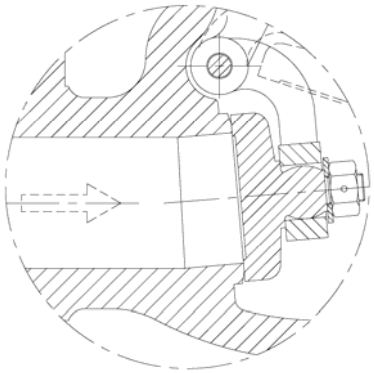
# Swing Check Valves Class 2500
# Type Bolted Cover
## Parts and materials




### 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 | S.S. 304 | S.S. 304 | S.S. 316 |
| 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 |

*(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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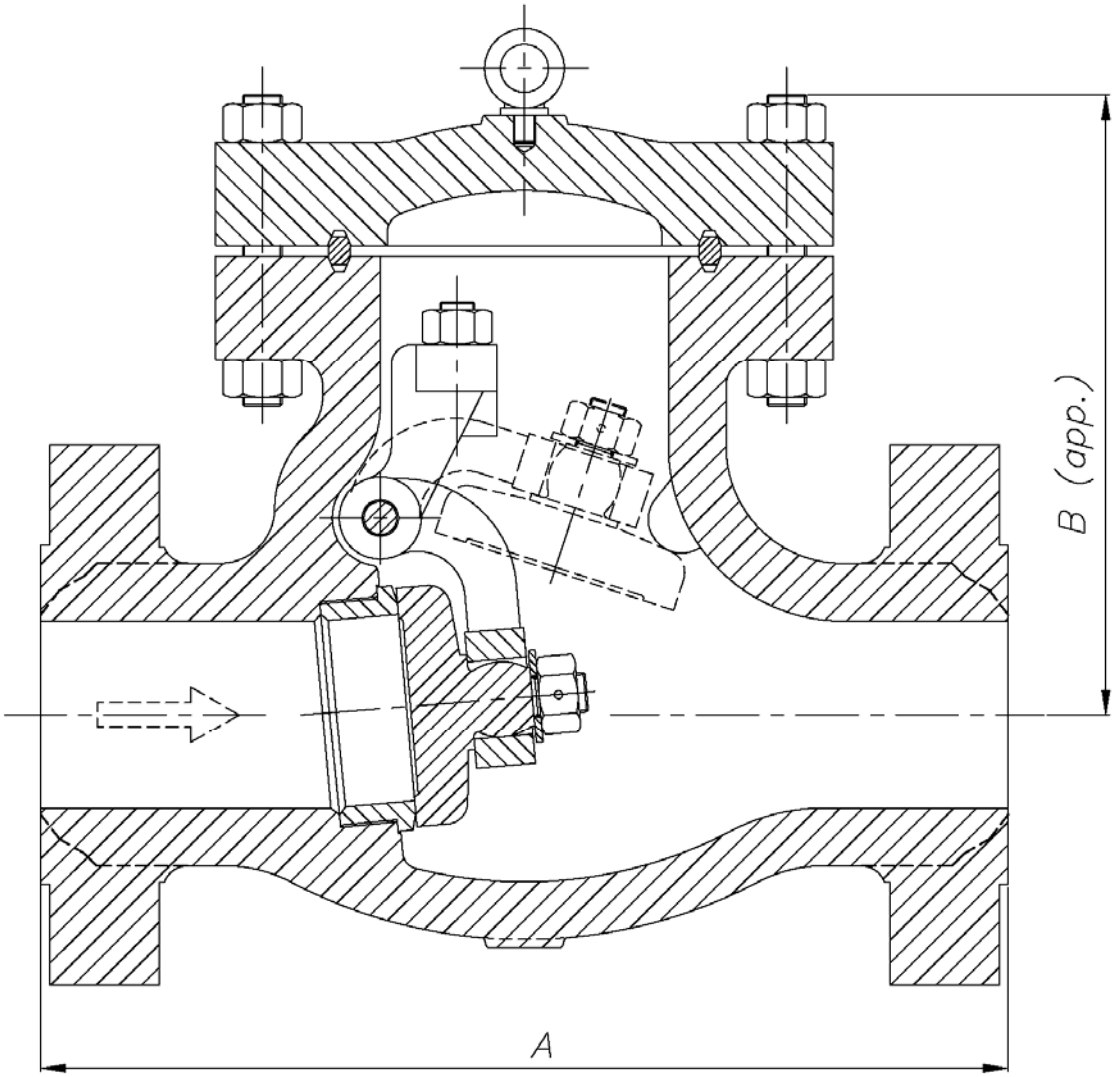
## Dimensions




| DN | A (RF/BW) | B | WEIGHT |
|---|---|---|---|
| 50 (2”) | 451 | 315 | 100 |
| 65 (2½") | 508 | 345 | 185 |
| 80 (3”) | 578 | 380 | 225 |
| 100 (4”) | 673 | 410 | 370 |
| 125 (5") | 794 | 495 | 595 |
| 150 (6”) | 914 | 560 | 805 |
| 200 (8”) | 1022 | 695 | |

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

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# Swing Check Valves Class 2500
# Type Bolted Cover
## General Characteristics, Cv, P&T Rating

| | | | | |
|---|---|---|---|---|
| **GENERAL CHARACTERISTICS** | Fig. VR2500BC | | | |
| **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 | 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 | EN-12266-1 | MSS SP-61 | |
| **Other** | ATEX, CE | | | |

### Cv Values in U.S. Gallons/min.

| DN | Cv | DN | Cv |
|---|---|---|---|
| 50 (2”) | 60 | 125 (5") | 425 |
| 65 (2½") | 105 | 150 (6”) | 600 |
| 80 (3”) | 150 | 200 (8”) | 1050 |
| 100 (4”) | 250 | | |

### Pressure-Temperature *(STANDARD CLASS According to ASME B16.34)*

| Temp | MATERIAL | | | |
|---|---|---|---|---|
| | A216 WCB | A352 LCB | A217 C5 | A351 CF8M (**) |
| ºC | 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 540ºC*

*** A351 CF8M at temparetures over 538ºC (1000ºF) to be used only if Carbon contents is 0,04% or higher.*





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