



Globe Stop Valves [VBS]

Standard: BS 1873

DN 50 (2") ÷ DN 250 (10")
Class 150 ÷ Class 900

Design

- Casted body and bonnet
- Bolted bonnet (BB)
- Rising stem (RS), outside screw and yoke (OS&Y)
- Dimensions >DN 50 with additional, balancing, disc
- Seats are integral or welded on

Applications

- Power plant, Chemical, Petrochemical, Refining, water supply and other

Media

- Depending on the valve materials: water, steam, gas, oil and oil derivatives and other non aggressive media

Class and temperature

(table A.3.7)

- Class 150 + Class 900
- Temperature up to 600 °C

Materials (table A.3.1)

- Carbon, heat resistant alloy and stainless steels

Advantages

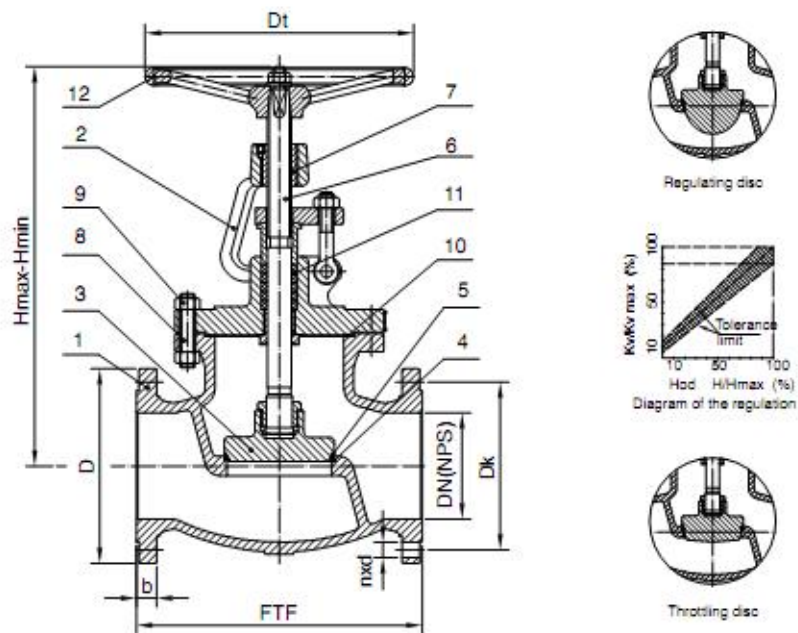
- Long service life
- Respect to emission standards
- Easy handling and maintenance
- Stem packing replacement in working conditions

Options

- Electric, hydraulic or pneumatic actuator
- Regulating parabolic disc
- Position indicator
- Extended stem
- Locking device
- Seats and sealing made of elastic materials
- Flanges and welding ends according to : GOST, DIN, EN.
- Other paint finishes are available upon customer's request
- Valve complete with counter flanges, bolting and gaskets

Testing

- Every produced valve was tested according to API 598



Drawing A.3.1 Parts and dimensions

List of materials

Table A.3.1

| Item | Part | Material Group acc. to ASME B16.34 | | | | | |
|------|---------------|--|-------------|-------------------|-----------------|------------------------------|--------------|
| | | 1.1 | 1.3 | 1.9 | 1.13 | 2.2 | 2.11 |
| | | Application | | | | | |
| | | +29°C+425°C | +40°C+345°C | +29°C+550°C | +29°C+550°C | +196°C+600°C | +196°C+600°C |
| | | Material Code | | | | | |
| | | 13 | 15 | 23 | 27 | 43 | 45 |
| 1 | Body | A216 WCB | A352 LCB | A217 WC6 | A217 C5 | A351 CF8M | A351 CF8C |
| 2 | Bonnet | A216 WCB | A352 LCB | A217 WC6 | A217 C5 | A351 CF8M | A351 CF8C |
| 3 | Disc | A216 WCB | A352 LCB | A217 WC6 | A217 C5 | A351 CF8M | A351 CF8C |
| 4 | Trim | Body Seat | Cr13 | | HF (Stellite 6) | Basic Material or Stellite 6 | |
| 5 | | Disc Seat | Cr13 | | HF (Stellite 6) | Basic Material or Stellite 6 | |
| 6 | | Stem | SS 420 | | | | SS 316 |
| 7 | Stem Nut | nodular cast iron / Cu alloy | | | | | |
| 8 | Stud Bolts | A193 B7 | | A193 B16 / 1.7709 | | A193 B8M | A193 B8 |
| 9 | Nuts | A194 2H | | A194 4 / 1.7709 | | A194 8M | A194 8 |
| 10 | Bonnet Gasket | Reinforced pure graphite / Soft Steel / Spiral-wound / Oval Metal Ring | | | | | |
| 11 | Stem Packing | graphite with corrosion inhibitor | | | | | |
| 12 | Handwheel | cast iron or epoxy coated steel | | | | | |

Standards

Table A.3.2

| | |
|--|-----------------------|
| Globe Stop Valves according to BS 1873 | Class 150 + Class 900 |
| Face-to-face dimensions according to | ASME/ANSI B16.10 |
| Flanged ends according to | ASME/ANSI B16.5 |

[VBS] Dimensions Class 150

Table A.3.3

| DN (NPS) | FTF | D | b | Dk | d | n | H max | H min | Dt | ⚖️ (kg) |
|-------------|--------|-----|------|-------|------|----|-------|-------|-----|---------|
| | ↕ (mm) | | | | | | | | | |
| 50 (2) | 203 | 150 | 19 | 120,7 | 19 | 4 | 370 | 330 | 200 | 19 |
| 80 (3) | 241 | 190 | 24 | 152,4 | 19 | 4 | 450 | 400 | 250 | 38 |
| 100 (4) | 292 | 230 | 24 | 190,5 | 19 | 8 | 490 | 435 | 315 | 55 |
| 150 (6) | 406 | 280 | 25,4 | 241,3 | 22,2 | 8 | 585 | 515 | 400 | 98 |
| 200 (8) | 495 | 345 | 29 | 298,5 | 22,2 | 8 | 785 | 685 | 400 | 169 |
| 250 (10) | 622 | 405 | 30 | 362 | 25,4 | 12 | 865 | 740 | 500 | 235 |

[VBS] Dimensions Class 300

Table A.3.4

| DN (NPS) | FTF | D | b | Dk | d | n | H max | H min | Dt | ⚖️ (kg) |
|-------------|--------|-----|------|-------|------|----|-------|-------|-----|---------|
| | ↕ (mm) | | | | | | | | | |
| 50 (2) | 267 | 165 | 22 | 127 | 19 | 8 | 430 | 390 | 250 | 24 |
| 80 (3) | 318 | 210 | 28,5 | 168,3 | 22,2 | 8 | 520 | 470 | 250 | 55 |
| 100 (4) | 356 | 255 | 32 | 200 | 22,2 | 8 | 560 | 505 | 315 | 97 |
| 150 (6) | 444 | 320 | 36,5 | 269,9 | 22,2 | 12 | 725 | 655 | 400 | 165 |
| 200 (8) | 559 | 380 | 41,5 | 330,2 | 25,4 | 12 | 915 | 815 | 500 | 303 |
| 250 (10) | 622 | 445 | 48,1 | 387,4 | 28,6 | 16 | 986 | 821 | 500 | 350 |

[VBS] Dimensions Class 600

Table A.3.5

| DN (NPS) | FTF | D | b | Dk | d | n | H max | H min | Dt | ⚖️ (kg) |
|-------------|--------|-----|------|-------|------|----|-------|-------|-----|---------|
| | ↕ (mm) | | | | | | | | | |
| 50 (2) | 292 | 165 | 31,8 | 127 | 19 | 8 | 475 | 435 | 250 | 41 |
| 80 (3) | 356 | 210 | 38,4 | 168,3 | 22,2 | 8 | 585 | 535 | 315 | 73 |
| 100 (4) | 432 | 275 | 44,4 | 215,9 | 25,4 | 8 | 680 | 625 | 400 | 125 |
| 150 (6) | 559 | 355 | 54,4 | 292,1 | 28,6 | 12 | 855 | 785 | 500 | 270 |
| 200 (8) | 660 | 420 | 62,4 | 349,2 | 31,7 | 12 | 995 | 895 | 630 | 480 |

[VBS] Dimensions Class 900

Table A.3.6

| DN (NPS) | FTF | D | b | Dk | d | n | H max | H min | Dt | ⚖️ (kg) |
|-------------|--------|-----|------|-------|------|----|-------|-------|-----|---------|
| | ↕ (mm) | | | | | | | | | |
| 50 (2) | 368 | 215 | 45,1 | 165,1 | 25,4 | 8 | 560 | 503 | 400 | 88 |
| 80 (3) | 381 | 240 | 45,1 | 190,5 | 25,4 | 8 | 660 | 590 | 500 | 115 |
| 100 (4) | 457 | 290 | 51,5 | 235 | 31,7 | 8 | 683 | 611 | 500 | 165 |
| 150 (6) | 610 | 380 | 62,6 | 317,5 | 31,7 | 12 | 911 | 811 | 630 | 356 |
| 200 (8) | 737 | 470 | 70,5 | 393,7 | 38,1 | 12 | 995 | 870 | 730 | 610 |