

Design

The cast steel gate valves are designed and manufactured to provide maximum service life and dependability. All gate valves are full ported and meet the design requirements of American Petroleum Institute standard API600&API 6D, British standard BS1414& BS EN 1984 and generally, conform to American Society of Mechanical Engineers standard ASME B16.34. Valves are available in a complete range of body/bonnet materials and trims.

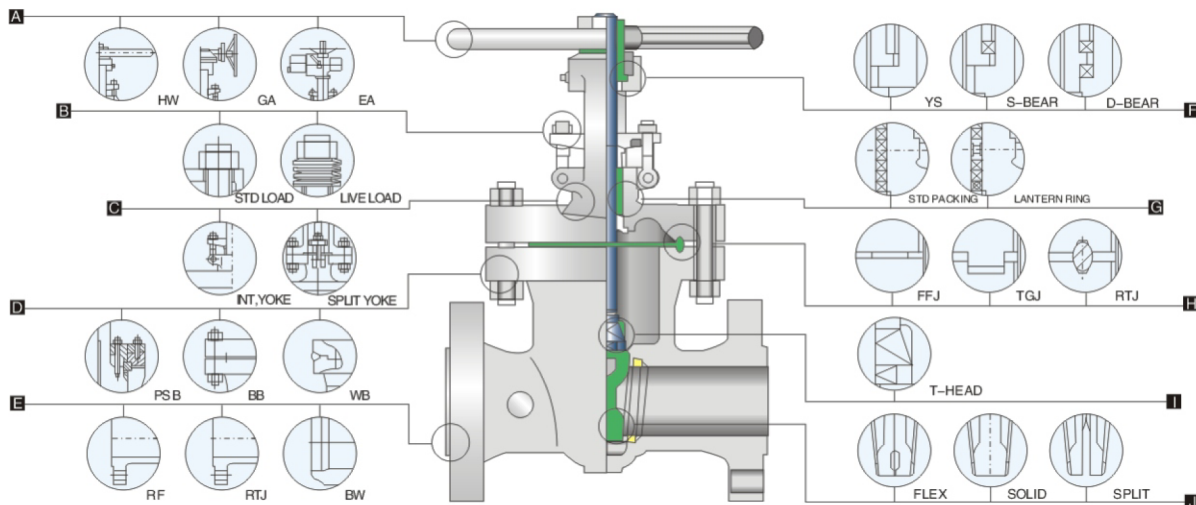
Ranges of materials

Standard body/bonnet materials include nine grades of carbon, low alloy and stainless steels. For special applications they can be supplied in other grades of alloy and stainless steel. There's a full range of trim materials to match any service. optional packing and gasket materials are available for a full range of service conditions.

Available Modifications

- Trim Changes
- End Connection Modifications
- Packing and Gasket Change
- Operator Mounting
- Handwheel Extensions

- Pressure Equalizing
- By-Pass
- Customer Specified Coatings
- Weld End Bore Changes
- Oxygen & Chlorine Clearing & Packaging



A Operation

Large handwheels for easy operation. also available with gearing, motor actuators, pneumatic or hydraulic actuators for more difficult services.

B Live Load Packing

In services requiring frequent cycling or with high pressure/temperature variations, live loading extends the service life between maintenance periods by requiring less adjustments. Belleville springs are employed to provide constant packing gland stress.

C OS&Y

Outside screw and yoke. Cast steel gate valve yoke integral with bonnet for 150Lb-8", 600Lb-6", 900Lb-4" & small.

D BB

bolted bonnet .welding bonnet and pressure seal bonnet in services requiring frequent cycling or with high pressure/temperature variations.

E End Connections

A choice of flanged ,RTJ flanged or buttwelding end for piping flexibility.

F Yokesleeve

Extra long thread engagement between yoke sleeve and stem provide long thread life. valves of sizes larger than 150Lb-12", 300Lb-10", 600Lb-6", 900Lb/1500Lb/2500Lb-4" are regularly provided with roll bearing yokes.

G Lantern Ring And Double Packing Set

lantern ring leak-off fitting connection and double packing stack is optionally available for critical services.

H Body-to-Bonnet Joint

A flat face gasket joint is used in the 150lb valves. A male and female joint is used in 300lb to 600lb valves. ring joint is used in the body to bonnet connections in 900lb & higher rated valves.

I Stem

All wedge gate valves are provided with upset forged T-head stems. By forging the T-head, the stem at the stem-wedge connection is strengthened, this design also allows the wedge possibility of a bent stem jamming the wedge.

J Wedge

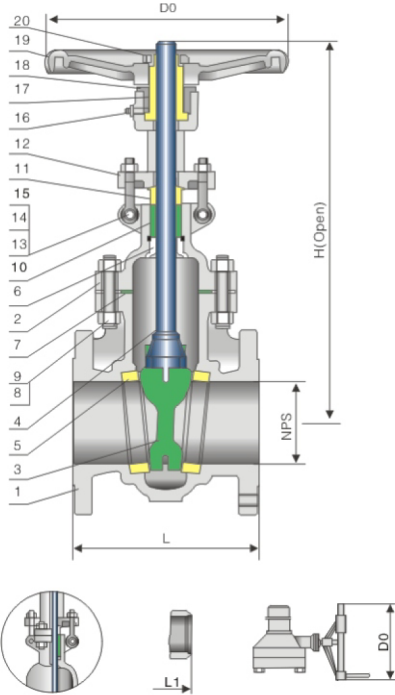
Integral guide rib faces assure self-centering of wedge. flexible wedge gate valve has a one-piece, twin-disc wedge, which is designed so that each half flexes independently. available in solid, flex split and his designs.

Applicable standards:

- STEEL GATE VALVES API 600/API 6D
- STEEL GATE VALVES ISO 10434/ISO 14313
- STEEL VALVES, ASME B16.34
- FACE TO FACE, ASME B16.10
- END FLANGES, ASME B16.5
- BUTTWELDING ENDS, ASME B16.25
- INSPECTION AND TEST API 598/API 6D

Design descriptions:

- FULL PORT DESIGN
- OS&Y OUTSIDE SCREW AND YOKE
- BB.BOLTED BONNET
- FLEXIBLE WEDGE, FULLY GUIDED
- CHOICE OF SOLID OR SPLIT WEDGE
- RENEWABLE SEAT RINGS
- FORGED T-HEAD STEM
- RISING STEM AND NON-RISING HANDWHEEL
- FLANGED OR BUTTWELDING ENDS
- AVAILABLE WITH BG OPERATOR



Materials of parts

| No | Part Name | Carbon steel | ASTM Material 1 1/4cr- 1/2mo | Carbon Steel |
|----|--------------------|----------------------------|---------------------------------|---------------|
| 1 | Body | A216-WCB | A217-WC6 | A352-LCB |
| 2 | Bonnet | A216-WCB | A217-WC6 | A352-LCB |
| 3 | Wedge | A216-WCB+CR13 | A217-WC6+HF | A352-LCB+CR13 |
| 4 | Stem | A182-F6a | CR-MO-V | A182-F6a |
| 5 | Seat ring | A105+CR13 | A182-F11+HF | A350-LF2+CR13 |
| 6 | Stem Backseat | A276-420 | A276-304 | A276-420 |
| 7 | Bonnet Gasket | Spiral wound(Graphite+304) | | |
| 8 | Bonnet Stud | A193-B7 | A193-B16 | A320-L7 |
| 9 | Bonnet Stud Nut | A194-2H | A194-7 | A194-4 |
| 10 | Packing | Graphite | | |
| 11 | Gland | A276-420 | A276-304 | A276-420 |
| 12 | Gland Flange | A216-WCB | A217-WC6 | A352-LCB |
| 13 | EyeBolt Pin | Carbon steel | A276-420 | Carbon steel |
| 14 | Eyebolt | Carbon steel | A193-B7 | Carbon steel |
| 15 | Eyebolt Nut | Carbon steel | A194-2H | Carbon steel |
| 16 | Grease Fitting | Brass+Steel | | |
| 17 | Yoke Sleeve | Aluminum-Bronze | | |
| 18 | Yokesleeve Jam nut | Carbon Steel | | |
| 19 | Handwheel | Malleable Iron | | |
| 20 | Handwheel Nut | Carbon Steel | | |

Note: 1) ductile ni-resist optional
2) wedge and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

Dimensional datas of ANSI Class 150Lb

| NPS DN | 2 | 2 1/2 | 3 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 24 | 26 | 28 | 30 | 32 | 36 | in |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|----|
| DN | 50 | 65 | 80 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 650 | 700 | 750 | 800 | 900 | mm |
| L (RF) | 7.00 | 7.50 | 8.00 | 9.00 | 10.50 | 11.50 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 20.00 | 22.00 | 24.00 | 24.00 | 28.00 | 28.00 | in |
| | 178 | 191 | 203 | 229 | 267 | 292 | 330 | 356 | 381 | 406 | 432 | 457 | 508 | 559 | 610 | 610 | 711 | 711 | mm |
| L1 (BW) | 85 | 9.50 | 11.12 | 12.00 | 15.88 | 16.50 | 18.00 | 19.75 | 22.50 | 24.00 | 26.00 | 28.00 | 32.00 | 34.00 | 36.00 | 36.00 | 38.00 | 40.00 | in |
| | 216 | 241 | 283 | 305 | 403 | 419 | 457 | 502 | 572 | 610 | 660 | 711 | 813 | 864 | 914 | 914 | 965 | 1016 | mm |
| H (open) | 15.25 | 17.00 | 18.88 | 23.00 | 30.50 | 37.62 | 45.50 | 53.12 | 59.38 | 67.00 | 74.50 | 83.50 | 98.25 | 110.50 | 116.50 | 124.00 | 129.00 | 146.50 | in |
| | 386 | 434 | 480 | 584 | 765 | 956 | 1149 | 1350 | 1508 | 1703 | 1892 | 2119 | 2500 | 2806 | 2960 | 3150 | 3280 | 3720 | mm |
| Do | 8 | 8 | 10 | 12 | 12 | 14 | 16 | 15 | 20 | 22 | 24 | 26 | 29 | 29 | 32 | 32 | 38 | 40 | in |
| | 200 | 200 | 250 | 300 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 640 | 700 | 720 | 800 | 800 | 950 | 1000 | mm |
| wt(kg) | 18 | 25 | 32 | 50 | 77 | 121 | 178 | 265 | 463 | 463 | 621 | 792 | 1521 | 1521 | 1838 | 2261 | 2490 | 3310 | RF |
| | 15 | 18 | 26 | 41 | 69 | 108 | 156 | 248 | 424 | 424 | 587 | 752 | 1570 | 1570 | 1900 | 3310 | 2540 | 3380 | BW |

Dimensional datas of ANSI Class 300Lb

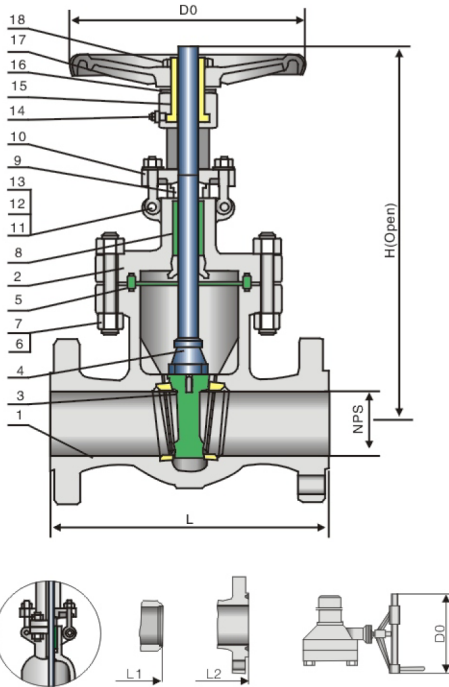
| NPS DN | 2 | 2 1/2 | 3 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 24 | 26 | 28 | 30 | 32 | 36 | in |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|----|
| DN | 50 | 65 | 80 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 650 | 700 | 750 | 800 | 900 | mm |
| L1 (RF/BW) | 8.50 | 9.50 | 11.12 | 12.00 | 15.88 | 16.50 | 18.00 | 19.75 | 30.00 | 33.00 | 36.00 | 39.00 | 45.00 | 49.00 | 53.00 | 55.00 | 60.00 | 68.00 | in |
| | 216 | 241 | 283 | 305 | 403 | 419 | 457 | 502 | 762 | 838 | 914 | 991 | 1143 | 1245 | 1346 | 1397 | 1524 | 1727 | mm |
| L2 (RTJ) | 9.12 | 10.12 | 11.75 | 12.62 | 16.50 | 17.12 | 18.62 | 20.38 | 30.62 | 33.62 | 36.62 | 39.75 | 45.88 | 50.00 | 54.00 | 56.00 | 61.12 | 69.12 | in |
| | 232 | 257 | 298 | 321 | 419 | 435 | 473 | 518 | 778 | 854 | 930 | 1010 | 1165 | 1270 | 1372 | 1422 | 1553 | 1756 | mm |
| H (open) | 16.12 | 17.88 | 20.00 | 24.00 | 31.75 | 39.38 | 47.62 | 55.75 | 62.25 | 67.88 | 77.12 | 86.38 | 102.00 | 117.00 | 122.00 | 126.00 | 130.00 | 152.00 | in |
| | 410 | 453 | 509 | 612 | 805 | 1000 | 1210 | 1415 | 1580 | 1725 | 1960 | 2195 | 2590 | 2975 | 3100 | 3200 | 3300 | 3860 | mm |
| Do | 8 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 22 | 24 | 26 | 29 | 29 | 32 | 32 | 38 | 40 | in |
| | 200 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 550 | 600 | 640 | 720 | 720 | 800 | 800 | 950 | 1000 | mm |
| wt(kg) | 23 | 35 | 50 | 71 | 144 | 209 | 322 | 482 | 683 | 950 | 1145 | 1635 | 2660 | 3090 | 3310 | 3595 | 3720 | 3985 | RF |
| | 17 | 26 | 39 | 53 | 113 | 164 | 256 | 390 | 565 | 805 | 965 | 1410 | 2305 | 2540 | 2725 | 3055 | 3360 | 3630 | BW |

Applicable Standards:

- STEEL GATE VALVES API 600/API 6D
- STEEL GATE VALVES ISO 10434/ISO 14313
- STEEL VALVES, ASME B16.34
- FACE TO FACE, ASME B16.10
- END FLANGES, ASME B16.5
- BUTTWELDING ENDS, ASME B16.25
- INSPECTION AND TEST API 598/API 6D

Design descriptions:

- FULL PORT DESIGN
- OS&Y OUTSIDE SCREW AND YOKE
- BB BOLTED BONNET
- FLEXIBLE WEDGE, FULLY GUIDED
- CHOICE OF SOLID OR SPLIT WEDGE
- RENEWABLE SEAT RINGS
- FORGED T-HEAD STEM
- RISING STEM AND NON-RISING HANDWHEEL
- FLANGED OR BUTTWELDING ENDS
- AVAILABLE WITH BG OPERATOR



Materials of parts

| No | Part Name | Carbon Steel | ASTM Material 1 ¹ / ₄ Cr-1 ¹ / ₂ Mo | Carbon Steel |
|----|---------------------|----------------------------|--|---------------|
| 1 | Body | A216-WCB | A217-WC6 | A352-LCB |
| 2 | Bonnet | A216-WCB | A217-WC6 | A352-LCB |
| 3 | Wedge | A216-WCB+CR13 | A217-WC6+HF | A352-LCB+CR13 |
| 4 | Stem | A182-F6a | CR-MO-V | A182-F6a |
| 5 | Seat Ring | A105+CR13 | A182-F11+HF | A350-LF2+CR13 |
| 6 | Stem Backseat | A276-420 | A276-304 | A276-420 |
| 7 | Bonnet Gasket | Spiral Wound(Graphite+304) | | |
| 8 | Bonnet Stud | A193-B7 | A193-B16 | A320-L7 |
| 9 | Bonnet Stud Nut | A194-2H | A194-7 | A194-4 |
| 10 | Packing | Graphite | | |
| 11 | Gland | A276-420 | A276-304 | A276-420 |
| 12 | Gland Flange | A216-WCB | A217-WC6 | A352-LCB |
| 13 | Eyebolt Pin | Carbon steel | A276-420 | Carbon steel |
| 14 | Eyebolt | Carbon steel | A193-B7 | Carbon steel |
| 15 | Eyebolt Nut | Carbon steel | A194-2H | Carbon steel |
| 16 | Grease Fitting | Brass+steel | | |
| 17 | Yokesleeve | Aluminum-bronze | | |
| 18 | Yokesleeve Jarn Nut | Carbon Steel | | |
| 19 | Handwheel | Malleable Iron | | |
| 20 | Handwheel Nut | Carbon Steel | | |

Note: 1) Ductile Ni-resist optional
 2) Wedge and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

Dimensional datas of ANSI Class 600Lb

| NPS DN | 2 50 | 2 1/2 65 | 3 80 | 4 100 | 6 150 | 8 200 | 10 250 | 12 300 | 14 350 | 16 400 | 18 450 | 20 500 | 24 600 | 26 650 | 28 700 | 30 750 | 32 800 | 36 900 | in mm |
|-----------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------|
| L/L1 (RF/BW) | 11.50 292 | 13.00 330 | 14.00 356 | 17.00 432 | 22.00 559 | 26.00 660 | 31.00 787 | 33.00 838 | 35.00 889 | 39.00 991 | 43.00 1092 | 47.00 1194 | 55.00 1397 | 57.00 1448 | 61.00 1549 | 65.00 1651 | 70.00 1778 | 82.00 2083 | in mm |
| L2 (RTJ) | 11.62 295 | 13.12 333 | 14.12 359 | 17.12 435 | 22.12 562 | 26.12 664 | 31.12 791 | 33.12 841 | 35.12 892 | 39.12 994 | 43.12 1095 | 47.25 1200 | 55.38 1407 | 57.50 1461 | 61.50 1562 | 65.50 1664 | 70.62 1794 | 82.62 2099 | in mm |
| H (open) | 16.50 418 | 18.75 476 | 20.38 518 | 25.50 646 | 33.00 840 | 40.38 1025 | 48.38 1230 | 57.00 1450 | 62.00 1575 | 70.62 1795 | 76.00 1930 | 87.00 2210 | 101.50 2580 | 105.00 2665 | 109.50 2780 | 114.00 2895 | 124.00 3150 | 140.00 3560 | in mm |
| Do | 8 200 | 10 250 | 10 250 | 12 300 | 18 450 | 20 500 | 24 600 | 24 600 | 24 600 | 24 600 | 26 640 | 26 640 | 29 720 | 29 720 | 32 800 | 32 800 | 38 950 | 40 1000 | in mm |
| wt(kg) | 36 29 | 52 42 | 67 53 | 112 83 | 170 125 | 393 310 | 610 472 | 890 730 | 1245 1055 | 1530 1240 | 1965 1625 | 2450 2030 | 2995 2590 | 3475 2855 | 3725 3065 | 4045 3440 | 4185 3780 | 4480 4085 | RF BW |

Dimensional datas of ANSI Class 900Lb

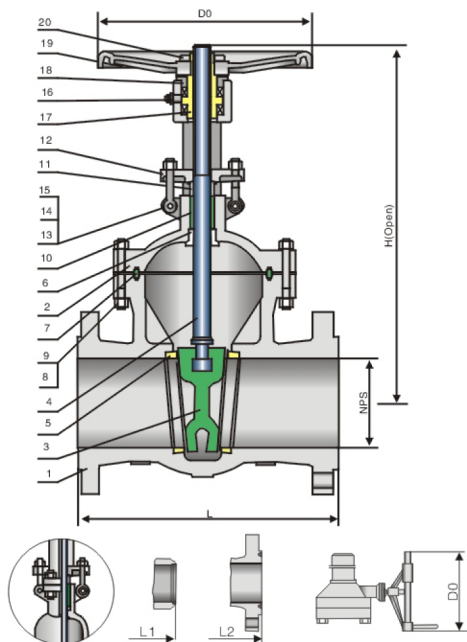
| NPS DN | 2 50 | 2 1/2 65 | 3 80 | 4 100 | 6 150 | 8 200 | 10 250 | 12 300 | 14 350 | 16 400 | 18 450 | 20 500 | 24 600 | in mm |
|-----------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|------------------|----------|
| L/L1 (RF/BW) | 14.50 368 | 16.50 419 | 15.00 381 | 18.00 457 | 24.00 610 | 29.00 737 | 33.00 838 | 38.00 965 | 40.50 1029 | 44.50 1130 | 48.00 1219 | 52.00 1321 | 61.00 1549 | in mm |
| L2 (RTJ) | 14.62 371 | 16.62 422 | 15.12 384 | 18.12 460 | 24.12 613 | 29.12 740 | 33.12 841 | 38.12 968 | 40.88 1038 | 44.88 1140 | 48.50 1232 | 52.50 1334 | 61.75 1568 | in mm |
| H (open) | 19.62 498 | 21.50 547 | 22.50 573 | 26.62 678 | 35.50 900 | 45.00 1103 | 53.00 1345 | 60.00 1525 | 74.88 1900 | 81.00 2055 | 87.00 2215 | 101.00 2565 | 104.00 264.00 | in mm |
| Do | 10 250 | 10 250 | 12 300 | 18 450 | 20 500 | 24 600 | 26 640 | 29 720 | 32 800 | 32 800 | 38 950 | 38 950 | 40 1000 | in mm |
| wt(kg) | 74 54 | 131 105 | 101 78 | 172 135 | 335 260 | 640 515 | 1100 920 | 1600 1380 | 2250 2010 | 2850 2565 | 3060 3485 | 3935 3250 | 49.00 4065 | RF BW |

Applicable Standards:

- STEEL GATE VALVES API 600/API6D
- STEEL GATE VALVES ISO 10434/ISO 14313
- STEEL VALVES, ASME B16.34
- FACE TO FACE, ASME B16.10
- END FLANGES, ASME B16.5
- BUTTWELDING ENDS, ASME B16.25
- INSPECTION AND TEST API 598/API 6D

Design descriptions:

- FULL PORT DESIGN
- OS&Y OUTSIDE SRCEW AND YOKE
- BB.BOLTED BONNET
- FLEXIBLE WEDGE, FULLY GUIDED
- CHOICE OF SOLID OR SPLIT WEDGE
- RENEWABLE SEAT RINGS
- FORGED T-HEAD STEM
- RISING STEM AND NON-RISING HANDWHEEL
- FLANGED OR BUTTWELDING ENDS
- AVAILABLE WITH BG OPERATOR



Materials of parts

| No | Part Name | Carbon Steel | ASTM Material 1 ¹ / ₄ Cr-1 ¹ / ₂ Mn | Carbon Steel |
|----|---------------------|----------------------------|--|---------------|
| 1 | Body | A216-WCB | A217-WC6 | A352-LCB |
| 2 | Bonnet | A216-WCB | A217-WC6 | A352-LCB |
| 3 | Wedge | A216-WCB+CR13 | A217-WC6+HF | A352-LCB+CR13 |
| 4 | Stem | A182-F6a | CR-MO-V | A182-F6a |
| 5 | Seat Ring | A105+CR13 | A182-F11+HF | A350-LF2+CR13 |
| 6 | Stem Backseat | A276-420 | A276-304 | A276-420 |
| 7 | Bonnet Gasket | Spiral Wound(Graphite+304) | | |
| 8 | Bonnet Stud | A193-B7 | A193-B16 | A320-L7 |
| 9 | Bonnet Stud Nut | A194-2H | A194-7 | A194-4 |
| 10 | Packing | Graphite | | |
| 11 | Gland | A276-420 | A276-304 | A276-420 |
| 12 | Gland Flange | A216-WCB | A217-WC6 | A352-LCB |
| 13 | Eyebolt Pin | Carbon steel | A276-420 | Carbon steel |
| 14 | Eyebolt | Carbon steel | A193-B7 | Carbon steel |
| 15 | Eyebolt Nut | Carbon steel | A194-2H | Carbon steel |
| 16 | Grease Fitting | Brass+steel | | |
| 17 | Yokesleeve | Aluminum-bronze | | |
| 18 | Yokesleeve Jarn Nut | Carbon Steel | | |
| 19 | Handwheel | Malleable Iron | | |
| 20 | Handwheel Nut | Carbon Steel | | |

Note: 1) Ductile Ni-resist optional
2) Wedge and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

Dimensional datas of ANSI Class 1500Lb

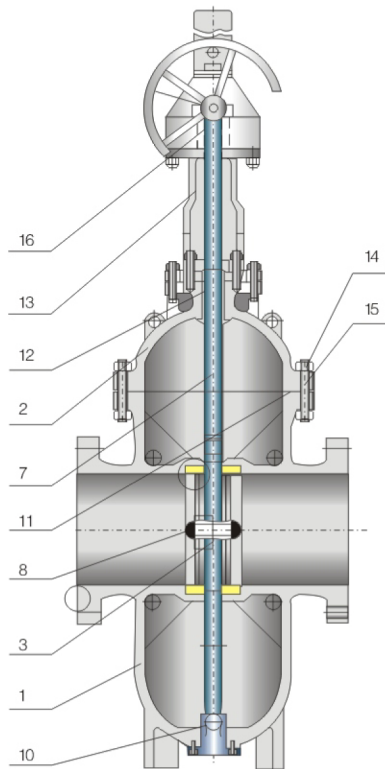
| NPS DN | 2 50 | 2 1/2 65 | 3 80 | 4 100 | 6 150 | 8 200 | 10 250 | 12 300 | 14 350 | 16 400 | 18 450 | 20 500 | 24 600 | in mm |
|-----------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------|
| L/L1 (RF/BW) | 14.50 368 | 16.50 419 | 18.50 470 | 21.50 546 | 27.75 705 | 32.75 832 | 39.00 991 | 44.50 1130 | 49.50 1257 | 54.50 1384 | 60.50 1537 | 65.50 1664 | 76.50 1943 | in mm |
| L2 (RTJ) | 15.50 371 | 16.62 422 | 18.62 473 | 21.62 549 | 28.00 711 | 33.12 841 | 39.38 1000 | 45.12 1146 | 50.25 1276 | 55.38 1407 | 61.38 1559 | 66.38 1686 | 77.62 1972 | in mm |
| H (open) | 24.25 615 | 26.00 658 | 30.00 760 | 34.12 868 | 39.50 1005 | 45.00 1145 | 54.00 1370 | 61.00 1550 | 74.88 1900 | 80.50 2050 | 93.75 2380 | 101.50 2580 | 114.75 2915 | in mm |
| Do | 10 250 | 12 300 | 18 450 | 20 500 | 24 600 | 18 460 | 18 460 | 24 600 | 24 600 | 24 600 | 24 600 | 24 600 | 24 600 | in mm |
| wt(kg) | 116 105 | 166 150 | 209 188 | 296 265 | 510 412 | 920 760 | 1910 1640 | 3145 2755 | 4100 3200 | 6200 5300 | 8965 8070 | 13100 11790 | 15860 14275 | RF BW |

Dimensional datas of ANSI Class 2500Lb

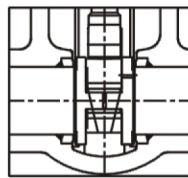
| NPS DN | 2 50 | 2 1/2 65 | 3 80 | 4 100 | 6 150 | 8 200 | 10 250 | 12 300 | 14 350 | 16 400 | 18 450 | 20 500 | 24 600 | in mm |
|-----------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|-----------|-----------|-----------|-----------|-----------|----------|
| L/L1 (RF/BW) | 17.75 451 | 20.00 508 | 22.75 578 | 26.50 673 | 36.00 914 | 40.25 1022 | 50.00 1270 | 56.00 1422 | - | - | - | - | - | in mm |
| L2 (RTJ) | 17.88 454 | 20.50 514 | 23.00 584 | 26.88 683 | 36.50 927 | 40.88 1038 | 50.88 1292 | 56.88 1445 | - | - | - | - | - | in mm |
| H (open) | 24.88 631 | 29.00 736 | 35.00 890 | 41.50 1055 | 57.00 1450 | 63.38 1610 | 81.75 2075 | 89.75 2280 | - | - | - | - | - | in mm |
| Do | 12 300 | 18 450 | 20 500 | 20 500 | 24 600 | 24 600 | 24 600 | 24 600 | - | - | - | - | - | in mm |
| wt(kg) | 155 124 | 210 160 | 310 245 | 580 460 | 1600 1310 | 2450 2010 | 4570 3800 | 7150 6000 | - | - | - | - | - | RF BW |

Applicable Standards:

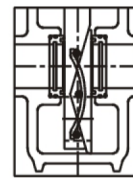
DESIGN & MANUFACTURE CONFORM WITH: API 6D/ISO 14313、ASME B16.34
 CONNECTION DIMENSION CONFORMS WITH: ASME B16.5、DIN EN 1092
 FIRE RESISTANCE DESIGN CONFORMS WITH: API 607/ISO 10497
 INSPECTION & TEST CONFORMS WITH: API 6D、ISO 5208、API 598
 MATERIAL CONFORMS WITH: ISO 15156



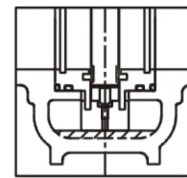
Single disk with pilot port structure



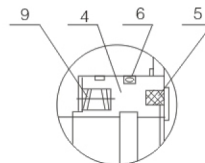
Double disk non-diversion hole structure



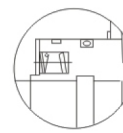
Double disk with diversion hole structure



Single disk non-diversion hole structure



Soft sealing structure



Hard sealing structure

Product Features

- 1、 Valve seat adopts the structure of O-ring seals and pretightening float valve seat, the soft sealing inlays fluoroplastic, it provides the function of double sealing: fluoroplastic to metal and metal to metal. And at the same time, the fluoroplastic can remove the dirt of the gate disk.
- 2、 Of the metal to metal sealing, there is a grease injection structure outside the valve, grease injects the sealing part through the seat, in this way achieves the aim of zero leakage.
- 3、 Through conduit gate valve always coincide with the sealing surface, whether the disc is full open-or full-closed; sealing surface to be protected from scouring by media directly, thereby extending the service life. In full-time, smooth channel for the direct and flow resistance coefficient is extremely small, no pressure loss, leading to Fig.

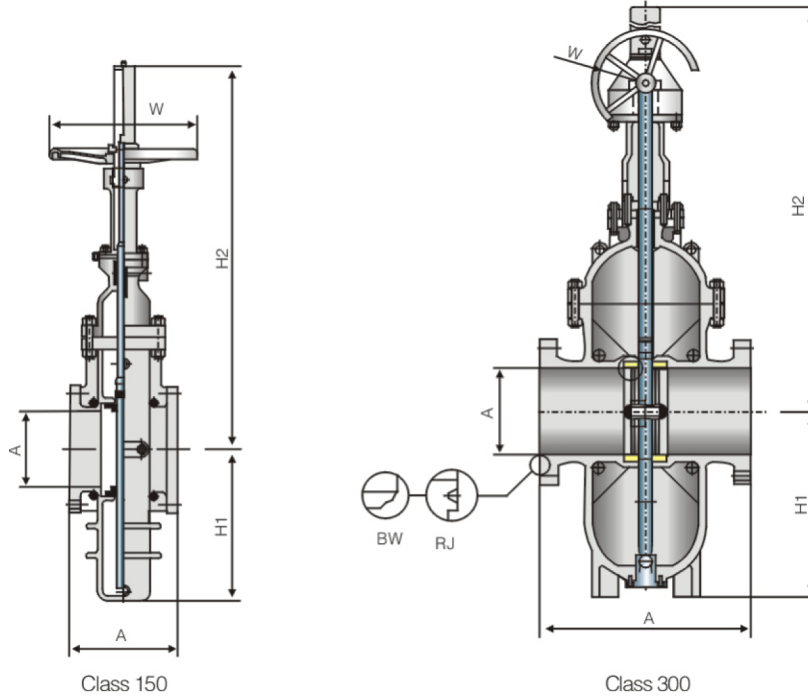
Materials of parts

| | |
|--------------------------|---|
| Body | WCB/LCB/CF8M/CF8/CF3M/CF3/WC6/WC9/CD3MN |
| Bonnet | WCB/LCB/CF8M/CF8/CF3M/CF3/WC6/WC9/CD3MN |
| Disc | A105+ENP/LF2+ENP/F304/F316/F304L/F316L/F51 |
| Seat | A105+ENP/LF2+ENP/F304/F316/F304L/F316L/F51 |
| Stem | F6a/F304/F316/F304L/F316L/F51 |
| Seal ring | PTFE/NYLON/PEEK/TEFLON |
| Sealing surface material | 1~12 Trim material |
| O-ring | VITON/NBR |
| Bolt | B7M/B8M/L7M/B16M |
| Nut | 2HM/8M/7M/4M |
| Spring | 17-4PH/Inconel |
| Stem nut | C95200/D2/A536 |
| Gasket | Flexible graphite+304/Flexible graphite+316 |
| Packing | Flexible graphite/PTFE |

Materials could be choosed according to customers' requirement & working condition.

Applicable Standards:

DESIGN & MANUFACTURE CONFORM WITH: API 6D/ISO 14313, ASME B16.34
 CONNECTION DIMENSION CONFORMS WITH: ASME B16.5 DIN EN 1092
 FIRE RESISTANCE DESIGN CONFORMS WITH: API 607/ISO 10497
 INSPECTION & TEST CONFORMS WITH: API 6D, ISO 5208, API 598
 MATERIAL CONFORMS WITH: ISO 15156



Dimensional datas

| NPS inch | DN | A mm | B mm | H1 mm | H2 mm | W mm | WT kg | T N.m | NPS inch | DN | A mm | B mm | H1 mm | H2 mm | W mm | WT kg | T N.m |
|-------------------------|-----|---------|---------|----------|----------|---------|----------|----------|-------------|-----|---------|---------|----------|----------|---------|----------|----------|
| ANSI Class 150Lb | | | | | | | | | | | | | | | | | |
| 2 | 50 | 178 | 51 | 125 | 452 | 200 | 25 | 23 | 16 | 400 | 406 | 385 | 685 | 1854 | 560 | 630 | 572 |
| 3 | 80 | 203 | 76 | 175 | 605 | 250 | 43 | 50 | 18 | 450 | 432 | 436 | 790 | 2088 | 650 | 836 | 728 |
| 4 | 100 | 229 | 100 | 202 | 680 | 280 | 65 | 60 | ★20 | 500 | 457 | 487 | 880 | 2420 | 460 | 1190 | 910 |
| 6 | 150 | 267 | 150 | 282 | 890 | 300 | 95 | 78 | ★24 | 600 | 508 | 589 | 1050 | 2688 | 460 | 1580 | 1313 |
| 8 | 200 | 292 | 201 | 355 | 1128 | 350 | 146 | 143 | ★28 | 700 | 610 | 684 | 1192 | 3078 | 460 | 2400 | 2028 |
| 10 | 250 | 330 | 252 | 445 | 1296 | 400 | 245 | 211 | ★30 | 750 | 610 | 735 | 1268 | 3252 | 600 | 3200 | 2305 |
| 12 | 300 | 356 | 303 | 518 | 1483 | 450 | 343 | 289 | ★32 | 800 | 711 | 779 | 1355 | 3495 | 600 | 3700 | 2795 |
| 14 | 350 | 381 | 334 | 606 | 1668 | 500 | 480 | 403 | ★36 | 900 | 711 | 874 | 1515 | 3898 | 600 | 4600 | 3783 |

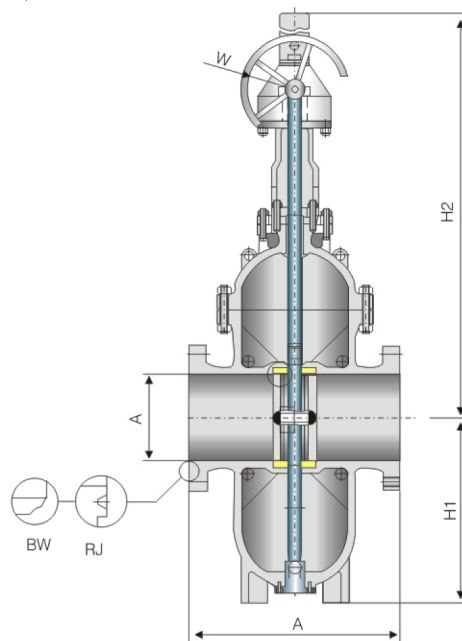
Dimensional datas

| NPS inch | DN | A mm | B mm | H1 mm | H2 mm | W mm | WT kg | T N.m | NPS inch | DN | A mm | B mm | H1 mm | H2 mm | W mm | WT kg | T N.m |
|-------------------------|-----|---------|---------|----------|----------|---------|----------|----------|-------------|-----|---------|---------|----------|----------|---------|----------|----------|
| ANSI Class 300Lb | | | | | | | | | | | | | | | | | |
| 2 | 50 | 292 | 51 | 135 | 456 | 200 | 30 | 25 | 16 | 400 | 902 | 385 | 730 | 1884 | 650 | 1280 | 735 |
| 3 | 80 | 356 | 76 | 182 | 618 | 250 | 48 | 71 | ★18 | 450 | 978 | 436 | 802 | 2163 | 460 | 1665 | 988 |
| 4 | 100 | 406 | 100 | 216 | 713 | 280 | 78 | 95 | ★20 | 500 | 1054 | 487 | 935 | 2420 | 460 | 2168 | 1235 |
| 6 | 150 | 495 | 150 | 315 | 903 | 350 | 152 | 117 | ★24 | 600 | 1232 | 589 | 1103 | 2810 | 460 | 2980 | 1963 |
| 8 | 200 | 597 | 201 | 382 | 1133 | 400 | 240 | 185 | ★28 | 700 | 1397 | 684 | 1262 | 3203 | 460 | 4060 | 2990 |
| 10 | 250 | 673 | 252 | 480 | 1403 | 450 | 420 | 292 | ★30 | 750 | 1524 | 735 | 1342 | 3412 | 600 | 4980 | 3566 |
| 12 | 300 | 762 | 303 | 545 | 1582 | 500 | 525 | 366 | ★32 | 800 | 1651 | 779 | 1422 | 3646 | 600 | 5800 | 4121 |
| 14 | 350 | 826 | 334 | 645 | 1688 | 560 | 810 | 576 | ★36 | 900 | 1880 | 874 | 1513 | 4055 | 600 | 7790 | 5785 |

Note: ★ Worm-gear actuator

Applicable Standards:

DESIGN & MANUFACTURE CONFORM WITH: API 6D/ISO 14313, ASME B16.34
 CONNECTION DIMENSION CONFORMS WITH: ASME B16.5 DIN EN 1092
 FIRE RESISTANCE DESIGN CONFORMS WITH: API 607/ISO 10497
 INSPECTION & TEST CONFORMS WITH: API 6D, ISO 5208, API 598
 MATERIAL CONFORMS WITH: ISO 15156



Dimensional datas

| NPS inch | DN | A mm | B mm | H1 mm | H2 mm | W mm | WT kg | T N.m | NPS inch | DN | A mm | B mm | H1 mm | H2 mm | W mm | WT kg | T N.m |
|-------------------------|-----|------|------|-------|-------|------|-------|-------|----------|-----|------|------|-------|-------|------|-------|-------|
| ANSI Class 600Lb | | | | | | | | | | | | | | | | | |
| 2 | 50 | 292 | 51 | 160 | 466 | 250 | 60 | 32 | ★ 14 | 350 | 889 | 334 | 654 | 1745 | 460 | 1680 | 1453 |
| 3 | 80 | 356 | 76 | 228 | 622 | 280 | 106 | 117 | ★ 16 | 400 | 991 | 385 | 740 | 1978 | 460 | 2230 | 2103 |
| 4 | 100 | 432 | 100 | 258 | 724 | 350 | 160 | 169 | ★ 18 | 450 | 1092 | 436 | 812 | 2268 | 600 | 2700 | 2808 |
| 6 | 150 | 559 | 150 | 332 | 913 | 450 | 395 | 234 | ★ 20 | 500 | 1194 | 487 | 1040 | 2509 | 600 | 3100 | 3653 |
| 8 | 200 | 660 | 201 | 411 | 1148 | 560 | 605 | 319 | ★ 24 | 600 | 1397 | 589 | 1160 | 2820 | 600 | 5100 | 4953 |
| 10 | 250 | 787 | 252 | 493 | 1412 | 600 | 960 | 737 | ★ 28 | 700 | 1549 | 684 | 1288 | 3233 | 1000 | 7050 | 6253 |
| 12 | 300 | 838 | 303 | 577 | 1596 | 650 | 1520 | 1274 | ★ 30 | 750 | 1651 | 735 | 1330 | 3442 | 1000 | 8200 | 7163 |

Dimensional datas

| NPS inch | DN | A mm | B mm | H1 mm | H2 mm | W mm | WT kg | T N.m | NPS inch | DN | A mm | B mm | H1 mm | H2 mm | W mm | WT kg | T N.m |
|-------------------------|-----|------|------|-------|-------|------|-------|-------|----------|-----|------|------|-------|-------|------|-------|-------|
| ANSI Class 900Lb | | | | | | | | | | | | | | | | | |
| 2 | 50 | 368 | 49 | 162 | 476 | 300 | 133 | 71 | 12 | 300 | 965 | 303 | 577 | 1600 | 460 | 1850 | 1296 |
| 3 | 80 | 381 | 74 | 230 | 638 | 350 | 198 | 150 | 14 | 350 | 1029 | 322 | 660 | 1755 | 460 | 2580 | 1482 |
| 4 | 100 | 457 | 100 | 262 | 730 | 400 | 260 | 181 | 16 | 400 | 1130 | 373 | 750 | 2028 | 600 | 3500 | 2139 |
| 6 | 150 | 610 | 150 | 336 | 920 | 560 | 565 | 413 | 18 | 450 | 1219 | 423 | 822 | 2288 | 600 | 4400 | 2919 |
| 8 | 200 | 737 | 201 | 415 | 1152 | 600 | 965 | 767 | 20 | 500 | 1321 | 471 | 1058 | 2525 | 600 | 5560 | 4486 |
| ★ 10 | 250 | 838 | 252 | 496 | 1418 | 460 | 1280 | 1021 | 24 | 600 | 1549 | 589 | 1176 | 2850 | 1000 | 7480 | 5195 |

Dimensional datas

| NPS inch | DN | A mm | B mm | H1 mm | H2 mm | W mm | WT kg | T N.m | NPS inch | DN | A mm | B mm | H1 mm | H2 mm | W mm | WT kg | T N.m |
|--------------------------|-----|------|------|-------|-------|------|-------|-------|----------|-----|------|------|-------|-------|------|-------|-------|
| ANSI Class 1500Lb | | | | | | | | | | | | | | | | | |
| 2 | 50 | 368 | 49 | 162 | 476 | 300 | 133 | 107 | ★ 6 | 150 | 705 | 144 | 338 | 930 | 460 | 830 | 618 |
| 3 | 80 | 470 | 74 | 230 | 638 | 400 | 235 | 225 | ★ 8 | 200 | 832 | 192 | 420 | 1160 | 460 | 1380 | 1151 |
| 4 | 100 | 546 | 100 | 270 | 745 | 500 | 398 | 272 | ★ 10 | 250 | 991 | 239 | 500 | 1428 | 460 | 2230 | 1532 |

Note: ★ Turbine drives