



## Main Materials

| No. | Part Name     | WCB                  | LCB                  | Z3C1Cr18Ni9Ti        | ZG1Cr18Ni12Mo2Ti         | ZG1Cr18Ni12Mo2Ti     | ZG1Cr15Cr1Mo1V       |
|-----|---------------|----------------------|----------------------|----------------------|--------------------------|----------------------|----------------------|
| 1   | Body          | WCB                  | LCB                  | Z3C1Cr18Ni9Ti        | ZG1Cr18Ni12Mo2Ti         | ZG1Cr15Cr1Mo1V       | ZG1Cr15Cr1Mo1V       |
| 2   | Cover         | Q235A                | A105                 | 1Cr18Ni9Ti           | 0Cr18Ni12Mo2Ti           | 25Cr2Mo1V            | 25Cr2Mo1V            |
| 3   | Ball          | SF-1                 | FBD60                | FBD60                | FBD16                    | FBD300               | FBD300               |
| 4   | Lower Stem    | 20Cr13               | 20Cr13               | 1Cr18Ni9Ti           | 0Cr18Ni12Mo2Ti           | 1Cr18Ni9Ti           | 1Cr18Ni9Ti           |
| 5   | Seal Ring     | WCB                  | LCB                  | Z3C1Cr18Ni9Ti        | ZG1Cr18Ni12Mo2Ti         | ZG1Cr15Cr1Mo1V       | ZG1Cr15Cr1Mo1V       |
| 6   | Cover         | Q235A                | LF2                  | 1Cr18Ni9Ti           | 0Cr18Ni12Mo2Ti           | 25Cr2Mo1V            | 25Cr2Mo1V            |
| 7   | Seat          | 0Cr35A+PTFE Seat     | LF2+PTFE Seat        | 1Cr18Ni9Ti+PTFE Seat | 0Cr18Ni12Mo2Ti+PTFE Seat | 25Cr2Mo1V+PTFE Seat  | 25Cr2Mo1V+PTFE Seat  |
| 8   | Seat Ring     | 1Cr18Ni9Ti+PTFE Seat | 1Cr18Ni9Ti+PTFE Seat | 1Cr18Ni9Ti+PTFE Seat | 0Cr18Ni12Mo2Ti+PTFE Seat | 1Cr18Ni9Ti+PTFE Seat | 1Cr18Ni9Ti+PTFE Seat |
| 9   | Stem          | SF-1                 | FBD60                | FBD60                | FBD16                    | FBD300               | FBD300               |
| 10  | Upper Stem    | 20Cr13               | 20Cr13               | 1Cr18Ni9Ti           | 0Cr18Ni12Mo2Ti           | 1Cr18Ni9Ti           | 1Cr18Ni9Ti           |
| 11  | Packing       | WCB                  | LCB                  | Z3C1Cr18Ni9Ti        | ZG1Cr18Ni12Mo2Ti         | ZG1Cr15Cr1Mo1V       | ZG1Cr15Cr1Mo1V       |
| 12  | Gland         | WCB                  | LCB                  | Z3C1Cr18Ni9Ti        | ZG1Cr18Ni12Mo2Ti         | ZG1Cr15Cr1Mo1V       | ZG1Cr15Cr1Mo1V       |
| 13  | Stud          | 35CrMoA              | 35CrMoA              | 0Cr18Ni9             | 0Cr18Ni9                 | 15Cr1Mo1V            | 15Cr1Mo1V            |
| 14  | Nut           | 45                   | 45                   | 0Cr18Ni9             | 0Cr18Ni9                 | 20CrMo               | 20CrMo               |
| 15  | Grease Nipple | Carbon Steel         | Carbon Steel         | Carbon Steel         | Carbon Steel             | Carbon Steel         | Carbon Steel         |
| 16  | Bracket       | WCB                  | LCB                  | Z3C1Cr18Ni9Ti        | 0Cr18Ni12Mo2Ti           | ZG1Cr15Cr1Mo1V       | ZG1Cr15Cr1Mo1V       |
| 17  | Support       | WCB                  | WCB                  | WCB                  | WCB                      | WCB                  | WCB                  |
| 18  | Worm Gear     |                      |                      |                      | QT                       |                      |                      |

## PN1.0MPa Main external and connection dimension

| DN<br>PN(MPa) | DN   | Dimensions (mm) |         |      |      |    |   |        |      |      |
|---------------|------|-----------------|---------|------|------|----|---|--------|------|------|
|               |      | L               | D       | K    | d    | b  | f | Z-φd   | Hw   | Hd   |
| 1.0           | 50   | 178             | 160/165 | 125  | 100  | 18 | 2 | 4-φ18  | 270  | 310  |
|               | 65   | 190             | 180/185 | 145  | 120  | 18 | 2 | 4-φ18  | 280  | 320  |
|               | 80   | 203             | 195/200 | 160  | 135  | 20 | 2 | 4-φ18  | 290  | 330  |
|               | 100  | 229             | 215/220 | 180  | 156  | 22 | 2 | 8-φ18  | 330  | 380  |
|               | 125  | 254             | 245/250 | 210  | 184  | 22 | 2 | 8-φ18  | 345  | 405  |
|               | 150  | 267             | 280/285 | 240  | 211  | 24 | 2 | 8-φ23  | 370  | 440  |
|               | 200  | 292             | 335/340 | 295  | 266  | 24 | 2 | 8-φ23  | 405  | 470  |
|               | 250  | 330             | 390/395 | 350  | 319  | 26 | 2 | 12-φ23 | 480  | 540  |
|               | 300  | 356             | 440/445 | 400  | 370  | 26 | 2 | 12-φ23 | 520  | 580  |
|               | 350  | 430             | 500/505 | 460  | 429  | 26 | 2 | 16-φ23 | 570  | 630  |
|               | 400  | 530             | 565     | 515  | 480  | 28 | 2 | 16-φ26 | 630  | 710  |
|               | 450  | 580             | 615     | 565  | 530  | 28 | 2 | 20-φ26 | 690  | 770  |
|               | 500  | 660             | 670     | 620  | 582  | 28 | 2 | 20-φ26 | 740  | 820  |
|               | 600  | 840             | 780     | 725  | 682  | 34 | 2 | 20-φ30 | 840  | 940  |
|               | 700  | 900             | 895     | 840  | 794  | 34 | 5 | 24-φ30 | 960  | 1040 |
|               | 800  | 1000            | 1015    | 950  | 901  | 36 | 5 | 24-φ33 | 1080 | 1180 |
|               | 900  | 1100            | 1115    | 1050 | 1001 | 38 | 5 | 28-φ33 | 1190 | 1280 |
|               | 1000 | 1200            | 1230    | 1160 | 1112 | 38 | 5 | 28-φ36 | 1310 | 1420 |
|               | 1100 | 1250            | 1340    | 1270 | 1222 | 42 | 5 | 28-φ36 | 1390 | 1480 |
|               | 1200 | 1300            | 1455    | 1380 | 1328 | 44 | 5 | 32-φ39 | 1420 | 1530 |
|               | 1400 | 1500            | 1575    | 1500 | 1530 | 48 | 5 | 36-φ42 | 1540 | 1650 |
|               | 1600 | 1800            | 1915    | 1820 | 1750 | 52 | 5 | 40-φ48 | 1650 | 1750 |
|               | 1800 | 2000            | 2115    | 2020 | 1950 | 56 | 5 | 44-φ48 | 1790 | 1860 |
|               | 2000 | 2200            | 2325    | 2230 | 2150 | 60 | 5 | 48-φ48 | 1920 | 1990 |

## PN1.6 MPa Main External and Connection Dimensions

| DN<br>PN(MPa) | DN   | Dimensions (mm) |           |      |      |    |   |          |      |      |
|---------------|------|-----------------|-----------|------|------|----|---|----------|------|------|
|               |      | L               | D         | K    | d    | b  | f | Z-φd     | Hw   | Hd   |
| 1.6           | 50   | 178             | 160/165   | 125  | 100  | 18 | 2 | 4- φ 18  | 270  | 310  |
|               | 65   | 190             | 180/185   | 145  | 120  | 18 | 2 | 4- φ 18  | 280  | 320  |
|               | 80   | 203             | 195/200   | 160  | 135  | 20 | 2 | 8- φ 18  | 290  | 330  |
|               | 100  | 229             | 215/220   | 180  | 156  | 22 | 2 | 8- φ 18  | 330  | 380  |
|               | 125  | 254             | 245/250   | 210  | 184  | 22 | 2 | 8- φ 18  | 345  | 405  |
|               | 150  | 267             | 280/285   | 240  | 211  | 24 | 2 | 8- φ 23  | 370  | 440  |
|               | 200  | 292             | 335/340   | 295  | 266  | 24 | 2 | 12- φ 23 | 405  | 470  |
|               | 250  | 330             | 390/395   | 355  | 320  | 26 | 2 | 12- φ 26 | 480  | 540  |
|               | 300  | 356             | 440/445   | 400  | 370  | 26 | 2 | 12- φ 23 | 520  | 580  |
|               | 350  | 430             | 500/505   | 460  | 435  | 30 | 2 | 16- φ 26 | 570  | 630  |
|               | 400  | 530             | 580       | 525  | 485  | 32 | 2 | 16- φ 30 | 630  | 710  |
|               | 450  | 580             | 640       | 585  | 545  | 34 | 2 | 20- φ 30 | 690  | 770  |
|               | 500  | 660             | 705/715   | 650  | 605  | 36 | 2 | 20- φ 33 | 740  | 820  |
|               | 600  | 840             | 840       | 770  | 718  | 38 | 2 | 20- φ 36 | 840  | 940  |
|               | 700  | 900             | 910       | 840  | 794  | 40 | 5 | 24- φ 36 | 960  | 1040 |
|               | 800  | 1000            | 1020/1025 | 950  | 901  | 42 | 5 | 24- φ 39 | 1080 | 1180 |
|               | 900  | 1100            | 1120/1125 | 1050 | 1001 | 44 | 5 | 28- φ 39 | 1190 | 1280 |
|               | 1000 | 1200            | 1255      | 1170 | 1112 | 46 | 5 | 28- φ 42 | 1310 | 1420 |
|               | 1100 | 1250            | 1370      | 1280 | 1222 | 48 | 5 | 28- φ 42 | 1390 | 1480 |
|               | 1200 | 1300            | 1485      | 1380 | 1328 | 52 | 5 | 32- φ 48 | 1420 | 1530 |
|               | 1400 | 1500            | 1685      | 1590 | 1530 | 58 | 5 | 36- φ 48 | 1540 | 1650 |
|               | 1600 | 1800            | 1930      | 1820 | 1750 | 64 | 5 | 40- φ 48 | 1660 | 1750 |
|               | 1800 | 2000            | 2130      | 2020 | 1950 | 68 | 5 | 44- φ 48 | 1790 | 1860 |
|               | 2000 | 2200            | 2345      | 2230 | 2150 | 70 | 5 | 48- φ 48 | 1920 | 1990 |