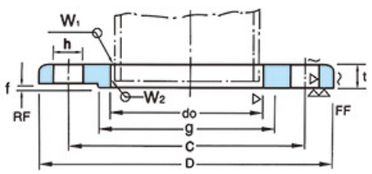
## 5Kg/Cm²

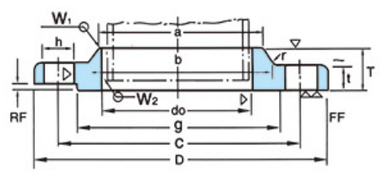
JIS B2220–1984(KSB 1503–1985)

5Kg/Cm² SLIP–ON WELDING STEEL PIPE FLANGES

SOP TYPE
NOMINAL SIZE 10-1000mm




SOH TYPE
NOMINAL SIZE 450-1000mm




Unit:mm

| Nominal Bore of Flange | Outside Diam.of AppliCable Pipe | Inside Diam.of Flange do | Outside Diam.of Flange D | Sectional Dimensions of Flange | | | | | | | Dia.of Bolt | | | Nominal Bolt Size | Weight(kg) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | t | T | Diam.of Hub | | Rad –ius r | Raised face f | Diam.of Raised Face g | Diam.of Bolt Circle C | Number of Bolt Holes | Hole Diam h | | SOP | BL | SOH |
| | | | | | | a | b | | | | | | | | | | |
| (10) | 17.3 | 17.8 | 75 | 9 | – | – | – | – | 1 | 39 | 55 | 4 | 12 | M10 | 0.27 | 0.3 | – |
| 15 | 21.7 | 22.2 | 80 | 9 | – | – | – | – | 1 | 44 | 60 | 4 | 12 | M10 | 0.30 | 0.4 | – |
| (20) | 27.2 | 27.7 | 85 | 10 | – | – | – | – | 1 | 49 | 65 | 4 | 12 | M10 | 0.37 | 0.5 | – |
| 25 | 34.0 | 34.5 | 95 | 10 | – | – | – | – | 1 | 59 | 75 | 4 | 12 | M10 | 0.45 | 0.6 | – |
| (32) | 42.7 | 43.2 | 115 | 12 | – | – | – | – | 2 | 70 | 90 | 4 | 15 | M12 | 0.78 | 0.9 | – |
| 40 | 48.6 | 49.1 | 120 | 12 | – | – | – | – | 2 | 75 | 95 | 4 | 15 | M12 | 0.83 | 1.0 | – |
| 50 | 60.5 | 61.1 | 130 | 14 | – | – | – | – | 2 | 85 | 105 | 4 | 15 | M12 | 1.07 | 1.4 | – |
| 65 | 76.3 | 77.1 | 155 | 14 | – | – | – | – | 2 | 110 | 130 | 4 | 15 | M12 | 1.49 | 2.0 | – |
| 80 | 89.1 | 90.0 | 180 | 14 | – | – | – | – | 2 | 121 | 145 | 4 | 19 | M16 | 1.99 | 2.7 | – |
| (90) | 101.6 | 102.6 | 190 | 14 | – | – | – | – | 2 | 131 | 155 | 4 | 19 | M16 | 2.09 | 3.0 | – |
| 100 | 114.3 | 115.4 | 200 | 16 | – | – | – | – | 2 | 141 | 165 | 8 | 19 | M16 | 2.39 | 3.7 | – |
| 125 | 139.8 | 141.2 | 235 | 16 | – | – | – | – | 2 | 176 | 200 | 8 | 19 | M16 | 3.23 | 5.2 | – |
| 150 | 165.2 | 166.6 | 265 | 18 | – | – | – | – | 2 | 206 | 230 | 8 | 19 | M16 | 4.41 | 7.5 | – |
| (175) | 190.7 | 192.1 | 300 | 18 | – | – | – | – | 2 | 232 | 260 | 8 | 23 | M20 | 5.51 | 9.5 | – |
| 200 | 216.3 | 218.0 | 320 | 20 | – | – | – | – | 2 | 252 | 280 | 8 | 23 | M20 | 6.33 | 12.2 | – |
| (225) | 241.8 | 243.7 | 345 | 20 | – | – | – | – | 2 | 277 | 305 | 12 | 23 | M20 | 6.64 | 14.0 | – |
| 250 | 267.4 | 269.5 | 385 | 22 | – | – | – | – | 2 | 317 | 345 | 12 | 23 | M20 | 9.45 | 19.3 | – |
| 300 | 318.5 | 321.0 | 430 | 22 | – | – | – | – | 3 | 360 | 390 | 12 | 23 | M20 | 10.3 | 24.3 | – |
| 350 | 355.6 | 358.1 | 480 | 24 | – | – | – | – | 3 | 403 | 435 | 12 | 25 | M22 | 14.0 | 33.2 | – |
| 400 | 406.4 | 409.0 | 540 | 24 | – | – | – | – | 3 | 463 | 495 | 16 | 25 | M22 | 16.9 | 41.9 | – |
| 450 | 457.2 | 460.0 | 605 | 24 | 40 | 495 | 500 | 5 | 3 | 523 | 555 | 16 | 25 | M22 | 21.6 | 53.0 | 24.8 |
| 500 | 508.0 | 511.0 | 655 | 24 | 40 | 546 | 552 | 5 | 3 | 573 | 605 | 20 | 25 | M22 | 23.1 | 61.9 | 26.9 |
| 550 | 558.8 | 562.0 | 720 | 26 | 42 | 597 | 603 | 5 | 3 | 630 | 665 | 20 | 27 | M24 | 30.3 | 81.2 | 34.1 |
| 600 | 609.6 | 613.0 | 770 | 26 | 44 | 648 | 654 | 5 | 3 | 680 | 715 | 20 | 27 | M24 | 32.7 | 93.2 | 37.5 |
| 650 | 660.4 | 664.0 | 825 | 26 | 48 | 702 | 708 | 5 | 3 | 735 | 770 | 24 | 27 | M24 | 35.9 | 106.9 | 42.8 |
| 700 | 711.2 | 715.0 | 875 | 26 | 48 | 751 | 758 | 5 | 3 | 785 | 820 | 24 | 27 | M24 | 38.2 | 120.6 | 45.4 |
| 750 | 762.0 | 766.0 | 945 | 28 | 52 | 802 | 810 | 5 | 3 | 840 | 880 | 24 | 33 | M30 | 48.7 | 150.5 | 57.4 |
| 800 | 812.8 | 817.0 | 995 | 28 | 52 | 854 | 862 | 5 | 3 | 890 | 930 | 24 | 33 | M30 | 51.2 | 167.4 | 60.8 |
| (850) | 863.6 | 868.0 | 1045 | 28 | 54 | 904 | 912 | 5 | 3 | 940 | 980 | 24 | 33 | M30 | 54.4 | 185.1 | 63.5 |
| 900 | 914.4 | 919.0 | 1095 | 30 | 56 | 956 | 964 | 5 | 3 | 990 | 1030 | 24 | 33 | M30 | 61.1 | 218.1 | 75.3 |
| 1000 | 1016.0 | 1021.0 | 1195 | 32 | 60 | 1058 | 1066 | 5 | 3 | 1090 | 1130 | 28 | 33 | M30 | 70.5 | 277.3 | 88.5 |
| *(1100) | 1117.6 | 1123 | 1305 | 32 | – | – | – | – | 3 | 1200 | 1240 | 28 | 33 | M30 | 81.7 | 331.9 | – |
| *1200 | 1219.2 | 1225 | 1420 | 34 | – | – | – | – | 3 | 1305 | 1350 | 32 | 33 | M30 | 102.0 | 417.8 | – |
| *1350 | 1371.6 | – | 1575 | 34 | – | – | – | – | 3 | 1460 | 1505 | 32 | 33 | M30 | 115.9 | 515.6 | – |
| *1500 | 1524.0 | – | 1730 | 36 | – | – | – | – | 3 | 1615 | 1660 | 36 | 33 | M30 | 157.4 | 659.2 | – |

1.Flanges of parenthesized nominal diameter had letter not be used.
2.The facing of flanges shall conform to KS B1509(JIS B2202)1984.
3.Nominal diameter over 1000 is manufacturer´ s standard(*).



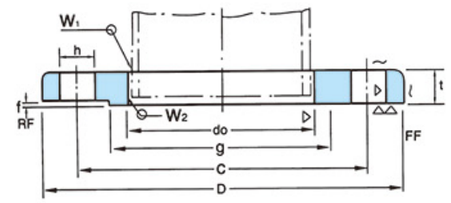


## 10Kg/Cm²

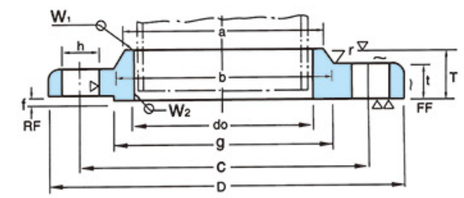
JIS B2220–1984(KSB 1503–1985)

10Kg/Cm² SLIP–ON WELDING STEEL PIPE FLANGES

SOP TYPE
NOMINAL SIZE 10-800mm




SOH TYPE
NOMINAL SIZE 250-1000mm




## NORMAL THICKNESS FLANGE

Unit:mm

| Nominal Diam of Flange | Outside Diam.of Steel Pipe | Inside Diam.of Flange do | Outside Diam.of Flange D | Sectional Dimensions of Flange | | | | | | | Dia.of Bolt | | | Nominal Bolt Size | Weight(kg) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | t | T | Diam.of Hub | | Rad –ius r | Raised Face f | Diam.of Raised Face g | Bolt Circle Diam. C | Number of Bolt Holes | Hole Diam h | | SOP | BL | SOH |
| | | | | | | a | b | | | | | | | | | | |
| 10 | 17.3 | 17.8 | 90 | 12 | – | – | – | – | 1 | 46 | 65 | 4 | 15 | M12 | 0.52 | 0.54 | – |
| 15 | 21.7 | 22.2 | 95 | 12 | – | – | – | – | 1 | 51 | 70 | 4 | 15 | M12 | 0.57 | 0.61 | – |
| 20 | 27.2 | 27.7 | 100 | 14 | – | – | – | – | 1 | 56 | 75 | 4 | 15 | M12 | 0.73 | 0.79 | – |
| 25 | 34.0 | 34.5 | 125 | 14 | – | – | – | – | 1 | 67 | 90 | 4 | 19 | M16 | 1.13 | 1.24 | – |
| 32 | 42.7 | 43.2 | 135 | 16 | – | – | – | – | 2 | 76 | 100 | 4 | 19 | M16 | 1.48 | 1.66 | – |
| 40 | 48.6 | 49.1 | 140 | 16 | – | – | – | – | 2 | 81 | 105 | 4 | 19 | M16 | 1.56 | 1.81 | – |
| 50 | 60.5 | 61.1 | 155 | 16 | – | – | – | – | 2 | 96 | 120 | 4 | 19 | M16 | 1.88 | 2.23 | – |
| 65 | 76.3 | 77.1 | 175 | 18 | – | – | – | – | 2 | 116 | 140 | 4 | 19 | M16 | 2.60 | 3.3 | – |
| 80 | 89.1 | 90 | 185 | 18 | – | – | – | – | 2 | 126 | 150 | 8 | 19 | M16 | 2.61 | 3.5 | – |
| (90) | 101.6 | 102.6 | 195 | 18 | – | – | – | – | 2 | 136 | 160 | 8 | 19 | M16 | 2.76 | 4.0 | – |
| 100 | 114.3 | 115.4 | 210 | 18 | – | – | – | – | 2 | 151 | 175 | 8 | 19 | M16 | 3.14 | 4.6 | – |
| 125 | 139.8 | 141.2 | 250 | 20 | – | – | – | – | 2 | 182 | 210 | 8 | 23 | M20 | 4.77 | 7.3 | – |
| 150 | 165.2 | 166.6 | 280 | 22 | – | – | – | – | 2 | 212 | 240 | 8 | 23 | M20 | 6.34 | 10.1 | – |
| (175) | 190.7 | 192.1 | 305 | 22 | – | – | – | – | 2 | 237 | 265 | 12 | 23 | M20 | 6.82 | 11.8 | – |
| 200 | 216.3 | 218 | 330 | 22 | – | – | – | – | 2 | 262 | 290 | 12 | 23 | M20 | 7.53 | 14.0 | – |
| (225) | 241.8 | 243.7 | 350 | 22 | – | – | – | – | 2 | 282 | 310 | 12 | 23 | M20 | 7.74 | 15.8 | – |
| 250 | 267.4 | 269.5 | 400 | 24 | 36 | 288 | 292 | 6 | 2 | 324 | 355 | 12 | 25 | M22 | 11.8 | 22.7 | 12.7 |
| 300 | 318.5 | 321 | 445 | 24 | 38 | 340 | 346 | 6 | 3 | 368 | 400 | 16 | 25 | M22 | 12.7 | 27.8 | 13.8 |
| 350 | 355.6 | 358.1 | 490 | 26 | 42 | 380 | 386 | 6 | 3 | 413 | 445 | 16 | 25 | M22 | 16.4 | 37.1 | 18.2 |
| 400 | 406.4 | 409 | 560 | 28 | 44 | 436 | 442 | 6 | 3 | 475 | 510 | 16 | 27 | M24 | 23.0 | 52.5 | 25.2 |
| 450 | 457.2 | 460 | 620 | 30 | 48 | 496 | 502 | 6 | 3 | 530 | 565 | 20 | 27 | M24 | 29.5 | 68.8 | 33.0 |
| 500 | 508 | 511 | 675 | 30 | 48 | 548 | 554 | 6 | 3 | 585 | 620 | 20 | 27 | M24 | 33.5 | 82.1 | 37.6 |
| (550) | 558.8 | 562 | 745 | 32 | 52 | 604 | 610 | 6 | 3 | 640 | 680 | 20 | 33 | M30 | 43.1 | 105.8 | 49.7 |
| 600 | 609.6 | 613 | 795 | 32 | 52 | 656 | 662 | 6 | 3 | 690 | 730 | 24 | 33 | M30 | 45.7 | 120.2 | 52.6 |
| (650) | 660.4 | 664 | 845 | 34 | 56 | 706 | 712 | 6 | 3 | 740 | 780 | 24 | 33 | M30 | 52.1 | 145.0 | 60.6 |
| 700 | 711.2 | 715 | 905 | 34 | 58 | 762 | 770 | 6 | 3 | 800 | 840 | 24 | 33 | M30 | 59.5 | 167.2 | 70.6 |
| (750) | 762 | 766 | 970 | 36 | 62 | 816 | 824 | 6 | 3 | 855 | 900 | 24 | 33 | M30 | 73.2 | 204.2 | 85.8 |
| 800 | 812.8 | 817 | 1020 | 36 | 64 | 868 | 876 | 6 | 3 | 905 | 950 | 28 | 33 | M30 | 76.4 | 225.4 | 91.2 |
| (850) | 863.6 | 868 | 1070 | 36 | 66 | 920 | 928 | 6 | 3 | 955 | 1000 | 28 | 33 | M30 | 80.7 | 248.8 | 98.6 |
| 900 | 914.4 | 919 | 1120 | 38 | 70 | 971 | 979 | 6 | 3 | 1005 | 1050 | 28 | 33 | M30 | 89.4 | 288.4 | 109.0 |
| 1000 | 1016 | 1021 | 1235 | 40 | 74 | 1073 | 1081 | 6 | 3 | 1110 | 1160 | 28 | 39 | M36 | 109.2 | 367.7 | 133.0 |
| *(1100) | 1117.6 | 1123 | 1345 | 42 | 76 | – | – | – | 3 | 1220 | 1270 | 28 | 39 | M36 | 131.6 | 460.0 | – |
| *1200 | 1219.2 | 1225 | 1465 | 44 | 78 | – | – | – | 3 | 1325 | 1380 | 32 | 39 | M36 | 163.5 | 572.2 | – |
| *1350 | 1371.6 | – | 1630 | 48 | 82 | – | – | – | 3 | 1480 | 1540 | 36 | 45 | M42 | 204.7 | 769.0 | – |
| *1500 | 1524.0 | – | 1795 | 50 | 90 | – | – | – | 3 | 1635 | 1700 | 40 | 45 | M42 | 250.2 | 974.9 | – |

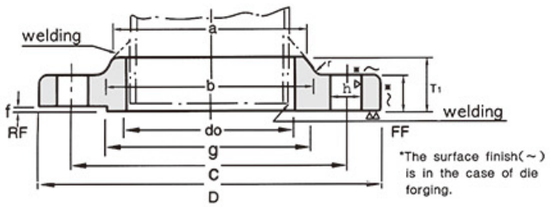
1.Flanges of parenthesized nominal diameter had letter not be used.
2.The facing of flanges shall conform to KS B1509(JIS B2202)1984.
3.Nominal diameter over 1000 is manufacturer´ s standard(*).

## 16Kg/Cm²

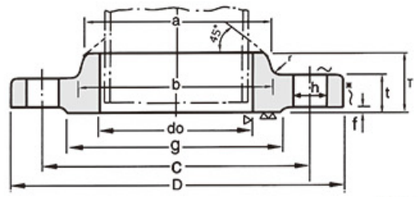
JIS B2220–1984(KSB 1503–1985)

16Kg/Cm² SLIP–ON WELDING STEEL PIPE FLANGES

NOMINAL SIZE 10-600mm




NOMINAL SIZE 650-1200mm




Unit:mm

| Nominal Diameter of Flange | Outside Diameter of Steel Pipe | Inside Diameter of Flange do | Sectional Dimensions of Flange | | | | | | | | Bolt Hole | | | Nominal Bolt Size | Weight(kg) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Outside Diameter of Flange D | t | T | Diam.of Hub a | Diam.of Hub b | Rad-ius r | f | g | Bolt Circle Diameter C | Number of Bolt Holes | Hole Diameter h | | SOP | BL | SOH |
| 10 | 17.3 | 17.8 | 90 | 12 | 16 | 26 | 28 | 4 | 1 | 46 | 65 | 4 | 15 | M12 | 0.52 | 0.54 | 0.52 |
| 15 | 21.7 | 22.2 | 95 | 12 | 16 | 30 | 32 | 4 | 1 | 51 | 70 | 4 | 15 | M12 | 0.57 | 0.61 | 0.58 |
| 20 | 27.2 | 27.7 | 100 | 14 | 20 | 38 | 42 | 4 | 1 | 56 | 75 | 4 | 15 | M12 | 0.73 | 0.79 | 0.75 |
| 25 | 34.0 | 34.5 | 125 | 14 | 20 | 46 | 50 | 4 | 1 | 67 | 90 | 4 | 19 | M16 | 1.13 | 1.24 | 1.16 |
| 32 | 42.7 | 43.2 | 135 | 16 | 22 | 56 | 60 | 5 | 2 | 76 | 100 | 4 | 19 | M16 | 1.48 | 1.66 | 1.53 |
| 40 | 48.6 | 49.1 | 140 | 16 | 24 | 62 | 66 | 5 | 2 | 81 | 105 | 4 | 19 | M16 | 1.56 | 1.81 | 1.64 |
| 50 | 60.5 | 61.1 | 155 | 16 | 24 | 76 | 80 | 5 | 2 | 96 | 120 | 8 | 19 | M16 | 1.8 | 2.3 | 1.83 |
| 65 | 76.3 | 77.1 | 175 | 18 | 26 | 94 | 98 | 5 | 2 | 116 | 140 | 8 | 19 | M16 | 2.5 | 3.1 | 2.58 |
| 80 | 89.1 | 90.0 | 200 | 20 | 28 | 108 | 112 | 6 | 2 | 132 | 160 | 8 | 23 | M20 | 3.5 | 4.5 | 3.66 |
| (90) | 101.6 | 102.6 | 210 | 20 | 30 | 120 | 124 | 6 | 2 | 145 | 170 | 8 | 23 | M20 | 3.7 | 5.0 | 3.95 |
| 100 | 114.3 | 115.4 | 225 | 22 | 34 | 134 | 138 | 6 | 2 | 160 | 185 | 8 | 23 | M20 | 4.5 | 6.3 | 4.94 |
| 125 | 139.8 | 141.2 | 270 | 22 | 34 | 164 | 170 | 6 | 2 | 195 | 225 | 8 | 25 | M22 | 6.5 | 9.2 | 7.0 |
| 150 | 165.2 | 166.6 | 305 | 24 | 38 | 196 | 202 | 6 | 2 | 230 | 260 | 12 | 25 | M22 | 8.7 | 12.8 | 9.62 |
| 200 | 216.3 | 218.0 | 350 | 26 | 40 | 244 | 252 | 6 | 2 | 275 | 305 | 12 | 25 | M22 | 10.9 | 18.6 | 12.1 |
| 250 | 267.4 | 269.5 | 430 | 28 | 44 | 304 | 312 | 6 | 2 | 345 | 380 | 12 | 27 | M24 | 18.0 | 30.6 | 20.0 |
| 300 | 318.5 | 321.0 | 480 | 30 | 48 | 354 | 364 | 8 | 3 | 395 | 430 | 16 | 27 | M24 | 21.5 | 40.7 | 24.4 |
| 350 | 355.6 | 358.1 | 540 | 34 | 52 | 398 | 408 | 8 | 3 | 440 | 480 | 16 | 33 | M30 × 3 | 30.8 | 57.8 | 35.0 |
| 400 | 406.4 | 409.0 | 605 | 38 | 60 | 446 | 456 | 10 | 3 | 495 | 540 | 16 | 33 | M30 × 3 | 42.8 | 82.2 | 46.2 |
| 450 | 457.2 | 460.0 | 675 | 40 | 64 | 504 | 514 | 10 | 3 | 560 | 605 | 20 | 33 | M30 × 3 | 55.1 | 107.6 | 61.9 |
| 500 | 508.0 | 511.0 | 730 | 42 | 68 | 558 | 568 | 10 | 3 | 615 | 660 | 20 | 33 | M30 × 3 | 65.1 | 133.1 | 73.25 |
| (550) | 558.8 | 562.0 | 795 | 44 | 70 | 612 | 622 | 10 | 3 | 670 | 720 | 20 | 39 | M36 × 3 | 77.9 | 164.1 | 88.1 |
| 600 | 609.6 | 613.0 | 845 | 46 | 74 | 666 | 676 | 10 | 3 | 720 | 770 | 24 | 39 | M36 × 3 | 86.0 | 193.2 | 98.8 |
| (650) | 660.4 | 664 | 895 | 48 | 77 | 704 | 726 | 10 | 5 | 770 | 820 | 24 | 39 | M36 × 3 | 96.3 | 227.5 | 101.0 |
| 700 | 711.2 | 715 | 960 | 50 | 80 | 754 | 776 | 10 | 5 | 820 | 875 | 24 | 42 | M39 × 3 | 114.1 | 272.6 | 120.0 |
| (750) | 762.0 | 766 | 1020 | 52 | 83 | 806 | 832 | 10 | 5 | 880 | 935 | 24 | 42 | M39 × 3 | 132.7 | 321.9 | 141.0 |
| 800 | 812.8 | 817 | 1085 | 54 | 86 | 865 | 885 | 10 | 5 | 930 | 990 | 24 | 48 | M45 × 3 | 152.1 | 375.6 | 161.0 |
| (850) | 863.6 | 868 | 1135 | 56 | 89 | 916 | 936 | 10 | 5 | 980 | 1040 | 24 | 48 | M45 × 3 | 166.5 | 428.1 | 177.0 |
| 900 | 914.4 | 919 | 1185 | 58 | 93 | 968 | 986 | 10 | 5 | 1030 | 1090 | 28 | 48 | M45 × 3 | 178.1 | 481.8 | 191.0 |
| 1000 | 1016.0 | 1021 | 1320 | 62 | 99 | 1070 | 1098 | 12 | 5 | 1140 | 1210 | 28 | 56 | M52 × 3 | 235.3 | 636.0 | 230.0 |
| 1100 | 1117.6 | 1123 | 1420 | 66 | 105 | 1180 | 1200 | 12 | 5 | 1240 | 1310 | 32 | 56 | M52 × 3 | 267.9 | 784.0 | 289.0 |
| 1200 | 1219.2 | 1225 | 1530 | 70 | 112 | 1282 | 1302 | 12 | 5 | 1350 | 1420 | 32 | 56 | M52 × 3 | 321.1 | 972.4 | 348.0 |
| 1300 | 1320.8 | 1326.0 | 1645 | 74 | – | – | – | – | 5 | 1450 | 1530 | 32 | 62 | | 378.6 | 1185.2 | – |
| 1350 | 1371.6 | 1377.0 | 1700 | 76 | – | – | – | – | 5 | 1510 | 1590 | 32 | 62 | | 410.0 | 1303.8 | – |
| 1400 | 1422.4 | 1428.0 | 1755 | 78 | – | – | – | – | 5 | 1560 | 1640 | 36 | 62 | | 436.0 | 1422.5 | – |
| 1500 | 1524.0 | 1529.0 | 1865 | 80 | – | – | – | – | 5 | 1670 | 1750 | 36 | 62 | | 496.4 | 1656.6 | – |

1.Flanges of parenthesized nominal diameter had better not be used.

2.For dimensional tolerance, refer to JIS B2203.

3.In principle material shall be SS400 specified in JIS G3101,SF390A(or SF440A) specified in JIS G3201, or S20C(or S25C) specified in JIS G4051, and shall be fit for welding.



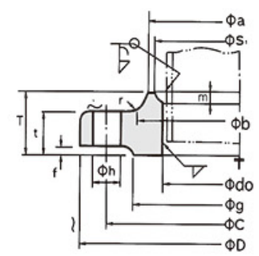


## 20Kg/Cm²

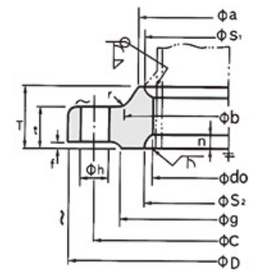
JIS B2220–1984(KSB 1503–1985)

20Kg/Cm² SLIP–ON WELDING STEEL PIPE FLANGES

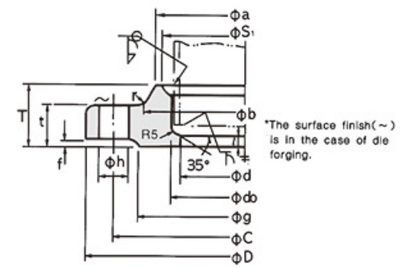
A-TYPE
NOMINAL SIZE 10~600mm




B-TYPE
NOMINAL SIZE 10~50mm




C-TYPE
NOMINAL SIZE 65~600mm




Unit:mm

| Nominal Diameter of Flange | Outside Diameter of Steel Pipe | Inside Diameter. of Flange do | Outside Diameter. of Flange D | Sectional Dimensions of Flange | | | | | | | | Bolt Hole | | | | Reference | | | | | Weight(kg) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | t | T | Diameter of Hub a | Diameter of Hub b | Rad-ius r | f | g | d | Bolt Circle Dia-meter C | Num-ber of Bolt Holes | Hole Dia meter h | Nominal Bolt Size | $S_1$ | m | $S_2$ | n | l | SOP | BL | SOH |
| 10 | 17.3 | 17.8 | 90 | 14 | 20 | 30 | 32 | 4 | 1 | 46 | – | 65 | 4 | 15 | M12 | 27 | 4 | 27 | 4 | – | 0.6 | 0.6 | 0.59 |
| 15 | 21.7 | 22.2 | 95 | 14 | 20 | 34 | 36 | 4 | 1 | 51 | – | 70 | 4 | 15 | M12 | 31 | 4 | 31 | 4 | – | 0.7 | 0.7 | 0.65 |
| 20 | 27.2 | 27.7 | 100 | 16 | 22 | 40 | 42 | 4 | 1 | 56 | – | 75 | 4 | 15 | M12 | 37 | 4 | 37 | 4 | – | 0.8 | 0.9 | 0.81 |
| 25 | 34.0 | 34.5 | 125 | 16 | 24 | 48 | 50 | 4 | 1 | 67 | – | 90 | 4 | 19 | M16 | 44 | 4 | 44 | 4.5 | – | 1.3 | 1.5 | 1.29 |
| 32 | 42.7 | 43.2 | 135 | 18 | 26 | 56 | 60 | 5 | 2 | 76 | – | 100 | 4 | 19 | M16 | 52 | 4 | 53 | 5 | – | 1.6 | 1.8 | 1.6 |
| 40 | 48.6 | 49.1 | 140 | 18 | 26 | 62 | 66 | 5 | 2 | 81 | – | 105 | 4 | 19 | M16 | 58 | 4 | 59 | 5.5 | – | 1.7 | 2.0 | 1.69 |
| 50 | 60.5 | 61.1 | 155 | 18 | 26 | 76 | 80 | 5 | 2 | 96 | – | 120 | 8 | 19 | M16 | 70 | 4 | 72 | 5.5 | – | 1.9 | 2.4 | 1.89 |
| 65 | 76.3 | 77.1 | 175 | 20 | 30 | 100 | 104 | 5 | 2 | 116 | 65.9 | 140 | 8 | 19 | M16 | 94 | 6 | 85 | 6 | 6 | 2.6 | 3.4 | 2.6 |
| 80 | 89.1 | 90.0 | 200 | 22 | 34 | 113 | 117 | 6 | 2 | 132 | 78.1 | 160 | 8 | 23 | M20 | 107 | 6 | – | – | 6 | 3.8 | 4.9 | 3.93 |
| (90) | 101.6 | 102.6 | 210 | 24 | 36 | 126 | 130 | 6 | 2 | 145 | 90.2 | 170 | 8 | 23 | M20 | 120 | 6 | – | – | 6 | 4.4 | 6.0 | 4.56 |
| 100 | 114.3 | 115.4 | 225 | 24 | 36 | 138 | 142 | 6 | 2 | 160 | 102.3 | 185 | 8 | 23 | M20 | 132 | 6 | – | – | 6 | 4.9 | 6.9 | 5.13 |
| 125 | 139.8 | 141.2 | 270 | 26 | 40 | 166 | 172 | 6 | 2 | 195 | 126.6 | 225 | 8 | 25 | M22 | 160 | 7 | – | – | 6 | 7.8 | 11.0 | 8.3 |
| 150 | 165.2 | 166.6 | 305 | 28 | 42 | 196 | 202 | 6 | 2 | 230 | 151.0 | 260 | 12 | 25 | M22 | 186 | 8 | – | – | 6 | 10.1 | 14.9 | 10.6 |
| 200 | 216.3 | 218.0 | 350 | 30 | 46 | 244 | 252 | 6 | 2 | 275 | 199.9 | 305 | 12 | 25 | M22 | 237 | 9 | – | – | 6 | 12.6 | 21.4 | 13.3 |
| 250 | 267.4 | 269.5 | 430 | 34 | 52 | 304 | 312 | 6 | 2 | 345 | 248.8 | 380 | 12 | 27 | M24 | 290 | 10 | – | – | 6 | 21.9 | 37.2 | 23.4 |
| 300 | 318.5 | 321.0 | 480 | 36 | 56 | 354 | 364 | 8 | 3 | 395 | 297.9 | 430 | 16 | 27 | M24 | 345 | 11 | – | – | 6 | 25.8 | 48.8 | 27.7 |
| 350 | 355.6 | 358.1 | 540 | 40 | 62 | 398 | 408 | 8 | 3 | 440 | 333.4 | 480 | 16 | 33 | M30 × 3 | 384 | 12 | – | – | 6 | 36.2 | 68.0 | 39.2 |
| 400 | 406.4 | 409.0 | 605 | 46 | 70 | 446 | 456 | 10 | 3 | 495 | 381.0 | 540 | 16 | 33 | M30 × 3 | 437 | 13 | – | – | 7 | 51.7 | 99.4 | 54.2 |
| 450 | 457.2 | 460.0 | 675 | 48 | 78 | 504 | 514 | 10 | 3 | 560 | 431.8 | 605 | 20 | 33 | M30 × 3 | 490 | 15 | – | – | 7 | 66.1 | 129.1 | 71.7 |
| 500 | 508.0 | 511.0 | 730 | 50 | 84 | 558 | 568 | 10 | 3 | 615 | 482.6 | 660 | 20 | 33 | M30 × 3 | 544 | 16 | – | – | 7 | 77.4 | 158.4 | 86.2 |
| (550) | 558.8 | 562.0 | 795 | 52 | 90 | 612 | 622 | 10 | 3 | 670 | 533.4 | 720 | 20 | 39 | M36 × 3 | 595 | 16 | – | – | 7 | 92.2 | 194.0 | 105 |
| 600 | 609.6 | 613.0 | 845 | 54 | 96 | 666 | 676 | 10 | 3 | 720 | 584.2 | 770 | 24 | 39 | M36 × 3 | 646 | 18 | – | – | 7 | 101.1 | 226.9 | 119 |
| (650) | 660.4 | 664.0 | 945 | 60 | – | – | – | – | 5 | 790 | – | 850 | 24 | 48 | M45 × 3 | | | | | | 147.6 | 311.6 | – |
| 700 | 711.2 | 715.0 | 995 | 64 | – | – | – | – | 5 | 840 | – | | | | | | | | | | 168.0 | 370.9 | – |
| (750) | 762.0 | 766.0 | 1080 | 68 | – | – | – | – | 5 | 900 | – | 970 | 24 | 56 | M52 × 3 | | | | | | 212.7 | 460.1 | – |
| 800 | 812.8 | 817.0 | 1140 | 72 | – | – | – | | 5 | 960 | – | 1030 | 24 | 56 | M52 × 3 | | | | | | 248.5 | 546.5 | – |
| (850) | 863.6 | 868.0 | 1200 | 74 | – | – | – | | 5 | 1020 | – | 1090 | 24 | 56 | M52 × 3 | | | | | | 280.5 | 626.2 | – |
| 900 | 914.6 | 919.0 | 1250 | 76 | – | – | – | – | 5 | 1070 | – | 1140 | 28 | 56 | M52 × 3 | | | | | | 296.9 | 694.9 | – |

1.Flanges of parenthesized nominal diameters had better not be used.

2.The Flange gasket surface is based on large raised facing specified in JIS B2202.

3.Size d is an example of pipe thickness for schedule 40 of JIS G3454.and JIS G3456 .But customers can order for other size as occasion demand.

4.For dimensional tolerance,refer to JIS B2203.

5.In principle, material shall be aSS400 specified in JIS G3101, SF390A(or SF440A)specified in JIS G3201, or S20C(or S25C) specified in JIS G4051.Material shall be fit for welding.

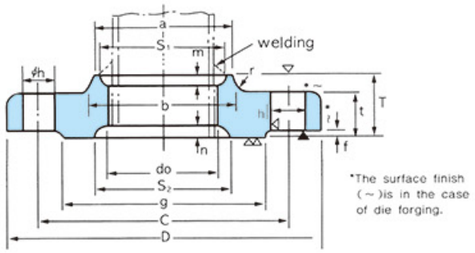
*The surface finish is the case of forging ( ▽:in other cases).

## 30Kg/Cm²

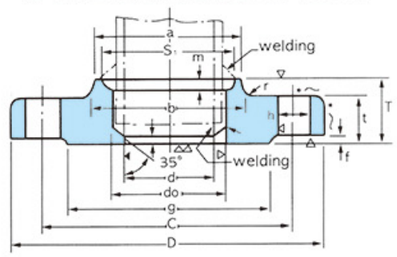
JIS B2220—1984(KSB 1503—1985)

30Kg/Cm² SLIP—ON WELDING STEEL PIPE FLANGES

A-TYPE NOMINAL SIZE 10-400mm
B-TYPE NOMINAL SIZE 10-50mm




C-TYPE NOMINAL SIZE 65-400mm




Unit : mm

| Nominal Diameter of Flange | Outside Diameter of Steet Pipe | Inside Diameter, of Flange do | Outside Diameter, of Flange D | Sectional Dimensions of Flange | | | | | | | | Bolt Hole | | | | Reference | | | | | Approx Weight (kg) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | t | T | Diameter, of Hub a | Diameter, of Hub b | Rad-ius r | f | g | d | Bolt Circle Dia-meter C | Number of Bolt Holes | Hole Dia meter h | Nominal Bolt Size | $S_1$ | m | $S_2$ | n | l | SOH | BL |
| 10 | 17.3 | 17.8 | 110 | 16 | 24 | 30 | 34 | 4 | 1 | 52 | – | 75 | 4 | 19 | M16 | – | – | – | – | – | 0.99 | 1.00 |
| 15 | 21.7 | 22.2 | 115 | 18 | 26 | 36 | 40 | 5 | 1 | 55 | – | 80 | 4 | 19 | M16 | 31 | 4 | 40 | 5 | – | 1.23 | 1.25 |
| 20 | 27.2 | 27.7 | 120 | 18 | 28 | 42 | 46 | 5 | 1 | 60 | – | 85 | 4 | 19 | M16 | 37 | 5 | 44 | 5 | – | 1.34 | 1.38 |
| 25 | 34.0 | 34.5 | 130 | 20 | 30 | 50 | 54 | 5 | 1 | 70 | – | 95 | 4 | 19 | M16 | 44 | 6 | 52 | 5 | – | 1.76 | 1.84 |
| 32 | 42.7 | 43.2 | 140 | 22 | 32 | 60 | 64 | 6 | 2 | 80 | – | 105 | 4 | 19 | M16 | 52 | 6 | 60 | 5 | – | 2.15 | 2.32 |
| 40 | 48.6 | 49.1 | 160 | 22 | 34 | 66 | 70 | 6 | 2 | 90 | – | 120 | 4 | 23 | M20 | 58 | 6 | 66 | 5 | – | 2.82 | 3.00 |
| 50 | 60.5 | 61.1 | 165 | 22 | 36 | 82 | 86 | 6 | 2 | 105 | – | 130 | 8 | 19 | M16 | 70 | 6.5 | 78 | 5 | – | 2.89 | 3.14 |
| 65 | 76.3 | 77.1 | 200 | 26 | 40 | 102 | 106 | 8 | 2 | 130 | 65.9 | 160 | 8 | 23 | M20 | 96 | 9.5 | 94 | 5 | 6 | 4.70 | 5.50 |
| 80 | 89.1 | 90.0 | 210 | 28 | 44 | 115 | 121 | 8 | 2 | 140 | 78.1 | 170 | 8 | 23 | M20 | 109 | 9.5 | – | – | 6 | 5.36 | 6.63 |
| (90) | 101.6 | 102.6 | 230 | 30 | 46 | 128 | 134 | 8 | 2 | 150 | 90.2 | 185 | 8 | 25 | M22 | 122 | 9.5 | – | – | 6 | 6.85 | 8.55 |
| 100 | 114.3 | 115.4 | 240 | 32 | 48 | 141 | 147 | 8 | 2 | 160 | 102.3 | 195 | 8 | 25 | M22 | 135 | 9.5 | – | – | 6 | 7.89 | 10.0 |
| 125 | 139.8 | 141.2 | 275 | 36 | 54 | 166 | 172 | 8 | 2 | 195 | 126.6 | 230 | 8 | 25 | M22 | 160 | 9.5 | – | – | 6 | 11.4 | 15.3 |
| 150 | 165.2 | 166.6 | 325 | 38 | 58 | 196 | 204 | 8 | 2 | 235 | 151.0 | 275 | 12 | 27 | M24 | 186 | 9.5 | – | – | 6 | 16.7 | 22.2 |
| 200 | 216.3 | 218.0 | 370 | 42 | 64 | 248 | 256 | 8 | 2 | 280 | 199.9 | 320 | 12 | 27 | M24 | 237 | 9.5 | – | – | 6 | 20.6 | 32.6 |
| 250 | 267.4 | 269.5 | 450 | 48 | 72 | 306 | 314 | 10 | 2 | 345 | 248.8 | 390 | 12 | 33 | M30 × 3 | 290 | 10 | – | – | 6 | 36.1 | 55.2 |
| 300 | 318.5 | 321.0 | 515 | 52 | 78 | 360 | 370 | 10 | 3 | 405 | 297.9 | 450 | 16 | 33 | M30 × 3 | 345 | 12 | – | – | 6 | 49.9 | 77.9 |
| 350 | 355.6 | 358.1 | 560 | 54 | 84 | 402 | 412 | 12 | 3 | 450 | 333.4 | 495 | 16 | 33 | M30 × 3 | 383 | 13 | – | – | 6 | 61.2 | 96.9 |
| 400 | 406.4 | 409.0 | 630 | 60 | 92 | 456 | 468 | 15 | 3 | 510 | 381.0 | 560 | 16 | 39 | M36 × 3 | 435 | 14 | – | – | 7 | 85.2 | 136 |

1. As far as possible, nominal diameter in parenthesis should be avoid from use.
2. The diamensional tolerancer shall confim to JIS B2203.
3. The flange gasket surface is based on large raised facing specified in JIS b2202. But, if necessary, facings other than the Large raised facing specified in JIS B2201 can be designated by customers.
4. Sized is an example of pipe thickness for schedule 40 of JIS G3454 and JIS B3456. When other size is necessary, customers Can order it at will.
5. Material

Catbon Steel:S25C spedified in JIS G4051, or Sf440A specified in JIS G3201.
Molybdeum steel: 1/2 Mo steel spcified in tables 1 and 2 of JIS B2215.
Chromium–Molybdenum steel: 1/4 Cr 1/2 Mo Steel specified in tables 1 and 2 of JIS B2215.
* The surface finish is in the case of forging (△: in other cases)



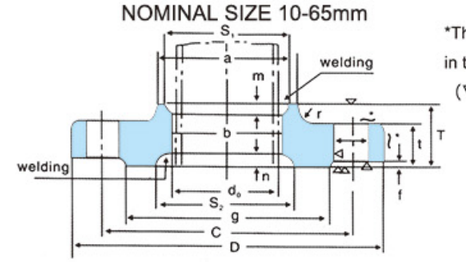


## 40Kg/Cm²

JIS B 2220-2004(KS B 1503-2007)

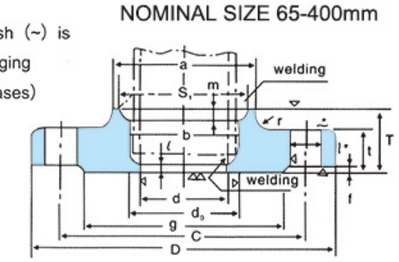
40kg/cm² SLIP-ON WELDING STEEL PIPE FLANGES

NOMINAL SIZE 10-65mm




*The surface finish (~) is in the case of forging (▽: in other cases)

NOMINAL SIZE 65-400mm




Unit:mm

| Nominal Diameter of Flange | Outside Diameter of Steel Pipe | Inside Diameter of Flange do | Outside Diameter of Flange D | Sectional Dimensions of Flange | | | | | | | | Bolt Hole | | | | Reference | | | | | Approx Weight (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | t | T | Diameter of Hub a | Diameter of Hub b | Rad-ius r | f | g | d | Bolt Circle Dia-meter C | Number of Bolt Holes | Hole Dia-meter h | Nominal Bolt Size | $S_1$ | m | $S_2$ | n | l | |
| 10 | 17.3 | 17.8 | 110 | 18 | 26 | 34 | 38 | 5 | 1 | 52 | – | 75 | 4 | 19 | M16 | 28.0 | 6 | 28.0 | 5 | | 1.11 |
| 15 | 21.7 | 22.2 | 115 | 20 | 30 | 39 | 43 | 5 | 1 | 58 | – | 80 | 4 | 19 | M16 | 32.5 | 6 | 32.5 | 5 | | 1.39 |
| 20 | 27.2 | 27.7 | 120 | 20 | 30 | 45 | 49 | 5 | 1 | 60 | – | 85 | 4 | 19 | M16 | 38.0 | 6 | 38.0 | 5 | | 1.51 |
| 25 | 34.0 | 34.5 | 130 | 22 | 32 | 55 | 59 | 5 | 1 | 70 | – | 95 | 4 | 19 | M16 | 47.8 | 6 | 47.8 | 5 | | 1.97 |
| 32 | 42.7 | 43.2 | 140 | 24 | 35 | 64 | 68 | 6 | 2 | 80 | – | 105 | 4 | 19 | M16 | 56.5 | 6 | 56.5 | 5 | | 2.50 |
| 40 | 48.6 | 49.1 | 160 | 24 | 35 | 70 | 74 | 6 | 2 | 90 | – | 120 | 4 | 23 | M20 | 62.5 | 6 | 62.5 | 5 | | 3.26 |
| 50 | 60.5 | 61.1 | 165 | 26 | 38 | 86 | 90 | 6 | 2 | 105 | – | 130 | 8 | 19 | M16 | 74.5 | 6 | 74.5 | 5.5 | | 3.47 |
| 65 | 76.3 | 77.1 | 200 | 30 | 44 | 106 | 110 | 8 | 2 | 130 | 62.3 | 160 | 8 | 23 | M20 | 91.5 | 7 | 91.5 | 7 | | 5.97 |
| 80 | 89.1 | 90.3 | 210 | 32 | 46 | 118 | 124 | 8 | 2 | 140 | 73.9 | 170 | 8 | 23 | M20 | 105.5 | 7.5 | 105.5 | 7 | | 6.76 |
| 100 | 114.3 | 115.4 | 250 | 36 | 52 | 145 | 151 | 8 | 2 | 165 | 97.1 | 205 | 8 | 25 | M22 | 133.0 | 8.5 | 133.0 | 7 | | 10.78 |
| 125 | 139.8 | 141.4 | 300 | 40 | 58 | 182 | 188 | 8 | 2 | 200 | 120.8 | 250 | 8 | 27 | M24 | 160.5 | 9.5 | 160.5 | 7 | | 16.97 |
| 150 | 165.2 | 167.0 | 355 | 44 | 64 | 200 | 208 | 8 | 2 | 240 | 143.2 | 295 | 12 | 33 | M30 | 188.0 | 11 | 188.0 | 7 | | 22.6 |
| 200 | 216.3 | 218.2 | 405 | 50 | 72 | 255 | 263 | 8 | 2 | 290 | 190.9 | 345 | 12 | 33 | M30 | 243.0 | 13 | 243.0 | 7 | | 34.9 |
| 250 | 267.4 | 269.5 | 475 | 56 | 80 | 310 | 318 | 10 | 2 | 355 | 237.2 | 410 | 12 | 33 | M30 | 298.0 | 15 | 298.0 | 7 | | 41.1 |

REMARKS:
1.As far as possible,nominal diameter in parenthesis should be avoid from use.
2.The diamensional tolerance shall confirm to JIS b 2203.
3.The flange gasket surface is based on large raised facing specified in JIS B 2202.But,if necessary,facings other than the large raised facing specified in JIS B 2201 can be designated by customers.
4.Size d is an example of pipe thickness for schedule 40 of JIS G 3454,and JIS B 3456.When other size is necessary,customers can order it at will.
5.Refer to JIS B 2216.