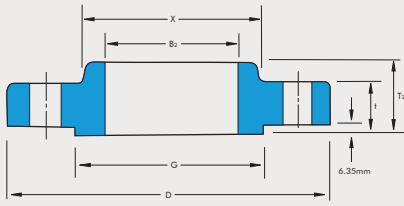
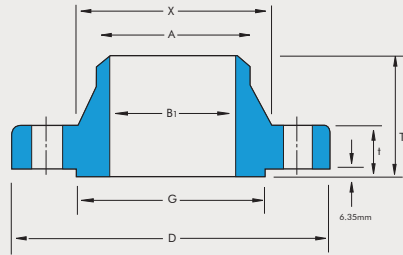


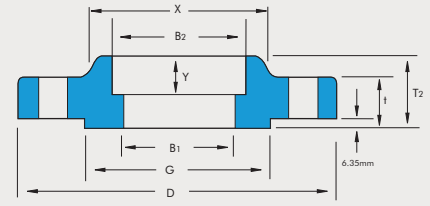
CLASS 1500 FLANGES



SLIP-ON



WELDING NECK



SOCKET WELDING

ANSI B16.5 FORGED FLANGES

Unit:mm

| Nominal Pipe Size | Outside Dia. | Dia. at Base of Hub | O.D. of Raised Face | Thickness | BORE | | | | LENGTH THRU HUB | | | Dia. Of Hub at Bevel | Radius of Fillet | Thread Length |
|-------------------|--------------|---------------------|---------------------|-----------|-----------------------------|------------------------|-----------|------------------|-----------------|---------------------------------|-----------|----------------------|------------------|---------------|
| | | | | | Welding Neck Socket Welding | Slip-on Socket Welding | Lap Joint | Counter Bore Min | Welding Neck | Slip on Threaded Socket Welding | Lap Joint | | | |
| | D | X | G | t | B1 | B2 | B3 | B | T1 | T2 | T3 | A | R | Q |
| 1/2 | 120.7 | 38.1 | 34.9 | 22.3 | | 22.4 | 22.9 | 23.6 | 60.3 | 31.8 | 31.8 | 21.3 | 3.2 | 22.2 |
| 3/4 | 130.2 | 44.5 | 42.9 | 25.4 | See | 27.7 | 28.2 | 29.0 | 69.9 | 34.9 | 34.9 | 26.7 | 3.2 | 25.4 |
| 1.0 | 149.2 | 52.4 | 50.8 | 28.6 | Notes | 34.5 | 35.1 | 35.8 | 73.0 | 41.3 | 41.3 | 33.5 | 3.2 | 28.6 |
| 1.1/4 | 158.8 | 63.5 | 63.5 | 28.6 | (1) | 43.2 | 43.7 | 44.5 | 73.0 | 41.3 | 41.3 | 42.2 | 4.8 | 30.2 |
| 1.1/2 | 177.8 | 69.9 | 73.0 | 31.8 | To be | 49.5 | 50.0 | 50.5 | 82.6 | 44.5 | 44.5 | 48.3 | 6.4 | 31.8 |
| 2.0 | 215.9 | 104.8 | 92.1 | 38.1 | specified | 62.0 | 62.5 | 63.5 | 101.6 | 57.2 | 57.2 | 60.5 | 7.9 | 38.1 |
| 2.1/2 | 244.5 | 123.8 | 104.8 | 41.3 | by | 74.7 | 75.4 | 76.2 | 104.8 | 63.5 | 63.5 | 73.2 | 7.9 | 47.6 |
| 3.0 | 266.7 | 133.4 | 127.0 | 47.7 | pur- | 90.7 | 91.4 | 92.2 | 117.5 | 73.0 | 73.0 | 88.9 | 9.5 | 50.8 |
| 4.0 | 311.2 | 161.9 | 157.2 | 54.0 | chaser | 116.1 | 116.8 | 117.6 | 123.8 | 90.5 | 90.5 | 114.3 | 11.1 | 57.2 |
| 5.0 | 374.7 | 196.9 | 185.7 | 73.1 | | 143.8 | 144.5 | 144.5 | 155.6 | 104.8 | 104.8 | 141.2 | 11.1 | 63.5 |
| 6.0 | 393.7 | 228.6 | 215.9 | 82.6 | | 170.7 | 171.5 | 171.5 | 171.5 | 119.1 | 119.1 | 168.4 | 12.7 | 69.9 |
| 8.0 | 482.6 | 292.1 | 269.9 | 92.1 | | 221.5 | 222.3 | 222.3 | 212.7 | 142.9 | 142.9 | 219.2 | 12.7 | 76.2 |
| 10.0 | 584.2 | 368.3 | 323.9 | 108.0 | | 276.4 | 277.4 | 276.4 | 254.0 | 158.8 | 177.8 | 273.1 | 12.7 | 84.1 |
| 12.0 | 673.1 | 450.9 | 381.0 | 123.9 | | 327.2 | 328.2 | 328.7 | 282.6 | 181.0 | 219.1 | 323.9 | 12.7 | 92.1 |
| 14.0 | 749.3 | 495.3 | 412.8 | 133.4 | | 359.2 | 360.2 | 360.4 | 298.5 | -- | 241.3 | 355.6 | 12.7 | -- |
| 16.0 | 825.5 | 552.5 | 469.9 | 146.1 | | 410.5 | 411.2 | 411.2 | 311.2 | -- | 260.4 | 406.4 | 12.7 | -- |
| 18.0 | 914.4 | 596.9 | 533.4 | 162.0 | | 461.8 | 462.3 | 462.0 | 327.0 | -- | 276.2 | 457.2 | 12.7 | -- |
| 20.0 | 984.3 | 641.4 | 584.2 | 177.8 | | 513.1 | 514.4 | 512.8 | 355.6 | -- | 292.1 | 508.0 | 12.7 | -- |
| 24.0 | 1168.4 | 762.0 | 692.2 | 203.2 | | 616.0 | 616.0 | 614.4 | 406.4 | -- | 330.2 | 609.6 | 12.7 | -- |

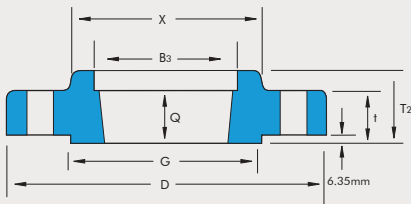
Note : (1) For the inside diameter of pipes (corresponding to 'Bore' (B1) of Welding Neck Flanges), refer to page.

(2) Class 1500 flanges except Lap Joint will be furnished with 0.25" raised face, which is included in 'Thickness' (t) and 'Length through Hub' (T₁), (T₂).

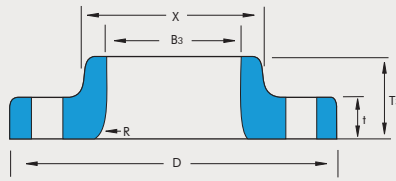
(3) For Slip-on, Threaded, Socket Welding and Lap Joint Flanges, the hubs can be shaped either vertical from base to top or tapered within the limits of 7 degrees.



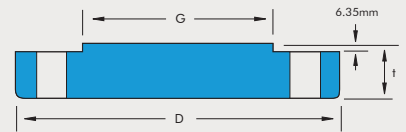
CLASS 1500 FLANGES



THREADED



LAP JOINT



BLIND

Unit:mm

| Nominal Pipe Size | Depth of Socket | DRILLING | | | BOLTING | | | | APPROXIMATE WEIGHT | | | | | | | | | |
|-------------------|-----------------|-----------|-----------------|---------------|---------------|------------------------|--------------------------------|-------------------|--------------------|----|------------------------|----|-----------|----|---------|----|----------------|----|
| | | Bolt Dia. | Number of Holes | Dia. of Holes | Dia. of Bolts | Stub 1/14" Raised Face | Bolt Male Female Tongue-Groove | Length Ring Joint | Welding Neck STD | | Slip - on and Threaded | | Joint Lop | | Blind | | Socket Welding | |
| | Y | | | | (inch) | | | | Kg. | lb | Kg. | lb | Kg. | lb | Kg. | lb | Kg. | lb |
| 1/2 | 9.5 | 82.6 | 4.0 | 22.2 | 3/4 | 4.0 | 3.3/4 | 4 | 1.89 | -- | 1.75 | -- | 1.72 | -- | 1.78 | -- | 1.79 | -- |
| 3/4 | 11.1 | 88.9 | 4.0 | 22.2 | 3/4 | 4.1/4 | 4 | 4.1/4 | 2.57 | -- | 2.34 | -- | 2.29 | -- | 2.42 | -- | 2.40 | -- |
| 1 | 12.7 | 101.6 | 4.0 | 25.4 | 7/8 | 4.3/4 | 4.1/2 | 4.3/4 | 3.73 | -- | 3.44 | -- | 3.37 | -- | 3.57 | -- | 3.54 | -- |
| 1.1/4 | 14.3 | 111.1 | 4.0 | 25.4 | 7/8 | 4.3/4 | 4.1/2 | 4.3/4 | 4.32 | -- | 3.92 | -- | 3.82 | -- | 4.15 | -- | 4.05 | -- |
| 1.1/2 | 15.9 | 123.8 | 4.0 | 28.6 | 1 | 5.1/4 | 5 | 5.1/4 | 5.95 | -- | 5.38 | -- | 5.26 | -- | 5.77 | -- | 5.55 | -- |
| 2 | 17.5 | 165.1 | 8.0 | 25.4 | 7/8 | 5.1/2 | 5.1/4 | 5.3/4 | 11.00 | -- | 9.87 | -- | 9.66 | -- | 11.00 | -- | 10.17 | -- |
| 2.1/2 | 19.1 | 190.5 | 8.0 | 28.6 | 1 | 6.0 | 5.3/4 | 6.1/4 | 15.17 | -- | 11.30 | -- | 13.44 | -- | 14.00 | -- | 14.21 | -- |
| 3 | - | 203.2 | 8.0 | 31.8 | 1.1/8 | 6.3/4 | 6.1/2 | 7 | 19.90 | -- | 17.94 | -- | 17.57 | -- | 19.19 | -- | -- | -- |
| 4 | - | 241.3 | 8.0 | 34.9 | 1.1/4 | 7.1/2 | 7.1/4 | 7.3/4 | 29.78 | -- | 27.84 | -- | 27.31 | -- | 30.00 | -- | -- | -- |
| 5 | - | 292 | 8.0 | 41.3 | 1.1/2 | 9.1/2 | 9.1/4 | 9.3/4 | 56.55 | -- | 51.93 | -- | 51.25 | -- | 58.53 | -- | -- | -- |
| 6 | - | 317.5 | 12.0 | 38.1 | 1.3/8 | 10.0 | 9.3/4 | 10.1/4 | 67.37 | -- | 61.16 | -- | 60.27 | -- | 71.96 | -- | -- | -- |
| 8 | - | 393.7 | 12.0 | 44.5 | 1.5/8 | 11.1/4 | 11 | 11.3/4 | 114.53 | -- | 103.27 | -- | 102.02 | -- | 121.72 | -- | -- | -- |
| 10 | - | 482.6 | 12.0 | 50.8 | 1.7/8 | 13.1/4 | 13 | 13.1/2 | 199.29 | -- | 175.57 | -- | 180.79 | -- | 210.93 | -- | -- | -- |
| 12 | - | 571.5 | 16.0 | 54.0 | 2 | 14.3/4 | 14.1/2 | 15.1/4 | 297.41 | -- | 264.25 | -- | 284.49 | -- | 316.42 | -- | -- | -- |
| 14 | - | 635.0 | 16.0 | 60.3 | 2.1/4 | 16.0 | 15.3/4 | 16.3/4 | 391.80 | -- | -- | -- | 384.39 | -- | 420.96 | -- | -- | -- |
| 16 | - | 704.9 | 16.0 | 66.7 | 2.1/2 | 17.1/2 | 17.1/4 | 18.1/2 | 497.15 | -- | -- | -- | 493.73 | -- | 558.84 | -- | -- | -- |
| 18 | - | 774.7 | 16.0 | 73.0 | 2.3/4 | 19.1/4 | 19 | 20.1/4 | 646.52 | -- | -- | -- | 637.35 | -- | 761.75 | -- | -- | -- |
| 20 | - | 831.9 | 16.0 | 79.4 | 3 | 21.0 | 20.3/4 | 22.1/4 | 789.07 | -- | -- | -- | 765.43 | -- | 965.67 | -- | -- | -- |
| 24 | - | 990.6 | 16.0 | 92.1 | 3.1/2 | 24.0 | 23.3/4 | 25.1/2 | 1252.51 | -- | -- | -- | 1222.13 | -- | 1559.15 | -- | -- | -- |

- Note :**
- (4) Blind Flanges may be made with the same hub as that used for Slip-on Flanges or without hub.
 - (5) The gasket surface and backside (bearing surface for bolting) are made parallel within 1 degree. To accomplish Parallelism. And facing is carried out according to MSS SP-9, without reducing thickness(t)
 - (6) Dimensions of sizes 1/2" through 2.1/2" are the same as for Class 900 Flanges.
 - (7) Depth of Socket(Y) is covered ANSI B16.5 only in sizes through 2.1/2", over 2.1/2 inch is at the manufacturer's option.

