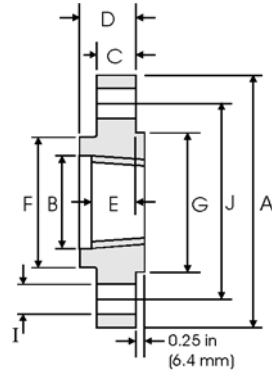


# Threaded Flanges - ANSI B16.5



## Class 400 lb

| Nominal Pipe Size | Pipe             |                  | Flange Data      |                      |                |                     |              | Hub           | Raised Face     | Drilling Data      |                             |           | Weight |
|-------------------|------------------|------------------|------------------|----------------------|----------------|---------------------|--------------|---------------|-----------------|--------------------|-----------------------------|-----------|--------|
|                   |                  | <b>A</b>         | <b>B</b>         | <b>C</b>             | <b>D</b>       | <b>E</b>            | <b>F</b>     | <b>G</b>      | <b>H</b>        | <b>I</b>           | <b>J</b>                    |           |        |
|                   | Outside Diameter | Overall Diameter | Counter-bore min | Flange Thickness min | Overall Length | Threaded length min | Hub Diameter | Face Diameter | Number of Holes | Bolt Hole Diameter | Diameter of Circle of Holes | kg/ piece |        |
| in mm             | in mm            | in mm            | in mm            | in mm                | in mm          | in mm               | in mm        | in mm         | in mm           | in mm              | in mm                       |           |        |
| 1/2               | 0.840            | 3.750            | 0.930            | 0.560                | 0.880          | 0.620               | 1.500        | 1.380         | 4               | 0.620              | 2.620                       | 0.74      |        |
|                   | 21.30            | 95.30            | 23.60            | 14.20                | 22.40          | 15.70               | 38.10        | 35.10         |                 |                    |                             |           | 15.70  |
| 3/4               | 1.050            | 4.620            | 1.140            | 0.620                | 1.000          | 0.620               | 1.880        | 1.690         | 4               | 0.750              | 3.250                       | 1.27      |        |
|                   | 26.70            | 117.3            | 29.00            | 15.70                | 25.40          | 15.70               | 47.80        | 42.90         |                 |                    |                             |           | 19.10  |
| 1                 | 1.315            | 4.880            | 1.410            | 0.690                | 1.060          | 0.690               | 2.120        | 2.000         | 4               | 0.750              | 3.500                       | 1.52      |        |
|                   | 33.40            | 124.0            | 35.80            | 17.50                | 26.90          | 17.50               | 53.80        | 50.80         |                 |                    |                             |           | 19.10  |
| 1 1/4             | 1.660            | 5.250            | 1.750            | 0.810                | 1.120          | 0.810               | 2.500        | 2.500         | 4               | 0.750              | 3.880                       | 2.03      |        |
|                   | 42.20            | 133.4            | 44.50            | 20.60                | 28.40          | 20.60               | 63.50        | 63.50         |                 |                    |                             |           | 19.10  |
| 1 1/2             | 1.900            | 6.120            | 1.990            | 0.880                | 1.250          | 0.880               | 2.750        | 2.880         | 4               | 0.880              | 4.500                       | 2.96      |        |
|                   | 48.30            | 155.4            | 50.50            | 22.40                | 31.75          | 22.40               | 69.85        | 73.15         |                 |                    |                             |           | 22.40  |
| 2                 | 2.375            | 6.500            | 2.500            | 1.000                | 1.440          | 1.120               | 3.310        | 3.620         | 8               | 0.750              | 5.000                       | 3.62      |        |
|                   | 60.30            | 165.1            | 63.50            | 25.40                | 36.60          | 28.40               | 84.10        | 91.90         |                 |                    |                             |           | 19.10  |
| 2 1/2             | 2.875            | 7.500            | 3.000            | 1.120                | 1.620          | 1.250               | 3.940        | 4.120         | 8               | 0.880              | 5.880                       | 5.28      |        |
|                   | 73.00            | 190.5            | 76.20            | 28.40                | 41.10          | 31.75               | 100.1        | 104.6         |                 |                    |                             |           | 22.40  |
| 3                 | 3.500            | 8.250            | 3.630            | 1.250                | 1.810          | 1.380               | 4.620        | 5.000         | 8               | 0.880              | 6.620                       | 7.00      |        |
|                   | 88.90            | 209.6            | 92.20            | 31.75                | 46.00          | 35.10               | 117.3        | 127.0         |                 |                    |                             |           | 22.40  |
| 3 1/2             | 4.000            | 9.000            | 4.130            | 1.380                | 1.940          | 1.560               | 5.250        | 5.500         | 8               | 1.000              | 7.250                       | 8.84      |        |
|                   | 101.6            | 228.6            | 104.9            | 35.10                | 49.30          | 39.60               | 133.4        | 139.7         |                 |                    |                             |           | 25.40  |
| 4                 | 4.500            | 10.00            | 4.630            | 1.380                | 2.000          | 1.440               | 5.750        | 6.190         | 8               | 1.000              | 7.880                       | 11.1      |        |
|                   | 114.3            | 254.0            | 117.6            | 35.10                | 50.80          | 36.60               | 146.1        | 157.2         |                 |                    |                             |           | 25.40  |
| 5                 | 5.563            | 11.00            | 5.690            | 1.500                | 2.120          | 1.690               | 7.000        | 7.310         | 8               | 1.000              | 9.250                       | 13.9      |        |
|                   | 141.3            | 279.4            | 144.5            | 38.10                | 53.80          | 42.90               | 177.8        | 185.7         |                 |                    |                             |           | 25.40  |
| 6                 | 6.625            | 12.50            | 6.750            | 1.620                | 2.250          | 1.810               | 8.120        | 8.500         | 12              | 1.000              | 10.62                       | 18.3      |        |
|                   | 168.3            | 317.5            | 171.5            | 41.10                | 57.15          | 46.00               | 206.2        | 215.9         |                 |                    |                             |           | 25.40  |
| 8                 | 8.625            | 15.00            | 8.750            | 1.880                | 2.690          | 2.000               | 10.25        | 10.62         | 12              | 1.120              | 13.00                       | 28.6      |        |
|                   | 219.1            | 381.0            | 222.3            | 47.80                | 68.30          | 50.80               | 260.4        | 269.7         |                 |                    |                             |           | 28.40  |
| 10                | 10.75            | 17.50            | 10.88            | 2.120                | 2.880          | 2.190               | 12.62        | 12.75         | 16              | 1.250              | 15.25                       | 39.2      |        |
|                   | 273.0            | 444.5            | 276.4            | 53.80                | 73.15          | 55.60               | 320.5        | 323.9         |                 |                    |                             |           | 31.75  |
| 12                | 12.75            | 20.50            | 12.94            | 2.250                | 3.120          | 2.380               | 14.75        | 15.00         | 16              | 1.380              | 17.75                       | 57.0      |        |
|                   | 323.8            | 520.7            | 328.7            | 57.15                | 79.25          | 60.45               | 374.7        | 381.0         |                 |                    |                             |           | 35.10  |
| 14                | 14.00            | 23.00            | 14.19            | 2.380                | 3.310          | 2.500               | 16.75        | 16.25         | 20              | 1.380              | 20.25                       | 79.1      |        |
|                   | 355.6            | 584.2            | 360.4            | 60.45                | 84.10          | 63.50               | 425.5        | 412.8         |                 |                    |                             |           | 35.10  |
| 16                | 16.00            | 25.50            | 16.19            | 2.500                | 3.690          | 2.690               | 19.00        | 18.50         | 20              | 1.500              | 22.50                       | 101       |        |
|                   | 406.4            | 647.7            | 411.2            | 63.50                | 93.70          | 68.30               | 482.6        | 469.9         |                 |                    |                             |           | 38.10  |
| 18                | 18.00            | 28.00            | 18.19            | 2.620                | 3.880          | 2.750               | 21.00        | 21.00         | 24              | 1.500              | 24.75                       | 123       |        |
|                   | 457.2            | 711.2            | 462.0            | 66.55                | 98.60          | 69.85               | 533.4        | 533.4         |                 |                    |                             |           | 38.10  |
| 20                | 20.00            | 30.50            | 20.19            | 2.750                | 4.000          | 2.880               | 23.12        | 23.00         | 24              | 1.620              | 27.00                       | 146       |        |
|                   | 508.0            | 774.7            | 512.8            | 69.85                | 101.6          | 73.15               | 587.2        | 584.2         |                 |                    |                             |           | 41.10  |
| 24                | 24.00            | 36.00            | 24.19            | 3.000                | 4.500          | 3.250               | 27.62        | 27.25         | 24              | 1.880              | 32.00                       | 219       |        |
|                   | 609.6            | 914.4            | 614.4            | 76.20                | 114.3          | 82.60               | 701.5        | 692.2         |                 |                    |                             |           | 47.80  |

### Notes

- The thread conforms to ASME B1.20.1 NTP threads as described in Section 10. (The only exceptions are small male and female plain face threaded flanges which use NPSL locknut threads.)
- Class 300 and higher threaded flanges are counter-bored. Threads are chamfered to the counterbore at an angle of 45° (approx).
- Weights are based on manufacturer's data and are approximate.
- For tolerances see page 8-4.