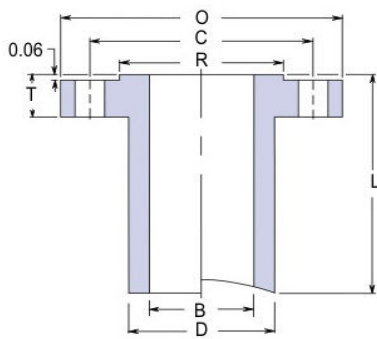
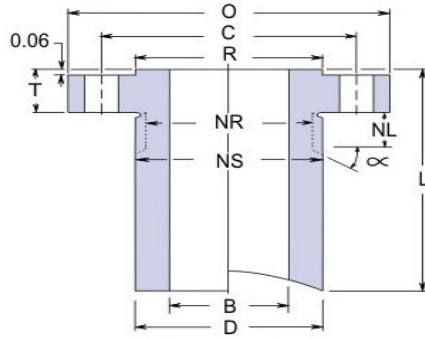


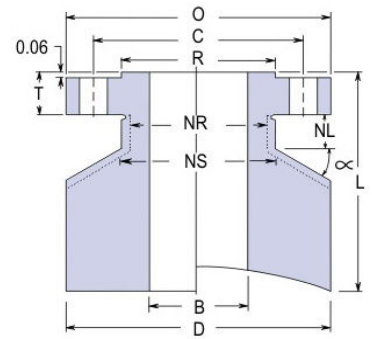
# Class 150 - Standard Connection Specifications



LONG WELD NECK "LWN"



HEAVY BARREL "HB"



EQUAL BARREL "E"

| Size  |              | Flange  |       |      |          | Barrel OD |       |       | Bolting    |           |             | Nut      |            |               | Stud Bolt |           |            | Weights |        |      |        |      |        | Length |
|-------|--------------|---------|-------|------|----------|-----------|-------|-------|------------|-----------|-------------|----------|------------|---------------|-----------|-----------|------------|---------|--------|------|--------|------|--------|--------|
| Nom   | Bore LWN & E | Bore HB | OD    | Thk. | RF of OD | LWN       | HB    | E     | # of Holes | Hole Size | Bolt Circle | Stop Dia | Relief Dia | Relief Length | Size      | RF Length | RTJ Length | LWN     |        | HB   |        | E    |        | Base   |
|       | B            | B       | O     | T    | R        | D         | D     | D     |            |           | C           | NS       | NR         | NL            |           |           |            | Base    | Per 1" | Base | Per 1" | Base | Per 1" | L      |
| 1/2   | 0.50         | 0.55    | 3.50  | 0.44 | 1.38     | 1.25      | 1.50  | 3.50  | 4          | 0.62      | 2.38        | 1.50     | 1.25       | 0.75          | 1/2       | 2 1/4     | 2 3/4      | 3       | 0.3    | 5    | 0.4    | 21   | 2.7    | 9      |
| 3/4   | 0.75         | 0.74    | 3.88  | 0.50 | 1.69     | 1.62      | 1.88  | 3.88  | 4          | 0.62      | 2.75        | 1.88     | 1.62       | 0.75          | 1/2       | 2 1/2     | 3          | 5       | 0.5    | 7    | 0.7    | 27   | 3.2    | 9      |
| 1     | 1.00         | 0.96    | 4.25  | 0.56 | 2.00     | 2.00      | 2.25  | 4.25  | 4          | 0.62      | 3.12        | 2.25     | 2.00       | 0.75          | 1/2       | 2 1/2     | 3          | 7       | 0.7    | 10   | 0.9    | 30   | 3.8    | 9      |
| 1 1/4 | 1.25         | 1.28    | 4.62  | 0.62 | 2.50     | 2.38      | 2.62  | 4.62  | 4          | 0.62      | 3.50        | 2.62     | 2.38       | 0.75          | 1/2       | 2 3/4     | 3 1/4      | 10      | 0.9    | 12   | 1.2    | 36   | 4.4    | 9      |
| 1 1/2 | 1.50         | 1.50    | 5.00  | 0.69 | 2.88     | 2.62      | 3.00  | 5.00  | 4          | 0.62      | 3.88        | 3.00     | 2.62       | 0.75          | 1/2       | 2 3/4     | 3 1/4      | 12      | 1      | 16   | 1.5    | 41   | 5.1    | 9      |
| 2     | 2.00         | 1.94    | 6.00  | 0.75 | 3.62     | 3.06      | 3.69  | 6.00  | 4          | 0.75      | 4.75        | 3.69     | 3.06       | 0.88          | 5/8       | 3 1/4     | 3 3/4      | 15      | 1.2    | 23   | 2.2    | 57   | 7.1    | 9      |
| 2 1/2 | 2.50         | 2.32    | 7.00  | 0.88 | 4.12     | 3.75      | 4.44  | 7.00  | 4          | 0.75      | 5.50        | 4.44     | 3.75       | 0.88          | 5/8       | 3 1/2     | 4          | 22      | 1.7    | 34   | 3.2    | 79   | 10     | 9      |
| 3     | 3.00         | 2.90    | 7.50  | 0.94 | 5.00     | 4.25      | 4.94  | 7.50  | 4          | 0.75      | 6.00        | 4.94     | 4.25       | 0.88          | 5/8       | 3 1/2     | 4 1/4      | 25      | 2      | 38   | 3.6    | 86   | 11     | 9      |
| 3 1/2 | 3.50         | 3.36    | 8.50  | 0.94 | 5.50     | 4.88      | 5.94  | 8.50  | 8          | 0.75      | 7.00        | 5.94     | 4.88       | 0.88          | 5/8       | 3 1/2     | 4 1/4      | 32      | 2.6    | 55   | 5.3    | 110  | 13     | 9      |
| 4     | 4.00         | 3.83    | 9.00  | 0.94 | 6.19     | 5.50      | 6.44  | 9.00  | 8          | 0.75      | 7.50        | 6.44     | 5.50       | 0.88          | 5/8       | 3 1/2     | 4 1/4      | 47      | 3.2    | 78   | 6      | 164  | 14     | 12     |
| 5     | 5.00         | 4.81    | 10.00 | 0.94 | 7.31     | 6.50      | 7.25  | 10.00 | 8          | 0.88      | 8.50        | 7.25     | 6.50       | 1.00          | 3/4       | 3 3/4     | 4 1/2      | 57      | 3.8    | 87   | 6.5    | 189  | 17     | 12     |
| 6     | 6.00         | 5.76    | 11.00 | 1.00 | 8.50     | 7.75      | 8.25  | 11.00 | 8          | 0.88      | 9.50        | 8.25     | 7.75       | 1.00          | 3/4       | 4         | 4 1/2      | 75      | 5.4    | 103  | 7.8    | 216  | 19     | 12     |
| 8     | 8.00         | 7.62    | 13.50 | 1.12 | 10.62    | 9.75      | 10.50 | 13.50 | 8          | 0.88      | 11.75       | 10.50    | 9.75       | 1.00          | 3/4       | 4 1/4     | 4 3/4      | 102     | 6.9    | 157  | 11     | 292  | 26     | 12     |
| 10    | 10.00        | 9.56    | 16.00 | 1.19 | 12.75    | 12.00     | 12.81 | 16.00 | 12         | 1.00      | 14.25       | 12.81    | 12.00      | 1.12          | 7/8       | 4 3/4     | 5 1/4      | 143     | 9.8    | 214  | 16     | 382  | 35     | 12     |
| 12    | 12.00        | 11.38   | 19.00 | 1.25 | 15.00    | 14.38     | 15.56 | 19.00 | 12         | 1.00      | 17.00       | 15.56    | 14.38      | 1.12          | 7/8       | 4 3/4     | 5 1/2      | 205     | 14     | 329  | 25     | 535  | 48     | 12     |
| 14    | 14.00        | 14.00   | 21.00 | 1.38 | 16.25    | 16.00     | 17.12 | 21.00 | 12         | 1.12      | 18.75       | 17.12    | 16.00      | 1.25          | 1         | 5 1/4     | 6          | 211     | 13     | 296  | 22     | 585  | 55     | 12     |
| 16    | 16.00        | 16.00   | 23.50 | 1.44 | 18.50    | 18.00     | 19.62 | 23.50 | 16         | 1.12      | 21.25       | 19.62    | 18.00      | 1.25          | 1         | 5 1/2     | 6          | 246     | 15     | 388  | 29     | 714  | 66     | 12     |
| 18    | 18.00        | 18.00   | 25.00 | 1.56 | 21.00    | 20.00     | 20.94 | 25.00 | 16         | 1.25      | 22.75       | 20.94    | 20.00      | 1.38          | 1 1/8     | 6         | 6 1/2      | 270     | 17     | 362  | 25     | 711  | 67     | 12     |
| 20    | 20.00        | 20.00   | 27.50 | 1.69 | 23.00    | 22.00     | 23.19 | 27.50 | 20         | 1.25      | 25.00       | 23.19    | 22.00      | 1.38          | 1 1/8     | 6 1/4     | 7          | 311     | 19     | 434  | 31     | 840  | 79     | 12     |
| 24    | 24.00        | 24.00   | 32.00 | 1.88 | 27.25    | 26.25     | 27.50 | 32.00 | 20         | 1.38      | 29.50       | 27.50    | 26.25      | 1.50          | 1 1/4     | 7         | 7 3/4      | 423     | 25     | 574  | 40     | 1046 | 100    | 12     |

*Dimensions are in inches. Weights are in pounds.*