| Primary Service Pressure Rating | Bolting | Flange Facing | NOMINAL PIPE SIZE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" | 2-1/2" | 3 | 3-1/2" | $4 "$ | 5" | 6" | 8" | 10" | 12" | 14" | 16" | 18" | 20" | 24" |
| $\begin{gathered} \text { CLASS } \\ 150 \end{gathered}$ | Number |  | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 8 | 8 | 8 | 12 | 12 | 12 | 16 | 16 | 20 | 20 |
|  | Diameter |  | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 5/8" | 5/8" | 5/8" | 5/8" | 5/8" | 3/4" | 3/4" | 3/4" | 7/8" | 7/8" | 1" | 1" | 1-1/8" | 1-1/8" | 1-1/4" |
|  | Length of stud bolts | 1/16"RF | 2-1/4" | 2-1/2" | 2-1/2" | 2-3/4" | 2-3/4" | 3-1/4" | 3-1/2" | 3-1/2" | 3-1/2" | 3-1/2" | 3-3/4" | 4 | 4-1/4" | 4-1/2" | 4-3/4" | 5-1/4" | 5-1/4" | 5-3/4" | 6-1/4" | 6-3/4" |
|  |  | RTJ |  |  | 3 " | 3-1/4" | 3-1/4" | 3-3/4" | 4" | 4" | 4" | $4^{\prime \prime}$ | 4-1/4" | 4-1/2" | 4-3/4" | 5 | 5-1/4" | 5-3/4" | 5-3/4" | 6-1/4" | 6-3/4" | 7-1/4" |
|  | Length bolts | 1/16"RF | 2" | 2" | 2-1/4" | 2-1/4" | 2-1/2" | 2-3/4" | $3{ }^{\prime \prime}$ | 3" | 3" | 3" | 3-1/4" | 3-1/4" | 3-1/2" | $4^{\prime \prime}$ | 4" | 4-1/2" | 4-1/2" | $5{ }^{\prime \prime}$ | 5-1/2" | 6" |
|  | Ring No. |  |  |  | R15 | R17 | R19 | R22 | R25 | R29 | R33 | R36 | R40 | R43 | R48 | R52 | R56 | R59 | R64 | R68 | R72 | R76 |
| $\begin{gathered} \text { CLASS } \\ 300 \end{gathered}$ | Number |  | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 8 | 8 | 8 | 8 | 12 | 12 | 16 | 16 | 20 | 20 | 24 | 24 | 24 |
|  | Diameter |  | 1/2" | 5/8" | 5/8" | 5/8" | 3/4" | 5/8" | 3/4" | 3/4" | 3/4" | 3/4" | 3/4" | 3/4" | 7/8" | $1^{\prime \prime}$ | 1-1/8" | 1-1/8" | 1-1/4" | 1-1/4" | 1-1/4" | 1-1/2" |
|  | Length of stud bolts | 1/16"RF | 2-1/2" | $3^{\prime \prime}$ | 3 " | 3-1/4" | 3-1/2" | 3-1/2" | $4^{\prime \prime}$ | 4-1/4" | 4-1/4" | 4-1/2" | 4-3/4" | 4-3/4" | 5-1/2" | 6-1/4" | 6-3/4" | $7{ }^{\prime \prime}$ | 7-1/2" | 7-3/4" | 8" | $9 "$ |
|  |  | RTJ | $3{ }^{\prime \prime}$ | 3-1/2" | 3-1/2" | 3-3/4" | $4^{\prime \prime}$ | $4{ }^{4}$ | 4-1/2" | 4-3/4" | $5{ }^{\prime \prime}$ | $5{ }^{\prime \prime}$ | 5-1/4" | 5-1/2" | $6^{\prime \prime}$ | 6-3/4" | 7-1/4" | 7-1/2" | 8" | 8-1/4" | 8-3/4" | 10" |
|  | Length bolts | 1/16"RF | 2-1/4" | 2-1/2" | 2-1/2" | 2-3/4" | 3" | 3" | 3-1/4" | 3-1/2" | 3-3/4" | 3-3/4" | 4-1/4" | 4-1/4" | 4-3/4" | 5-1/2" | 5-3/4" | 6-1/4" | 6-1/2" | 6-3/4" | 7-1/4" | 8" |
|  | Ring No. |  | R11 | R15 | R16 | R18 | R20 | R23 | R26 | R31 | R34 | R37 | R41 | R45 | R49 | R53 | R57 | R61 | R65 | R69 | R73 | R77 |
| $\begin{gathered} \text { CLASS } \\ 600 \end{gathered}$ | Number |  | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 8 | 8 | 8 | 8 | 12 | 12 | 16 | 20 | 20 | 20 | 20 | 24 | 24 |
|  | Diameter |  | 1/2" | 5/8" | 5/8" | 5/8" | 3/4" | 5/8" | 3/4" | 3/4" | 718" | 718" | 1" | 1" | 1-1/8" | 1-1/4" | 1-1/4" | 1-3/8" | 1-1/2" | 1-5/8" | 1-5/8" | 1-7/8" |
|  | Length of stud bolts | 1/4"RF | 3" | 3-1/2" | 3-1/2" | 3-3/4" | 4-1/4" | 4-1/4" | 4-3/4" | $5^{\prime \prime}$ | 5-1/2" | 5-3/4" | 6-1/2" | 6-3/4" | 7-1/2" | 8-1/2" | 8-3/4" | 9-1/4" | 10" | 10-3/4" | 11-1/4" | 13 " |
|  |  | M\&F T\&G | 2-3/4" | 3-1/4" | 3-1/4" | 3-1/2" | 4" | 4" | 4-1/2" | 4-3/4" | 5-1/4" | 5-1/2" | 6-1/4" | 6-1/2" | 7-1/4" | 8-1/4" | 8-1/2" | 9" | 9-3/4" | 10-1/2" | 11" | 12-3/4" |
|  | Length bolts | RTJ | 3" | 3-1/2" | 3-1/2" | 3-3/4" | 4-1/4" | 4-1/4" | 4-3/4" | $5{ }^{\prime \prime}$ | 5-1/2" | 5-3/4" | 6-1/2" | 6-3/4" | 7-3/4" | 8-1/2" | 8-3/4" | 9-1/4" | 10" | 10-3/4" | 11-1/2" | 13-1/4" |
|  | Ring No. |  | R11 | R13 | R16 | R18 | R20 | R23 | R26 | R31 | R34 | R37 | R41 | R45 | R49 | R53 | R57 | R61 | R65 | R69 | R73 | R77 |
| $\begin{gathered} \text { CLASS } \\ 900 \end{gathered}$ | Number |  | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 8 |  | 8 | 8 | 12 | 12 | 16 | 20 | 20 | 20 | 20 | 20 | 20 |
|  | Diameter |  | 3/4" | 3/4" | 7/8" | 7/8" | $1^{\prime \prime}$ | 7/8" | 1" | 7/8" |  | 1-1/8" | 1-1/4" | 1-1/8" | 1-3/8" | 1-3/8" | 1-3/8" | 1-1/2" | 1-5/8" | 1-17/8" | $2^{\prime \prime}$ | 2-1/2" |
|  | Length of stud bolts | 1/4"RF | 4-1/4" | 4-1/2" | 5" | $5^{\prime \prime}$ | 5-1/2" | 5-3/4" | 6-1/4" | 5-3/4" |  | 6-3/4" | 7-1/2" | 7-1/2" | 8-3/4" | 9-1/4" | 10" | 10-3/4" | 11-1/4" | 12-3/4" | 13-3/4" | 17-1/4" |
|  |  | M\&F T\&G | 4" | 4-1/4" | 4-3/4" | 4-3/4" | 5-1/4" | 5-1/2" | 6" | 5-1/2" |  | 6-1/2" | 7-1/4" | 7-1/4" | 8-1/2" | 9" | 9-3/4" | 10-1/2" | $11^{\prime \prime}$ | 12-1/2" | 13-1/2" | $17{ }^{\prime \prime}$ |
|  | Length bolts | RTJ | 4-1/4" | 4-1/2" | 5" | 5" | 5-1/2" | 5-3/4" | 6-1/4" | 5-3/4" |  | 6-3/4" | 7-1/2" | 7-3/4" | 8-3/4" | 9-1/4" | 10" | 11" | 11-1/2" | 13-1/4" | 14-1/4" | 18" |
|  | Ring No. |  | R12 | R14 | R16 | R18 | R20 | R24 | R27 | R31 |  | R37 | R41 | R45 | R49 | R53 | R57 | R62 | R66 | R70 | R74 | R78 |
| $\begin{gathered} \text { CLASS } \\ 1500 \end{gathered}$ | Number |  | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 8 |  | 8 | 8 | 12 | 12 | 12 | 16 | 16 | 16 | 16 | 16 | 16 |
|  | Diameter |  | 3/4" | 3/4" | 7/8" | 7/8" | 1" | 7/8" | 1" | 1-1/8" |  | 1-1/4" | 1-1/2" | 1-3/8" | 1-5/8" | 1-7/8" | $2{ }^{\prime \prime}$ | 2-1/4" | 2-1/2" | 2-3/4" | $3{ }^{\prime \prime}$ | 3-1/2" |
|  | Length of stud bolts | 1/4"RF | 4-1/4" | 4-1/2" | $5^{\prime \prime}$ | $5{ }^{\prime \prime}$ | 5-1/2" | 5-3/4" | 6-1/4" | $7{ }^{\prime \prime}$ |  | 7-3/4" | 9-3/4" | 10-1/4" | 11-1/2" | 13-1/4" | 14-3/4" | $16^{\prime \prime}$ | 17-1/2" | 19-1/2" | 21-1/4" | 24-1/4" |
|  |  | M\&F T\&G | 4" | 4-1/4" | 4-3/4" | 4-3/4" | 5-1/4" | 5-1/2" | $6^{\prime \prime}$ | 6-3/4" |  | 7-1/2" | 9-1/2" | 10" | 11-1/4" | 13 " | 14-1/2" | 15-1/4" | 17-1/4" | 19-1/4" | 21" | $24{ }^{\prime \prime}$ |
|  | Length bolts | RTJ | 4-1/4" | 4-1/2" | $5{ }^{\prime \prime}$ | $5^{\prime \prime}$ | 5-1/2" | 5-3/4" | 6-1/4" | 7" |  | 7-3/4" | 9-3/4" | 10-1/2" | 12-3/4" | 13-1/2" | 15-1/4" | 16-3/4" | 18-1/2" | 20-3/4" | 22-1/4" | 25-1/2" |
|  | Ring No. |  | R12 | R14 | R16 | R18 | R20 | R24 | R27 | R35 |  | R39 | R44 | R46 | R50 | R54 | R58 | R63 | R67 | R71 | R75 | R79 |
| $\begin{gathered} \text { CLASS } \\ 2500 \end{gathered}$ | Number |  | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 8 |  | 8 | 8 | 8 | 12 | 12 | 12 |  |  |  |  |  |
|  | Diameter |  | 3/4" | 3/4" | 7/8" | 1" | 1-1/8" | 1" | 1-1/8" | 1-1/4" |  | 1-1/2" | 1-3/4" | 2" | $2^{\prime \prime}$ | 2-1/2" | 2-3/4" |  |  |  |  |  |
|  | Length of stud bolts | 1/4"RF | 4-3/4" | 5" | 5-1/2" | $6^{\prime \prime}$ | 6-3/4" | $7{ }^{\prime \prime}$ | 7-3/4" | 8-3/4" |  | 10" | 11-3/4" | 13-1/2" | 15" | 19-1/4" | 21-1/4" |  |  |  |  |  |
|  |  | M\&F T\&G | 4-1/2" | 4-3/4" | 5-1/4" | 5-3/4" | 6-1/2" | 6-3/4" | 7-1/2" | 8-1/2" |  | 9-3/4" | 11-1/2" | 13-1/4" | 14-3/4" | 19" | 21" |  |  |  |  |  |
|  | Length bolts | RTJ | 4-3/4" | $5{ }^{\prime \prime}$ | 5-1/2" | $6^{\prime \prime}$ | 6-3/4" | $7{ }^{\text {7 }}$ | 8" | $9 "$ |  | 10-1/4" | 12-1/4" | $14{ }^{\prime \prime}$ | 15-1/2" | $20^{\prime \prime}$ | $22^{\prime \prime}$ |  |  |  |  |  |
|  | Ring No. |  | R13 | R16 | R18 | R21 | R23 | R26 | R28 | R32 |  | R38 | R42 | R47 | R51 | R55 | R60 |  |  |  |  |  |

