

Piping: Allowable Working Pressures

Schedule 5s Grade 304/304L; 316/316L

TEMPERATURE °C

| NB | Inches | | 37 | 66 | 93 | 121 | 149 | 177 | 204 | 232 | 260 | 288 | 316 | 330 | 343 | 357 | 371 | 385 | 399 | 414 |
|-----|--------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|-------|------|------|------|
| 15 | 1/2" | Mpa | 15.40 | 15.40 | 15.40 | 14.86 | 14.31 | 13.08 | 11.85 | 11.35 | 10.86 | 10.44 | 10.02 | 9.85 | 9.67 | 9.50 | 9.33 | 9.16 | 8.98 | 8.83 |
| 20 | 3/4" | Mpa | 12.18 | 12.18 | 12.18 | 11.75 | 11.32 | 10.34 | 9.37 | 8.98 | 8.59 | 8.26 | 7.92 | 7.79 | 7.65 | 7.52 | 7.38 | 7.24 | 7.10 | 6.99 |
| 25 | 1" | Mpa | 9.64 | 9.64 | 9.64 | 9.30 | 8.96 | 8.18 | 7.41 | 7.10 | 6.80 | 6.54 | 6.27 | 6.16 | 6.05 | 5.94 | 5.884 | 5.73 | 5.62 | 5.53 |
| 40 | 1 1/2" | Mpa | 6.60 | 6.60 | 6.60 | 6.36 | 6.13 | 5.61 | 5.07 | 4.86 | 4.65 | 4.47 | 4.30 | 4.22 | 4.14 | 4.07 | 4.00 | 3.92 | 3.85 | 3.79 |
| 50 | 2" | Mpa | 5.25 | 5.25 | 5.25 | 5.07 | 4.88 | 4.46 | 4.04 | 3.87 | 3.70 | 3.56 | 3.42 | 3.36 | 3.30 | 3.24 | 3.18 | 3.12 | 3.06 | 3.01 |
| 65 | 2 1/2" | Mpa | 5.54 | 5.54 | 5.54 | 5.35 | 5.16 | 4.71 | 4.27 | 4.09 | 3.91 | 3.76 | 3.61 | 3.54 | 3.48 | 3.42 | 3.36 | 3.30 | 3.23 | 3.18 |
| 80 | 3" | Mpa | 4.54 | 4.54 | 4.54 | 4.38 | 4.22 | 3.85 | 3.49 | 3.34 | 3.20 | 3.08 | 2.95 | 2.90 | 2.85 | 2.80 | 2.75 | 2.70 | 2.65 | 2.61 |
| 100 | 4" | Mpa | 3.52 | 3.52 | 3.52 | 3.39 | 3.27 | 2.99 | 2.70 | 2.59 | 2.48 | 2.39 | 2.29 | 2.25 | 2.21 | 2.17 | 2.13 | 2.09 | 2.05 | 2.02 |
| 150 | 6" | Mpa | 3.13 | 3.13 | 3.13 | 3.02 | 2.91 | 2.66 | 2.41 | 2.31 | 2.21 | 2.12 | 2.04 | 2.01 | 1.97 | 1.93 | 1.90 | 1.86 | 1.83 | 1.80 |
| 200 | 8" | Mpa | 2.40 | 2.40 | 2.40 | 2.32 | 2.23 | 2.04 | 1.85 | 1.77 | 1.69 | 1.63 | 1.56 | 1.54 | 1.51 | 1.48 | 1.45 | 1.43 | 1.40 | 1.38 |
| 250 | 10" | Mpa | 2.36 | 2.36 | 2.36 | 2.28 | 2.20 | 2.01 | 1.82 | 1.74 | 1.67 | 1.61 | 1.54 | 1.52 | 1.49 | 1.46 | 1.43 | 1.41 | 1.38 | 1.36 |
| 300 | 12" | Mpa | 2.32 | 2.32 | 2.32 | 2.24 | 2.16 | 1.97 | 1.79 | 1.71 | 1.64 | 1.57 | 1.51 | 1.48 | 1.46 | 1.43 | 1.41 | 1.38 | 1.36 | 1.33 |

Schedule 10s Grade 304/304L; 316/316L

TEMPERATURE °C

| NB | Inches | | 37 | 66 | 93 | 121 | 149 | 177 | 204 | 232 | 260 | 288 | 316 | 330 | 343 | 357 | 371 | 385 | 399 | 414 |
|-----|--------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 15 | 1/2" | Mpa | 19.98 | 19.98 | 19.98 | 19.28 | 18.58 | 16.97 | 15.37 | 14.73 | 14.09 | 13.54 | 13.00 | 12.78 | 12.56 | 12.33 | 12.10 | 11.88 | 11.66 | 11.47 |
| 20 | 3/4" | Mpa | 15.75 | 15.75 | 15.75 | 15.20 | 14.64 | 13.38 | 12.11 | 11.61 | 11.11 | 10.68 | 10.25 | 10.07 | 9.89 | 9.72 | 9.554 | 9.36 | 9.19 | 9.04 |
| 25 | 1" | Mpa | 16.56 | 16.56 | 16.56 | 15.98 | 15.40 | 14.07 | 12.74 | 12.21 | 11.68 | 11.23 | 10.78 | 10.59 | 10.40 | 10.22 | 10.03 | 9.85 | 9.66 | 9.50 |
| 40 | 1 1/2" | Mpa | 11.25 | 11.25 | 11.25 | 10.85 | 10.46 | 9.56 | 8.65 | 8.29 | 7.94 | 7.63 | 7.32 | 7.19 | 7.07 | 6.94 | 6.81 | 6.69 | 6.56 | 6.45 |
| 50 | 2" | Mpa | 8.93 | 8.93 | 8.93 | 8.61 | 8.29 | 7.58 | 6.87 | 6.58 | 6.30 | 6.05 | 5.81 | 5.71 | 5.61 | 5.51 | 5.41 | 5.31 | 5.221 | 5.12 |
| 65 | 2 1/2" | Mpa | 8.09 | 8.09 | 8.09 | 7.81 | 7.52 | 6.87 | 6.23 | 5.96 | 5.71 | 5.49 | 5.27 | 5.18 | 5.08 | 4.99 | 4.90 | 4.81 | 4.72 | 4.64 |
| 80 | 3" | Mpa | 6.61 | 6.61 | 6.61 | 6.38 | 6.14 | 5.62 | 5.09 | 4.87 | 4.66 | 4.48 | 4.30 | 4.23 | 4.15 | 4.08 | 4.01 | 3.93 | 3.85 | 3.79 |
| 100 | 4" | Mpa | 5.12 | 5.12 | 5.12 | 4.94 | 4.76 | 4.34 | 3.94 | 3.77 | 3.61 | 3.47 | 3.33 | 3.27 | 3.21 | 3.16 | 3.10 | 3.04 | 2.99 | 2.94 |
| 150 | 6" | Mpa | 3.86 | 3.86 | 3.86 | 3.72 | 3.59 | 3.28 | 2.97 | 2.85 | 2.72 | 2.62 | 2.51 | 2.47 | 2.43 | 2.39 | 2.34 | 2.30 | 2.25 | 2.21 |
| 200 | 8" | Mpa | 3.27 | 3.27 | 3.27 | 3.15 | 3.04 | 2.78 | 2.52 | 2.41 | 2.30 | 2.21 | 2.12 | 2.09 | 2.05 | 2.02 | 1.98 | 1.94 | 1.91 | 1.88 |
| 250 | 10" | Mpa | 2.92 | 2.92 | 2.92 | 2.82 | 2.72 | 2.48 | 2.25 | 2.15 | 2.06 | 1.98 | 1.90 | 1.87 | 1.83 | 1.80 | 1.77 | 1.74 | 1.70 | 1.68 |
| 300 | 12" | Mpa | 2.68 | 2.68 | 2.68 | 2.59 | 2.50 | 2.28 | 2.06 | 1.98 | 1.89 | 1.82 | 1.74 | 1.72 | 1.69 | 1.65 | 1.63 | 1.59 | 1.57 | 1.54 |



Piping: Allowable Working Pressures (cont.)

Schedule 40s Grade 304/304L; 316/316L

TEMPERATURE °C

| NB | Inches | | 37 | 66 | 93 | 121 | 149 | 177 | 204 | 232 | 260 | 288 | 316 | 330 | 343 | 357 | 371 | 385 | 399 | 414 |
|-----|--------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 15 | 1/2" | Mpa | 26.86 | 26.61 | 26.35 | 24.46 | 22.56 | 20.75 | 18.94 | 17.82 | 16.71 | 16.10 | 15.50 | 15.29 | 15.07 | 14.85 | 14.64 | 14.47 | 14.29 | 14.12 |
| 20 | 3/4" | Mpa | 21.91 | 21.70 | 21.48 | 19.94 | 18.40 | 16.92 | 15.44 | 14.53 | 13.62 | 13.13 | 12.64 | 12.47 | 12.29 | 12.11 | 11.94 | 11.80 | 11.66 | 11.51 |
| 25 | 1" | Mpa | 20.49 | 20.29 | 20.09 | 18.65 | 17.20 | 15.82 | 14.45 | 13.59 | 12.74 | 12.28 | 11.82 | 11.66 | 11.49 | 11.33 | 11.16 | 11.03 | 10.90 | 10.77 |
| 40 | 1 1/2" | Mpa | 15.18 | 15.03 | 14.89 | 13.81 | 12.74 | 11.72 | 10.70 | 10.07 | 9.44 | 9.09 | 8.76 | 8.63 | 8.52 | 8.39 | 8.27 | 8.17 | 8.07 | 7.98 |
| 50 | 2" | Mpa | 12.78 | 12.67 | 12.54 | 11.64 | 10.74 | 9.87 | 9.02 | 8.48 | 7.95 | 7.66 | 7.38 | 7.27 | 7.17 | 7.07 | 6.96 | 6.89 | 6.81 | 6.72 |
| 65 | 2 1/2" | Mpa | 13.98 | 13.85 | 13.71 | 12.73 | 11.74 | 10.80 | 9.86 | 9.27 | 8.69 | 8.38 | 8.07 | 7.96 | 7.84 | 7.73 | 7.62 | 7.53 | 7.44 | 7.35 |
| 80 | 3" | Mpa | 12.14 | 12.02 | 11.91 | 11.05 | 10.20 | 9.38 | 8.56 | 8.05 | 7.55 | 7.27 | 7.01 | 6.91 | 6.81 | 6.72 | 6.61 | 6.54 | 6.46 | 6.38 |
| 100 | 4" | Mpa | 10.29 | 10.19 | 10.09 | 9.37 | 8.65 | 7.95 | 7.26 | 6.83 | 6.40 | 6.17 | 5.94 | 5.85 | 5.77 | 5.69 | 5.61 | 5.54 | 5.47 | 5.41 |
| 150 | 6" | Mpa | 8.20 | 8.12 | 8.04 | 7.46 | 6.88 | 6.33 | 5.78 | 5.44 | 5.10 | 4.92 | 4.73 | 4.66 | 4.60 | 4.53 | 4.47 | 4.41 | 4.36 | 4.31 |
| 200 | 8" | Mpa | 7.22 | 7.14 | 7.07 | 6.57 | 6.06 | 5.57 | 5.09 | 4.79 | 4.49 | 4.32 | 4.16 | 4.10 | 4.05 | 3.99 | 3.93 | 3.89 | 3.84 | 3.79 |
| 250 | 10" | Mpa | 6.54 | 6.48 | 6.42 | 5.96 | 5.50 | 5.05 | 4.62 | 4.34 | 4.07 | 3.92 | 3.78 | 3.72 | 3.68 | 3.62 | 3.56 | 3.52 | 3.48 | 3.44 |
| 300 | 12" | Mpa | 6.13 | 6.07 | 6.01 | 5.58 | 5.15 | 4.74 | 4.32 | 4.07 | 3.81 | 3.68 | 3.54 | 3.49 | 3.44 | 3.39 | 3.34 | 3.30 | 3.26 | 3.22 |

Schedule 80s Grade 304/304L; 316/316L

TEMPERATURE °C

| NB | Inches | | 37 | 66 | 93 | 121 | 149 | 177 | 204 | 232 | 260 | 288 | 316 | 330 | 343 | 357 | 371 | 385 | 399 | 414 |
|-----|--------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 15 | 1/2" | Mpa | 37.54 | 37.18 | 36.82 | 34.17 | 31.52 | 28.99 | 26.47 | 24.90 | 23.34 | 22.50 | 21.66 | 21.35 | 21.06 | 20.75 | 20.46 | 20.22 | 19.97 | 19.73 |
| 20 | 3/4" | Mpa | 30.77 | 30.47 | 30.17 | 28.01 | 25.84 | 23.77 | 21.69 | 20.41 | 19.13 | 18.44 | 17.75 | 17.51 | 17.26 | 17.01 | 16.76 | 16.57 | 16.37 | 16.17 |
| 25 | 1" | Mpa | 28.32 | 28.05 | 27.78 | 25.78 | 23.78 | 21.88 | 19.97 | 18.79 | 17.61 | 16.98 | 16.34 | 16.11 | 15.89 | 15.66 | 15.43 | 15.25 | 15.07 | 14.89 |
| 40 | 1 1/2" | Mpa | 21.39 | 21.18 | 20.98 | 19.47 | 17.96 | 16.52 | 15.09 | 14.19 | 13.30 | 12.82 | 12.34 | 12.17 | 12.00 | 11.82 | 11.65 | 11.51 | 11.38 | 11.25 |
| 50 | 2" | Mpa | 18.46 | 18.29 | 18.11 | 16.81 | 15.51 | 14.27 | 13.02 | 12.25 | 11.48 | 11.07 | 10.65 | 10.50 | 10.36 | 10.21 | 10.06 | 9.94 | 9.83 | 9.71 |
| 65 | 2 1/2" | Mpa | 19.37 | 19.19 | 19.00 | 17.63 | 16.27 | 14.96 | 13.66 | 12.85 | 12.05 | 11.61 | 11.18 | 11.02 | 10.87 | 10.71 | 10.56 | 10.43 | 10.31 | 10.18 |
| 80 | 3" | Mpa | 17.16 | 17.00 | 16.83 | 15.62 | 14.41 | 13.26 | 12.10 | 11.39 | 10.67 | 10.29 | 9.90 | 9.76 | 9.63 | 9.49 | 9.35 | 9.24 | 9.13 | 9.03 |
| 100 | 4" | Mpa | 14.88 | 14.73 | 14.59 | 13.54 | 12.49 | 11.49 | 10.49 | 9.87 | 9.25 | 8.92 | 8.58 | 8.46 | 8.34 | 8.23 | 8.11 | 8.01 | 7.92 | 7.82 |
| 150 | 6" | Mpa | 12.86 | 12.74 | 12.61 | 11.71 | 10.80 | 9.94 | 9.07 | 8.54 | 8.00 | 7.71 | 7.42 | 7.32 | 7.21 | 7.11 | 7.01 | 6.92 | 6.84 | 6.76 |
| 200 | 8" | Mpa | 11.38 | 11.27 | 11.16 | 10.36 | 9.55 | 8.78 | 8.02 | 7.54 | 7.07 | 6.82 | 6.56 | 6.47 | 6.38 | 6.29 | 6.20 | 6.12 | 6.05 | 5.98 |
| 250 | 10" | Mpa | 10.82 | 10.71 | 10.61 | 9.85 | 9.09 | 8.36 | 7.63 | 7.18 | 6.73 | 6.49 | 6.24 | 6.16 | 6.07 | 5.98 | 5.90 | 5.83 | 5.76 | 5.69 |
| 300 | 12" | Mpa | 10.56 | 10.45 | 10.36 | 9.61 | 8.87 | 8.16 | 7.45 | 7.01 | 6.56 | 6.33 | 6.09 | 6.01 | 5.92 | 5.83 | 5.75 | 5.68 | 5.62 | 5.55 |

