

| Nominal Diameter<br>d |     | 3    | 4    | 5    | 6     | 8     | 10    | 12    | 14    | 16    | 18    | 20    | 22    | 24    |
|-----------------------|-----|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d                     | max | 3.00 | 4.00 | 5.00 | 6.00  | 8.00  | 10.00 | 12.00 | 14.00 | 16.00 | 18.00 | 20.00 | 22.00 | 24.00 |
|                       | min | 2.94 | 3.93 | 4.93 | 5.93  | 7.91  | 9.91  | 11.90 | 13.90 | 15.90 | 17.90 | 19.87 | 21.87 | 23.87 |
| d <sub>k</sub>        | max | 5.00 | 6.00 | 8.00 | 10.00 | 14.00 | 18.00 | 20.00 | 22.00 | 25.00 | 28.00 | 30.00 | 33.00 | 36.00 |
|                       | min | 4.70 | 5.70 | 7.64 | 9.64  | 13.57 | 17.57 | 19.48 | 21.48 | 24.48 | 27.48 | 29.48 | 32.38 | 35.38 |
| k                     | max | 1.20 | 1.20 | 1.80 | 2.20  | 3.20  | 4.20  | 4.20  | 4.20  | 4.70  | 5.20  | 5.20  | 5.70  | 6.20  |
|                       | min | 0.80 | 0.80 | 1.40 | 1.80  | 2.80  | 3.80  | 3.80  | 3.80  | 4.30  | 4.80  | 4.80  | 5.30  | 5.80  |
| E                     |     | 0.50 | 0.50 | 1.00 | 1.00  | 1.00  | 1.00  | 1.50  | 1.50  | 1.50  | 1.50  | 2.00  | 2.00  | 2.00  |
| R                     |     | 0.60 | 0.60 | 0.60 | 0.60  | 0.60  | 0.60  | 0.60  | 0.60  | 0.60  | 1.00  | 1.00  | 1.00  | 1.00  |
| d <sub>p</sub>        | max | 2.20 | 3.20 | 3.30 | 4.30  | 6.30  | 8.30  | 9.50  | 11.50 | 13.50 | 15.50 | 16.60 | 18.60 | 20.60 |
|                       | min | 1.80 | 2.80 | 2.70 | 3.70  | 5.70  | 7.70  | 8.50  | 10.50 | 12.50 | 14.50 | 15.40 | 17.40 | 19.40 |

| Nominal Diameter<br>d |     | 27    | 30    | 33    | 36    | 40    | 45    | 50    | 55    | 60    | 70    | 80     | 90     | 100    |
|-----------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| d                     | max | 27.00 | 30.00 | 33.00 | 36.00 | 40.00 | 45.00 | 50.00 | 55.00 | 60.00 | 70.00 | 80.00  | 90.00  | 100.00 |
|                       | min | 26.87 | 29.87 | 32.84 | 35.84 | 39.84 | 44.84 | 49.84 | 54.81 | 59.81 | 69.81 | 79.81  | 89.78  | 99.78  |
| d <sub>k</sub>        | max | 40.00 | 44.00 | 47.00 | 50.00 | 55.00 | 60.00 | 66.00 | 72.00 | 78.00 | 90.00 | 100.00 | 110.00 | 120.00 |
|                       | min | 39.38 | 43.38 | 46.38 | 49.38 | 54.26 | 59.26 | 65.26 | 71.26 | 77.26 | 89.13 | 99.13  | 109.13 | 119.13 |
| k                     | max | 6.20  | 8.30  | 8.30  | 8.30  | 8.30  | 9.30  | 9.30  | 11.40 | 12.40 | 13.40 | 13.40  | 13.40  | 13.40  |
|                       | min | 5.80  | 7.70  | 7.70  | 7.70  | 7.70  | 8.70  | 8.70  | 10.60 | 11.60 | 12.60 | 12.60  | 12.60  | 12.60  |
| E                     |     | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 3.00  | 3.00  | 3.00  | 3.00   | 3.00   | 3.00   |
| R                     |     | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00   | 1.00   | 1.00   |
| d <sub>p</sub>        | max | 23.60 | 26.60 | 29.60 | 32.60 | 36.60 | 41.60 | 46.60 | 50.00 | 55.00 | 65.00 | 75.00  | 85.00  | 95.00  |
|                       | min | 22.40 | 25.40 | 28.40 | 31.40 | 35.40 | 40.40 | 45.40 | 48.00 | 53.00 | 63.00 | 73.00  | 83.00  | 93.00  |