

DOUBLE REDUCTION • HELICAL / WORM MAXIMUM RATING TABLES

800 SERIES • ALL STOCK STYLES



813, 815, 818 and 821 Series • 1.0 S.F.

| Nominal Ratio | Input RPM | Nominal Output RPM | 813 Series | | | | 815 Series | | | | 818 Series | | | | 821 Series | | | |
|---------------|-----------|--------------------|------------|-----------|-------------------|-------------|------------|-----------|-------------------|-------------|------------|-----------|-------------------|-------------|------------|-----------|-------------------|-------------|
| | | | Input HP | Output HP | Output TQ (lb-in) | Exact Ratio | Input HP | Output HP | Output TQ (lb-in) | Exact Ratio | Input HP | Output HP | Output TQ (lb-in) | Exact Ratio | Input HP | Output HP | Output TQ (lb-in) | Exact Ratio |
| 10 | 1750 | 175 | 0.650 | 0.590 | 212 | 10.28 | 1.120 | 0.960 | 347 | 10.28 | 1.560 | 1.350 | 499 | 10.28 | 1.780 | 1.540 | 574 | 10.28 |
| 15 | 1750 | 117 | 0.540 | 0.460 | 248 | 15.42 | 0.850 | 0.710 | 383 | 15.42 | 1.200 | 1.030 | 542 | 14.64 | 1.610 | 1.410 | 762 | 15.42 |
| 20 | 1750 | 88 | 0.460 | 0.380 | 272 | 20.56 | 0.710 | 0.560 | 406 | 20.56 | 0.940 | 0.790 | 570 | 20.00 | 1.360 | 1.180 | 847 | 20.56 |
| 25 | 1750 | 70 | 0.320 | 0.270 | 241 | 25.56 | 0.550 | 0.450 | 409 | 25.56 | 0.770 | 0.640 | 588 | 25.56 | 0.910 | 0.750 | 699 | 25.56 |
| 30 | 1750 | 58 | 0.350 | 0.270 | 290 | 30.83 | 0.550 | 0.400 | 432 | 30.83 | 0.670 | 0.540 | 578 | 30.83 | 1.000 | 0.840 | 911 | 29.29 |
| 40 | 1750 | 44 | 0.260 | 0.210 | 297 | 40.00 | 0.430 | 0.320 | 462 | 40.00 | 0.490 | 0.410 | 584 | 40.00 | 0.790 | 0.660 | 944 | 40.00 |
| 45 | 1750 | 39 | 0.260 | 0.190 | 307 | 43.93 | 0.420 | 0.290 | 471 | 43.93 | 0.490 | 0.380 | 618 | 43.93 | 0.750 | 0.600 | 973 | 43.93 |
| 50 | 1750 | 35 | 0.216 | 0.168 | 302 | 51.11 | 0.350 | 0.260 | 474 | 51.11 | 0.400 | 0.330 | 595 | 51.11 | 0.650 | 0.540 | 965 | 51.11 |
| 60 | 1750 | 29 | 0.202 | 0.146 | 316 | 60.00 | 0.330 | 0.230 | 491 | 60.00 | 0.390 | 0.300 | 638 | 60.00 | 0.590 | 0.470 | 1007 | 60.00 |
| 75 | 1750 | 23.33 | 0.166 | 0.119 | 321 | 76.67 | 0.280 | 0.190 | 504 | 76.67 | 0.320 | 0.240 | 651 | 76.67 | 0.490 | 0.380 | 1028 | 76.67 |
| 80 | 1750 | 21.88 | 0.160 | 0.109 | 315 | 80.00 | 0.280 | 0.180 | 505 | 80.00 | 0.300 | 0.220 | 634 | 80.00 | 0.480 | 0.360 | 1026 | 80.00 |
| 100 | 1750 | 17.50 | 0.143 | 0.090 | 323 | 100.00 | 0.232 | 0.144 | 518 | 100.00 | 0.250 | 0.180 | 646 | 100.00 | 0.390 | 0.290 | 1047 | 100.00 |
| 125 | 1750 | 14.00 | 0.119 | 0.073 | 329 | 127.78 | 0.200 | 0.115 | 519 | 127.78 | 0.200 | 0.140 | 629 | 127.78 | 0.310 | 0.220 | 1004 | 127.78 |
| 150 | 1750 | 11.67 | 0.106 | 0.061 | 329 | 153.33 | 0.185 | 0.096 | 516 | 153.33 | 0.198 | 0.124 | 667 | 153.33 | 0.290 | 0.200 | 1053 | 153.33 |
| 200 | 1750 | 8.75 | 0.084 | 0.044 | 318 | 204.44 | 0.156 | 0.071 | 514 | 204.44 | 0.151 | 0.089 | 641 | 204.44 | 0.240 | 0.150 | 1041 | 204.44 |
| 250 | 1750 | 7.00 | 0.068 | 0.033 | 299 | 255.56 | 0.134 | 0.055 | 498 | 255.56 | 0.122 | 0.067 | 603 | 255.56 | 0.188 | 0.107 | 964 | 255.56 |
| 300 | 1750 | 5.83 | 0.060 | 0.027 | 287 | 298.46 | 0.115 | 0.049 | 531 | 298.46 | 0.108 | 0.061 | 656 | 298.46 | 0.172 | 0.100 | 1069 | 298.46 |
| 400 | 1750 | 4.38 | 0.040 | 0.015 | 228 | 413.33 | 0.117 | 0.044 | 472 | 413.33 | 0.068 | 0.031 | 451 | 413.33 | 0.100 | 0.048 | 710 | 413.33 |
| 500 | 1750 | 3.50 | 0.030 | 0.010 | 180 | 516.67 | 0.063 | 0.017 | 308 | 516.67 | 0.046 | 0.019 | 348 | 516.67 | 0.081 | 0.032 | 590 | 516.67 |
| 600 | 1750 | 2.92 | 0.029 | 0.011 | 232 | 596.92 | 0.065 | 0.019 | 403 | 596.92 | 0.049 | 0.021 | 459 | 596.92 | 0.073 | 0.034 | 724 | 596.92 |



DOUBLE REDUCTION • HELICAL / WORM MAXIMUM RATING TABLES

800 SERIES • ALL STOCK STYLES



824, 826, 830 and 832 Series • 1.0 S.F.

| Nominal Ratio | Input RPM | Nominal Output RPM | 824 Series | | | | 826 Series | | | | 830 Series | | | | 832 Series | | | |
|---------------|-----------|--------------------|------------|-----------|-------------------|-------------|------------|-----------|-------------------|-------------|------------|-----------|-------------------|-------------|------------|-----------|-------------------|-------------|
| | | | Input HP | Output HP | Output TQ (lb-in) | Exact Ratio | Input HP | Output HP | Output TQ (lb-in) | Exact Ratio | Input HP | Output HP | Output TQ (lb-in) | Exact Ratio | Input HP | Output HP | Output TQ (lb-in) | Exact Ratio |
| 10 | 1750 | 175 | 2.92 | 2.60 | 935 | 10.00 | 3.57 | 3.30 | 1187 | 10.33 | 5.08 | 4.57 | 1645 | 10.00 | 6.99 | 6.30 | 2343 | 10.33 |
| 15 | 1750 | 117 | 2.46 | 2.16 | 1166 | 15.00 | 3.09 | 2.73 | 1474 | 15.00 | 4.56 | 4.03 | 2180 | 15.00 | 5.92 | 5.26 | 2839 | 15.00 |
| 20 | 1750 | 88 | 2.11 | 1.82 | 1309 | 20.00 | 2.73 | 2.37 | 1707 | 20.00 | 3.97 | 3.45 | 2488 | 20.00 | 5.19 | 4.56 | 3287 | 20.00 |
| 25 | 1750 | 70 | 1.49 | 1.29 | 1160 | 25.00 | 1.86 | 1.66 | 1495 | 25.83 | 2.75 | 2.40 | 2157 | 25.00 | 3.83 | 3.35 | 3117 | 25.83 |
| 30 | 1750 | 58 | 1.52 | 1.32 | 1427 | 29.13 | 1.99 | 1.74 | 1876 | 29.13 | 2.93 | 2.56 | 2771 | 29.13 | 3.85 | 3.41 | 3680 | 29.13 |
| 40 | 1750 | 44 | 1.23 | 1.03 | 1490 | 40.00 | 1.61 | 1.36 | 1966 | 40.00 | 2.39 | 2.03 | 2924 | 40.00 | 3.14 | 2.70 | 3894 | 40.00 |
| 45 | 1750 | 39 | 1.14 | 0.940 | 1525 | 43.70 | 1.40 | 1.19 | 1925 | 43.7 | 2.23 | 1.87 | 3026 | 43.7 | 2.97 | 2.50 | 4044 | 43.7 |
| 50 | 1750 | 35 | 1.02 | 0.850 | 1529 | 50.00 | 1.34 | 1.12 | 2023 | 50.00 | 2.00 | 1.68 | 3020 | 50.00 | 2.64 | 2.24 | 4028 | 50.00 |
| 60 | 1750 | 29 | 0.920 | 0.740 | 1589 | 60.00 | 1.18 | 0.950 | 2048 | 58.26 | 1.82 | 1.47 | 3181 | 60.00 | 2.44 | 1.98 | 4284 | 60.00 |
| 75 | 1750 | 23.33 | 0.770 | 0.600 | 1629 | 75.00 | 0.940 | 0.760 | 2047 | 75.00 | 1.52 | 1.21 | 3279 | 75.00 | 2.06 | 1.64 | 4434 | 75.00 |
| 80 | 1750 | 21.88 | 0.740 | 0.560 | 1611 | 80.00 | 0.950 | 0.740 | 2133 | 80.00 | 1.43 | 1.10 | 3186 | 80.00 | 1.89 | 1.47 | 4247 | 80.00 |
| 100 | 1750 | 17.50 | 0.620 | 0.460 | 1650 | 100.00 | 0.800 | 0.610 | 2186 | 100.00 | 1.21 | 0.910 | 3284 | 100.00 | 1.59 | 1.22 | 4385 | 100.00 |
| 125 | 1750 | 14.00 | 0.510 | 0.360 | 1627 | 125.00 | 0.650 | 0.480 | 2139 | 125.00 | 1.03 | 0.750 | 3359 | 125.00 | 1.30 | 0.960 | 4312 | 125.00 |
| 150 | 1750 | 11.67 | 0.470 | 0.310 | 1669 | 150.00 | 0.550 | 0.390 | 2100 | 150.00 | 0.900 | 0.620 | 3362 | 150.00 | 1.23 | 0.840 | 4547 | 150.00 |
| 200 | 1750 | 8.75 | 0.380 | 0.230 | 1640 | 200.00 | 0.480 | 0.300 | 2174 | 200.00 | 0.730 | 0.450 | 3266 | 200.00 | 0.950 | 0.610 | 4361 | 200.00 |
| 250 | 1750 | 7.00 | 0.310 | 0.170 | 1562 | 250.00 | 0.390 | 0.230 | 2054 | 250.00 | 0.620 | 0.360 | 3226 | 250.00 | 0.770 | 0.460 | 4141 | 250.00 |
| 300 | 1750 | 5.83 | 0.280 | 0.160 | 1688 | 287.27 | 0.320 | 0.180 | 1912 | 300.00 | 0.530 | 0.280 | 3062 | 300.00 | 0.640 | 0.360 | 3868 | 300.00 |
| 400 | 1750 | 4.38 | 0.176 | 0.092 | 1428 | 430.91 | 0.240 | 0.130 | 1964 | 430.91 | 0.400 | 0.200 | 3172 | 430.91 | 0.480 | 0.260 | 4006 | 430.91 |
| 500 | 1750 | 3.50 | 0.110 | 0.049 | 0.877 | 500.00 | 0.137 | 0.064 | 1157 | 500.00 | 0.240 | 0.110 | 1157 | 500.00 | 0.270 | 0.130 | 2326 | 500.00 |
| 600 | 1750 | 2.92 | 0.122 | 0.056 | 1164 | 574.55 | 0.154 | 0.075 | 1542 | 574.55 | 0.270 | 0.130 | 2618 | 574.55 | 0.310 | 0.150 | 3112 | 574.55 |

DOUBLE REDUCTION • HELICAL / WORM MAXIMUM RATING TABLES

800 SERIES • ALL STOCK STYLES



842, 852 and 8600 Series • 1.0 S.F.

| Overall Ratio | Input RPM | Output RPM | 842 Series | | | | 852 Series | | | | 8600 Series | | | |
|---------------|-----------|------------|------------|-----------|-------------------|-------------|------------|-----------|-------------------|-------------|-------------|-----------|-------------------|-------------|
| | | | Input HP | Output HP | Output TQ (lb-in) | Exact Ratio | Input HP | Output HP | Output TQ (lb-in) | Exact Ratio | Input HP | Output HP | Output TQ (lb-in) | Exact Ratio |
| 10 | 1750 | 175 | 11.89 | 10.89 | 4051 | 10.33 | 20.00 | 18.39 | 6789 | 10.25 | 20.00 | 18.46 | 6649 | 10.00 |
| 15 | 1750 | 117 | 10.79 | 9.74 | 5263 | 15.00 | 18.26 | 16.59 | 8961 | 15.00 | 20.00 | 18.25 | 9858 | 15.00 |
| 20 | 1750 | 88 | 9.80 | 8.74 | 6295 | 20.00 | 14.87 | 13.25 | 9542 | 20.00 | 18.05 | 16.18 | 11653 | 20.00 |
| 25 | 1750 | 70 | 6.99 | 6.17 | 5933 | 26.69 | 10.07 | 8.97 | 8550 | 26.48 | 10.07 | 8.80 | 8187 | 25.83 |
| 30 | 1750 | 58 | 7.14 | 6.13 | 6620 | 30.00 | 11.35 | 10.01 | 10818 | 30.00 | 13.43 | 11.61 | 12544 | 30.00 |
| 40 | 1750 | 44 | 6.26 | 5.42 | 7896 | 40.45 | 10.63 | 9.16 | 13343 | 40.45 | 11.35 | 9.83 | 14316 | 40.45 |
| 50 | 1750 | 35 | 5.19 | 4.38 | 8156 | 51.67 | 9.04 | 7.69 | 14312 | 51.67 | 10.07 | 8.60 | 16001 | 51.67 |
| 60 | 1750 | 29 | 4.62 | 3.81 | 8319 | 60.68 | 7.98 | 6.54 | 14282 | 60.68 | 10.06 | 8.32 | 18176 | 60.68 |
| 75 | 1750 | 23.33 | 3.84 | 3.24 | 8788 | 75.38 | 6.69 | 5.49 | 15334 | 77.50 | 8.68 | 7.06 | 19700 | 77.50 |
| 80 | 1750 | 21.88 | 3.75 | 2.97 | 8642 | 80.90 | 6.42 | 5.00 | 14569 | 80.86 | 8.10 | 6.40 | 18647 | 80.90 |
| 100 | 1750 | 17.50 | 3.12 | 2.43 | 9034 | 103.33 | 5.50 | 4.19 | 15597 | 103.33 | 6.70 | 5.41 | 20122 | 103.33 |
| 125 | 1750 | 14.00 | 2.55 | 1.91 | 8879 | 129.17 | 4.65 | 3.37 | 15677 | 129.17 | 5.91 | 4.35 | 20229 | 129.17 |
| 150 | 1750 | 11.67 | 2.31 | 1.75 | 9510 | 150.77 | 4.21 | 3.10 | 16856 | 150.77 | 5.41 | 4.05 | 21969 | 150.77 |
| 200 | 1750 | 8.75 | 1.85 | 1.21 | 8989 | 206.67 | 3.32 | 2.09 | 15515 | 206.67 | 4.19 | 2.69 | 20026 | 206.67 |
| 250 | 1750 | 7.00 | 1.50 | 0.920 | 8530 | 258.33 | 2.80 | 1.62 | 15057 | 258.33 | 3.53 | 2.09 | 19434 | 258.33 |
| 300 | 1750 | 5.83 | 1.40 | 0.870 | 9456 | 301.54 | 2.59 | 1.54 | 16757 | 301.54 | 3.30 | 2.01 | 21844 | 301.54 |
| 400 | 1750 | 4.38 | 0.780 | 0.420 | 6210 | 413.33 | 1.72 | 0.797 | 11864 | 413.33 | 2.19 | 1.08 | 16037 | 413.33 |
| 500 | 1750 | 3.50 | 0.530 | 0.260 | 4782 | 516.67 | 1.21 | 0.522 | 9707 | 516.67 | 1.56 | 0.692 | 12884 | 516.67 |
| 600 | 1750 | 2.92 | 0.590 | 0.300 | 6488 | 603.08 | 1.37 | 0.590 | 12810 | 603.08 | 1.75 | 0.801 | 17397 | 603.08 |

Series 8700, 8800 and 81000 also available - Contact Factory.