

6150 Carbon Steel Series

| Metric Dimensions | | | | | Load 75% h _o | Load 100% h _o | Part Number | Inch Dimensions | | | | | Load 75% h _o | Load 100% h _o |
|-------------------|----------------|------|----------------|----------------|----------------------------|-----------------------------|--------------|-----------------|----------------|-------|----------------|----------------|----------------------------|-----------------------------|
| D _e | D _i | t | h _o | l _o | (N) | (N) | | D _e | D _i | t | h _o | l _o | (lb.) | (lb.) |
| 6 | 3.2 | 0.3 | 0.15 | 0.45 | 119 | 153 | 6-3.2-3 | 0.236 | 0.126 | 0.012 | 0.006 | 0.018 | 27 | 35 |
| 8 | 3.2 | 0.2 | 0.2 | 0.4 | 26 | 30 | 8-3.2-2 | 0.315 | 0.126 | 0.008 | 0.008 | 0.016 | 5.8 | 6.7 |
| 8 | 3.2 | 0.3 | 0.25 | 0.55 | 104 | 126 | 8-3.2-3 | 0.315 | 0.126 | 0.012 | 0.010 | 0.022 | 24 | 28 |
| 8 | 3.2 | 0.4 | 0.2 | 0.6 | 186 | 238 | 8-3.2-4 | 0.315 | 0.126 | 0.016 | 0.008 | 0.024 | 42 | 54 |
| 8 | 3.2 | 0.5 | 0.2 | 0.7 | 357 | 465 | 8-3.2-5 | 0.315 | 0.126 | 0.020 | 0.008 | 0.028 | 81 | 105 |
| 8 | 4.2 | 0.2 | 0.25 | 0.45 | 39 | 42 | 8-4.2-2 | 0.315 | 0.165 | 0.008 | 0.010 | 0.018 | 8.9 | 9.5 |
| 8 | 4.2 | 0.3 | 0.25 | 0.55 | 118 | 142 | 8-4.2-3 | 0.315 | 0.165 | 0.012 | 0.010 | 0.022 | 27 | 32 |
| 8 | 4.2 | 0.4 | 0.2 | 0.6 | 210 | 269 | 8-4.2-4 | 0.315 | 0.165 | 0.016 | 0.008 | 0.024 | 47 | 61 |
| 10 | 3.2 | 0.3 | 0.35 | 0.65 | 98 | 108 | 10-3.2-3 | 0.394 | 0.126 | 0.012 | 0.014 | 0.026 | 22 | 24 |
| 10 | 3.2 | 0.4 | 0.3 | 0.7 | 179 | 220 | 10-3.2-4 | 0.394 | 0.126 | 0.016 | 0.012 | 0.028 | 40 | 50 |
| 10 | 3.2 | 0.5 | 0.25 | 0.75 | 279 | 357 | 10-3.2-5 | 0.394 | 0.126 | 0.020 | 0.010 | 0.030 | 63 | 81 |
| 10 | 4.2 | 0.4 | 0.3 | 0.7 | 189 | 232 | 10-4.2-4 | 0.394 | 0.165 | 0.016 | 0.012 | 0.028 | 43 | 52 |
| 10 | 4.2 | 0.5 | 0.25 | 0.75 | 294 | 377 | 10-4.2-5 | 0.394 | 0.165 | 0.020 | 0.010 | 0.030 | 66 | 85 |
| 10 | 4.2 | 0.6 | 0.25 | 0.85 | 502 | 652 | 10-4.2-6 | 0.394 | 0.165 | 0.024 | 0.010 | 0.033 | 113 | 147 |
| 10 | 5.2 | 0.25 | 0.3 | 0.55 | 58 | 63 | 10-5.2-2.5 | 0.394 | 0.205 | 0.010 | 0.012 | 0.022 | 13 | 14 |
| 10 | 5.2 | 0.4 | 0.3 | 0.7 | 209 | 257 | 10-5.2-4 | 0.394 | 0.205 | 0.016 | 0.012 | 0.028 | 47 | 58 |
| 10 | 5.2 | 0.5 | 0.25 | 0.75 | 325 | 418 | 10-5.2-5 | 0.394 | 0.205 | 0.020 | 0.010 | 0.030 | 73 | 94 |
| 12 | 4.2 | 0.4 | 0.4 | 0.8 | 178 | 206 | 12-4.2-4 | 0.472 | 0.165 | 0.016 | 0.016 | 0.031 | 404 | 46 |
| 12 | 4.2 | 0.5 | 0.35 | 0.85 | 284 | 352 | 12-4.2-5 | 0.472 | 0.165 | 0.020 | 0.014 | 0.033 | 64 | 79 |
| 12 | 4.2 | 0.6 | 0.4 | 1 | 557 | 694 | 12-4.2-6 | 0.472 | 0.165 | 0.024 | 0.016 | 0.039 | 126 | 157 |
| 12 | 5.2 | 0.5 | 0.4 | 0.9 | 350 | 424 | 12-5.2-5 | 0.472 | 0.205 | 0.020 | 0.016 | 0.035 | 79 | 96 |
| 12 | 5.2 | 0.6 | 0.35 | 0.95 | 506 | 641 | 12-5.2-6 | 0.472 | 0.205 | 0.024 | 0.014 | 0.037 | 114 | 145 |
| 12 | 6.2 | 0.5 | 0.35 | 0.85 | 326 | 404 | 12-6.2-5 | 0.472 | 0.244 | 0.020 | 0.014 | 0.033 | 74 | 91 |
| 12 | 6.2 | 0.6 | 0.35 | 0.95 | 552 | 699 | 12-6.2-6 | 0.472 | 0.244 | 0.024 | 0.014 | 0.037 | 125 | 158 |
| 12.5 | 5.2 | 0.5 | 0.35 | 0.85 | 272 | 337 | 12.5-5.2-5 | 0.492 | 0.205 | 0.020 | 0.014 | 0.033 | 61 | 76 |
| 12.5 | 6.2 | 0.35 | 0.45 | 0.8 | 151 | 160 | 12.5-6.2-.35 | 0.492 | 0.244 | 0.014 | 0.018 | 0.031 | 34 | 36 |
| 12.5 | 6.2 | 0.5 | 0.35 | 0.85 | 294 | 364 | 12.5-6.2-5 | 0.492 | 0.244 | 0.020 | 0.014 | 0.033 | 66 | 82 |
| 12.5 | 6.2 | 0.7 | 0.3 | 1 | 660 | 855 | 12.5-6.2-7 | 0.492 | 0.244 | 0.028 | 0.012 | 0.039 | 149 | 193 |
| 14 | 7.2 | 0.35 | 0.45 | 0.8 | 123 | 131 | 14-7.2-.35 | 0.551 | 0.283 | 0.014 | 0.018 | 0.031 | 28 | 29 |
| 14 | 7.2 | 0.5 | 0.4 | 0.9 | 279 | 338 | 14-7.2-5 | 0.551 | 0.283 | 0.020 | 0.016 | 0.035 | 63 | 76 |
| 14 | 7.2 | 0.8 | 0.3 | 1.1 | 797 | 1040 | 14-7.2-8 | 0.551 | 0.283 | 0.031 | 0.012 | 0.043 | 180 | 235 |
| 15 | 5.2 | 0.4 | 0.55 | 0.95 | 176 | 181 | 15-5.2-4 | 0.591 | 0.205 | 0.016 | 0.022 | 0.037 | 40 | 41 |
| 15 | 5.2 | 0.5 | 0.5 | 1 | 278 | 321 | 15-5.2-5 | 0.591 | 0.205 | 0.020 | 0.020 | 0.039 | 63 | 72 |
| 15 | 5.2 | 0.6 | 0.45 | 1.05 | 407 | 499 | 15-5.2-6 | 0.591 | 0.205 | 0.024 | 0.018 | 0.041 | 92 | 113 |
| 15 | 5.2 | 0.7 | 0.4 | 1.1 | 555 | 705 | 15-5.2-7 | 0.591 | 0.205 | 0.028 | 0.016 | 0.043 | 125 | 159 |
| 15 | 6.2 | 0.5 | 0.5 | 1 | 289 | 334 | 15-6.2-5 | 0.591 | 0.244 | 0.020 | 0.020 | 0.039 | 65 | 75 |
| 15 | 6.2 | 0.6 | 0.45 | 1.05 | 424 | 519 | 15-6.2-6 | 0.591 | 0.244 | 0.024 | 0.018 | 0.041 | 96 | 117 |
| 15 | 6.2 | 0.7 | 0.4 | 1.1 | 578 | 733 | 15-6.2-7 | 0.591 | 0.244 | 0.028 | 0.016 | 0.043 | 130 | 165 |
| 15 | 8.2 | 0.7 | 0.4 | 1.1 | 666 | 844 | 15-8.2-7 | 0.591 | 0.323 | 0.028 | 0.016 | 0.043 | 150 | 191 |
| 15 | 8.2 | 0.8 | 0.4 | 1.2 | 982 | 1261 | 15-8.2-8 | 0.591 | 0.323 | 0.031 | 0.016 | 0.047 | 222 | 285 |

| | | | | | | | | | | | | | | |
|------|------|------|------|------|------|------|----------------|-------|-------|-------|-------|-------|-----|------|
| 16 | 8.2 | 0.4 | 0.5 | 0.9 | 154 | 166 | 16-8.2-4 | 0.630 | 0.323 | 0.016 | 0.020 | 0.035 | 35 | 37 |
| 16 | 8.2 | 0.6 | 0.45 | 1.05 | 410 | 503 | 16-8.2-6 | 0.630 | 0.323 | 0.024 | 0.018 | 0.041 | 93 | 114 |
| 16 | 8.2 | 0.7 | 0.45 | 1.15 | 637 | 798 | 16-8.2-7 | 0.630 | 0.232 | 0.028 | 0.018 | 0.045 | 144 | 180 |
| 16 | 8.2 | 0.8 | 0.4 | 1.2 | 825 | 1059 | 16-8.2-8 | 0.630 | 0.323 | 0.031 | 0.016 | 0.047 | 186 | 239 |
| 16 | 8.2 | 0.9 | 0.35 | 1.25 | 1013 | 1319 | 16-8.2-9 | 0.630 | 0.323 | 0.035 | 0.014 | 0.049 | 229 | 298 |
| 18 | 6.2 | 0.4 | 0.6 | 1 | 139 | 137 | 18-6.2-4 | 0.709 | 0.244 | 0.016 | 0.024 | 0.039 | 31 | 31 |
| 18 | 6.2 | 0.5 | 0.6 | 1.1 | 246 | 267 | 18-6.2-5 | 0.709 | 0.244 | 0.020 | 0.240 | 0.043 | 55 | 60 |
| 18 | 6.2 | 0.6 | 0.6 | 1.2 | 400 | 462 | 18-6.2-6 | 0.709 | 0.244 | 0.024 | 0.024 | 0.047 | 90 | 104 |
| 18 | 6.2 | 0.7 | 0.55 | 1.25 | 553 | 672 | 18-6.2-7 | 0.709 | 0.244 | 0.028 | 0.022 | 0.049 | 125 | 152 |
| 18 | 6.2 | 0.8 | 0.5 | 1.3 | 726 | 912 | 18-6.2-8 | 0.709 | 0.244 | 0.031 | 0.020 | 0.051 | 164 | 206 |
| 18 | 8.2 | 0.5 | 0.6 | 1.1 | 265 | 288 | 18-8.2-5 | 0.709 | 0.323 | 0.020 | 0.024 | 0.043 | 60 | 65 |
| 18 | 8.2 | 0.7 | 0.55 | 1.25 | 596 | 725 | 18-8.2-7 | 0.709 | 0.323 | 0.028 | 0.022 | 0.049 | 135 | 164 |
| 18 | 8.2 | 0.8 | 0.5 | 1.3 | 783 | 984 | 18-8.2-8 | 0.709 | 0.323 | 0.031 | 0.020 | 0.051 | 177 | 222 |
| 18 | 8.2 | 1 | 0.4 | 1.4 | 1181 | 1537 | 18-8.2-1 | 0.709 | 0.323 | 0.039 | 0.016 | 0.055 | 267 | 347 |
| 18 | 9.2 | 0.45 | 0.6 | 1.05 | 214 | 223 | 18-9.2-45 | 0.709 | 0.362 | 0.018 | 0.024 | 0.041 | 48 | 50 |
| 18 | 9.2 | 0.7 | 0.5 | 1.2 | 566 | 700 | 18-9.2-7 | 0.709 | 0.362 | 0.028 | 0.020 | 0.047 | 128 | 158 |
| 18 | 9.2 | 1 | 0.4 | 1.4 | 1254 | 1631 | 18-9.2-1 | 0.709 | 0.362 | 0.039 | 0.016 | 0.055 | 283 | 368 |
| 20 | 8.2 | 0.5 | 0.65 | 1.15 | 231 | 244 | 20-8.2-5 | 0.787 | 0.323 | 0.020 | 0.026 | 0.045 | 52 | 55 |
| 20 | 8.2 | 0.6 | 0.7 | 1.3 | 412 | 453 | 20-8.2-6 | 0.787 | 0.323 | 0.024 | 0.028 | 0.051 | 93 | 102 |
| 20 | 8.2 | 0.7 | 0.65 | 1.35 | 569 | 668 | 20-8.2-7 | 0.787 | 0.323 | 0.028 | 0.026 | 0.053 | 128 | 151 |
| 20 | 8.2 | 0.8 | 0.6 | 1.4 | 751 | 921 | 20-8.2-8 | 0.787 | 0.323 | 0.031 | 0.024 | 0.055 | 170 | 208 |
| 20 | 8.2 | 0.9 | 0.55 | 1.45 | 954 | 1201 | 20-8.2-9 | 0.787 | 0.323 | 0.035 | 0.022 | 0.057 | 215 | 271 |
| 20 | 8.2 | 1 | 0.55 | 1.55 | 1294 | 1648 | 20-8.2-1 | 0.787 | 0.323 | 0.039 | 0.022 | 0.061 | 292 | 372 |
| 20 | 10.2 | 0.4 | 0.5 | 0.9 | 99 | 106 | 20-10.2-4 | 0.787 | 0.402 | 0.016 | 0.020 | 0.035 | 22 | 24 |
| 20 | 10.2 | 0.5 | 0.65 | 1.15 | 254 | 268 | 20-10.2-5 | 0.787 | 0.402 | 0.020 | 0.026 | 0.045 | 57 | 61 |
| 20 | 10.2 | 0.8 | 0.55 | 1.35 | 748 | 929 | 20-10.2-8 | 0.787 | 0.402 | 0.031 | 0.022 | 0.053 | 169 | 210 |
| 20 | 10.2 | 0.9 | 0.55 | 1.45 | 1050 | 1323 | 20-10.2-9 | 0.787 | 0.402 | 0.035 | 0.022 | 0.057 | 237 | 299 |
| 20 | 10.2 | 1 | 0.55 | 1.55 | 1425 | 1815 | 20-10.2-1 | 0.787 | 0.402 | 0.039 | 0.022 | 0.061 | 322 | 410 |
| 20 | 10.2 | 1.1 | 0.45 | 1.55 | 1521 | 1976 | 20-10.2-1.1 | 0.787 | 0.402 | 0.043 | 0.018 | 0.061 | 343 | 446 |
| 20 | 10.2 | 1.2 | 0.35 | 1.55 | 1516 | 1995 | 20-10.2-1.2 | 0.787 | 0.402 | 0.047 | 0.014 | 0.061 | 342 | 450 |
| 20 | 10.2 | 1.5 | 0.3 | 1.8 | 2521 | 3340 | 20-10.2-1.5 | 0.787 | 0.402 | 0.059 | 0.012 | 0.071 | 569 | 754 |
| 22.5 | 11.2 | 0.6 | 0.8 | 1.4 | 426 | 444 | 22.5-11.2-6 | 0.886 | 0.441 | 0.024 | 0.031 | 0.055 | 96 | 100 |
| 22.5 | 11.2 | 0.8 | 0.65 | 1.45 | 708 | 855 | 22.5-11.2-8 | 0.886 | 0.441 | 0.031 | 0.026 | 0.057 | 160 | 193 |
| 22.5 | 11.2 | 1.25 | 0.5 | 1.75 | 1929 | 2509 | 22.5-11.2-1.25 | 0.866 | 0.441 | 0.049 | 0.020 | 0.069 | 435 | 566 |
| 23 | 8.2 | 0.7 | 0.8 | 1.5 | 544 | 602 | 23-8.2-7 | 0.906 | 0.323 | 0.028 | 0.031 | 0.059 | 123 | 136 |
| 23 | 8.2 | 0.8 | 0.75 | 1.55 | 719 | 842 | 23-8.2-8 | 0.906 | 0.323 | 0.031 | 0.030 | 0.061 | 162 | 190 |
| 23 | 8.2 | 0.9 | 0.7 | 1.6 | 919 | 1119 | 23-8.2-9 | 0.906 | 0.323 | 0.035 | 0.028 | 0.063 | 207 | 253 |
| 23 | 8.2 | 1 | 0.7 | 1.7 | 1240 | 1536 | 23-8.2-1 | 0.906 | 0.323 | 0.039 | 0.028 | 0.067 | 280 | 347 |
| 23 | 10.2 | 0.9 | 0.75 | 1.65 | 1058 | 1273 | 23-10.2-9 | 0.906 | 0.402 | 0.035 | 0.030 | 0.065 | 239 | 287 |
| 23 | 10.2 | 1 | 0.7 | 1.7 | 1315 | 1629 | 23-10.2-1 | 0.906 | 0.402 | 0.039 | 0.028 | 0.067 | 297 | 368 |
| 23 | 10.2 | 1.25 | 0.65 | 1.9 | 2310 | 2955 | 23-10.2-1.25 | 0.906 | 0.402 | 0.049 | 0.026 | 0.075 | 521 | 667 |
| 23 | 12.2 | 1 | 0.6 | 1.6 | 1217 | 1536 | 23-12.2-1 | 0.906 | 0.480 | 0.039 | 0.024 | 0.063 | 275 | 347 |
| 23 | 12.2 | 1.25 | 0.6 | 1.85 | 2331 | 3000 | 23-12.2-1.25 | 0.906 | 0.480 | 0.049 | 0.024 | 0.073 | 526 | 677 |
| 23 | 12.2 | 1.5 | 0.6 | 2.1 | 3986 | 5184 | 23-12.2-1.5 | 0.906 | 0.480 | 0.059 | 0.024 | 0.083 | 900 | 1170 |

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|------|------|------|------|------|------|------|----------------|-------|-------|-------|-------|-------|------|------|
| 25 | 10.2 | 1 | 0.75 | 1.75 | 1172 | 1436 | 25-10.2-1 | 0.984 | 0.402 | 0.039 | 0.030 | 0.069 | 265 | 324 |
| 25 | 12.2 | 0.7 | 0.9 | 1.6 | 600 | 636 | 25-12.2-7 | 0.984 | 0.480 | 0.028 | 0.035 | 0.063 | 135 | 143 |
| 25 | 12.2 | 0.9 | 0.7 | 1.6 | 862 | 1050 | 25-12.2-9 | 0.984 | 0.480 | 0.035 | 0.028 | 0.063 | 195 | 237 |
| 25 | 12.2 | 1 | 0.8 | 1.8 | 1359 | 1647 | 25-12.2-1 | 0.984 | 0.480 | 0.039 | 0.031 | 0.071 | 307 | 372 |
| 25 | 12.2 | 1.25 | 0.7 | 1.95 | 2214 | 2814 | 25-12.2-1.25 | 0.984 | 0.480 | 0.049 | 0.028 | 0.077 | 500 | 635 |
| 25 | 12.2 | 1.5 | 0.55 | 2.05 | 2926 | 3821 | 25-12.2-1.5 | 0.984 | 0.480 | 0.059 | 0.022 | 0.081 | 661 | 863 |
| 28 | 10.2 | 0.8 | 0.95 | 1.75 | 662 | 723 | 28-10.2-8 | 1.102 | 0.402 | 0.031 | 0.037 | 0.069 | 149 | 163 |
| 28 | 10.2 | 1 | 0.9 | 1.9 | 1130 | 1337 | 28-10.2-1 | 1.102 | 0.402 | 0.039 | 0.035 | 0.075 | 255 | 302 |
| 28 | 10.2 | 1.25 | 0.8 | 2.05 | 1853 | 2322 | 28-10.2-1.25 | 1.102 | 0.402 | 0.049 | 0.031 | 0.081 | 418 | 524 |
| 28 | 10.2 | 1.5 | 0.7 | 2.2 | 2723 | 3511 | 28-10.2-1.5 | 1.102 | 0.480 | 0.059 | 0.028 | 0.087 | 615 | 793 |
| 28 | 12.2 | 1 | 0.95 | 1.95 | 1268 | 1482 | 28-12.2-1 | 1.102 | 0.480 | 0.090 | 0.037 | 0.077 | 286 | 335 |
| 28 | 12.2 | 1.25 | 0.85 | 2.1 | 2083 | 2590 | 28-12.2-1.25 | 1.102 | 0.480 | 0.049 | 0.033 | 0.083 | 470 | 585 |
| 28 | 12.2 | 1.5 | 0.75 | 2.25 | 3077 | 3949 | 28-12.2-1.5 | 1.102 | 0.559 | 0.059 | 0.030 | 0.089 | 695 | 891 |
| 28 | 14.2 | 0.8 | 1 | 1.8 | 801 | 859 | 28-14.2-8 | 1.102 | 0.559 | 0.031 | 0.039 | 0.071 | 181 | 194 |
| 28 | 14.2 | 1 | 0.8 | 1.8 | 1107 | 1342 | 28-14.2-1 | 1.102 | 0.559 | 0.039 | 0.031 | 0.071 | 250 | 303 |
| 28 | 14.2 | 1.25 | 0.85 | 2.1 | 2240 | 2785 | 28-14.2-1.25 | 1.102 | 0.559 | 0.049 | 0.033 | 0.083 | 506 | 629 |
| 28 | 14.2 | 1.5 | 0.65 | 2.15 | 2841 | 3680 | 28-14.2-1.5 | 1.102 | 0.559 | 0.059 | 0.026 | 0.085 | 641 | 831 |
| 31.5 | 12.2 | 1 | 1.1 | 2.1 | 1167 | 1309 | 31.5-12.2-1 | 1.240 | 0.480 | 0.039 | 0.043 | 0.083 | 263 | 295 |
| 31.5 | 12.2 | 1.25 | 0.95 | 2.2 | 1805 | 2207 | 31.5-12.2-1.25 | 1.240 | 0.480 | 0.049 | 0.037 | 0.087 | 407 | 498 |
| 31.5 | 12.2 | 1.5 | 0.85 | 2.35 | 2688 | 3413 | 31.5-12.2-1.5 | 1.240 | 0.480 | 0.059 | 0.033 | 0.093 | 607 | 770 |
| 31.5 | 16.3 | 0.8 | 1.05 | 1.85 | 687 | 722 | 31.5-16.3-8 | 1.240 | 0.642 | 0.031 | 0.041 | 0.073 | 155 | 163 |
| 31.5 | 16.3 | 1.25 | 0.9 | 2.15 | 1913 | 2359 | 31.5-16.3-1.25 | 1.240 | 0.642 | 0.049 | 0.035 | 0.085 | 432 | 533 |
| 31.5 | 16.3 | 1.5 | 0.9 | 2.4 | 3230 | 4077 | 31.5-16.3-1.5 | 1.240 | 0.642 | 0.059 | 0.035 | 0.094 | 729 | 920 |
| 31.5 | 16.3 | 1.75 | 0.7 | 2.45 | 3871 | 5036 | 31.5-16.3-1.75 | 1.240 | 0.642 | 0.069 | 0.028 | 0.096 | 874 | 1137 |
| 31.5 | 16.3 | 2 | 0.75 | 2.75 | 6173 | 8054 | 31.5-16.3-2 | 1.240 | 0.642 | 0.079 | 0.030 | 0.108 | 1393 | 1818 |
| 34 | 12.2 | 1 | 1.25 | 2.25 | 1172 | 1256 | 34-12.2-1 | 1.339 | 0.480 | 0.039 | 0.049 | 0.089 | 265 | 284 |
| 34 | 12.2 | 1.25 | 1.1 | 2.35 | 1815 | 2159 | 34-12.2-1.25 | 1.339 | 0.480 | 0.049 | 0.043 | 0.093 | 410 | 487 |
| 34 | 12.2 | 1.5 | 1 | 2.5 | 2721 | 3392 | 34-12.2-1.5 | 1.339 | 0.480 | 0.059 | 0.039 | 0.098 | 614 | 766 |
| 34 | 14.3 | 1.25 | 1.15 | 2.4 | 1993 | 2347 | 34-14.3-1.25 | 1.339 | 0.563 | 0.049 | 0.045 | 0.094 | 450 | 530 |
| 34 | 14.3 | 1.5 | 1.05 | 2.55 | 2990 | 3704 | 34-14.3-1.5 | 1.339 | 0.563 | 0.059 | 0.041 | 0.100 | 675 | 836 |
| 34 | 16.3 | 1.5 | 1.05 | 2.55 | 3155 | 3908 | 34-16.3-1.5 | 1.339 | 0.642 | 0.059 | 0.041 | 0.100 | 712 | 882 |
| 34 | 16.3 | 2 | 0.85 | 2.85 | 5783 | 7498 | 34-16.3-2 | 1.339 | 0.642 | 0.079 | 0.033 | 0.112 | 1305 | 1693 |
| 35.5 | 18.3 | 0.9 | 1.15 | 2.05 | 832 | 884 | 35.5-18.3-9 | 1.398 | 0.720 | 0.035 | 0.045 | 0.081 | 188 | 200 |
| 35.5 | 18.3 | 1.25 | 1 | 2.25 | 1699 | 2059 | 35.5-18.3-1.25 | 1.398 | 0.720 | 0.049 | 0.039 | 0.089 | 384 | 465 |
| 35.5 | 18.3 | 2 | 0.8 | 2.8 | 5187 | 6747 | 35.5-18.3-2 | 1.398 | 0.720 | 0.079 | 0.031 | 0.110 | 1171 | 1523 |
| 40 | 14.2 | 1.25 | 1.4 | 2.65 | 1778 | 1982 | 40-14.2-1.25 | 1.575 | 0.559 | 0.049 | 0.055 | 0.104 | 401 | 447 |
| 40 | 14.2 | 1.5 | 1.25 | 2.75 | 2542 | 3058 | 40-14.2-1.5 | 1.575 | 0.559 | 0.059 | 0.049 | 0.108 | 574 | 690 |
| 40 | 14.2 | 2 | 1.05 | 30.5 | 4763 | 6088 | 40-14.2-2 | 1.575 | 0.559 | 0.079 | 0.041 | 0.120 | 1075 | 1374 |
| 40 | 16.3 | 1.5 | 0.3 | 2.8 | 2749 | 3281 | 40-16.3-1.5 | 1.575 | 0.642 | 0.059 | 0.051 | 0.110 | 621 | 741 |
| 40 | 16.3 | 2 | 1.1 | 3.1 | 5169 | 6580 | 40-16.3-2 | 1.575 | 0.642 | 0.079 | 0.043 | 0.122 | 1167 | 1485 |
| 40 | 18.3 | 2 | 1.15 | 3.15 | 5656 | 7171 | 40-18.3-2 | 1.575 | 0.720 | 0.079 | 0.045 | 0.124 | 1277 | 1619 |
| 40 | 20.4 | 1 | 1.3 | 2.3 | 1017 | 1072 | 40-20.4-1 | 1.575 | 0.803 | 0.039 | 0.045 | 0.091 | 230 | 242 |
| 40 | 20.4 | 1.5 | 1.15 | 2.65 | 2621 | 3201 | 40-20.4-1.5 | 1.575 | 0.803 | 0.059 | 0.045 | 0.104 | 592 | 723 |

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|----|------|------|------|------|-------|-------|--------------|-------|-------|-------|-------|-------|------|-------|
| 40 | 20.4 | 2 | 1.1 | 3.1 | 5701 | 7258 | 40-20.4-2 | 1.575 | 0.803 | 0.079 | 0.043 | 0.122 | 1287 | 1638 |
| 40 | 20.4 | 2.25 | 0.9 | 3.15 | 6500 | 8456 | 40-20.4-2.25 | 1.575 | 0.803 | 0.089 | 0.035 | 0.124 | 1467 | 1909 |
| 40 | 20.4 | 2.5 | 0.95 | 3.45 | 9390 | 12240 | 40-20.4-2.5 | 1.575 | 0.803 | 0.098 | 0.037 | 0.136 | 2119 | 2764 |
| 45 | 22.4 | 1.25 | 1.6 | 2.85 | 1891 | 2007 | 45-22.4-1.25 | 1.772 | 0.882 | 0.049 | 0.063 | 0.112 | 427 | 453 |
| 45 | 22.4 | 1.75 | 1.3 | 3.05 | 3646 | 4475 | 45-22.4-1.75 | 1.772 | 0.882 | 0.069 | 0.051 | 0.120 | 823 | 1010 |
| 45 | 22.4 | 2.5 | 1 | 3.5 | 7716 | 10040 | 45-22.4-2.5 | 1.772 | 0.882 | 0.098 | 0.039 | 0.138 | 1742 | 2266 |
| 50 | 18.3 | 1.25 | 1.6 | 2.85 | 1373 | 1458 | 50-18.3-1.25 | 1.969 | 0.720 | 0.049 | 0.063 | 0.112 | 310 | 329 |
| 50 | 18.3 | 1.5 | 1.8 | 3.3 | 2603 | 2834 | 50-18.3-1.5 | 1.969 | 0.720 | 0.059 | 0.071 | 0.130 | 588 | 640 |
| 50 | 18.3 | 2 | 1.5 | 3.5 | 4567 | 5597 | 50-18.3-2 | 1.969 | 0.720 | 0.079 | 0.059 | 0.138 | 1031 | 12163 |
| 50 | 18.3 | 2.5 | 1.35 | 3.85 | 7715 | 9839 | 50-18.3-2.5 | 1.969 | 0.720 | 0.098 | 0.053 | 0.152 | 1742 | 2221 |
| 50 | 18.3 | 3 | 1 | 4 | 9609 | 12590 | 50-18.3-3 | 1.969 | 0.720 | 0.118 | 0.039 | 0.157 | 2169 | 2843 |
| 50 | 20.4 | 2 | 1.5 | 3.5 | 4687 | 5745 | 50-20.4-2 | 1.969 | 0.803 | 0.079 | 0.059 | 0.138 | 1058 | 1297 |
| 50 | 20.4 | 2.5 | 1.35 | 3.85 | 7919 | 10100 | 5020.4-2.5 | 1.969 | 0.803 | 0.098 | 0.053 | 0.152 | 1788 | 2279 |
| 50 | 22.4 | 2 | 1.6 | 3.6 | 5222 | 6329 | 50-22.4-2 | 1.969 | 0.882 | 0.079 | 0.063 | 0.142 | 1179 | 1429 |
| 50 | 22.4 | 2.5 | 1.4 | 3.9 | 8510 | 10820 | 5022.4-2.5 | 1.969 | 0.882 | 0.098 | 0.055 | 0.154 | 1921 | 2442 |
| 50 | 25.4 | 1.25 | 1.6 | 2.85 | 1550 | 1646 | 50-25.4-1.25 | 1.969 | 1.000 | 0.049 | 0.063 | 0.112 | 350 | 372 |
| 50 | 25.4 | 1.5 | 1.6 | 3.1 | 2512 | 2844 | 50-25.4-1.5 | 1.969 | 1.000 | 0.059 | 0.063 | 0.122 | 567 | 642 |
| 50 | 25.4 | 2 | 1.4 | 3.4 | 4762 | 5898 | 50-25.4-2 | 1.969 | 1.000 | 0.079 | 0.055 | 0.134 | 1075 | 1331 |
| 50 | 25.4 | 2.25 | 1.5 | 3.75 | 7217 | 8997 | 50-25.4-2.25 | 1.969 | 1.000 | 0.089 | 0.059 | 0.148 | 1629 | 2031 |
| 50 | 25.4 | 2.5 | 1.4 | 3.9 | 9063 | 11520 | 50-25.4-2.5 | 1.969 | 1.000 | 0.098 | 0.055 | 0.154 | 2046 | 2600 |
| 50 | 25.4 | 3 | 1.1 | 4.1 | 11980 | 15640 | 50-25.4-3 | 1.969 | 1.000 | 0.118 | 0.043 | 0.161 | 2703 | 3530 |
| 56 | 28.5 | 1.5 | 1.95 | 3.45 | 2622 | 2766 | 56-28.5-1.5 | 2.205 | 1.122 | 0.059 | 0.077 | 0.136 | 592 | 624 |
| 56 | 28.5 | 2 | 1.6 | 3.6 | 4438 | 5379 | 56-28.5-2 | 2.205 | 1.122 | 0.079 | 0.063 | 0.142 | 1002 | 1214 |
| 56 | 28.5 | 2.5 | 1.7 | 4.2 | 8978 | 11160 | 56-28.5-2.5 | 2.205 | 1.122 | 0.098 | 0.067 | 0.165 | 2026 | 2520 |
| 56 | 28.5 | 3 | 1.3 | 4.3 | 11390 | 14750 | 56-28.5-3 | 2.205 | 1.122 | 0.118 | 0.051 | 0.169 | 2571 | 3330 |
| 60 | 20.4 | 2 | 2.1 | 4.1 | 4727 | 5376 | 60-20.4-2 | 2.362 | 0.803 | 0.079 | 0.083 | 0.161 | 1067 | 1214 |
| 60 | 20.4 | 2.5 | 1.8 | 4.3 | 7297 | 9000 | 60-20.4-2.5 | 2.362 | 0.803 | 0.098 | 0.071 | 0.169 | 1647 | 2032 |
| 60 | 20.4 | 3 | 1.7 | 4.7 | 11570 | 14690 | 60-20.4-3 | 2.362 | 0.803 | 0.118 | 0.067 | 0.185 | 2611 | 3316 |
| 60 | 25.5 | 2.5 | 1.9 | 4.4 | 8175 | 9997 | 60-25.5-2.5 | 2.362 | 1.004 | 0.098 | 0.075 | 0.173 | 1845 | 2257 |
| 60 | 25.5 | 3 | 1.65 | 4.65 | 11780 | 15000 | 60-25.5-3 | 2.362 | 1.004 | 0.118 | 0.065 | 0.183 | 2660 | 3386 |
| 60 | 30.5 | 2.5 | 2 | 4.5 | 9432 | 11430 | 60-30.5-2.5 | 2.362 | 1.201 | 0.098 | 0.079 | 0.177 | 2129 | 2581 |
| 60 | 30.5 | 2.75 | 2 | 4.75 | 12360 | 15220 | 60-30.5-2.75 | 2.362 | 1.201 | 0.108 | 0.079 | 0.187 | 2789 | 3435 |
| 60 | 30.5 | 3 | 1.7 | 4.7 | 13230 | 16790 | 60-30.5-3 | 2.362 | 1.201 | 0.118 | 0.067 | 0.185 | 2985 | 3790 |
| 60 | 30.5 | 3.5 | 1.5 | 5 | 18150 | 23530 | 60-30.5-3.5 | 2.362 | 1.201 | 0.138 | 0.059 | 0.197 | 4098 | 5311 |
| 63 | 31 | 1.8 | 2.35 | 4.15 | 4238 | 4463 | 63-31-1.8 | 2.480 | 1.220 | 0.071 | 0.093 | 0.163 | 957 | 1007 |
| 63 | 31 | 2.5 | 1.75 | 4.25 | 7189 | 8904 | 63-31-2.5 | 2.480 | 1.220 | 0.098 | 0.069 | 0.167 | 1623 | 2010 |
| 63 | 31 | 3 | 1.8 | 4.8 | 12540 | 15830 | 63-31-3 | 2.480 | 1.220 | 0.118 | 0.071 | 0.189 | 2830 | 3572 |
| 63 | 31 | 3.5 | 1.4 | 4.9 | 15030 | 19550 | 63-31-3.5 | 2.480 | 1.220 | 0.138 | 0.055 | 0.193 | 3392 | 4412 |
| 70 | 25.5 | 2 | 2.5 | 4.5 | 4437 | 4755 | 70-25.5-2 | 2.756 | 1.004 | 0.079 | 0.098 | 0.177 | 1002 | 1073 |
| 70 | 30.5 | 2.5 | 2.4 | 4.9 | 8031 | 9360 | 70-30.5-2.5 | 2.756 | 1.201 | 0.098 | 0.094 | 0.193 | 1813 | 2113 |
| 70 | 30.5 | 3 | 2.1 | 5.1 | 11430 | 14150 | 70-30.5-3 | 2.756 | 1.201 | 0.118 | 0.083 | 0.201 | 2579 | 3194 |
| 70 | 35.5 | 3 | 2.1 | 5.1 | 12290 | 15220 | 70-35.5-3 | 2.756 | 1.398 | 0.118 | 0.083 | 0.201 | 1774 | 3435 |
| 70 | 35.5 | 3.5 | 1.8 | 5.3 | 16180 | 20710 | 70-35.5-3.5 | 2.756 | 1.398 | 0.138 | 0.071 | 0.209 | 3652 | 4676 |
| 70 | 35.5 | 4 | 1.8 | 5.8 | 23920 | 30920 | 70-35.5-4 | 2.756 | 1.398 | 0.157 | 0.071 | 0.228 | 5400 | 6979 |
| 70 | 40.5 | 4 | 1.6 | 5.6 | 23350 | 30380 | 70-40.5-4 | 2.756 | 1.594 | 0.157 | 0.063 | 0.220 | 5271 | 6857 |
| 70 | 40.5 | 5 | 1.2 | 6.2 | 33670 | 44500 | 70-40.5-5 | 2.756 | 1.594 | 0.197 | 0.047 | 0.244 | 7601 | 10040 |

| | | | | | | | | | | | | | | |
|-----|----|------|------|------|-------|--------|------------|-------|-------|-------|-------|-------|-------|-------|
| 71 | 36 | 2 | 2.6 | 4.6 | 5144 | 5426 | 71-36-2 | 2.795 | 1.417 | 0.079 | 0.102 | 0.181 | 1161 | 1225 |
| 71 | 36 | 2.5 | 2 | 4.5 | 6725 | 8152 | 71-36-2.5 | 2.795 | 1.417 | 0.098 | 0.079 | 0.177 | 1518 | 1840 |
| 71 | 36 | 4 | 1.6 | 5.6 | 20530 | 26710 | 71-36-4 | 2.795 | 1.417 | 0.157 | 0.063 | 0.220 | 4635 | 6030 |
| 76 | 46 | 5 | 1.4 | 6.4 | 34990 | 46090 | 76-46-5 | 2.992 | 1.811 | 0.197 | 0.055 | 0.252 | 7899 | 10400 |
| 80 | 31 | 2.5 | 2.8 | 5.3 | 7239 | 8070 | 80-31-2.5 | 3.150 | 1.220 | 0.098 | 0.110 | 0.209 | 1634 | 1822 |
| 80 | 31 | 3 | 2.5 | 5.5 | 10350 | 12450 | 80-31-3 | 3.150 | 1.220 | 0.118 | 0.098 | 0.217 | 2337 | 2811 |
| 80 | 31 | 4 | 2.1 | 6.1 | 19390 | 24790 | 80-31-4 | 3.150 | 1.220 | 0.157 | 0.083 | 0.240 | 4378 | 5596 |
| 80 | 36 | 3 | 2.7 | 5.7 | 11920 | 14110 | 80-36-3 | 3.150 | 1.417 | 0.118 | 0.106 | 0.224 | 2690 | 3184 |
| 80 | 36 | 4 | 2.2 | 6.2 | 21400 | 27250 | 80-36-4 | 3.150 | 1.417 | 0.157 | 0.087 | 0.024 | 4831 | 6150 |
| 80 | 41 | 2.25 | 2.95 | 5.2 | 6613 | 6950 | 80-41-2.25 | 3.150 | 1.614 | 0.089 | 0.116 | 0.205 | 1493 | 1569 |
| 80 | 41 | 3 | 2.3 | 5.3 | 10520 | 12840 | 80-41-3 | 3.150 | 1.614 | 0.118 | 0.091 | 0.209 | 2374 | 2899 |
| 80 | 41 | 4 | 2.2 | 6.2 | 22870 | 29120 | 80-41-4 | 3.150 | 1.614 | 0.157 | 0.087 | 0.244 | 5163 | 6574 |
| 80 | 41 | 5 | 1.7 | 6.7 | 33560 | 43950 | 80-41-5 | 3.150 | 1.614 | 0.197 | 0.067 | 0.264 | 7575 | 9921 |
| 90 | 46 | 2.5 | 3.2 | 5.7 | 7684 | 8157 | 90-46-2.5 | 3.543 | 1.811 | 0.098 | 0.126 | 0.224 | 1735 | 1841 |
| 90 | 46 | 3.5 | 2.5 | 6 | 14160 | 17490 | 90-46-3.5 | 3.543 | 1.811 | 0.138 | 0.098 | 0.236 | 3197 | 3947 |
| 90 | 46 | 5 | 2 | 7 | 31350 | 40790 | 90-46-5 | 3.543 | 1.811 | 0.197 | 0.079 | 0.276 | 7078 | 9207 |
| 100 | 41 | 4 | 3.2 | 7.2 | 20250 | 24550 | 100-41-4 | 3.937 | 1.614 | 0.157 | 0.126 | 0.283 | 4571 | 5541 |
| 100 | 41 | 5 | 2.75 | 7.75 | 32360 | 41200 | 100-41-5 | 3.937 | 1.614 | 0.197 | 0.108 | 0.305 | 7305 | 9300 |
| 100 | 51 | 2.7 | 3.5 | 6.2 | 8609 | 9091 | 100-51-2.7 | 3.937 | 2.008 | 0.106 | 0.138 | 0.244 | 1943 | 2052 |
| 100 | 51 | 3.5 | 2.8 | 6.3 | 13070 | 15840 | 100-51-3.5 | 3.937 | 2.008 | 0.138 | 0.110 | 0.248 | 2950 | 3576 |
| 100 | 51 | 4 | 3 | 7 | 20670 | 25340 | 100-51-4 | 3.937 | 2.008 | 0.157 | 0.118 | 0.276 | 4667 | 5720 |
| 100 | 51 | 5 | 2.8 | 7.8 | 36340 | 46190 | 100-51-5 | 3.937 | 2.008 | 0.197 | 0.110 | 0.307 | 8203 | 10430 |
| 100 | 51 | 6 | 2.2 | 8.2 | 48020 | 62710 | 100-51-6 | 3.937 | 2.008 | 0.236 | 0.087 | 0.323 | 10840 | 14160 |
| 100 | 51 | 5.6 | 2.6 | 8.2 | 48020 | 61570 | 100-51-6-F | 3.937 | 2.008 | 0.220 | 0.102 | 0.323 | 10840 | 13900 |
| 112 | 57 | 3 | 3.9 | 6.9 | 10490 | 11060 | 112-57-3 | 4.409 | 2.244 | 0.118 | 0.154 | 0.272 | 2368 | 2497 |
| 112 | 57 | 4 | 3.2 | 7.2 | 17750 | 21520 | 112-57-4 | 4.409 | 2.244 | 0.157 | 0.126 | 0.283 | 4007 | 4857 |
| 112 | 57 | 6 | 2.5 | 8.5 | 43710 | 56740 | 112-57-6 | 4.409 | 2.244 | 0.236 | 0.098 | 0.335 | 9866 | 12810 |
| 112 | 57 | 5.6 | 2.9 | 8.5 | 43710 | 55530 | 112-57-6-F | 4.409 | 2.244 | 0.220 | 0.114 | 0.335 | 9866 | 12540 |
| 125 | 41 | 4 | 4.2 | 8.2 | 17350 | 19730 | 125-41-4 | 4.921 | 1.614 | 0.157 | 0.165 | 0.323 | 3915 | 4453 |
| 125 | 51 | 4 | 4.5 | 8.5 | 19820 | 22060 | 125-51-4 | 4.921 | 2.008 | 0.157 | 0.177 | 0.335 | 4473 | 4980 |
| 125 | 51 | 5 | 3.9 | 8.9 | 30670 | 37340 | 125-51-5 | 4.921 | 2.008 | 0.197 | 0.154 | 0.350 | 6923 | 8429 |
| 125 | 51 | 6 | 3.4 | 9.4 | 44310 | 56250 | 125-51-6 | 4.921 | 2.008 | 0.236 | 0.134 | 0.370 | 10000 | 12700 |
| 125 | 51 | 5.6 | 3.8 | 9.4 | 44310 | 54550 | 125-51-6-F | 4.921 | 2.008 | 0.220 | 0.150 | 0.370 | 10000 | 12310 |
| 125 | 61 | 5 | 4 | 9 | 33970 | 41170 | 125-61-5 | 4.921 | 2.402 | 0.197 | 0.157 | 0.354 | 7667 | 9293 |
| 125 | 61 | 6 | 3.6 | 9.6 | 50720 | 64030 | 125-61-6 | 4.921 | 2.402 | 0.236 | 0.142 | 0.378 | 11450 | 14450 |
| 125 | 61 | 5.6 | 4 | 9.6 | 50720 | 61970 | 125-61-6-F | 4.921 | 2.402 | 0.220 | 0.157 | 0.378 | 11450 | 13990 |
| 125 | 61 | 8 | 2.9 | 10.9 | 93580 | 122300 | 125-61-8 | 4.921 | 2.402 | 0.315 | 0.114 | 0.429 | 21120 | 27600 |
| 125 | 61 | 7.6 | 3.3 | 10.9 | 93580 | 120700 | 125-61-8-F | 4.921 | 2.402 | 0.299 | 0.130 | 0.429 | 21120 | 27240 |
| 125 | 64 | 3.5 | 4.5 | 8 | 15420 | 16340 | 125-64-3.5 | 4.921 | 2.520 | 0.138 | 0.177 | 0.315 | 3480 | 3687 |
| 125 | 64 | 5 | 3.5 | 8.5 | 39910 | 37040 | 125-64-5 | 4.921 | 2.520 | 0.197 | 0.138 | 0.335 | 6751 | 8361 |
| 125 | 64 | 6 | 3.6 | 9.6 | 52150 | 65840 | 125-64-6 | 4.921 | 2.520 | 0.236 | 0.142 | 0.378 | 11770 | 14860 |
| 125 | 64 | 5.6 | 4 | 9.6 | 52150 | 63720 | 125-64-6-F | 4.921 | 2.520 | 0.220 | 0.157 | 0.378 | 11770 | 14380 |

| | | | | | | | | | | | | | | |
|-----|----|------|------|------|--------|--------|-------------|-------|-------|-------|-------|-------|-------|-------|
| 125 | 64 | 7 | 3 | 10 | 67220 | 87120 | 125-64-7 | 4.921 | 2.520 | 0.276 | 0.118 | 0.394 | 15170 | 19670 |
| 125 | 64 | 6.55 | 3.45 | 10 | 67220 | 85290 | 125-64-7-F | 4.921 | 2.520 | 0.258 | 0.136 | 0.394 | 15170 | 19250 |
| 125 | 64 | 8 | 2.6 | 10.6 | 85930 | 112700 | 125-64-8 | 4.921 | 2.520 | 0.315 | 0.102 | 0.417 | 19400 | 25440 |
| 125 | 64 | 7.5 | 3.1 | 10.6 | 85930 | 111100 | 125-64-8-F | 4.921 | 2.520 | 0.295 | 0.122 | 0.417 | 19400 | 25070 |
| 125 | 71 | 6 | 3.3 | 9.3 | 51220 | 65210 | 125-71-6 | 4.921 | 2.795 | 0.236 | 0.130 | 0.366 | 11560 | 14720 |
| 125 | 71 | 5.6 | 3.7 | 9.3 | 51220 | 63300 | 125-71-6-F | 4.921 | 2.795 | 0.220 | 0.146 | 0.366 | 11560 | 14290 |
| 125 | 71 | 8 | 2.4 | 10.4 | 85490 | 112400 | 125-71-8 | 4.921 | 2.795 | 0.315 | 0.094 | 0.409 | 19300 | 25370 |
| 125 | 71 | 7.4 | 3 | 10.4 | 85490 | 110500 | 125-71-8-F | 4.921 | 2.795 | 0.291 | 0.118 | 0.409 | 19300 | 24950 |
| 125 | 71 | 10 | 1.8 | 11.8 | 124100 | 164700 | 125-71-10 | 4.921 | 2.795 | 0.394 | 0.071 | 0.465 | 28020 | 37170 |
| 125 | 71 | 9.2 | 2.6 | 11.8 | 124100 | 163000 | 125-71-10-F | 4.921 | 2.795 | 0.362 | 0.102 | 0.465 | 28020 | 36800 |
| | | | | | | | | | | | | | | |
| 140 | 72 | 3.8 | 4.9 | 8.7 | 17200 | 18200 | 140-72-3.8 | 5.512 | 2.835 | 0.150 | 0.193 | 0.343 | 3881 | 4108 |
| 140 | 72 | 5 | 4 | 9 | 27920 | 33840 | 140-72-5 | 5.512 | 2.835 | 0.197 | 0.157 | 0.354 | 6302 | 7639 |
| 140 | 72 | 8 | 3.2 | 11.2 | 85250 | 110900 | 140-72-8 | 5.512 | 2.835 | 0.315 | 0.126 | 0.441 | 19240 | 25030 |
| 140 | 72 | 7.5 | 3.7 | 11.2 | 85250 | 108800 | 140-72-8-F | 5.512 | 2.835 | 0.295 | 0.146 | 0.441 | 19240 | 24560 |
| | | | | | | | | | | | | | | |
| 150 | 61 | 5 | 5.3 | 10.3 | 31040 | 35210 | 150-61-5 | 5.906 | 2.402 | 0.197 | 0.209 | 0.406 | 7007 | 7947 |
| 150 | 61 | 6 | 4.8 | 10.8 | 45460 | 55100 | 150-61-6 | 5.906 | 2.402 | 0.236 | 0.189 | 0.425 | 10260 | 12440 |
| 150 | 61 | 5.8 | 5 | 10.8 | 45460 | 53950 | 150-61-6-F | 5.906 | 2.402 | 0.228 | 0.197 | 0.425 | 10260 | 12180 |
| 150 | 71 | 6 | 4.8 | 10.8 | 48150 | 58370 | 150-71-6 | 5.906 | 2.795 | 0.236 | 0.189 | 0.425 | 10870 | 13180 |
| 150 | 71 | 5.65 | 5.15 | 10.8 | 48150 | 56180 | 150-71-6-F | 5.906 | 2.795 | 0.222 | 0.203 | 0.425 | 10870 | 12680 |
| 150 | 71 | 8 | 4 | 12 | 89850 | 115300 | 150-71-8 | 5.906 | 2.795 | 0.315 | 0.157 | 0.472 | 20280 | 26030 |
| 150 | 71 | 7.5 | 4.5 | 12 | 89850 | 112500 | 150-71-8-F | 5.906 | 2.795 | 0.295 | 0.177 | 0.472 | 20280 | 25390 |
| 150 | 81 | 8 | 3.7 | 11.7 | 89530 | 115500 | 150-81-8 | 5.906 | 3.189 | 0.315 | 0.146 | 0.461 | 20210 | 26070 |
| 150 | 81 | 7.5 | 4.2 | 11.7 | 89530 | 112900 | 150-81-8-F | 5.906 | 3.189 | 0.295 | 0.165 | 0.461 | 20210 | 25490 |
| 150 | 81 | 10 | 3 | 13 | 139100 | 182900 | 150-81-10 | 5.906 | 3.189 | 0.394 | 0.118 | 0.512 | 31410 | 41290 |
| 150 | 81 | 9.3 | 3.7 | 13 | 139100 | 180100 | 150-81-10-F | 5.906 | 3.189 | 0.366 | 0.146 | 0.512 | 31410 | 40660 |
| | | | | | | | | | | | | | | |
| 160 | 82 | 4.3 | 5.6 | 9.9 | 21840 | 23020 | 160-82-4.3 | 6.299 | 3.228 | 0.169 | 0.220 | 0.390 | 4930 | 5197 |
| 160 | 82 | 6 | 4.5 | 10.5 | 41010 | 50260 | 160-82-6 | 6.299 | 3.228 | 0.236 | 0.177 | 0.413 | 9257 | 11350 |
| 160 | 82 | 5.6 | 4.9 | 10.5 | 41010 | 48220 | 160-82-6-F | 6.299 | 3.228 | 0.220 | 0.193 | 0.413 | 9257 | 10880 |
| 160 | 82 | 10 | 3.5 | 13.5 | 138300 | 181000 | 160-82-10 | 6.299 | 3.228 | 0.394 | 0.138 | 0.531 | 31230 | 40850 |
| 160 | 82 | 9.4 | 4.1 | 13.5 | 138300 | 178200 | 160-82-10-F | 6.299 | 3.228 | 0.370 | 0.161 | 0.531 | 31230 | 40230 |
| | | | | | | | | | | | | | | |
| 180 | 92 | 4.8 | 6.2 | 11 | 26440 | 27970 | 180-92-4.8 | 7.087 | 3.622 | 0.189 | 0.244 | 0.433 | 5969 | 6313 |
| 180 | 92 | 6 | 5.1 | 11.1 | 37500 | 44930 | 180-92-6 | 7.087 | 3.622 | 0.236 | 0.201 | 0.437 | 8465 | 10140 |
| 180 | 92 | 5.6 | 5.5 | 11.1 | 37500 | 42870 | 180-92-6-F | 7.087 | 3.622 | 0.220 | 0.217 | 0.437 | 8465 | 9677 |
| 180 | 92 | 10 | 4 | 14 | 125400 | 163100 | 180-92-10 | 7.087 | 3.622 | 0.394 | 0.157 | 0.551 | 28310 | 36830 |
| 180 | 92 | 9.4 | 4.6 | 14 | 125400 | 160200 | 180-92-10-F | 7.087 | 3.622 | 0.370 | 0.181 | 0.551 | 28310 | 36170 |
| 180 | 92 | 13 | 3.5 | 16.5 | 237900 | 313600 | 180-92-13 | 7.087 | 3.622 | 0.512 | 0.138 | 0.650 | 53700 | 70790 |
| 180 | 92 | 12.1 | 4.4 | 16.5 | 237900 | 309500 | 180-92-13-F | 7.087 | 3.622 | 0.476 | 0.173 | 0.650 | 53700 | 69860 |
| | | | | | | | | | | | | | | |
| 200 | 82 | 8 | 6.2 | 14.2 | 78030 | 95120 | 200-82-8 | 7.874 | 3.228 | 0.315 | 0.244 | 0.559 | 17610 | 21470 |
| 200 | 82 | 7.6 | 6.6 | 14.2 | 78030 | 92180 | 200-82-8-F | 7.874 | 3.228 | 0.299 | 0.260 | 0.559 | 17610 | 20810 |
| 200 | 82 | 10 | 5.5 | 15.5 | 129400 | 164800 | 200-82-10 | 7.874 | 3.228 | 0.394 | 0.217 | 0.610 | 29220 | 37200 |
| 200 | 82 | 9.45 | 6.05 | 15.5 | 129400 | 160900 | 200-82-10-F | 7.874 | 3.228 | 0.372 | 0.238 | 0.610 | 29220 | 36320 |
| 200 | 82 | 12 | 4.6 | 16.6 | 182700 | 238200 | 200-82-12 | 7.874 | 3.228 | 0.472 | 0.181 | 0.654 | 41250 | 53760 |
| 200 | 82 | 11.4 | 5.25 | 16.6 | 182700 | 234600 | 200-82-12-F | 7.874 | 3.228 | 0.447 | 0.207 | 0.654 | 41250 | 52950 |
| 200 | 92 | 10 | 5.6 | 15.6 | 137700 | 175000 | 200-92-10 | 7.874 | 3.622 | 0.394 | 0.220 | 0.614 | 31080 | 39500 |

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|-----|-----|------|------|------|--------|--------|---------------|-------|-------|-------|-------|-------|-------|--------|
| 200 | 92 | 9.5 | 6.1 | 15.6 | 137700 | 171200 | 200-92-10-F | 7.874 | 3.622 | 0.374 | 0.240 | 0.614 | 31080 | 38650 |
| 200 | 92 | 12 | 4.8 | 16.8 | 199300 | 259200 | 200-92-12 | 7.874 | 3.622 | 0.472 | 0.189 | 0.661 | 44980 | 58510 |
| 200 | 92 | 11.4 | 5.4 | 16.8 | 199300 | 255400 | 200-92-12-F | 7.874 | 3.622 | 0.449 | 0.213 | 0.661 | 44980 | 57660 |
| 200 | 92 | 14 | 4.1 | 18.1 | 267200 | 351600 | 200-92-14 | 7.874 | 3.622 | 0.551 | 0.161 | 0.713 | 60320 | 79360 |
| 200 | 92 | 13.2 | 4.9 | 18.1 | 267200 | 347500 | 200-92-14-F | 7.874 | 3.622 | 0.520 | 0.193 | 0.713 | 60320 | 78440 |
| 200 | 102 | 5.5 | 7 | 12.5 | 36110 | 38420 | 200-102-5.5 | 7.874 | 4.016 | 0.217 | 0.276 | 0.492 | 8151 | 8673 |
| 200 | 102 | 8 | 5.6 | 13.6 | 76380 | 94600 | 200-102-8 | 7.874 | 4.016 | 0.315 | 0.220 | 0.535 | 17240 | 21350 |
| 200 | 102 | 7.5 | 6.1 | 13.6 | 76380 | 91250 | 200-102-8-F | 7.874 | 4.016 | 0.295 | 0.240 | 0.535 | 17240 | 20600 |
| 200 | 102 | 10 | 5.6 | 15.6 | 145400 | 184800 | 200-102-10 | 7.874 | 4.016 | 0.394 | 0.220 | 0.614 | 32810 | 41700 |
| 200 | 102 | 9.4 | 6.2 | 15.6 | 145400 | 179900 | 200-102-10-F | 7.874 | 4.016 | 0.370 | 0.244 | 0.614 | 32810 | 40600 |
| 200 | 102 | 12 | 4.2 | 16.2 | 183000 | 239400 | 200-102-12 | 7.874 | 4.016 | 0.472 | 0.165 | 0.638 | 41310 | 54050 |
| 200 | 102 | 11.3 | 4.95 | 16.2 | 183000 | 235600 | 200-102-12-F | 7.874 | 4.016 | 0.443 | 0.195 | 0.638 | 41310 | 53180 |
| 200 | 102 | 14 | 4.2 | 18.2 | 289200 | 380200 | 200-102-14 | 7.874 | 4.016 | 0.551 | 0.165 | 0.717 | 65280 | 85830 |
| 200 | 102 | 13.1 | 5.1 | 18.2 | 289200 | 375000 | 200-102-14-F | 7.874 | 4.016 | 0.516 | 0.201 | 0.717 | 65280 | 84650 |
| 200 | 112 | 12 | 4.2 | 16.2 | 195800 | 256200 | 200-112-12 | 7.874 | 4.409 | 0.472 | 0.165 | 0.638 | 44200 | 57830 |
| 200 | 112 | 11.1 | 5.1 | 16.2 | 195800 | 251100 | 200-112-12-F | 7.874 | 4.409 | 0.437 | 0.201 | 0.638 | 44200 | 56680 |
| 200 | 112 | 14 | 3.5 | 17.5 | 256800 | 339000 | 200-112-14 | 7.874 | 4.409 | 0.551 | 0.138 | 0.689 | 57960 | 76530 |
| 200 | 112 | 12.9 | 4.6 | 17.5 | 256800 | 334200 | 200-112-14-F | 7.874 | 4.409 | 0.508 | 0.181 | 0.689 | 57960 | 75440 |
| 200 | 112 | 16 | 2.8 | 18.8 | 305100 | 404900 | 200-112-16 | 7.874 | 4.409 | 0.630 | 0.110 | 0.740 | 68870 | 91390 |
| 200 | 112 | 14.7 | 4.1 | 18.8 | 305100 | 400900 | 200-112-16-F | 7.874 | 4.409 | 0.579 | 0.161 | 0.740 | 68870 | 90500 |
| | | | | | | | | | | | | | | |
| 225 | 112 | 6 | 7.6 | 13.6 | 39570 | 42180 | 225-112-6 | 8.858 | 4.409 | 0.236 | 0.299 | 0.535 | 8931 | 9521 |
| 225 | 112 | 6 | 7.6 | 13.6 | 39570 | 42180 | 225-112-6-F | 8.858 | 4.409 | 0.236 | 0.299 | 0.535 | 8931 | 9521 |
| 225 | 112 | 6.5 | 7.1 | 13.6 | 44580 | 50100 | 225-112-6.5 | 8.858 | 4.409 | 0.256 | 0.280 | 0.535 | 10060 | 11310 |
| 225 | 112 | 6.2 | 7.4 | 13.6 | 44580 | 48150 | 225-112-6.5-F | 8.858 | 4.409 | 0.244 | 0.291 | 0.535 | 10060 | 10870 |
| 225 | 112 | 8 | 6.5 | 14.5 | 70750 | 85510 | 225-112-8 | 8.858 | 4.409 | 0.315 | 0.256 | 0.571 | 15970 | 19300 |
| 225 | 112 | 7.5 | 7 | 14.5 | 70750 | 82000 | 225-112-8-F | 8.858 | 4.409 | 0.295 | 0.276 | 0.571 | 15970 | 18510 |
| 225 | 112 | 12 | 5 | 17 | 171000 | 222000 | 225-112-12 | 8.858 | 4.409 | 0.472 | 0.197 | 0.669 | 38600 | 50110 |
| 225 | 112 | 11.3 | 5.75 | 17 | 171000 | 217600 | 225-112-12-F | 8.858 | 4.409 | 0.443 | 0.226 | 0.669 | 38600 | 49120 |
| 225 | 112 | 16 | 4.5 | 20.5 | 359600 | 473600 | 225-112-16 | 8.858 | 4.409 | 0.630 | 0.177 | 0.807 | 81170 | 106900 |
| 225 | 112 | 15 | 5.5 | 20.5 | 359600 | 467800 | 225-112-16-F | 8.858 | 4.409 | 0.591 | 0.217 | 0.807 | 81170 | 105600 |
| | | | | | | | | | | | | | | |
| 250 | 102 | 10 | 8 | 18 | 126400 | 153200 | 250-102-10 | 9.843 | 4.016 | 0.394 | 0.315 | 0.709 | 28530 | 34580 |
| 250 | 102 | 9.7 | 8.3 | 18 | 126400 | 150300 | 250-102-10-F | 9.843 | 4.016 | 0.382 | 0.327 | 0.709 | 28530 | 33930 |
| 250 | 102 | 12 | 7 | 19 | 183000 | 231600 | 250-102-12 | 9.843 | 4.016 | 0.472 | 0.276 | 0.748 | 41300 | 52290 |
| 250 | 102 | 11.3 | 7.75 | 19 | 183000 | 224900 | 250-102-12-F | 9.843 | 4.016 | 0.443 | 0.305 | 0.748 | 41300 | 50770 |
| 250 | 127 | 6.5 | 8.3 | 14.8 | 45180 | 48010 | 250-127-6.5 | 9.843 | 5.000 | 0.256 | 0.327 | 0.583 | 10200 | 10840 |
| 250 | 127 | 6.5 | 8.3 | 14.8 | 45180 | 48010 | 250-127-6.5-F | 9.843 | 5.000 | 0.256 | 0.327 | 0.583 | 10200 | 10840 |
| 250 | 127 | 7 | 7.8 | 14.8 | 50470 | 56350 | 250-127-7 | 9.843 | 5.000 | 0.276 | 0.307 | 0.583 | 11390 | 12720 |
| 250 | 127 | 6.7 | 8.1 | 14.8 | 50470 | 54280 | 250-127-7-F | 9.843 | 5.000 | 0.264 | 0.319 | 0.583 | 11390 | 12250 |

| | | | | | | | | | | | | | | |
|-----|-----|------|-----|------|--------|--------|--------------|-------|-------|-------|-------|-------|-------|--------|
| 250 | 127 | 10 | 7 | 17 | 119100 | 147400 | 250-127-10 | 9.843 | 5.000 | 0.394 | 0.276 | 0.669 | 26870 | 33280 |
| 250 | 127 | 9.4 | 7.6 | 17 | 119100 | 142500 | 250-127-10-F | 9.843 | 5.000 | 0.370 | 0.299 | 0.669 | 26870 | 32160 |
| 250 | 127 | 12 | 7.3 | 19.3 | 210800 | 265700 | 250-127-12 | 9.843 | 5.000 | 0.472 | 0.287 | 0.760 | 47580 | 59980 |
| 250 | 127 | 11.3 | 8 | 19.3 | 210800 | 258200 | 250-127-12-F | 9.843 | 5.000 | 0.445 | 0.315 | 0.760 | 47580 | 58290 |
| 250 | 127 | 14 | 5.6 | 19.6 | 248800 | 323700 | 250-127-14 | 9.843 | 5.000 | 0.551 | 0.220 | 0.772 | 56170 | 73060 |
| 250 | 127 | 13.1 | 6.5 | 19.6 | 248800 | 317400 | 250-127-14-F | 9.843 | 5.000 | 0.516 | 0.256 | 0.772 | 56170 | 71650 |
| 250 | 127 | 16 | 5.8 | 21.8 | 383000 | 500400 | 250-127-16 | 9.843 | 5.000 | 0.630 | 0.228 | 0.858 | 86460 | 113000 |
| 250 | 127 | 15.1 | 6.7 | 21.8 | 383000 | 493000 | 250-127-16-F | 9.843 | 5.000 | 0.594 | 0.264 | 0.858 | 86460 | 111300 |

Part numbers ending in "-F" are provided with flats (load-bearing surfaces). The thickness is reduced to compensate for an increased load due to a shortened lever arm between the load points. The Load values on these are based on an equivalent deflection of the disc spring without flats.

Material for part numbers shown: 1075-1090 high carbon steel (t<0.050")
6150 alloy steel

Other Materials available:

| | |
|----------------|-------------------------|
| 17-7-(prefix) | 17-7 PH Stainless Steel |
| (suffix) -718 | Inconel 718 |
| (suffix) -X750 | Inconel X750 |