

# Hub City™ Worm Gear Drives

## Single Reduction

### PowerCubeX® Worm Speed Reducer Catalog Ratings

#### Series W150

| SERIES | INPUT RPM | RATIO | OUTPUT RPM | CONVENTIONAL OIL |        |                     |                                 |                       | PAO SYNTHETIC OIL |        |               | PAG SYNTHETIC OIL |        |               |
|--------|-----------|-------|------------|------------------|--------|---------------------|---------------------------------|-----------------------|-------------------|--------|---------------|-------------------|--------|---------------|
|        |           |       |            | MECH. INPUT HP   | EFF. % | MECH. OUTPUT TORQUE | THERMAL INPUT HP                | THERMAL OUTPUT TORQUE | INPUT HP          | EFF. % | OUTPUT TORQUE | INPUT HP          | EFF. % | OUTPUT TORQUE |
| W150   | 2500      | 5     | 500        | 2.25             | 85.6   | 243                 | 2.05                            | 221                   | 2.25              | 90.7   | 258           | 2.25              | 93.5   | 266           |
|        |           | 7.5   | 333        | 1.66             | 83.6   | 263                 | 1.52                            | 240                   | 1.66              | 88.7   | 279           | 1.66              | 91.4   | 288           |
|        |           | 10    | 250        | 1.37             | 81.5   | 281                 | 1.14                            | 234                   | 1.37              | 86.4   | 298           | 1.37              | 89.1   | 307           |
|        |           | 15    | 167        | 1.03             | 77.5   | 301                 | 0.87                            | 254                   | 1.03              | 82.2   | 319           | 1.03              | 84.7   | 329           |
|        |           | 20    | 125        | 0.84             | 74.4   | 313                 | 0.76                            | 283                   | 0.84              | 78.8   | 332           | 0.84              | 81.3   | 343           |
|        |           | 25    | 100        | 0.71             | 71.4   | 319                 | 0.60                            | 272                   | 0.71              | 75.7   | 338           | 0.71              | 78.1   | 348           |
|        |           | 30    | 83.3       | 0.61             | 67.4   | 309                 | 0.55                            | 278                   | 0.61              | 71.5   | 328           | 0.61              | 73.7   | 338           |
|        |           | 40    | 62.5       | 0.49             | 62.7   | 312                 | 0.46                            | 294                   | 0.49              | 66.5   | 331           | 0.49              | 68.6   | 341           |
|        |           | 50    | 50.0       | 0.41             | 58.7   | 306                 | 0.37                            | 279                   | 0.41              | 62.2   | 325           | 0.41              | 64.1   | 335           |
|        |           | 60    | 41.7       | 0.35             | 55.1   | 293                 | THERMAL<br>EQUALS<br>MECHANICAL |                       | 0.35              | 58.4   | 311           | 0.35              | 60.2   | 320           |
|        |           | 80    | 31.3       | 0.250            | 48.8   | 244                 |                                 |                       | 0.250             | 51.8   | 259           | 0.250             | 53.4   | 267           |
|        |           | 100   | 25.0       | 0.170            | 44.2   | 194                 |                                 |                       | 0.170             | 46.8   | 206           | 0.170             | 48.3   | 212           |
|        | 1750      | 5     | 350        | 1.94             | 84.6   | 296                 | 2.00                            | 305                   | 1.94              | 89.6   | 314           | 1.94              | 92.4   | 323           |
|        |           | 7.5   | 233        | 1.50             | 82.3   | 330                 | 1.45                            | 323                   | 1.50              | 87.3   | 350           | 1.50              | 90.0   | 361           |
|        |           | 10    | 175        | 1.22             | 79.9   | 351                 | 1.10                            | 317                   | 1.22              | 84.7   | 372           | 1.22              | 87.3   | 384           |
|        |           | 15    | 117        | 0.92             | 75.4   | 375                 | 0.82                            | 335                   | 0.92              | 79.9   | 398           | 0.92              | 82.4   | 410           |
|        |           | 20    | 87.5       | 0.75             | 71.8   | 387                 | 0.72                            | 370                   | 0.75              | 76.2   | 411           | 0.75              | 78.5   | 423           |
|        |           | 25    | 70.0       | 0.63             | 68.6   | 392                 | 0.57                            | 356                   | 0.63              | 72.8   | 416           | 0.63              | 75.0   | 428           |
|        |           | 30    | 58.3       | 0.55             | 64.3   | 385                 | 0.50                            | 348                   | 0.55              | 68.1   | 408           | 0.55              | 70.3   | 420           |
|        |           | 40    | 43.8       | 0.45             | 59.3   | 385                 | THERMAL<br>EQUALS<br>MECHANICAL |                       | 0.45              | 62.8   | 408           | 0.45              | 64.8   | 421           |
|        |           | 50    | 35.0       | 0.38             | 55.0   | 376                 |                                 |                       | 0.38              | 58.3   | 399           | 0.38              | 60.1   | 411           |
|        |           | 60    | 29.2       | 0.33             | 51.3   | 359                 |                                 |                       | 0.33              | 54.4   | 381           | 0.33              | 56.1   | 392           |
|        |           | 80    | 21.9       | 0.230            | 44.9   | 299                 |                                 |                       | 0.230             | 47.7   | 316           | 0.230             | 49.1   | 326           |
|        |           | 100   | 17.5       | 0.160            | 40.3   | 236                 |                                 |                       | 0.160             | 42.7   | 251           | 0.160             | 44.1   | 258           |
|        | 1170      | 5     | 234        | 1.58             | 83.3   | 355                 | THERMAL<br>EQUALS<br>MECHANICAL |                       | 1.58              | 88.3   | 376           | 1.58              | 91.0   | 388           |
|        |           | 7.5   | 156        | 1.21             | 80.7   | 393                 |                                 |                       | 1.21              | 85.5   | 417           | 1.21              | 88.2   | 430           |
|        |           | 10    | 117        | 1.00             | 77.9   | 417                 |                                 |                       | 1.00              | 82.6   | 442           | 1.00              | 85.2   | 456           |
|        |           | 15    | 78.0       | 0.76             | 72.8   | 445                 |                                 |                       | 0.76              | 77.2   | 471           | 0.76              | 79.6   | 486           |
|        |           | 20    | 58.5       | 0.61             | 68.9   | 456                 |                                 |                       | 0.61              | 73.0   | 484           | 0.61              | 75.3   | 499           |
|        |           | 25    | 46.8       | 0.52             | 65.4   | 460                 |                                 |                       | 0.52              | 69.3   | 488           | 0.52              | 71.5   | 503           |
|        |           | 30    | 39.0       | 0.46             | 60.7   | 456                 |                                 |                       | 0.46              | 64.3   | 483           | 0.46              | 66.3   | 498           |
|        |           | 40    | 29.3       | 0.38             | 55.4   | 453                 |                                 |                       | 0.38              | 58.7   | 481           | 0.38              | 60.5   | 496           |
|        |           | 50    | 23.4       | 0.33             | 51.0   | 441                 |                                 |                       | 0.33              | 54.0   | 468           | 0.33              | 55.7   | 482           |
|        |           | 60    | 19.5       | 0.28             | 47.2   | 420                 |                                 |                       | 0.28              | 50.0   | 445           | 0.28              | 51.6   | 459           |
|        |           | 80    | 14.6       | 0.200            | 40.8   | 349                 |                                 |                       | 0.200             | 43.3   | 370           | 0.200             | 44.6   | 381           |
|        |           | 100   | 11.7       | 0.140            | 36.3   | 275                 |                                 |                       | 0.140             | 38.5   | 292           | 0.140             | 39.7   | 301           |
|        | 100       | 5     | 20.0       | 0.210            | 75.5   | 497                 | THERMAL<br>EQUALS<br>MECHANICAL |                       | 0.210             | 80.1   | 527           | 0.210             | 82.5   | 543           |
|        |           | 7.5   | 13.3       | 0.160            | 71.3   | 543                 |                                 |                       | 0.160             | 75.6   | 576           | 0.160             | 77.9   | 593           |
|        |           | 10    | 10.0       | 0.140            | 66.9   | 574                 |                                 |                       | 0.140             | 70.9   | 608           | 0.140             | 73.1   | 627           |
|        |           | 15    | 6.7        | 0.110            | 59.4   | 609                 |                                 |                       | 0.110             | 63.0   | 646           | 0.110             | 64.9   | 666           |
|        |           | 20    | 5.0        | 0.090            | 54.4   | 617                 |                                 |                       | 0.090             | 57.6   | 654           | 0.090             | 59.4   | 674           |
|        |           | 25    | 4.0        | 0.080            | 50.1   | 617                 |                                 |                       | 0.080             | 53.1   | 655           | 0.080             | 54.8   | 675           |
|        |           | 30    | 3.3        | 0.070            | 44.3   | 623                 |                                 |                       | 0.070             | 46.9   | 660           | 0.070             | 48.4   | 680           |
|        |           | 40    | 2.5        | 0.060            | 38.8   | 613                 |                                 |                       | 0.060             | 41.2   | 649           | 0.060             | 42.5   | 669           |
|        |           | 50    | 2.0        | 0.050            | 34.6   | 592                 |                                 |                       | 0.050             | 36.7   | 628           | 0.050             | 37.8   | 647           |
|        |           | 60    | 1.7        | 0.050            | 31.2   | 560                 |                                 |                       | 0.050             | 33.1   | 594           | 0.050             | 34.1   | 613           |
|        |           | 80    | 1.3        | 0.040            | 25.8   | 464                 |                                 |                       | 0.040             | 27.3   | 492           | 0.040             | 28.2   | 508           |
|        |           | 100   | 1.0        | 0.030            | 22.3   | 365                 |                                 |                       | 0.030             | 23.6   | 387           | 0.030             | 24.4   | 398           |

ADDITIONAL RATINGS FOR OTHER INPUT SPEEDS ARE AVAILABLE AT [WWW.REGALBELOIT.COM](http://WWW.REGALBELOIT.COM)

‡OHL AND THRUST VALUES SHOWN ARE INDEPENDENT FUNCTIONS AND CANNOT BE APPLIED SIMULTANEOUSLY. REFER APPLICATIONS WITH COMBINED OHL AND THRUST TO HUB CITY CUSTOMER SERVICE DEPARTMENT.

#### OVERHUNG LOAD AND THRUST LOAD INFORMATION

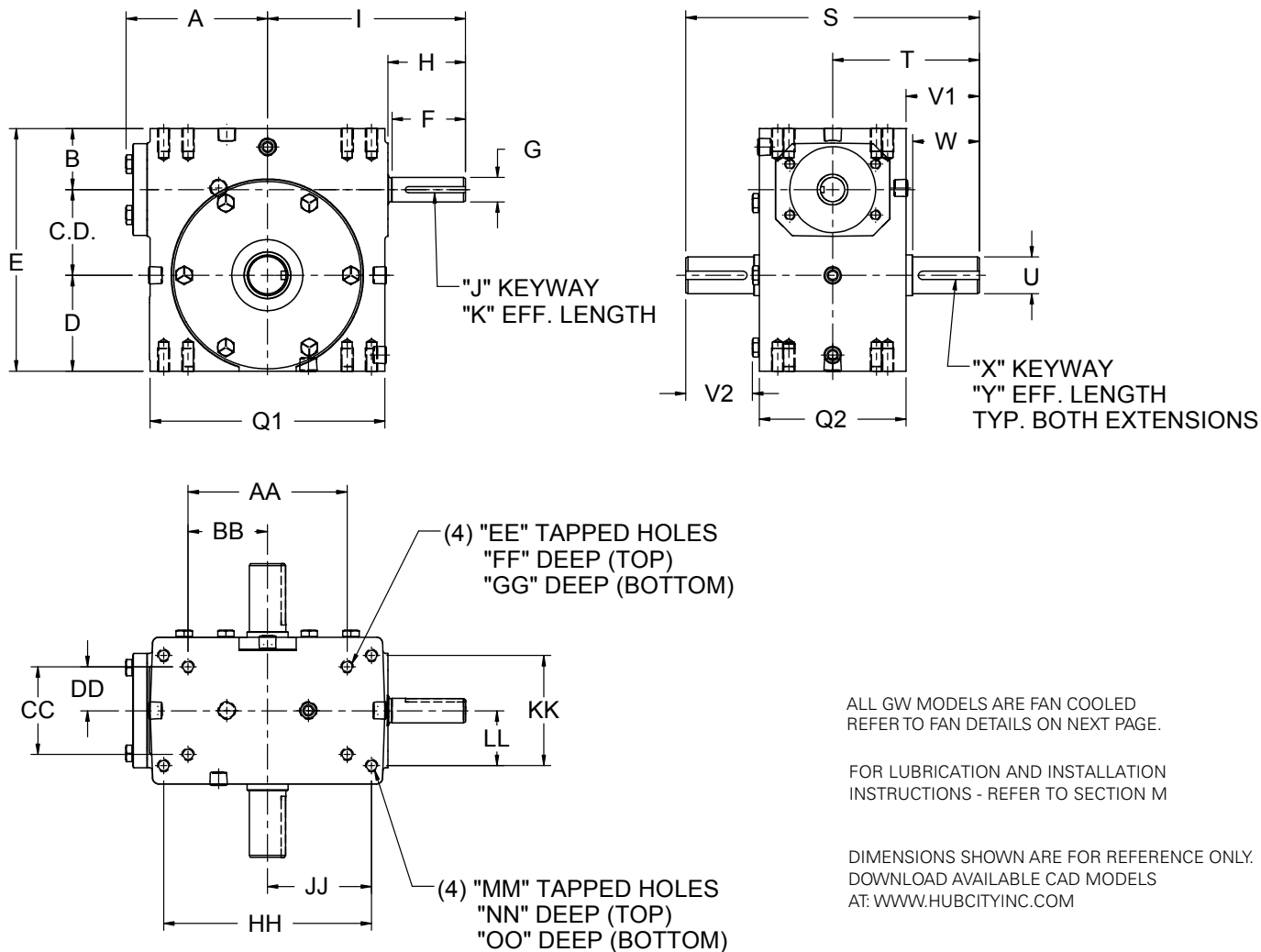
OVERHUNG LOAD - LOW SPEED SHAFT — MODELS 151 AND 154 860 LBS. AT CENTER POINT OF SHAFT EXTENSION. MODELS 152 AND 155 NOT APPLICABLE. THRUST‡ UP OR DOWN 790 LBS.

OUTPUT TORQUE VALUES SHOWN ARE INCH-POUNDS (IN-LB).

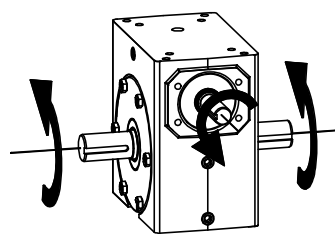
# Hub City™ Worm Gear Drives

## Single Reduction Models

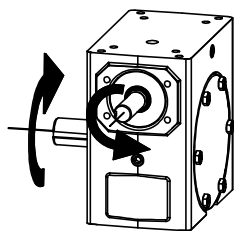
131, 151, 181, 211, 241, 261, 301, 321, 381, 421, 451, 521, GW601, GW701, GW801, GW1001



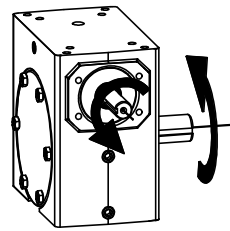
### Standard Styles Available



STYLE "A"



STYLE "B"



STYLE "C"

CONSULT FACTORY FOR VERTICAL SHAFT LUBRICATION RECOMMENDATIONS.

INPUT SHAFT CAN BE ROTATED IN EITHER DIRECTION.

# Hub City™ Worm Gear Drives

## Single Reduction Models

131, 151, 181, 211, 241, 261, 301, 321, 381, 421, 451, 521, GW601, GW701, GW801, GW1001

| MODEL  | C.D.   | A    | B     | D      | E      | Q1    | Q2   | F    | G            | H    | I     | J               | K    |
|--------|--------|------|-------|--------|--------|-------|------|------|--------------|------|-------|-----------------|------|
| 131    | 1.334  | 2.61 | 1.186 | 1.562  | 4.082  | 4.12  | 3.12 | 1.67 | .500/.4985   | 1.76 | 3.82  | 1/8 X 1/16 P&W  | 1.44 |
| 151    | 1.541  | 3.14 | 1.928 | 1.906  | 5.375  | 4.88  | 3.44 | 1.76 | .625/.6235   | 1.76 | 4.35  | 3/16 X 3/32 P&W | 1.50 |
| 181    | 1.751  | 3.23 | 1.374 | 1.875  | 5.000  | 5.16  | 3.44 | N/A  | .625/.6235   | 1.76 | 4.44  | 3/16 X 3/32 P&W | 1.50 |
| 211    | 2.064  | 3.61 | 1.500 | 2.437  | 6.000  | 5.88  | 4.12 | N/A  | .625/.6235   | 1.76 | 4.82  | 3/16 X 3/32 P&W | 1.50 |
| 241    | 2.376  | 3.77 | 2.061 | 2.500  | 6.937  | 6.12  | 4.06 | 2.38 | .750/.7485   | 2.38 | 5.51  | 3/16 X 3/32 P&W | 1.75 |
| 261    | 2.626  | 4.33 | 1.874 | 2.938  | 7.438  | 7.20  | 4.50 | 2.36 | .750/.7485   | 2.38 | 6.07  | 3/16 X 3/32 P&W | 1.75 |
| 301    | 3.001  | 4.84 | 2.624 | 3.250  | 8.875  | 8.12  | 5.25 | 2.38 | .875/.8735   | 2.38 | 6.57  | 3/16 X 3/32 P&W | 1.75 |
| 321    | 3.251  | 5.28 | 2.124 | 3.250  | 8.625  | 8.62  | 5.20 | N/A  | .875/.8735   | 2.38 | 6.75  | 3/16 X 3/32 P&W | 1.75 |
| 381    | 3.751  | 4.90 | 2.374 | 3.937  | 10.062 | 9.60  | 5.62 | 2.20 | 1.000/.999   | 2.48 | 7.38  | 1/4 X 1/8 P&W   | 1.91 |
| 421    | 4.251  | 6.10 | 2.686 | 4.438  | 11.375 | 10.25 | 6.13 | 3.47 | 1.250/1.2485 | 3.47 | 9.60  | 1/4 X 1/8 P&W   | 2.87 |
| 451    | 4.501  | 5.23 | 2.499 | 4.625  | 11.625 | 9.25  | 4.63 | 2.98 | 1.125/1.124  | 3.21 | 8.44  | 1/4 X 1/8       | 2.50 |
| 521    | 5.168  | 5.98 | 2.624 | 5.375  | 13.167 | 10.75 | 5.06 | N/A  | 1.250/1.249  | 3.27 | 9.25  | 1/4 X 1/8       | 2.63 |
| GW601  | 6.000  | N/A  | 4.000 | 6.500  | 16.500 | 14.25 | 8.13 | N/A  | 1.500        | 3.41 | 11.78 | 3/8 X 3/16      | 3.00 |
| GW701  | 7.000  | N/A  | 4.320 | 7.590  | 18.910 | 14.88 | 7.63 | N/A  | 1.625        | 2.98 | 11.50 | 3/8 X 3/16 P&W  | 2.87 |
| GW801  | 8.000  | N/A  | 4.100 | 8.860  | 20.960 | 17.00 | 8.63 | N/A  | 1.875        | 2.84 | 12.50 | 1/2 X 1/4 P&W   | 2.81 |
| GW1001 | 10.000 | N/A  | 5.110 | 10.360 | 25.470 | 20.88 | 9.53 | N/A  | 2.250        | 3.76 | 15.50 | 1/2 X 1/4 P&W   | 3.69 |

| MODEL  | AA     | BB    | CC    | DD    | EE        | FF   | GG   | HH    | JJ    | KK    | LL    | MM       | NN   | OO   | Wt. Lbs. |
|--------|--------|-------|-------|-------|-----------|------|------|-------|-------|-------|-------|----------|------|------|----------|
| 131    | 2.250  | 1.125 | 1.625 | 0.813 | 1/4 UNC   | 0.50 | 0.50 | 3.250 | 1.625 | 2.000 | 1.000 | 5/16 UNC | 0.50 | 0.50 | 10       |
| 151    | 4.188  | 2.094 | 2.750 | 1.375 | 5/16 UNC  | 0.63 | 0.63 | N/A   | N/A   | N/A   | N/A   | N/A      | N/A  | N/A  | 15       |
| 181    | 3.125  | 1.563 | 1.625 | 0.813 | 1/4 UNC   | 0.50 | 0.50 | 4.188 | 2.094 | 2.750 | 1.375 | 5/16 UNC | 0.63 | 0.63 | 15       |
| 211    | 4.000  | 2.000 | 2.000 | 1.000 | 3/8 UNC   | 0.50 | 0.70 | 5.000 | 2.500 | 2.875 | 1.438 | 3/8 UNC  | 0.70 | 0.70 | 23       |
| 241    | 5.000  | 2.500 | 2.875 | 1.438 | 3/8 UNC   | 0.69 | 0.69 | N/A   | N/A   | N/A   | N/A   | N/A      | N/A  | N/A  | 37       |
| 261    | 4.875  | 2.438 | 2.688 | 1.344 | 3/8 UNC   | 0.70 | 0.70 | 6.375 | 3.188 | 3.375 | 1.688 | 3/8 UNC  | 0.70 | 0.70 | 37       |
| 301    | 7.000  | 3.500 | 4.000 | 2.000 | 7/16 UNC  | 0.88 | 0.88 | N/A   | N/A   | N/A   | N/A   | N/A      | N/A  | N/A  | 57       |
| 321    | 6.250  | 3.125 | 2.750 | 1.375 | 1/2 UNC   | 0.75 | 0.75 | 7.500 | 3.750 | 4.000 | 2.000 | 7/16 UNC | 0.88 | 0.88 | 60       |
| 381    | 6.875  | 3.438 | 3.000 | 1.500 | 1/2 UNC   | 0.94 | 1.00 | 8.500 | 4.250 | 4.750 | 2.375 | 1/2 UNC  | 1.00 | 1.00 | 85       |
| 421    | 8.500  | 4.250 | 5.000 | 2.500 | 5/8 UNC   | 1.00 | 1.00 | N/A   | N/A   | N/A   | N/A   | N/A      | N/A  | N/A  | 102      |
| 451    | 8.125  | 4.063 | 3.250 | 1.625 | 5/8 UNC   | 0.88 | 1.13 | N/A   | N/A   | N/A   | N/A   | N/A      | N/A  | N/A  | 102      |
| 521    | 9.500  | 4.750 | 3.750 | 1.875 | 5/8 UNC   | 1.00 | 1.25 | N/A   | N/A   | N/A   | N/A   | N/A      | N/A  | N/A  | 128      |
| GW601  | 12.750 | 6.375 | 6.380 | 3.190 | 5/8 UNC   | 1.00 | 1.00 | N/A   | N/A   | N/A   | N/A   | N/A      | N/A  | N/A  | 288      |
| GW701  | 12.500 | 6.250 | 5.500 | 2.750 | 1 UNC     | 1.56 | 1.56 | N/A   | N/A   | N/A   | N/A   | N/A      | N/A  | N/A  | 399      |
| GW801  | 14.250 | 7.125 | 6.500 | 3.250 | 1 UNC     | 1.66 | 1.66 | N/A   | N/A   | N/A   | N/A   | N/A      | N/A  | N/A  | 582      |
| GW1001 | 17.750 | 8.875 | 6.875 | 3.438 | 1-1/4 UNC | 2.04 | 2.04 | N/A   | N/A   | N/A   | N/A   | N/A      | N/A  | N/A  | 905      |

| MODEL   | S     | T     | U            | V1   | V2   | W    | X              | Y    |
|---------|-------|-------|--------------|------|------|------|----------------|------|
| 131     | 6.50  | 3.25  | .625/.624    | 1.69 | 1.53 | 1.60 | 3/16 X 3/32    | 1.38 |
| 151     | 8.62  | 4.31  | .750/.7485   | 2.11 | 1.90 | 2.08 | 3/16 X 3/32    | 1.51 |
| 181     | 7.00  | 3.50  | .750/.749    | 1.78 | 1.57 | 1.54 | 3/16 X 3/32    | 1.41 |
| 211     | 8.50  | 4.25  | .875/.874    | 2.19 | 1.98 | 1.95 | 3/16 X 3/32    | 1.83 |
| 241     | 10.28 | 5.14  | 1.125/1.1235 | 2.66 | 2.44 | 2.62 | 1/4 x 1/8      | 1.76 |
| 261     | 9.00  | 4.50  | 1.250/1.249  | 2.25 | 2.04 | N/A  | 1/4 x 1/8      | 1.85 |
| 301     | 13.50 | 6.75  | 1.250/1.2485 | 3.60 | 3.36 | 3.57 | 1/4 X 1/8      | 2.26 |
| 321     | 10.88 | 5.44  | 1.375/1.374  | 2.84 | 2.62 | 2.75 | 5/16 X 5/32    | 2.31 |
| 381     | 13.38 | 6.69  | 1.500/1.499  | 3.88 | N/A  | N/A  | 3/8 X 3/16     | 3.16 |
| 421     | 16.24 | 8.12  | 1.875/1.8735 | 4.50 | 4.21 | 4.47 | 1/2 X 1/4      | 3.06 |
| 451 **  | 14.50 | 7.25  | 1.625/1.624  | 4.18 | N/A  | 3.90 | 3/8 X 3/16     | 3.28 |
| 521 *** | 15.62 | 7.81  | 1.750/1.749  | 4.47 | N/A  | 4.17 | 3/8 X 3/16     | 3.50 |
| GW601   | 20.00 | 10.00 | 2.500        | 4.65 | 4.65 | N/A  | 5/8 X 5/16 P&W | 4.00 |
| GW701   | 23.52 | 11.76 | 2.750        | 5.65 | 5.65 | N/A  | 5/8 X 5/16 P&W | 4.00 |
| GW801   | 24.50 | 12.25 | 3.000        | 5.98 | 5.98 | 5.26 | 3/4 X 3/8 P&W  | 4.50 |
| GW1001  | 29.50 | 14.75 | 3.750        | 6.76 | 6.76 | 6.39 | 7/8 X 7/16 P&W | 5.00 |

\*\* ALSO AVAILABLE WITH 1.750/1.749 (U) DIAMETER OUTPUT SHAFT. CONSULT FACTORY.

\*\*\* ALSO AVAILABLE WITH 2.000/1.999 (U) DIAMETER OUTPUT SHAFT. CONSULT FACTORY.

### Fan Detail for Models GW601 Through GW1001

| MODEL  | A   | FA    | FB    | FC   |
|--------|-----|-------|-------|------|
| GW601  | N/A | 11.13 | 9.50  | 4.00 |
| GW701  | N/A | 11.37 | 9.65  | 4.83 |
| GW801  | N/A | 12.52 | 9.65  | 4.83 |
| GW1001 | N/A | 14.69 | 11.28 | 5.62 |

ALL GW MODELS ARE FAN COOLED.

