

# Hub City™ HERA® High-Efficiency Right Angle Gear Drives

## Ratings

### SELECT BASIC MODEL

Using the rating chart below, select basic model and ratio based on application HP, service factor and output torque requirements (Please note color-coding for quick selection by motor HP). OR, if interchanging from competitor worm drive, use the interchange chart on back of this brochure to select the basic model.

### Selection Procedure

## Basic Model Quick Selection By Motor HP

(1.0 Service Factor @ 1750 RPM Input)

| Nom. Ratio | 1/2 | 3/4 | 1  | 1-1/2 | 2  | 3  | 5  | 7-1/2 | 10 | 15 | 20 |
|------------|-----|-----|----|-------|----|----|----|-------|----|----|----|
| 7/1        | 35  | 35  | 35 | 35    | 35 | 35 | 45 | 45    | 55 |    |    |
| 10/1       | 35  | 35  | 35 | 35    | 35 | 45 | 45 | 55    | 55 | 75 | 75 |
| 15/1       | 35  | 35  | 35 | 35    | 35 | 45 | 45 | 55    | 75 | 75 |    |
| 20/1       | 35  | 35  | 35 | 35    | 45 | 45 | 55 | 75    | 75 |    |    |
| 30/1       | 35  | 35  | 35 | 45    | 45 | 55 | 75 | 75    |    |    |    |
| 40/1       | 35  | 35  | 45 | 45    | 45 | 55 | 75 |       |    |    |    |
| 50/1       | 35  | 45  | 45 | 45    | 55 | 75 |    |       |    |    |    |
| 60/1       | 35  | 45  | 45 | 55    | 55 | 75 |    |       |    |    |    |

Consult factory for high efficiency right angle drives suited for these power ratings.



Try the new HERA® Selector app for Android and iPhone.

# HERA®

## Gear Drive

## POWER & TORQUE RATINGS (@ 1.0 Service Factor)

|            |           |          | HERA35      |          |                          | HERA45      |          |                          | HERA55      |          |                          | HERA75      |          |                          |
|------------|-----------|----------|-------------|----------|--------------------------|-------------|----------|--------------------------|-------------|----------|--------------------------|-------------|----------|--------------------------|
| Nom. Ratio | INPUT RPM | Eff. (%) | Exact Ratio | Input HP | Output Torque (in. lbs.) | Exact Ratio | Input HP | Output Torque (in. lbs.) | Exact Ratio | Input HP | Output Torque (in. lbs.) | Exact Ratio | Input HP | Output Torque (in. lbs.) |
| 7/1        | 2500      | 90       | 8.02        | 2.0      | 364                      | 7.80        | 8.5      | 1504                     | 7.94        | 13.0     | 2342                     | —           | —        | —                        |
| 10/1       | 2500      | 90       | 11.42       | 2.0      | 518                      | 11.36       | 7.5      | 1933                     | 10.77       | 13.0     | 3177                     | 9.58        | 18.0     | 3912                     |
| 15/1       | 2500      | 90       | 15.60       | 2.0      | 708                      | 15.60       | 7.0      | 2478                     | 15.05       | 9.5      | 3244                     | 15.05       | 15.0     | 5122                     |
| 20/1       | 2500      | 90       | 19.93       | 2.0      | 905                      | 19.50       | 5.9      | 2600                     | 21.15       | 8.0      | 3839                     | 21.15       | 13.0     | 6238                     |
| 30/1       | 2500      | 90       | 29.10       | 1.7      | 1100                     | 28.01       | 4.1      | 2600                     | 30.14       | 6.6      | 4500                     | 30.14       | 12.4     | 8500                     |
| 40/1       | 2500      | 90       | 43.53       | 1.1      | 1100                     | 39.98       | 2.9      | 2600                     | 43.97       | 4.5      | 4500                     | 37.33       | 10.0     | 8500                     |
| 50/1       | 2500      | 90       | 52.50       | 0.9      | 1100                     | 52.50       | 2.2      | 2600                     | 53.03       | 3.7      | 4500                     | 53.03       | 7.1      | 8500                     |
| 60/1       | 2500      | 90       | 58.33       | 0.8      | 1100                     | 59.79       | 1.9      | 2600                     | 58.92       | 3.4      | 4500                     | 58.92       | 6.4      | 8500                     |
| 7/1        | 1750      | 90       | 8.02        | 4.2      | 1100                     | 7.80        | 8.5      | 2149                     | 7.94        | 13.0     | 3346                     | —           | —        | —                        |
| 10/1       | 1750      | 90       | 11.42       | 3.0      | 1100                     | 11.36       | 7.1      | 2600                     | 10.77       | 13.0     | 4500                     | 9.58        | 27.4     | 8500                     |
| 15/1       | 1750      | 90       | 15.60       | 2.2      | 1100                     | 15.60       | 5.1      | 2600                     | 15.05       | 9.2      | 4500                     | 15.05       | 17.4     | 8500                     |
| 20/1       | 1750      | 90       | 19.93       | 1.7      | 1100                     | 19.50       | 4.1      | 2600                     | 21.15       | 6.6      | 4500                     | 21.15       | 12.4     | 8500                     |
| 30/1       | 1750      | 90       | 29.10       | 1.2      | 1100                     | 28.01       | 2.9      | 2600                     | 30.14       | 4.6      | 4500                     | 30.14       | 8.7      | 8500                     |
| 40/1       | 1750      | 90       | 43.53       | 0.8      | 1100                     | 39.98       | 2.0      | 2600                     | 43.97       | 3.2      | 4500                     | 37.33       | 7.0      | 8500                     |
| 50/1       | 1750      | 90       | 52.50       | 0.7      | 1100                     | 52.50       | 1.5      | 2600                     | 53.03       | 2.6      | 4500                     | 53.03       | 5.0      | 8500                     |
| 60/1       | 1750      | 90       | 58.33       | 0.6      | 1100                     | 59.79       | 1.3      | 2600                     | 58.92       | 2.4      | 4500                     | 58.92       | 4.5      | 8500                     |
| 7/1        | 1150      | 90       | 8.02        | 2.8      | 1100                     | 7.80        | 6.8      | 2600                     | 7.94        | 11.5     | 4500                     | —           | —        | —                        |
| 10/1       | 1150      | 90       | 11.42       | 2.0      | 1100                     | 11.36       | 4.6      | 2600                     | 10.77       | 8.5      | 4500                     | 9.58        | 18.0     | 8500                     |
| 15/1       | 1150      | 90       | 15.60       | 1.4      | 1100                     | 15.60       | 3.4      | 2600                     | 15.05       | 6.1      | 4500                     | 15.05       | 11.5     | 8500                     |
| 20/1       | 1150      | 90       | 19.93       | 1.1      | 1100                     | 19.50       | 2.70     | 2600                     | 21.15       | 4.3      | 4500                     | 21.15       | 8.2      | 8500                     |
| 30/1       | 1150      | 90       | 29.10       | 0.8      | 1100                     | 28.01       | 1.9      | 2600                     | 30.14       | 3.0      | 4500                     | 30.14       | 5.7      | 8500                     |
| 40/1       | 1150      | 90       | 43.53       | 0.5      | 1100                     | 39.98       | 1.3      | 2600                     | 43.97       | 2.1      | 4500                     | 37.33       | 4.6      | 8500                     |
| 50/1       | 1150      | 90       | 52.50       | 0.4      | 1100                     | 52.50       | 1.0      | 2600                     | 53.03       | 1.7      | 4500                     | 53.03       | 3.3      | 8500                     |
| 60/1       | 1150      | 90       | 58.33       | 0.4      | 1100                     | 59.79       | 0.9      | 2600                     | 58.92       | 1.6      | 4500                     | 58.92       | 2.9      | 8500                     |
| 7/1        | 850       | 90       | 8.02        | 2.1      | 1100                     | 7.80        | 5.0      | 2600                     | 7.94        | 8.5      | 4500                     | —           | —        | —                        |
| 10/1       | 850       | 90       | 11.42       | 1.4      | 1100                     | 11.36       | 3.4      | 2600                     | 10.77       | 6.3      | 4500                     | 9.58        | 13.3     | 8500                     |
| 15/1       | 850       | 90       | 15.60       | 1.1      | 1100                     | 15.60       | 2.5      | 2600                     | 15.05       | 4.5      | 4500                     | 15.05       | 8.5      | 8500                     |
| 20/1       | 850       | 90       | 19.93       | 0.8      | 1100                     | 19.50       | 2.0      | 2600                     | 21.15       | 3.2      | 4500                     | 21.15       | 6.0      | 8500                     |
| 30/1       | 850       | 90       | 29.10       | 0.6      | 1100                     | 28.01       | 1.4      | 2600                     | 30.14       | 2.2      | 4500                     | 30.14       | 4.2      | 8500                     |
| 40/1       | 850       | 90       | 43.53       | 0.4      | 1100                     | 39.98       | 1.0      | 2600                     | 43.97       | 1.5      | 4500                     | 37.33       | 3.4      | 8500                     |
| 50/1       | 850       | 90       | 52.50       | 0.3      | 1100                     | 52.50       | 0.7      | 2600                     | 53.03       | 1.3      | 4500                     | 53.03       | 2.4      | 8500                     |
| 60/1       | 850       | 90       | 58.33       | 0.3      | 1100                     | 59.79       | 0.7      | 2600                     | 58.92       | 1.1      | 4500                     | 58.92       | 2.2      | 8500                     |
| 7/1        | 100       | 90       | 8.02        | 0.2      | 1100                     | 7.80        | 0.6      | 2600                     | 7.94        | 1.0      | 4500                     | —           | —        | —                        |
| 10/1       | 100       | 90       | 11.42       | 0.2      | 1100                     | 11.36       | 0.4      | 2600                     | 10.77       | 0.7      | 4500                     | 9.58        | 1.6      | 8500                     |
| 15/1       | 100       | 90       | 15.60       | 0.1      | 1100                     | 15.60       | 0.3      | 2600                     | 15.05       | 0.5      | 4500                     | 15.05       | 1.0      | 8500                     |
| 20/1       | 100       | 90       | 19.93       | 0.1      | 1100                     | 19.50       | 0.2      | 2600                     | 21.15       | 0.4      | 4500                     | 21.15       | 0.7      | 8500                     |
| 30/1       | 100       | 90       | 29.10       | 0.07     | 1100                     | 28.01       | 0.2      | 2600                     | 30.14       | 0.3      | 4500                     | 30.14       | 0.5      | 8500                     |
| 40/1       | 100       | 90       | 43.53       | 0.04     | 1100                     | 39.98       | 0.1      | 2600                     | 43.97       | 0.2      | 4500                     | 37.33       | 0.4      | 8500                     |
| 50/1       | 100       | 90       | 52.50       | 0.04     | 1100                     | 52.50       | 0.09     | 2600                     | 53.03       | 0.2      | 4500                     | 53.03       | 0.3      | 8500                     |
| 60/1       | 100       | 90       | 58.33       | 0.03     | 1100                     | 59.79       | 0.08     | 2600                     | 58.92       | 0.1      | 4500                     | 58.92       | 0.3      | 8500                     |

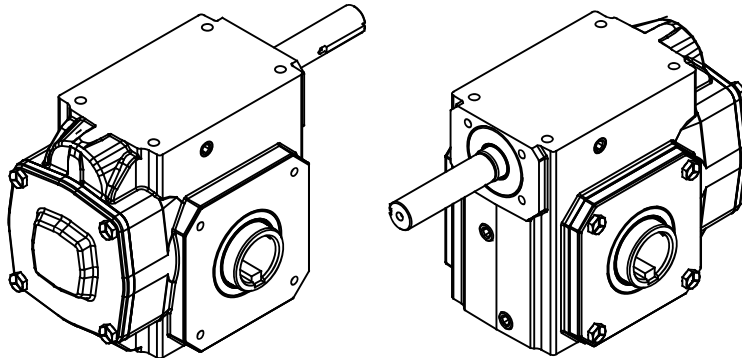
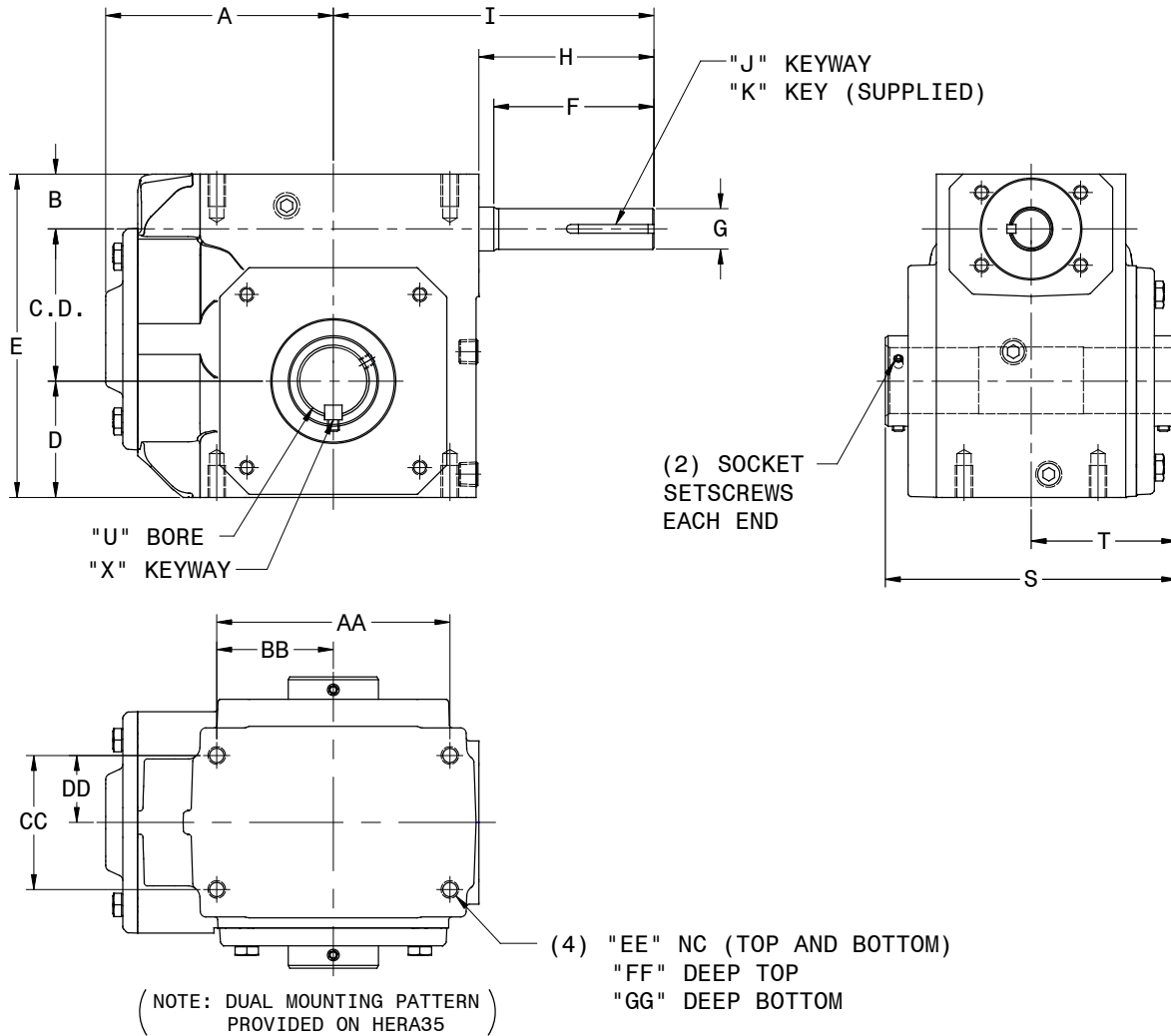
Additional ratios from 70/1 to 420/1 are available by adding a Helical Ratio Multiplier to HERA gear drive. See page H-20.

Additional ratios from 86/1 to as high as 3,487/1 are available by ordering a DOUBLE HERA gear drive. See page H-18.

# Hub City™ HERA® High-Efficiency Right Angle Gear Drives

## Shaft Input

**Models: HERA35AS, HERA45AS,  
HERA55AS, HERA75AS**



FOR LUBRICATION AND INSTALLATION INSTRUCTIONS REFER TO SECTION M.

THESE UNITS CAN BE FURNISHED WITH SOLID OUTPUT SHAFT ON SPECIAL ORDERS.

SHAFT MOUNTED UNITS REQUIRE TORQUE ARMS. TORQUE ARM KITS ARE AVAILABLE. SEE PAGE H-17.

DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. DOWNLOAD AVAILABLE CAD MODELS AT: [WWW.HUBCITYINC.COM](http://WWW.HUBCITYINC.COM)

CONSULT FACTORY FOR VERTICAL SHAFT LUBRICATION RECOMMENDATIONS.

INPUT SHAFT CAN BE ROTATED IN EITHER DIRECTION.

# Hub City™ HERA® High-Efficiency Right Angle Gear Drives

**Models: HERA35AS, HERA45AS,  
HERA55AS, HERA75AS**

## Shaft Input

| MODEL    | C.D.  | A    | B     | D     | E      | AA    | BB    | CC    | DD    | EE       | FF   | GG   |
|----------|-------|------|-------|-------|--------|-------|-------|-------|-------|----------|------|------|
| HERA35AS | 2.509 | 4.25 | 1.178 | 2.062 | 5.750  | 4.188 | 2.094 | 2.750 | 1.375 | 5/16 UNC | 0.63 | 0.63 |
|          |       |      |       |       |        | 5.000 | 2.500 | 2.875 | 1.438 | 3/8 UNC  | 0.69 | 0.69 |
| HERA45AS | 3.263 | 4.88 | 1.175 | 2.500 | 6.938  | 5.000 | 2.500 | 2.875 | 1.438 | 3/8 UNC  | 0.69 | 0.69 |
| HERA55AS | 3.675 | 6.15 | 2.200 | 3.500 | 9.375  | 7.500 | 3.750 | 4.000 | 2.000 | 7/16 UNC | 0.88 | 0.88 |
| HERA75AS | 4.287 | 8.36 | 2.650 | 4.438 | 11.375 | 8.500 | 4.250 | 5.000 | 2.500 | 5/8 UNC  | 1.00 | 1.00 |

| MODEL    | SIZE REF. | F    | G             | H           | I     | J           | K               | Wt. Lbs. |
|----------|-----------|------|---------------|-------------|-------|-------------|-----------------|----------|
| HERA35AS | 18        | 1.56 | .6245/.6235   | 1.94        | 4.88  | 3/16 X 3/32 | 3/16 SQ X 1-1/4 | 28       |
|          | 21        | 1.81 |               | 2.19        | 5.13  |             | 3/16 SQ X 1-1/2 |          |
|          | 24        | 2.00 |               | .7495/.7485 | 2.38  |             | 5.31            |          |
| HERA45AS | 24        | 2.00 | .7495/.7485   | 2.38        | 5.50  | 3/16 X 3/32 | 3/16 SQ X 1-1/2 | 38       |
|          | 26        | 2.81 |               | 3.19        | 6.31  |             |                 |          |
|          | 30        | 3.44 | .8745/.8735   | 3.76        | 6.88  |             |                 |          |
|          | 32        | 4.00 |               | 4.32        | 7.44  |             |                 |          |
| HERA55AS | 32        | 2.07 | .8745/.8735   | 2.38        | 6.75  | 3/16 X 3/32 | 3/16 SQ X 1-1/2 | 74       |
|          | 38        | 3.70 | .9995/.9985   | 4.01        | 8.38  | 1/4 X 1/8   | 1/4 SQ X 2-1/4  |          |
|          | 42        | 4.88 | 1.2495/1.2485 | 5.19        | 9.56  |             |                 |          |
| HERA75AS | 32        | 2.07 | 1.2495/1.2485 | 2.38        | 7.63  | 3/16 X 3/32 | 3/16 SQ X 1-1/2 | 161      |
|          | 42        | 4.00 |               | 4.31        | 9.56  | 1/4 X 1/8   | 1/4 SQ X 2-1/4  |          |
|          | 52        | 5.00 |               | 5.44        | 10.69 |             | 1/4 SQ X 3      |          |

## Stock Bores

| MODEL    | S    | T    | U       | X           | Key Furnished |
|----------|------|------|---------|-------------|---------------|
| HERA35AS | 5.50 | 2.75 | 3/4     | 3/16 X 3/32 | 3/16 Sq.      |
|          |      |      | 7/8     | 3/16 X 3/32 | 3/16 Sq.      |
|          |      |      | 1       | 1/4 X 1/8   | 1/4 Sq.       |
|          |      |      | 1-1/8   | 1/4 X 1/8   | 1/4 Sq.       |
|          |      |      | 1-3/16  | 1/4 X 1/8   | 1/4 Sq.       |
|          |      |      | 1-1/4   | 1/4 X 1/8   | 1/4 Sq.       |
|          |      |      | 1-7/16  | 3/8 X 1/8   | 3/8 X 5/16    |
| HERA45AS | 6.25 | 3.13 | 1       | 1/4 X 1/8   | 1/4 Sq.       |
|          |      |      | 1-1/8   | 1/4 X 1/8   | 1/4 Sq.       |
|          |      |      | 1-3/16  | 1/4 X 1/8   | 1/4 Sq.       |
|          |      |      | 1-1/4   | 1/4 X 1/8   | 1/4 Sq.       |
|          |      |      | 1-7/16  | 3/8 X 1/8   | 3/8 X 5/16    |
|          |      |      | 1-1/2   | 3/8 X 1/8   | 3/8 X 5/16    |
| HERA55AS | 7.50 | 3.75 | 1-3/16  | 1/4 X 1/8   | 1/4 Sq.       |
|          |      |      | 1-1/4   | 1/4 X 1/8   | 1/4 Sq.       |
|          |      |      | 1-7/16  | 3/8 X 3/16  | 3/8 Sq.       |
|          |      |      | 1-1/2   | 3/8 X 3/16  | 3/8 Sq.       |
|          |      |      | 1-5/8   | 3/8 X 3/16  | 3/8 Sq.       |
|          |      |      | 1-11/16 | 3/8 X 3/16  | 3/8 Sq.       |
|          |      |      | 1-3/4   | 3/8 X 3/16  | 3/8 Sq.       |
|          |      |      | 1-7/8   | 1/2 X 1/4   | 1/2 Sq.       |
|          |      |      | 1-15/16 | 1/2 X 3/16  | 1/2 X 7/16    |
|          |      |      | 2       | 1/2 X 3/16  | 1/2 X 7/16    |
|          |      |      | 2-3/16  | 1/2 X 1/8   | 1/2 X 3/8     |
| HERA75AS | 9.50 | 4.75 | 1-7/16  | 3/8 X 3/16  | 3/8 Sq.       |
|          |      |      | 1-1/2   | 3/8 X 3/16  | 3/8 Sq.       |
|          |      |      | 1-15/16 | 1/2 X 1/4   | 1/2 Sq.       |
|          |      |      | 2       | 1/2 X 1/4   | 1/2 Sq.       |
|          |      |      | 2-3/16  | 1/2 X 1/4   | 1/2 Sq.       |
|          |      |      | 2-7/16  | 5/8 X 5/16  | 5/8 Sq.       |
|          |      |      | 3       | 3/4 X 3/8   | 3/4 Sq.       |
|          |      |      | 3-7/16  | 7/8 X 1/4   | 7/8 X 11/16   |

Bore tolerance nominal + .0025

Torque Arm Kits Required for Shaft Mounted applications – See Page H-17