

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

## Selection Procedure

## 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.



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

## 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.

## HERA® Gear Drive POWER & TORQUE RATINGS (@ 1.0 Service Factor)

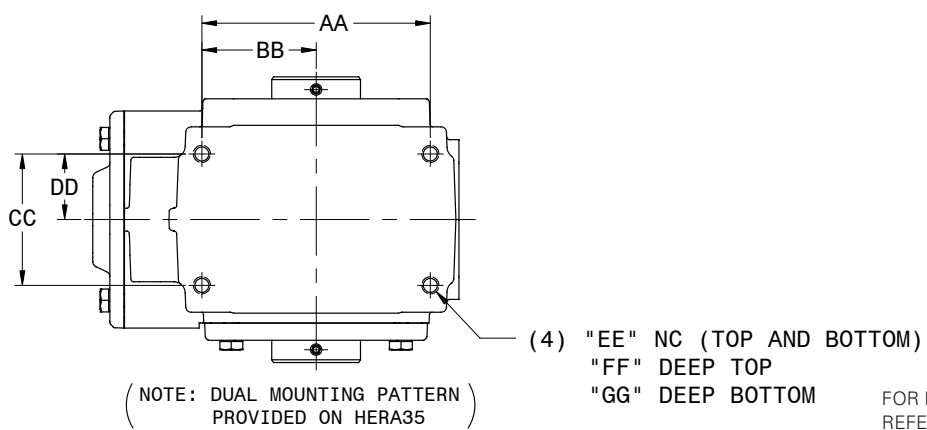
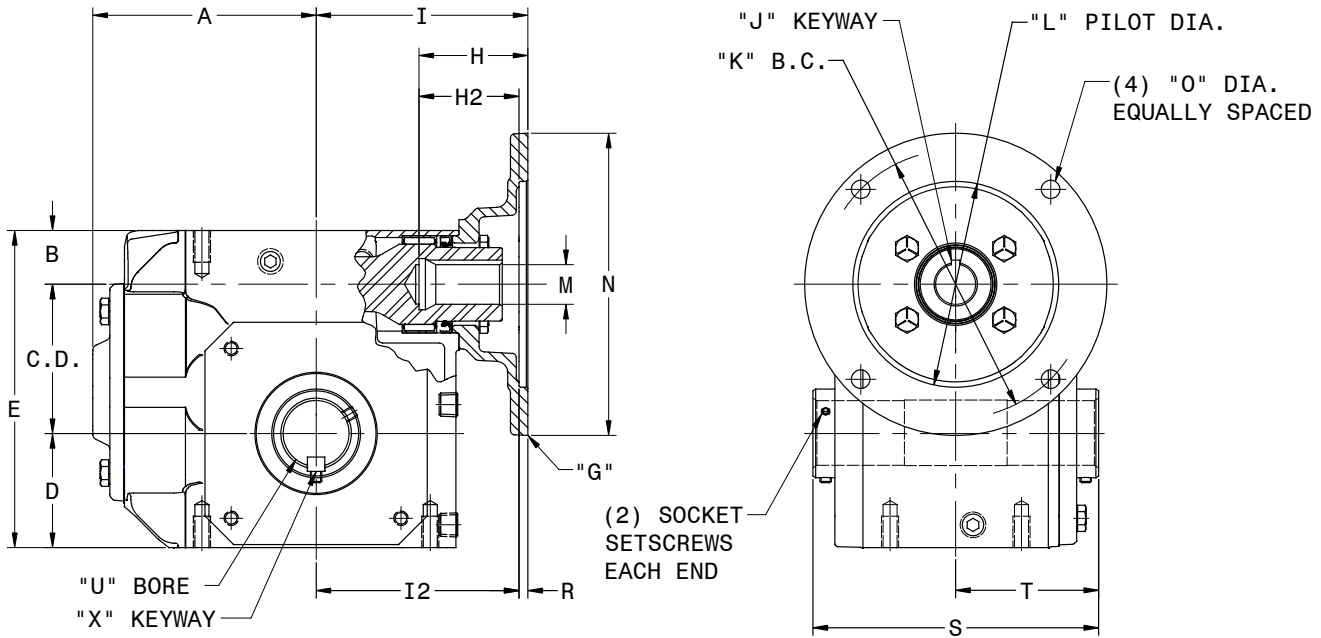
Nom. Ratio	INPUT RPM	Eff. (%)	HERA35			HERA45			HERA55			HERA75		
			Exact Ratio	Input HP	Output Torque (in. lbs.)	Exact Ratio	Input HP	Output Torque (in. lbs.)	Exact Ratio	Input HP	Output Torque (in. lbs.)	Exact Ratio	Input HP	Output Torque (in. lbs.)
7/1	2500	90	8.02	2.0	364	7.80	8.5	1504	7.94	13.0	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

## Quill Input

Models: HERA35ES, HERA45ES,  
HERA55ES, HERA75ES



FOR LUBRICATION AND INSTALLATION INSTRUCTIONS REFER TO SECTION M.

SPECIAL, METRIC AND SAE HYDRAULIC INPUT FLANGES AVAILABLE. CONSULT FACTORY FOR COMPLETE SPECIFICATIONS.

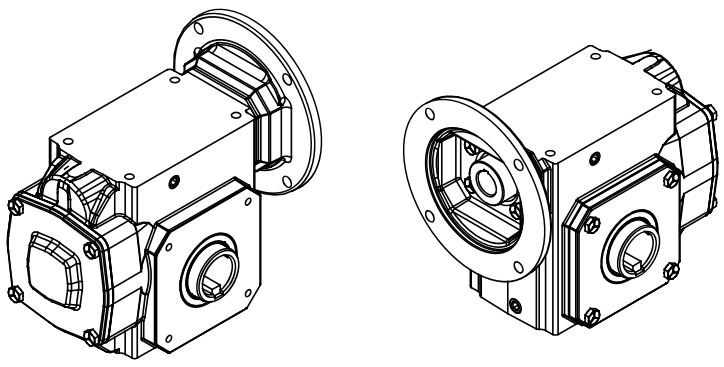
THESE UNITS CAN BE FURNISHED WITH SOLID OUTPUT SHAFT ON SPECIAL ORDERS.

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: HERA35ES, HERA45ES,  
HERA55ES, HERA75ES

## Quill Input

MODEL	C.D.	A	B	D	E	AA	BB	CC	DD	EE	FF	GG
HERA35ES	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
HERA45ES	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
HERA55ES	3.675	6.15	2.200	3.500	9.375	7500	3.750	4.000	2.000	7/16 UNC	0.88	0.88
HERA75ES	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	G	H	H2	I	I2	J	K	L	M	N	O	R	Wt. Lbs.
HERA35ES	56C	2.27	N/A	4.44	N/A	3/16 X 3/32	5.875	4.501/4.503	0.625	6.61	13/32	0.188	30
	143TC	2.38							0.875				
HERA45ES	56C	2.27	N/A	4.63	N/A	3/16 X 3/32	5.875	4.501/4.503	0.625	6.61	13/32	0.188	42
	143TC	2.38							0.875				
	182TC	N/A	2.89	N/A	5.06	1/4 X 1/8	7.250	8.501/8.503	1.125	9.00	17/32	0.188	48
HERA55ES	56C	2.27	N/A	5.57	N/A	3/16 X 3/32	5.875	4.501/4.503	0.625	6.63	13/32	0.188	81
	143TC	2.38							0.875				
	182TC	N/A	2.89	N/A	6.33	1/4 X 1/8	7.250	8.501/8.503	1.125	9.00	17/32	0.188	88
	213TC		3.63			5/16 X 5/32			1.375				
	256TC		3.88			3/8 X 3/16			1.625				
HERA75ES	56C	2.27	N/A	6.45	N/A	3/16 X 3/32	5.875	4.501/4.503	0.625	6.63	13/32	0.188	164
	143TC	2.38							0.875				
	182TC	N/A	2.89	N/A	7.21	1/4 X 1/8	7.250	8.501/8.503	1.125	9.00	17/32	0.188	171
	213TC		3.63			5/16 X 5/32			1.375				
	256TC		3.88			3/8 X 3/16			1.625				

## Stock Bores

MODEL	S	T	U	X	Key Furnished
HERA35ES	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
HERA45ES	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
HERA55ES	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

MODEL	S	T	U	X	Key Furnished
HERA75ES	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