

# Hub City™ Worm Gear Drives

## Single Reduction

### PowerCubeX® Worm Speed Reducer Catalog Ratings

#### Series W420

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
W420	2500	5	500	22.02	88.3	2452	12.21	1360	22.02	93.6	2599	22.02	96.5	2679
		7.5	333	17.22	87.6	2851	11.33	1876	17.22	92.8	3022	17.22	95.7	3116
		10	250	16.10	87.0	3529	10.90	2389	16.10	92.2	3741	16.10	95.0	3857
		15	167	12.65	85.1	4068	7.90	2540	12.65	90.2	4312	12.65	93.0	4446
		20	125	10.73	83.6	4522	6.55	2759	10.73	88.6	4793	10.73	91.3	4942
		25	100	9.08	82.2	4704	4.85	2514	9.08	87.1	4987	9.08	89.8	5141
		30	83.3	7.92	79.9	4786	4.42	2672	7.92	84.7	5073	7.92	87.3	5230
		40	62.5	6.31	77.2	4914	3.74	2913	6.31	81.8	5210	6.31	84.3	5371
		50	50.0	5.06	74.9	4771	2.34	2209	5.06	79.4	5057	5.06	81.8	5214
		60	41.7	4.11	72.7	4523	2.89	3183	4.11	77.0	4795	4.11	79.4	4943
	80	31.3	2.65	69.5	3723	2.27	3183	2.65	73.7	3947	2.65	76.0	4069	
	100	25.0	1.75	66.2	2923	1.51	2517	1.75	70.2	3099	1.75	72.3	3194	
	1750	5	350	19.01	87.8	3005	11.99	1895	19.01	93.1	3186	19.01	95.9	3285
		7.5	233	15.00	86.9	3495	11.11	2608	15.00	92.1	3705	15.00	95.0	3819
		10	175	13.94	86.2	4326	11.00	3332	13.94	91.4	4586	13.94	94.2	4728
		15	117	10.99	84.0	4987	7.65	3469	10.99	89.0	5286	10.99	91.8	5450
		20	87.5	9.36	82.2	5543	6.36	3765	9.36	87.2	5876	9.36	89.9	6058
		25	70.0	7.94	80.7	5767	4.74	3443	7.94	85.5	6113	7.94	88.2	6302
		30	58.3	6.96	78.0	5866	4.26	3588	6.96	82.7	6219	6.96	85.3	6411
		40	43.8	5.58	75.0	6024	3.61	3895	5.58	79.5	6387	5.58	82.0	6584
		50	35.0	4.49	72.4	5848	2.26	2937	4.49	76.8	6200	4.49	79.1	6391
		60	29.2	3.55	70.0	5371	2.78	4211	3.55	74.2	5694	3.55	76.5	5870
	80	21.9	2.35	66.5	4500	1.98	3792	2.35	70.5	4771	2.35	72.7	4918	
	100	17.5	1.56	62.9	3546	1.34	3050	1.56	66.7	3759	1.56	68.8	3875	
	1170	5	234	15.76	87.0	3694	10.07	2360	15.76	92.3	3917	15.76	95.1	4038
		7.5	156	12.42	86.0	4313	9.33	3240	12.42	91.1	4573	12.42	94.0	4714
		10	117	11.79	85.1	5405	9.02	4135	11.79	90.2	5730	11.79	93.0	5907
		15	78.0	9.34	82.5	6229	6.71	4475	9.34	87.5	6603	9.34	90.2	6808
		20	58.5	7.99	80.5	6929	5.74	4980	7.99	85.3	7346	7.99	88.0	7573
		25	46.8	6.79	78.7	7199	4.48	4747	6.79	83.4	7632	6.79	86.0	7868
		30	39.0	6.00	75.7	7332	4.02	4906	6.00	80.2	7773	6.00	82.7	8014
		40	29.3	5.00	72.2	7530	3.42	5322	5.00	76.6	7983	5.00	78.9	8229
		50	23.4	3.91	69.3	7298	2.34	4374	3.91	73.5	7736	3.91	75.8	7976
		60	19.5	3.21	66.6	6904	2.81	6032	3.21	70.7	7319	3.21	72.8	7546
	80	14.6	2.07	62.9	5618	1.78	4837	2.07	66.7	5955	2.07	68.8	6140	
	100	11.7	1.38	59.1	4384	1.19	3774	1.38	62.6	4648	1.38	64.5	4792	
	100	5	20.0	2.80	81.0	7146	THERMAL EQUALS MECHANICAL	2.80	85.8	7575	2.80	88.5	7810	
		7.5	13.3	2.20	78.7	8185		2.20	83.5	8677	2.20	86.1	8946	
		10	10.0	1.91	77.5	9344		1.91	82.1	9906	1.91	84.6	10212	
		15	6.7	1.58	72.4	10800		1.58	76.8	11449	1.58	79.1	11803	
		20	5.0	1.34	69.0	11608		1.34	73.1	12306	1.34	75.4	12687	
		25	4.0	1.12	66.1	11716		1.12	70.1	12420	1.12	72.3	12804	
30		3.3	1.09	60.8	12545	1.09		64.4	13299	1.09	66.4	13710		
40		2.5	0.89	56.0	12512	0.89		59.3	13264	0.89	61.2	13674		
50		2.0	0.72	52.3	11808	0.72		55.4	12518	0.72	57.1	12905		
60		1.7	0.59	49.0	10972	0.59		52.0	11632	0.59	53.6	11992		
80		1.3	2.00	45.3	8458	0.37		48.0	8967	0.37	49.5	9244		
100		1.0	0.25	41.2	6487	0.25		43.6	6877	0.25	45.0	7090		

Worm Gear Drives



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

#### OVERHUNG LOAD AND THRUST LOAD INFORMATION

OVERHUNG LOAD - LOW SPEED SHAFT — MODELS 421 AND 424 1,400 LBS. AT CENTER POINT OF SHAFT EXTENSION. MODELS 422 AND 425 NOT APPLICABLE. THRUST± UP OR DOWN 1,450 LBS.

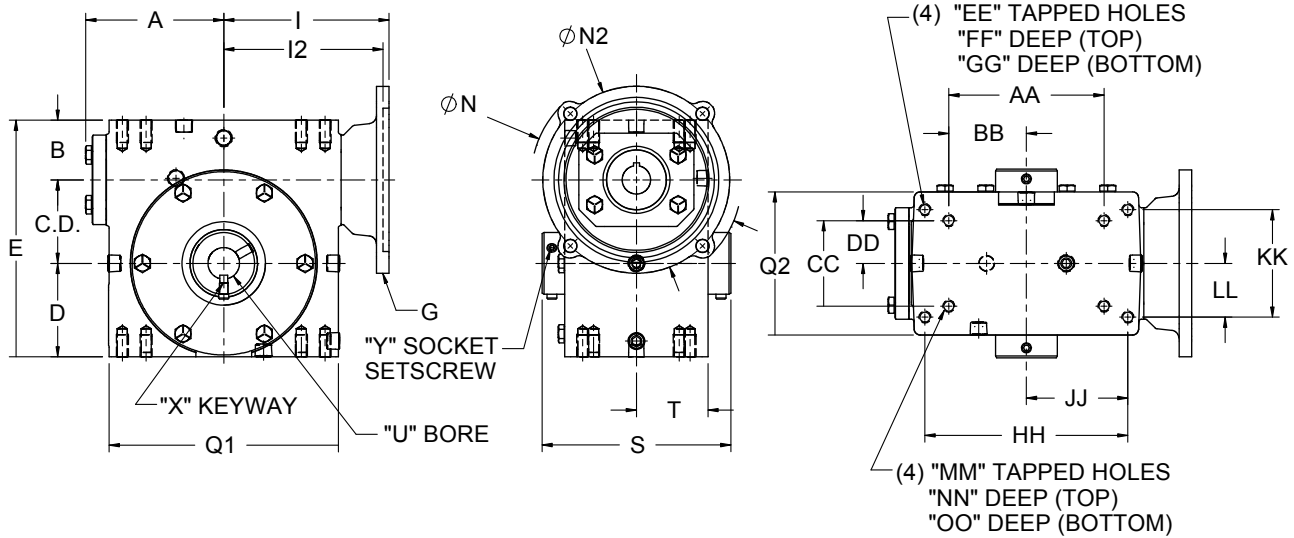
\*OHL AND THRUST VALUES SHOWN ARE INDEPENDENT FUNCTIONS AND CANNOT BE APPLIED SIMULTANEOUSLY. REFER APPLICATIONS WITH COMBINED OHL AND THRUST TO REGAL CUSTOMER SERVICE DEPARTMENT.

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

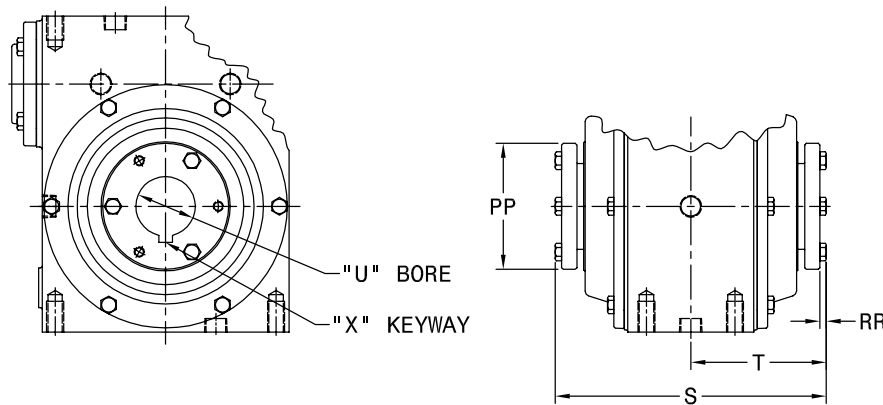
# Hub City™ Worm Gear Drives

## Single Reduction Models

135, 155, 185, 215, 245, 265, 305, 325, 385, 425, 455, 525, GW605



### QD™ Bushing Detail for Models 455 & 525



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.

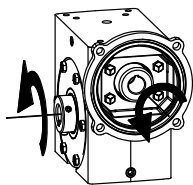
SHAFT MOUNTED UNITS REQUIRE TORQUE ARMS. TORQUE ARM KITS ARE AVAILABLE. SEE PAGE B-105.

ALL GW MODELS ARE FAN COOLED REFER TO FAN DETAILS ON NEXT PAGE.

FOR LUBRICATION AND INSTALLATION INSTRUCTIONS - REFER TO SECTION M

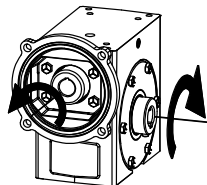
DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.  
 DOWNLOAD AVAILABLE CAD MODELS AT: [WWW.HUBCITYINC.COM](http://WWW.HUBCITYINC.COM)

### Standard Styles Available



STYLE "A"

NOTE: STYLE "A" SUPPLIED AS STANDARD UNLESS SPECIFIED OTHERWISE.



STYLE "B"

NOTE: STYLE B DOES NOT APPLY TO MODELS 455 AND LARGER. HOUSINGS HAVE A COVER ON BOTH SIDES OF OUTPUT.

CONSULT FACTORY FOR VERTICAL SHAFT LUBRICATION RECOMMENDATIONS.

INPUT SHAFT CAN BE ROTATED IN EITHER DIRECTION.



Select hollow output bore models in this product line are now available with the HubLoc® keyless bushing system. Refer to pages i and ii at front of this catalog for features, available sizes, and ordering information.

# Hub City™ Worm Gear Drives

## Single Reduction Models

135, 155, 185, 215, 245, 265, 305, 325, 385, 425, 455, 525, GW605

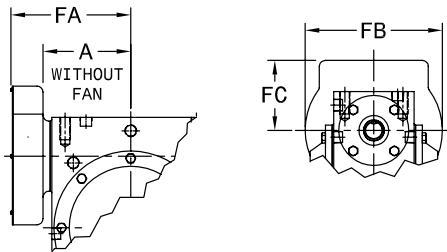
MODEL	C.D.	A	B	D	E	Q1	Q2
135	1.334	2.61	1.186	1.562	4.082	4.12	3.12
155	1.541	3.14	1.928	1.906	5.375	4.88	3.44
185	1.751	3.23	1.374	1.875	5.000	5.16	3.44
215	2.064	3.61	1.500	2.437	6.000	5.88	4.12
245	2.376	3.77	2.061	2.500	6.937	6.12	4.06
265	2.626	4.33	1.874	2.938	7.438	7.20	4.50
305	3.001	4.84	2.624	3.250	8.875	8.12	5.25
325	3.251	5.28	2.124	3.250	8.625	8.62	5.20
385	3.751	4.90	2.374	3.937	10.062	9.60	5.62
425	4.251	6.10	2.686	4.438	11.375	10.25	6.13
455	4.501	5.23	2.499	4.625	11.625	9.25	4.63
525	5.168	5.98	2.624	5.375	13.167	10.75	5.06
GW605	6.000	N/A	4.000	6.500	16.500	14.25	8.13

### Stock Output Bores

MINIMUM AND MAXIMUM BORE DIMENSIONS SHOWN.  
FOR ADDITIONAL STOCK OUTPUT BORE SIZES AND  
STOCK QD™ BUSHING KITS AVAILABLE SEE PAGE B-96.

MODEL	U (MIN.)	U (MAX.)	S	T
135	N/A	5/8	4.50	2.25
155	N/A	5/8	5.42	2.71
185	15/16	1	4.81	2.41
215	15/16	1-1/2	5.56	2.78
245	1	1-1/2	6.00	3.00
265	1	1-1/2	5.93	2.97
305	1-3/16	2-3/16	7.50	3.75
325	1-7/16	2-3/16	7.56	3.78
385	1-7/16	2-3/16	7.56	3.78
425	1-7/16	2-3/16	8.50	4.25
455	QD BUSHING KIT REQUIRED		10.00	5.00
525	QD BUSHING KIT REQUIRED		11.13	5.56
GW605	2	3-7/16	11.50	5.75

### Fan Detail for Model GW605



MODEL	A	FA	FB	FC
GW605	N/A	11.13	9.50	4.00

ALL GW MODELS ARE FAN COOLED.

MODEL	AA	BB	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM	NN	OO	Wt. Lbs.
135	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	16
155	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	16
185	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	16
215	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	25
245	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	38
265	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	38
305	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	61
325	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	70
385	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	86
425	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	117
455	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	117
525	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	145
GW605	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	330

MODEL	G	I	I2	N	N2
135	48CZ	3.46	N/A	4.36	3.87
	56C			6.63	6.50
155	48CZ	3.99	N/A	4.36	3.87
	56C			6.63	6.50
	143TC				
185	48CZ	4.09	N/A	4.36	3.87
	56C			6.63	6.50
	143TC				
215	48CZ	4.46	N/A	4.36	3.87
	56C			6.63	6.50
	143TC				
245	56C	4.63	N/A	6.50	6.50
	143TC			9.00	9.00
	182TC				
265	56C	5.19	N/A	6.50	6.50
	143TC			9.00	9.00
	182TC				
305	56C	5.95	N/A	6.50	6.50
	143TC			9.00	9.00
	182TC				
	213TC				
325	56C	6.14	N/A	6.50	6.50
	143TC			9.00	9.00
	182TC				
	213TC				
385	56C	6.50	N/A	6.50	6.50
	143TC			9.00	9.00
	182TC				
425	56C	6.45	N/A	6.50	6.50
	143TC			9.00	9.00
	182TC				
	213TC				
	254TC				
455	56C	6.75	N/A	6.50	6.50
	143TC			9.00	9.00
	182TC				
	213TC				
525 *	182TC	N/A	7.50	9.00	9.00
	213TC				
GW605	56C	10.45	N/A	6.50	6.50
	143TC			9.00	9.00
	182TC				
	213TC				
	254TC				

\* 56C & 143TC FLANGES AVAILABLE AS MODIFIED STANDARDS