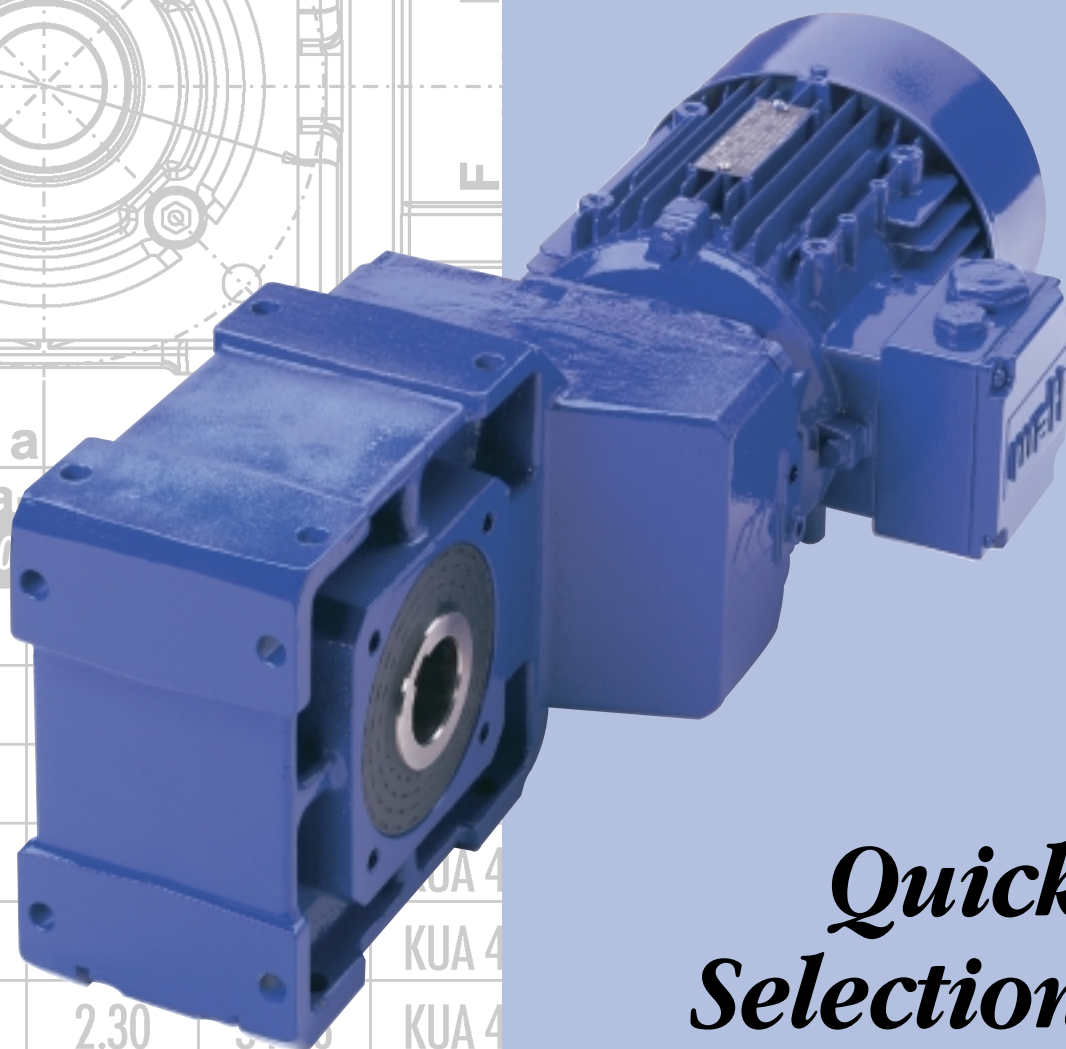


Helical Bevel

*Series K and
Series C*



*Quick
Selection
Guide*

1/4 HP nominal (0.18 kW)

93	195			
81	230			
70	266			
63	292			
52	354			
47	389	2.30	37.7	KUA 4
42	434	2.05	38.41	KUA 4
37	496	1.80	44.11	KUA 4
33	549	1.65	48.42	KUA 4

Helical Bevel Gearmotors and Speed Reducers

WATT Drive has been a global supplier of cutting edge drive technology for over 30 years. With manufacturing, assembly, warehousing, and tech center facilities throughout Europe, North America, and Asia, WATT Drive provides local personal service along with worldwide customer support.

The WATT Drive philosophy is to provide the optimal drive solution for each unique application. By combining the most appropriate reducer, motor and drive, or just individual components, the result is maximum design versatility, outstanding operating performance, and extreme reliability.

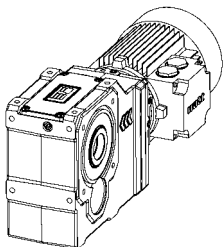
This catalog has been designed merely as a quick selection guide, highlighting the available solutions for basic applications. A wide variety of features, options, speeds, and ratios are offered by WATT Drive. Please contact DieQua Corporation, WATT Drive's manufacturing, engineering, and marketing partner in North America, for additional technical information or capabilities not found in this selection guide.

Program Benefits:

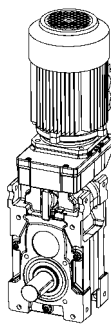
- Optimized gearing for high power density
- Multi Volts/Hz inverter duty integral motors
- NEMA, IEC, or servo motor adapters
- High efficiency and low backlash
- Multiple mounting configurations
- Inch or metric shafts and bores
- Special design options
- Complete drive packages

Designs Available

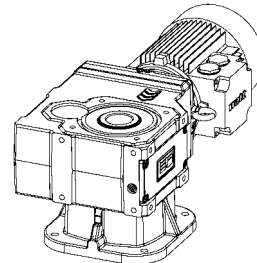
Series K



Series C



**Agitator
Drives**



Selection Guide Contents

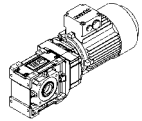
Selection Information.	pg. 4-5
Series K Gearmotor Data	pg. 6-14
Series K Speed Reducer Data	pg. 15-17
Series K Dimensions.	pg. 18-23

Series C Gearmotor Data	pg. 24-27
Series C Speed Reducer Data	pg. 28-29
Series C Dimensions.	pg. 30-33
Technical Data	pg. 34-36
Ordering Examples	pg. 37

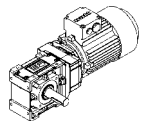
Series K Designs

The Series K is a compact, heavy duty gearbox featuring a wide range of input and output mounting configurations and shaft options. Hollow bore with keyway, shrink disc, and single and dual output shafts are available on all models. Housings machined on all sides, along with a bolt on flange option, provide maximum mounting versatility. Integral motors along with adapters for NEMA, Servo, and IEC motors, as well as an input shaft, are available as standard options.

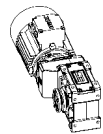
Output Options



KUA
Shaft
Mount

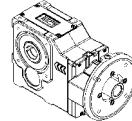


KU
Output
Shaft

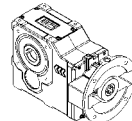


KUS
Shrink
Disc

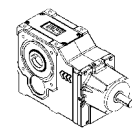
Input Options



NA
NEMA
Adapter

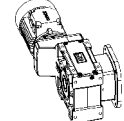


SA
Servo
Adapter

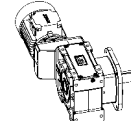


WN
Input
Shaft

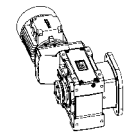
Agitator Designs



KRA
Hollow
Shaft



KR
Output
Shaft

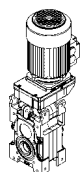


KRS
Shrink
Disc

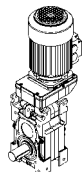
Series C Designs

The Series C is a compact, heavy duty gearbox featuring an offset input stage for ultra close mounting of the gearbox. The input stage can be rotated 90 degrees to assure the motor maintains optimal clearance. Machined housings on all sides and a variety of shaft configurations provide the ultimate in mounting versatility. Integral motors and adapters for NEMA, IEC, and Servo motors, along with an input shaft version, are available for all models.

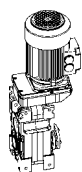
Output Options



CSA
Shaft
Mount

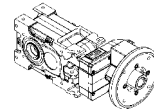


CS
Output
Shaft

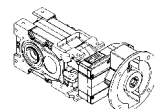


CSS
Shrink
Disc

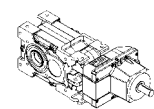
Input Options



NA
NEMA
Adapter

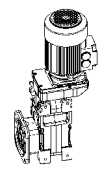


SA
Servo
Adapter

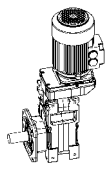


WN
Input
Shaft

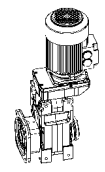
Agitator Designs



CRA
Hollow
Shaft



CR
Output
Shaft



CRS
Shrink
Disc

Selection Information

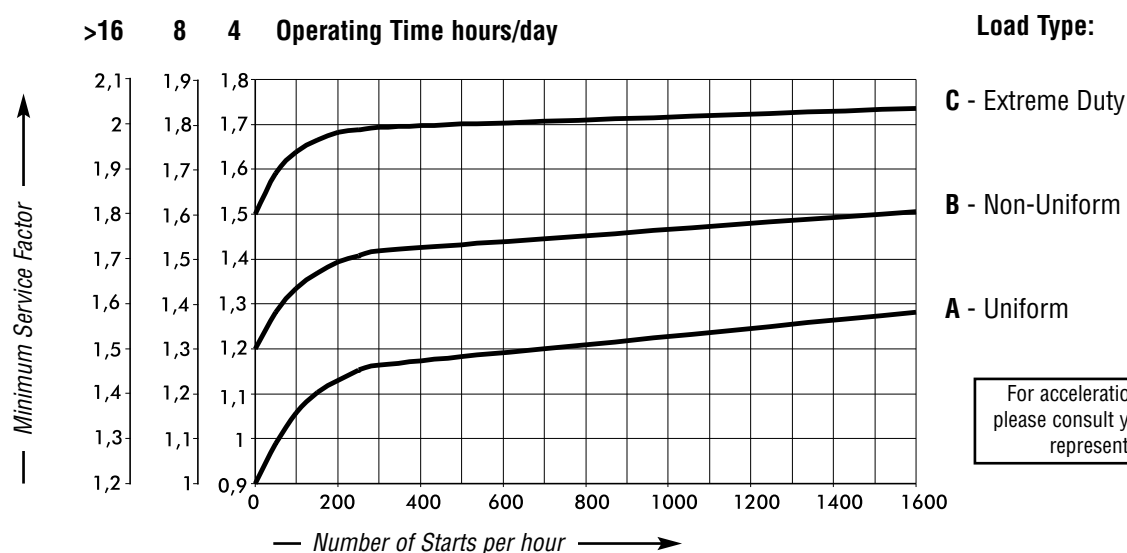
The ratings in this guide are based on 3 phase, 60 Hz, 460 Volt operation. Power and torque ratings for 230 Volt operation may be lower. For additional technical data and design options, please contact your WATT Drive/DieQua Corporation representative or request the complete MAS 2000 engineering catalog.

1. Determine horsepower or torque required:

$$\text{Horsepower} = \frac{\text{Torque (in-lbs)} \times \text{Output Speed}}{63025}$$

$$\text{Output Torque (in-lbs)} = \frac{63025 \times \text{HP} \times \text{Ratio}}{\text{Input Speed}}$$

2. Determine service factor:



3. Select the appropriate drive.

4. Determine mounting position.

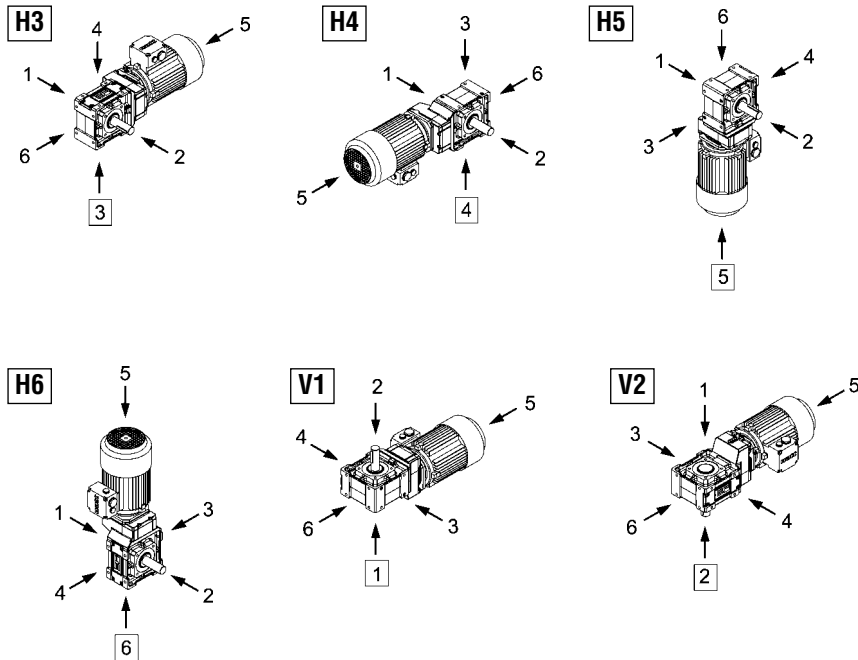
5. Determine primary gear unit position - Series C only.

6. Determine terminal box position.

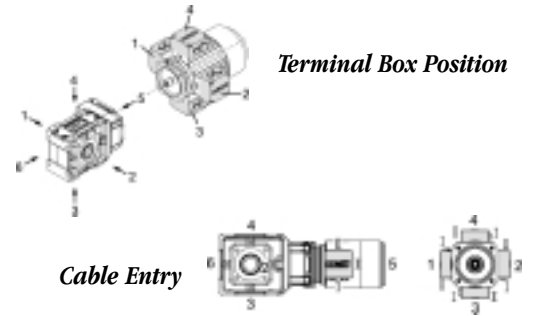
7. Determine cable entry position.

8. Determine special options required.

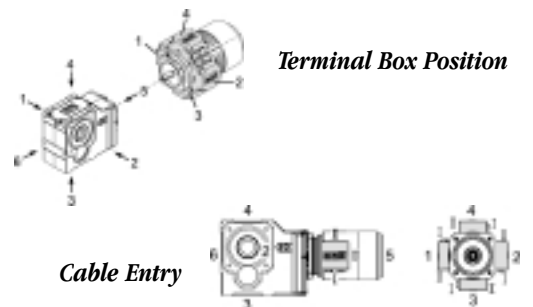
Series K Mounting Positions



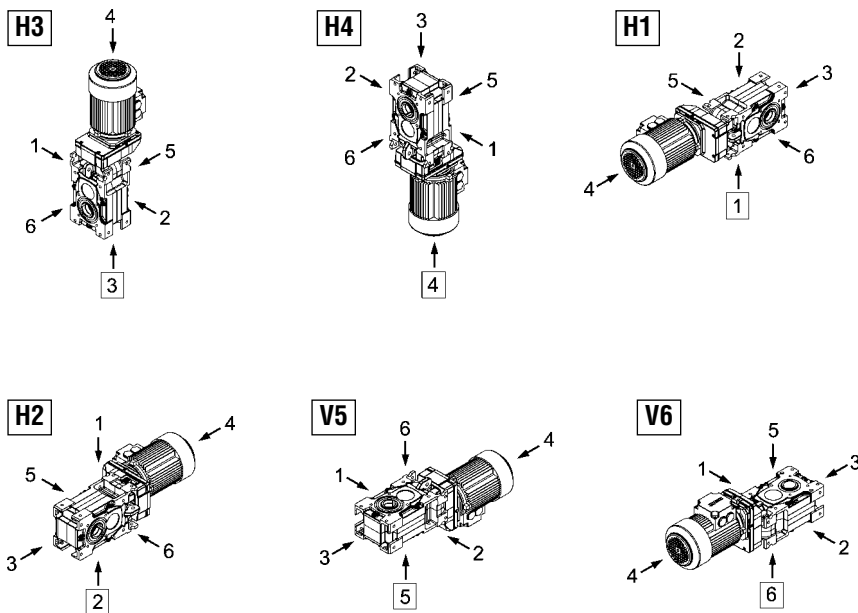
Compact housing with primary gear unit.



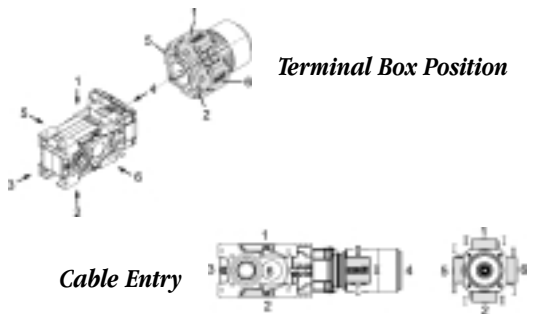
Block housing



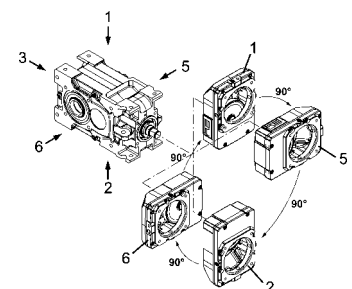
Series C Mounting Positions



Primary Gear Unit



Position of primary gear unit





WATT Drive gear motors are known the world over for offering superior performance and reliable operation in the most demanding applications. An optimized gear tooth design provides high power density, resulting in greater torque capacities in a smaller size. The inverter duty WATT Drive EUSAS motor can be connected to any Volts/Hertz combination for global usage and is available with a wide variety of options.

In the American market, the unique design of this motor generates up to 20% more power than competitive motors of similar frame sizes. Therefore, a major benefit of the WATT Drive gear motor is the

ability to generate higher torque in an overall smaller and more cost effective package.

Engineering Note:

The torque values and service factors in the selection charts have been calculated with the actual motor horsepower at 460V operation. Torque output for 1/8 to 2 HP will be lower with 230V power source. For all selections, when considering nominal horse power ratings, please note that the torque generated will be lower while the service factor will increase by up to 20%. Contact your representative with any questions regarding proper selection.

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
1/8 HP nominal (0.2 HP actual with 460V)				
70	177	5.10	23.22	KUA 40A 64K4
63	195	4.60	25.78	KUA 40A 64K4
52	239	3.80	31.34	KUA 40A 64K4
47	257	3.45	34.58	KUA 40A 64K4
42	292	3.10	38.41	KUA 40A 64K4
37	327	2.70	44.11	KUA 40A 64K4
33	363	2.45	48.42	KUA 40A 64K4
30	398	2.25	53.50	KUA 40A 64K4
27	451	2.00	59.61	KUA 40A 64K4
24	504	1.80	67.07	KUA 40A 64K4
13	938	1.90	124.95	KUA 50C 64K4
11	1142	1.60	151.91	KUA 50C 64K4
9.7	1257	1.45	167.61	KUA 50C 64K4
9.5	1283	2.80	171.19	KUA 60C 64K4
8.7	1398	1.30	186.17	KUA 50C 64K4
8.5	1425	2.50	190.09	KUA 60C 64K4
7.6	1602	1.15	213.79	KUA 50C 64K4
7.0	1735	2.05	231.10	KUA 60C 64K4
6.9	1761	1.05	234.66	KUA 50C 64K4
6.4	1912	1.85	255.00	KUA 60C 64K4
6.2	1947	0.95	259.31	KUA 50C 64K4
5.6	2168	0.85	288.90	KUA 50C 64K4
5.7	2124	1.70	283.24	KUA 60C 64K4
5.0	2443	1.45	325.26	KUA 60C 64K4
4.5	2682	1.35	357.00	KUA 60C 64K4
4.1	2965	1.20	394.51	KUA 60C 64K4
3.7	3301	1.10	439.53	KUA 60C 64K4
3.4	3558	1.90	472.99	KUA 70C 64K4
3.3	3717	1.00	494.55	KUA 60C 64K4
3.1	3947	1.70	525.60	KUA 70C 64K4
2.7	4434	1.50	589.90	KUA 70C 64K4
2.5	4319	1.55	650.70	KUA 70D 64K4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
2.2	5018	1.35	750.35	KUA 70D 64K4
1.9	5841	1.15	865.79	KUA 70D 64K4
1.7	6514	1.05	961.39	KUA 70D 64K4
1.4	7983	0.85	1168.82	KUA 70D 64K4
1.3	8823	0.80	1289.67	KUA 70D 64K4
1/4 HP nominal (0.3 HP actual with 460V)				
93	195	4.55	17.45	KUA 40A 64N4
81	230	3.95	20.12	KUA 40A 64N4
70	266	3.40	23.22	KUA 40A 64N4
63	292	3.05	25.78	KUA 40A 64N4
52	354	2.55	31.34	KUA 40A 64N4
47	389	2.30	34.58	KUA 40A 64N4
42	434	2.05	38.41	KUA 40A 64N4
37	496	1.80	44.11	KUA 40A 64N4
33	549	1.65	48.42	KUA 40A 64N4
30	602	1.50	53.50	KUA 40A 64N4
29	628	2.85	55.78	KUA 50A 64N4
27	673	1.35	59.61	KUA 40A 64N4
26	690	2.60	61.47	KUA 50A 64N4
24	770	2.30	68.31	KUA 50A 64N4
24	752	1.20	67.07	KUA 40A 64N4
21	867	2.05	76.67	KUA 50A 64N4
13	1451	2.45	128.66	KUA 60C 64N4
11	1673	2.15	148.36	KUA 60C 64N4
11	1708	1.05	151.91	KUA 50C 64N4
9.7	1885	0.95	167.61	KUA 50C 64N4
9.5	1929	1.85	171.19	KUA 60C 64N4
8.7	2097	0.85	186.17	KUA 50C 64N4
8.5	2142	1.70	190.09	KUA 60C 64N4
7.0	2602	1.40	231.10	KUA 60C 64N4
6.4	2876	1.25	255.00	KUA 60C 64N4
5.7	3195	1.15	283.24	KUA 60C 64N4
5.2	3487	1.95	309.70	KUA 70C 64N4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
5.0	3664	1.00	325.26	KUA 60C 64N4
4.7	3859	1.75	342.68	KUA 70C 64N4
4.5	4027	0.90	357.00	KUA 60C 64N4
4.1	4416	1.55	392.06	KUA 70C 64N4
4.1	4443	0.80	394.51	KUA 60C 64N4
3.8	4832	1.40	429.15	KUA 70C 64N4
3.4	5327	1.35	472.99	KUA 70C 64N4
3.1	5921	1.20	525.60	KUA 70C 64N4
2.7	6646	1.00	589.90	KUA 70C 64N4
2.5	6522	1.70	659.61	KUA 75D 64N4
2.1	7602	1.45	760.63	KUA 75D 64N4
2.0	8408	1.60	846.55	KUA 77C 64N4
1.8	8806	1.45	933.02	KUA 77C 64N4
1.8	8850	1.25	877.65	KUA 75D 64N4
1.7	9868	1.15	974.56	KUA 75D 64N4
1.6	10425	1.35	1036.80	KUA 77C 64N4
1.5	11779	1.15	1163.64	KUA 77C 64N4
1.4	12089	0.95	1184.83	KUA 75D 64N4
1.2	13399	0.85	1307.33	KUA 75D 64N4
1/3 HP nominal (0.4 HP actual with 460V)				
130	195	4.55	12.45	KUA 40A 72K4
110	230	3.90	14.67	KUA 40A 72K4
93	274	3.25	17.45	KUA 40A 72K4
81	319	2.85	20.12	KUA 40A 72K4
70	363	2.45	23.22	KUA 40A 72K4
63	407	2.20	25.78	KUA 40A 72K4
52	487	1.85	31.34	KUA 40A 72K4
47	540	1.65	34.58	KUA 40A 72K4
42	602	1.50	38.41	KUA 40A 72K4
40	628	2.85	40.25	KUA 50A 72K4
37	690	1.30	44.11	KUA 40A 72K4
36	699	2.55	44.54	KUA 50A 72K4
33	761	1.20	48.42	KUA 40A 72K4

* These units have thermal limitations. Please contact a DieQua representative for details.
⁽¹⁾ At nominal horsepower, the service factor (SF) will increase by up to 20%.



Gearmotor Selection Tables - Series K

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
32	797	2.25	50.95	KUA 50A 72K4
30	841	1.10	53.50	KUA 40A 72K4
29	876	2.05	55.78	KUA 50A 72K4
27	929	0.95	59.61	KUA 40A 72K4
26	965	1.85	61.47	KUA 50A 72K4
24	1071	1.70	68.31	KUA 50A 72K4
24	1053	0.85	67.07	KUA 40A 72K4
21	1204	1.50	76.67	KUA 50A 72K4
13	2018	1.80	128.66	KUA 60C 72K4
11	2319	1.55	148.36	KUA 60C 72K4
10	2549	2.65	162.59	KUA 70C 72K4
9.5	2682	1.35	171.19	KUA 60C 72K4
8.7	2912	2.30	185.82	KUA 70C 72K4
8.5	2974	1.20	190.09	KUA 60C 72K4
7.6	3328	2.00	212.36	KUA 70C 72K4
7.0	3620	1.00	231.10	KUA 60C 72K4
6.9	3673	1.85	234.48	KUA 70C 72K4
6.4	3991	0.90	255.00	KUA 60C 72K4
5.7	4407	1.55	281.79	KUA 70C 72K4
5.7	4434	0.80	283.24	KUA 60C 72K4
5.2	4850	1.40	309.70	KUA 70C 72K4
4.7	5363	1.25	342.68	KUA 70C 72K4
4.1	6222	1.80	397.43	KUA 75C 72K4
4.1	6133	1.20	392.06	KUA 70C 72K4
3.8	6717	1.00	429.15	KUA 70C 72K4
3.7	6806	1.65	435.03	KUA 75C 72K4
3.4	7505	1.50	479.47	KUA 75C 72K4
3.4	7399	0.90	472.99	KUA 70C 72K4
3.1	7620	1.75	555.86	KUA 77C 72K4
3.1	8231	0.90	525.60	KUA 70C 72K4
3.0	8337	1.35	532.80	KUA 75C 72K4
2.8	8434	1.60	610.91	KUA 77C 72K4
2.7	9363	1.20	597.98	KUA 75C 72K4
2.7	9231	0.80	589.90	KUA 70C 72K4
2.5	9390	1.45	675.97	KUA 77C 72K4
2.2	10824	1.25	773.37	KUA 77C 72K4
2.0	11903	1.15	846.55	KUA 77C 72K4
1.8	13169	1.05	933.02	KUA 77C 72K4
1.7	12700	1.90	932.11	KUA 80C 72K4
1.6	14231	1.70	1035.79	KUA 80C 72K4
1.6	14691	0.95	1036.80	KUA 77C 72K4
1.5	16594	0.80	1163.64	KUA 77C 72K4
1.4	16107	1.50	1162.50	KUA 80C 72K4
1/2 HP nominal (0.6 HP actual with 460V)				
188	204	4.45	8.76	KUA 40A 72N4
156	239	3.70	10.51	KUA 40A 72N4
132	283	3.15	12.45	KUA 40A 72N4
112	336	2.65	14.67	KUA 40A 72N4
94	398	2.25	17.45	KUA 40A 72N4
82	460	1.95	20.12	KUA 40A 72N4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
71	531	1.70	23.22	KUA 40A 72N4
64	584	1.55	25.78	KUA 40A 72N4
60	628	2.85	27.60	KUA 50A 72N4
54	699	2.55	30.48	KUA 50A 72N4
52	717	1.25	31.34	KUA 40A 72N4
48	788	1.15	34.58	KUA 40A 72N4
45	832	2.15	36.62	KUA 50A 72N4
43	876	1.05	38.41	KUA 40A 72N4
41	920	1.95	40.25	KUA 50A 72N4
37	1018	1.75	44.54	KUA 50A 72N4
37	1009	0.90	44.11	KUA 40A 72N4
34	1106	0.85	48.42	KUA 40A 72N4
32	1159	1.55	50.95	KUA 50A 72N4
29	1274	1.40	55.78	KUA 50A 72N4
29	1274	2.80	55.93	KUA 60A 72N4
27	1407	1.30	61.47	KUA 50A 72N4
26	1460	2.45	63.94	KUA 60A 72N4
24	1558	1.15	68.31	KUA 50A 72N4
24	1593	2.25	69.82	KUA 60A 72N4
21	1752	1.05	76.67	KUA 50A 72N4
21	1752	2.05	76.76	KUA 60A 72N4
16	2336	3.05	102.39	KUA 70C 72N4
14	2726	2.60	119.45	KUA 70C 72N4
13	2938	1.25	128.66	KUA 60C 72N4
12	3168	2.25	138.63	KUA 70C 72N4
11	3390	1.05	148.36	KUA 60C 72N4
10	3708	1.95	162.59	KUA 70C 72N4
9.6	3912	0.95	171.19	KUA 60C 72N4
8.8	4239	1.70	185.82	KUA 70C 72N4
8.7	4301	2.55	188.36	KUA 75C 72N4
8.6	4337	0.85	190.09	KUA 60C 72N4
7.7	4850	1.50	212.36	KUA 70C 72N4
7.6	4912	2.25	215.27	KUA 75C 72N4
7.0	5354	1.35	234.48	KUA 70C 72N4
6.9	5425	2.05	237.70	KUA 75C 72N4
6.0	5292	2.55	273.45	KUA 77C 72N4
5.8	6522	1.70	285.65	KUA 75C 72N4
5.8	6434	1.15	281.79	KUA 70C 72N4
5.3	7071	1.05	309.70	KUA 70C 72N4
5.2	7169	1.55	313.94	KUA 75C 72N4
5.1	6319	2.10	320.73	KUA 77C 72N4
4.8	7823	0.95	342.68	KUA 70C 72N4
4.7	7930	1.40	347.37	KUA 75C 72N4
4.5	7301	1.85	366.55	KUA 77C 72N4
4.2	8947	0.80	392.06	KUA 70C 72N4
4.1	9071	1.25	397.43	KUA 75C 72N4
3.9	8434	1.60	418.91	KUA 77C 72N4
3.8	9930	1.15	435.03	KUA 75C 72N4
3.6	9363	1.45	462.55	KUA 77C 72N4
3.4	10947	1.05	479.47	KUA 75C 72N4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
3.1	12160	0.95	532.80	KUA 75C 72N4
3.0	11372	1.20	555.86	KUA 77C 72N4
2.7	12080	2.00	610.31	KUA 80C 72N4
2.7	12549	1.10	610.91	KUA 77C 72N4
2.7	13647	0.85	597.98	KUA 75C 72N4
2.4	13479	1.80	675.31	KUA 80C 72N4
2.4	13948	1.00	675.97	KUA 77C 72N4
2.1	15585	1.55	772.62	KUA 80C 72N4
2.1	16054	0.85	773.37	KUA 77C 72N4
1.9	17160	1.40	845.72	KUA 80C 72N4
1.9	17603	0.80	846.55	KUA 77C 72N4
1.8	18992	1.30	932.11	KUA 80C 72N4
1.6	21231	1.15	1035.79	KUA 80C 72N4
1.5	21860	1.90	1099.64	KUA 85C 72N4
1.4	23984	1.00	1162.50	KUA 80C 72N4
1.3	24488	1.70	1221.94	KUA 85C 72N4
1.2	27824	1.40	1371.43	KUA 85C 72N4
3/4 HP nominal (0.8 HP actual with 460V)				
274	204	4.35	6.12	KUA 40A 81K4
229	248	3.65	7.32	KUA 40A 81K4
191	292	3.05	8.76	KUA 40A 81K4
159	354	2.55	10.51	KUA 40A 81K4
134	416	2.15	12.45	KUA 40A 81K4
114	487	1.85	14.67	KUA 40A 81K4
96	584	1.55	17.45	KUA 40A 81K4
93	602	2.95	18.02	KUA 50A 81K4
83	673	1.35	20.12	KUA 40A 81K4
79	708	2.55	21.13	KUA 50A 81K4
72	770	1.15	23.22	KUA 40A 81K4
69	805	2.20	24.15	KUA 50A 81K4
65	858	1.05	25.78	KUA 40A 81K4
61	920	1.95	27.60	KUA 50A 81K4
55	1018	1.75	30.48	KUA 50A 81K4
53	1044	0.85	31.34	KUA 40A 81K4
48	1151	0.80	34.58	KUA 40A 81K4
47	1195	3.00	35.75	KUA 60A 81K4
46	1221	1.50	36.62	KUA 50A 81K4
43	1310	2.75	39.27	KUA 60A 81K4
42	1345	1.35	40.25	KUA 50A 81K4
38	1487	1.20	44.54	KUA 50A 81K4
36	1540	2.30	46.32	KUA 60A 81K4
33	1690	2.10	50.73	KUA 60A 81K4
33	1699	1.05	50.95	KUA 50A 81K4
30	1867	1.90	55.93	KUA 60A 81K4
30	1859	1.00	55.78	KUA 50A 81K4
27	2044	0.90	61.47	KUA 50A 81K4
26	2133	1.70	63.94	KUA 60A 81K4
25	2274	0.80	68.31	KUA 50A 81K4
24	2328	1.55	69.82	KUA 60A 81K4
22	2558	1.40	76.76	KUA 60A 81K4

* These units have thermal limitations. Please contact a DieQua representative for details.
⁽¹⁾ At nominal horsepower, the service factor (SF) will increase by up to 20%.

Gearmotor Selection Tables - Series K



RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
14	4036	2.75	121.09	KUA 75C 81K4
14	3983	1.80	119.45	KUA 70C 81K4
12	4682	2.85	140.53	KUA 75C 81K4
12	4620	1.55	138.63	KUA 70C 81K4
10	5496	2.45	164.82	KUA 75C 81K4
10	5416	1.35	162.59	KUA 70C 81K4
9	6195	1.15	185.82	KUA 70C 81K4
8.9	6275	2.15	188.36	KUA 75C 81K4
8	7080	1.05	212.36	KUA 70C 81K4
7.8	7177	1.85	215.27	KUA 75C 81K4
7.1	6823	1.95	235.64	KUA 77C 81K4
7.1	7815	0.95	234.48	KUA 70C 81K4
7.0	7921	1.70	237.70	KUA 75C 81K4
6.1	8000	1.70	273.45	KUA 77C 81K4
5.9	9523	1.40	285.65	KUA 75C 81K4
5.9	9390	0.80	281.79	KUA 70C 81K4
5.3	10461	1.30	313.94	KUA 75C 81K4
5.2	9478	1.45	320.73	KUA 77C 81K4
4.8	11576	1.15	347.37	KUA 75C 81K4
4.6	10921	1.25	366.55	KUA 77C 81K4
4.2	13240	1.00	397.43	KUA 75C 81K4
4	12089	2.00	418.50	KUA 80C 81K4
4	12567	1.10	418.91	KUA 77C 81K4
3.8	14496	0.95	435.03	KUA 75C 81K4
3.6	13461	1.80	462.09	KUA 80C 81K4
3.6	13930	1.00	462.55	KUA 77C 81K4
3.0	16381	1.50	555.32	KUA 80C 81K4
3.0	16877	0.80	555.86	KUA 77C 81K4
2.7	18116	1.35	610.31	KUA 80C 81K4
2.5	20169	1.20	675.31	KUA 80C 81K4
2.3	20806	2.00	720.00	KUA 85C 81K4
2.2	23222	1.05	772.62	KUA 80C 81K4
2.1	23214	1.80	796.68	KUA 85C 81K4
2.0	25523	0.95	845.72	KUA 80C 81K4
1.8	26833	1.55	911.47	KUA 85C 81K4
1.8	28240	0.85	932.11	KUA 80C 81K4
1.7	29550	1.40	997.71	KUA 85C 81K4
1.6	31444	0.80	1035.79	KUA 80C 81K4
1.5	32772	1.25	1099.64	KUA 85C 81K4
1.4	36568	1.15	1221.94	KUA 85C 81K4
1.2	41383	0.95	1371.43	KUA 85C 81K4
1 HP nominal (1.2 HP actual with 460V)				
274	274	1.70	6.12	KUA 40A 81N4
229	336	1.55	7.32	KUA 40A 81N4
191	398	1.40	8.76	KUA 40A 81N4
159	478	1.25	10.51	KUA 40A 81N4
134	566	1.10	12.45	KUA 40A 81N4
126	602	2.95	13.31	KUA 50A 81N4
114	664	1.00	14.67	KUA 40A 81N4
108	708	2.55	15.53	KUA 50A 81N4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
96	797	0.90	17.45	KUA 40A 81N4
93	823	2.20	18.02	KUA 50A 81N4
83	912	0.85	20.12	KUA 40A 81N4
79	956	1.85	21.13	KUA 50A 81N4
72	1053	0.80	23.22	KUA 40A 81N4
69	1097	1.65	24.15	KUA 50A 81N4
61	1257	1.45	27.60	KUA 50A 81N4
60	1266	2.85	27.82	KUA 60A 81N4
55	1381	1.30	30.48	KUA 50A 81N4
53	1434	2.50	31.64	KUA 60A 81N4
47	1628	2.20	35.75	KUA 60A 81N4
46	1664	1.10	36.62	KUA 50A 81N4
43	1788	2.00	39.27	KUA 60A 81N4
42	1832	1.00	40.25	KUA 50A 81N4
38	2027	0.90	44.54	KUA 50A 81N4
36	2106	1.70	46.32	KUA 60A 81N4
33	2301	1.55	50.73	KUA 60A 81N4
33	2319	0.80	50.95	KUA 50A 81N4
30	2540	1.40	55.93	KUA 60A 81N4
29	2664	2.70	58.71	KUA 70A 81N4
26	2912	2.45	64.15	KUA 70A 81N4
26	2903	1.25	63.94	KUA 60A 81N4
24	3204	2.25	70.59	KUA 70A 81N4
24	3168	1.15	69.82	KUA 60A 81N4
22	3487	1.05	76.76	KUA 60A 81N4
20	3885	2.85	85.48	KUA 75C 81N4
19	4027	2.75	88.54	KUA 75C 81N4
16	4717	2.35	103.79	KUA 75C 81N4
14	5266	2.55	115.80	KUA 77A 81N4
14	5505	2.00	121.09	KUA 75C 81N4
14	5425	1.35	119.45	KUA 70C 81N4
13	5753	2.35	126.55	KUA 77A 81N4
12	6328	2.10	139.24	KUA 77A 81N4
12	6390	1.75	140.53	KUA 75C 81N4
12	6301	1.15	138.63	KUA 70C 81N4
10	7487	1.50	164.82	KUA 75C 81N4
10	7390	1.00	162.59	KUA 70C 81N4
9	8443	0.85	185.82	KUA 70C 81N4
8.9	8558	1.30	188.36	KUA 75C 81N4
7.8	9779	1.15	215.27	KUA 75C 81N4
7.1	9009	2.70	235.41	KUA 80C 81N4
7.1	9514	1.40	235.64	KUA 77C 81N4
7.0	10797	1.05	237.70	KUA 75C 81N4
6.1	10655	2.25	273.19	KUA 80C 81N4
6.1	11133	1.20	273.45	KUA 77C 81N4
5.9	12983	0.85	285.65	KUA 75C 81N4
5.3	14266	0.80	313.94	KUA 75C 81N4
5.2	12682	1.90	320.14	KUA 80C 81N4
5.2	13142	1.05	320.73	KUA 77C 81N4
4.6	14638	1.65	366.19	KUA 80C 81N4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
4.6	15116	0.90	366.55	KUA 77C 81N4
4.0	16868	1.45	418.50	KUA 80C 81N4
4.0	17346	0.80	418.91	KUA 77C 81N4
3.6	18744	1.30	462.09	KUA 80C 81N4
3.1	21567	1.90	545.14	KUA 85C 81N4
3.0	22709	1.10	555.32	KUA 80C 81N4
2.7	25063	1.00	610.31	KUA 80C 81N4
2.6	26249	1.60	655.12	KUA 85C 81N4
2.5	27842	0.90	675.31	KUA 80C 81N4
2.3	29019	1.45	720.00	KUA 85C 81N4
2.1	32311	1.30	796.68	KUA 85C 81N4
1.8	37276	1.10	911.47	KUA 85C 81N4
1.7	40967	1.00	997.71	KUA 85C 81N4
1.5	45339	0.90	1099.64	KUA 85C 81N4
1.4	50489	0.85	1221.94	KUA 85C 81N4
1.5 HP nominal (1.7 HP actual with 460V)				
277	407	1.20	6.12	KUA 40A 91S4
231	487	1.05	7.32	KUA 40A 91S4
193	575	0.95	8.76	KUA 40A 91S4
161	690	0.85	10.51	KUA 40A 91S4
136	823	0.80	12.45	KUA 40A 91S4
127	876	2.05	13.31	KUA 50A 91S4
109	1027	1.75	15.53	KUA 50A 91S4
94	1186	1.50	18.02	KUA 50A 91S4
81	1381	2.60	20.95	KUA 60A 91S4
80	1389	1.30	21.13	KUA 50A 91S4
71	1584	2.25	24.00	KUA 60A 91S4
70	1593	1.15	24.15	KUA 50A 91S4
61	1832	1.95	27.82	KUA 60A 91S4
61	1823	1.00	27.60	KUA 50A 91S4
56	2009	0.90	30.48	KUA 50A 91S4
53	2089	1.70	31.64	KUA 60A 91S4
47	2354	1.55	35.75	KUA 60A 91S4
43	2593	1.40	39.27	KUA 60A 91S4
42	2664	2.70	40.37	KUA 70A 91S4
37	3027	2.35	45.94	KUA 70A 91S4
37	3053	1.20	46.32	KUA 60A 91S4
34	3319	2.15	50.33	KUA 70A 91S4
33	3345	1.10	50.73	KUA 60A 91S4
30	3690	1.00	55.93	KUA 60A 91S4
29	3867	1.85	58.71	KUA 70A 91S4
26	4230	1.70	64.15	KUA 70A 91S4
26	4213	0.85	63.94	KUA 60A 91S4
24	4691	3.00	71.18	KUA 77A 91S4
24	4655	1.55	70.59	KUA 70A 91S4
24	4602	0.80	69.82	KUA 60A 91S4
21	5248	2.70	79.64	KUA 77A 91S4
19	5974	2.35	90.63	KUA 77A 91S4
17	6549	2.15	99.27	KUA 77A 91S4
16	6841	1.65	103.79	KUA 75C 91S4

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⁽¹⁾ At nominal horsepower, the service factor (SF) will increase by up to 20%.



Gearmotor Selection Tables - Series K

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
15	7638	1.85	115.80	KUA 77A 91S4
14	7983	1.40	121.09	KUA 75C 91S4
14	7877	0.90	119.45	KUA 70C 91S4
13	8346	1.70	126.55	KUA 77A 91S4
12	9142	0.80	138.63	KUA 70C 91S4
12	9177	1.55	139.24	KUA 77A 91S4
12	9266	1.20	140.53	KUA 75C 91S4
11	8115	2.95	147.71	KUA 80C 91S4
10	10868	1.05	164.82	KUA 75C 91S4
9.8	9638	2.50	172.13	KUA 80C 91S4
9.0	12417	0.90	188.36	KUA 75C 91S4
8.4	11487	2.10	201.78	KUA 80C 91S4
7.9	14195	0.80	215.27	KUA 75C 91S4
7.2	13576	1.80	235.41	KUA 80C 91S4
7.2	14072	0.95	235.64	KUA 77C 91S4
6.2	16390	0.85	273.45	KUA 77C 91S4
6.2	15912	1.55	273.19	KUA 80C 91S4
6.1	15452	2.65	277.71	KUA 85C 91S4
5.3	18240	2.25	322.29	KUA 85C 91S4
5.3	18859	1.30	320.41	KUA 80C 91S4
4.6	21683	1.15	366.19	KUA 80C 91S4
4.5	21700	1.90	378.00	KUA 85C 91S4
4.0	24939	1.00	418.50	KUA 80C 91S4
3.9	25063	1.65	432.00	KUA 85C 91S4
3.7	27647	0.90	462.09	KUA 80C 91S4
3.4	28878	1.45	493.71	KUA 85C 91S4
3.1	32081	1.30	545.14	KUA 85C 91S4
2.6	38958	1.05	655.12	KUA 85C 91S4
2.4	40905	1.75	708.01	KUA 110C 91S4
2.4	42993	0.95	720.00	KUA 85C 91S4
2.2	44976	1.60	773.68	KUA 110C 91S4
2.1	47666	0.90	796.68	KUA 85C 91S4
2.0	49790	1.45	851.29	KUA 110C 91S4
2 HP nominal (2.3 HP actual with 460V)				
279	549	0.90	6.12	KUA 40A 91L4
247	620	2.90	6.90	KUA 50A 91L4
233	655	0.80	7.32	KUA 40A 91L4
203	752	2.40	8.39	KUA 50A 91L4
175	867	2.05	9.74	KUA 50A 91L4
150	1018	1.75	11.35	KUA 50A 91L4
128	1186	1.50	13.31	KUA 50A 91L4
112	1363	2.60	15.27	KUA 60A 91L4
110	1389	1.30	15.53	KUA 50A 91L4
97	1566	2.30	17.57	KUA 60A 91L4
95	1611	1.15	18.02	KUA 50A 91L4
81	1867	1.90	20.95	KUA 60A 91L4
81	1885	0.95	21.13	KUA 50A 91L4
71	2142	1.70	24.00	KUA 60A 91L4
71	2159	0.85	24.15	KUA 50A 91L4
62	2460	2.90	27.54	KUA 70A 91L4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
61	2487	1.45	27.82	KUA 60A 91L4
54	2797	2.55	31.34	KUA 70A 91L4
54	2823	1.30	31.64	KUA 60A 91L4
48	3195	1.15	35.75	KUA 60A 91L4
47	3221	2.20	36.09	KUA 70A 91L4
43	3505	1.05	39.27	KUA 60A 91L4
42	3602	2.00	40.37	KUA 70A 91L4
37	4098	1.75	45.94	KUA 70A 91L4
37	4133	0.90	46.32	KUA 60A 91L4
34	4496	1.60	50.33	KUA 70A 91L4
34	4531	0.80	50.73	KUA 60A 91L4
33	4558	2.45	51.02	KUA 75A 91L4
31	4850	2.75	54.33	KUA 77A91L4
29	5310	2.05	59.51	KUA 75A 91L4
29	5239	1.40	58.71	KUA 70A 91L4
28	5522	2.45	61.82	KUA 77A91L4
27	5726	1.25	64.15	KUA 70A 91L4
26	5806	1.70	65.03	KUA 75A 91L4
24	6354	2.10	71.18	KUA 77A91L4
24	6390	1.40	71.55	KUA 75A 91L4
24	6301	1.15	70.59	KUA 70A 91L4
21	7107	1.90	79.64	KUA 77A91L4
19	8089	1.65	90.63	KUA 77A91L4
17	8859	1.50	99.27	KUA 77A91L4
16	9266	1.20	103.79	KUA 75C 91L4
15	10337	1.30	115.80	KUA 77A91L4
14	10815	1.05	121.09	KUA 75C 91L4
13	9647	2.50	127.25	KUA 80C 91L4
13	11301	1.20	126.55	KUA 77A91L4
12	11363	2.15	147.71	KUA 80C 91L4
12	12434	1.10	139.24	KUA 77A91L4
12	12549	0.90	140.53	KUA 75C 91L4
9.9	13434	1.80	172.13	KUA 80C 91L4
8.4	15266	2.70	203.06	KUA 85C 91L4
8.4	15912	1.55	201.78	KUA 80C 91L4
7.2	18240	2.25	238.04	KUA 85C 91L4
7.2	18762	1.30	235.41	KUA 80C 91L4
6.2	21948	1.10	273.19	KUA 80C 91L4
6.1	21594	1.90	277.71	KUA 85C 91L4
5.3	25320	1.65	322.29	KUA 85C 91L4
5.3	25904	0.95	320.41	KUA 80C 91L4
4.7	29727	0.85	366.19	KUA 80C 91L4
4.5	30002	1.40	378.00	KUA 85C 91L4
3.9	34568	1.20	432.00	KUA 85C 91L4
3.5	37851	1.90	486.88	KUA 110C 91L4
3.5	39754	1.05	493.71	KUA 85C 91L4
3.1	43524	1.65	554.09	KUA 110C 91L4
3.1	44073	0.95	545.14	KUA 85C 91L4
2.8	47967	1.50	606.94	KUA 110C 91L4
2.6	53295	0.80	655.12	KUA 85C 91L4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
2.4	56419	1.30	708.01	KUA 110C 91L4
2.2	62039	1.15	773.68	KUA 110C 91L4
2.0	68543	1.05	851.29	KUA 110C 91L4
1.8	71278	1.75	941.77	KUA 136D 91L4
1.6	83810	1.50	1093.20	KUA 136D 91L4
1.3	98678	1.30	1273.93	KUA 136D 91L4
3 HP nominal (3.4 HP actual)				
300	743	2.40	5.67	KUA 50A 101L4
247	903	2.00	6.90	KUA 50A 101L4
203	1097	1.65	8.39	KUA 50A 101L4
184	1212	2.95	9.25	KUA 60A 101L4
175	1274	1.40	9.74	KUA 50A 101L4
154	1451	2.45	11.08	KUA 60A 101L4
150	1487	1.20	11.35	KUA 50A 101L4
128	1743	1.05	13.31	KUA 50A 101L4
127	1752	2.05	13.38	KUA 60A 101L4
112	2000	1.80	15.27	KUA 60A 101L4
110	2036	0.90	15.53	KUA 50A 101L4
97	2301	1.55	17.57	KUA 60A 101L4
95	2363	0.80	18.02	KUA 50A 101L4
84	2646	2.70	20.23	KUA 70A 101L4
81	2744	1.30	20.95	KUA 60A 101L4
74	3018	2.35	23.05	KUA 70A 101L4
71	3142	1.15	24.00	KUA 60A 101L4
62	3602	2.00	27.54	KUA 70A 101L4
61	3646	1.00	27.82	KUA 60A 101L4
54	4106	1.75	31.34	KUA 70A 101L4
54	4142	0.90	31.64	KUA 60A 101L4
48	4682	0.80	35.75	KUA 60A 101L4
47	4788	2.35	36.58	KUA 75A101L4
47	4726	1.50	36.09	KUA 70A 101L4
43	5222	2.55	39.90	KUA 77A 101L4
42	5363	2.10	40.92	KUA 75A101L4
42	5283	1.35	40.37	KUA 70A 101L4
37	5956	2.25	45.47	KUA 77A 101L4
37	6098	1.85	46.57	KUA 75A101L4
37	6018	1.20	45.94	KUA 70A 101L4
34	6593	1.10	50.33	KUA 70A 101L4
33	6682	1.70	51.02	KUA 75A101L4
31	7115	1.90	54.33	KUA 77A 101L4
29	7797	1.40	59.51	KUA 75A101L4
29	7691	0.95	58.71	KUA 70A 101L4
28	8098	1.65	61.82	KUA 77A 101L4
27	8399	0.85	64.15	KUA 70A 101L4
26	8514	1.20	65.03	KUA 75A101L4
24	9319	1.45	71.18	KUA 77A 101L4
24	9372	0.95	71.55	KUA 75A101L4
24	9239	0.80	70.59	KUA 70A 101L4
21	10425	1.30	79.64	KUA 77A 101L4
19	11868	1.15	90.63	KUA 77A 101L4

* These units have thermal limitations. Please contact a DieQua representative for details.
⁽¹⁾ At nominal horsepower, the service factor (SF) will increase by up to 20%.

Gearmotor Selection Tables - Series K



RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
17	13001	1.05	99.27	KUA 77A 101L4
16	14364	2.75	109.71	KUA 85A 101L4
15	15160	0.90	115.80	KUA 77A 101L4
14	15709	2.30	120.00	KUA 85A 101L4
13	16567	0.85	126.55	KUA 77A 101L4
12	18373	1.70	140.31	KUA 85A 101L4
8.4	23824	1.05	201.78	KUA 80C 101L4
7.2	27594	1.50	238.04	KUA 85C 101L4
7.2	27966	0.90	235.41	KUA 80C 101L4
7.0	26957	2.65	243.92	KUA 110C 101L4
6.1	31179	2.30	278.02	KUA 110C 101L4
6.1	32462	1.30	277.71	KUA 85C 101L4
5.3	37984	1.10	322.29	KUA 85C 101L4
5.1	37869	1.90	332.15	KUA 110C 101L4
4.5	43542	1.65	377.95	KUA 110C 101L4
4.5	44825	0.95	378.00	KUA 85C 101L4
3.9	50551	1.45	435.19	KUA 110C 101L4
3.9	51542	0.80	432.00	KUA 85C 101L4
3.5	57021	1.25	486.88	KUA 110C 101L4
3.1	65295	1.10	554.09	KUA 110C 101L4
2.8	69782	1.80	609.44	KUA 136C 101L4
2.8	71818	1.00	606.94	KUA 110C 101L4
2.5	79464	1.60	688.31	KUA 136C 101L4
2.4	84296	0.85	708.01	KUA 110C 101L4
2.3	87447	1.45	752.84	KUA 136C 101L4
2.2	92306	0.80	773.68	KUA 110C 101L4
1.9	103094	1.25	880.24	KUA 136C 101L4
4 HP nominal (4.6 HP actual)				
300	1009	2.10	5.67	KUA 50A 101LA4
247	1230	1.75	6.90	KUA 50A 101LA4
219	1389	2.60	7.77	KUA 60A 101LA4
203	1496	1.45	8.39	KUA 50A 101LA4
184	1655	2.15	9.25	KUA 60A 101LA4
175	1743	1.25	9.74	KUA 50A 101LA4
154	1974	1.80	11.08	KUA 60A 101LA4
150	2027	1.05	11.35	KUA 50A 101LA4
127	2390	1.50	13.38	KUA 60A 101LA4
113	2690	2.65	15.06	KUA 70A 101LA4
112	2726	1.30	15.27	KUA 60A 101LA4
97	3133	1.15	17.57	KUA 60A 101LA4
95	3195	2.25	17.89	KUA 70A 101LA4
84	3611	2.00	20.23	KUA 70A 101LA4
81	3744	0.95	20.95	KUA 60A 101LA4
74	4115	1.75	23.05	KUA 70A 101LA4
73	4168	2.70	23.37	KUA 75A 101LA4
71	4283	0.85	24.00	KUA 60A 101LA4
62	4921	1.45	27.54	KUA 70A 101LA4
61	4983	2.25	27.92	KUA 75A 101LA4
57	5301	2.55	29.71	KUA 77A 101LA4
54	5673	2.00	31.77	KUA 75A 101LA4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
54	5593	1.30	31.34	KUA 70A 101LA4
48	6301	2.15	35.29	KUA 77A 101LA4
47	6531	1.70	36.58	KUA 75A 101LA4
47	6443	1.10	36.09	KUA 70A 101LA4
43	7124	1.90	39.90	KUA 77A 101LA4
42	7310	1.55	40.92	KUA 75A 101LA4
42	7213	1.00	40.37	KUA 70A 101LA4
37	8115	1.65	45.47	KUA 77A 101LA4
37	8319	1.35	46.57	KUA 75A 101LA4
37	8204	0.90	45.94	KUA 70A 101LA4
35	8629	2.80	48.34	KUA 80A 101LA4
34	8983	0.80	50.33	KUA 70A 101LA4
33	9107	1.25	51.02	KUA 75A 101LA4
31	9700	1.40	54.33	KUA 77A 101LA4
30	10071	2.40	56.38	KUA 80A 101LA4
29	10629	1.05	59.51	KUA 75A 101LA4
28	11036	1.25	61.82	KUA 77A 101LA4
27	11178	2.15	62.60	KUA 80A 101LA4
26	11611	0.85	65.03	KUA 75A 101LA4
25	12284	1.95	68.78	KUA 80A 101LA4
24	12709	1.05	71.18	KUA 77A 101LA4
24	12779	0.70	71.55	KUA 75A 101LA4
21	14487	2.85	81.14	KUA 85A 101LA4
21	14700	1.65	82.34	KUA 80A 101LA4
21	14222	0.95	79.64	KUA 77A 101LA4
19	16187	0.85	90.63	KUA 77A 101LA4
18	17346	2.35	97.14	KUA 85A 101LA4
18	16603	1.45	93.00	KUA 80A 101LA4
17	18160	1.35	101.72	KUA 80A 101LA4
16	19594	2.05	109.71	KUA 85A 101LA4
14	21426	1.70	120.00	KUA 85A 101LA4
14	21240	1.15	118.93	KUA 80A 101LA4
12	25054	1.25	140.31	KUA 85A 101LA4
9.4	27426	2.60	181.62	KUA 110C 101LA4
7.9	33196	2.15	215.75	KUA 110C 101LA4
7.2	38250	1.10	238.04	KUA 85C 101LA4
7.0	37922	1.90	243.92	KUA 110C 101LA4
6.1	41666	3.00	280.56	KUA 136C 101LA4
6.1	43675	1.65	278.02	KUA 110C 101LA4
6.1	44905	0.95	277.71	KUA 85C 101LA4
5.4	47542	2.65	315.47	KUA 136C 101LA4
5.3	52436	0.80	322.29	KUA 85C 101LA4
5.1	52835	1.35	332.15	KUA 110C 101LA4
4.8	54711	2.30	357.74	KUA 136C 101LA4
4.5	60490	1.20	377.95	KUA 110C 101LA4
4.1	64747	1.95	417.29	KUA 136C 101LA4
3.9	70083	1.05	435.19	KUA 110C 101LA4
3.7	72482	1.75	463.28	KUA 136C 101LA4
3.5	78889	0.90	486.88	KUA 110C 101LA4
3.3	80305	1.55	509.06	KUA 136C 101LA4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
3.1	90146	0.80	554.09	KUA 110C 101LA4
2.8	97138	1.30	609.44	KUA 136C 101LA4
2.5	110386	1.15	688.31	KUA 136C 101LA4
2.3	121227	1.05	752.84	KUA 136C 101LA4
1.9	142618	0.90	880.24	KUA 136C 101LA4
5.5 HP nominal (6.3 HP actual)				
314	1292	2.75	5.51	KUA 60A 114M4
305	1336	1.35	5.67	KUA 50A 114M4
264	1540	2.35	6.55	KUA 60A 114M4
250	1620	1.10	6.90	KUA 50A 114M4
222	1823	1.95	7.77	KUA 60A 114M4
206	1974	0.90	8.39	KUA 50A 114M4
187	2168	1.65	9.25	KUA 60A 114M4
177	2283	0.80	9.74	KUA 50A 114M4
157	2584	2.75	10.99	KUA 70A 114M4
156	2602	1.40	11.08	KUA 60A 114M4
135	3009	2.40	12.82	KUA 70A 114M4
129	3142	1.15	13.38	KUA 60A 114M4
115	3531	2.05	15.06	KUA 70A 114M4
113	3584	1.00	15.27	KUA 60A 114M4
98	4124	0.90	17.57	KUA 60A 114M4
97	4204	1.70	17.89	KUA 70A 114M4
95	4257	2.60	18.13	KUA 75A 114M4
85	4752	1.50	20.23	KUA 70A 114M4
84	4814	2.30	20.50	KUA 75A 114M4
80	5089	2.65	21.68	KUA 77A 114M4
75	5416	1.35	23.05	KUA 70A 114M4
74	5487	2.05	23.37	KUA 75A 114M4
68	5938	2.25	25.28	KUA 77A 114M4
63	6469	1.10	27.54	KUA 70A 114M4
62	6558	1.70	27.92	KUA 75A 114M4
58	6974	1.95	29.71	KUA 77A 114M4
55	7354	1.00	31.34	KUA 70A 114M4
54	7461	1.50	31.77	KUA 75A 114M4
49	8284	1.65	35.29	KUA 77A 114M4
48	8469	0.85	36.09	KUA 70A 114M4
47	8585	1.30	36.58	KUA 75A 114M4
46	8903	2.70	37.91	KUA 80A 114M4
43	9363	1.45	39.90	KUA 77A 114M4
42	9611	1.20	40.92	KUA 75A 114M4
41	10009	2.40	42.63	KUA 80A 114M4
38	10673	1.25	45.47	KUA 77A 114M4
37	10930	1.05	46.57	KUA 75A 114M4
36	11346	2.15	48.34	KUA 80A 114M4
34	11974	0.95	51.02	KUA 75A 114M4
32	12753	1.05	54.33	KUA 77A 114M4
31	13240	1.85	56.38	KUA 80A 114M4
29	13974	0.80	59.51	KUA 75A 114M4
28	14700	1.65	62.60	KUA 80A 114M4
28	14514	0.95	61.82	KUA 77A 114M4

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⁽¹⁾ At nominal horsepower, the service factor (SF) will increase by up to 20%.



Gearmotor Selection Tables - Series K

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
26	15611	2.65	66.51	KUA 85A 114M4
25	16151	1.50	68.78	KUA 80A 114M4
24	16709	0.80	71.18	KUA 77A 114M4
23	17337	2.35	73.85	KUA 85A 114M4
21	19054	2.15	81.14	KUA 85A 114M4
21	19328	1.25	82.34	KUA 80A 114M4
19	21833	1.10	93.00	KUA 80A 114M4
18	22806	1.80	97.14	KUA 85A 114M4
17	23877	1.05	101.72	KUA 80A 114M4
16	25754	1.55	109.71	KUA 85A 114M4
15	27922	0.90	118.93	KUA 80A 114M4
14	28170	1.30	120.00	KUA 85A 114M4
12	32940	0.95	140.31	KUA 85A 114M4
7.1	50905	1.40	243.92	KUA 110C 114M4
6.2	56649	2.20	280.56	KUA 136C 114M4
6.2	58383	1.25	278.02	KUA 110C 114M4
5.5	64357	1.95	315.47	KUA 136C 114M4
5.2	70322	1.05	332.15	KUA 110C 114M4
4.8	73738	1.70	357.74	KUA 136C 114M4
4.6	80517	0.90	377.95	KUA 110C 114M4
4.1	86907	1.45	417.29	KUA 136C 114M4
4.0	93093	0.80	435.19	KUA 110C 114M4
3.7	97085	1.30	463.28	KUA 136C 114M4
3.4	107120	1.20	509.06	KUA 136C 114M4
2.8	129299	1.00	609.44	KUA 136C 114M4
2.5	146928	0.85	688.31	KUA 136C 114M4
2.3	161035	0.80	752.84	KUA 136C 114M4
7.5 HP nominal (8.4 HP actual)				
312	1788	2.00	5.51	KUA 60A 114ML4
*304	1841	1.00	5.67	KUA 50A 114ML4
*250	2239	0.80	6.90	KUA 50A 114ML4
263	2124	1.70	6.55	KUA 60A 114ML4
222	2522	1.45	7.77	KUA 60A 114ML4
210	2655	2.70	8.21	KUA 70A 114ML4
186	3000	1.20	9.25	KUA 60A 114ML4
182	3071	2.35	9.48	KUA 70A 114ML4
157	3558	2.00	10.99	KUA 70A 114ML4
155	3584	1.00	11.08	KUA 60A 114ML4
134	4151	1.75	12.82	KUA 70A 114ML4
133	4204	2.65	12.99	KUA 75A 114ML4
129	4337	0.85	13.38	KUA 60A 114ML4
114	4876	1.50	15.06	KUA 70A 114ML4
113	4947	2.25	15.27	KUA 75A 114ML4
106	5248	2.55	16.19	KUA 77A 114ML4
96	5797	1.25	17.89	KUA 70A 114ML4
95	5876	1.90	18.13	KUA 75A 114ML4
92	6062	2.20	18.70	KUA 77A 114ML4
85	6549	1.10	20.23	KUA 70A 114ML4
84	6638	1.70	20.50	KUA 75A 114ML4
79	7027	1.90	21.68	KUA 77A 114ML4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
75	7469	0.95	23.05	KUA 70A 114ML4
74	7567	1.50	23.37	KUA 75A 114ML4
68	8186	1.65	25.28	KUA 77A 114ML4
63	8921	0.80	27.54	KUA 70A 114ML4
62	8956	2.70	27.66	KUA 80A 114ML4
62	9045	1.25	27.92	KUA 75A 114ML4
58	9620	1.40	29.71	KUA 77A 114ML4
54	10293	1.10	31.77	KUA 75A 114ML4
53	10425	2.30	32.19	KUA 80A 114ML4
49	11434	1.20	35.29	KUA 77A 114ML4
47	11850	0.95	36.58	KUA 75A 114ML4
45	12284	1.95	37.91	KUA 80A 114ML4
43	12921	1.05	39.90	KUA 77A 114ML4
42	13257	0.85	40.92	KUA 75A 114ML4
40	13806	1.75	42.63	KUA 80A 114ML4
39	14487	2.85	44.72	KUA 85A 114ML4
38	14726	0.95	45.47	KUA 77A 114ML4
36	15656	1.55	48.34	KUA 80A 114ML4
34	16293	2.50	50.29	KUA 85A 114ML4
32	17603	0.80	54.33	KUA 77A 114ML4
31	18266	1.35	56.38	KUA 80A 114ML4
30	18470	2.25	57.02	KUA 85A 114ML4
28	20275	1.20	62.60	KUA 80A 114ML4
26	21550	1.90	66.51	KUA 85A 114ML4
25	22284	1.10	68.78	KUA 80A 114ML4
23	23922	1.75	73.85	KUA 85A 114ML4
21	26285	1.55	81.14	KUA 85A 114ML4
21	26674	0.90	82.34	KUA 80A 114ML4
19	30125	0.80	93.00	KUA 80A 114ML4
18	31471	1.30	97.14	KUA 85A 114ML4
16	35542	1.15	109.71	KUA 85A 114ML4
14	38869	0.95	120.00	KUA 85A 114ML4
6.1	80296	1.55	280.56	KUA 136C 114M4
5.5	90845	1.40	315.47	KUA 136C 114M4
4.8	103864	1.20	357.74	KUA 136C 114M4
4.1	121909	1.05	417.29	KUA 136C 114M4
3.7	135901	0.95	463.28	KUA 136C 114M4
3.4	149937	0.85	509.06	KUA 136C 114M4
10 HP nominal (12 HP actual)				
317	2398	1.50	5.51	KUA 60A 134M4
310	2451	2.90	5.63	KUA 70A 134M4
267	2850	1.25	6.55	KUA 60A 134M4
257	2956	2.40	6.79	KUA 70A 134M4
225	3390	1.05	7.77	KUA 60A 134M4
213	3575	2.00	8.21	KUA 70A 134M4
189	4036	0.90	9.25	KUA 60A 134M4
184	4133	1.75	9.48	KUA 70A 134M4
182	4186	2.65	9.61	KUA 75A 134M4
159	4788	1.50	10.99	KUA 70A 134M4
157	4832	2.90	11.10	KUA 77A 134M4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
157	4850	2.30	11.14	KUA 75A 134M4
136	5584	1.30	12.82	KUA 70A 134M4
134	5655	2.00	12.99	KUA 75A 134M4
130	5841	2.30	13.40	KUA 77A 134M4
116	6558	1.10	15.06	KUA 70A 134M4
114	6646	1.70	15.27	KUA 75A 134M4
108	7053	1.90	16.19	KUA 77A 134M4
98	7797	0.95	17.89	KUA 70A 134M4
96	7903	1.45	18.13	KUA 75A 134M4
95	8000	3.00	18.36	KUA 80A 134M4
93	8151	1.65	18.70	KUA 77A 134M4
86	8815	0.85	20.23	KUA 70A 134M4
85	8930	1.25	20.50	KUA 75A 134M4
83	9116	2.65	20.93	KUA 80A 134M4
81	9443	1.45	21.68	KUA 77A 134M4
75	10178	1.10	23.37	KUA 75A 134M4
73	10443	2.30	23.98	KUA 80A 134M4
69	11009	1.25	25.28	KUA 77A 134M4
63	12054	2.00	27.66	KUA 80A 134M4
63	12160	0.95	27.92	KUA 75A 134M4
59	12939	1.05	29.71	KUA 77A 134M4
55	13841	0.80	31.77	KUA 75A 134M4
54	14213	2.90	32.63	KUA 85A 134M4
54	14027	1.75	32.19	KUA 80A 134M4
49	15372	0.90	35.29	KUA 77A 134M4
46	16550	2.50	37.98	KUA 85A 134M4
46	16514	1.45	37.91	KUA 80A 134M4
44	17381	0.80	39.9	KUA 77A 134M4
41	18567	1.30	42.63	KUA 80A 134M4
39	19479	2.10	44.72	KUA 85A 134M4
36	21054	1.15	48.34	KUA 80A 134M4
35	21904	1.90	50.29	KUA 85A 134M4
31	24258	2.95	55.69	KUA 110A 134M4
31	24842	1.65	57.02	KUA 85A 134M4
31	24559	1.00	56.38	KUA 80A 134M4
28	27267	0.90	62.60	KUA 80A 134M4
27	28568	2.50	65.57	KUA 110A 134M4
26	28975	1.45	66.51	KUA 85A 134M4
25	29966	0.80	68.78	KUA 80A 134M4
24	32170	1.30	73.85	KUA 85A 134M4
22	34311	2.10	78.75	KUA 110A 134M4
22	35347	1.20	81.14	KUA 85A 134M4
20	37958	1.90	87.14	KUA 110A 134M4
18	42347	1.70	97.20	KUA 110A 134M4
18	42321	1.00	97.14	KUA 85A 134M4
16	47507	1.50	109.04	KUA 110A 134M4
16	47799	0.85	109.71	KUA 85A 134M4
15	49197	2.55	112.93	KUA 136A 134M4
15	51950	1.40	119.25	KUA 110A 134M4
14	54312	2.30	124.66	KUA 136A 134M4

* These units have thermal limitations. Please contact a DieQua representative for details.
⁽¹⁾ At nominal horsepower, the service factor (SF) will increase by up to 20%.

Gearmotor Selection Tables - Series K



RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
13	60446	2.05	138.74	KUA 136A 134ML4
12	61755	1.15	141.75	KUA 110A 134ML4
11	67579	1.85	155.12	KUA 136A 134ML4
11	69216	0.85	158.88	KUA 110A 134ML4
10	73791	1.70	169.39	KUA 136A 134ML4
6.2	109775	1.15	280.56	KUA 136C 134ML4
5.5	124201	1.00	315.47	KUA 136C 134ML4
4.9	141423	0.90	357.74	KUA 136C 134ML4
12.5 HP nominal (14 HP actual)				
*315	2965	1.20	5.51	KUA 60A 134ML4
*265	3522	1.05	6.55	KUA 60A 134ML4
*223	4186	0.85	7.77	KUA 60A 134ML4
308	3027	2.35	5.63	KUA 70A 134ML4
255	3655	1.95	6.79	KUA 70A 134ML4
252	3708	3.00	6.89	KUA 75A 134ML4
211	4416	1.65	8.21	KUA 70A 134ML4
208	4478	2.50	8.32	KUA 75A 134ML4
183	5098	1.40	9.48	KUA 70A 134ML4
180	5168	2.15	9.61	KUA 75A 134ML4
158	5912	1.20	10.99	KUA 70A 134ML4
156	5974	2.25	11.10	KUA 77A 134ML4
156	5991	1.85	11.14	KUA 75A 134ML4
135	6894	1.05	12.82	KUA 70A 134ML4
133	6992	1.60	12.99	KUA 75A 134ML4
129	7213	1.85	13.40	KUA 77A 134ML4
115	8107	0.90	15.06	KUA 70A 134ML4
114	8213	1.35	15.27	KUA 75A 134ML4
112	8337	2.90	15.50	KUA 80A 134ML4
107	8708	1.55	16.19	KUA 77A 134ML4
96	9762	1.15	18.13	KUA 75A 134ML4
94	9877	2.45	18.36	KUA 80A 134ML4
93	10062	1.35	18.70	KUA 77A 134ML4
85	11036	1.05	20.50	KUA 75A 134ML4
83	11257	2.15	20.93	KUA 80A 134ML4
80	11664	1.15	21.68	KUA 77A 134ML4
74	12576	0.90	23.37	KUA 75A 134ML4
72	12903	1.90	23.98	KUA 80A 134ML4
69	13602	1.00	25.28	KUA 77A 134ML4
63	14886	1.65	27.66	KUA 80A 134ML4
61	15222	2.70	28.29	KUA 85A 134ML4
58	15983	0.85	29.71	KUA 77A 134ML4
54	17319	1.40	32.19	KUA 80A 134ML4
53	17558	2.35	32.63	KUA 85A 134ML4
46	20435	2.00	37.98	KUA 85A 134ML4
46	20399	1.20	37.91	KUA 80A 134ML4
41	22939	1.05	42.63	KUA 80A 134ML4
39	24063	1.70	44.72	KUA 85A 134ML4
36	25833	2.75	48.0	KUA 110A 134ML4
36	26010	0.95	48.34	KUA 80A 134ML4
34	27063	1.55	50.29	KUA 85A 134ML4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
31	29966	2.40	55.69	KUA 110A 134ML4
31	30338	0.80	56.38	KUA 80A 134ML4
30	30683	1.35	57.02	KUA 85A 134ML4
26	35285	2.05	65.57	KUA 110A 134ML4
26	35789	1.15	66.51	KUA 85A 134ML4
23	39737	1.05	73.85	KUA 85A 134ML4
22	42374	1.70	78.75	KUA 110A 134ML4
21	43400	2.90	80.66	KUA 136A 134ML4
21	43666	0.95	81.14	KUA 85A 134ML4
20	46887	1.55	87.14	KUA 110A 134ML4
18	50843	2.45	94.49	KUA 136A 134ML4
18	52304	1.40	97.20	KUA 110A 134ML4
18	52277	0.80	97.14	KUA 85A 134ML4
16	58676	1.25	109.04	KUA 110A 134ML4
15	60764	2.05	112.93	KUA 136A 134ML4
15	64171	1.15	119.25	KUA 110A 134ML4
14	67083	1.85	124.66	KUA 136A 134ML4
12	74659	1.70	138.74	KUA 136A 134ML4
12	76278	0.95	141.75	KUA 110A 134ML4
11	83473	1.50	155.12	KUA 136A 134ML4
10	91146	1.40	169.39	KUA 136A 134ML4
9.8	84535	1.50	177.45	KUA 136C 134ML4
8.5	98324	1.30	204.71	KUA 136C 134ML4
7.3	115386	1.10	238.26	KUA 136C 134ML4
6.2	136715	0.95	280.56	KUA 136C 134ML4
5.5	154353	0.85	315.47	KUA 136C 134ML4
15 HP nominal (17 HP actual)				
311	3584	2.00	5.63	KUA 70A 161ML4
258	4328	1.65	6.79	KUA 70A 161ML4
254	4390	2.55	6.89	KUA 75A 161ML4
213	5230	1.40	8.21	KUA 70A 161ML4
211	5301	2.10	8.32	KUA 75A 161ML4
185	6036	1.20	9.48	KUA 70A 161ML4
182	6115	1.85	9.61	KUA 75A 161ML4
159	7000	1.05	10.99	KUA 70A 161ML4
158	7071	1.90	11.10	KUA 77A 161ML4
157	7098	1.60	11.14	KUA 75A 161ML4
137	8160	0.90	12.82	KUA 70A 161ML4
135	8275	1.35	12.99	KUA 75A 161ML4
133	8372	2.90	13.14	KUA 80A 161ML4
131	8531	1.60	13.40	KUA 77A 161ML4
115	9717	1.15	15.27	KUA 75A 161ML4
113	9868	2.45	15.50	KUA 80A 161ML4
108	10310	1.30	16.19	KUA 77A 161ML4
97	11549	1.00	18.13	KUA 75A 161ML4
95	11691	2.05	18.36	KUA 80A 161ML4
94	11912	1.15	18.70	KUA 77A 161ML4
85	13054	0.85	20.50	KUA 75A 161ML4
84	13328	1.80	20.93	KUA 80A 161ML4
81	13788	3.00	21.65	KUA 85A 161ML4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
81	13806	1.00	21.68	KUA 77A 161ML4
73	15266	1.60	23.98	KUA 80A 161ML4
71	15718	2.60	24.69	KUA 85A 161ML4
69	16098	0.85	25.28	KUA 77A 161ML4
63	17612	1.40	27.66	KUA 80A 161ML4
62	18010	2.30	28.29	KUA 85A 161ML4
54	20780	2.00	32.63	KUA 85A 161ML4
54	20497	1.20	32.19	KUA 80A 161ML4
46	24187	1.70	37.98	KUA 85A 161ML4
46	24143	1.00	37.91	KUA 80A 161ML4
42	26647	2.70	41.85	KUA 110A 161ML4
41	27143	0.90	42.63	KUA 80A 161ML4
39	28479	1.45	44.72	KUA 85A 161ML4
37	30568	2.35	48.00	KUA 110A 161ML4
36	30780	0.80	48.34	KUA 80A 161ML4
35	32019	1.30	50.29	KUA 85A 161ML4
31	35462	2.00	55.69	KUA 110A 161ML4
31	36312	1.15	57.02	KUA 85A 161ML4
27	41754	1.70	65.57	KUA 110A 161ML4
26	42356	1.00	66.51	KUA 85A 161ML4
25	44516	2.80	69.91	KUA 136A 161ML4
24	47020	0.90	73.85	KUA 85A 161ML4
22	51365	2.45	80.66	KUA 136A 161ML4
22	50144	1.45	78.75	KUA 110A 161ML4
22	51666	0.80	81.14	KUA 85A 161ML4
20	55490	1.30	87.14	KUA 110A 161ML4
19	60171	2.10	94.49	KUA 136A 161ML4
18	61897	1.15	97.20	KUA 110A 161ML4
16	71906	1.75	112.93	KUA 136A 161ML4
16	69437	1.05	109.04	KUA 110A 161ML4
15	75933	0.95	119.25	KUA 110A 161ML4
14	79376	1.60	124.66	KUA 136A 161ML4
13	88341	1.45	138.74	KUA 136A 161ML4
12	90261	0.80	141.75	KUA 110A 161ML4
11	98775	1.30	155.12	KUA 136A 161ML4
10	107864	1.15	169.39	KUA 136A 161ML4
9.9	101076	1.25	177.45	KUA 136C 161ML4
8.6	117316	1.10	204.71	KUA 136C 161ML4
7.4	137387	0.95	238.26	KUA 136C 161ML4
6.2	162778	0.80	280.56	KUA 136C 161ML4
20 HP nominal (23 HP actual)				
311	4885	1.45	5.63	KUA 70A 161L4
307	4956	2.15	5.70	KUA 75A 161L4
258	5903	1.25	6.79	KUA 70A 161L4
254	5983	1.85	6.89	KUA 75A 161L4
213	7124	1.00	8.21	KUA 70A 161L4
211	7222	1.55	8.32	KUA 75A 161L4
185	8231	0.90	9.48	KUA 70A 161L4
182	8346	1.35	9.61	KUA 75A 161L4
157	9691	2.50	11.16	KUA 80A 161L4

* These units have thermal limitations. Please contact a DieQua representative for details.
⁽¹⁾ At nominal horsepower, the service factor (SF) will increase by up to 20%.



Gearmotor Selection Tables - Series K

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
157	9673	1.15	11.14	KUA 75A 161L4
135	11284	1.00	12.99	KUA 75A 161L4
133	11408	2.10	13.14	KUA 80A 161L4
115	13257	0.85	15.27	KUA 75A 161L4
113	13461	2.85	15.50	KUA 85A 161L4
113	13461	1.80	15.50	KUA 80A 161L4
96	15877	2.60	18.29	KUA 85A 161L4
95	15939	1.50	18.36	KUA 80A 161L4
84	18169	1.35	20.93	KUA 80A 161L4
81	18806	2.20	21.65	KUA 85A 161L4
73	20815	1.15	23.98	KUA 80A 161L4
71	21435	1.90	24.69	KUA 85A 161L4
63	24019	1.00	27.66	KUA 80A 161L4
62	24559	1.70	28.29	KUA 85A 161L4
60	25249	2.85	29.08	KUA 110A 161L4
54	28329	2.50	32.63	KUA 110A 161L4
54	28338	1.45	32.63	KUA 85A 161L4
54	27957	0.90	32.19	KUA 80A 161L4
48	31966	2.25	36.82	KUA 110A 161L4
46	32975	1.25	37.98	KUA 85A 161L4
42	36338	1.95	41.85	KUA 110A 161L4
39	38834	1.05	44.72	KUA 85A 161L4
37	41684	1.70	48.00	KUA 110A 161L4
36	42029	2.95	48.40	KUA 136A 161L4
35	43666	0.95	50.29	KUA 85A 161L4
32	47117	2.65	54.26	KUA 136A 161L4
31	48356	1.50	55.69	KUA 110A 161L4
31	49516	0.85	57.02	KUA 85A 161L4
29	53233	2.35	61.30	KUA 136A 161L4
27	56941	1.25	65.57	KUA 110A 161L4
25	60702	2.05	69.91	KUA 136A 161L4
22	70039	1.80	80.66	KUA 136A 161L4
22	68384	1.05	78.75	KUA 110A 161L4
20	75668	0.95	87.14	KUA 110A 161L4
19	82048	1.55	94.49	KUA 136A 161L4
18	84402	0.85	97.20	KUA 110A 161L4
16	98058	1.30	112.93	KUA 136A 161L4
14	108244	1.15	124.66	KUA 136A 161L4
13	120466	1.05	138.74	KUA 136A 161L4
11	134697	0.95	155.12	KUA 136A 161L4
10	147087	0.85	169.39	KUA 136A 161L4
9.9	139821	0.90	177.45	KUA 136C 161L4
8.6	161964	0.80	204.71	KUA 136C 161L4
25 HP nominal (28 HP actual)				
308	6089	1.75	5.70	KUA 75A 181M4
255	7354	1.55	6.89	KUA 75A 181M4
211	8877	1.25	8.32	KUA 75A 181M4
183	10257	1.10	9.61	KUA 75A 181M4
*158	11912	2.05	11.16	KUA 80A 181M4
158	11894	0.95	11.14	KUA 75A 181M4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
135	13868	0.80	12.99	KUA 75A 181M4
134	14054	2.50	13.17	KUA 85A 181M4
*134	14027	1.75	13.14	KUA 80A 181M4
113	16550	2.35	15.50	KUA 85A 181M4
*113	16541	1.45	15.50	KUA 80A 181M4
96	19514	2.10	18.29	KUA 85A 181M4
*96	19594	1.25	18.36	KUA 80A 181M4
*84	22329	1.10	20.93	KUA 80A 181M4
81	23107	1.80	21.65	KUA 85A 181M4
*73	25594	0.95	23.98	KUA 80A 181M4
71	26346	1.55	24.69	KUA 85A 181M4
68	27789	2.55	26.04	KUA 110A 181M4
*64	29524	0.85	27.66	KUA 80A 181M4
62	30187	1.35	28.29	KUA 85A 181M4
60	31037	2.30	29.08	KUA 110A 181M4
54	34816	2.05	32.63	KUA 110A 181M4
54	34825	1.20	32.63	KUA 85A 181M4
48	39294	1.85	36.82	KUA 110A 181M4
46	40533	1.05	37.98	KUA 85A 181M4
45	41816	3.00	39.18	KUA 136A 181M4
42	44666	1.60	41.85	KUA 110A 181M4
40	46356	2.70	43.43	KUA 136A 181M4
39	47728	0.90	44.72	KUA 85A 181M4
37	51233	1.40	48.00	KUA 110A 181M4
36	51657	2.40	48.40	KUA 136A 181M4
35	53666	0.80	50.29	KUA 85A 181M4
32	57914	2.15	54.26	KUA 136A 181M4
32	59437	1.20	55.69	KUA 110A 181M4
29	65428	1.90	61.30	KUA 136A 181M4
27	69986	1.05	65.57	KUA 110A 181M4
25	74614	1.70	69.91	KUA 136A 181M4
22	86093	1.45	80.66	KUA 136A 181M4
22	84048	0.85	78.75	KUA 110A 181M4
20	92996	0.80	87.14	KUA 110A 181M4
19	100846	1.25	94.49	KUA 136A 181M4
16	120528	1.05	112.93	KUA 136A 181M4
14	133042	0.95	124.66	KUA 136A 181M4
13	148069	0.85	138.74	KUA 136A 181M4
30 HP nominal (34 HP actual)				
*307	7266	1.45	5.70	KUA 75A 181L4
*254	8770	1.30	6.89	KUA 75A 181L4
*211	10593	1.05	8.32	KUA 75A 181L4
*182	12240	0.95	9.61	KUA 75A 181L4
*157	14187	0.80	11.14	KUA 75A 181L4
133	16771	2.10	13.17	KUA 85A 181L4
113	19744	1.95	15.50	KUA 85A 181L4
96	23284	1.75	18.29	KUA 85A 181L4
81	27577	1.50	21.65	KUA 85A 181L4
71	31435	1.30	24.69	KUA 85A 181L4
67	33161	2.15	26.04	KUA 110A 181L4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
62	36020	1.15	28.29	KUA 85A 181L4
60	37028	1.95	29.08	KUA 110A 181L4
54	41551	1.75	32.63	KUA 110A 181L4
54	41560	1.00	32.63	KUA 85A 181L4
52	43082	2.90	33.83	KUA 136A 181L4
48	46887	1.55	36.82	KUA 110A 181L4
46	48365	0.85	37.98	KUA 85A 181L4
45	49896	2.50	39.18	KUA 136A 181L4
42	53295	1.35	41.85	KUA 110A 181L4
40	55313	2.25	43.43	KUA 136A 181L4
37	61127	1.20	48.00	KUA 110A 181L4
36	61631	2.05	48.40	KUA 136A 181L4
32	69110	1.80	54.26	KUA 136A 181L4
31	70924	1.00	55.69	KUA 110A 181L4
29	78075	1.60	61.30	KUA 136A 181L4
27	83509	0.85	65.57	KUA 110A 181L4
25	89031	1.40	69.91	KUA 136A 181L4
22	102722	1.25	80.66	KUA 136A 181L4
19	120333	1.05	94.49	KUA 136A 181L4
16	143813	0.90	112.93	KUA 136A 181L4
14	158760	0.80	124.66	KUA 136A 181L4
40 HP nominal (46 HP actual)				
68	44524	2.80	25.72	KUA 136A 201L4
*68	45064	1.60	26.04	KUA 110A 201L4
60	50914	2.45	28.42	KUA 136A 201L4
*60	50321	1.45	29.08	KUA 110A 201L4
*54	56463	1.30	32.63	KUA 110A 201L4
52	58543	2.15	33.83	KUA 136A 201L4
*48	63720	1.15	36.82	KUA 110A 201L4
45	67809	1.85	39.18	KUA 136A 201L4
*42	72428	1.00	41.85	KUA 110A 201L4
40	75172	1.65	43.43	KUA 136A 201L4
*37	83075	0.90	48.00	KUA 110A 201L4
36	83765	1.50	48.40	KUA 136A 201L4
32	93916	1.35	54.26	KUA 136A 201L4
29	106103	1.20	61.30	KUA 136A 201L4
25	120988	1.05	69.91	KUA 136A 201L4
22	139600	0.90	80.66	KUA 136A 201L4
19	163539	0.80	94.49	KUA 136A 201L4
50 HP nominal (57 HP actual)				
78	47879	2.60	22.59	KUA 136A 226S4
69	54543	2.30	25.72	KUA 136A 226S4
*68	55197	1.30	26.04	KUA 110A 226S4
*61	61649	1.15	29.08	KUA 110A 226S4
60	62366	2.00	29.42	KUA 136A 226S4
*54	69172	1.05	32.63	KUA 110A 226S4
52	71712	1.75	33.83	KUA 136A 226S4
*48	78057	0.95	36.82	KUA 110A 226S4
45	83066	1.50	39.18	KUA 136A 226S4
*42	88730	0.80	41.85	KUA 110A 226S4

* These units have thermal limitations. Please contact a DieQua representative for details.
⁽¹⁾ At nominal horsepower, the service factor (SF) will increase by up to 20%.

Gearmotor Selection Tables - Series K



RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
41	92084	1.35	43.43	KUA 136A 226S4
37	102607	1.25	48.40	KUA 136A 226S4
33	115041	1.10	54.26	KUA 136A 226S4
29	129971	1.00	61.30	KUA 136A 226S4
25	148211	0.85	69.91	KUA 136A 226S4
60 HP nominal (69 HP actual)				
110	41595	3.00	16.13	KUA 136A 226M4
93	49162	2.55	19.07	KUA 136A 226M4
78	58233	2.15	22.59	KUA 136A 226M4
69	66331	1.90	25.72	KUA 136A 226M4
*68	67136	1.10	26.04	KUA 110A 226M4
*61	74977	0.95	29.08	KUA 110A 226M4
60	75853	1.65	29.42	KUA 136A 226M4
*54	84119	0.85	32.63	KUA 110A 226M4
52	87217	1.45	33.83	KUA 136A 226M4
45	101023	1.25	39.18	KUA 136A 226M4
41	111988	1.15	43.43	KUA 136A 226M4
37	124794	1.00	48.40	KUA 136A 226M4
33	139919	0.90	54.26	KUA 136A 226M4
29	158070	0.80	61.30	KUA 136A 226M4
25	180257	0.70	69.91	KUA 136A 226M4
75 HP nominal (89 HP actual)				
*110	50666	2.45	16.13	KUA 136A 251M4
*93	59879	2.10	19.07	KUA 136A 251M4
*79	70933	1.75	22.59	KUA 136A 251M4
*69	80801	1.55	25.72	KUA 136A 251M4
*60	92394	1.35	29.42	KUA 136A 251M4
*53	106244	1.20	33.83	KUA 136A 251M4
*45	123050	1.05	39.18	KUA 136A 251M4
*41	136414	0.95	43.43	KUA 136A 251M4
*37	152008	0.85	48.40	KUA 136A 251M4
100 HP nominal (120 HP actual)				
*110	68862	1.80	16.13	KUA 136A 251M4
*93	81385	1.55	19.07	KUA 136A 251M4
*79	96403	1.30	22.59	KUA 136A 251M4
*69	109802	1.15	25.72	KUA 136A 251M4
*61	125573	1.00	29.42	KUA 136A 251M4
*53	144388	0.90	33.83	KUA 136A 251M4
120 HP nominal (145 HP actual)				
*110	82632	1.50	16.13	KUA 136A 281M4
*93	97660	1.30	19.07	KUA 136A 281M4
*79	115687	1.10	22.59	KUA 136A 281M4
*69	131768	0.95	25.72	KUA 136A 281M4
*61	150689	0.85	29.42	KUA 136A 281M4
*53	173265	0.75	33.83	KUA 136A 281M4

* These units have thermal limitations. Please contact a DieQua representative for details.

⁽¹⁾ At nominal horsepower, the service factor (SF) will increase by up to 20%.



Speed Reducer Selection Tables - Series K

WATT Drive speed reducers are known the world over for offering superior performance and reliable operation in the most demanding applications. An optimized gear tooth design provides high power density resulting in greater torque capacities in a smaller size. The modular housing allows for shaft, foot, or flange mounting to increase design versatility.

A variety of input styles are offered including adapters for NEMA, IEC, and servo motors, as well as a model with standard input shaft. Output shafts are available

in both inch and metric dimensions. Bolt on output flanges and agitator designs are standard options.

Engineering Note:

The torque and horsepower capacities highlighted in the selection charts are based on mechanical limitations. For continuous duty applications, some models may have lower thermal horsepower capacities. Consult your representative with any questions regarding proper selection.

Ratio	in-lbs	HP	Model
Size K.40			
6.12	469	2.08	A
7.32	504	1.86	A
8.76	549	1.68	A
10.51	584	1.50	A
12.45	620	1.34	A
14.67	664	1.22	A
17.45	708	1.09	A
20.12	743	0.99	A
23.22	814	0.94	A
25.78	841	0.89	A
31.34	885	0.76	A
34.58	885	0.68	A
38.41	885	0.62	A
44.11	885	0.54	A
48.42	885	0.50	A
53.50	885	0.44	A
59.61	885	0.40	A
67.07	885	0.36	A
Size K.50			
5.67	1770	8.42	*A
6.90	1770	6.92	A
8.39	1770	5.69	A
9.74	1770	4.89	A
11.35	1770	4.21	A
13.31	1770	3.59	A
15.53	1770	3.07	A
18.02	1770	2.66	A
21.13	1770	2.25	A
24.15	1770	1.97	A
27.60	1770	1.73	A
29.65	1770	1.61	C
30.48	1770	1.57	A
35.49	1770	1.34	C
36.62	1770	1.30	A
40.25	1770	1.18	A

Ratio	in-lbs	HP	Model
42.47	1770	1.14	C
44.54	1770	1.07	A
50.94	1770	0.94	C
50.95	1770	0.94	A
55.78	1770	0.86	A
60.34	1770	0.79	C
61.47	1770	0.78	A
68.31	1770	0.70	A
71.11	1770	0.67	C
76.67	1770	0.62	A
84.57	1770	0.56	C
97.52	1770	0.50	C
112.52	1770	0.43	C
124.95	1770	0.38	C
151.91	1770	0.31	C
167.61	1770	0.28	C
186.17	1770	0.25	C
213.79	1770	0.23	C
234.66	1770	0.20	C
259.31	1770	0.19	C
288.90	1770	0.16	C
325.07	1770	0.15	C
Size K.60			
5.51	3540	17.33	*A
6.55	3540	14.59	*A
7.77	3540	12.28	A
9.25	3540	10.31	A
11.08	3540	8.62	A
13.38	3540	7.13	A
15.27	3540	6.25	A
17.57	3540	5.43	A
20.95	3540	4.56	A
24.00	3540	3.98	A
27.82	3540	3.43	A
31.64	3540	3.02	A
35.75	3540	2.67	A

Ratio	in-lbs	HP	Model
39.27	3540	2.43	A
45.11	3540	2.12	C
46.32	3540	2.07	A
50.73	3540	1.88	A
54.00	3540	1.77	C
55.93	3540	1.70	A
63.94	3540	1.49	A
64.61	3540	1.48	C
69.82	3540	1.37	A
76.76	3540	1.25	A
77.49	3540	1.23	C
91.80	3540	1.05	C
108.18	3540	0.89	C
128.66	3540	0.74	C
148.36	3540	0.64	C
171.19	3540	0.56	C
190.09	3540	0.50	C
231.10	3540	0.42	C
255.00	3540	0.38	C
283.40	3540	0.34	C
325.26	3540	0.30	C
357.00	3540	0.27	C
394.51	3540	0.24	C
439.53	3540	0.21	C
494.55	3540	0.19	C
Size K.70			
5.63	7080	33.94	*A
6.79	7080	28.11	*A
8.21	7080	23.27	A
9.48	7080	20.14	A
10.99	7080	17.38	A
12.82	7080	14.90	A
15.06	7080	12.69	A
17.89	7080	10.67	A
20.23	7080	9.44	A
23.05	7080	8.29	A

Ratio	in-lbs	HP	Model
27.54	7080	6.93	A
31.34	7080	6.09	A
36.09	7080	5.30	A
40.37	7080	4.73	A
43.65	7080	4.37	C
45.94	7080	4.16	A
50.33	7080	3.80	A
53.09	7080	3.59	C
58.71	7080	3.26	A
64.15	7080	2.98	A
64.57	7080	2.96	C
70.59	7080	2.71	A
74.95	7080	2.55	C
87.34	7080	2.19	C
102.39	7080	1.86	C
119.45	7080	1.60	C
138.63	7080	1.38	C
162.59	7080	1.18	C
185.82	7080	1.03	C
212.36	7080	0.90	C
228.15	7080	0.83	D
234.48	7080	0.82	C
273.11	7080	0.70	D
281.79	7080	0.68	C
309.70	7080	0.62	C
326.77	7080	0.59	D
342.68	7080	0.56	C
391.92	7080	0.48	D
392.06	7080	0.48	C
429.15	7080	0.44	C
464.28	7080	0.42	D
472.99	7080	0.40	C
525.60	7080	0.36	C
547.13	7080	0.35	D
589.90	7080	0.32	C
650.70	7080	0.30	D

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Speed Reducer Selection Tables - Series K



Ratio	in-lbs	HP	Model
750.35	7080	0.25	D
865.79	7080	0.21	D
961.39	7080	0.20	D
1168.82	7080	0.16	D
1289.67	7080	0.15	D
1432.49	7080	0.13	D
1645.00	7080	0.12	D
1805.53	7080	0.11	D
1995.25	7080	0.09	D
2222.92	7080	0.08	D
2501.17	7080	0.08	D
Size K.75			
5.70	11063	49.78	*A
6.89	11063	43.33	*A
8.32	11063	35.86	*A
9.61	11063	31.04	A
11.14	11063	26.78	A
12.99	11063	22.97	A
15.27	11063	19.55	A
18.13	11063	16.45	A
20.50	11063	14.55	A
23.37	11063	12.77	A
27.92	11063	10.69	A
31.77	11063	9.39	A
36.58	11063	8.15	A
40.92	11063	7.30	A
44.25	10956	6.68	C
46.57	11063	6.41	A
51.02	11063	5.85	A
53.82	10956	5.48	C
59.51	10655	4.83	A
65.03	9815	4.06	A
65.45	10956	4.52	C
71.55	8841	3.34	A
75.98	10956	3.89	C
88.54	10956	3.34	C
103.79	10956	2.84	C
121.09	10956	2.44	C
140.53	10956	2.11	C
164.82	10956	1.80	C
188.36	10956	1.57	C
215.27	10956	1.37	C
231.27	10956	1.27	D
237.70	10956	1.25	C
276.85	10956	1.07	D
285.65	10956	1.03	C
313.94	10956	0.94	C
331.24	10956	0.90	D
347.37	10956	0.84	C
397.29	10956	0.74	D

Ratio	in-lbs	HP	Model
397.43	10956	0.74	C
435.03	10956	0.68	C
470.64	10956	0.63	D
479.47	10956	0.62	C
532.80	10956	0.55	C
554.63	10956	0.54	D
597.98	10956	0.50	C
659.61	10956	0.44	D
760.63	10956	0.39	D
877.65	10956	0.34	D
974.56	10956	0.31	D
1184.83	10956	0.25	D
1307.33	10956	0.23	D
1452.11	10956	0.20	D
1667.54	10956	0.17	D
1830.27	10956	0.16	D
2022.59	10956	0.15	D
2253.37	10956	0.13	D
2535.43	10956	0.12	D
Size K.77			
10.52	13275	34.02	*A
12.71	13275	28.17	*A
15.35	13275	23.32	*A
17.73	13275	20.20	*A
20.56	13275	17.42	*A
23.97	13275	14.94	A
28.17	13275	12.71	A
33.46	13275	10.70	A
37.83	13275	9.47	A
43.12	13275	8.30	A
51.51	13275	6.95	A
58.61	13275	6.12	A
67.49	13275	5.31	A
75.51	13275	4.75	A
81.64	13275	4.39	C
85.93	13275	4.17	A
94.13	13275	3.81	A
99.30	13275	3.61	C
109.80	13275	3.26	A
119.98	13275	2.99	A
120.77	13275	2.96	C
132.02	13275	2.71	A
140.18	13275	2.55	C
163.36	13275	2.19	C
191.50	13275	1.86	C
223.42	13275	1.61	C
259.28	13275	1.38	C
304.10	13275	1.18	C
347.54	13275	1.03	C
397.19	13275	0.90	C

Ratio	in-lbs	HP	Model
426.71	13275	0.84	D
438.56	13275	0.82	C
510.80	13275	0.70	D
527.04	13275	0.68	C
579.23	13275	0.62	C
611.16	13275	0.59	D
640.92	13275	0.56	C
733.02	13275	0.48	D
733.27	13275	0.48	C
802.65	13275	0.44	C
868.35	13275	0.42	D
884.65	13275	0.40	C
983.04	13275	0.36	C
1023.31	13275	0.35	D
1103.30	13275	0.32	C
1217.01	13275	0.30	D
1403.40	13275	0.25	D
1619.30	13275	0.21	D
1798.10	13275	0.20	D
2186.06	13275	0.16	D
2412.09	13275	0.15	D
2679.21	13275	0.13	D
3076.68	13275	0.12	D
3376.92	13275	0.11	D
3731.76	13275	0.09	D
4157.56	13275	0.08	D
4677.99	13275	0.08	D
Size K.80			
11.16	23895	57.76	*A
13.14	23895	49.04	*A
15.50	23895	41.59	*A
18.36	23895	35.11	*A
20.93	23895	30.80	*A
23.98	23895	26.89	*A
27.66	23895	23.31	A
32.19	23895	20.02	A
37.91	23895	17.00	A
42.63	23895	15.13	A
48.34	23895	13.33	A
56.38	23895	11.43	A
62.60	23895	10.30	A
68.78	23895	9.37	A
82.34	23895	7.83	A
86.03	23895	7.50	C
93.00	23895	6.93	A
101.72	23895	6.34	A
104.63	23895	6.16	C
118.93	23895	5.42	A
127.25	23895	5.07	C
147.71	23895	4.36	C

Ratio	in-lbs	HP	Model
172.13	23895	3.74	C
201.78	23895	3.19	C
235.41	23895	2.74	C
273.19	23895	2.36	C
320.41	23895	2.01	C
366.19	23895	1.76	C
418.50	23895	1.54	C
449.60	23895	1.43	D
462.09	23895	1.39	C
538.20	23895	1.19	D
555.32	23895	1.17	C
610.31	23895	1.06	C
643.95	23895	1.01	D
675.31	23895	0.95	C
772.36	23895	0.83	D
772.62	23895	0.83	C
845.72	23895	0.76	C
914.95	23895	0.71	D
932.11	23895	0.70	C
1035.79	23895	0.62	C
1078.22	23895	0.60	D
1162.50	23895	0.55	C
1282.31	23895	0.50	D
1478.70	23895	0.44	D
1706.19	23895	0.38	D
1894.58	23895	0.34	D
2303.36	23895	0.28	D
2541.52	23895	0.25	D
2822.97	23895	0.23	D
3241.77	23895	0.20	D
3558.12	23895	0.19	D
3932.00	23895	0.16	D
4380.65	23895	0.15	D
4929.00	23895	0.13	D
Size K.85			
13.17	40710	71.84	*A
15.50	40710	66.41	*A
18.29	40710	60.05	*A
21.65	40710	50.70	*A
24.69	40710	44.48	*A
28.29	40710	38.82	A
32.63	40710	33.65	A
37.98	40710	28.91	A
44.72	40710	24.55	A
50.29	40710	21.83	A
57.02	40710	19.26	A
66.51	40710	16.51	A
73.85	40710	14.87	A
81.14	40710	13.53	A
97.14	40710	11.30	A

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Speed Reducer Selection Tables - Series K

Ratio	in-lbs	HP	Model
101.49	40710	10.82	C
109.71	39436	9.70	A
120.00	36081	8.11	A
123.43	40710	8.89	C
140.31	30648	5.89	A
150.12	40710	7.31	C
174.25	40710	6.30	C
203.06	40710	5.40	C
238.04	40710	4.61	C
277.71	40710	3.96	C
322.29	40710	3.41	C
378.00	40710	2.91	C
432.00	40710	2.55	C
493.17	40710	2.23	C
530.41	40710	2.07	D
545.14	40710	2.01	C
634.93	40710	1.73	D
655.12	40710	1.68	C
720.00	40710	1.53	C
759.68	40710	1.45	D
796.68	40710	1.38	C
911.17	40710	1.21	D
911.47	40710	1.21	C
997.71	40710	1.10	C
1079.38	40710	1.02	D
1099.64	40710	0.99	C
1221.94	40710	0.90	C
1272.00	40710	0.86	D
1371.43	38781	0.76	C
1512.77	40710	0.72	D
1744.46	40710	0.63	D
2012.84	40710	0.55	D
2235.09	40710	0.50	D
2717.33	40710	0.40	D
2998.29	40710	0.36	D
3330.33	40710	0.34	D
3824.39	40710	0.28	D
4197.60	40710	0.27	D
4638.67	40710	0.24	D
5167.95	40710	0.21	D
5814.86	40710	0.19	D
Size K.110			
26.04	70800	73.35	*A
29.08	70800	65.68	*A
32.63	70800	58.54	*A
36.82	70800	51.87	A
41.85	70800	45.63	A
48.00	70800	39.79	A
55.69	70800	34.29	A
65.57	70800	29.13	A

Ratio	in-lbs	HP	Model
67.86	70800	28.15	C
78.75	70800	24.25	A
81.94	70800	23.31	C
87.14	70800	21.91	A
97.20	70800	19.65	A
98.99	70800	19.30	C
109.04	70800	17.51	A
114.34	70800	16.71	C
119.25	70800	16.01	A
132.56	70800	14.40	C
141.75	70729	13.46	A
154.55	70800	12.35	C
158.88	56755	9.63	A
181.62	70800	10.51	C
215.75	70800	8.85	C
243.92	70800	7.83	C
278.02	70800	6.87	C
332.15	70800	5.75	C
377.95	70800	5.06	C
435.19	70800	4.39	C
486.88	70800	3.92	C
526.46	70800	3.63	D
554.09	70800	3.45	C
606.94	70800	3.15	C
640.29	70800	2.98	D
708.01	70800	2.70	C
773.68	70800	2.47	C
778.73	70800	2.45	D
851.29	70800	2.24	C
903.93	70800	2.12	D
1053.37	70800	1.81	D
1234.84	70800	1.54	D
1440.64	70800	1.33	D
1671.86	70800	1.14	D
1960.88	70800	0.98	D
2241.00	70800	0.86	D
2561.14	70800	0.75	D
2827.93	70800	0.67	D
3398.44	70800	0.56	D
3735.00	70800	0.51	D
4132.75	70800	0.46	D
4728.26	70800	0.40	D
5175.64	70800	0.38	D
5704.36	70800	0.34	D
6338.83	70800	0.30	D
7114.29	70800	0.27	D
Size K.136			
16.13	123900	207.16	*A
19.07	123900	175.30	*A
22.59	123900	147.97	*A

Ratio	in-lbs	HP	Model
25.72	123900	129.92	*A
29.42	123900	113.61	*A
33.83	123900	98.81	*A
39.18	123900	85.30	*A
43.43	123900	76.95	A
48.40	123900	69.05	A
54.26	123900	61.59	A
61.30	123900	54.51	A
69.91	123900	47.81	A
80.66	123900	41.44	A
82.60	123900	40.46	C
94.49	123900	35.38	A
97.26	123900	34.36	C
112.93	123900	29.60	A
114.72	123900	29.13	C
124.66	123900	26.81	A
135.85	123900	24.59	C
138.74	123900	24.08	A
154.87	123900	21.58	C
155.12	123900	21.55	A
169.39	123900	19.73	A
177.45	123900	18.83	C
204.71	123900	16.32	C
238.26	123900	14.03	C
280.56	123900	11.91	C
315.47	123900	10.59	C
357.74	123900	9.35	C
417.29	123900	8.01	C
463.28	123900	7.21	C
509.06	123900	6.57	C
609.44	123900	5.48	C
636.69	123900	5.24	D
688.31	123900	4.85	C
752.84	123900	4.44	C
774.35	123900	4.32	D
880.24	123900	3.80	C
941.77	123900	3.55	D
1093.20	123900	3.06	D
1273.93	123900	2.63	D
1493.38	123900	2.24	D
1742.28	123900	1.92	D
2021.91	123900	1.65	D
2371.44	123900	1.41	D
2710.21	123900	1.23	D
3097.39	123900	1.07	D
3420.03	123900	0.98	D
4110.00	123900	0.82	D
4517.02	123900	0.74	D
4998.06	123900	0.67	D
5718.26	123900	0.59	D

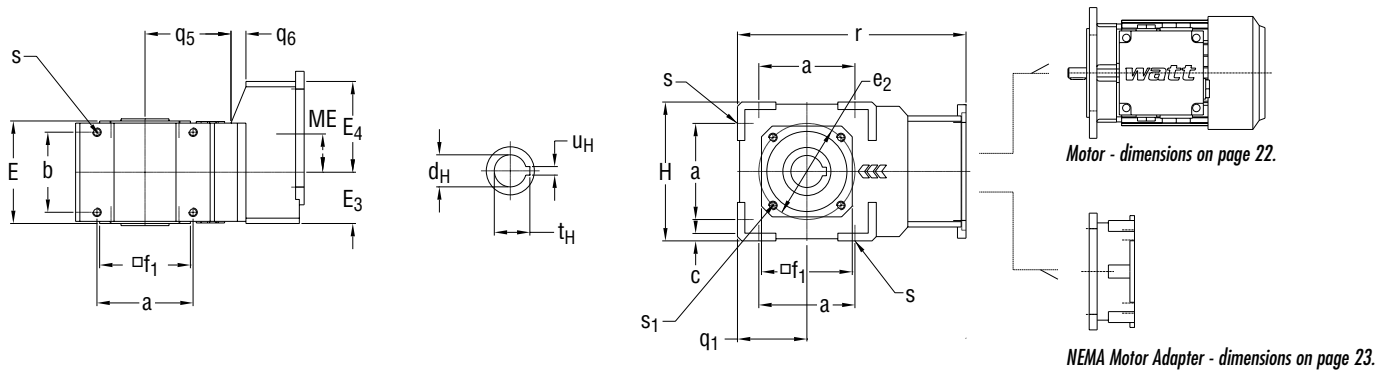
Ratio	in-lbs	HP	Model
6259.31	123900	0.54	D
6898.73	123900	0.48	D
7666.04	123900	0.44	D
8603.86	123900	0.39	D

* These units have thermal limitations. Please contact a DieQua representative for details.

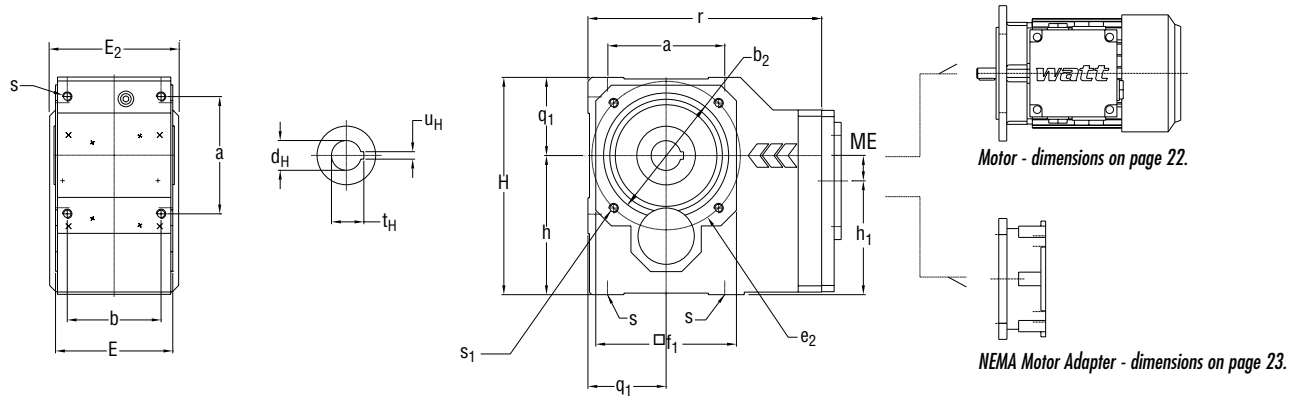
Schematics - Series K

We have provided basic dimensions only. For complete drawings, please visit our website or contact your DieQua representative.

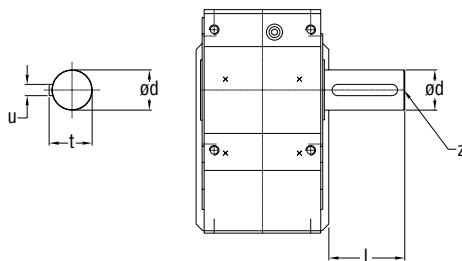
Size 40 - 75



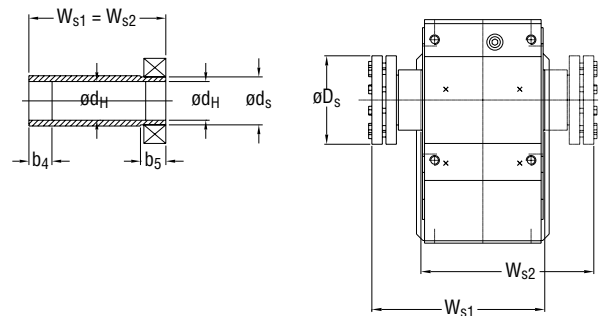
Sizes 77 - 136



Output Shaft



Shrink Disc



KU 40 - 75

	a	b	c	E	e ₂	E ₃	E ₄	f ₁	H	ME	r	q ₁	q ₅	q ₆	s	s ₁ ⁽¹⁾
KU 40A	3.54	2.95	---	3.78	3.54	1.89	3.35	3.35	5.12	1.26	8.43	2.56	3.19	0.55	M8x16	M8x16
KU 50A	4.33	3.15	0.39	4.13	4.33	2.11	4.17	4.13	6.69	1.59	9.96	3.35	3.46	0.75	0.35	M10x16
KU 50C	4.33	3.15	0.39	4.13	4.33	2.11	4.17	4.13	6.69	2.56	11.3	3.35	3.46	0.75	0.35	M10x16
KU 60A	5.51	3.74	0.47	4.72	5.12	2.68	4.96	4.92	7.87	2.01	11.73	3.94	3.98	0.94	0.43	M10x16
KU 60C	5.51	3.74	0.47	4.72	5.12	2.68	4.96	4.92	7.87	3.13	13.07	3.94	3.98	0.94	0.43	M10x16
KU 70A	6.69	4.33	0.55	5.51	6.5	3.03	6.18	6.3	9.45	2.62	13.94	4.72	5.91	1.1	0.51	M12x20
KU 70C	6.69	4.33	0.55	5.51	6.5	3.03	6.18	6.3	9.45	3.83	15.55	4.72	5.91	1.1	0.51	M12x20
KU 70D	6.69	4.33	0.55	5.51	6.5	3.03	6.18	6.3	9.45	4.79	16.89	4.72	5.91	1.1	0.51	M12x20
KU 75A	7.87	4.72	0.63	5.91	7.48	3.19	6.1	7.87	11.02	2.52	16.07	5.51	7.01	0.98	0.51	M12x20
KU 75C	7.87	4.72	0.63	5.91	7.48	3.19	6.1	7.87	11.02	3.73	17.68	5.51	7.01	0.98	0.51	M12x20
KU 75D	7.87	4.72	0.63	5.91	7.48	3.19	6.1	7.87	11.02	4.7	19.02	5.51	7.01	0.98	0.51	M12x20

Dimensions are in inches.

Dimensions are subject to change without notice.

(1) Metric Thread.

KU 77 - 136

	a	b	b ₂	E	E ₂	e ₂	f ₁	H	h	h ₁	ME	r	q ₁	s ⁽¹⁾	s ₁ ⁽¹⁾
KU 77A	5.91	4.72	6.3	5.91	6.5	7.48	7.09	10.94	7.01	5.73	1.28	12.56	3.94	M12x18	M12x18
KU 77C	5.91	4.72	6.3	5.91	6.5	7.48	7.09	10.94	7.01	6.94	0.07	14.18	3.94	M12x18	M12x18
KU 77D	5.91	4.72	6.3	5.91	6.5	7.48	7.09	10.94	7.01	7.91	0.9	15.51	3.94	M12x18	M12x18
KU 80A	7.48	5.51	5.91	6.85	7.48	7.48	7.28	13.19	8.27	6.65	2.01	15.4	4.92	M16x26	M16x25
KU 80C	7.48	5.51	5.91	6.85	7.48	7.48	7.28	13.19	8.27	8.07	0.2	16.82	4.92	M16x26	M16x25
KU 80D	7.48	5.51	5.91	6.85	7.48	7.48	7.28	13.19	8.27	9.04	0.77	18.15	4.92	M16x26	M16x25
KU 85A	8.66	6.3	---	8.03	7.72	9.45	9.25	16.73	10.63	7.52	3.11	18.07	6.1	M20x30	M20x30
KU 85C	8.66	6.3	---	8.03	7.72	9.45	9.25	16.73	10.63	8.94	1.7	19.49	6.1	M20x30	M20x30
KU 85D	8.66	6.3	---	8.03	7.72	9.45	9.25	16.73	10.63	9.91	0.73	20.83	6.1	M20x30	M20x30
KU 110A	10.24	7.48	---	9.84	10.63	9.45	9.25	18.7	11.81	9.64	2.18	21.78	6.89	M24x36	M20x30
KU 110C	10.24	7.48	---	9.84	10.63	9.45	9.25	18.7	11.81	11.4	0.42	23.98	6.89	M24x36	M20x30
KU 110D	10.24	7.48	---	9.84	10.63	9.45	9.25	18.7	11.81	12.61	0.8	24.77	6.89	M24x36	M20x30
KU 136A	13.39	10.24	---	13.31	12.2	11.81	13.39	22.05	13.19	10.84	2.35	28.31	8.86	M30x45	M24x36
KU 136C	13.39	10.24	---	13.31	12.2	11.81	13.39	22.05	13.19	12.69	0.5	31.3	8.86	M30x45	M24x36
KU 136D	13.39	10.24	---	13.31	12.2	11.81	13.39	22.05	13.19	14.11	0.92	31.93	8.86	M30x45	M24x36

Dimensions are in inches.

Dimensions are subject to change without notice.

(1) Metric Thread.

Shaft Dimensions

	Hollow Shaft			Solid Shaft ⁽¹⁾					Shrink Disc				
	d _H	t _H	u _H	d	l	t	u	z ⁽²⁾	b ₄	b ₅	d _H ⁽³⁾	D _S	W _{S1}
K40	1.25	1.367	0.25	1	1.97	1.11	0.25	M10	0.79	0.83	1.181	2.84	4.96
K50	1.375	1.518	0.313	1.25	2.36	1.36	0.25	M12	0.79	0.95	1.378	3.15	5.44
K60	1.5	1.669	0.375	1.375	2.76	1.51	0.313	M12	0.79	0.99	1.575	3.55	6.11
K70	1.5	1.669	0.375	1.625	3.15	1.79	0.375	M16	1.18	1.03	1.969	4.33	6.97
K75	2	2.223	0.5	2	3.94	2.22	0.5	M20	1.18	1.1	1.969	4.33	8.47
K77	2	2.223	0.5	2	3.94	2.22	0.5	M20	1.18	1.1	1.969	4.33	8.47
K80	2.375	2.651	0.625	2.375	4.72	2.65	0.625	M20	1.18	1.14	2.559	5.44	9.61
K85	2.75	2.938	0.625	2.875	5.51	3.2	0.75	M20	1.97	1.58	2.953	6.11	12.7
K110	3.625	4.014	0.875	3.625	6.69	4.01	0.875	M24	2.36	1.77	3.543	7.29	14.4
K136	4	4.441	1	4.375	8.27	4.82	1	M24	2.36	1.97	4.134	8.47	16.1

Dimensions are in inches.

(1) Dual output option available.

Dimensions are subject to change without notice.

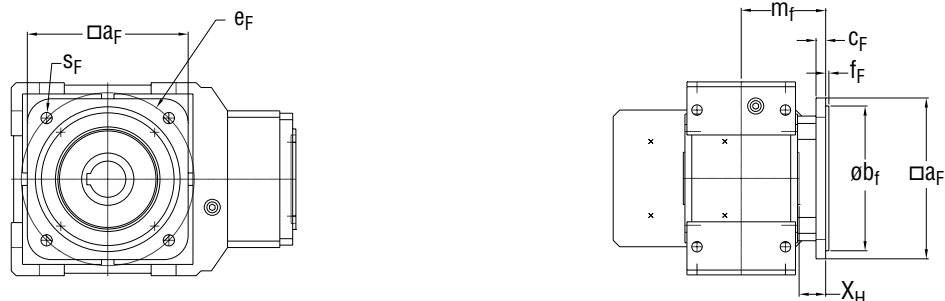
(2) Metric thread.

(3) Estimate converted from metric dimension.

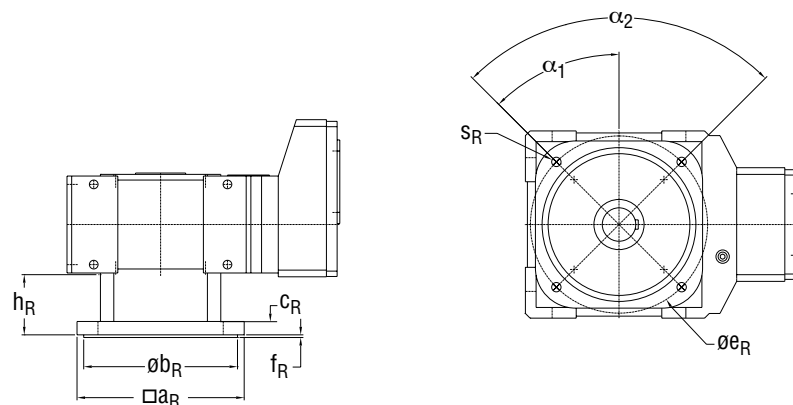
Schematics - Series K

We have provided basic dimensions only. For complete drawings, please visit our website or contact your DieQua representative.

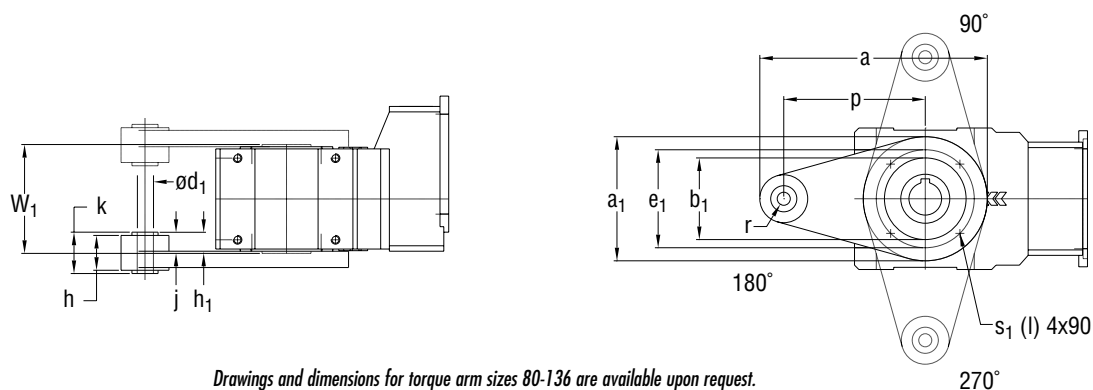
Optional Output Flange



Agitator Design



Optional Torque Arm



Drawings and dimensions for torque arm sizes 80-136 are available upon request.

Optional Output Flange Dimensions

	a _F	b _F	c _F	e _F	f _F	m _F	s _F	x _H
K. 40	5.12	4.33	0.39	5.12	0.12	3.15	0.35	1.18
K. 50	5.91	5.12	0.39	6.50	0.14	3.33	0.43	1.18
K. 60	5.91	5.12	0.39	6.50	0.14	4.02	0.43	1.57
K. 70	7.87	7.09	0.47	8.46	0.16	4.13	0.55	1.30
K. 75	9.84	9.06	0.55	10.43	0.16	5.12	0.55	2.09
K. 77	9.84	9.06	0.55	10.43	0.16	5.12	0.55	2.09
K. 80	11.81	9.84	0.63	11.81	0.20	5.59	0.71	1.97
K. 85	*17.72	13.78	0.94	15.75	0.20	6.93	0.71	2.72
K. 110	*17.72	13.78	0.94	15.75	0.20	7.83	0.71	2.72
K. 136	*21.65	17.72	0.94	19.69	0.20	9.80	0.71	2.91

Dimensions are in inches.

Dimensions are subject to change without notice.

* Designates round flange

Agitator Design Dimensions

	a _R	b _R	c _R	e _R	f _R	h _R	s _R	α ₁	α ₂
KRA 75	9.84	9.06	0.79	10.43	0.16	3.54	0.55	45°	4 x 90°
KRA 77	9.84	9.06	0.79	10.43	0.16	3.54	0.55	45°	4 x 90°
KRA 80	11.42	9.84	0.87	11.81	0.20	4.45	0.71	45°	4 x 90°
KRA 85	*17.72	13.78	1.02	15.75	0.20	5.12	0.71	22.5°	8 x 45°
KRA 110	*17.72	13.78	1.02	15.75	0.20	6.30	0.71	22.5°	8 x 45°
KRA 136	*21.65	17.72	1.10	19.69	0.20	7.87	0.71	22.5°	8 x 45°

Dimensions are in inches.

Dimensions are subject to change without notice.

* Designates round flange

Optional Torque Arm Dimensions

	a	a ₁	b ₁	c	d ₁	E	e ₁	h	h ₁	j	k	l ⁽¹⁾	s ₁	w ₁
K. 40	8.23	4.49	2.95	0.59	0.47	3.78	3.54	1.26	0.75	0.67	1.46	M8 x 20	0.33	3.94
K. 50	9.84	5.35	3.62	0.67	0.47	4.13	4.33	1.26	0.77	0.69	1.46	M10 x 25	0.41	4.29
K. 60	11.89	6.30	4.25	0.75	0.47	4.72	5.12	1.26	0.75	0.67	1.46	M10 x 25	0.41	4.88
K. 70	15.16	7.87	5.20	0.91	0.79	5.51	6.50	2.20	1.24	1.16	2.36	M12 x 30	0.49	5.67
K. 75	15.47	8.50	5.98	0.91	0.79	5.91	7.48	2.20	1.24	1.16	2.36	M12 x 30	0.49	6.06
K. 77	15.47	8.50	5.98	0.91	0.79	5.91	7.48	2.20	1.24	1.16	2.36	M12 x 30	0.49	6.06

Drawings and dimensions for torque arm sizes 80-136 are available upon request.

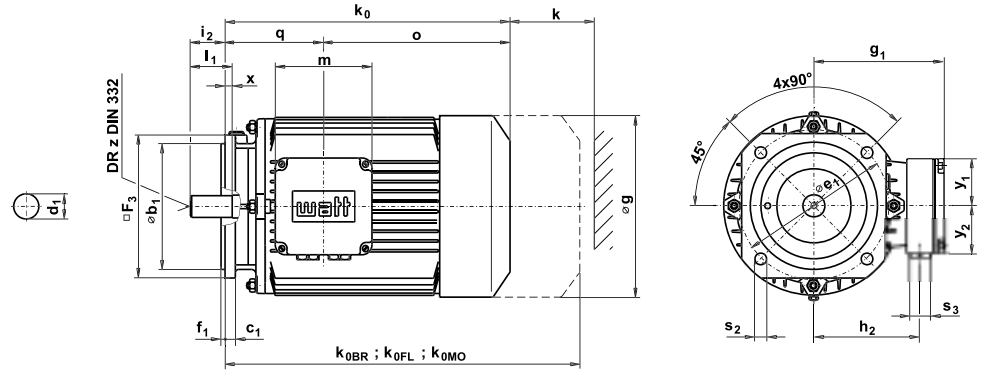
Dimensions are subject to change without notice.

Dimensions are in inches.

⁽¹⁾ Metric Thread.

Integral Motor Dimensions - Series K

The WATT Drive EUSAS brand motor is a high quality design featuring cast housings, upgraded bearings, superior protection, and windings capable of operating in any Volts/Hz combination, for worldwide usage. These motors offer up to 20% additional horsepower over similar competitive frame sizes.



Type	Motor Dimensions												
	g	g ₁	h ₂	k*	kobr*	koff*	komo*	m	q	s ₂	s ₃	y ₁	y ₂
64K,N	4.76	4.61	3.35	0.87	9.53	12	14.02	3.54	2.83	10	2xM25x1.5+M16x1.5	1.77	1.77
72K,N	5.47	5	3.74	0.94	10.91	13.62	15.51	3.54	2.83	10	2xM25x1.5+M16x1.5	1.77	1.77
81K,N	6.14	5.35	4.09	1.02	12.24	15.39	17.13	4.8	3.31	10	2xM25x1.5+M16x1.5	2.4	2.4
91S,L	6.85	5.67	4.41	1.1	14.65	17.09	19.41	4.8	3.58	10	2xM25x1.5+M16x1.5	2.4	2.4
101L,LA	7.72	6.3	4.96	1.54	15.79	18.63	20.63	4.8	4.25	12	2xM32x1.5	2.4	2.4
114M,ML	8.66	6.85	5.55	1.73	18.59	20.87	23.43	4.8	4.37	12	2xM32x1.5	2.4	2.4
134S,M	10.2	7.68	6.18	1.97	21.42	24.02	26.42	5.51	5.08	14.5	2xM32x1.5	2.76	2.76
161M,L	12.36	9.76	7.87	2.36	25.12	29.97	31.42	7.28	5.71	15	2xM40x1.5	3.94	3.94
181M,L	14.96	10.83	8.9	2.56	29.97	32.27	34.3	7.44	6.26	15	2xM40x1.5+M16x1.5	3.9	4.17
201L	16.34	12.6	10.12	3.15	33.05	36.12	38.01	9.33	6.89	19	2xM50x1.5+M16x1.5	4.84	7.64
226S,M	17.52	13.58	10.63	3.94	33.1	36.09	39.24	9.33	7.09	19	2xM50x1.5+M16x1.5	4.72	7.64
251M	19.29	14.94	11.81	3.94	38.41	39	44.71	8.58	7.87	8x19	2xM63x1.5+M16x1.5	5.12	7.28

Dimensions are in inches. *k = air flow space, k_{0BR} = motor with brake, k_{0FL} = motor with forced cooling, k_{0MO} = motor with forced cooling and encoder.

To determine complete gearmotor length, add basic motor length "k₀" to reducer length "r", found on page 19.

Integral Motor Length Adder "k ₀ "									
	64	72	81	91	101	114	134	161	181
40A	7.76	8.86	10.16	11.69	---	---	---	---	---
50A	7.76	8.86	10.16	11.69	13.11	15.16	---	---	---
50C	7.76	8.86	10.16	11.69	---	---	---	---	---
60A	7.76	8.86	10.16	11.69	13.11	15.16	16.30	---	---
60C	7.76	8.86	10.16	11.69	---	---	---	---	---
70A	7.76	8.86	10.16	11.69	13.11	15.16	16.30	21.65	---
70C	7.76	8.86	10.16	11.69	13.11	15.16	---	---	---
70D	7.76	8.86	10.16	11.69	---	---	---	---	---
75A	7.76	8.86	10.16	11.69	13.11	15.16	16.30	21.65	24.61
75C	7.76	8.86	10.16	11.69	13.11	15.16	---	---	---
75D	7.76	8.86	10.16	11.69	---	---	---	---	---
77A	7.76	8.86	10.16	11.69	13.11	15.16	16.30	---	---
77C	7.76	8.86	10.16	11.69	13.11	15.16	---	---	---
77D	7.76	8.86	10.16	11.69	---	---	---	---	---

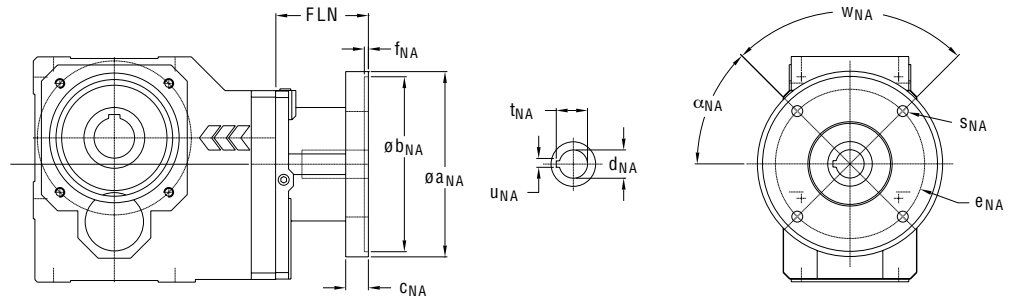
Integral Motor Length Adder "k ₀ "												
	64	72	81	91	101	114	134	161	181	201	226	251
80A	---	---	---	---	12.91	14.96	16.10	21.46	24.41	---	---	---
80C	7.76	8.86	10.16	11.69	13.11	15.16	---	---	---	---	---	---
80D	7.76	8.86	10.16	11.69	---	---	---	---	---	---	---	---
85A	---	---	---	---	12.91	14.96	16.10	21.46	24.41	---	---	---
85C	7.76	8.86	10.16	11.69	13.11	15.16	---	---	---	---	---	---
85D	7.76	8.86	10.16	11.69	---	---	---	---	---	---	---	---
110A	---	---	---	---	---	---	16.77	20.78	23.74	28.86	---	---
110C	7.76	8.86	10.16	11.69	13.11	15.16	16.30	---	---	---	---	---
110D	7.76	8.86	10.16	11.69	13.11	15.16	---	---	---	---	---	---
136A	---	---	---	---	---	---	16.77	20.79	23.74	28.86	28.86	32.72
136C	---	---	---	---	12.91	14.96	16.10	21.46	24.41	---	---	---
136D	7.76	8.86	10.16	11.69	13.11	15.16	---	---	---	---	---	---

Dimensions are in inches.

Dimensions are subject to change without notice.

NEMA Motor Adapter Dimensions - Series K

WATT Drive speed reducers are available with motor adapters for NEMA, IEC, and a wide variety of servo motors. For IEC and servo motor adapter dimensions, consult your DieQua representative. NEMA adapter dimensions, for the appropriate reducers, are provided on this page.



Type	NEMA Adapter Dimensions											
	a _{NA}	b _{NA}	c _{NA}	d _{NA}	d x l	e _{NA}	f _{NA}	s _{NA}	t _{NA}	u _{NA}	w _{NA}	α _{NA}
NA56	6.5	4.5	0.71	0.625	0.625 x 2.056	5.875	0.2	0.41	0.709	0.188	4x90°	45°
NA143/145	6.5	4.5	0.71	0.875	0.875 x 2.12	5.875	0.2	0.41	0.964	0.188	4x90°	45°
NA182/184	10	8.5	1.1	1.125	1.125 x 2.62	7.25	0.2	0.53	1.241	0.25	4x90°	45°
NA213/215	10	8.5	1.1	1.375	1.375 x 3.12	7.25	0.2	0.53	1.518	0.312	4x90°	45°
NA254/256	10	8.5	1.1	1.625	1.625 x 3.75	7.25	0.2	0.53	1.796	0.375	4x90°	45°
NA284/286	11.25	10.5	1.1	1.875	1.875 x 4.38	9	0.2	0.53	2.096	0.5	4x90°	45°

Dimensions are in inches.

To determine complete reducer length, add flange length "FLN" to reducer length "r", found on page 19.

NEMA Flange Length Adder "FLN"						
	56	143/145	182/184	213/215	254/256	284/286
40A	2.283	2.283	---	---	---	---
50A	2.283	2.283	3.740	3.740	---	---
50C	2.283	2.283	---	---	---	---
60A	2.283	2.283	3.70	3.740	---	---
60C	2.283	2.283	---	---	---	---
70A	2.283	2.283	3.70	3.740	---	---
70C	2.283	2.283	3.70	3.740	---	---
70D	2.283	2.283	---	---	---	---
75A	2.283	2.283	3.70	3.740	4.72	5.51
75C	2.283	2.283	3.70	3.740	---	---
75D	2.283	2.283	---	---	---	---
77A	2.283	2.283	3.70	3.740	4.72	5.51
77C	2.283	2.283	3.740	3.70	---	---
77D	2.283	2.283	---	---	---	---

NEMA Flange Length Adder "FLN"						
	56	143/145	182/184	213/215	254/256	284/286
80A	---	---	5.315	5.315	5.315	5.315
80C	2.24	2.24	3.70	3.70	---	---
80D	2.24	2.24	---	---	---	---
85A	---	---	5.31	5.31	5.31	5.31
85C	2.283	2.283	3.740	3.740	---	---
85D	2.24	2.24	---	---	---	---
110A	---	---	---	4.69	4.69	4.69
110C	2.24	2.24	3.70	3.70	4.69	5.47
110D	3.07	3.07	4.49	4.49	---	---
136A	---	---	---	---	4.65	4.65
136C	---	---	5.31	5.31	5.31	5.31
136D	3.03	3.03	4.49	4.49	---	---

Dimensions are in inches.

Dimensions are subject to change without notice.



WATT Drive gear motors are known the world over for offering superior performance and reliable operation in the most demanding applications. An optimized gear tooth design provides high power density, resulting in greater torque capacities in a smaller size. The inverter duty WATT Drive EUSAS motor can be connected to any Volts/Hertz combination for global usage and is available with a wide variety of options.

In the American market, the unique design of this motor generates up to 20% more power than competitive motors of similar frame sizes. Therefore, a major benefit of the WATT Drive gear motor is the

ability to generate higher torque in an overall smaller and more cost effective package.

Engineering Note:

The torque values and service factors in the selection charts have been calculated with the actual motor horsepower at 460V operation. Torque output for 1/8 to 2 HP will be lower with 230V power source. For all selections, when considering nominal horse power ratings, please note that the torque generated will be lower while the service factor will increase by up to 20%. Contact your representative with any questions regarding proper selection.

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
1/8 HP nominal (0.2 HP actual with 460V)				
1.8	5752	1.85	878.14	CSA 70C 64K4
1.7	6451	1.65	975.81	CSA 70C 64K4
1.5	7283	1.5	1095.19	CSA 70C 64K4
1/4 HP nominal (0.3 HP actual with 460V)				
2.8	5646	1.9	574.97	CSA 70C 64N4
2.5	6292	1.7	636.2	CSA 70C 64N4
2	8000	1.35	796.75	CSA 70C 64N4
1.8	8867	1.2	878.14	CSA 70C 64N4
1.7	9894	1.1	975.81	CSA 70C 64N4
1.5	11151	1	1095.19	CSA 70C 64N4
1/3 HP nominal (0.4 HP actual with 460V)				
3.7	5495	1.95	435.34	CSA 70C 72K4
3.1	6779	1.6	523.16	CSA 70C 72K4
2.8	7540	1.45	574.97	CSA 70C 72K4
2.5	8442	1.3	636.2	CSA 70C 72K4
2	10797	1	796.75	CSA 70C 72K4
1.8	11991	0.9	878.14	CSA 70C 72K4
1.4	16177	1.5	1162.5	CSA 80C 72K4
1/2 HP nominal (0.6 HP actual with 460V)				
7.4	4301	2.5	221.78	CSA 70C 72N4
6.4	5071	2.1	257.37	CSA 70C 72N4
5.4	6026	1.8	301.86	CSA 70C 72N4
4.8	6956	1.55	344.98	CSA 70C 72N4
4.2	8018	1.35	394.27	CSA 70C 72N4
3.8	8903	1.2	435.34	CSA 70C 72N4
3.1	10788	1	523.16	CSA 70C 72N4
2.7	12080	2	610.31	CSA 80C 72N4
2.4	13478	1.8	675.31	CSA 80C 72N4
2.1	15584	1.55	772.62	CSA 80C 72N4
1.9	17160	1.4	845.72	CSA 80C 72N4
1.8	18992	1.3	932.11	CSA 80C 72N4
1.6	21231	1.15	1035.79	CSA 80C 72N4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
1.5	21859	1.9	1099.64	CSA 85C 72N4
1.4	23983	1	1162.5	CSA 80C 72N4
1.3	24487	1.7	1221.94	CSA 85C 72N4
1.2	27824	1.4	1371.43	CSA 85C 72N4
3/4 HP nominal (0.8 HP actual with 460V)				
15	3628	2.95	108.99	CSA 70A 81K4
14	3964	2.7	119.1	CSA 70A 81K4
13	4363	2.45	131.05	CSA 70A 81K4
7.5	6504	1.65	221.78	CSA 70C 81K4
6.5	7619	1.4	257.37	CSA 70C 81K4
5.5	9018	1.2	301.86	CSA 70C 81K4
4.9	10363	1.05	344.98	CSA 70C 81K4
4.2	11920	0.9	394.27	CSA 70C 81K4
4	12089	2	418.5	CSA 80C 81K4
3.6	13460	1.8	462.09	CSA 80C 81K4
3	16381	1.5	555.32	CSA 80C 81K4
2.7	18115	1.35	610.31	CSA 80C 81K4
2.3	20806	2	720	CSA 85C 81K4
2.2	23222	1.05	772.62	CSA 80C 81K4
2.1	23213	1.8	796.68	CSA 85C 81K4
2	25523	0.95	845.72	CSA 80C 81K4
1.8	26833	1.55	911.47	CSA 85C 81K4
1.5	32771	1.25	1099.64	CSA 85C 81K4
1.2	41382	0.95	1371.43	CSA 85C 81K4
1 HP nominal (1.2 HP actual with 460V)				
20	3876	2.75	85.3	CSA 70A 81N4
18	4248	2.55	93.43	CSA 70A 81N4
15	4956	2.15	108.99	CSA 70A 81N4
14	5416	2	119.1	CSA 70A 81N4
13	5956	1.8	131.05	CSA 70A 81N4
7.5	9035	1.2	221.78	CSA 70C 81N4
7.1	9009	2.7	235.41	CSA 80C 81N4
6.5	10549	1.05	257.37	CSA 70C 81N4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
6.1	10655	2.25	273.19	CSA 80C 81N4
5.5	12443	0.9	301.86	CSA 70C 81N4
5.2	12682	1.9	320.41	CSA 80C 81N4
4.6	14637	1.65	366.19	CSA 80C 81N4
4	16868	1.45	418.5	CSA 80C 81N4
3.6	18744	1.3	462.09	CSA 80C 81N4
3.1	21567	1.9	545.14	CSA 85C 81N4
3	22709	1.1	555.32	CSA 80C 81N4
2.7	25063	1	610.31	CSA 80C 81N4
2.6	26249	1.6	655.12	CSA 85C 81N4
2.5	27842	0.9	675.31	CSA 80C 81N4
2.3	29019	1.45	720	CSA 85C 81N4
2.1	32311	1.3	796.68	CSA 85C 81N4
1.8	37276	1.1	911.47	CSA 85C 81N4
1.7	40966	1	997.71	CSA 85C 81N4
1.5	45338	0.9	1099.64	CSA 85C 81N4
1.5 HP nominal (1.7 HP actual with 460V)				
29	3832	2.8	58.18	CSA 70A 91S4
25	4416	2.45	66.99	CSA 70A 91S4
23	4938	2.15	74.95	CSA 70A 91S4
20	5628	1.9	85.3	CSA 70A 91S4
18	6159	1.75	93.43	CSA 70A 91S4
16	7186	1.5	108.99	CSA 70A 91S4
14	7849	1.4	119.1	CSA 70A 91S4
13	8637	1.25	131.05	CSA 70A 91S4
11	8115	2.95	147.71	CSA 80C 91S4
9.8	9637	2.5	172.13	CSA 80C 91S4
8.4	11487	2.1	201.78	CSA 80C 91S4
7.2	13575	1.8	235.41	CSA 80C 91S4
6.2	15912	1.55	273.19	CSA 80C 91S4
6.1	15452	2.65	277.71	CSA 85C 91S4
5.3	18859	1.3	320.41	CSA 80C 91S4
5.3	18239	2.25	322.29	CSA 85C 91S4

* These units have thermal limitations. Please contact a DieQua representative for details.
⁽¹⁾ At nominal horsepower, the service factor (SF) will increase by up to 20%.



Gearmotor Selection Tables - Series C

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
4.6	21682	1.15	366.19	CSA 80C 91S4
4.5	21700	1.9	378	CSA 85C 91S4
4	24939	1	418.5	CSA 80C 91S4
3.9	25063	1.65	432	CSA 85C 91S4
3.7	27647	0.9	462.09	CSA 80C 91S4
3.4	28877	1.45	493.71	CSA 85C 91S4
3.1	32081	1.3	545.14	CSA 85C 91S4
2.6	38957	1.05	655.12	CSA 85C 91S4
2.4	40904	1.75	708.01	CSA 110C 91S4
2.2	44975	1.6	773.68	CSA 110C 91S4
2.1	47666	0.9	796.68	CSA 85C 91S4
2	49790	1.45	851.29	CSA 110C 91S4
2 HP nominal (2.3 HP actual with 460V)				
40	3823	2.8	42.8	CSA 70A 91L4
33	4566	2.35	51.13	CSA 70A 91L4
29	5194	2.05	58.18	CSA 70A 91L4
25	5982	1.8	66.99	CSA 70A 91L4
23	6690	1.6	74.95	CSA 70A 91L4
20	7611	1.4	85.3	CSA 70A 91L4
18	8345	1.3	93.43	CSA 70A 91L4
16	9735	1.1	108.99	CSA 70A 91L4
14	10637	1	119.1	CSA 70A 91L4
13	11699	0.95	131.05	CSA 70A 91L4
8.4	15912	1.55	201.78	CSA 80C 101L4
8.4	15266	2.7	203.06	CSA 85C 91L4
7.2	18762	1.3	235.41	CSA 80C 101L4
7.2	18239	2.25	238.04	CSA 85C 91L4
6.2	21948	1.1	273.19	CSA 80C 101L4
6.1	21594	1.9	277.71	CSA 85C 91L4
5.3	25903	0.95	320.41	CSA 80C 101L4
5.3	25319	1.65	322.29	CSA 85C 91L4
4.5	30001	1.4	378	CSA 85C 91L4
3.9	34568	1.2	432	CSA 85C 91L4
3.5	39754	1.05	493.71	CSA 85C 91L4
3.5	37851	1.9	486.88	CSA 110C 91L4
3.1	44073	0.95	545.14	CSA 85C 91L4
3.1	43524	1.65	554.09	CSA 110C 91L4
2.8	47967	1.5	606.94	CSA 110C 91L4
2.7	48409	1.85	642.92	CSA 130D 91L4
2.4	56418	1.3	708.01	CSA 110C 91L4
2.3	56923	1.6	746.29	CSA 130D 91L4
2.2	62038	1.15	773.68	CSA 110C 91L4
2	67189	1.35	869.67	CSA 130D 91L4
1.7	79579	1.15	1019.49	CSA 130D 91L4
1.4	93801	0.95	1189.4	CSA 130D 91L4
3 HP nominal (3.4 HP actual)				
61	3663	2.95	27.96	CSA 70A 101L4
51	4345	2.45	33.21	CSA 70A 101L4
45	4920	2.2	37.55	CSA 70A 101L4
40	5602	1.9	42.8	CSA 70A 101L4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
33	6699	1.6	51.13	CSA 70A 101L4
29	7619	1.4	58.18	CSA 70A 101L4
27	8195	2.95	62.6	CSA 80A 101L4
25	8770	1.25	66.99	CSA 70A 101L4
23	9814	1.1	74.95	CSA 70A 101L4
21	10779	2.25	82.34	CSA 80A 101L4
20	11168	1	85.3	CSA 70A 101L4
18	12230	0.9	93.43	CSA 70A 101L4
18	12177	2	93	CSA 80A 101L4
17	13319	1.8	101.72	CSA 80A 101L4
16	14363	2.75	109.71	CSA 85A 101L4
14	15576	1.55	118.93	CSA 80A 101L4
14	15708	2.3	120	CSA 85A 101L4
12	18372	1.7	140.31	CSA 85A 101L4
8.4	23824	1.05	201.78	CSA 80C 101L4
7.2	27966	0.9	235.41	CSA 80C 101L4
7.2	27594	1.5	238.04	CSA 85C 101L4
7	26957	2.65	243.92	CSA 110C 101L4
6.1	32461	1.3	277.71	CSA 85C 101L4
6.1	31178	2.3	278.02	CSA 110C 101L4
6	31222	2.85	284.84	CSA 130C 101L4
5.4	35099	2.55	316.27	CSA 130C 101L4
5.3	37984	1.1	322.29	CSA 85C 101L4
5.1	37869	1.9	332.15	CSA 110C 101L4
4.9	38975	2.3	347.52	CSA 130C 101L4
4.5	44825	0.95	378	CSA 85C 101L4
4.5	43542	1.65	377.95	CSA 110C 101L4
4.1	47436	1.9	416.05	CSA 130C 101L4
3.9	50551	1.45	435.19	CSA 110C 101L4
3.6	54135	1.65	469.89	CSA 130C 101L4
3.5	57020	1.25	486.88	CSA 110C 101L4
3.3	59578	1.5	513.94	CSA 130C 101L4
3.1	65295	1.1	554.09	CSA 110C 101L4
2.8	70233	1.3	600.91	CSA 130C 101L4
4 HP nominal (4.6 HP actual)				
84	3646	2.95	20.41	CSA 70A 101LA4
72	4248	2.5	23.79	CSA 70A 101LA4
61	4991	2.15	27.96	CSA 70A 101LA4
51	5929	1.8	33.21	CSA 70A 101LA4
45	6708	1.6	37.55	CSA 70A 101LA4
40	7646	1.4	42.8	CSA 70A 101LA4
35	8628	2.8	48.34	CSA 80A 101LA4
33	9133	1.2	51.13	CSA 70A 101LA4
30	10071	2.4	56.38	CSA 80A 101LA4
29	10389	1.05	58.18	CSA 70A 101LA4
27	11177	2.15	62.6	CSA 80A 101LA4
25	11965	0.9	66.99	CSA 70A 101LA4
25	12283	1.95	68.78	CSA 80A 101LA4
21	14699	1.65	82.34	CSA 80A 101LA4
21	14487	2.85	81.14	CSA 85A 101LA4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
18	16602	1.45	93	CSA 80A 101LA4
18	17346	2.35	97.14	CSA 85A 101LA4
17	18160	1.35	101.72	CSA 80A 101LA4
16	19593	2.05	109.71	CSA 85A 101LA4
14	21240	1.15	118.93	CSA 80A 101LA4
12	25054	1.25	140.31	CSA 85A 101LA4
9.4	27426	2.6	181.62	CSA 110C 101LA4
7.9	33196	2.15	215.75	CSA 110C 101LA4
7.9	32320	2.75	215.37	CSA 130C 101LA4
7.2	38249	1.1	238.04	CSA 85C 101LA4
7	37922	1.9	243.92	CSA 110C 101LA4
7	37187	2.4	244.22	CSA 130C 101LA4
6.1	44904	0.95	277.71	CSA 85C 101LA4
6.1	43674	1.65	278.02	CSA 110C 101LA4
6	44019	2.05	284.87	CSA 130C 101LA4
5.4	49383	1.8	316.27	CSA 130C 101LA4
5.1	52834	1.35	332.15	CSA 110C 101LA4
4.9	54595	1.65	347.52	CSA 130C 101LA4
4.5	60489	1.2	377.95	CSA 110C 101LA4
4.1	66171	1.35	416.05	CSA 130C 101LA4
3.9	70083	1.05	435.19	CSA 110C 101LA4
3.6	75198	1.2	469.89	CSA 130C 101LA4
3.5	78888	0.9	486.88	CSA 110C 101LA4
3.3	82588	1.1	513.94	CSA 130C 101LA4
2.8	97164	0.95	600.91	CSA 130C 101LA4
5.5 HP nominal (6.6 HP actual)				
113	3575	3	15.24	CSA 70A 114M4
98	4132	2.6	17.6	CSA 70A 114M4
85	4787	2.25	20.41	CSA 70A 114M4
73	5584	1.95	23.76	CSA 70A 114M4
62	6566	1.65	27.96	CSA 70A 114M4
52	7796	1.4	33.21	CSA 70A 114M4
46	8814	1.25	37.55	CSA 70A 114M4
46	8903	2.7	37.91	CSA 80A 114M4
41	10009	2.4	42.63	CSA 80A 114M4
40	10044	1.1	42.8	CSA 70A 114M4
36	11345	2.15	48.34	CSA 80A 114M4
34	12000	0.9	51.13	CSA 70A 114M4
31	13239	1.85	56.38	CSA 80A 114M4
28	14699	1.65	62.6	CSA 80A 114M4
26	15611	2.65	66.51	CSA 85A 114M4
25	16151	1.5	68.78	CSA 80A 114M4
21	19328	1.25	82.34	CSA 80A 114M4
21	19054	2.15	81.14	CSA 85A 114M4
19	21832	1.1	93	CSA 80A 114M4
18	22806	1.8	97.14	CSA 85A 114M4
17	23877	1.05	101.72	CSA 80A 114M4
16	25753	1.55	109.71	CSA 85A 114M4
15	27921	0.9	118.93	CSA 80A 114M4
14	28169	1.3	120	CSA 85A 114M4

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⁽¹⁾ At nominal horsepower, the service factor (SF) will increase by up to 20%.

Gearmotor Selection Tables - Series C



RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
12	32939	0.95	140.31	CSA 85A 114M4
9	38506	2.3	191.53	CSA 130C 114M4
8	43754	2.05	215.37	CSA 130C 114M4
7.1	50905	1.4	243.92	CSA 110C 114M4
7.1	50135	1.8	244.22	CSA 130C 114M4
6.2	58383	1.25	278.02	CSA 110C 114M4
6.1	59206	1.5	284.87	CSA 130C 114M4
5.2	70322	1.05	332.15	CSA 110C 114M4
5	72977	1.25	347.52	CSA 130C 114M4
4.6	80517	0.9	377.95	CSA 110C 114M4
4.2	88084	1.05	416.05	CSA 130C 114M4
3.7	100102	0.9	469.89	CSA 130C 114M4

7.5 HP nominal (6.6 HP actual)

137	4088	2.6	12.61	CSA 70A 114ML4
113	4938	2.2	15.24	CSA 70A 114ML4
98	5699	1.9	17.6	CSA 70A 114ML4
84	6610	1.65	20.41	CSA 70A 114ML4
72	7708	1.4	23.79	CSA 70A 114ML4
62	9053	1.2	27.96	CSA 70A 114ML4
62	8956	2.7	27.66	CSA 80A 114ML4
53	10425	2.3	32.19	CSA 80A 114ML4
52	10761	1	33.21	CSA 70A 114ML4
46	12159	0.9	37.55	CSA 70A 114ML4
45	12283	1.95	37.91	CSA 80A 114ML4
40	13806	1.75	42.63	CSA 80A 114ML4
39	14487	2.85	44.72	CSA 85A 114ML4
36	15655	1.55	48.34	CSA 80A 114ML4
34	16292	2.5	50.29	CSA 85A 114ML4
31	18266	1.35	56.38	CSA 80A 114ML4
30	18469	2.25	57.02	CSA 85A 114ML4
28	20275	1.2	62.6	CSA 80A 114ML4
26	21549	1.9	66.51	CSA 85A 114ML4
25	22284	1.1	68.78	CSA 80A 114ML4
23	23921	1.75	73.85	CSA 85A 114ML4
21	26673	0.9	82.34	CSA 80A 114ML4
21	26284	1.55	81.14	CSA 85A 114ML4
18	31470	1.3	97.14	CSA 85A 114ML4
16	35541	1.15	109.71	CSA 85A 114ML4
14	38869	0.95	120	CSA 85A 114ML4
9	54586	1.65	191.53	CSA 130C 114ML4
8	61888	1.45	215.37	CSA 130C 114ML4
7.1	70614	1.3	244.22	CSA 130C 114ML4
6	83048	1.1	284.87	CSA 130C 114ML4
5.4	92579	1	316.27	CSA 130C 114ML4
5	102146	0.9	347.52	CSA 130C 114ML4

10 HP nominal (12 HP actual)

167	4548	2.35	10.45	CSA 70A 134M4
138	5495	1.95	12.61	CSA 70A 134M4
115	6637	1.6	15.24	CSA 70A 134M4
99	7664	1.4	17.6	CSA 70A 134M4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
95	8000	3	18.36	CSA 80A 134M4
86	8894	1.2	20.41	CSA 70A 134M4
83	9115	2.65	20.93	CSA 80A 134M4
73	10363	1.05	23.79	CSA 70A 134M4
73	10443	2.3	23.98	CSA 80A 134M4
63	12053	2	27.66	CSA 80A 134M4
62	12177	0.9	27.96	CSA 70A 134M4
54	14027	1.75	32.19	CSA 80A 134M4
54	14213	2.9	32.63	CSA 85A 134M4
46	16514	1.45	37.91	CSA 80A 134M4
46	16549	2.5	37.98	CSA 85A 134M4
41	18567	1.3	42.63	CSA 80A 134M4
39	19478	2.1	44.72	CSA 85A 134M4
36	21054	1.15	48.34	CSA 80A 134M4
35	21903	1.9	50.29	CSA 85A 134M4
31	24558	1	56.38	CSA 80A 134M4
31	24841	1.65	57.02	CSA 85A 134M4
31	24257	2.95	55.69	CSA 110A 134M4
28	27266	0.9	62.6	CSA 80A 134M4
27	28567	2.5	65.57	CSA 110A 134M4
26	28974	1.45	66.51	CSA 85A 134M4
24	32169	1.3	73.85	CSA 85A 134M4
23	33585	2.65	77.09	CSA 130A 134M4
22	35346	1.2	81.14	CSA 85A 134M4
22	34311	2.1	78.75	CSA 110A 134M4
21	37072	2.4	85.1	CSA 130A 134M4
20	37957	1.9	87.14	CSA 110A 134M4
18	42320	1	97.14	CSA 85A 134M4
18	42347	1.7	97.2	CSA 110A 134M4
16	47506	1.5	109.04	CSA 110A 134M4
16	46135	1.95	105.89	CSA 130A 134M4
12	41258	2.15	94.71	CSA 130A 134M4
15	51949	1.4	119.25	CSA 110A 134M4
15	50374	1.8	115.64	CSA 130A 134M4
12	61755	1.15	141.75	CSA 110A 134M4
9.1	74791	1.2	191.53	CSA 130C 134M4
8.1	84614	1.05	215.37	CSA 130C 134M4
7.1	96341	0.95	244.22	CSA 130C 134M4

12.5 HP nominal (14.4 HP actual)

166	5619	1.9	10.45	CSA 70A 134ML4
137	6787	1.6	12.61	CSA 70A 134ML4
114	8203	1.3	15.24	CSA 70A 134ML4
112	8336	2.9	15.5	CSA 80A 134ML4
99	9469	1.15	17.6	CSA 70A 134ML4
94	9876	2.45	18.36	CSA 80A 134ML4
85	10982	1	20.41	CSA 70A 134ML4
83	11257	2.15	20.93	CSA 80A 134ML4
72	12903	1.9	23.98	CSA 80A 134ML4
63	14885	1.65	27.66	CSA 80A 134ML4
61	15222	2.7	28.29	CSA 85A 134ML4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
54	17319	1.4	32.19	CSA 80A 134ML4
53	17558	2.35	32.63	CSA 85A 134ML4
46	20399	1.2	37.91	CSA 80A 134ML4
46	20434	2	37.98	CSA 85A 134ML4
41	22939	1.05	42.63	CSA 80A 134ML4
39	24063	1.7	44.72	CSA 85A 134ML4
36	26010	0.95	48.34	CSA 80A 134ML4
36	25833	2.75	48	CSA 110A 134ML4
34	27063	1.55	50.29	CSA 85A 134ML4
31	29966	2.4	55.69	CSA 110A 134ML4
30	30682	1.35	57.02	CSA 85A 134ML4
26	35789	1.15	66.51	CSA 85A 134ML4
26	35284	2.05	65.57	CSA 110A 134ML4
23	39736	1.05	73.85	CSA 85A 134ML4
22	42373	1.7	78.75	CSA 110A 134ML4
21	43665	0.95	81.14	CSA 85A 134ML4
20	46887	1.55	87.14	CSA 110A 134ML4
18	52303	1.4	97.2	CSA 110A 134ML4
16	58675	1.25	109.04	CSA 110A 134ML4
15	64171	1.15	119.25	CSA 110A 134ML4
12	76278	0.95	141.75	CSA 110A 134ML4

15 HP nominal (18 HP actual)

*168	6655	1.6	10.45	CSA 70A 161M4
*139	8035	1.35	12.61	CSA 70A 161M4
133	8372	2.9	13.14	CSA 80A 161M4
*115	9699	1.1	15.24	CSA 70A 161M4
113	9867	2.45	15.5	CSA 80A 161M4
*100	11204	0.95	17.6	CSA 70A 161M4
95	11690	2.05	18.36	CSA 80A 161M4
84	13328	1.8	20.93	CSA 80A 161M4
81	13788	3	21.65	CSA 85A 161M4
73	15266	1.6	23.98	CSA 80A 161M4
71	15717	2.6	24.69	CSA 85A 161M4
63	17611	1.4	27.66	CSA 80A 161M4
62	18009	2.3	28.29	CSA 85A 161M4
54	20496	1.2	32.19	CSA 80A 161M4
54	20779	2	32.63	CSA 85A 161M4
46	24142	1	37.91	CSA 80A 161M4
46	24187	1.7	37.98	CSA 85A 161M4
42	26647	2.7	41.85	CSA 110A 161M4
41	27142	0.9	42.63	CSA 80A 161M4
39	28479	1.45	44.72	CSA 85A 161M4
37	30567	2.35	48	CSA 110A 161M4
37	30390	2.95	47.72	CSA 130A 161M4
35	32019	1.3	50.29	CSA 85A 161M4
32	35063	2.55	55.06	CSA 130A 161M4
31	36311	1.15	57.02	CSA 85A 161M4
31	35461	2	55.69	CSA 110A 161M4
27	41754	1.7	65.57	CSA 110A 161M4
27	41072	2.2	64.5	CSA 130A 161M4

* These units have thermal limitations. Please contact a DieQua representative for details.

⁽¹⁾ At nominal horsepower, the service factor (SF) will increase by up to 20%.



Gearmotor Selection Tables - Series C

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
26	42356	1	66.51	CSA 85A 161M4
24	47020	0.9	73.85	CSA 85A 161M4
23	49090	1.85	77.09	CSA 130A 161M4
22	50144	1.45	78.75	CSA 110A 161M4
21	54188	1.65	85.1	CSA 130A 161M4
20	55489	1.3	87.14	CSA 110A 161M4
18	61896	1.15	97.2	CSA 110A 161M4
18	60312	1.5	94.71	CSA 130A 161M4
17	67428	1.35	105.89	CSA 130A 161M4
16	69437	1.05	109.04	CSA 110A 161M4
15	75933	0.95	119.25	CSA 110A 161M4
15	73632	1.25	115.64	CSA 130A 161M4
14	68853	1.3	121.14	CSA 130C 161M4
13	79924	1.15	139.75	CSA 130C 161M4
11	91137	0.95	162.65	CSA 130C 161M4
20 HP nominal (24 HP actual)				
157	9690	2.5	11.16	CSA 80A 161L4
133	11407	2.1	13.14	CSA 80A 161L4
113	13460	1.8	15.5	CSA 80A 161L4
113	13460	2.85	15.5	CSA 85A 116L4
96	15876	2.6	18.29	CSA 85A 116L4
95	15938	1.5	18.36	CSA 80A 161L4
84	18169	1.35	20.93	CSA 80A 161L4
81	18806	2.2	21.65	CSA 85A 116L4
73	20815	1.15	23.98	CSA 80A 161L4
71	21434	1.9	24.69	CSA 85A 116L4
63	24018	1	27.66	CSA 80A 161L4
62	24558	1.7	28.29	CSA 85A 116L4
60	25249	2.85	29.08	CSA 110A 161L4
54	27957	0.9	32.19	CSA 80A 161L4
54	28337	1.45	32.63	CSA 85A 116L4
54	28328	2.5	32.63	CSA 110A 161L4
53	28691	3.1	33.04	CSA 130A 161L4
48	31966	2.25	36.82	CSA 110A 161L4
47	32169	2.8	37.04	CSA 130A 161L4
46	32975	1.25	37.98	CSA 85A 116L4
42	36338	1.95	41.85	CSA 110A 161L4
42	36338	2.45	41.85	CSA 130A 161L4
39	38833	1.05	44.72	CSA 85A 116L4
37	41683	1.7	48	CSA 110A 161L4
37	41435	2.15	47.72	CSA 130A 161L4
35	43665	0.95	50.29	CSA 85A 116L4
32	47816	1.9	55.06	CSA 130A 161L4
31	48356	1.5	55.69	CSA 110A 161L4
27	56940	1.25	65.57	CSA 110A 161L4
27	56011	1.6	64.5	CSA 130A 161L4
23	66941	1.35	77.09	CSA 130A 161L4
22	68383	1.05	78.75	CSA 110A 161L4
21	73897	1.2	85.1	CSA 130A 161L4
20	75667	0.95	87.14	CSA 110A 161L4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
17	91951	1	105.89	CSA 130A 161L4
15	100412	0.9	115.64	CSA 130A 161L4
25 HP nominal (30 HP actual)				
*158	11912	2.05	11.16	CSA 80A 181M4
*134	14027	1.75	13.14	CSA 80A 181M4
134	14053	2.5	13.17	CSA 85A 181M4
*113	16540	1.45	15.5	CSA 80A 181M4
113	16549	2.35	15.5	CSA 85A 181M4
*96	19593	1.25	18.36	CSA 80A 181M4
96	19514	2.1	18.29	CSA 85A 181M4
*84	22328	1.1	20.93	CSA 80A 181M4
81	23107	1.8	21.65	CSA 85A 181M4
*73	25594	0.95	23.98	CSA 80A 181M4
71	26346	1.55	24.69	CSA 85A 181M4
68	27789	2.55	26.04	CSA 110A 181M4
62	30187	1.35	28.29	CSA 85A 181M4
60	31036	2.3	29.08	CSA 110A 181M4
59	31647	2.8	29.65	CSA 130A 181M4
54	34824	1.2	32.63	CSA 85A 181M4
54	34815	2.05	32.62	CSA 110A 181M4
53	35258	2.55	33.04	CSA 130A 181M4
48	39294	1.85	36.82	CSA 110A 181M4
47	39532	2.25	37.04	CSA 130A 181M4
46	40533	1.05	37.98	CSA 85A 181M4
42	44665	1.6	41.85	CSA 110A 181M4
42	44665	2	41.85	CSA 130A 181M4
39	47728	0.9	44.72	CSA 85A 181M4
37	51232	1.4	48	CSA 110A 181M4
37	50931	1.75	47.72	CSA 130A 181M4
32	59436	1.2	55.69	CSA 110A 181M4
32	58772	1.55	55.06	CSA 130A 181M4
27	69985	1.05	65.57	CSA 110A 181M4
27	68844	1.3	64.5	CSA 130A 181M4
23	82278	1.1	77.09	CSA 130A 181M4
21	90827	1	85.1	CSA 130A 181M4
19	101084	0.9	94.71	CSA 130A 181M4
30 HP nominal (36 HP actual)				
*133	16770	2.1	13.17	CSA 85A 181L4
*113	19744	1.95	15.5	CSA 85A 181L4
*96	23284	1.75	18.29	CSA 85A 181L4
*81	27576	1.5	21.65	CSA 85A 181L4
*71	31435	1.3	24.69	CSA 85A 181L4
67	33160	2.15	26.04	CSA 110A 181L4
66	34063	2.6	26.75	CSA 130A 181L4
*62	36019	1.15	28.29	CSA 85A 181L4
60	37028	1.95	29.08	CSA 110A 181L4
59	37762	2.35	29.65	CSA 130A 181L4
*54	41559	1	32.63	CSA 85A 181L4
54	41550	1.75	32.63	CSA 110A 181L4
53	42072	2.15	33.04	CSA 130A 181L4

RPM	In-lbs.	SF ⁽¹⁾	Ratio	Model
48	46887	1.55	36.82	CSA 110A 181L4
42	53294	1.35	41.85	CSA 110A 181L4
42	53294	1.7	41.85	CSA 130A 181L4
37	61126	1.2	48	CSA 110A 181L4
37	60781	1.5	47.72	CSA 130A 181L4
32	70127	1.3	55.06	CSA 130A 181L4
31	70923	1	55.69	CSA 110A 181L4
27	82145	1.1	64.5	CSA 130A 181L4
23	98181	0.95	77.09	CSA 130A 181L4
40 HP nominal (48 HP actual)				
100	30390	2.95	17.56	CSA 130A 201L4
88	34753	2.55	20.08	CSA 130A 201L4
76	39966	2.25	23.09	CSA 130A 201L4
68	45064	1.6	26.04	CSA 110A 201L4
66	46285	1.95	26.75	CSA 130A 201L4
60	50321	1.45	29.08	CSA 110A 201L4
59	51321	1.75	29.65	CSA 130A 201L4
54	56463	1.3	32.63	CSA 110A 201L4
53	57179	1.55	33.04	CSA 130A 201L4
48	63720	1.15	36.82	CSA 110A 201L4
47	64109	1.4	37.04	CSA 130A 201L4
42	72428	1	41.85	CSA 110A 201L4
42	72428	1.25	41.85	CSA 130A 201L4
37	83074	0.9	48	CSA 110A 201L4
32	95305	0.95	55.06	CSA 130A 201L4
50 HP nominal (60 HP actual)				
115	32691	2.75	15.42	CSA 130A 226S4
101	37231	2.4	17.56	CSA 130A 226S4
88	42577	2.1	20.08	CSA 130A 226S4
77	48958	1.85	23.09	CSA 130A 226S4
*68	55197	2.3	26.04	CSA 110A 226S4
66	56701	1.6	26.75	CSA 130A 226S4
*61	61649	1.15	29.08	CSA 110A 226S4
60	62861	1.45	29.65	CSA 130A 226S4
*54	69171	1.05	32.63	CSA 110A 226S4
54	70047	1.3	33.04	CSA 130A 226S4
48	78534	1.15	37.04	CSA 130A 226S4
42	88721	1	41.85	CSA 130A 226S4
37	101173	0.9	47.72	CSA 130A 226S4
60 HP nominal (72 HP actual)				
*161	28399	3.15	11.01	CSA 130A 226M4
*136	33559	2.65	13.02	CSA 130A 226M4
*115	39754	2.25	15.42	CSA 130A 226M4
*101	45285	2	17.56	CSA 130A 226M4
*88	51781	1.75	20.08	CSA 130A 226M4
*77	59542	1.5	23.09	CSA 130A 226M4
*66	68968	1.3	26.75	CSA 130A 226M4
*60	76455	1.2	29.65	CSA 130A 226M4
*54	85190	1.05	33.04	CSA 130A 226M4
*48	95518	0.95	37.04	CSA 130A 226M4

* These units have thermal limitations. Please contact a DieQua representative for details.
⁽¹⁾ At nominal horsepower, the service factor (SF) will increase by up to 20%.

Speed Reducer Selection Tables - Series C



WATT Drive speed reducers are known the world over for offering superior performance and reliable operation in the most demanding applications. An optimized gear tooth design provides high power density resulting in greater torque capacities in a smaller size. The modular housing allows for shaft, foot, or flange mounting to increase design versatility.

A variety of input styles are offered including adapters for NEMA, IEC, and servo motors, as well as a model with standard input shaft. Output shafts are available

in both inch and metric dimensions. Bolt on output flanges and agitator designs are standard options.

Engineering Note:

The torque and horsepower capacities highlighted in the selection charts are based on mechanical limitations. For continuous duty applications, some models may have lower thermal horsepower capacities. Consult your representative with any questions regarding proper selection.

Ratio	in-lbs	HP	Model
Size C.70			
10.45	10620	27.42	*A
12.61	10620	22.70	*A
15.24	10620	18.80	*A
17.6	10620	16.28	*A
20.41	10620	14.04	A
23.79	10620	12.04	A
27.96	10620	10.25	A
33.21	10620	8.62	A
37.55	10620	7.63	A
42.8	10620	6.69	A
51.13	10620	5.61	A
58.18	10620	4.92	A
66.99	10620	4.28	A
74.95	10620	3.82	A
81.04	10620	3.54	C
85.3	10620	3.35	A
93.43	10620	3.07	A
98.57	10620	2.91	C
108.99	10620	2.63	A
119.1	10620	2.40	A
119.88	10620	2.39	C
131.05	10620	2.19	A
139.15	10620	2.07	C
162.16	10620	1.77	C
190.09	10620	1.50	C
221.78	10620	1.29	C
257.37	10620	1.11	C
301.86	10620	0.95	C
344.98	10620	0.83	C
394.27	10620	0.72	C
423.57	10620	0.67	D
435.34	10620	0.66	C
507.04	10620	0.56	D
523.16	10620	0.55	C
574.97	10620	0.50	C

Ratio	in-lbs	HP	Model
606.66	10620	0.47	D
636.2	10620	0.46	C
727.63	10620	0.39	D
727.88	10620	0.39	C
796.75	10620	0.36	C
861.97	10620	0.34	D
878.14	10620	0.32	C
975.81	10620	0.30	C
1015.79	10620	0.28	D
1095.19	10620	0.27	C
1208.06	10620	0.24	D
1393.08	10620	0.20	D
1607.4	10620	0.17	D
1784.88	10620	0.16	D
2169.99	10620	0.13	D
2394.35	10620	0.12	D
2659.51	10620	0.11	D
3054.06	10620	0.09	D
3352.09	10620	0.08	D
3704.32	10620	0.08	D
4126.99	10620	0.07	D
4643.59	10620	0.07	D
Size C.80			
11.16	23895	57.76	*A
13.14	23895	49.04	*A
15.5	23895	41.59	*A
18.36	23895	35.11	*A
20.93	23895	30.80	*A
23.98	23895	26.89	*A
27.66	23895	23.31	A
32.19	23895	20.02	A
37.91	23895	17.00	A
42.63	23895	15.13	A
48.34	23895	13.33	A
56.38	23895	11.43	A
62.6	23895	10.30	A

Ratio	in-lbs	HP	Model
68.78	23895	9.37	A
82.34	23895	7.83	A
86.03	23895	7.50	C
93	23895	6.93	A
101.72	23895	6.34	A
104.63	23895	6.16	C
118.93	23895	5.42	A
127.25	23895	5.07	C
147.71	23895	4.36	C
172.13	23895	3.74	C
201.78	23895	3.19	C
235.41	23895	2.74	C
273.19	23895	2.36	C
320.41	23895	2.01	C
366.19	23895	1.76	C
418.5	23895	1.54	C
449.6	23895	1.43	D
462.09	23895	1.39	C
538.2	23895	1.19	D
555.32	23895	1.17	C
610.31	23895	1.06	C
643.95	23895	1.01	D
675.31	23895	0.95	C
772.36	23895	0.83	D
772.62	23895	0.83	C
845.72	23895	0.76	C
914.95	23895	0.71	D
932.11	23895	0.70	C
1035.79	23895	0.62	C
1078.22	23895	0.60	D
1162.5	23895	0.55	C
1282.31	23895	0.50	D
1478.7	23895	0.44	D
1706.19	23895	0.38	D
1894.58	23895	0.34	D
2303.36	23895	0.28	D

Ratio	in-lbs	HP	Model
2541.52	23895	0.25	D
2822.97	23895	0.23	D
3241.77	23895	0.20	D
3558.12	23895	0.19	D
3932	23895	0.16	D
4380.65	23895	0.15	D
4929	23895	0.13	D
Size C.85			
13.17	35064	71.84	*A
15.5	38170	66.41	*A
18.29	40710	60.05	*A
21.65	40710	50.70	*A
24.69	40710	44.48	*A
28.29	40710	38.82	*A
32.63	40710	33.65	*A
37.98	40710	28.91	A
44.72	40710	24.55	A
50.29	40710	21.83	A
57.02	40710	19.26	A
66.51	40710	16.51	A
73.85	40710	14.87	A
81.14	40710	13.53	A
97.14	40710	11.30	A
101.49	40710	10.82	C
109.71	39436	9.70	A
120	36081	8.11	A
123.43	40710	8.89	C
140.31	30648	5.89	A
150.12	40710	7.31	C
174.25	40710	6.30	C
203.06	40710	5.40	C
238.04	40710	4.61	C
277.71	40710	3.96	C
322.29	40710	3.41	C
378	40710	2.91	C
432	40710	2.55	C

* These units have thermal limitations. Please contact a DieQua representative for details.



Speed Reducer Selection Tables - Series C

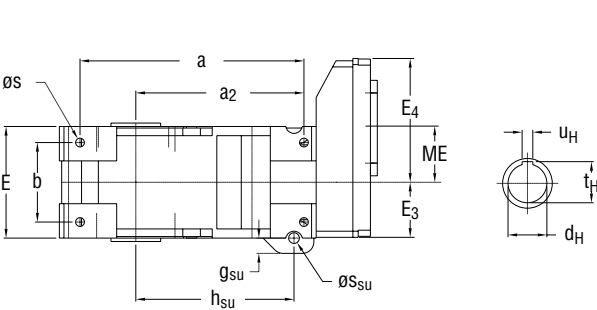
Ratio	in-lbs	HP	Model
493.71	40710	2.23	C
530.41	40710	2.07	D
545.14	40710	2.01	C
634.93	40710	1.73	D
655.12	40710	1.68	C
720	40710	1.53	C
759.68	40710	1.45	D
796.68	40710	1.38	C
911.17	40710	1.21	D
911.47	40710	1.21	C
997.71	40710	1.10	C
1079.38	40710	1.02	D
1099.64	40710	0.99	C
1221.94	40710	0.90	C
1272	40710	0.86	D
1371.43	38781	0.76	C
1512.77	40710	0.72	D
1744.46	40710	0.63	D
2012.84	40710	0.55	D
2235.09	40710	0.50	D
2717.33	40710	0.40	D
2998.29	40710	0.36	D
3330.33	40710	0.34	D
3824.39	40710	0.28	D
4197.6	40710	0.27	D
4638.67	40710	0.24	D
5167.95	40710	0.21	D
5814.86	40710	0.19	D
Size C.110			
26.04	70800	73.35	*A
29.08	70800	65.68	*A
32.63	70800	58.54	*A
36.82	70800	51.87	*A
41.85	70800	45.63	A
48	70800	39.79	A
55.69	70800	34.29	A
65.57	70800	29.13	A
67.86	70800	28.15	C
78.75	70800	24.25	A
81.94	70800	23.31	C
87.14	70800	21.91	A
97.2	70800	19.65	A
98.99	70800	19.30	C
109.04	70800	17.51	A
114.34	70800	16.71	C
119.25	70800	16.01	A
132.56	70800	14.40	C
141.75	70729	13.46	A
154.55	70800	12.35	C
158.88	56755	9.63	A

Ratio	in-lbs	HP	Model
181.62	70800	10.51	C
215.75	70800	8.85	C
243.92	70800	7.83	C
278.02	70800	6.87	C
332.15	70800	5.75	C
377.95	70800	5.06	C
435.19	70800	4.39	C
486.88	70800	3.92	C
526.46	70800	3.63	D
554.09	70800	3.45	C
606.94	70800	3.15	C
640.29	70800	2.98	D
708.01	70800	2.70	C
773.68	70800	2.47	C
778.73	70800	2.45	D
851.29	70800	2.24	C
903.93	70800	2.12	D
1053.37	70800	1.81	D
1234.84	70800	1.54	D
1440.64	70800	1.33	D
1671.86	70800	1.14	D
1960.88	70800	0.98	D
2241	70800	0.86	D
2561.14	70800	0.75	D
2827.93	70800	0.67	D
3398.44	70800	0.56	D
3735	70800	0.51	D
4132.75	70800	0.46	D
4728.26	70800	0.40	D
5175.64	70800	0.38	D
5704.36	70800	0.34	D
6338.83	70800	0.30	D
7114.29	70800	0.27	D
Size C.130			
11.01	88500	216.76	*A
13.02	88500	183.41	*A
15.42	88500	154.82	*A
17.56	88500	135.94	*A
20.08	88500	118.87	*A
23.09	88500	103.38	*A
26.75	88500	89.26	*A
29.65	88500	80.51	*A
33.04	88500	72.25	*A
37.04	88500	64.44	*A
41.85	88500	57.05	A
47.72	88500	50.02	A
55.06	88500	43.36	A
56.39	88500	42.34	C
64.5	88500	37.01	A
66.4	88500	35.95	C

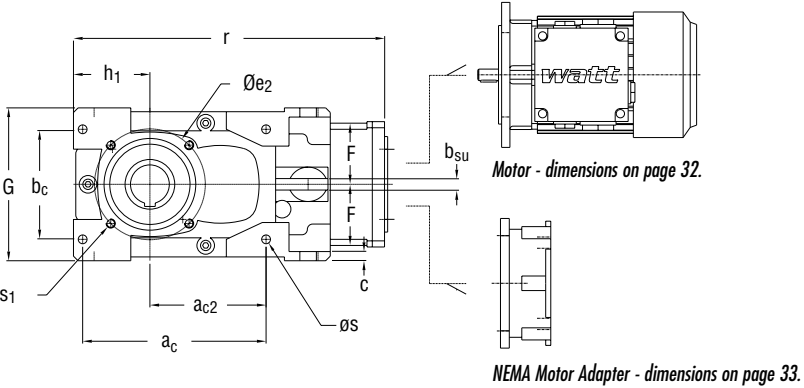
Ratio	in-lbs	HP	Model
77.09	88500	30.96	A
78.31	88500	30.48	C
85.1	88500	28.05	A
92.74	88500	25.73	C
94.71	88500	25.20	A
105.72	88500	22.58	C
105.89	88500	22.54	A
115.4	88500	20.64	A
121.14	88500	19.70	C
139.75	88500	14.40	C
162.65	88500	14.67	C
191.53	88500	12.46	C
215.37	88500	11.09	C
244.22	88500	9.78	C
284.87	88500	8.38	C
316.27	88500	7.55	C
347.52	88500	6.87	C
416.05	88500	5.74	C
434.65	88500	5.50	D
469.89	88500	5.08	C
513.94	88500	4.64	C
528.62	88500	4.52	D
600.91	88500	3.97	C
642.92	88500	3.71	D
746.29	88500	3.21	D
869.67	88500	2.75	D
1019.49	88500	2.35	D
1189.4	88500	2.01	D
1380.29	88500	1.73	D
1618.91	88500	1.48	D
1850.18	88500	1.29	D
2114.49	88500	1.13	D
2334.75	88500	1.02	D
2805.77	88500	0.84	D
3083.64	88500	0.78	D
3412.02	88500	0.70	D
3903.68	88500	0.62	D
4273.04	88500	0.56	D
4709.55	88500	0.51	D
5233.37	88500	0.46	D
5873.59	88500	0.40	D

* These units have thermal limitations. Please contact a DieQua representative for details.

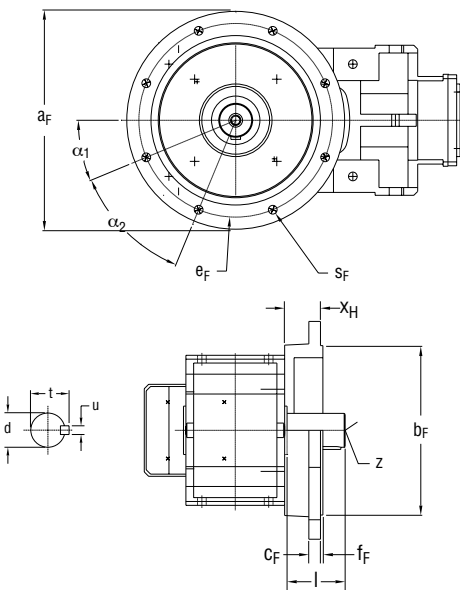
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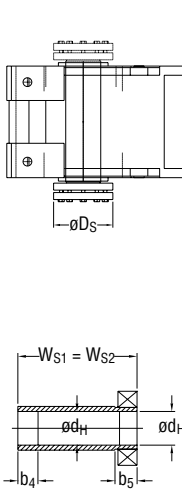
Hollow Shaft



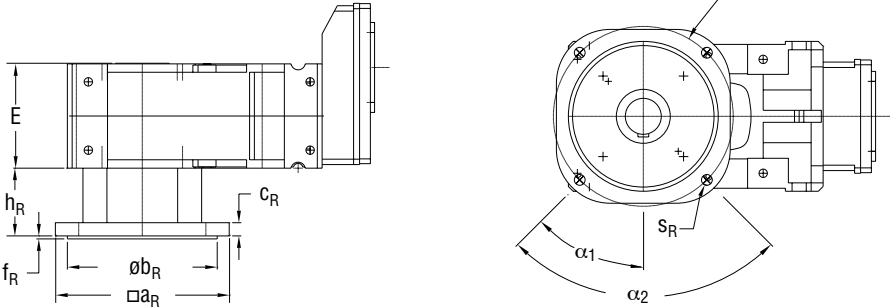
Solid Shaft (with optional output flange)



Shrink Disc



Agitator Design



Main Dimensions

	a	a ₂	a _c	a _{c2}	b	b _c	b _{su}	C	E	e ₂	E ₃	E ₄	F	G	g _{su}	h ₁	h _{su}	ME	r	s	s ₁ ⁽¹⁾	s _{su}
70A	11.54	8.66	9.449	5.98	4.09	5.67	0.59	0.47	5.75	5.7	2.8	6.4	3.2	7.87	0.8	3.94	8.15	2.8	16	0.45	M12x18	0.55
70C	11.54	8.66	9.45	5.98	4.09	5.67	0.59	0.47	5.75	5.71	2.83	6.38	3.23	7.87	0.79	3.94	8.15	4.02	17.80	0.45	M12x18	0.55
70D	11.54	8.66	9.45	5.98	4.09	5.67	0.59	0.47	5.75	5.71	2.83	6.38	3.23	7.87	0.79	3.94	8.15	5.00	19.13	0.45	M12x18	0.55
80A	14.57	11.02	12.20	7.87	4.49	7.48	0.79	0.55	6.85	7.48	3.19	7.40	3.74	9.84	0.87	4.92	10.24	3.19	20.00	0.55	M16x26	0.63
80C	14.57	11.02	12.20	7.87	4.49	7.48	0.79	0.55	6.85	7.48	3.19	7.40	3.74	9.84	0.87	4.92	10.24	4.61	21.57	0.55	M16x26	0.63
80D	14.57	11.02	12.20	7.87	4.49	7.48	0.79	0.55	6.85	7.48	3.19	7.40	3.74	9.84	0.87	4.92	10.24	5.59	22.91	0.55	M16x26	0.63
85A	18.31	13.66	14.96	9.53	5.43	9.13	0.98	0.71	8.03	9.45	3.19	7.40	3.74	12.20	1.14	6.30	12.99	3.19	24.57	0.71	M20x35	0.79
85C	18.31	13.66	14.96	9.53	5.43	9.13	0.98	0.71	8.03	9.45	3.19	7.40	3.74	12.20	1.14	6.30	12.99	4.61	25.94	0.71	M20x35	0.79
85D	18.31	13.66	14.96	9.53	5.43	9.13	0.98	0.71	8.03	9.45	3.19	7.40	3.74	12.20	1.14	6.30	12.99	5.59	27.28	0.71	M20x35	0.79
110A	20.08	15.47	16.42	11.02	6.69	10.00	1.10	0.87	9.84	9.45	4.61	10.51	5.31	13.78	1.57	6.50	14.57	4.53	28.11	0.87	M20x35	0.98
110C	20.08	15.47	16.42	11.02	6.69	10.00	1.10	0.87	9.84	9.45	4.61	10.51	5.31	13.78	1.57	6.50	14.57	6.30	30.24	0.87	M20x35	0.98
110D	20.08	15.47	16.42	11.02	6.69	10.00	1.10	0.87	9.84	9.45	4.61	10.51	5.31	13.78	1.57	6.50	14.57	7.52	31.85	0.87	M20x35	0.98
130A	24.21	18.31	19.29	12.60	7.48	11.81	1.34	0.94	10.79	10.63	5.28	12.05	6.10	15.75	1.38	7.87	16.54	5.28	32.48	0.87	M24x32	0.98
130C	24.21	18.31	19.29	12.60	7.48	11.81	1.34	0.94	10.79	10.63	5.28	12.05	6.10	15.75	1.38	7.87	16.54	7.13	35.47	0.87	M24x32	0.98
130D	24.21	18.31	19.29	12.60	7.48	11.81	1.34	0.94	10.79	10.63	5.28	12.05	6.10	15.75	1.38	7.87	16.54	8.54	37.09	0.87	M24x32	0.98

Dimensions are in inches.

Dimensions are subject to change without notice.

⁽¹⁾ Metric thread

Shaft Dimensions

	Hollow Shaft			Solid Shaft ⁽¹⁾					Shrink Disc				
	d _H	t _H	u _H	d	l	t	u	z ⁽²⁾	b ₄	b ₅	d _H ⁽³⁾	D ₅	W ₅₁
C70	2.0	2.223	0.5	2.0	3.94	2.22	0.5	M20	1.18	1.38	1.969	4.33	7.4
C80	2.375	2.651	0.625	2.375	4.72	2.65	0.625	M20	1.18	1.14	2.559	5.44	9.61
C85	2.75	2.938	0.625	2.875	5.51	3.20	0.75	M20	1.97	1.58	2.953	6.11	12.72
C110	3.625	4.014	0.875	3.625	6.69	4.01	0.875	M24	2.37	1.77	3.543	7.29	14.37
C130	4.0	4.441	1.0	4.375	8.27	4.82	1.0	M24	2.37	2.37	4.134	8.47	13.39

* Models with aluminum housings.

⁽¹⁾ Dual output option available.

Dimensions are in inches.

⁽²⁾ Metric thread.

Dimensions are subject to change without notice.

⁽³⁾ Estimate converted from metric dimension.

Optional Flange Adapters

	a _F	b _F	c _F	e _F	f _F	m _F	s _F	x _H	α ₁	α ₂
C. 70	7.87	7.09	0.47	8.46	0.16	4.53	0.55	1.48	45°	4 x 90°
C. 80	11.81	9.84	0.63	11.81	0.20	5.59	0.71	1.97	45°	4 x 90°
C. 85	*17.72	13.78	0.94	15.75	0.20	6.93	0.71	2.72	22.5°	8 x 45°
C. 110	*17.72	13.78	0.94	15.75	0.20	7.83	0.71	2.72	22.5°	8 x 45°
C. 130	*21.65	17.72	0.94	19.69	0.20	8.54	0.71	2.95	22.5°	8 x 45°

Dimensions are in inches.

Dimensions are subject to change without notice.

* Designates round flange

Agitator Design

	a _R	b _R	c _R	e _R	E	f _R	h _R	s _R	α ₁	α ₂
CRA 80	11.42	9.84	0.87	11.81	6.85	0.20	4.45	0.71	45°	4 x 90°
CRA 85	*17.72	13.78	1.02	15.75	8.03	0.20	5.12	0.71	22.5°	8 x 45°
CRA 110	*17.72	13.78	1.02	15.75	9.84	0.20	6.30	0.71	22.5°	8 x 45°

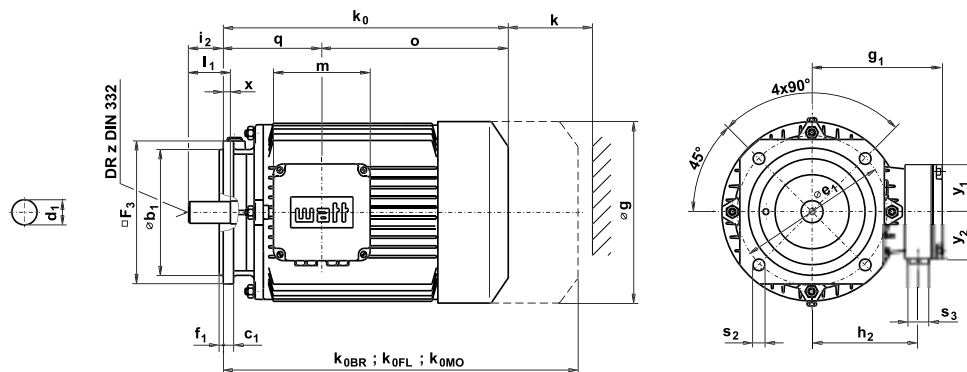
Dimensions are in inches.

Dimensions are subject to change without notice.

* Designates round flange

Integral Motor Dimensions - Series C

The WATT Drive EUSAS brand motor is a high quality design featuring cast housings, upgraded bearings, superior protection, and windings capable of operating in any Volts/Hz combination, for worldwide usage. These motors offer up to 20% additional horsepower over similar competitive frame sizes.



Type	Motor Dimensions												
	g	g ₁	h ₂	k*	k _{obr} *	k _{off} *	k _{omo} *	m	q	s ₂	s ₃	y ₁	y ₂
64K,N	4.76	4.61	3.35	0.87	9.53	12	14.02	3.54	2.83	10	2xM25x1.5+M16x1.5	1.77	1.77
72K,N	5.47	5	3.74	0.94	10.91	13.62	15.51	3.54	2.83	10	2xM25x1.5+M16x1.5	1.77	1.77
81K,N	6.14	5.35	4.09	1.02	12.24	15.39	17.13	4.8	3.31	10	2xM25x1.5+M16x1.5	2.4	2.4
91S,L	6.85	5.67	4.41	1.1	14.65	17.09	19.41	4.8	3.58	10	2xM25x1.5+M16x1.5	2.4	2.4
101L,LA	7.72	6.3	4.96	1.54	15.79	18.63	20.63	4.8	4.25	12	2xM32x1.5	2.4	2.4
114M,ML	8.66	6.85	5.55	1.73	18.59	20.87	23.43	4.8	4.37	12	2xM32x1.5	2.4	2.4
134S,M	10.2	7.68	6.18	1.97	21.42	24.02	26.42	5.51	5.08	14.5	2xM32x1.5	2.76	2.76
161M,L	12.36	9.76	7.87	2.36	25.12	29.97	31.42	7.28	5.71	15	2xM40x1.5	3.94	3.94
181M,L	14.96	10.83	8.9	2.56	29.97	32.27	34.3	7.44	6.26	15	2xM40x1.5+M16x1.5	3.9	4.17
201L	16.34	12.6	10.12	3.15	33.05	36.12	38.01	9.33	6.89	19	2xM50x1.5+M16x1.5	4.84	7.64
226S,M	17.52	13.58	10.63	3.94	33.1	36.09	39.24	9.33	7.09	19	2xM50x1.5+M16x1.5	4.72	7.64
251M	19.29	14.94	11.81	3.94	38.41	39	44.71	8.58	7.87	8x19	2xM63x1.5+M16x1.5	5.12	7.28

Dimensions are in inches. * k = air flow space, k_{obr} = motor with brake, k_{off} = motor with forced cooling, k_{omo} = motor with forced cooling and encoder.

To determine complete gearmotor length, add basic motor length "k_o" to reducer length "r", found on page 31.

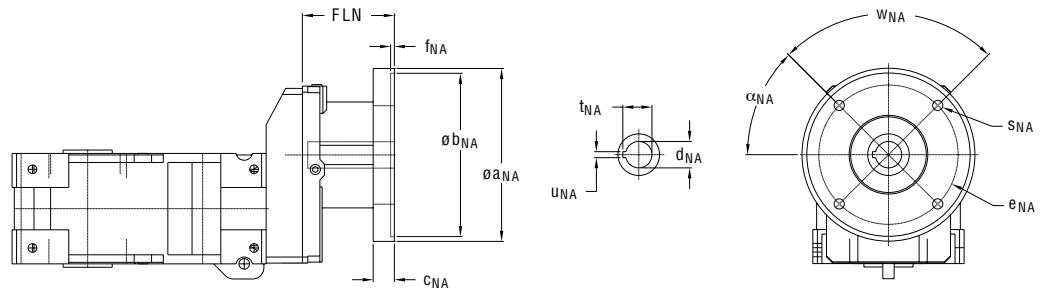
Integral Motor Length Adder "k _o "											
	64	72	81	91	101	114	134	161	181	201	226
70A	7.76	8.86	10.16	11.69	13.11	15.16	17.64	---	---	---	---
70C	7.76	8.86	10.16	11.69	13.11	15.16	---	---	---	---	---
70D	7.76	8.86	10.16	11.69	---	---	---	---	---	---	---
80A	7.76	8.86	10.16	11.69	13.11	15.16	17.64	21.65	24.61	---	---
80C	7.76	8.86	10.16	11.69	13.11	15.16	---	---	---	---	---
80D	7.76	8.86	10.16	11.69	---	---	---	---	---	---	---
85A	---	---	---	---	12.91	14.96	17.44	21.46	24.41	---	---
85C	7.76	8.86	10.16	11.69	13.11	15.16	---	---	---	---	---
85D	7.76	8.86	10.16	11.69	---	---	---	---	---	---	---
110A	---	---	---	---	---	---	16.77	20.79	23.74	28.86	28.86
110C	7.76	8.86	10.16	11.69	13.11	15.16	17.64	21.65	24.61	---	---
110D	7.76	8.86	10.16	11.69	13.11	15.16	---	---	---	---	---
130A	---	---	---	---	---	---	16.77	20.79	23.74	28.86	28.86
130C	---	---	---	---	12.91	14.96	17.44	21.46	24.41	---	---
130D	---	---	---	---	12.91	14.96	---	---	---	---	---

Dimensions are in inches.

Dimensions are subject to change without notice.

NEMA Motor Adapter Dimensions - Series C

WATT Drive speed reducers are available with motor adapters for NEMA, IEC, and a wide variety of servo motors. For IEC and servo motor adapter dimensions, consult your DieQua representative. NEMA adapter dimensions, for the appropriate reducers, are provided on this page.



Type	NEMA Adapter Dimensions											
	a _{NA}	b _{NA}	c _{NA}	d _{NA}	d x l	e _{NA}	f _{NA}	s _{NA}	t _{NA}	u _{NA}	w _{NA}	α _{NA}
NA56	6.5	4.5	0.71	0.625	0.625 x 2.056	5.875	0.2	0.41	0.709	0.188	4x90°	45°
NA143/145	6.5	4.5	0.71	0.875	0.875 x 2.12	5.875	0.2	0.41	0.964	0.188	4x90°	45°
NA182/184	10	8.5	1.1	1.125	1.125 x 2.62	7.25	0.2	0.53	1.241	0.25	4x90°	45°
NA213/215	10	8.5	1.1	1.375	1.375 x 3.12	7.25	0.2	0.53	1.518	0.312	4x90°	45°
NA254/256	10	8.5	1.1	1.625	1.625 x 3.75	7.25	0.2	0.53	1.796	0.375	4x90°	45°
NA284/286	11.25	10.5	1.1	1.875	1.875 x 4.38	9	0.2	0.53	2.096	0.5	4x90°	45°

Dimensions are in inches.

To determine complete reducer length, add flange length "FLN" to reducer length "r", found on page 31.

NEMA Flange Length Adder "FLN"						
	56	143/145	182/184	213/215	254/256	284/286
70A	2.28	2.28	3.74	3.74	4.72	4.72
70C	2.28	2.28	3.7	3.7	---	---
70D	2.28	2.28	---	---	---	---
80A	---	---	5.51	5.51	5.51	5.51
80C	2.28	2.28	3.74	3.74	---	---
80D	2.28	2.28	---	---	---	---
85A	2.28	2.28	5.31	5.31	5.31	5.31
85C	2.32	2.32	3.78	3.78	---	---
85D	2.28	2.28	---	---	---	---
110A	---	---	---	4.65	4.65	4.65
110C	2.28	2.28	3.74	3.74	4.72	4.72
110D	2.28	2.28	3.7	3.7	---	---
130A	---	---	---	---	4.65	4.65
130C	---	---	5.31	5.31	5.31	5.31
130D	2.09	2.09	3.5	3.5	---	---

Dimensions are in inches.

Dimensions are subject to change without notice.

The EUSAS Motor

The WATT Drive EUSAS Motor is specially designed for worldwide operation and can accommodate all Volts/Hz combinations. At 60 Hz, the actual power is up to 20% higher than similar motor frame sizes. As a special feature, the winding design can provide full torque at double nominal speed when inverter driven at a specific voltage and wire connection. Therefore, in some cases, a smaller motor may be selected to generate the required torque. The modular motor design also allows for a variety of options, many of them field retrofitable.

Component Materials

The frames of motor sizes 64 to 161 are made of cast aluminum. Motor sizes 181 to 281 are made of cast iron, as are the end shields for all sizes. Fan covers are made of plate steel. The stator windings have class F insulation, with class B temperature rise, as standard. The motor rotors have a squirrel cage design, in die cast aluminum, and are suitable for direct on line starting. The motor shaft is made of CK45 steel, which is comparable to ST 70.

Motor Protection Classifications and Options

The standard motor protection class is IP55. Protection Class IP56 and IP65 is also available. It is recommended that starters with thermal overload protection are used. Windings with Class F insulation are provided. For additional safety, temperature switches and temperature sensors can be incorporated. Condensation drainage holes, anti-condensation heating, and options for extreme climate conditions are also available.

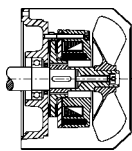
Motor cooling is achieved by integral fans. See the dimension pages for the required airflow space. For inverter controlled applications, low speed operation may require forced cooling. Consult your representative to determine when this is necessary.

Motor Speed and Design Options

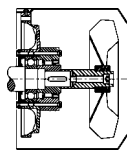
EUSAS motors are available in 2 pole, 4 pole, 6 pole, and 8 pole designs. Two speed motors in 4/2, 8/4, 6/4, 6/2, and 8/2 pole combinations are also possible. A unique asynchronous servo motor, for precise speed and positioning applications, is also offered. It provides the possibility of highly dynamic motion profiles operated by frequency inverters with closed loop control.

Modular System Options

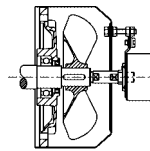
The EUSAS motor is designed to allow the integration of brakes, backstops, and encoders. In most cases kits can be provided to field retrofit these options. Brakes are offered for both holding and working applications. Encoders with a variety of resolutions and feedback are available. Consult your representative for the appropriate option selection.



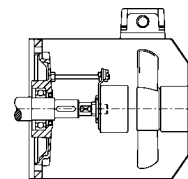
Brake



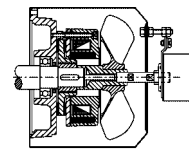
Backstop



Encoder



Forced Cooling



Brake & Encoder

Type	Nominal HP	Rated HP	Rated Speed RPM	Rated Current			Mn in-lbs ⁽²⁾	Ma/Mn ⁽³⁾	Double Power/Double Speed ⁽⁴⁾		
				In 230V [A]	In 460V [A]	Ia/In ⁽¹⁾			Rated Speed		In 460V [A]
							HP	RPM			
64K4	0.16	0.2*	1660	1	0.5	3	7	1.9	0.32	2880	0.9
64N4	0.25	0.3*	1650	1.2	0.6	3.2	11	2	0.48	2860	1
72K4	0.33	0.4*	1630	1.6	0.8	3.1	15	1.8	0.66	2820	1.4
72N4	0.5	0.6*	1650	2.2	1.1	3.7	22	1.9	1	2860	1.9
81K4	0.75	0.8*	1670	3	1.5	4	32	1.9	1.5	2890	2.6
81N4	1	1.2*	1680	4	2	4.6	43	2.2	2	2910	3.5
91S4	1.5	1.7*	1700	5.2	2.6	5.5	63	2.5	2.9	2940	4.5
91L4	2	2.3*	1710	7	3.5	6	85	2.6	4	2960	6.1
101L4	3	3.4	1710	9.4	4.7	5.9	125	2.2	6.7	3420	9.4
101LA4	4	4.6	1700	12.6	6.3	6	172	2.5	9.2	3400	12.6
114M4	5	6.1	1720	16.6	8.3	6.5	230	2.4	12	3440	16.6
114ML4	7.5	8.4	1730	25	12.5	6.7	310	3.2	17	3460	25
134S4	7.5	8.4	1740	23	11.5	7.3	310	2.4	17	3480	23
134M4	10	12	1740	30	15	7.2	416	2.4	23	3480	30
134ML4	12.5	14	1740	40	20	7.9	513	3.5	28	3480	40
161M4	15	17	1750	43	22	6.5	610	2.3	34	3500	43
161L4	20	23	1750	57	29	7.7	832	2.8	46	3500	57
181M4	25	28	1750	72	36	7	1027	2.1	57	3500	72
181L4	30	34	1760	84	42	7.4	1212	2.2	67	3520	84
201L4	40	46	1760	110	55	7	1655	2.6	92	3520	110
226S4	50	57	1760	136	68	7.9	2045	2.7	113	3520	136
226M4	60	69	1760	164	82	8.8	2487	2.9	138	3520	164
251M4	80	84	1780	198	99	6.1	3000	2.2	N/A	N/A	N/A
251ML4	110	115	1782	264	132	7	4089	2.3	N/A	N/A	N/A
281S4	110	115	1785	264	132	7.1	4080	2.3	N/A	N/A	N/A
281M4	135	138	1785	316	158	7.4	4903	2.3	N/A	N/A	N/A
281L4	165	169	1788	390	196	7.9	5983	2.6	N/A	N/A	N/A

* At 460V only. At 230V, use nominal HP rating.

(1) Starting current to rated current ratio.

(2) Rated torque.

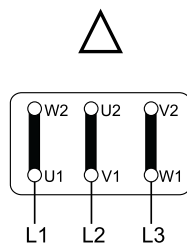
(3) Starting torque to rated torque ratio.

(4) Engineering Note: The double power/double speed option allows full torque up to 120Hz when inverter driven. This effectively doubles the power of a given motor. When incorporated with a higher ratio reducer, the same output torque can be achieved with a smaller motor than competitive gearmotors. Please be advised that the higher horsepower inverter and a 460V - 480V power source is required.

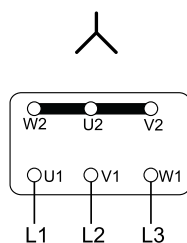
Wiring Diagrams

For Motor Sizes 64 to 91

220 - 240V at 50Hz
220 - 280V at 60Hz
Delta Connection

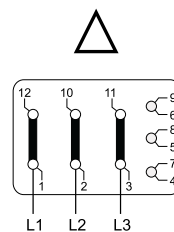


380 - 420V at 50Hz
380 - 480V at 60Hz
Star Connection, Standard

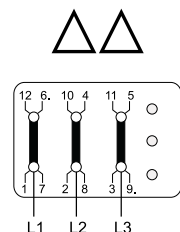


For Motor Sizes 101 to 281

380 - 420V at 50Hz
380 - 480V at 60Hz
Delta Connection, Standard Supply



190 - 210V at 50Hz
190 - 240V at 60Hz
Delta/Delta Connection



Radial Load Capacities

The output radial load capacities of these gearmotors and reducers is based on several factors. These include the output speed, percentage of unit torque utilization, direction of radial force, position of radial force on the shaft, and service factor desired. Contact your DieQua representative for a precise calculation.

Lubrication

The WATT drive MAS 2000 gearmotors and speed reducers are prefilled with oil prior to shipment. The amount of oil is determined by the mounting position. The lubricant used is a standard ISO VG 220 mineral oil. A synthetic oil option is also available. After mounting it is necessary to install the included breather plug in the uppermost plug location. Contact your DieQua representative for additional operating instructions.

Backlash

Gearing and machining tolerances have been optimized to provide excellent backlash control. The level of backlash within each unit is a function of the ratio. Reduced backlash options are available for precise rotary motion such as used in servo or other positioning applications. Contact your DieQua representative for backlash values and capabilities.

Moments of Inertia

Unit moments of inertia are a function of the gear ratio. Higher ratios have lower moments of inertia. Contact your DieQua representative for inertia values of the unit selected.

Mechanical Efficiency

Helical gearing is one of the most efficient gear types available. Precision machining and optimized tooth geometry maximizes power and torque transmission. In general, power losses are limited to 1 - 2% per gear stage. Spiral bevel gearing is also highly efficient, with power losses of only 2 - 3% per stage. Ambient conditions may affect these values. Contact your DieQua representative for efficiency values of the unit selected.

Horsepower Capacity

The horsepower ratings in this catalog are based on mechanical limits. The thermal capacity will vary and is a function of ambient conditions and other heat dissipation criteria. In most cases, the thermal limit will exceed the mechanical limit. However, when considering lower ratios, the mechanical limit may exceed the thermal limit. Consult your DieQua representative for the horsepower limit of the reducer selected.

Gear Motor Example: KUA 70A 134M4 BR10 98

Model Range

C = Helical Bevel Gear Motor
K = Helical Bevel Gear Motor

Gearbox Design

F = Bolt-On Flange
R = Agitator Design
U = Uniblock

Output Shaft

— = Output Shaft
A = Hollow Shaft
S = Shrink Disc
Z = Dual Output

Size of Gear Unit

40, 50, 60, 70, 75, 77, 80, 85, 110, 130, 136

Gear Stages Code

K40 - 75 **K77 - 136 and C70 - 130**
A = 2-stage A = 3-stage
C = 3-stage C = 4-stage
D = 4-stage D = 5-stage

Motor Size

64, 72, 81, 91, 101, 114, 134,
161, 181, 201, 226, 251, 281

Motor Modules and Options

BR = Brake
IG = Encoder
FL = Forced Cooling
Other standard options are available upon request.

Output Speed

Speed Reducer Example: CUA 70C NA143 98.57

Model Range

C = Helical Bevel Gear Unit
K = Helical Bevel Gear Unit

Gearbox Design

F = Bolt-On Flange
R = Agitator Design
U = Uniblock

Output Shaft

— = Output Shaft
A = Hollow Shaft
S = Shrink Disc
Z = Dual Output

Size of Gear Unit

40, 50, 60, 70, 75, 77, 80, 85, 110, 130, 136

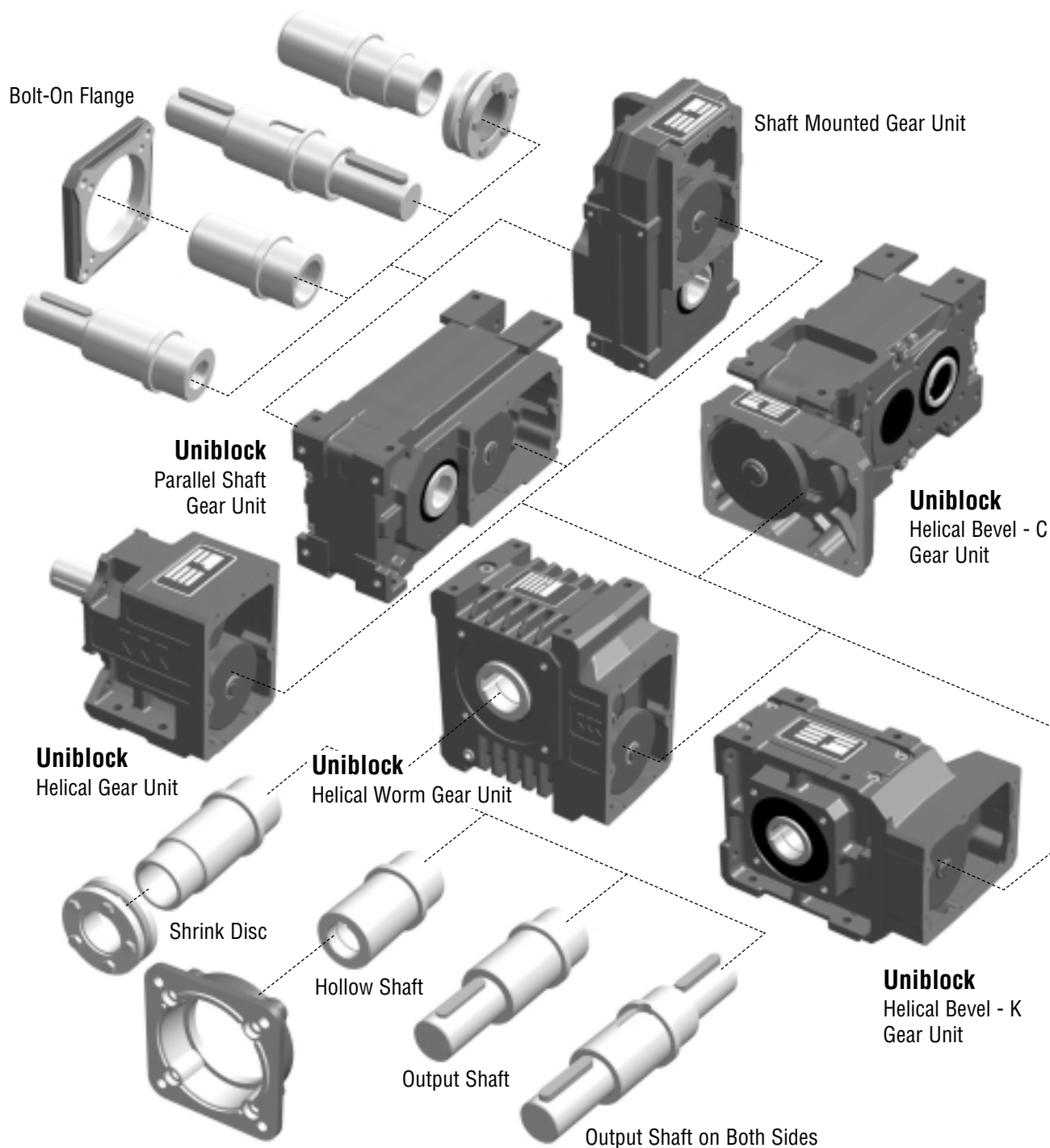
Gear Stages Code

K40 - 75 **K77 - 136 and C70 - 130**
A = 2-stage A = 3-stage
C = 3-stage C = 4-stage
D = 4-stage D = 5-stage

Input Type

NA = NEMA Adapter
IA = IEC Adapter
SA = Servo Adapter
WN = Input Shaft

Ratio



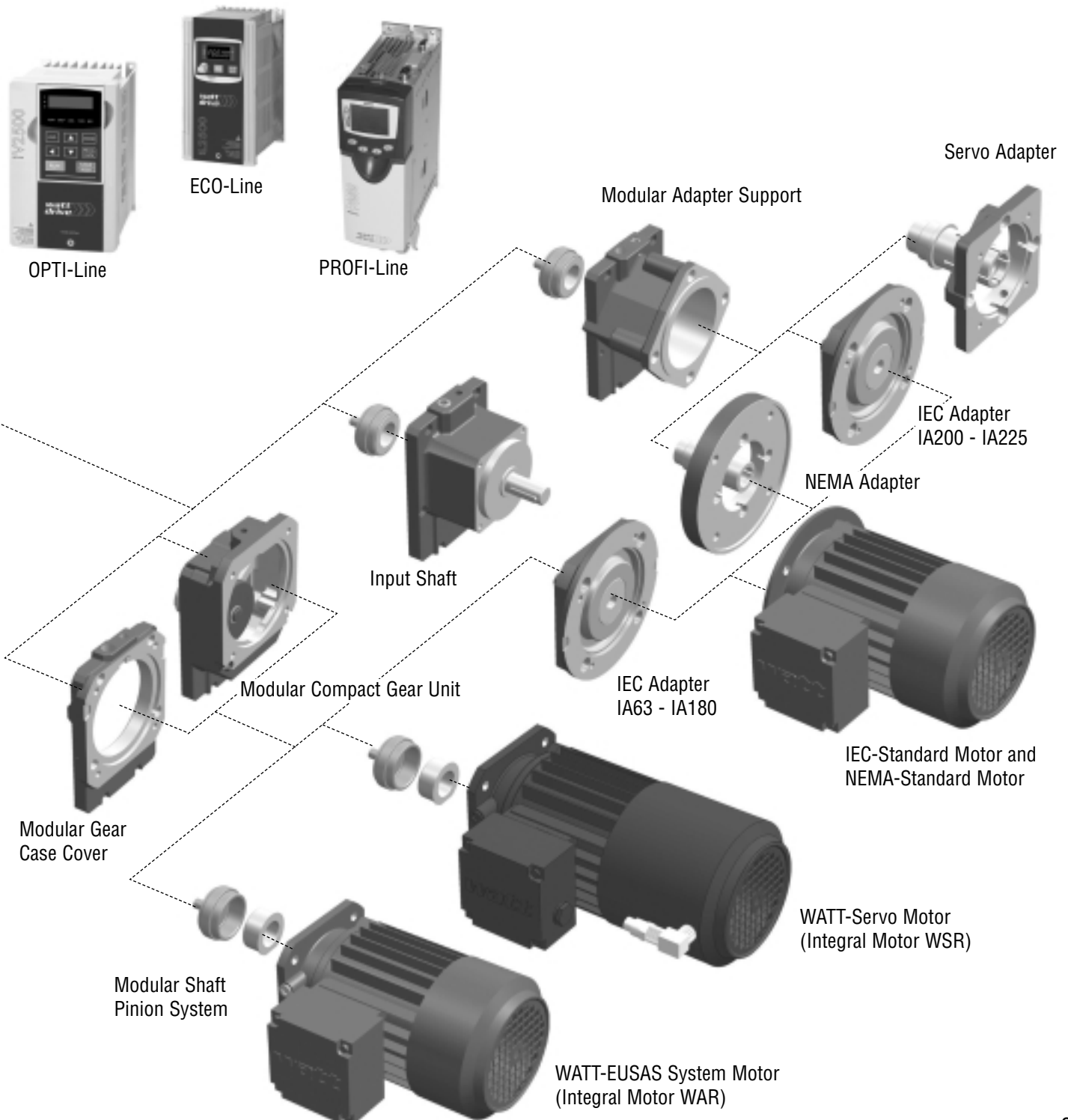
watt drive >>> - *The intelligent choice!*

The WATT Drive philosophy is to provide the optimal drive solution for each unique application. By combining the most appropriate reducer, motor and drive, or just individual components, the result is maximum design versatility, outstanding operating performance, and extreme reliability.

WATT Drive has been a global supplier of cutting edge drive technology for over 30 years. With manufacturing, assembly, warehousing, and tech center facilities throughout Europe, North America, and Asia, WATT Drive provides local personal service along with worldwide customer support.

MAS means Modular Assembly System

- **Modular Gear System** - Standard parts integrated into different gearbox designs.
- **Modular Motor System** - Standard design accommodates a variety of add-on options
- **Modular Electronic System** - Frequency inverters for speed and positioning control.



Other Products & Services



Inline Helical - H



Helical Worm - S



Shaft Mount - A



Parallel Shaft - F



Motors



Controls

Engineering Support

DieQua Corporation has several decades of combined experience specifying power transmission and motion control components. This assures the proper selection of components and systems for your unique requirements.



Manufacturing

DieQua Corporation's manufacturing capabilities allow production of many of the components used in the drives we provide. Mounting components and design modifications are also available from our full service machine shop.



Assembly

DieQua Corporation has a team of factory trained technicians that assemble the majority of the drives we provide. This allows prompt delivery of your production requirements or service repairs.



Warehousing

DieQua Corporation maintains an extensive inventory of common speed reducer and motor components for quick delivery of small orders, prototypes, and spare parts.



DIEQUA
Corporation

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