

Maximum Rating Tables

Size 813 • GR, NH, EL Series



Single Reduction
Worm Gear Reducers

Double Reduction
Worm - Worm Gear Reducers

Double Reduction
Helical - Worm Gear Reducers

WASHGUARD® Reducers
and GEAR+MOTOR™

Ratio Multipliers

Accessories and
Additional Capabilities

Style B

Style H



Size 813

Ratio	Input RPM	Output RPM	Input HP	Output HP	Output Torque (lb in)	Left Hand Catalog No	Right Hand Catalog No	Double Extension Catalog No	Hollow Output Catalog No
5	2500	500	1 528	1 429	180	8130001	8130013	8130025	8130501.10
	1750	350	1 248	1 158	209				
	1170	234	0 952	0 872	235				
7.5	100	20	0 140	0 095	298	8130002	8130014	8130026	8130502.10
	2500	333	1 281	1 178	223				
	1750	233	1 025	0 933	252				
10	1170	156	0 770	0 689	278	8130003	8130015	8130027	8130503.10
	100	13	0 118	0 072	339				
	2500	250	1 016	0 912	230				
15	1750	175	0 823	0 729	263	8130004	8130016	8130028	8130504.10
	1170	117	0 626	0 543	293				
	100	10	0 103	0 058	363				
20	2500	166	0 790	0 678	257	8130005	8130017	8130029	8130505.10
	1750	116	0 642	0 541	292				
	1170	78	0 491	0 402	325				
25	100	6.7	0 090	0 042	401	8130006	8130018	8130030	8130506.10
	2500	125	0 681	0 562	283				
	1750	87	0 551	0 445	320				
30	1170	58	0 422	0 328	354	8130007	8130019	8130031	8130507.10
	100	5.0	0 084	0 034	431				
	2500	100	0 544	0 431	272				
40	1750	70	0 445	0 344	309	8130008	8130020	8130032	8130508.10
	1170	46	0 344	0 255	344				
	100	4.0	0 074	0 027	423				
50	2500	83	0 481	0 364	276	8130009	8130021	8130033	8130509.10
	1750	58	0 395	0 290	314				
	1170	39	0 308	0 215	348				
60	100	3.3	0 071	0 023	429	8130010	8130022	8130034	8130510.10
	2500	62	0 400	0 283	285				
	1750	43	0 329	0 223	322				
80	1170	29	0 258	0 165	355	8130011	8130023	8130035	8130511.10
	100	2.5	0 066	0 017	432				
	2500	50	0 346	0 232	292				
100	1750	35	0 285	0 182	327	8130012	8130024	8130036	8130512.10
	1170	23	0 224	0 133	359				
	100	2.0	0 061	0 014	431				
	2500	41	0 297	0 184	279				
	1750	29	0 246	0 145	313				
	1170	19	0 195	0 107	345				
	100	1.7	0 058	0 011	415				
	2500	31	0 144	0 081	163				
	1750	21	0 121	0 064	183				
	1170	14	0 096	0 047	201				
	100	1.3	0 014	0 005	237				
	2500	25	0 100	0 051	128				
	1750	17	0 084	0 040	143				
	1170	11	0 067	0 029	156				
	100	1.0	0 010	0 003	184				

How To Build a Part Number For Size GR813, NH813, EL813

1. Select partial catalog number from the selection table
2. Replace leading “_” with series code (GR, NH, EL)

Example:

Grove Gear IRONMAN, style B, 5:1 ratio, left hand output
GR-B813-5-L
GR8130001

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NEMA C Input Flange ▲	Style BM			Style HM	Style BMQ			Style HMQ	Ratio
	Left Hand Catalog No	Right Hand Catalog No	Double Extension Catalog No	Hollow Output Catalog No	Left Hand Catalog No	Right Hand Catalog No	Double Extension Catalog No	Hollow Output Catalog No	
48CZ 56C	8130109 8130037	8130121 8130049	8130133 8130061	8130537.10 8130513.10	8130181 8130073	8130193 8130085	8130205 8130097	8130561.10 8130525.10	5
48CZ 56C	8130110 8130038	8130122 8130050	8130134 8130062	8130538.10 8130514.10	8130182 8130074	8130194 8130086	8130206 8130098	8130562.10 8130526.10	7.5
48CZ 56C	8130111 8130039	8130123 8130051	8130135 8130063	8130539.10 8130515.10	8130183 8130075	8130195 8130087	8130207 8130099	8130563.10 8130527.10	10
48CZ 56C	8130112 8130040	8130124 8130052	8130136 8130064	8130540.10 8130516.10	8130184 8130076	8130196 8130088	8130208 8130100	8130564.10 8130528.10	15
48CZ 56C	8130113 8130041	8130125 8130053	8130137 8130065	8130541.10 8130517.10	8130185 8130077	8130197 8130089	8130209 8130101	8130565.10 8130529.10	20
48CZ 56C	8130114 8130042	8130126 8130054	8130138 8130066	8130542.10 8130518.10	8130186 8130078	8130198 8130090	8130210 8130102	8130566.10 8130530.10	25
48CZ 56C	8130115 8130043	8130127 8130055	8130139 8130067	8130543.10 8130519.10	8130187 8130079	8130199 8130091	8130211 8130103	8130567.10 8130531.10	30
48CZ 56C	8130116 8130044	8130128 8130056	8130140 8130068	8130544.10 8130520.10	8130188 8130080	8130200 8130092	8130212 8130104	8130568.10 8130532.10	40
48CZ 56C	8130117 8130045	8130129 8130057	8130141 8130069	8130545.10 8130521.10	8130189 8130081	8130201 8130093	8130213 8130105	8130569.10 8130533.10	50
48CZ 56C	8130118 8130046	8130130 8130058	8130142 8130070	8130546.10 8130522.10	8130190 8130082	8130202 8130094	8130214 8130106	8130570.10 8130534.10	60
48CZ 56C	8130119 8130047	8130131 8130059	8130143 8130071	8130547.10 8130523.10	8130191 8130083	8130203 8130095	8130215 8130107	8130571.10 8130535.10	80
48CZ 56C	8130120 8130048	8130132 8130060	8130144 8130072	8130548.10 8130524.10	8130192 8130084	8130204 8130096	8130216 8130108	8130572.10 8130536.10	100

For input/ output shaft overhung load and thrust load ratings, refer to pages 419-422.

▲ Consult Factory for other motor flanges available.

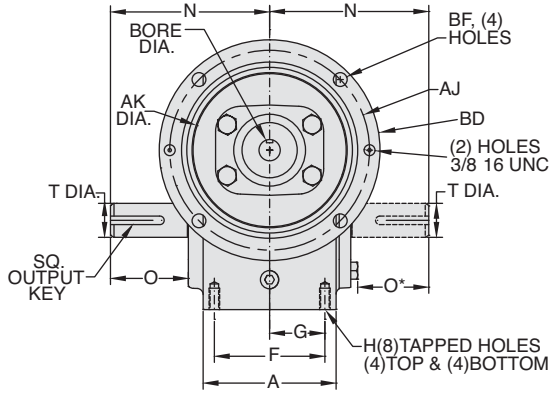
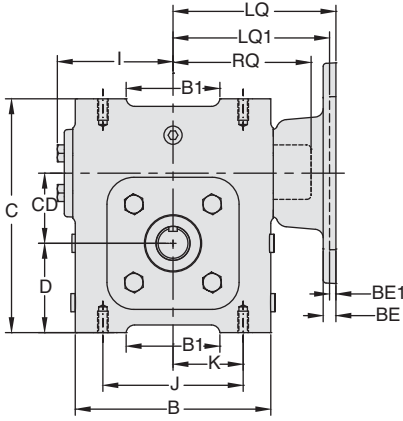
ELECTRA-GEAR

EL Series

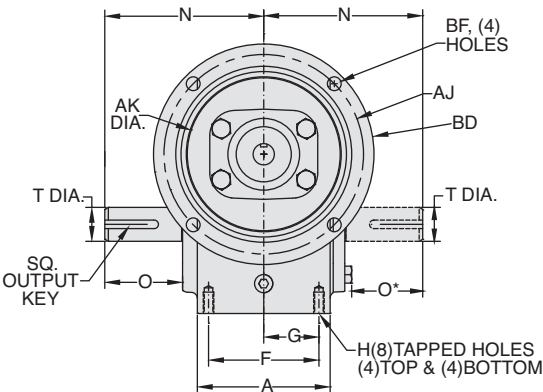
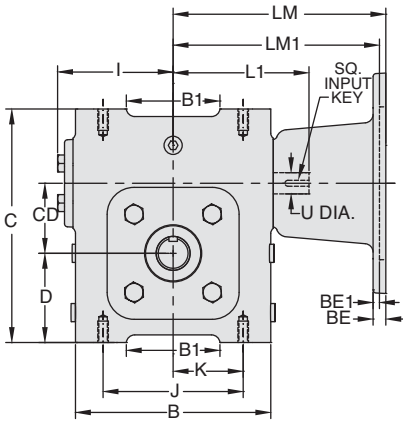
Dimensions

Styles: BMQ, BM, B

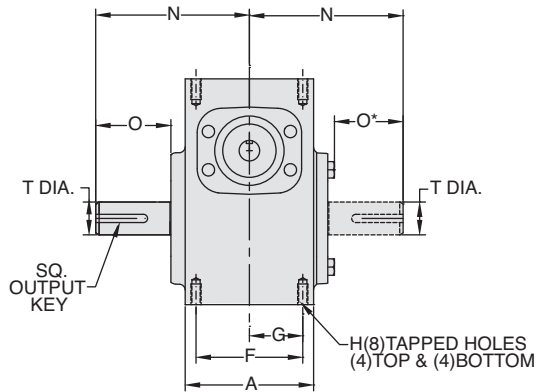
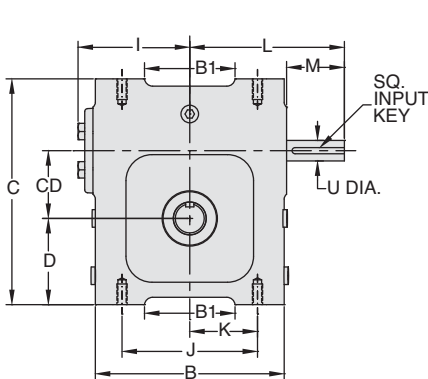
Style BMQ



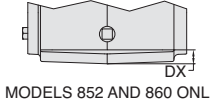
Style BM



Style B

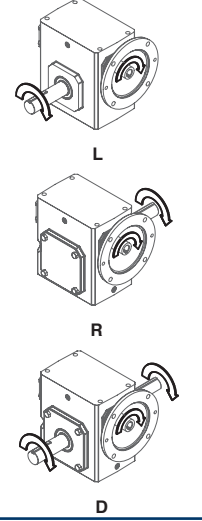


SIDE VIEW

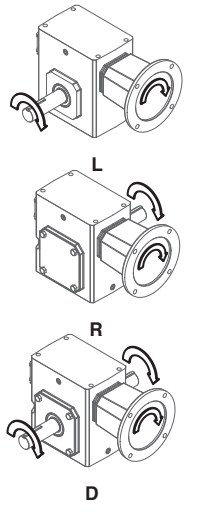


END VIEW

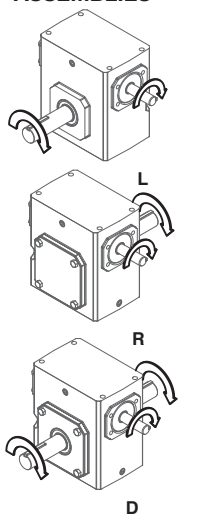
ASSEMBLIES



ASSEMBLIES



ASSEMBLIES



REVERSE ALL ARROWS FOR OPPOSITE INPUT SHAFT ROTATION. CONTACT FACTORY FOR OTHER MOUNTINGS OR ASSEMBLY POSITIONS.

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STYLE BMQ, BM, B DIMENSIONS (Inches)

Size	A	B	B1	C	CD	D	DX	F	G	H		I	J	K	L	M	N	O	O*	T +0.000 -0.0015	U +0.000 -0.0015	Input Key (Style B Only)	Input Key (Style BM only)	Output Key
										Tap Size	Depth													
EL813	2.82	3.80	--	4.66	1.33	1.72	--	2.00	1.00	5/16-18	0.50	2.40	3.25	1.63	3.82	1.87	4.00	2.16	1.96	0.625	0.500	1/8 x 1.00	1/8 x 1.00	3/16 x 1.38
EL818	3.50	4.83	2.48	5.86	1.75	2.31	--	2.94	1.47	5/16-18	0.63	3.03	3.69	1.84	4.45	1.78	4.39	2.05	1.85	0.750	0.625	3/16 x1.38	3/16 x .500	3/16 x 1.38
EL821	3.91	5.75	2.76	6.88	2.06	2.63	--	3.25	1.63	3/8-16	0.87	3.40	4.13	2.06	4.82	1.76	4.68	2.29	2.09	1.000	0.625	3/16 x1.38	3/16 x .500	1/4 x 1.44
EL824	4.06	5.86	--	6.94	2.38	2.50	--	2.88	1.44	3/8-16	0.69	3.61	5.00	2.50	5.51	2.45	5.14	2.66	2.46	1.125	0.750	3/16 x1.63	3/16 x .500	1/4 x 1.62
EL826	4.84	7.17	4.21	8.00	2.63	3.25	--	3.38	1.69	3/8-16	0.69	4.17	5.00	2.50	6.07	2.45	5.63	2.73	2.53	1.250	0.750	3/16 x1.63	3/16 x .500	1/4 x 1.62
EL830	5.25	8.11	4.50	8.94	3.00	3.50	--	4.13	2.06	1/2-13	1.00	4.81	5.75	2.88	6.56	2.31	6.62	3.60	3.37	1.500	0.875	3/16 x1.63	3/16 x .500	3/8 x 2.25
EL832	5.25	8.11	4.53	10.50	3.25	4.00	--	4.13	2.06	1/2-13	1.00	5.00	6.63	3.31	6.75	2.31	6.62	3.60	3.37	1.625	0.875	3/16 x1.63	3/16 x .500	3/8 x 2.25
EL842	6.13	9.63	5.71	11.69	4.25	4.50	--	3.75	1.88	5/8-11	1.19	6.15	7.00	3.50	9.57	3.47	8.12	4.50	4.22	1.750	1.250	1/4 x 2.50	1/4 x 2.50	3/8 x 3.00
EL852	7.19	11.50	7.82	12.25	5.25	4.25	0.75	5.25	2.63	3/4-10	1.44	7.55	9.62	4.81	10.88	3.38	9.06	4.78	4.50	2.000	1.250	1/4 x 3.00	1/4 x 3.00	1/2 x 2.50
EL860	7.00	13.50	--	14.25	6.00	5.00	1.63	5.38	2.69	7/8-9	1.63	7.88	11.00	5.50	10.99	3.00	10.75	5.25	5.25	2.250	1.500	3/8 x 3.00	3/8 x 2.75	1/2 x 4.00

Motor Mounting Dimensions

NEMA DIMENSIONS (Inches)

Size	LM	LM1	L1		LQ	LQ1	RQ	
	56C/140TC	180TC / 210TC	56C/140TC	180TC / 210TC	56C/140TC	180TC / 210TC	56C/140TC	180TC / 210TC
EL813	6.07	--	3.82	--	3.79	--	3.09	--
EL818	5.89	--	3.64	--	4.42	--	3.59	--
EL821	6.26	--	4.00	--	4.79	--	4.06	--
EL824	6.48	7.30	4.29	4.29	4.77	4.77	4.09	4.09
EL826	7.04	7.86	4.88	4.88	5.33	5.33	4.82	4.82
EL830	7.67	8.31	5.38	5.38	5.97	5.97	5.32	5.32
EL832	7.86	8.50	5.56	5.56	6.16	6.16	5.51	5.51
EL842	11.25	12.53	9.57	9.57	6.45	6.45	6.04	6.04
EL852	12.65	13.93	10.88	10.88	7.85	7.85	7.35	7.35
EL860	--	11.94	10.99	10.99	--	--	--	--

NEMA DIMENSIONS (Inches)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway	BF
56C	5.88	4.50	6.50	0.38	N/A	.625	3/16 X 3/32	0.41
140TC	5.88	4.50	6.50	0.38	N/A	.875	3/16 X 3/32	0.41
180TC	7.25	8.50	9.00	N/A	0.50	1.125	1/4 X 1/8	0.53
210TC	7.25	8.50	9.00	N/A	0.50	1.375	5/16 X 5/32	0.53

- * Applies to double output shaft
- ◆ Keyway width by depth
- * Solid input shaft and C-faced coupling input reducers have different input shaft length and key.



WARNING For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

INTEGRAL GEARMOTOR INPUTS AVAILABLE

— Contact Factory for price and availability.

EL SERIES MOUNTING DIMENSIONS

- EL Series mounting dimensions are the same as the original ELECTRA-GEAR product with an option to match the industry standard dimensions of GR Series.
- See page 52 for GR Series dimensions.

ELECTRA-GEAR INTERCHANGE GUIDE

Original Style	New Style
MSC or MLSC	BMQ
MC or MLC	BM
M or ML	B
M + "KV" Kit	B + "KV" Kit

Convert Style B to motorized coupling input using kits shown on page 278.