

CAST IRON
GR SERIES

CAST IRON
NH SERIES

ALUMINUM
EL SERIES

Maximum Rating Tables

GR, NH & EL Series • All Stock Styles



Sizes 842, 852 and 860 • 1.0 S.F.

Nominal Ratio	Nominal		Size 842				Size 852				Size 860**			
	Input RPM	Output RPM	Input HP	Output HP	Output TQ (lb-in)	Exact Total Ratio*	Input HP	Output HP	Output TQ (lb-in)	Exact Total Ratio*	Input HP	Output HP	Output TQ (lb-in)	Exact Total Ratio*
10	1750	175.0	13.43	12.469	4640	10.00	20.00	18.699	6902	10.00	20.00	18.74	6748	10.00
15	1750	116.7	11.93	10.934	5907	15.00	20.00	18.501	9994	15.00	20.00	18.54	10013	15.00
20	1750	87.5	10.76	9.770	7037	20.00	17.27	15.751	11345	20.00	18.67	17.08	12302	20.00
25	1750	65.5	7.471	6.797	6529	26.70	10.07	9.273	8835	26.70	10.07	9.32	8389	26.70
30	1750	58.3	8.056	7.120	7693	30.00	13.54	11.980	12944	30.00	14.41	12.80	13824	30.00
40	1750	43.8	6.701	5.950	8660	40.45	11.35	10.188	14828	40.45	11.35	10.24	14836	40.45
45	1750	39.4	6.293	5.480	8781	44.46	11.05	9.668	15492	44.46	11.99	10.54	16884	44.46
50	1750	33.9	5.568	4.881	9074	51.57	9.81	8.718	16208	51.57	10.07	9.02	16240	51.67
60	1750	28.8	5.061	4.340	9476	60.68	9.11	7.876	17195	60.68	9.82	8.39	17924	60.68
75	1750	23.3	4.121	3.527	9581	75.38	7.71	6.578	18345	77.38	8.21	6.78	18118	75.38
80	1750	21.6	4.277	3.525	10261	80.90	7.377	6.161	17934	80.90	8.22	6.93	20079	80.90
100	1750	16.9	3.575	2.884	10725	103.34	6.259	5.143	19122	103.34	6.89	5.60	20287	103.34
125	1750	13.5	2.989	2.318	10776	129.18	5.300	4.181	19432	129.18	5.71	4.55	22053	129.18
150	1750	11.6	2.685	2.078	11292	150.76	4.765	3.795	20618	150.76	5.32	4.29	23533	150.76
200	1750	8.5	2.099	1.449	10775	206.68	3.636	2.582	19198	206.68	3.93	2.83	21924	206.68
250	1750	6.7	1.765	1.139	10584	258.35	3.103	2.052	19075	258.35	3.32	2.23	21649	258.35
300	1750	5.8	1.618	1.043	11335	301.52	2.829	1.904	20687	301.52	3.13	2.15	23615	301.52
400	1750	4.2	0.781	0.417	6210	413.36	1.718	0.797	11864	413.36	2.19	1.08	16037	413.36
500	1750	3.4	0.526	0.257	4782	516.70	1.206	0.522	9707	516.70	1.56	0.69	12884	516.70
600	1750	3.0	0.588	0.298	6468	603.04	1.374	0.590	12810	603.04	1.75	0.80	17397	603.04

Sizes 870, 880 and 8100 • 1.0 S.F.

Nominal Ratio	Nominal		Size 870***				Size 880***				Size 8100***			
	Input RPM	Output RPM	Input HP	Output HP	Output TQ (lb-in)	Exact Total Ratio	Input HP	Output HP	Output TQ (lb-in)	Exact Total Ratio	Input HP	Output HP	Output TQ (lb-in)	Exact Total Ratio
25	1750	70.0	19.60	18.10	17000	26.05	31.90	29.70	26900	25.23	42.10	39.30	36800	26.02
37.5	1750	46.7	18.60	16.90	22900	37.61	26.80	24.60	32300	36.43	42.10	39.00	52300	37.23
50	1750	25.0	15.20	13.70	24400	49.56	21.70	19.70	34100	48.00	37.80	34.60	61700	49.50
75	1750	23.3	11.20	9.74	26200	74.55	16.20	14.30	37100	72.21	28.40	25.20	67700	74.46
100	1750	17.5	8.95	7.41	27800	104.20	12.60	10.60	38600	100.92	22.30	19.00	71400	104.08
125	1750	14.0	7.56	6.14	27500	124.53	10.80	8.90	38600	120.61	18.90	15.80	70600	124.39
138	1750	12.7	6.90	5.84	29000	138.08	10.20	8.75	41200	130.65	17.80	15.40	79000	139.22
150	1750	11.7	6.26	4.95	26700	149.95	9.05	7.27	38000	145.23	15.80	13.00	69000	149.77
185	1750	9.5	5.52	4.43	30800	192.99	8.00	6.53	42900	182.61	14.20	11.70	83900	194.59
200	1750	8.8	5.06	3.70	27100	203.32	7.00	5.22	37000	196.92	12.40	9.46	69200	203.08
210	1750	8.3	4.90	4.07	30200	205.92	6.94	5.84	43200	205.78	12.60	10.70	80800	212.23
250	1750	7.0	3.77	3.25	28500	244.04	5.35	4.63	41100	246.38	10.10	8.81	77300	243.65
280	1750	6.3	3.98	3.09	32000	287.82	5.50	4.38	45300	287.62	10.10	8.13	86800	296.64
300	1750	5.8	3.31	2.23	24500	304.98	4.78	3.23	34300	295.38	7.15	5.69	62400	304.62

* Actual ratio combinations supplied by Factory may vary from above depending on application and manufacturing requirements.
 ** Size 860 is only available in GR and EL Series
 *** Sizes 870, 880 and 8100 are only available in GR Series
 Refer to page 201 for exact ratio of helical primary stage and worm gear secondary stage.
 At speeds above 1750 input RPM, gear reducers may become thermally limited. For continuous operation, limit input HP to 1750 RPM input ratings shown. Contact Factory with application requirements if higher speeds are required.
 For input/output shaft overhung load and thrust load ratings, refer to pages 419-422.
 EL Series sizes 842-860 have cast iron primary. Contact Factory for dimensions.

Single Reduction
Worm Gear Reducers

Double Reduction
Worm - Worm Gear Reducers

Double Reduction
Helical - Worm Gear Reducers

WASHGUARD® Reducers
and GEAR+MOTOR™

Ratio Multipliers

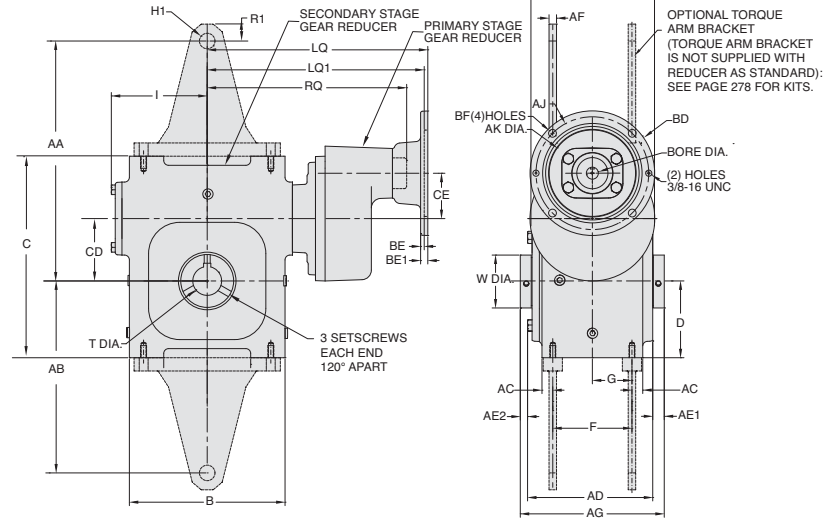
Accessories and
Additional Capabilities

ELECTRA-GEAR

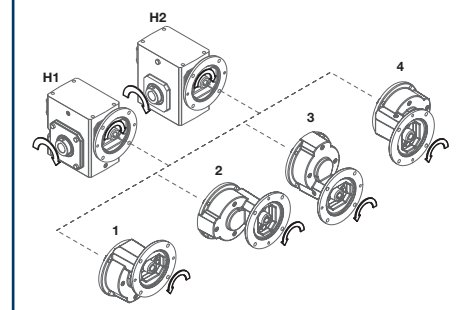
EL Series Dimensions

Styles: DXHMQ, DXHM, DXH

Style DXHMQ

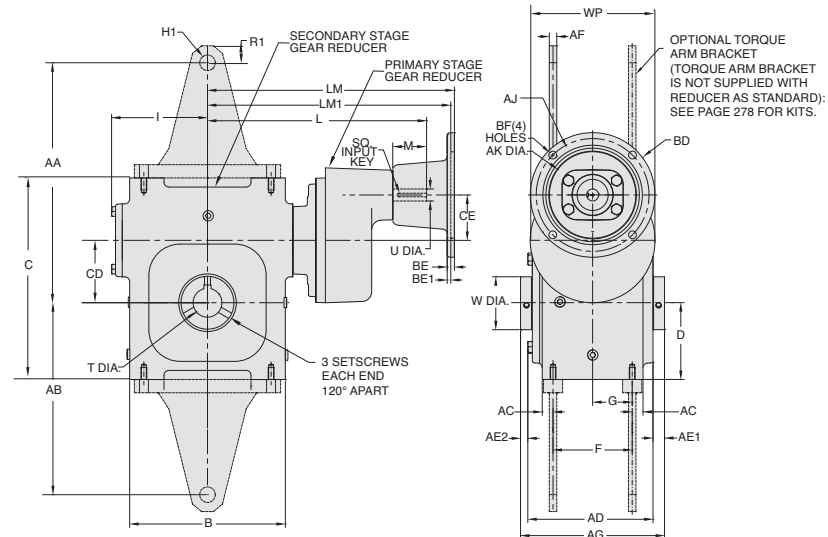


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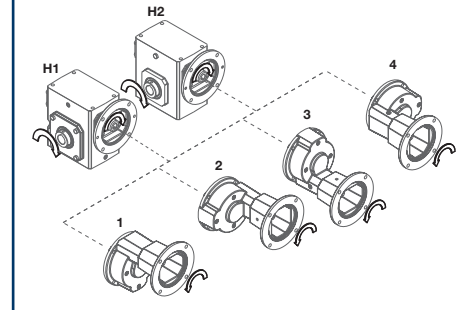


H1 IS SUPPLIED AS STANDARD UNLESS OTHERWISE SPECIFIED.

Style DXHM

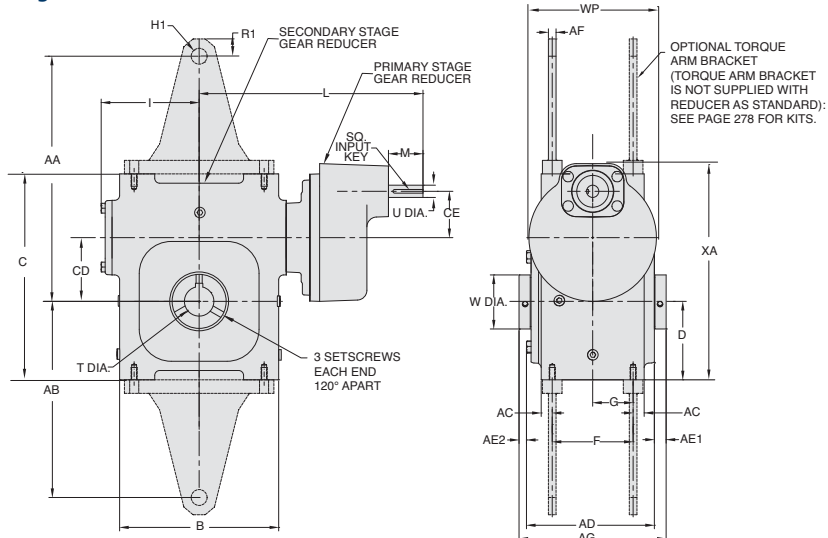


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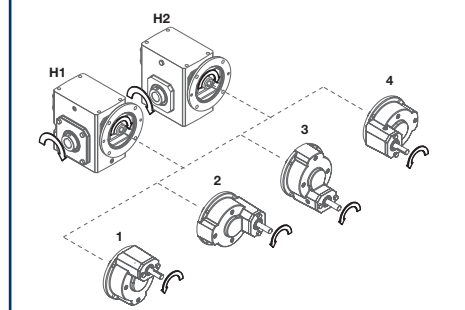


H1 IS SUPPLIED AS STANDARD UNLESS OTHERWISE SPECIFIED.

Style DXH



ASSEMBLIES



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

H1 IS SUPPLIED AS STANDARD UNLESS OTHERWISE SPECIFIED.

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 DXHMQ, DXHM, DXH DIMENSIONS (Inches)

Size	AA	AB	AC	AD	AE1	AE2	AF	AG	B	C	CD	CE	D	F	G	H1
EL813	--	--	0.41	3.89	0.58	0.26	--	4.73	3.80	4.66	1.33	1.91	1.72	2.00	1.00	--
EL818	6.25	5.00	0.28	4.72	0.49	0.29	0.69	5.50	4.83	5.86	1.75	1.91	2.31	2.94	1.47	0.53
EL821	7.63	6.00	0.33	4.98	0.60	0.42	0.69	6.00	5.75	6.88	2.06	1.91	2.63	3.25	1.63	0.53
EL824	7.81	5.87	0.59	5.17	1.02	0.81	0.69	7.00	5.86	6.94	2.38	2.36	2.50	2.88	1.44	0.53
EL826	8.50	7.00	0.73	6.00	0.60	0.40	0.69	7.00	7.17	8.00	2.63	2.36	3.25	3.38	1.69	0.53
EL830	9.94	8.00	0.56	6.52	0.60	0.38	0.69	7.50	8.11	8.94	3.00	2.36	3.50	4.13	2.06	0.53
EL832	12.50	10.00	0.56	6.52	0.60	0.38	0.69	7.50	8.11	10.50	3.25	2.36	4.00	4.13	2.06	0.53

Size	I	L	M	R1	W	WP	XA	T -0.000 +0.0015	U +0.000 -0.0015	Input Key *	Output Key
EL813	2.40	8.08	1.76	-	1.00	6.50	6.83	0.625	0.625	3/16 x 3/32	3/16 x 1.38
EL818	3.03	8.71	1.76	0.66	1.44	6.50	7.83	1.000	0.625	3/16 x 3/32	3/16 x 1.38
EL821	3.40	9.08	1.76	0.75	1.94	6.50	8.46	1.500*	0.625	3/16 x 3/32	1/4 x 1.44
EL824	3.61	9.06	1.76	0.75	1.94	6.50	8.56	1.500*	0.625	3/16 x 3/32	1/4 x 1.62
EL826	4.17	9.62	1.76	0.75	1.94	6.50	9.65	1.500*	0.625	3/16 x 3/32	1/4 x 1.62
EL830	4.81	10.26	1.76	0.81	2.76	6.50	10.27	2.188	0.625	3/16 x 3/32	3/8 x 2.25
EL832	5.00	10.45	1.76	0.88	2.76	6.50	11.02	2.188	0.625	3/16 x 3/32	3/8 x 2.25

Motor Mounting Dimensions

NEMA DIMENSIONS (Inches)

Size	LM 56C/140TC	LM1 180TC / 210TC	LQ 56TC/140TC	LQ1 180TC / 210TC	RQ 56C/140TC	RQ 180TC / 210TC
EL813	10.33	--	8.85	--	8.46	7.47
EL818	10.96	--	9.48	--	9.09	8.10
EL821	11.33	--	9.85	--	9.46	8.41
EL824	11.31	--	9.83	10.04	9.44	9.01
EL826	11.87	--	10.39	10.60	10.00	9.57
EL830	12.51	--	11.03	11.23	10.64	10.20
EL832	12.70	--	11.22	11.42	10.83	10.39

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

NOTE: Larger sizes available with cast iron primary - Contact Factory.

- Max bore dimensions shown. For additional bores available, refer to page 130.
- ♦ 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.

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 202 for GR Series dimensions.

ELECTRA-GEAR INTERCHANGE GUIDE

Original Style	New Style
H_MHSC	DXHMQ
H_MHC	DXHM
H_MH	DXH

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