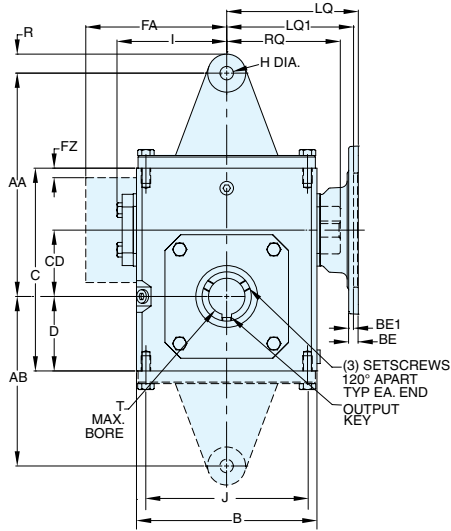




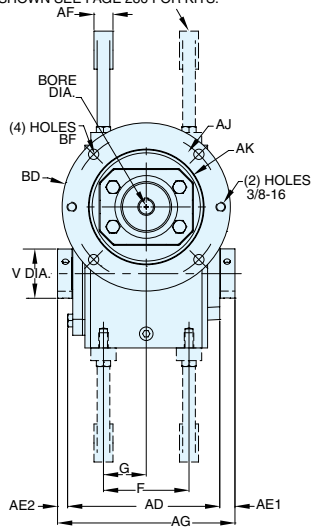
**GR SERIES
DIMENSIONS**
STYLES: HMQ, HM, H



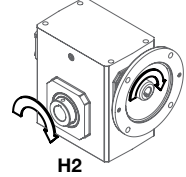
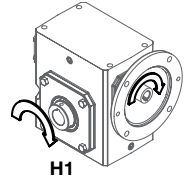
STYLE HMQ



OPTIONAL TORQUE ARM BRACKET
(TORQUE ARM BRACKET IS NOT SUPPLIED WITH REDUCER AS STANDARD);
ALL POSSIBLE MOUNTING POSITIONS SHOWN SEE PAGE 286 FOR KITS.

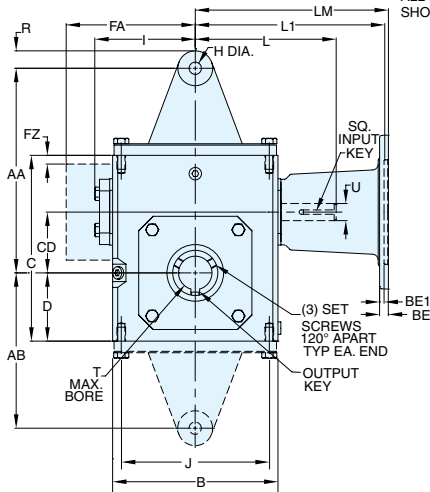


ASSEMBLIES

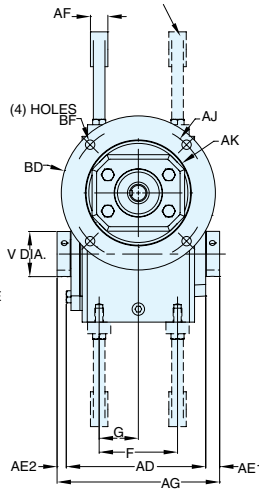


H1 SUPPLIED AS STANDARD UNLESS SPECIFIED.

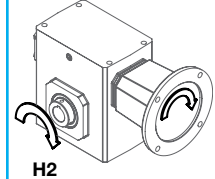
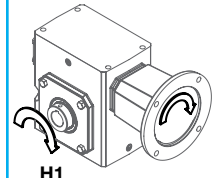
STYLE HM



OPTIONAL TORQUE ARM BRACKET
(TORQUE ARM BRACKET IS NOT SUPPLIED WITH REDUCER AS STANDARD);
ALL POSSIBLE MOUNTING POSITIONS SHOWN SEE PAGE 286 FOR KITS.

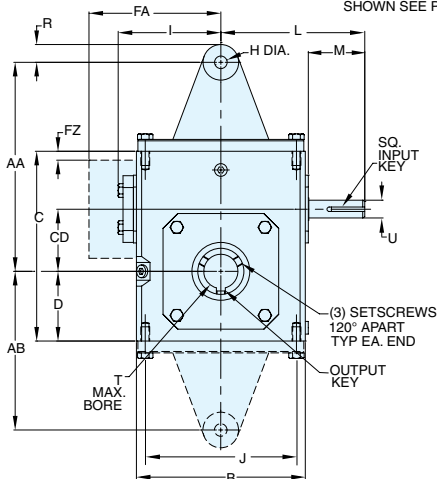


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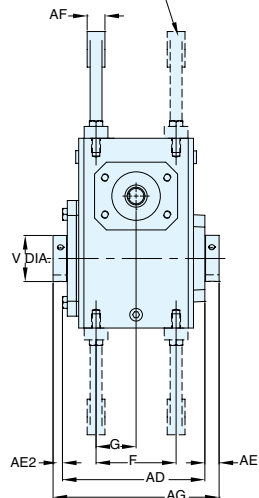


H1 SUPPLIED AS STANDARD UNLESS SPECIFIED.

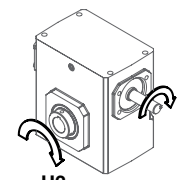
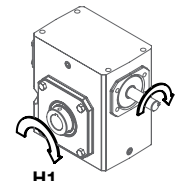
STYLE H



OPTIONAL TORQUE ARM BRACKET
(TORQUE ARM BRACKET IS NOT SUPPLIED WITH REDUCER AS STANDARD);
ALL POSSIBLE MOUNTING POSITIONS SHOWN SEE PAGE 286 FOR KITS.



ASSEMBLIES



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

H1 SUPPLIED AS STANDARD UNLESS SPECIFIED.



STYLE HMQ, HM, H DIMENSIONS (Inches)

Series	AA	AB	AD	AE1	AE2	AF	AG	B	C	D	CD	F	FA ▼	FZ ▼	G	H	I	J	L	M	R	V	T MAX+ -0.000 +0.0025	U +0.000 -0.0015	Input Key*	Output Key+†
GR813	4.19	2.97	3.90	0.53	0.32	0.75	4.75	3.80	4.66	1.72	1.33	2.00	N/A	N/A	1.00	0.53	2.61	3.25	3.82	1.76	0.50	1.00	0.625	.500	1/8 X 1.00	3/16 x 1.50
GR815	5.97	4.41	4.61	0.51	0.30	0.75	5.42	5.19	5.38	1.91	1.54	2.75	N/A	N/A	1.38	0.53	3.14	4.19	4.35	1.76	0.75	1.00	0.625	.625	3/16 X 1.38	3/16 x 1.50
GR818	6.19	4.56	4.73	0.49	0.28	0.75	5.50	5.19	5.75	2.06	1.75	2.75	N/A	N/A	1.38	0.53	3.24	4.19	4.45	1.76	0.75	1.44	1.000	.625	3/16 X 1.38	1/4 x 3.00
GR821	7.24	5.43	4.99	0.61	0.40	0.75	6.00	5.80	6.38	2.28	2.06	▲	N/A	N/A	1.44	0.53	3.61	▲	4.82	1.76	0.75	1.44	1.500	.625	3/16 X 1.38	3/8 x 3.00
GR824	7.69	5.75	5.18	0.51	0.31	0.75	6.00	6.12	6.94	2.50	2.38	2.88	N/A	N/A	1.44	0.53	3.77	5.00	5.51	2.38	0.75	1.94	1.500	.750	3/16 X 1.63	3/8 x 3.00
GR826*	8.81	6.69	6.01	0.60	0.39	0.75	7.00	7.38	8.00	2.94	2.63	3.38	N/A	N/A	1.69	0.53	4.34	6.38	6.07	2.38	0.75	1.94	1.500	.750	3/16 X 1.63	3/8 x 3.00
GR830	10.63	8.25	6.53	0.60	0.36	0.75	7.50	8.12	8.88	3.25	3.00	4.00	N/A	N/A	2.00	0.53	4.84	7.00	6.57	2.38	0.88	2.51	2.188	.875	3/16 X 1.63	1/2 x 3.00
GR832*	10.88	8.50	7.04	0.54	0.29	0.75	7.88	8.75	9.38	3.50	3.25	4.00	N/A	N/A	2.00	0.53	5.02	7.50	6.76	2.38	0.88	2.51	2.188	.875	3/16 X 1.63	1/2 x 3.00
GR842	11.94	9.44	7.53	0.63	0.34	0.75	8.50	10.25	11.38	4.44	4.25	5.00	N/A	N/A	2.50	0.53	6.10	8.50	9.57	3.47	0.75	2.75	2.188	1.250	1/4 X 2.50	1/2 x 3.00
GR852	13.88	10.12	8.85	0.97	0.68	1.00	10.50	13.00	14.00	5.12	5.25	5.81	N/A	N/A	2.91	0.66	7.50	11.00	10.88	3.38	1.00	4.26	3.438	1.250	1/4 X 3.00	7/8 x 3.44
GR860	15.00	11.50	10.52	0.52	0.38	1.15	11.50	14.50	16.50	6.50	6.00	6.38	11.13	0.33	3.19	0.66	N/A	12.75	11.78	3.41	0.69	4.18	3.438	1.500	3/8 X 3.00	7/8 x 3.44
GR870	N/A	N/A	11.36	1.09	1.09	N/A	13.50	14.88	18.91	7.59	7.00	5.50	11.37	0.35	2.75	N/A	N/A	12.50	11.50	2.97	N/A	4.92	3.938	1.625	3/8 x 2.87**	1 x 1/2**
GR880	N/A	N/A	12.48	1.03	1.03	N/A	14.50	17.00	20.96	8.86	8.00	6.50	12.52	0.57	3.25	N/A	N/A	14.25	12.50	2.84	N/A	5.55	4.438	1.875	1/2 x 2.81**	1 x 1/2**
GR8100	N/A	N/A	15.78	1.39	1.39	N/A	18.50	20.88	25.47	10.36	10.00	6.88	14.69	0.51	3.44	N/A	N/A	14.75	15.50	3.76	N/A	6.67	5.438	2.250	1/2 x 3.69**	1-1/4 x 5/8**

▲ See feature comparison chart.

FEATURE COMPARISON (821)

Size	Output Shaft Diameter Needed?	Mounting Footprint Needed?	All Other Features	Grove Gear Flexaline Interchange	LEESON IRONMAN Interchange	Replace With Series Code Below:
GR821	Identical	(F)3.00" x (J)4.75" (F)2.88" x (J)5.00"	Identical	✓	✓	GRG GRL

NOTE: If reducer is used without the accessory mounted, select based mounting dimensions on pages 52-53 (B, BM, BMQ).

MOTOR MOUNTING DIMENSIONS

NEMA DIMENSIONS (Inches)

Size	LM		L1		LQ		LQ1			RQ		
	48CZ	56C/140TC	180TC/210TC	250TC	48CZ/56C/140TC	180TC	210TC	250TC	48CZ/56C/140TC	180TC	210TC	250TC
GR813	5.63	6.07	N/A	N/A	3.46	N/A	N/A	N/A	3.09	N/A	N/A	N/A
GR815	6.16	6.60	N/A	N/A	3.99	N/A	N/A	N/A	3.62	N/A	N/A	N/A
GR818	6.26	6.70	N/A	N/A	4.09	N/A	N/A	N/A	3.59	N/A	N/A	N/A
GR821*	6.63	7.07	N/A	N/A	4.46	N/A	N/A	N/A	4.06	N/A	N/A	N/A
GR824	N/A	7.76	8.76	N/A	4.63■	5.06	N/A	N/A	4.09■	4.56	N/A	N/A
GR826*	N/A	8.32	9.32	N/A	5.19■	5.62	N/A	N/A	4.82■	5.13	N/A	N/A
GR830	N/A	8.82	9.82	N/A	5.95■	6.15	6.56	N/A	5.32■	5.63	6.06	N/A
GR832*	N/A	9.01	10.01	N/A	6.14■	6.34	6.75	N/A	5.51■	5.81	6.25	N/A
GR842	N/A	11.81	12.90	13.46	6.45■	7.21	7.21	7.77	6.04■	6.68	6.68	7.24
GR852	N/A	13.21	14.30	14.86	7.85■	8.61	8.61	9.17	7.35■	7.98	7.98	8.54
GR860	N/A	N/A	15.88	16.50	10.45■	9.33	9.33	9.94	10.01■	8.69	8.69	8.69
GR870	N/A	N/A	15.50	15.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GR880	N/A	N/A	16.58●	16.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NEMA DIMENSIONS (Inches)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway◆	BF
48CZ	3.75	3.00	4.36	0.38	N/A	.500	1/8 X 1/16	0.28
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
250TC	7.25	8.50	9.00	N/A	0.50	1.625	3/8 X 3/16	0.53

IEC B5 & B3/B5 METRIC DIMENSIONS (Inches)◆

Size	LQ1						RQ					
	D63D	D71D	D80D	D90D	D100LD/D112MD	D132D	D63D	D71D	D80D	D90D	D100LD/D112MD	D132D
GR813	2.62	2.65	2.89	N/A	N/A	N/A	2.45	2.47	2.71	N/A	N/A	N/A
GR815	3.15	3.18	3.42	N/A	N/A	N/A	2.98	3.00	3.24	N/A	N/A	N/A
GR818	3.25	3.28	3.52	N/A	N/A	N/A	2.95	2.97	3.21	N/A	N/A	N/A
GR821*	3.62	3.65	3.89	N/A	N/A	N/A	3.43	3.44	3.68	N/A	N/A	N/A
GR824	N/A	3.72	4.34	N/A	N/A	N/A	3.46	3.71	N/A	N/A	N/A	N/A
GR826*	N/A	4.28	4.90	4.90	5.30	N/A	N/A	4.09	4.72	4.72	5.07	N/A
GR830	N/A	4.78	5.41	5.41	5.88	N/A	N/A	4.59	5.22	5.22	5.57	N/A
GR832*	N/A	4.97	5.59	5.59	6.07	N/A	N/A	4.78	5.41	5.41	5.76	N/A
GR842	N/A	N/A	N/A	6.38	6.39	7.17	N/A	N/A	N/A	6.16	6.14	6.93
GR852	N/A	N/A	N/A	7.78	7.78	8.57	N/A	N/A	N/A	7.46	7.45	8.24

IEC B5 & B3/B5 METRIC DIMENSIONS (MM)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway◆	BF TAP	OD
D63D	115	95	117	10	11	4 X 2	M8 X 1.25	131
D71D	130	110	132	11	14	5 X 2.5	M8 X 1.25	146
D80D	165	130	165	15	19	6 X 3	M10 X 1.50	184
D90D	165	130	165	15	24	8 X 3.5	M10 X 1.50	184
D100LD/D112MD	215	180	216	18	28	8 X 3.5	M12 X 1.75	237
D132D	265	230	267	18	38	10 X 4	M12 X 1.75	290

† Max bore dimensions shown. For additional bores available, refer to page 128.

* Applies to double output shaft

** Key not provided with gear reducer. Keyway dimension shown.

◆ Keyway width by depth

⊙ Mounting holes rotated 45 degrees from positions shown on Size GR860, Style HM with frame sizes 180TC-250TC.

■ 48CZ not available

● 180TC not available

◆ Metric IEC B5 input flange options are available only on quill input styles.

* Dimensions same for GRG and GRL Series

※ Style H and HM only.

▼ Sizes 860-8100 are supplied with a fan. Dimensions refer to fan guard location.

Note: Torque arm bracket available separately. Refer to page 286 for kits. If a special bracket is required, refer to Style BMQ dimensions for mounting pad dimensions on top/bottom of reducer.

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.

All dimensions shown are for reference only. Contact Factory for certified dimensions.