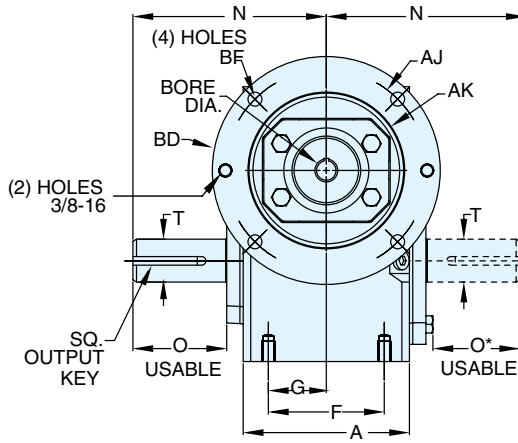
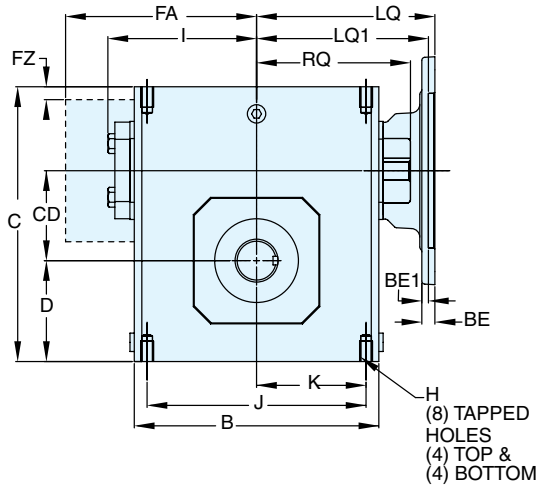




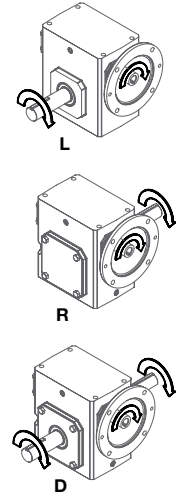
**GR SERIES
DIMENSIONS**
STYLES: BMQ, BM, B

**CAST IRON
GR SERIES**

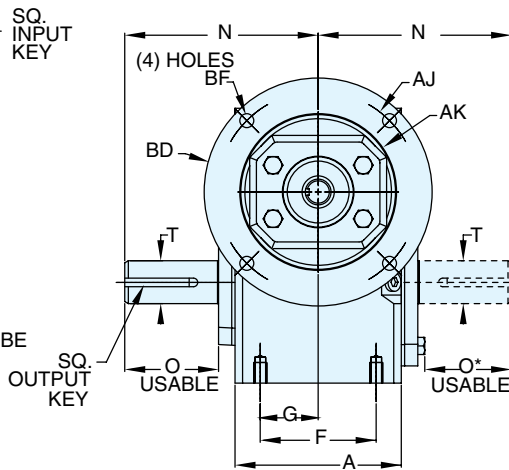
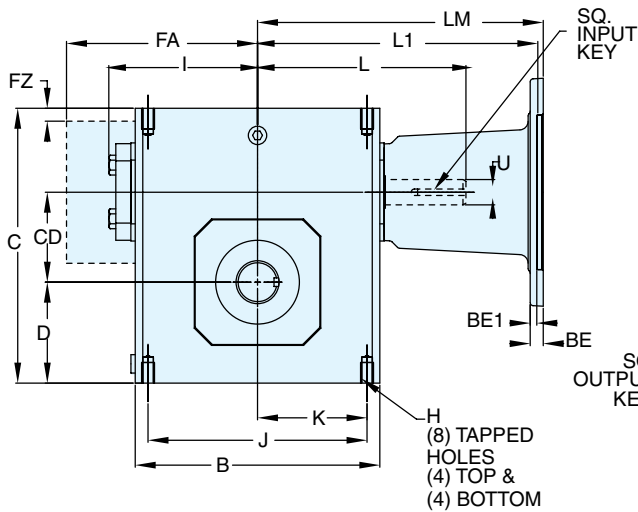
STYLE BMQ



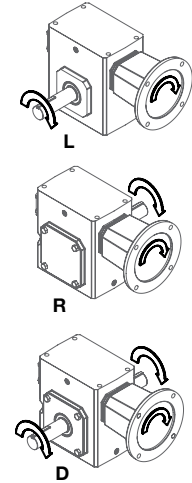
ASSEMBLIES



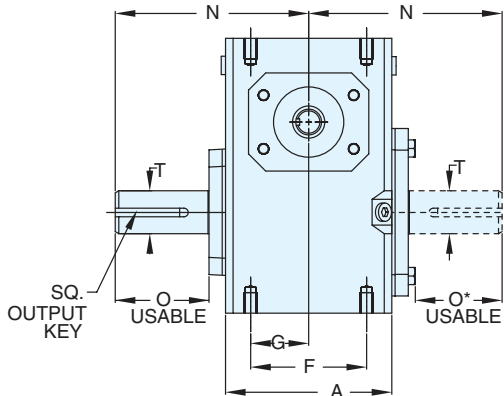
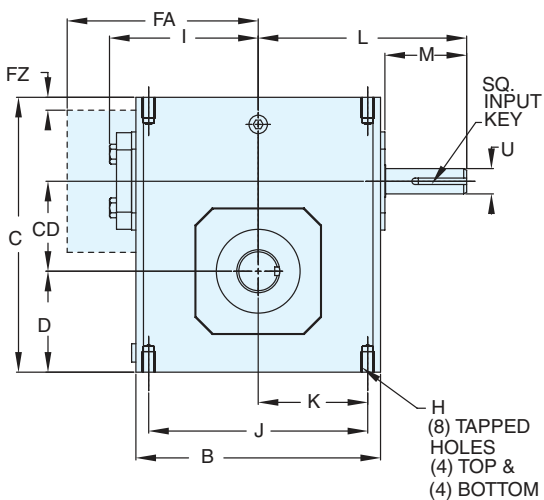
STYLE BM



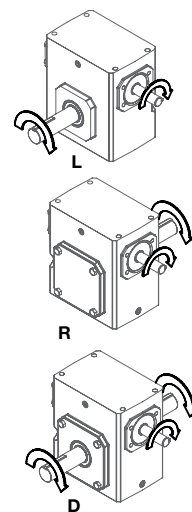
ASSEMBLIES



STYLE B



ASSEMBLIES



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



STYLE BMQ, BM, B DIMENSIONS (Inches)

Size	A	B	C	D	CD	F	FA▼	FZ▼	G	H		I	J	K	L	M	N	O	O*	T +0.000 -0.0015	U +0.000 -0.0015	Input Key*	Output Key
										Tap Size	Depth												
GR813	2.82	3.80	4.66	1.72	1.33	2.00	N/A	N/A	1.00	5/16-18 UNC	.50	2.61	3.25	1.63	3.82	1.76	4.00	2.16	1.94	.625	.500	1/8 X 1.00	3/16 X 1.50
GR815	3.44	4.88	5.38	1.91	1.54	2.75	N/A	N/A	1.38	5/16-18 UNC	.63	3.14	4.19	2.09	4.35	1.76	4.31	2.11	1.90	.750	.625	3/16 X 1.38	3/16 X 1.50
GR818	3.56	5.06	5.75	2.06	1.75	2.75	N/A	N/A	1.38	5/16-18 UNC	.63	3.24	4.19	2.09	4.45	1.76	4.31	2.05	1.84	.875	.625	3/16 X 1.38	3/16 X 1.38
GR821	3.81	5.80	6.38	2.28	2.06	▲	N/A	N/A	1.44	3/8-16 UNC	.63	3.61	▲	2.50	4.82	1.76	4.68	2.29	2.08	1.000	.625	3/16 X 1.38	1/4 X 1.44
GR824	4.06	6.12	6.94	2.50	2.38	2.88	N/A	N/A	1.44	3/8-16 UNC	.69	3.77	5.00	2.50	5.51	2.38	5.14	2.66	2.44	1.125	.750	3/16 X 1.63	1/4 X 1.75
GR826	4.84	7.12	8.00	2.94	2.63	3.38	N/A	N/A	1.69	3/8-16 UNC	.69	4.34	6.38	3.19	6.07	2.38	5.63	2.73	2.52	▲	.750	3/16 X 1.63	1/4 X 1.75
GR830	5.25	8.12	8.88	3.25	3.00	4.00	N/A	N/A	2.00	7/16-14 UNC	.88	4.84	7.00	3.50	6.57	2.38	6.75	3.60	3.36	1.250	.875	3/16 X 1.63	1/4 X 1.75
GR832	5.75	8.50	9.38	3.50	3.25	4.00	N/A	N/A	2.00	7/16-14 UNC	.88	5.02	7.50	3.75	6.76	2.38	7.06	3.66	3.42	▲	.875	3/16 X 1.63	3/8 X 2.25
GR842	6.13	10.25	11.38	4.44	4.25	5.00	N/A	N/A	2.50	5/8-11 UNC	1.00	6.10	8.50	4.25	9.57	3.47	8.12	4.50	4.21	1.875	1.250	1/4 X 2.50	1/2 X 3.06
GR852	7.19	13.00	14.00	5.12	5.25	5.81	N/A	N/A	2.91	5/8-11 UNC	1.25	7.50	11.00	5.50	10.88	3.38	9.06	4.78	4.53	2.000	1.250	1/4 X 3.00	1/2 X 3.50
GR860	8.13	14.25	16.50	6.50	6.00	6.38	11.13	0.33	3.19	5/8-11 UNC	1.00	N/A	12.75	6.38	11.78	3.41	10.00	4.65	4.65	2.500	1.500	3/8 X 3.00	5/8 X 4.00
GR870	7.63	14.88	18.91	7.59	7.00	5.50	11.37	0.35	2.75	1-8 UNC	1.56	N/A	12.50	6.25	11.50	2.97	11.76	5.65	5.65	2.750	1.625	3/8 x 2.87**	5/8 x 4.00**
GR880	8.63	17.00	20.96	8.86	8.00	6.50	12.52	0.57	3.25	1-8 UNC	1.66	N/A	14.25	7.13	12.50	2.84	12.25	5.98	5.98	3.000	1.875	1/2 x 2.81**	3/4 x 4.50**
GR8100	9.53	20.88	25.47	10.36	10.00	6.88	14.69	0.51	3.44	1-1/4 -7 UNC	2.04	N/A	17.75	8.88	15.50	3.76	14.75	6.76	6.76	3.750	2.250	1/2 x 3.69**	7/8 x 5.00**

▲ See feature comparison chart.

FEATURE COMPARISON (821, 826, 832)

Size	Output Shaft Diameter Needed?	Mounting Footprint Needed?	All Other Features	Grove Gear Flexaline Interchange	LEESON IRONMAN Interchange	Replace With Series Code Below:
821	Identical	(F)3.00" x (J)4.75"	Identical	✓	✓	GRG
		(F)2.88" x (J)5.00"				GRL
826	1.250"	Identical	Identical	✓	✓	GRG
						1.125"
832	1.500"	Identical	Identical	✓	✓	GRG
						1.375"

MOTOR MOUNTING DIMENSIONS

NEMA DIMENSIONS (Inches)

Size	LM		180TC/210TC	L1 250TC	LQ		180TC	LQ1 210TC	250TC	RQ		
	48CZ	56C/140TC			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

* 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 BM 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 B and BM only.

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

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

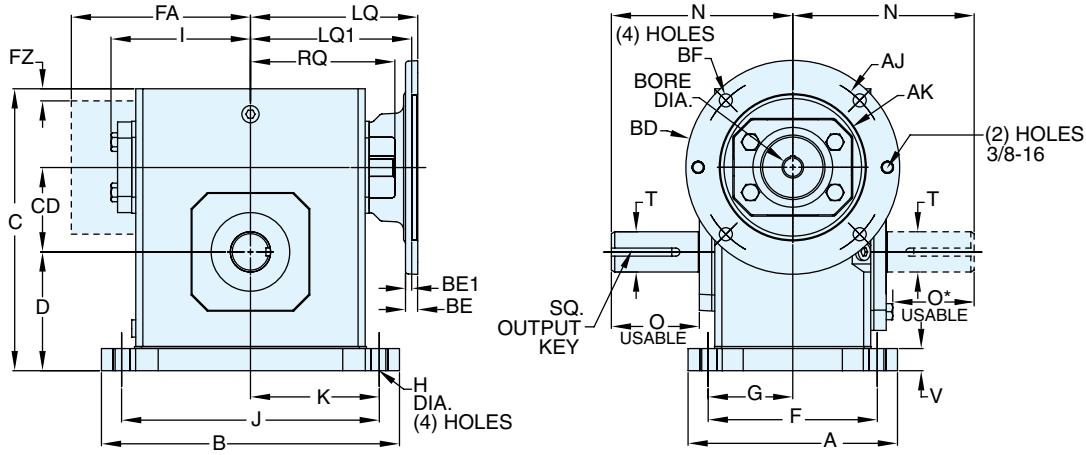
All dimensions shown are for reference only. Contact Factory for certified dimensions.



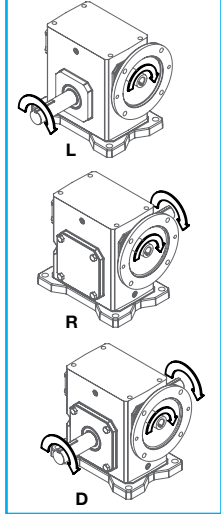
**GR SERIES
DIMENSIONS**
STYLES: TMQ, TM, T

**CAST IRON
GR SERIES**

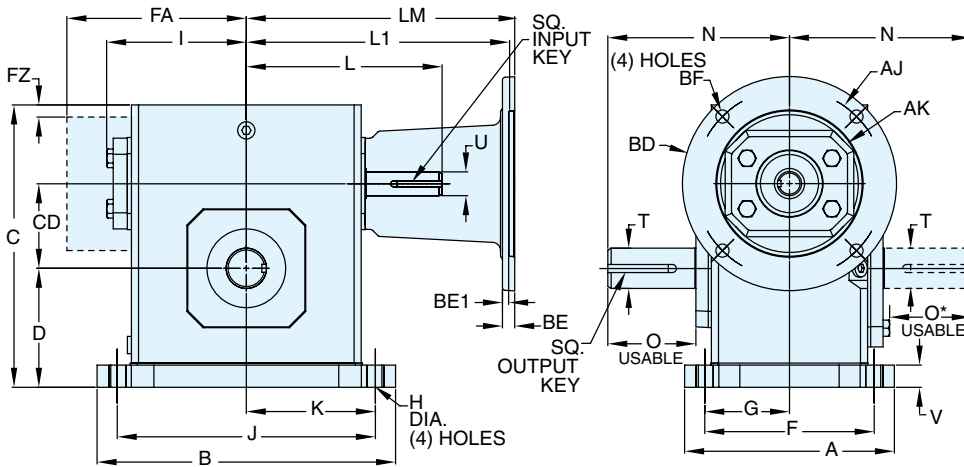
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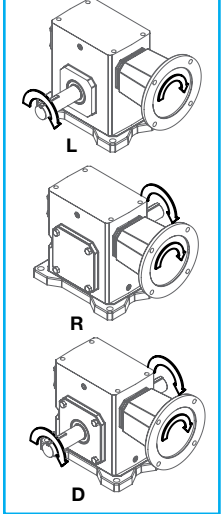
ASSEMBLIES



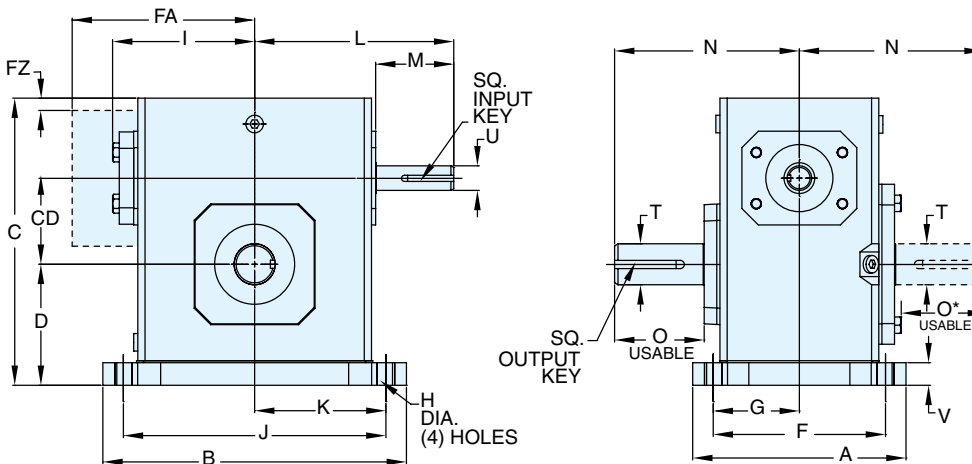
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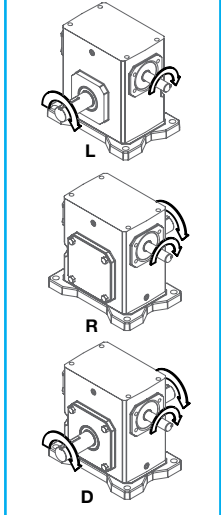
ASSEMBLIES



STYLE T



ASSEMBLIES



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



STYLE TMQ, TM, T DIMENSIONS (Inches)

Size	A	B	C	D	CD	F	FA▼	FZ▼	G	H	I	J	K	L	M	N	O	O*	V	T +0.000 -0.0015	U +0.000 -0.0015	Input Key#*	Output Key
GR813	5.38	5.37	5.19	2.25	1.33	3.31	N/A	N/A	1.66	.34	2.61	4.37	2.19	3.82	1.76	4.00	2.16	1.94	0.53	.625	.500	1/8 X 1.00	3/16 X 1.50
GR815	5.56	6.50	5.97	2.50	1.54	4.31	N/A	N/A	2.16	.41	3.14	5.25	2.63	4.35	1.76	4.31	2.11	1.90	0.59	.750	.625	3/16 X 1.38	3/16 X 1.50
GR818	5.75	6.99	6.44	2.75	1.75	4.50	N/A	N/A	2.25	.41	3.24	5.75	2.88	4.45	1.76	4.31	2.05	1.84	0.69	.875	.625	3/16 X 1.38	3/16 X 1.38
GR821	6.00	7.69	7.09	3.00	2.06	4.69	N/A	N/A	2.34	.47	3.61	6.38	3.19	4.82	1.76	4.68	2.29	2.08	0.72	1.000	.625	3/16 X 1.38	1/4 X 1.44
GR824	6.19	8.37	7.69	3.25	2.38	4.88	N/A	N/A	2.44	.49	3.77	7.06	3.53	5.51	2.38	5.14	2.66	2.44	0.75	1.125	.750	3/16 X 1.63	1/4 X 1.75
GR826	6.50	9.25	8.75	3.69	2.63	5.25	N/A	N/A	2.63	.53	4.34	8.00	4.00	6.07	2.38	5.63	2.73	2.52	0.75	▲	.750	3/16 X 1.63	1/4 X 1.75
GR830	7.50	10.00	9.63	4.00	3.00	5.88	N/A	N/A	2.94	.53	4.84	8.44	4.22	6.57	2.38	6.75	3.60	3.36	0.75	1.250	.875	3/16 X 1.63	1/4 X 1.75
GR832	7.75	11.12	10.25	4.38	3.25	6.13	N/A	N/A	3.06	.53	5.02	9.50	4.75	6.76	2.38	7.06	3.66	3.42	0.81	▲	.875	3/16 X 1.63	3/8 X 2.25
GR842	9.75	13.24	12.38	5.44	4.25	7.63	N/A	N/A	3.81	.66	6.10	11.12	5.56	9.57	3.47	8.12	4.50	4.21	1.00	1.875	1.250	1/4 X 2.50	1/2 X 3.06
GR852	10.50	16.24	15.13	6.25	5.25	8.38	N/A	N/A	4.19	.78	7.50	14.12	7.06	10.88	3.38	9.06	4.78	4.53	1.13	2.000	1.250	1/4 X 3.00	1/2 X 3.50
GR860	12.00	18.99	17.75	7.75	6.00	9.50	11.13	0.33	4.75	.91	N/A	16.49	8.25	11.78	3.41	10.00	4.65	4.65	1.25	2.500	1.500	3/8 X 3.00	5/8 X 4.00
GR870	13.38	15.38	20.33	9.00	7.00	11.25	11.37	0.35	5.63	1.13	N/A	13.00	6.50	11.50	2.97	11.76	5.65	5.65	1.42	2.750	1.625	3/8 x 2.87**	5/8 x 4.00**
GR880	13.50	17.37	22.61	10.50	8.00	11.50	12.52	0.57	5.75	1.13	N/A	14.75	7.38	12.50	2.84	12.25	5.98	5.98	1.65	3.000	1.875	1/2 x 2.81**	3/4 x 4.50**
GR100	16.88	21.14	27.12	12.00	10.00	14.00	14.69	0.51	7.00	1.44	N/A	17.00	8.50	15.50	3.76	14.75	6.76	6.76	1.65	3.750	2.250	1/2 x 3.69**	7/8 x 5.00**

▲ See feature comparison chart.

FEATURE COMPARISON (821, 826, 832)

Size	Output Shaft Diameter Needed?	Mounting Footprint Needed?	All Other Features	Grove Gear Flexaline Interchange	LEESON IRONMAN Interchange	Replace With Series Code Below:
821	Identical	Identical	Identical	✓	✓	GRG
						GRL
826	1.250"	Identical	Identical	✓	✓	GRG
	1.125"					GRL
832	1.500"	Identical	Identical	✓	✓	GRG
	1.375"					GRL

◇ If Accessory kit is removed, dimensions will vary. 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	48CZ LM	56C/140TC	180TC L1	250TC	LQ 48CZ/56C/140TC	180TC	LQ1 210TC	250TC	RQ 48CZ/56C/140TC	180TC	250TC
GR813	5.63	6.07	N/A	N/A	3.46	N/A	N/A	N/A	3.09	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
GR818	6.26	6.70	N/A	N/A	4.09	N/A	N/A	N/A	3.59	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
GR824	N/A	7.76	8.76	N/A	4.63■	5.06	N/A	N/A	4.09■	4.56	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
GR830	N/A	8.82	9.82	N/A	5.95■	6.15	6.56	N/A	5.32■	5.63	N/A
GR832*	N/A	9.01	10.01	N/A	6.14■	6.34	6.75	N/A	5.51■	5.81	N/A
GR842	N/A	11.81	12.90	13.46	6.45■	7.21	7.21	7.77	6.04■	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	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
GR870	N/A	N/A	15.50	15.50	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

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

* 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 TM 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 T and TM only.

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

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.

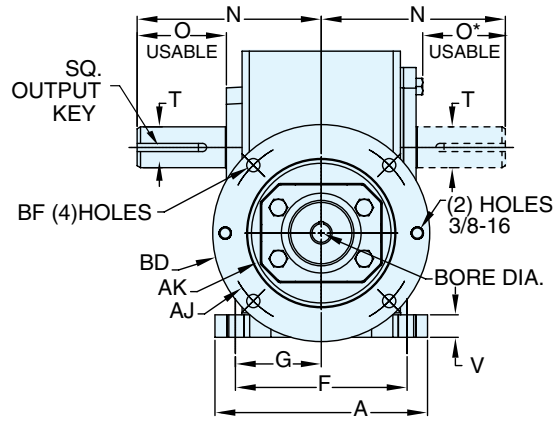
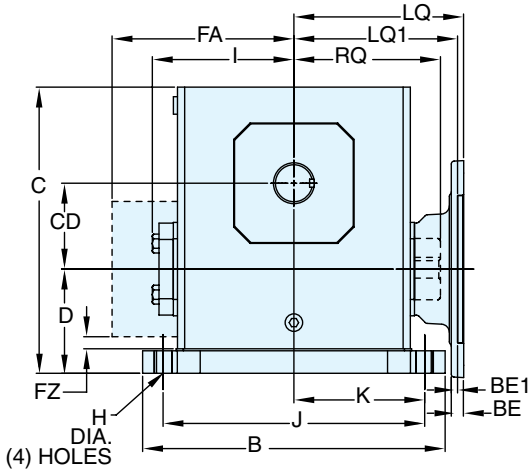
All dimensions shown are for reference only. Contact Factory for certified dimensions.



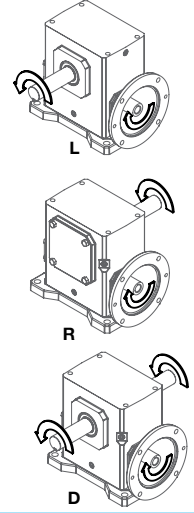
**GR SERIES
DIMENSIONS**
STYLES: UMQ, UM, U

**CAST IRON
GR SERIES**

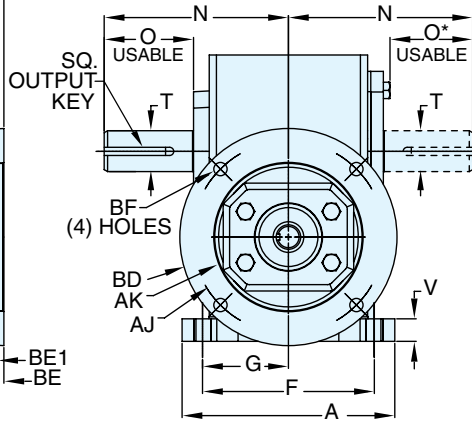
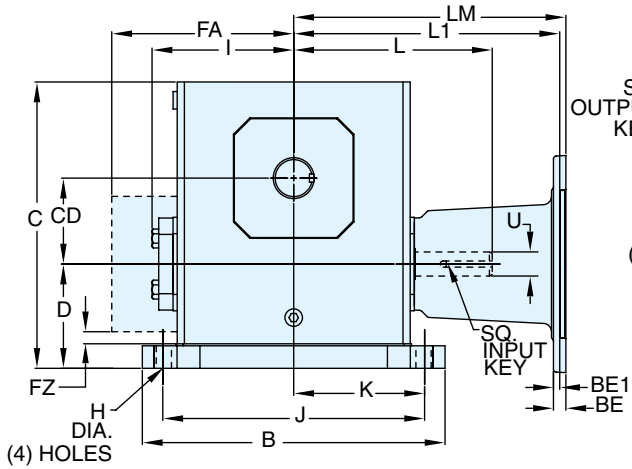
STYLE UMQ



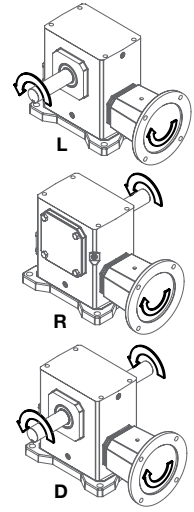
ASSEMBLIES



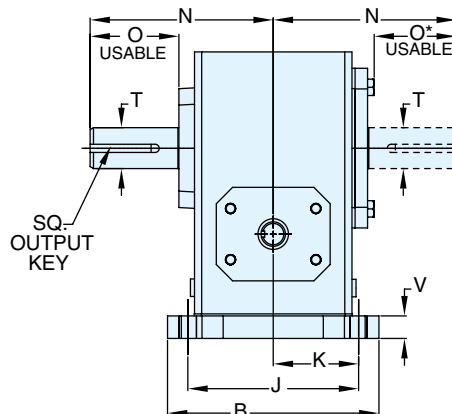
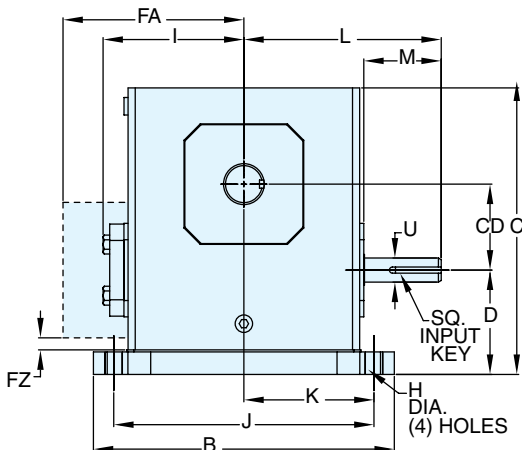
STYLE UM



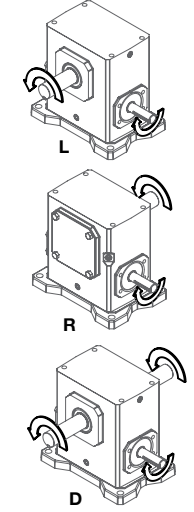
ASSEMBLIES



STYLE U



ASSEMBLIES



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



STYLE UMQ, UM, U DIMENSIONS (Inches)

Size	A	B	C	D	CD	F	FA▼	FZ▼	G	H	I	J	K	L	M	N	O	O*	V	T +0.000 -0.0015	U +0.000 -0.0015	Input Key:§	Output Key
GR813	4.24	5.37	5.19	2.14	1.33	3.31	N/A	N/A	1.66	.34	2.61	4.37	2.19	3.82	1.76	4.00	2.16	1.94	0.53	.625	.500	1/8 X 1.00	3/16 X 1.50
GR815	5.56	6.50	5.97	2.52	1.54	4.31	N/A	N/A	2.16	.41	3.14	5.25	2.63	4.35	1.76	4.31	2.11	1.90	0.59	.750	.625	3/16 X 1.38	3/16 X 1.50
GR818	5.75	6.99	6.44	2.63	1.75	4.50	N/A	N/A	2.25	.41	3.24	5.75	2.88	4.45	1.76	4.31	2.05	1.84	0.69	.875	.625	3/16 X 1.38	3/16 X 1.38
GR821	6.00	7.69	7.09	2.75	2.06	4.69	N/A	N/A	2.34	.47	3.61	6.38	3.19	4.82	1.76	4.68	2.29	2.08	0.72	1.000	.625	3/16 X 1.38	1/4 X 1.44
GR824	6.19	8.37	7.69	2.81	2.38	4.88	N/A	N/A	2.44	.49	3.77	7.06	3.53	5.51	2.38	5.14	2.66	2.44	0.75	1.125	.750	3/16 X 1.63	1/4 X 1.75
GR826	6.50	9.25	8.75	3.19	2.63	5.25	N/A	N/A	2.63	.53	4.34	8.00	4.00	6.07	2.38	5.63	2.73	2.52	0.75	▲	.750	3/16 X 1.63	1/4 X 1.75
GR830	7.50	10.00	9.63	3.38	3.00	5.88	N/A	N/A	2.94	.53	4.84	8.44	4.22	6.57	2.38	6.75	3.60	3.36	0.75	1.250	.875	3/16 X 1.63	1/4 X 1.75
GR832	7.75	11.12	10.25	3.50	3.25	6.13	N/A	N/A	3.06	.53	5.02	9.50	4.75	6.76	2.38	7.06	3.66	3.42	0.81	▲	.875	3/16 X 1.63	3/8 X 2.25
GR842	9.75	13.24	12.38	3.69	4.25	7.63	N/A	N/A	3.81	.66	6.10	11.12	5.56	9.57	3.47	8.12	4.50	4.21	1.00	1.875	1.250	1/4 X 2.50	1/2 X 3.06
GR852	10.50	16.24	15.13	4.76	5.25	8.38	N/A	N/A	4.19	.78	7.50	14.12	7.06	10.88	3.38	9.06	4.78	4.53	1.13	2.000	1.250	1/4 X 3.00	1/2 X 3.50
GR860	12.00	18.99	17.75	5.25	6.00	9.50	11.13	0.33	4.75	.91	N/A	16.49	8.25	11.78	3.41	10.00	4.65	4.65	1.25	2.500	1.500	3/8 X 3.00	5/8 X 4.00
GR870	13.38	15.38	20.33	5.74	7.00	11.25	11.37	0.35	5.63	1.13	N/A	13.00	6.50	11.50	2.97	11.76	5.65	5.65	1.42	2.750	1.625	3/8 x 2.87**	5/8 x 4.00**
GR880	13.50	17.37	22.61	5.75	8.00	11.50	12.52	0.57	5.75	1.13	N/A	14.75	7.38	12.50	2.84	12.25	5.98	5.98	1.65	3.000	1.875	1/2 x 2.81**	3/4 x 4.50**
GR8100	16.88	21.14	27.12	6.76	10.00	14.00	14.69	0.51	7.00	1.44	N/A	17.00	8.50	15.50	3.76	14.75	6.76	6.76	1.65	3.750	2.250	1/2 x 3.69**	7/8 x 5.00**

▲ See feature comparison chart.

FEATURE COMPARISON (821, 826, 832)

Size	Output Shaft Diameter Needed?	Mounting Footprint Needed?	All Other Features	Grove Gear Flexaline Interchange	LEESON IRONMAN Interchange	Replace With Series Code Below:
821	Identical	Identical	Identical	✓	✓	GRG
						GRL
826	1.250"	Identical	Identical	✓	✓	GRG
	1.125"					GRL
832	1.500"	Identical	Identical	✓	✓	GRG
	1.375"					GRL

◊ If Accessory kit is removed, dimensions will vary. NOTE: If reducer is used without the accessory mounted, select based mounting dimensions on pages 52-53 (B, BM, BMO).

MOTOR MOUNTING DIMENSIONS

NEMA DIMENSIONS (Inches)

Size	LM	L1	LQ	LQ1	250TC	48CZ/56C/140TC	180TC	210TC	250TC	48CZ/56C/140TC	RQ	250TC
GR813	5.63	6.07	N/A	N/A	3.46	N/A	N/A	N/A	N/A	3.09	N/A	N/A
GR815	6.16	6.60	N/A	N/A	3.99	N/A	N/A	N/A	N/A	3.62	N/A	N/A
GR818	6.26	6.70	N/A	N/A	4.09	N/A	N/A	N/A	N/A	3.59	N/A	N/A
GR821*	6.63	7.07	N/A	N/A	4.46	N/A	N/A	N/A	N/A	4.06	N/A	N/A
GR824	N/A	7.76	8.76	N/A	4.63■	5.06	N/A	N/A	N/A	4.09■	4.56	N/A
GR826*	N/A	8.32	9.32	N/A	5.19■	5.62	N/A	N/A	N/A	4.82■	5.13	N/A
GR830	N/A	8.82	9.82	N/A	5.95■	6.15	6.56	N/A	N/A	5.32■	5.63	N/A
GR832*	N/A	9.01	10.01	N/A	6.14■	6.34	6.75	N/A	N/A	5.51■	5.81	N/A
GR842	N/A	11.81	12.90	13.46	6.45■	7.21	7.21	7.77	6.04■	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	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	
GR870	N/A	N/A	15.50	15.50	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	

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

- * 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 UM 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 U and UM only.
- ▼ Sizes 860-8100 are supplied with a fan. Dimensions refer to fan guard location.

Note: Styles UMQ, UM and U are worm under mounting assemblies and not recommended due to increase potential for high speed shaft seal leakage and potential mounting interference. Motor flange may extend below base. Riser blocks are available upon request (see page 286). Contact Factory for selection assistance.

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.

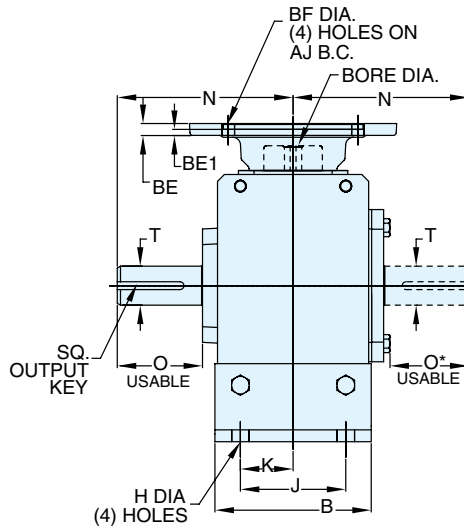
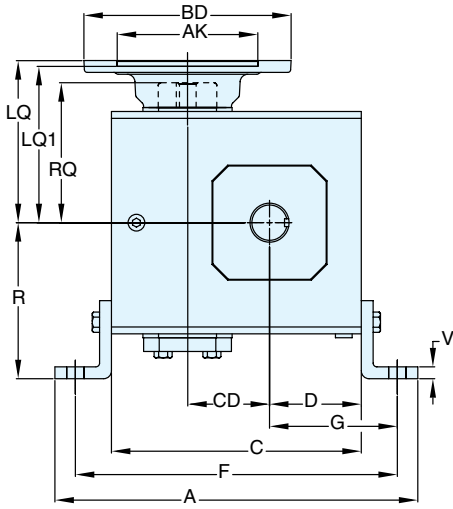
All dimensions shown are for reference only. Contact Factory for certified dimensions.



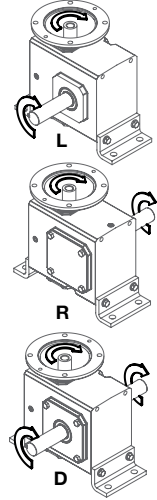
**GR SERIES
DIMENSIONS**
STYLES: JMQ, JM, J

**CAST IRON
GR SERIES**

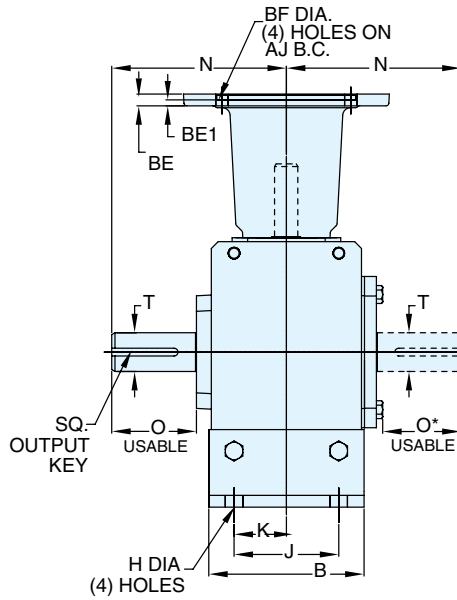
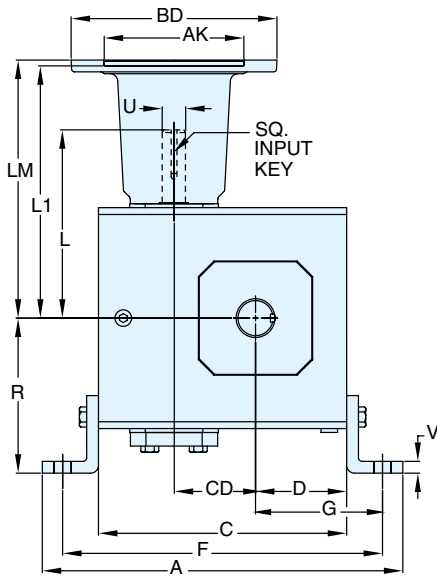
STYLE JMQ



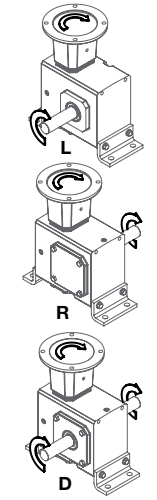
ASSEMBLIES



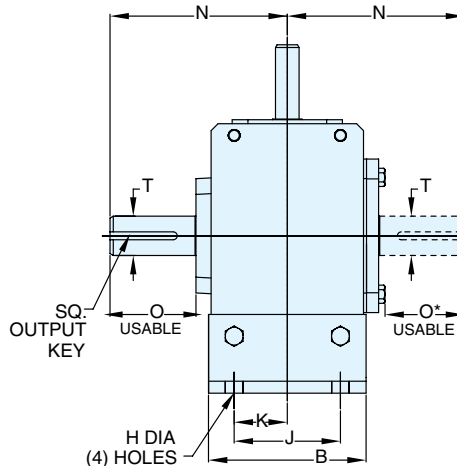
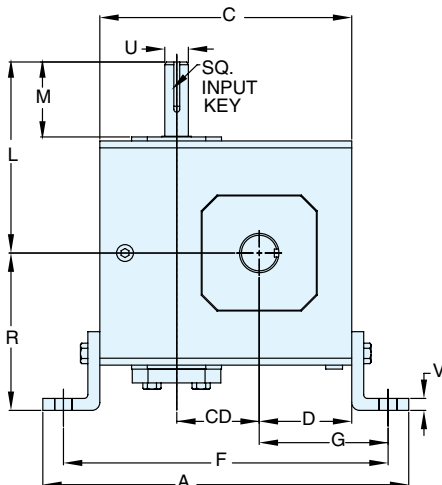
STYLE JM



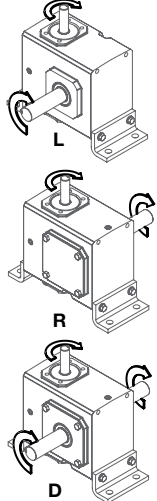
ASSEMBLIES



STYLE J



ASSEMBLIES



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



STYLE JMQ, JM, J DIMENSIONS (Inches)

Size	A	B	C	D	CD	F	G	H	J	K	L	M	N	O	O*	R	V	T +0.000 -0.0015	U +0.000 -0.0015	Input Key*§	Output Key
GR813	7.42	2.75	4.66	1.72	1.33	6.42	2.60	.38	2.00	1.00	3.82	1.76	4.00	2.16	1.94	2.94	0.25	.625	.500	1/8 X 1.00	3/16 X 1.50
GR815	8.14	3.50	5.38	1.91	1.54	7.08	2.76	.44	2.75	1.38	4.35	1.76	4.31	2.11	1.90	3.50	0.25	.750	.625	3/16 X 1.38	3/16 X 1.50
GR818	8.51	3.50	5.75	2.06	1.75	7.45 - 7.63	3.00	.44 slot	2.50 - 2.75	1.25 - 1.38	4.45	1.76	4.31	2.05	1.84	3.50	0.25	.875	.625	3/16 X 1.38	3/16 X 1.38
GR821	9.76	4.00	6.38	2.28	2.06	8.63	3.40	.56 slot	2.63 - 2.75	1.31-1.38	4.82	1.76	4.68	2.29	2.08	4.01	0.38	1.000	.625	3/16 X 1.38	1/4 X 1.44
GR824	10.31	4.00	6.94	2.50	2.38	9.19	3.63	.69	2.88	1.44	5.51	2.38	5.14	2.66	2.44	4.06	0.38	1.125	.750	3/16 X 1.63	1/4 X 1.75
GR826	11.62	5.00	8.00	2.94	2.63	10.38	4.13	.56	3.38	1.69	6.07	2.38	5.63	2.73	2.52	5.00	0.38	▲	.750	3/16 X 1.63	1/4 X 1.75
GR830	12.64	6.00	8.88	3.25	3.00	11.38	4.50	.56	3.88	1.94	6.57	2.38	6.75	3.60	3.36	5.62	0.38	1.250	.875	3/16 X 1.63	1/4 X 1.75
GR832	13.14	6.00	9.38	3.50	3.25	11.88	4.75	.56	3.88	1.94	6.76	2.38	7.06	3.66	3.42	5.63	0.38	▲	.875	3/16 X 1.63	3/8 X 2.25
GR842	16.38	7.00	11.38	4.44	4.25	14.88	6.19	.69	5.00	2.50	9.57	3.47	8.12	4.50	4.21	6.50	0.50	1.875	1.250	1/4 X 2.50	1/2 X 3.06
GR852	19.00	7.00	14.00	5.12	5.25	17.50	6.87	.69	5.81	2.91	10.88	3.38	9.06	4.78	4.53	7.75	0.50	2.000	1.250	1/4 X 3.00	1/2 X 3.50

▲ See feature comparison chart.

FEATURE COMPARISON (821, 826, 832)

Size	Output Shaft Diameter Needed?	Mounting Footprint Needed?	All Other Features	Grove Gear Flexaline Interchange	LEESON IRONMAN Interchange	Replace With Series Code Below:
821	Identical	Identical	Identical	✓	✓	GRG
						GRL
826	1.250"	Identical	Identical	✓	✓	GRG
	1.125"					GRL
832	1.500"	Identical	Identical	✓	✓	GRG
	1.375"					GRL

◊ If Accessory kit is removed, dimensions will vary. 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	48CZ ^{LM}	56C/140TC	180TC/210TC	250TC	LQ 48CZ/56C/140TC	180TC	LQ1 210TC	250TC	RQ 48CZ/56C/140TC	180TC
GR813	5.63	6.07	N/A	N/A	3.46	N/A	N/A	N/A	3.09	N/A
GR815	6.16	6.60	N/A	N/A	3.99	N/A	N/A	N/A	3.62	N/A
GR818	6.26	6.70	N/A	N/A	4.09	N/A	N/A	N/A	3.59	N/A
GR821*	6.63	7.07	N/A	N/A	4.46	N/A	N/A	N/A	4.06	N/A
GR824	N/A	7.76	8.76	N/A	4.63■	5.06	N/A	N/A	4.09	4.56
GR826*	N/A	8.32	9.32	N/A	5.19■	5.62	N/A	N/A	4.82■	5.13
GR830	N/A	8.82	9.82	N/A	5.95■	6.15	6.56	N/A	5.32■	5.63
GR832*	N/A	9.01	10.01	N/A	6.14■	6.34	6.75	N/A	5.51■	5.81
GR842	N/A	11.81	12.90	13.46	6.45■	7.21	7.21	7.77	6.04■	6.68
GR852	N/A	13.21	14.30	14.86	7.85■	8.61	8.61	9.17	7.35■	7.98

NEMA DIMENSIONS (Inches)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway▲	BF
48CZ	3.75	3.00	4.36	0.38	N/A	0.500	1/8 X 1/16	0.28
56C	5.88	4.50	6.50	0.38	N/A	0.625	3/16 X 3/32	0.41
140TC	5.88	4.50	6.50	0.38	N/A	0.875	3/16 X 3/32	0.41
180TC	7.25	8.50	8.50	N/A	0.50	1.125	1/4 X 1/8	0.53
210TC	7.25	8.50	8.50	N/A	0.50	1.375	5/16 X 5/32	0.53
250TC	7.25	8.50	8.50	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
GR813	2.62	2.65	2.89	N/A	N/A	N/A	2.45	2.47	2.71	N/A
GR815	3.15	3.18	3.42	N/A	N/A	N/A	2.98	3.00	3.24	N/A
GR818	3.25	3.28	3.52	N/A	N/A	N/A	2.95	2.97	3.21	N/A
GR821*	3.62	3.65	3.89	N/A	N/A	N/A	3.43	3.44	3.68	N/A
GR824	N/A	3.72	4.34	N/A	N/A	N/A	3.46	3.46	3.71	N/A
GR826*	N/A	4.28	4.90	4.90	5.30	N/A	N/A	4.09	4.72	4.72
GR830	N/A	4.78	5.41	5.41	5.88	N/A	N/A	4.59	5.22	5.22
GR832*	N/A	4.97	5.59	5.59	6.07	N/A	N/A	4.78	5.41	5.41
GR842	N/A	N/A	N/A	6.38	6.39	7.17	N/A	N/A	N/A	6.16
GR852	N/A	N/A	N/A	7.78	7.78	8.57	N/A	N/A	N/A	7.46

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

* 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 JM 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 J and JM only.

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

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.

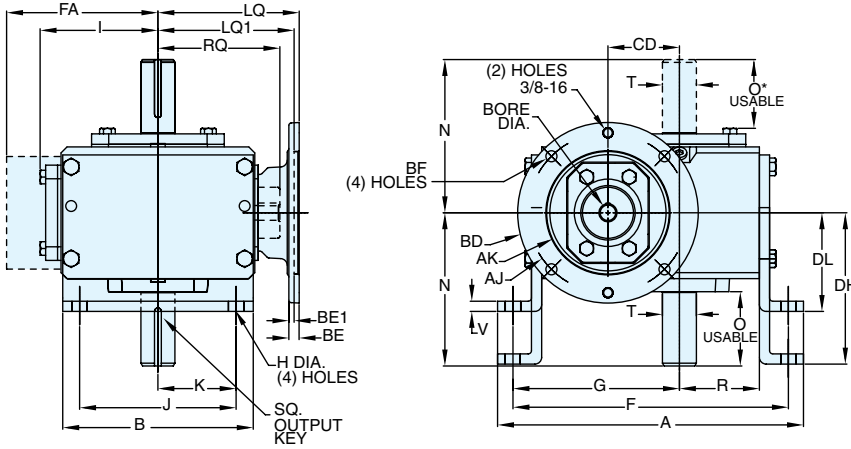


GR SERIES DIMENSIONS

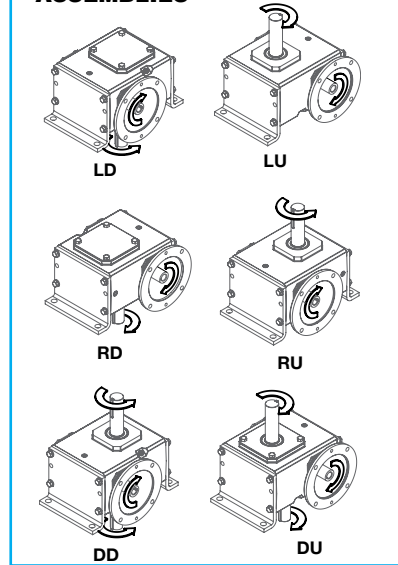
STYLES: V_MQ, V_M, V_

**CAST IRON
GR SERIES**

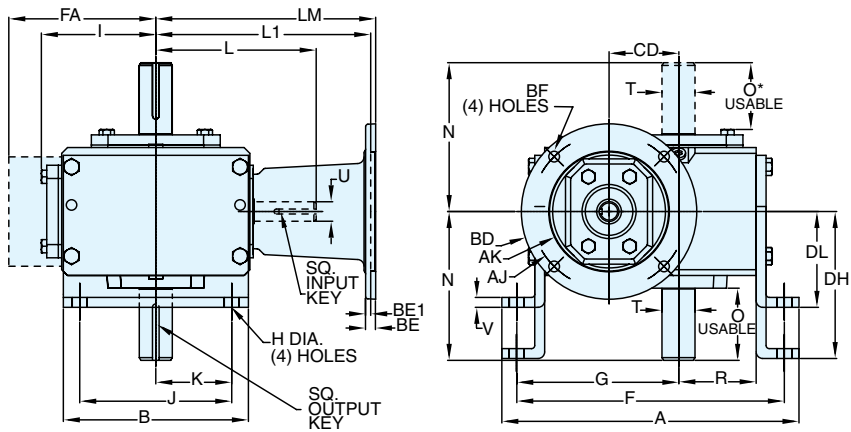
STYLE V(L or H)MQ



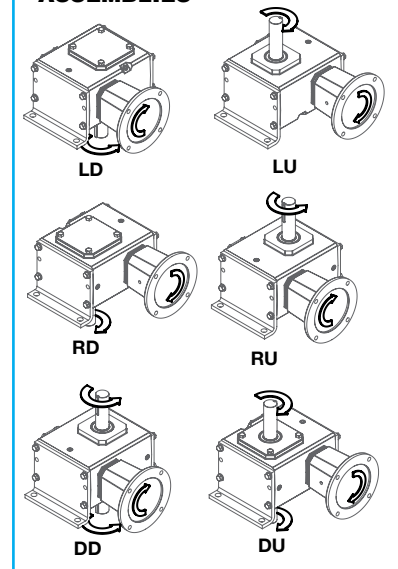
ASSEMBLIES



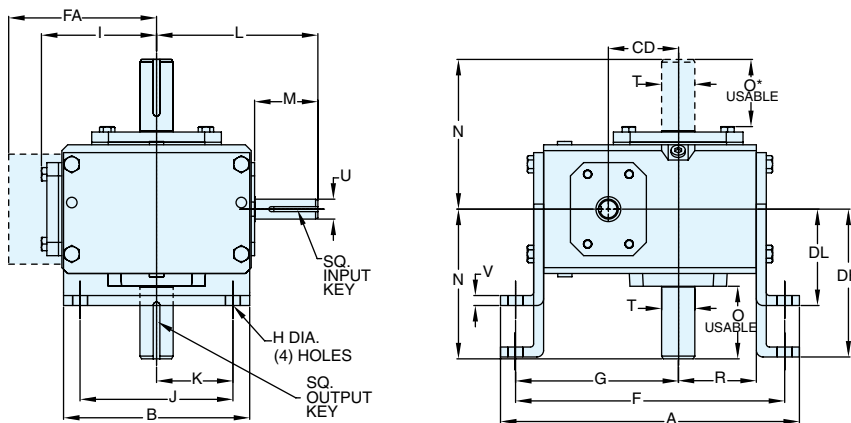
STYLE V(L or H)M



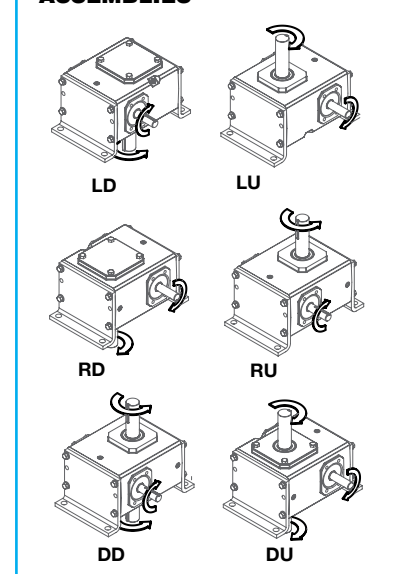
ASSEMBLIES



STYLE V(L or H)



ASSEMBLIES



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



STYLE V_MQ, V_M, V_DIMENSIONS (Inches)

Size	A	B	CD	DL	DH	F	FA▼	FZ▼	G	H	I	J	K	L	M	N	O	O*	R	V	T +0.000 -0.0015	U +0.000 -0.0015	Input Key*	Output Key
GR813	7.26	4.00	1.33	2.63	3.56	6.50	N/A	N/A	3.86	.38	2.61	3.00	1.50	3.82	1.76	4.00	2.16	1.94	1.72	0.25	.625	.500	1/8 X 1.00	3/16 X 1.50
GR815	7.88	5.00	1.54	3.00	4.38	7.00	N/A	N/A	4.28	.44	3.14	4.00	2.00	4.35	1.76	4.31	2.11	1.90	1.91	0.25	.750	.625	3/16 X 1.38	3/16 X 1.50
GR818	8.25	5.00	1.75	3.00	4.38	7.37	N/A	N/A	4.50	.44	3.24	4.00	2.00	4.45	1.76	4.31	2.05	1.84	2.06	0.25	.875	.625	3/16 X 1.38	3/16 X 1.38
GR821	9.38	6.00	2.06	3.13	4.88	8.38	N/A	N/A	5.09	.50	3.61	4.88	2.44	4.82	1.76	4.68	2.29	2.08	2.28	0.38	1.000	.625	3/16 X 1.38	1/4 X 1.44
GR824	9.94	6.00	2.38	3.38	5.25	8.81	N/A	N/A	5.44	.50	3.77	4.88	2.44	5.51	2.38	5.14	2.66	2.44	2.50	0.38	1.125	.750	3/16 X 1.63	1/4 X 1.75
GR826	11.24	7.00	2.63	3.63	5.56	10.12	N/A	N/A	6.12	.56	4.34	5.75	2.88	6.07	2.38	5.63	2.73	2.52	2.94	0.38	▲	.750	3/16 X 1.63	1/4 X 1.75
GR830	12.50	8.00	3.00	3.94	5.88	11.13	N/A	N/A	6.75	.56	4.84	6.00	3.00	6.57	2.38	6.75	3.60	3.25	3.36	0.38	1.250	.875	3/16 X 1.63	1/4 X 1.75
GR832	13.00	8.50	3.25	4.69	6.25	11.88	N/A	N/A	7.13	.56	5.02	6.13	3.06	6.76	2.38	7.06	3.66	3.42	3.50	0.38	▲	.875	3/16 X 1.63	3/8 X 2.25
GR842	16.26	10.00	4.25	5.00	7.50	14.88	N/A	N/A	8.69	.69	6.10	7.88	3.94	9.57	3.47	8.12	4.50	4.21	4.44	0.50	1.875	1.250	1/4 X 2.50	1/2 X 3.06
GR852	19.62	13.00	5.25	5.16	9.16	18.00	N/A	N/A	10.88	.78	7.50	10.00	5.00	10.88	3.38	9.06	4.78	4.53	5.12	0.50	2.000	1.250	1/4 X 3.00	1/2 X 3.50
GR860	23.26	14.75	6.00	7.31	9.63	20.88	11.13	0.33	12.19	.91	N/A	11.76	5.88	11.78	3.41	10.00	4.65	4.65	6.50	0.50	2.500	1.500	3/8 X 3.00	5/8 X 4.00
GR870	26.91	14.88	7.00	7.00	N/A	23.99	11.37	0.35	13.87	1.13	N/A	12.50	6.25	11.50	2.97	11.76	5.65	5.65	7.59	0.75	2.750	1.625	3/8 x 2.87**	5/8 x 4.00**
GR880	28.96	17.00	8.00	8.00	N/A	25.50	12.52	0.57	14.38	1.13	N/A	14.00	7.00	12.50	2.84	12.25	5.98	5.98	8.86	0.75	3.000	1.875	1/2 x 2.81**	3/4 x 4.50**
GR8100	37.47	20.88	10.00	9.00	N/A	30.75	14.69	0.51	17.76	1.44	N/A	17.75	8.88	15.50	3.76	14.75	6.76	6.76	10.36	1.00	3.750	2.250	1/2 x 3.69**	7/8 x 5.00**

▲ See feature comparison chart.

FEATURE COMPARISON (821, 826, 832)

Size	Output Shaft Diameter Needed?	Mounting Footprint Needed?	All Other Features	Grove Gear Flexaline Interchange	LEESON IRONMAN Interchange	Replace With Series Code Below:
821	Identical	Identical	Identical	✓	✓	GRG
						GRL
826	1.250"	Identical	Identical	✓	✓	GRG
	1.125"					GRL
832	1.500"	Identical	Identical	✓	✓	GRG
	1.375"					GRL

⊖ If Accessory kit is removed, dimensions will vary. 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	180TC	LQ1	250TC	RQ	250TC
	48CZ	56C/140TC							
GR813	5.63	6.07	N/A	3.46	N/A	N/A	N/A	3.09	N/A
GR815	6.16	6.60	N/A	3.99	N/A	N/A	N/A	3.62	N/A
GR818	6.26	6.70	N/A	4.09	N/A	N/A	N/A	3.59	N/A
GR821	6.63	7.07	N/A	4.46	N/A	N/A	N/A	4.06	N/A
GR824	N/A	7.76	8.76	4.63	5.06	N/A	N/A	4.09	4.56
GR826*	N/A	8.32	9.32	5.19	5.62	N/A	N/A	4.82	5.13
GR830	N/A	8.82	9.82	5.95	6.15	6.56	N/A	5.32	5.63
GR832*	N/A	9.01	10.01	6.14	6.34	6.75	N/A	5.51	5.81
GR842	N/A	11.81	12.90	13.46	6.45	7.21	7.21	7.77	6.04
GR852	N/A	13.21	14.30	14.86	7.85	8.61	8.61	9.17	7.35
GR860	N/A	N/A	15.88	16.50	10.45	9.33	9.33	9.94	10.01
GR870	N/A	N/A	15.50	15.50	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

NEMA DIMENSIONS (Inches)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway▲	BF
48CZ	3.75	3.00	4.36	0.38	N/A	0.500	1/8 X 1/16	0.28
56C	5.88	4.50	6.50	0.38	N/A	0.625	3/16 X 3/32	0.41
140TC	5.88	4.50	6.50	0.38	N/A	0.875	3/16 X 3/32	0.41
180TC	7.25	8.50	8.50	N/A	0.50	1.125	1/4 X 1/8	0.53
210TC	7.25	8.50	8.50	N/A	0.50	1.375	5/16 X 5/32	0.53
250TC	7.25	8.50	8.50	N/A	0.50	1.625	3/8 X 3/16	0.53

IEC B5 & B3/B5 METRIC DIMENSIONS (Inches)

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

* 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 V_M 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 V_ and V_M only.

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



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

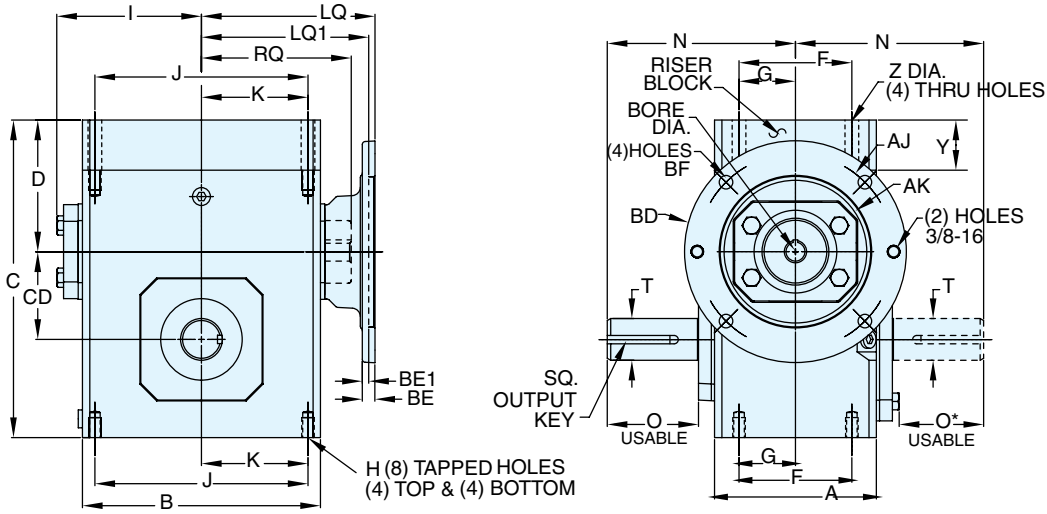
All dimensions shown are for reference only. Contact Factory for certified dimensions.



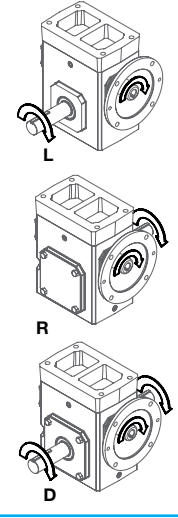
**GR SERIES
DIMENSIONS**
STYLES: RMQ, RM, R

**CAST IRON
GR SERIES**

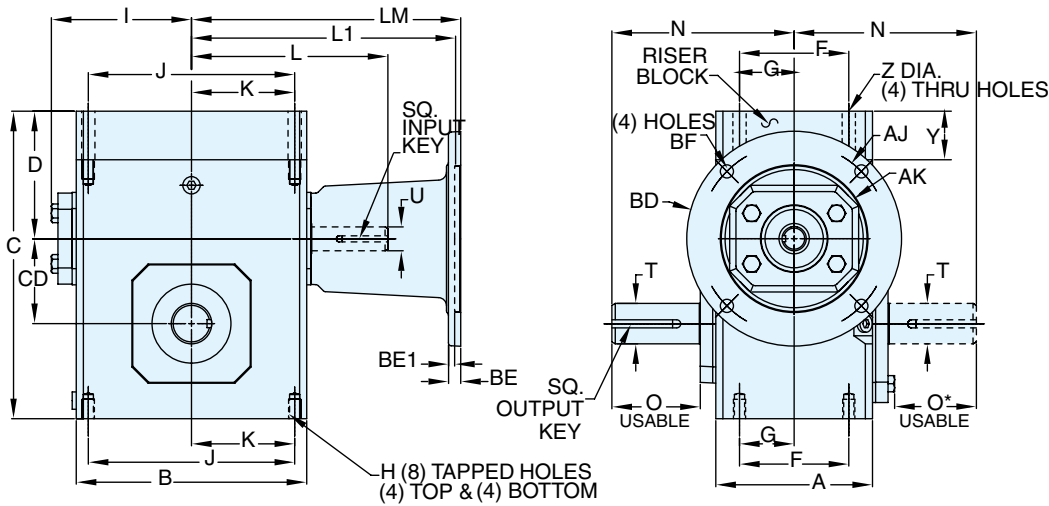
STYLE RMQ



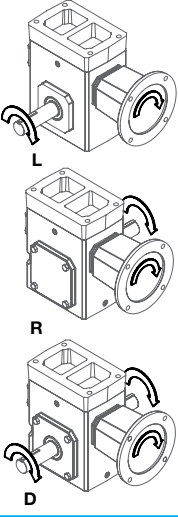
ASSEMBLIES



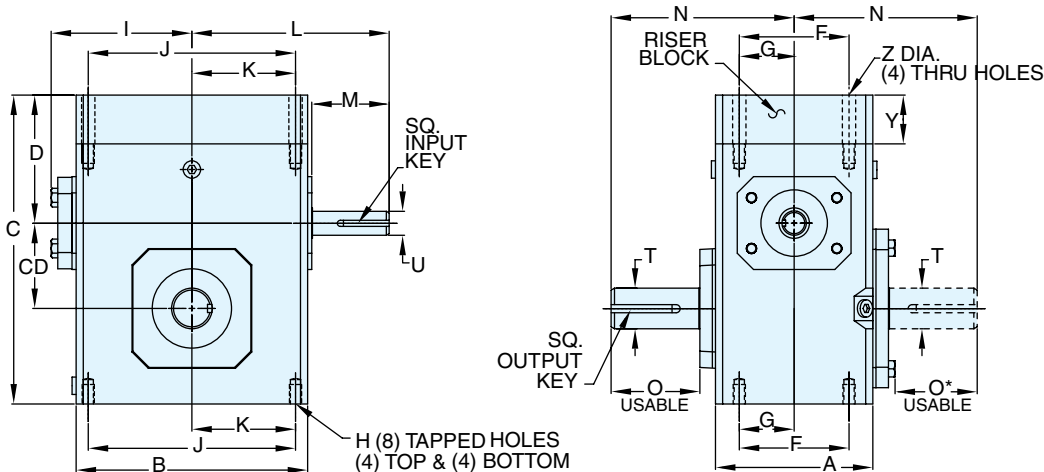
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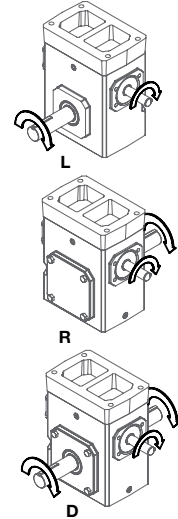
ASSEMBLIES



STYLE R



ASSEMBLIES



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



STYLE RMQ, RM, R DIMENSIONS (Inches)

Size	A	B	C	D	CD	F	G	H		I	J	K	L	M	N	O	O*	Y	Z	T +0.000 -0.0015	U +0.000 -0.0015	Input Key*‡	Output Key
								Tap Size	Depth														
GR815	3.44	4.88	7.38	3.93	1.54	2.75	1.38	5/16-18 UNC	.63	3.14	4.19	2.09	4.35	1.76	4.31	2.11	1.90	2.00	0.34	.750	.625	3/16 X 1.38	3/16 X 1.50
GR818	3.56	5.06	7.75	3.94	1.75	2.75	1.38	5/16-18 UNC	.63	3.24	4.19	2.09	4.45	1.76	4.31	2.05	1.84	2.00	0.34	.875	.625	3/16 X 1.38	3/16 X 1.38
GR821	3.81	5.80	8.38	4.03	2.06	▲	1.44	3/8-16 UNC	.63	3.61	▲	2.50	4.82	1.76	4.68	2.29	2.08	2.00	0.34	1.000	.625	3/16 X 1.38	1/4 X 1.44
GR824	4.06	6.12	8.94	4.06	2.38	2.88	1.44	3/8-16 UNC	.69	3.77	5.00	2.50	5.51	2.38	5.14	2.66	2.44	2.00	0.41	1.125	.750	3/16 X 1.63	1/4 X 1.75
GR826	4.84	7.12	9.50	3.94	2.63	3.38	1.69	3/8-16 UNC	.69	4.34	6.38	3.19	6.07	2.38	5.63	2.73	2.52	1.50	0.41	▲	.750	3/16 X 1.63	1/4 X 1.75
GR830	5.25	8.12	11.01	4.76	3.00	4.00	2.00	7/16-14 UNC	.88	4.84	7.00	3.50	6.57	2.38	6.75	3.60	3.36	2.13	0.47	1.250	.875	3/16 X 1.63	1/4 X 1.75
GR832	5.75	8.50	11.50	4.75	3.25	4.00	2.00	7/16-14 UNC	.88	5.02	7.50	3.75	6.76	2.38	7.06	3.66	3.42	2.13	0.47	▲	.875	3/16 X 1.63	3/8 X 2.25
GR842	6.13	10.25	13.51	4.82	4.25	5.00	2.50	5/8-11 UNC	1.00	6.10	8.50	4.25	9.57	3.47	8.12	4.50	4.21	2.13	0.66	1.875	1.250	1/4 X 2.50	1/2 X 3.06
GR852	7.19	13.00	15.25	4.88	5.25	5.81	2.91	5/8-11 UNC	1.25	7.50	11.00	5.50	10.88	3.38	9.06	4.78	4.53	1.25	0.66	2.000	1.250	1/4 X 3.00	1/2 X 3.50*

▲ See feature comparison chart.

FEATURE COMPARISON (821, 826, 832)

Size	Output Shaft Diameter Needed?	Mounting Footprint Needed?	All Other Features	Grove Gear Flexaline Interchange	LEESON IRONMAN Interchange	Replace With Series Code Below:
821	Identical	(F)3.00" x (J)4.75"	Identical	✓	✓	GRG
		(F)2.88" x (J)5.00"				GRL
826	1.250"	Identical	Identical	✓	✓	GRG
						1.125"
832	1.500"	Identical	Identical	✓	✓	GRG
						1.375"

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 48CZ/ 56C/140TC	LQ1			RQ			
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	210TC	250TC
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

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
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

* Applies to double output shaft

◆ Keyway width by depth

■ 48CZ not available

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

* Dimensions same for GRG and GRL Series

‡ Style R and RM only.

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.

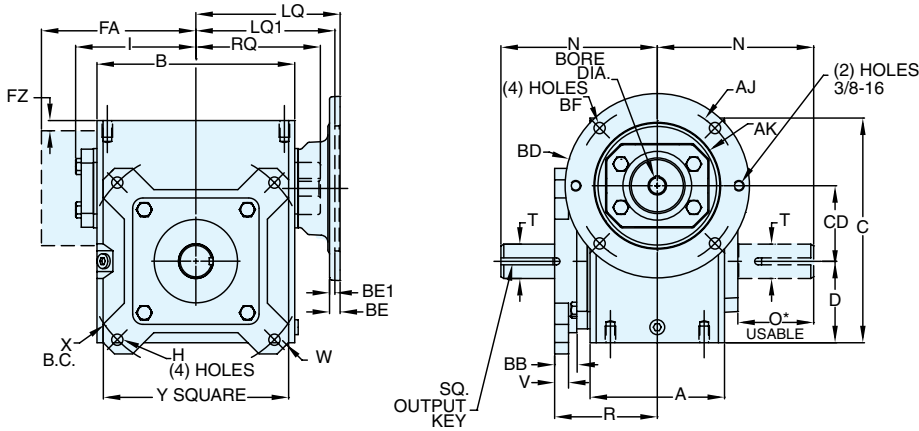
All dimensions shown are for reference only. Contact Factory for certified dimensions.



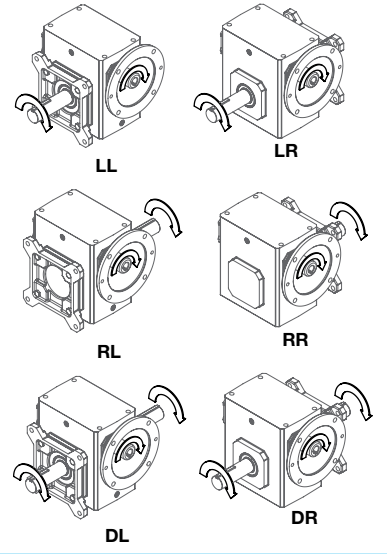
**GR SERIES
DIMENSIONS**
STYLES: FMQ, FM, F

**CAST IRON
GR SERIES**

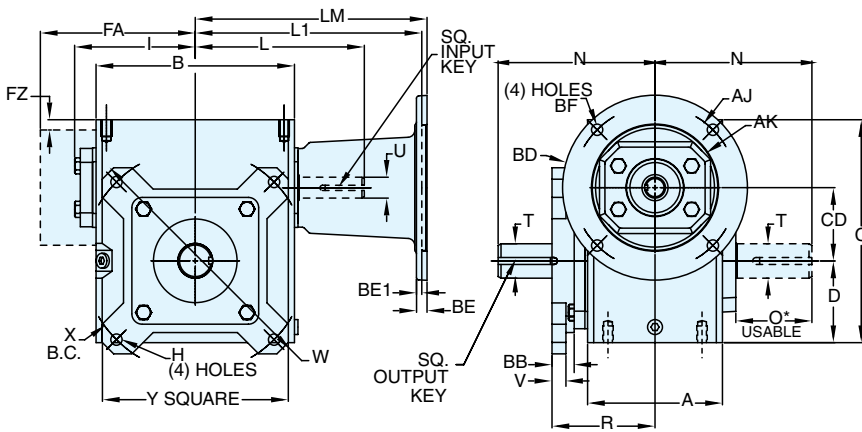
STYLE FMQ



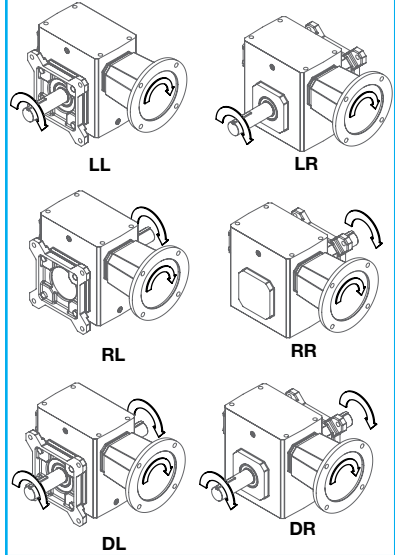
ASSEMBLIES



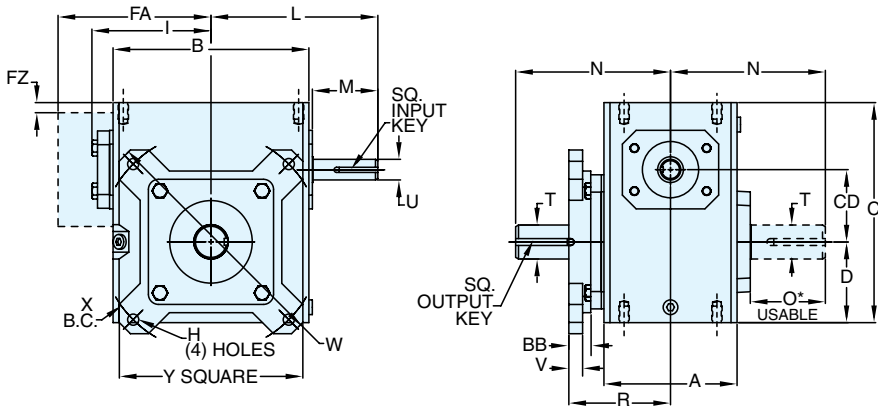
STYLE FM



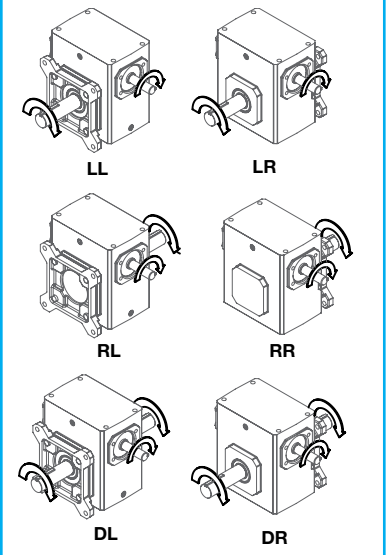
ASSEMBLIES



STYLE F



ASSEMBLIES



**Sizes 815-8100 output flange must be mounted at
Factory on styles FMQ, FM, F.**

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



STYLE FMQ, FM, F DIMENSIONS (Inches)

Series	A	B	C	D	CD	FA▼	FZ▼	H	I	L	M	N	O*	R	V	W	X	Y	T +0.000 -0.0015	U +0.000 -0.0015	Input Key:§	Output Key
GR813	2.82	3.80	4.66	1.72	1.33	N/A	N/A	.34	2.61	3.82	1.76	4.00	1.94	2.52	0.38	5.92	5.00	4.50	.625	.500	1/8 X 1.00	3/16 X 1.50
GR815	3.44	4.88	5.38	1.91	1.54	N/A	N/A	.34	3.14	4.35	1.76	4.31	1.90	2.87	0.38	5.88	5.00	4.50	.750	.625	3/16 X 1.38	3/16 X 1.50
GR818	3.56	5.06	5.75	2.06	1.75	N/A	N/A	.34	3.24	4.45	1.76	4.31	1.84	3.18	0.38	6.64	5.88	5.00	.875	.625	3/16 X 1.38	3/16 X 1.38
GR821	3.81	5.80	6.38	2.28	2.06	N/A	N/A	.41	3.61	4.82	1.76	4.68	2.08	3.69	0.44	7.88	7.00	5.99	1.000	.625	3/16 X 1.38	1/4 X 1.44
GR824	4.06	6.12	6.94	2.50	2.38	N/A	N/A	.41	3.77	5.51	2.38	5.14	2.44	3.73	0.44	8.39	7.50	6.27	1.125	.750	3/16 X 1.63	1/4 X 1.75
GR826	4.84	7.12	8.00	2.94	2.63	N/A	N/A	.41	4.34	6.07	2.38	5.63	2.52	3.70	0.50	8.88	8.00	6.67	▲	.750	3/16 X 1.63	1/4 X 1.75
GR830	5.25	8.10	8.88	3.25	3.00	N/A	N/A	.41	4.84	6.57	2.38	6.75	3.36	3.78	0.50	9.89	9.00	7.37	1.250	.875	3/16 X 1.63	1/4 X 1.75
GR832	5.75	8.50	9.38	3.50	3.25	N/A	N/A	.41	5.02	6.76	2.38	7.06	3.42	4.03	0.50	9.89	9.00	7.37	▲	.875	3/16 X 1.63	3/8 X 2.25
GR842	6.13	10.25	11.38	4.44	4.25	N/A	N/A	.56	6.10	9.57	3.47	8.12	4.21	4.56	0.62	12.95	11.50	9.65	1.875	1.250	1/4 X 2.50	1/2 X 3.06
GR852	7.19	13.00	14.00	5.12	5.25	N/A	N/A	.69	7.50	10.88	3.38	9.06	4.53	5.62	0.75	15.50	14.00	11.75	2.000	1.250	1/4 X 3.00	1/2 X 3.50
GR860	8.13	14.25	16.50	6.50	6.00	11.13	0.33	.69	N/A	11.78	3.41	10.00	4.65	7.26	0.75	18.00	15.63	14.00	2.500	1.500	3/8 X 3.00	5/8 X 4.00
GR870	7.63	14.88	18.91	7.59	7.00	11.37	0.35	.78	N/A	11.50	2.97	11.76	5.65	7.45	0.75	21.00	18.38	15.63	2.750	1.625	3/8 x 2.87**	5/8 x 4.00**
GR880	8.63	17.00	20.96	8.86	8.00	12.52	0.57	1.03	N/A	12.50	2.84	12.25	5.98	8.34	0.75	24.00	21.00	17.88	3.000	1.875	1/2 x 2.81**	3/4 x 4.50**
GR8100	9.53	20.88	25.47	10.36	10.00	14.69	0.51	1.03	N/A	15.50	3.76	14.75	6.76	9.07	1.00	29.00	25.00	21.19	3.750	2.250	1/2 x 3.69**	7/8 x 5.00**

▲ See feature comparison chart.

FEATURE COMPARISON (821, 826, 832)

Size	Output Shaft Diameter Needed?	Mounting Footprint Needed?	All Other Features	Grove Gear Flexaline Interchange	LEESON IRONMAN Interchange	Replace With Series Code Below:
821	Identical	Identical◊	Identical	✓	✓	GRG GRL
826	1.250"	Identical	Identical	✓	✓	GRG
	1.125"					GRL
832	1.500"	Identical	Identical	✓	✓	GRG
	1.375"					GRL

◊ If Accessory kit is removed, dimensions will vary. NOTE: If reducer is used without the accessory mounted, select based mounting dimensions on pages 52-53 (B, BM, BMO).

MOTOR MOUNTING DIMENSIONS

NEMA DIMENSIONS (Inches)

Series	LM		L1		LQ 48CZ/ 56C/140TC	180TC	LQ1 210TC	250TC	RQ		
	48CZ	56C/ 140TC	180TC/ 210TC	250TC					180TC	250TC	
GR813	5.63	6.07	N/A	N/A	3.46	N/A	N/A	N/A	3.09	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
GR818	6.26	6.70	N/A	N/A	4.09	N/A	N/A	N/A	3.59	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
GR824	N/A	7.76	8.76	N/A	4.63	5.06	N/A	N/A	4.09	4.56	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
GR830	N/A	8.82	9.82	N/A	5.95	6.15	6.56	N/A	5.32	5.63	N/A
GR832*	N/A	9.01	10.01	N/A	6.14	6.34	6.75	N/A	5.51	5.81	N/A
GR842	N/A	11.81	12.90	13.46	6.45	7.21	7.21	7.77	6.04	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	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
GR870	N/A	N/A	15.50	15.50	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

NEMA DIMENSIONS (Inches)

Frame	AJ⊕	AK	BD	BE	BE1	Bore Dia.	Keyway▲	BF⊕
48CZ	3.75	3.00	4.36	0.38	N/A	0.500	1/8 X 1/16	0.28
56C	5.88	4.50	6.50	0.38	N/A	0.625	3/16 X 3/32	0.41
140TC	5.88	4.50	6.50	0.38	N/A	0.875	3/16 X 3/32	0.41
180TC	7.25	8.50	8.50	N/A	0.50	1.125	1/4 X 1/8	0.53
210TC	7.25	8.50	8.50	N/A	0.50	1.375	5/16 X 5/32	0.53
250TC	7.25	8.50	8.50	N/A	0.50	1.625	3/8 X 3/16	0.53

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

Series	LQ1				D100LD/D112MD	RQ					
	D63D	D71D	D80D	D90D		D132D	D63D	D71D	D80D	D90D	D132D
GR813	2.62	2.65	2.89	N/A	N/A	N/A	2.45	2.47	2.71	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
GR818	3.25	3.28	3.52	N/A	N/A	N/A	2.95	2.97	3.21	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
GR824	N/A	3.72	4.34	N/A	N/A	N/A	N/A	3.46	3.71	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	N/A
GR830	N/A	4.78	5.41	5.41	5.88	N/A	N/A	4.59	5.22	5.22	N/A
GR832*	N/A	4.97	5.59	5.59	6.07	N/A	N/A	4.78	5.41	5.41	N/A
GR842	N/A	N/A	N/A	6.38	6.39	7.17	N/A	N/A	N/A	6.16	6.93
GR852	N/A	N/A	N/A	7.78	7.78	8.57	N/A	N/A	N/A	7.46	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

* 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 FM 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 F and FM only.

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

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.

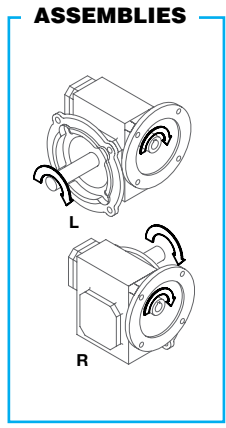
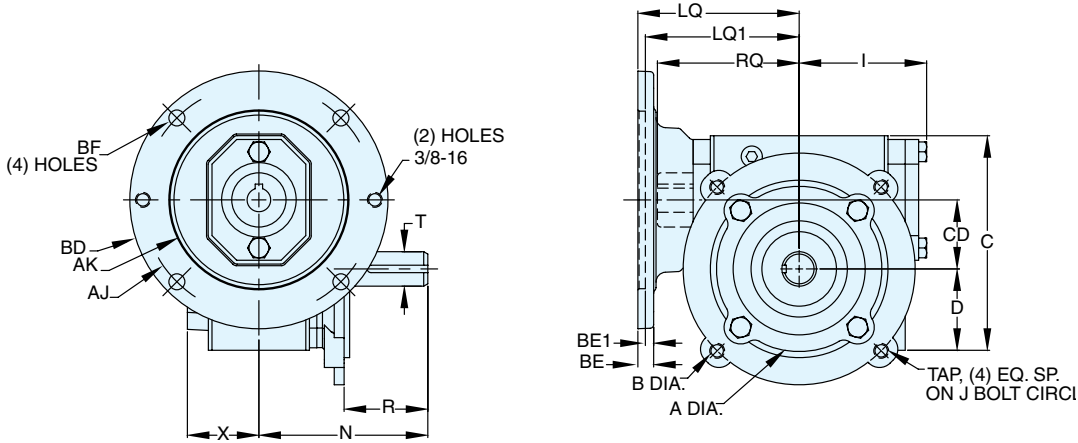
All dimensions shown are for reference only. Contact Factory for certified dimensions.



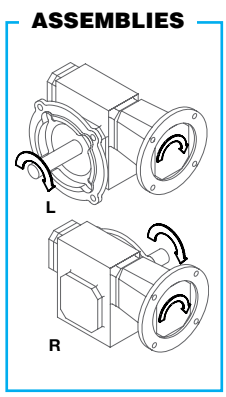
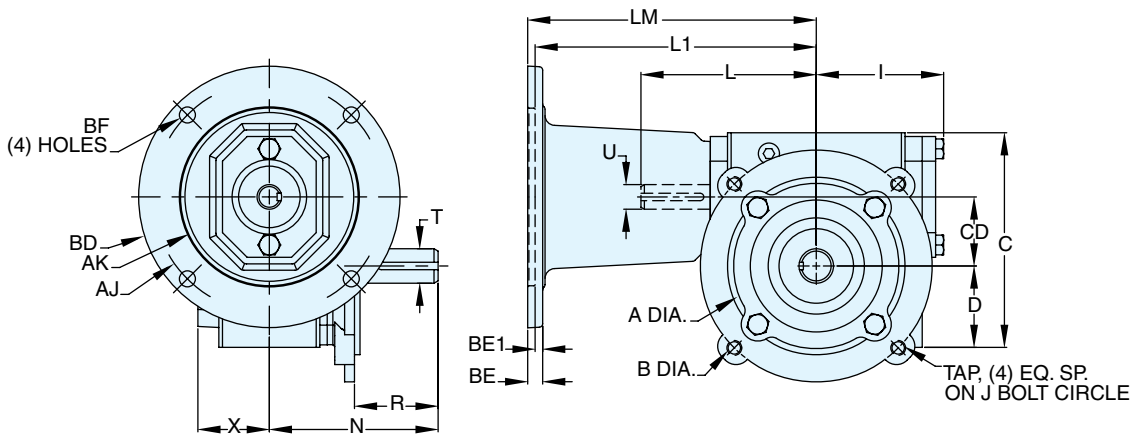
**GR SERIES
DIMENSIONS**
STYLES: CMQ, CM, C

**CAST IRON
GR SERIES**

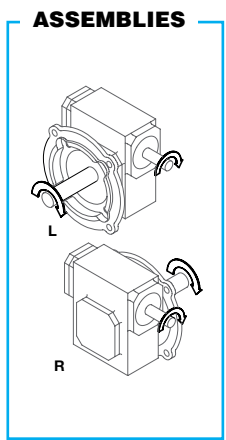
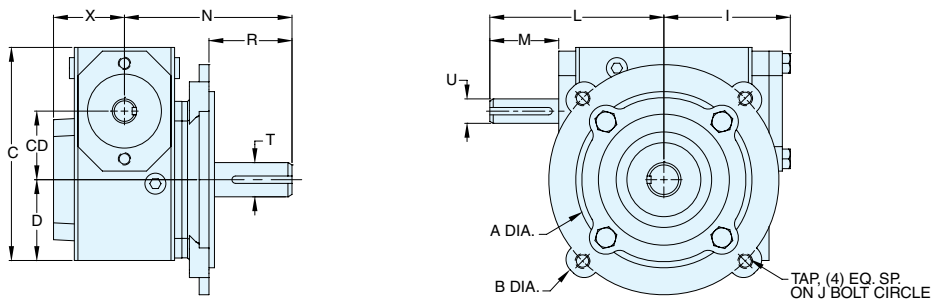
STYLE CMQ



STYLE CM



STYLE C



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



STYLE CMQ, CM, C DIMENSIONS (Inches)

Series	Output C-Face Frame	A	B	C	D	CD	I	J	L	M	N	R	X	Tap Size	T +0.000 -0.0015	U +0.000 -0.0015	Input Key* [‡]	Output Key
GR813	56C	4.50	6.64	4.66	1.72	1.33	2.61	5.88	3.82	1.76	5.00	2.06	1.84	3/8-16 UNC	.625	.500	1/8 X 1.00	3/16 X 1.50
GR818	140TC	4.50	6.64	5.44	2.06	1.75	3.24	5.88	4.45	1.76	4.28	2.13	1.81	3/8-16 UNC	.875	.625	3/16 X 1.38	3/16 X 1.38
GR824	180TC	8.50	9.00	6.88	2.69	2.38	3.77	7.25	5.51	2.38	6.59	2.37	1.97	1/2-13 UNC	1.125	.750	3/16 X 1.63	1/4 X 1.75

MOTOR MOUNTING DIMENSIONS

NEMA DIMENSIONS (Inches)

Series	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ			
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		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
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
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

NEMA DIMENSIONS (Inches)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway▲	BF
48CZ	3.75	3.00	4.36	0.38	N/A	0.500	1/8 X 1/16	0.28
56C	5.88	4.50	6.50	0.38	N/A	0.625	3/16 X 3/32	0.41
140TC	5.88	4.50	6.50	0.38	N/A	0.875	3/16 X 3/32	0.41
180TC	7.25	8.50	8.50	N/A	0.50	1.125	1/4 X 1/8	0.53
210TC	7.25	8.50	8.50	N/A	0.50	1.375	5/16 X 5/32	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
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
GR824	N/A	3.72	4.34	N/A	N/A	N/A	N/A	3.46	3.71	N/A	N/A	N/A

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

- ◆ Keyway width by depth
- 48CZ not available
- ◇ Metric IEC B5 input flange options are available only on quill input styles.
- * Style C and CM only.

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.

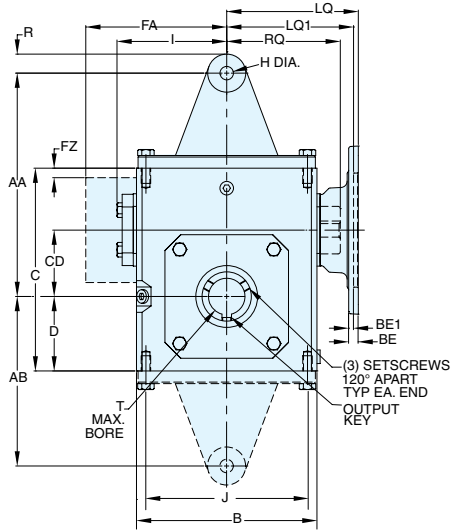
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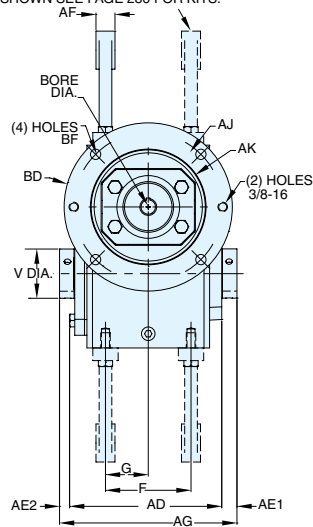
**GR SERIES
DIMENSIONS**
STYLES: HMQ, HM, H



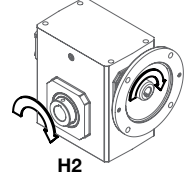
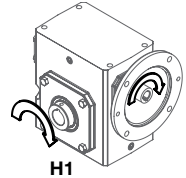
STYLE HMQ



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

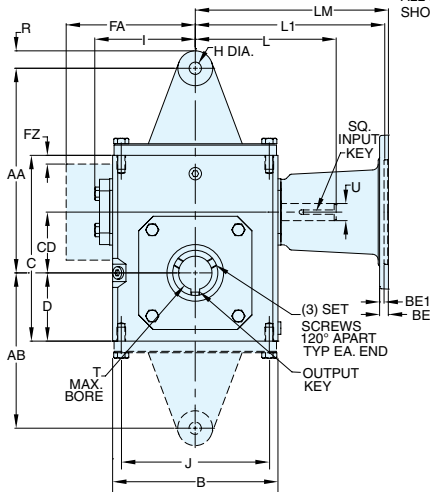


ASSEMBLIES

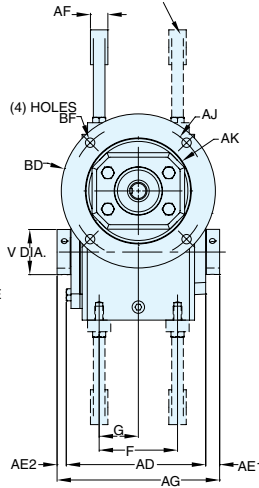


H1 SUPPLIED AS STANDARD UNLESS SPECIFIED.

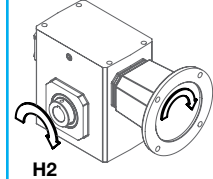
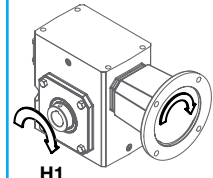
STYLE HM



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

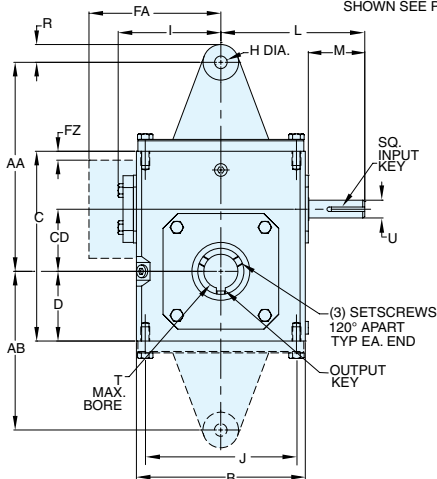


ASSEMBLIES

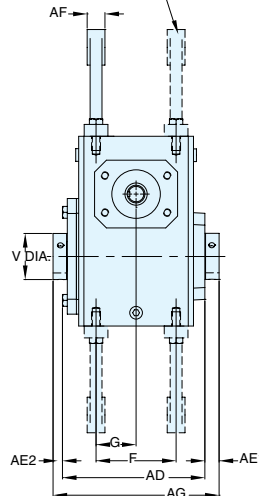


H1 SUPPLIED AS STANDARD UNLESS SPECIFIED.

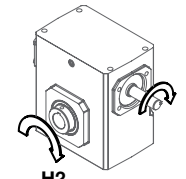
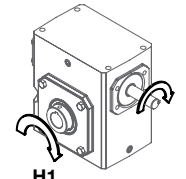
STYLE H



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.

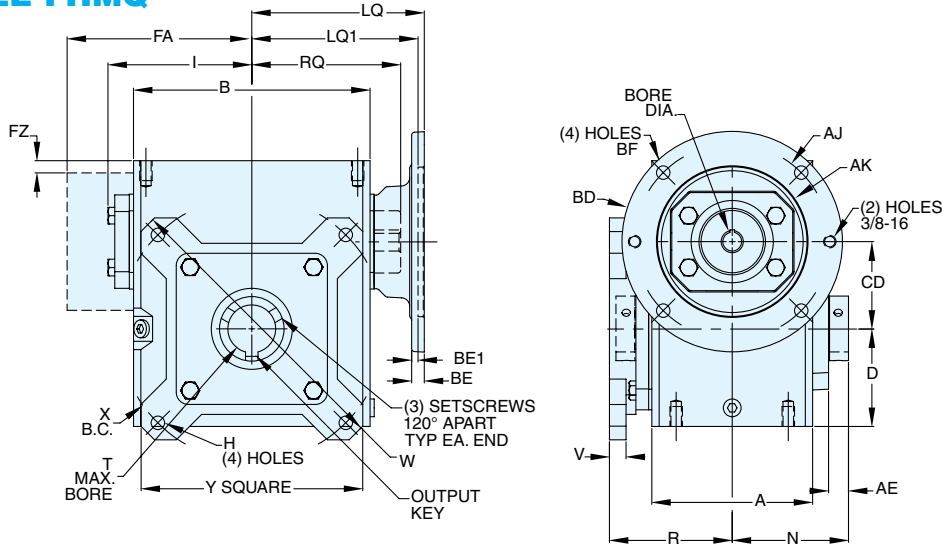
All dimensions shown are for reference only. Contact Factory for certified dimensions.



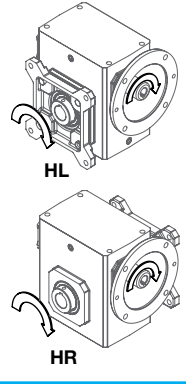
**GR SERIES
DIMENSIONS**
STYLES: FHM, FHM, FH

**CAST IRON
GR SERIES**

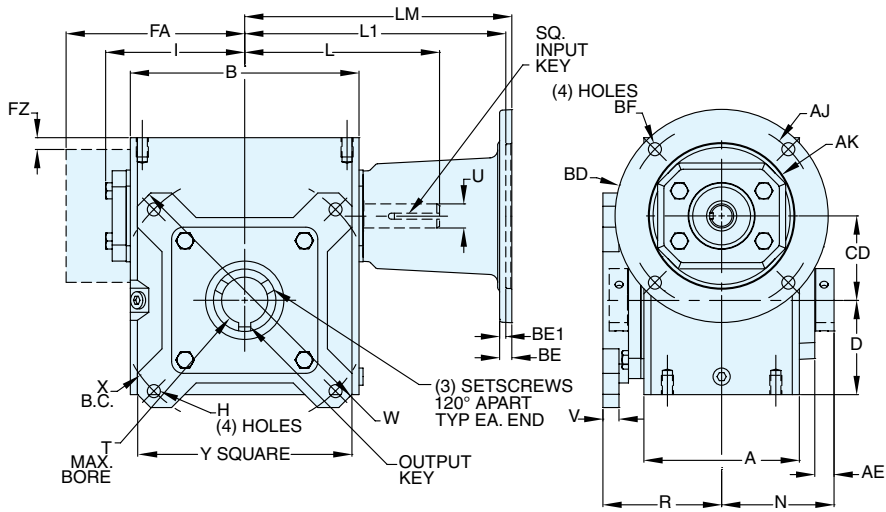
STYLE FHM



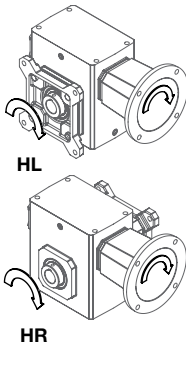
ASSEMBLIES



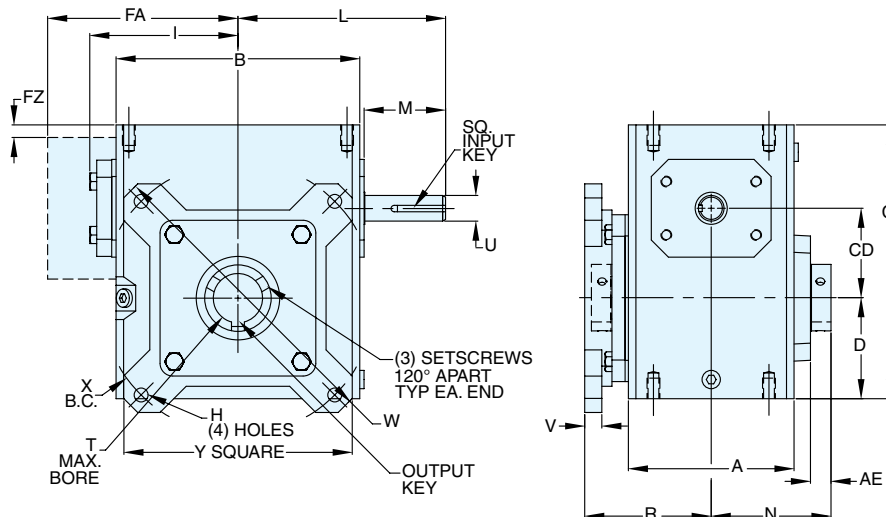
STYLE FHM



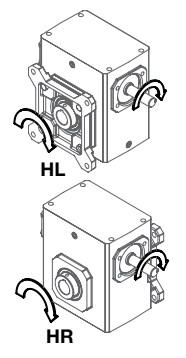
ASSEMBLIES



STYLE FH



ASSEMBLIES



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



STYLE FH DIMENSIONS (Inches)

Series	A	AE	B	C	D	CD	FA▼	FZ▼	H	I	L	M	N	R	V	W	X	Y	T MAX+ -0.000 +0.0025	U +0.000 -0.0015	Input Key*†	Output Key+†
GR813	2.82	0.53	3.80	4.66	1.72	1.33	N/A	N/A	.34	2.61	3.82	1.76	2.38	2.52	0.38	5.92	5.00	4.50	0.625	.500	1/8 X 1.00	3/16 x 1.50
GR815	3.44	0.51	5.19	5.38	1.91	1.54	N/A	N/A	.34	3.14	4.35	1.76	2.71	2.87	0.38	5.88	5.00	4.50	0.625	.625	3/16 X 1.38	3/16 x 1.50
GR818	3.56	0.49	5.19	5.75	2.06	1.75	N/A	N/A	.34	3.24	4.45	1.76	2.75	3.18	0.38	6.64	5.88	5.00	1.000	.625	3/16 X 1.38	1/4 x 3.00
GR821	3.81	0.61	5.80	6.38	2.28	2.06	N/A	N/A	.41	3.61	4.82	1.76	3.00	3.69	0.44	7.88	7.00	5.99	1.500	.625	3/16 X 1.38	3/8 x 3.00
GR824	4.06	0.51	6.12	6.94	2.50	2.38	N/A	N/A	.41	3.77	5.51	2.38	3.00	3.73	0.44	8.39	7.50	6.27	1.500	.750	3/16 X 1.63	3/8 x 3.00
GR826*	4.84	0.60	7.38	8.00	2.94	2.63	N/A	N/A	.41	4.34	6.07	2.38	3.50	3.70	0.50	8.88	8.00	6.67	1.500	.750	3/16 X 1.63	3/8 x 3.00
GR830	5.25	0.60	8.12	8.88	3.25	3.00	N/A	N/A	.41	4.84	6.57	2.38	3.75	3.78	0.50	9.89	9.00	7.37	2.188	.875	3/16 X 1.63	1/2 x 3.00
GR832*	5.75	0.54	8.75	9.38	3.50	3.25	N/A	N/A	.41	5.02	6.76	2.38	3.94	4.03	0.50	9.89	9.00	7.37	2.188	.875	3/16 X 1.63	1/2 x 3.00
GR842	6.13	0.63	10.25	11.38	4.44	4.25	N/A	N/A	.56	6.10	9.57	3.47	4.25	4.56	0.62	12.95	11.50	9.65	2.188	1.250	1/4 X 2.50	1/2 x 3.00
GR852	7.19	0.97	13.00	14.00	5.12	5.25	N/A	N/A	.69	7.50	10.88	3.38	5.25	5.62	0.75	15.50	14.00	11.75	3.438	1.250	1/4 X 3.00	7/8 x 3.44
GR860	8.13	0.52	14.50	16.50	6.50	6.00	11.13	0.33	.69	N/A	11.78	3.41	5.75	7.26	0.75	18.00	15.63	14.00	3.438	1.500	3/8 X 3.00	7/8 x 3.44
GR870	7.63	1.09	14.88	18.91	7.59	7.00	11.37	0.35	.78	N/A	11.50	2.97	6.75	7.45	0.75	21.00	18.38	15.63	3.938	1.625	3/8 x 2.87**	1 x 1/2**
GR880	8.63	1.03	17.00	20.96	8.86	8.00	12.52	0.57	1.03	N/A	12.50	2.84	7.25	8.34	0.75	24.00	21.00	17.88	4.438	1.875	1/2 x 2.81**	1 x 1/2**
GR8100	9.53	1.39	20.88	25.47	10.36	10.00	14.69	0.51	1.03	N/A	15.50	3.76	9.25	9.07	1.00	29.00	25.00	21.19	5.438	2.250	1/2 x 3.69**	1-1/4 x 5/8**

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:
821	Identical	Identical	Identical	✓	✓	GRL

† If Accessory kit is removed, dimensions will vary. 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 48CZ/ 56C/140TC	180TC	LQ1			RQ			
	48CZ/ 140TC	56C/ 140TC	180TC/ 210TC	250TC			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	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	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	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	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	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	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	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	N/A
GR842	N/A	11.81	12.90	13.46	6.45	7.21	7.21	7.77	6.04	6.68	6.98	7.24	N/A
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	N/A
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	N/A
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	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	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	N/A	3.46	3.71	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 FHM 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 FH and FHM only.

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



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

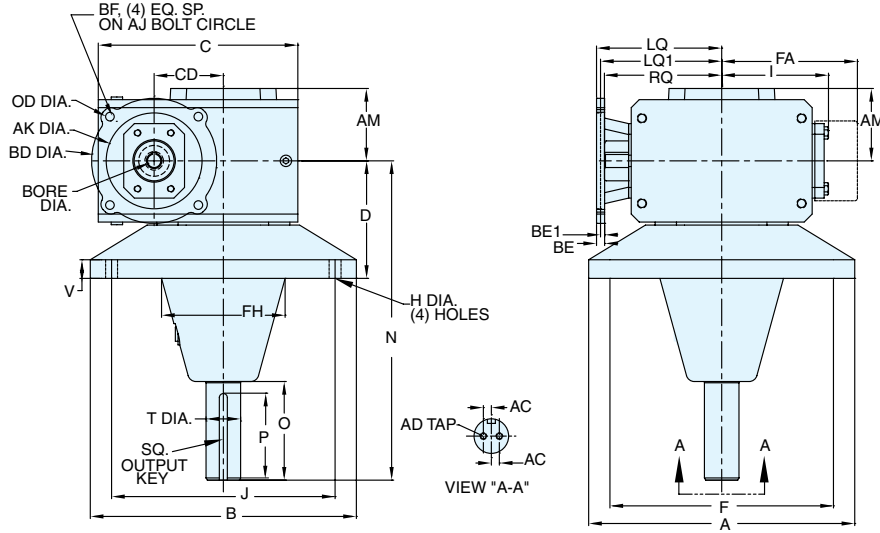
All dimensions shown are for reference only. Contact Factory for certified dimensions.



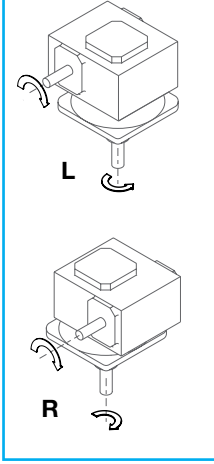
**GR SERIES
DIMENSIONS**
STYLES: FEMQ, FEM, FE

**CAST IRON
GR SERIES**

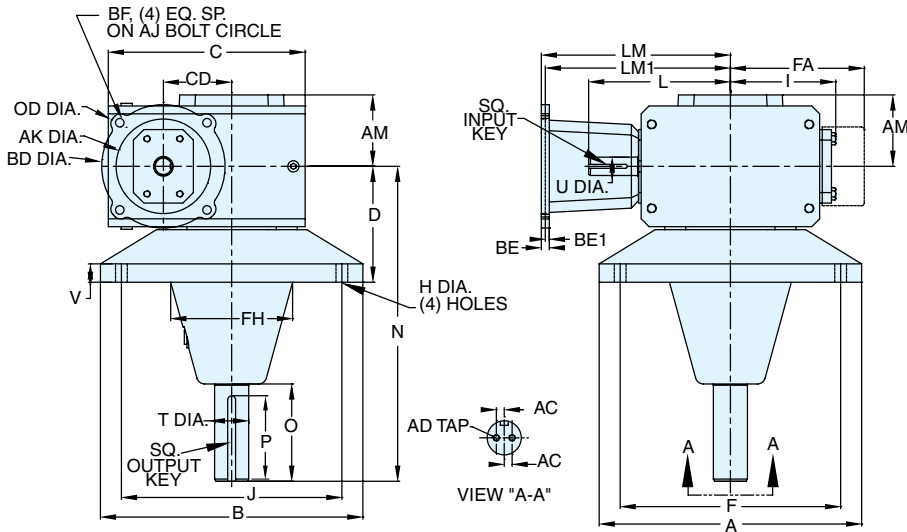
STYLE FEMQ



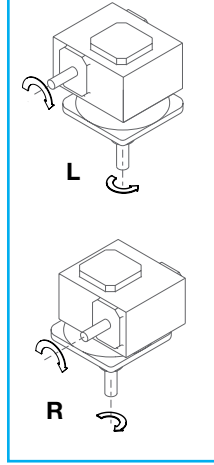
ASSEMBLIES



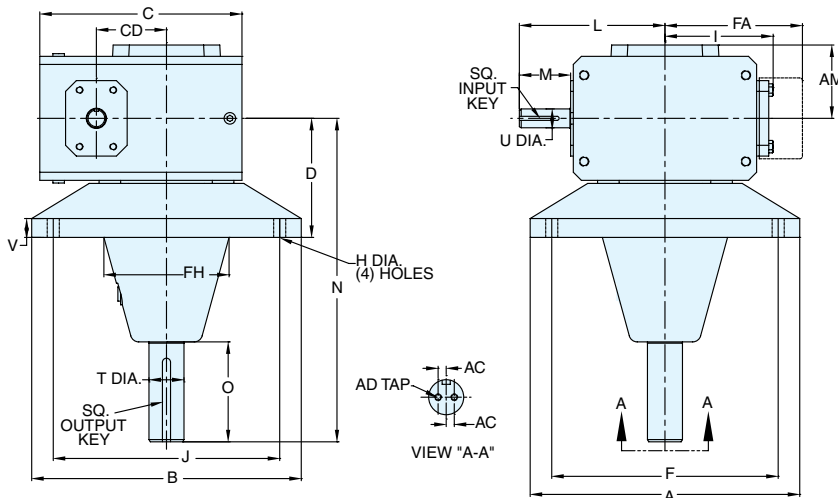
STYLE FEM



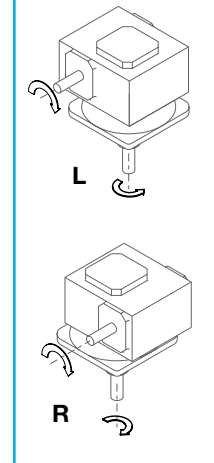
ASSEMBLIES



STYLE FE



ASSEMBLIES



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



STYLE FEMQ, FEM, FE DIMENSIONS (Inches)

Series	A	AC	AD	AM	B	D	CD	F	FA ▼	FH	H	I	J	L	M
GR830	11.00	0.375	.31-18 UNC X 1.00 DP	3.15	11.00	4.60	3.00	9.00	N/A	5.12	.56	4.84	9.00	6.57	2.38
GR832	12.50	0.375	.31-18 UNC X 1.00 DP	3.40	12.50	5.52	3.25	10.50	N/A	5.75	.56	5.02	10.50	6.76	2.38
GR842	14.00	0.500	.38-16 UNC X 1.00 DP	3.62	14.00	5.74	4.25	12.00	N/A	6.75	.69	6.10	12.00	9.57	3.47
GR852	16.00	0.750	.38-16 UNC X 1.00 DP	4.28	16.00	6.00	5.25	14.00	N/A	8.00	.81	7.50	14.00	10.88	3.38
GR860	19.50	0.750	.38-16 UNC X 1.00 DP	5.28	19.50	7.00	6.00	17.00	11.13	9.50	.88	N/A	17.00	11.78	3.41
GR870	22.00	1.000	.38-16 UNC X 1.00 DP	6.06	22.00	8.50	7.00	19.00	11.37	10.75	1.13	N/A	19.00	11.50	2.97
GR880	28.00	1.062	.62-11 UNC X 1.50 DP	6.22	28.00	10.00	8.00	24.00	12.52	13.75	1.31	N/A	24.00	12.50	2.84
GR8100	32.00	1.118	.62-11 UNC X 1.50 DP	7.94	32.00	12.50	10.00	28.00	14.69	17.00	1.31	N/A	28.00	15.50	3.76

Series	N	O*	V	T +0.000 -0.0015	U +0.000 -0.0015	Input Key*†	P‡
GR830	14.38	4.96	0.78	1.438	.875	3/16 x 1.63	3/8 x 3.88
GR832	15.00	4.63	0.88	1.625	.875	3/16 x 1.63	3/8 x 3.69
GR842	16.50	5.91	1.00	1.688	1.250	1/4 X 2.50	3/8 x 4.68
GR852	16.50	5.62	1.25	2.188	1.250	1/4 X 3.00	1/2 x 4.63
GR860	22.50	7.63	1.50	2.438	1.500	3/8 X 3.00	5/8 x 6.50
GR870	24.00	7.63	1.75	2.937	1.625	3/8 x 2.87**	3/4 x 6.44
GR880	27.06	9.25	2.00	3.438	1.875	1/2 x 2.81**	7/8 x 8.00
GR8100	29.50	9.43	2.25	3.938	2.250	1/2 x 3.69**	1 x 7.75

MOTOR MOUNTING DIMENSIONS

NEMA DIMENSIONS (Inches)

Size	LM 56C/ 140TC		L1 250TC	LQ 56C/140TC		LQ1 210TC		250TC		56C/140TC		180TC		RQ 210TC		250TC	
	LM	LM		LQ	LQ	LQ1	LQ1	250TC	250TC	56C/140TC	180TC	180TC	210TC	250TC	250TC	250TC	
GR830	8.82	9.82	N/A	5.95	6.15	6.56	N/A	5.32	5.63	6.06	N/A						
GR832	9.01	10.01	N/A	6.14	6.34	6.75	N/A	5.51	5.81	6.25	N/A						
GR842	11.81	12.90	13.46	6.45	7.21	7.21	7.77	6.04	6.68	6.68	7.24						
GR852	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	15.88	16.50	10.45	9.33	9.33	9.94	10.01	8.69	8.69	8.69						
GR870	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	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⊕
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	LQ					RQ				
	D71D	D80D	D90D	D100LD/ D112MD	D132D	D71D	D80D	D90D	D100LD/ D112MD	D132D
GR830	4.78	5.41	5.41	5.88	N/A	4.59	5.22	5.22	5.57	N/A
GR832	4.97	5.59	5.59	6.07	N/A	4.78	5.41	5.41	5.76	N/A
GR842	N/A	N/A	6.38	6.39	7.17	N/A	N/A	6.16	6.14	6.93
GR852	N/A	N/A	7.78	7.78	8.57	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
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

- ** 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 FEM with frame sizes 180TC-250TC.
- 180TC not available
- ⊕ Metric IEC B5 input flange options are available only on quill input styles.

- * Style FE and FEM only.
- ▼ Sizes 860-8100 are supplied with a fan. Dimensions refer to fan guard location.
- ⚠ 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.