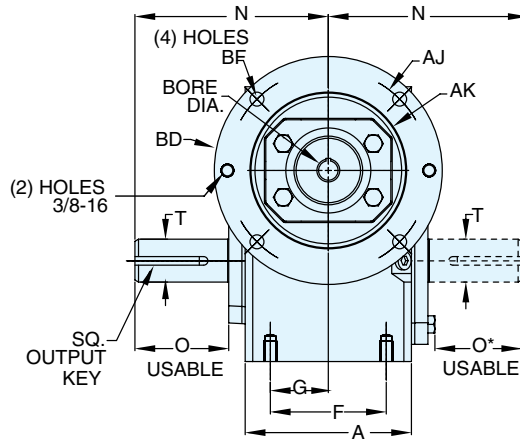
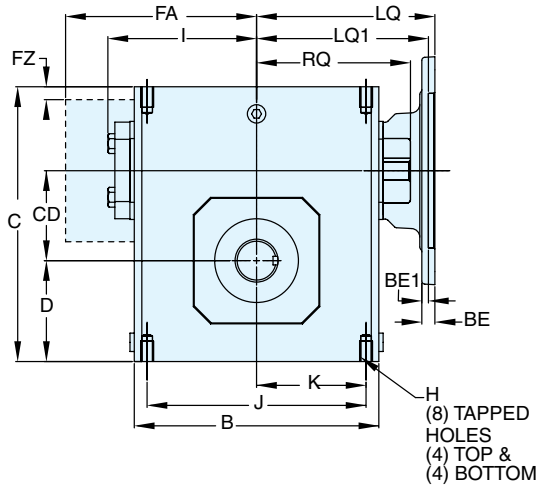




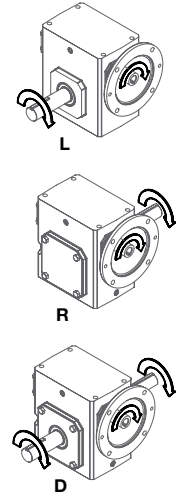
**GR SERIES  
DIMENSIONS**  
STYLES: BMQ, BM, B

**CAST IRON  
GR SERIES**

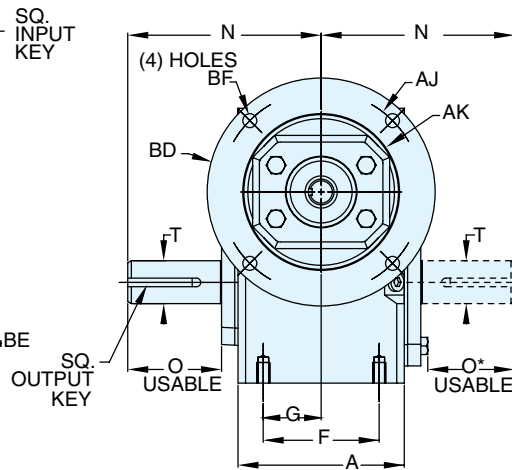
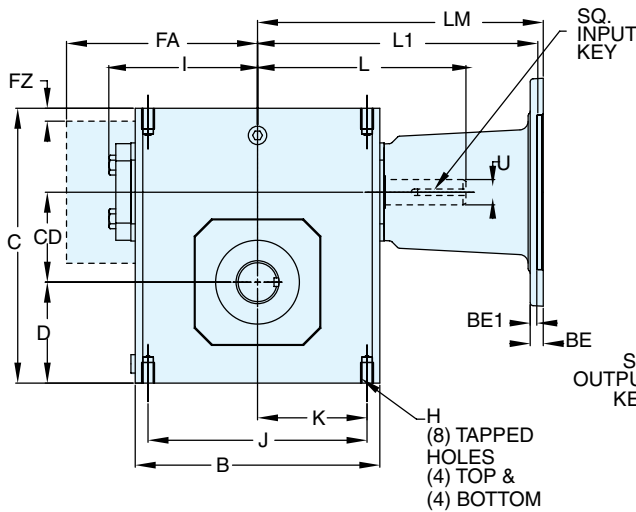
**STYLE BMQ**



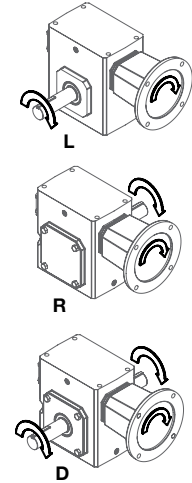
**ASSEMBLIES**



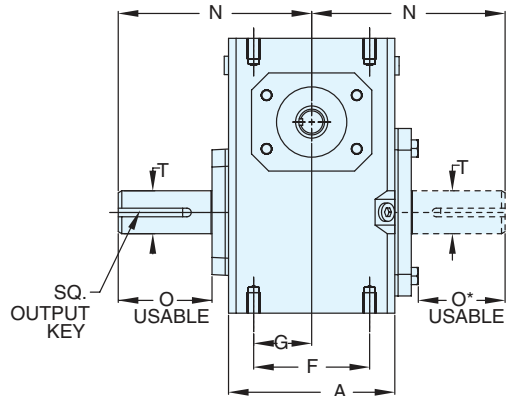
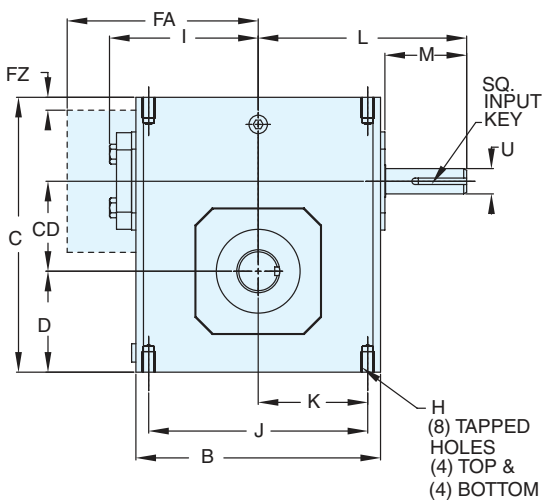
**STYLE BM**



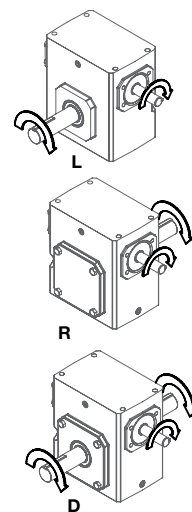
**ASSEMBLIES**



**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, sheaves and belts, sprockets and chains, etc., mounted thereon.

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



**GR SERIES • SINGLE REDUCTION • APPROXIMATE WEIGHTS<sup>Δ</sup> (LBS.)**

Reducer Style	Reducer Size													
	GR813	GR815	GR818	GR821	GR824	GR826	GR830	GR832	GR842	GR852	GR860	GR870	GR880	GR8100
<b>Solid Output Shaft</b>														
BMQ	17	21	24	29	45	56	68	75	146	247	331	---	---	---
BM	22	23	26	30	47	57	69	76	154	254	336	429	612	---
B	17	18	20	25	40	52	64	71	136	232	321	399	582	904
TMQ & UMQ	19	24	27	33	49	62	74	84	160	267	362	---	---	---
TM & UM	24	26	29	34	51	63	75	85	168	274	367	470	660	---
T & U	19	21	23	29	44	58	70	80	150	252	352	440	630	980
RMQ	---	28	31	38	54	68	83	106	170	262	---	---	---	---
RM	---	30	33	39	56	69	84	107	178	269	---	---	---	---
R	---	25	27	34	49	64	79	102	160	247	---	---	---	---
JMQ	18	22	26	32	48	61	74	81	156	262	---	---	---	---
JM	23	24	28	33	50	62	75	82	164	269	---	---	---	---
J	18	19	22	28	43	57	70	77	146	247	---	---	---	---
VHMQ & VLMQ	19	24	27	36	52	65	78	88	166	272	367	---	---	---
VHM & VLM	24	26	29	37	54	66	79	89	174	279	372	500	690	---
VH & VL	19	21	23	32	47	61	74	84	156	257	357	470	660	1060
FMQ	18	22	25	32	48	60	78	85	161	277	369	---	---	---
FM	23	24	27	33	50	61	79	86	169	284	374	489	630	---
F	18	19	21	28	43	56	74	81	151	262	359	459	600	925
BFMQ	19	---	26	32	49	62	---	---	---	---	---	---	---	---
BFM	24	---	28	33	51	63	---	---	---	---	---	---	---	---
BF	19	---	22	28	44	58	---	---	---	---	---	---	---	---
CMQ	19	---	26	---	51	---	---	---	---	---	---	---	---	---
CM	24	---	28	---	53	---	---	---	---	---	---	---	---	---
C	19	---	22	---	48	---	---	---	---	---	---	---	---	---
FEMQ	---	---	---	---	---	---	78	85	176	278	373	---	---	---
FEM	---	---	---	---	---	---	79	86	184	285	378	590	810	---
FE	---	---	---	---	---	---	74	71	166	263	363	560	780	1180
<b>Hollow Output Shaft</b>														
HMQ	18	21	25	30	47	55	69	77	149	247	331	---	---	---
HM	22	23	27	31	49	56	70	78	157	254	336	429	612	---
H	18	19	21	26	42	51	65	73	139	232	321	399	582	904
FHMQ	19	22	27	33	50	59	79	87	164	277	369	---	---	---
FHM	23	24	29	34	51	60	80	88	172	284	374	444	630	---
FH	19	20	23	29	45	55	75	83	154	262	359	414	600	925
BFHMQ	20	---	27	33	51	61	---	---	---	---	---	---	---	---
BFHM	24	---	29	34	53	62	---	---	---	---	---	---	---	---
BFH	20	---	23	29	46	57	---	---	---	---	---	---	---	---

<sup>Δ</sup> Weights include oil.

**GR SERIES • ACCESSORIES • APPROXIMATE WEIGHTS (LBS.)**

Accessory	Reducer Size													
	GR813	GR815	GR818	GR821	GR824	GR826	GR830	GR832	GR842	GR852	GR860	GR870	GR880	GR8100
T/U-Base	2	3	3	4	4	6	6	9	14	20	31	41	48	76
J-Base	1	1	2	3	3	5	6	6	10	15	---	---	---	---
VL/VH-Base	2	3	3	7	7	9	10	13	20	25	36	**	**	**
F-Flange (cast Iron)	1	1	2	3	3	4	10	10	15	30	38	**	**	**
BF-Flange (Steel)	2	---	2	3	4	6	---	---	---	---	---	---	---	---
R-Riser Block	---	7	7	9	9	12	15	31	24	15	---	---	---	---
Hollow Shaft Torque Arm Kit	5	5	5	5	5	5	5	5	5	8	8	---	---	---
<b>Coupling Input C-Flange Kits</b>														
48CZ, 56C, 140TC	7	7	7	7	8	8	11	11	14	16	---	---	---	---
180TC-210TC	---	---	---	---	11	11	11	11	16	18	22	30	30	---
250TC	---	---	---	---	---	---	---	28	30	30	32	34	36	---

\*\* This accessory must be assembled at the Factory. It is not available as a kit for field installation.