

Maximum Rating Tables

Size 870, 880, 8100 • GR Series

Single Reduction
Worm Gear Reducers

Double Reduction
Worm - Worm Gear Reducers

Double Reduction
Helical - Worm Gear Reducers

WASHGUARD® Reducers
and GEAR+MOTOR™

Ratio Multipliers

Accessories and
Additional Capabilities

Size 870, 880, 8100

Ratio	Input RPM	Output RPM	Input HP	Output HP	Output Torque (lb-in)	Input HP	Output HP	Output Torque (lb-in)	Input HP	Output HP	Output Torque (lb-in)
5	1750	350	51.1	49.1	9062	66.8	64.3	11866	104.6	100.9	18619
	1170	234	43.3	41.3	11404	56.6	54.1	14932	88.5	84.9	23431
	(5.13 actual) 100	20	9.2	8.18	26416	13.9	12.4	36447	22.1	19.8	63935
7.5	1750	233	41.5	39.6	10572	54.3	52.0	13867	84.4	81.1	21413
	1170	156	35.2	33.3	13304	46.0	43.8	17451	71.4	68.2	26947
	(7.33 actual) 100	13	6.97	6.09	28388	9.72	8.54	39793	16.5	14.6	67727
10	1750	175	36.16	34.28	12033	43.3	41.1	14447	67.1	64.0	22466
	1170	117	30.72	28.8	15143	36.7	34.6	18181	56.8	53.8	28273
	(9.75 actual) 100	10	6.22	5.32	32661	7.96	6.83	41958	13.6	11.8	72712
15	1750	116	25.9	24.2	12827	33.8	31.7	16766	52.7	49.8	26308
	1170	78	22.1	20.4	16143	28.7	26.7	21099	44.8	41.9	33107
	(14.67 actual) 100	607	4.16	3.44	31744	5.75	6.82	44195	9.95	8.37	77295
20	1750	887	19.9	18.2	13431	25.9	23.8	17575	40.4	37.3	27597
	1170	58	17.0	15.3	16903	22.1	20.0	22118	34.4	31.4	34730
	(20.50 actual) 100	5.0	3.35	2.60	33520	4.63	3.62	46792	8.01	6.35	82011
25	1750	70	16.9	15.2	13462	21.9	19.9	17578	34.2	31.3	27618
	1170	46	14.0	12.4	16417	18.7	16.7	22122	29.2	26.3	34756
	(24.50 actual) 100	4.0	2.82	2.12	32790	3.86	2.94	45421	6.70	5.18	79871
30	1750	58	14.1	12.5	13356	17.9	16.1	17166	28.5	25.8	27433
	1170	39	11.9	10.3	16491	14.9	13.2	21058	24.4	21.7	34523
	(29.50 actual) 100	3.3	2.30	1.68	31233	2.94	2.21	41088	5.49	4.12	76598
40	1750	43	10.8	9.31	13399	14.0	12.1	17507	21.8	19.0	27471
	1170	29	9.18	7.62	16416	12.1	10.2	22032	18.8	16.0	34571
	100	2.5	1.94	1.28	32194	2.64	1.77	44687	4.54	3.11	78246
50	1750	35	8.74	7.23	13011	11.3	9.46	17028	17.4	14.8	26703
	1170	23	7.43	5.93	15966	9.84	7.96	21429	15.1	12.4	33605
	100	2.0	1.62	0.99	31109	2.22	1.38	43469	3.79	2.41	75935
60	1750	29	7.00	5.66	12220	9.05	7.40	15982	13.9	11.6	25107
	1170	19	6.03	4.69	15143	7.63	6.01	19430	12.1	9.78	31597
	100	1.7	1.27	0.74	28131	1.75	1.04	39244	3.01	1.83	69119
70	1750	21	5.74	4.48	11300	7.37	5.85	14743	11.4	9.22	23235
	1170	14	4.96	3.71	13979	6.24	4.76	17921	9.98	7.76	29240
	100	1.3	1.09	0.60	26222	1.48	0.82	36215	2.59	1.46	64584

Specify model number when ordering reducer size 870, 880 or 8100. Refer to page 19 for how to build a model number.

Available bore codes - Size 870

Fraction Size	2-7/16"	2-1/2"	2-11/16"	2-15/16"	3"	3-7/16"	3-15/16"
Decimal Size	2.438	2.500	2.688	2.938	3.000	3.438	3.938
Output Bore Code	39	40	43	47	48	55	63

Available bore codes - Size 880

Fraction Size	3-7/16"	3-15/16"	4-3/16"	4-7/16"
Decimal Size	3.438	3.938	4.188	4.438
Output Bore Code	55	63	67	71

Available bore codes - Size 8100

Fraction Size	3-7/16"	3-15/16"	4-7/16"	4-15/16"	5-7/16"
Decimal Size	3.438	3.938	4.438	4.938	5.438
Output Bore Code	55	63	71	79	87

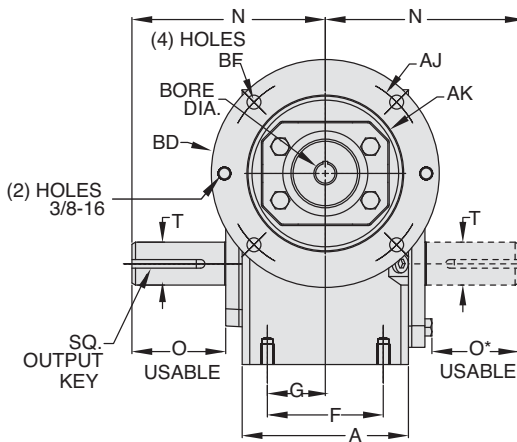
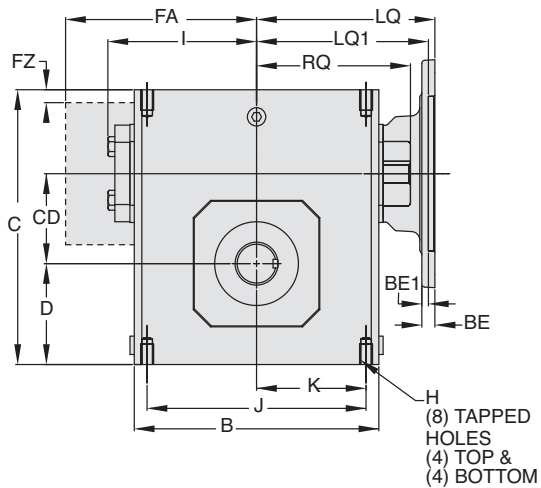


GR Series Dimensions

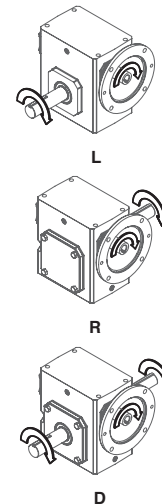
Styles: BMQ, BM, B

**CAST IRON
GR SERIES**

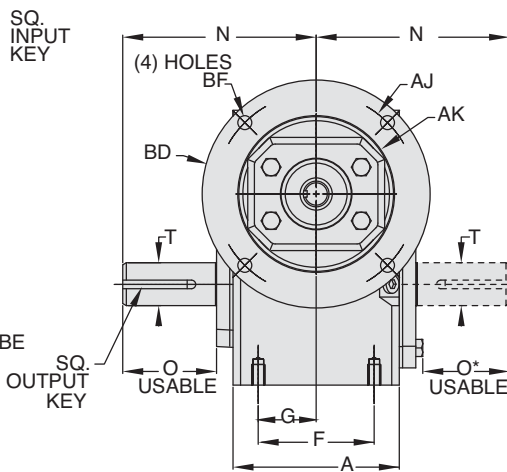
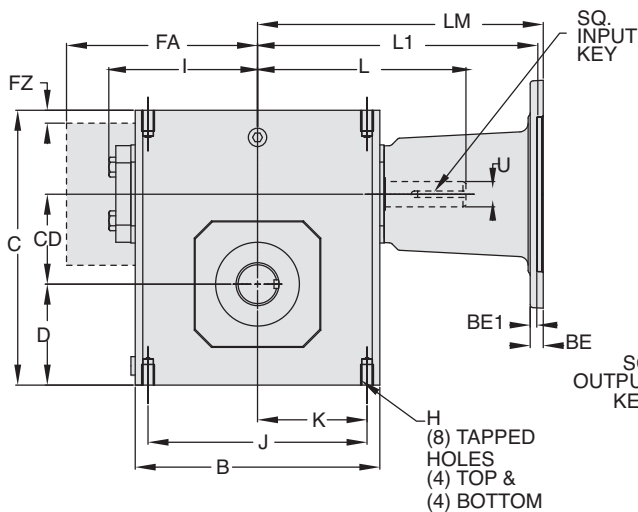
Style BMQ



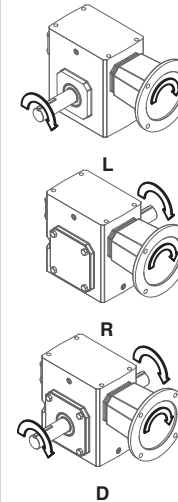
ASSEMBLIES



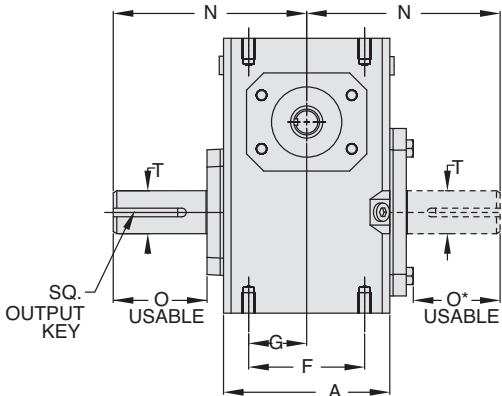
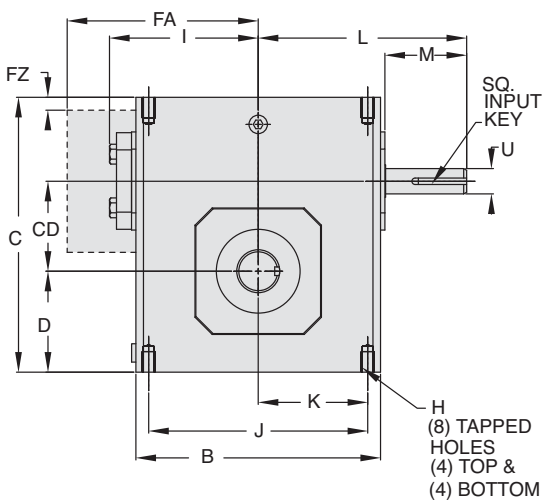
Style BM



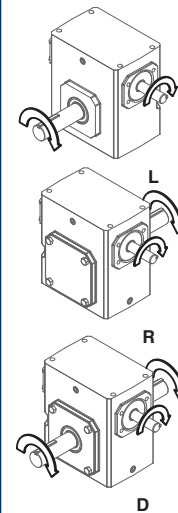
ASSEMBLIES



Style B



ASSEMBLIES



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

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