

800 Series Gear Reducer Model Number Nomenclature

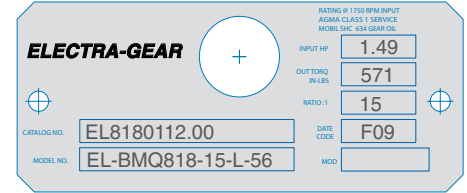
All new stock and custom 800 Series Grove Gear and Electra-Gear worm gear reducers are identified by a model number. The model number appears on the nameplate and describes pertinent features of the reducer. An example follows, along with a listing of the various letters and positions used.

NOTE: All reducers also have a catalog number—for example EL8130001 and GR8130001. Reducers and renewal parts should be ordered by catalog number. If a stock reducer has been Factory modified by the addition of an optional base for example, the modification number T818EL is stamped in the blank column of the nameplate. Accessories that are field installed will not be noted on the nameplate.

Catalog numbers 3000 and higher (for example, GR8133000 and NH8133000) are WASHGUARD® reducers for washdown service.

Catalog numbers 5000 and higher (for example, GR8135000 and EL8135000) are custom reducers manufactured for a specific application. The machinery or equipment manufacturer should be contacted for replacement reducers. Renewal parts can be ordered by catalog number.

TYPICAL NAMEPLATE
(Electra-Gear shown)



Series Code	Style	Size	Ratio	Output Shaft Orientation	Motor Flange	Output Bore Code																																																																																						
<p>GR - Grove Gear IRONMAN Cast Iron Reducers</p> <p>NH - Grove Gear IRONMAN Narrow Housing Cast Iron Reducers</p> <p>EL - Electra-Gear Aluminum Reducers</p> <p>GRG - Grove Gear Flexaline Interchange (Sizes 821, 826, 832)</p> <p>GRL - Leeson IRONMAN Interchange (Sizes 821, 826, 832)</p>	<p>SOLID OUTPUT SHAFT</p> <p>BMQ – Motorized, Quill Input</p> <p>BM – Motorized, Flexible Coupling Input</p> <p>B – Non-Flanged</p> <p>See pages 10, 11, 14, 15 for other styles</p> <p>HOLLOW OUTPUT SHAFT</p> <p>HMQ – Motorized, Quill Input</p> <p>HM – Motorized, Flexible Coupling Input</p> <p>H – Non-Flanged</p> <p>See pages 12, 13, 16, 17 for other styles.</p> <p>WASHGUARD STYLES</p> <p>W prefix; i.e. WBMQ denotes WASHDOWN Reducer</p> <p>S prefix; i.e. SHMQ denotes All-Stainless Steel Reducer</p>	<p>See Selection Tables on pages 22-48, for all available ratios.</p>	<p>800 SERIES CENTER DISTANCES</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Size</th> <th>Center Distance (Inches)</th> </tr> </thead> <tbody> <tr><td>813</td><td>1.33</td></tr> <tr><td>815**</td><td>1.54</td></tr> <tr><td>818</td><td>1.75</td></tr> <tr><td>821</td><td>2.06</td></tr> <tr><td>824</td><td>2.38</td></tr> <tr><td>826</td><td>2.62</td></tr> <tr><td>830</td><td>3.00</td></tr> <tr><td>832</td><td>3.25</td></tr> <tr><td>842</td><td>4.25</td></tr> <tr><td>852</td><td>5.25</td></tr> <tr><td>860</td><td>6.00</td></tr> <tr><td>870*</td><td>7.00</td></tr> <tr><td>880*</td><td>8.00</td></tr> <tr><td>8100*</td><td>10.00</td></tr> </tbody> </table> <p>* GR Series only ** Not available in EL Series</p>	Size	Center Distance (Inches)	813	1.33	815**	1.54	818	1.75	821	2.06	824	2.38	826	2.62	830	3.00	832	3.25	842	4.25	852	5.25	860	6.00	870*	7.00	880*	8.00	8100*	10.00	<p>L – Left-hand Output Shaft*</p> <p>R – Right-hand Output Shaft*</p> <p>D – Double Output Shaft</p> <p>H – Hollow Output Shaft</p> <p>* Viewed from drive end of reducer.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Input Code</th> <th colspan="2">For Input Type</th> </tr> <tr> <th>Single Input</th> <th>Dual Input</th> <th colspan="2"></th> </tr> </thead> <tbody> <tr> <td>blank</td> <td>A</td> <td colspan="2">non-motorized</td> </tr> <tr> <td>48**</td> <td>48A</td> <td colspan="2">48CZ</td> </tr> <tr> <td>56</td> <td>56A</td> <td colspan="2">56C</td> </tr> <tr> <td>140</td> <td>140A</td> <td colspan="2">143-5TC</td> </tr> <tr> <td>180</td> <td>180A</td> <td colspan="2">182-4TC</td> </tr> <tr> <td>210</td> <td>210A</td> <td colspan="2">213-5TC</td> </tr> <tr> <td>250</td> <td>250A</td> <td colspan="2">254-6TC</td> </tr> <tr> <td>63</td> <td rowspan="5" style="text-align: center;">Contact Factory</td> <td colspan="2">D63D B5</td> </tr> <tr> <td>71</td> <td colspan="2">D71D B5</td> </tr> <tr> <td>80</td> <td colspan="2">D80D B5</td> </tr> <tr> <td>90</td> <td colspan="2">D90D B5</td> </tr> <tr> <td>110</td> <td colspan="2">D100LD/D112MD B5</td> </tr> <tr> <td>132</td> <td></td> <td colspan="2">D132D</td> </tr> </tbody> </table> <p>** Not available in EL Series</p>	Input Code		For Input Type		Single Input	Dual Input			blank	A	non-motorized		48**	48A	48CZ		56	56A	56C		140	140A	143-5TC		180	180A	182-4TC		210	210A	213-5TC		250	250A	254-6TC		63	Contact Factory	D63D B5		71	D71D B5		80	D80D B5		90	D90D B5		110	D100LD/D112MD B5		132		D132D		<p>Hollow Shaft Only</p> <p>See bottom right hand pages of Max Ratings Tables starting on page 27.</p>
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Sample Model Numbers

Solid Output Shaft - GR Series

Cast iron, single reduction, 2.38" reducer with 56C motorized quill input, left-hand output shaft, 30:1 ratio.

GR - BMQ 824 - 30 - L - 56
Series Style Size Ratio Shaft Orientation Input Type

Hollow Output Shaft - EL Series

Aluminum, single reduction, 1.75" reducer with 56C motorized quill input, 1.00" hollow output bore, 10:1 ratio.

EL - HMQ 818 - 10 - H - 56 - 16
Series Style Size Ratio Shaft Orientation Input Type Output Bore Code



INTERCHANGE GUIDE

SINGLE REDUCTION

CAST IRON
GR SERIES

CAST IRON
NH SERIES

ALUMINUM
EL SERIES

Reducer Style

Replaces Original
GROVE GEAR
OE Series Reducer Style

Replaces Original
ELECTRA-GEAR
Reducer Style

B	U	M
BM & BMQ	UFC & UF	MC & MSC
B★	N/A	ML
BM & BMQ★	N/A	MLC & MLSC
T & U	Z & UB	A
TM & TMQ	ZFC & ZF	AC & ASC
T★	N/A	AL
TM & TMQ★	N/A	ALC & ALSC
UM & UMQ	UBFC & UBF	NEW
J	J	JB
JM & JMQ	JFC & JF	JBC & JBSC
VL & VH	SL & SH	B
VLM & VLMQ	SLFC & SLF	BC & BSC
VHM	SHFC	N/A
VHMQ	SHF	N/A
F	K & V	N/A
FM & FMQ	KFC & KF / VFC & VF	N/A
C	P	N/A
CM & CMQ	PFC & PF	N/A
FE	E	N/A
FEM & FEMQ	EFC & EF	N/A
H	Y	MH_ & H_
HM & HMQ	YFC & YF	MH_C/ MH_SC & H_C/H_SC
JH	N/A	JBH_
JHM & JHMQ	N/A	JBH_C & JBH_SC
VLHM & VLHMQ	SHFC & SHF	BH_C & BH_SC
FH	M	RH_
FHM & FHMQ	MFC & MF	RH_C & H_C/H_SC & RH_SC
FR	N/A	NEW
FRM & FRMQ	N/A	New
FL	N/A	RL
FLM & FLMQ	N/A	RLC & RLSC
BL (Torque Limiter Reducer)	UL	N/A
BLM & BLMQ (Torque Limiter Reducer)	ULFC & ULF	N/A
ABC	N/A	ABC (contact factory)

Accessory

Horizontal Base Kit (T & U)	Horizontal Base Kit (Z & UB)	Horizontal Base Kit (AK Kit #'s)
Vert. Output Shaft Base Kit (VL & VH)	Vert. Output Shaft Base Kit (SL & SH)	Vert. Output Shaft Base Kit (BK Kit #'s)
Vertical Input Shaft Base Kit (J)	Vert. Input Shaft Base Kit (J)	Vert. Input Shaft Base Kit (JBK Kit #'s)
Cast Iron Output Flange (F)	Cast Iron Output Flange (K & V)	Cast Iron Output Flange (Square)
ABC Base Kit	N/A	ABC
Cast Iron Output Flange for Solid Output Shaft Styles (FR)	N/A	Cast Iron Output Flange (Round)
Coupling Input "C" Flange Kit – Single Red.✚	C-Flange Mounting Kit	N/A
Coupling Input "C" Flange Kit – Double Red.✚	C-Flange Mounting Kit	N/A
Hollow Shaft Tie Rod Kit	Hollow Shaft Tie Rod Kit	Hollow Shaft Tie Rod Kit
Hollow Shaft Torque Arm Bracket	Hollow Shaft Torque Arm Bracket	Hollow Shaft Torque Arm Bracket (TAK Kit #'s)

★ Confirm required output shaft length
✚ Convert Style B to BM using coupling input kit

SEE PAGE 111 FOR DOUBLE REDUCTION



Style BMQ



Style TMQ



Style JMQ



Style FMQ



Style CMQ



Style FEMQ



Style HMQ



Style JHMQ



Style VLHMQ

ELECTRA-GEAR

Aluminum Gear Reducers Built For Industrial Use

ALL FEATURES SHOWN ARE SAME FOR ALL GR, NH AND EL SERIES EXCEPT WHERE NOTED.

Cast aluminum NEMA C-input with machined fits for precision alignment of motors and bearings. (EL Series)

Cast iron NEMA C-input flange with machined fits for precision alignment of motors and bearings. (GR & NH Series)

Push-off holes drilled and tapped into flange for quick motor removal on quill input styles (56 & 140TC frames).

Premium Grade 5 zinc-plated bolts used throughout.

Seal Guard** on quill-input styles protects input seal from damage during motor installation.

** Sizes 813 through 852 only

EL Series One piece 356T cast aluminum housing to provide strength and rigidity. Polished finish also available.

GR and NH Series IRONMAN fine-grained, one piece cast iron housing for rigidity and alignment. Machined for precision alignment of worm, worm gear, bearings and mounting surfaces. Superior resistance to environmental contaminants with high heat dissipation and noise reduction. BISSC certified reducer available for food service applications.

DIN1705 (CuSn45Ni4) bronze alloy provides maximum strength, lubricity and superior life.

Tapered roller bearings on output shaft for high overhung and thrust load capacities.

EL Series Mounting dimensions same as the original Electra-Gear product with an option to match the industry standard dimensions of Grove Gear.

GR and NH Series Mounting dimensions are interchangeable with Baldor 900 series, Boston Gear, Browning Raider, Falk, Morse Invader and other "industry standard" reducers.

O-rings on input and output covers eliminate gaskets, sealants and leaks.

Precision mounting surfaces and extra threaded bolt holes on top and bottom for flexibility and to accept a wide range of stock mounting accessories.

Oversized positively-retained high speed input shaft bearing for higher shock load capacity, shaft alignment and seal life. Ideal for frequent starting and reversing applications.

Single-piece, alloy steel input worm shaft. High lead angle worm is case-hardened, ground and polished for enhanced efficiency and noise reduction.

High capacity oil reservoir reduces noise, aids heat dissipation and lubricates for life. Multiple venting options for multi-position mounting. Factory filled with premium synthetic Mobil Glygoyle 460 polyalkylene glycol (PAG) lubricant.

Viton® premium quality, double lip seals provide extended life and resistance to high temperature, abrasion and chemicals. Only non-rusting rubber O.D. seals used in all exposed locations.

Robust output shaft of high strength steel alloy for superior torque and overhung load capacities.

Single output cover design provides precise centering of gear for lower noise levels and higher overall gear efficiencies. Output shaft comes out non-cover side as standard.

