

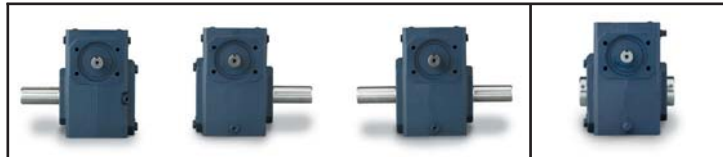
Maximum Rating Tables

Size 821 • GR, NH, EL Series



Style B

Style H



Size 821

| Ratio | Input RPM | Output RPM | Input HP | Output HP | Output Torque (lb-in) | Left Hand Catalog No. | Right Hand Catalog No. | Double Extension Catalog No. | Hollow Output Catalog No.* |
|-------|-----------|------------|----------|-----------|-----------------------|-----------------------|------------------------|------------------------------|----------------------------|
| 5 | 2500 | 500 | 4.305 | 4.043 | 510 | _8210001 | _8210013 | _8210025 | _8210501.XX |
| | 1750 | 350 | 3.653 | 3.410 | 614 | | | | |
| | 1170 | 234 | 2.873 | 2.657 | 716 | | | | |
| 7.5 | 100 | 20 | 0.433 | 0.310 | 977 | _8210002 | _8210014 | _8210026 | _8210502.XX |
| | 2500 | 333 | 3.300 | 3.051 | 577 | | | | |
| | 1750 | 233 | 2.793 | 2.562 | 692 | | | | |
| 10 | 1170 | 156 | 2.194 | 1.989 | 804 | _8210003 | _8210015 | _8210027 | _8210503.XX |
| | 100 | 13 | 0.341 | 0.230 | 1089 | | | | |
| | 2500 | 250 | 2.973 | 2.722 | 686 | | | | |
| 15 | 1750 | 175 | 2.464 | 2.235 | 805 | _8210004 | _8210016 | _8210028 | _8210504.XX |
| | 1170 | 117 | 1.905 | 1.702 | 917 | | | | |
| | 100 | 10 | 0.300 | 0.189 | 1192 | | | | |
| 20 | 2500 | 166 | 2.284 | 2.035 | 769 | _8210005 | _8210017 | _8210029 | _8210505.XX |
| | 1750 | 116 | 1.887 | 1.661 | 897 | | | | |
| | 1170 | 78 | 1.459 | 1.259 | 1017 | | | | |
| 25 | 100 | 6.7 | 0.245 | 0.138 | 1309 | _8210006 | _8210018 | _8210030 | _8210506.XX |
| | 2500 | 125 | 1.914 | 1.642 | 828 | | | | |
| | 1750 | 87 | 1.584 | 1.338 | 964 | | | | |
| 30 | 1170 | 58 | 1.229 | 1.012 | 1090 | _8210007 | _8210019 | _8210031 | _8210507.XX |
| | 100 | 5.0 | 0.226 | 0.111 | 1397 | | | | |
| | 2500 | 100 | 1.623 | 1.359 | 857 | | | | |
| 40 | 1750 | 70 | 1.333 | 1.094 | 985 | _8210008 | _8210020 | _8210032 | _8210508.XX |
| | 1170 | 46 | 1.030 | 0.820 | 1104 | | | | |
| | 100 | 4.0 | 0.200 | 0.088 | 1386 | | | | |
| 50 | 2500 | 83 | 1.359 | 1.102 | 833 | _8210009 | _8210021 | _8210033 | _8210509.XX |
| | 1750 | 58 | 1.129 | 0.896 | 968 | | | | |
| | 1170 | 39 | 0.882 | 0.677 | 1095 | | | | |
| 60 | 100 | 3.3 | 0.181 | 0.074 | 1399 | _8210010 | _8210022 | _8210034 | _8210510.XX |
| | 2500 | 62 | 1.096 | 0.829 | 836 | | | | |
| | 1750 | 43 | 0.916 | 0.674 | 971 | | | | |
| 80 | 1170 | 29 | 0.722 | 0.509 | 1097 | _8210011 | _8210023 | _8210035 | _8210511.XX |
| | 100 | 2.5 | 0.167 | 0.056 | 1401 | | | | |
| | 2500 | 50 | 0.925 | 0.670 | 845 | | | | |
| 100 | 1750 | 35 | 0.769 | 0.539 | 970 | _8210012 | _8210024 | _8210036 | _8210512.XX |
| | 1170 | 23 | 0.606 | 0.403 | 1086 | | | | |
| | 100 | 2.0 | 0.149 | 0.043 | 1359 | | | | |
| 100 | 2500 | 41 | 0.799 | 0.535 | 809 | _8210011 | _8210023 | _8210035 | _8210511.XX |
| | 1750 | 29 | 0.674 | 0.435 | 940 | | | | |
| | 1170 | 19 | 0.539 | 0.328 | 1061 | | | | |
| 100 | 100 | 1.7 | 0.145 | 0.036 | 1354 | _8210012 | _8210024 | _8210036 | _8210512.XX |
| | 2500 | 31 | 0.357 | 0.236 | 476 | | | | |
| | 1750 | 21 | 0.304 | 0.190 | 547 | | | | |
| 100 | 1170 | 14 | 0.241 | 0.141 | 609 | _8210012 | _8210024 | _8210036 | _8210512.XX |
| | 100 | 1.3 | 0.034 | 0.015 | 743 | | | | |
| | 2500 | 25 | 0.251 | 0.150 | 379 | | | | |
| 100 | 1750 | 17 | 0.217 | 0.122 | 439 | _8210012 | _8210024 | _8210036 | _8210512.XX |
| | 1170 | 11 | 0.175 | 0.091 | 491 | | | | |
| | 100 | 1.0 | 0.026 | 0.010 | 605 | | | | |

How To Build a Part Number For Size GRG821, GRL821, NH821, EL821

1. Select partial catalog number from the selection table
2. Replace leading “_” with series code (GRG, GRL, NH, EL) (see next page for codes)
3. For hollow output, replace “XX” suffix with bore code

Example:

Direct replacement to LEESON IRONMAN, style B, 5:1 ratio, left hand output
 GRL-B821-5-L
 GRL8210001

GRG = **GROVE GEAR**

- Direct replacement to Grove Gear Flexaline
- Mounting footprint 3.00" x 4.75"
- See pages 52-73 for dimensions

GRL = **IRONMAN** Interchange

- Direct replacement to LEESON IRONMAN & major brands.
- Mounting footprint 2.88" x 5.00"
- See pages 52-73 for dimensions



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



Maximum Rating Tables

Size 821 • GR, NH, EL Series

| NEMA C Input Flange ▲ | Style BM | | | Style HM | Style BMQ | | | Style HMQ | Ratio |
|------------------------|--|--|--|---|--|--|--|---|------------|
| | Left Hand Catalog No. | Right Hand Catalog No. | Double Extension Catalog No. | Hollow Output Catalog No.* | Left Hand Catalog No. | Right Hand Catalog No. | Double Extension Catalog No. | Hollow Output Catalog No.* | |
| 56C 143-5TC | <u>8210037</u> <u>8210073</u> | <u>8210049</u> <u>8210085</u> | <u>8210061</u> <u>8210097</u> | <u>8210513.XX</u> <u>8210525.XX</u> | <u>8210109</u> <u>8210145</u> | <u>8210121</u> <u>8210157</u> | <u>8210133</u> <u>8210169</u> | <u>8210537.XX</u> <u>8210549.XX</u> | 5 |
| 56C 143-5TC | <u>8210038</u> <u>8210074</u> | <u>8210050</u> <u>8210086</u> | <u>8210062</u> <u>8210098</u> | <u>8210514.XX</u> <u>8210526.XX</u> | <u>8210110</u> <u>8210146</u> | <u>8210122</u> <u>8210158</u> | <u>8210134</u> <u>8210170</u> | <u>8210538.XX</u> <u>8210550.XX</u> | 7.5 |
| 56C 143-5TC | <u>8210039</u> <u>8210075</u> | <u>8210051</u> <u>8210087</u> | <u>8210063</u> <u>8210099</u> | <u>8210515.XX</u> <u>8210527.XX</u> | <u>8210111</u> <u>8210147</u> | <u>8210123</u> <u>8210159</u> | <u>8210135</u> <u>8210171</u> | <u>8210539.XX</u> <u>8210551.XX</u> | 10 |
| 56C 143-5TC | <u>8210040</u> <u>8210076</u> | <u>8210052</u> <u>8210088</u> | <u>8210064</u> <u>8210100</u> | <u>8210516.XX</u> <u>8210528.XX</u> | <u>8210112</u> <u>8210148</u> | <u>8210124</u> <u>8210160</u> | <u>8210136</u> <u>8210172</u> | <u>8210540.XX</u> <u>8210552.XX</u> | 15 |
| 56C 143-5TC | <u>8210041</u> <u>8210077</u> | <u>8210053</u> <u>8210089</u> | <u>8210065</u> <u>8210101</u> | <u>8210517.XX</u> <u>8210529.XX</u> | <u>8210113</u> <u>8210149</u> | <u>8210125</u> <u>8210161</u> | <u>8210137</u> <u>8210173</u> | <u>8210541.XX</u> <u>8210553.XX</u> | 20 |
| 56C 143-5TC | <u>8210042</u> <u>8210078</u> | <u>8210054</u> <u>8210090</u> | <u>8210066</u> <u>8210102</u> | <u>8210518.XX</u> <u>8210530.XX</u> | <u>8210114</u> <u>8210150</u> | <u>8210126</u> <u>8210162</u> | <u>8210138</u> <u>8210174</u> | <u>8210542.XX</u> <u>8210554.XX</u> | 25 |
| 56C 143-5TC | <u>8210043</u> <u>8210079</u> | <u>8210055</u> <u>8210091</u> | <u>8210067</u> <u>8210103</u> | <u>8210519.XX</u> <u>8210531.XX</u> | <u>8210115</u> <u>8210151</u> | <u>8210127</u> <u>8210163</u> | <u>8210139</u> <u>8210175</u> | <u>8210543.XX</u> <u>8210555.XX</u> | 30 |
| 56C 143-5TC | <u>8210044</u> <u>8210080</u> | <u>8210056</u> <u>8210092</u> | <u>8210068</u> <u>8210104</u> | <u>8210520.XX</u> <u>8210532.XX</u> | <u>8210116</u> <u>8210152</u> | <u>8210128</u> <u>8210164</u> | <u>8210140</u> <u>8210176</u> | <u>8210544.XX</u> <u>8210556.XX</u> | 40 |
| 56C 143-5TC | <u>8210045</u> <u>8210081</u> | <u>8210057</u> <u>8210093</u> | <u>8210069</u> <u>8210105</u> | <u>8210521.XX</u> <u>8210533.XX</u> | <u>8210117</u> <u>8210153</u> | <u>8210129</u> <u>8210165</u> | <u>8210141</u> <u>8210177</u> | <u>8210545.XX</u> <u>8210557.XX</u> | 50 |
| 48CZ 56C 143-5TC | <u>8210190</u> <u>8210046</u> <u>8210082</u> | <u>8210202</u> <u>8210058</u> <u>8210094</u> | <u>8210214</u> <u>8210070</u> <u>8210106</u> | <u>8210570.XX</u> <u>8210522.XX</u> <u>8210534.XX</u> | <u>8210226</u> <u>8210118</u> <u>8210154</u> | <u>8210238</u> <u>8210130</u> <u>8210166</u> | <u>8210250</u> <u>8210142</u> <u>8210178</u> | <u>8210582.XX</u> <u>8210546.XX</u> <u>8210558.XX</u> | 60 |
| 48CZ 56C | <u>8210191</u> <u>8210047</u> | <u>8210203</u> <u>8210059</u> | <u>8210215</u> <u>8210071</u> | <u>8210571.XX</u> <u>8210523.XX</u> | <u>8210227</u> <u>8210119</u> | <u>8210239</u> <u>8210131</u> | <u>8210251</u> <u>8210143</u> | <u>8210583.XX</u> <u>8210547.XX</u> | 80 |
| 48CZ 56C | <u>8210192</u> <u>8210048</u> | <u>8210204</u> <u>8210060</u> | <u>8210216</u> <u>8210072</u> | <u>8210572.XX</u> <u>8210524.XX</u> | <u>8210228</u> <u>8210120</u> | <u>8210240</u> <u>8210132</u> | <u>8210252</u> <u>8210144</u> | <u>8210584.XX</u> <u>8210548.XX</u> | 100 |

For input/ output shaft overhung load and thrust load ratings, refer to pages 419-422.

▲ Consult Factory for other motor flanges available.

* Catalog numbers are for hollow output shaft reducers.

When ordering, substitute the XX suffix with the required output bore code.

Available bore codes

| Fraction Size | 1" | 1-1/8" | 1-3/16" | 1-1/4" | 1-7/16" | 1-1/2" |
|------------------|-------|--------|---------|--------|---------|--------|
| Decimal Size | 1.000 | 1.125 | 1.188 | 1.250 | 1.438 | 1.500 |
| Output Bore Code | 16 | 18 | 19 | 20 | 23 | 24 |

Single Reduction
Worm Gear Reducers

Double Reduction
Worm - Worm Gear Reducers

Double Reduction
Helical - Worm Gear Reducers

WASHGUARD® Reducers
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Accessories and
Additional Capabilities

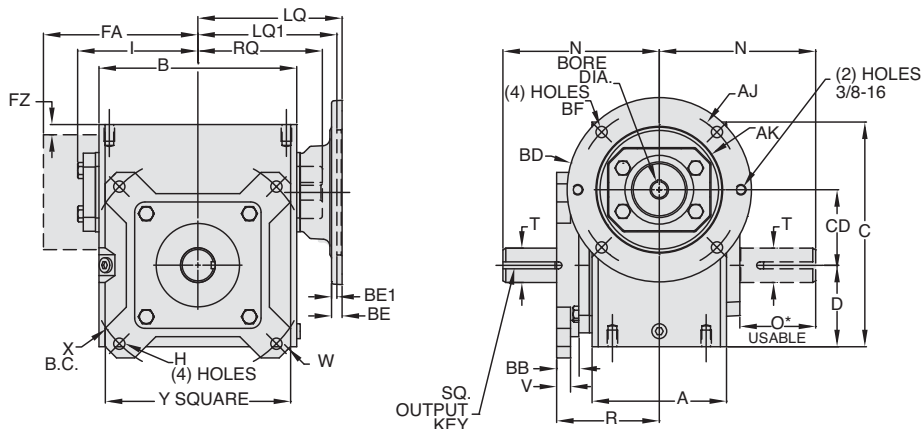


GR Series Dimensions

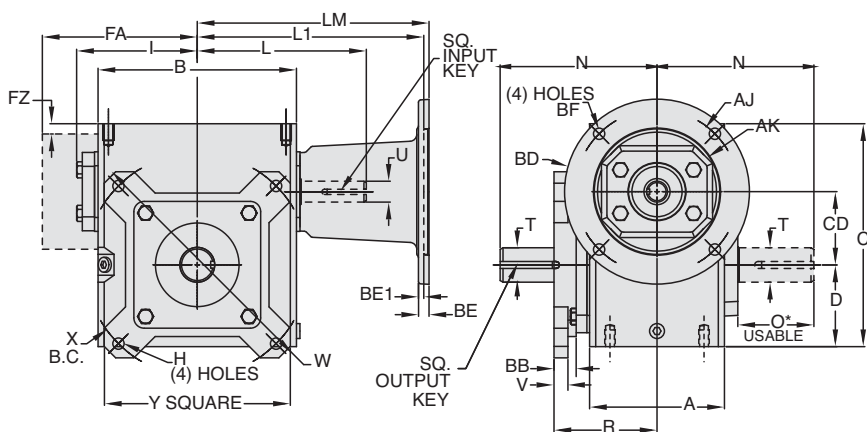
Styles: FMQ, FM, F

CAST IRON
GR SERIES

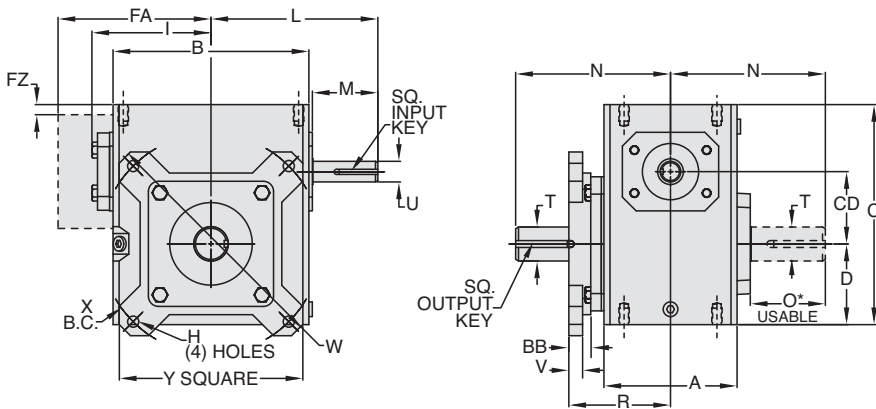
Style FMQ



Style FM

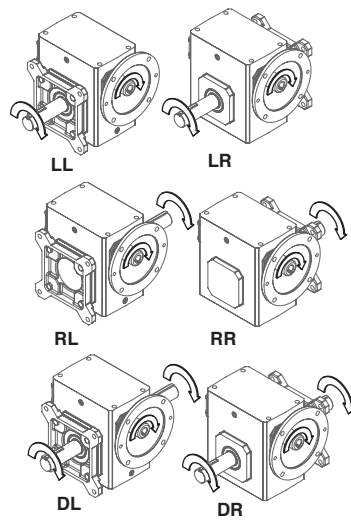


Style F

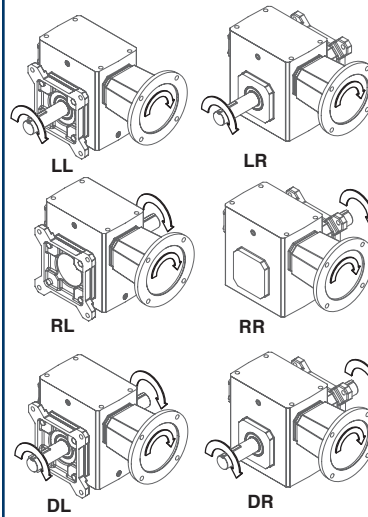


Sizes 813-8100 output flange must be mounted at Factory on styles FMQ, FM, F.

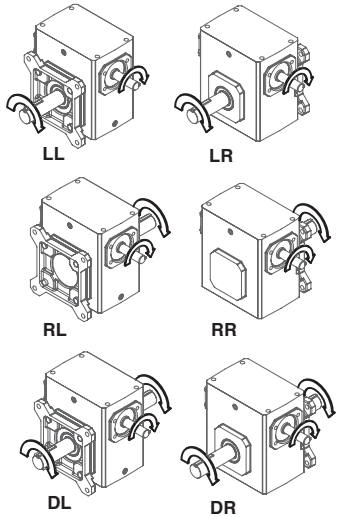
ASSEMBLIES



ASSEMBLIES



ASSEMBLIES



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

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



STYLE FMQ, FM, F DIMENSIONS (Inches)

| Series | A | B | BB | C | D | CD | FA▼ | FZ▼ | H | I | L | M | N | O | R | V | W | X | Y | T MAX+ -0.000 +0.0025 | U +0.000 -0.0015 | Input Key* | Output Key |
|--------|------|-------|-------|-------|-------|-------|-------|------|------|------|-------|------|-------|------|------|------|-------|-------|-------|-----------------------------|------------------------|--------------|--------------|
| GR813 | 2.82 | 3.80 | 0.675 | 4.66 | 1.72 | 1.33 | N/A | N/A | 0.03 | 2.61 | 3.82 | 1.76 | 4.00 | 1.94 | 2.52 | 0.38 | 5.92 | 5.00 | 4.50 | 0.625 | 0.500 | 1/8 x 1.00 | 3/16 x 1.50 |
| GR815 | 3.44 | 4.88 | 0.675 | 5.38 | 1.91 | 1.54 | N/A | N/A | 0.03 | 3.14 | 4.35 | 1.76 | 4.31 | 1.90 | 2.87 | 0.38 | 5.88 | 5.00 | 4.50 | 0.750 | 0.625 | 3/16 x 1.38 | 3/16 x 1.50 |
| GR818 | 3.56 | 5.06 | 0.925 | 5.75 | 2.06 | 1.75 | N/A | N/A | 0.03 | 3.24 | 4.45 | 1.76 | 4.31 | 1.84 | 3.18 | 0.38 | 6.64 | 5.88 | 5.00 | 0.875 | 0.625 | 3/16 x 1.38 | 3/16 x 1.38 |
| GR821 | 3.81 | 5.80 | 1.24 | 6.38 | 2.28 | 2.06 | N/A | N/A | 0.41 | 3.61 | 4.82 | 1.76 | 4.68 | 2.08 | 3.69 | 0.44 | 7.88 | 7.00 | 5.99 | 1.000 | 0.625 | 3/16 x 1.38 | 1/4 x 1.44 |
| GR824 | 4.06 | 6.12 | 1.560 | 6.94 | 2.50 | 2.38 | N/A | N/A | 0.41 | 3.77 | 5.51 | 2.38 | 5.14 | 2.44 | 3.73 | 0.44 | 8.39 | 7.50 | 6.27 | 1.125 | 0.750 | 3/16 x 1.63 | 1/4 x 1.75 |
| GR826 | 4.84 | 7.12 | 0.796 | 8.00 | 2.94 | 2.63 | N/A | N/A | 0.41 | 4.34 | 6.07 | 2.38 | 5.63 | 2.52 | 3.70 | 0.50 | 8.88 | 8.00 | 6.67 | ▲ | 0.750 | 3/16 x 1.63 | 1/4 x 1.75 |
| GR830 | 5.25 | 8.12 | 0.636 | 8.88 | 3.25 | 3.00 | N/A | N/A | 0.41 | 4.84 | 6.57 | 2.38 | 6.75 | 3.36 | 3.78 | 0.50 | 9.89 | 9.00 | 7.37 | 1.250 | 0.875 | 3/16 x 1.63 | 1/4 x 1.75 |
| GR832 | 5.75 | 8.50 | 0.636 | 9.38 | 3.50 | 3.25 | N/A | N/A | 0.41 | 5.02 | 6.76 | 2.38 | 7.06 | 3.42 | 4.03 | 0.50 | 9.89 | 9.00 | 7.37 | ▲ | 0.875 | 3/16 x 1.63 | 3/8 x 2.25 |
| GR842 | 6.13 | 10.25 | 0.940 | 11.38 | 4.44 | 4.25 | N/A | N/A | 0.56 | 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 | 1.340 | 14.00 | 5.12 | 5.25 | N/A | N/A | 0.69 | 7.50 | 10.88 | 3.38 | 9.16 | 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 | 2.603 | 16.50 | 6.50 | 6.00 | 11.13 | 0.33 | 0.69 | 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 | 2.770 | 18.91 | 7.59 | 7.00 | 11.37 | 0.35 | 0.78 | 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 | 3.090 | 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 | 3.298 | 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? | Output Key Needed? | All Other Features | Grove Gear Flexaline Interchange | LEESON IRONMAN Interchange | Replace With Series Code Below: |
|------|-------------------------------|----------------------------|--------------------|--------------------|----------------------------------|----------------------------|---------------------------------|
| 821 | Identical | Identical | Identical | Identical | ✓ | ✓ | GRG |
| | | | | | | | GRL |
| 826 | 1.250" | Identical | Identical | Identical | ✓ | ✓ | GRG |
| | 1.125" | | | | | | GRL |
| 832 | 1.500" | Identical | 3/8 x 2.63 | Identical | ✓ | ✓ | GRG |
| | 1.375" | | 5/16 x 2.63 | | | | 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)

| Series | LM | | L1 | | LQ 48CZ/ 56C/140TC | 180TC | LQ1 210TC | 250TC | RQ | | |
|--------|------|---------------|-----------------|-------|--------------------------|-------|--------------|-------|--------------------|-------|------|
| | 48CZ | 56C/ 140TC | 180TC/ 210TC | 250TC | | | | | 48CZ/ 56C/140TC | 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 | Ajb | AK | BD | BE | BE1 | Bore Dia. | Keyway◆ | BFB |
|-------|------|------|------|------|------|-----------|-------------|------|
| 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 | 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)◊

| 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.

Single Reduction
Worm Gear Reducers

Double Reduction
Worm - Worm Gear Reducers

Double Reduction
Helical - Worm Gear Reducers

WASHGARD® Reducers
and GEAR-MOTOR™

Ratio Multipliers

Accessories and
Additional Capabilities