

The 250 motor is a permanent magnet gearmotor utilizing barium ferrite 2 pole field magnets. Carbon brushes provide long life, quiet operation and low starting voltage. The rotor is supported by permanently lubricated sintered bronze bearings. The 250 motor is available in a wide range of speeds and is an excellent choice for applications requiring reliability and quiet operation at low cost.

#### Features:

Highest torque pear-shaped DC motor • Rugged die cast gear housing • Output shaft may extend from front, rear, or both ends and is supported by bronze sleeve bearings • Mounting is compatible with other pear-shaped motors • Integral RFI filtering can be furnished • Standard models totally enclosed for protection against contaminants • DC drive may be customized to suit special requirements • Options available... consult factory



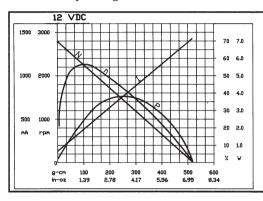
Crystal Lake, Illinois 60039 USA ■ 815/459-3080 FAX 815/459-3227

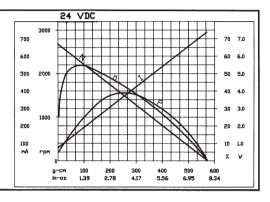
Toll Free: 1-800-228-6207
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# Specifications

#### Rated Torque

Curves below typify rated torque outputs for standard 12 and 24 volt motors. Values may vary  $\pm 15\%$  and are to be used only as a guide to determine available performance.





No Load Rotor Speed 12V-2,800 RPM 24V-2,800 RPM

#### Voltage

Rated Voltage Operating Range

12 VDC 9-18 volts 24VDC 9-30 volts

#### **Current Draw**

Voltage Rated Load No Load 12 VDC 470mA 80mA 24 VDC 240mA 50mA

Current draw may be higher in certain units depending on the type and amount of lubrication used in the gear trains.

## Ambient Operating Temp. Range -20°c to +60°c

#### Lubrication

Permanently lubricated. Special lubricants available for operation under -20°c...consult factory (-40°c min.)

#### Directon of Rotation

DC Motors may be operated in either direction depending on polarity as applied to the terminals. Direction of rotation of the output shaft with respect to polarity markings of the terminals will depend upon the number of gear reductions used in the gear train. Instantaneous reversing is not recommended in order to provide maximum brush life.

Bi-directional DC Motors available.

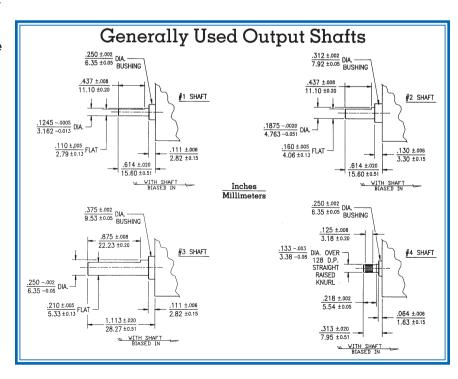
#### Dielectric and Insulation Resistance

Dielectric: 1000 volts RMS for one minute between terminals and case. Insulation Resistance; 10 megohm minimum measured with 500 VDC applied.

#### R.F.I.

The 250 motor is available with an integrally assembled radio frequency filter to suppress RF noise and enhance brush life.

### Output Shaft Options Available



This data sheet is intended for design purposes only. Actual motor performance characteristics, shaft design and optional features will depend upon specific requirements of the application. Consult factory for sample information or assistance in establishing your specifications.

12/03