

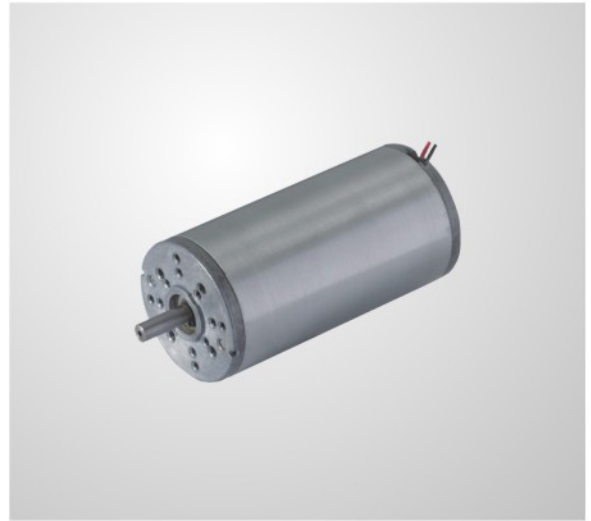
## PM063KG Brush DC Motor Series

### General Features

- Size 63 mm
- Ball Bearing
- Torques up to 320.00 Oz-in Peak, 46.00 Oz-in continuous
- Speeds up to 3700 RPM
- Voltage rating up to 24 Vdc
- 2 Pole Brush Design
- Class F rated construction

### Available Options

- Encoder - IMS Q or EQM35 Series
- Connectors and Matting cables
- Custom Shaft ends
- Custom Winding (Voltage or Current)
- Gearbox - IMS EL60 Series



### Technical and Performance Data

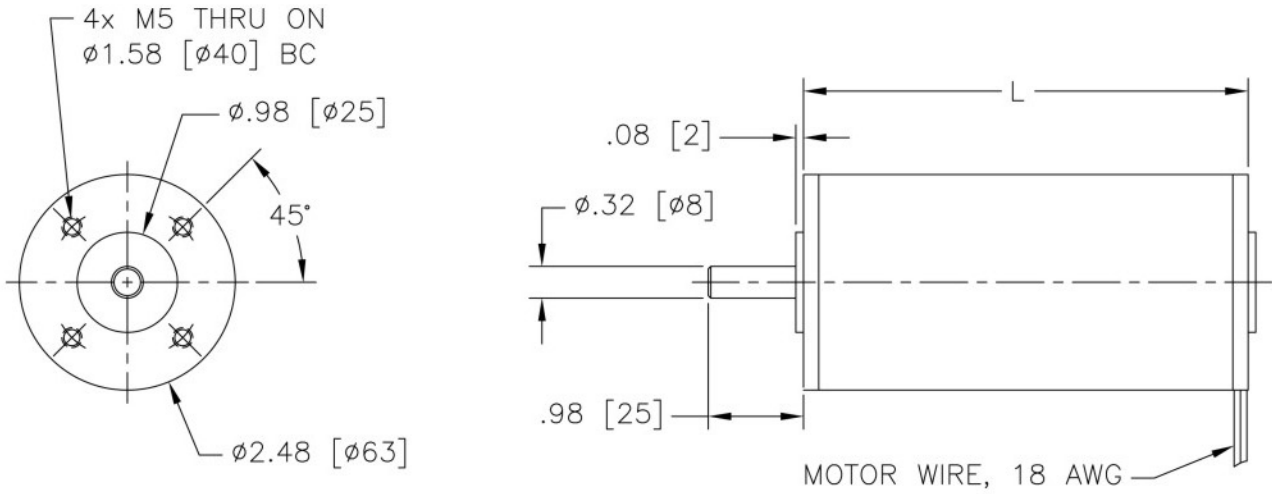
| Model Number                     |                        | PM063KG150 | PM063KG100 | PM063KG250 | PM063KG200 |
|----------------------------------|------------------------|------------|------------|------------|------------|
| <b>General</b>                   |                        |            |            |            |            |
| Terminal Voltage                 | Vdc                    | 12.00      | 24.00      | 12.00      | 24.00      |
| Continuous Stall Torque          | Oz-in                  | 20.52      | 23.61      | 39.30      | 46.30      |
|                                  | Nm                     | 0.14       | 0.17       | 0.28       | 0.33       |
| Continuous Current (3)           | Amps                   | 5.93       | 3.41       | 10.63      | 6.14       |
| Peak Stall Torque                | Oz-in                  | 102.01     | 135.38     | 217.45     | 324.10     |
|                                  | Nm                     | 0.72       | 0.96       | 1.54       | 2.29       |
| Peak Current (3)                 | Amps                   | 27.36      | 18.11      | 54.57      | 40.50      |
| Rated Speed @ Terminal Voltage   | RPM                    | 3100       | 3250       | 3100       | 3300       |
| Rated Torque @ Rated Speed       | Oz-in                  | 18.00      | 18.00      | 30.00      | 34.00      |
|                                  | Nm                     | 0.13       | 0.13       | 0.21       | 0.24       |
| Rated Output Power @ Rated Speed | Watts                  | 41         | 43         | 69         | 83         |
| Thermal Resistance               | °C/W                   | 7.5        | 7.5        | 5.0        | 5.0        |
| <b>Electrical</b>                |                        |            |            |            |            |
| Torque Constant (± 10%), (2)     | Oz-in/Amp              | 4.25       | 8.51       | 4.54       | 9.05       |
|                                  | Nm/Amp                 | 0.0300     | 0.0601     | 0.0320     | 0.0639     |
| Voltage Constant (± 10%), (2)    | V/KRPM                 | 3.15       | 6.30       | 3.36       | 6.70       |
|                                  | V s/rad                | 0.0300     | 0.0601     | 0.0320     | 0.0639     |
| Resistance (± 15%), (2)          | Ohms                   | 0.44       | 1.33       | 0.19       | 0.60       |
| Inductance (± 15%), (2)          | mH                     | 1.00       | 2.90       | 0.50       | 1.50       |
| <b>Mechanical</b>                |                        |            |            |            |            |
| Inertia                          | Oz-In-Sec <sup>2</sup> | 0.005664   | 0.005664   | 0.010621   | 0.010621   |
|                                  | kg m <sup>2</sup>      | 4.00E-05   | 4.00E-05   | 7.50E-05   | 7.50E-05   |
| Maximum Speed (1)                | RPM                    | 3700       | 3700       | 3500       | 3500       |
| Weight                           | Oz                     | 35.3       | 35.3       | 60.0       | 60.0       |
|                                  | gm                     | 1000.00    | 1000.00    | 1700.00    | 1700.00    |
| Length                           | Inch                   | 3.74       | 3.74       | 4.92       | 4.92       |
|                                  | mm                     | 95.00      | 95.00      | 125.00     | 125.00     |

(1) Maximum Speed can be limited by bus voltage and feedback types

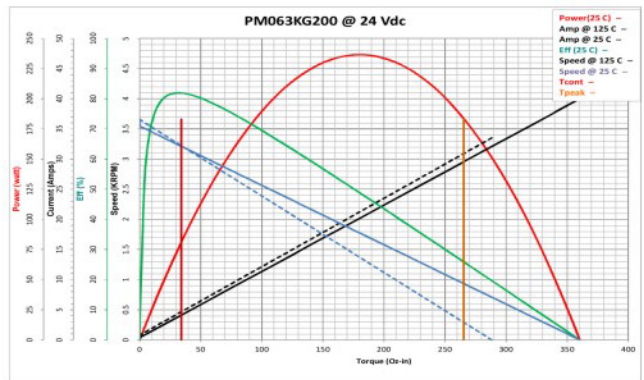
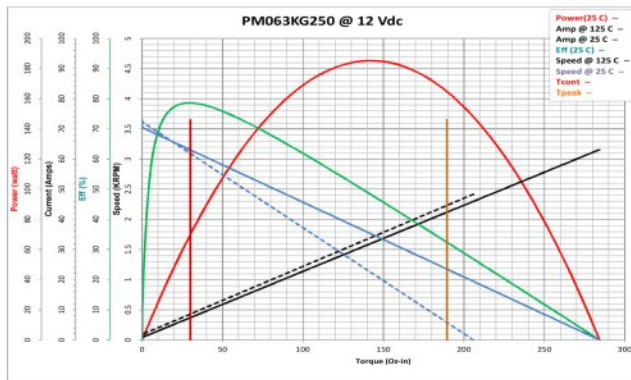
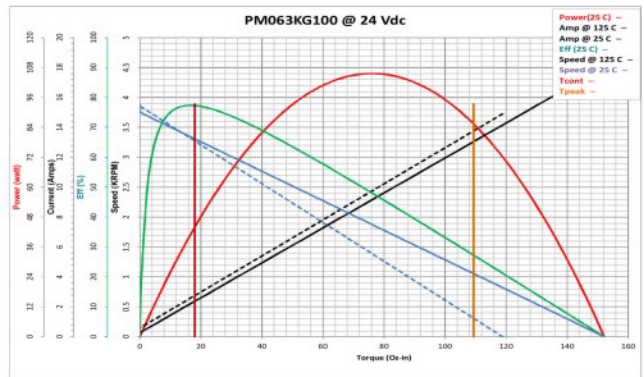
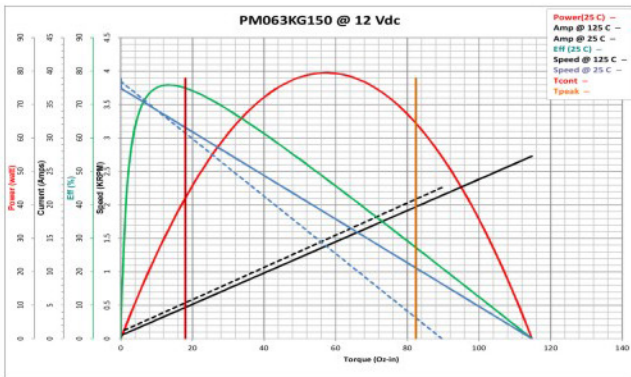
(2) Measure values at 20 °C

(3) Current values are at maximum allowable winding temperature 125 °C

## Outline Drawing and Dimensional Data



## Performance Curves



\* Motor performance curves may vary with the drive technology used

\*\* Motor performance curves may vary based upon the quality of the input voltage