

PM100FG Brush DC Motor Series

General Features

- Size 100 mm
- Ball Bearing
- Torques up to 1480.00 Oz-in Peak, 290.00 Oz-in continuous
- Speeds up to 3900 RPM
- Voltage rating up to 48 Vdc
- 4 Pole Brush Design
- Class F rated construction
- RoHS and CE compliant

Available Options

- Encoder - IMS Q or EQM35 Series
- Connectors and Matting cables
- Custom Shaft ends
- Custom Winding (Voltage or Current)
- Gearbox - IMS EL90 Series
- Custom mounting



Technical and Performance Data

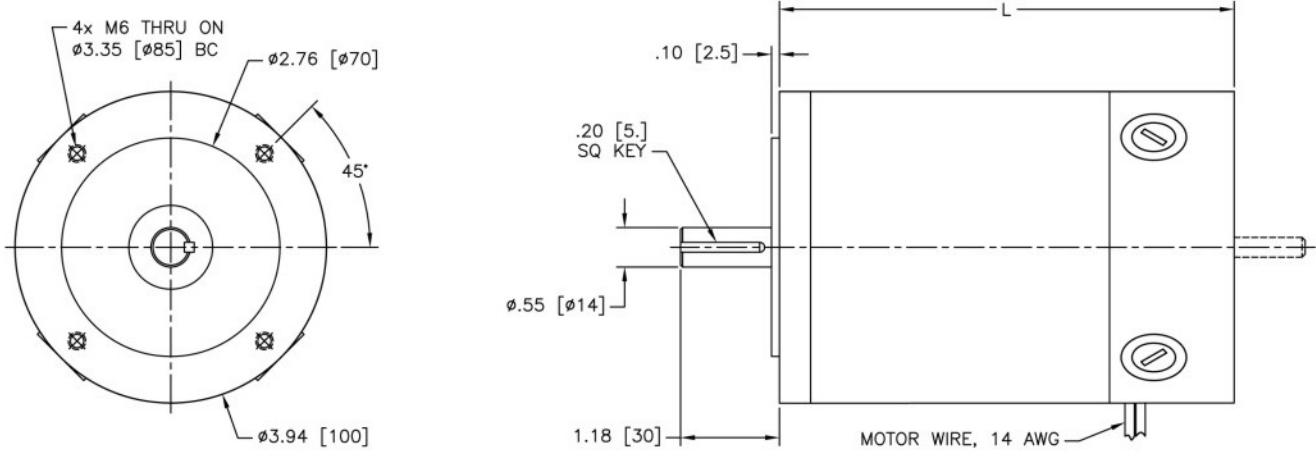
Model Number		PM100FG100	PM100FG200	PM100FG300
General				
Terminal Voltage	Vdc	48.00	48.00	48.00
Continuous Stall Torque	Oz-in	127.92	230.37	297.58
	Nm	0.90	1.63	2.10
Continuous Current (3)	Amps	9.42	16.97	21.92
Peak Stall Torque	Oz-in	639.59	1151.83	1487.88
	Nm	4.52	8.13	10.51
Peak Current (3)	Amps	44.76	80.60	104.12
Rated Speed @ Terminal Voltage	RPM	3600	3600	3600
Rated Torque @ Rated Speed	Oz-in	100.00	195.00	260.00
	Nm	0.71	1.38	1.84
Rated Output Power @ Rated Speed	Watts	266	519	692
Thermal Resistance	°C/W	2.3	1.9	1.5
Electrical				
Torque Constant (± 10%), (2)	Oz-in/Amp	16.20	16.20	16.20
	Nm/Amp	0.1144	0.1144	0.1144
Voltage Constant (± 10%), (2)	V/KRPM	12.00	12.00	12.00
	V s/rad	0.1144	0.1144	0.1144
Resistance (± 15%), (2)	Ohms	0.60	0.23	0.17
Inductance (± 15%), (2)	mH	2.00	1.20	0.70
Mechanical				
Inertia	Oz-In-Sec ²	0.099128	0.198257	0.254902
	kg m ²	7.00E-04	1.40E-03	1.80E-03
Maximum Speed (1)	RPM	3900	3900	3900
Weight	Oz	115.3	115.3	115.3
	gm	3270.00	3270.00	3270.00
Length	Inch	4.92	6.22	7.01
	mm	125.00	158.00	178.00

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

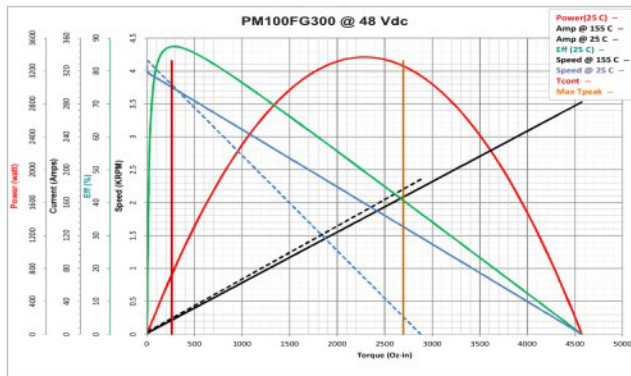
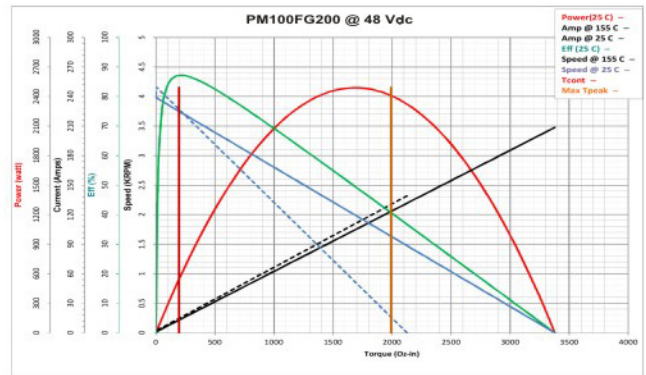
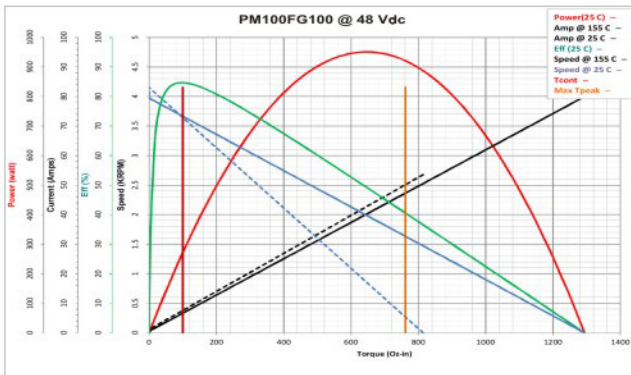
(2) Measure values at 20 °C

(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