

# PM057DG

## DC Brush Motor



### ● General Information

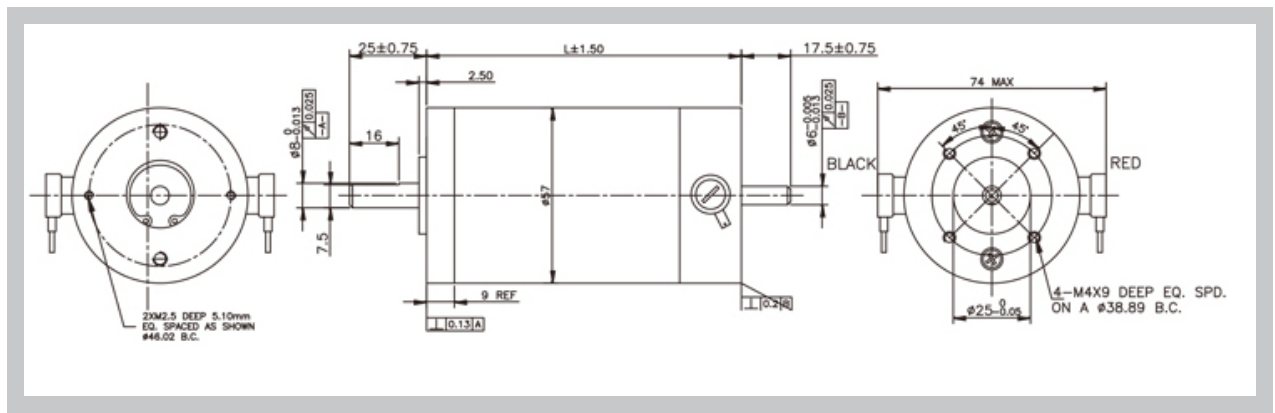
- Higher Performance Motors with Exceptional Efficiency
- Compact Size through Optimized Torque to Inertia Ratio
- Developed for High Dynamic Applications
- Best Performance with Cost Improved Design
- Various Options to Meet Your Specific Needs

### ● Specifications

Specification	PM057DG100	PM057DG210	PM057DG310	PM057DG410	PM057DG430
<i>Continuous Stall Torque (Lb. in)</i>	0.89	1.77	3.1	3.54	3.54
<i>Peak Stall Torque (Lb. in)</i>	4.43	9.29	13.28	12.74	12.74
<i>Continuous Stall Current (A)</i>	0.8	3	3.3	3.3	4.7
<i>Maximum Pulse Current (A)</i>	2.5	14.7	14.2	11.9	16.7
<i>Maximum Terminal Voltage (V)</i>	60	60	60	60	60
<i>Maximum Speed (RPM)</i>	3000	6000	5200	4700	6000
<b>Mechanical Data</b>					
<i>Rotor Moment of Inertia (Kg.m<sup>2</sup>)</i>	1.3E-05	2.7E-05	4.3E-05	5.3E-05	5.3E-05
<i>Mechanical Time Constant (MS)</i>	10.4	8.4	8.2	8	8
<i>Motor Mass (Lb)</i>	1.54	2.2	3.1	3.5	3.5
<b>Thermal Data</b>					
<i>Thermal Resistance (C/W) (Armature to Ambient)</i>	10	5	4.2	4	4
<b>Winding Specifications</b>					
<i>Torque Constant (Nm/A)</i>	0.19	0.071	0.105	0.121	0.86
<i>Voltage Constant (V/KRPM)</i>	20	7.41	11	12.7	9
<i>Terminal Resistance (OHMS)</i>	32	1.55	2	2.2	1.5
<i>Armature Inductance (mH)</i>	50	3.39	5.2	6.4	2.4
<i>Electrical Time Constant (mS)</i>	1.5	2.1	2.6	2.9	1.6
<i>Length (mm)</i>	84	102	127	140	140

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## ● Mechanical



## ● Characteristic Diagram

