

PM057DG

DC Brush Motor



● General Information

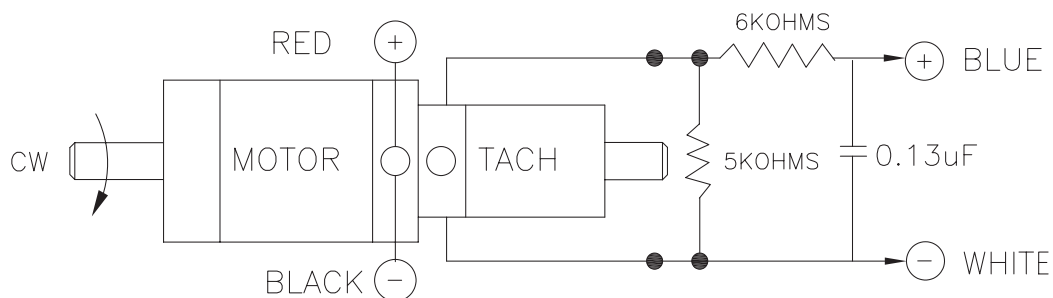
- High Performance Motors with Exceptional Efficiency
- Rated Torque from 0.2 Nm to 0.4 Nm
- High Overload Capacity
- Peak Torque up to 2.8 Nm
- Compact Size through Optimized Torque to Inertia Ratio
- Developed for High Dynamic Applications
- Best Price with Cost Improved Design
- Various Options to Meet Your Specific Needs

● Standard Specification

- Insulation Class F
- Flange Mounting IMB5 According to IEC34-7
- Vibration Class N (DIN 45665)
- Ambient Temperature 0-40°C
- Manufactured According to EN60034-1:1995-02
- Double Color Flying Leads
- Protection Class IP23
- Ball Bearings with Lifetime Lubrication
- Black Coating

● Custom Options

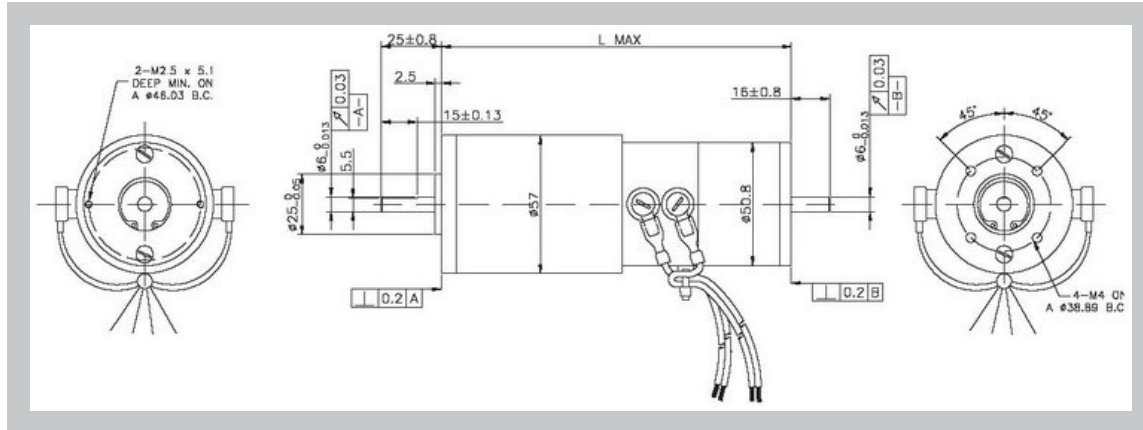
- Encoder
- Various Connectors
- Gearboxes
- Custom Shaft Extensions



Tacho Filter Circuit

PM057DT

● Mechanical



● Performance Data

Specification	PM057DT110	PM057DT210	PM057DT310
Continuous Stall Torque (Nm)	0.21	0.35	0.4
Peak Stall Torque (Nm)	1.69	2.48	2.82
Continuous Stall Current (A)	4.2	3.7	3.7
Maximum Pulse Current (A)	18.7	14.2	11.9
Maximum Terminal Voltage (V)	60	60	60
Maximum Speed (RPM)	6000	4700	4000
Mechanical Data			
Rotor Moment of Inertia (Kg.m ²)	3.88*10 ⁻⁵	5.5*10 ⁻⁵	6.8*10 ⁻⁵
Mechanical Time Constant (MS)	10.2	10	8
Motor Mass (Kg)	1.3	1.7	1.9
Maximum Length (mm)	145	168	184
Thermal Data			
Thermal Resistance (C/W) (Armature to Ambient)	5	4.2	4
Maximum Armature Temp (°C)	155	155	155
Winding Specifications			
Torque Constant (Nm/A)	0.056	0.105	0.12
Voltage Constant (V/KRPM)	5.8	11	12.7
Armature Resistance (OHMS)	0.8	1.6	1.8
Terminal Resistance (OHMS)	1.15	2	2.2
Armature Inductance (mH)	1.4	5.2	6.4
Electrical Time Constant (mS)	2.95	2.6	2.9
Tachometer Data			
Linearity [Max. Deviation] (%)		0.2	
Ripple [Max. Peak to Peak] (%)		5	
Ripple Frequency (cycle/rev)		11	
Temperature Coefficient (%/°C)		-0.05	
Output Voltage Gradient (V/KRPM)		14 +/- 10%	