

MB057DG series

PMDC Servo Motor



- High performance motors with exceptional efficiency
- Rated torque from 0.1Nm to 0.4Nm
- High overload capability, peak torque up to 1.4Nm
- Compact size through optimized torque to inertia ratio
- Developed for high dynamic applications
- Best price performance ratio by cost improved design
- Various options to meet your specific needs

Descriptions

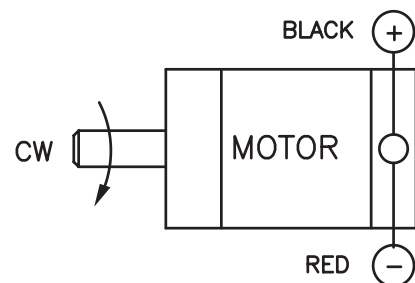
This is a family of permanent magnet DC servomotors designed to satisfy the demands of a broad range of industrial and professional applications, where highly precise speed and/or positioning performance are required. It can match most of the applications in terms of precision and speed. The high level of technological know-how and the extreme accuracy of quality control make these servomotors highly reliable

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

Special Options

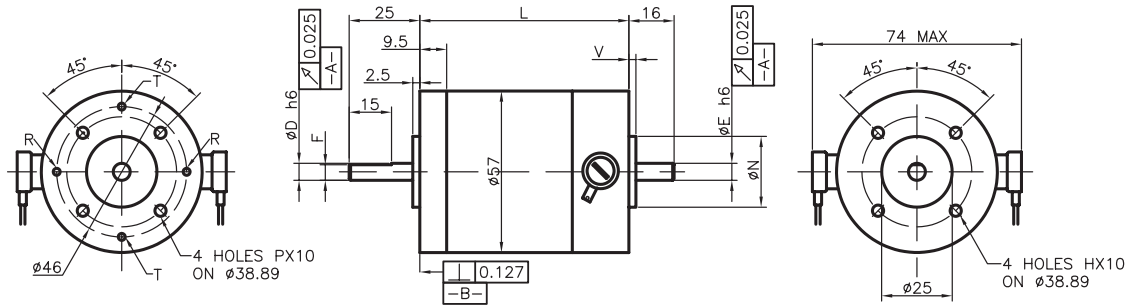
- Encoder
- Various Connectors
- Gearboxes
- Custom Shaft Extensions



Motor Wiring Diagram

MB057DG series

Mechanical



PART NO	L	D	E	F	H	V	N	P	T	R
MB057DG100	84	6	/	/	M4	/	/	/	/	/
MB057DG210	102	6	6	5.5	M4	/	/	M4	M2.5	/
MB057DG220	102	6	6	5.5	M4	2.5	25	M4	/	/
MB057DG310	127	8	6	7.1	M4	/	/	/	M2.5	/
MB057DG320	127	8	8	/	M5	2.5	25	M4	/	M2.5
MB057DG410	140	8	8	/	M5	/	/	/	M2.5	/
MB057DG420	140	8	8	/	M5	2.5	25	M4	/	M2.5
MB057DG430	140	8	8	/	M5	2.5	25	M4	/	M2.5

Performance Data

SPECIFICATION		MB057DG100	MB057DG210	MB057DG310	MB057DG410	MB057DG430
CONTINUOUS STALL TORQUE	NM	0.10	0.20	0.35	0.40	0.40
PEAK STALL TORQUE	NM	0.50	1.05	1.50	1.44	1.44
CONTINUOUS STALL CURRENT	A	0.60	3.00	3.30	3.30	4.70
MAXIMUM PULSE CURRENT	A	2.50	14.70	14.20	11.90	16.70
MAXIMUM TERMINAL VOLTAGE	V	60	60	60	60	60
MAXIMUM SPEED	rpm	3000	6000	5200	4700	6000
MECHANICAL DATA						
ROTOR MOMENT OF INERTIA	Kg m ²	1.3*10 ⁻⁵	2.7*10 ⁻⁵	4.3*10 ⁻⁵	5.3*10 ⁻⁵	5.3*10 ⁻⁵
MECHANICAL TIME CONSTANT	ms	10.4	8.4	8.2	8	8
MOTOR MASS	Kg	0.7	1.0	1.4	1.6	1.6
THERMAL DATA						
THERMAL RESISTANCE (ARMATURE TO AMBIENT)	C/W	10	5	4.2	4	4
WINDING SPECIFICATIONS						
TORQUE CONSTANT(KT)	Nm/A	0.190	0.071	0.105	0.121	0.086
VOLTAGE CONSTANT(BACK EMF) V/K rpm		20	7.41	11	12.7	9
ARMATURE RESISTANCE	OHMS	31.5	1.24	1.6	1.8	1.1
TERMINAL RESISTANCE	OHMS	32	1.55	2	2.2	1.5
AMATURE INDUCTANCE	mH	50	3.39	5.2	6.4	2.4
ELECTRICAL TIME CONSTANT	mS	1.6	2.1	2.6	2.9	1.6