

LOW KOG DC SERVO MOTORS



- Available in 5 lengths
- 7 slot armature
- Insulation Class B
- Speeds from 4500 to 8500 rpm
- Peak torque from 10 to 55 Ncm
- Maximum winding temperature 155Deg.C.
- Encoder resolutions from 500 to 1024ppr

Exmek Low-Kog brush-commutated DC motors offer smooth quiet operation and long life. Armatures are skewed to minimize magnetic cogging, even at low speed, and winding are resin impregnated for greater reliability in incremental motion applications. The cartridge brush holder assembly reduces audible and electrical noise and significantly improves brush life by maintaining optimum brush force throughout the life of the motor. For precision motion control, encoders are available in 2 or 3 channel versions with several different resolution to meet your position and direction feedback needs.

Options:

- Custom cables
- Multiple shaft configurations
- Shaft mounted pulleys and gears
- Multiple windings
- Installed with Optical encoder
- RFI suppression
- Dynamic armature balancing
- Customized versions available in production quantities
- Other brush materials available

Construction:

- 2 pole permanent magnet stators are constructed of ceramic magnets enclosed in heavy-gauge steel return rings
- Diamond turned commutators ensure maximum brush life
- High grade silicon-steel lamination
- 2ball bearing with low noise for quite operation

LOW KOG DC MOTORS Series MB040JS

Technical Date:

Parameter	Units	MB040JS100	MB040JS200	MB040JS300	MB040JS500	MB040JS600
Continuous Torque	N.cm	1.7	3.3	4.3	6.71	8.12
Peak Torque	N.cm	10	22.3	29	43.6	54.3
No-load Speed	rpm	6500	5500	6100	4800	5000
No-load Current	A	0.16	0.15	0.16	0.16	0.18
Rated Speed	rpm	6000	4500	5200	3500	3900
Rotor Inertia	gcm ²	1.4	3.25	4.17	7.05	8.89
Motor length	mm	46.4	56	61	77	84
Motor weight	g	200	250	280	390	440
Voltage	V	24	24	24	24	24
Torque constant	Ncm/A	3.13	3.73	3.65	4.56	4.24
Back EMF	V/Krpm	3.3	3.9	3.82	4.8	4.44
Resistance	Ohms	7.4	2.97	2.96	2.49	2.82
Inductance	mH	4.6	3.29	2.51	2.63	1.97
Peak Current	A	3.3	6.09	8.11	9.64	12.96

Mechanical Dimensions

