

The Possibilities Are Endless. These small Brushless DC Motors offer reliability, robust construction, design flexibility, power density and the patented advantage that only comes with the "Parallel" motor



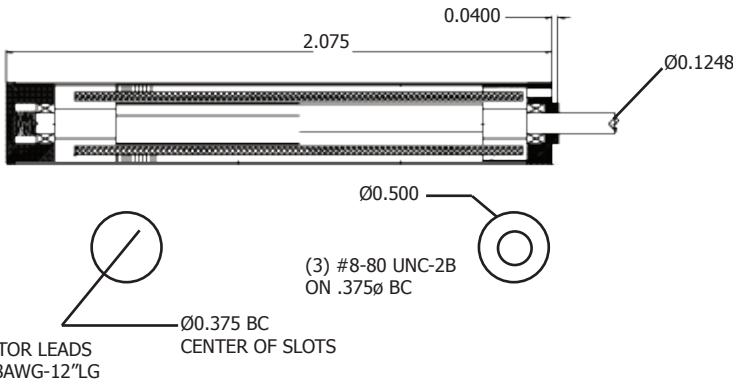
APPLICATIONS:

- Automotive
- Aerospace
- Military Hardware
- Marine Pumps
- Dental Drills
- Rehabilitation Equipment
- Cleaning Equipment
- Hand Power Tools
- Robotics
- Medical Instruments
- Home Appliances
- Computer Hardware

AVAILABLE OPTIONS:

- Controllers
- Gearheads
- Encoders
- Halls
- Dual shafts
- Flat shafts
- Sealed
- RF/EMI Compliance
- Premium Bearings
- Prototypes Available

DIAMETER: 0.5 In.
 LENGTH: 2.09 or 2.84 In.
 CONTINUOUS TORQUE: 0.75 to 1.0 oz-in
 PEAK TORQUE: 1.48 to 3.81 oz-in
 WEIGHT: 1.1 or 1.25 oz



TYPE BI05 WINDING DATA	Reference Voltage	Torque Constant	Terminal Resistance	Back EMF Constant	Coil Inductance	Peak Current
	Volts	Oz-in/Amp	Ohms	Volts/Krpm	µH	amps
	Vr	Kt	Rm	Ke	L	Ipk
ALN002BI057511S	24	1.46	24.0	1.08	70	1.00
ALN002BI057554S	24	0.73	6.00	0.54	50	4.00
ALN002BI0515011S	24	1.48	9.25	1.08	79	2.60
ALN002BI0515054S	24	0.73	4.60	0.54	40	5.20

TYPE BI05 PERFORMANCE DATA	Cont. Torque	Peak Torque (Stall)	Friction Torque	No Load Speed	Rotor Inertia	Motor Constant	Electrical Time Constant	Mech. Time Constant	Damping Constant	Max Winding Temp	Thermal Res.	Weight
	Oz-in	Oz-in	Oz-in	rpm	Oz-in-s ²	Oz-in/sqrt(W)	µs	mS	Oz-in/Krpm	°C	°C/Watt	Oz
	Tc	Tpk	Tf	ωo	Jr	Km	Te	Tm	Kd	Θmax	Rth	W
ALN002BI057511S	0.75	1.48	0.05	22,250	2.47 x 10 ⁻⁵	0.297	2.93	3.9	0.005	135	18	1.1
ALN002BI057554S	0.75	2.92	0.05	44,525	2.47 x 10 ⁻⁵	0.298	8.30	3.9	0.005	135	18	1.1
ALN002BI0515011S	1.30	3.80	0.07	22,250	4.94 x 10 ⁻⁵	0.479	76	4.0	0.005	135	16	1.25
ALN002BI0515054S	1.0	3.81	0.07	44,525	4.94 x 10 ⁻⁵	0.340	87	5.0	0.005	135	16	1.25

- PATENTED ADVANTAGE:**
- POWER DENSITY:**
- ROBUST CONSTRUCTION:**
- RELIABILITY:**
- DESIGN FLEXIBILITY:**

Coil Winding Geometry Optimizes Flux In The Magnetic Circuit
 High Energy NdFeB Rare Earth Magnets Enhance Motor Performance
 All Models Feature Corrosion Resistant Steel Housings
 Precision ABEC Bearings & Balanced Rotors Render Smooth, Quiet Operation
 Variety of Performance Options Available In One Standard Frame Size