

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 "Parallex" motor



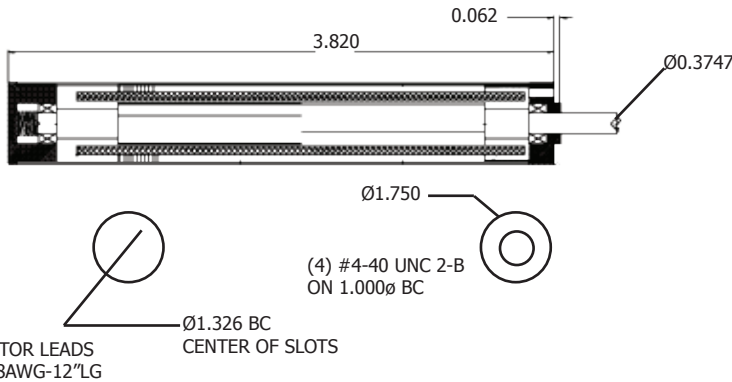
APPLICATIONS:

- 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: 1.75 In.
 LENGTH: 3.070 or 3.820 In.
 CONTINUOUS TORQUE: 19.8 to 42.60 oz-in
 PEAK TORQUE: 98.1 to 628 oz-in
 WEIGHT: 26.0 to 36.0 oz



TYPE BI18 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
ALN002BI187525S	24	3.40	0.83	2.52	140	28.9
ALN002BI187513S	24	8.1.70	0.21	1.26	80	114.3
ALN002BI1815038S	24	5.10	0.44	3.77	160	54.5
ALN002BI1815013S	24	1.70	0.20	1.26	90	480

TYPE BI18 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
ALN002BI187525S	19.8	98.1	1.50	9,525	2.1 x 10 ⁻⁴	3.73	169	2.25	0.005	135	4.0	26.0
ALN002BI187513S	19.7	194.3	1.50	19,050	2.1 x 10 ⁻⁴	3.73	381	2.25	0.005	135	4.0	26.0
ALN002BI1815038S	43.10	277.9	1.50	6,350	4.2 x 10 ⁻⁴	7.69	364	4.0	0.005	135	3.6	36.0
ALN002BI1815013S	42.60	628	1.50	19,050	4.2 x 10 ⁻⁴	7.69	450	3.0	0.005	135	3.6	36.0

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