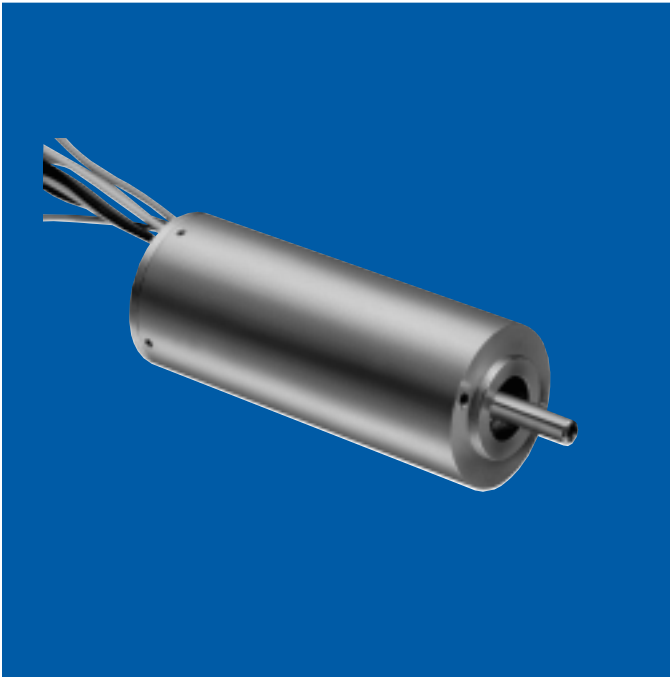


INB-08 MOTORS

Brushless DC Permanent Magnet Motors

EN-1000



power rating: .024 hp (18 W)

voltage: 24 VDC nominal

weight: 2.8 ounces

shaft: Precision-ground, 400 series stainless steel per ASTM A-582. Options: length, flats, pinions, gears, holes (through or tapped), threaded ends and tapers. Shaft material may change depending upon options selected

magnets: Rare earth

bearings: Ball bearings are double shielded, life-lubricated

cables/leads: 8" #26 AWG leads, Typ 8 places

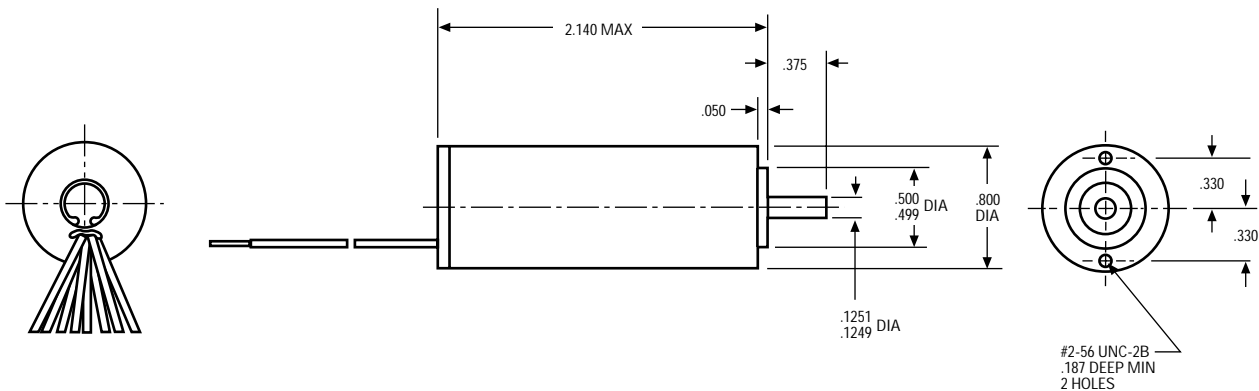
motor housing: Aluminum

sensors: Built-in open collector, latching hall effects

options available:

- Gear train
- Alternate windings (Speeds to 70,000 RPM)

Dimensions



NOTE: Consult factory prior to preparing spec control prints. Dimensions are for reference only

Motor Characteristics @ 25°C

ITEM	ABBREVIATION	UNITS	REFERENCE VALUE
Motor Constant (K_t/\sqrt{R})	Km	oz. in./ \sqrt{W}	.69
Electrical Time Constant	Te	msec.	.130
Mechanical Time Constant	Tm	msec.	5.17
Max Cont Input Power	P	W	34.8
Temperature Rise†	TPR	°C/W	12.0
Max Winding Temperature		°C	155
Rotor Inertia	Jm	oz. in. sec ²	.000018
Number of Poles			4
Winding Connection			3 phase WYE

†Assumes motor is mounted to 8.00" x 8.00" x .25" aluminum heat sink

Winding Characteristics (alternate windings available)

VOLTAGE (VDC)	SPEED no load (rpm)	TORQUE		CURRENT			CONSTANTS		STANDARD PART NUMBERS*
		max rated (oz. in.)	** theoretical stall (oz. in.)	max no load (amps)	max rated load (amps)	** theoretical stall (amps)	K _t (oz. in./amp)	R (ohms)	
24	24,000	1.0	8.75	.21	1.1	6.63	1.32	3.62	545A100-1

**Because of motor losses and the variable types of commutation/drive electronics, stall currents and torques will not always be attainable

NOTE: Alternate windings (voltage, speed) are available

*When You Order

Units shown above are standard and may be ordered by part number. Remember to include motor winding dash number,

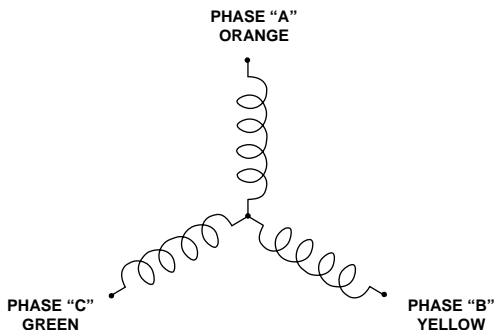
EXAMPLE: 545A100-1

Lead Wire Designation

LEAD WIRE COLOR CODE			
LEAD	COLORS	AWG	DESCRIPTIONS
+ VDC	RED/WHITE	26	HALL SENSORS
GROUND	BLACK/WHITE	26	
HALL "A"	ORANGE/WHITE	26	
HALL "B"	YELLOW/WHITE	26	
HALL "C"	GREEN/WHITE	26	
PHASE "A"	ORANGE	26	MOTOR LEADS
PHASE "B"	YELLOW	26	
PHASE "C"	GREEN	26	

NOTE: Lead colors may vary at factory discretion

Motor Coil Connections



Commutation and Connection Diagrams

