INB-08 GEARMOTORS

Brushless DC Permanent Magnet Planetary Gearmotors





Dimensions

torque rating: Up to 300 oz. in. maximum continuous torque

weight: 6 to 8 ounces depending on ratio

gears: Planetary gearing system. All gears are heat treated for consistently reliable performance and long life

shaft: Precision-ground No. 416 stainless steel. Options: length, smaller diameter, flats, pinions, gears, holes (through or tapped), threaded ends and tapers. Shaft material may change depending upon options selected

backlash: Varies with reduction but average unit will have less than 3°

gear inertia: 1.8 x 10-6 oz. in. sec.2 @ input max

bearings: Ball bearings are double shielded, life-lubricated

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

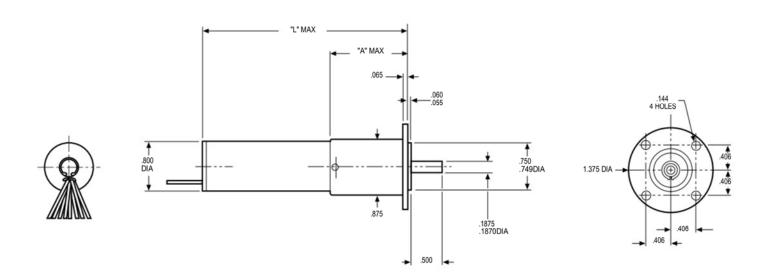
housing: Aluminum

mounting flange: No. 303 stainless steel per ASTM A582

gear train housing: Stress-proof steel

options available:

• Alternate windings



EN-1030

Standard Part Numbers and Data

			STANDARD PART NUMBER PREFIX*			
SPEED REDUCTION RATIO	MAXIMUM CONTINUOUS TORQUE (oz. in.)	TORQUE MULTIPLIER RATIO	dimension "A" max (in.)	dimension "L" max (in.)	part no. prefix*	
3.82:1 5.77:1	1.0 1.5	3.1 4.6	.993	3.006	547A100 547A101	
14.58:1 22.03:1 33.28:1	3.0 4.5 7.0	9.3 14.0 21.0	1.211	3.224	547A102 547A103 547A104	
55.66:1 84.11:1 127.1:1 192:1	10.0 14.0 21.0 30.0	28.0 43.0 65.0 93.0	1.380	3.393	547A105 547A106 547A107 547A108	
321:1 485:1 733:1 1,108:1	45.0 70.0 100.0 150.0	130.0 200.0 300.0 450.0	1.549	3.562	547A109 547A110 547A111 547A112	
1,853:1 2,799:1 4,230:1 6,391:1	200.0 300.0 300.0 300.0	600.0 900.0 1,400 2,100	1.718	3.731	547A113 547A114 547A115 547A116	
10,689:1 16,150:1 24,403:1 36,873:1	300.0 300.0 300.0 300.0	2,800 4,200 6,400 9,700	1.887	3.900	547A117 547A118 547A119 547A120	

Max Cont. Torque: The values in this column are based upon gear train strength and capability for 1,000 hrs. minimum life. Max rated torque of motor selected x torque multiplier ratio must not exceed maximum continuous torque of gearbox

Max Intermittent Torque = 2 x Max Cont. Torque

Momentary Stall Torque = 5 x Max Cont. Torque (1,000 oz. in. max)

Mininum Gearbox Efficiency = Torque Multiplier Ratio divided by Speed Reduction Ratio x 100

*When You Order

Basic motor winding data is shown on chart below. To order, state gear train standard part number, plus a motor winding dash number. EXAMPLE: 547A100-1. Alternate windings are available. Contact the factory for additional information

Winding Characteristics

		TORQUE		CURRENT		CONSTANTS			
VOLTAGE (VDC)	SPEED no load (rpm)	max rated (oz. in.)	theoretical stall (oz. in.)	max no load (amps)	max rated load (amps)	theoretical stall (amps)	K _τ (oz. in./ amp)	R (ohms)	STANDARD PART NUMBERS*
24	24.000	1.5	8.75	.21	1.45	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: See bulletin sheet EN-1000 for schematics and additional motor information