

# CMM MOTORS

DC Alnico Permanent Magnet Motors

## E-2000



**power rating:** .01 hp (7.5 W)

**voltage:** 4 to 50 VDC

**weight:** 3.5 ounces

**armature:** Dynamically balanced

**inertia:**  $5.2 \times 10^{-5}$  oz. in. sec.<sup>2</sup>

**electrical time constant:** 0.5 millisecond max

**mechanical time constant:** 20.0 milliseconds max

**typical no load torque:** 0.40 oz. in.

**shaft:** Precision-ground 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

**magnets:** Alnico V

**bearings:** Ball bearings are double shielded, life-lubricated

**cover:** Corrosion-resistant aluminum

**frame:** Die-cast aluminum

**end bell:** Precision-molded, fiberglass-filled Diallyl Phthalate

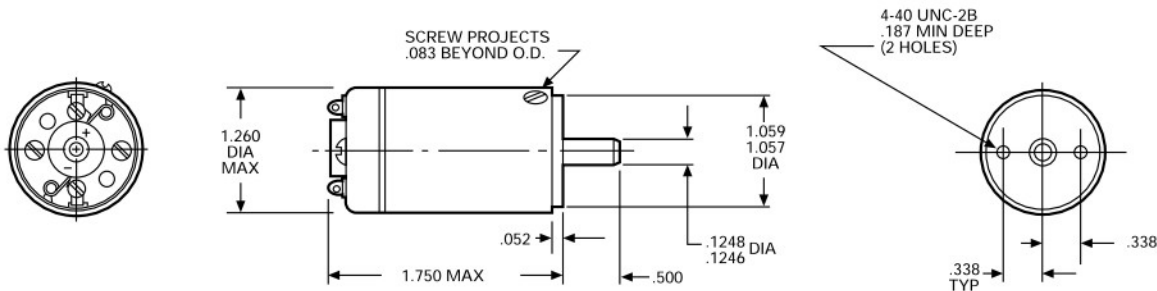
**winding temperature rise:** 8°C per watt w/8.00" x 8.00" x .25" aluminum heat sink

**winding insulation rating:** 130°C (higher temperature windings available)

**options available:**

- Gear train (see Bulletin E-2030)

### Dimensions



# E-2000

## Standard Part Numbers and Data

VOLTAGE (VDC)	SPEED no load (rpm)	TORQUE		CURRENT			CONSTANTS		STANDARD PART NUMBERS* front face mount
		max rated (oz. in.)	** theoretical stall (oz. in.)	max no load (amps)	max rated load (amps)	** nominal stall (amps)	K <sub>t</sub> (oz. in./amp)	R (ohms)	
6	12,000-14,000	.75	4.6	.80	2.00	9.9	.58	.66	235A106-5
12	18,000-21,400	.50	7.4	.56	1.20	11.8	.77	1.11	235A106-24
12	14,500-17,000	.70	5.9	.50	1.20	7.5	.97	1.75	235A106-3
12	12,400-14,700	.75	4.6	.40	1.20	5.1	1.12	2.56	235A106-21
12	11,000-13,000	1.00	4.6	.35	1.20	4.6	1.26	2.87	235A106-4
24	19,200-22,800	.35	7.4	.30	.60	6.3	1.45	4.17	235A106-7
24	16,000-19,000	.60	5.8	.25	.60	3.8	1.74	6.30	235A106-1
24	11,500-14,000	1.00	4.6	.18	.60	2.1	2.42	11.02	235A106-2
24	10,700-12,700	1.00	3.6	.17	.60	1.6	2.60	15.00	235A106-8
24	9,600-11,400	1.00	2.9	.15	.50	1.1	2.90	21.00	235A106-22
24	8,000-10,000	1.00	2.9	.13	.45	.93	3.48	25.20	235A106-10
24	6,000-7,000	.80	2.3	.08	.30	.55	4.65	42.30	235A106-11
50	14,300-17,000	.70	4.8	.11	.30	1.30	4.06	37.00	235A106-25
50	9,500-11,500	1.00	3.8	.07	.30	.71	6.00	69.00	235A106-16
50	8,000-10,000	1.00	3.0	.07	.20	.50	6.77	98.00	235A106-12
50	6,700-8,000	.80	2.4	.05	.16	.30	8.71	159.00	235A106-15
50	4,600-5,500	.80	1.9	.04	.12	.20	10.83	249.00	235A106-13

\*\*Because of brush drop and field distortion, current and torque indicated will not always be attainable

### \*When You Order

Units shown above are standard and may be ordered by part number. Remember to include armature winding dash number, EXAMPLE: 235A106-10

## Typical Motor Performance

Part No.: 235A106-10

Voltage: 24 VDC

