

Specifications: DC Permanent Magnet Motor CMR 120A100/101

ELECTRICAL SPECIFICATIONS

Rating: 0.01 hp continuous duty

Voltage: 3, 6, 12, 27 and 50 VDC are standard; other direct current voltages available as required.

Speed: 5,500 rpm to 24,000 rpm are standard; other speeds available upon request.

Connection Method: Shielded, double conductor leads for enclosed version. Solder terminals on open unit.

Rotation: Direction is CCW when positive terminal is plus and viewing shaft end.

Reversibility: Motor reverses when voltage is reversed.

MECHANICAL SPECIFICATIONS

Frame: Machined aluminum impact extrusion for rigidity

Armature: Varnish impregnated, precision balanced, with diamond-turned commutator

Inertia: 6.4×10^{-5} oz.in. sec.² (max.)

Magnet: Precision ground Alnico 5

Brush-holder: Glass filled Diallyl Phthalate thermo-set, precision molded

Bearings: Double shielded, life lubricated, R-2 precision ball bearings

Lubrication: Grease per MIL-G-3278; other lubricants available.

Shaft: Precision ground stainless 17-4 PH, heat treated H-900

Mounting Method: Two, #4-40 tapped holes in front endbell or non-magnetic clamp on frame O.D.

Weight: 4.3 oz. for open frame, 4.5 oz. for enclosed unit

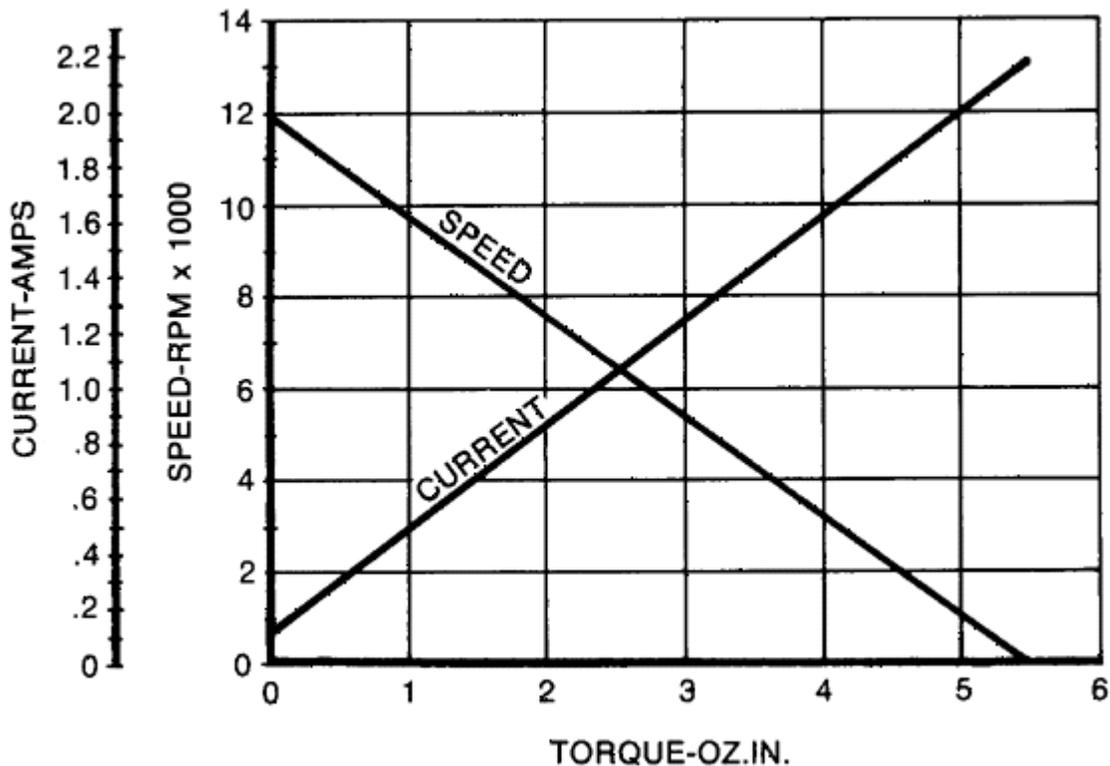
DC Motor Data CMR 120A100/101

Basic DC Motor Data for -Standard Part Numbers

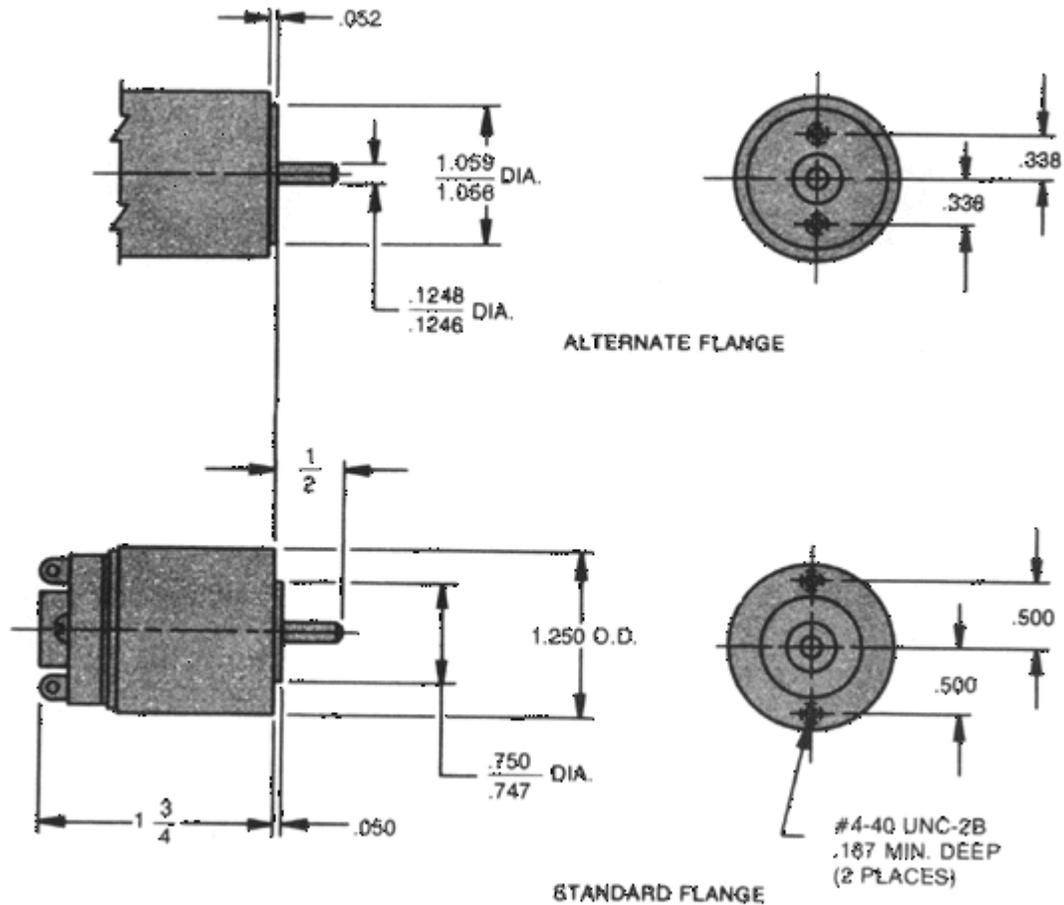
INPUT VOLTAGE DC	NO-LOAD SPEED* RPM	RATED TORQUE OZ.IN.	STALL TORQUE* OZ.IN.	NO-LOAD CURRENT* AMPS	RATED TORQUE CURRENT* AMPS	STALL CURRENT* AMPS	STANDARD CMR PART NUMBERS	
							OPEN	ENCLOSED
3	12,200	1.0	5.7	1.2	4.8	21	120A100-1	120A101-1
3	10,400	1.0	4.8	.97	3.9	15	120A100-2	120A101-2
6	15,900	0.7	7.4	.74	2.5	17.8	120A100-3	120A101-3
6	12,600	1.0	5.8	.59	2.4	11.1	120A100-4	120A101-4
12	20,300	0.5	9.4	.47	1.3	14.6	120A100-5	120A101-5
12	16,300	0.7	7.6	.38	1.3	9.4	120A100-6	120A101-6
12	12,800	1.0	5.9	.30	1.25	5.8	120A100-7	120A101-7
27	24,000	0.4	11.0	.25	.65	9.1	120A100-8	120A101-8
27	18,500	0.6	8.6	.19	.65	5.3	120A100-9	120A101-9
27	15,100	0.7	7.0	.16	.60	3.6	120A100-10	120A101-10
27	11,800	1.0	5.5	.12	.50	2.2	120A100-11	120A101-11
27	9,700	1.0	4.5	.10	.40	1.5	120A100-12	120A101-12
27	7,700	1.0	3.5	.08	.33	.92	120A100-13	120A101-13
50	11,500	1.0	5.3	.084	.25	1.11	120A100-14	120A101-14
50	8,700	1.0	4.0	.049	.20	.64	120A100-15	120A101-15
50	7,000	0.8	3.2	.039	.14	.42	120A100-16	120A101-16
50	5,500	0.7	2.5	.031	.10	.26	120A100-17	120A101-17

*The standard production tolerance on no-load speed, stall torque and stall current is +/- 10%. The tolerance on no-load current is +25%. The tolerance on current at rated torque is +15%.

NOMINAL PERFORMANCE CURVES 120A100-11 at 27 VDC



Dimensions: DC Motor CMR 120A100/101



ORDERING

For standard motors, order using the part number listed above corresponding to the performance required.

Special modifications to the CMR motor are available and are ordered as follows:

1. Reference the closest standard P/N in your order.
2. Call out all the special requirements by stating exactly what is required.

A special part number will be assigned to identify custom/modified motors. For complete engineering information on plotting speed/torque and current/torque curves for other armatures, see Bulletin E-1.