

DM1004 Motor Data Specifications

Parameter	Value (DM1004B and DM1004C)	
Performance	Repeatability	5 arc-sec (0.00139°)
	Accuracy	±60 arc-sec (0.0167°) standard ±20 arc-sec (0.00556°) (version available)
	Max. stepping rate	1,572,000 steps/sec
Power	Volts	115VAC 1-phase, or 230VAC 1-phase, 50/60Hz
	Range	+10% to -15%
	Current	5 amps max.
	Encoder output	400 kHz max.
Inputs	Command interface	
	• Step input	Low going low pulse, 150 nanoseconds min. pulse width
	• Direction	Logic high = CW rotation, Logic low = CCW rotation
	Analog input	±10V velocity signal; ±8V torque signal
Outputs	Encoder output	A/B encoder output 393 kHz max. Z-channel—124 pulses/rev

		DM1004B	DM1004C
Peak torque	ft-lbs	3	3
	(N-m)	(4)	(4)
Rated speed	115VAC	2.5	2.5
	• rps 230VAC	2.5	2.5
Rotor inertia	oz-in ² x 10 ²	3.01	1.37
	(Kgm ²) x 10 ⁻³	(5.5)	(2.5)
Maximum step	s/rev	655,360	655,360
Motor weight*	lbs	6.6	6.6
	(kg)	(3)	(3)
Maximum static axial load**			
	• Compression	440 (200)	770 (350)
	• Tension	154 (70)	770 (350)
Maximum static overhung load**	ft-lb (kg-m)	20 (2.7)	24.4 (3.3)

* Drive weight is 4 lbs (1.8 kgs)

** When designing a system, de-rate the maximum load to the values specified here:

Application	De-rate Factor
Smooth, rotary motion	1/3
Intermittent press loading	1/5
Repetitive shock loading	1/10

Please refer to the ordering information matrix on page 107