

- Step Motor with Internal Conversion to Linear
 Output
- Self Contained Package with Long Shield Ball Bearings
- Available in a Wide Variety of Voltage and Inductance Ratings
- Can be Microstepped for Smoothness and Resolutions up to 2 x 10⁻⁵ inches
- Several Lead Screw Choices

FEATURES

DESCRIPTION

SPECIFICATIONS



The 23A Series Stepper Motors offeres many advantages to users over previous design choices. All of the lower cost digital attributes of a hybrid step motor are retained while the internal conversion to linear motion eliminates the need for other rotary-to-linear conversions such as belt and pulleys, racks and pinions, or external ball screws. Motion designs can be simplified, production costs lowered and product life enhanced. The 23A designed captures a bronze acme nut internally such that each normal electrical step sequence results in the linear travel of a mating screw axially. Since the ends of the screw are free-floating, any length can be used; if the motor is fixed, the screw will travel, if the screw is fixed, the motor will travel. Normal open loop drivers can be used. Typical applications for the linear step motor actuator include X-Y tables, pick and place, medical instrumentation, valve adjustment, and test equipment. We can bring together many of the components required to make your application work the best.

	Model #	NEMA Size	Maximum Force (lbs)	Series Current (A)	Unipolar Current (A)	Unipolar Resistance (ohms)	Unipolar Inductance (mH)	Rotor Inertia (oz-in-sec²)	Travel per Step (Inch)*	# of Lead Wires	Weight (lbs)	L Length (in)
	23A102A	23	100	0.7	1.0	5.00	8.00	0.0016	0.0002500	6	1.35	2.00
	23A102B	23	75	0.7	1.0	5.00	8.00	0.0016	0.0003125	6	1.35	2.00
	23A102C	23	40	0.7	1.0	5.00	8.00	0.0016	0.0012500	6	1.35	2.00
	23A104A	23	100	1.4	2.0	1.50	2.50	0.0016	0.0002500	6	1.35	2.00
	23A104B	23	75	1.4	2.0	1.50	2.50	0.0016	0.0003125	6	1.35	2.00
	23A104C	23	40	1.4	2.0	1.50	2.50	0.0016	0.0012500	6	1.35	2.00
	23A108A	23	100	2.7	3.8	0.33	0.40	0.0016	0.0002500	6	1.35	2.00
	23A108B	23	75	2.7	3.8	0.33	0.40	0.0016	0.0003125	6	1.35	2.00
	23A108C	23	40	2.7	3.8	0.33	0.40	0.0016	0.0012500	6	1.35	2.00

*Suffix A has 0.050 inch leadscrew Suffix B has 0.0625 inch lead screw Suffix C has 0.250 inch lead screw - Internal rotating nut: SAE 660 Bearing Bronze

- 1/4" Dia. Acme Leadscrew: 300 Series Stainless Steel

- Recommended Lubrication: White Lithium Grease

L010368

Tel. (714) 992-6990







Step Angle Accuracy:	±5% (Full Step, No Load)
Resistance Accuracy:	±10%
Inductance Accuracy:	±20%
Temperature Rise:	80°C Max (2 Phase On)
Ambient Temperature:	-20° to +50° C
Insulation Type:	Class B

SPECIFICATIONS

WIRING INFORMATION