24Y Series - High Torque Stepper Motors

FEATURES

- ***NEMA 24 Frame Size (Same Mounting and Shaft Dimensions as NEMA 23 Size, but 30% - 50% More Torque than NEMA 23 Motors)***
- ***1.8° Step Angle***
- ***Higher Torque than Other Motor Manufacturers***
- ***Up to 475 oz-in of Torque***
- ***Can be Customized for***
  - ***-Winding Current***
  - ***-Shaft Options***
  - ***-Cables and Connectors***
- ***CE Certified and RoHS Comliant***

DESCRIPTION

If you need more torque from a NEMA 23 motor but can't move to a NEMA 34, then the 24Y Series is your answer! They are bulkier than standard 23 Frame motors, but have the same mounting and shaft dimensions as well as higher torque. A broad line of motor windings and stack lengths are available off-the-shelf, or the motors can be customized to fit your machine requirements. The standard 8-lead motor can be connected in all possible configurations: series, unipolar, or parallel, to allow the maximum flexibility for your application. We can also customize the winding to perfectly match your voltage, current, and maximum operating speed.

See Accessories on our website for optional motor adders such as encoders, brakes, cables and connectors. For gearbox options, see gearboxes. For Compatible drivers, consider MBC25081TB, MBC05641, MBC12101 and Driver Packs.

SPECIFICATIONS

Model #	NEMA Size	Bipolar Torque (oz-in)	Unipolar Current (A)	Series RMS Current (A)	Unipolar Inductance (mH)	Rotor Inertia (oz-in-sec^2)	Shaft Diameter (in)	# of Terminals	Weight (lbs)	"L" Length (in)
24Y104S-LW8	24	150	2.0	1.4	2.0	0.0039	0.25	8	1.44	1.77
24Y204S-LW8	24	230	2.0	1.4	3.6	0.0057	0.25	8	1.82	2.20
24Y304S-LW8	24	300	2.0	1.4	4.6	0.0070	0.25	8	2.26	2.56
24Y404S-LW8	24	380	2.0	1.4	8.2	0.0082	0.25	8	2.66	3.03
24Y504S-LW8	24	432	2.0	1.4	6.8	0.0119	0.25	8	3.14	3.38
24Y506S-LW8	24	432	3.0	2.1	3.2	0.0119	0.25	8	3.14	3.38
24Y508S-LW8	24	432	4.0	2.8	1.8	0.0119	0.25	8	3.14	3.38

Notes: The 7th character "S" denotes a single shaft, use "D" for double shaft. Custom leadwires, cables, connectors, and windings are available upon request.

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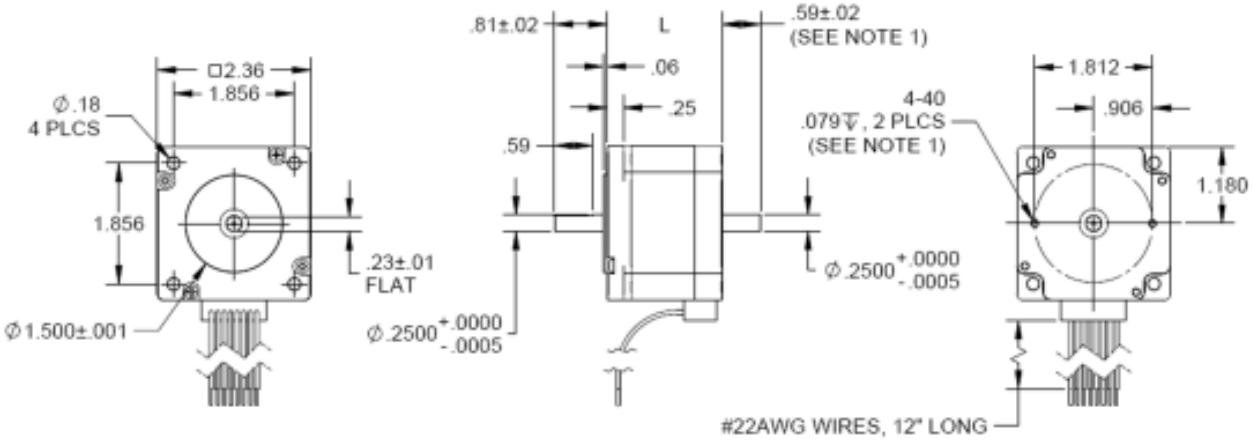
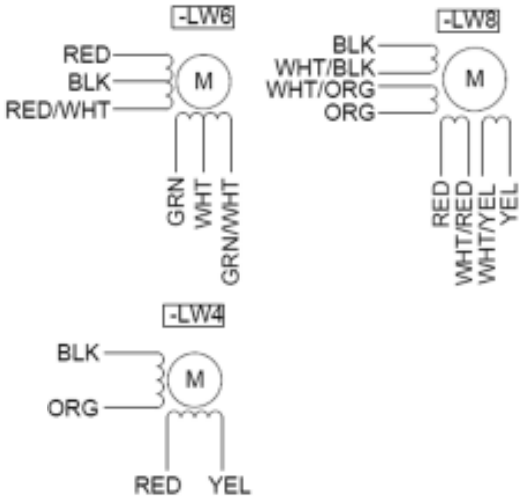


(All units are inches)

Connection	Lead Wire Connection	Lead Wire Color
4 - Lead Bipolar Series MBC or MLP Series	Phase 1 (A) Phase 3 (/A) Phase 2 (B) Phase 4 (/B) Connect Wires with Wire Nut Connect Wires with Wire Nut	Black Orange Red Yellow White/Black & White/Orange White/Red & White/Yellow
4 - Lead Bipolar Parallel MBC or MLP Series	Phase 1 (A) Phase 3 (/A) Phase 2 (B) Phase 4 (/B)	Black & White/Orange Orange & White/Black Red & White/Yellow Yellow & White/Red
6 - Lead Unipolar BLD, TM Series	Phase 1 Phase 3 Phase 2 Phase 4 Common Phase 1 & 3 Common Phase 2 & 4	Black Orange Red Yellow White/Black & White/Orange White/Red & White/Yellow



Step Angle Accuracy:	+/- 5% (Full Step, No Load)	Insulation Resistance:	100M Ohm Min, 500VDC
Resistance Accuracy:	+/- 10%	Dielectric Strength:	500VDC for one minute
Inductance Accuracy:	+/- 20%	Radial Play:	0.02" at 1.0 lbs
Temperature Rise:	80° C Max (2 Phases On)	End Play:	0.08" at 1.0 lbs
Ambient Temperature:	-20° to +50° C	Max Radial Force:	16.9 lbs (0.79" from flange)
Insulation Type:	Class B	Max Axial Force:	3.4 lbs-Force