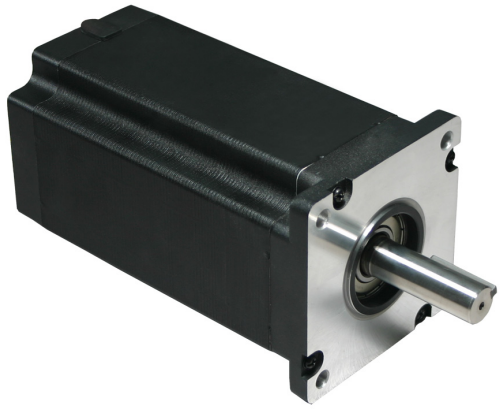
42Y Series - High Torque Stepper Motors

FEATURES

- ***NEMA 42 Frame Size***
- ***1.8° Step Angle***
- ***IP50 Rated***
- ***Holding Torque Ratings Up To 4036 oz-in***
- ***High Step Accuracy and Resolution***
- ***Keyed Shaft Standard***
- ***Can Be Customized for***
  - ***Winding Current***
  - ***Shaft Options***
  - ***Cables and Connectors***
- ***CE Certified and RoHS Compliant***



DESCRIPTION

The 42Y Series High Torque Step Motors offer a great value without sacrificing quality. These motors are designed to offer the highest possible torque while minimizing vibration and audible noise. 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 motors can be connected in all possible configurations: series, unipolar, or parallel, to allow the maximum flexibility for your application. Anaheim Automation 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. Gearbox options can be found in Gearboxes See compatible drivers consider MBC10641, MLA10641, and Driver Packs.

SPECIFICATIONS

Model #	NEMA Size	Bipolar Torque (oz-in)	Series Current (A)	Bipolar Voltage (V)	Series Resistance (ohm)	Series Inductance (mH)	Rotor Inertia (oz-in-sec^2)	Shaft Diameter (in)	# Lead Wires	Weight (lbs)	"L" Length (in)
42Y012S-LW8	42	1625	4.25	4.845	1.14	16.8	0.071	0.75	8	11.0	3.9
42Y112S-LW8	42	1700	4.25	3.658	0.86	11.6	0.102	0.75	8	13.5	4.5
42Y212S-LW8	42	2974	4.25	9.69	2.28	42	0.154	0.75	8	18.5	5.9
42Y312S-LW8	42	4036	4.25	10.455	2.46	48	0.229	0.75	8	26.0	7.9

Notes: LW8 is for the 8 leadwires, other leadwire options are available. All Shafts have keyways unless otherwise noted. The 7th "S" denotes a single shaft, use a "D" for double shaft. Double shafts include encoder mounting provisions. Custom leadwires, cables, connectors, and windings are available upon request.

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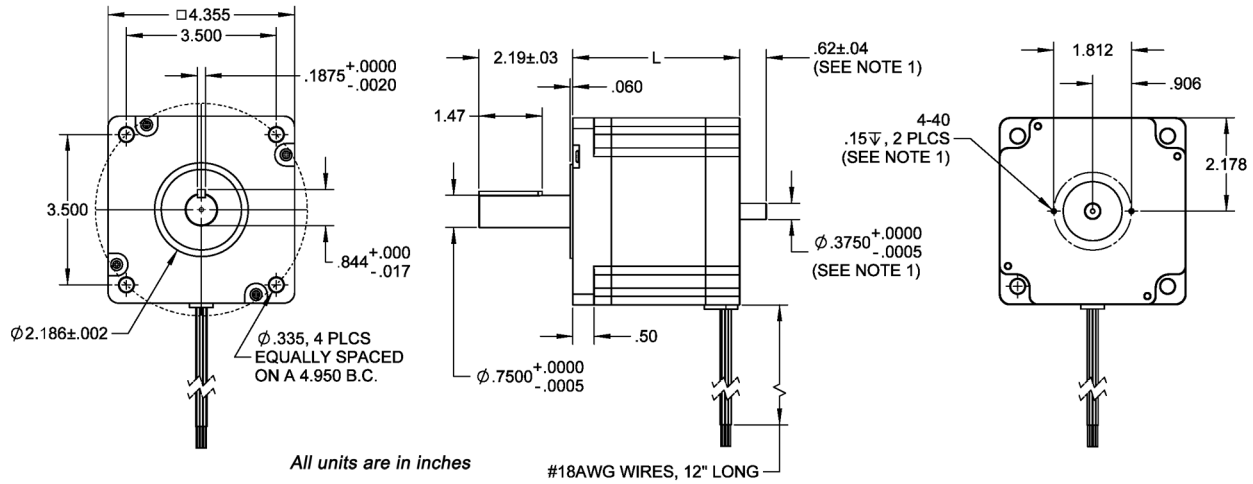
DIMENSIONS

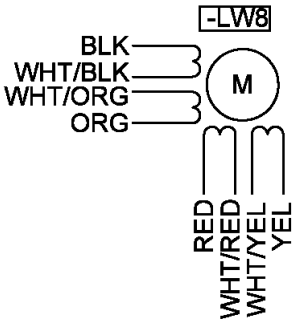


Notes: On dual shaft models 42XXXD-LWX

WIRING INFORMATION

SPECIFICATION CONVERSION TABLE			
Connection	Current (A)	Resistance (R)	Inductance (L)
Series Standard	A	R	L
Parallel	2A	R / 4	L / 4
Unipolar	1.414A	R / 2	L / 4

Connection	Lead Wire Connection	Lead Wire Color
4 - Lead Bipolar Series MBC 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 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 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



SPECIFICATIONS

Step Angle Accuracy:	± 5% (Full Step, No Load)	Insulation Resistance:	100M Ohm Min, 500VDC
Resistance Accuracy:	± 10%	Dielectric Strength:	1800VAC for 1 minute
Inductance Accuracy:	± 20%	Shaft Radial Play:	0.02" Max (1.0 lbs)
Temperature Rise:	80°C Max (2 Phases On)	End Play:	0.08" Max (1.0 lbs)
Ambient Temperature:	-20° to +50° C	Max Radial Force:	49.46 lbs (0.79" from flange)
Insulation Type:	Class B (130°C Internal)	Max Axial Force:	13.5 lbs-Force