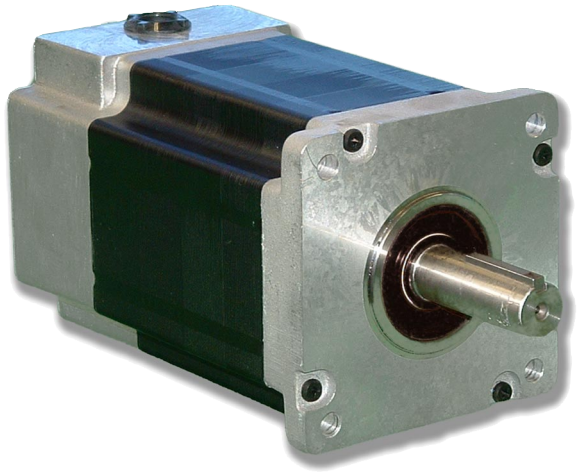
42N Series - High Torque Stepper Motor

FEATURES

- ***NEMA 42 Frame Size***
- ***1.8º Natural Step Angle***
- ***Substantial Increase In Torque Over Standard Motors Holding Torque Ratings Up to 4365 oz-in***
- ***High Acceleration and Increased Rotor Inertia***
- ***3 Stack Lengths***
- ***Microstep Increments as Small as 0.0072º (with our MBC082561 driver)***
- ***3.0% Typical Step Accuracy***
- ***Rugged Construction***
- ***Higher Temperature Characteristics***
- ***CE Certified and RoHS Compliant***



DESCRIPTION

Anaheim Automation's High Torque Step Motors use advanced magnetic technologies to provide significantly higher torque levels than what is available in standard step motors. These motors are available in a variety of windings to meet any application specific requirement. The torque levels reached with this step motor line make them cost effective alternatives to servo motors in many applications. These motors can be specified in place of standard motors to reduce system size and cost, or increase system performace, without the need to go to larger sized motors or drivers. The 42N Series is the closest match to Pacific Scientific N42 Series.

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 MBC10641, MBC12101, MBC082561, MLA10641 and Driver Packs.

SPECIFICATIONS

Model #	NEMA Size	Bipolar Torque (oz-in)	Series Current (A)	Unipolar Current (A)	Parallel Current (A)	Unipolar Inductance (mH)	Rotor Inertia (oz-in-sec²)	Shaft Diameter (in)	# of Lead Wires	Weight (lbs)	L Length (in)
42N112S-CB8	42	1625	4.4	6.2	8.80	3.90	0.0783	0.750	8	11.4	3.9
42N115S-CB8	42	1655	5.3	7.5	10.6	2.80	0.0783	0.750	8	11.4	3.9
42N209S-CB8	42	3105	3.2	4.5	6.4	12.8	0.1546	0.750	8	18.8	5.9
42N214S-CB8	42	3145	4.9	7.0	9.8	5.50	0.1546	0.750	8	18.8	5.9
42N222S-CB8	42	3130	7.9	11.2	15.8	2.10	0.1546	0.750	8	18.8	5.9
42N314S-CB8	42	4320	4.9	7.0	5.80	7.7	0.2293	0.750	8	27.0	7.9
42N322S-CB8	42	4365	7.7	10.9	15.4	3.2	0.2293	0.750	8	27.0	7.9

Notes: The 7th character "S" denotes a single shaft, use "D" for double shaft and replace CB8 with LW8. Custom leadwires, cables, connectors, and windings are available upon request.

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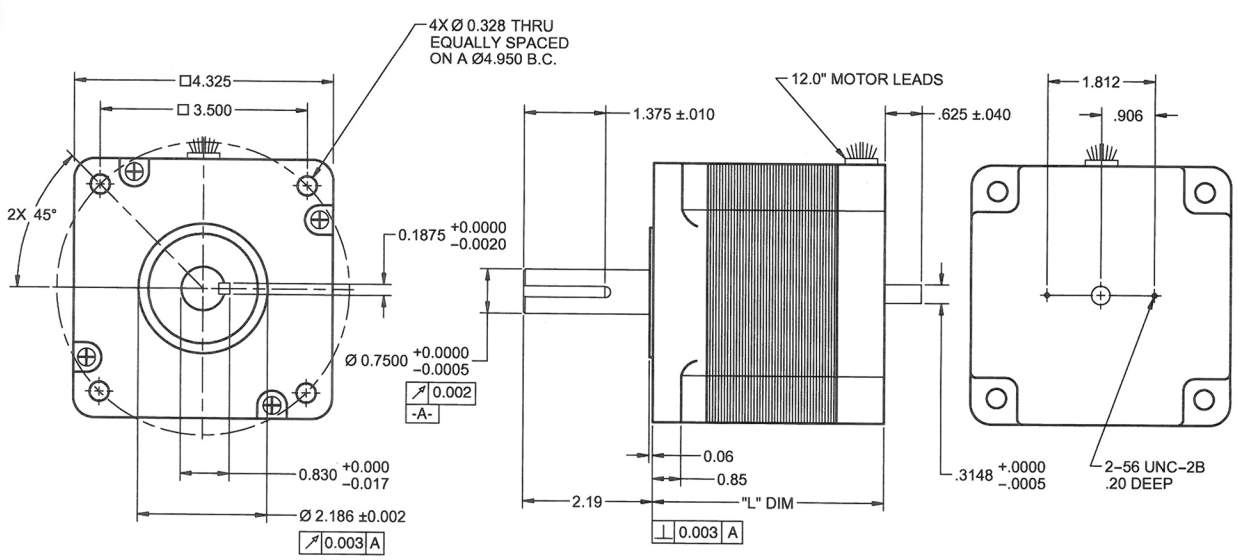
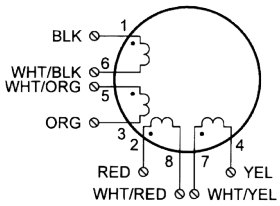
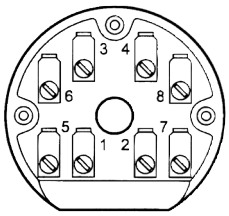


(All units are inches)

Connection	Lead Wire Connection	Lead Wire Color	Terminal #
4 - Lead Bipolar Series MBC or MLP Series	A	Black	1
	A	Orange	3
	B	Red	2
	B	Yellow	4
	None	White/Black & White/Orange	6 & 5
	None	White/Red & White/Yellow	8 & 7
4 - Lead Bipolar Series MBC or MLP Series	A	Black & White/Orange	1 & 5
	A	Orange & White/Black	3 & 6
	B	Red & White/Yellow	2 & 6
	B	Yellow & White/Red	4 & 8
6 - Lead Unipolar BLD, TM Series	Phase 1	Black	1
	Phase 3	Orange	3
	Phase 2	Red	2
	Phase 4	Yellow	4
	Common Phase 1 & 3	White/Black & White/Orange	6 & 5
	Common Phase 2 & 4	White/Red & White/Yellow	8 & 7
Ground		Green/Yellow	Motor Frame



8-Lead Configuration (flying leads)



Terminal Board NEMA 34 and 42

Step Angle Accuracy:	+/- 3.0%	Insulation Type:	Class B
Resistance Accuracy:	+/- 10%	Insulation Resistance:	100M ohms @ 500VDC
Full Step Angle:	1.8º	Max Radial Force:	20lbs
Ambient Temperature:	-20º C - 40º C	Max Axial Force:	13lbs

DIMENSIONS

WIRING INFORMATION

SPECIFICATIONS