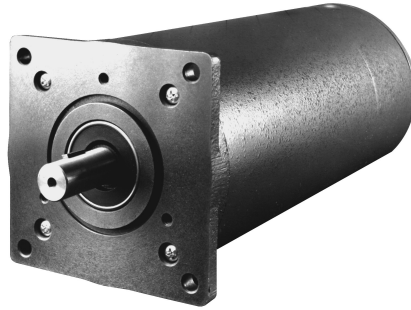


SIZE  
**42**  
4.28"  
DIA

# Rotary Hybrid Stepping Motor 1.8°

## Conventional



EADmotors Size 42 hybrid DC stepping motors are precision bi-directional devices with position accuracy of ±3% non-cumulative.

Motors are totally enclosed with permanently lubricated ball bearings.

EADmotors specializes in meeting the individual requirements of each application and offers engineering assistance for your design requirements.

### Electrical Ratings

Model Number	Unipolar Connection					Bipolar Connection								
	Phase Voltage (VDC)	Phase Current (amps)	Phase Resistance (ohms)	Phase Inductance (mH)	Holding Torque (oz-in)	Phase Voltage (VDC) series	Phase Voltage (VDC) parallel	Phase Current (amps) series	Phase Current (amps) parallel	Phase Resistance (ohms) series	Phase Resistance (ohms) parallel	Phase Inductance (mH) series	Phase Inductance (mH) parallel	Holding Torque (oz-in)
LA42BLK-5	2.26	6.11	0.37	3.5	650	3.2	1.6	4.32	8.64	0.74	0.185	14	3.5	810
LA42BLK-6	4.10	3.50	1.17	10.5	650	5.8	2.9	2.48	4.96	2.34	0.585	41.9	10.5	810
LA42BLK-7	7.93	1.77	4.47	40.1	650	11.2	5.6	1.25	2.50	8.94	2.24	160	40.1	810
LA42BLK-8	9.80	1.40	7.00	63.8	650	13.9	6.95	0.99	1.98	14	3.5	255	63.8	810
LA42BLK-200						7.0	3.5	2.0	4.0	3.5	0.4	63.8	16.0	810
LA42BLK-300						4.7	2.3	3.0	6.0	1.6	0.4	28.3	7.1	810
LA42BLK-500						2.8	1.4	5.0	10	0.6	0.150	10.2	2.6	810
LA42CNK-5	3.66	6.10	0.60	7.0	1150	5.18	2.54	4.31	8.62	1.2	0.3	28	7.0	1440
LA42CNK-6	4.60	4.74	0.97	11.3	1150	6.5	3.25	3.35	6.70	1.94	0.485	45	11.3	1440
LA42CNK-7	5.80	3.79	1.53	17.4	1150	8.2	4.1	2.68	5.36	3.06	0.765	70	17.4	1440
LA42CNK-8	7.44	3.10	2.40	26.9	1150	10.52	5.26	2.19	4.38	4.8	1.2	108	26.9	1440
LA42CNK-200						11.0	5.5	2.0	4.0	5.5	1.4	186	46.6	1440
LA42CNK-300						7.3	3.7	3.0	6.0	2.4	0.6	82.8	20.7	1440
LA42CNK-500						4.4	2.2	5.0	10	0.9	0.2	29.8	7.5	1440
LA42HRK-5	2.40	10.40	0.23	2.6	1650	3.4	1.7	7.3	14.6	0.46	0.115	10.4	2.6	2100
LA42HRK-6	3.20	8.40	0.38	4.0	1650	4.5	2.25	6.0	12.0	0.76	0.19	16	4.0	2100
LA42HRK-7	3.85	6.80	0.57	6.9	1650	5.4	2.7	4.8	9.6	1.14	0.285	27.6	6.9	2100
LA42HRK-8	4.50	5.20	0.86	10.6	1650	6.3	3.15	3.7	7.4	1.72	0.43	42.4	10.6	2100
LA42HRK-200						12.5	6.3	2.0	4.0	6.25	1.6	140	35	2100
LA42HRK-300						8.3	4.2	3.0	6.0	3.04	0.76	64	16	2100
LA42HRK-500						5.0	2.5	5.0	10	1.0	0.25	22.2	5.6	2100

Model Number	Rotor Inertia (oz-in-sec <sup>2</sup> )	Weight (ounces)
LA42BLK-*	0.055	216
LA42CNK-*	0.114	320
LA42HRK-*	0.172	424

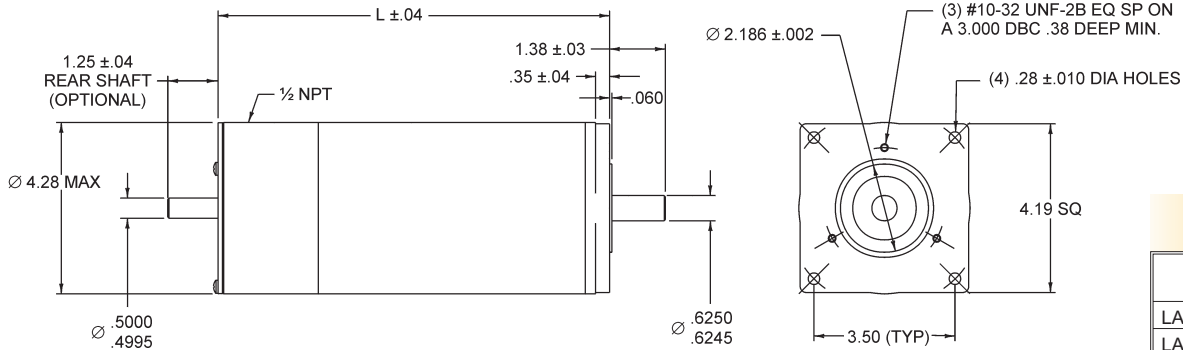
Solutions in motion



# Rotary Hybrid Stepping Motor 1.8°

Conventional

SIZE  
**42**  
4.28"  
DIA



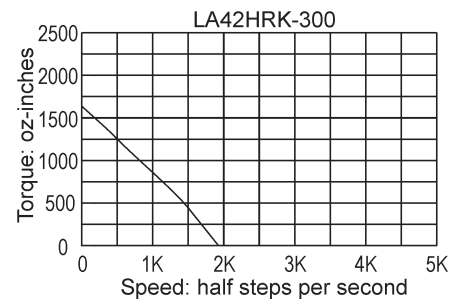
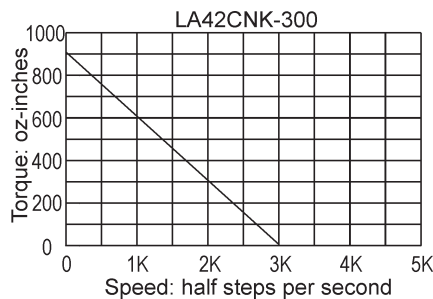
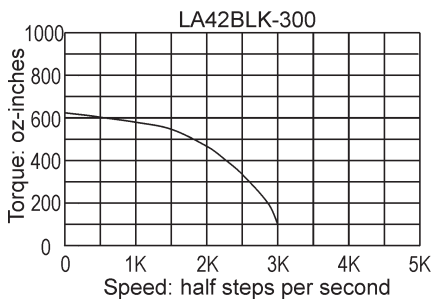
## Size 42

Model Series	Dimension "L" (inches)
LA42BLK	5.39
LA42CNK	7.56
LA42HRK	9.90

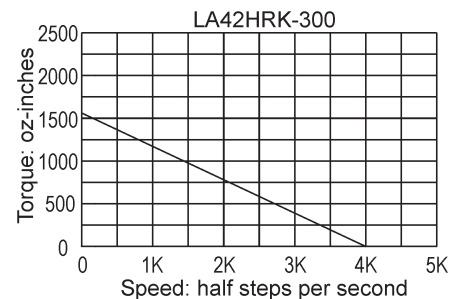
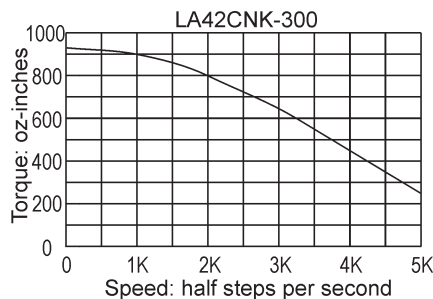
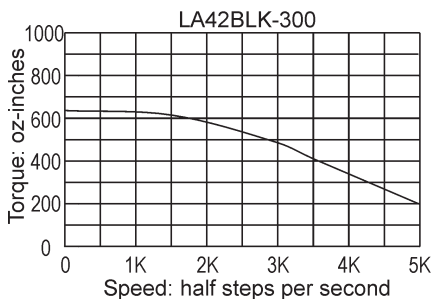
See page 38 for Connection Diagrams.  
For the rear shaft option, use the suffix "R" (for example, LA42BLK-300R).

## Pullout Torque Speed Curves

### Typical Bipolar Performance: 80 VDC Power Supply, 3 Amps/Phase—Series



### Typical Bipolar Performance: 80 VDC Power Supply, 6 Amps/Phase—Parallel



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