

JAMECO ReliaPro

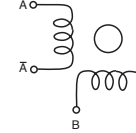
## Bipolar & Unipolar Stepper Motors

\* Web Code: UBN

Jameco offers the industry's widest variety of off-the-shelf two-phase bipolar and four-phase unipolar stepper motors for your precision applications. Be sure to check out the wide selection of 2 to 24VDC models below.

- Ball bearings
- Dielectric strength: 500V, 50Hz/minute
- Insulation resistance: 100MΩ @ 500VDC
- 18° lead wires
- Ambient temp.: -10°C to +55°C
- Use P/N 161998, pg 193, for shaft coupler

Bipolar (2-phase)



Unipolar (4-phase)

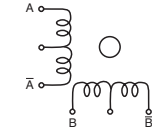


Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10

Part No.	*Mfr.	Product No.	Fig.	Drive System	Voltage (VDC)	Step Angle	Phase Resis. (Ω)	Curr. (mA)	Phase Inductance (mH)	Detent Torque (g-cm)	Holding Torque (g-cm)	Mounting Hole Space Diagonal (in.)	Mounting Holes (in.)	Shaft Dia. (in.)	Shaft Length (in.)	Motor Dia. (in.)	Motor Depth (in.)	Wt. (lbs.)	Pricing		
																			1	5	25
237569	JRP	57BYG009	1	Unipolar	2.4	1.8	1	2400	1.5	—	5914	1.86	0.20	0.25	0.83	2.29	2.20	1.40	\$24.95	\$22.49	\$19.95
237614	JRP	57BYGH801	2	Unipolar	3.3	1.8	2.2	1500	22	—	5608	1.86	0.20	0.25	0.83	2.24	2.01	1.32	31.95	28.95	25.95
1581231	ORM	PX243M-01AA	3	Unipolar	4	0.9	8.4	670	10	—	793	1.79	0.08	0.195	0.88	1.67	1.27	0.46	19.95	17.95	15.95
237552	JRP	57BYG008	1	Unipolar	4	1.8	3.1	1300	4.4	—	4996	1.86	0.20	0.25	0.83	2.29	2.01	1.30	31.95	28.95	25.95
237607	JRP	57BYGH001	2	Unipolar	5	1.8	5	1000	—	—	3976	1.86	0.20	0.25	0.83	2.24	1.61	1.10	36.95	33.25	29.95
237825	JRP	25BY4801	4	Unipolar	5	7.5	10	500	—	45	110	1.38	0.14	0.08	0.35	0.98	0.56	0.07	9.95	8.95	7.95
223870	JRP	57BYG070	1	Unipolar	5.4	1.8	3.6	1500	6	977	8974	2.65	0.20	0.25	0.80	2.20	2.20	2.00	29.95	26.95	24.25
237631	JRP	57BYGH803	2	Unipolar	6.3	1.8	4.2	1500	—	—	14276	1.86	0.20	0.25	0.83	2.24	2.99	2.43	59.95	53.95	48.95
171601	◆	PF35T48L4*	5	Unipolar	7	7.5	20	350	9	40	680	1.68	0.14	0.078	0.47	1.38	0.58	0.15	2.95	1.95	1.75
172646	JRP	42BYG205	1	Unipolar	9.6	1.8	75	480	15	220	2300	1.73	0.10	0.20	0.90	1.70	1.40	0.50	19.95	17.95	15.95
224022	JRP	42BYG016	6	Unipolar	12	1.8	75	160	40	150	900	1.73	0.10	0.20	0.70	1.70	1.30	0.50	21.95	19.75	17.75
155433	JRP	42BYG228	6	Unipolar	12	1.8	30	400	23	220	2000	1.73	0.10	0.20	0.90	1.70	1.50	0.50	20.95	18.95	16.95
237543	JRP	57BYG007	1	Unipolar	12	1.8	32	380	30	—	2957	1.86	0.20	0.25	0.83	2.29	1.61	1.00	24.95	22.49	19.95
238538	JRP	42BYGH404	7	Unipolar	12	1.8	30	400	25	250	3200	1.22	0.10	0.20	0.95	1.67	1.89	0.60	21.95	19.75	17.75
162027	JRP	57BYG084	1	Unipolar	12	1.8	20	600	22	725	6000	2.65	0.20	0.25	1.00	2.20	2.00	1.30	35.95	32.25	28.95
237876	JRP	25BY4809	4	Unipolar	20	7.5	50	400	16	45	155	1.42	0.35	0.08	0.22	0.98	0.87	0.10	4.95	4.49	3.95
238115	JRP	35BY48B08	8	Unipolar	24	7.5	75	320	38	65	270	1.65	0.13	0.08	0.35	1.38	0.59	0.15	8.49	7.49	6.75
237729	JRP	42BY48H07	9	Unipolar	24	7.5	85	280	78	130	780	1.95	0.14	0.12	0.39	1.65	0.87	0.27	6.95	6.25	5.49
237497	JRP	39BYG101-01	6	Bipolar	2.7	1.8	6.8	400	6.5	150	650	1.22	0.10	0.20	0.75	1.54	0.79	0.26	16.95	15.25	13.75
237490	JRP	39BYG001	6	Bipolar	5	1.8	5	1000	—	150	1800	1.22	0.10	0.20	0.91	1.54	1.34	0.44	19.95	17.95	15.95
237578	JRP	57BYG061	1	Bipolar	6	1.8	12	500	24	—	3569	1.86	0.20	0.25	0.83	2.29	1.61	1.00	37.95	33.95	30.75
237519	JRP	42BYG017	6	Bipolar	6.3	1.8	15	420	16	150	1400	1.22	0.10	0.20	0.51	1.67	1.34	0.50	19.95	17.95	15.95
237454	JRP	39BYG201	6	Bipolar	9.6	1.8	20	480	—	200	1000	1.22	0.10	0.20	0.20	1.54	0.98	0.44	18.95	17.95	16.95
155460	JRP	42BYG023**	6	Bipolar	12	1.8	30	400	36	220	2100	1.73	0.10	0.20	0.60	1.70	1.30	0.50	20.95	18.95	17.45
237472	JRP	39BYG401A	6	Bipolar	12	1.8	30	400	32	200	2100	1.22	0.10	0.20	0.95	1.54	1.34	0.44	21.95	19.75	17.75
1585653	JPN	KP35FM2-044	10	Bipolar	24	1.8	8	500	7.8	90	700	1.45	0.09	0.197	0.90	1.62	1.05	0.32	5.95	5.35	4.85

\* 171601: Dual shaft with 10 tooth gear \*\* 155460: Dual shaft

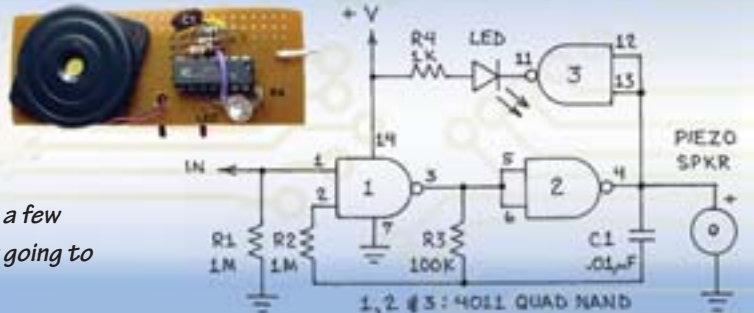
Electromech

## VOLTAGE PROBE WITH TONE AND LED OUTPUTS

by Forrest M. Mims III

A voltage probe can be very handy when troubleshooting circuits. This one described here indicates a positive voltage with both a tone and a glowing LED. It is powered by the circuit being tested, so it needs no onboard power supply. It can be built for a few dollars and can be easily modified. See how it works by going to

[www.jameco.com/FMR7](http://www.jameco.com/FMR7)



\* JRP = Jameco ReliaPro | JPN = Japan Servo | ORM = Orient Motor | ◆ Manufacturer Varies

\* For Complete Specs & Additional Product Listings Search [www.jameco.com/More](http://www.jameco.com/More) and Enter Web Code Listed Above

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