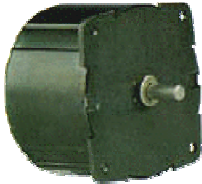


STEPPING MOTOR FAMILY

Series 73mm (RAS) Direct Drive Synchronous Motor



Step Angle:	7.5° & 15°
Position Accuracy:	+/- 5% max.
Number of Phases:	4 phase bifilar
Insulation Class:	Class A (105°C)
Lead Wire:	6 leads (approx. 12 inches [304.8 mm])
Operation Ambient Temp:	-10°C to +40°C (approx.)
Shaft Bearing:	Sleeve or Ball Bearing Available
Note: Typical data subject to change without notification	

Designed specifically to combine greater torque and small size, RAS and RBS stepping motors meet many industrial and instrument requirements. Standard 7.5° Step angle motors have a torque rating at 4-5 p/s of 23 ounce-inches [162.4 mN-m]. The Hi-Torque model is rated at 29 ounce-inches [204.8 mN-m]. Models with 15° step angles are rated, respectively, 13 and 17 ounce-inches [91.8 and 120.0 mN-m]. Dual sleeve bearings are standard, ball bearings may be specified. Double-ended shafts also are available.

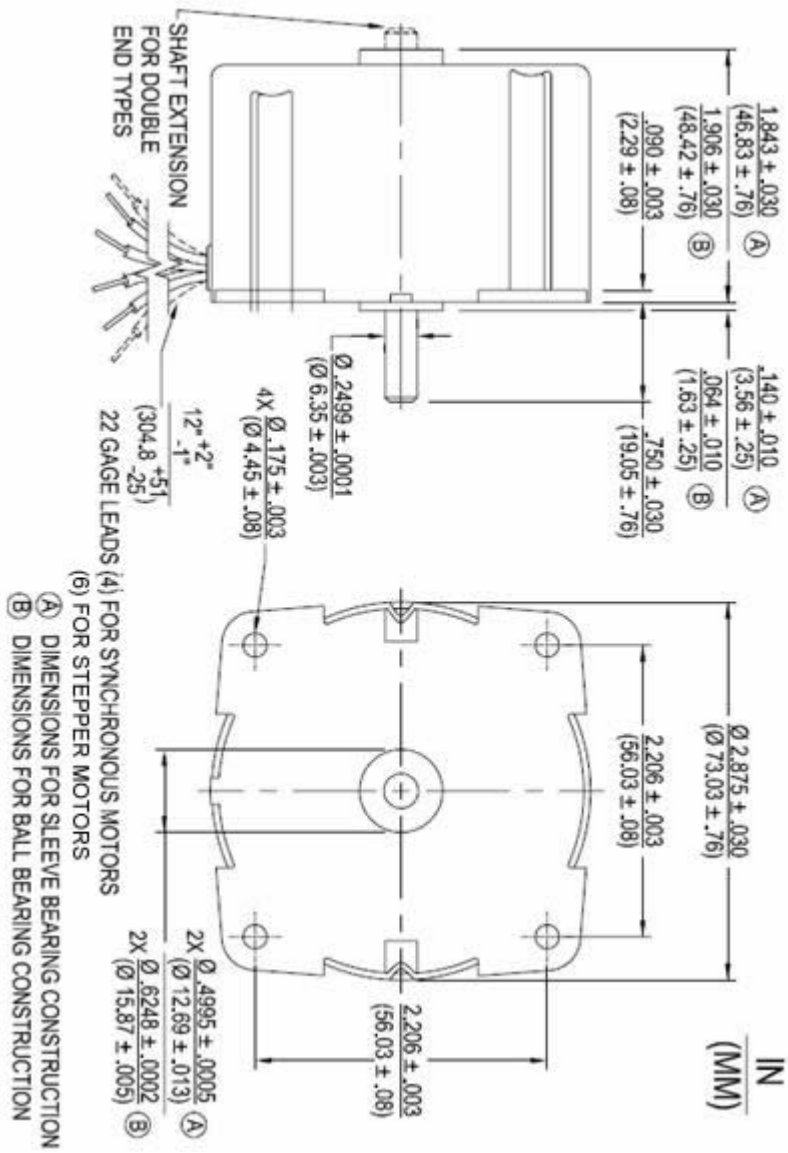
Notes:

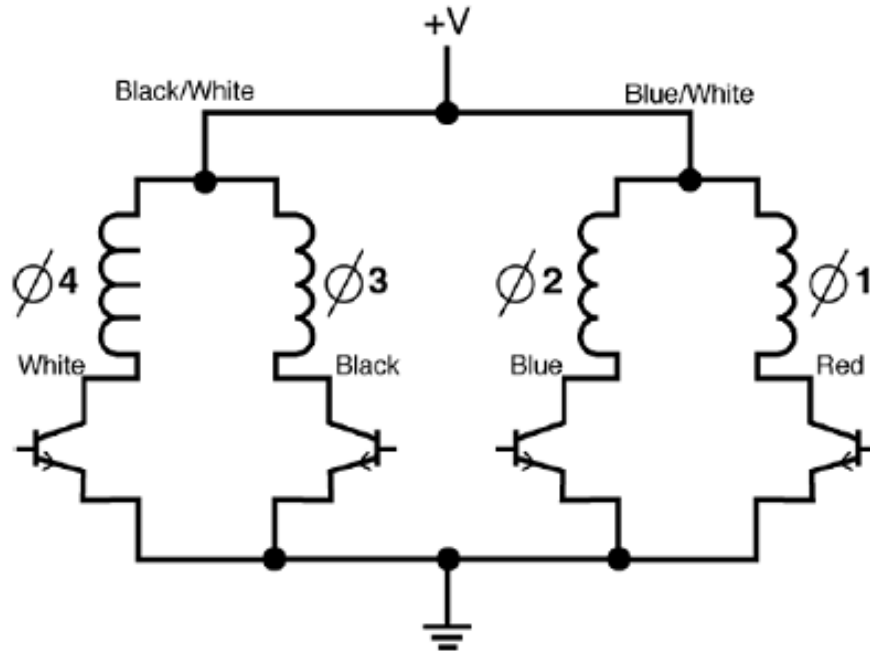
- Standard RAS and RBS direct drive motors have 4-phase bifilar windings (6 lead wires) and unipolar operation.

Model	Part Number	Step Angle (deg.)	Steps Per Rev.	Rated Torque @ 4-5 p/s (oz-in)	Rated Torque @ 4-5 p/s (mN-m)	2-Phase Holding Torque (oz-in)	2-Phase Holding Torque (mN-m)	Input Power (watts)	Nominal Voltage (volts)	Wdg Res (ohms)	Rotor Inertia (oz-in ²)	Rotor Inertia (gm-cm ²)	Temp. Rise (°C)	Weight (oz)	Weight (g)
RAS	3903-001	7.5	48	23	162	33	233	12	12	24	0.92	168.3	55	26	737.1
RAS	3906-001	7.5	48	29	205	37	261	12	12	24	0.92	168.3	55	26	737.1
RAS	3903-002	7.5	48	23	162	33	233	12	6	6	0.92	168.3	55	26	737.1
RAS	3903-003	7.5	48	23	162	33	233	12	24	96	0.92	168.3	55	26	737.1
RBS	3904-001	15.0	24	13	92	24	169	12	12	24	0.92	168.3	60	26	737.1
RBS	3907-002	15.0	24	17	120	27	191	12	12	24	0.92	168.3	60	26	737.1
RBS	3904-002	15.0	24	13	92	24	169	12	6	6	0.92	168.3	60	26	737.1
RBS	3904-003	15.0	24	13	92	24	169	12	24	96	0.92	168.3	60	26	737.1

* Measured with no heat sink, motor in a holding mode with 2 phases energized.

Bold face listings indicate Hi-Torque rotor.





	Ø4 White	Ø3 Black	Ø2 Blue	Ø1 Red	
CCW ROTATION ↑	1	0	1	0	↓ CW ROTATION
	1	0	0	1	
	0	1	0	1	
	0	1	1	0	

1 = ON, 0 = OFF

SWITCHING SEQUENCE

