

## STEPPER MOTOR FAMILY

### Series BAS Direct Drive Stepping Motor



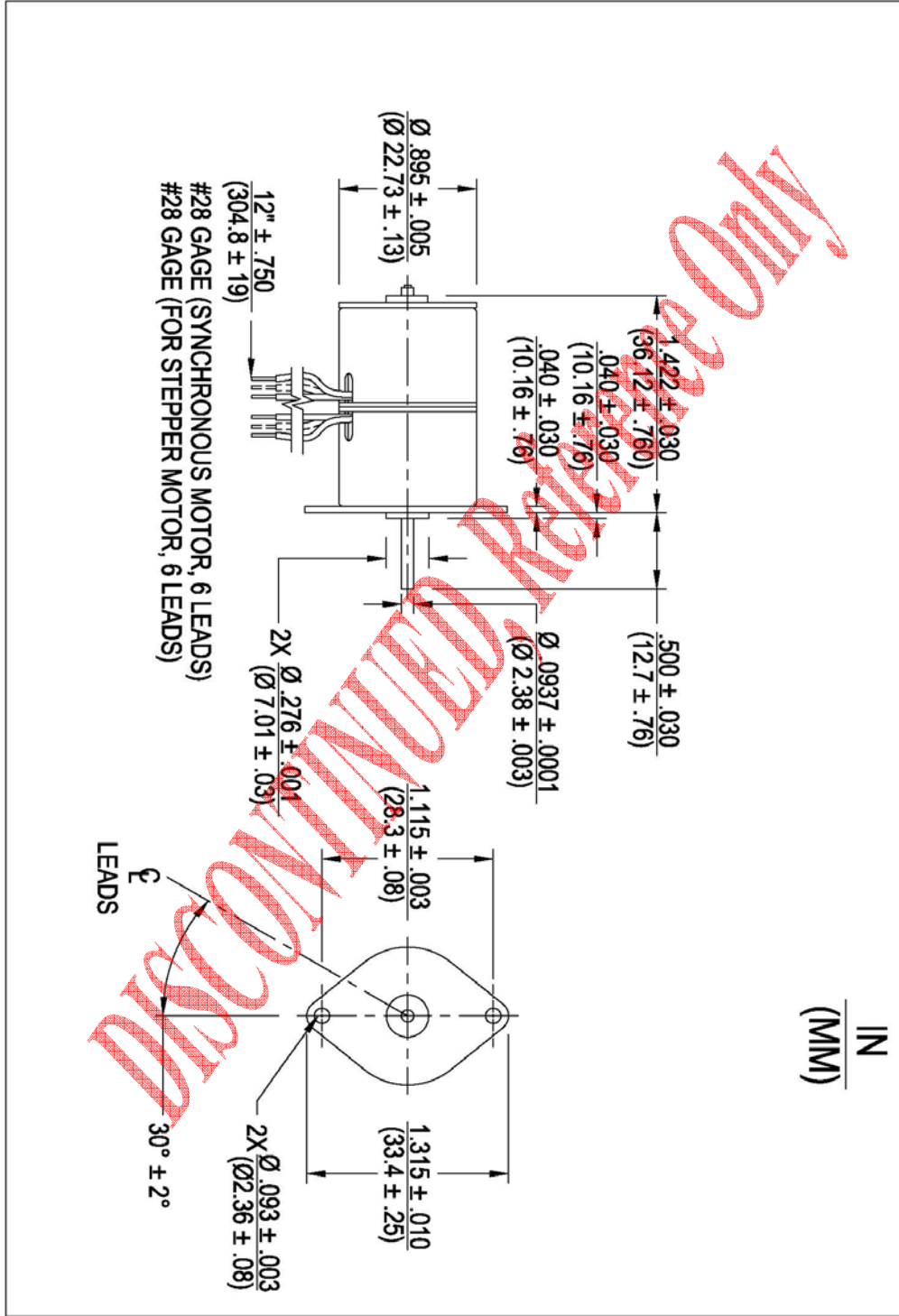
Step Angle:	18°
Output Speed:	300 RPM
Number of Phases:	4 phase bifilar Standard
Lead Wire:	6 leads 24AWG (approx. 12 inches [304.8 mm])
Operation Ambient Temp:	-10°C to +40°C (approx.)
Temperature Rise:	46 °C Max
Note: Typical data subject to change without notification	

This small stepping motor has a relatively high torque/inertia ratio. Its design recognizes the demand for small components to fit where space is severely limited.

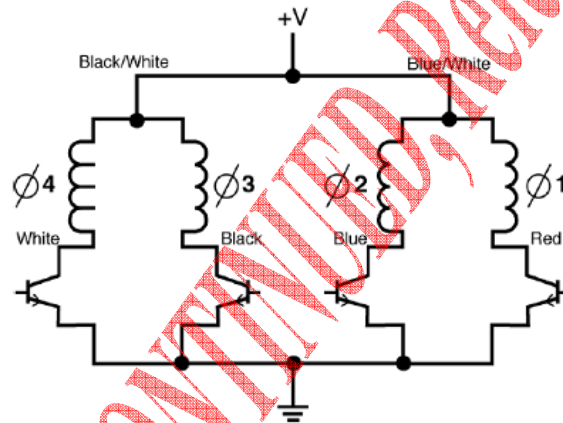
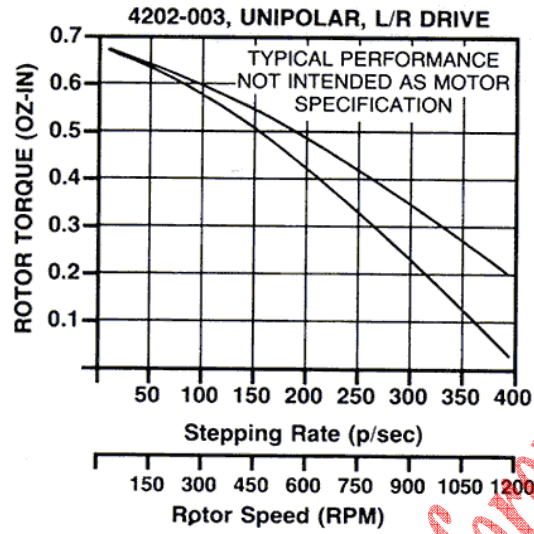
The BAS series motor is available from stock in 5, 6, 12, and 24 volt models. They have a holding torque of 1.1 oz-in [31.2 mN-m]. All have a step angle of 18° or 20 steps per revolution and a shaft sleeve bearing.

Applications are found in a wide range of medical and scientific instruments and robotics. These stepping motors are also recommended for low duty - cycle, battery operated equipment.

Model	Part Number	Step Angle (deg)	Steps per Rev	Rated Torque @ 175 p/s (oz-in)	Rated Torque @ 175 p/s (mN-m)	Rated Torque @ 4-5 p/s (oz-in)	Rated Torque @ 4-5 p/s (mN-m)	Holding Torque (oz-in)	Holding Torque (mN-m)	Output Speed (RPM)	Input Power (watts)	Nominal Voltage (Vdc)	Wdg Res (ohms)	Rotor Inertia (oz-in <sup>2</sup> )	Rotor Inertia (gm-cm <sup>2</sup> )	Weight (oz)	Weight (g)
BAS	4202-001	18	20	0.5	3.531	0.5	3.531	1.1	7.767	300	2.5	5	20	217.65	1.19	2.1	59.535
BAS	4202-002	18	20	0.5	3.531	0.5	3.531	1.1	7.767	300	2.5	6	29	217.65	1.19	2.1	59.535
BAS	4202-003	18	20	0.5	3.531	0.5	3.531	1.1	7.767	300	2.5	12	115	217.65	1.19	2.1	59.535
BAS	4202-004	18	20	0.5	3.531	0.5	3.531	1.1	7.767	300	2.5	24	461	217.65	1.19	2.1	59.535



**TORQUE/STEPPING RATE CURVES**



	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**