

## SYNCHRONOUS MOTOR FAMILY

### Series 57mm (SA) Direct Drive Synchronous Motor



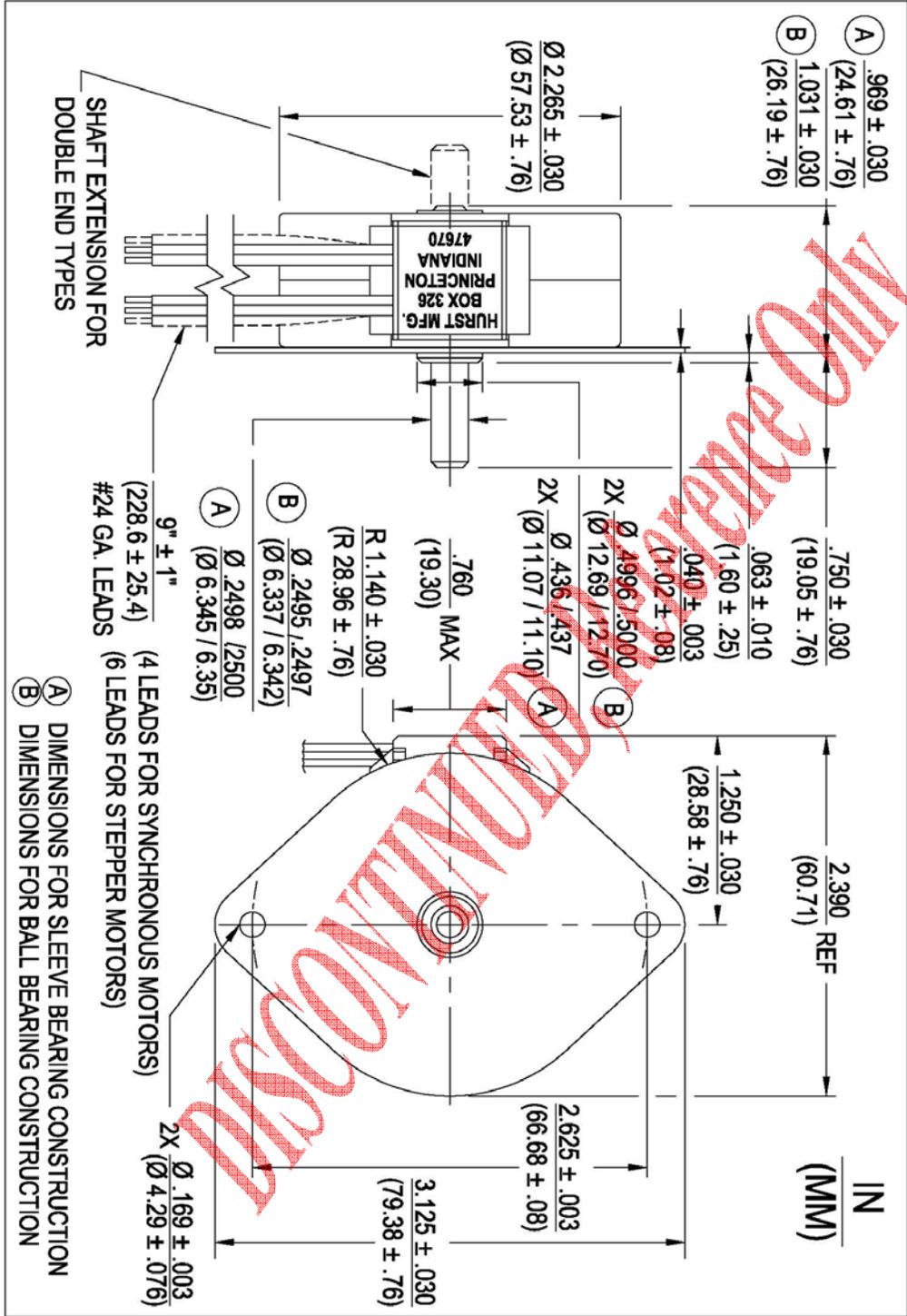
Output Speed:	300 RPM
Insulation Class:	Class A (105°C)
Lead Wire:	4 leads 22AWG (approx. 9 inches [228.6 mm])
Operation Ambient Temp:	-10°C to +40°C (approx.)
Shaft Bearing:	Sleeve Bearing (unless otherwise noted)
 Recognition:	E53578(N), Component-Impedance Protected Motors
Capacitors are required for operation. Capacitors supplied with 115 Vac motors.	
Note: Typical data subject to change without notification	

Series SA permanent magnet synchronous motors are designed for application where space is limited and precise performance is required. The standard 60Hz models have synchronous speeds of 300 RPM. Standard motors are 115V, 60Hz, other voltages and frequencies may be specified.

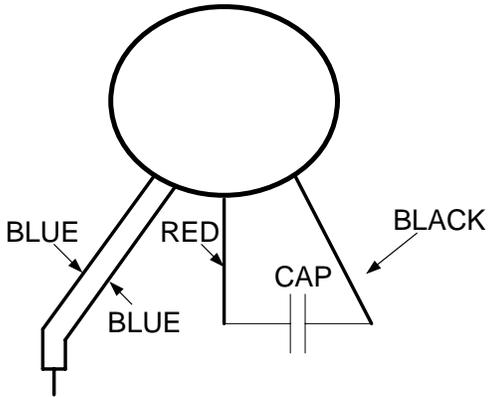
**Notes:**

- Sleeve or ball bearings are standard. Double ended shafts may be specified.
- Capacitors are required for operation and must be used in the circuit even if the motor is used in a unidirectional mode.
- Capacitors are furnished with 115V motors.

Model	Part Number	Rated Torque (oz-in)	Rated Torque (mN-m)	Output Speed (RPM)	Input Power (watts)	Voltage (VAC) 60HZ	Full Load Temp. Rise °C	Capacitor Value (mfd)	Capacitor not supplied	Shaft bearing	Weight (oz)	Weight (g)	Hi-Torque Rotor
SA	4001-001	6	42.4	300	5.5	115	28	0.5		sleeve	8	226.8	
SA	4001-003	6	42.4	300	5.5	24	28	10 100VDC +/-10%	X	sleeve	8	226.8	
SA	4009-001	7	49.4	300	5.5	115	28	0.5		ball	8	226.8	
SA	4017-001	8.5	60	300	7	115	37	0.62		sleeve	8	226.8	X
SA	4018-001	8.5	60	300	7	115	37	0.62		ball	8	226.8	X
SA	4018-003	8.5	60	300	7	24	37	15 100VDC +/-10%	X	ball	8	226.8	X

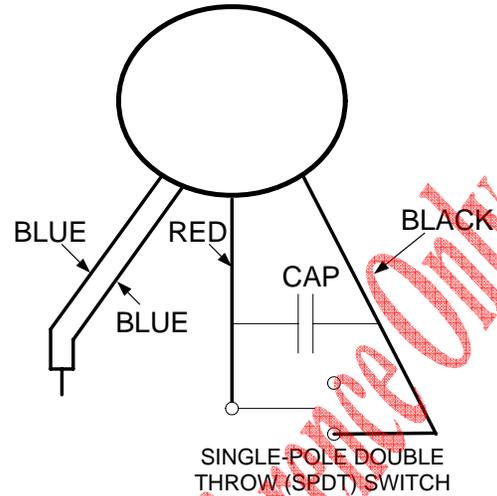


Wiring Diagram



Capacitors are non-polarized and must always be connected between the red and black leads. Always connect the (2) coil blue leads together. Connect the power supply to the blue leads and red lead to produce clockwise (CW) rotation viewing shaft end. Connect the power supply to the blue leads and black lead to produce counter-clockwise (CCW) rotation viewing shaft end.

Optional Wiring Diagram with Switch



Capacitors are non-polarized and must always be connected between the red and black leads. Always connect the (2) coil blue leads together. Connect the power supply to the blue leads and red lead to produce clockwise (CW) rotation viewing shaft end. Connect the power supply to the blue leads and black lead to produce counter-clockwise (CCW) rotation viewing shaft end.

DISCONTINUED, SEE SPEC ONLY