SYNCHRONOUS MOTOR FAMILY

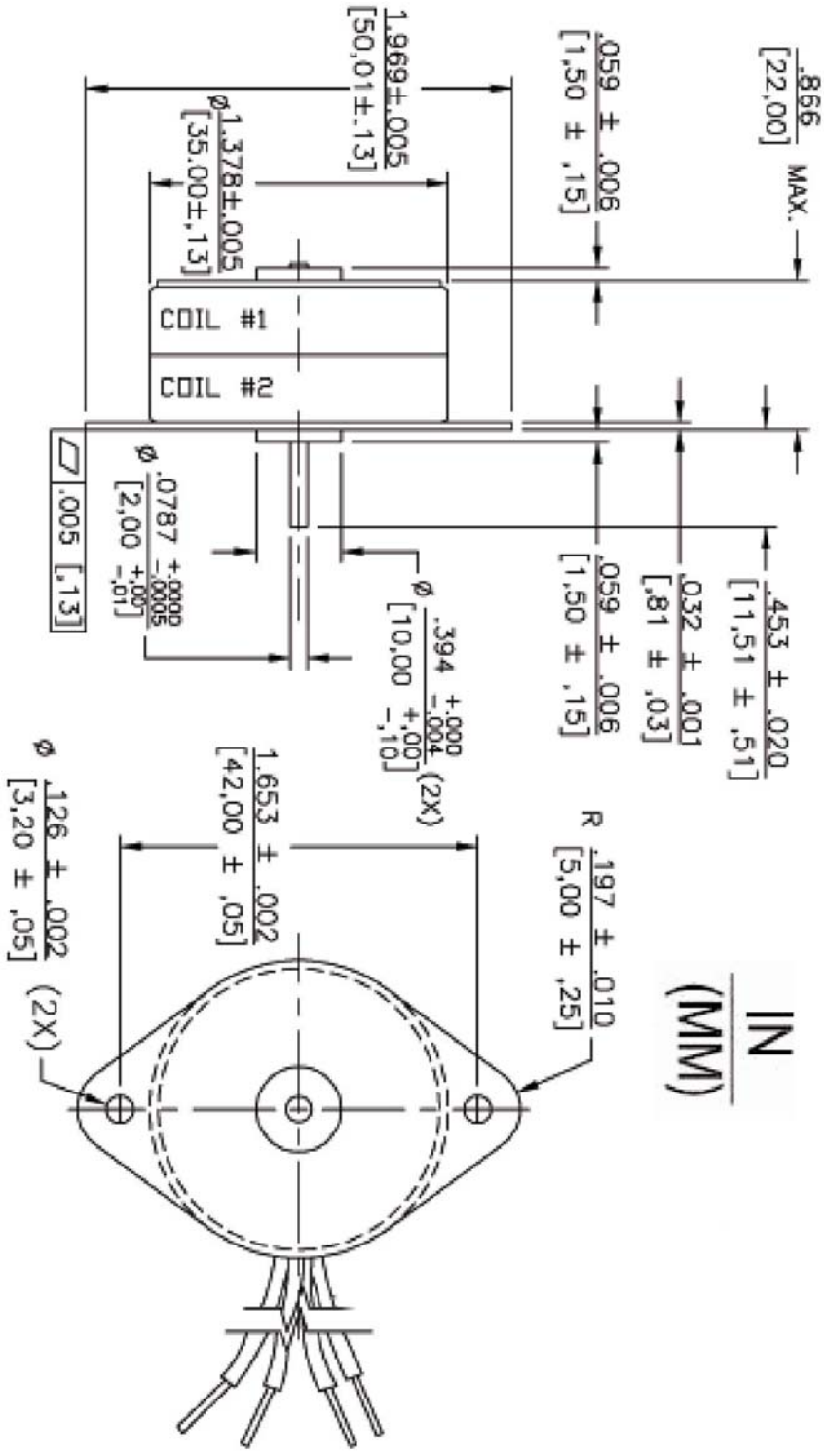
Series 35mm (LYD35) Direct Drive Synchronous Motor

Frame Size:	35mm
Output Speed:	250/300 RPM (50/60 Hz respectively)
Standard Voltages:	115 Vac & 24 Vac 50/60 Hz
Insulation Class:	Class A (105°C)
Lead Wire:	4 leads 28AWG (approx. 9 inches [228.6 mm])
Operation Ambient Temp:	-10°C to +40°C (approx.)
Shaft Bearings:	Sleeve bearings
UL Recognition:	E53578(N), Component-Impedance Protected Motors
Capacitor is required for operation. Capacitor supplied with 115 Vac motors.	
Note: Typical data subject to change without notification	

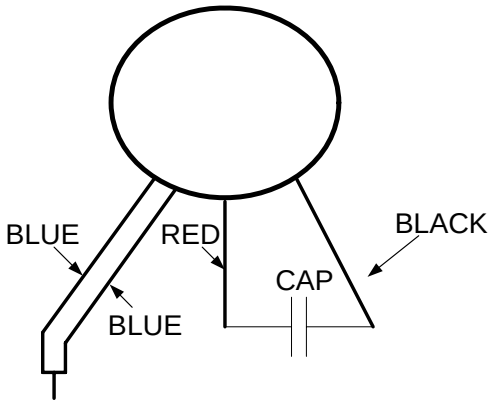
Example: LY G 35 115 E02 P

	Motor Family	Gearing	Motor Size	Voltage	Gear Ratio	Gear Box
Options	LY	D=Direct Drive G=Geared	35=35MM 42=42MM	024=24VAC 50/60Hz 115=115VAC 50/60Hz	Gear Options	P=Pear-Shaped Gearbox R=Round-Shaped Gearbox

Model	Part Number	Minimum Torque (oz-in)	Minimum Torque (mN-m)	Output Speed (RPM)	Input Power (watts)	Nominal Voltage (VAC) 50/60 Hz	Winding Resistance (ohms)	Inductance (mH/phase)	Capacitor Value (mFd)	Capacitor not supplied	Weight (oz)	Weight (g)	Length (L, in)	Length (L, mm)
LYD35	LYD35024D	2.3	16.2	250/300	2	24	316	0.368	4.0, 100VDC +/-5%	X	3.5	106.6	0.866	22
LYD35	LYD35115D	2.3	16.2	250/300	2.5	115	6115	5.4	0.25, 400VDC +/-5%		3.5	106.6	0.866	22

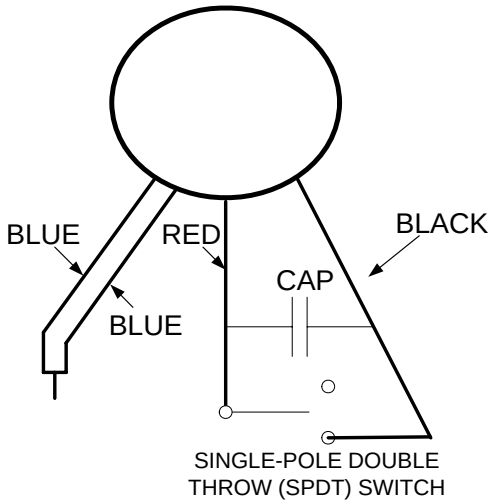

.866 [22,00] MAX.
1.969±.005 [50,01±.13]
.059 ± .006 [1,50 ± ,15]
Ø1.378±.005 [35.00±,13]
COIL #1
COIL #2
.005 [,13]
Ø .0787 +.0000 -.0005 [2,00 +,00 -,01]
Ø .394 +.000 -.004 [10,00 +,00 -,10] (2X)
.059 ± .006 [1,50 ± ,15]
.032 ± .001 [,81 ± ,03]
.453 ± .020 [11,51 ± ,51]
R .197 ± .010 [5,00 ± ,25]
1.653 ± .002 [42,00 ± ,05]
Ø .126 ± .002 [3,20 ± ,05] (2X)
IN
(MM)

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



SINGLE-POLE DOUBLE THROW (SPDT) 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.