

Permanent Magnet Stepper Motors



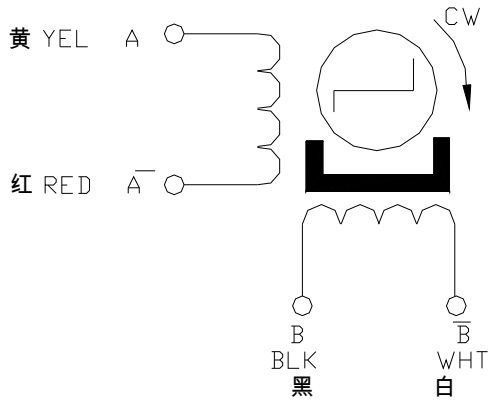
- Permanent Magnet Stepper Motor
- Precise Motion at a Low Cost
- 27 to 1200 g-cm of Torque
- 15 to 57 mm diameter
- Can be customized for
 - winding current to optimize torque, shaft options, cables or connectors

Specifications

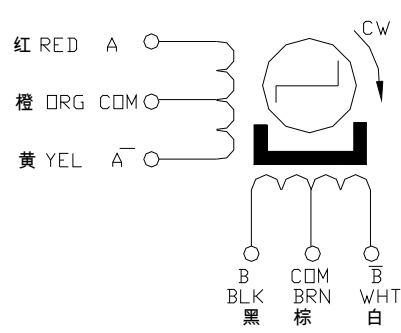
Item	Specifications
Step Angle Accuracy	±8% (full step, no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80° C Max
Ambient Temperature	-20°C to +50°C
Insulation Resistance	100MΩMin. ,500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.06Max. (450 g-load)
Shaft Axial Play	0.08Max. (450 g-load)

Model	Body Diam. (mm)	Body Length (mm)	Step Angle (deg)	# of Wires/ Pins	Voltage (V)	Current per Phase (A)	Holding Torque (g.cm)	Detent Torque (g.cm)	Rotor Inertia (g.cm ²)
TSM15-180-12-5V-050A-PINS	15	12	18	4	5	0.50	27	6	<1
TSM15-180-12-12V-007A-PINS	15	12	18	4	12	0.065	40	10	<1
TSM15-180-12-12V-004A-LW4	15	12	18	4	12	0.04	40	10	<1
TSM20-180-19-5V-050A-LW4	20	19	18	4	5	0.50	60	20	<1
TSM20-180-19-12V-024A-LW6	20	19	18	6	12	0.24	80	25	<1
TSM25-075-15-5V-050A-LW6	25	15	7.5	6	5	0.50	120	45	<1
TSM25-075-15-5V-050A-LW4	25	15	7.5	4	5	0.50	110	40	<1
TSM25-150-16-12V-040A-LW6	25	16	15	6	12	0.40	130	75	<1
TSM25-150-16-9V-045A-LW6	25	16	15	6	9	0.45	140	75	<1
TSM25-075-15-12V-024A-LW6	25	15	7.5	6	12	0.24	160	35	<1
TSM25-075-15-12V-024A-LW4	25	15	7.5	4	12	0.24	170	45	<1
TSM35-150-22-5V-046A-LW4	35	22	15	4	5	0.46	335	125	7.5
TSM35-075-16-5V-060A-LW4	35	16	7.5	4	5	0.60	350	75	7.5
TSM35-075-22-5V-050A-LW4	35	22	7.5	4	5	0.50	550	125	7.5
TSM35-075-22-12V-020A-LW4	35	22	7.5	4	12	0.20	550	125	7.5
TSM42-075-22-12V-013A-LW4	42	22	7.5	4	12	0.13	550	100	7.5
TSM42-075-17-5V-059A-LW4	42	17	7.5	4	5	0.59	500	100	9.6

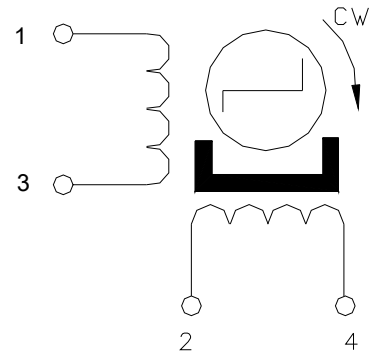
TSM42-075-22-4V-060A-LW4	42	22	7.5	4	4.2	0.60	800	210	9.6
TSM57-075-25-6V-063A-LW4	57	25	7.5	4	5.6	0.625	1200	425	12.5



A



B



C