

## 5017-006

NEMA 17 Step Motor



### ***Product Features***

- *2-phase hybrid step motor*
- *Standard NEMA 17 dimensions*



## Description

### **Product Description:**

The 5017-006 two-phase stepper motor is suitable for a wide range of motion control applications.

## Specifications

<b>Part Number:</b>	5017-006
<b>Frame Size:</b>	NEMA 17
<b>Motor Type:</b>	Standard torque
<b>Part Number w/Double Shaft:</b>	5017-006D
<b>Motor Length:</b>	1.34 inches
<b>Number of Lead Wires:</b>	6
<b>Lead Wire Configuration:</b>	flying leads, no connector
<b>Lead Wire/Cable Length:</b>	12 inches inches
<b>Lead Wire Gauge:</b>	22 AWG
<b>Unipolar Holding Torque:</b>	15.3 oz-in
<b>Bipolar Holding Torque:</b>	21.6 oz-in
<b>Step Angle:</b>	1.8 deg
<b>Bipolar Series Current:</b>	0.67 A/phase
<b>Bipolar Series Resistance:</b>	8.4 Ohms/phase
<b>Bipolar Series Inductance:</b>	12.4 mH/phase
<b>Unipolar Current:</b>	0.95 A/phase
<b>Unipolar Resistance:</b>	4.2 Ohms/phase
<b>Unipolar Inductance:</b>	3.1 mH/phase
<b>Rotor Inertia:</b>	2.69E-04 oz-in-sec <sup>2</sup>
<b>Integral Gearhead:</b>	No
<b>Storage Temperature:</b>	-40 to 70 °C
<b>Operating Temperature:</b>	-20 to 50 °C
<b>Insulation Class:</b>	Class B (130 °C)
<b>Shaft Run Out:</b>	0.001 inch T.I.R. max
<b>Radial Play:</b>	0.001 inch max w/ 4.4 lb load
<b>End Play:</b>	0.001 inch max w/ 6.6 lb load
<b>Perpendicularity:</b>	0.003 inches
<b>Concentricity:</b>	0.002 inches

Concentricity: 0.002 inches

## Downloads

**Family Datasheet:**  [StepMotorWiring-6-lead.pdf](#)

**Datasheet:** <http://s3.amazonaws.com/applied-motion-pdf/5017-006.pdf>

**2D Drawing:**  [5017-006\\_RevE.pdf](#)

 [171833\\_RevD\\_MechanicalSpec.pdf](#)