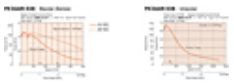
Item # PK266M-03A, Stepper Motor

Stepper Motor

The High Resolution Type have half the step angle of standard stepper motors. The high resolution type increase motor resolution from 200 steps/revolution to 400 steps/revolution.

RoHS

SPECIFICATIONS

Motor Type	2-Phase
Frame Size	2.22 in
Motor Length	2.13 in.
Speed-Torque Characteristics	 Speed-Torque Characteristics
Holding Torque	Bipolar (Series) 166 oz-in Unipolar 127 oz-in
Shaft/Gear Type	Round Shaft (No Gearhead)
Shaft	Single
Type	High-Resolution

Encoder	None
Basic Step Angle	0.9°
Step Angle	0.9 °
Motor Connection Type	Flying Leads
Connection Type	Bipolar (Series) Unipolar
Current per Phase (A/phase)	2.1 [Bipolar (Series)] 3 [Unipolar]
Lead Wires	6
Voltage (VDC)	3.2 [Bipolar (Series)] 2.3 [Unipolar]
Resistance (Ω/phase)	1.5 [Bipolar (Series)] 0.75 [Unipolar]
Inductance (mH/phase)	5.8 [Bipolar (Series)] 1.45 [Unipolar]
Rotor Inertia	1.64 oz-in²
RoHS Compliant	Yes
Insulation Resistance	100 M Ω or more when 500 VDC megger is applied between the windings and the case under normal ambient temperature and humidity.
Dielectric Strength	Sufficient to withstand 1.0 kVAC at 50 Hz or 60 Hz applied between the windings and the case for 1 minute under normal ambient temperature and humidity.
Temperature Rise	Temperature rise of the windings is 176°F (80°C) or less measured by the change resistance method. (at rated voltage, at standstill, 2 phases energized)
Insulation Class	Class B [266°F (130°C)]
Ambient Temperature Range	14 ~ 122°F (-10 ~ 50°C) (non-freezing)
Ambient Humidity	85% or less (non-condensing)
Shaft Runout	0.05 mm (0.002 in.) T.I.R.
Concentricity	0.075 mm (0.003 in.) T.I.R.
Perpendicularity	0.075 mm (0.003 in.) T.I.R.
Radial Play	0.025 mm (0.001 in.) maximum of 5 N (1.12 lb.)
Axial Play	0.075 mm (0.003 in.) maximum of 10 N (2.2 lb.)
Step Accuracy	±3 arc minutes (±0.05°)

Permissible Overhung Load	0 in. from Shaft End = 12.1 lb 0.2 in. from Shaft End = 15 lb 0.39 in. from Shaft End = 20 lb 0.59 in. from Shaft End = 29 lb
Permissible Thrust Load	The permissible thrust load shall be no greater than the motor mass.