Oriental Motor U.S.A. Corp.

1001 Knox St.

Torrance, CA 90502

Tel: 800-418-7903 Fax: 800-309-7999

www.orientalmotor.com

Item # PK243-01AA, Stepping Motor

\$59.00



Stepping Motor

The standard PK series stepping motor offers balanced performance enhanced by high torque, low vibration and low noise.



SPECIFICATIONS FEATURES

SPECIFICATIONS

Product Line	VEXTA ®
Frame Size	1.65 in 42 mm
Speed-Torque Characteristics	Graph
Holding Torque	Bipolar (Series) 28 oz-in Unipolar 22 oz-in Bipolar (Series) 0.2 N⋅m Unipolar 0.16 N⋅m
Shaft/Gear Type	Round Shaft (No Gearhead)
Gear Type	No Gearhead
Shaft	Single
Туре	Standard
Encoder	None
Basic Step Angle	1.8°
Step Angle	1.8 °

Matan Cannastian Time	Flying Leads
Motor Connection Type	, , , , , , , , , , , , , , , , , , , ,
Connection Type	Bipolar (Series) Unipolar
Current per Phase (A/phase)	0.67 [Bipolar (Series)] 0.95 [Unipolar]
Lead Wires	6
Voltage (VDC)	5.6 [Bipolar (Series)] 4 [Unipolar]
Resistance (Ω/phase)	8.4 [Bipolar (Series)] 4.2 [Unipolar]
Inductance (mH/phase)	10 [Bipolar (Series)] 2.5 [Unipolar]
Rotor Inertia	0.191_oz-in² 35×10 ⁻⁷ kg·m²
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 0.5 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 144°F (80°C) or less measured by the change resistance method. (at rated current, 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°)

FEATURES

Standard Type Stepping Motors

The standard PK 2-phase stepping motor offers balanced performance enhanced by high torque, low vibration and low noise. The optimal motor size and winding specifications can be selected from a wide range of motor variations.



Encoder Option Available

The PK Series stepping motor with encoder offers high torque and precise feedback capability.

- Encoder Feedback Type: Incremental
 Two feedback resolutions: 200 and 400 pulses/rev.
- · 2-channel or 3-channel
- Provides closed loop system capability