

Orientalmotor

ORIENTAL MOTOR U.S.A. Corp.
570 Alaska Avenue
Torrance, CA 90503
1-800-GO-VEXTA (468-3982)

Item # PK296-F4.5A, Stepper Motor



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



Lead Time | Specifications

Lead Time

Available to Ship¹

Contact your local sales office for more information.

Specifications

Product Line	VEXTA ®
Motor Type	2-Phase
Motor Frame Size	3.35 in. sq.
Shaft/Gear Type	Round Shaft (No Gearhead)
Holding Torque	440 oz-in
Type	Standard
Connection Type	Bipolar (Series) Unipolar Bipolar (Parallel)
Lead Wires	8
Current per Phase (A/phase)	3.18 [Bipolar (Series)] 4.5 [Unipolar] 6.3 [Bipolar (Parallel)]

Encoder	Not Equipped
Shaft	Single
Voltage (VDC)	1.4 [Bipolar (Parallel)] 2.8 [Bipolar (Series)] 2 [Unipolar]
Resistance (Ω/phase)	0.24 [Bipolar (Parallel)] 0.96 [Bipolar (Series)] 0.48 [Unipolar]
Inductance (mH/phase)	1.5 [Bipolar (Parallel)] 6 [Bipolar (Series)] 1.5 [Unipolar]
Step Angle	1.8 °
Rotor Inertia (oz-in²)	7.7 oz-in ²
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 ($\pm 0.05^\circ$)

¹ Quoted Ship Date for orders placed before 12:00pm PST in quantities listed.
A newer version of this product is available, contact your local sales office for more information.