

**Item # PK296B2A-SG10, Stepper Motor**

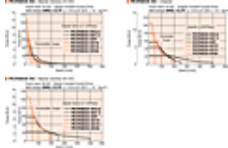


**Stepper Motor**

Incorporating the SH gears with high permissible torque delivers high resolution, high torque and smooth low-speed rotation.



**SPECIFICATIONS**

Motor Type	2-Phase
Frame Size	3.54 in
Motor Length	4.96 in.
Speed-Torque Characteristics	 <p>Speed - Torque Characteristics</p>
Holding Torque	976 oz-in
Shaft/Gear Type	Spur Gear
Gear Ratio (X:1)	10 :1
Shaft	Double

Type	Geared
Encoder	None
Basic Step Angle	1.8°
Step Angle	0.18 °
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)	2 [Bipolar (Series)] 1.4 [Unipolar]
Resistance ( $\Omega$ /phase)	0.96 [Bipolar (Series)] 0.48 [Unipolar]
Inductance (mH/phase)	6 [Bipolar (Series)] 1.5 [Unipolar]
Rotor Inertia	7.7 oz-in <sup>2</sup>
RoHS Compliant	Yes
Insulation Resistance	100 M $\Omega$ 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.)

Permissible Overhung Load	0 in. from Shaft End = 49 lb 0.2 in. from Shaft End = 56 lb 0.39 in. from Shaft End = 67 lb 0.59 in. from Shaft End = 78 lb 0.79 in. from Shaft End = 90 lb
Permissible Thrust Load	22 lb

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## FEATURES