

Item # PV267-02BA, Stepper Motor

Web Price \$102.85

Stepper Motor

The PV series provides, on average, 1.5 times higher torque than a standard stepper motor. By utilizing a larger rotor diameter, larger magnets can be used to significantly increase the output torque.



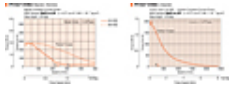
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LEAD TIME

Available to Ship ¹	Contact your local sales office for more information.
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¹ Quoted Ship Date for orders placed before 12:00pm PST in quantities listed.

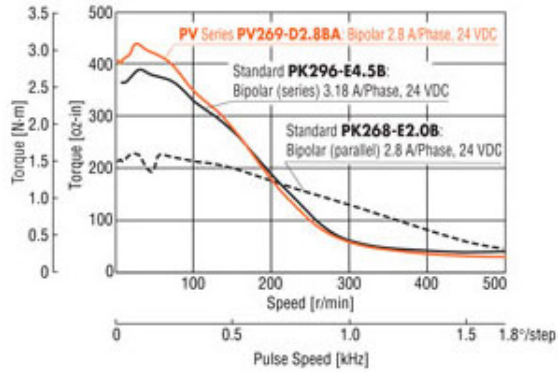
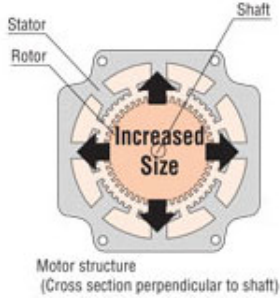
SPECIFICATIONS

Motor Type	2-Phase
Frame Size	2.36 in
Motor Length	2.56 in.
Speed-Torque Characteristics	 Graph
Holding Torque	Bipolar (Series) 310 oz-in Unipolar 240 oz-in
Shaft/Gear Type	Round Shaft (No Gearhead)
Shaft	Double
Type	High-Inertia

Encoder	None
Basic Step Angle	1.8°
Step Angle	1.8 °
Motor Connection Type	Flying Leads
Connection Type	Bipolar (Series) Unipolar
Current per Phase (A/phase)	1.4 [Bipolar (Series)] 2 [Unipolar]
Lead Wires	6
Voltage (VDC)	6.7 [Bipolar (Series)] 4.8 [Unipolar]
Resistance (Ω /phase)	4.8 [Bipolar (Series)] 2.4 [Unipolar]
Inductance (mH/phase)	14.2 [Bipolar (Series)] 3.54 [Unipolar]
Rotor Inertia	3.1 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	± 2 arc minutes ($\pm 0.034^\circ$)

Permissible Overhung Load	0 in. from Shaft End = 11.2 lb 0.2 in. from Shaft End = 13.5 lb 0.39 in. from Shaft End = 16.8 lb 0.59 in. from Shaft End = 22 lb 0.79 in. from Shaft End = 33 lb
Permissible Thrust Load	The permissible thrust load shall be no greater than the motor mass.

FEATURES



High-Inertia Type Stepping Motors

On average the PV Series provides 1.5 times higher torque than a standard stepping motor. By utilizing a larger rotor diameter, larger magnets can be used to significantly increase the output torque.

All equipment has a friction load and the motor stops when the motor output torque and friction load torque are balanced. As shown in the characteristics above, the larger the output torque per step angle, the less the motor is influenced by the friction load, so positioning accuracy is improved. Stop positioning displacement by external force does not occur as often.