## Item # PKP213U05A, Stepper Motor

Web Price $55.25

### Stepper Motor

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

- Unipolar Winding

RoHS

· LEAD TIME · SPECIFICATIONS

## LEAD TIME

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|---|---|
| Available to Ship [1] | 07/18/2016 |

1 Quoted Ship Date for orders placed before 12:00 pm PST. Quantities may affect Shipping Date.

## SPECIFICATIONS

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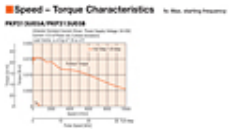
|---|---|
| Motor Type | 2-Phase |
| Frame Size | 20 mm |
| Motor Length | 30 mm |
| Speed-Torque Characteristics |  Speed - Torque Characteristics |
| Holding Torque | 0.014 N·m |
| Shaft/Gear Type | Round Shaft (No Gearhead) |
| Shaft | Single |
| Type | High-Torque |
| Encoder | Not Equipped |
| Basic Step Angle | 1.8° |
| Output Step Angle | 1.8 ° |

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|---|---|
| Electromagnetic Brake | Not Equipped |
| Motor Connection Type | Flying Leads |
| Connection Type | Unipolar |
| Current per Phase (A/phase) | 0.5 |
| Lead Wires | 5 |
| Voltage (VDC) | 4.25 |
| Resistance (Ω/phase) | 8.5 |
| Inductance (mH/phase) | 2.9 |
| Rotor Inertia | $1.6\times10^{-7}$ 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 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)]<br>Depending on the driving conditions, a considerable amount of heat may be generated by the motor. Be sure to keep the temperature of the motor case under 212°F (100°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°) |
| Radial Load | 0 mm from Shaft End = 12 N<br>5 mm from Shaft End = 15 N |
| Axial Load | 3 N |