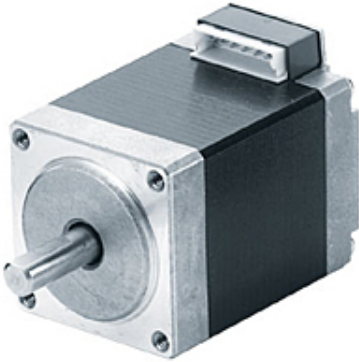


Item # PKP224U09A Stepper Motor

Stepper Motor



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

- Unipolar Winding



[LEAD TIME](#) · [SPECIFICATIONS](#)

LEAD TIME

Available to Ship ¹	1 ~ 30 pcs 03/19/2015
--------------------------------	-----------------------

¹ Quoted Ship Date for orders placed before 12:00pm PST in quantities listed.

SPECIFICATIONS

Motor Type	2-Phase
Frame Size	1.10 in
Motor Length	1.57 in.
Speed-Torque Characteristics	 Speed - Torque Characteristics
Holding Torque	10.6 oz-in
Shaft/Gear Type	Round Shaft (No Gearhead)
Shaft	Single
Type	High-Torque

Encoder	None
Basic Step Angle	1.8°
Step Angle	1.8 °
Motor Connection Type	Connector
Connection Type	Unipolar
Current per Phase (A/phase)	0.95
Lead Wires	6
Voltage (VDC)	3.2
Resistance (Ω /phase)	3.4
Inductance (mH/phase)	1.2
Rotor Inertia	0.066 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 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)]
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 ($\pm 0.05^\circ$)

Permissible Overhung Load	0 in. from Shaft End = 5.6 lb 0.2 in. from Shaft End = 7.6 lb 0.39 in. from Shaft End = 11.7 lb
Permissible Thrust Load	The permissible thrust load shall be no greater than the motor mass.

PKP224U09A

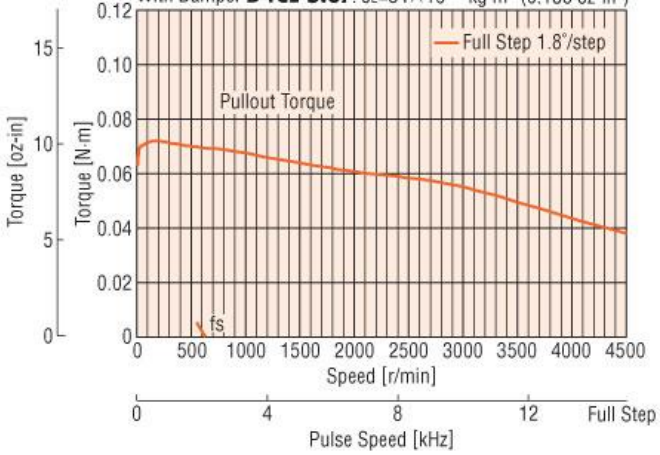
Speed - Torque Characteristics

Speed – Torque Characteristics

fs: Max. starting frequency

PKP224U09

Unipolar Constant Current Driver Power Supply Voltage: 24 VDC
Current: 0.95 A/Phase (At 2-phase excitation)
With Damper **D4CL-5.0F**: $J_L=34 \times 10^{-7}$ kg·m² (0.186 oz·in²)



PRINT

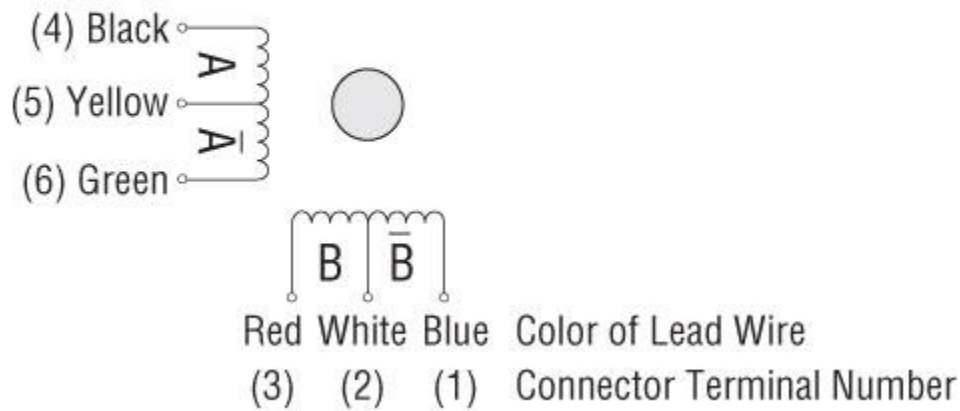
BACK

PKP224U09A

Connection Diagram

Inner Wiring Diagram for Motor

Unipolar 6 Lead Wires



PRINT

BACK

Oriental motor

Dear: Roy Turchin
Hologic Inc.

Date: 03/13/15

Oriental Motor USA acknowledges and certifies that Oriental Motor part number listed in the table below does not include the substances that exceed the amount regulated by RoHS directive (2011/65/EU). This document also certifies that any materials declarations provided by Oriental Motor are accurate.

This document also certifies that any materials declarations provided by Oriental Motor are accurate.

Customer Pt #	Oriental Motor Pt #	Motor Description	Rev Level
	PKP224U09A	Stepper Motor	

If you have any questions regarding this certification, please contact me.



Jonathan Strukl
Oriental Motor U.S.A.
Technical Support Engineer
Tech Support | 800.GO.VEXTA | [800.468.3982 x 2108](tel:800.468.3982)



March 13, 2015

Dear: Roy Turchin
Hologic Inc.

Thank you very much for your request for compliance with Regulation (EC) No 1907/2006 (REACH). It is our intention to meet the requirements set by REACH.

The product(s) listed below that our company supplies is 'Article' defined by Article 3(3) of the REACH, and doesn't have the substances intended to be released from these products as defined by article 7(1) under normal or reasonably foreseeable conditions of use.

On 19 December 2011, 20 substances were added to the candidate list (according to article 59 (1, 10) of Regulation (EC) No 1907/2006 ("REACH")), which now contains 73 substances in total. See the website of the European Chemicals Agency (ECHA). As far as we know at present, our articles do not currently contain any substances above 0.1 mass-% per product that are listed on the candidate list*.

If the product number for which information is necessary can be presented by priority, we will answer information that can be transmitted. This information is based on our current level of knowledge and expresses only our intention. It does not constitute a binding obligation.

Product: PKP224U09A stepper motor

Sincerely yours,

A handwritten signature in black ink, appearing to read "Jonathan Struki".

Jonathan Struki
Oriental Motor U.S.A.
Technical Support Engineer
Tech Support | 800.GO.VEXTA | 800.468.3982 x 2108