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

Item # PK235PA, Stepper Motor

This product is scheduled to be discontinued, please contact your local sales office for more information.

Web Price

Request Quote

Lead Time | **Specifications**

Lead Time

Specifications

Product Line	VEXTA ®
Motor Type	2-Phase
Motor Frame Size	1.38 in. sq.
Shaft/Gear Type	Round Shaft (No Gearhead)
Holding Torque	Bipolar (Series) 52 oz-in Unipolar 42 oz-in
Type	High-Torque
Connection Type	Bipolar (Series) Unipolar
Lead Wires	6
Current per Phase (A/phase)	0.85 [Bipolar (Series)]

	1.2 [Unipolar]
Encoder	None
Shaft	Single
Voltage (VDC)	5.8 [Bipolar (Series)] 4.08 [Unipolar]
Resistance (Ω/phase)	6.8 [Bipolar (Series)] 3.4 [Unipolar]
Inductance (mH/phase)	8 [Bipolar (Series)] 2 [Unipolar]
Step Angle	1.8 °
Rotor Inertia (oz-in^2)	0.27 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 current, 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 (±0.05°)

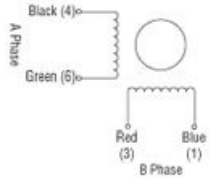
[1] Quoted Ship Date for orders placed before 12:00pm PST in quantities listed.
A newer version of this product is available, contact your local sales office for more information.

Wirings and Connections

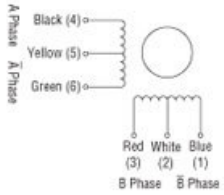
●PK Series High-Torque Type, Standard Type, High-Resolution Type, SH Geared Type and PV Series

◇Motor Wirings

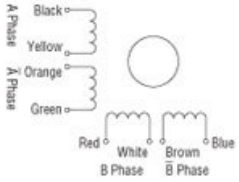
• 4 Lead Motor



• 6 Lead Motor

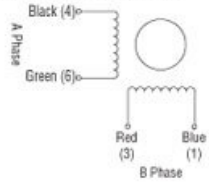


• 8 Lead Motor

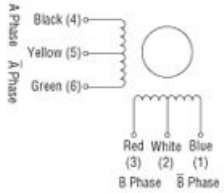


◇Wiring Connection Diagrams

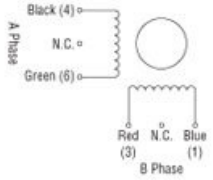
4 Leads Bipolar Connection



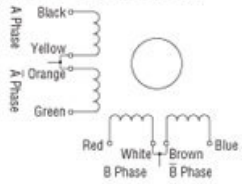
6 Leads Unipolar Connection



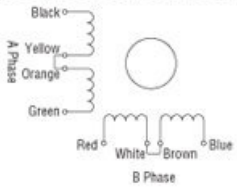
6 Leads Bipolar (Series) Connection



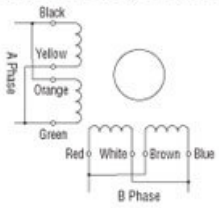
8 Leads Unipolar Connection



8 Leads Bipolar (Series) Connection



8 Leads Bipolar (Parallel) Connection

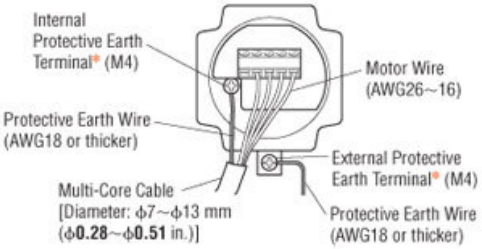


●The numbers inside the parentheses indicate the connector pin No. of the high-torque type motor.
●N.C.: No Connection

●Standard Type Terminal Box

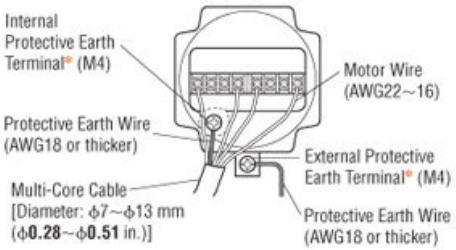
◇Motor Connections

PK26□DAT



*Use either the internal or external protective earth terminal for grounding.

PK29□EAT

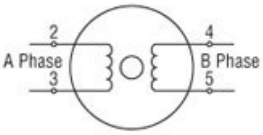


*Use either the internal or external protective earth terminal for grounding.

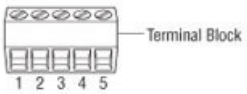
◇Wiring Connection Diagrams

PK26□DAT

Bipolar

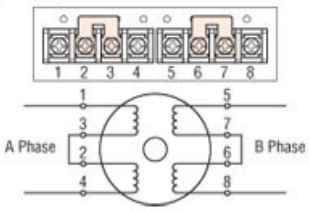


Connect motor lead wires to the terminals 2 to 5.

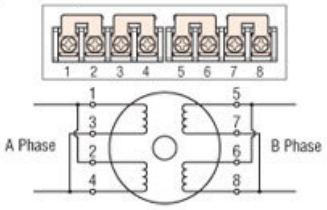


PK29□EAT

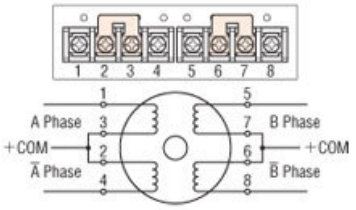
Bipolar (Series)



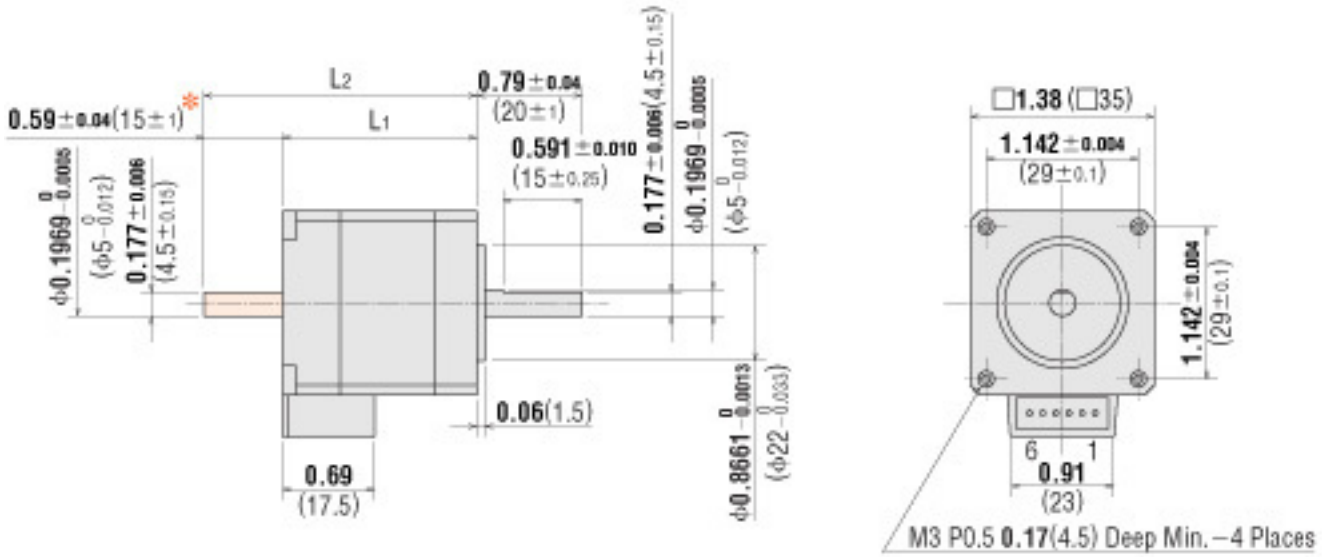
Bipolar (Parallel)



Unipolar



Dimensions Scale 1/2, Unit = **inch** (mm)



* The length of machining on double shaft model is 0.591±0.010 (15±0.25).
- These dimensions are for double shaft models. For single shaft models, ignore the shaded area.

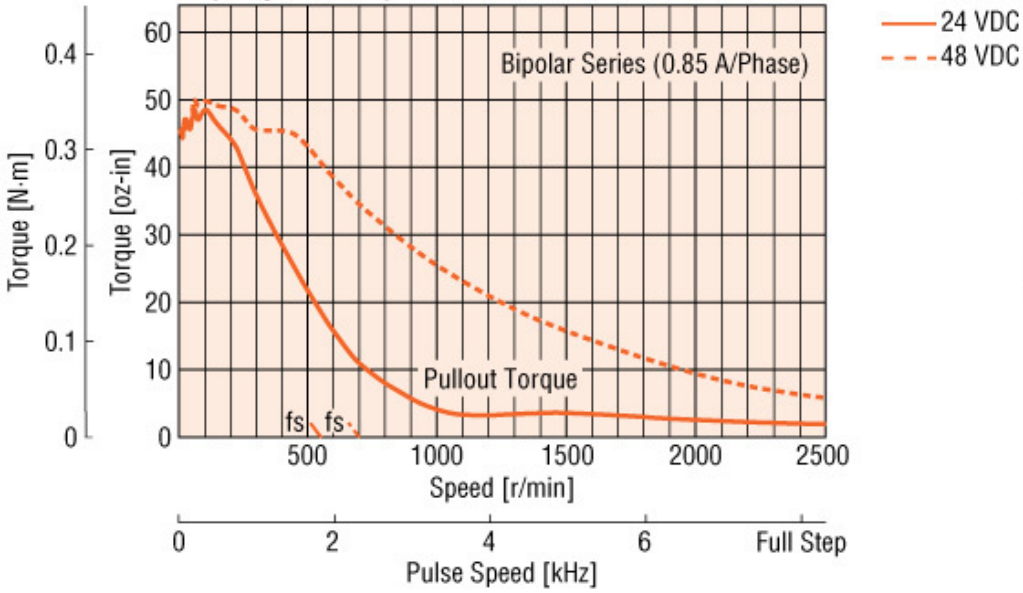
Applicable Connector

The following housing and contacts must be purchased separately.
Housing: 51103-0600 (MOLEX, Positive Lock Type) or
51102-0600 (MOLEX, Friction Lock Type)
Contact: 50351-8100 (MOLEX)
Connector Assembly Tool: 57295-5000 (MOLEX)

Model	L1 inch (mm)	L2 inch (mm)	Weight lb. (kg)	DXF
PK233PA	1.46 (37)	—	0.4 (0.18)	B329
PK233PB		2.05 (52)		
PK235PA	2.05 (52)	—	0.63 (0.285)	B330
PK235PB		2.64 (67)		

PK235PB Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in^2 (34×10^{-7} kg·m^2)
Step Angle: 1.8°/step



PK235PB Unipolar

Power Input: 24 VDC Unipolar Constant Current Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in^2 (34 ×10^{-7} kg·m^2)
Step Angle: 1.8°/step