

RoHS RoHS-Compliant

Stepping Motors

PK Series

High-Torque Type

Motor Frame Size **20 mm (0.79 in.)**



Oriental Motor introduces a new stepping motor with a 20 mm (0.79 in.) frame size. This new motor offers a small and lightweight body combined with high torque technology.

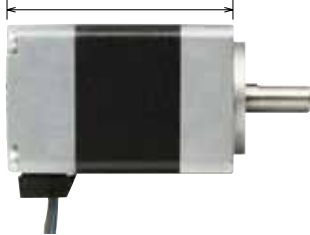
Features

● Small-Size and Light Weight

With a 20 mm (0.79 in.) frame size and 50 g (1.77 oz.) mass, this new motor is the smallest motor in the PK Series and is perfectly suited for applications with little space.

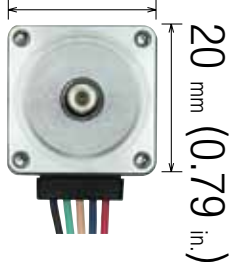
<Actual Size>

30 mm (1.18 in.)



• Mass 50 g (1.77 oz.)

20 mm (0.79 in.)



20 mm (0.79 in.)

● High-Torque

This stepping motor utilizes Oriental Motor's high torque technology.

Model	Connection Type	Maximum Holding Torque
PK213PD □	Bipolar	0.020 N·m (2.8 oz-in)
PK213P □	Unipolar	0.014 N·m (1.98 oz-in)

Visit www.orientalmotor.com

for further specifications, dimensions, and speed-torque characteristics.

20 mm (0.79 in.)

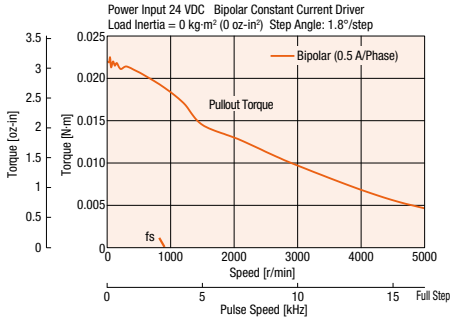
Step Angle 1.8°

Specifications RoHS

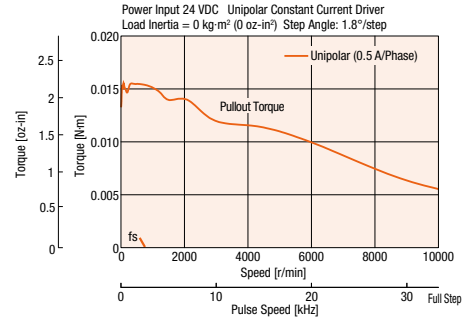
Model	Connection Type	Holding Torque		Rated Current	Voltage	Resistance	Inductance	Rotor Inertia		Lead Wires
		N·m	oz·in	A/phase	VDC	Ω/phase	mH/phase	kg·m ²	oz·in ²	
PK213PDA PK213PDB	Bipolar	0.02	2.8	0.5	4.25	8.5	4.1	1.6×10 ⁻⁷	0.0088	4
PK213PA PK213PB	Unipolar	0.014	1.98	0.5	4.25	8.5	2.9	1.6×10 ⁻⁷	0.0088	5

Speed – Torque Characteristics fs: Maximum Starting Frequency

PK213PDA, PK213PDB



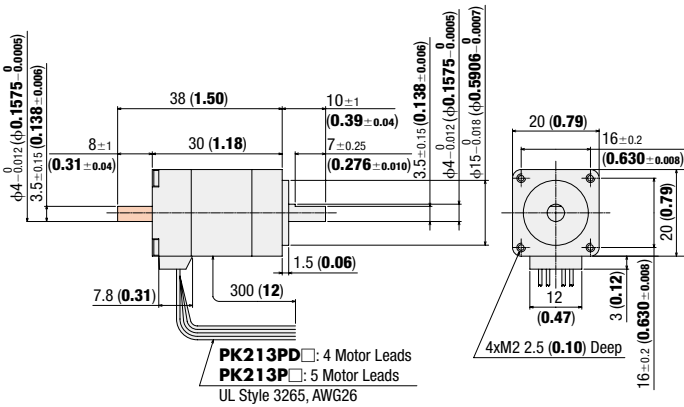
PK213PA, PK213PB



Dimensions Unit = mm (in.)

Mass: 0.05 kg (0.11 lb.)

PK213PD DXF B612, **PK213P** DXF B611



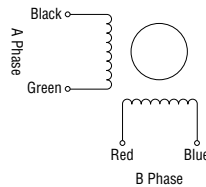
PK213PD DXF: 4 Motor Leads
PK213P DXF: 5 Motor Leads
UL Style 3265, AWG26

● These dimensions are for the double shaft models. For the single shaft models, ignore the orange shaded areas.

Wiring Connection Diagrams

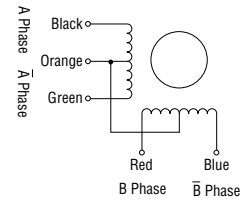
PK213PDA, PK213PDB

4 Leads Bipolar Connection



PK213PA, PK213PB

5 Leads Unipolar Connection



Microstep Driver (Sold Separately)

for **PK213PDA, PK213PDB** (20~40 VDC)



RBD215A-K

for **PK213PA, PK213PB** (24 VDC)



CMD2109P

Note: Driver operating current needs to be adjusted to 0.5 amps. Please see driver's operating manual for instructions. RBD215A-K (Setting 4), CMD2109P (Setting 6)

ORIENTAL MOTOR U.S.A. CORP.

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