□ 1.65 in. (□ 42 mm)

Step Angle 1.8°

PK Series High Torque Type

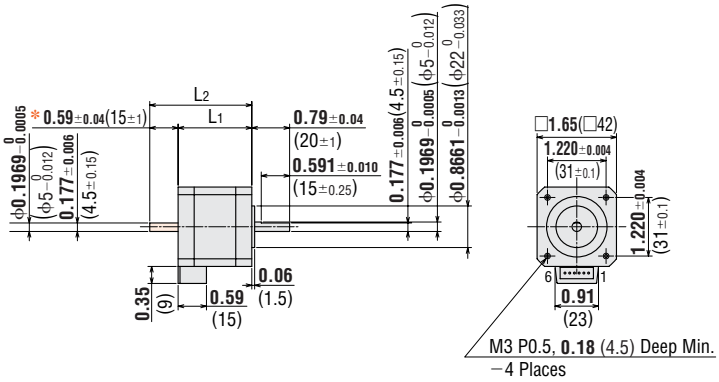
Specifications

Model Single Shaft Double Shaft	Connection Type	Holding Torque oz-in	 N·m	Current per Phase A/phase	Voltage VDC	Resistance per Phase Ω/phase	Inductance mH/phase	Rotor Inertia J oz-in^2	 kg·m^2	Lead Wires (Pins)
PK244PA	Bipolar (Series)	68	0.48	0.85	6.8	8	15.6	0.31	57×10^{-7}	6
PK244PB	Unipolar	55	0.39	1.2	4.8	4	3.9			
PK246PA	Bipolar (Series)	132	0.93	0.85	10	12	26	0.62	114×10^{-7}	6
PK246PB	Unipolar	106	0.75	1.2	7.2	6	6.5			

How to Read Specifications→Page C-9
Motor Wiring Diagrams→Page C-189

Dimensions

Scale 1/4, 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.

Model	L1 inch (mm)	L2 inch (mm)	Weight lb. (kg)	DXF
PK244PA	1.54 (39)	—	0.66 (0.3)	B331
PK244PB		2.13 (54)		
PK246PA	2.32 (59)	—	1.1 (0.5)	B332
PK246PB		2.91 (74)		

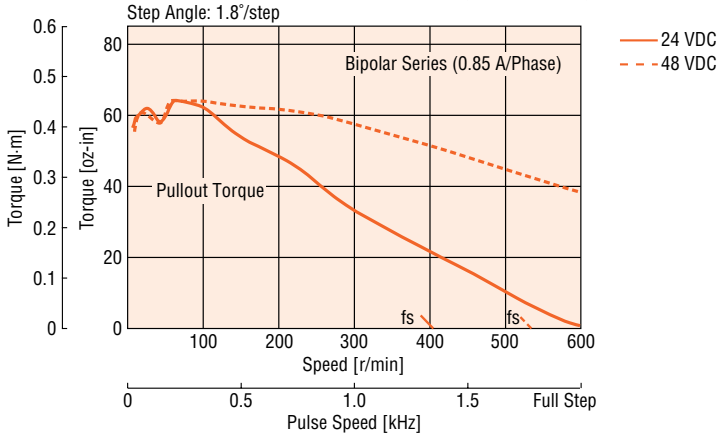
Applicable Connector
The following housing and contacts must be purchased separately.
Housing: 51103-0600 (MOLEX, Positive Lock Type) or
51102-0600 (MOLEX, Friction Lock Type)
Contact: 50351-8100 (MOLEX)
Connector Assembly Tool: 57295-5000 (MOLEX)

Speed–Torque Characteristics

How to Read Speed-Torque Characteristics→Page C-10

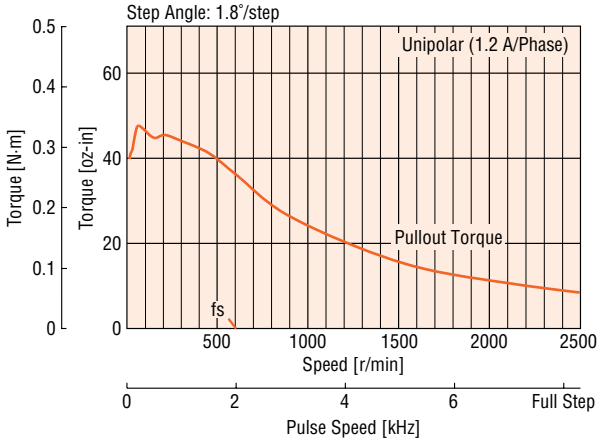
● **PK244PB** Bipolar (Series)

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



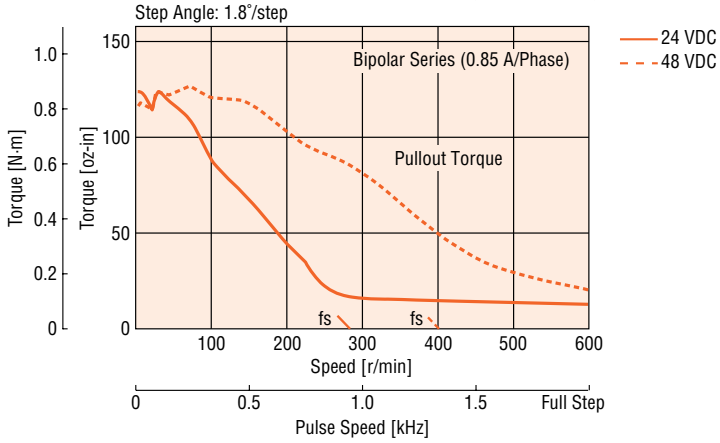
● **PK244PB** Unipolar

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



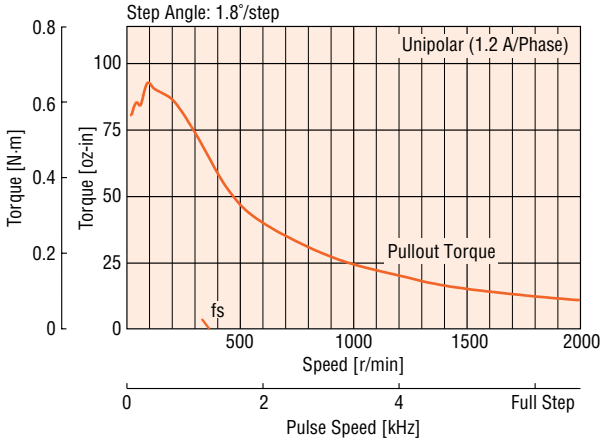
● **PK246PB** Bipolar (Series)

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



● **PK246PB** 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



Motor Cables (Sold separately)

These cables make it easy to connect the high torque type motor. The crimped connectors eliminate the need for assembly. There are two cable lengths to choose from.

Model	Cable Length feet	(m)	Number of Leads	Lead Specifications UL Style No.	AWG No.
LC2U06B	2	(0.6)	6 Leads	3265	24
LC2U10B	3.3	(1)			

Connection Diagrams C-189 General Specifications C-240

□ 1.65 in. (□ 42 mm)

Step Angle 1.8°

PK Series Standard Type

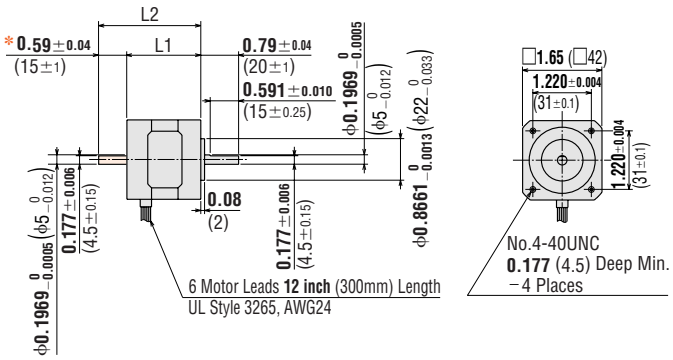
Specifications

Model Single Shaft Double Shaft	Connection Type	Holding Torque oz-in	 N·m	Current per Phase A/phase	Voltage VDC	Resistance per Phase Ω/phase	Inductance mH/phase	Rotor Inertia J oz-in^2	 kg·m^2	Lead Wires	Corresponding AC/DC-Input Motor & Driver Package
PK243-01AA	Bipolar (Series)	28	0.2	0.67	5.6	8.4	10	0.191	35×10^{-7}	6	**UMK243□A/ CSK243-□TA**
PK243-01BA	Unipolar	22	0.16	0.95	4	4.2	2.5				
PK243-02AA	Bipolar (Series)	28	0.2	0.28	13	48	60	0.191	35×10^{-7}	6	—
PK243-02BA	Unipolar	22	0.16	0.4	9.6	24	15				
PK243-03AA	Bipolar (Series)	28	0.2	0.22	17	77	84	0.191	35×10^{-7}	6	—
PK243-03BA	Unipolar	22	0.16	0.31	12	38.5	21				
PK244-01AA	Bipolar (Series)	46	0.33	0.85	5.6	6.6	12.8	0.3	54×10^{-7}	6	**UMK244□A/ CSK244-□TA**
PK244-01BA	Unipolar	36	0.26	1.2	4	3.3	3.2				
PK244-02AA	Bipolar (Series)	46	0.33	0.57	8.6	15	26.8	0.3	54×10^{-7}	6	—
PK244-02BA	Unipolar	36	0.26	0.8	6	7.5	6.7				
PK244-03AA	Bipolar (Series)	46	0.33	0.28	17	60	120	0.3	54×10^{-7}	6	—
PK244-03BA	Unipolar	36	0.26	0.4	12	30	30				
PK244-04AA	Bipolar (Series)	46	0.33	0.14	34	240	428	0.3	54×10^{-7}	6	—
PK244-04BA	Unipolar	36	0.26	0.2	24	120	107				
PK245-01AA	Bipolar (Series)	61	0.43	0.85	5.6	6.6	11.2	0.37	68×10^{-7}	6	**UMK245□A/ CSK245-□TA**
PK245-01BA	Unipolar	45	0.32	1.2	4	3.3	2.8				
PK245-02AA	Bipolar (Series)	61	0.43	0.57	8.6	15	28.4	0.37	68×10^{-7}	6	—
PK245-02BA	Unipolar	45	0.32	0.8	6	7.5	7.1				
PK245-03AA	Bipolar (Series)	61	0.43	0.28	17	60	100	0.37	68×10^{-7}	6	—
PK245-03BA	Unipolar	45	0.32	0.4	12	30	25				

How to Read Specifications→Page C-9
Motor Wiring Diagrams→Page C-189

Dimensions

Scale 1/4, Unit = **inch** (mm)



Model	L1 inch (mm)	L2 inch (mm)	Weight lb. (kg)	DXF
PK243-0□AA	1.30 (33)	—	0.46 (0.21)	B081U
PK243-0□BA		1.89 (48)		
PK244-0□AA	1.54 (39)	—	0.59 (0.27)	B082U
PK244-0□BA		2.13 (54)		
PK245-0□AA	1.85 (47)	—	0.77 (0.35)	B083U
PK245-0□BA		2.44 (62)		

- Enter the winding specification in the box (□) within the model number.

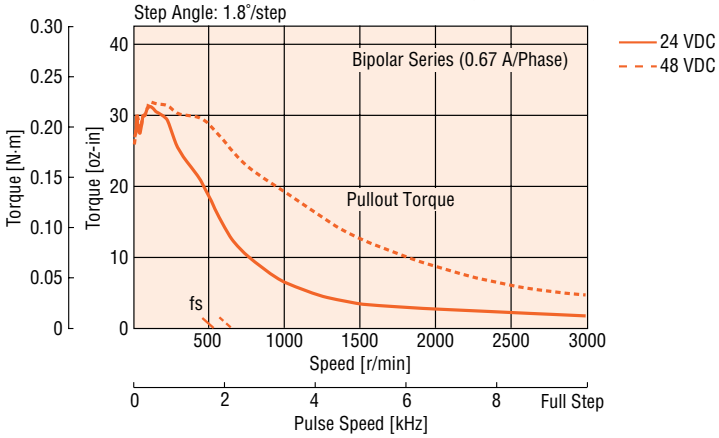
✻ The length of machining on double shaft model is 0.591±0.010 (15±0.25).
- These dimensions are for double shaft models. For single shaft models, ignore the shaded area.

Speed–Torque Characteristics

How to Read Speed-Torque Characteristics→Page C-10

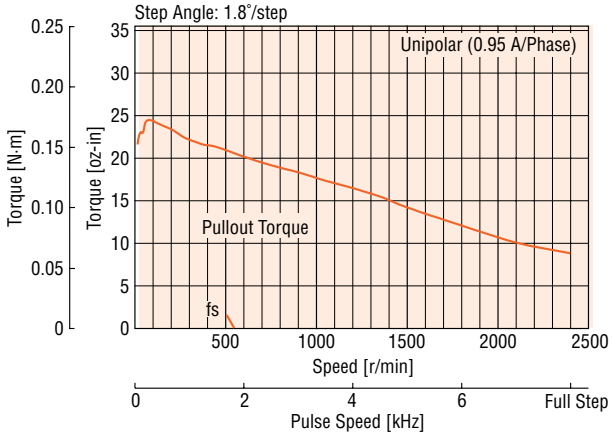
PK243-01BA Bipolar (Series)

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



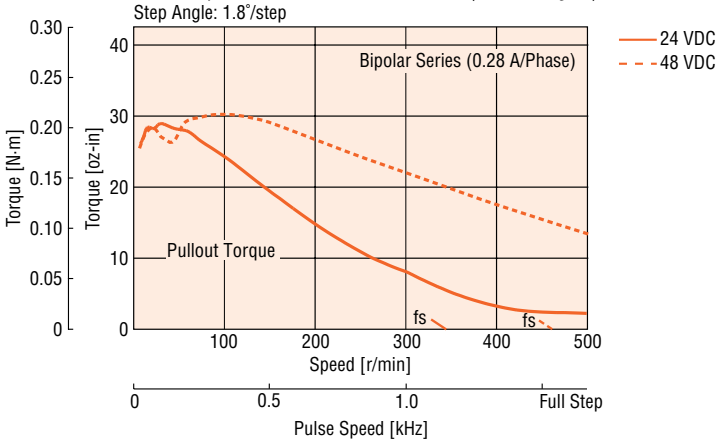
PK243-01BA Unipolar

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



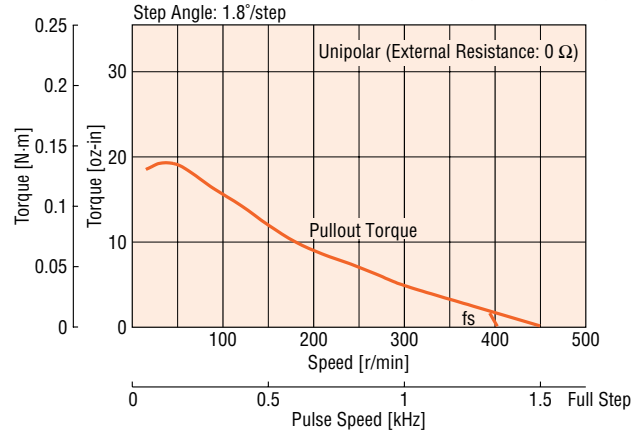
PK243-02BA Bipolar (Series)

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



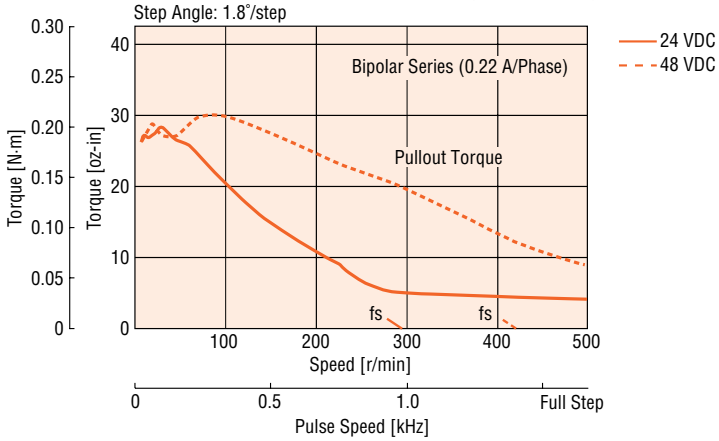
PK243-02BA Unipolar

Power Input: 11.5 VDC Unipolar Constant Voltage Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in^2 (34 × 10^{-7} kg·m^2)
Step Angle: 1.8°/step



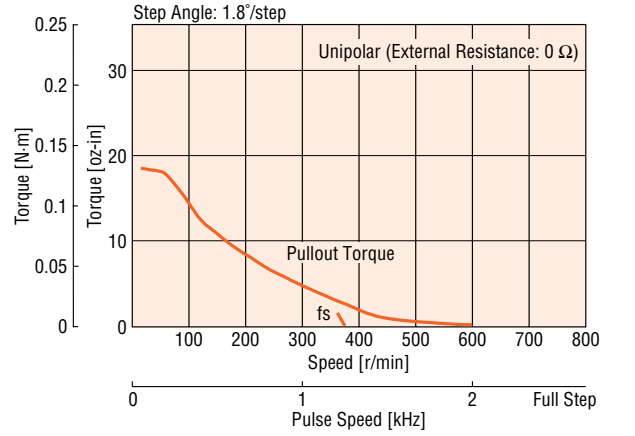
PK243-03BA Bipolar (Series)

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



PK243-03BA Unipolar

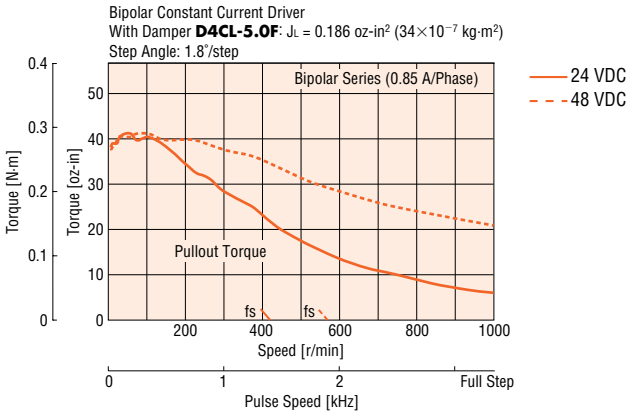
Power Input: 13.6 VDC Unipolar Constant Voltage Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in^2 (34 × 10^{-7} kg·m^2)
Step Angle: 1.8°/step



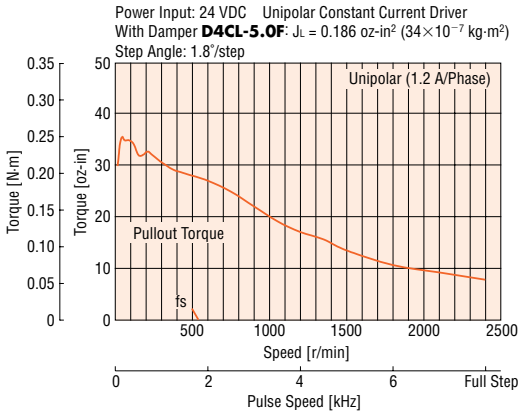
Speed–Torque Characteristics

How to Read Speed-Torque Characteristics→Page C-10

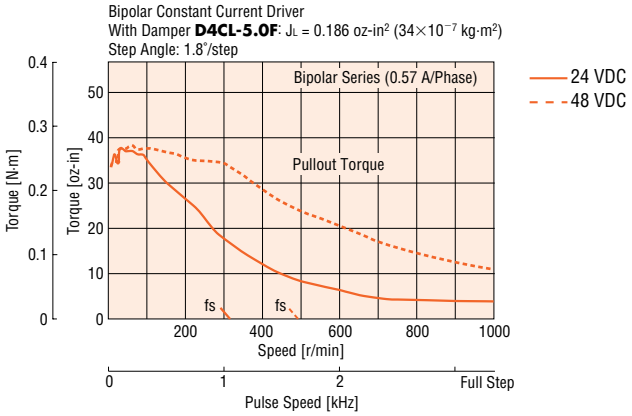
PK244-01BA Bipolar (Series)



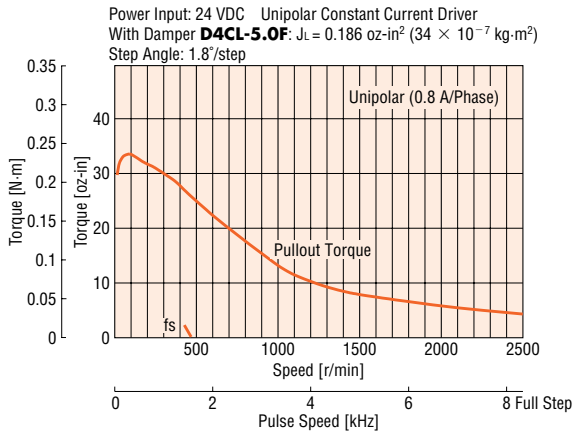
PK244-01BA Unipolar



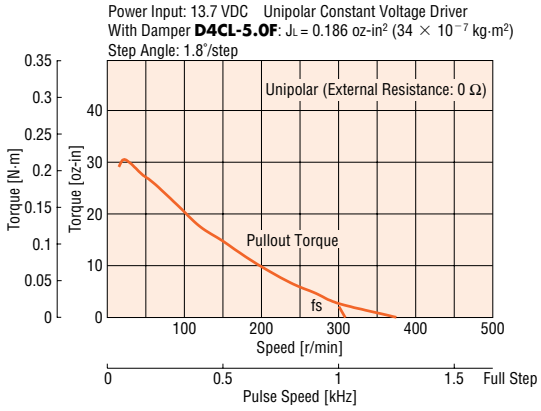
PK244-02BA Bipolar (Series)



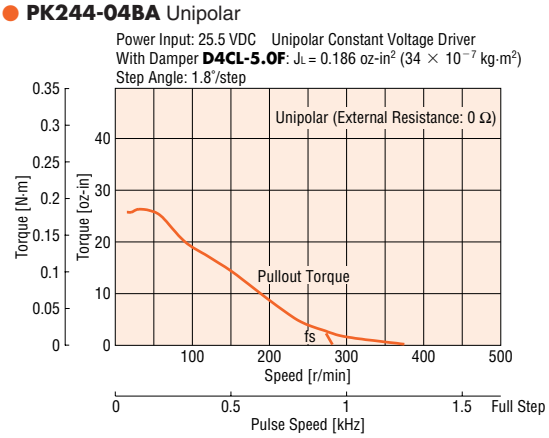
PK244-02BA Unipolar



PK244-03BA Unipolar

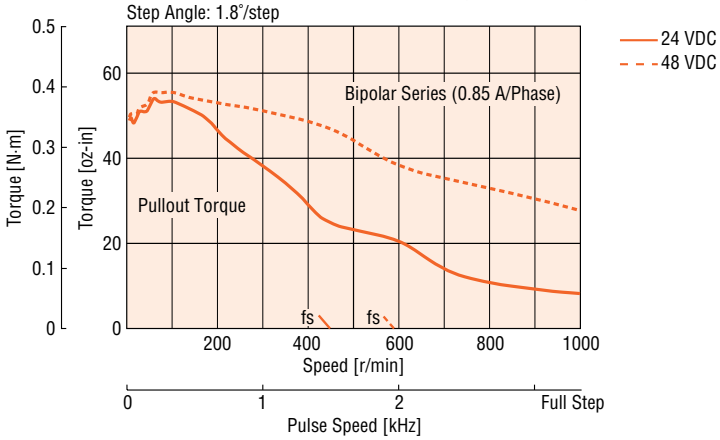


PK244-04BA Unipolar



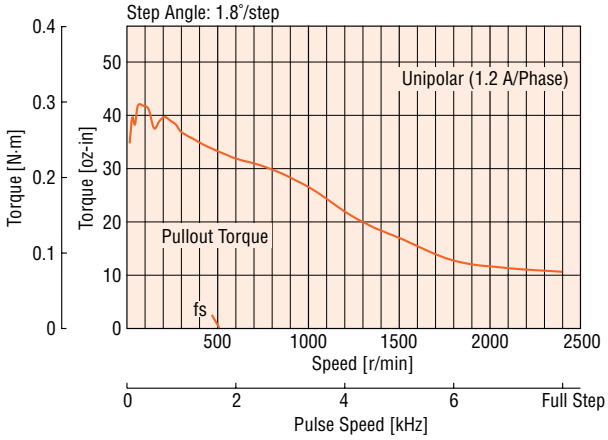
● **PK245-01BA** Bipolar (Series)

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



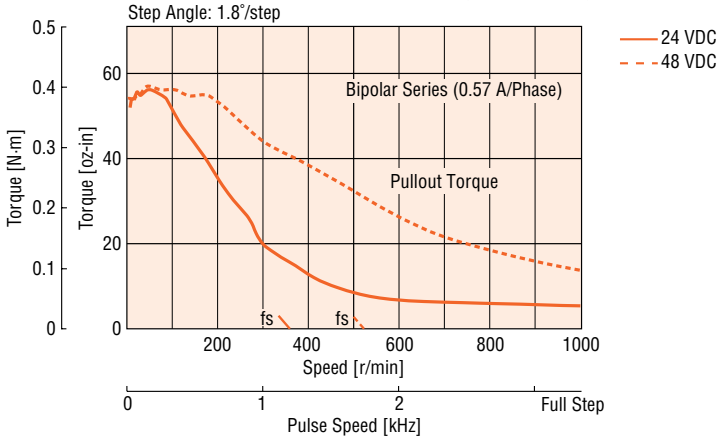
● **PK245-01BA** Unipolar

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



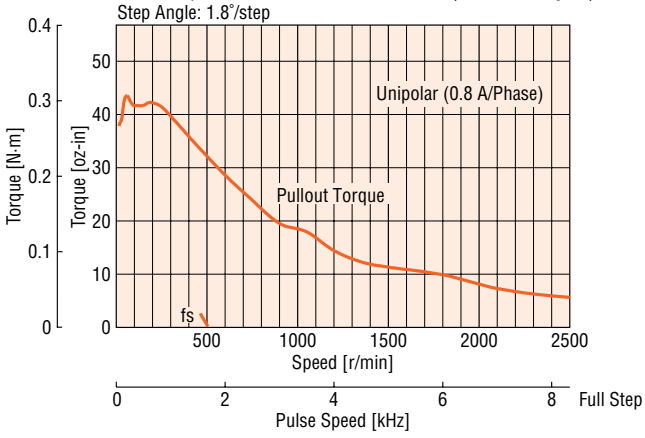
● **PK245-02BA** Bipolar (Series)

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



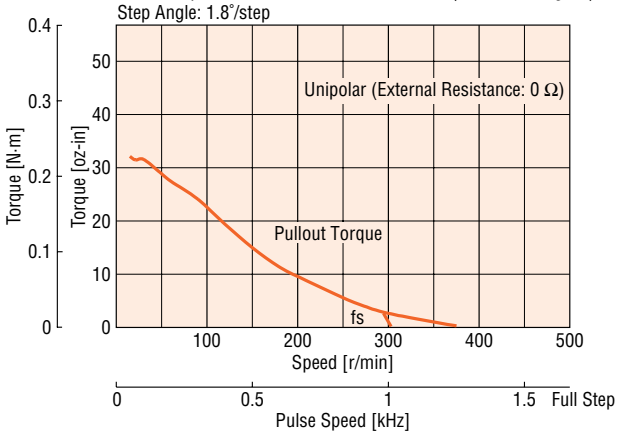
● **PK245-02BA** Unipolar

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



● **PK245-03BA** Unipolar

Power Input: 13.7 VDC Unipolar Constant Voltage Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in^2 (34 × 10^{-7} kg·m^2)
Step Angle: 1.8°/step



Connection Diagrams C-189
General Specifications C-240

□ 1.65 in. (□ 42 mm)

Step Angle 0.9°

PK Series High Resolution Type

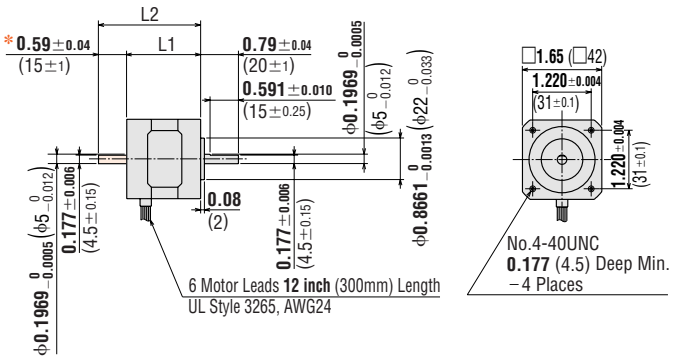
Specifications

Model Single Shaft Double Shaft	Connection Type	Holding Torque oz-in	 N·m	Current per Phase A/phase	Voltage VDC	Resistance per Phase Ω/phase	Inductance mH/phase	Rotor Inertia J oz-in^2	 kg·m^2	Lead Wires	Corresponding AC/DC-Input Motor & Driver Package
PK243M-01AA	Bipolar (Series)	28	0.2	0.67	5.6	8.4	15.2	0.191	35×10^{-7}	6	**UMK243M□A/ CSK243M-□TA**
PK243M-01BA	Unipolar	22	0.16	0.95	4	4.2	3.8				
PK243M-02AA	Bipolar (Series)	28	0.2	0.42	8.4	20	38.8	0.191	35×10^{-7}	6	—
PK243M-02BA	Unipolar	22	0.16	0.6	6	10	9.7				
PK243M-03AA	Bipolar (Series)	28	0.2	0.22	17	77	136	0.191	35×10^{-7}	6	—
PK243M-03BA	Unipolar	22	0.16	0.31	12	38.5	34				
PK244M-01AA	Bipolar (Series)	44	0.31	0.85	5.6	6.6	17.2	0.3	54×10^{-7}	6	**UMK244M□A/ CSK244M-□TA**
PK244M-01BA	Unipolar	36	0.26	1.2	4	3.3	4.3				
PK244M-02AA	Bipolar (Series)	44	0.31	0.57	8.6	15	38.8	0.3	54×10^{-7}	6	—
PK244M-02BA	Unipolar	36	0.26	0.8	6	7.5	9.7				
PK244M-03AA	Bipolar (Series)	44	0.31	0.28	17	60	152	0.3	54×10^{-7}	6	—
PK244M-03BA	Unipolar	36	0.26	0.4	12	30	38				
PK245M-01AA	Bipolar (Series)	53	0.38	0.85	5.6	6.6	15.6	0.37	68×10^{-7}	6	**UMK245M□A/ CSK245M-□TA**
PK245M-01BA	Unipolar	45	0.32	1.2	4	3.3	3.9				
PK245M-02AA	Bipolar (Series)	53	0.38	0.57	8.6	15	39.6	0.37	68×10^{-7}	6	—
PK245M-02BA	Unipolar	45	0.32	0.8	6	7.5	9.9				
PK245M-03AA	Bipolar (Series)	53	0.38	0.28	17	60	128	0.37	68×10^{-7}	6	—
PK245M-03BA	Unipolar	45	0.32	0.4	12	30	32				

How to Read Specifications→Page C-9
Motor Wiring Diagrams→Page C-189

Dimensions

Scale 1/4, Unit = **inch** (mm)



Model	L1 inch (mm)	L2 inch (mm)	Weight lb. (kg)	DXF
PK243M-0□AA	1.30 (33)	—	0.53 (0.24)	B081U
PK243M-0□BA		1.89 (48)		
PK244M-0□AA	1.54 (39)	—	0.66 (0.3)	B082U
PK244M-0□BA		2.13 (54)		
PK245M-0□AA	1.85 (47)	—	0.81 (0.37)	B083U
PK245M-0□BA		2.44 (62)		

● Enter the winding specification in the box (□) within the model number.

✻ 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.

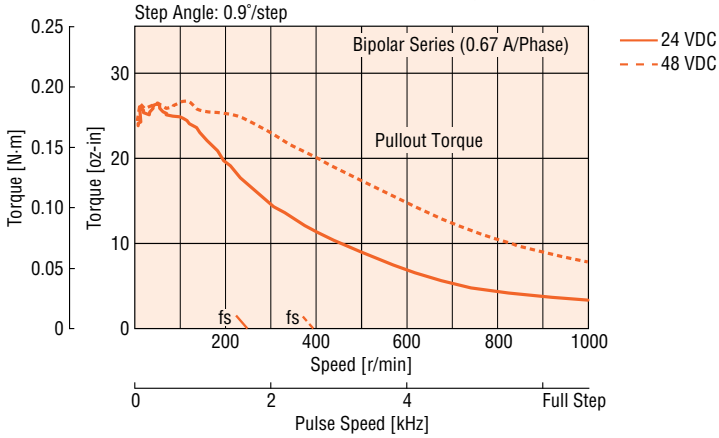
Features C-184 Accessories C-185

Speed–Torque Characteristics

How to Read Speed-Torque Characteristics→Page C-10

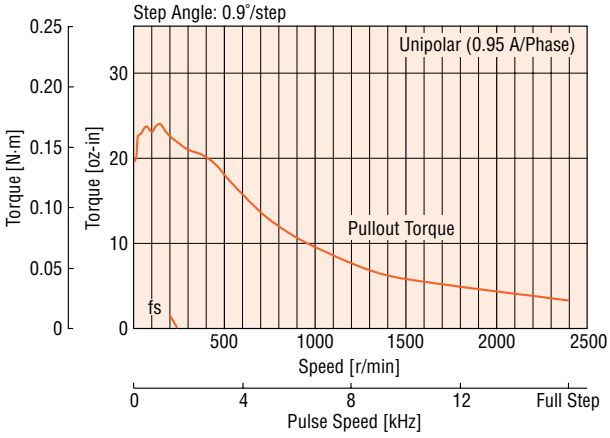
PK243M-01BA Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in² (34×10⁻⁷ kg·m²)
Step Angle: 0.9°/step



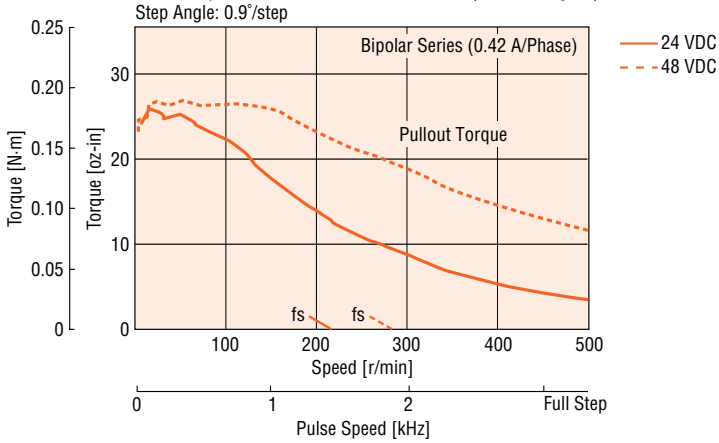
PK243M-01BA Unipolar

Power Input: 24 VDC Unipolar Constant Current Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in² (34×10⁻⁷ kg·m²)
Step Angle: 0.9°/step



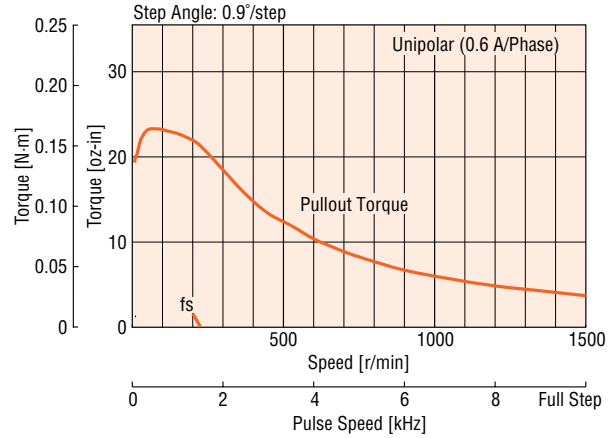
PK243M-02BA Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in² (34×10⁻⁷ kg·m²)
Step Angle: 0.9°/step



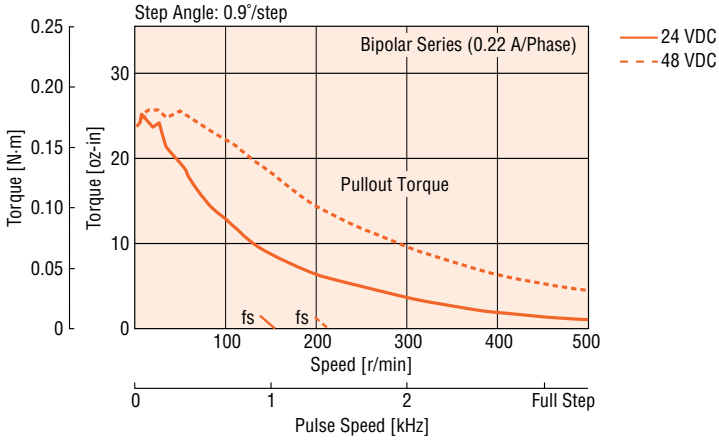
PK243M-02BA Unipolar

Power Input: 24 VDC Unipolar Constant Current Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in² (34 × 10⁻⁷ kg·m²)
Step Angle: 0.9°/step



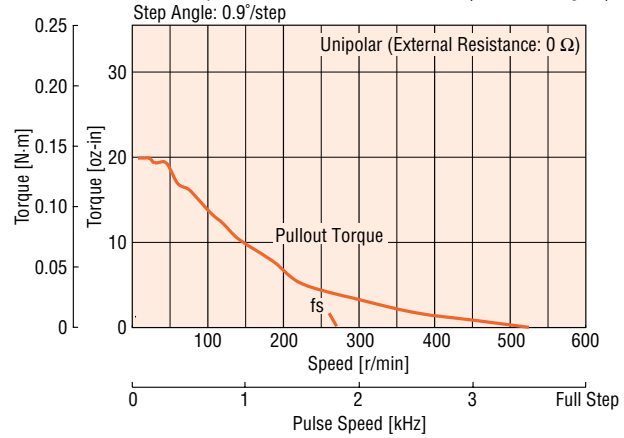
PK243M-03BA Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in² (34×10⁻⁷ kg·m²)
Step Angle: 0.9°/step



PK243M-03BA Unipolar

Power Input: 13.5 VDC Unipolar Constant Voltage Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in² (34 × 10⁻⁷ kg·m²)
Step Angle: 0.9°/step

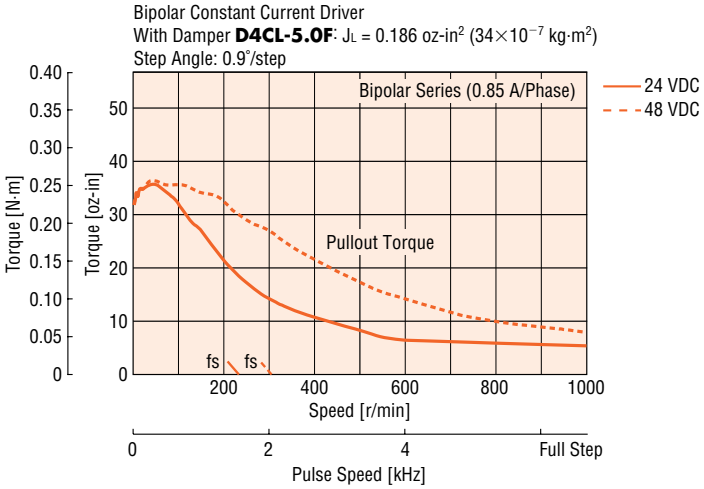


Connection Diagrams C-189
General Specifications C-240

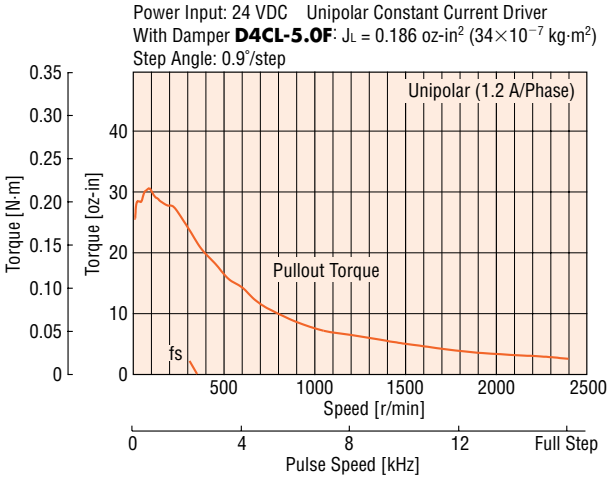
Speed–Torque Characteristics

How to Read Speed-Torque Characteristics→Page C-10

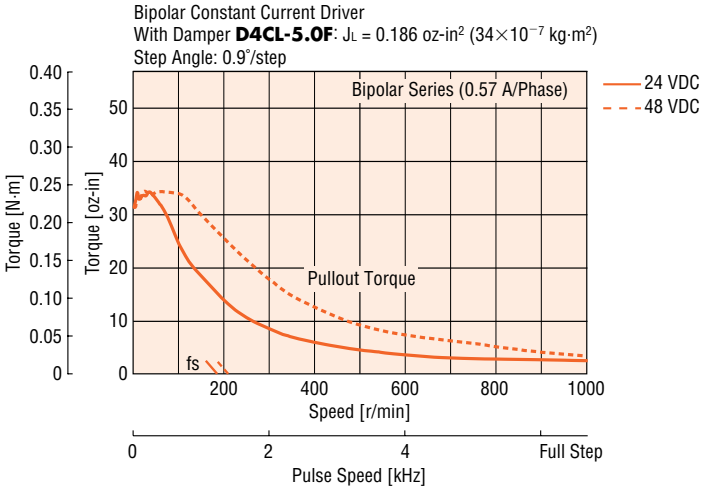
PK244M-01BA Bipolar (Series)



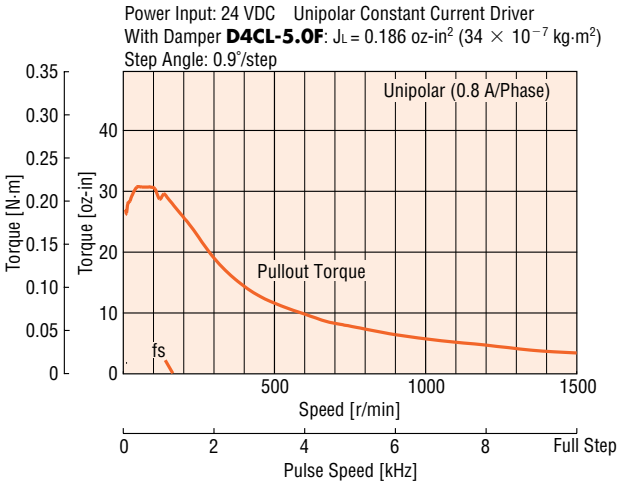
PK244M-01BA Unipolar



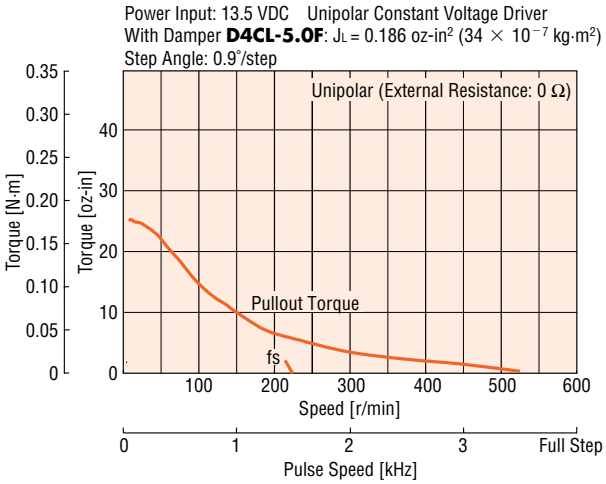
PK244M-02BA Bipolar (Series)



PK244M-02BA Unipolar

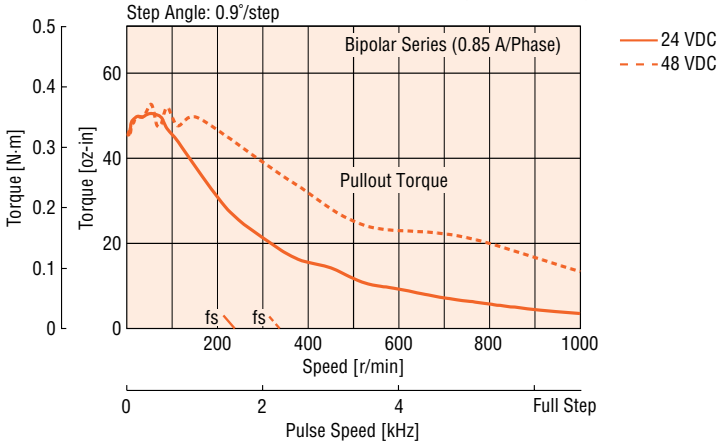


PK244M-03BA Unipolar



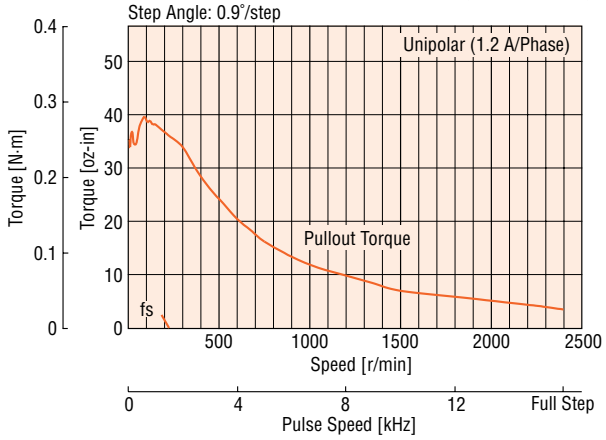
● PK245M-01BA Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in^2 (34×10^{-7} kg·m^2)
Step Angle: 0.9°/step



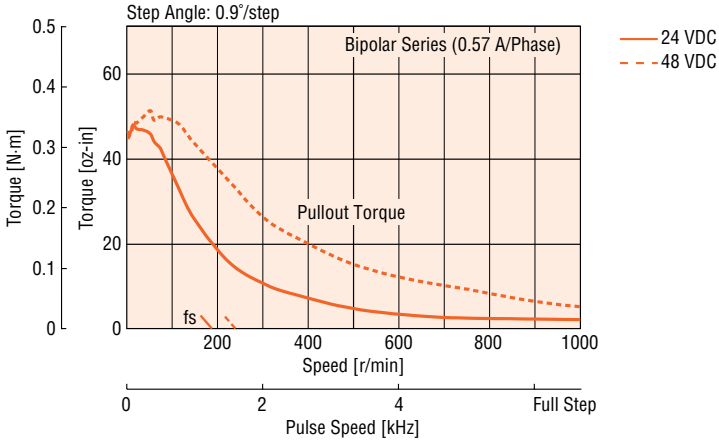
● PK245M-01BA Unipolar

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: 0.9°/step



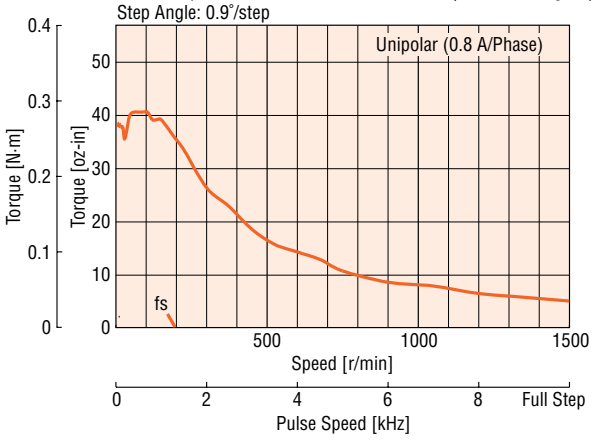
● PK245M-02BA Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in^2 (34×10^{-7} kg·m^2)
Step Angle: 0.9°/step



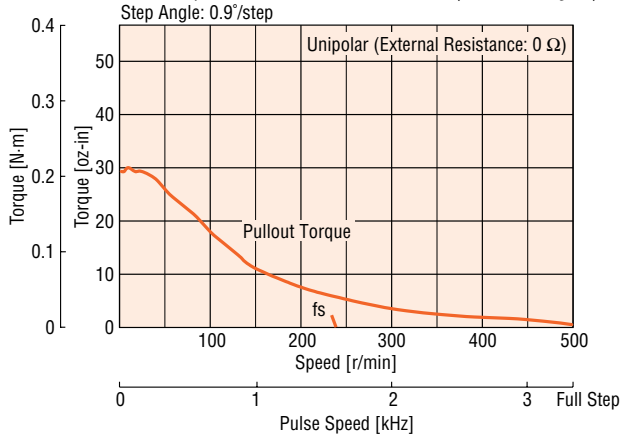
● PK245M-02BA Unipolar

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: 0.9°/step



● PK245M-03BA Unipolar

Power Input: 13.5 VDC Unipolar Constant Voltage Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in^2 (34 × 10^{-7} kg·m^2)
Step Angle: 0.9°/step



Connection Diagrams C-189
General Specifications C-240

□ 1.65 in. (□ 42 mm)

PK Series SH Geared Type

Specifications

Motor Specifications

Model Single Shaft Double Shaft	Connection Type	Current per Phase A/phase	Voltage VDC	Resistance per Phase Ω/phase	Inductance mH/phase	Rotor Inertia J oz-in²	 kg·m²	Lead Wires	Corresponding DC-Input Motor & Driver Package
PK243A1A-SG□	Bipolar (Series)	0.67	5.6	8.4	10	0.191	35×10^{-7}	6	**CSK243□TA-SG□**
PK243B1A-SG□	Unipolar	0.95	4.0	4.2	2.5				
PK243A2A-SG□	Bipolar (Series)	0.28	13	48	60	0.191	35×10^{-7}	6	—
PK243B2A-SG□	Unipolar	0.4	9.6	24	15				

How to Read Specifications→Page C-9
Motor Wiring Diagrams→Page C-189
● Enter the gear ratio in the box (□) within the model number.

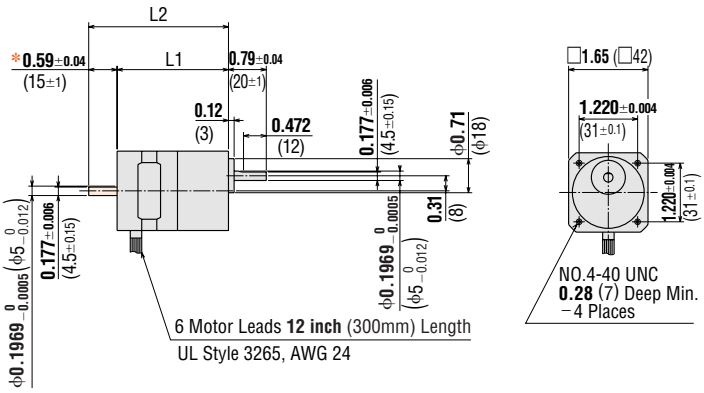
Gearmotor Specifications

Model Single Shaft Double Shaft	Gear Ratio	Holding Torque* lb-in	 N·m	Step Angle	Permissible Speed r/min
PK243A1A-SG3.6, PK243A2A-SG3.6 **PK243B1A-SG3.6, PK243B2A-SG3.6**	3.6:1	1.77	0.2	0.5°	500
PK243A1A-SG7.2, PK243A2A-SG7.2 **PK243B1A-SG7.2, PK243B2A-SG7.2**	7.2:1	3.5	0.4	0.25°	250
PK243A1A-SG9, PK243A2A-SG9 **PK243B1A-SG9, PK243B2A-SG9**	9:1	4.4	0.5	0.2°	200
PK243A1A-SG10, PK243A2A-SG10 **PK243B1A-SG10, PK243B2A-SG10**	10:1	4.9	0.56	0.18°	180
PK243A1A-SG18, PK243A2A-SG18 **PK243B1A-SG18, PK243B2A-SG18**	18:1	7.0	0.8	0.1°	100
PK243A1A-SG36, PK243A2A-SG36 **PK243B1A-SG36, PK243B2A-SG36**	36:1	7.0	0.8	0.05°	50

* Holding torque is the same regardless of the connection type, due to the permissible torque limit of the gearhead.

Dimensions

Scale 1/4, Unit = **inch** (mm)



Model	L1 inch (mm)	L2 inch (mm)	Weight lb. (kg)	DXF
PK243A□A-SG□	2.32 (59)	—	0.77 (0.35)	B091U
PK243B□A-SG□		2.91 (74)		

● Enter the winding specification in the box (□) within the model number.
● Enter the gear ratio in the box (□) within the model number.

Mounting Screws (included)
No.4-40 UNC 0.39 in. (10 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.

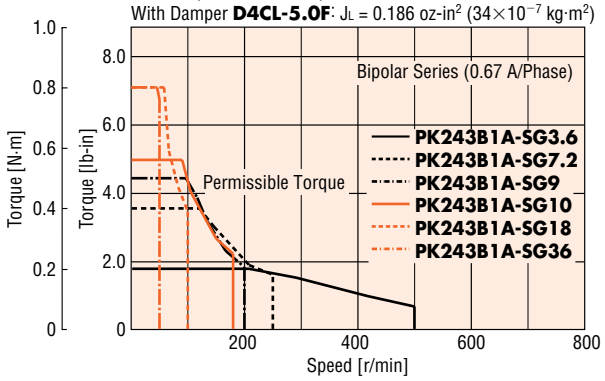
Features C-184 Accessories C-185

Speed–Torque Characteristics

How to Read Speed-Torque Characteristics →Page C-10

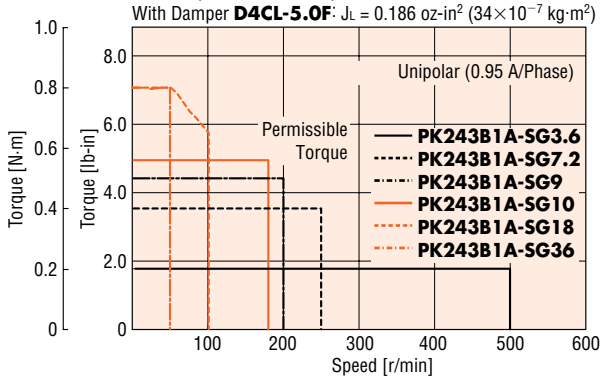
PK243B1A-SG□ Bipolar (Series) 24 VDC

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



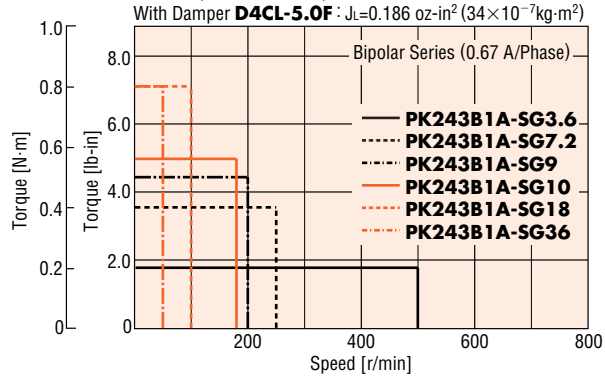
PK243B1A-SG□ Unipolar

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)



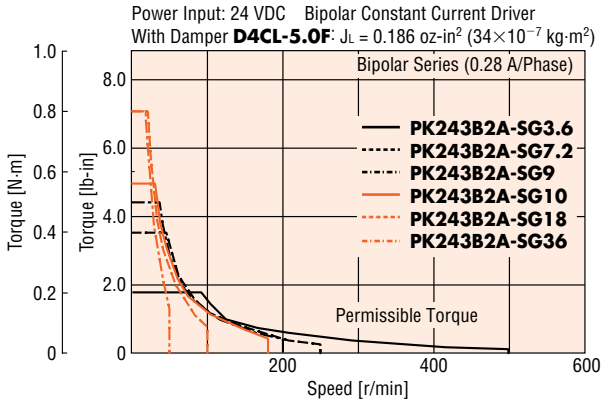
PK243B1A-SG□ Bipolar (Series) 48 VDC

Power Input: 48 VDC Bipolar Constant Current Driver
With Damper **D4CL-5.0F**: J_L=0.186 oz-in^2 (34×10^{-7}kg·m^2)



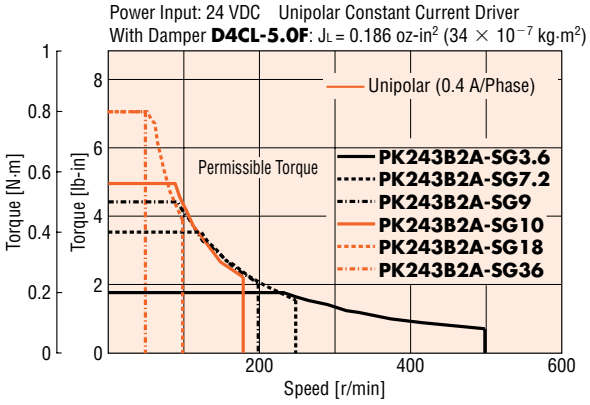
PK243B2A-SG□ Bipolar (Series) 24 VDC

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



PK243B2A-SG□ 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)



PK243B2A-SG□ Bipolar (Series) 48 VDC

Power Input: 48 VDC Bipolar Constant Current Driver
With Damper **D4CL-5.0F**: J_L = 0.186 oz-in^2 (34×10^{-7} kg·m^2)