□ 3.35 in. (□ 85 mm)

Step Angle 1.8°

PK Series Standard Type

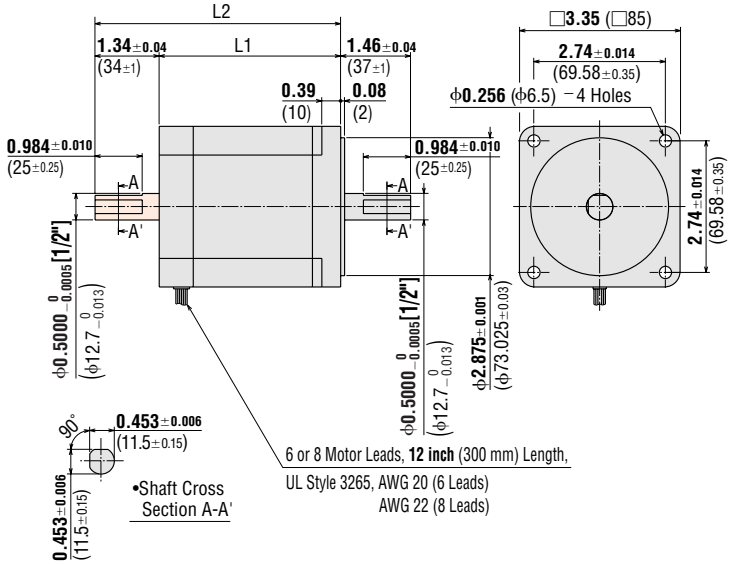
Specifications

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-in²	 kg·m²	Lead Wires
PK296-01AA	Bipolar (Series)	440	3.1	1.4	6.2	4.4	30.8	7.7	1400×10⁻⁷	6
PK296-01BA	Unipolar	310	2.2	2	4.4	2.2	7.7			
PK296-02AA	Bipolar (Series)	440	3.1	2.1	4.2	2	14	7.7	1400×10⁻⁷	6
PK296-02BA	Unipolar	310	2.2	3	3	1	3.5			
PK296-03AA	Bipolar (Series)	440	3.1	3.18	2.8	0.96	6	7.7	1400×10⁻⁷	6
PK296-03BA	Unipolar	310	2.2	4.5	2	0.48	1.5			
PK296-F4.5A **PK296-F4.5B**	Bipolar (Parallel)	440	3.1	6.3	1.4	0.24	1.5	7.7	1400×10⁻⁷	8
	Bipolar (Series)	440	3.1	3.18	2.8	0.96	6			
	Unipolar	310	2.2	4.5	2	0.48	1.5			
PK299-01AA	Bipolar (Series)	880	6.2	1.4	9	6.4	56	14.8	2700×10⁻⁷	6
PK299-01BA	Unipolar	620	4.4	2	6.4	3.2	14			
PK299-02AA	Bipolar (Series)	880	6.2	2.1	6	3	24	14.8	2700×10⁻⁷	6
PK299-02BA	Unipolar	620	4.4	3	4.2	1.5	6			
PK299-03AA	Bipolar (Series)	880	6.2	3.18	3.9	1.32	10	14.8	2700×10⁻⁷	6
PK299-03BA	Unipolar	620	4.4	4.5	2.8	0.66	2.5			
PK299-F4.5A **PK299-F4.5B**	Bipolar (Parallel)	880	6.2	6.3	1.9	0.33	2.5	14.8	2700×10⁻⁷	8
	Bipolar (Series)	880	6.2	3.18	3.9	1.32	10			
	Unipolar	620	4.4	4.5	2.8	0.66	2.5			
PK2913-01AA	Bipolar (Series)	1320	9.3	1.4	10	7.6	76.8	22	4000×10⁻⁷	6
PK2913-01BA	Unipolar	930	6.6	2	7.6	3.8	19.2			
PK2913-02AA	Bipolar (Series)	1320	9.3	2.8	5.3	1.94	16.8	22	4000×10⁻⁷	6
PK2913-02BA	Unipolar	930	6.6	4	3.8	0.97	4.2			
PK2913-F4.0A **PK2913-F4.0B**	Bipolar (Parallel)	1320	9.3	5.6	2.6	0.49	4.2	22	4000×10⁻⁷	8
	Bipolar (Series)	1320	9.3	2.8	5.3	1.94	16.8			
	Unipolar	930	6.6	4	3.8	0.97	4.2			

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
PK296-0□AA **PK296-F4.5A**	2.60 (66)	—	3.7 (1.7)	B122U
PK296-0□BA **PK296-F4.5B**		3.94 (100)		
PK299-0□AA **PK299-F4.5A**	3.78 (96)	—	6.2 (2.8)	B123U
PK299-0□BA **PK299-F4.5B**		5.12 (130)		
PK2913-0□AA **PK2913-F4.0A**	4.96 (126)	—	8.4 (3.8)	B124U
PK2913-0□BA **PK2913-F4.0B**		6.30 (160)		

- These dimensions are for double shaft models. For single shaft models, ignore the shaded area.
- Enter the winding specification in the box (□) within the model name.

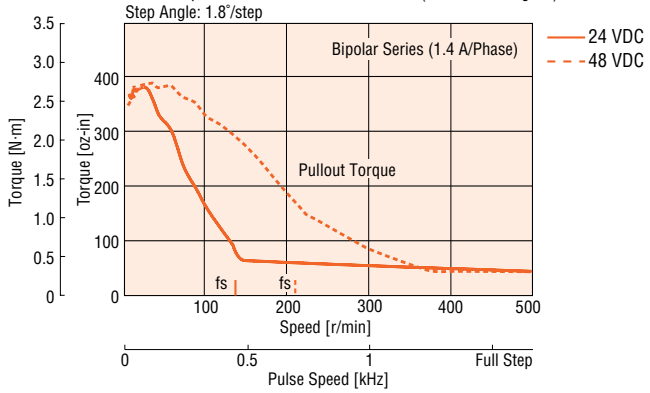
Connection Diagrams C-189 | General Specifications C-240

Speed–Torque Characteristics

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

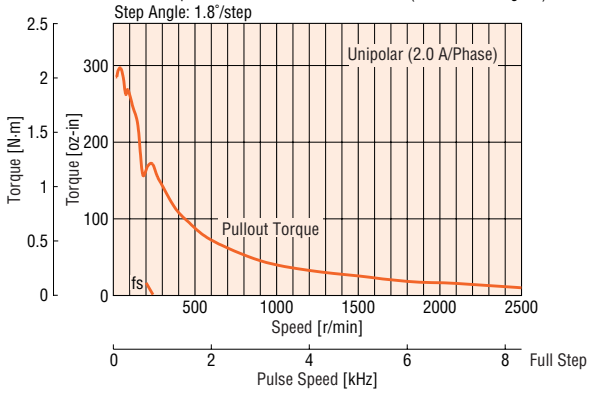
PK296-01BA Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



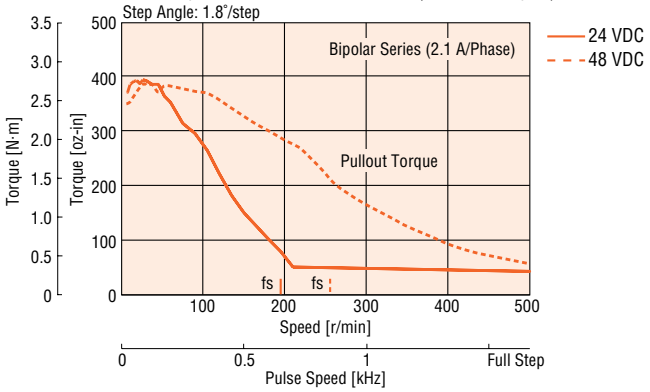
PK296-01BA Unipolar

Power Input: 24 VDC Unipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



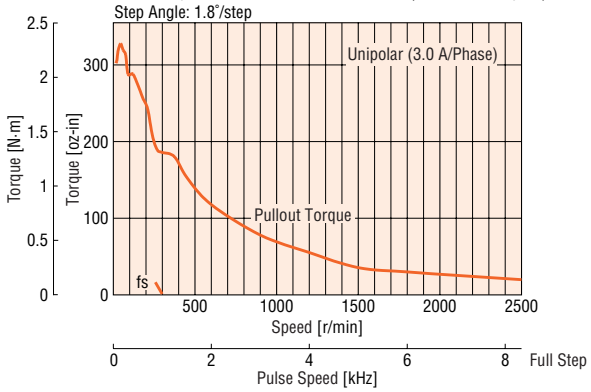
PK296-02BA Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



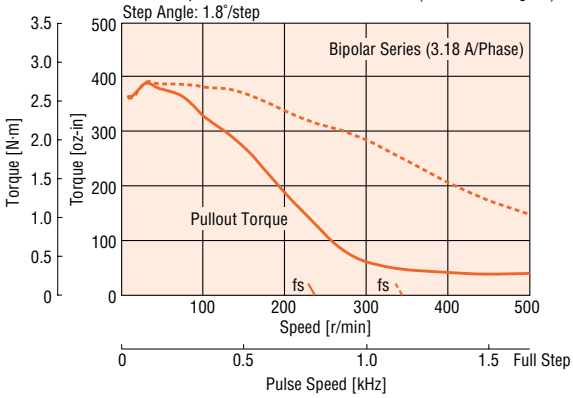
PK296-02BA Unipolar

Power Input: 24 VDC Unipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



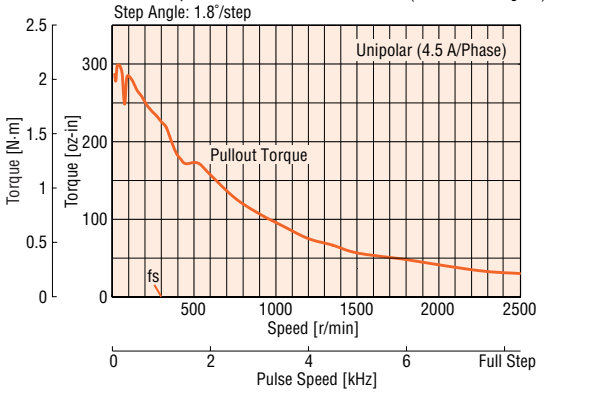
PK296-03BA Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



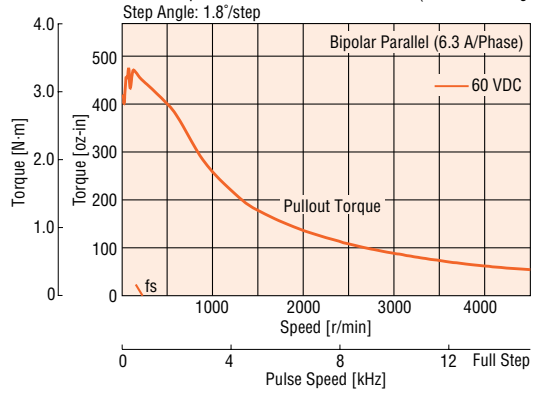
PK296-03BA Unipolar

Power Input: 24 VDC Unipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



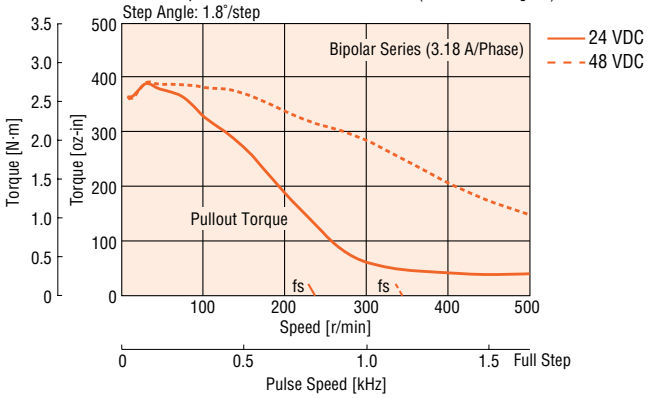
PK296-F4.5B Bipolar (Parallel)

Power Input: 60 VDC Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



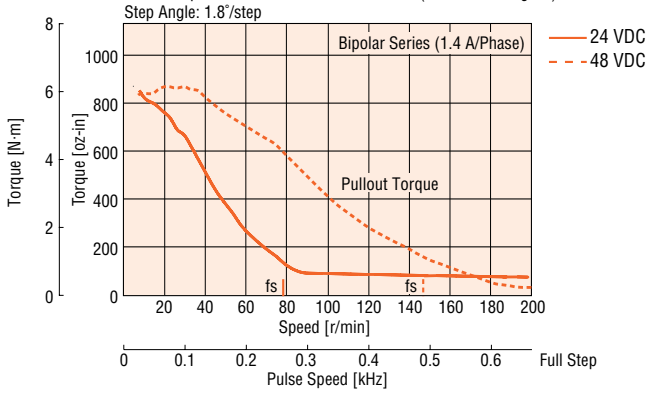
PK296-F4.5B Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



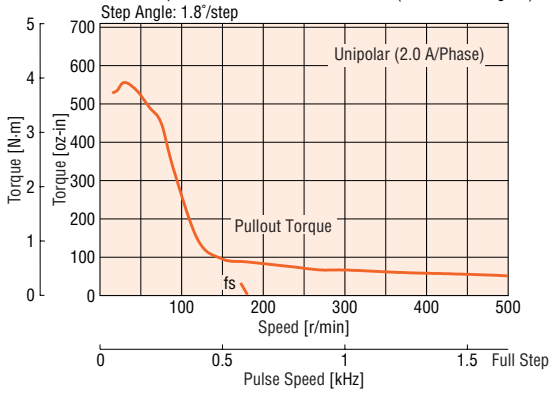
● PK299-01BA Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



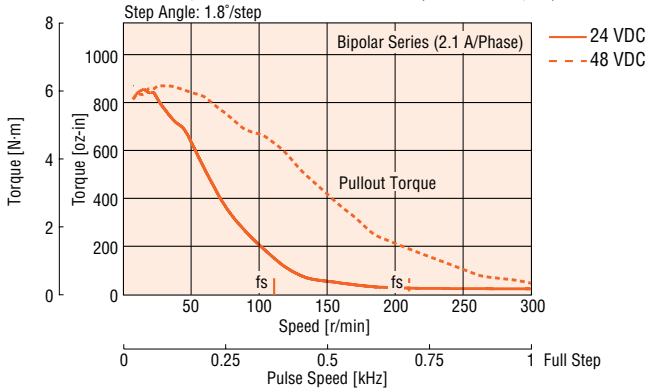
● PK299-01BA Unipolar

Power Input: 24 VDC Unipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



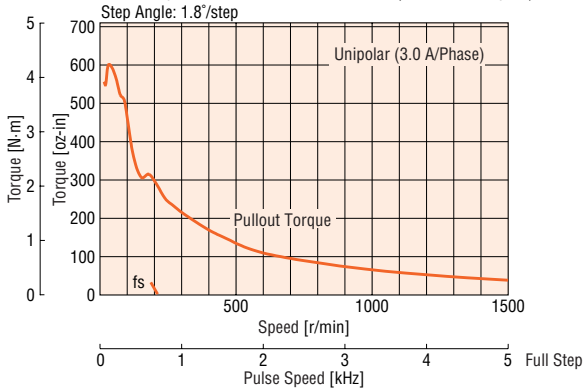
● PK299-02BA Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



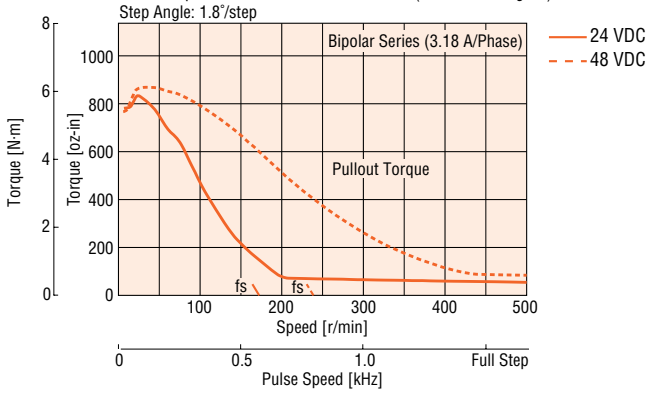
● PK299-02BA Unipolar

Power Input: 24 VDC Unipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



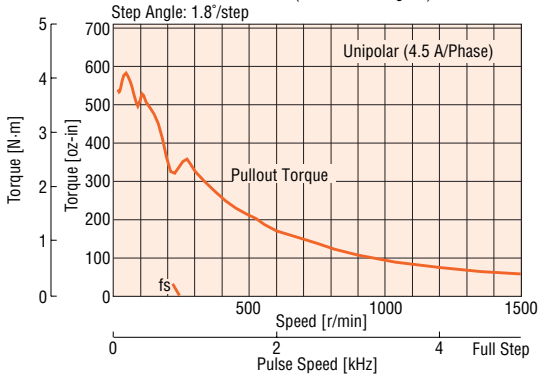
● PK299-03BA Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



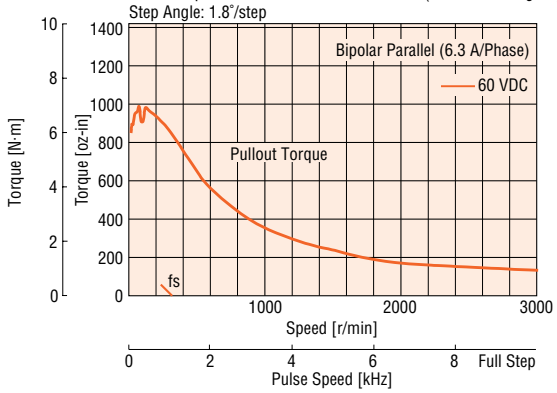
● PK299-03BA Unipolar

Power Input: 24 VDC Unipolar Constant Current Driver
Load Inertia: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



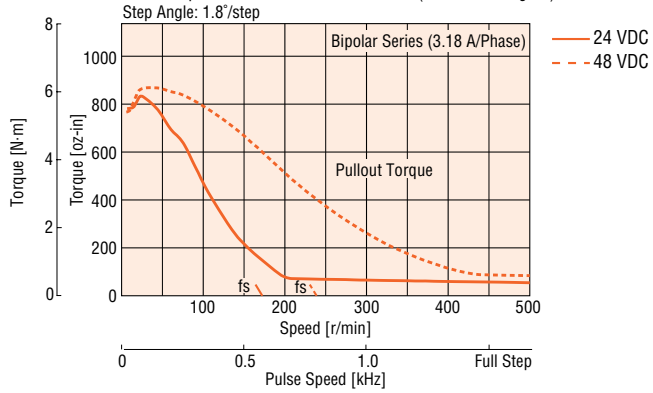
● PK299-F4.5B Bipolar (Parallel)

Power Input: 60 VDC Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



● PK299-F4.5B Bipolar (Series)

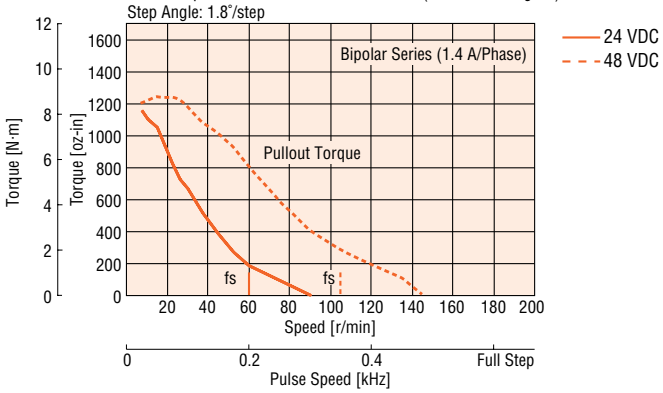
Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)
Step Angle: 1.8°/step



Connection Diagrams C-189
General Specifications C-240

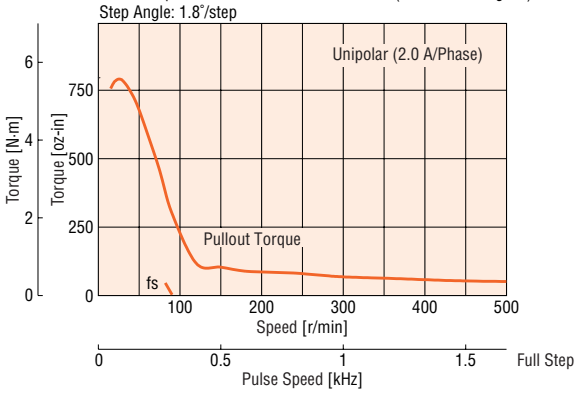
● **PK2913-01BA** Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in^2 (870 × 10^{-7} kg·m^2)
Step Angle: 1.8°/step



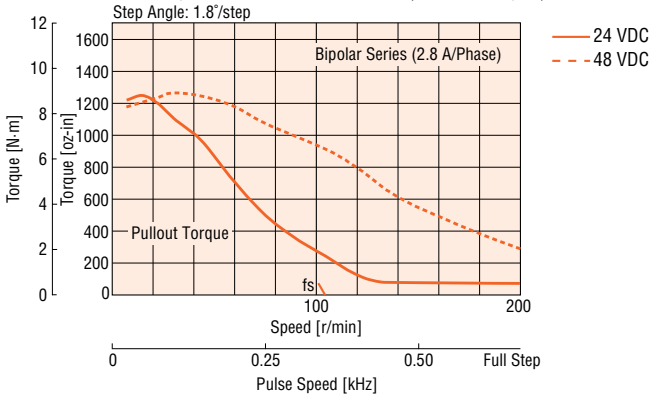
● **PK2913-01BA** Unipolar

Power Input: 24 VDC Unipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in^2 (870 × 10^{-7} kg·m^2)
Step Angle: 1.8°/step



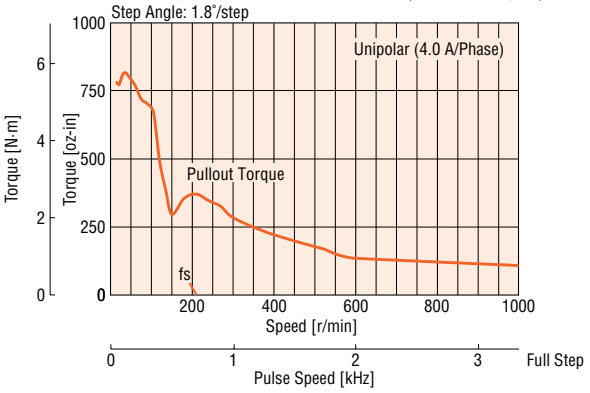
● **PK2913-02BA** Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in^2 (870 × 10^{-7} kg·m^2)
Step Angle: 1.8°/step



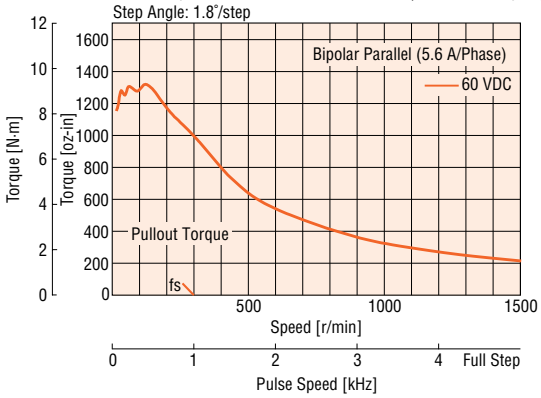
● **PK2913-02BA** Unipolar

Power Input: 24 VDC Unipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in^2 (870 × 10^{-7} kg·m^2)
Step Angle: 1.8°/step



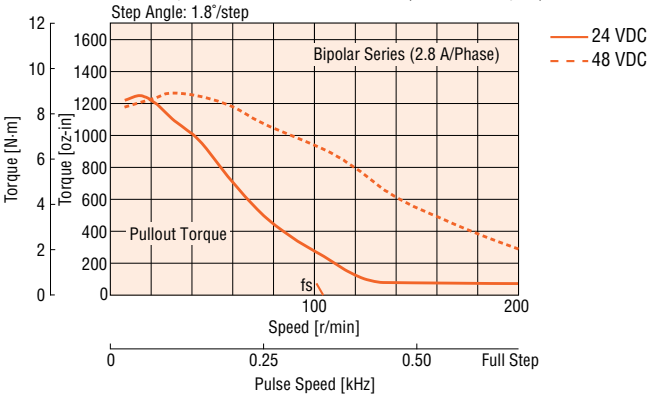
● **PK2913-F4.0B** Bipolar (Parallel)

Power Input: 60 VDC Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in^2 (870 × 10^{-7} kg·m^2)
Step Angle: 1.8°/step



● **PK2913-F4.0B** Bipolar (Series)

Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in^2 (870 × 10^{-7} kg·m^2)
Step Angle: 1.8°/step



□ 3.54 in. (□ 90 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
PK296A1A-SG□	Bipolar (Series)	1	4.4	4.4	30.8	7.7	1400×10⁻⁷	6
PK296B1A-SG□	Unipolar	1.5	3.3	2.2	7.7			
PK296A2A-SG□	Bipolar (Series)	2.1	2	0.96	6	7.7	1400×10⁻⁷	6
PK296B2A-SG□	Unipolar	3	1.4	0.48	1.5			

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

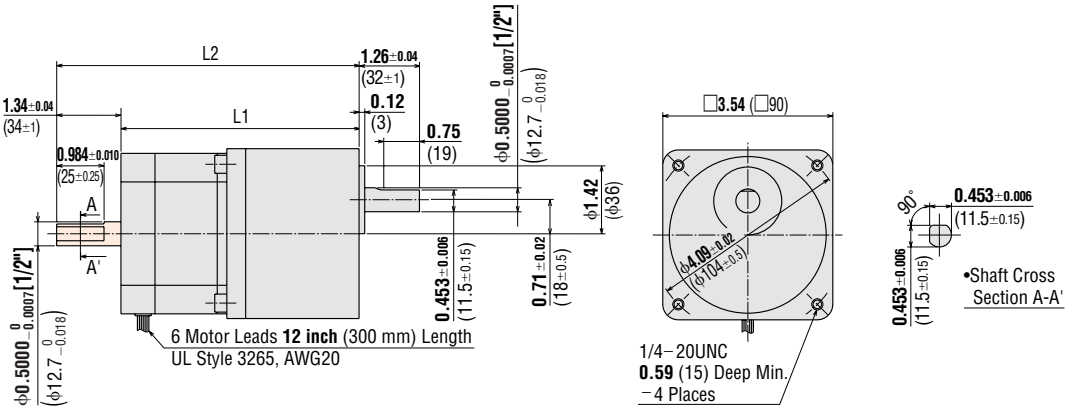
Gearmotor Specifications

Model Single Shaft Double Shaft	Gear Ratio	Holding Torque* lb-in	 N·m	Step Angle	Permissible Speed r/min
PK296A1A-SG3.6, PK296A2A-SG3.6 **PK296B1A-SG3.6, PK296B2A-SG3.6**	3.6:1	22	2.5	0.5°	500
PK296A1A-SG7.2, PK296A2A-SG7.2 **PK296B1A-SG7.2, PK296B2A-SG7.2**	7.2:1	44	5	0.25°	250
PK296A1A-SG9, PK296A2A-SG9 **PK296B1A-SG9, PK296B2A-SG9**	9:1	55	6.3	0.2°	200
PK296A1A-SG10, PK296A2A-SG10 **PK296B1A-SG10, PK296B2A-SG10**	10:1	61	7	0.18°	180
PK296A1A-SG18, PK296A2A-SG18 **PK296B1A-SG18, PK296B2A-SG18**	18:1	79	9	0.1°	100
PK296A1A-SG36, PK296A2A-SG36 **PK296B1A-SG36, PK296B2A-SG36**	36:1	106	12	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)



- Screws (included)
  1/4 -20 UNC, 0.75 inch (19 mm) length, 4 pieces
- 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
PK296A□A-SG□	4.96 (126)	—	6.2 (2.8)	B242U
PK296B□A-SG□		6.3 (160)		

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

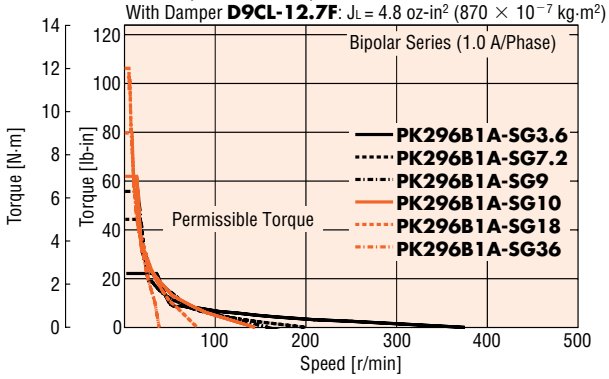
Connection Diagrams C-189 | General Specifications C-240

Speed–Torque Characteristics

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

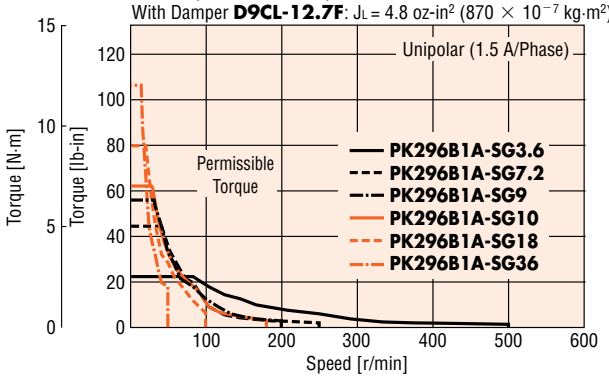
● PK296B1A-SG□ Bipolar (Series) 24 VDC

Power Input: 24 VDC Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)



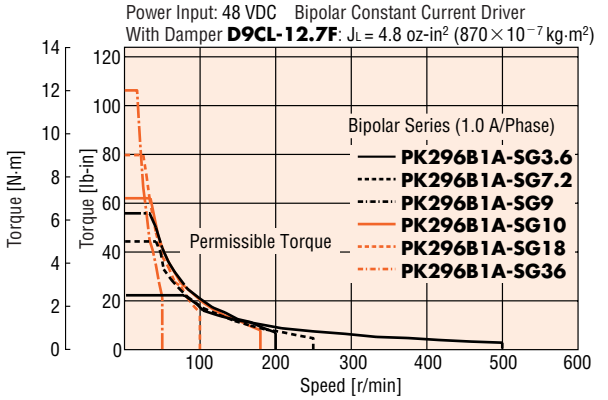
● PK296B1A-SG□ Unipolar

Power Input: 24 VDC Unipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)



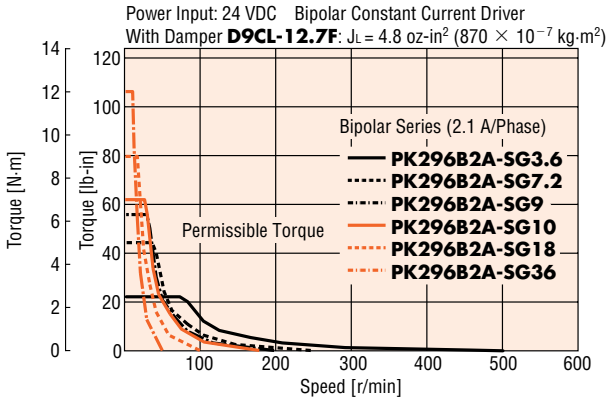
● PK296A1B-SG□ Bipolar (Series) 48 VDC

Power Input: 48 VDC Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870×10^{-7} kg·m²)



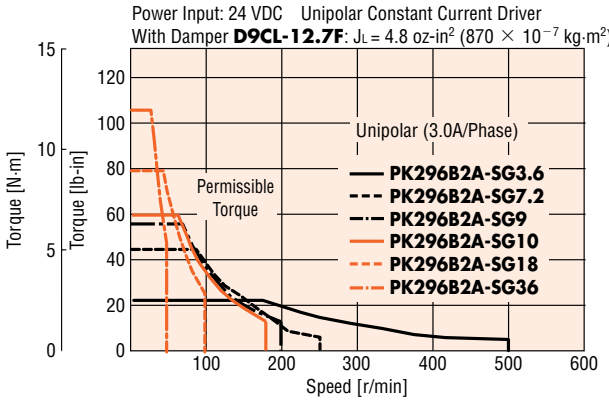
● PK296B2A-SG□ Bipolar (Series) 24 VDC

Power Input: 24 VDC Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)



● PK296B2A-SG□ Unipolar

Power Input: 24 VDC Unipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)



● PK296B2A-SG□ Bipolar (Series) 48 VDC

Power Input: 48 VDC Bipolar Constant Current Driver
With Damper **D9CL-12.7F**: J_L = 4.8 oz-in² (870 × 10^{-7} kg·m²)