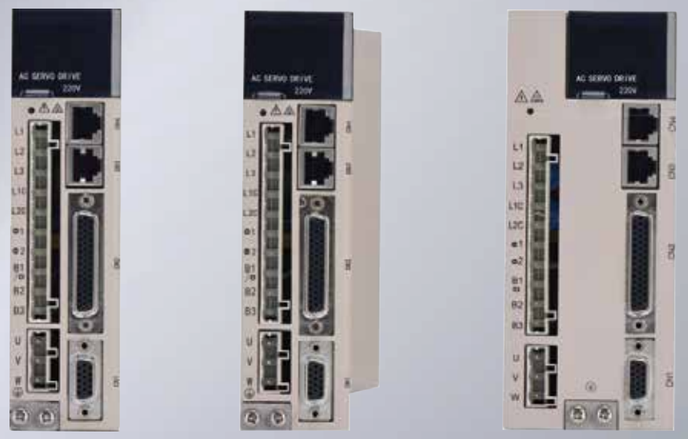
PSDG Series Servo Drive



Product Features

Fast and Accurate

- Faster computation speed with 150MHz main frequency processor. Current loop frequency response is 2.5kHz, speed loop frequency response is 1.6kHz
- Up to 23 bit bus encoder for positioning accuracy
- Improved velocity and accuracy with Kalman observer

Stable Operation

- Configured with two notch filters, adjustable frequency and depth of notch, effectively overcome the low frequency resonance and vibration of the machine end

Multi-Functional

- 12 control modes to choose from to easily meet the needs of any application
- Built-in position/velocity/acceleration observer for improved response bandwidth, real-time monitoring of operating status, and collision detection
- Pulse command filter function, can set the pulse filter width, filter out high frequency interference signal, improve the servo anti-interference ability

Easy to Debug

- 6-channel software oscilloscope, easy to debug
- Support load inertia recognition function, shorten the debugging process and save man-hours

Specifications

Model	PSDGAS04AB	PSDGAS08AB	PSDGAS15AB	PSDGAS22AB	PSDGAS30AB	PSDGAS50AB
	0.4KW	0.75KW	1.5KW	2.2KW	3.0KW	5.0KW

Input Power	
Control Mode	Three-phase PWM converter sine wave drive
Main Power	Single-phase / three-phase 220V AC（-15~+10%，50~60Hz）
Control Power	Single-phase 220V AC（-15~+10%，50~60Hz）
Rated Current	0.4kW/2.8A,0.75kW/5.5A ,1.5kW/10A,2.2kW/12A,3kW/16A,5kW/25A
Encoder Feedback	Serial encoder, support for the Tamagawa protocol

Environment	
Working Temperature	0～45°C
Storage Temperature	-20～65°C
Working Humidity	20～85%RH or less (non condensing)
Storage Humidity	20～85%RH or less (non condensing)
Working And Storage air	Indoor (no direct sunlight), non-corrosive gases, flammable gases, oil mist, dust
Altitude	Below 1000m
Vibration	5.8m/s² (0.6G) below 10～60Hz (Cannot be used continuously at resonant frequency)
Insulation And Pressure Resistance	Primary- between F and G, 1 minute under AC1500V

Functions	
IO Input	8-channel (DC24V opto-coupler isolation) Input function can be selected according to parameters below: Servo on, P action positive rotation inhibit, negative rotation inhibit, alarm reset,positive torque limit, negative torque limit, error clear
IO Output	4-channel opto-coupler isolated output; the following output function can be selected according to parameters: Alarm output, position proximity, velocity consistent detection output, motor rotation detection, servo ready, torque limit, brake release
Pulse Input	Differential input: 500K; open collector: 200K Pulse + direction, AB orthogonal pulse, CW+CCW pulse
Pulse Output	Phase A, phase B: differential output. Phase Z: differential output or open collector output
Internal Speed Command	Three-speed distribution via input terminals
Overload Capacity	Max. 3 times torque
Analog Input	1-channel differential input ±10V, 1-channel single-ended 0-10V; switch according to control mode
Communication	Modbus; Customized CAN
Control Modes	12 control modes: position control, speed control, torque control, inner speed, position/speed control, position/torque control, speed/torque control, inner speed/position, inner speed/speed, inner speed/torque, speed/zero clamp, position control/command inhibit
Regenerative Resistance	400W: without external regenerative resistance; over 750W: with