

YKD2608MG 2 Phase DSP Stepper Drive

Review and Model Selection

Stepper Drive 2 Phase

Stepper Drive 3 Phase

Close-Loop Stepper Drive

Close-Loop Stepper Motor 2 Phase

Servo-Stepper Drive

Close-Loop Stepper Motor 3 Phase

EtherCAT Drive

Bus-Type Drive 2 Phase

Integrated Motor Open-Loop

Integrated Motor Close-Loop

Stepper Motor 2 Phase

Stepper Motor 3 Phase

Speed-Torque Curve

Accessories



► Features

- 32-bit DSP control, low noise and superior vibration performance
- 16 constant torque microstep setting, up to 200 microsteps
- Smooth and accurate current control, effectively reduce motor heating
- The highest pulse response frequency is 400KHz
- When the pulse stops over 200ms, the motor current is halved
- Excellent smoothness in low frequency microsteps
- Optically isolated differential signal input, strong anti-interference ability
- Drive current is adjustable below 4.8A
- Voltage input range: DC24~80V
- With over voltage, under voltage etc. fault protection
- Small size, volume 136*82*45 (mm³), weight 0.65kg
- Suitable for 57-86mm(NEMA23-34) 2 phase open-loop stepper motors.

Application: Mainly used in medical equipment, dispensing machines, engraving machines, laser equipment, labeling machines, electronic equipment, advertising equipment and other automation equipment.

► Dimensions

Dimensions (mm)

DIP switch function setting

SW9	Pulse Smoothing	ON	Enable
		OFF	Forbid
SW10	Pulse Filter	ON	400k
		OFF	100k
SW11	Pulse Mode	ON	CW/CCW Pulse
		OFF	Pulse/Direction
SW12	Self-test Pulse 5KHz	ON	Enable
		OFF	Forbid

Drive Wiring Diagram

Input Signal Timing Diagram

PU: Pulse signal — <math><1\mu s</math>

DR: Direction signal — $>2.5\mu s$

MF: Motor free signal — $>125\mu s$

Alarm Indicator Setting

Overcurrent	1 Flashes/3 seconds
Overvoltage	2 Flashes/3 seconds
Undervoltage	3 Flashes/3 seconds

► YKD2608MG Microstep Setting

PU/Rev	Default	400	800	1600	3200	6400	12800	25600	1000	2000	4000	5000	8000	10000	20000	40000
SW8	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
SW7	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
SW6	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
SW5	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF

SW4 :OFF=Half Current
ON =Full Current

► YKD2608MG Current Setting

Current RMS	1.7	2.3	2.6	2.9	3.2	3.8	4.2	4.8
Current Peak	2.4	3.2	3.6	4.0	4.5	5.3	5.9	6.7
SW3	ON	ON	ON	ON	OFF	OFF	OFF	OFF
SW2	ON	ON	OFF	OFF	ON	ON	OFF	OFF
SW1	ON	OFF	ON	OFF	ON	OFF	ON	OFF

► Terminal Introduction

Symbol	Function	Specification
PWR	Power indicator	When power on, the green indicator lights up.
ALM	Fault indicator	When over current, under voltage or over voltage, the red indicator lights up.
PU+	Pulse signal +	Connect with the signal power supply, 5V~24V can drive, need to connect a current limiting resistor with PU- when >5V
PU-	SW11=OFF, it's pulse signal	Effects on falling edge, the motor moves a step when the pulse goes from high to low. The input resistance is 220Ω. It requires: low level 0~0.5V, high level 4~5V, pulse width>2.5us.
	SW11=ON, it's CW pulse signal	
DR+	Input signal +	Connect with the signal power supply, 5V~24V can drive, need to connect a current limiting resistor with DR- when >5V
DR-	SW11=OFF, it's direction control signal	Used to change motor direction. Input resistance 220Ω, requirements: low level 0~0.5V, high level 4~5V Effects on falling edge, the motor moves a step when the pulse goes from high to low. The input resistance is 220Ω. It requires: low level 0~0.5V, high level 4~5V, pulse width>2.5us.
	SW11=ON, it's CCW pulse signal	
MF+	Input signal +	Connect with 5V signal power supply, 5V~24V can drive, need to connect a current limiting resistor when >5V
MF-	Motor free signal	When effective (low level), the motor coil current is turned off, the driver stops working and the motor is free.
TM+	Home output signal +	The motor coil is energized at the origin to be active; opto-isolated output (high level)
TM-	Home output signal -	+ terminal is connected to the output signal resistor, TM connect with output ground. Maximum drive current 50mA, maximum voltage 50V
+V	Power supply +	DC24-80V
-V	Power supply -	
+A,-A	Motor connection	
+B,-B		



- Notice**
- Do not reverse the power supply, input voltage should not exceed DC80V.
 - The input control signal level is 5V. The current limiting resistor needs to be connected when > 5V. (Please refer to page 4 for connection)
 - When overcurrent, overvoltage or undervoltage, the O.C light flashes, please restart the power supply after eliminating motor connection and other short-circuit faults.
 - The green PWR indicator lights up when the drive is powered on.