SEB2M68

Features

- High performance, low noise, affordable price, high speed and torque, excellent stability
- Single / dual pulse input
- 16 selections of uniform angle and constant torque subdivisions, the max resolution up to 40000 steps/rev
- Adoption of 4-wires-control circuit greatly reduces noise and increases the rotation stability
- The max response frequency up to 300KHz
- Once the pulse stops for more than 100ms, the coil current will be halved automatically, to prevent the overheating
- Bipolar constant current chopper control improves the output speed and power of the motor
- Photoelectric-isolated signal I / O
- Current range：0.1A～6A
- Single power input, voltage range: DC24～80V（the optimal voltage is DC70V）
- Signal source voltage: DC3.3～28V
- Error protection：① Open phase protection ② Overheating ③ Overcurrent ④ Low voltage
- Size：117mm×75.7mm×33mm, Net weight：0.27kg

Description

SEA2M68 Using 32bit DSP control technology, the max rotate speed up to 3000rpm, the attenuation of high speed torque is much lower than that of the common open-loop stepper motor, it greatly improves the performance of the closed-loop stepper motor speed and torque utilization, effectively reduces the vibration and heat, so as to improve the processing officiency and precision of the equipment. Voltage DC24V～80V (the optimal voltage is DC70V ）, single power supply. It matches 2 phase hybrid closed-loop stepper motors which rated current under 6A, external diameter 56mm～86mm.

Based on the load current control technology, it can effectively prolong the service life of the motor. Position arival signal and alarm signal has built into the driver to facilitate the monitoring and control of the controller.

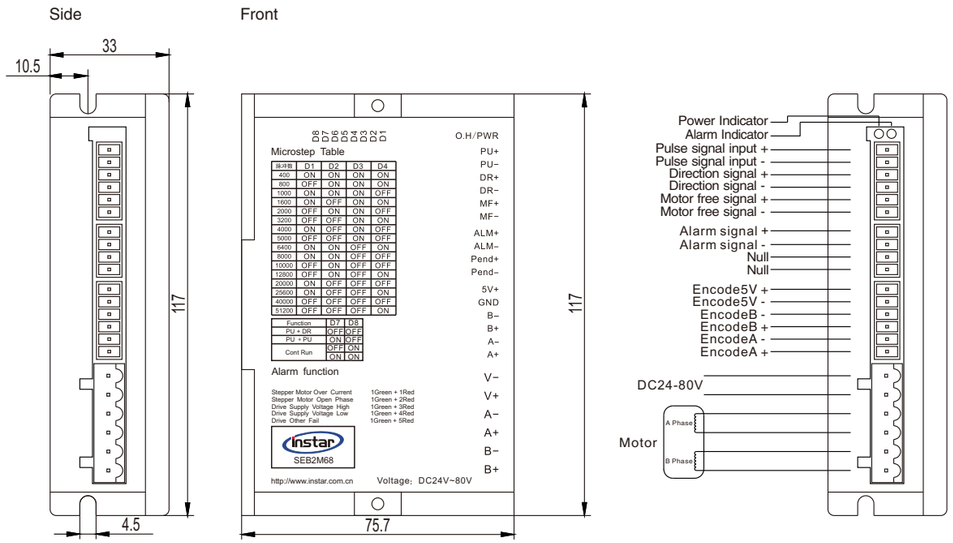
Applications

Carpentry engracing machine, Laser engraving machine, Labelling machine, Die bonder, Inkjrt printer, Embroiderer, Dispenser, BGA repair machine, Laminating machine Wire-stripping machine, Winding machine, Hot-press machine, PCB drilling machine, Non-standard equipment, XYZ gauge, Connctors assemble machine, Medical equipments, Semiconductor Equipment, Blast furnace, etc.

Microstep Setting List

Pulse/rev	400	800	1000	1600	2000	3200	4000	5000	6400	8000	10000	12800	20000	25600	40000	52100
D1	ON	ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON
D2	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
D3	ON	ON	ON	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
D4	ON	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
D5	OFF: Forward, ON: Reversal															
D7	ON: Double pulse, PU is Clockwise pulse signal, DR is Counter Clockwise pulse signal OFF: Single Pulse, PU is pulse signal, DR is Direction control signal															
D8	Trial run switch (OFF: accept external pulse signal; ON: accept and send intemal pulse signal, rotate speed can be controlled by D5～D8.															

Installation dimensions



Pin Functions

Mark	Function	Instruction
POWER	Power indicator	Power on, the green indicator normally on.
O.H	Fault indecator	Overcurrent, phase open circuit, overtension, low voltage, the red indicator flashes.
PU+	Input signal positive side	Connects +3.3V～+28V pulse signal power.
PU-	Pulse signal	When the falling edge is valid, the motor moves a step as the pulse become lower, input resistance is 220Ω. Requires: low level +0V～+0.5V, high level +4V～+5V, pulse width >2.5 μs.
DR+	Input signal positive side	Connects +3.3V～+28V pulse signal power.
DR-	Direction control signal	For changing the direction,input resistance is 220 Ω. Requires: low level +0V～+0.5V, high level+4V～+5V, pulse width >2.5 μs
MF+	Input signal positive side	Connects +3.3V～+28V pulse signal power.
MF-	Motor free signal	When the low electrical level is valid, it cuts off the motor current, the driver stops working and motor will be in a free state.
ALM+	Alarm signal output positive side	It flashes when (Output optocoupler breakover) Overcurrent, Phase open circuit Overvoltage, Low voltage, Position deviation alarm. ALM+ connects to the positive pole, ALM- connects to the negative pole, max current 50mA。
ALM-	Alarm signal output negative side	
+V	Power+	DC24～80V (the optimal voltage is DC80V)
-V	Power-	
+A、-A	Connect to the motor	Please refer to the motor connections.
+B、-B		

Alarm functions

- 1 Green 1 Red Alternately flashes，Overcurrent；
- 1 Green 2 Red Alternately flashes，Phase open circuit；
- 1 Green 3 Red Alternately flashes，Overvoltage；
- 1 Green 4 Red Alternately flashes， Low voltage；
- 1 Green 5 Red Alternately flashes，Other faults；

The driver will lose self-locking function when the above alarms start,please clear faults and re-up electricity,the driver goes back to normal when the power green indicator normally on.

▲Attention：The driver can't be protective when connects the wire inversely or wrong,please confirm the connections before electrify it,otherwise the fuse inside may be burnout.

DSP 2-PHASE CLOSE-LOOP STEPPING MOTOR DRVIER