MEZ Step-Servo Series Drives

MEZ-2D260
18-60VDC

MEZ-2D580
18-75VDC

MEZ-2D6120
18-80VAC

MEZ Series Step-Servo Drives is the perfect integration of servo control technology in digital stepping drive, it adopts typical three-loop control method (position loop, speed loop and current loop), compatible with the dual advantages of stepping and servo.

Features

◇Multiple Control Modes

Pulse & Direction Control Mode、Double Pulse Control Mode、Automatic Run Under Control、 Continue Running、Analog control

◇Full Close-loop

Automatically adapt to a wide range of inertia and friction load changes, motor standard with 1000 line encoder.

◇Low Calorific Value, High Efficiency

Adjust current in real time according to the load condition to minimize heating; At rest, the current is almost zero, no heat; Nearly 100% torque output capacity, in the most compact space to play the largest energy conversion, energy saving efficiency.

◇Smooth And Precise

Excellent performance at high speed and low speed. At low speed, the motor runs smoothly, quietly, no jitter, low noise; Make the motor in running and at static positioning accurate.

◇High-Speed Response

In the case of point-to-point fast positioning, it provides a large torque output, so that the system has a very high dynamic response.

◇High Torque

The driver is always in full servo mode, the torque of the motor can be fully utilized by 100%, and the system design does not need to consider torque redundancy.

◇Automatically Adjusts Parameters

Automatically adjust parameters according to motor model without manual setting.

Status Indicator

LED codes		ERROR
●	Green LED keeps on	The motor is running
● ●	Green LED flashes	The motor is lying idle
● ●	The LED flashes one red and one green	Excessive current
● ●	The LED flashes two red and one green	The motor winding is open circuited
● ● ●	The LED flashes three red and one green	The drive input over-voltage
● ● ● ●	The LED flashes four red and one green	The drive input under-voltage
● ● ● ● ●	The LED flashes five red and one green	Position out of tolerance alarm
● ● ● ● ● ●	The LED flashes six red and one green	Detect encoder error

Specification

Specification	Range
Speed Range	Up to 3000RPM
Ambient Temp	0℃-50℃
Ambient Humidity	90%or less non-condensing
Shock	60~300Hz/mm
Storage Temp	-20℃-75℃
Cooling Way	Natural cooling or forced cooling
Environment	Do not place it next to other heating equipment. Avoid places whit dust, oil mist,corrosive gas,high humidity and strong vibration. Combustible gases and conductive dust are prohibited.

MEZ Step-Servo Serie

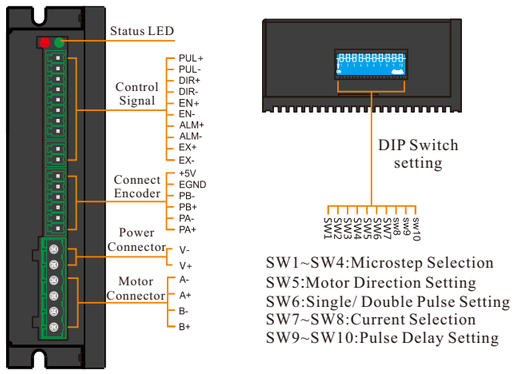
Feature

♦Voltage Range: MEZ-2D260:18-60VDC
MEZ-2D580:18-75VDC
MEZ-2D6120:18-80VAC
♦Selectable Microstep: 16 Settings, Can be customized according to customer requirements
♦Signal Input: compatible with 5-24V, no external series resistance required
♦The Maximum Response Frequency400KHz
♦The Highest Speed 3000rmp
♦External In Place And Alarm Output Port
♦DIP Switch Setting The Single/ Double Pulse
The Default Setting Is Pulse & Direction Control Mode
♦DIP Switch Setting The Pulse Delay,The Default Setting Is 40MS

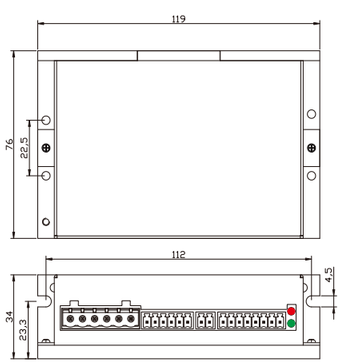
Selection Guide

Model	Current	Voltage	Recommended Motors	Dimensions	Selectable Microstep	Weight
MEZ-2D260	0.5-2.0A	18-60VDC	42 & smaller	119*75.5*34	16 Settings	about 276g
MEZ-2D580	2.5-5.0A	18-75VDC	57、60	119*75.5*34	16 Settings	about 276g
MEZ-2D6120	3.0-6.0A	18-80VAC	60、86	119*75.5*34	16 Settings	about 297g

Mechanical Dimension

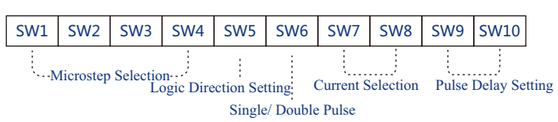


SW1~SW4:Microstep Selection
SW5:Motor Direction Setting
SW6:Single/ Double Pulse Setting
SW7~SW8:Current Selection
SW9~SW10:Pulse Delay Setting



Switch Selectable

Many configuration parameters of the drive can be set with a dip switch ON/OFF:



DIP Setting

Microstep	2	4	8	16	32	64	128	256	5	10	20	25	40	50	100	200
Pulse/RPM	400	800	1600	3200	6400	12800	25600	51200	1000	2000	4000	5000	8000	10000	20000	40000
SW1	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF
SW2	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
SW3	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
SW4	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

SW5 Motor Rotate Direction Setting : OFF=CW,ON=CCW

SW6 Single/ Double Pulse Setting : OFF=Pulse+Direction,ON=Double Pulse

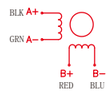
SW7、SW8 The Drive Current Selection

Model	2D260 Current	2.0A	1.5A	1.0A	0.5A
	2D580 Current	5.0A	4.0A	3.0A	2.5A
	2D6120 Current	6.0A	5.0A	4.0A	3.0A
DIP setting	SW7	ON	OFF	ON	OFF
	SW8	ON	ON	OFF	OFF

SW9、SW10 Pulse Delay Setting

Pulse Delay(ms)	0	4	20	40
SW9	ON	OFF	ON	OFF
SW10	ON	ON	OFF	OFF

The Pin Function Of Status LED

Mark	Function	Interpret
Status	The fault & voltage lamp	Refer to status indicator table on page 34
PUL+	Pulse signal photoelectric isolation positive end	Connected the signal, power supply, Input voltage 5V -24V
PUL-	Pulse signal photoelectric isolation of the negative end	Falling edge is effective, when the pulse changes from high to low, the motor takes one step. Step Pulse width>2.5μs
DIR+	Input signal photoelectric isolation positive end	Connect the power supply, Input voltage 5V-24V
DIR-	When SW9=OFF, it is the direction control signal	It used to change the motor steering
	When SW9=ON, it is the reverse pulse signal	Falling edge is effective, when the pulse changes from high to low, the motor takes one step. Step Pulse width>2.5μs
EN+	Input signal photoelectric isolation positive end	Connect the signal, power supply, Input voltage 5V -24V
EN-	Motor release and alarm clearance signal	When the "Enable" signal is activated (low level), then turn off the motor coil current， the motor is lying idle and the fault alarm signal is cleared
ALM+	The positive end of the alarm signal output	When the red LED flashes, the alarm signal is activated. ALM+ connect the pull resistor to the positive pole of the output power supply, ALM- connect the negative pole of the input power supply, and the maximum driving current is 10MA
ALM-	The negative end of the alarm signal output	
EX+	Position Positive end of signal output	When the driver finishes the given pulse, the signal in place is valid (the output optical coupler is on). EX+ is connected with a pull resistor to the positive pole of the output power supply, and EX- is connected to the negative pole of the output current. The maximum driving current is 10MA
EX-	Position signal output negative end	
+5V	Encoder power supply alignment	Encoder power supply positive pole 5V
EGND	Encoder power supply ground	Encoder power supply negative pole 0V
PB+	Encoder phase B input positive end	Connect to positive input of encoder channel B
PB-	Encoder phase B input negative end	Connect to negative input of encoder channel B
PA+	Encoder phase A input positive end	Connect to positive input of encoder channel A
PA-	Encoder phase A input negative end	Connect to negative input of encoder channel A
V+	Positive pole of driver power supply	Positive pole of driver power supply，DE42：18~60VDC；DE57：18~75VDC；DE86：18~80VAC
V-	Negative pole of driver power supply	Negative pole of driver power supply
A+	Wiring diagram A+	
A-	Wiring diagram A-	
B+	Wiring diagram B+	
B−	Wiring diagram B-	