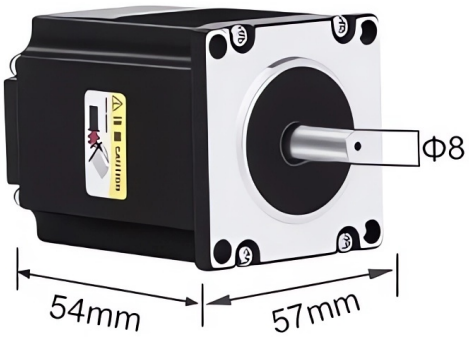
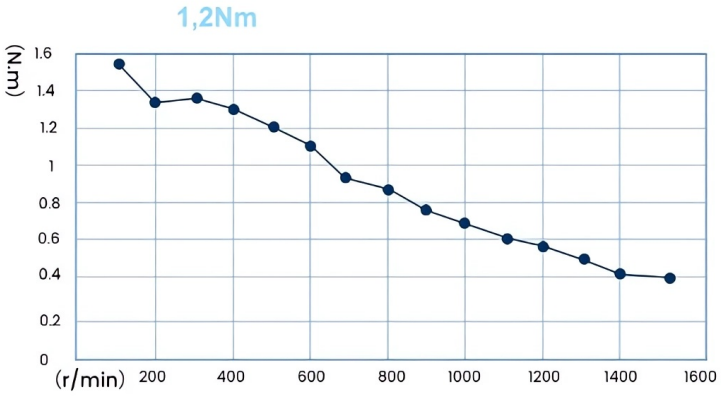
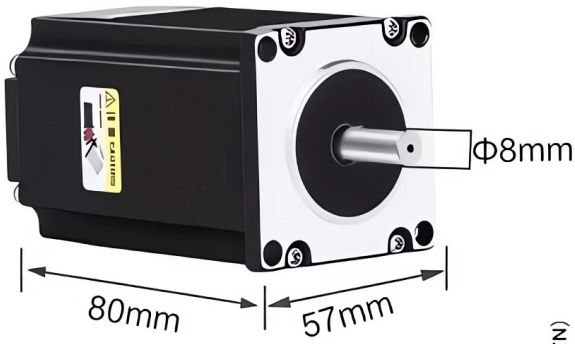
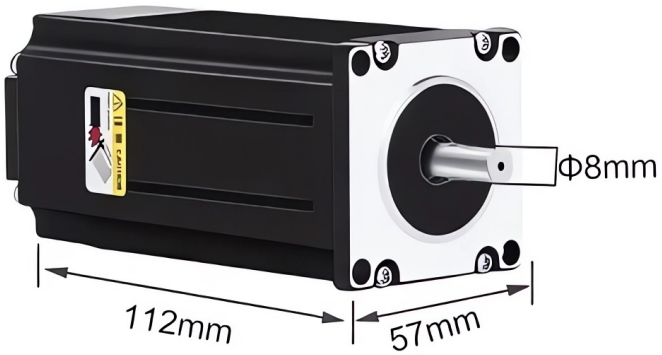
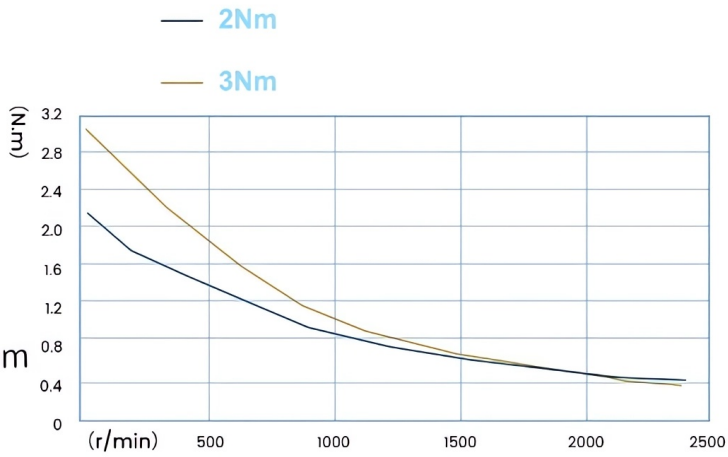
Nema 23 Closed Loop Stepper Motor









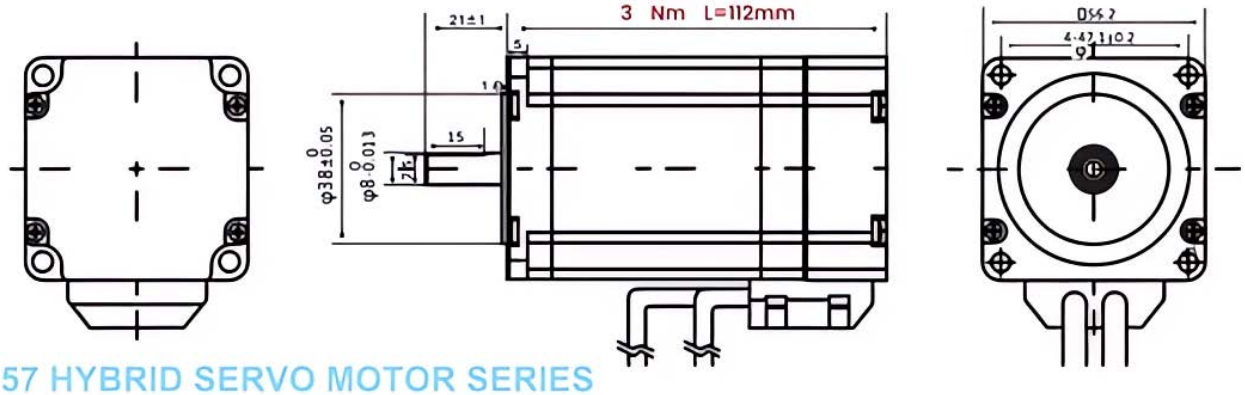


MOTOR TECHNICAL DATA

Modell	Step angle	L	Current	Resistance	Inductance	Hold torque	Voltage	Weight
	(°)	(mm)	(A)	(Ω)	(mH)	(N·m)	(V)	(kg)
57HB250-54B	1.8	54	3	0.93	3.5	1.2	12-60	0.9
57HB250-80B	1.8	80	3	0.55	2.5	2.0	12-60	1.4
57HB250-110B	1.8	112	3	0.78	3.6	3.0	12-60	1.9

OUTLINE SIZE DRA WING

1.2 Nm L=54mm
2 Nm L=80mm
3 Nm L=112mm

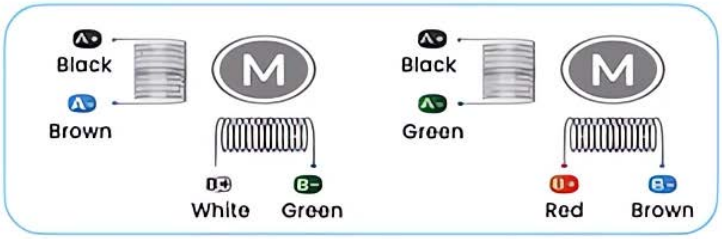


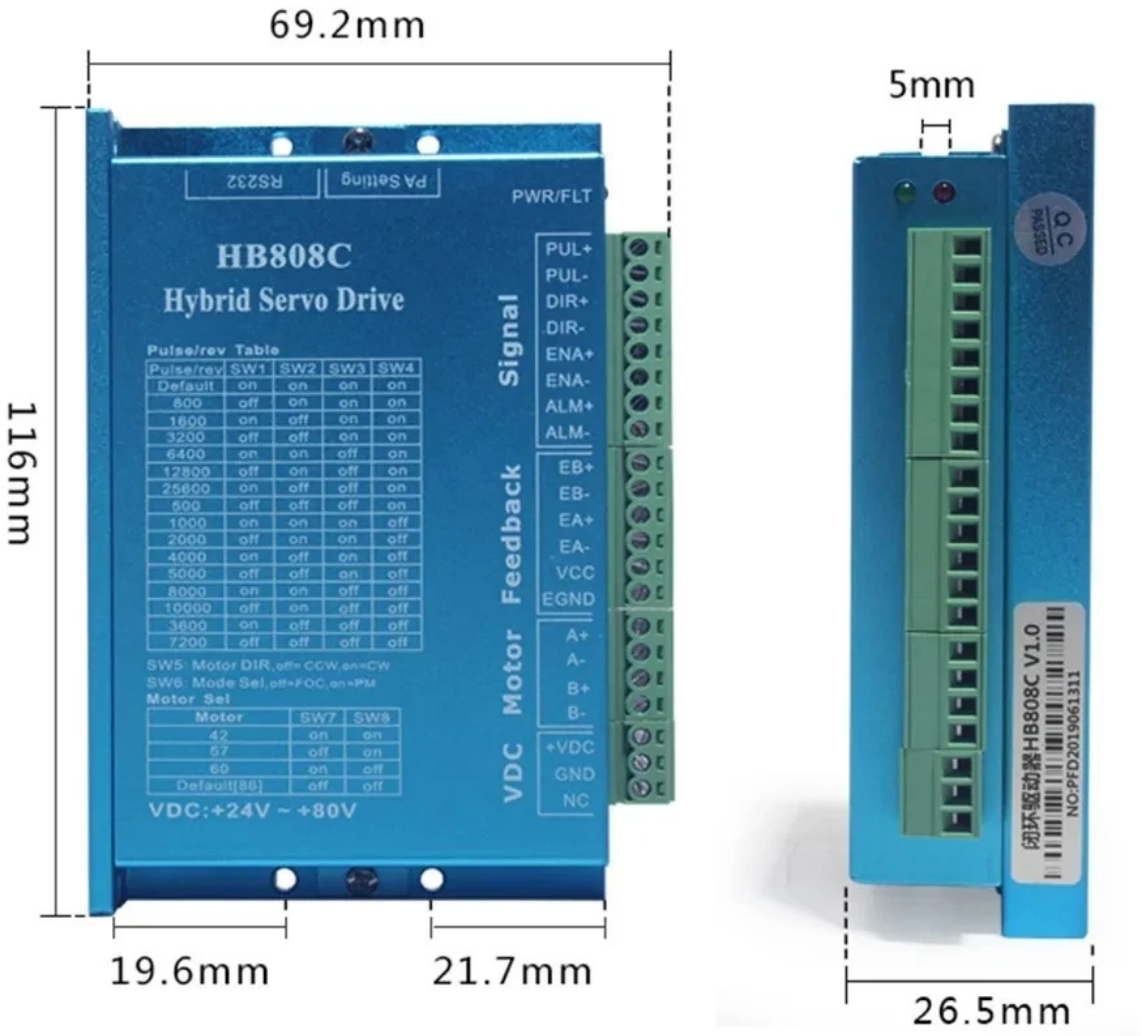
57 HYBRID SERVO MOTOR SERIES

Encoder interface definition1000 cables

Motor connection definition (6-pin/male vS female)		
Pin No:	Definition	Colour
1	EB+	Yellow
2	EB-	Green
3	EA+	Black
4	EA-	Brown
5	VCC	Red
6	GND	White

Tips:
Please follow the English label
on the motor for accurate wiring.





Parameter of HB808C Driver:

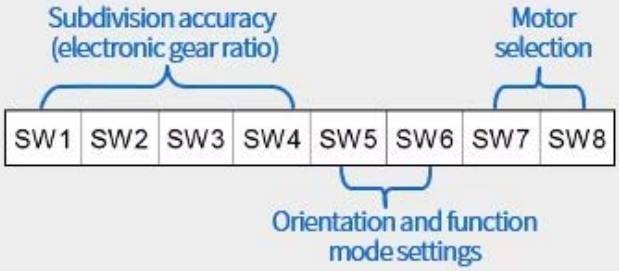
	HB808C			
Driver Parameters	Minimum value	Rated value	Maximum value	Unit
Continuous output Current	0.5	-	13	A
Input Voltage (DC)	24	36/48	80	Vdc
Logic input Current	6	10	16	mA
Logic input Voltage	4.5	5	28	Vdc
Pulse Frequency	0	200	500	kHz
Maximum Acceleration (No load)	-	100	-	rpm/ms
Overvoltage Protection Voltage	90	92	94	Vdc
Insulation Resistance	100	-	-	MΩ

Environment Requirements:

Cooling Method	Natural cooling or Forced air cooling	
Operating Environment	Occasion	Do not place it next to other heating equipment; Avoid dust, oil, corrosive gas, excessive humidity and strong vibration, and prohibit flammable gas and conductive dust
	Temperature	-5ºC~45ºC
	Humidity	40~90%RH
	Vibration	10~55Hz/0.15mm
Holding Temperature	-20ºC~65ºC	
Operating Altitude	≤1000m	
Weight	About 1.4 Kg	

DIP Switch Setting

The HB808C digital closed-loop servo driver uses an 8-bit DIP switch to set the subdivision accuracy (electronic gear ratio), the initial direction of motor rotation and function mode selection.
The detailed description is as follows:



Subdivision accuracy (electronic gear ratio): When S1, S2, S3, and S4 are all ON, the driver's microstep subdivision adopts the driver's internal default microstep subdivision. The initial value of the driver's internal default microstep subdivision is 400Pulse/rey, which can also be debugged.
Software setting electronic gear ratio: SW5 sets the motor direction. When it is ON, the motor rotates clockwise (CW). When it is OFF, the motor rotates counterclockwise (CCW). SW6 function mode selection. When it is OFF, the driver is in space vector control mode (FOC). When it is ON, the driver is in point motion mode (PM). This mode has better start and stop effect.

Adaptable motor selection	SW7	SW8
42 flange closed loop stepper motor	ON	ON
57 flange closed loop stepper motor	OFF	ON
60 flange closed loop stepper motor	ON	O FF
86 flange closed loop stepper motor	OFF	OFF

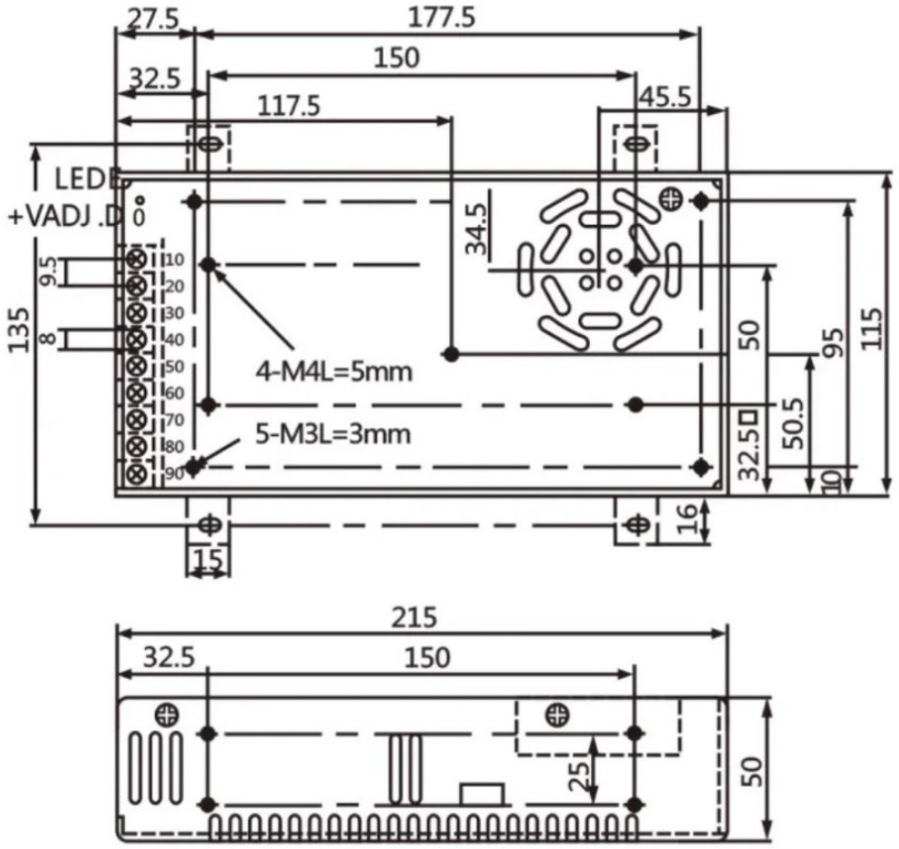
Steps/ Turn	SW5	SW6	SW7	SW8	Segmentation description
Default [400]	ON	ON	ON	ON	When SW1, SW2, SW3, and SW4 are all ON, the driver subdivision adopts the driver's internal default subdivision number: the user sets the subdivision number through the software ProTuner. The minimum value is 200, the resolution is 1, and the maximum value is 51200.
800	OFF	ON	ON	ON	
1600	ON	OFF	ON	ON	
3200	OFF	OFF	ON	ON	
6400	ON	ON	OFF	ON	
12800	OFF	ON	OFF	ON	
25600	ON	OFF	OFF	ON	
500	OFF	OFF	OFF	ON	
1000	ON	ON	ON	OFF	
2000	OFF	ON	ON	OFF	
4000	ON	OFF	ON	OFF	
5000	OFF	OFF	ON	OFF	
8000	ON	ON	OFF	OFF	
10000	OFF	ON	OFF	OFF	
3600	ON	OFF	OFF	OFF	
7200	OFF	OFF	OFF	OFF	

Power Supply

1.Model: S-350-24
2.Rated Load: 350W (Max Load)
3.Input Voltage: AC100-120V/200-245VAC 50/60Hz
4.Output Voltage:DC24V (Constant Voltage)
5.Output Current:14.6A
6.Conversion Efficiency:more than 80%
7.Working temperature:-30~+50
8.IP code:IP20
9.Cooling type:Fan Cooling

Pure copper transformer
High power and high temperature resistance

S-350W


27.5
177.5
150
32.5
117.5
45.5
LED
+VADJ .D
34.5
9.5
8
135
4-M4L=5mm
5-M3L=5mm
50
95
115
50.5
32.5
10
16
15

215
32.5
150
25
50