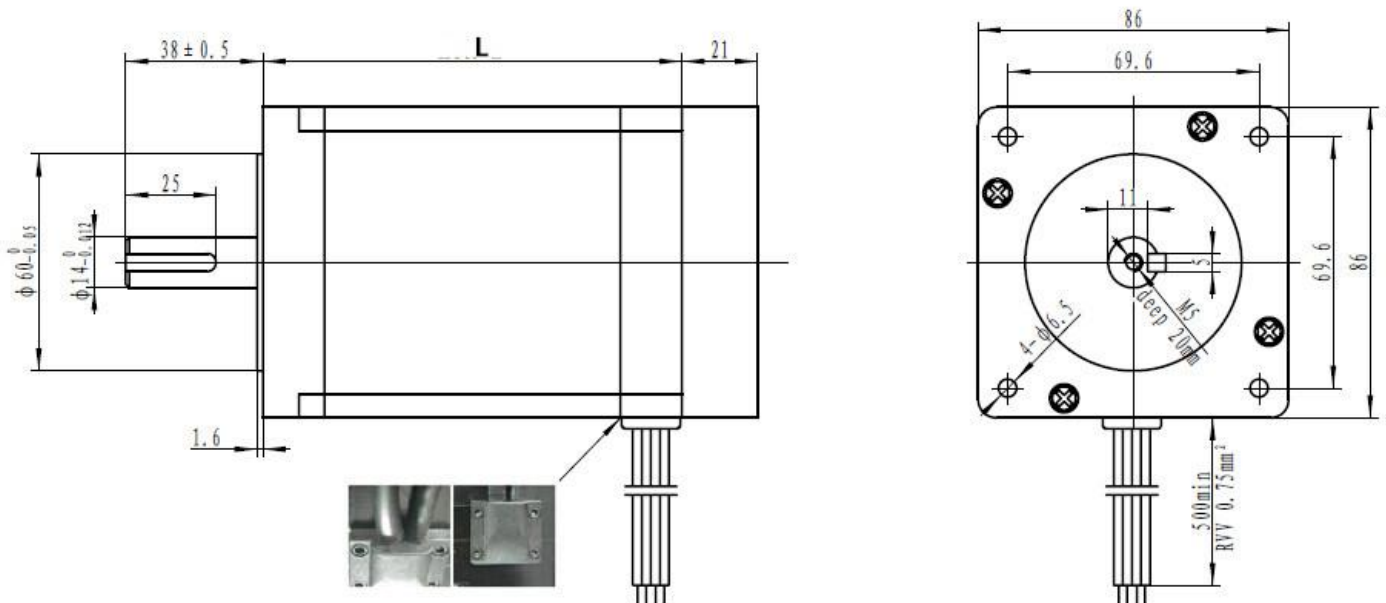# NEMA34 easy servo series

(NEMA34 closed loop series)

Motor Eelctrical Parameters:

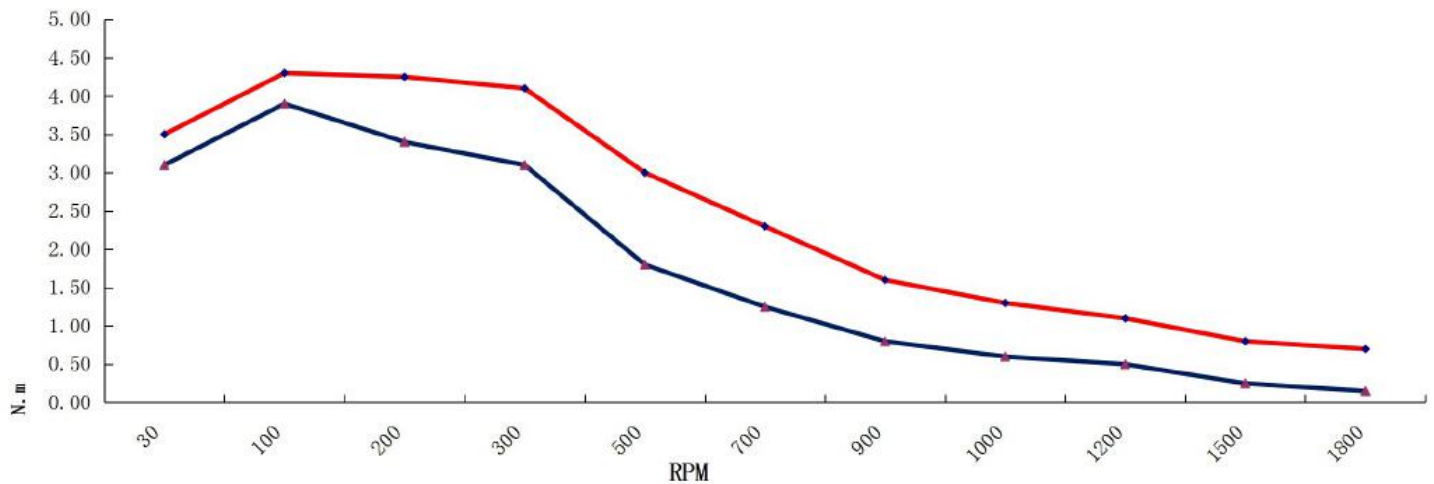| Mode	Step angle	Current (A)	Resistance (Ω±10%)	Inductance (mH±20%)	Holding torque(N.m)	Motor length(mm)	Encoder Resolution(PPR)	Weight(kg)
86HSE4N-BC38	1.8°	6.0	0.45	3.7	4.5	82	1000	2.65
86HSE8N-BC38	1.8°	6.0	0.44	3.7	8.0	118	1000	4.0
86HSE12N-BC38	1.8°	6.0	0.45	5.2	12.0	156	1000	5.65

motor dimension：mm

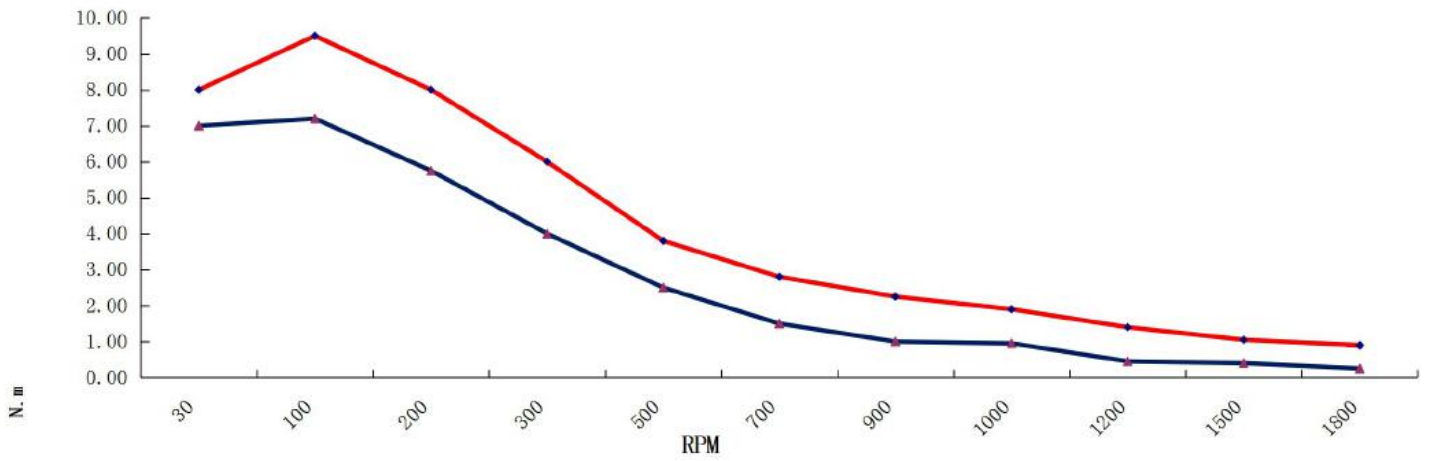**Torque/Frequency Curve**

86HSE8N-BC38

Test condition: AC-60V, HSS86, 1600 mircostep

86HSE12N-BC38

Test condition: AC-60V, HSS86, 1600 microstep

Driver HSS86

1. Position error correction and never lose steps
2. Quick response and perfect acceleration, High torque at high speed
3. Automatic current adjustment based on load, lower temperature rising
4. Over-current, over-voltage and position ultra difference protection function
5. Pulses response frequency can reach 200KHZ
6. 16 kinds microsteps choice, highest 51200microsteps/rev.
7. Drive nema 34 series 4.5N.m, 8N.m, 12N.m closed loop stepper motor
8. Voltage range: AC20V~80V, DC30V-110V
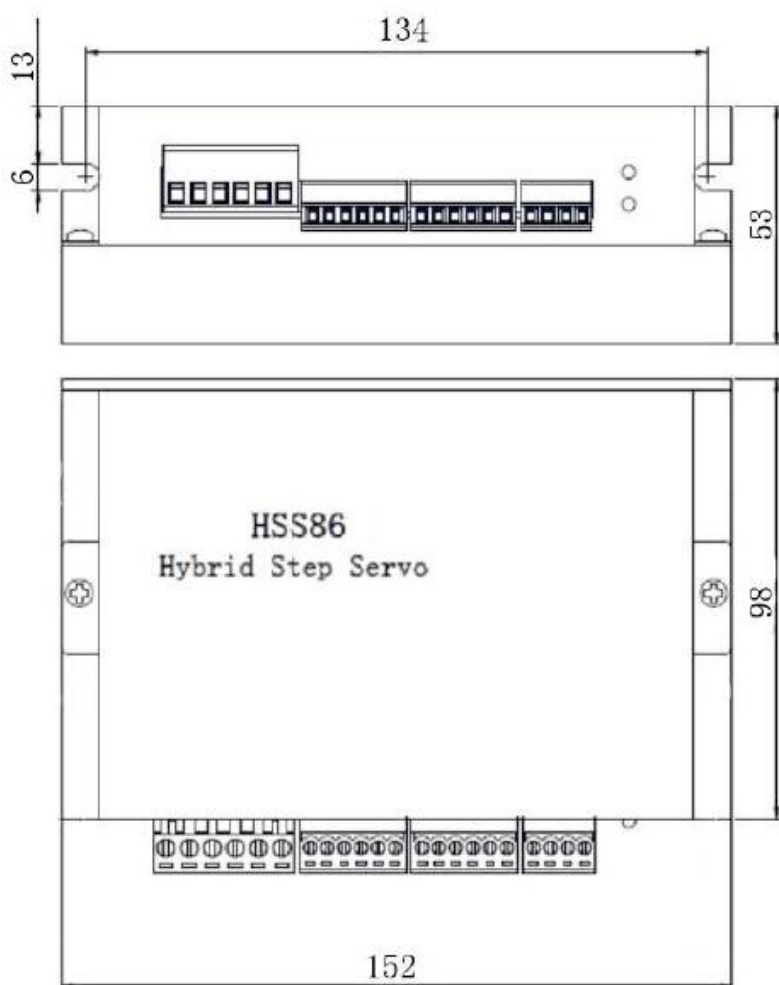
Microstep selection:

Micorstep/rev	SW3	SW4	SW5	SW6
Default（400）	on	on	on	on
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
51200	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
20000	on	off	off	off
40000	off	off	off	off

driver dimension (mm):

Wiring Diagram:

HSS86

+5V

PUL+ R
PUL−
DIR+ R
DIR−
ENA+ R
ENA−
PEND+
PEND−
ALM+
ALM−

controller

voltage
AC20-80V or
DC30-110V

AC1
AC2

EB+ yellow
EB− green
EA+ black
EA− blue
VCC red
EGND white

encoder

A+ red
A− green
B+ yellow
B− blue

motor