

HYBRID STEPPER MOTOR ES-M32320 WITH ENCODER



FEATURES:

- 3-phase hybrid stepper motor
- 1000-lines/Rev. encoder
- Standard NEMA 23 dimensions
- High torque design

The ES-M32320 three-phase stepper motor with encoder feedback is designed to work with the Leadshine Hybrid Servo Drive ES-D508 to build a hybrid servo closed loop system (no loss of steps anymore).

GENERAL SPECIFICATIONS:

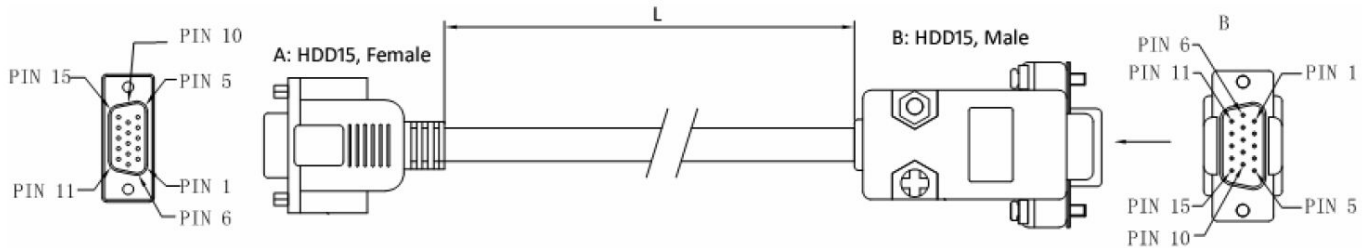
	ES-M32320	
Step Angle (Degree)	1.2	
Holding Torque (Nm)	2.0	
Phase Current (A)	5.8	
Phase Resistance (Ohm)	0.62	
Phase Inductance (mH)	1.85	
Inertia (g.cm ²)	500	
Weight (kg)	1.35	
Encoder (lines / Rev.)	1000	

Encoder Specifications:

Parameter	Min	Typical	Max	Unit
Operating Temperature	-40	-	100	°C
Supply Voltage	4.5	5	5.5	VDC
Output Current per Channel	-1	-	5	mA
Low Level Output Voltage	-	-	0.4	VDC
High Level Output Voltage	2.4	-	-	VDC
Count Frequency	-	-	100	KHz

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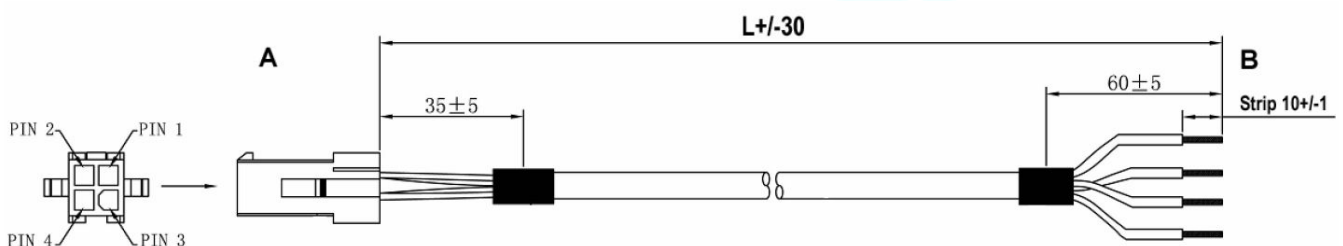
Encoder Extension Cable:



Pin (female)	Name	Color	Pin (male)	Description
1	EA+	Black	1	Encoder channel A+
2	VCC	Red	13	+5V power input
3	GND	White	3	Ground (for power input)
4	NC	-	-	Not connected
5	NC	-	-	Not connected
6	NC	-	-	Not connected
7	NC	-	-	Not connected
8	NC	-	-	Not connected
9	NC	-	-	Not connected
10	NC	-	-	Not connected
11	EB+	Yellow	2	Encoder channel B+
12	EB-	Green	12	Encoder channel B-
13	EA-	Blue	11	Encoder channel A-
14	NC	-	-	Not connected
15	NC	-	-	Not connected

Note: The encoder extension cable must be connected between ES-M32309 motor and the ES-D508. You can not connect the motors encoder cable to the ES-D508 directly.

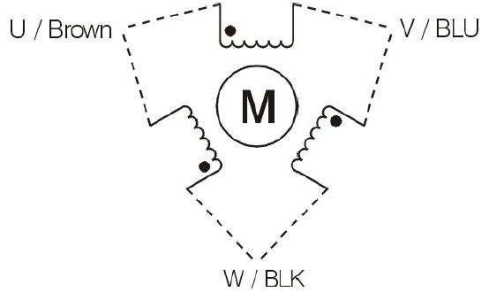
Motor Extension Cable:



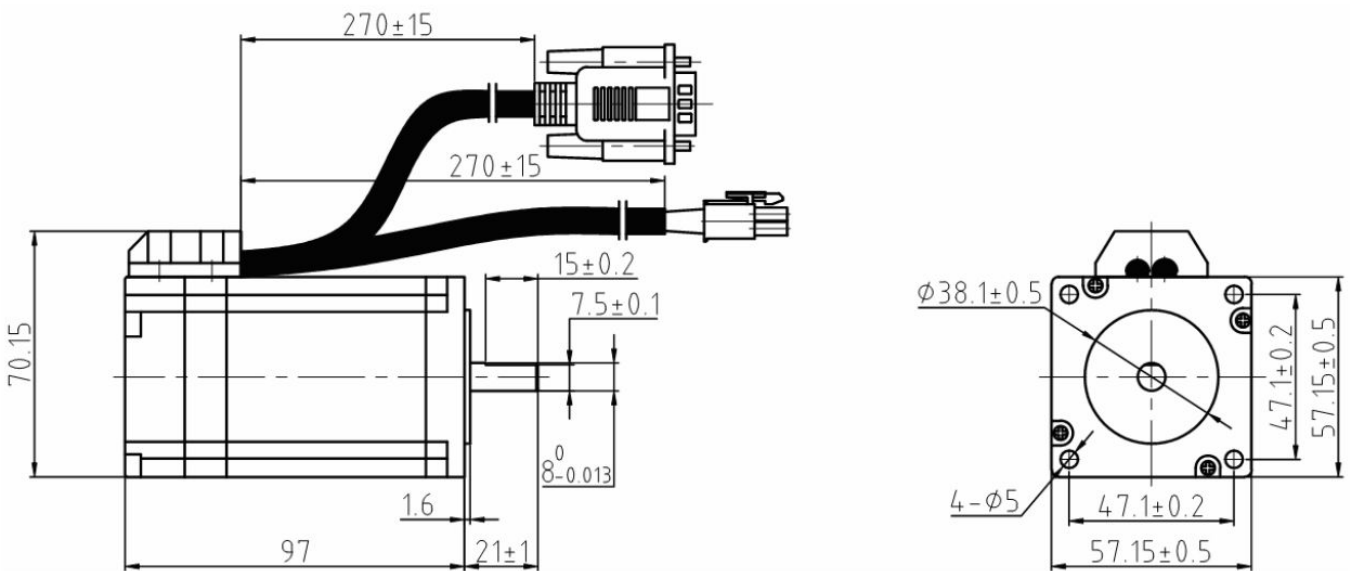
Pin	Name	Color	Description
1	V	Blue	Phase V
2	U	Red	Phase U
3	W	Black	Phase W
4	-	Yellow / Green	Not connected

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MOTOR WIRING DIAGRAM:



MECHANICAL DIMENSIONS:



SPEED TORQUE CURVE:

