



**Datasheet of 2 Phase Nema34
Easy Servo Motor**

LC86H2 Series

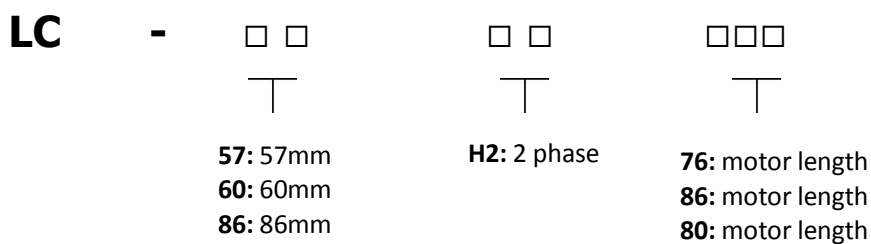


**2 Phase nema34 Closed Loop Stepper Motors
4.5~12Nm**

Descriptions

Lichuan's LC86H2 series nema34 easy servo motors, are also called 2 phase nema34 closed loop stepper motors. They are designed to match with Lichuan's 2 phase easy servo drivers including the LCDA86H and LCDA808H. They are available from 4.5Nm to 12Nm. 1000-line optical incremental encoders are used on those easy servo motors to improve the machine accuracy. They all have good function characteristics such as encoder feedback, high speed, high precision and so on.

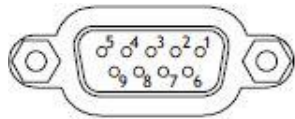
Naming Rules



Encoder Specifications

Parameter	Min	Typical	Max	Unit
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

Encoder Cable Connector

Pin	Name	Wire color	Description	Connector
1	EA+	black	Channel A+ output	
2	EA-	blue	Channel A- output	
4	EB+	white	Channel B+ output	
5	EB-	red	Channel B- output	
7	GND	yellow	Ground	
8	VCC	green	+5V power input	

» 2 Phase 86 (NEMA34) Easy Servo Motor Series

General Specifications---

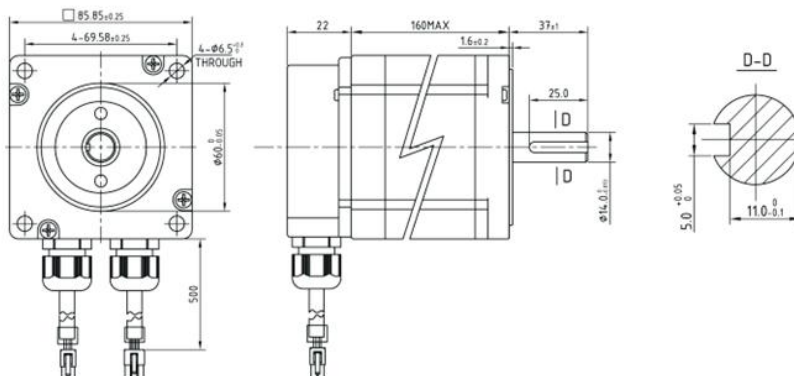
Item	Specifications
Step Angle Accuracy	±5%
Resistance Accuracy	±10% (20°)
Inductance Accuracy	±20% (1KHZ)
Temperature Rise	80°Cmax
Ambient Temperature	-20°~+50°
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500V AC 1minute
Allowable Radial Load	0.02mm Max .(450g load)
Allowable Thrust Load	0.08mm Max. (450g load)
Maximum Radial load	130N (From the flange surface 20mm)
Maximum Axial load	30N

Technical Data---

Models	Step Angle (°)	Motor Length (mm)	Holding Torque (N.M)	Phase Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Rotor Inertia (g.cm2)	Leads	Motor Weight (Kg)
LC86H268	1.8	68+22	3.5	6	0.3	2.2	1400	4	2.2
LC86H280	1.8	80+22	4.5	6	0.3	3.4	1800	4	2.5
LC86H298	1.8	98+22	6.5	6	0.5	4.3	2800	4	3.3
LC86H2120	1.8	120+22	8.2	6	0.5	6.5	3600	4	4.0
LC86H2128	1.8	128+22	10	7.5	0.4	4.6	4200	4	4.5
LC86H2160	1.8	160+22	12	7.5	0.5	6.3	5400	4	5.4

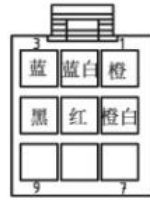
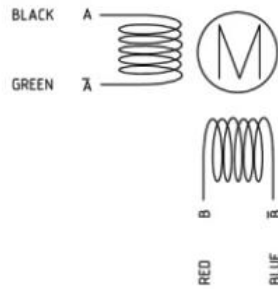
Dimension---

⊗ DIMENSIONS unit=mm

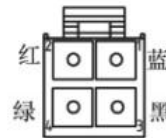


Motor Wiring Diagram---

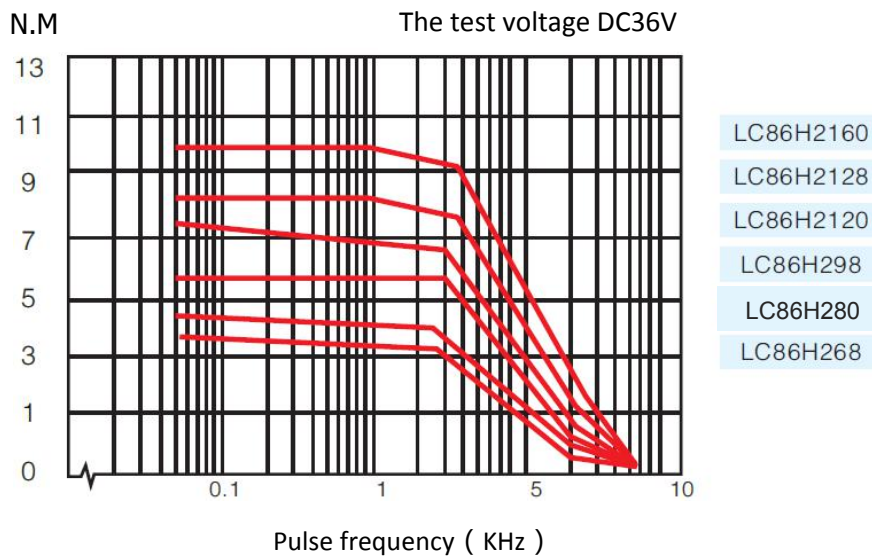
MOTOR CONNECTIONS



1	Black	EGND
2	Red	+5VCC
3	Blue/ white	EA-
4	Blue	EA+
5	Orange/ White	EB-
6	Orange	EB+



Torque-speed Curve---



Matters Need Attention:

1. Not to be wrong when connect the motor to the driver.
2. Due to the difference of driving conditions, the motor may have obvious fever. Motor surface temperature allowing more than 85 °C during the operation.
3. Position the motor with the installing seam on the front end cover when installing, and pay attention to the tolerance matching, strictly the concentricity of the motor shaft and load.