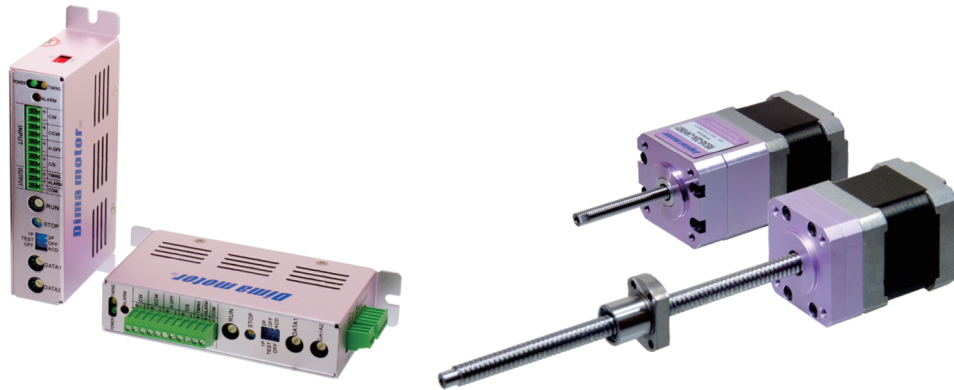


5 Phase □ 42 Precision linear stepper motor drive system



Features :

- ⊙ Miniaturization and space saving
- ⊙ With high precision ball screw
- ⊙ Lightweight, improving overall system responsiveness
- ⊙ Significantly reduce parts count and working time
- ⊙ Resolution from 0.000008mm/step to 0.001mm/step, Max Thrust Force 70N

Motor name view : MS545H - A - LN H 06 01

1 2 3 4 5 6

- 1 : MS545H- : 5-Phase 42-frame stepper motor , drive current 1.4A/Phase
- 2 : A : Single-axis B: Double shaft , AM: Brake type , A05: Model with encoder, resolution 1000P/R
- 3 : LS : External drive shaft LN: Through shaft 4: H : Ball screw model
- 5 : 06 : Ball screw diameter is 6.0mm , 08: Ball screw diameter is 8.0mm
- 6 : 01: The lead of the ball screw is 1.0mm , 05: The lead of the ball screw is 5.0mm

Precision Linear Stepper Motor Specifications:

※Travel per step Calculated value based on drive resolution

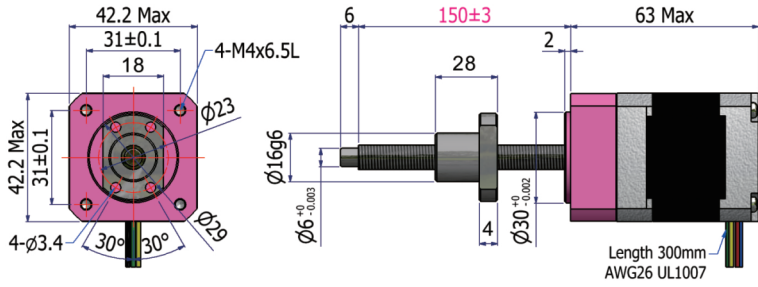
Motor type	Screw Dia.	Lead	Travel per step						Stroke	Max. Thrust Force
			1000	5000	10000	20000	50000	100000 P/R		
MS545H- □-LSH0805	8.0mm	5.0mm	0.005	0.001	0.0005	0.00025	0.0001	0.00005mm	100mm	100N
MS545H- □-LNH0601	6.0mm	1.0mm	0.001	0.0002	0.00001	0.00005	0.00002	0.00001mm	50mm	70N

Using grinding grade ball screw, positioning accuracy:±0.01mm , Repeatability:±0.005mm

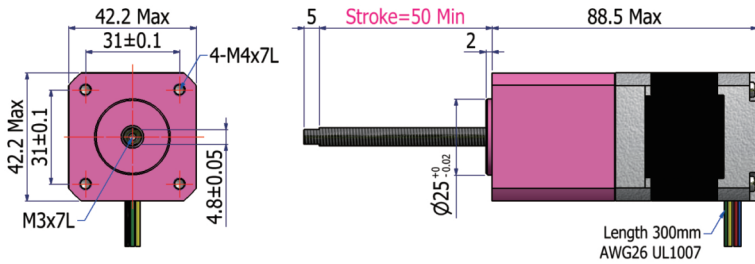
Microstep stepping motor driver specifications:

Drive model	DS514HMD	
Input power	DC24V (3A and above)	
Drive current	0.4 ~ 1.4A/phase	
Step angle setting	Full step/Half step/2.5/4/5/8/10/20/25/40/50/100/125/200/250	
Maximum response frequency	800KHZ	
Signal input/output method	* Optocoupler input interface * Open collector output interface	
Output signal	ALARM output	When an abnormal alarm occurs, the red ALARM LED light will flash. At the same time, ALARM+ outputs "L" level
Basic skills	* Self-test function * Step angle switching function * Automatic current drop (ACD) function * Pulse input mode (1P/2P) switching function	
Protection mechanism	* Power reverse connection protection * Signal terminal overvoltage protection * External overvoltage protection * Overcurrent protection * Internal overvoltage protection	

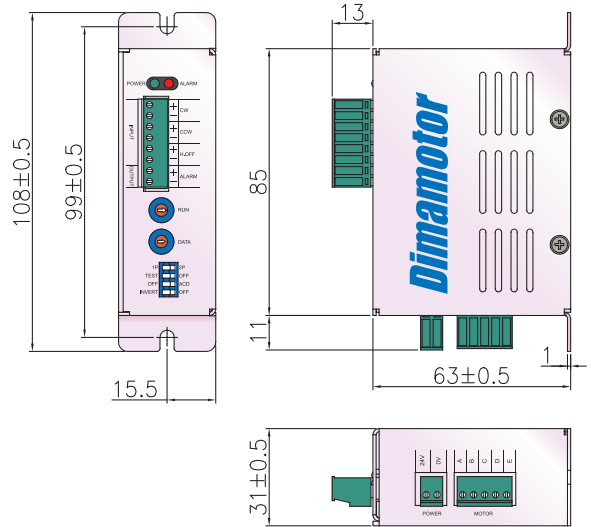
Dimensions (unit: mm)



◆ MS545H-A-LSH0805

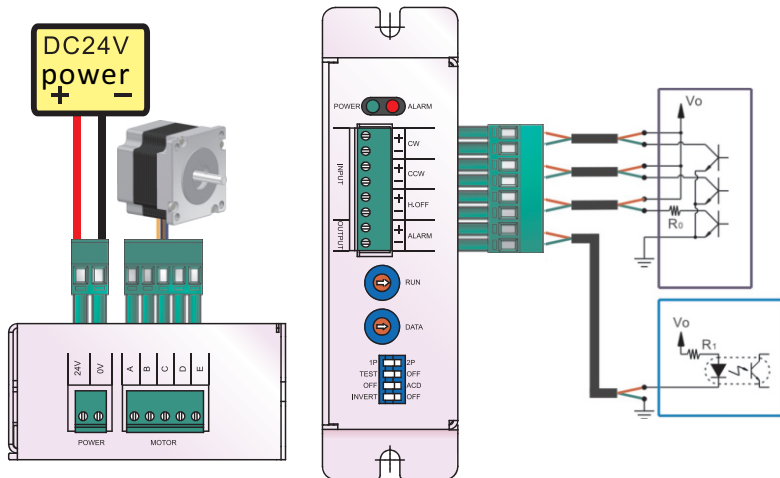


◆ MS545H-A-LNH0601



◆ DS514HMD

System Wiring Diagram



Internal wiring diagram of stepper motor

Motor Wiring Comparison Table					
Phase	A	B	C	D	E
Dimamotor	Blue	Red	Orange	Green	Black

