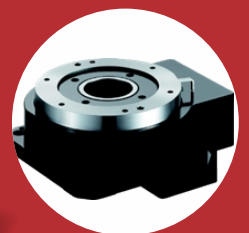


PRODUCT CATALOG

**Hybrid Linear Stepper Motors
Nema 8 to Nema 34**

**Precise and Reliable
Motion Control Solutions**

**High Precision and Smoothness
High Reliability
Long Lifetime
Flexible Customization**



About Us

-Automate In A Better Way-

COMPANY

Reliable & Long-Term Partnership

Focused on Providing Comprehensive, Reliable and Precise Motion Control Solutions with High Quality & Competitive Pricing.

Rich Industrial Automation Experiences

Future Oriented Development Strategy

Open For Overseas Market Cooperation



RESEARCH & DEVELOPMENT

Deliver the Best

More than 15 Years Motion Control R&D Experiences of Key Experts

Wide International R&D Cooperation

Continuous Cutting-Edge & Practical Technology Implement

Flexible & Fast Customization



PRODUCTS

Beyond Your Expectation

Wide Range of Motion Control Solutions, Designed for Different Market Segments.

Top Level of Products Performance with High Reliability & Attractive Prices. .

100% Replacements of Top Brands with Extra Values and Benefits.

PRODUCTION

Deliver the Best

Strict Quality Control System

100% Functional Test

48 Hours Aging Test

ISO9001 Certificates of Factories
3C, UL, CE, RoHS, etc. Certificates.

Target Application Markets

Covering Majority of Automation Applications

Electronics and Semiconductors, CNC (Laser, Plasma, Water Jet, Cutting, Milling, Engraving, Polishing, Positioning, etc.), Machine Tools, Medical, Aerospace, Test Bed, Packaging(Marking, Labeling, Feeding, etc.), Sewing, Printing, Textile, Dying, Fabrication, Surveillance, Logistics, Factory Automation, Sorting, Farming, Robotics, Printing, Automotive, Telecom, SPM, etc.



SERVICES

Professional and In Time

7*24H Technical Support.

Remote and On-site Training

Local Market Co-marketing

≥18 Months Warranty (5Years for some products)

Quick Customization and Delivery

Reliability

Process

Technology

Innovation

Productivity

System

AUTOMATION

Repeatability

Control

Precision

Products and Applications

—Reliable Motion Control—

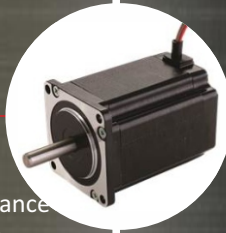
2 & 3 Phase Stepper Drive

Step & Step Servo Drive in One, 0.4-8.0A, DC(12-75V) and AC(80-265VAC), Pulse&DIR, CW&CCW, EtherCAT, CanOpen, Profinet Mode-bus Rich Special&Practical Functions, Wide Applications in High-End Market, Unique Design with Patents, Fast Customization.



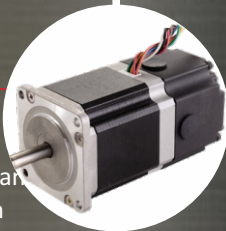
2 & 3 Phase Stepper Motor

Nema11 to Nema52, 0.07 to 33.0N.m, High Quality and Performance Low heating and Vibration, Hollow Shaft, Waterproof, High Speed etc. Fast Customization.



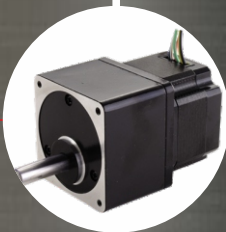
2 Phase Stepper Motor with Brake

Nema17 to Nema34 0.07 to 33.0N.m High Quality and Performance Low heating and Vibration Extra Long Lifetime Hollow Shaft, Waterproof, High Speed etc. Fast Customization.



2 Phase Integrated Stepper Motor with Reducer

Nema17 to Nema34 0.2 to 12.0N.m Compact Design, High Reduction Ratios 1:3.6 to 1:100 High Smoothness Extra Long Lifetime Flexible Customization.



Auto Positioning Platform

Ultra Thin, Lightweight, Hollow structure, Hi Rigidity and Accuracy, Size in Full Range.



Planetary Gear Reducers

Round, Square, Right-angle Types, Size 28 to 120mm, Standard Precision 12-18arcmin, High Precision 3 and 5arcmin, Rich Reduction Ratios, High Input Speed, High Torque, >20000 hours Lifetime, Life-long Lubrication.



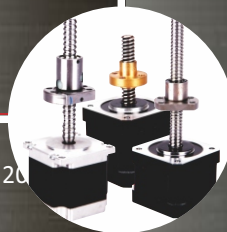
Brushless Products

30 to 750W 80 to 4000RPM Low Noise Low Vibration Low Heating Long Lifetime, Easy Maintenance Customization Supported



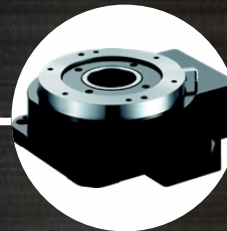
2 Phase Linear Stepper Motor

Nema17 to Nema34 Rated Push Strength 5 to 20N Lead 0.61 to 10mm Word-Class Lead Screw High performance Flexible Customization



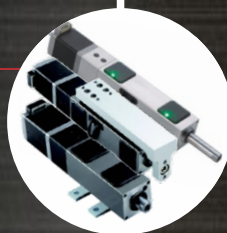
Rotar Actuators

Max. Torque 5-480N.m Reduction Ratio 5 to 250 IP65 Direct Connection Hollow Shaft Flexible Installation High Positioning Accuracy Easy Equipped with Motor



Electric Cylinders

Vertical, Horizontal, Guideway Reduction Ratio 5 to 250 IP65 Direct Connection Hollow Shaft Flexible Installation High Positioning Accuracy Easy Equipped with Motor



Electric Spindles

800W to above 30kW Water and Air Cooling Wood, Stone, Metal, Glass etc. High Precision and Performance Flexible Customization



Variable Frequency Drives

750W to above 30kW Vector Control Extra Long Lifetime Rich Functions and Interfaces High Reliability



FACTORY AUTOMATION CUTTING MARKING ELECTRONICS
ASSEMBLING CNC LABELLING LASER MACHINE TOOL
METAL WORK PACKAGING MEDICAL SURVEILLANCE
TUBED SORTING WOOD WORK MARBLE WORK SEWING
GLASS WORK PLASMA ENGRAVING TEXTILE

Stepper Drives Overview

2 Phase Compact DC Stepper Drive: Y2SD1R5

Item	Description
Input Voltage	12 to 48VDC
Output Current	0.4 to 3.0A (Peak)
Control Mode	Pulse and Direction, CW & CCW
Control Signal	5VDC and 24VDC Compatible
Micro Step Range	16 Types, 1-128 Micro Step Settings, From 200 to 25600 Pulses/Round
Idle Current	50% or 90% by Setting Jumpers
Special Functions	Auto Tuning, Self Test, Micro Step Interpolation, Load Inertia Selection
Input signal Filtering	150KHz Digital Filtering for Low Micro Step Scenarios 2MHz Digital Filtering for High Micro Step Scenarios
Protection	Metal, High EMC Performance, Multi-Level Electrical Protection
Matching Motors	Adaptable to Stepper Motors of Nema 8 to Nema 17



2 Phase Compact DC Stepper Drive: Y2SD1R5 PLUS

Item	Description
Input Voltage	12 to 48VDC
Output Current	0.4 to 3.0A (Peak)
Control Mode	Pulse and Direction, CW & CCW
Control Signal	5VDC and 24VDC Compatible
Micro Step Range	16 Types, 1-128 Micro Step Settings, From 200 to 25600 Pulses/Round
Idle Current	50% or 90% by Setting Jumpers
Special Functions	Auto Tuning, Self Test, Micro Step Interpolation, Load Inertia Selection, Alarm Output
Input signal Filtering	150KHz Digital Filtering for Low Micro Step Scenarios 2MHz Digital Filtering for High Micro Step Scenarios
Protection	Metal, High EMC Performance, Multi-Level Electrical Protection
Matching Motors	Adaptable to Stepper Motors of Nema 11 to Nema 17



2 Phase Regular DC Stepper Drive: Y2SD1

Item	Description
Input Voltage	12 to 48VDC
Output Current	0.3 to 2.2A (Peak)
Control Mode	Pulse and Direction, CW & CCW
Control Signal	5VDC and 24VDC Compatible
Micro Step Range	16 Types, 1-128 Micro Step Settings, From 200 to 25600 Pulses/Round
Idle Current	50% or 90% by Setting Jumpers
Special Functions	Auto Tuning, Self Test, Micro Step Interpolation, Load Inertia Selection
Input signal Filtering	150KHz Digital Filtering for Low Micro Step Scenarios 2MHz Digital Filtering for High Micro Step Scenarios
Protection	Metal, High EMC Performance, Multi-Level Electrical Protection
Matching Motors	Adaptable to Stepper Motors of Nema 17 and below
Power Supplies	Adaptable to 2A and above DC Power Supplies



2 Phase Regular DC Stepper Drive: Y2SD2

Item	Description
Input Voltage	24 to 48VDC
Output Current	1.0 to 4.5A (Peak)
Control Mode	Pulse and Direction, CW & CCW
Control Signal	5VDC and 24VDC Compatible
Micro Step Range	16 Types, 5-125 Micro Step Settings, From 1000 to 25000 Pulses/Round
Idle Current	50% or 90% by Setting Jumpers
Special Functions	Auto Tuning, Self Test, Alarm Output , Load Inertia Selection
Input signal Filtering	150KHz Digital Filtering for Low Micro Step Scenarios 2MHz Digital Filtering for High Micro Step Scenarios
Protection	Metal, High EMC Performance, Multi-Level Electrical Protection
Matching Motors	Adaptable to Stepper Motors of Nema 17 to Nema 34
Power Supplies	Adaptable to 4A and above DC Power Supplies



2 Phase Regular DC Stepper Drive: Y2SD3

Item	Description
Input Voltage	24 to 75VDC
Output Current	2.4 to 7.8A (Peak)
Control Mode	Pulse and Direction, CW & CCW
Control Signal	5VDC and 24VDC Compatible
Micro Step Range	8 Types, 2-256 Micro Step Settings, From 400 to 51200 Pulses/Round
Idle Current	50% or 90% by Setting Jumpers
Special Functions	Auto Tuning, Self Test, Alarm Output , Load Inertia Selection
Input signal Filtering	150KHz Digital Filtering for Low Micro Step Scenarios 2MHz Digital Filtering for High Micro Step Scenarios
Protection	Metal, High EMC Performance, Multi-Level Electrical Protection
Matching Motors	Adaptable to Stepper Motors of Nema 23 to Nema 47
Power Supplies	Adaptable to 6A and above DC Power Supplies



2 Phase Regular DC Stepper Drive: Y2S3060

Item	Description
Input Voltage	20 to 60VDC
Output Current	0.9 to 3.0A (Peak)
Control Mode	Pulse and Direction, CW & CCW
Control Signal	5VDC
Micro Step Range	8 Types, 2-256 Micro Step Settings, From 400 to 51200 Pulses/Round
Idle Current	Continuously Adjustable
Special Functions	Auto Tuning, Self Test, Load Inertia Selection
Input signal Filtering	150KHz Digital Filtering for Low Micro Step Scenarios 2MHz Digital Filtering for High Micro Step Scenarios
Protection	Metal, High EMC Performance, Multi-Level Electrical Protection
Matching Motors	Adaptable to Stepper Motors of Nema 17 to Nema 23
Power Supplies	Adaptable to 4A and above DC Power Supplies



Stepper Drives Overview

2 Phase High-voltage AC Stepper Drive: Y2SA1

Item	Description
Input Voltage	80 to 265VAC
Output Current	0.6 to 2.5A (Peak)
Control Mode	Pulse and Direction,
Control Signal	5VDC and 24VDC Compatible
Micro Step Range	16 Types, 1-128 Micro Step Settings, From 200 to 25600 Pulses/Round
Idle Current	50% or 90% by Setting Jumpers
Special Functions	Auto Tuning, Self Test, Alarm Output , Load Inertia Selection
Input signal Filtering	150KHz Digital Filtering for Low Micro Step Scenarios 2MHz Digital Filtering for High Micro Step Scenarios
Protection	Metal, High EMC Performance, Multi-Level Electrical Protection
Matching Motors	Adaptable to Stepper Motors of Nema23 to Nema34
Power Supplies	Adaptable to 6A and above DC Power Supplies



2 Phase High-voltage AC Stepper Drive: Y2SA2

Item	Description
Input Voltage	80 to 265VAC
Output Current	0.4 to 4.0A (Peak)
Control Mode	Pulse and Direction, CW and CCW
Control Signal	5VDC and 24VDC Compatible
Micro Step Range	16 Types, 1-128 Micro Step Settings, From 200 to 25600 Pulses/Round
Idle Current	25%, 50%, 70% or 90% by Setting DIP Switch
Special Functions	Auto Tuning, Self Test, Alarm Output , Micro Step Interpolation, Load Inertia Optimization
Input signal Filtering	150KHz Digital Filtering for Low Micro Step Scenarios 2MHz Digital Filtering for High Micro Step Scenarios
Protection	Metal, High EMC Performance, Multi-Level Electrical Protection
Matching Motors	Adaptable to Stepper Motors of Nema23 to Nema47
Power Supplies	No Need AC/DC Power Supplies or Transformers



2 Phase High-voltage AC Stepper Drive: Y2SA3

Item	Description
Input Voltage	80 to 265VAC
Output Current	0.4 to 8.0A (Peak)
Control Mode	Pulse and Direction, CW and CCW
Control Signal	5VDC and 24VDC Compatible
Micro Step Range	16 Types, 1-128 Micro Step Settings, From 200 to 25600 Pulses/Round
Idle Current	25%, 50%, 70% or 90% by Setting DIP Switch
Special Functions	Auto Tuning, Self Test, Alarm Output , Micro Step Interpolation, Load Inertia Optimization
Input signal Filtering	150KHz Digital Filtering for Low Micro Step Scenarios 2MHz Digital Filtering for High Micro Step Scenarios
Protection	Metal, High EMC Performance, Multi-Level Electrical Protection
Matching Motors	Adaptable to Stepper Motors of Nema23 to Nema47
Power Supplies	No Need AC/DC Power Supplies or Transformers



3 Phase High-Voltage AC Stepper Drive: Y3SA3

Item	Description
Input Voltage	80 to 265VAC
Output Current	0.4 to 8.0A (Peak)
Control Mode	Pulse and Direction, CW and CCW
Control Signal	5VDC and 24VDC Compatible
Micro Step Range	16 Types, 1-128 Micro Step Settings, From 200 to 25600 Pulses/Round
Idle Current	25%, 50%, 70% or 90% by Setting DIP Switch
Special Functions	Auto Tuning, Self Test, Alarm Output , Micro Step Interpolation, Load Inertia Optimization
Input signal Filtering	150KHz Digital Filtering for Low Micro Step Scenarios 2MHz Digital Filtering for High Micro Step Scenarios
Protection	Metal, High EMC Performance, Multi-Level Electrical Protection
Matching Motors	Adaptable to Stepper Motors of Nema23 to Nema47
Power Supplies	No Need AC/DC Power Supplies or Transformers



3 Phase Regular DC Stepper Drive: Y3SD3

Item	Description
Input Voltage	24 to 75VDC
Output Current	1.5 to 7.8A (Peak)
Control Mode	Pulse and Direction, CW & CCW
Control Signal	5VDC and 24VDC Compatible
Micro Step Range	8 Types, 5-256 Micro Step Settings, From 1000 to 51200 Pulses/Round
Idle Current	50% or 90% by Setting Jumpers
Special Functions	Auto Tuning, Self Test, Alarm Output , Load Inertia Selection
Input signal Filtering	Available, not Open.
Protection	Metal, High EMC Performance, Multi-Level Electrical Protection
Matching Motors	Adaptable to Three Phase Stepper Motors
Power Supplies	Adaptable to 6A and above DC Power Supplies



2 Phase Regular DC Step Servo Drive: Y2SS3

Item	Description
Input Voltage	24 to 75VDC
Output Current	1.0 to 4.5A (Peak)
Control Mode	Pulse and Direction, CW and CCW
Control Signal	5VDC and 24VDC Compatible
Micro Step Range	16 Types, 1-128 Micro Step Settings, From 200 to 25600 Pulses/Round
Special Functions	Auto Tuning, Alarm Output , Load Inertia Optimization, Load Current Automatic Adjustment
Input signal Filtering	Available, not Open
Protection	Metal, High EMC Performance, Multi-Level Electrical Protection



Power Supplies Overview

150W to 360W

Technical Features



Disadvantages of Regular AC/DC Switch Power Supplies:

- **Low-voltage Protection**
Caused by big starting current of stepper motors, which causes malfunction of drives.
- **High-voltage Protection & Over-current Protection**
Caused by feed-back current when a stepper motor decelerating.
- **Potential Damages of Drive's Electronic Circuits & Performance of Machines**

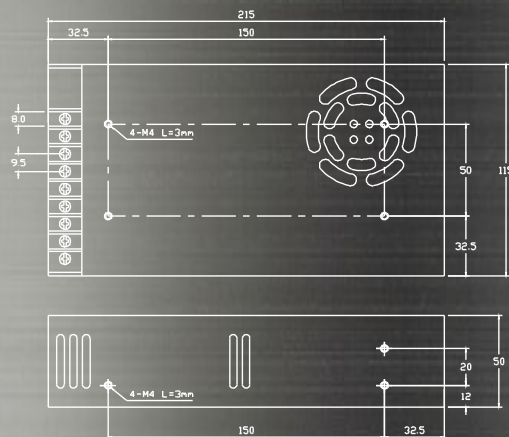
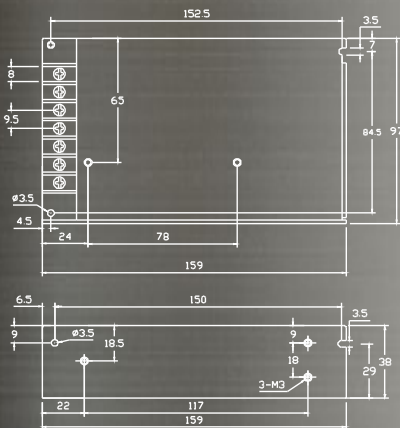
Advantages of Our Specially Designed Motion Control Power Supplies:

- **Wide Operation Voltage Range**
- **High Over-load Ratio**
- **Shortcut Protection, Over-load Protection, Over-voltage Protection**
- **Big Output Side Capacitor enables High Output Voltage Compatibility**
- **High Efficiency, Low Heating**
- **3-years Warranty**

Specifications

Model	Output Voltage	Output Current	Input Voltage	Dimensions mm	Weight kg
KF-150-24	24VDC	6.25 A	100~120VAC	159*97*38	0.5
			200~240VAC		
KF-350-24	24VDC	14.6 A	100~120VAC	215*115*50	0.8
			200~240VAC		
KF-150-36	36VDC	4.2 A	100~120VAC	159*97*38	0.5
			200~240VAC		
KF-350-36	36VDC	10A	100~120VAC	215*115*50	0.8
			200~240VAC		

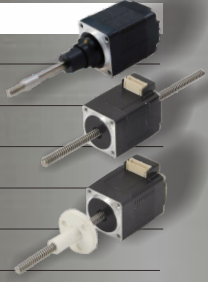
Mechanical Dimensions in mm



Hybrid Linear Stepper Motors Overview

Nema8, Captive/No-Captive/External Nut

Item	Description
Step Angle	1.8° (2 Phase) , ±0.09° (Accuracy)
Rated Current	0.16/0.24/0.49/0.5/0.6A
Rated Voltage	2.5/5.0/7.5V
Frame Size	20mm*20mm, Nema8
Motor Body Length	30mm
Leadscrew Diameter	φ 3.5mm, φ 5mm, Customizable
Screw Lead	0.3048mm to 4mm, Rich Lead Screw Options
Leadscrew Length	As per customer Requirement
Step Length	0.001524mm to 0.04mm
Thrust Range	Less than 47N
No. of Wires	4 Wires and 6 Wires



Nema11, Captive/No-Captive/External Nut

Item	Description
Step Angle	1.8° (2 Phase) , ±0.09° (Accuracy)
Rated Current	0.18/0.35/0.42/0.75/1.0/1.9A
Rated Voltage	2.1/5.0/12V
Frame Size	28mm*28mm, Nema11
Motor Body Length	32.2/34/41/46mm
Leadscrew Diameter	φ 4.76mm, φ 5mm, customizable
Screw Lead	0.635mm to 5.08mm, Rich Lead Screw Options
Leadscrew Length	As per customer Requirement
Step Length	0.003175mm to 0.0254mm
Thrust Range	Less than 120N
No. of Wires	4 Wires and 6 Wires



Nema14, Captive/No-Captive/External Nut

Item	Description
Step Angle	1.8° (2 Phase) , ±0.09° (Accuracy)
Rated Current	0.24/0.38/0.57/0.91/1.25/2A
Rated Voltage	2.33/5.0/12V
Frame Size	35mm*35mm, Nema14
Motor Body Length	34.5/48mm
Leadscrew Diameter	φ 5.54mm, φ 6.35mm, Customizable
Screw Lead	0.6096mm to 9.7536mm, Rich Lead Screw Options
Leadscrew Length	As per customer Requirement
Step Length	0.003048mm to 0.048768mm
Thrust Range	Less than 250N
No. of Wires	4 Wires and 6 Wires



Nema17 Captive/No-Captive/External Nut/Ball Screw/Brake

Item	Description
Step Angle	1.8° (2 Phase) , ±0.09° (Accuracy)
Rated Current	0.29/0.55/0.7/1.2/1.3/1.5/1.67/2.6A
Rated Voltage	2.33/5.0/12V
Frame Size	42mm*42mm, Nema17
Motor Body Length	34/40/41/46/48/74(including Brake)mm
Leadscrew Diameter	φ 5.54mm, φ 6.35mm, customizable
Screw Lead	0.6096mm to 9.7536mm, Rich Lead Screw Options
Leadscrew Length	As per customer Requirement
Step Length	0.003048mm to 0.048768mm
Thrust Range	Less than 300N
No. of Wires	4 Wires and 6 Wires



Nema23 Captive/No-Captive/External Nut/Ball Screw/Brake

Item	Description
Step Angle	1.8° (2 Phase) , ±0.09° (Accuracy)
Rated Current	0.54/0.9/1.3/2/2.16/3/3.32A
Rated Voltage	3.25/5/12V
Frame Size	57mm*57mm, Nema23
Motor Body Length	45.2/56/66/92(Including Brake)mm
Leadscrew Diameter	φ 9.53mm, φ 10mm, Customizable
Screw Lead	1.5875mm to 10.16mm, Rich Lead Screw Options
Leadscrew Length	As per customer Requirement
Step Length	0.0079375mm to 0.0508mm
Thrust Range	Less than 1000N
No. of Wires	4 Wires and 6 Wires



Nema34, Captive/No-Captive/External Nut

Item	Description
Step Angle	1.8° (2 Phase) , ±0.09° (Accuracy)
Rated Current	1.3/3.12/5.47A
Rated Voltage	2.85/5.0/12.0V
Frame Size	86mm*86mm, Nema34
Motor Body Length	76/79mm
Leadscrew Diameter	φ 15.88mm, φ 5mm, customizable
Screw Lead	2.54mm to 25.4mm, Rich Lead Screw Options
Leadscrew Length	As per customer Requirement
Step Length	0.0127mm to 0.127mm
Thrust Range	Less than 2000N
No. of Wires	4 Wires and 6 Wires



Hybrid Linear Stepper Motor Overview

Nema 8 to Nema 34

Advantages

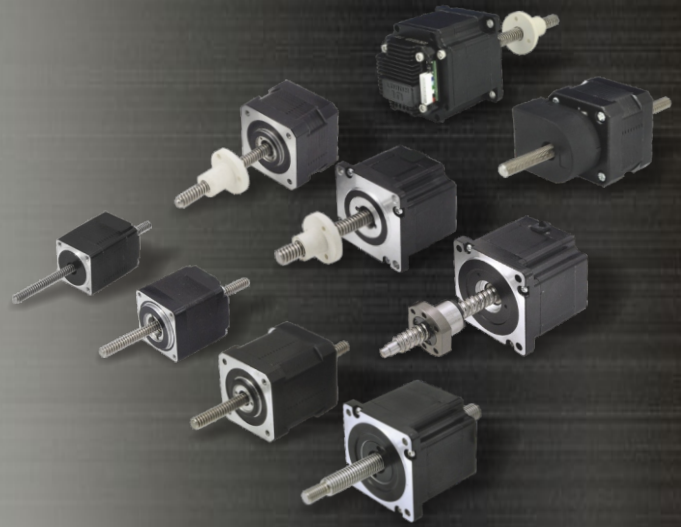
Top Performance

High Reliability

Wide Applications

Flexible Customization

Fast Delivery



Contents

- 1-4. 20LHS-C/N/E Series
- 5-10. 28LHS-C/N/E Series
- 11-14. 35LHS-C/N/E Series
- 10-22. 42LHS Series
- 23-31. 57LHS Series
- 32-33. 86LHS Series

Naming Rules

42 LHS 1504 N - N - 200 BR

With Brake

Leadscrew Length: 200mm

Leadscrew or Distance Code
Details refer to motor page

Shaft Type:

C: Captive; E: External Nut;
N: No-captive; B: Ball Screw.

Rated Current and Leads

Current: 150/100=1.5A

Leads: 4 Leads

Linear Hybrid Stepper Motor

Motor Frame Size: 42mm

20LHS/0494/0244/0164 Series Hybrid Linear Stepper Motors

2Phase Nema 8, Captive and Rich Leadscrews

Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 8
Insulation Grade	500VDC, 20 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC



Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
20LHS0494C-C-L	Bipolar	2.5V	0.49A	5.1Ω	1.5mH	2.45W	75°C	43g	20MΩ
20LHS0244C-C-L		5V	0.24A	20.4Ω	5.0mH				
20LHS0164C-C-L		7.5V	0.16A	45.9Ω	11.7mH				

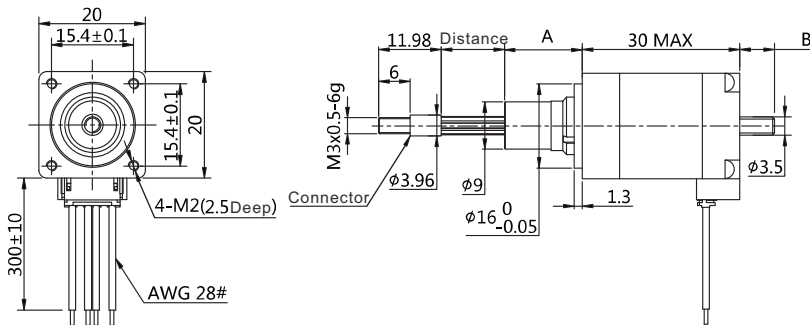
Note: Customization of motor specifications available.

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
U	φ 3.5	0.001524	0.3048
N	φ 3.5	0.003048	0.6096
K	φ 3.5	0.006096	1.2192
J	φ 3.5	0.012192	2.4384

Note: Customization of step and lead specification available.

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
AB	φ 3.5	0.005	0.5
AC	φ 3.5	0.01	1.0
AD	φ 3.5	0.02	2.0
AE	φ 3.5	0.04	4.0

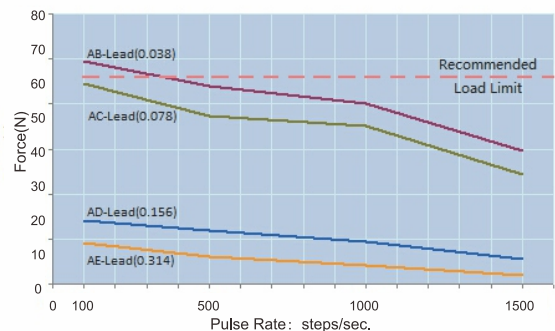
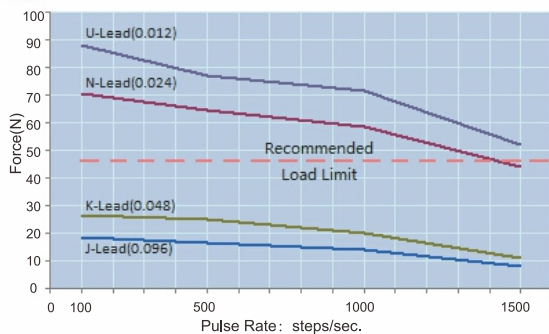
Captive Type Mechanical Drawings in mm



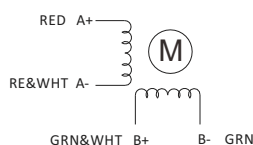
Distance Code	Distance(mm)	A(mm)	B(mm)
301	9	11.1	1.58
302	12.7	14.81	5.28
303	19.1	21.16	11.63
304	25.4	27.51	17.98
305	31.8	33.86	24.33
306	38.1	40.21	30.68

Load Force and Pulse Rate Curves

Chopper drive : motor 5V and power supply 24V

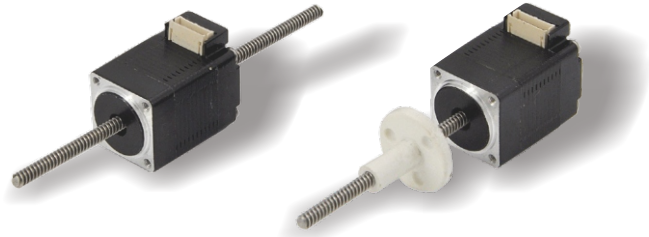


Wiring Diagram



20LHS/0494/0244/0164 Series Hybrid Linear Stepper Motors

2Phase Nema 8, No-captive, External Nut and Rich Leadscrews



Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 8
Insulation Grade	500VDC, 20 MΩ Min. , Class B
Dielectric Strengt	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Suface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC

Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
20LHS0494N/E-C-L	Bipolar	2.5V	0.49A	5.1Ω	1.5mH	2.45W	75°C	43g	20MΩ
20LHS0244N/E-C-L		5V	0.24A	20.4Ω	5.0mH				
20LHS0164N/E-C-L		7.5V	0.16A	45.9Ω	11.7mH				

Note: Customization of motor specifications available.

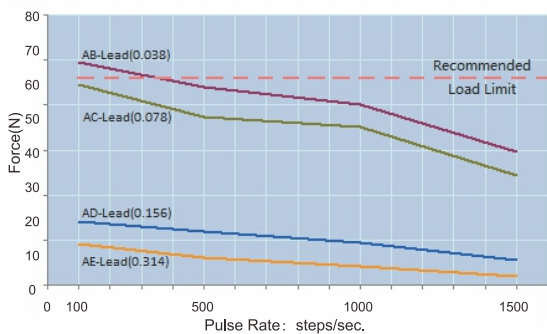
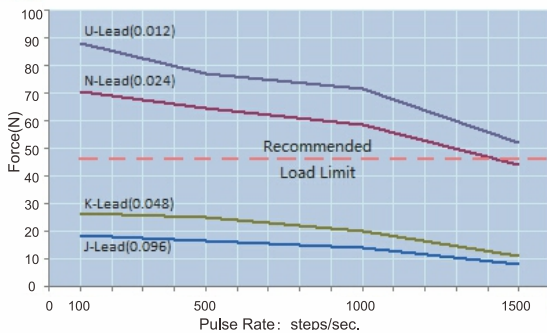
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
U	φ 3.5	0.001524	0.3048
N	φ 3.5	0.003048	0.6096
K	φ 3.5	0.006096	1.2192
J	φ 3.5	0.012192	2.4384

Note: Cutomization of step and lead specification available.

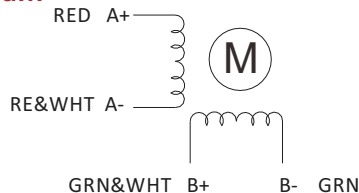
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
AB	φ 3.5	0.005	0.5
AC	φ 3.5	0.01	1.0
AD	φ 3.5	0.02	2.0
AE	φ 3.5	0.04	4.0

Load Force and Pulse Rate Curves

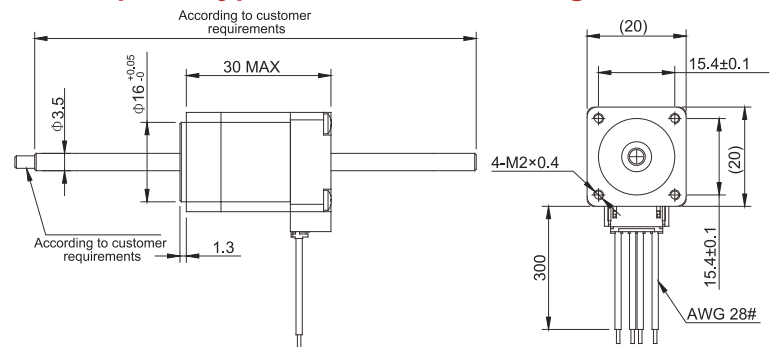
Chopper drive : motor 5V and power supply 24V



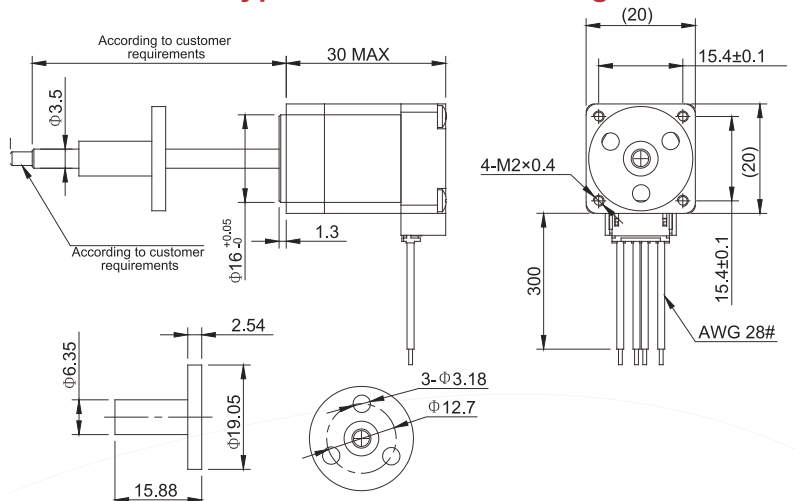
Wiring Diagram



No-captive Type Mechanical Drawings in mm



External Nut Type Mechanical Drawings in mm



20LHS054N-100

Hybrid Linear Stepper Motors

2Phase Nema 8, No-captive



Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 8
Insulation Grade	500VDC, 20 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC

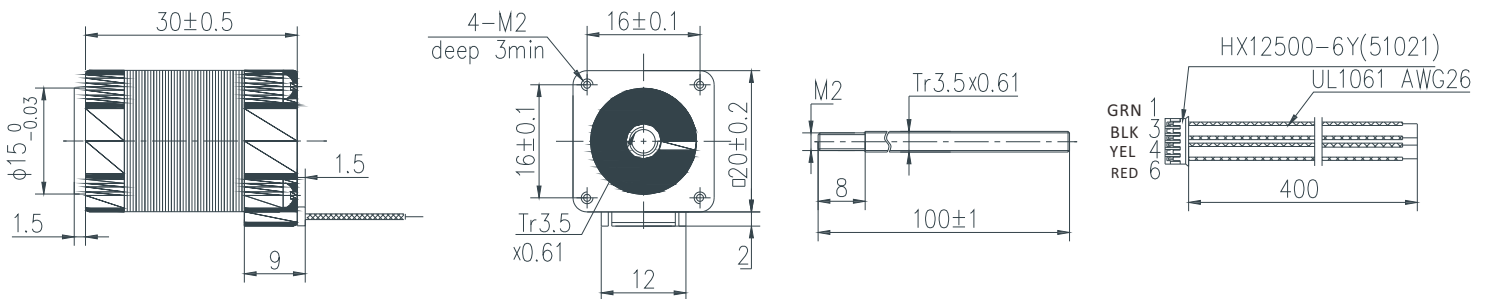
Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

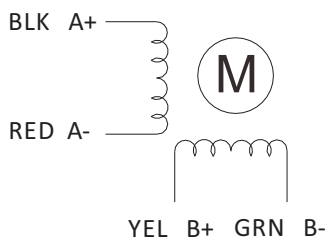
Model	Current	Resistance	Inductance	Min Thrust	Rotor Inertia	Bi/Unipolar	Screw Lead	Screw Length	Weight	Motor Length	Driver
	A/∅	Ω/∅	mH/∅	N @10RPS	g.cm ²	# of Wires	mm	mm	kg	mm	
20LHS0504N-100	0.5	6.5	1.7	2	2	Bi (4)	0.61	100	0.06	30	Y2SD1

Note: Customization of motor and leadscrew specifications available.

Mechanical Dimensions (in mm)



Wiring Diagram



28LHS/1004/0424/0184/0426/0186 Series Hybrid Linear Stepper Motors

2Phase Nema 11, Captive and Rich Leadscrews

Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 11
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC



Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
28LHS1004C-C-L	Bipolar	2.1V	1A	2.1Ω	1.5mH	4.2W	75°C	119g	20MΩ
28LHS0424C-C-L		5V	0.42A	11.9Ω	6.7mH				
28LHS0184C-C-L		12V	0.18A	68.6Ω	39mH				
28LHS0426C-C-L	Unipolar	5V	0.42A	11.9Ω	3.3mH				
28LHS0186C-C-L		12V	0.18A	68.6Ω	19.5mH				

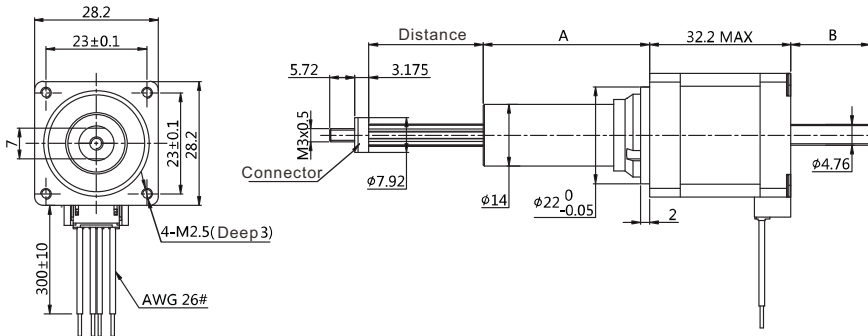
Note: Customization of motor specifications available.

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
7	φ 4.76	0.003175	0.635
9	φ 4.76	0.00635	1.27

Note: Customization of step and lead specification available.

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
3	φ 4.76	0.0127	2.54
1	φ 4.76	0.0254	5.08

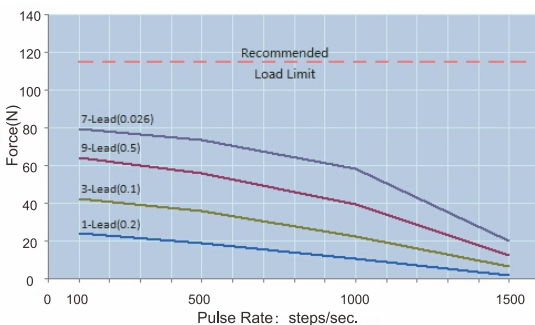
Captive Type Mechanical Drawings in mm



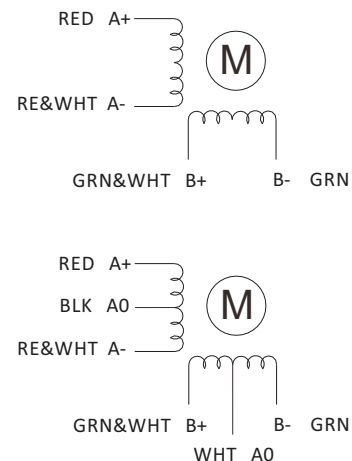
Distance Code	Distance(mm)	A(mm)	B(mm)
302	12.7	20.47	1.68
303	19.1	26.82	8.03
304	25.4	33.17	14.38
305	31.8	39.52	20.73
306	38.1	45.87	27.08
307	50.8	58.57	39.78

Load Force and Pulse Rate Curves

Chopper drive : motor 5V and power supply 24V

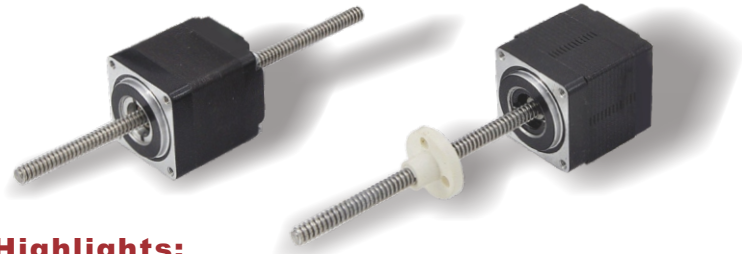


Wiring Diagram



28LHS/1004/0424/0184/0426/0186 Series Hybrid Linear Stepper Motors

2Phase Nema 11, No-captive, External Nut and Rich Leadscrews



Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 11
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC

Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization:
Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
28LHS1004N/E-C-L	Bipolar	2.1V	1A	2.1Ω	1.5mH	4.2W	75°C	119g	20MΩ
28LHS0424N/E-C-L		5V	0.42A	11.9Ω	6.7mH				
28LHS0184N/E-C-L		12V	0.18A	68.6Ω	39mH				
28LHS0426N/E-C-L	Unipolar	5V	0.42A	11.9Ω	3.3mH	4.2W	75°C	119g	20MΩ
28LHS0186N/E-C-L		12V	0.18A	68.6Ω	19.5mH				

Note: Customization of motor specifications available.

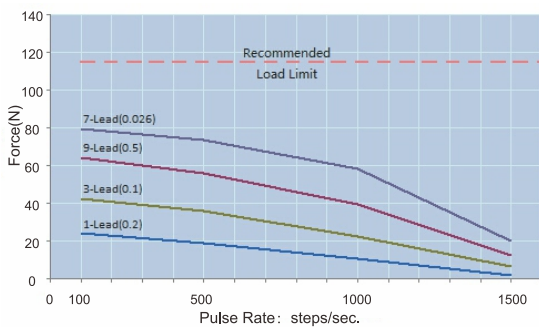
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
7	φ4.76	0.003175	0.635
9	φ4.76	0.00635	1.27

Note: Customization of step and lead specification available.

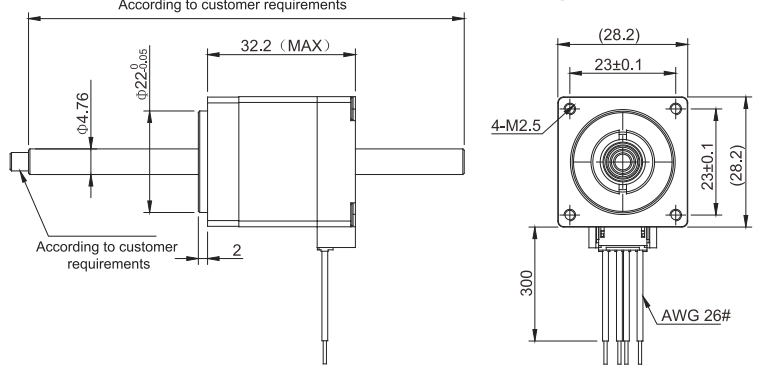
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
3	φ4.76	0.0127	2.54
1	φ4.76	0.0254	5.08

Load Force and Pulse Rate Curves

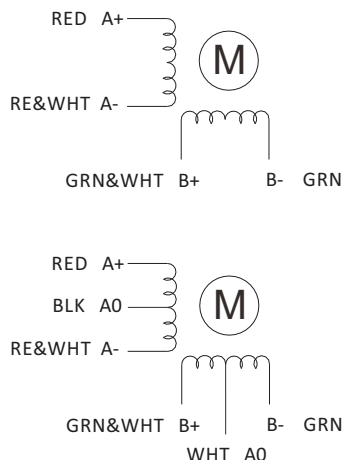
Chopper drive : motor 5V and power supply 24V



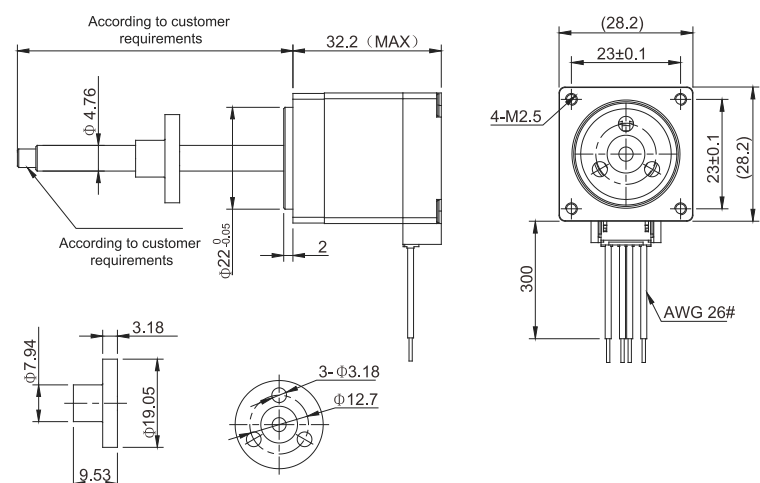
No-captive Type Mechanical Drawings in mm



Wiring Diagram



External Nut Type Mechanical Drawings in mm



28LHS/1904/0754/0354 Series

Double Stack Hybrid Linear Stepper Motors

2 Phase, Nema 11, Captivet and Rich Leadscrews

Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 11
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC



Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization:
Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
28LHS1904C-C-L	Bipolar	2.1V	1.9A	1.1Ω	1.1mH	7.5W	75°C	180g	20MΩ
28LHS0754C-C-L		5V	0.75A	6.7Ω	5.8mH				
28LHS0354C-C-L		12V	0.35A	34.8Ω	35.6mH				

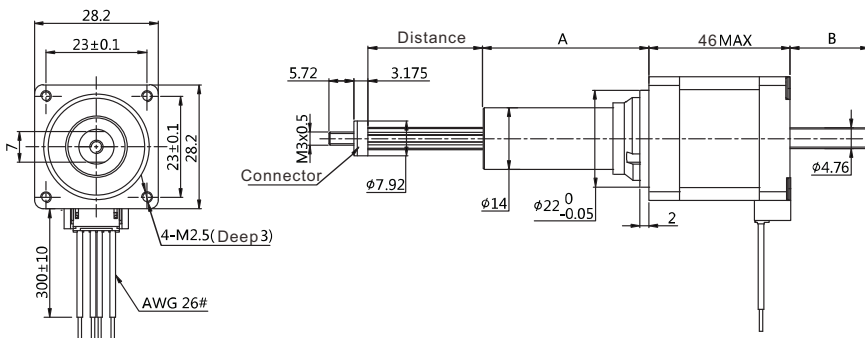
Note: Customization of motor specifications available.

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
7	φ 4.76	0.003175	0.635
9	φ 4.76	0.00635	1.27

Note: Customization of step and lead specification available.

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
3	φ 4.76	0.0127	2.54
1	φ 4.76	0.0254	5.08

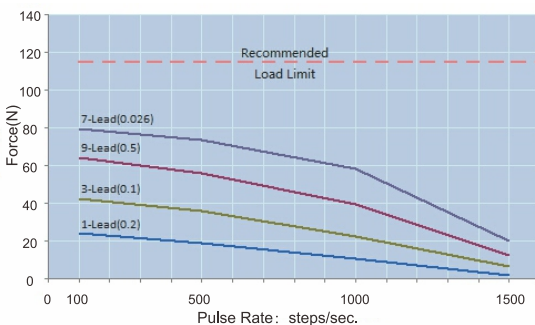
Captive Type Mechanical Drawings in mm



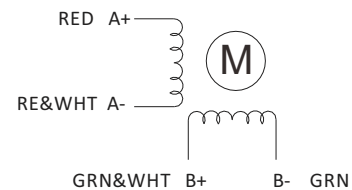
Distance Code	Distance(mm)	A(mm)	B(mm)
302	12.7	20.5	2.3
303	19.1	26.8	8.6
304	25.4	33.17	15
305	31.8	39.5	21.4
306	38.1	72.7	27.7
307	50.8	85.4	40.4

Load Force and Pulse Rate Curves

Chopper drive : motor 5V and power supply 24V



Wiring Diagram



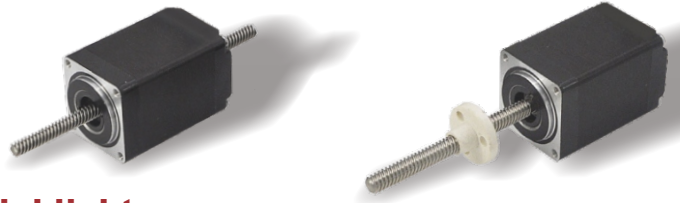
28LHS/1904/0754/0354 Series

Double Stack Hybrid Linear Stepper Motors

2 Phase, Nema 11, No-captive, External Nut and Rich Leadscrews

Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 11
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC



Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
28LHS1904N/E-C-L	Bipolar	2.1V	1.9A	1.1Ω	1.1mH	7.5W	75°C	180g	20MΩ
28LHS0754N/E-C-L		5V	0.75A	6.7Ω	5.8mH				
28LHS0354N/E-C-L		12V	0.35A	34.8Ω	35.6mH				

Note: Customization of motor specifications available.

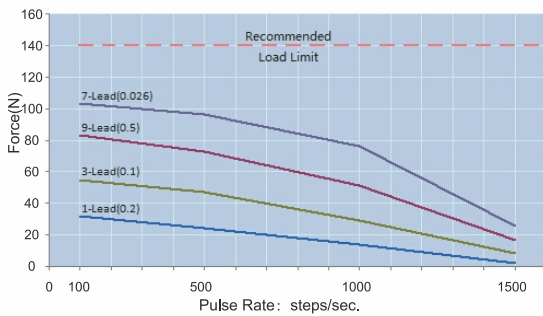
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
7	φ4.76	0.003175	0.635
9	φ4.76	0.00635	1.27

Note: Customization of step and lead specification available.

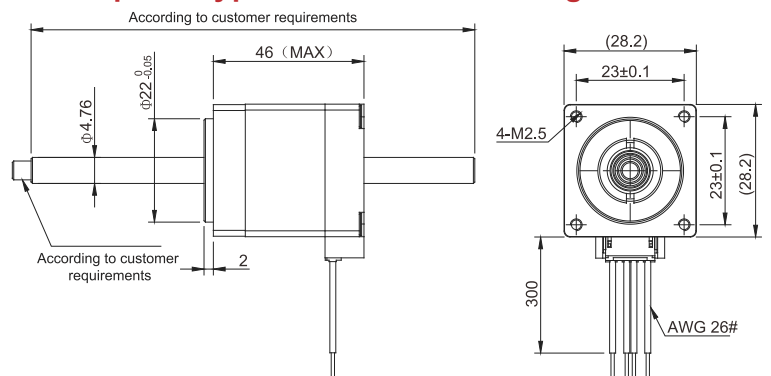
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
3	φ4.76	0.0127	2.54
1	φ4.76	0.0254	5.08

Load Force and Pulse Rate Curves

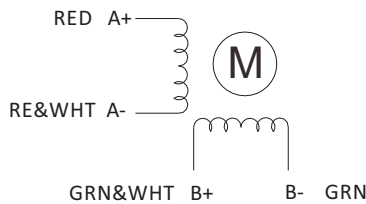
Chopper drive : motor 5V and power supply 24V



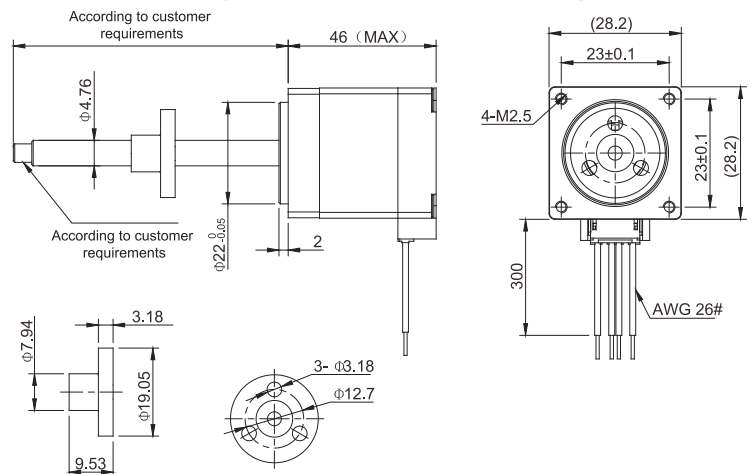
No-captive Type Mechanical Drawings in mm



Wiring Diagram



External Nut Type Mechanical Drawings in mm



28LHS0754N-200

Hybrid Linear Stepper Motors

2 Phase, Nema 11, No-captive

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 11
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC



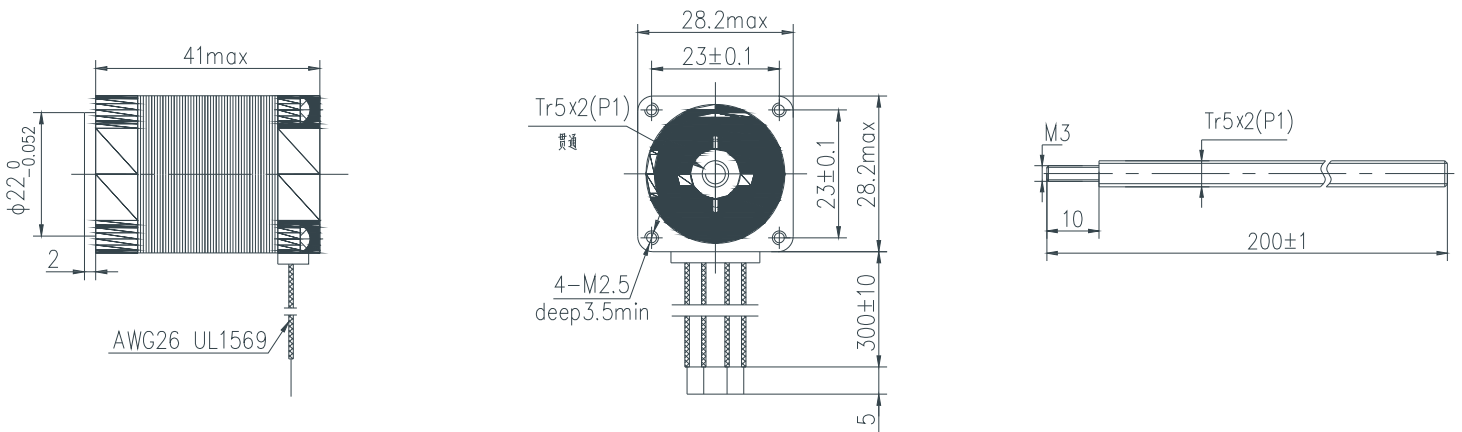
Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

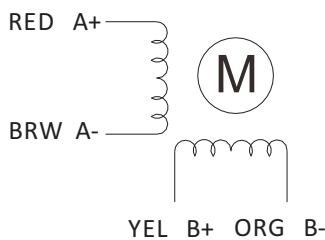
Model	Current	Resistance	Inductance	Min Thrust	Rotor Inertia	Bi/Unipolar	Screw Lead	Screw Length	Weight	Motor Length	Driver
	A/∅	Ω/∅	mH/∅	N @10RPS	g.cm ²	# of Wires	mm	mm	kg	mm	
28LHS0754N-200	0.75	7.5	4.5	20	12	Bi (4)	2	200	0.18	41	Y2SD1

Note: Customization of motor and leadscrew specifications available.

Mechanical Dimensions (in mm)



Wiring Diagram



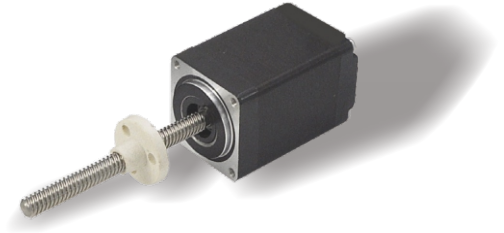
28LHS1004E-100

Stack Hybrid Linear Stepper Motors

2 Phase, Nema 11, External Nut

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 11
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Nut Material	POM
Certificates	Rohs, CE, CCC



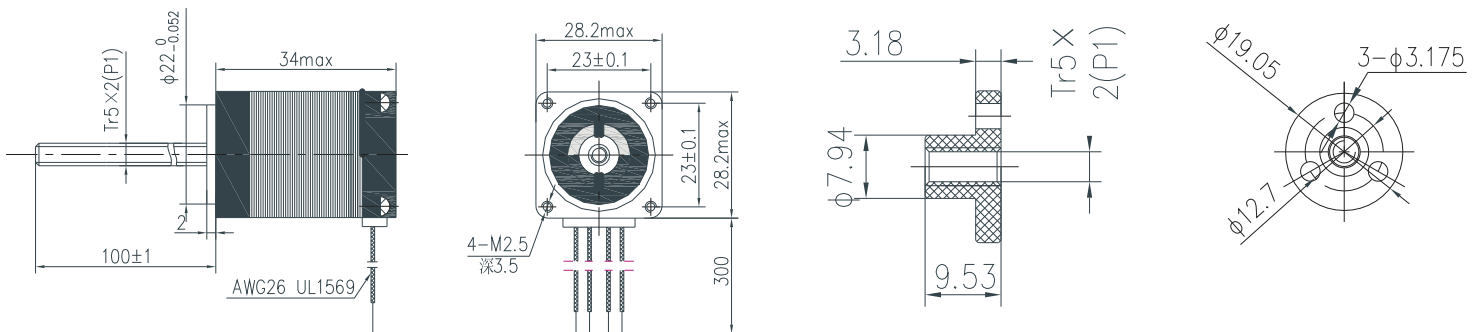
Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

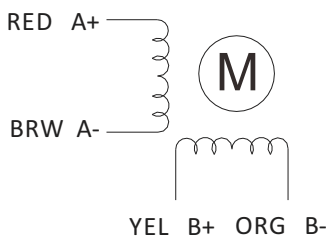
Model	Current	Resistance	Inductance	Min Thrust	Rotor Inertia	Bi/Unipolar	Screw Lead	Screw Length	Weight	Motor Length	Driver
	A/∅	Ω/∅	mH/∅	N @10RPS	g.cm ²	# of Wires	mm	mm	kg	mm	
28LHS1004E-100	1.0	2.2	1.2	20	9	Bi (4)	2	100	0.12	34	Y2SD1

Note: Customization of motor and leadscrew specifications available.

Mechanical Dimensions (in mm)



Wiring Diagram



35LHS/1254/0574/0244/0576/0246 Series Hybrid Linear Stepper Motors

2 Phase, Nema14, Captive and Rich Leadscrews



Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 14
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC

Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
35LHS1254C-C-L	Bipolar	2.33V	1.25A	1.86Ω	2.8mH	5.7W	75°C	162g	20MΩ
35LHS0574C-C-L		5V	0.57A	8.8Ω	13mH				
35LHS0244C-C-L		12V	0.24A	50.5Ω	60mH				
35LHS0576C-C-L	Unipolar	5V	0.57A	8.8Ω	6.5mH	5.7W	75°C	162g	20MΩ
35LHS0246C-C-L		12V	0.24A	50.5Ω	30mH				

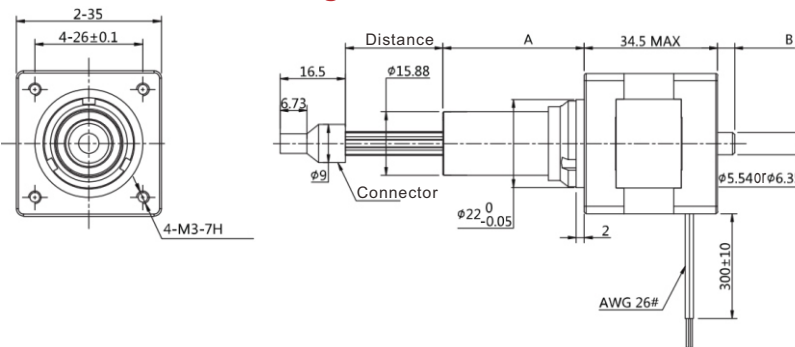
Note: Customization of motor specifications available.

Code	Leadscrew Thread Dimension		
	Diameter	Step	Lead
N	φ 5.54	0.003048	0.6096
J	φ 5.54	0.012192	2.4384
Q	φ 5.54	0.024384	4.8768
R	φ 5.54	0.048768	9.7536

Note: Customization of step and lead specification available.

Code	Leadscrew Thread Dimension		
	Diameter	Step	Lead
P	φ 6.35	0.0039688	0.79375
A	φ 6.35	0.0079375	1.58750
B	φ 6.35	0.0158750	3.17500
C	φ 6.35	0.0317500	6.35000

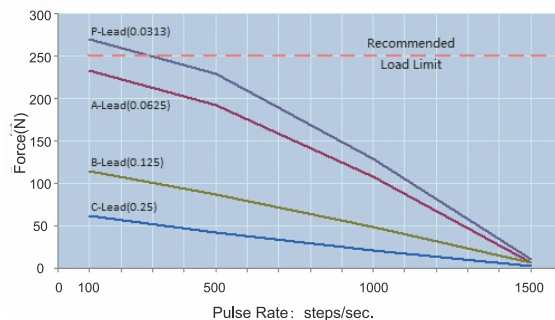
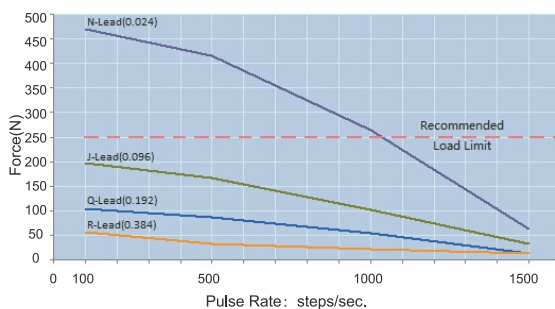
Mechanical Drawings in mm



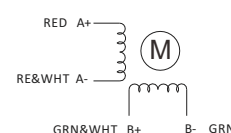
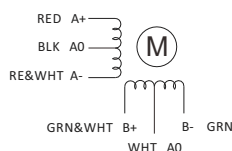
Distance Code	Distance(mm)	A(mm)	B(mm)
302	12.7	20.8	1
303	19.1	27.2	7.4
304	25.4	33.5	13.7
305	31.8	39.9	20.1
306	38.1	46.2	26.4
307	50.8	58.9	39.1

Load Force and Pulse Rate Curves

Chopper drive : motor 5V and power supply 24V

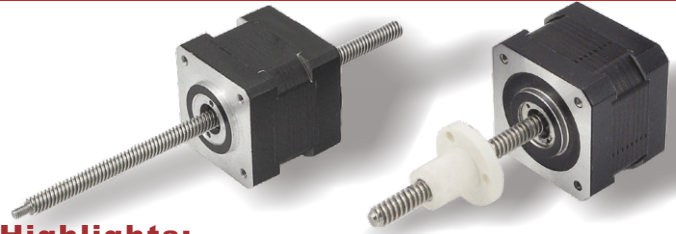


Wiring Diagram



35LHS/1254/0574/0244/0576/0246 Series Hybrid Linear Stepper Motors

2 Phase, Nema14, No-captive, External Nut and Rich Leadscrews



Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 14
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strengt	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Suface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC

Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
35LHS1254N/E-C-L	Bipolar	2.33V	1.25A	1.86Ω	2.8mH	5.7W	75°C	162g	20MΩ
35LHS0574N/E-C-L		5V	0.57A	8.8Ω	13mH				
35LHS0244N/E-C-L		12V	0.24A	50.5Ω	60mH				
35LHS0576N/E-C-L	Unipolar	5V	0.57A	8.8Ω	6.5mH	5.7W	75°C	162g	20MΩ
35LHS0246N/E-C-L		12V	0.24A	50.5Ω	30mH				

Note: Customization of motor specifications available.

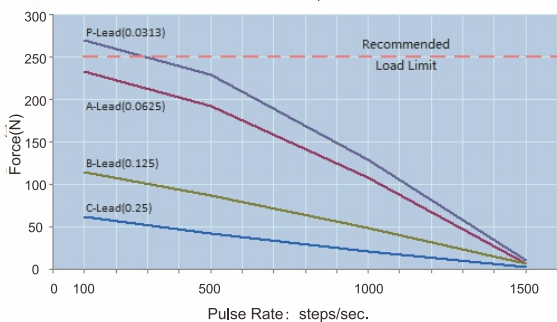
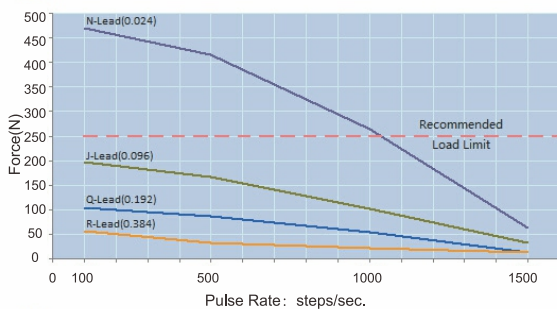
Code	Leadscrew Thread Dimension		
	Diameter	Step	Lead
N	φ5.54	0.003048	0.6096
J	φ5.54	0.012192	2.4384
Q	φ5.54	0.024384	4.8768
R	φ5.54	0.048768	9.7536

Note: Customization of step and lead specification available.

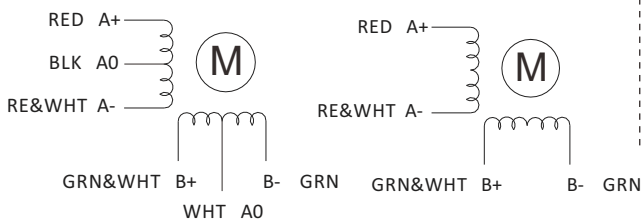
Code	Leadscrew Thread Dimension		
	Diameter	Step	Lead
P	φ6.35	0.0039688	0.79375
A	φ6.35	0.0079375	1.58750
B	φ6.35	0.0158750	3.17500
C	φ6.35	0.0317500	6.35000

Load Force and Pulse Rate Curves

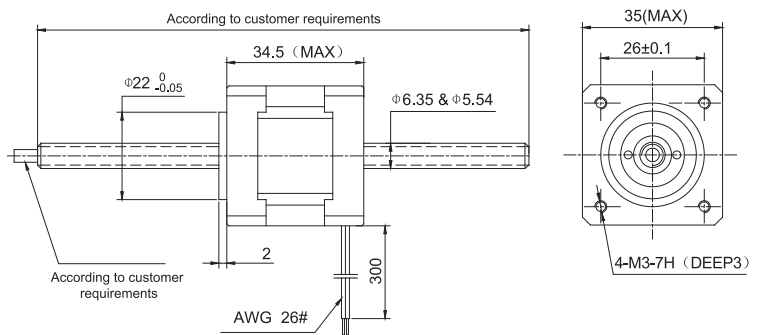
Chopper drive : motor 5V and power supply 24V



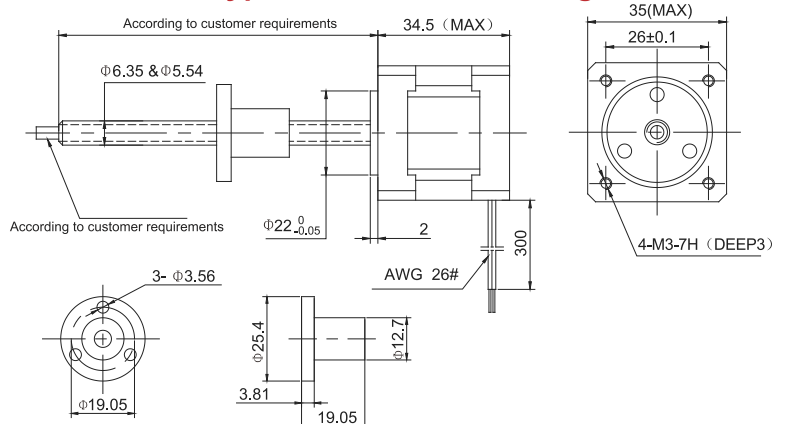
Wiring Diagram



No-captive Type Mechanical Drawings in mm



External Nut Type Mechanical Drawings in mm



35LHS/1254/0574/0244/0576/0246 Series Double Stack Hybrid Linear Stepper Motors 2 Phase, Nema14, Captive and Rich Leadscrews



Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 14
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC

Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization:
Screw Diameter, Screw Lead, Screw Length, Motor Length,
Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
35LHS1254C-C-L	Bipolar	2.33V	1.25A	1.86Ω	2.8mH	5.7W	75°C	162g	20MΩ
35LHS0574C-C-L		5V	0.57A	8.8Ω	13mH				
35LHS0244C-C-L		12V	0.24A	50.5Ω	60mH				
35LHS0576C-C-L	Unipolar	5V	0.57A	8.8Ω	6.5mH	5.7W	75°C	162g	20MΩ
35LHS0246C-C-L		12V	0.24A	50.5Ω	30mH				

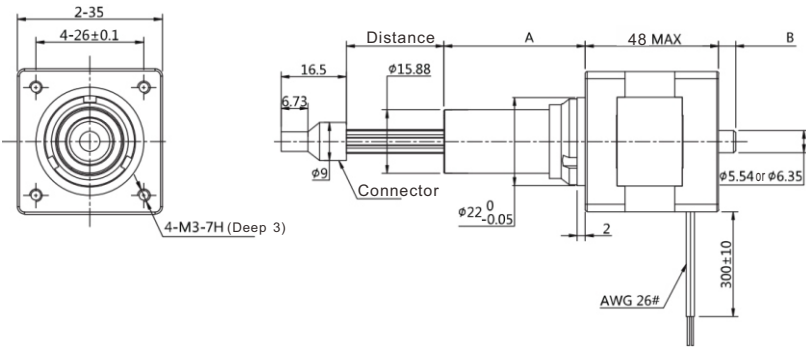
Note: Customization of motor specifications available.

Code	Leadscrew Thread Dimension		
	Diameter	Step	Lead
N	φ 5.54	0.003048	0.6096
J	φ 5.54	0.012192	2.4384
Q	φ 5.54	0.024384	4.8768
R	φ 5.54	0.048768	9.7536

Note: Customization of step and lead specification available.

Code	Leadscrew Thread Dimension		
	Diameter	Step	Lead
P	φ 6.35	0.0039688	0.79375
A	φ 6.35	0.0079375	1.58750
B	φ 6.35	0.0158750	3.17500
C	φ 6.35	0.0317500	6.35000

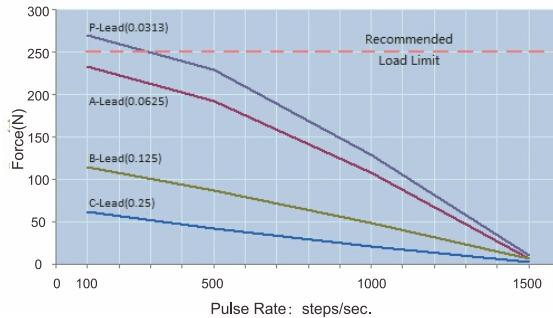
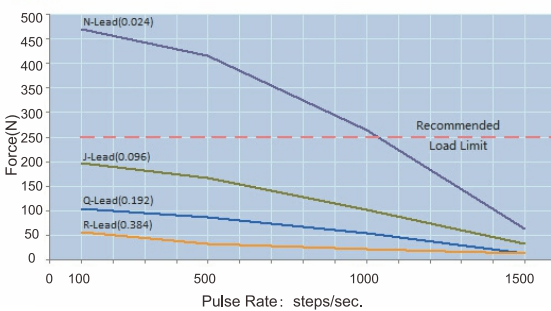
Mechanical Drawings in mm



Distance Code	Distance(mm)	A(mm)	B(mm)
302	12.7	20.8	1
303	19.1	27.2	7.4
304	25.4	33.5	13.7
305	31.8	39.9	20.1
306	38.1	46.2	26.4
307	50.8	58.9	39.1

Load Force and Pulse Rate Curves

Chopper drive : motor 5V and power supply 24V



Wiring Diagram



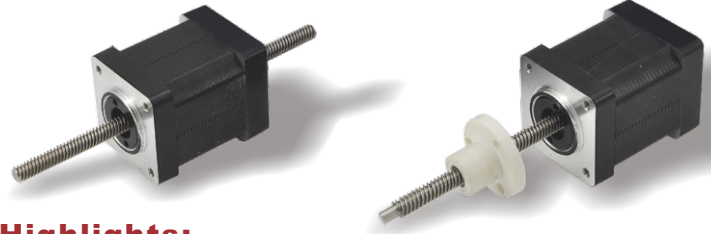
35LHS/2004/0914/0384 Series

Double Stack Hybrid Linear Stepper Motors

2 Phase, Nema 14, No-captive, External Nut and Rich Leadscrews

Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 14
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC



Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
35LHS2004N/E-C-L	Bipolar	2.33V	2A	1.2Ω	1.95mH	9.1W	75°C	240g	20MΩ
35LHS0914N/E-C-L		5V	0.91A	5.5Ω	7.63mH				
35LHS0384N/E-C-L		12V	0.38A	31.6Ω	65.1mH				

Note: Customization of motor specifications available.

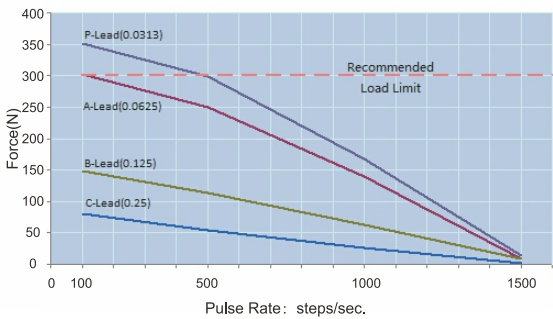
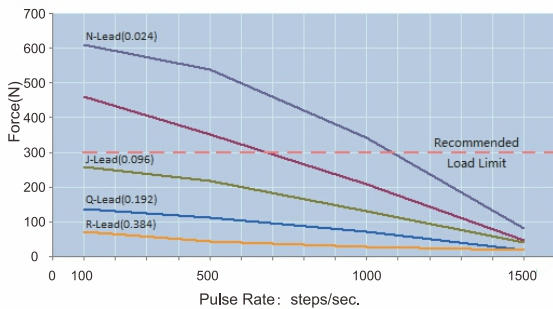
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
N	φ 5.54	0.003048	0.6096
J	φ 5.54	0.012192	2.4384
Q	φ 5.54	0.024384	4.8768
R	φ 5.54	0.048768	9.7536

Note: Customization of step and lead specification available.

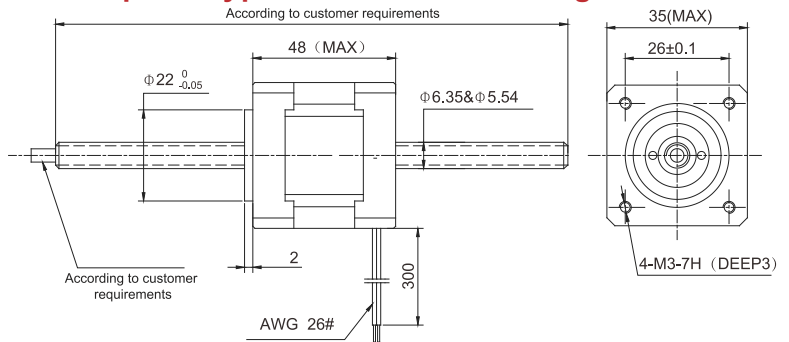
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
P	φ 6.35	0.0039688	0.79375
A	φ 6.35	0.0079375	1.58750
B	φ 6.35	0.0158750	3.17500
C	φ 6.35	0.0317500	6.35000

Load Force and Pulse Rate Curves

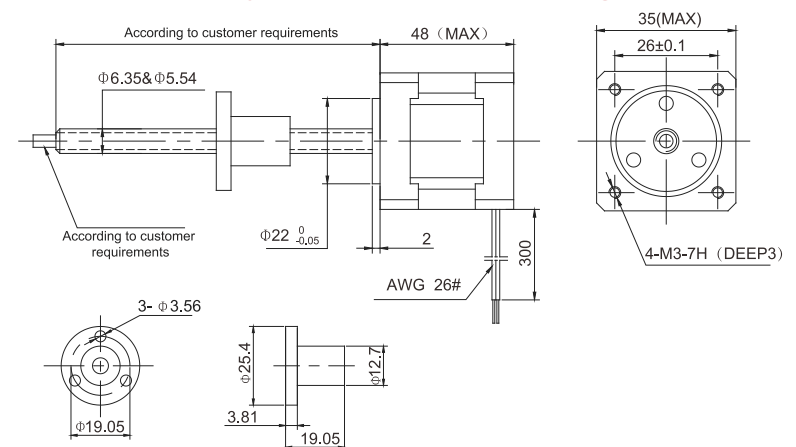
Chopper drive : motor 5V and power supply 24V



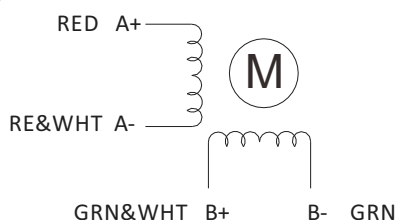
No-captive Type Mechanical Drawings in mm



External Nut Type Mechanical Drawings in mm



Wiring Diagram



42LHS/1504/0704/0294/0706/0296 Series Hybrid Linear Stepper Motors

2 Phase, Nema 17, Captive and Rich Leadscrews

Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 17
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC



Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
42LHS1504C-C-L	Bipolar	2.33V	1.5A	1.56Ω	1.9mH	7W	75°C	241g	20MΩ
42LHS0704C-C-L		5V	0.7A	7.2Ω	10.6mH				
42LHS0294C-C-L		12V	0.29A	41.5Ω	73.3mH				
42LHS0706C-C-L	Unipolar	5V	0.7A	7.2Ω	4.4mH				
42LHS0296C-C-L		12V	0.29A	41.5Ω	27mH				

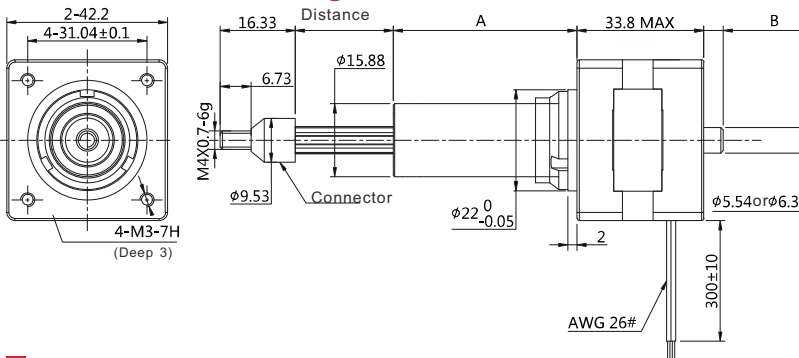
Note: Customization of motor specifications available.

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
N	φ 5.54	0.003048	0.6096
J	φ 5.54	0.012192	2.4384
Q	φ 5.54	0.024384	4.8768
R	φ 5.54	0.048768	9.7536

Note: Customization of step and lead specification available.

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
P	φ 6.35	0.0039688	0.79375
A	φ 6.35	0.0079375	1.58750
B	φ 6.35	0.0158750	3.17500
C	φ 6.35	0.0317500	6.35000

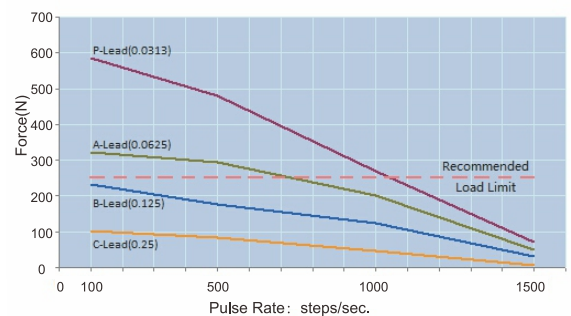
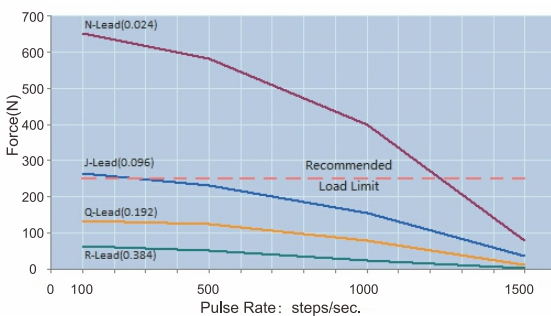
Mechanical Drawings in mm



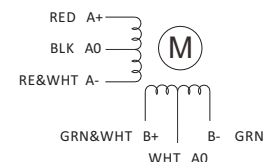
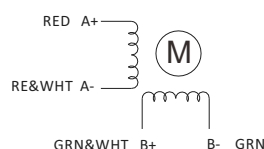
Distance Code	Distance(mm)	A(mm)	B(mm)
302	12.7	19.8	4.1
303	19.1	26.2	10.4
304	25.4	32.5	16.8
305	31.8	38.9	23.1
306	38.1	45.2	29.5
307	50.8	57.9	42.2

Load Force and Pulse Rate Curves

Chopper drive : motor 5V and power supply 24V



Wiring Diagram



42LHS/1504/0704/0294/0706/0296 Series Hybrid Linear Stepper Motors

2 Phase, Nema 17, No-captive, External Nut and Rich Leadscrews

Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 17
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC



Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
42LHS1504N/E-C-L	Bipolar	2.33V	1.5A	1.56Ω	1.9mH	7W	75°C	241g	20MΩ
42LHS0704N/E-C-L		5V	0.7A	7.2Ω	10.6mH				
42LHS0294N/E-C-L		12V	0.29A	41.5Ω	73.3mH				
42LHS0706N/E-C-L	Unipolar	5V	0.7A	7.2Ω	4.4mH				
42LHS0296N/E-C-L		12V	0.29A	41.5Ω	27mH				

Note: Customization of motor specifications available.

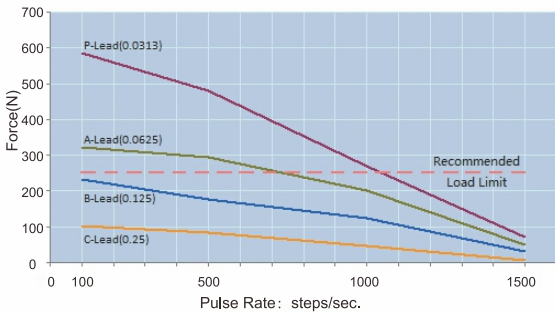
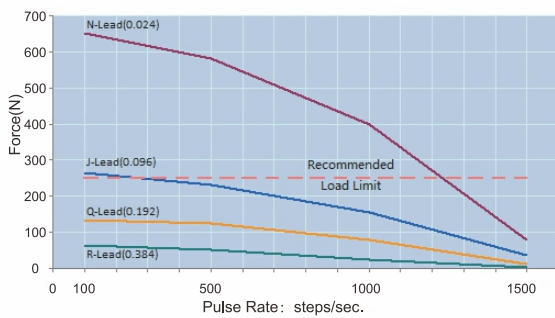
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
N	φ 5.54	0.003048	0.6096
J	φ 5.54	0.012192	2.4384
Q	φ 5.54	0.024384	4.8768
R	φ 5.54	0.048768	9.7536

Note: Customization of step and lead specification available.

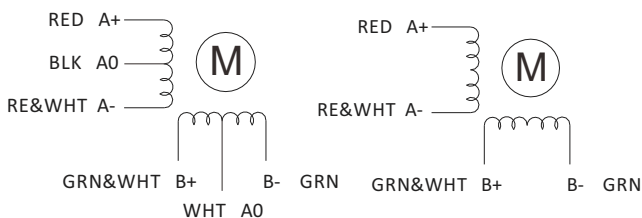
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
P	φ 6.35	0.0039688	0.79375
A	φ 6.35	0.0079375	1.58750
B	φ 6.35	0.0158750	3.17500
C	φ 6.35	0.0317500	6.35000

Load Force and Pulse Rate Curves

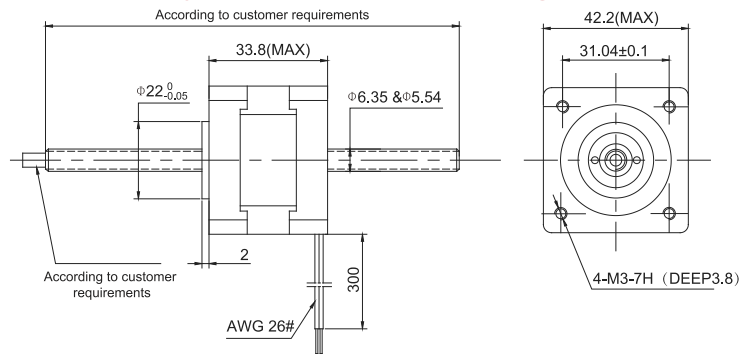
Chopper drive : motor 5V and power supply 24V



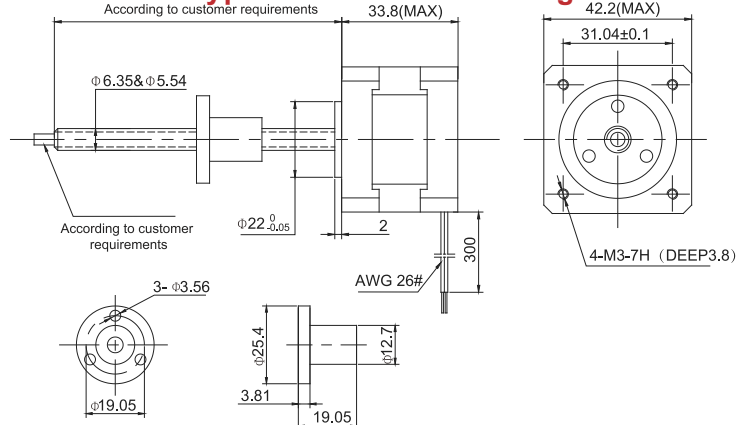
Wiring Diagram



No-captive Type Mechanical Drawings in mm



External Nut Type Mechanical Drawings in mm



42LHS/2604/1304/0554 Series

Double Stack Hybrid Linear Stepper Motors

2 Phase, Nema 17, Captive and Rich Leadscrews



Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 17
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC

Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization:
Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
42LHS2604C-C-L	Bipolar	2.33V	2.6A	0.9Ω	1.33mH	14W	75°C	352g	20MΩ
42LHS1304C-C-L		5V	1.3A	3.8Ω	6.6mH				
42LHS0554C-C-L		12V	0.55A	21.9Ω	45.1mH				

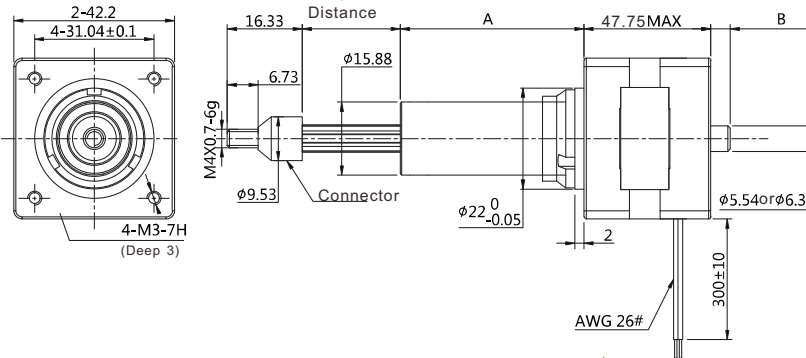
Note: Customization of motor specifications available.

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
N	φ 5.54	0.003048	0.6096
J	φ 5.54	0.012192	2.4384
Q	φ 5.54	0.024384	4.8768
R	φ 5.54	0.048768	9.7536

Note: Customization of step and lead specification available.

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
P	φ 6.35	0.0039688	0.79375
A	φ 6.35	0.0079375	1.58750
B	φ 6.35	0.0158750	3.17500
C	φ 6.35	0.0317500	6.35000

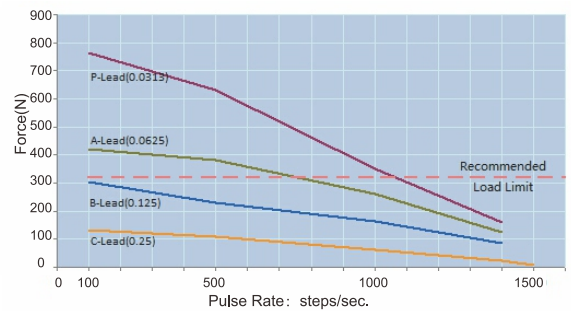
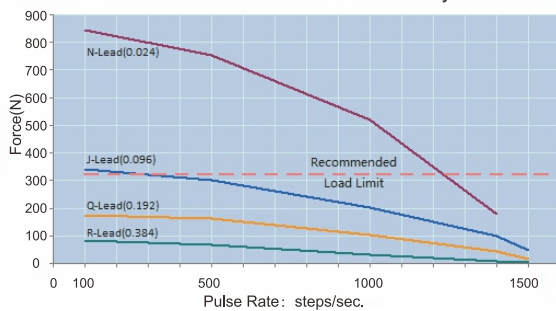
Mechanical Drawings in mm



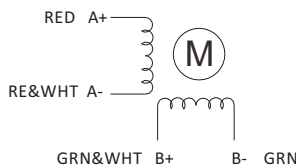
Distance Code	Distance(mm)	A(mm)	B(mm)
302	12.7	19.8	0.51
303	19.1	26.2	6.86
304	25.4	32.5	13.21
305	31.8	38.9	19.56
306	38.1	45.2	25.91
307	50.8	57.9	38.61

Load Force and Pulse Rate Curves

Chopper drive : motor 5V and power supply 24V



Wiring Diagram



42LHS/2604/1304/0554 Series

Double Stack Hybrid Linear Stepper Motors

2 Phase, Nema 17, No-captive, External Nut and Rich Leadscrews

Technical Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 17
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC



Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
42LHS2604N/E-C-L	Bipolar	2.33V	2.6A	0.9Ω	1.33mH	14W	75°C	352g	20MΩ
42LHS1304N/E-C-L		5V	1.3A	3.8Ω	6.6mH				
42LHS0554N/E-C-L		12V	0.55A	21.9Ω	45.1mH				

Note: Customization of motor specifications available.

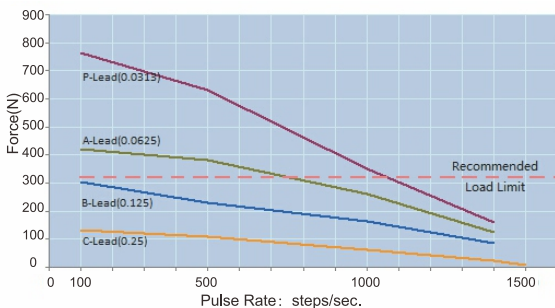
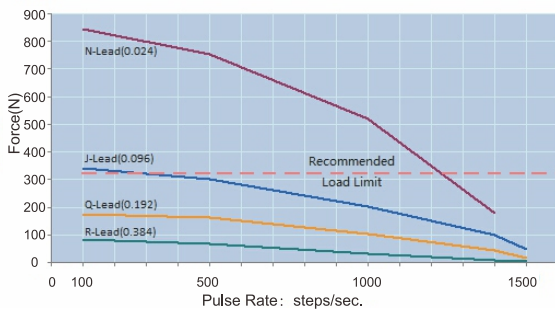
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
N	φ 5.54	0.003048	0.6096
J	φ 5.54	0.012192	2.4384
Q	φ 5.54	0.024384	4.8768
R	φ 5.54	0.048768	9.7536

Note: Customization of step and lead specification available.

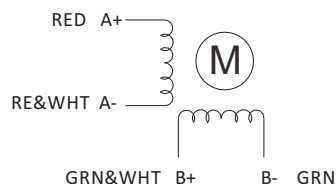
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
P	φ 6.35	0.0039688	0.79375
A	φ 6.35	0.0079375	1.58750
B	φ 6.35	0.0158750	3.17500
C	φ 6.35	0.0317500	6.35000

Load Force and Pulse Rate Curves

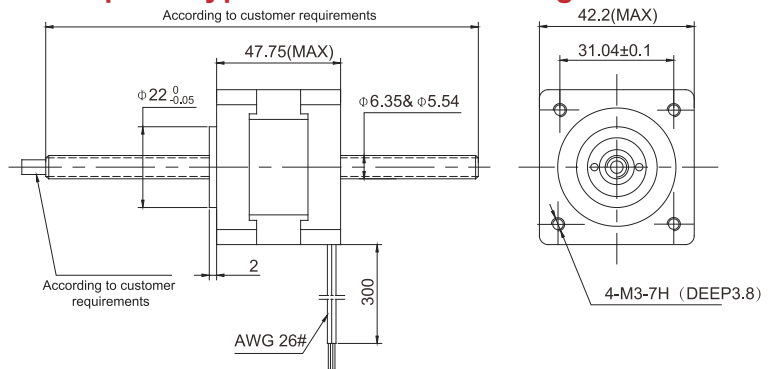
Chopper drive : motor 5V and power supply 24V



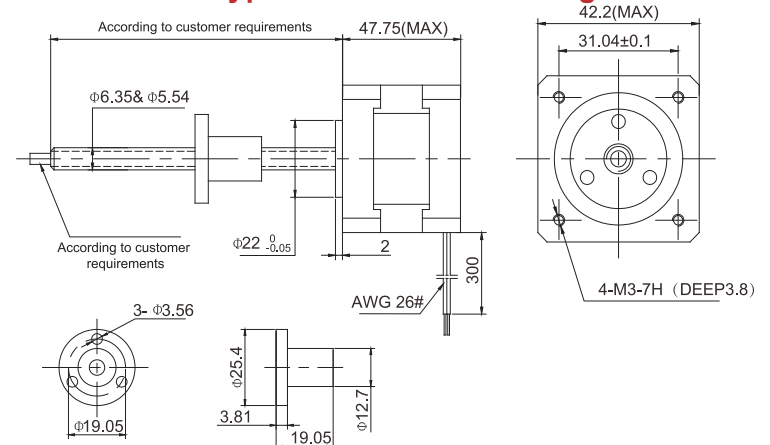
Wiring Diagram



No-captive Type Mechanical Drawings in mm



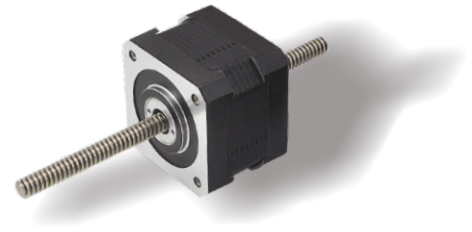
External Nut Type Mechanical Drawings in mm



42LHS1674N-170

Double Stack Hybrid Linear Stepper Motors

2 Phase, Nema 17, No-captive



Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 17
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC

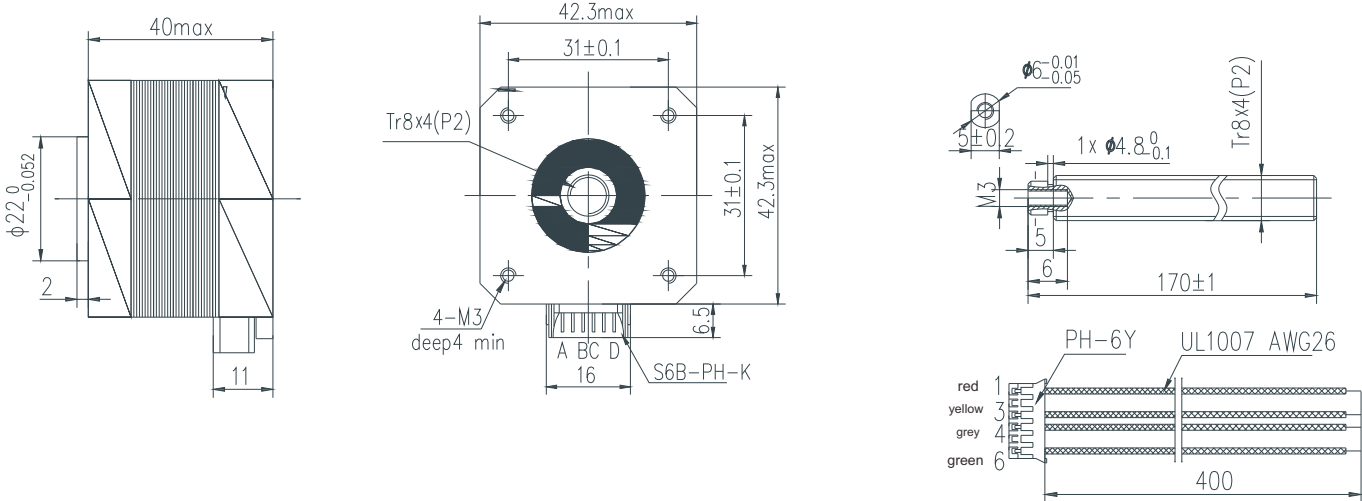
Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization:
Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

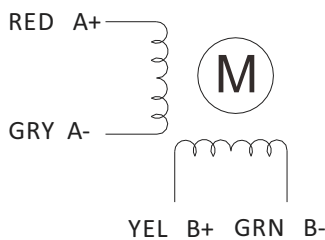
Model	Current	Resistance	Inductance	Min Thrust	Rotor Inertia	Bi/Unipolar	Screw Lead	Screw Length	Weight	Motor Length	Driver
	A/∅	Ω/∅	mH/∅	N @10RPS	g.cm ²	# of Wires	mm	mm	kg	mm	
42LHS1674N-170	1.67	1.9	4.5	50	57	Bi (4)	4	170	0.24	40	Y2SD1

Note: Customization of motor and leadscrew specifications available.

Mechanical Dimensions (in mm)



Wiring Diagram



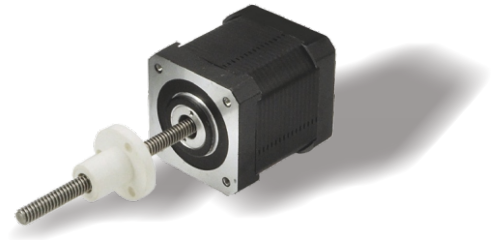
42LHS1204E-210

Hybrid Linear Stepper Motors

2 Phase, Nema 17, External Nut

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 17
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Nut Material	POM
Certificates	Rohs, CE, CCC



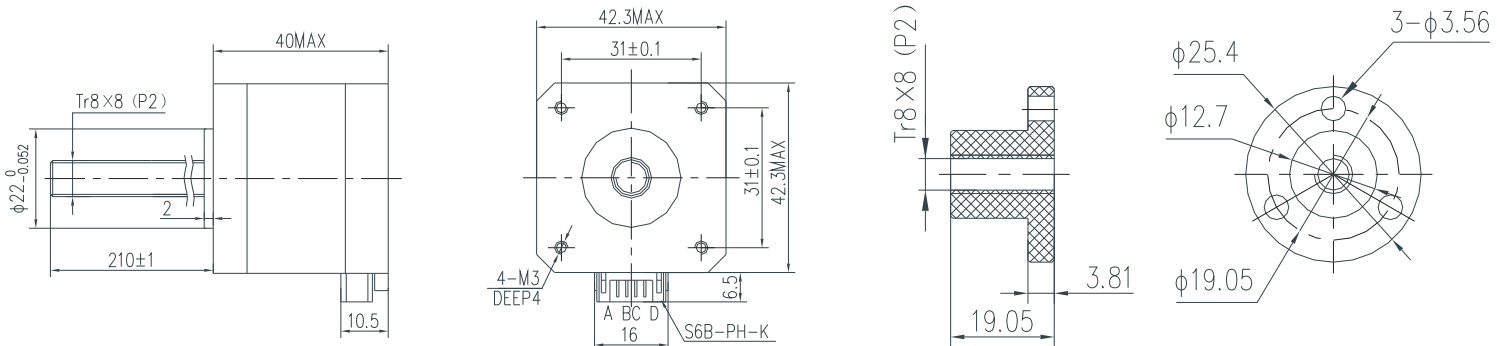
Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization:
Screw Diameter, Screw Lead, Screw Length, Motor Length,
Electric Parameters, Motor Surface Processing etc.

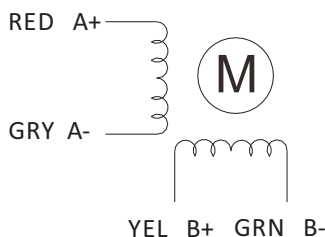
Model	Current	Resistance	Inductance	Min Thrust	Rotor Inertia	Bi/Unipolar	Screw Lead	Screw Length	Weight	Motor Length	Driver
	A/∅	Ω/∅	mH/∅	N @10RPS	g.cm ²	# of Wires	mm	mm	kg	mm	
42LHS1204E-210	1.2	1.9	4.5	50	57	Bi (4)	8	210	0.35	40	Y2SD1

Note: Customization of motor and leadscrew specifications available.

Mechanical Dimensions (in mm)



Wiring Diagram



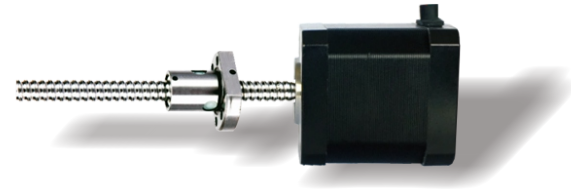
42LHS1504B-102

Hybrid Linear Stepper Motors

2 Phase, Nema 17, Ball Screw

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 17
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strengt	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Suface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Nut Type	Ball Nut
Certificates	Rohs, CE, CCC



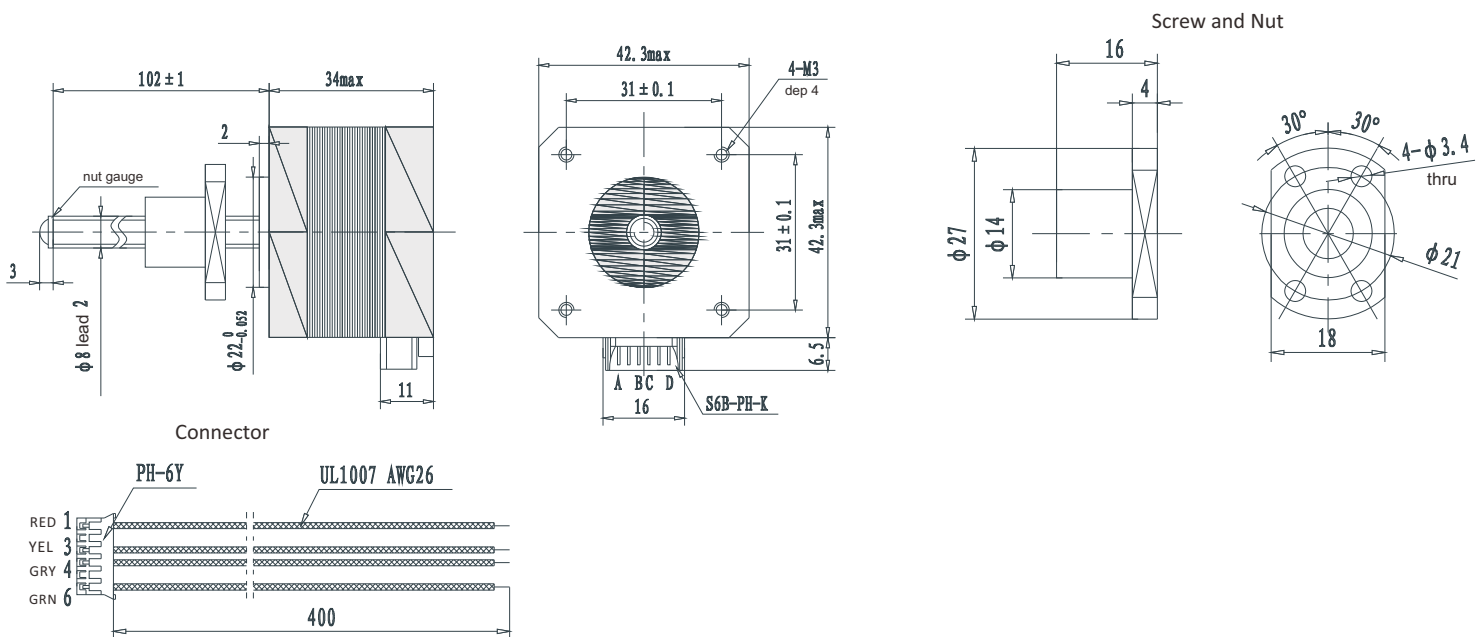
Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

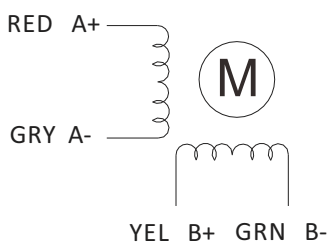
Model	Current	Resistance	Inductance	Min Thrust	Rotor Inertia	Bi/Unipolar	Screw Lead	Screw Length	Weight	Motor Length	Driver
	A/∅	Ω/∅	mH/∅	N @10RPS	g.cm2	# of Wires	mm	mm	kg	mm	
42LHS1504B-102	1.5	1.56	2.4	50	38	Bi (4)	2	102	0.2	34	Y2SD1

Note: Customization of motor and leadscrew specifications available.

Mechanical Dimensions (in mm)



Wiring Diagram



57LHS2004/1304/0544/1306/0546 Series Hybrid Linear Stepper Motors

2 Phase, Nema 23, Captive, Rich Leadscews

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 23
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Nut Type	Ball Nut
Certificates	Rohs, CE, CCC



Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
57LHS2004C-C-L	Bipolar	3.25V	2A	1.63Ω	3.5mH	13W	75°C	511g	20MΩ
57LHS1304C-C-L		5V	1.3A	3.85Ω	10.5mH				
57LHS0544C-C-L		12V	0.54A	22.2Ω	47mH				
57LHS1306C-C-L	Unipolar	5V	1.3A	3.85Ω	5.3mH	13W	75°C	511g	20MΩ
57LHS0546C-C-L		12V	0.54A	22.2Ω	23.6mH				

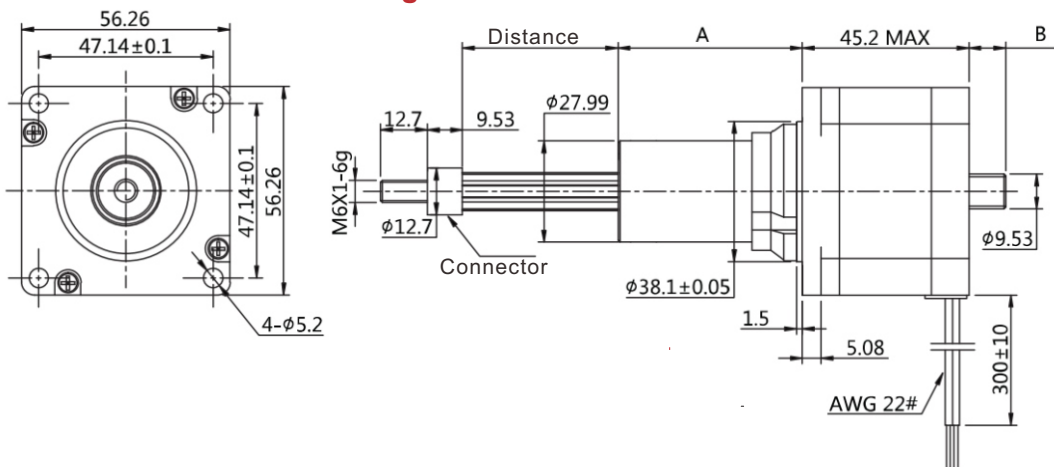
Note: Customization of motor specifications available.

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
A	φ 9.53	0.0079375	1.5875
T	φ 9.53	0.021166	4.22
S	φ 9.53	0.010584	2.1168

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
3	φ 9.53	0.0127	2.54
1	φ 9.53	0.0254	5.08
2	φ 9.53	0.0508	10.16

Note: Customization of step and lead specification available.

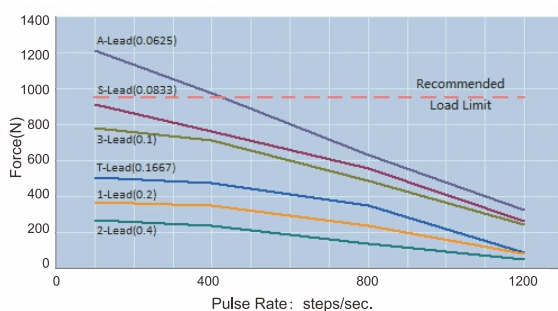
Mechanical Drawings in mm



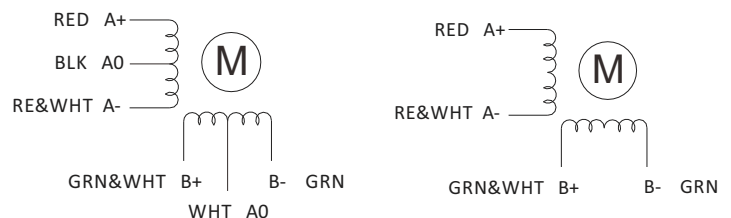
Distance Code	Distance(mm)	A(mm)	B(mm)
302	12.7	25.7	1.5
303	19.1	32	7.9
304	25.4	38.4	14.2
305	31.8	44.7	20.6
306	38.1	51.1	26.9
307	50.8	63.8	39.6

Load Force and Pulse Rate Curves

Chopper drive : motor 5V and power supply 24V



Wiring Diagram

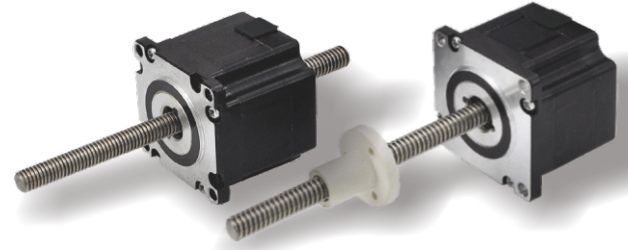


57LHS2004/1304/0544/1306/0546 Series Hybrid Linear Stepper Motors

2 Phase, Nema 23, No-captive, External Nut, Rich Leadscews

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 23
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strengt	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Suface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Nut Type	Ball Nut
Certificates	Rohs, CE, CCC



Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
57LHS2004N/E-C-L	Bipolar	3.25V	2A	1.63Ω	3.5mH	13W	75°C	511g	20MΩ
57LHS1304N/E-C-L		5V	1.3A	3.85Ω	10.5mH				
57LHS0544N/E-C-L		12V	0.54A	22.2Ω	47mH				
57LHS1306N/E-C-L	Unipolar	5V	1.3A	3.85Ω	5.3mH	13W	75°C	511g	20MΩ
57LHS0546N/E-C-L		12V	0.54A	22.2Ω	23.6mH				

Note: Customization of motor specifications available.

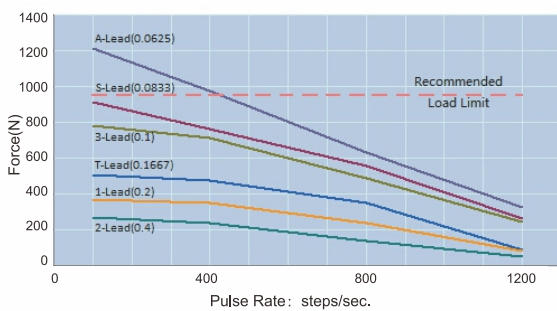
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
A	φ 9.53	0.0079375	1.5875
T	φ 9.53	0.021166	4.22
S	φ 9.53	0.010584	2.1168

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
3	φ 9.53	0.0127	2.54
1	φ 9.53	0.0254	5.08
2	φ 9.53	0.0508	10.16

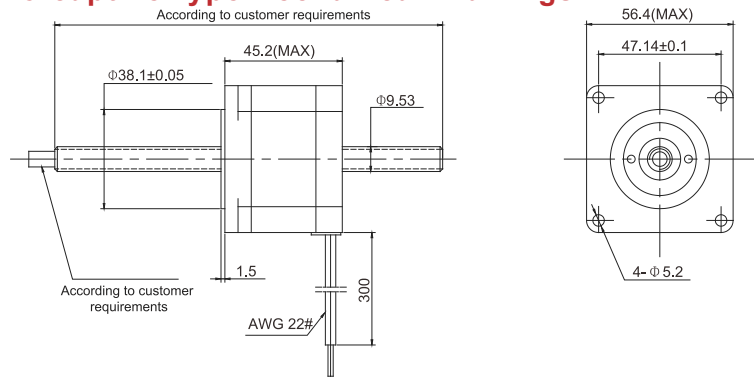
Note: Customization of step and lead specification available.

Load Force and Pulse Rate Curves

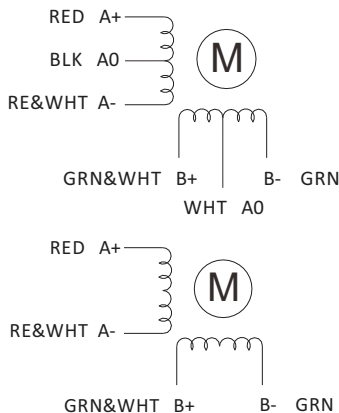
Chopper drive : motor 5V and power supply 24V



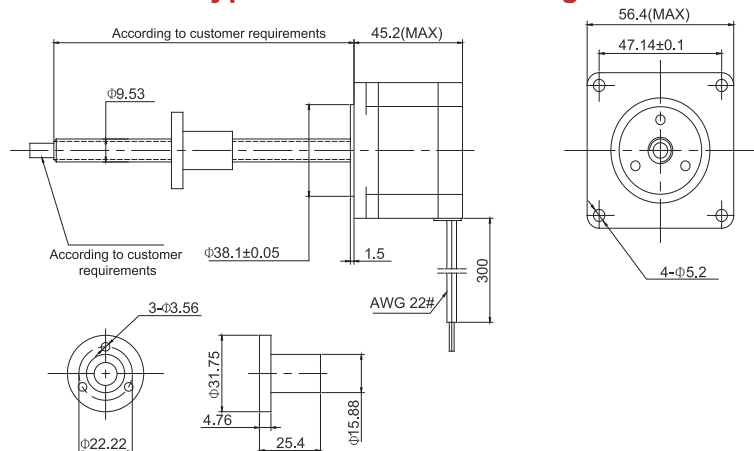
No-captive Type Mechanical Drawings in mm



Wiring Diagram



External Nut Type Mechanical Drawings in mm



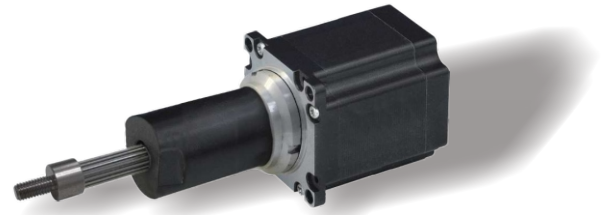
57LHS3324/2164/0904 Series

Double Stack Hybrid Linear Stepper Motors

2 Phase, Nema 23, Captive, Rich Leadscews

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 23
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Nut Type	Ball Nut
Certificates	Rohs, CE, CCC



Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
57LHS3324C-C-L	Bipolar	3.25V	3.32A	0.98Ω	1.33mH	14W	75°C	352g	20MΩ
57LHS2164C-C-L		5V	2.16A	2.31Ω	6.6mH				
57LHS0904C-C-L		12V	0.9A	13.33Ω	45.1mH				

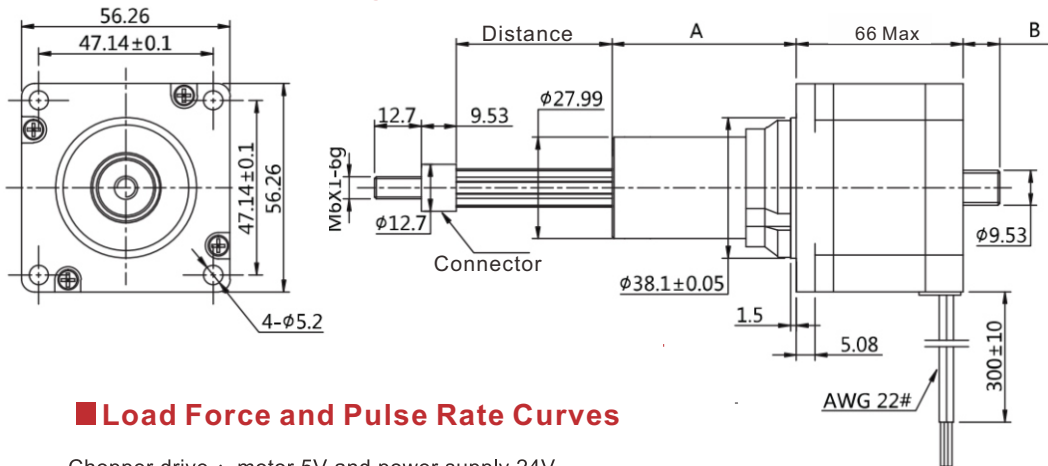
Note: Customization of motor specifications available.

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
A	φ9.53	0.0079375	1.5875
T	φ9.53	0.021166	4.22
S	φ9.53	0.010584	2.1168

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
3	φ9.53	0.0127	2.54
1	φ9.53	0.0254	5.08
2	φ9.53	0.0508	10.16

Note: Customization of step and lead specification available.

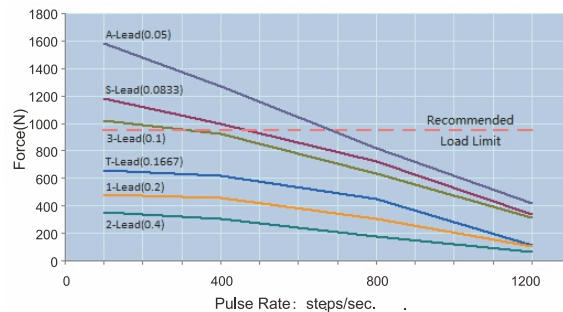
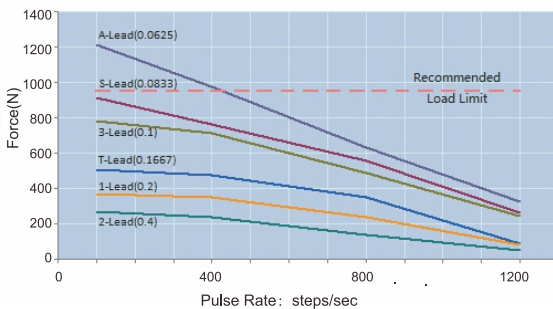
Mechanical Drawings in mm



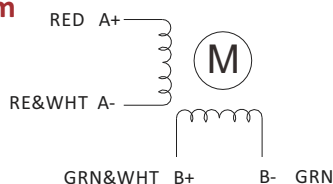
Distance Code	Distance(mm)	A(mm)	B(mm)
302	12.7	20.47	1.68
303	19.1	26.82	8.03
304	25.4	33.17	14.38
305	31.8	39.52	20.73
306	38.1	45.87	27.08
307	50.8	58.57	39.78

Load Force and Pulse Rate Curves

Chopper drive : motor 5V and power supply 24V



Wiring Diagram



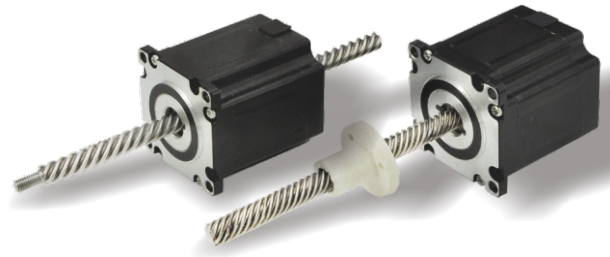
57LHS3324/2164/0904 Series

Double Stack Hybrid Linear Stepper Motors

2 Phase, Nema 23, No-captive, External Nut, Rich Leadscews

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 23
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strengt	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Suface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Nut Type	Ball Nut
Certificates	RoHS, CE, CCC



Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
57LHS3324N/E-C-L	Bipolar	3.25V	3.32A	0.98Ω	1.33mH	14W	75°C	352g	20MΩ
57LHS2164N/E-C-L		5V	2.16A	2.31Ω	6.6mH				
57LHS0904N/E-C-L		12V	0.9A	13.33Ω	45.1mH				

Note: Customization of motor specifications available.

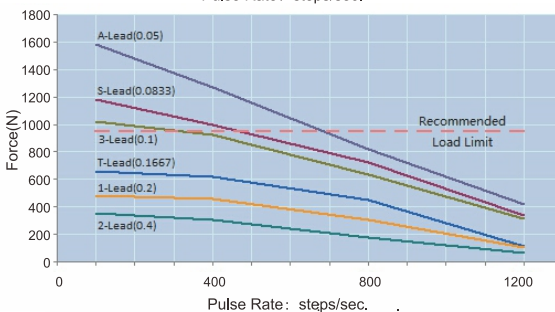
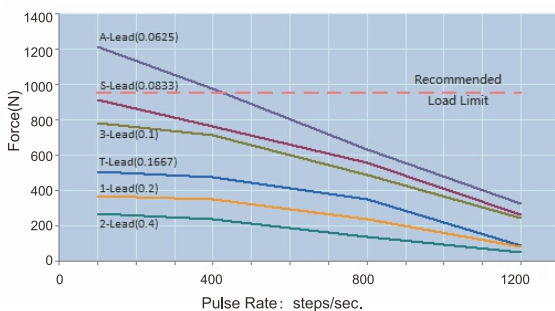
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
A	φ9.53	0.0079375	1.5875
T	φ9.53	0.021166	4.22
S	φ9.53	0.010584	2.1168

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
3	φ9.53	0.0127	2.54
1	φ9.53	0.0254	5.08
2	φ9.53	0.0508	10.16

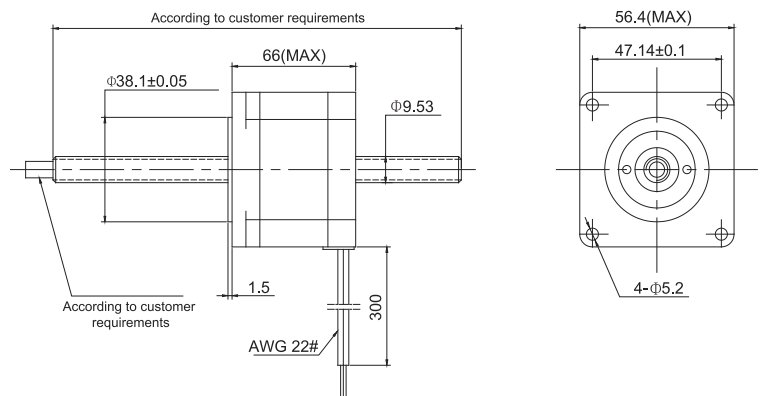
Note: Customization of step and lead specification available.

Load Force and Pulse Rate Curves

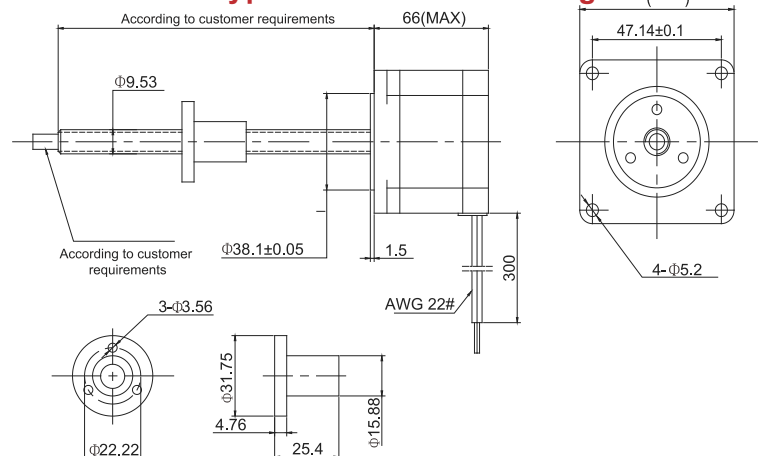
Chopper drive : motor 5V and power supply 24V



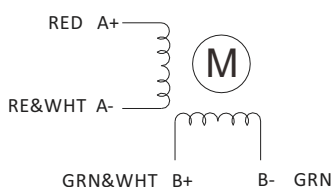
No-captive Type Mechanical Drawings in mm



External Nut Type Mechanical Drawings in mm



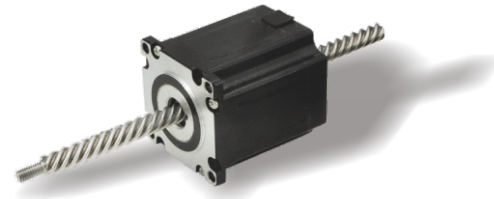
Wiring Diagram



57LHS3004N-170

Hybrid Linear Stepper Motors

2 Phase, Nema 23, No-captive



Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 23
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Certificates	Rohs, CE, CCC

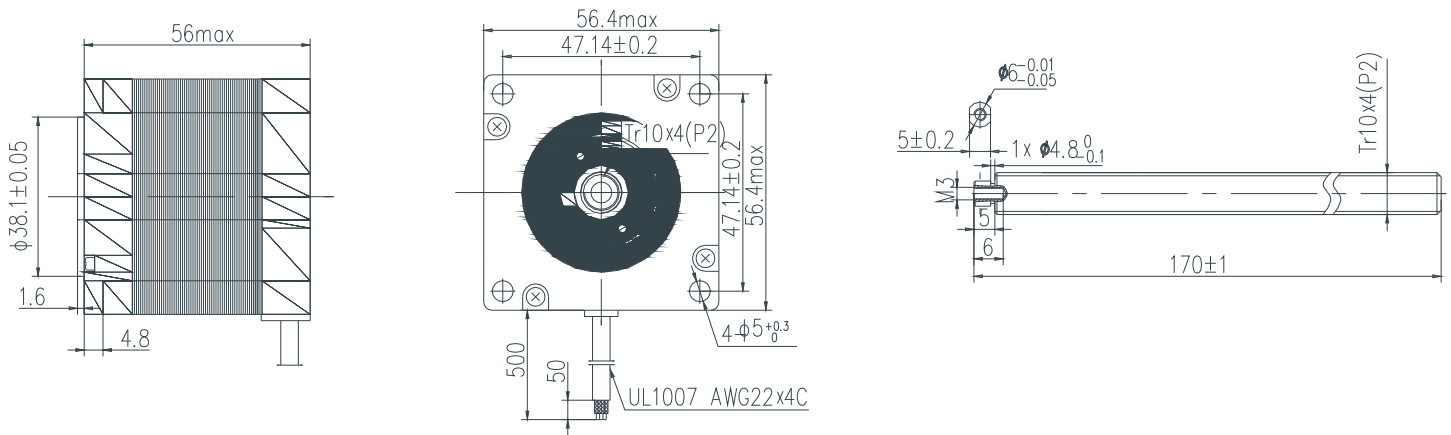
Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

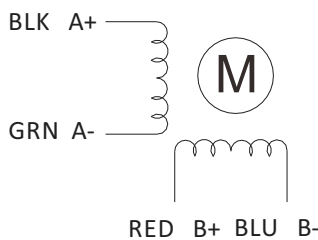
Model	Current	Resistance	Inductance	Min Thrust	Rotor Inertia	Bi/Unipolar	Screw Lead	Screw Length	Weight	Motor Length	Driver
	A/∅	Ω/∅	mH/∅	N @10RPS	g.cm ²	# of Wires	mm	mm	kg	mm	
57LHS3004N-170	3.0	1.1	3.2	100	280	Bi (4)	4	170	0.68	56	Y2SD2

Note: Customization of motor and leadscrew specifications available.

Mechanical Dimensions (in mm)



Wiring Diagram



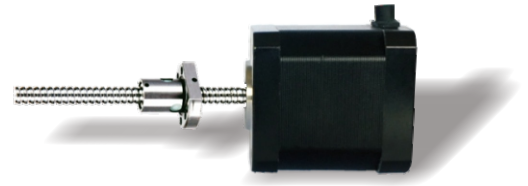
57LHS3004B-160

Hybrid Linear Stepper Motors

2 Phase, Nema 23, Ball Screw

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 23
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Nut Type	Ball Nut
Certificates	Rohs, CE, CCC



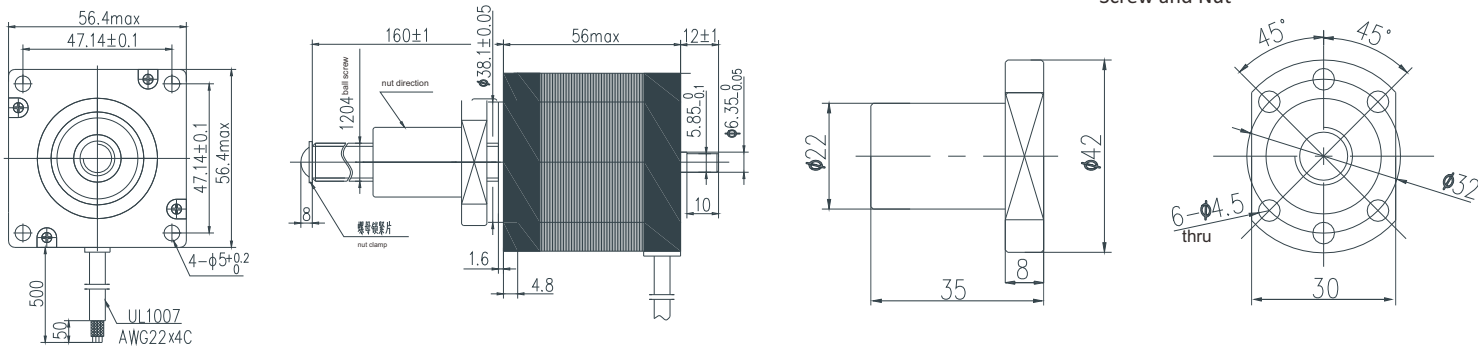
Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

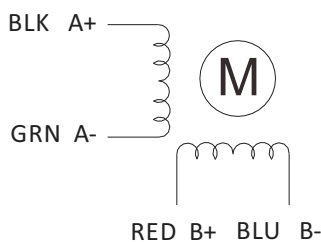
Model	Current	Resistance	Inductance	Min Thrust	Rotor Inertia	Bi/Unipolar	Screw Lead	Screw Length	Weight	Motor Length	Driver
	A/∅	Ω/∅	mH/∅	N @10RPS	g.cm ²	# of Wires	mm	mm	kg	mm	
57LHS3004B-160	3.0	1.1	3.2	100	280	Bi (4)	4	160	0.7	56	Y2SD2

Note: Customization of motor and leadscrew specifications available.

Mechanical Dimensions (in mm)



Wiring Diagram



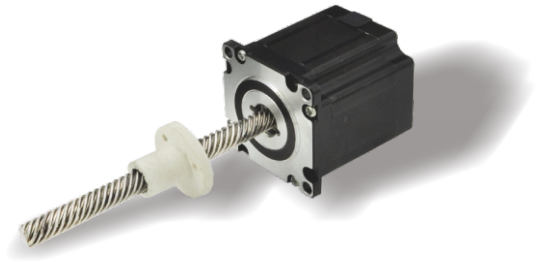
57LHS3004E-200

Hybrid Linear Stepper Motors

2 Phase, Nema 23, External Nut

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 23
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Nut Material	POM
Certificates	Rohs, CE, CCC



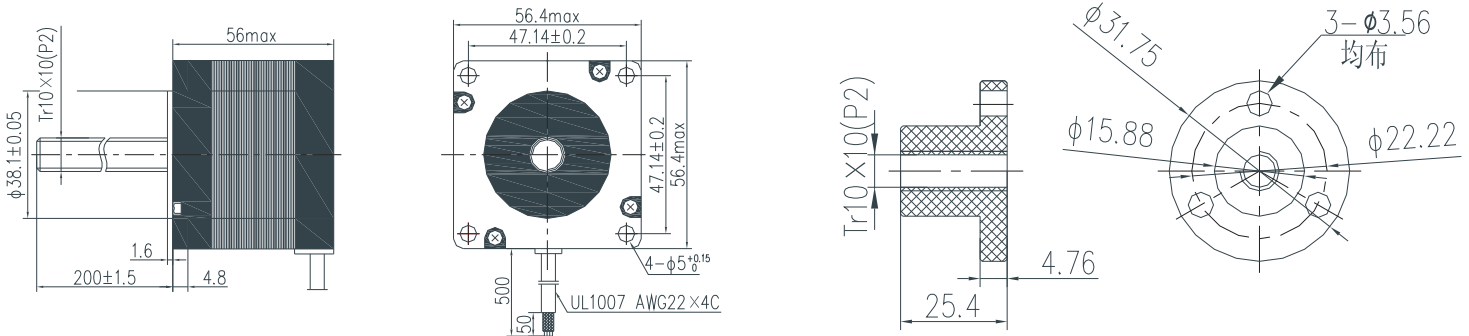
Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

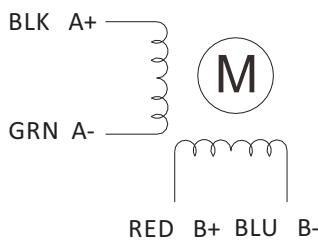
Model	Current	Resistance	Inductance	Min Thrust	Rotor Inertia	Bi/Unipolar	Screw Lead	Screw Length	Weight	Motor Length	Driver
	A/∅	Ω/∅	mH/∅	N @10RPS	g.cm ²	# of Wires	mm	mm	kg	mm	
57LHS3004E-200	3.0	1.1	3.2	100	280	Bi (4)	10	200	0.62	56	Y2SD2

Note: Customization of motor and leadscrew specifications available.

Mechanical Dimensions (in mm)



Wiring Diagram



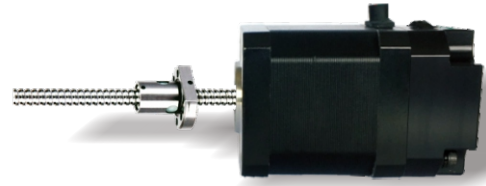
57LHS3004B-160BR

Hybrid Linear Stepper Motors with Brake

2 Phase, Nema 23, Ball Screw

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 23
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Nut Type	Ball Nut
Certificates	Rohs, CE, CCC



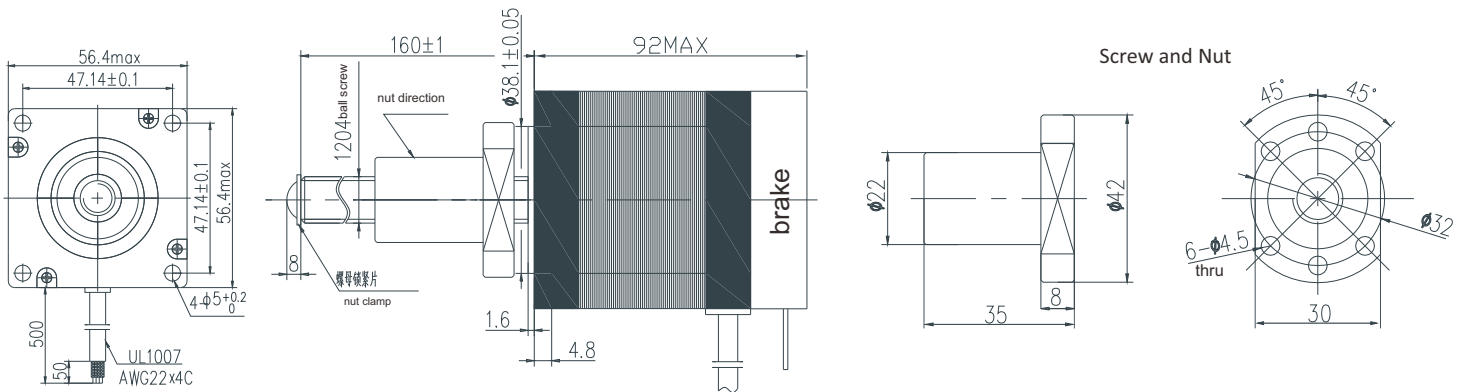
Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization:
Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

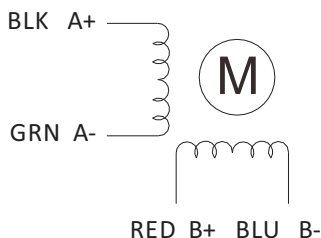
Model	Current	Resistance	Inductance	Min Thrust	Rotor Inertia	Bi/Unipolar	Screw Lead	Screw Length	Weight	Motor Length	Driver
	A/∅	Ω/∅	mH/∅	N @10RPS	g.cm2	# of Wires	mm	mm	kg	mm	
57LHS100-3004BE-92BR	3.0	1.1	3.2	100	280	Bi (4)	4	160	0.7	92	Y2SD2

Model	Brake Voltage	Brake Power	Brake Torque	Reaction Time	Connection	
	DC V	W	N. m	ms	24V+	GND
57LHS100-3004BE-92BR	24	4	1.5	50	BLK	BLK

Mechanical Dimensions (in mm)



Wiring Diagram



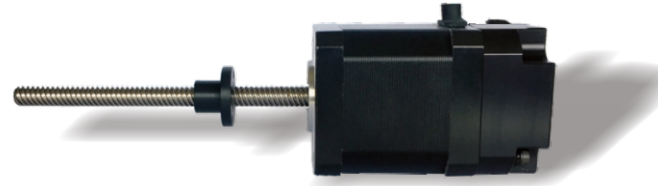
57LHS3004E-200BR

Hybrid Linear Stepper Motors with Brake

2 Phase, Nema 23, External Nut

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 23
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Nut Type	Ball Nut
Certificates	RoHS, CE, CCC



Highlights:

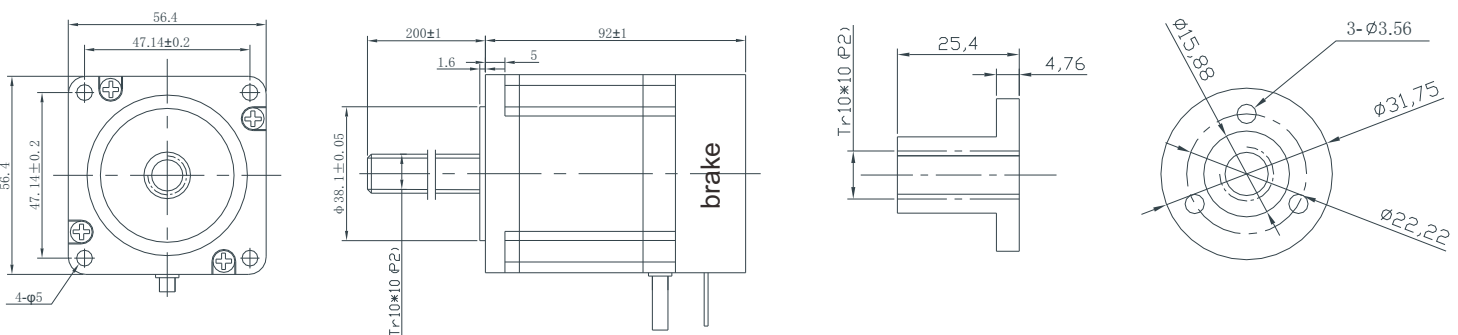
- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization:
Screw Diameter, Screw Lead, Screw Length, Motor Length,
Electric Parameters, Motor Surface Processing etc.

Model	Current	Resistance	Inductance	Min Thrust	Rotor Inertia	Bi/Unipolar	Screw Lead	Screw Length	Weight	Motor Length	Driver
	A/∅	Ω/∅	mH/∅	N @10RPS	g.cm ²	# of Wires	mm	mm	kg	mm	
57LHS3004E-200BR	3.0	1.1	3.2	100	280	Bi (4)	10	200	0.71	92	Y2SD2

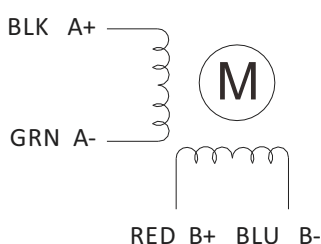
Model	Brake Voltage	Brake Power	Brake Torque	Reaction Time	Connection	
	DC V	W	N. m	ms	24V+	GND
57LHS3004E-200BR	24	4	1.5	50	BLK	BLK

Note: Customization of motor, leadscrew and brake specifications available.

Mechanical Dimensions (in mm)



Wiring Diagram

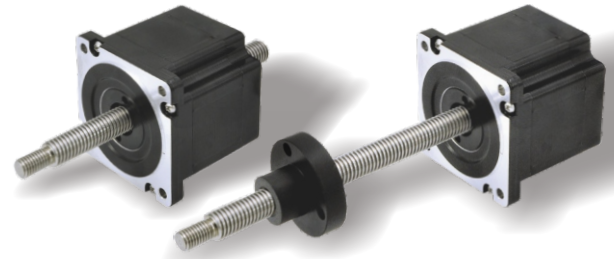


86LHS5474/3124/1304/3126/1306 Series Hybrid Linear Stepper Motors

2 Phase, Nema 34, No-captive, External Nut

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema 34
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Nut Type	Ball Nut
Certificates	RoHS, CE, CCC



Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

Model Name	Wiring	Rated voltage	Rated current	Resistance /phase	Inductance /phase	Power consumption	Temperature rise	Weight	Insulation resistance
86LHS5474N/E-C-L	Bipolar	2.85V	5.47A	0.52Ω	2.86mH	31.2W	75°C	2.3kg	20MΩ
86LHS3124N/E-C-L		5V	3.12A	1.6Ω	8.8mH				
86LHS1304N/E-C-L		12V	1.3A	9.23Ω	51mH				
86LHS3126N/E-C-L	Unipolar	5V	3.12A	1.6Ω	4.4mH	25.5mH			
86LHS1306N/E-C-L		12V	1.3A	9.23Ω	51mH				

Note: Customization of motor specifications available.

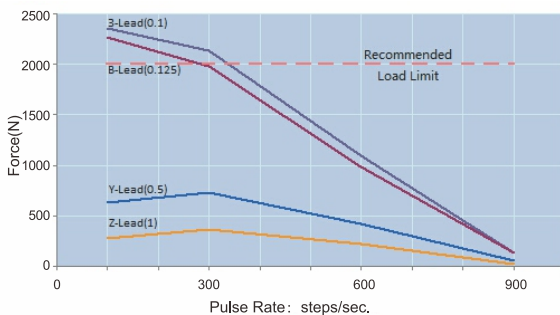
Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
3	φ 15.88	0.0127	2.54
B	φ 15.88	0.015875	3.175

Code	Leadscrew Thread Dimensions in mm		
	Diameter	Step	Lead
Y	φ 15.88	0.0635	12.7
Z	φ 15.88	0.127	25.4

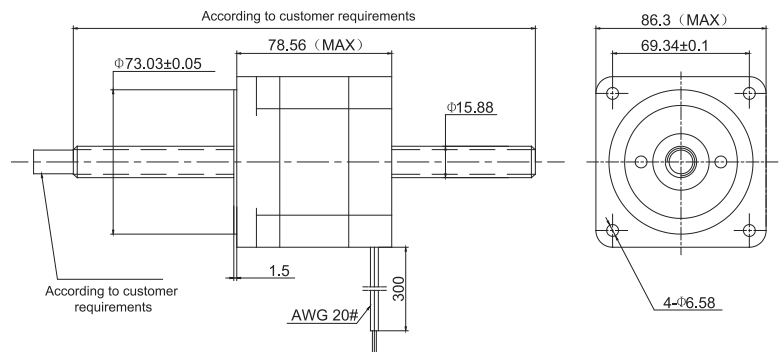
Note: Customization of step and lead specification available.

Load Force and Pulse Rate Curves

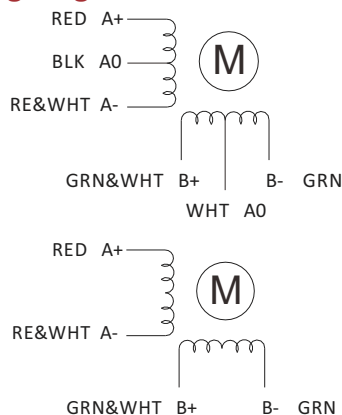
Chopper drive : motor 5V and power supply 24V



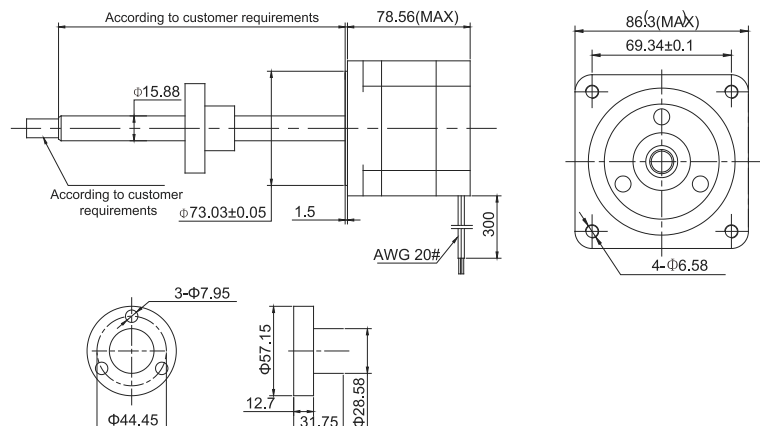
No-captive Type Mechanical Drawings in mm



Wiring Diagram



External Nut Type Mechanical Drawings in mm



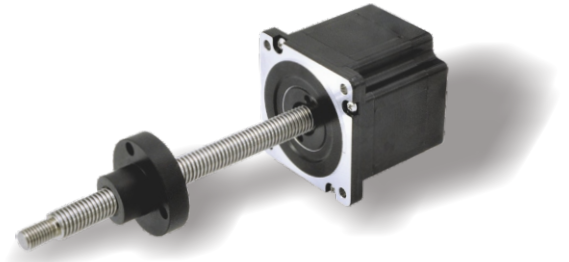
86LHS3004E-280

Hybrid Linear Stepper Motors

2 Phase, Nema 34, External Nut

Specifications

Step Angle	1.8° (2 Phase)
Step Angle Accuracy	±0.09°
Size	Nema34
Insulation Grade	500VDC, 100 MΩ Min. , Class B
Dielectric Strength	500 VAC for 1 Minute
Temperature Rise	Less than 80°C (Rated Current)
Surface Temperature	Max. Allowed 100°C
Humidity Range	20% to 90% RH
IP Grade	IP40
Nut Material	POM
Certificates	Rohs, CE, CCC



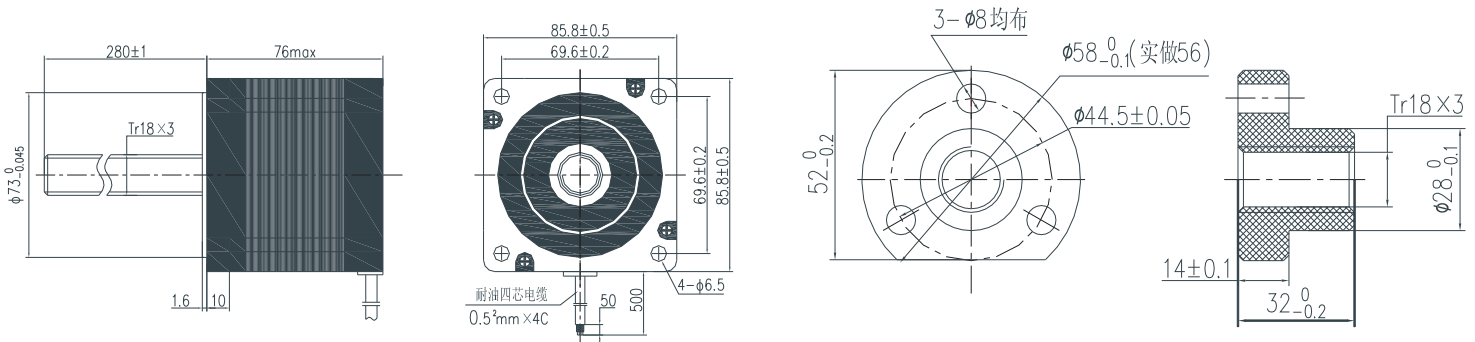
Highlights:

- Low Noise, Low Vibration, Low Heating;
- High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in Customization: Screw Diameter, Screw Lead, Screw Length, Motor Length, Electric Parameters, Motor Surface Processing etc.

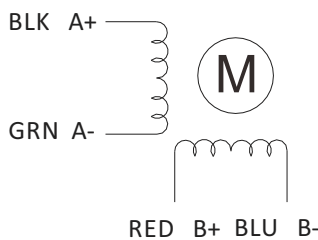
Model	Current	Resistance	Inductance	Min Thrust	Rotor Inertia	Bi/Unipolar	Screw Lead	Screw Length	Weight	Motor Length	Driver
	A/∅	Ω/∅	mH/∅	N @10RPS	g.cm ²	# of Wires	mm	mm	kg	mm	
86LHS3004E-280	3.0	1.2	12	200	1400	Bi (4)	3	280	2	76	Y2SD3

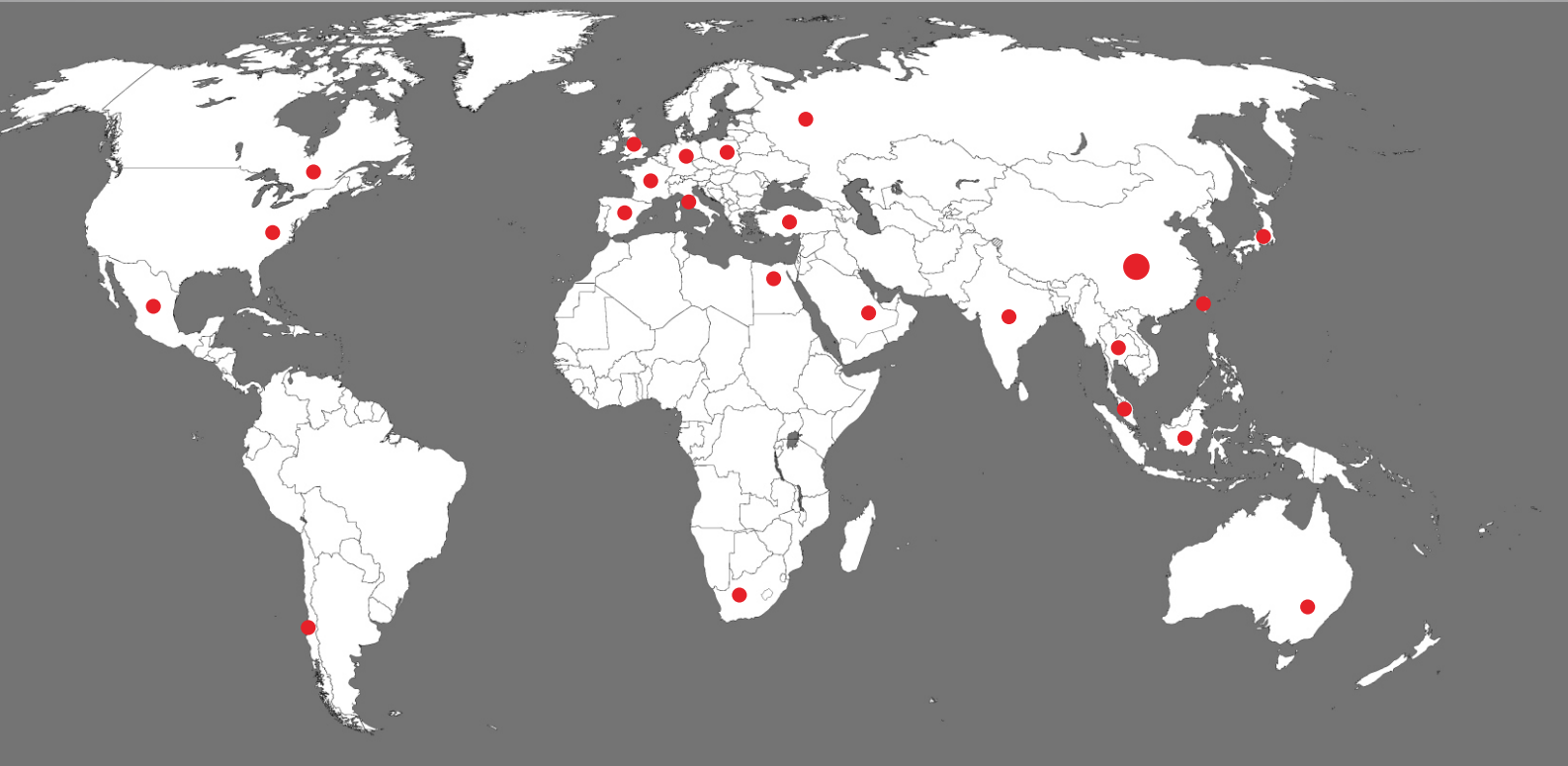
Note: Customization of motor and leadscrew specifications available.

Mechanical Dimensions (in mm)



Wiring Diagram





Contact Us

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