

PHBL42 Series

| | |
|-----------------------|--|
| Ambient Temperature | -20 °C ~ +50 °C |
| Temperature Rise | 80 °C Max. (rated current, 2 phase on) |
| Dielectric Strength | 500 VAC for one minute |
| Insulation Resistance | Class B (Class F also available) |



Motor Specs

| Mode | Voltage | Current | Resistance | Inductance | Lead Wire | Motor Length | |
|----------------|---------|---------|------------|------------|-----------|--------------|------|
| | V/∅ | A/∅ | Ω/∅ | mH/∅ | Pin | inch | mm |
| PHBL42□35-4S05 | 7.2 | 0.5 | 14.4 | 19.8 | 4 | 1.3780 | 34.1 |
| PHBL42□35-4S10 | 3.6 | 1.0 | 3.6 | 5.0 | 4 | 1.3780 | 34.1 |
| PHBL42□35-4S15 | 2.4 | 1.5 | 1.6 | 2.2 | 4 | 1.3780 | 34.1 |
| PHBL42□49-4S05 | 11.0 | 0.5 | 22.0 | 46.0 | 4 | 1.9291 | 48.1 |
| PHBL42□49-4S12 | 4.5 | 1.2 | 3.8 | 8.0 | 4 | 1.9291 | 48.1 |
| PHBL42□49-4S25 | 2.2 | 2.5 | 0.87 | 1.8 | 4 | 1.9291 | 48.1 |

Note: Non-captive type (N), External type (E) or Captive type (C) is available, and please specify it with the blank box when ordering.

LeadScrewSpecs

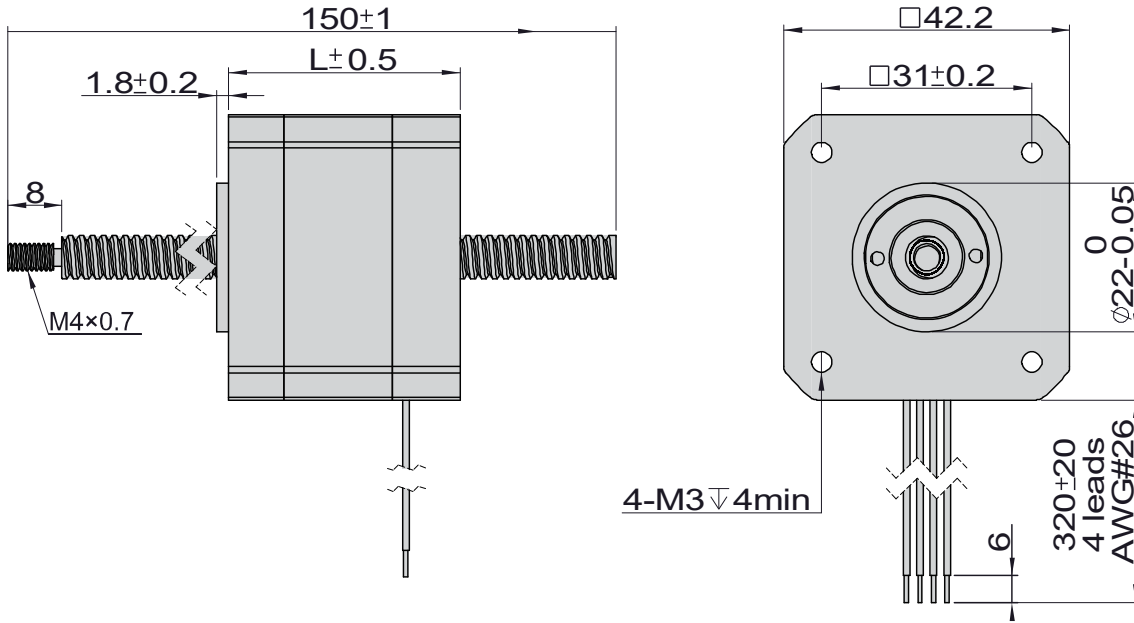
| Lead Code | Screw Dia. | | Lead | | Travel/Step @ 1.8Deg* | | Travel/Step @ 0.9Deg* | |
|-----------|------------|------|--------|--------|-----------------------|--------|-----------------------|--------|
| | inch | mm | inch | mm | inch | mm | inch | mm |
| AA | 0.25 | 6.35 | 0.024 | 0.6096 | 0.00012 | 0.003 | 0.00006 | 0.0015 |
| AB | 0.25 | 6.35 | 0.039 | 1.0000 | 0.00020 | 0.005 | 0.00010 | 0.0025 |
| B | 0.25 | 6.35 | 0.048 | 1.2192 | 0.00024 | 0.006 | 0.00012 | 0.003 |
| D | 0.25 | 6.35 | 0.05 | 1.27 | 0.00025 | 0.006 | 0.00013 | 0.0032 |
| F | 0.25 | 6.35 | 0.063 | 1.6002 | 0.00032 | 0.008 | 0.00016 | 0.004 |
| H | 0.31 | 8.00 | 0.083 | 2.1167 | 0.00042 | 0.0106 | 0.00021 | 0.0053 |
| J | 0.25 | 6.35 | 0.096 | 2.4384 | 0.00048 | 0.012 | 0.00024 | 0.0061 |
| K | 0.25 | 6.35 | 0.1 | 2.54 | 0.0005 | 0.013 | 0.00025 | 0.0064 |
| L | 0.25 | 6.35 | 0.125 | 3.175 | 0.0006 | 0.016 | 0.00031 | 0.0079 |
| Q | 0.25 | 6.35 | 0.192 | 4.8768 | 0.00096 | 0.024 | 0.00048 | 0.0122 |
| S | 0.25 | 6.35 | 0.25 | 6.35 | 0.00125 | 0.032 | 0.00061 | 0.0155 |
| U | 0.25 | 6.35 | 0.33 | 8.382 | 0.00167 | 0.042 | 0.0008 | 0.021 |
| W | 0.25 | 6.35 | 0.384 | 9.7536 | 0.00192 | 0.049 | 0.001 | 0.024 |
| Y | 0.25 | 6.35 | 0.5 | 12.7 | 0.0025 | 0.0635 | 0.00125 | 0.0318 |
| Z | 0.25 | 6.35 | 1.0 | 25.4 | 0.005 | 0.127 | 0.0025 | 0.0635 |
| M | 0.315 | 8.0 | 0.175 | 4.0 | 0.00079 | 0.02 | 0.00039 | 0.01 |
| T | 0.315 | 8.0 | 0.315 | 8.0 | 0.00158 | 0.04 | 0.00079 | 0.02 |
| G | 0.315 | 8.0 | 0.0787 | 2.0 | 0.00039 | 0.01 | 0.00020 | 0.005 |

*values truncated

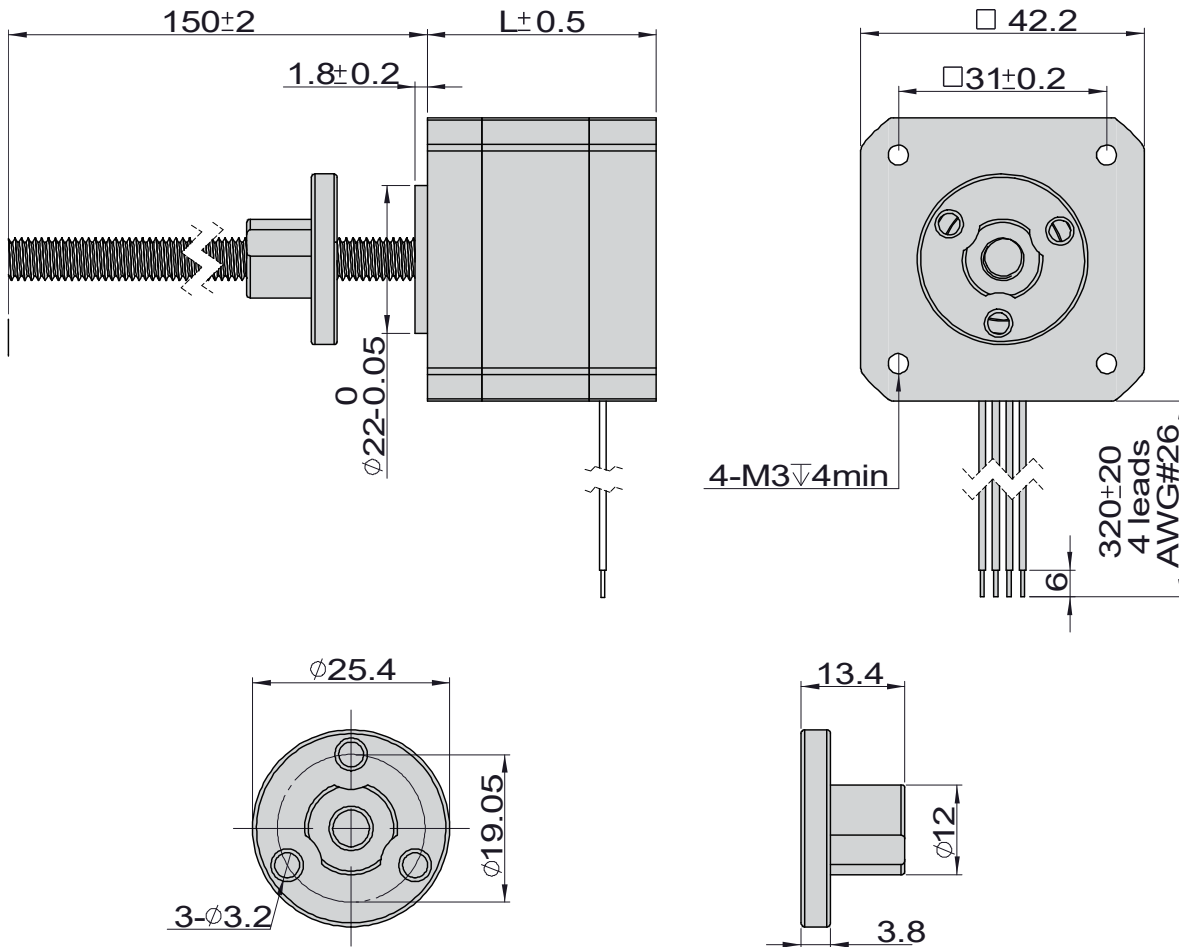
PHBL42 Series

■ Typical Dimension

Non-captive



External



2Phase Hybrid Stepper Motor

3Phase Hybrid Stepper Motor

5Phase Hybrid Stepper Motor

Hybrid Stepper Gear Motor

Lead Screw Linear Actuator

Ball Screw Linear Actuator

IP65 Stepper Motor

Hollow Shaft Stepper Motor

Stepper Motor With Brake

Pancake Stepper Motor

PM Stepper Motor

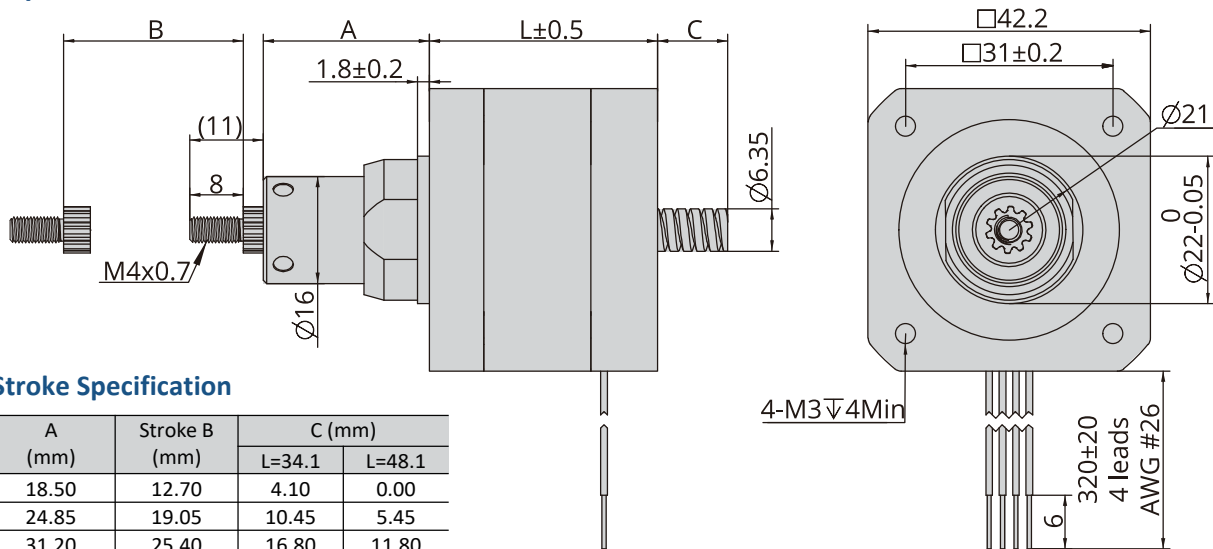
Can-Stack Stepper Linear Actuator

PM Stepper Gear Motor

Stepper Motor Drive

PHBL42 Series

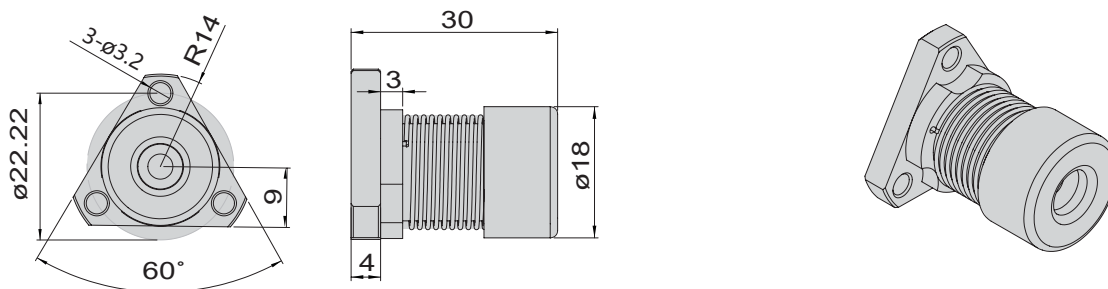
Captive



Stroke Specification

| A (mm) | Stroke B (mm) | C (mm) | |
|--------|---------------|--------|--------|
| | | L=34.1 | L=48.1 |
| 18.50 | 12.70 | 4.10 | 0.00 |
| 24.85 | 19.05 | 10.45 | 5.45 |
| 31.20 | 25.40 | 16.80 | 11.80 |
| 37.55 | 31.80 | 23.15 | 18.15 |
| 43.90 | 38.10 | 29.50 | 24.50 |
| 56.60 | 50.80 | 42.20 | 37.20 |
| 69.30 | 63.50 | 54.90 | 49.90 |

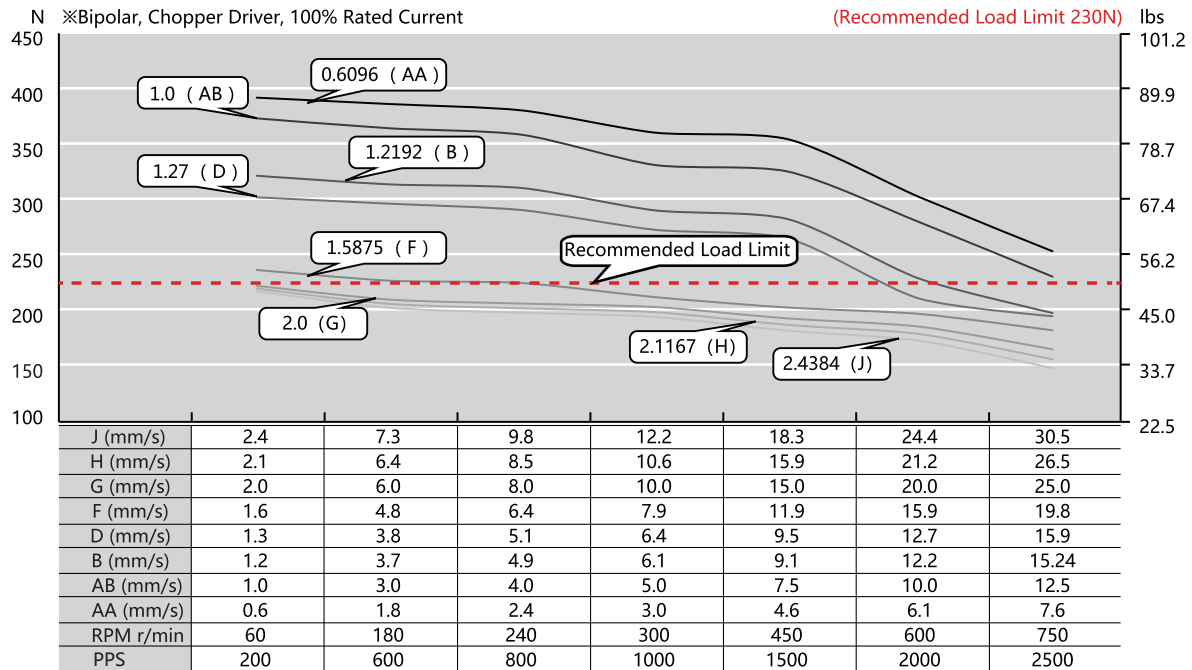
Anti-backlash Nut



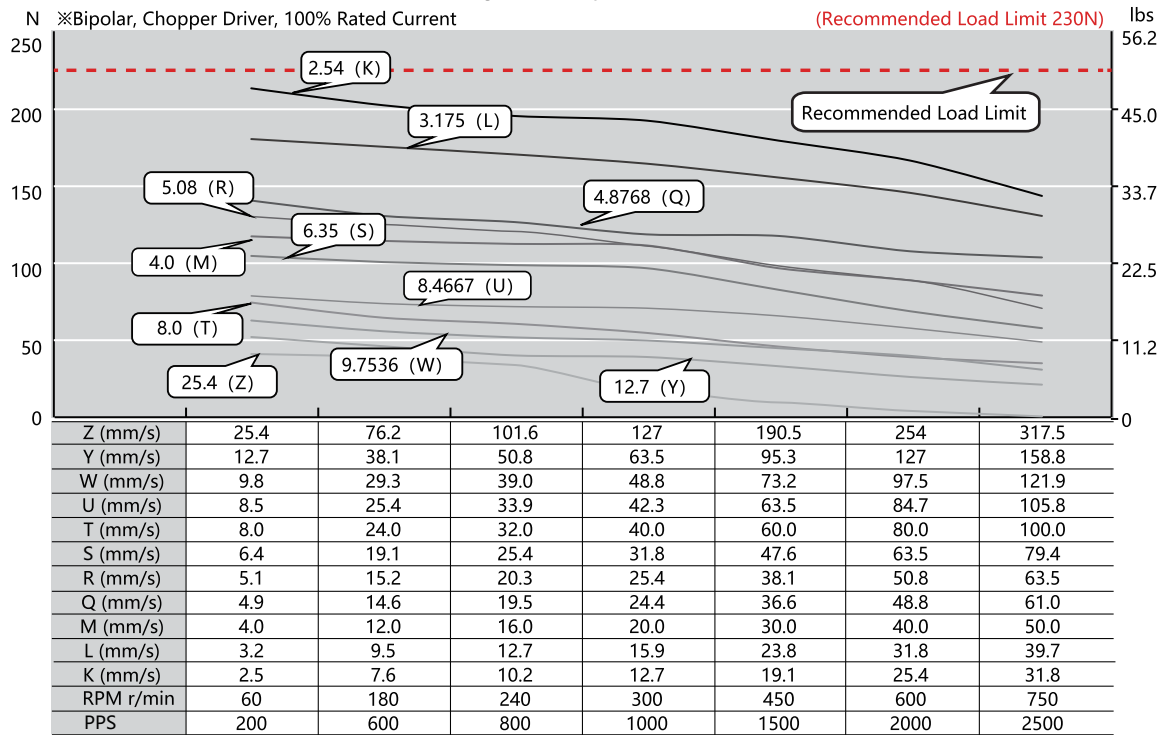
PHBL42 Series

Speed Thrust Curves

Size 17 Single Stack Speed Thrust Curves



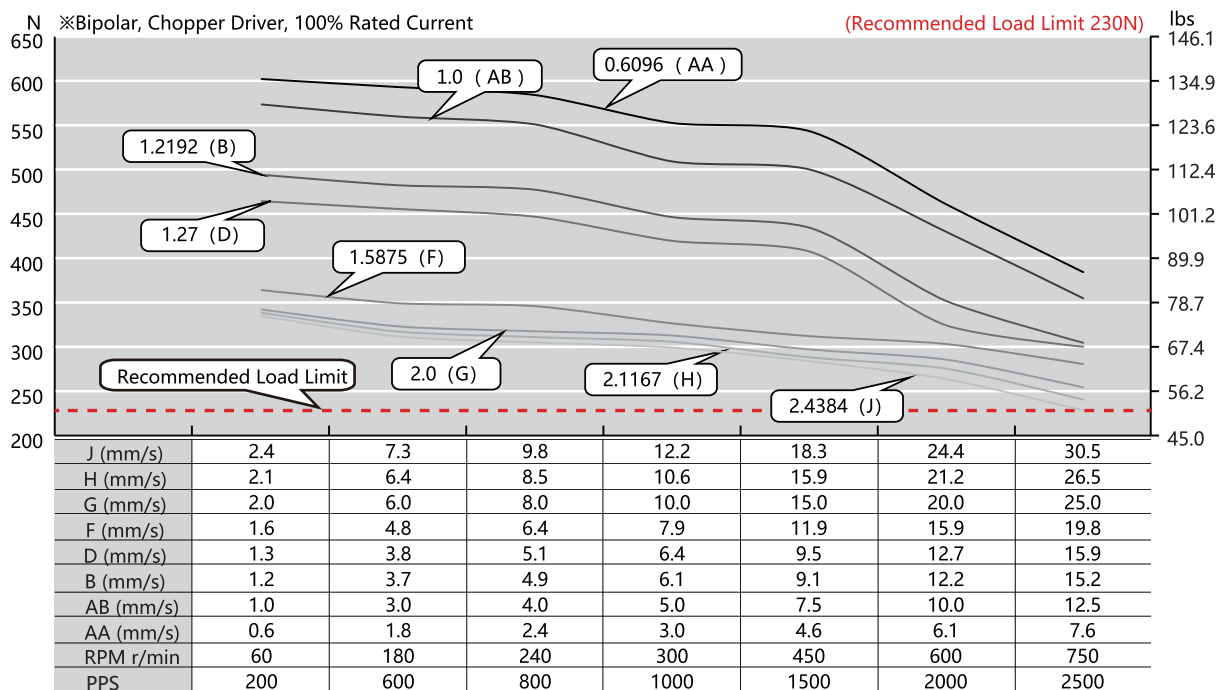
Size 17 Single Stack Speed Thrust Curves



- 2Phase Hybrid Stepper Motor
- 3Phase Hybrid Stepper Motor
- 5Phase Hybrid Stepper Motor
- Hybrid Stepper Gear Motor
- Lead Screw Linear Actuator
- Ball Screw Linear Actuator
- IP65 Stepper Motor
- Hollow Shaft Stepper Motor
- Stepper Motor With Brake
- Pancake Stepper Motor
- PM Stepper Motor
- Can-Stack Stepper Linear Actuator
- PM Stepper Gear Motor
- Stepper Motor Drive

PHBL42 Series

Size 17 Double Stack Speed Thrust Curves



Size 17 Double Stack Speed Thrust Curves

