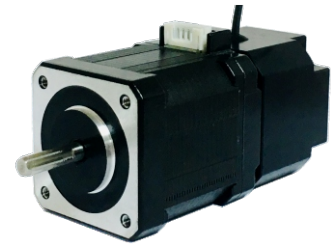


# 42AHS Series Motors with Brake

Nema 17, 2 Phase Hybrid Stepper Motors



## Specifications

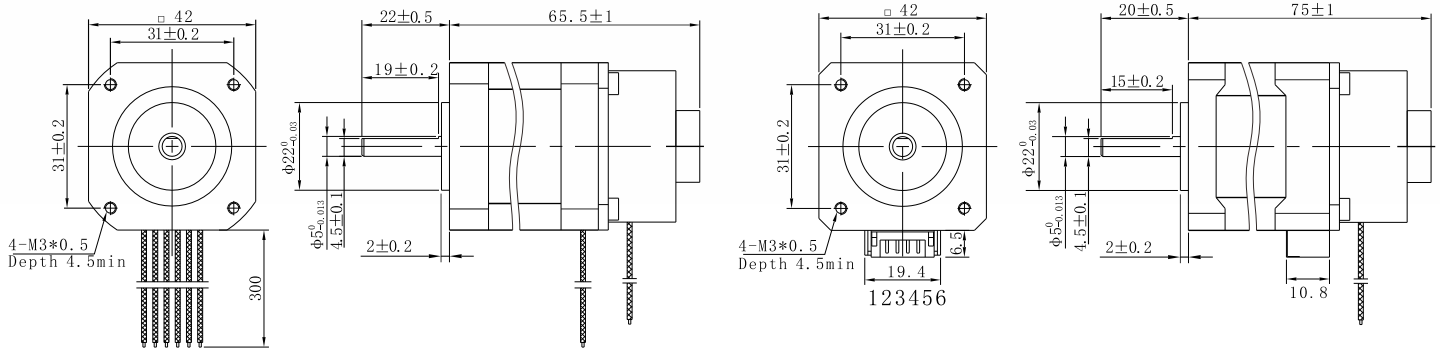
|                          |                                    |
|--------------------------|------------------------------------|
| Step Angle               | 1.8°                               |
| Step Angle Accuracy      | ±0.09° (full step, no load)        |
| Brake Power              | 5W                                 |
| Brake Reaction Time      | 50ms                               |
| Max. Surface Temperature | 100 °C Max.(max. allowed temp.)    |
| Ambient Temperature      | -20 °C ~ +50 °C                    |
| Insulation Resistance    | 500VDC, 100 MΩ Min.                |
| Dielectric Strength      | 500 VAC, 1min, Class B             |
| Max. Radical Load        | 10N                                |
| Max. Axial Load          | 25N (15mm from installation point) |

## Highlights:

- Japanese Top Manufacturer;
- Low Noise, Low Vibration;
- High Speed, High Smoothness;
- High Efficiency, Long lifetime ;
- Flexible in **Customization**:  
Shaft Type(diameters, dual shaft, hollow shaft, flat, key),  
Torque Values, Lead Type etc.

| Model              | Holding Torque N.m | Current A/∅ | Resistance Ω/∅ | Inductance mH/∅ | Rotor Inertia g.cm <sup>2</sup> | Bi/Unipolar # of Leads | Brake Torque N.m | Brake Voltage DC V | Weight Kg | Length Include Brake mm |
|--------------------|--------------------|-------------|----------------|-----------------|---------------------------------|------------------------|------------------|--------------------|-----------|-------------------------|
| 42AHS054-2004BR-75 | 0.54               | 2.0         | 1.8            | 4.0             | 66                              | Bi(4)                  | 0.6              | 24                 | 0.5       | 75                      |
| 42AHS031-1606BR-66 | 0.31               | 1.6         | 1.9            | 1.8             | 56                              | Bi(6)                  | 0.6              | 24                 | 0.41      | 65.5                    |
| 42AHS043-1106BR-66 | 0.43               | 1.1         | 3.8            | 7.2             | 56                              | Bi(6)                  | 0.6              | 24                 | 0.41      | 65.5                    |

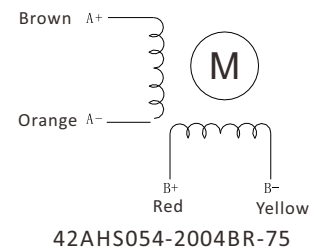
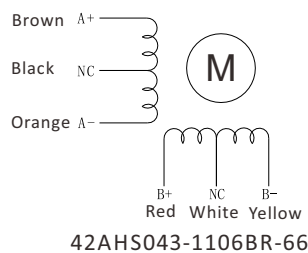
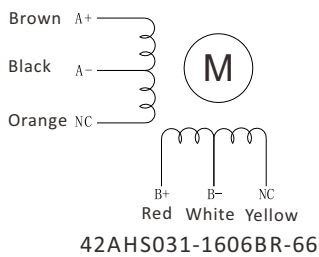
## Mechanical Dimensions in mm



42AHS031-1606BR-66  
42AHS043-1106BR-66

42AHS054-2004BR-75

## Wiring Diagram

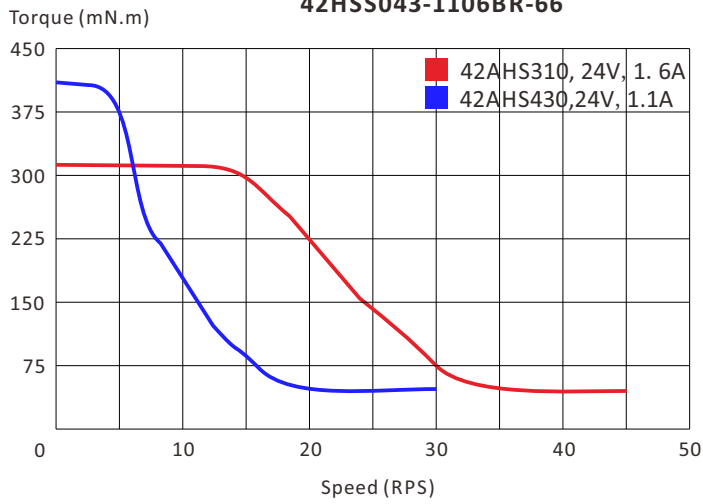


Note: Brake wiring as, Red for 24+ and Black for GND.

# 42AHS Series Torque Speed Curves

Nema 17, 2 Phase Hybrid Stepper Motors

42HSS031-1606BR-66  
42HSS043-1106BR-66



42AHS054-2004BR-75

