



2-Phase Hybrid Stepping Motors 42 (K) Series

High Torque/Volume Ratio, Low Resonance



| | |
|-------------------------------|------------------|
| Insulation Resistance: | 500VDC 100MΩ Min |
| Shaft Axial Play: | 1mm Max |
| Shaft Radial Play: | 0.02mm Max |
| Temperature Rise: | 65K Max |
| Dielectric Strength: | 500VAC 1Minute |
| Ambient Temperature: | -25°C ~ +40°C |
| Class of Insulation: | B |

Electrical Ratings

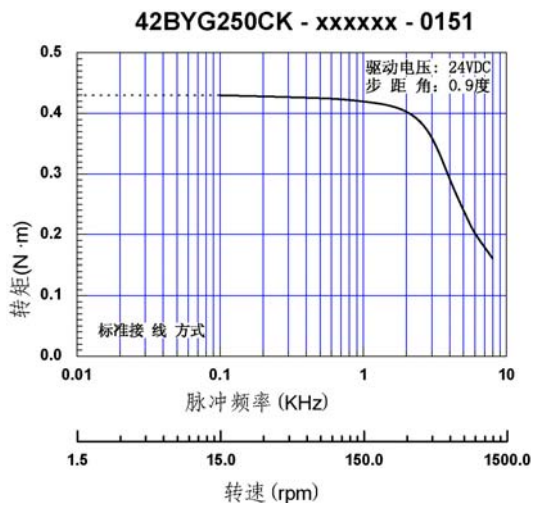
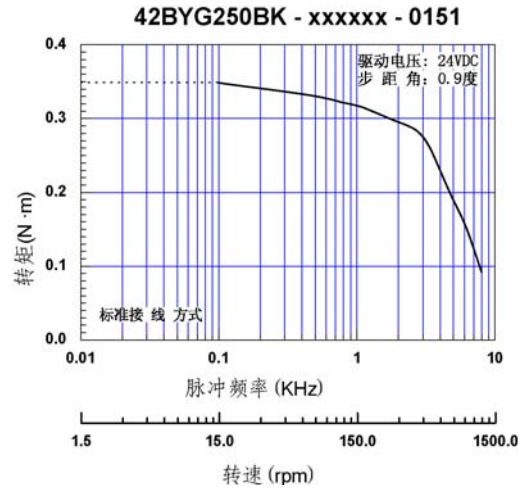
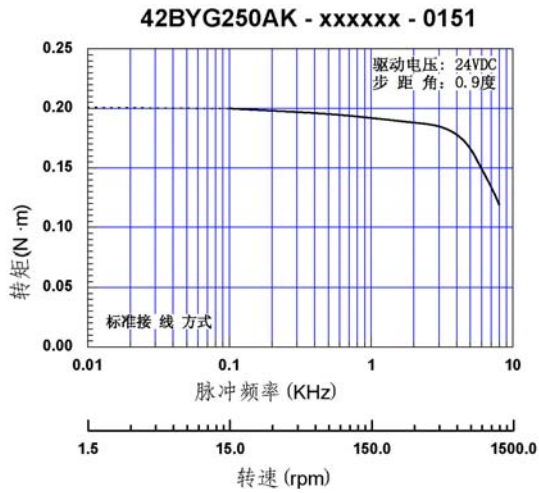
| Items | Module | Phase | Step Angle (°) | Phase Current (A) | Phase Resistance (Ω) | Phase Inductance (mH) | Holding Torque (Nm) | Detent Torque (Nm) | No Load Starting Frequency at Half Step Mode (KHz) | Weight (kg) | Rotor Inertia (gcm ²) | Dimensions |
|--------|------------------------|-------|----------------|-------------------|----------------------|-----------------------|---------------------|--------------------|----------------------------------------------------|-------------|-----------------------------------|------------|
| 000782 | 42BYG250AK-SASSML-0151 | 2 | 0.9/1.8 | 1.5 | 1.3 | 2.1 | 0.23 | 0.012 | 1.6 | 0.21 | 38 | 1 |
| 000769 | 42BYG250AK-BASSML-0151 | 2 | 0.9/1.8 | 1.5 | 1.3 | 2.1 | 0.23 | 0.012 | 1.6 | 0.21 | 38 | 2 |
| 000768 | 42BYG250BK-SASSML-0151 | 2 | 0.9/1.8 | 1.5 | 2.1 | 5.0 | 0.43 | 0.015 | 1.5 | 0.23 | 57 | 1 |
| 000743 | 42BYG250BK-BASSML-0151 | 2 | 0.9/1.8 | 1.5 | 2.1 | 5.0 | 0.43 | 0.015 | 1.5 | 0.23 | 57 | 2 |
| 000760 | 42BYG250CK-SASSML-0151 | 2 | 0.9/1.8 | 1.5 | 2.0 | 3.85 | 0.54 | 0.025 | 1.5 | 0.36 | 82 | 1 |
| 000773 | 42BYG250CK-BASSML-0151 | 2 | 0.9/1.8 | 1.5 | 2.0 | 3.85 | 0.54 | 0.025 | 1.5 | 0.36 | 82 | 2 |

Notes: The exciting voltage for testing the no load starting frequency is 24VDC.

Matched driver: SH-20402N SH-20403 SH-20806E SD-20403 SD-20504

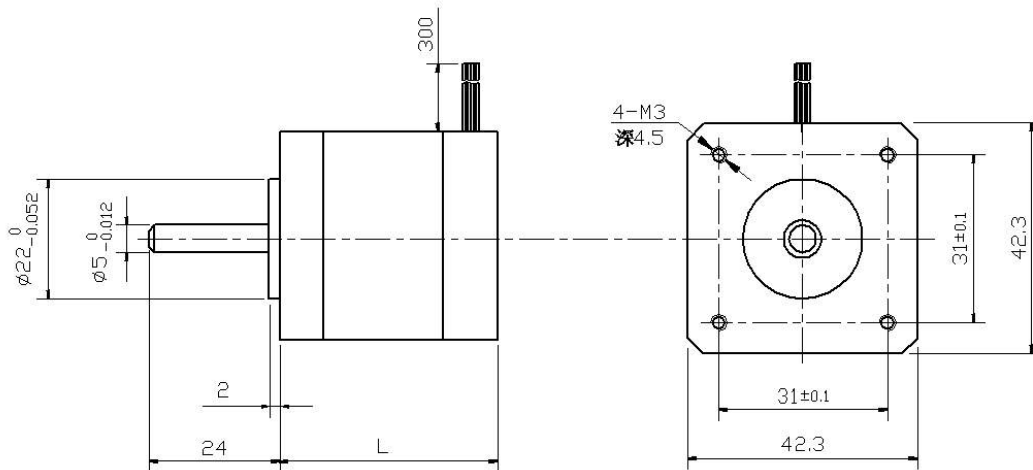
42BYG P1

Pullout torque Speed Curves



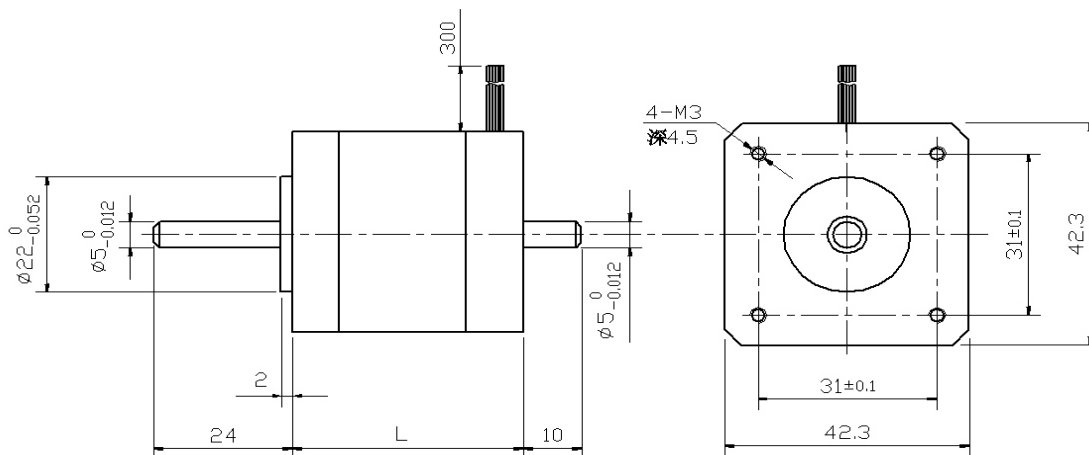
Dimensions [Unit: mm]

Diagram 1 42BYG250x – SASSML –0151



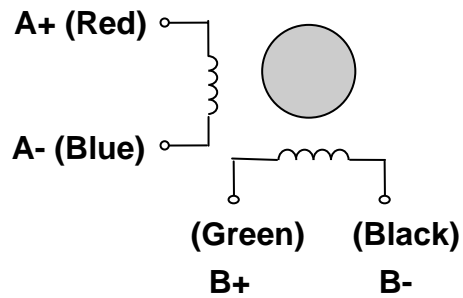
| | 42BYG250AK-SASSML | 42BYG250BK-SASSML | 42BYG250CK-SASSML |
|---|-------------------|-------------------|-------------------|
| L | 34 | 40 | 48 |

Diagram 2 42BYG250x – BASSML –0151



| | 42BYG250AK-BASSML | 42BYG250BK-BASSML | 42BYG250CK-BASSML |
|---|-------------------|-------------------|-------------------|
| L | 34 | 40 | 48 |

Wiring Diagram



- ⚠ Cautions:**
1. Flange mounting is mandatory for concentricity.
 2. Hazard will happen for wrong connection.