

General Specifications

- Dielectric strength : 1000VAC
- Insulation resistance : 100M (500VDC)
- Insulation type : B type
- Allowable radial load : 75N
- Allowable thrust load : 15N
- * The load point is 1/3 from the axis end



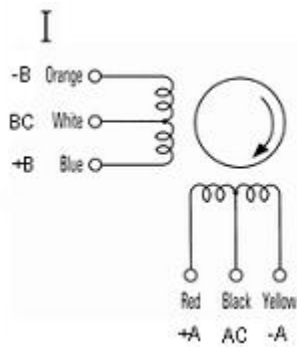
Specifications (unipolar windings)

| Model | Axis | Basic step angle (°) | Voltage | Current (A/phase) | Resistance (Ω/phase) | Inductance (mH/phase) | Holding torque N.m(kgf.cm) | Rotor inertia (× 10 ⁻⁴ kg.m ²) | Mass (Kg) | Connection Cord |
|---------------------|----------------------|----------------------|-----------|-------------------|----------------------|-----------------------|----------------------------|-------------------------------------------------------|-----------|-----------------|
| 103H7121-0140(0110) | One axis (both axes) | 1.8 | 4.8 | 1 | 4.8 | 9.3 | 0.39(4) | 0.1 | 0.47 | |
| 103H7121-0440(0410) | | | 2.5 | 2 | 1.25 | 1.9 | | | | |
| 103H7121-0740(0710) | | | 1.8 | 3 | 0.6 | 0.8 | | | | |
| 103H7123-0140(0110) | | | 0.83(8.5) | 0.21 | 6.7 | 1 | 6.7 | 15 | | |
| 103H7123-0440(0410) | | | | | 3.2 | 2 | 1.6 | 3.8 | | |
| 103H7123-0740(0710) | | | | | 2.3 | 3 | 0.77 | 1.58 | | |
| 103H7124-0140(0110) | | | | | 7 | 1 | 7 | 12.5 | | |
| 103H7124-0440(0410) | | | | | 3.4 | 2 | 1.7 | 3.1 | | |
| 103H7124-0740(0710) | | | | | 2.2 | 3 | 0.74 | 1.4 | | |
| 103H7126-0140(0110) | | | 0.98(10) | 0.245 | 8.6 | 1 | 8.6 | 19 | | |
| 103H7126-0440(0410) | | | | | 4 | 2 | 2 | 4.5 | | |
| 103H7126-0740(0710) | | | | | 2.75 | 3 | 0.9 | 2.2 | | |

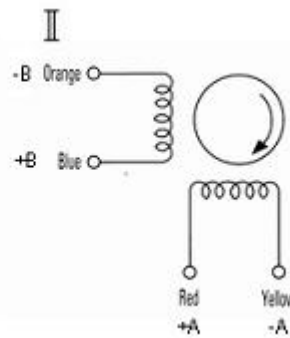
Specifications (bipolar windings)

| Model | Axis | Basic step angle (°) | Voltage | Current (A/phase) | Resistance (Ω/phase) | Inductance (mH/phase) | Holding torque N.m(kgf.cm) | Rotor inertia (× 10 ⁻⁴ kg.m ²) | Mass (Kg) | Connection Cord |
|---------------------|----------------------|----------------------|---------|-------------------|----------------------|-----------------------|----------------------------|-------------------------------------------------------|-----------|-----------------|
| 103H7121-5040(5010) | One axis (both axes) | 1.8 | 1.3 | 2 | 0.65 | 1.9 | 0.39(4) | 0.1 | 0.47 | |
| 103H7123-5040(5010) | | | 1.6 | | 0.8 | 3.8 | 0.83(8.5) | 0.21 | 0.65 | |
| 103H7126-5040(5010) | | | 2.1 | | 1.05 | 4.5 | 1.27(13) | 0.36 | 0.98 | |

Motor inner connections and rotation direction (as viewed from the mounting base)

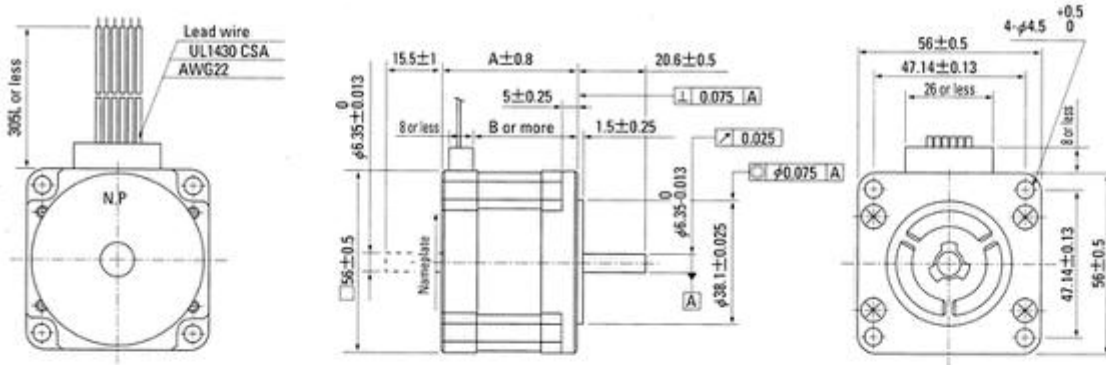


| | | Color of lead | | | | |
|------|---|-----------------|-----|------|--------|--------|
| | | Black and white | Red | Blue | Yellow | Orange |
| Step | 1 | ⊕ | ⊖ | ⊖ | | |
| | 2 | ⊕ | | ⊖ | ⊖ | |
| | 3 | ⊕ | | | ⊖ | ⊖ |
| | 4 | ⊕ | ⊖ | | | ⊖ |



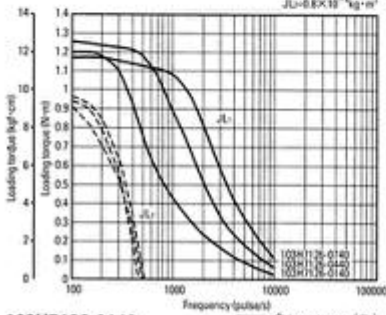
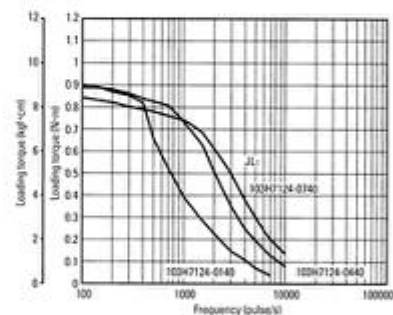
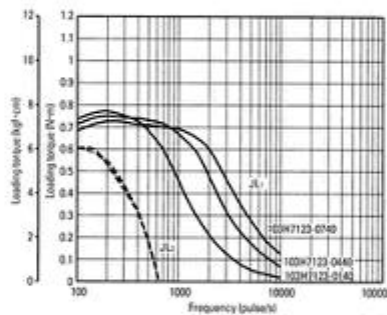
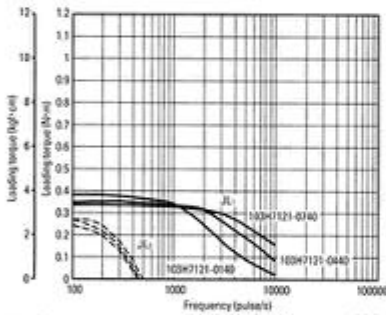
| | | Color of lead | | | |
|------|---|---------------|------|--------|--------|
| | | Red | Blue | Yellow | Orange |
| Step | 1 | ⊖ | ⊖ | ⊕ | ⊕ |
| | 2 | ⊕ | ⊖ | ⊖ | ⊕ |
| | 3 | ⊕ | ⊕ | ⊖ | ⊖ |
| | 4 | ⊖ | ⊕ | ⊕ | ⊖ |

■ Dimension (unipolar windings) [unit:mm]



| Model | A(mm) | B(mm) |
|---------------|-------|-------|
| 103H7121-□□□□ | 41.8 | 32.2 |
| 103H7123-□□□□ | 53.8 | 44.2 |
| 103H7124-□□□□ | 63.8 | 54.2 |
| 103H7126-□□□□ | 75.8 | 66.2 |

■ Frequency-torque characteristics (2-phase excitation drive)



*The measured current is based on the specification.