

General Specifications

Dielectric strength : 1000VAC

Insulation resistance : 100M (500VDC)

Insulation type : B type

Allowable radial load : 80N

Allowable thrust load : 20N

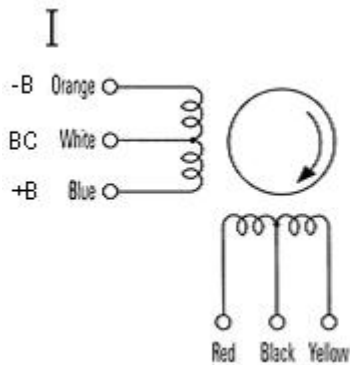
* The load point is 1/3 from the axis end



Specifications

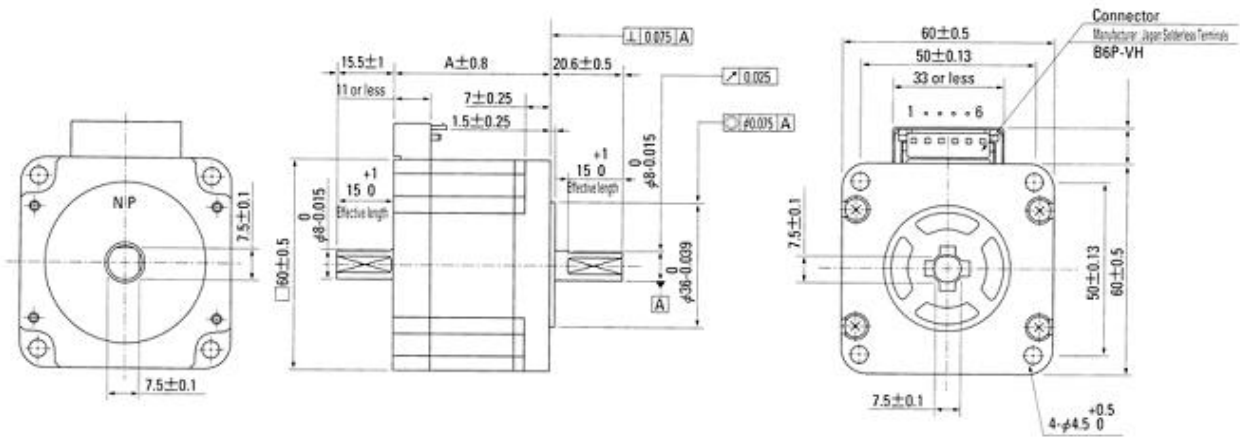
| Model | Axis | Basic step angle (°) | Voltage | Current (A/phase) | Resistance (Ω/phase) | Inductance (mH/phase) | Holding torque N.m(kgf.cm) | Rotor inertia (× 10 ⁻⁴ kg.m ²) | Mass (Kg) | Connection Cord |
|---------------------|----------------------|----------------------|---------|-------------------|----------------------|-----------------------|----------------------------|---|-----------|-----------------|
| 103H7821-0140(0110) | One axis (both axes) | 1.8 | 5.7 | 1 | 5.7 | 8.3 | 0.83(8.5) | 0.275 | 0.6 | |
| 103H7821-0440(0410) | | | 3 | 2 | 1.5 | 2 | | | | |
| 103H7821-0740(0710) | | | 2.04 | 3 | 0.68 | 0.8 | | | | |
| 103H7822-0140(0110) | | | 8 | 1 | 6.9 | 14 | 1.17(12) | 0.4 | 0.77 | |
| 103H7822-0440(0410) | | | 4 | 2 | 1.8 | 3.6 | | | | |
| 103H7822-0740(0710) | | | 2.74 | 3 | 0.8 | 1.38 | | | | |
| 103H7823-0140(0110) | | | 10.4 | 1 | 10.4 | 21.7 | 2.1(21) | 0.84 | 1.34 | |
| 103H7823-0440(0410) | | | 5.2 | 2 | 2.6 | 5.6 | | | | |
| 103H7823-0740(0710) | | | 3.6 | 3 | 1.2 | 2.4 | | | | |

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 | ⊕ | ⊖ | | | ⊖ |

■Dimension (unipolar windings) [unit:mm]



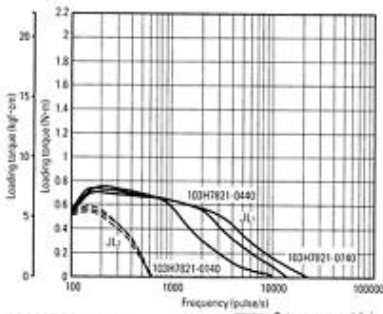
Note about applicable connector (Jagan Solderless Terminals)

| | |
|------------|--|
| Solderless | Housing : VHR-6N Contact : SVH-2IT-P1-1 |
|------------|--|

Note : The applicable housing and contact must be provided by the customer.

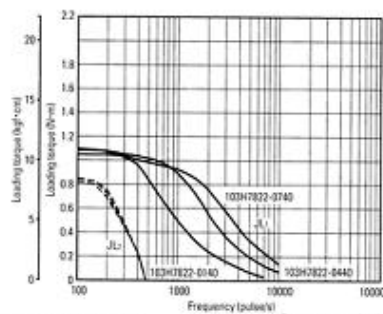
| Model | A(mm) | B(mm) |
|---------------|-------|-------|
| 103H7821-□□□□ | 44.8 | 00.0 |
| 103H7822-□□□□ | 53.8 | 00.0 |
| 103H7823-□□□□ | 85.8 | 00.0 |

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



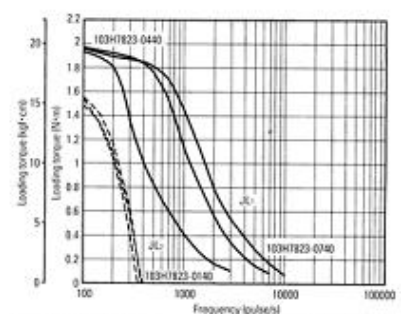
103H7821-0140
103H7821-0440
103H7821-0740

— : Getaway torque (JL)
- - - : Starting torque (JL)
Drive circuit = SLA-7026M
E=24V
JL=8.94×10⁻³ kg·m²
JL=0.8×10⁻³ kg·m²



103H7822-0140
103H7822-0440
103H7822-0740

— : Getaway torque (JL)
- - - : Starting torque (JL)
Drive circuit = SLA-7026M
E=24V
JL=7.4×10⁻³ kg·m²



103H7823-0140
103H7823-0440
103H7823-0740

— : Getaway torque (JL)
- - - : Starting torque (JL)
Drive circuit = SLA-7026M
E=24V
JL=7.4×10⁻³ kg·m²

*The measured current is based on the specification.