

General Specifications

- Dielectric strength : 500VAC
- Insulation resistance : 100M (500VDC)
- Insulation type : B type
- Allowable radial load : 28N
- Allowable thrust load : 10N
- * The load point is 1/3 from the axis end



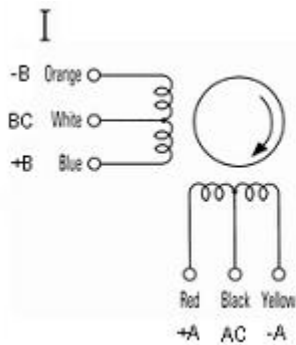
Specifications (unipolar windings)

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
103H546-0440(0410)	One axis (both axes)	1.8	3.15	1	3.15	2.8	0.147(1.5)	0.03	0.2	
103H548-0440(0410)			3.6	1.2	3	4.3	0.265(2.7)	0.053	0.28	
103H549-0440(0410)			3.96	1.2	3.3	3.8	0.315(3.2)	0.065	0.35	

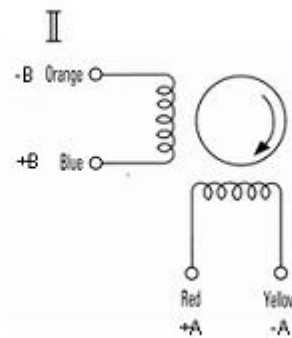
Specifications (bipolar windings)

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
103H546-5040(5010)	One axis (both axes)	1.8	3.15	2	0.6	0.7	0.147(1.5)	0.03	0.2	
103H548-5040(5010)			3.6	2	0.8	1.5	0.265(2.7)	0.053	0.28	

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	⊕	⊖			⊖



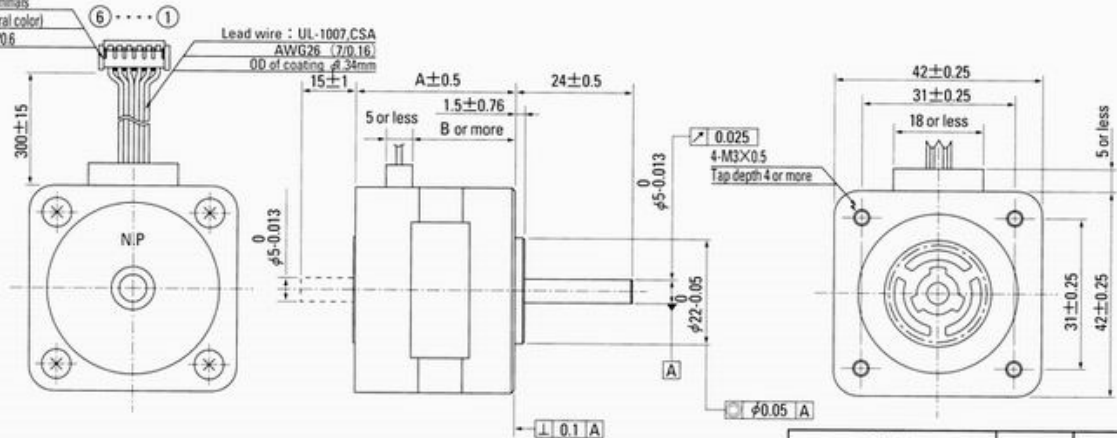
		Color of lead			
		Red	Blue	Yellow	Orange
Step	1	⊖	⊖	⊕	⊕
	2	⊕	⊖	⊖	⊕
	3	⊕	⊕	⊖	⊖
	4	⊖	⊕	⊕	⊖

Dimension (unipolar windings) [unit:mm]

Manufacturer: Japan Solderless Terminals
 Housing: FHR-8 (natural color)
 Terminal: SEH-001T-P0.6

Lead wire: UL-1007.CSA
 AWG26 (7/0.16)
 OD of coating: $\phi 0.24$ mm

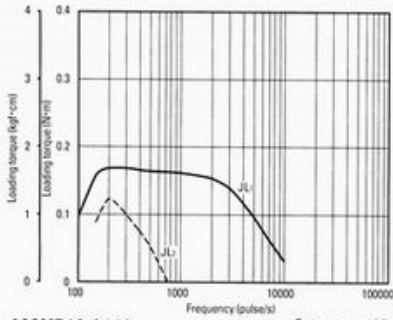
Pin No.	Lead wire
1	Blue
2	Yellow
3	White
4	Black
5	Orange
6	Red



Model	A(mm)	B(mm)
103H546-□□□□	32	21.5
103H548-□□□□	41	30.5
103H549-□□□□	47	36.5

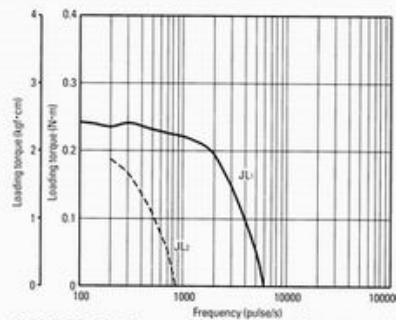
*The bipolar windings consist only of lead wires.

Frequency-torque characteristics (2-phase excitation drive)



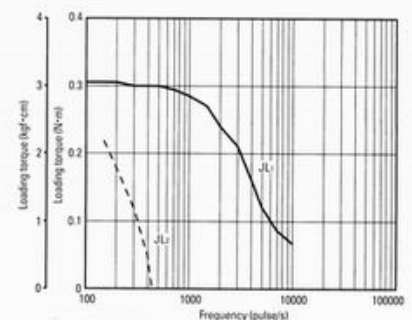
103H546-0440

— : Getaway torque (JL₁)
 - - - : Starting torque (JL₂)
 Drive circuit = SLA-7026M
 E = 24V
 JL₁ = 0.33×10^{-4} kg·m²
 JL₂ = 0.175×10^{-4} kg·m²



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— : Getaway torque (JL₁)
 - - - : Starting torque (JL₂)
 Drive circuit = SLA-7026M
 E = 24V
 JL₁ = 0.94×10^{-4} kg·m²
 JL₂ = 0.8×10^{-4} kg·m²



103H549-0440

— : Getaway torque (JL₁)
 - - - : Starting torque (JL₂)
 Drive circuit = SLA-7026M
 E = 24V
 JL₁ = 0.94×10^{-4} kg·m²
 JL₂ = 0.8×10^{-4} kg·m²

*The measured current is based on the specification.