



## Ultra-high vacuum stepping motors

For environment in  $10^{-8}$ Pa (For reference).

103H-□□□□-5□□□  
103-□□□□-5□□□

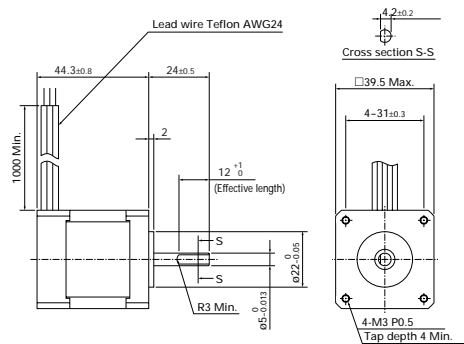
● For detailed information on applicable drivers, contact our Sales Department.

## Specifications

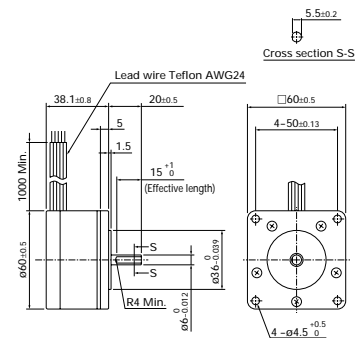
Model Number	Number of phases	Basic step angle	Holding torque	Rated current	Wiring resistance	Wiring inductance	Rotor inertia x 10 <sup>-4</sup> ·kg·m <sup>2</sup>	Weight kg
			N.m or more	A/phase	Ω/phase	mH/phase		
103-4510-54V2	5	0.36°	0.14	1.5	0.89	0.87	0.036	0.4
103-7556-50V2	5	0.45°	0.26	0.75	2.5	7	0.057	0.6
103-7501-52V1	5	0.72°	0.39	1.5	0.79	1.5	0.105	0.8
103H7523-56V2	5	0.72°	1.47	1.5	2.1	5.2	0.423	1.2

## Dimensions (Unit : mm)

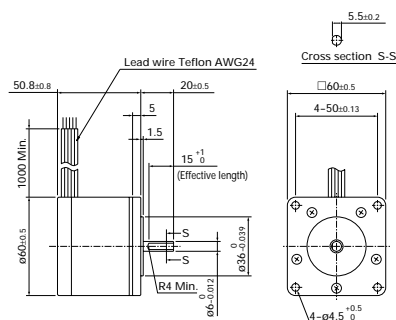
103-4510-54V2



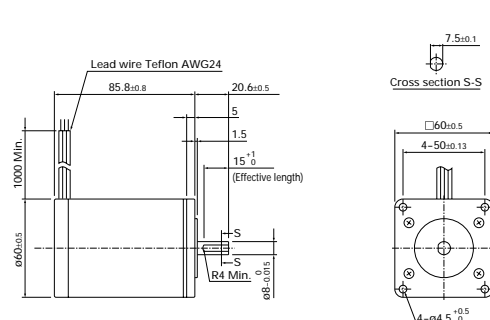
103-7556-50V2



103-7501-52V1

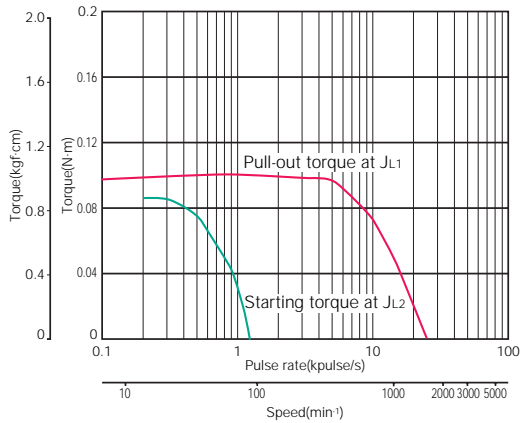


103H7523-56V2



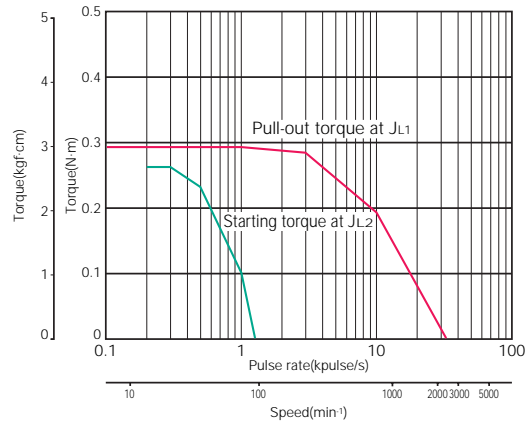
# Pulse rate-torque characteristics

## ●103-4510-54V2



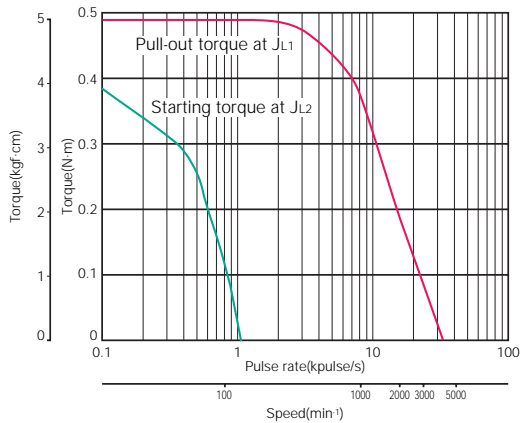
Sanyo constant current circuit  
 Source voltage : 24V DC · Winding current : 1A/phase  
 5-phase excitation (Full step)  
 $J_{L1}=0.94 \times 10^{-4} \text{kg} \cdot \text{m}^2$  (With rubber coupling)  
 $J_{L2}=0.8 \times 10^{-4} \text{kg} \cdot \text{m}^2$  (With direct-coupled coupling)

## ●103-7556-50V2



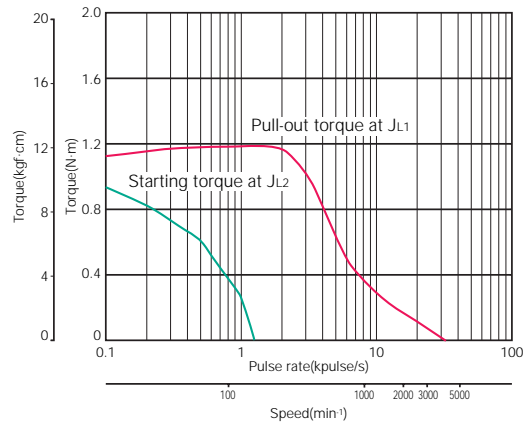
Sanyo constant current circuit  
 Source voltage : 24V DC · Winding current : 0.75A/phase  
 5-phase excitation (Full step)  
 $J_{L1}=0.94 \times 10^{-4} \text{kg} \cdot \text{m}^2$  (With rubber coupling)  
 $J_{L2}=0.8 \times 10^{-4} \text{kg} \cdot \text{m}^2$  (With direct-coupled coupling)

## ●103-7501-52V1



Sanyo constant current circuit  
 Source voltage : 24V DC · Winding current : 1A/phase  
 5-phase excitation (Full step)  
 $J_{L1}=0.94 \times 10^{-4} \text{kg} \cdot \text{m}^2$  (With rubber coupling)  
 $J_{L2}=0.8 \times 10^{-4} \text{kg} \cdot \text{m}^2$  (With direct-coupled coupling)

## ●103H7523-56V2



Sanyo constant current circuit  
 Source voltage : 24V DC · Winding current : 1A/phase  
 5-phase excitation (Full step)  
 $J_{L1}=2.6 \times 10^{-4} \text{kg} \cdot \text{m}^2$  (With rubber coupling)  
 $J_{L2}=2.6 \times 10^{-4} \text{kg} \cdot \text{m}^2$  (With direct-coupled coupling)

- 39mm (0.36")
- 60mm (0.45")
- 28mm (0.72")
- 42mm (0.72")
- 50mm (0.72")
- 60mm (0.72")
- 86mm (0.72")
- 106mm (0.72")
- CE marked
- Specifications of 5-phase stepping motor
- In-vacuum stepping motor