



# 5-phase stepping motor

**60mm sq.** 103H785□-□□□□  
0.72°/step

●Applicable drivers

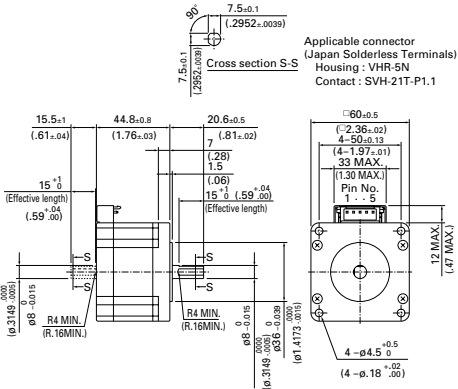


## Specifications

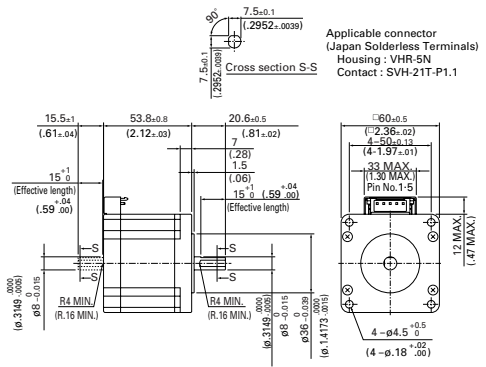
Model number		Holding torque at 5-phase energization	Rated current	resistance	inductance	Rotor inertia	Mass (Weight)
Single shaft	Double shaft	N.m(oz-in) MIN.	A/phase	Ω/phase	mH/phase	x10 <sup>-4</sup> kg-m <sup>2</sup> (oz-in <sup>2</sup> )	kg(lbs)
103H7851-7051	-7021	0.65(92.0)	0.75	2.75	4.75	0.275(1.50)	0.6(1.32)
103H7851-8051	-8021	0.65(92.0)	1.5	0.64	1.2	0.275(1.50)	0.6(1.32)
103H7852-7051	-7021	0.98(138.8)	0.75	3.4	7.75	0.4(2.19)	0.78(1.72)
103H7852-8051	-8021	0.98(138.8)	1.5	0.8	2	0.4(2.19)	0.78(1.72)
103H7853-7051	-7021	1.86(263.4)	0.75	5.5	15	0.84(4.59)	1.36(3.00)
103H7853-8051	-8021	1.86(263.4)	1.5	1.28	3.85	0.84(4.59)	1.36(3.00)

## Dimensions [unit:mm(inch)]

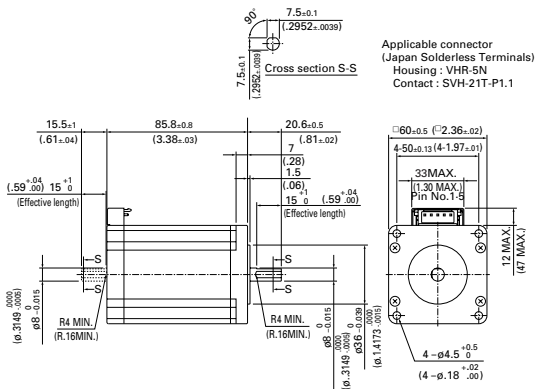
103H7851-7051/8051 (Single shaft)  
103H7851-7021/8021 (Double shaft)



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103H7852-7021/8021 (Double shaft)

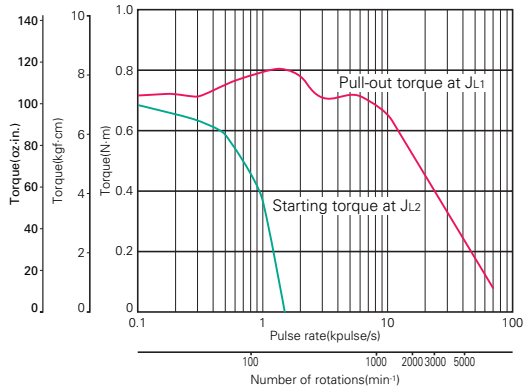


103H7853-7051/8051 (Single shaft)  
103H7853-7021/8021 (Double shaft)



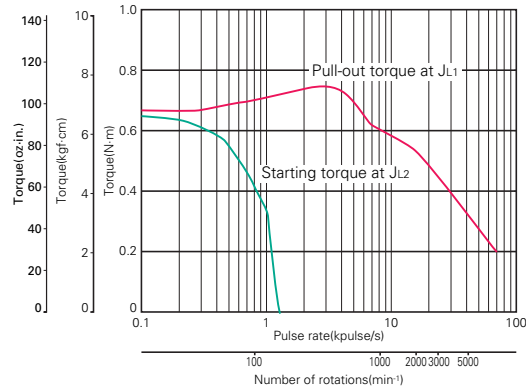
# Pulse rate-torque characteristics

## ●103H7851-7051



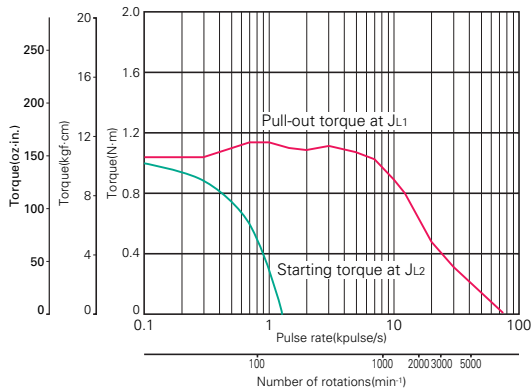
Sanyo constant current circuit  
 Source voltage : 100V AC-Operating current : 0.75A/phase  
 5-phase excitation (Full step)  
 $J_{L1}=0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$  [5.14 oz-in<sup>2</sup>] (Use the rubber coupling)  
 $J_{L2}=0.8 \times 10^{-4} \text{kg}\cdot\text{m}^2$  [4.37 oz-in<sup>2</sup>] (Use the direct coupling)

## ●103H7851-8051



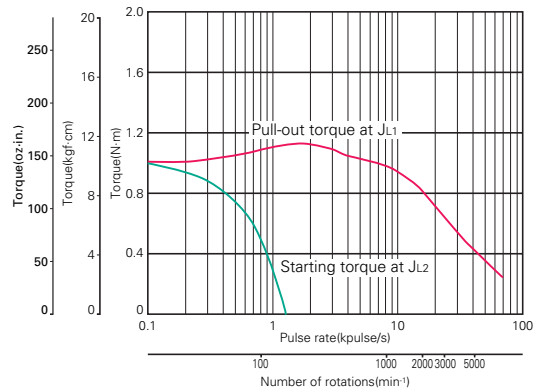
Sanyo constant current circuit  
 Source voltage : 100V AC-Operating current : 1.5A/phase  
 5-phase excitation (Full step)  
 $J_{L1}=0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$  [5.14 oz-in<sup>2</sup>] (Use the rubber coupling)  
 $J_{L2}=0.8 \times 10^{-4} \text{kg}\cdot\text{m}^2$  [4.37 oz-in<sup>2</sup>] (Use the direct coupling)

## ●103H7852-7051



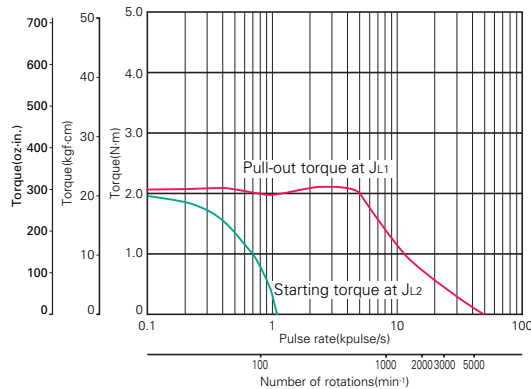
Sanyo constant current circuit  
 Source voltage : 100V AC-Operating current : 0.75A/phase  
 5-phase excitation (Full step)  
 $J_{L1}=2.6 \times 10^{-4} \text{kg}\cdot\text{m}^2$  [14.22 oz-in<sup>2</sup>] (Use the rubber coupling)  
 $J_{L2}=2.6 \times 10^{-4} \text{kg}\cdot\text{m}^2$  [14.22 oz-in<sup>2</sup>] (Use the direct coupling)

## ●103H7852-8051



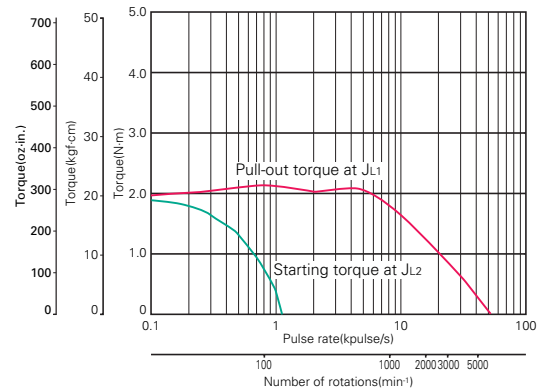
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 Source voltage : 100V AC-Operating current : 1.5A/phase  
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- 39mm (0.36")
- 60mm (0.45")
- 28mm (0.72")
- 42mm (0.72")
- 50mm (0.72")
- 60mm (0.72")
- 60mm (0.72")
- 86mm (0.72")
- 106mm (0.72")
- CE marked
- Specifications of 5-phase stepping motor
- In-vacuum stepping motor