



2-phase Stepping Motor

56mm sq. 103H712
1.8°/step

- For information on the applicable driver, contact our sales department.

Specifications

Unipolar winding

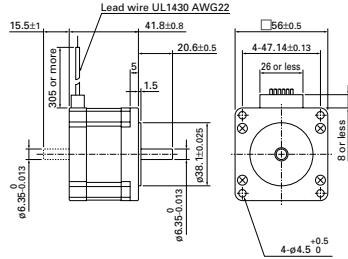
Model		Holding torque at 2-phase energization	Rated current	Wiring resistance	Wiring inductance	Rotor inertia	Weight
One shaft	Two shafts	N.m or more	A/phase	Ω/phase	mH/phase	x10 ⁻⁴ kg·m ²	kg
103H7121-0140	-0110	0.39	1	4.8	8	0.1	0.47
103H7121-0440	-0410	0.39	2	1.25	1.9	0.1	0.47
103H7121-0740	-0710	0.39	3	0.6	0.8	0.1	0.47
103H7123-0140	-0110	0.83	1	6.7	15	0.21	0.65
103H7123-0440	-0410	0.83	2	1.6	3.8	0.21	0.65
103H7123-0740	-0710	0.78	3	0.77	1.58	0.21	0.65
103H7124-0140	-0110	0.98	1	7	12.5	0.245	0.8
103H7124-0440	-0410	0.98	2	1.7	3.1	0.245	0.8
103H7124-0740	-0710	0.98	3	0.74	1.4	0.245	0.8
103H7126-0140	-0110	1.27	1	8.6	19	0.36	0.98
103H7126-0440	-0410	1.27	2	2	4.5	0.36	0.98
103H7126-0740	-0710	1.27	3	0.9	2.2	0.36	0.98

Bipolar winding

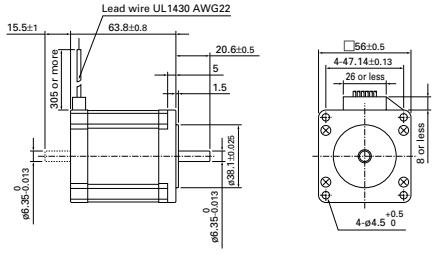
Model		Holding torque at 2-phase energization	Rated current	Wiring resistance	Wiring inductance	Rotor inertia	Weight
One shaft	Two shafts	N.m or more	A/phase	Ω/phase	mH/phase	x10 ⁻⁴ kg·m ²	kg
103H7121-5040	-5010	0.39	2	0.65	1.9	0.1	0.47
103H7123-5040	-5010	0.83	2	0.8	3.8	0.21	0.65
103H7126-5040	-5010	1.27	2	1.05	4.5	0.36	0.98

Dimensions (Unit: mm)

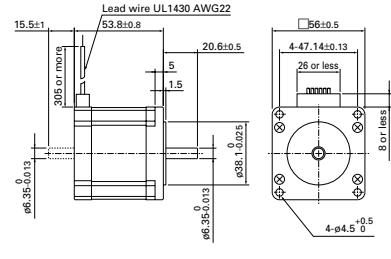
**103H7121-0140/0440/0740/5040 (Single shaft)
103H7121-0110/0410/0710/5010 (Double shaft)**



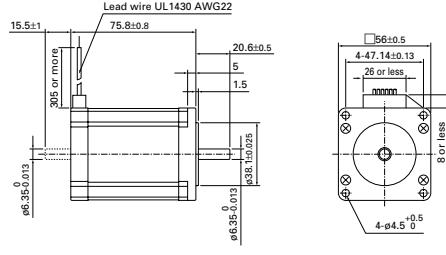
**103H7124-0140/0440/0740 (Single shaft)
103H7124-0110/0410/0710 (Double shaft)**



**103H7123-0140/0440/0740/5040 (Single shaft)
103H7123-0110/0410/0710/5010 (Double shaft)**



**103H7126-0140/0440/0740/5040 (Single shaft)
103H7126-0110/0410/0710/5010 (Double shaft)**



1-phase
stepper motor
2-phase
synchronous motor
Specifications of
2-phase
stepper motor

ø106mm(CE)
ø86mm(CE)
ø56mm(CE)
ø106mm(CE)

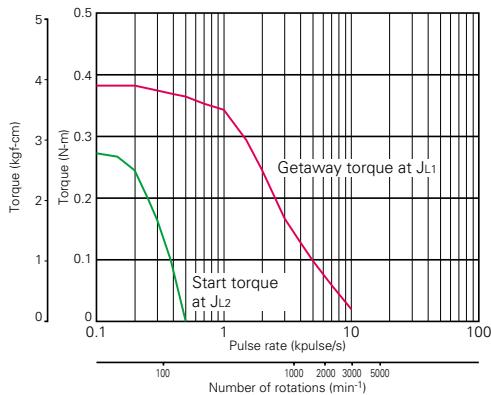
60mm(1.8)
56mm(1.8)
50mm(1.8)
42mm(1.8)

28mm(1.8)
42mm(1.8)
56mm(0.9)
39mm(0.9)

.....
.....
.....
.....

Pulse Rate - Torque Characteristics

●103H7121-0140



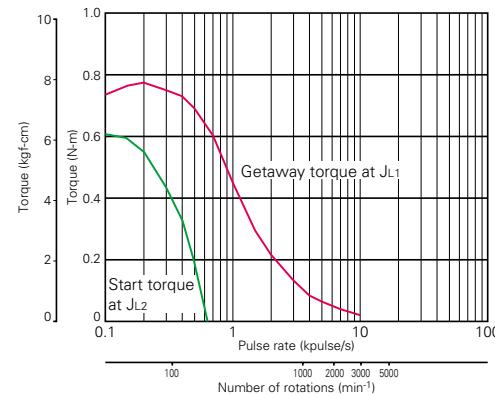
Sanyo constant current circuit

Source voltage: DC24V Wiring current: 1A/phase, 2-phase energization (full-step)

$J_{L1}=0.94\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=0.8\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses direct coupling)

●103H7123-0140



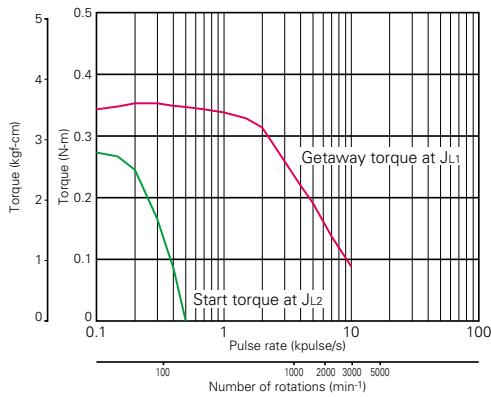
Sanyo constant current circuit

Source voltage: DC24V Wiring current: 1A/phase, 2-phase energization (full-step)

$J_{L1}=0.94\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=0.8\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses direct coupling)

●103H7121-0440



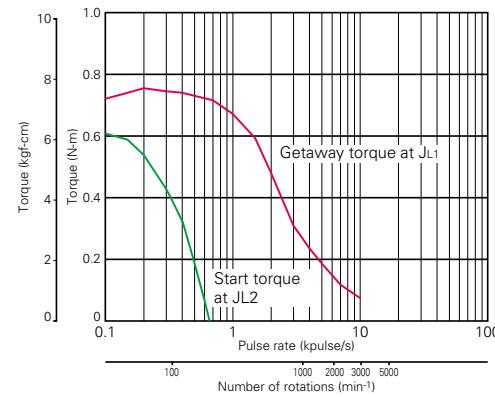
Sanyo constant current circuit

Source voltage: DC24V Wiring current: 2A/phase, 2-phase energization (full-step)

$J_{L1}=0.94\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=0.8\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses direct coupling)

●103H7123-0440



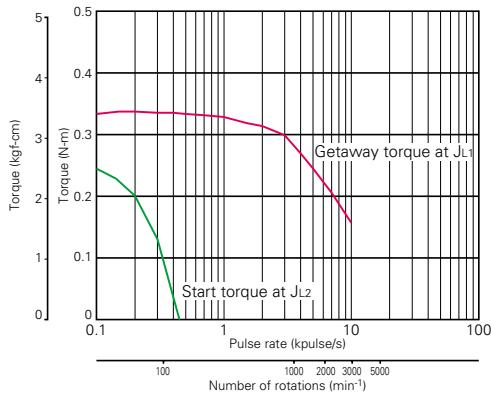
Sanyo constant current circuit

Source voltage: DC24V Wiring current: 2A/phase, 2-phase energization (full-step)

$J_{L1}=0.94\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=0.8\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses direct coupling)

●103H7121-0740



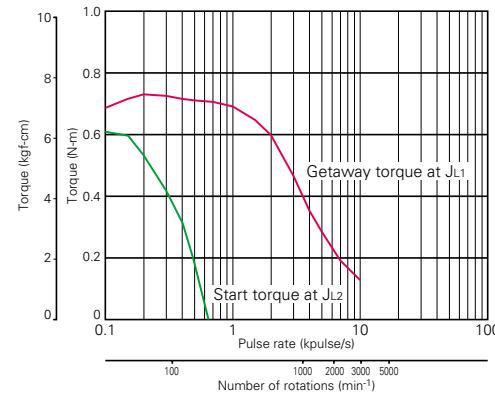
Sanyo constant current circuit

Source voltage: DC24V Wiring current: 3A/phase, 2-phase energization (full-step)

$J_{L1}=0.94\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=0.8\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses direct coupling)

●103H7123-0740



Sanyo constant current circuit

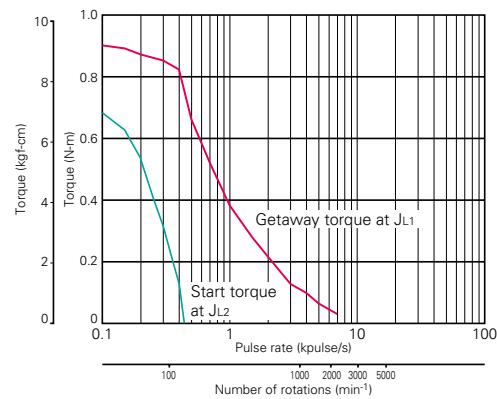
Source voltage: DC24V Wiring current: 3A/phase, 2-phase energization (full-step)

$J_{L1}=0.94\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=0.8\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses direct coupling)

Pulse Rate - Torque Characteristics

●103H7124-0140



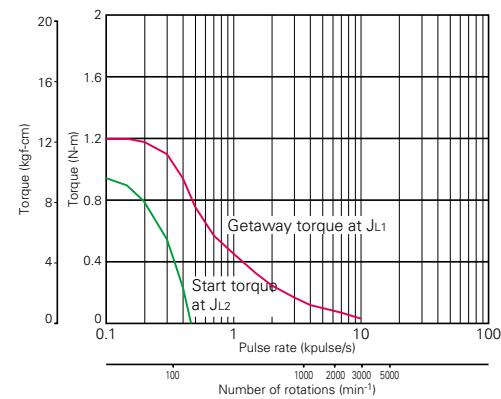
Sanyo constant current circuit

Source voltage: DC24V Wiring current: 1A/phase, 2-phase energization (full-step)

$J_{L1}=2.6\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=2.6\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses direct coupling)

●103H7126-0140



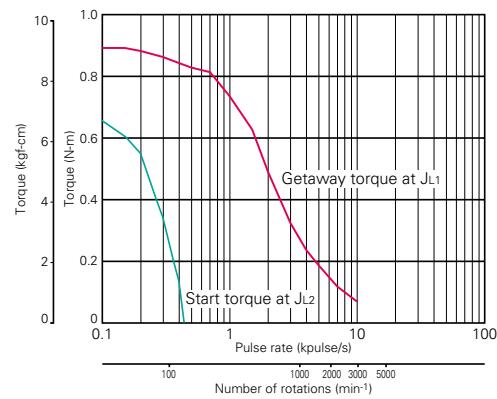
Sanyo constant current circuit

Source voltage: DC24V Wiring current: 1A/phase, 2-phase energization (full-step)

$J_{L1}=2.6\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=2.6\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses direct coupling)

●103H7124-0440



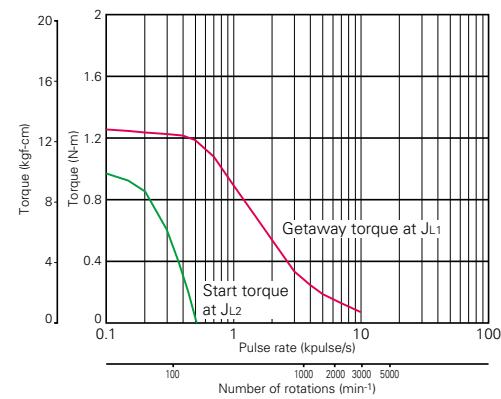
Sanyo constant current circuit

Source voltage: DC24V Wiring current: 2A/phase, 2-phase energization (full-step)

$J_{L1}=2.6\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=2.6\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses direct coupling)

●103H7126-0440



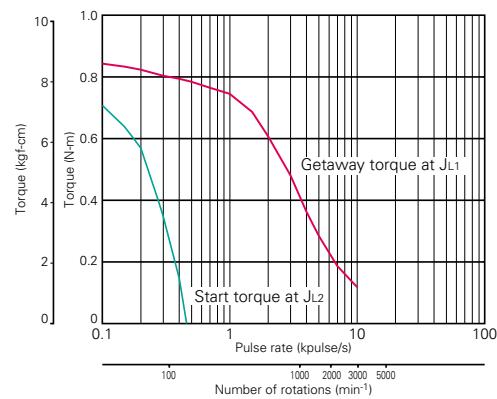
Sanyo constant current circuit

Source voltage: DC24V Wiring current: 2A/phase, 2-phase energization (full-step)

$J_{L1}=2.6\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=2.6\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses direct coupling)

●103H7124-0740



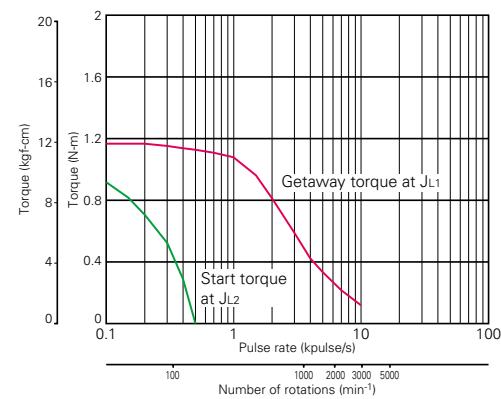
Sanyo constant current circuit

Source voltage: DC24V Wiring current: 3A/phase, 2-phase energization (full-step)

$J_{L1}=2.6\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=2.6\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses direct coupling)

●103H7126-0740



Sanyo constant current circuit

Source voltage: DC24V Wiring current: 3A/phase, 2-phase energization (full-step)

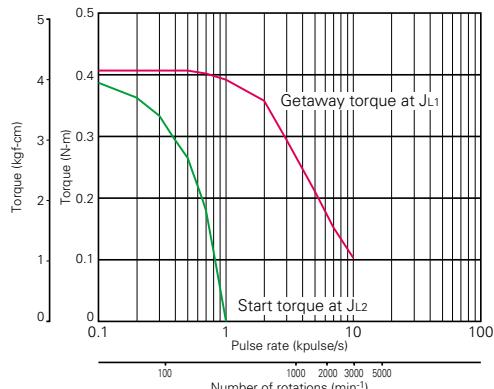
$J_{L1}=2.6\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=2.6\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses direct coupling)

- 39mm(0.9)
- 42mm(0.9)
- 56mm(1.8)
- 28mm(1.8)
- 42mm(1.8)
- 50mm(1.8)
- 56mm(1.8)
- 60mm(1.8)
- φ86mm(1.8)
- φ106mm(CE)
- 56mm(CE)
- φ86mm(CE)
- φ106mm(CE)
- Specifications of 2-phase stepping motor
- Vacuum stepping motor
- 2-phase synchronous motor

Pulse Rate - Torque Characteristics

●103H7121-5040



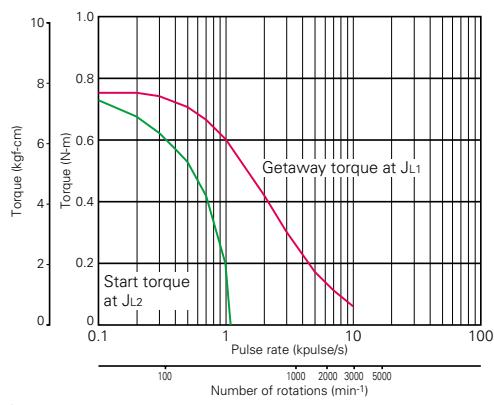
Sanyo constant current circuit

Source voltage: DC24V Wiring current: 2A/phase, 2-phase energization (full-step)

$J_{L1}=0.94\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=0.1\times10^{-4}\text{kg}\cdot\text{m}^2$ (pulley balancer method)

●103H7123-5040



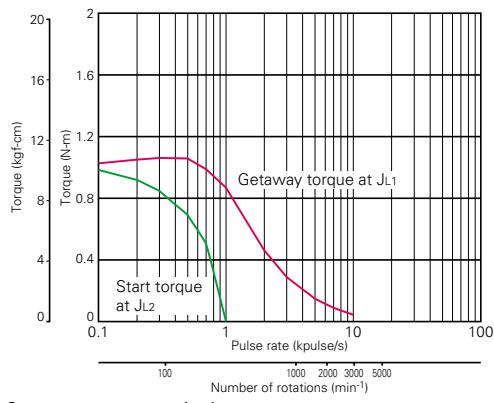
Sanyo constant current circuit

Source voltage: DC24V Wiring current: 2A/phase, 2-phase energization (full-step)

$J_{L1}=0.94\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=0.21\times10^{-4}\text{kg}\cdot\text{m}^2$ (pulley balancer method)

●103H7126-5040



Sanyo constant current circuit

Source voltage: DC24V Wiring current: 2A/phase, 2-phase energization (full-step)

$J_{L1}=2.6\times10^{-4}\text{kg}\cdot\text{m}^2$ (Uses rubber coupling)

$J_{L2}=0.33\times10^{-4}\text{kg}\cdot\text{m}^2$ (pulley balancer method)

Specifications of
2-phase stepping motor

2-phase
synchronous motor

H-vacuum
stepping motor

Specifications of
2-phase stepping motor

Ø106mm(CE)

Ø86mm(CE)

Ø56mm(CE)

Ø106mm(1.8)

Ø86mm(1.8)

Ø56mm(1.8)

Ø60mm(1.8)

Ø42mm(1.8)

Ø50mm(1.8)

Ø28mm(1.8)

Ø42mm(1.8)

Ø56mm(1.8)

Ø39mm(0.9)

Ø42mm(0.9)