2-phase Stepping Motor

56mm sq.

103H712□
1.8°/step

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

Unipolar winding

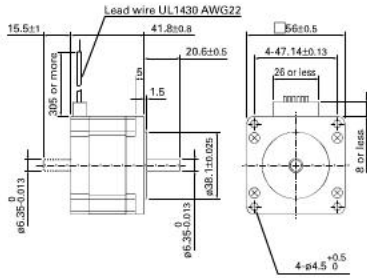| Model		Holding torque at 2-phase energization	Rated current	Wiring resistance	Wiring inductance	Rotor inertia	Weigh
One shaft	Two shafts	N.m or more	A/phase	Ω/phase	mH/phase	x10⁻⁴kg·m²	kg
103H7121-0140	-0110	0.39	1	4.8	8	0.1	0.47
103H7121-0440	-0410	0.39	2	1.25	1.9	0.1	0.47
103H7121-0740	-0710	0.39	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

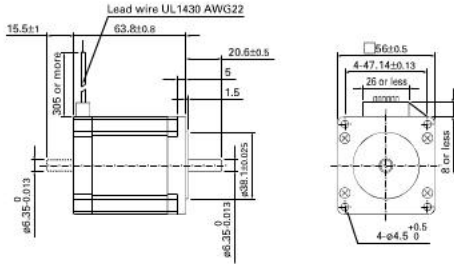| Model		Holding torque at 2-phase energization	Rated current	Wiring resistance	Wiring inductance	Rotor inertia	Weigh
One shaft	Two shafts	N.m or more	A/phase	Ω/phase	mH/phase	x10⁻⁴kg·m²	kg
103H7121-5040	-5010	0.39	2	0.65	1.9	0.1	0.47
103H7123-5040	-5010	0.83	2	0.8	3.8	0.21	0.65
103H7126-5040	-5010	1.27	2	1.05	4.5	0.36	0.98

Dimensions (Unit: mm)

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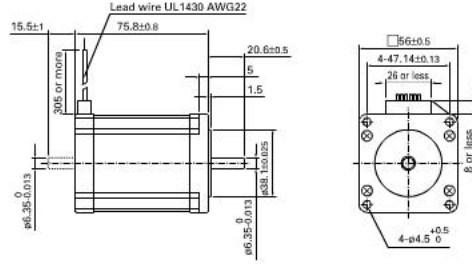**103H7121-0110/0410/0710/5010 (Double shaft)**

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

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

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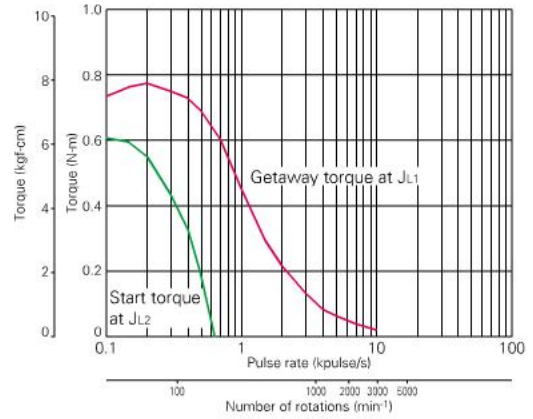**103H7126-0110/0410/0710/5010 (Double shaft)**

Pulse Rate - Torque Characteristics

●103H7121-0140

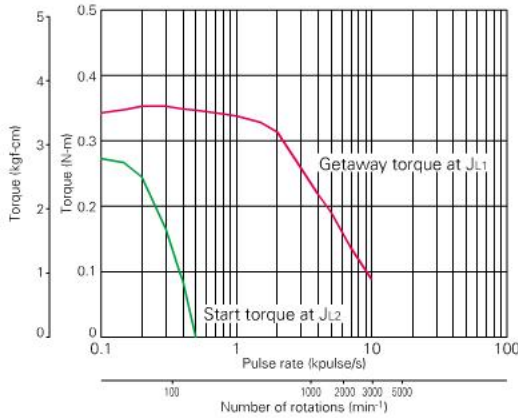
Sanyo constant current circuit
Source voltage: DC24V Wiring current: 1A/phase, 2-phase energization (full-step)
$J_{L1}=0.94 \times 10^{-4} kg \cdot m^2$ (Uses rubber coupling)
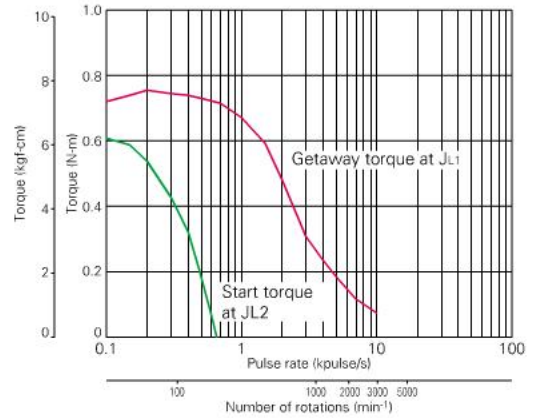$J_{L2}=0.8 \times 10^{-4} kg \cdot m^2$ (Uses direct coupling)

●103H7121-0440

Sanyo constant current circuit
Source voltage: DC24V Wiring current: 2A/phase, 2-phase energization (full-step)
$J_{L1}=0.94 \times 10^{-4} kg \cdot m^2$ (Uses rubber coupling)
$J_{L2}=0.8 \times 10^{-4} kg \cdot m^2$ (Uses direct coupling)

●103H7121-0740

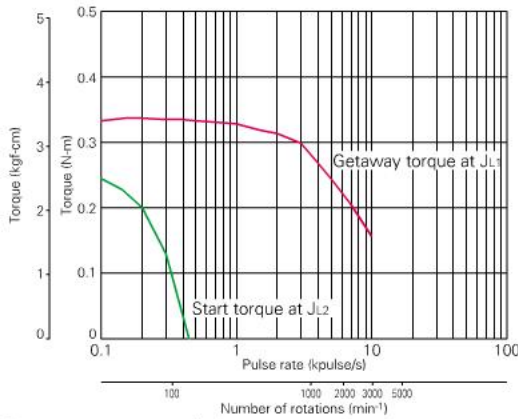Sanyo constant current circuit
Source voltage: DC24V Wiring current: 3A/phase, 2-phase energization (full-step)
$J_{L1}=0.94 \times 10^{-4} kg \cdot m^2$ (Uses rubber coupling)
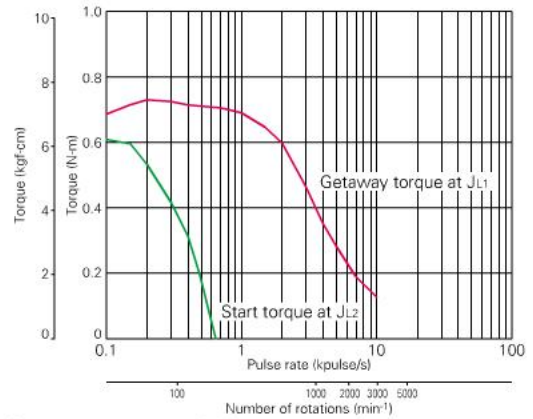$J_{L2}=0.8 \times 10^{-4} kg \cdot m^2$ (Uses direct coupling)

●103H7123-0140

Sanyo constant current circuit
Source voltage: DC24V Wiring current: 1A/phase, 2-phase energization (full-step)
$J_{L1}=0.94 \times 10^{-4} kg \cdot m^2$ (Uses rubber coupling)
$J_{L2}=0.8 \times 10^{-4} kg \cdot m^2$ (Uses direct coupling)

●103H7123-0440

Sanyo constant current circuit
Source voltage: DC24V Wiring current: 2A/phase, 2-phase energization (full-step)
$J_{L1}=0.94 \times 10^{-4} kg \cdot m^2$ (Uses rubber coupling)
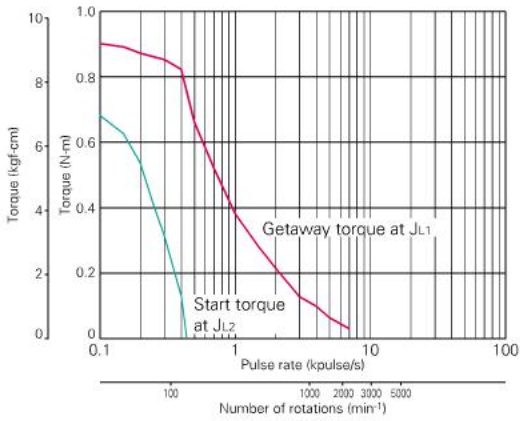$J_{L2}=0.8 \times 10^{-4} kg \cdot m^2$ (Uses direct coupling)

●103H7123-0740

Sanyo constant current circuit
Source voltage: DC24V Wiring current: 3A/phase, 2-phase energization (full-step)
$J_{L1}=0.94 \times 10^{-4} kg \cdot m^2$ (Uses rubber coupling)
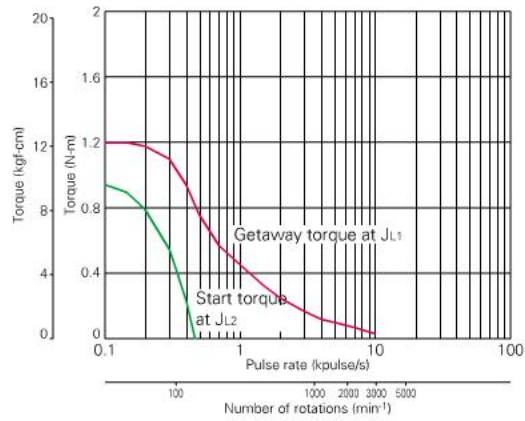$J_{L2}=0.8 \times 10^{-4} kg \cdot m^2$ (Uses direct coupling)
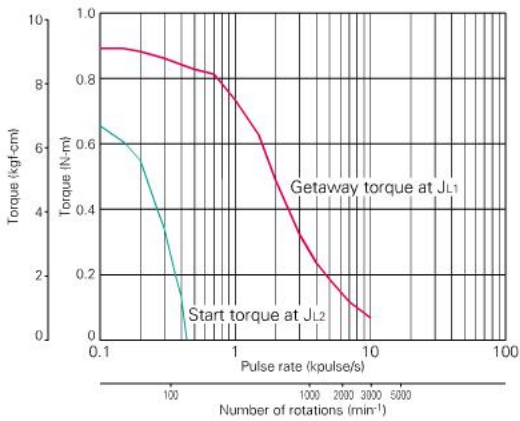
Pulse Rate - Torque Characteristics

●103H7124-0140

Sanyo constant current circuit
Source voltage: DC24V Wiring current: 1A/phase, 2-phase energization (full-step)
$J_{L1}=2.6 \times 10^{-4} kg \cdot m^2$ (Uses rubber coupling)
$J_{L2}=2.6 \times 10^{-4} kg \cdot m^2$ (Uses direct coupling)

●103H7124-0440
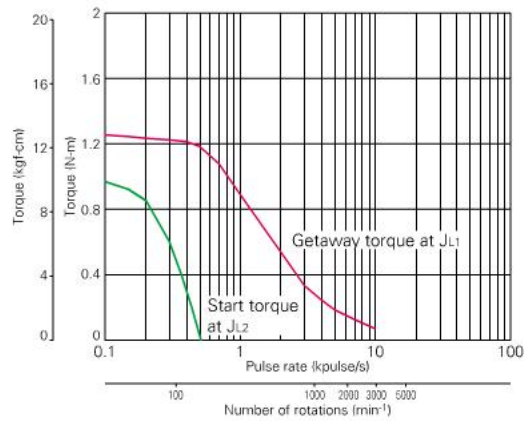

Sanyo constant current circuit
Source voltage: DC24V Wiring current: 2A/phase, 2-phase energization (full-step)
$J_{L1}=2.6 \times 10^{-4} kg \cdot m^2$ (Uses rubber coupling)
$J_{L2}=2.6 \times 10^{-4} kg \cdot m^2$ (Uses direct coupling)

●103H7124-0740

Sanyo constant current circuit
Source voltage: DC24V Wiring current: 3A/phase, 2-phase energization (full-step)
$J_{L1}=2.6 \times 10^{-4} kg \cdot m^2$ (Uses rubber coupling)
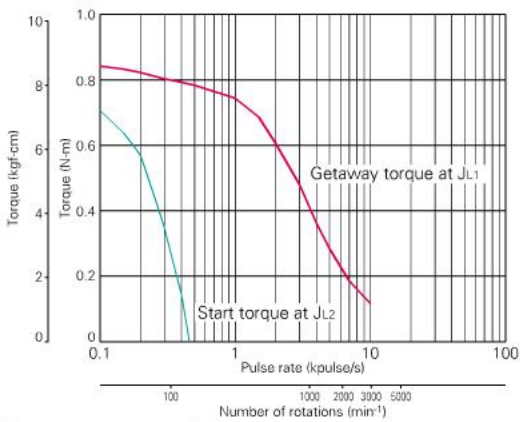$J_{L2}=2.6 \times 10^{-4} kg \cdot m^2$ (Uses direct coupling)

●103H7126-0140

Sanyo constant current circuit
Source voltage: DC24V Wiring current: 1A/phase, 2-phase energization (full-step)
$J_{L1}=2.6 \times 10^{-4} kg \cdot m^2$ (Uses rubber coupling)
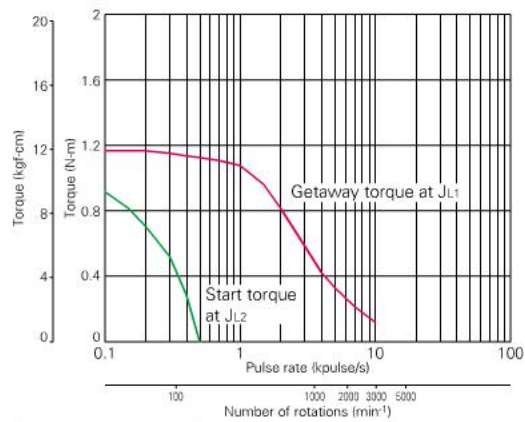$J_{L2}=2.6 \times 10^{-4} kg \cdot m^2$ (Uses direct coupling)

●103H7126-0440

Sanyo constant current circuit
Source voltage: DC24V Wiring current: 2A/phase, 2-phase energization (full-step)
$J_{L1}=2.6 \times 10^{-4} kg \cdot m^2$ (Uses rubber coupling)
$J_{L2}=2.6 \times 10^{-4} kg \cdot m^2$ (Uses direct coupling)

●103H7126-0740
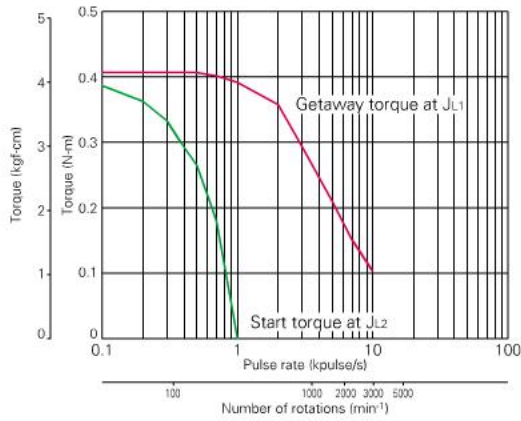

Sanyo constant current circuit
Source voltage: DC24V Wiring current: 3A/phase, 2-phase energization (full-step)
$J_{L1}=2.6 \times 10^{-4} kg \cdot m^2$ (Uses rubber coupling)
$J_{L2}=2.6 \times 10^{-4} kg \cdot m^2$ (Uses direct coupling)

Pulse Rate - Torque Characteristics

●103H7121-5040

Sanyo constant current circuit
Source voltage: DC24V Wiring current: 2A/phase, 2-phase energization (full-step)
J_{L1}=0.94x10^{-4}kg·m^2 (Uses rubber coupling)
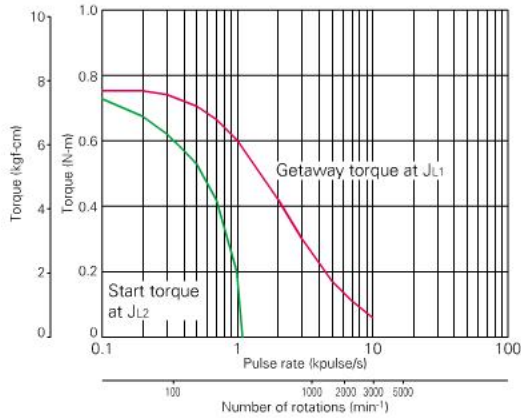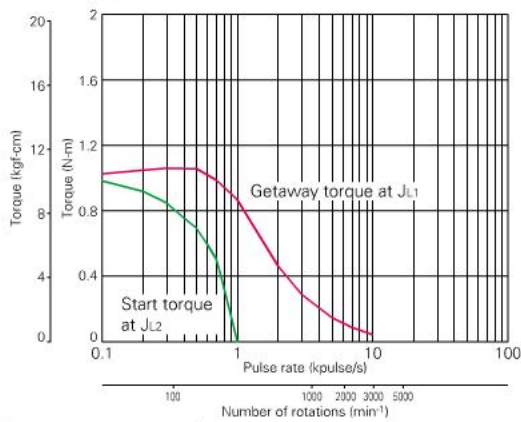J_{L2}=0.1x10^{-4}kg·m^2 (pulley balancer method)

●103H7123-5040

Sanyo constant current circuit
Source voltage: DC24V Wiring current: 2A/phase, 2-phase energization (full-step)
J_{L1}=0.94x10^{-4}kg·m^2 (Uses rubber coupling)
J_{L2}=0.21x10^{-4}kg·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}=2.6x10^{-4}kg·m^2 (Uses rubber coupling)
J_{L2}=0.33x10^{-4}kg·m^2 (pulley balancer method)

□39mm(0.9°)
□42mm(0.9°)

□56mm(0.9°)

□28mm(1.8°)

□42mm(1.8°)

□50mm(1.8°)

□56mm(1.8°)

□60mm(1.8°)

Ø86mm(1.8°)

Ø106mm(1.8°)

□56mm(CE)

Ø86mm(CE)

Ø106mm(CE)

Specifications of
2-phase stepping motor

In-vacuum
stepping motor

2-phase
synchronous motor