2-phase stepping motor

56mm sq. 2.20inch sq.

103H712
1.8° /step

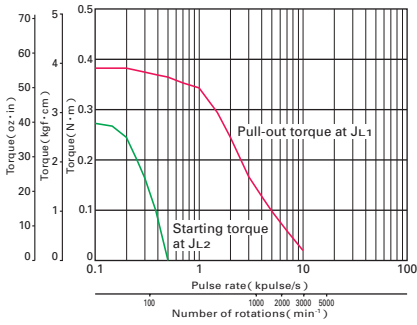## Unipolar winding

Model		Holding torque at 2-phase energization	Rated current	Wiring resistance	Winding inductance	Rotor inertia	Mass Weight
Single shaft	Double shafts	[N m oz in MIN.]	A/phase	/phase	mH/phase	[× 10⁻⁴kg m² oz in²]	[kg lbs]
103H7121-0140	-0110	0.39 55.2	1	4.8	8	0.1 0.55	0.47 1.04
103H7121-0440	-0410	0.39 55.2	2	1.25	1.9	0.1 0.55	0.47 1.04
103H7121-0740	-0710	0.39 55.2	3	0.6	0.8	0.1 0.55	0.47 1.04
103H7123-0140	-0110	0.83 117.	1	6.7	15	0.21 1.15	0.65 1.43
103H7123-0440	-0410	0.83 117.5	2	1.6	3.8	0.21 1.15	0.65 1.43
103H7123-0740	-0710	0.78 110.5	3	0.77	1.58	0.21 1.15	0.65 1.43
103H7124-0140	-0110	0.98 138.8	1	7	12.5	0.245 1.34	0.8 1.76
103H7124-0440	-0410	0.98 138.8	2	1.7	3.1	0.245 1.34	0.8 1.76
103H7124-0740	-0710	0.98 138.8	3	0.74	1.4	0.245 1.34	0.8 1.76
103H7126-0140	-0110	1.27 179.8	1	8.6	19	0.36 1.97	0.98 2.16
103H7126-0440	-0410	1.27 179.8	2	2	4.5	0.36 1.97	0.98 2.16
103H7126-0740	-0710	1.27 179.8	3	0.9	2.2	0.36 1.97	0.98 2.16

Bipolar winding

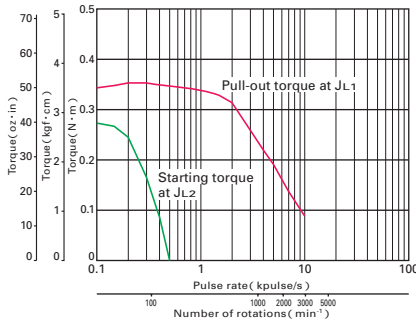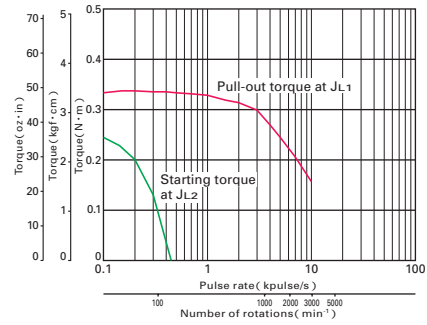| Model		Holding torque at 2-phase energization	Rated current	Wiring resistance	Winding inductance	Rotor inertia	Mass Weight
Single shaft	Double shafts	[N m oz in MIN.]	A/phase	/phase	mH/phase	[× 10⁻⁴kg m² oz in²]	[kg lbs]
103H7121-5640	-5610	0.55 77.9	1	4.3	14.5	0.1 0.55	0.47 1.04
103H7121-5740	-5710	0.55 77.9	2	1.1	3.7	0.1 0.55	0.47 1.04
103H7121-5840	-5810	0.55 77.9	3	0.54	1.74	0.1 0.55	0.47 1.04
103H7123-5640	-5610	1.0 141.6	1	5.7	29.4	0.21 1.15	0.65 1.43
103H7123-5740	-5710	1.0 141.6	2	1.5	7.5	0.21 1.15	0.65 1.43
103H7123-5840	-5810	1.0 141.6	3	0.7	3.5	0.21 1.15	0.65 1.43
103H7126-5640	-5610	1.6 226.6	1	7.7	34.6	0.36 1.97	0.98 2.16
103H7126-5740	-5710	1.6 226.6	2	2	9.1	0.36 1.97	0.98 2.16
103H7126-5840	-5810	1.6 226.6	3	0.94	4	0.36 1.97	0.98 2.16
103H7128-5640	-5610	2 283.2	1	8.9	40.1	0.49 2.68	1.3 2.87
103H7128-5740	-5710	2 283.2	2	2.3	10.4	0.49 2.68	1.3 2.87
103H7128-5840	-5810	2 283.2	3	1.03	4.3	0.49 2.68	1.3 2.87

Pulse rate-torque characteristics

103H7121-01
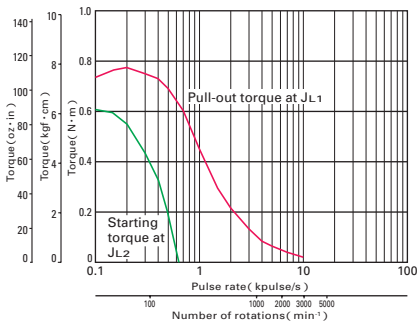

Sanyo constant current circuit
Source voltage : DC24V   operating current : 1A/phase,
    2-phase energization full-step
J_{L1} = 0.94x10⁻⁴kg m² 5.14 oz in² use the rubber coupling
J_{L2} = 0.8x10⁻⁴kg m² 4.37 oz in² use the direct coupling

103H7121-04

Sanyo constant current circuit
Source voltage : DC24V   operating current : 2A/phase,
    2-phase energization full-step
J_{L1} = 0.94x10⁻⁴kg m² 5.14 oz in² use the rubber coupling
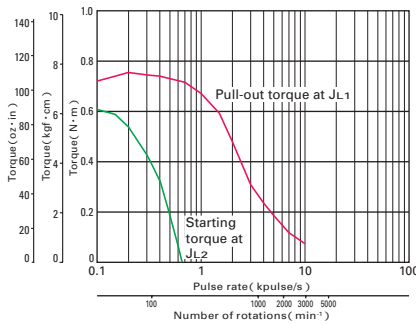J_{L2} = 0.8x10⁻⁴kg m² 4.37 oz in² use the direct coupling

103H7121-07

Sanyo constant current circuit
Source voltage : DC24V   operating current : 3A/phase,
    2-phase energization full-step
J_{L1} = 0.94x10⁻⁴kg m² 5.14 oz in² use the rubber coupling
J_{L2} = 0.8x10⁻⁴kg m² 4.37 oz in² use the direct coupling

103H7123-01

Sanyo constant current circuit
Source voltage : DC24V   operating current : 1A/phase,
    2-phase energization full-step
J_{L1} = 0.94x10⁻⁴kg m² 5.14 oz in² use the rubber coupling
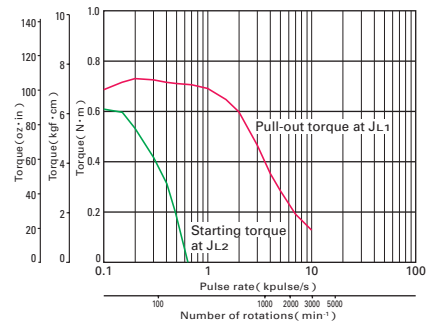J_{L2} = 0.8x10⁻⁴kg m² 4.37 oz in² use the direct coupling

103H7123-04

Sanyo constant current circuit
Source voltage : DC24V   operating current : 2A/phase,
    2-phase energization full-step
J_{L1} = 0.94x10⁻⁴kg m² 5.14 oz in² use the rubber coupling
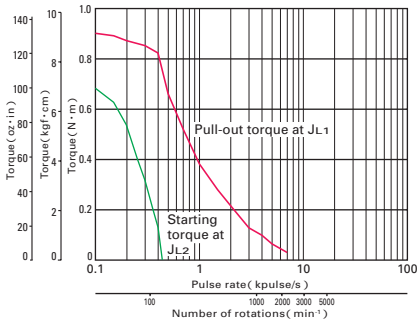J_{L2} = 0.8x10⁻⁴kg m² 4.37 oz in² use the direct coupling

103H7123-07

Sanyo constant current circuit
Source voltage : DC24V   operating current : 3A/phase,
    2-phase energization full-step
J_{L1} = 0.94x10⁻⁴kg m² 5.14 oz in² use the rubber coupling
J_{L2} = 0.8x10⁻⁴kg m² 4.37 oz in² use the direct coupling

103H7124-01

Sanyo constant current circuit
Source voltage : DC24V   operating current : 1A/phase,
    2-phase energization full-step
J_{L1} = 2.6x10⁻⁴kg m² 14.22 oz in² use the rubber coupling
J_{L2} = 2.6x10⁻⁴kg m² 14.22 oz in² use the direct coupling

103H7124-04
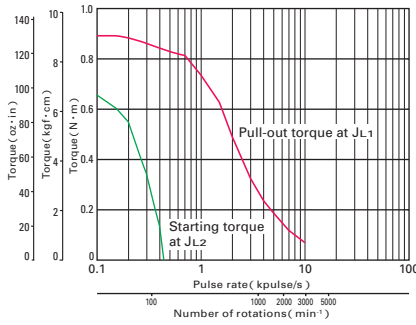

Sanyo constant current circuit
Source voltage : DC24V   operating current : 2A/phase,
    2-phase energization full-step
J_{L1} = 2.6x10⁻⁴kg m² 14.22 oz in² use the rubber coupling
J_{L2} = 2.6x10⁻⁴kg m² 14.22 oz in² use the direct coupling

103H7124-07

Sanyo constant current circuit
Source voltage : DC24V   operating current : 3A/phase,
    2-phase energization full-step
J_{L1} = 2.6x10⁻⁴kg m² 14.22 oz in² use the rubber coupling
J_{L2} = 2.6x10⁻⁴kg m² 14.22 oz in² use the direct coupling

2-phase stepping motor

56mm sq. 2.20inch sq.

Pulse rate-torque characteristics

103H7126-01
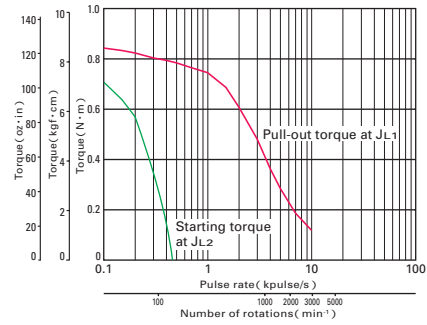

Sanyo constant current circuit
Source voltage : DC24V operating current : 1A/phase,
2-phase energization full-step
J_{L1} = 2.6x10⁻⁴kg m² 14.22 oz in² use the rubber coupling
J_{L2} = 2.6x10⁻⁴kg m² 14.22 oz in² use the direct coupling

103H7126-04

Sanyo constant current circuit
Source voltage : DC24V operating current : 2A/phase,
2-phase energization full-step
J_{L1} = 2.6x10⁻⁴kg m² 14.22 oz in² use the rubber coupling
J_{L2} = 2.6x10⁻⁴kg m² 14.22 oz in² use the direct coupling

103H7126-07
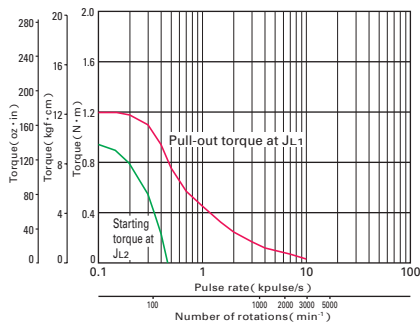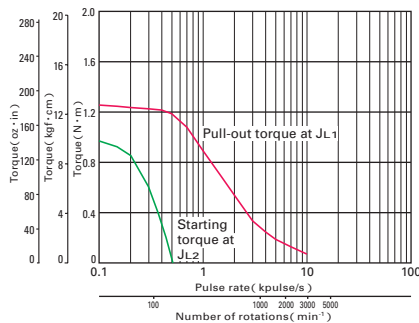

Sanyo constant current circuit
Source voltage : DC24V operating current : 3A/phase,
2-phase energization full-step
J_{L1} = 2.6x10⁻⁴kg m² 14.22 oz in² use the rubber coupling
J_{L2} = 2.6x10⁻⁴kg m² 14.22 oz in² use the direct coupling

103H7121-56

Sanyo constant current circuit
Source voltage : DC24V operating current : 1A/phase,
2-phase energization full-step
J_{L1} = 0.94x10⁻⁴kg m² 5.14 oz in² use the rubber coupling
J_{L2} = 0.8x10⁻⁴kg m² 4.37 oz in² use the direct coupling

103H7121-57

Sanyo constant current circuit
Source voltage : DC24V operating current : 2A/phase,
2-phase energization full-step
J_{L1} = 0.94x10⁻⁴kg m² 5.14 oz in² use the rubber coupling
J_{L2} = 0.8x10⁻⁴kg m² 4.37 oz in² use the direct coupling

103H7121-58

Sanyo constant current circuit
Source voltage : DC24V operating current : 3A/phase,
2-phase energization full-step
J_{L1} = 0.94x10⁻⁴kg m² 5.14 oz in² use the rubber coupling
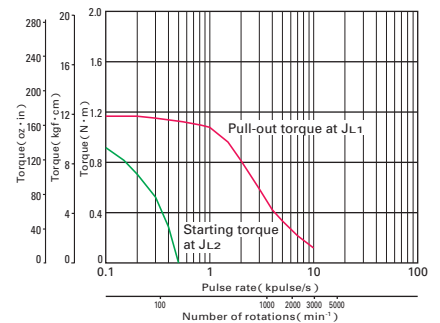J_{L2} = 0.8x10⁻⁴kg m² 4.37 oz in² use the direct coupling

103H7123-56

Sanyo constant current circuit
Source voltage : DC24V   operating current : 1A/phase,
2-phase energization full-step
J_{L1} = 2.6x10^{-4}kg m^2 14.22 oz in^2 use the rubber coupling
J_{L2} = 2.6x10^{-4}kg m^2 14.22 oz in^2 use the direct coupling

103H7123-57

Sanyo constant current circuit
Source voltage : DC24V   operating current : 2A/phase,
2-phase energization full-step
J_{L1} = 2.6x10^{-4}kg m^2 14.22 oz in^2 use the rubber coupling
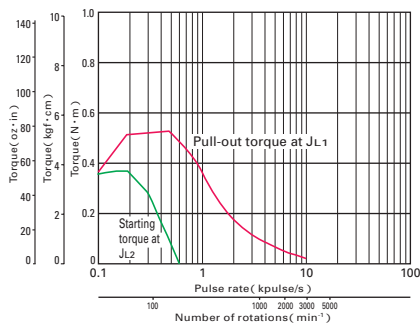J_{L2} = 2.6x10^{-4}kg m^2 14.22 oz in^2 use the direct coupling

103H7123-58

Sanyo constant current circuit
Source voltage : DC24V   operating current : 3A/phase,
2-phase energization full-step
J_{L1} = 2.6x10^{-4}kg m^2 14.22 oz in^2 use the rubber coupling
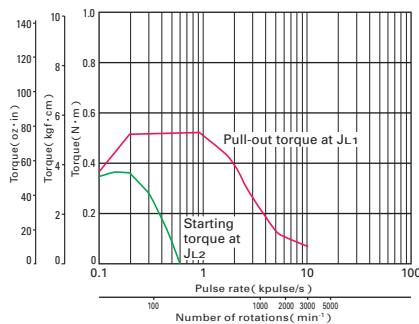J_{L2} = 2.6x10^{-4}kg m^2 14.22 oz in^2 use the direct coupling

103H7126-56

Sanyo constant current circuit
Source voltage : DC24V   operating current : 1A/phase,
2-phase energization full-step
J_{L1} = 2.6x10^{-4}kg m^2 14.22 oz in^2 use the rubber coupling
J_{L2} = 2.6x10^{-4}kg m^2 14.22 oz in^2 use the direct coupling

103H7126-57

Sanyo constant current circuit
Source voltage : DC24V   operating current : 2A/phase,
2-phase energization full-step
J_{L1} = 2.6x10^{-4}kg m^2 14.22 oz in^2 use the rubber coupling
J_{L2} = 2.6x10^{-4}kg m^2 14.22 oz in^2 use the direct coupling

103H7126-58
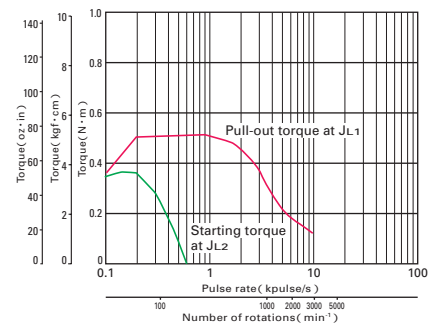
Sanyo constant current circuit
Source voltage : DC24V   operating current : 3A/phase,
2-phase energization full-step
J_{L1} = 2.6x10^{-4}kg m^2 14.22 oz in^2 use the rubber coupling
J_{L2} = 2.6x10^{-4}kg m^2 14.22 oz in^2 use the direct coupling

103H7128-56

Sanyo constant current circuit
Source voltage : DC24V   operating current : 1A/phase,
2-phase energization full-step
J_{L1} = 7.4x10^{-4}kg m^2 40.46 oz in^2 use the rubber coupling
J_{L2} = 7.4x10^{-4}kg m^2 40.46 oz in^2 use the direct coupling

103H7128-57

Sanyo constant current circuit
Source voltage : DC24V   operating current : 2A/phase,
2-phase energization full-step
J_{L1} = 7.4x10^{-4}kg m^2 40.46 oz in^2 use the rubber coupling
J_{L2} = 7.4x10^{-4}kg m^2 40.46 oz in^2 use the direct coupling

103H7128-58

Sanyo constant current circuit
Source voltage : DC24V   operating current : 3A/phase,
2-phase energization full-step
J_{L1} = 7.4x10^{-4}kg m^2 40.46 oz in^2 use the rubber coupling
J_{L2} = 7.4x10^{-4}kg m^2 40.46 oz in^2 use the direct coupling