2-phase Stepping Motor

42mm sq.
(1.65inch sq.)

103H52□□
1.8˚/step

Recommendable Driver
Refer to the page 7,17,27 and 45.

Specifications

Unipolar winding

Model		Holding torque at 2-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^{-4}kg·m^2(oz·in^2)	kg(lbs)
103H5205-0440	-0410	0.2(28.32)	1.2	2.4	2.3	0.036(0.20)	0.23(0.51)
103H5208-0440	-0410	0.3(42.48)	1.2	2.9	3.4	0.056(0.31)	0.29(0.64)
103H5209-0440	-0410	0.32(45.31)	1.2	3	3.9	0.062(0.34)	0.31(0.68)
103H5210-0440	-0410	0.37(52.39)	1.2	3.3	3.4	0.074(0.40)	0.37(0.82)

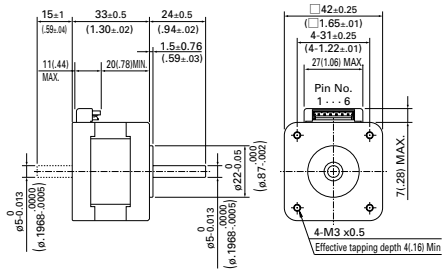
Bipolar winding

Model		Holding torque at 2-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^{-4}kg·m^2(oz·in^2)	kg(lbs)
103H5205-5040	-5010	0.23(32.57)	0.25	54	78	0.036(0.20)	0.23(0.51)
103H5205-5140	-5110	0.25(35.40)	0.5	13.4	23.4	0.036(0.20)	0.23(0.51)
103H5205-5240	-5210	0.265(37.53)	1	3.4	6.5	0.036(0.20)	0.23(0.51)
103H5208-5040	-5010	0.35(49.56)	0.25	66	116	0.056(0.31)	0.3(0.66)
103H5208-5140	-5110	0.38(53.81)	0.5	16.5	34	0.056(0.31)	0.3(0.66)
103H5208-5240	-5210	0.39(55.23)	1	4.1	9.5	0.056(0.31)	0.3(0.66)
103H5209-5040	-5010	0.38(53.81)	0.25	71.4	132	0.062(0.34)	0.31(0.68)
103H5209-5140	-5110	0.41(58.06)	0.5	18.2	39	0.062(0.34)	0.31(0.68)
103H5209-5240	-5210	0.425(60.18)	1	4.4	11	0.062(0.34)	0.31(0.68)
103H5210-5040	-5010	0.465(65.85)	0.25	80	123.3	0.074(0.40)	0.37(0.82)
103H5210-5140	-5110	0.49(69.39)	0.5	20	35	0.074(0.40)	0.37(0.82)
103H5210-5240	-5210	0.51(72.22)	1	4.8	9.5	0.074(0.40)	0.37(0.82)

Dimensions [Unit:mm(inch)]

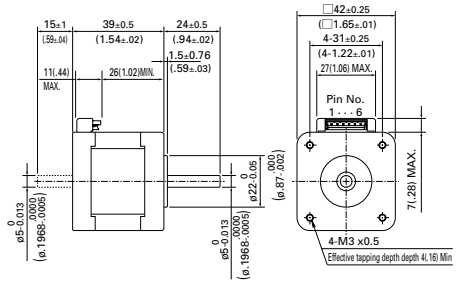
103H5205-0440 (Single shaft)
103H5205-0410 (Double shaft)

Applicable connector (J.S.T. MFG., CO.)
Connector: EHR-6
Terminal: SEH-001T-P0.6



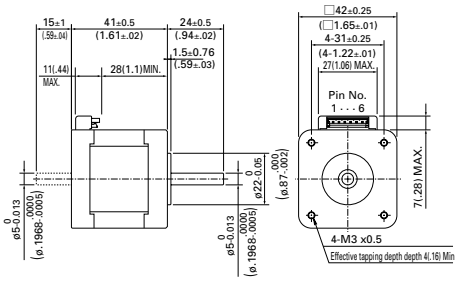
103H5208-0440 (Single shaft)
103H5208-0410 (Double shaft)

Applicable connector (J.S.T. MFG., CO.)
Connector: EHR-6
Terminal: SEH-001T-P0.6



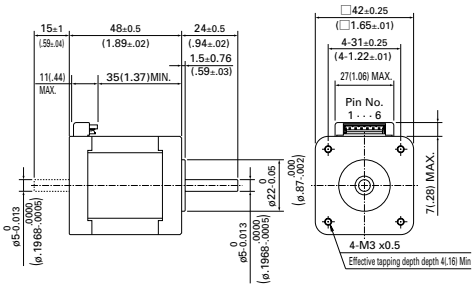
103H5209-0440 (Single shaft)
103H5209-0410 (Double shaft)

Applicable connector (J.S.T. MFG., CO.)
Connector: EHR-6
Terminal: SEH-001T-P0.6



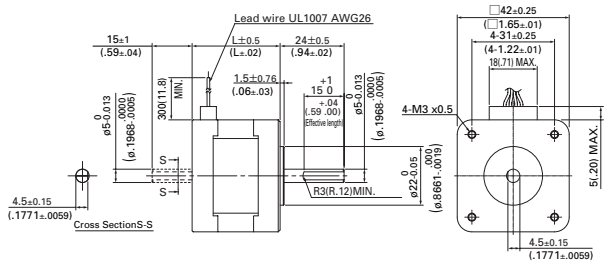
103H5210-0440 (Single shaft)
103H5210-0410 (Double shaft)

Applicable connector (J.S.T. MFG., CO.)
Connector: EHR-6
Terminal: SEH-001T-P0.6



Bipolar winding

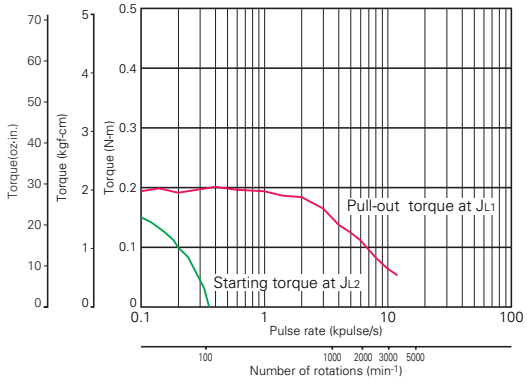
103H520□-□□40 (Single shaft)
103H520□-□□10 (Double shaft)



Model	L
103H5205-□□□□	33 (1.30)
103H5208-□□□□	39 (1.54)
103H5209-□□□□	41 (1.61)
103H5210-□□□□	48 (1.89)

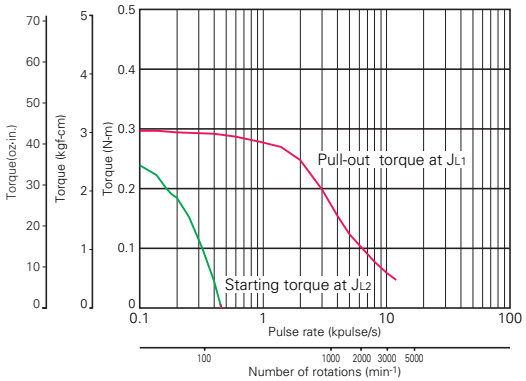
Pulse Rate - Torque Characteristics

● 103H5205-0440



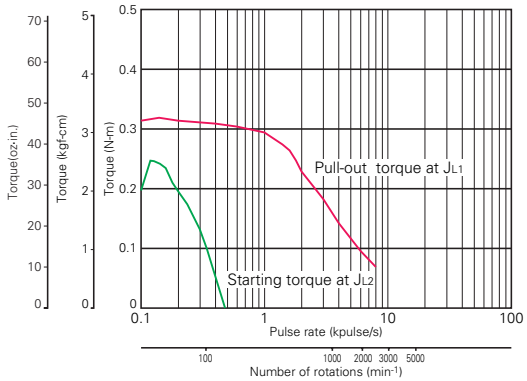
Sanyo constant current circuit
Source voltage: DC24V Operating current :1.2A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]

● 103H5208-0440



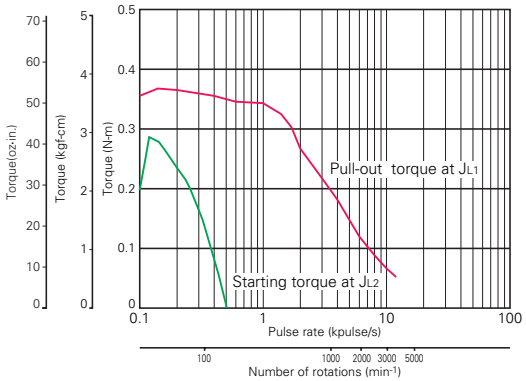
Sanyo constant current circuit
Source voltage: DC24V Operating current : 1.2A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]

● 103H5209-0440



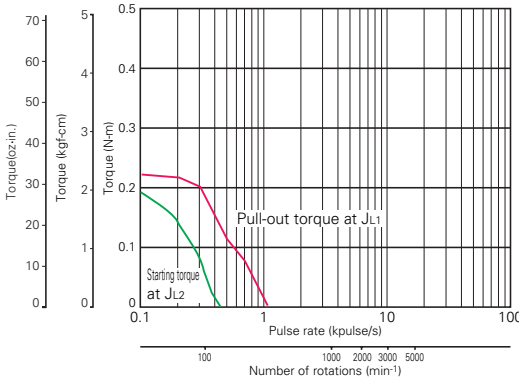
Sanyo constant current circuit
Source voltage: DC24V Operating current : 1.2A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2(4.37 oz·in^2) Use the direct coupling]

● 103H5210-0440



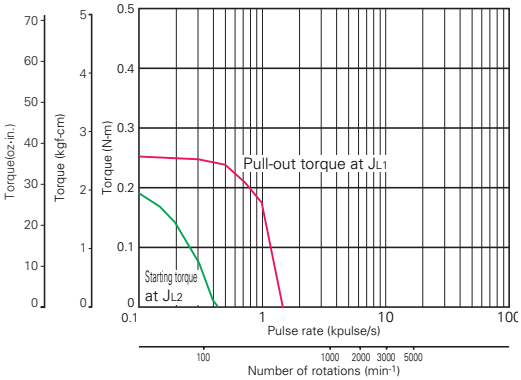
Sanyo constant current circuit
Source voltage: DC24V Operating current : 1.2A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2)Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]

● 103H5205-5040



Sanyo constant current circuit
Source voltage: DC24V Operating current : 25A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]

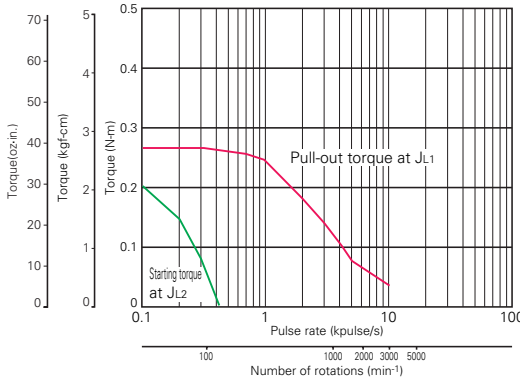
● 103H5205-5140



Sanyo constant current circuit
Source voltage: DC24V Operating current : 0.5A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]

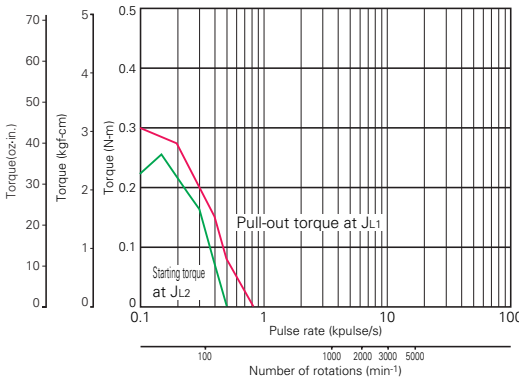
Pulse Rate - Torque Characteristics

● 103H5205-5240



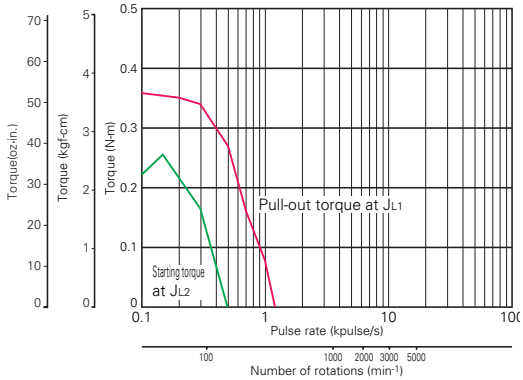
Sanyo constant current circuit
Source voltage: DC24V Operating current : 1A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]

● 103H5208-5040



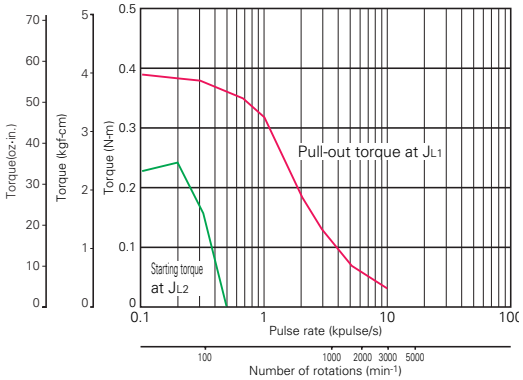
Sanyo constant current circuit
Source voltage: DC24V Operating current : 0.25A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]

● 103H5208-5140



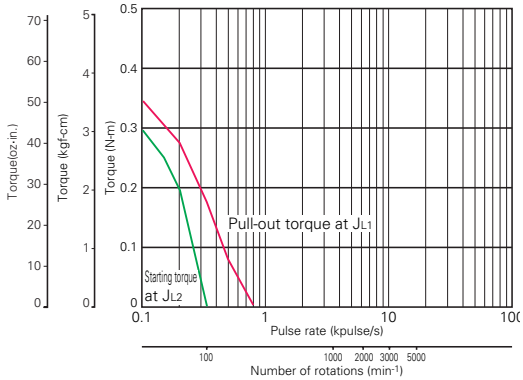
Sanyo constant current circuit
Source voltage: DC24V Operating current : 0.5A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]

● 103H5208-5240



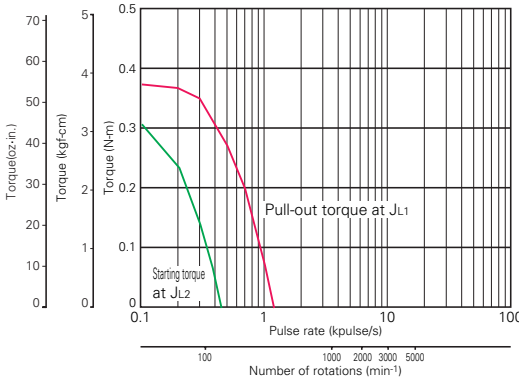
Sanyo constant current circuit
Source voltage: DC24V Operating current : 1A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]

● 103H5209-5040



Sanyo constant current circuit
Source voltage: DC24V Operating current : 0.25A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2)Use the direct coupling]

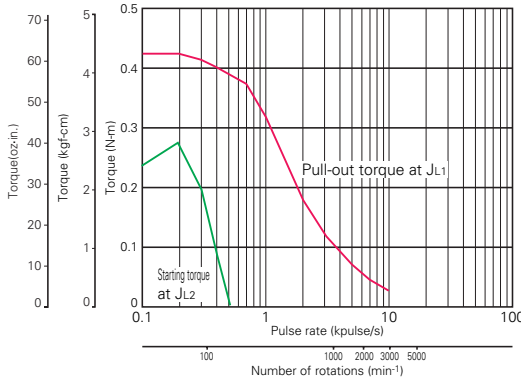
● 103H5209-5140



Sanyo constant current circuit
Source voltage: DC24V Operating current : 0.5A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]

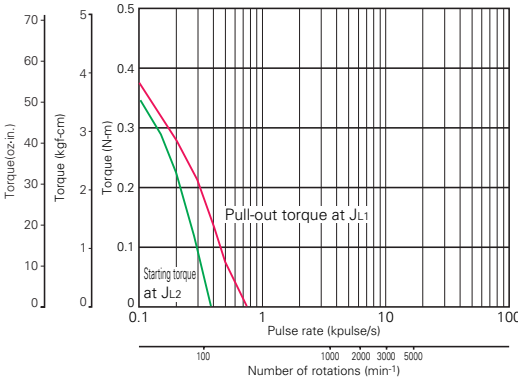
Pulse Rate - Torque Characteristics

● 103H5209-5240



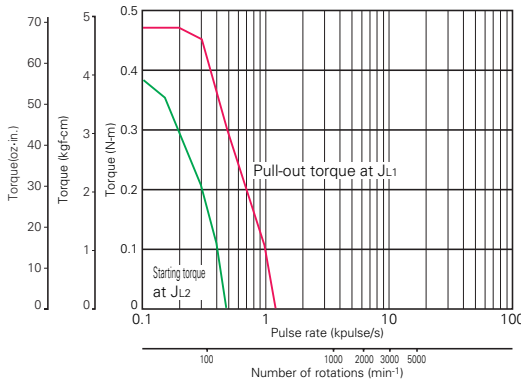
Sanyo constant current circuit
Source voltage: DC24V Operating current : 1A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]

● 103H5210-5040



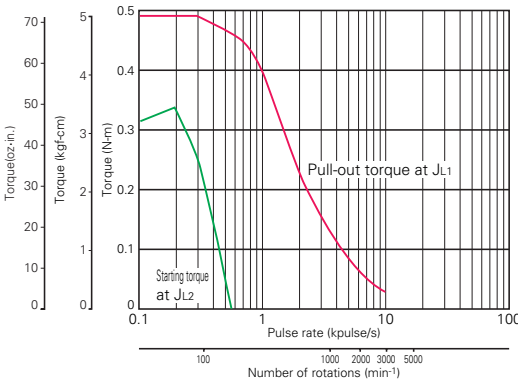
Sanyo constant current circuit
Source voltage: DC24V Operating current : 0.25A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2)Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]

● 103H5210-5140



Sanyo constant current circuit
Source voltage: DC24V Operating current : 0.5A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]

● 103H5210-5240



Sanyo constant current circuit
Source voltage: DC24V Operating current : 1A/phase, 2-phase energization (full-step)
J_{L1}=[0.94x10^{-4}kg·m^2 (5.14 oz·in^2) Use the rubber coupling]
J_{L2}=[0.8x10^{-4}kg·m^2 (4.37 oz·in^2) Use the direct coupling]