2-phase stepping motor

42mm sq. (1.65inch sq.)

103H52 □□
1.8 °/step

Unipolar winding • Connector type

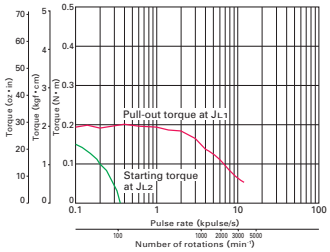
Model		Holding torque at 2-phase energization	Rated current	Wiring resistance	Winding inductance	Rotor inertia	Mass (Weight)
Single shaft	Double shafts	[N • m (oz • in) MIN.]	A/phase	Ω /phase	mH/phase	[×10⁻⁴kg•m²(oz•in²)]	[kg (lbs)]
103H5205-0440	**-0410**	0.2 (28.32)	1.2	2.4	2.3	0.036 (0.20)	0.23 (0.51)
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 • Lead wire type

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	Ω /phase	mH/phase	[×10⁻⁴kg•m²(oz•in²)]	[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)	0.29 (0.64)
103H5208-5140	**-5110**	0.38 (53.81)	0.5	16.5	34	0.056 (0.31)	0.29 (0.64)
103H5208-5240	**-5210**	0.39 (55.23)	1	4.1	9.5	0.056 (0.31)	0.29 (0.64)
103H5209-5040	**-5010**	0.38 (53.81)	0.25	71.4	133	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)

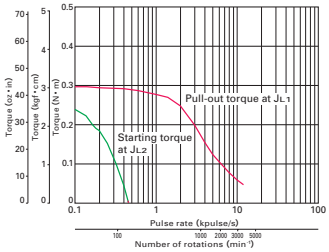
■ Pulse rate-torque characteristics

● 103H5205-04 □□



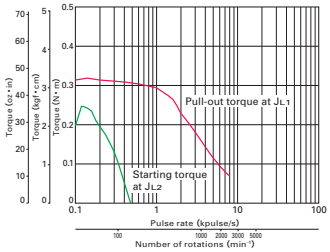
Constant current circuit
Source voltage : DC24V • operating current : 1.2A/phase, 2-phase energization (full-step)
J_{L1} = [0.94x10⁻⁴kg • m² (5.14 oz • in²) use the rubber coupling]
J_{L2} = [0.8x10⁻⁴kg • m² (4.37 oz • in²) use the direct coupling]

● 103H5208-04 □□



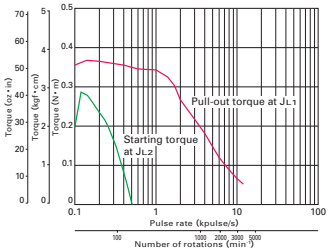
Constant current circuit
Source voltage : DC24V • operating current : 1.2A/phase, 2-phase energization (full-step)
J_{L1} = [0.94x10⁻⁴kg • m² (5.14 oz • in²) use the rubber coupling]
J_{L2} = [0.8x10⁻⁴kg • m² (4.37 oz • in²) use the direct coupling]

● 103H5209-04 □□



Constant current circuit
Source voltage : DC24V • operating current : 1.2A/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]

● 103H5210-04 □□



Constant current circuit
Source voltage : DC24V • operating current : 1.2A/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]