2-phase stepping motor

86mm cir. (3.39inch cir.)

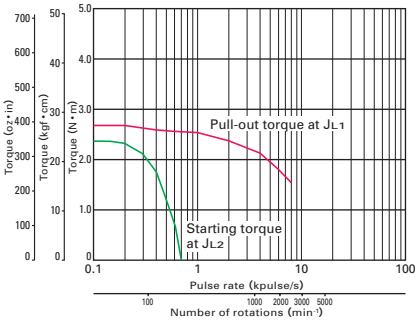
103H822 □
CE marking
1.8 °/step

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	Ω /phase	mH/phase	[×10⁻⁴kg・m²(oz・in²)]	[kg (lbs)]
103H8221-6240	**-6210**	2.74 (388.0)	6	0.3	1.65	1.45 (7.93)	1.5 (3.31)
103H8222-6340	**-6310**	5.09 (720.8)	6	0.35	2.7	2.9 (15.86)	2.5 (5.51)
103H8223-6340	**-6310**	7.44 (1053.6)	6	0.45	3.4	4.4 (24.06)	3.5 (7.72)

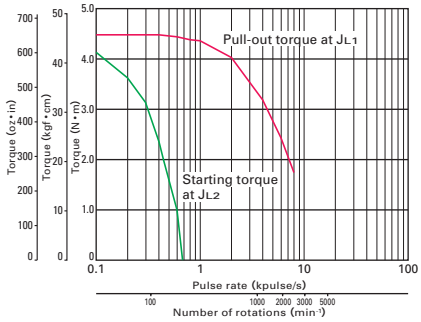
Pulse rate-torque characteristics

● **103H8221-62 □□**



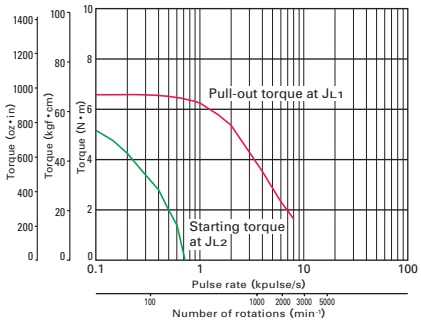
Constant current circuit
Source voltage : AC100V • operating current : 6A/phase,
2-phase energization (full-step)
J_{L1} = [7.4x10⁻⁴kg • m² (40.46 oz • in²) use the rubber coupling]
J_{L2} = [7.4x10⁻⁴kg • m² (40.46 oz • in²) use the direct coupling]

● **103H8222-63 □□**



Constant current circuit
Source voltage : AC100V • operating current : 6A/phase,
2-phase energization (full-step)
J_{L1} = [15.3x10⁻⁴kg • m² (83.65 oz • in²) use the rubber coupling]
J_{L2} = [15.3x10⁻⁴kg • m² (83.65 oz • in²) use the direct coupling]

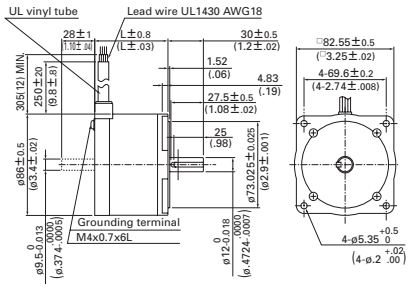
● **103H8223-63 □□**



Constant current circuit
Source voltage : AC100V • operating current : 6A/phase,
2-phase energization (full-step)
J_{L1} = [43x10⁻⁴kg • m² (235.10 oz • in²) use the rubber coupling]
J_{L2} = [43x10⁻⁴kg • m² (235.10 oz • in²) use the direct coupling]

The date are measured under the drive condition of our company. The drive torque may very depending on the accuracy of customer-side equipment.

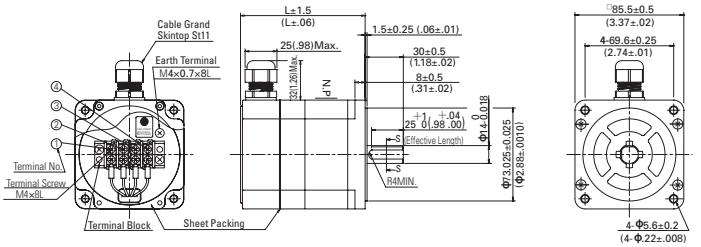
Φ86mm (Φ3.39inch)



Lead wire type

	Set part number	Motor model number	Motor length : mm (inch)	Cable type
Bipolar	—	103H8221-62△0	62 (3.31)	Lead wire (CE)
	—	103H8222-63△0	92.2 (5.51)	Lead wire (CE)
	—	103H8223-63△0	125.9(7.72)	Lead wire (CE)

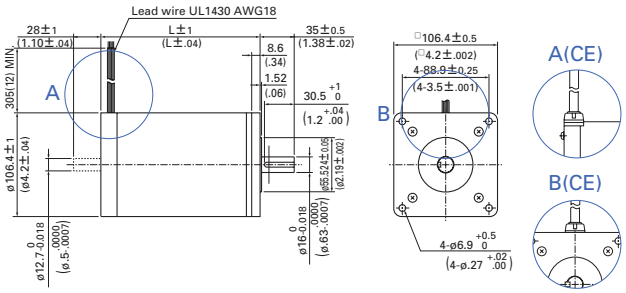
□86mm (□3.39inch)



Terminal block type

	Set part number	Motor model number	Motor length : mm (inch)	Cable type
Terminal block	—	SM2861-5066	97.9 (3.9)	Terminal block
	—	SM2861-5166	97.9 (3.9)	Terminal block
	—	SM2861-5266	97.9 (3.9)	Terminal block
	—	SM2862-5066	128.4 (5.1)	Terminal block
	—	SM2862-5166	128.4 (5.1)	Terminal block
	—	SM2862-5266	128.4 (5.1)	Terminal block
	—	SM2863-5066	158.8 (6.3)	Terminal block
	—	SM2863-5166	158.8 (6.3)	Terminal block
	—	SM2863-5266	158.8 (6.3)	Terminal block

Φ106mm (Φ4.17inch)



Lead wire type CE type

	Set part number	Motor model number	Motor length : mm (inch)	Cable type
Unipolar	—	103H89222-09△1	163.3 (6.4)	Lead wire
	—	103H89223-09△1	221.3 (8.7)	Lead wire
Bipolar	—	103H89222-52△1	163.3 (6.4)	Lead wire
	—	103H89223-52△1	221.3 (8.7)	Lead wire (CE)
	—	103H89222-63△1	163.3 (6.4)	Lead wire (CE)
	—	103H89223-63△1	221.3 (8.7)	Lead wire

△: Motor shaft specification code

Motor shaft spec	Set type code	Motor type code
Single shaft	S	4
Double shafts	D	1

▽: Motor shaft specification code

Motor shaft spec	Set type code	Motor type code
Single shaft	S	7
Double shafts	D	3