2-phase stepping motor

42mm sq.（1.65inch sq.）

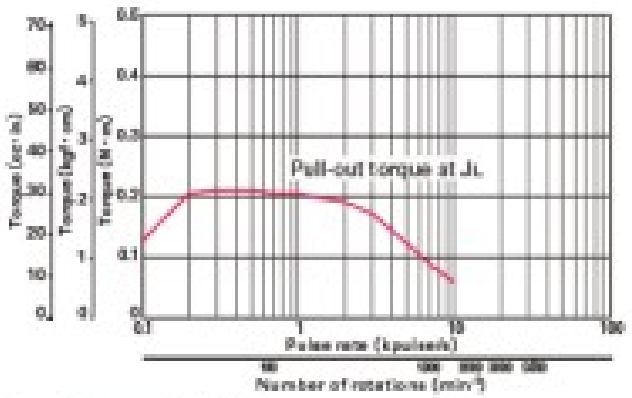
SH142□
0.9° /step

Unipolar 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)]
SH1421-0441	-0411	0.20 (28.32)	1.2	2.7	3.2	0.044 (0.241)	0.24 (0.53)
SH1422-0441	-0411	0.29 (41.07)	1.2	3.1	5.3	0.066 (0.361)	0.29 (0.64)
SH1424-0441	-0411	0.39 (55.23)	1.2	3.5	5.3	0.089 (0.487)	0.38 (0.84)

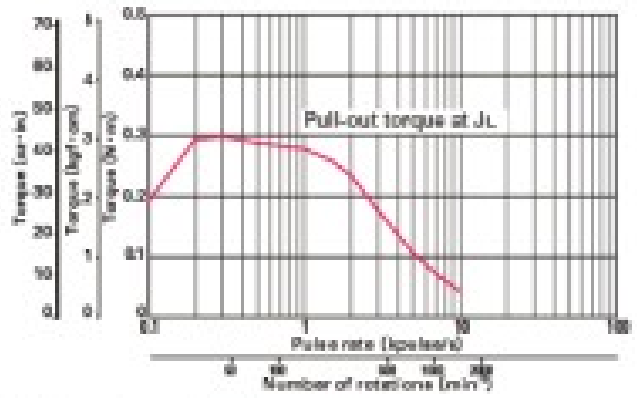
■ Pulse rate-torque characteristics

● SH1421-04□□



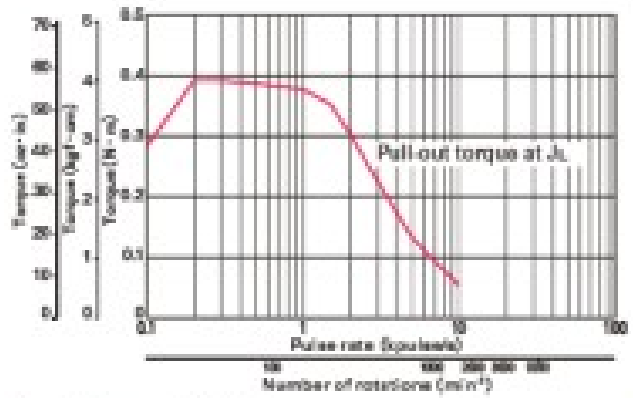
Constant current circuit
Source voltage : DC24V - operating current : 1.2A/phase,
2-phase energization (full-step)
J_L = [0.94x10⁻⁴kg・m² (5.14 oz・in²) Use the rubber coupling]

● SH1422-04□□



Constant current circuit
Source voltage : DC24V - operating current : 1.2A/phase,
2-phase energization (full-step)
J_L = [0.94x10⁻⁴kg・m² (5.14 oz・in²) Use the rubber coupling]

● SH1424-04□□



Constant current circuit
Source voltage : DC24V - operating current : 1.2A/phase,
2-phase energization (full-step)
J_L = [0.94x10⁻⁴kg・m² (5.14 oz・in²) Use the rubber coupling]

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

脱出トルク at JL
Pull-out torque at JL

fs

0.1 1 10 100

パルスレート Pulse rate (kpulses/s)

50 100 500 1000 2000

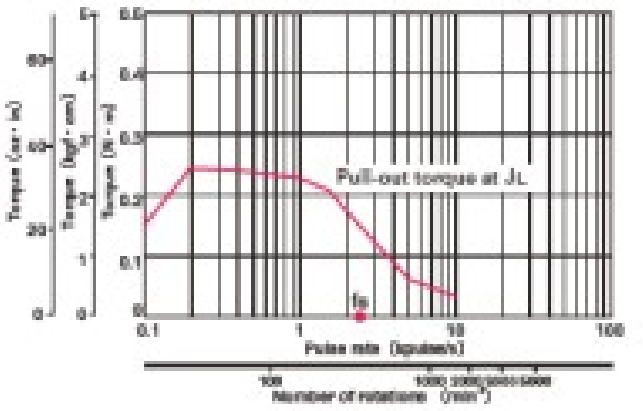
回転数 Number of rotations (min⁻¹)

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)]
SH1421-5041	**-5011**	0.23 (32.5)	1	3.3	8.0	0.044 (0.24)	0.24 (0.53)
SH1421-5241	**-5211**	0.23 (32.5)	2	0.85	2.1	0.044 (0.24)	0.24 (0.53)
SH1422-5041	**-5011**	0.34 (48.1)	1	4.0	14.0	0.066 (0.36)	0.29 (0.64)
SH1422-5241	**-5211**	0.34 (48.1)	2	1.05	3.6	0.066 (0.36)	0.29 (0.64)
SH1424-5041	**-5011**	0.48 (67.9)	1	4.7	15.0	0.089 (0.49)	0.38 (0.84)
SH1424-5241	**-5211**	0.48 (67.9)	2	1.25	3.75	0.089 (0.49)	0.38 (0.84)

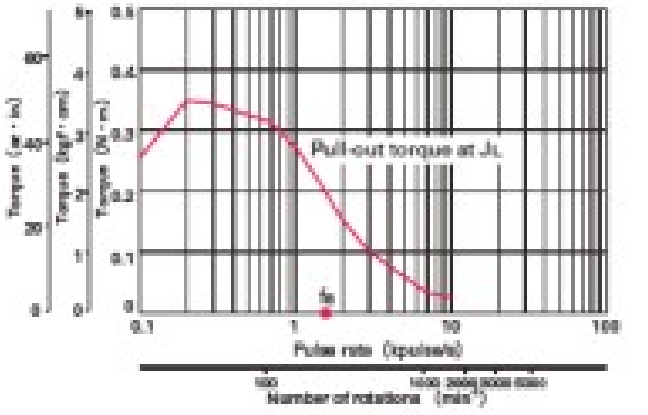
■ Pulse rate-torque characteristics

● **SH1421-50 □□**



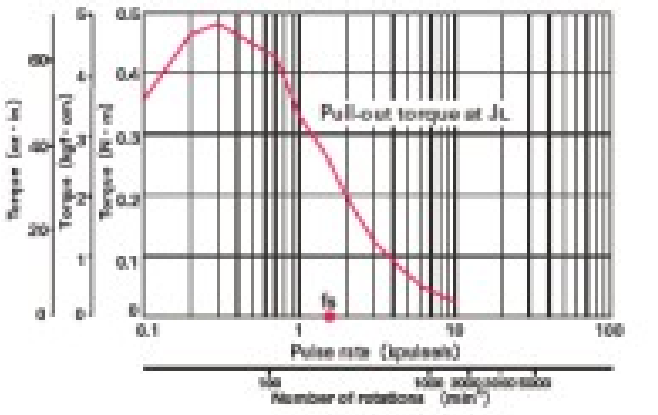
Constant current circuit
Source voltage : DC24V - operating current : 2A/phase,
2-phase energization (full-step)
JL = [0.94x10⁻⁴kg · m² (5.14 oz · in²) Use the rubber coupling]
fs: No load maximum starting pulse rate

● **SH1422-50 □□**



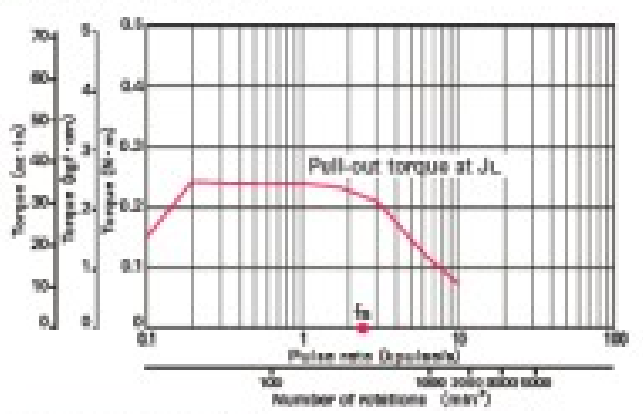
Constant current circuit
Source voltage : DC24V - operating current : 2A/phase,
2-phase energization (full-step)
JL = [0.94x10⁻⁴kg · m² (5.14 oz · in²) Use the rubber coupling]
fs: No load maximum starting pulse rate

● **SH1424-50 □□**



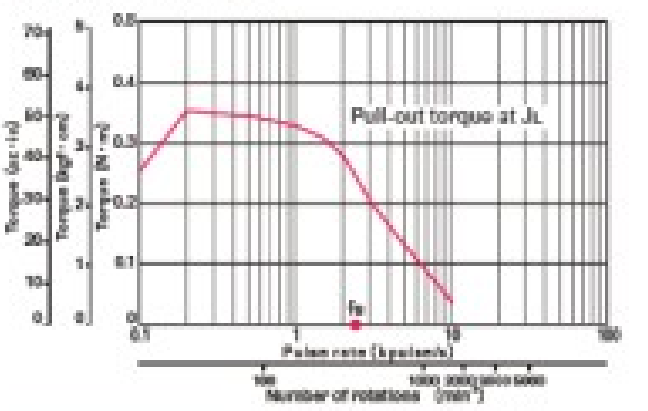
Constant current circuit
Source voltage : DC24V - operating current : 2A/phase,
2-phase energization (full-step)
JL = [0.94x10⁻⁴kg · m² (5.14 oz · in²) Use the rubber coupling]
fs: No load maximum starting pulse rate

● **SH1421-52 □□**



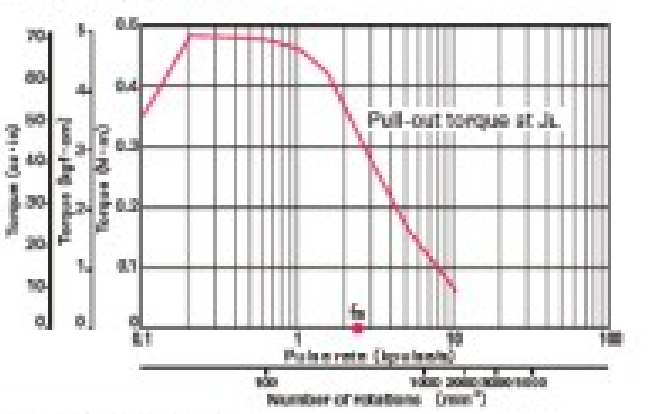
Constant current circuit
Source voltage : DC24V - operating current : 2A/phase,
2-phase energization (full-step)
JL = [0.94x10⁻⁴kg · m² (5.14 oz · in²) Use the rubber coupling]
fs: No load maximum starting pulse rate

● **SH1422-52 □□**



Constant current circuit
Source voltage : DC24V - operating current : 2A/phase,
2-phase energization (full-step)
JL = [0.94x10⁻⁴kg · m² (5.14 oz · in²) Use the rubber coupling]
fs: No load maximum starting pulse rate

● **SH1424-52 □□**



Constant current circuit
Source voltage : DC24V - operating current : 2A/phase,
2-phase energization (full-step)
JL = [0.94x10⁻⁴kg · m² (5.14 oz · in²) Use the rubber coupling]
fs: No load maximum starting pulse rate

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