42 mm sq.

0.9°/step RoHS

Unipolar winding, Lead wire type
Bipolar winding, Lead wire type

Customizing

Hollow | Shaft modification | Decelerator | Encoder

Varies depending on the model number and quantity. Contact us for details.

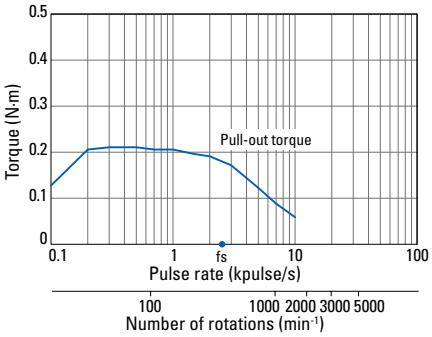
Unipolar winding, Lead wire type

Model no.		Holding torque at 2-phase energization	Rated current	Wiring resistance	Winding inductance	Rotor inertia	Mass	Motor length (L)
Single shaft	Dual shaft	N·m min.	A/phase	Ω/phase	mH/phase	×10⁻⁴kg·m²	kg	mm
SH1421-0441	**SH1421-0411**	0.2	1.2	2.7	3.2	0.044	0.24	33
SH1422-0441	**SH1422-0411**	0.29	1.2	3.1	5.3	0.066	0.29	39
SH1424-0441	**SH1424-0411**	0.39	1.2	3.5	5.3	0.089	0.38	48

Characteristics diagram

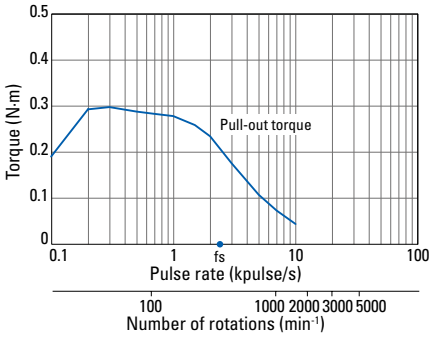
SH1421-0441
SH1421-0411

Constant current circuit
Source voltage: 24 VDC
Operating current:
1.2 A/phase, 2-phase energization (full-step)
Pull-out torque:
J_L=0.94×10⁻⁴kg·m² (use the rubber coupling)
fs: Maximum self-start frequency when not loaded



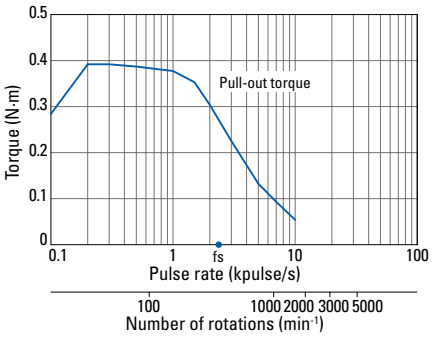
SH1422-0441
SH1422-0411

Constant current circuit
Source voltage: 24 VDC
Operating current:
1.2 A/phase, 2-phase energization (full-step)
Pull-out torque:
J_L=0.94×10⁻⁴kg·m² (use the rubber coupling)
fs: Maximum self-start frequency when not loaded

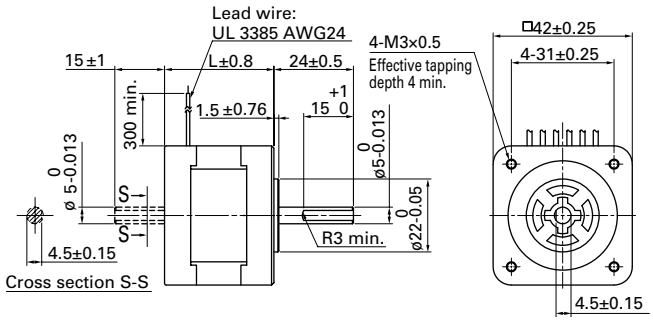


SH1424-0441
SH1424-0411

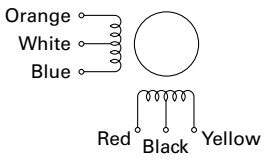
Constant current circuit
Source voltage: 24 VDC
Operating current:
1.2 A/phase, 2-phase energization (full-step)
Pull-out torque:
J_L=0.94×10⁻⁴kg·m² (use the rubber coupling)
fs: Maximum self-start frequency when not loaded



Dimensions (Unit: mm)



Internal wiring



Compatible drivers

Model no.: US1D200P10 (DC input)
Operating current select switch setting: 8
The characteristics diagram shown above is from our experimental circuit.

Allowable Load ▶ p. 71 Rotation Direction ▶ p. 72 General Specifications ▶ p. 73

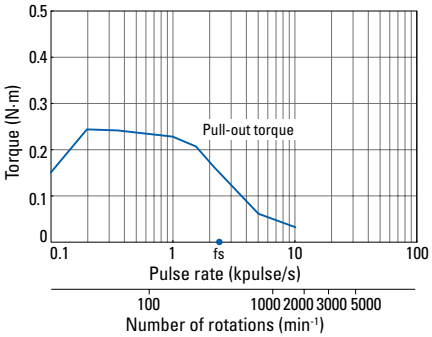
Bipolar winding, Lead wire type

Model no.		Holding torque at 2-phase energization	Rated current	Wiring resistance	Winding inductance	Rotor inertia	Mass	Motor length (L)
Single shaft	Dual shaft	N·m min.	A/phase	Ω/phase	mH/phase	×10⁻⁴kg·m²	kg	mm
SH1421-5041	**SH1421-5011**	0.23	1	3.3	8.0	0.044	0.24	33
SH1421-5241	**SH1421-5211**	0.23	2	0.85	2.1	0.044	0.24	33
SH1422-5041	**SH1422-5011**	0.34	1	4.0	14.0	0.066	0.29	39
SH1422-5241	**SH1422-5211**	0.34	2	1.05	3.6	0.066	0.29	39
SH1424-5041	**SH1424-5011**	0.48	1	4.7	15.0	0.089	0.38	48
SH1424-5241	**SH1424-5211**	0.48	2	1.25	3.75	0.089	0.38	48

Characteristics diagram

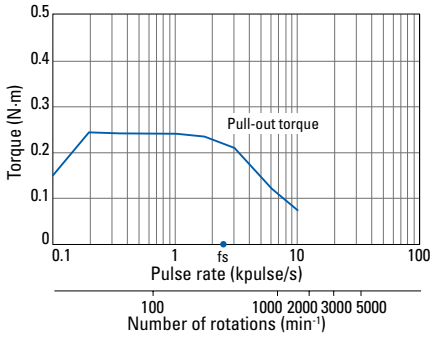
SH1421-5041 SH1421-5011

Constant current circuit
Source voltage: 24 VDC
Operating current:
1 A/phase, 2-phase energization (full-step)
Pull-out torque:
J_L=0.94×10⁻⁴kg·m² (use the rubber coupling)
fs: Maximum self-start frequency when not loaded



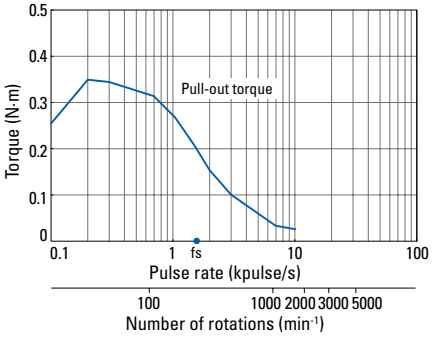
SH1421-5241 SH1421-5211

Constant current circuit
Source voltage: 24 VDC
Operating current:
2 A/phase, 2-phase energization (full-step)
Pull-out torque:
J_L=0.94×10⁻⁴kg·m² (use the rubber coupling)
fs: Maximum self-start frequency when not loaded



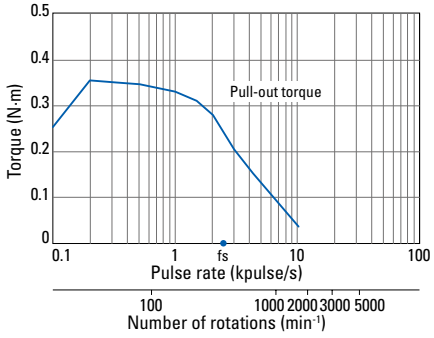
SH1422-5041 SH1422-5011

Constant current circuit
Source voltage: 24 VDC
Operating current:
1 A/phase, 2-phase energization (full-step)
Pull-out torque:
J_L=0.94×10⁻⁴kg·m² (use the rubber coupling)
fs: Maximum self-start frequency when not loaded



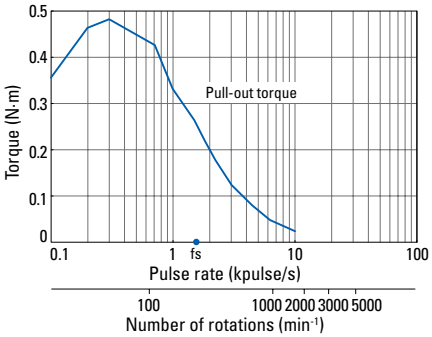
SH1422-5241 SH1422-5211

Constant current circuit
Source voltage: 24 VDC
Operating current:
2 A/phase, 2-phase energization (full-step)
Pull-out torque:
J_L=0.94×10⁻⁴kg·m² (use the rubber coupling)
fs: Maximum self-start frequency when not loaded



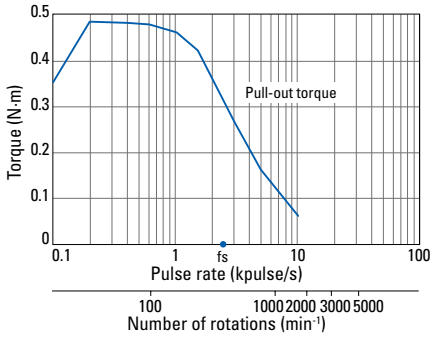
SH1424-5041 SH1424-5011

Constant current circuit
Source voltage: 24 VDC
Operating current:
1 A/phase, 2-phase energization (full-step)
Pull-out torque:
J_L=0.94×10⁻⁴kg·m² (use the rubber coupling)
fs: Maximum self-start frequency when not loaded

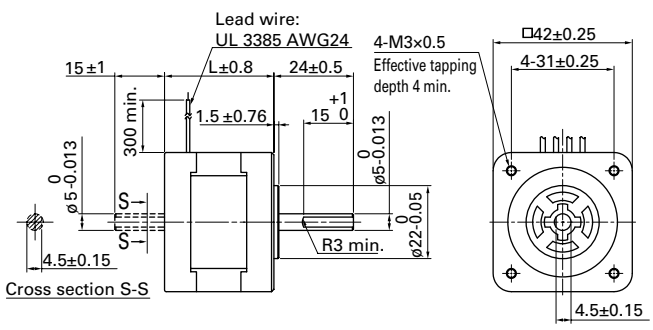


SH1424-5241 SH1424-5211

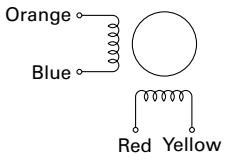
Constant current circuit
Source voltage: 24 VDC
Operating current:
2 A/phase, 2-phase energization (full-step)
Pull-out torque:
J_L=0.94×10⁻⁴kg·m² (use the rubber coupling)
fs: Maximum self-start frequency when not loaded



Dimensions (Unit: mm)



Internal wiring



Compatible drivers

- For motor model no. SH142 □ -50 □ 1 (1 A/phase)
  Driver is not included.
  If you require assistance finding a driver, contact us for details.
- For model no. SH142 □ -52 □ 1 (2 A/phase)
  Model no.: BS1D200P10 (DC input)
  Operating current select switch setting: 0

The characteristics diagram shown above is from our experimental circuit.

Allowable Load ▶ p. 71 Rotation Direction ▶ p. 72 General Specifications ▶ p. 73

Data is measured under the trial conditions of SANYO DENKI. Driving torque may vary according to actual machine precision.