

Note: The photo shows a unipolar motor.

42 mm sq.

0.9°/step **RoHS**
Bipolar, lead type



Custom options

- Hollow shaft Custom shaft
- Gear Encoder

Note: Customization feasibility depends on the model number and quantity. Contact us for details.

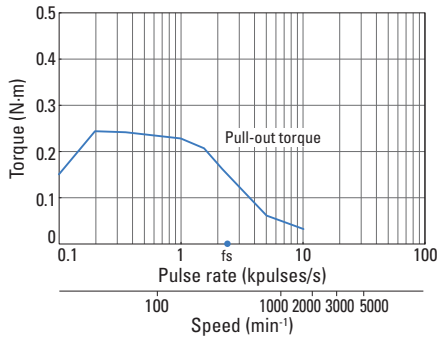
Bipolar, lead type

Model no.		Holding torque at 2-phase excitation	Rated current	Winding resistance	Winding inductance	Rotor inertia	Mass	Motor length (L)
Single shaft	Dual shaft	N·m or more	A/phase	Ω/phase	mH/phase	×10 ⁻⁴ kg·m ²	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

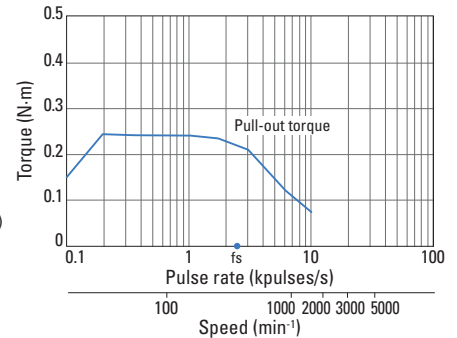
SH1421-5041 SH1421-5011

Constant current circuit
Input voltage: 24 VDC
Winding current:
1 A/phase
At 2-phase excitation (full step)
Pull-out torque:
 $J_L = 0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$
(with rubber coupling used)
 f_s : Maximum starting pulse rate with no load



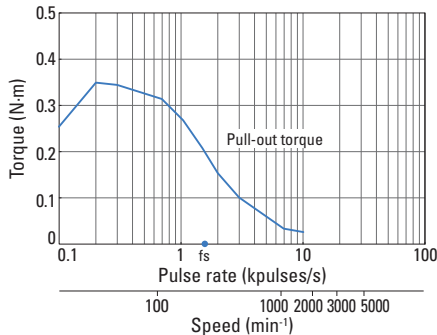
SH1421-5241 SH1421-5211

Constant current circuit
Input voltage: 24 VDC
Winding current:
2 A/phase
At 2-phase excitation (full step)
Pull-out torque:
 $J_L = 0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$
(with rubber coupling used)
 f_s : Maximum starting pulse rate with no load



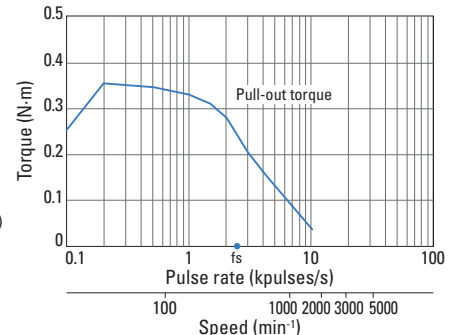
SH1422-5041 SH1422-5011

Constant current circuit
Input voltage: 24 VDC
Winding current:
1 A/phase
At 2-phase excitation (full step)
Pull-out torque:
 $J_L = 0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$
(with rubber coupling used)
 f_s : Maximum starting pulse rate with no load



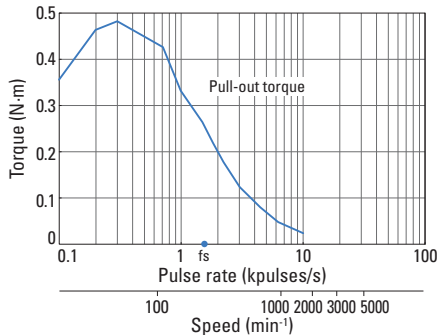
SH1422-5241 SH1422-5211

Constant current circuit
Input voltage: 24 VDC
Winding current:
2 A/phase
At 2-phase excitation (full step)
Pull-out torque:
 $J_L = 0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$
(with rubber coupling used)
 f_s : Maximum starting pulse rate with no load



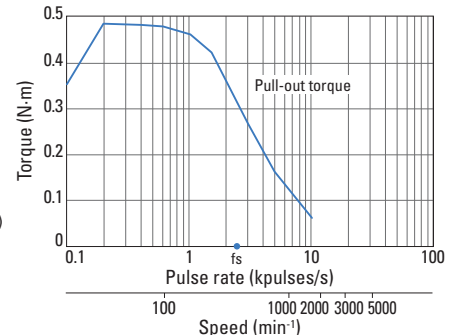
SH1424-5041 SH1424-5011

Constant current circuit
Input voltage: 24 VDC
Winding current:
1 A/phase
At 2-phase excitation (full step)
Pull-out torque:
 $J_L = 0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$
(with rubber coupling used)
 f_s : Maximum starting pulse rate with no load

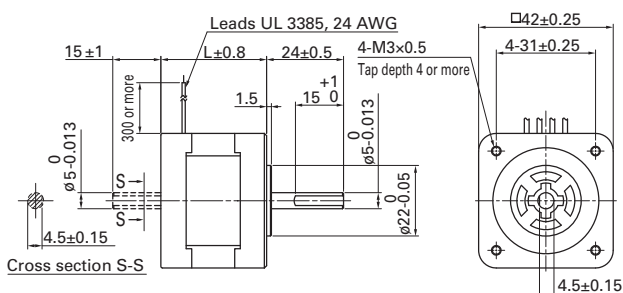


SH1424-5241 SH1424-5211

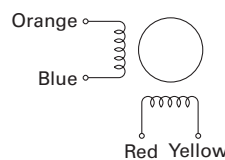
Constant current circuit
Input voltage: 24 VDC
Winding current:
2 A/phase
At 2-phase excitation (full step)
Pull-out torque:
 $J_L = 0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$
(with rubber coupling used)
 f_s : Maximum starting pulse rate with no load



Dimensions (Unit: mm)



Internal winding



Compatible drivers

- For motors SH142 □ -52 □ 1 (2 A/phase)...
Model no.: BS1D200P10 (DC input)
Operating current selection switch setting: 0
 - For motors SH142 □ -50 □ 1 (1 A/phase)...
Model no.: BS1D200P10 (DC input)
Operating current selection switch setting: A
- Note: The characteristics shown above are calculated using our experimental circuit.

Allowable loads... ▶ p. 69 Internal wiring and rotational directions... ▶ p. 70

General specifications... ▶ p. 71

Data is measured under the drive conditions of SANYO DENKI. Drive torque may vary depending on the actual machine precision.