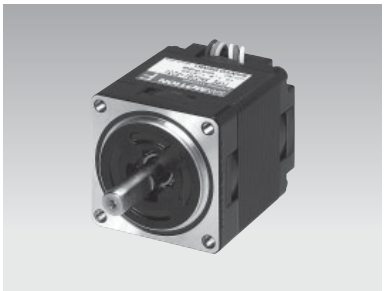


28 mm sq.

1.8°/step RoHS

Unipolar, lead type

Bipolar, lead type ▶p. 38

ECO PRODUCTS

Custom options

Hollow shaft | Custom shaft | Gear | Encoder

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

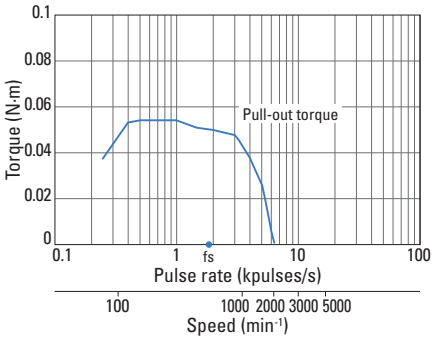
Unipolar, lead type

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	×10⁻⁴kg·m²	kg	mm
SH2281-5171	**SH2281-5131**	0.055	0.5	10.5	3.7	0.01	0.11	32
SH2281-5271	**SH2281-5231**	0.055	1	2.85	1	0.01	0.11	32
SH2285-5171	**SH2285-5131**	0.115	0.5	17	7	0.022	0.2	51.5
SH2285-5271	**SH2285-5231**	0.115	1	4.1	1.9	0.022	0.2	51.5

Characteristics

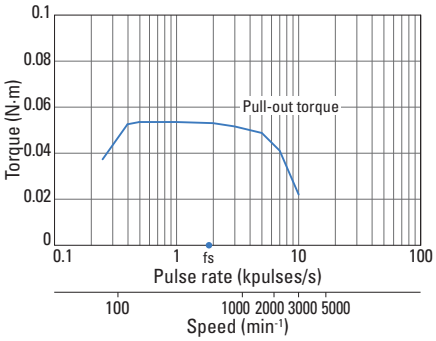
SH2281-5171 SH2281-5131

Constant current circuit
Input voltage: 24 VDC
Winding current:
0.5 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 0.01 \times 10^{-4}$kg·m²
(Pulley balancer method)
f_S: Maximum starting pulse rate with no load



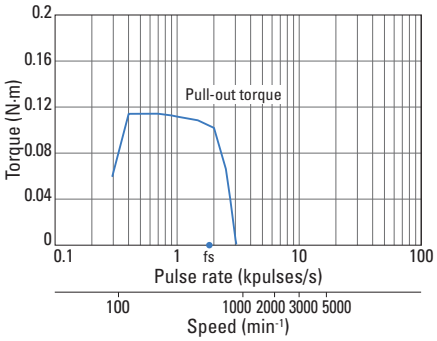
SH2281-5271 SH2281-5231

Constant current circuit
Input voltage: 24 VDC
Winding current:
1 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 0.01 \times 10^{-4}$kg·m²
(Pulley balancer method)
f_S: Maximum starting pulse rate with no load



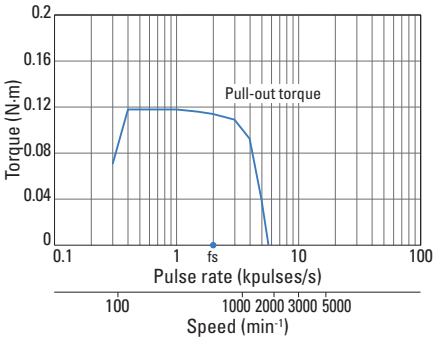
SH2285-5171 SH2285-5131

Constant current circuit
Input voltage: 24 VDC
Winding current:
0.5 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 0.01 \times 10^{-4}$kg·m²
(Pulley balancer method)
f_S: Maximum starting pulse rate with no load

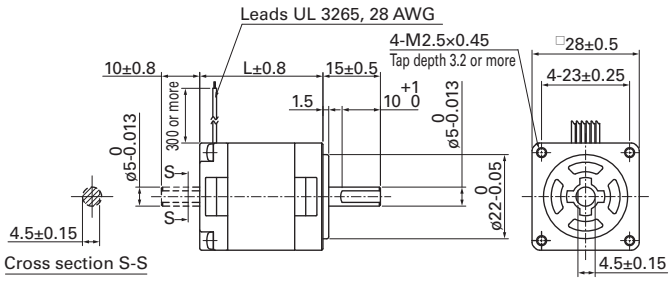


SH2285-5271 SH2285-5231

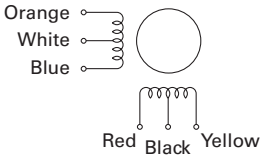
Constant current circuit
Input voltage: 24 VDC
Winding current:
1 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 0.01 \times 10^{-4}$kg·m²
(Pulley balancer method)
f_S: Maximum starting pulse rate with no load



Dimensions (Unit: mm)



Internal winding



Compatible drivers

- For motors SH228 □ -52 □ 1 (1 A/phase)...
  Model no.: US1D200P10 (DC input)
  Operating current selection switch setting: A
- For motors other than above...
  A driver is to be provided by the customer.

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.