Stepping Motors

56 mm sq.

1.8°/step **RoHS**

Unipolar, connector type

c**UL**us

Custom options

Hollow shaft | Custom shaft
Gear | Encoder
Brake

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

Unipolar, connector 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
SM2561C10U41	SM2561C10U11	0.53	1	4.3	6.8	0.14	0.49	41.8
SM2561C20U41	SM2561C20U11	0.53	2	1.15	1.8	0.14	0.49	41.8
SM2561C30U41	SM2561C30U11	0.53	3	0.52	0.77	0.14	0.49	41.8
SM2562C10U41	SM2562C10U11	1.1	1	5.85	12.6	0.28	0.69	53.8
SM2562C20U41	SM2562C20U11	1.1	2	1.55	3.3	0.28	0.69	53.8
SM2562C30U41	SM2562C30U11	1.1	3	0.69	1.37	0.28	0.69	53.8
SM2563C10U41	SM2563C10U11	1.7	1	7.8	17	0.5	1.1	75.8
SM2563C20U41	SM2563C20U11	1.7	2	1.87	4.2	0.5	1.1	75.8
SM2563C30U41	SM2563C30U11	1.7	3	0.74	1.75	0.5	1.1	75.8
SM2564C10U41	SM2564C10U11	1.75	1	9	22	0.6	1.27	85.8
SM2564C20U41	SM2564C20U11	1.75	2	2.1	5.4	0.6	1.27	85.8
SM2564C30U41	SM2564C30U11	1.75	3	0.84	2.2	0.6	1.27	85.8

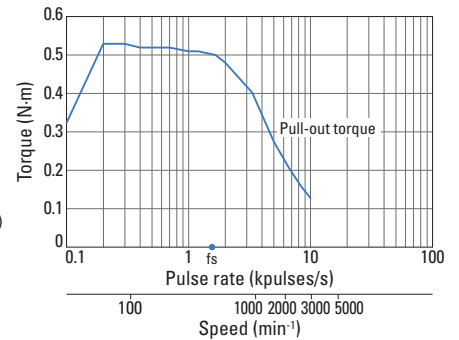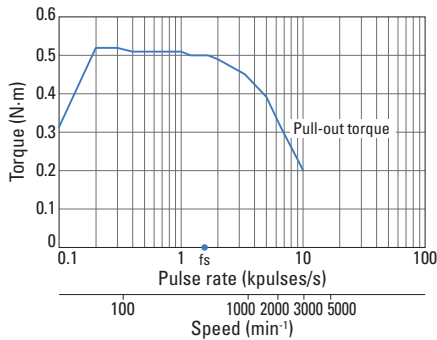Motor cable model no.: 4837798-1

■ Characteristics

SM2561C10U41 / SM2561C10U11

Constant current circuit
Input voltage: 24 VDC
Winding current:
1 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 0.94 \times 10^{-4}$kg·m² (with rubber coupling used)
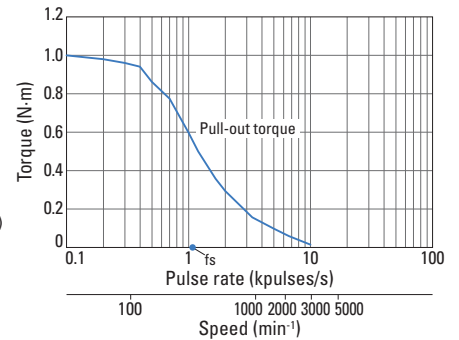f_s: Maximum starting pulse rate with no load
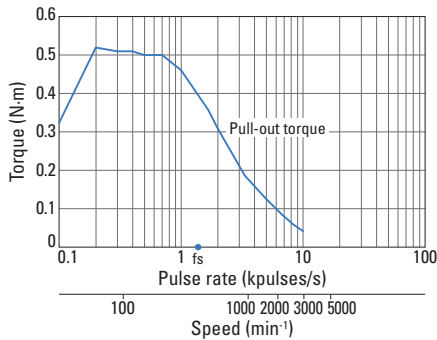
SM2561C20U41 / SM2561C20U11

Constant current circuit
Input voltage: 24 VDC
Winding current:
2 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 0.94 \times 10^{-4}$kg·m² (with rubber coupling used)
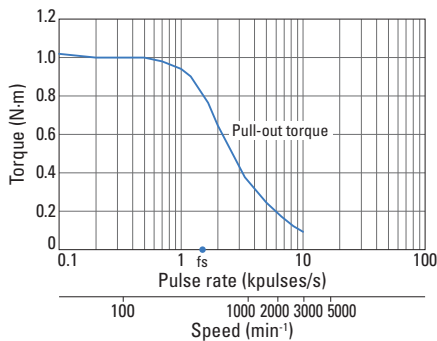f_s: Maximum starting pulse rate with no load

SM2561C30U41 / SM2561C30U11

Constant current circuit
Input voltage: 24 VDC
Winding current:
3 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 0.94 \times 10^{-4}$kg·m² (with rubber coupling used)
f_s: Maximum starting pulse rate with no load

SM2562C10U41 / SM2562C10U11

Constant current circuit
Input voltage: 24 VDC
Winding current:
1 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 2.6 \times 10^{-4}$kg·m² (with rubber coupling used)
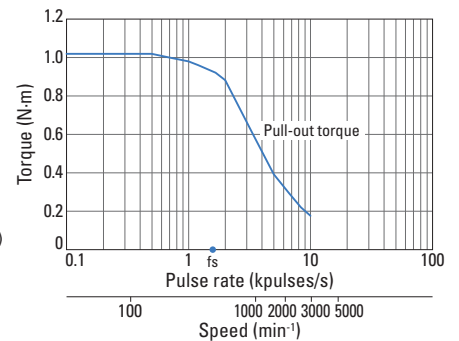f_s: Maximum starting pulse rate with no load

SM2562C20U41 / SM2562C20U11

Constant current circuit
Input voltage: 24 VDC
Winding current:
2 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 2.6 \times 10^{-4}$kg·m² (with rubber coupling used)
f_s: Maximum starting pulse rate with no load
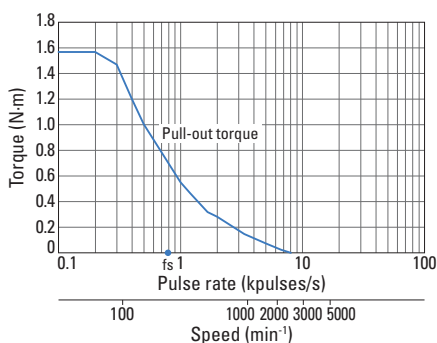

SM2562C30U41 / SM2562C30U11

Constant current circuit
Input voltage: 24 VDC
Winding current:
3 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 2.6 \times 10^{-4}$kg·m² (with rubber coupling used)
f_s: Maximum starting pulse rate with no load

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

56 mm sq. 1.8°/step

DC Input Set Orders and Drivers

Stepping Motors

IP65-Rated Stepping Motors

In-Vacuum Stepping Motors

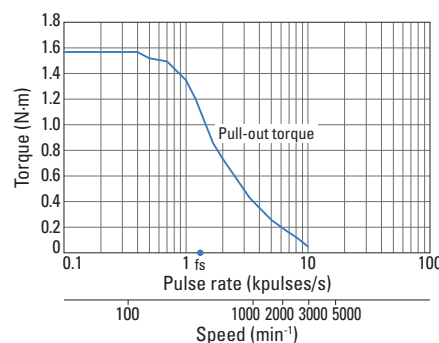Synchronous Motors
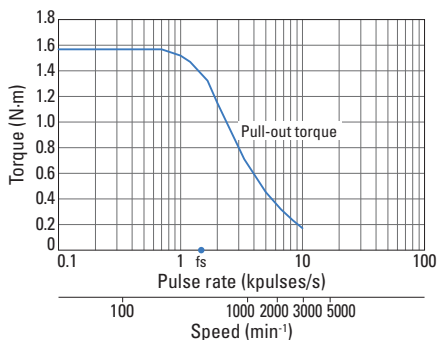
■ Characteristics

SM2563C10U41
SM2563C10U11

Constant current circuit
Input voltage: 24 VDC
Winding current:
1 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 7.4 \times 10^{-4} kg \cdot m^2$
(with rubber coupling used)
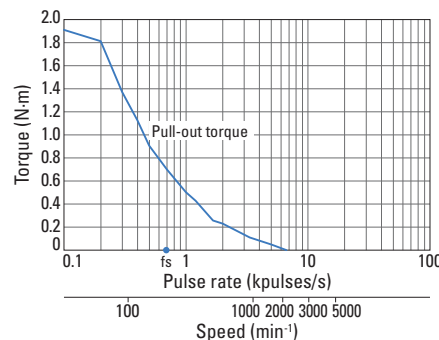f_S: Maximum starting pulse rate with no load

SM2563C20U41
SM2563C20U11

Constant current circuit
Input voltage: 24 VDC
Winding current:
2 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 7.4 \times 10^{-4} kg \cdot m^2$
(with rubber coupling used)
f_S: Maximum starting pulse rate with no load

SM2563C30U41
SM2563C30U11

Constant current circuit
Input voltage: 24 VDC
Winding current:
3 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 7.4 \times 10^{-4} kg \cdot m^2$
(with rubber coupling used)
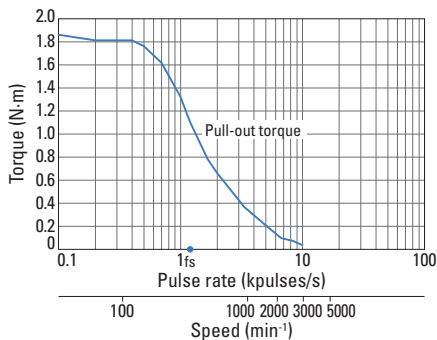f_S: Maximum starting pulse rate with no load

SM2564C10U41
SM2564C10U11

Constant current circuit
Input voltage: 24 VDC
Winding current:
1 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 7.4 \times 10^{-4} kg \cdot m^2$
(with rubber coupling used)
f_S: Maximum starting pulse rate with no load

SM2564C20U41
SM2564C20U11

Constant current circuit
Input voltage: 24 VDC
Winding current:
2 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 7.4 \times 10^{-4} kg \cdot m^2$
(with rubber coupling used)
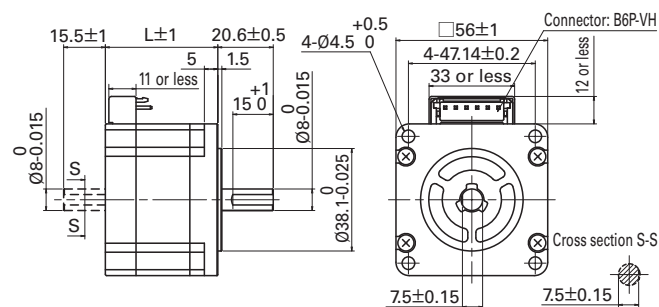f_S: Maximum starting pulse rate with no load

SM2564C30U41
SM2564C30U11

Constant current circuit
Input voltage: 24 VDC
Winding current:
3 A/phase
At 2-phase excitation (full step)
Pull-out torque:
$J_L = 7.4 \times 10^{-4} kg \cdot m^2$
(with rubber coupling used)
f_S: Maximum starting pulse rate with no load
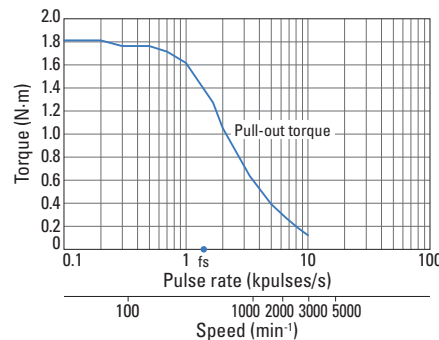
■ Dimensions (Unit: mm)

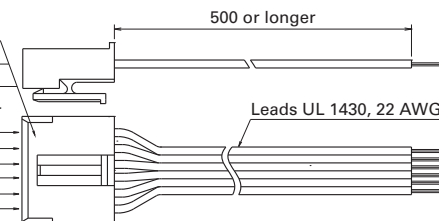Separate option: Motor cable 4837798-1
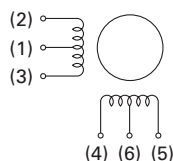
Mfr.: J.S.T.
Housing: VHR-6N
Terminal: SVH-21T-P1.1

Terminal no.	Lead color
6	Black
5	Yellow
4	Red
3	Blue
2	Orange
1	White

Leads UL 1430, 22 AWG
500 or longer

■ Internal wiring
In parentheses are connector pin nos.

■ Compatible drivers

• For motors SM256□C20U□1 (2 A/phase)...
  Model no.: US1D200P10 (DC input)
  Operating current selection switch setting: 0
• 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.

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