

56 mm sq.

1.8°/step RoHS
Bipolar, connector type



Custom options

- Hollow shaft Custom shaft
- Gear Encoder
- Brake

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

Bipolar, connector type

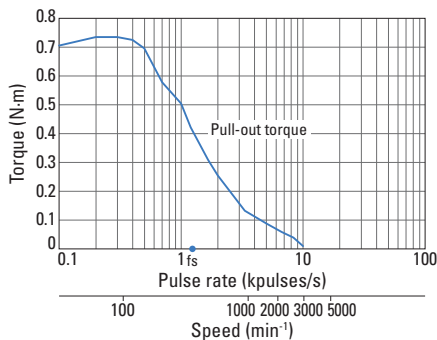
Model no.		Holding torque at 2-phase excitation	Rated current	Winding resistance	Winding inductance	Rotor inertia	Mass	Motor length (L)
Single shaft	Dual shaft	N·m or more	A/phase	Ω/phase	mH/phase	×10 ⁻⁴ kg·m ²	kg	mm
SM2561C10B41	SM2561C10B11	0.75	1	4.6	13.5	0.14	0.49	41.8
SM2561C20B41	SM2561C20B11	0.75	2	1.1	3.5	0.14	0.49	41.8
SM2561C30B41	SM2561C30B11	0.75	3	0.51	1.5	0.14	0.49	41.8
SM2561C40B41	SM2561C40B11	0.75	4	0.28	0.85	0.14	0.49	41.8
SM2561C60B41	SM2561C60B11	0.75	6	0.14	0.38	0.14	0.49	41.8
SM2562C10B41	SM2562C10B11	1.4	1	6.3	25.5	0.28	0.69	53.8
SM2562C20B41	SM2562C20B11	1.4	2	1.5	6.5	0.28	0.69	53.8
SM2562C30B41	SM2562C30B11	1.4	3	0.68	2.9	0.28	0.69	53.8
SM2562C40B41	SM2562C40B11	1.4	4	0.37	1.5	0.28	0.69	53.8
SM2562C60B41	SM2562C60B11	1.4	6	0.18	0.72	0.28	0.69	53.8
SM2563C10B41	SM2563C10B11	2.35	1	8.6	36	0.5	1.1	75.8
SM2563C20B41	SM2563C20B11	2.35	2	2.1	9.5	0.5	1.1	75.8
SM2563C30B41	SM2563C30B11	2.35	3	0.95	4.2	0.5	1.1	75.8
SM2563C40B41	SM2563C40B11	2.35	4	0.52	2.4	0.5	1.1	75.8
SM2563C60B41	SM2563C60B11	2.35	6	0.25	1.05	0.5	1.1	75.8
SM2564C10B41	SM2564C10B11	2.5	1	9.4	41	0.6	1.27	85.8
SM2564C20B41	SM2564C20B11	2.5	2	2.1	11	0.6	1.27	85.8
SM2564C30B41	SM2564C30B11	2.5	3	0.95	4.9	0.6	1.27	85.8
SM2564C40B41	SM2564C40B11	2.5	4	0.59	2.8	0.6	1.27	85.8
SM2564C60B41	SM2564C60B11	2.5	6	0.27	1.15	0.6	1.27	85.8

Motor cable model no.: 4837961-1

Characteristics

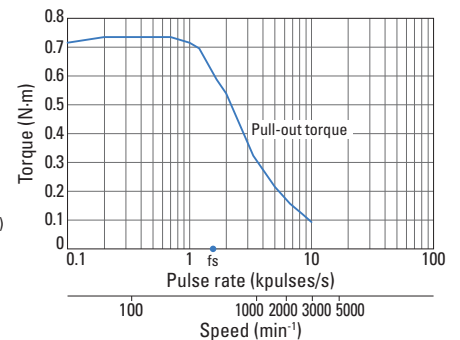
SM2561C10B41 SM2561C10B11

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



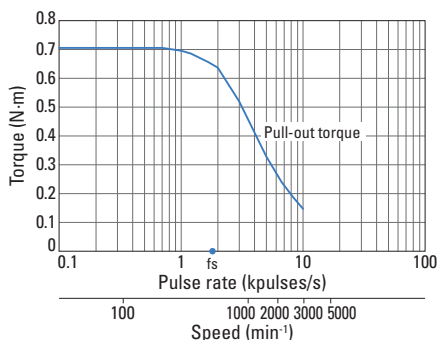
SM2561C20B41 SM2561C20B11

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



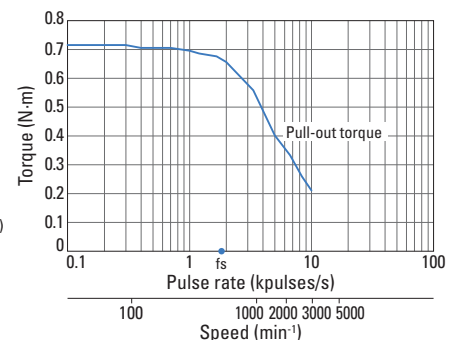
SM2561C30B41 SM2561C30B11

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



SM2561C40B41 SM2561C40B11

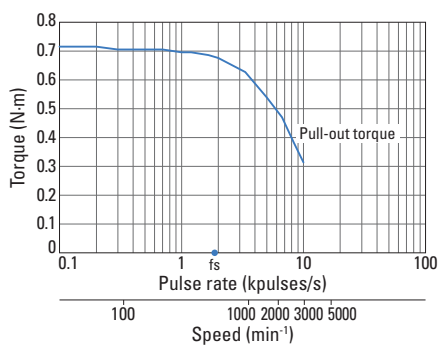
Constant current circuit
Input voltage: 24 VDC
Winding current:
4 A/phase
At 2-phase excitation (full step)
Pull-out torque:
 $J_L = 0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$
(with rubber coupling used)
 f_s : Maximum starting pulse rate with no load



Characteristics

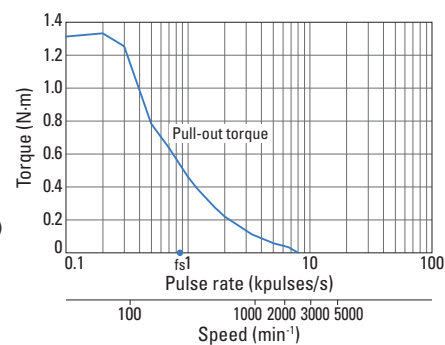
SM2561C60B41 SM2561C60B11

Constant current circuit
Input voltage: 24 VDC
Winding current:
6 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



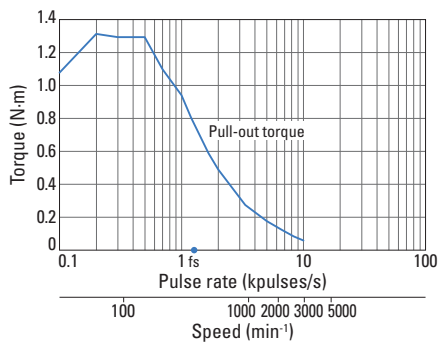
SM2562C10B41 SM2562C10B11

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



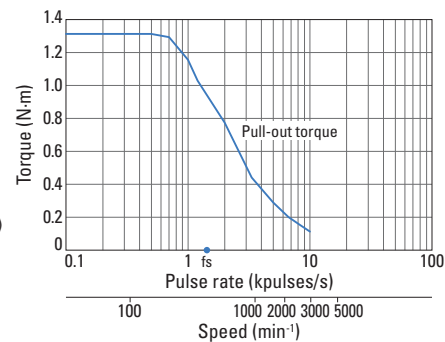
SM2562C20B41 SM2562C20B11

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



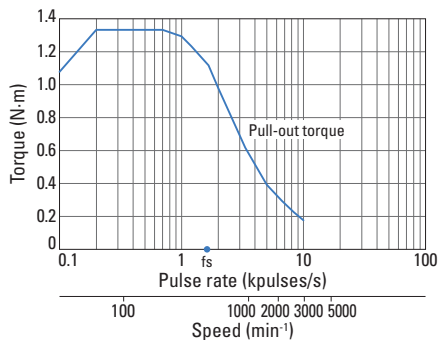
SM2562C30B41 SM2562C30B11

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



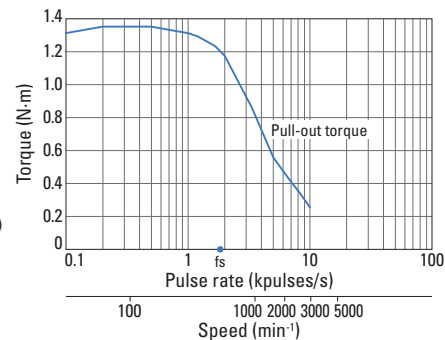
SM2562C40B41 SM2562C40B11

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



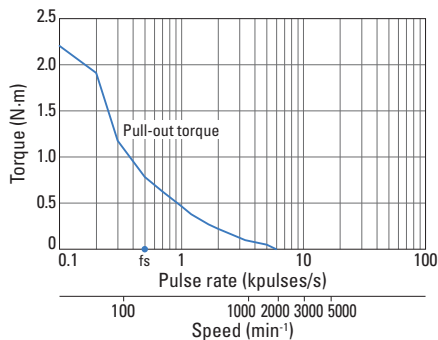
SM2562C60B41 SM2562C60B11

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



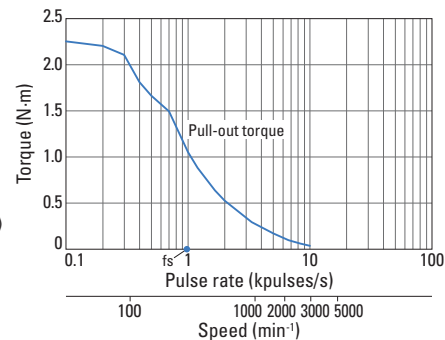
SM2563C10B41 SM2563C10B11

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



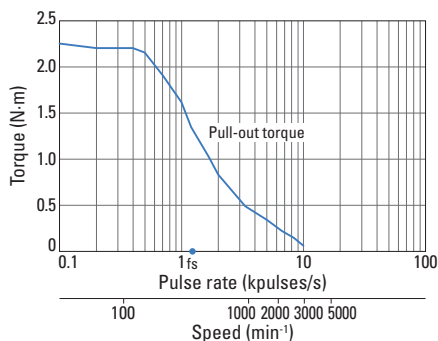
SM2563C20B41 SM2563C20B11

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



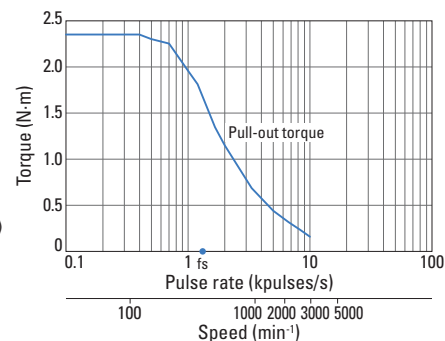
SM2563C30B41 SM2563C30B11

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



SM2563C40B41 SM2563C40B11

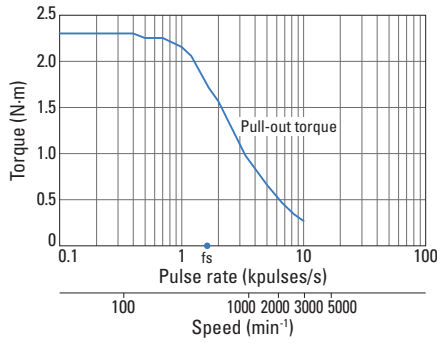
Constant current circuit
Input voltage: 24 VDC
Winding current:
4 A/phase
At 2-phase excitation (full
step)
Pull-out torque:
 $J_L = 7.4 \times 10^{-4} \text{kg}\cdot\text{m}^2$
(with rubber coupling used)
 f_s : Maximum starting pulse
rate with no load



Characteristics

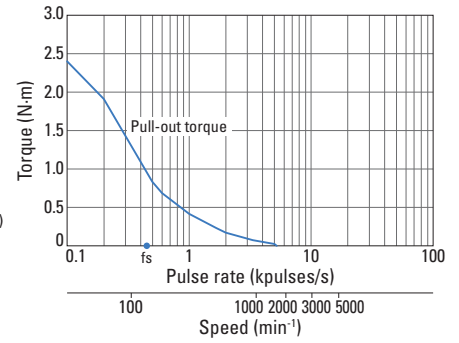
SM2563C60B41 SM2563C60B11

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



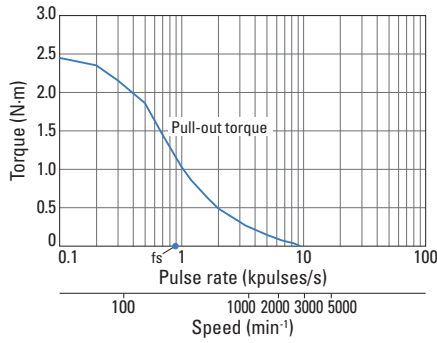
SM2564C10B41 SM2564C10B11

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



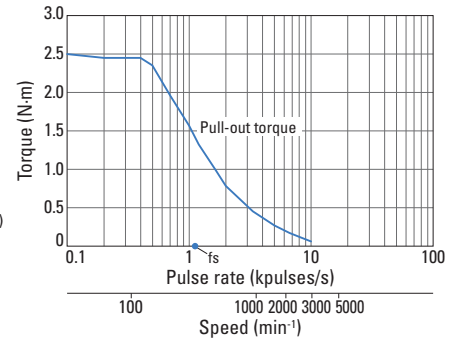
SM2564C20B41 SM2564C20B11

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



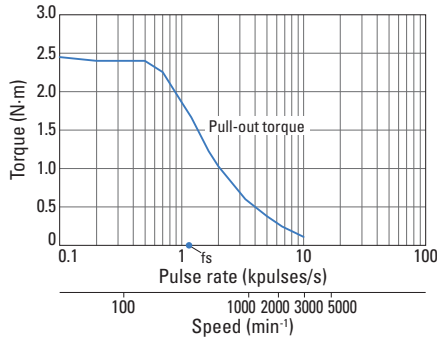
SM2564C30B41 SM2564C30B11

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



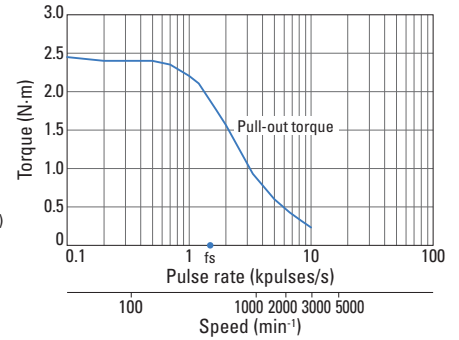
SM2564C40B41 SM2564C40B11

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

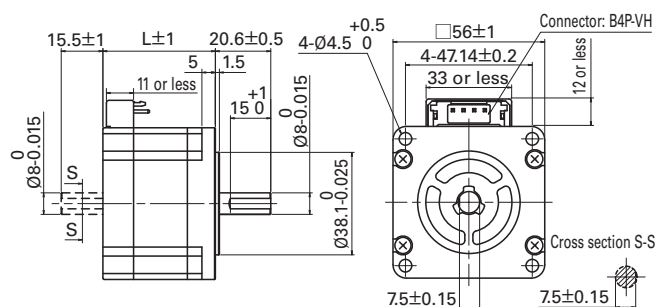


SM2564C60B41 SM2564C60B11

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



Dimensions (Unit: mm)

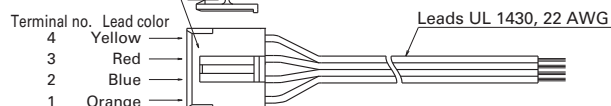


Separate option: Motor cable 4837961-1

Mfr.: J.S.T.

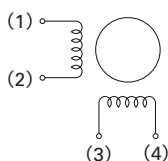
Housing: VHR-4N

Terminal: SVH-21T-P1.1



Internal wiring

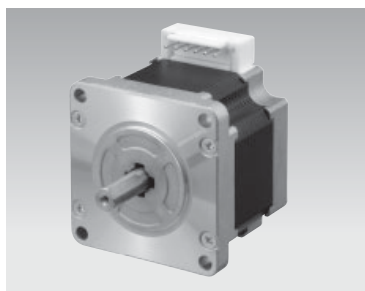
In parentheses are connector pin nos.



Compatible drivers

- For motors SM256□C20B□1 (2 A/phase)...
Model no.: BS1D200P10 (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.



60 mm sq.

Our conventional 60 mm sq. motors (103H782□)

1.8-phase step RoHS

It is recommended you use a 56 mm sq. motor (SM256□C□0□□1) that has equivalent torque in a smaller size. See Models No Longer Listed and Their Replacement Models in pages 78 to 79.

We also offer customization that makes the flange compatible with 60 mm sq. motors for easy replacement.

If considering replacing our conventional 56 mm sq. motors (103H712□),

→ See Models No Longer Listed and Their Replacement Models in p. 78 to 79