

# 50 mmsq. (1.97 inch sq.)

1.8° /step RoHS

Unipolar winding, Lead wire type  
Bipolar winding, Lead wire type ▶ p. 66

### Customizing

Hollow Shaft modification

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

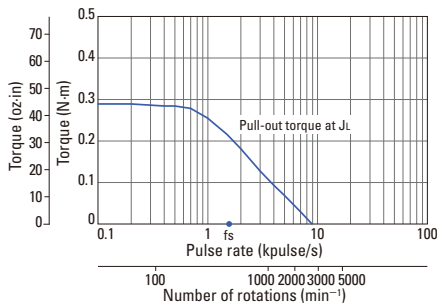
### Unipolar winding, Lead wire type

| Model number         |                      | Holding torque at 2-phase energization | Rated current | Wiring resistance | Winding inductance | Rotor inertia  | Mass (Weight) | Motor length (L) |
|----------------------|----------------------|--|---------------|-------------------|--------------------|--|---------------|------------------|
| Single shaft         | Dual shaft           | [N·m (oz·in) min.]                     | A/phase       | Ω /phase          | mH/phase           | [× 10 <sup>-4</sup> kg·m <sup>2</sup> (oz·in <sup>2</sup> )] | [kg (lbs)]    | mm (in)          |
| <b>103H6701-0140</b> | <b>103H6701-0110</b> | 0.28 (39.6)                            | 1             | 4.3               | 6.8                | 0.057 (0.31)   | 0.35 (0.77)   | 39.8 (1.57)      |
| <b>103H6701-0440</b> | <b>103H6701-0410</b> | 0.28 (39.6)                            | 2             | 1.1               | 1.6                | 0.057 (0.31)   | 0.35 (0.77)   | 39.8 (1.57)      |
| <b>103H6701-0740</b> | <b>103H6701-0710</b> | 0.28 (39.6)                            | 3             | 0.6               | 0.7                | 0.057 (0.31)   | 0.35 (0.77)   | 39.8 (1.57)      |
| <b>103H6703-0140</b> | <b>103H6703-0110</b> | 0.49 (69.4)                            | 1             | 6                 | 13                 | 0.118 (0.65)   | 0.5 (1.10)    | 51.3 (2.02)      |
| <b>103H6703-0440</b> | <b>103H6703-0410</b> | 0.49 (69.4)                            | 2             | 1.6               | 3.2                | 0.118 (0.65)   | 0.5 (1.10)    | 51.3 (2.02)      |
| <b>103H6703-0740</b> | <b>103H6703-0710</b> | 0.49 (69.4)                            | 3             | 0.83              | 1.4                | 0.118 (0.65)   | 0.5 (1.10)    | 51.3 (2.02)      |
| <b>103H6704-0140</b> | <b>103H6704-0110</b> | 0.53 (75.1)                            | 1             | 6.5               | 16.5               | 0.14 (0.77)  | 0.55 (1.21)   | 55.8 (2.20)      |
| <b>103H6704-0440</b> | <b>103H6704-0410</b> | 0.52 (73.6)                            | 2             | 1.7               | 3.8                | 0.14 (0.77)  | 0.55 (1.21)   | 55.8 (2.20)      |
| <b>103H6704-0740</b> | <b>103H6704-0710</b> | 0.53 (75.1)                            | 3             | 0.9               | 1.7                | 0.14 (0.77)  | 0.55 (1.21)   | 55.8 (2.20)      |

## Characteristics diagram

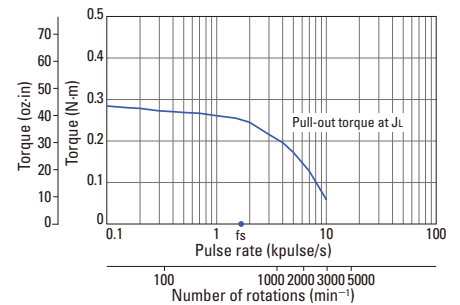
### 103H6701-0140 103H6701-0110

Constant current circuit  
Source voltage: 24 VDC  
Operating current:  
1 A/phase, 2-phase  
energization (full-step)  
 $J_L=[0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$  (5.14  
oz·in<sup>2</sup>) use the rubber  
coupling]  
fs: Maximum self-start  
frequency when not  
loaded



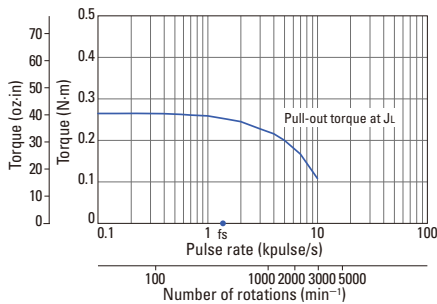
### 103H6701-0440 103H6701-0410

Constant current circuit  
Source voltage: 24 VDC  
Operating current:  
2 A/phase, 2-phase  
energization (full-step)  
 $J_L=[0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$  (5.14  
oz·in<sup>2</sup>) use the rubber  
coupling]  
fs: Maximum self-start  
frequency when not  
loaded



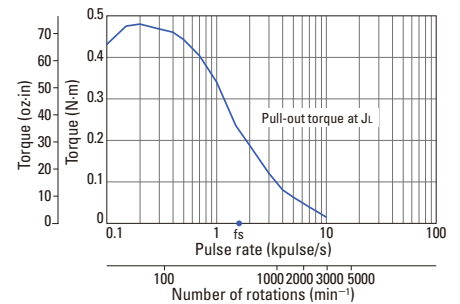
### 103H6701-0740 103H6701-0710

Constant current circuit  
Source voltage: 24 VDC  
Operating current:  
3 A/phase, 2-phase  
energization (full-step)  
 $J_L=[0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$  (5.14  
oz·in<sup>2</sup>) use the rubber  
coupling]  
fs: Maximum self-start  
frequency when not  
loaded



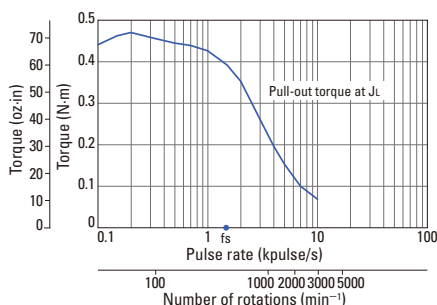
### 103H6703-0140 103H6703-0110

Constant current circuit  
Source voltage: 24 VDC  
Operating current:  
1 A/phase, 2-phase  
energization (full-step)  
 $J_L=[0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$  (5.14  
oz·in<sup>2</sup>) use the rubber  
coupling]  
fs: Maximum self-start  
frequency when not  
loaded



### 103H6703-0440 103H6703-0410

Constant current circuit  
Source voltage: 24 VDC  
Operating current:  
2 A/phase, 2-phase  
energization (full-step)  
 $J_L=[0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$  (5.14  
oz·in<sup>2</sup>) use the rubber  
coupling]  
fs: Maximum self-start  
frequency when not  
loaded



### 103H6703-0740 103H6703-0710

Constant current circuit  
Source voltage: 24 VDC  
Operating current:  
3 A/phase, 2-phase  
energization (full-step)  
 $J_L=[0.94 \times 10^{-4} \text{kg}\cdot\text{m}^2$  (5.14  
oz·in<sup>2</sup>) use the rubber  
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