



# 42 mm sq. (1.65 inch sq.)

1.8° /step RoHS

Bipolar winding, Lead wire type  
Unipolar winding, Connector type ▶ p. 61

## Customizing

Hollow | Shaft modification  
Decelerator | Encoder  
Brake

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

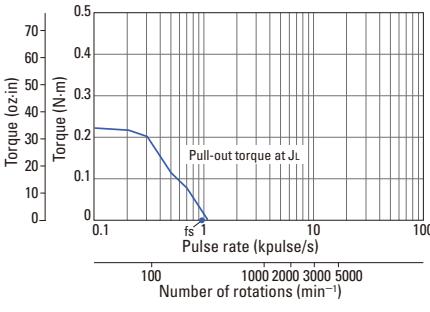
### Bipolar winding, Lead wire type

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>103H5205-5040</b>	<b>103H5205-5010</b>	0.23 (32.57)	0.25	54	78	0.036 (0.20)	0.23 (0.51)	33 (1.25)
<b>103H5205-5140</b>	<b>103H5205-5110</b>	0.25 (35.40)	0.5	13.4	23.4	0.036 (0.20)	0.23 (0.51)	33 (1.25)
<b>103H5205-5240</b>	<b>103H5205-5210</b>	0.265 (37.53)	1	3.4	6.5	0.036 (0.20)	0.23 (0.51)	33 (1.25)
<b>103H5208-5040</b>	<b>103H5208-5010</b>	0.35 (49.56)	0.25	66	116	0.056 (0.31)	0.29 (0.64)	39 (1.54)
<b>103H5208-5140</b>	<b>103H5208-5110</b>	0.38 (53.81)	0.5	16.5	34	0.056 (0.31)	0.29 (0.64)	39 (1.54)
<b>103H5208-5240</b>	<b>103H5208-5210</b>	0.39 (55.23)	1	4.1	9.5	0.056 (0.31)	0.29 (0.64)	39 (1.54)
<b>103H5209-5040</b>	<b>103H5209-5010</b>	0.38 (53.81)	0.25	71.4	133	0.062 (0.34)	0.31 (0.68)	41 (1.61)
<b>103H5209-5140</b>	<b>103H5209-5110</b>	0.41 (58.06)	0.5	18.2	39	0.062 (0.34)	0.31 (0.68)	41 (1.61)
<b>103H5209-5240</b>	<b>103H5209-5210</b>	0.425 (60.18)	1	4.4	11	0.062 (0.34)	0.31 (0.68)	41 (1.61)
<b>103H5210-5040</b>	<b>103H5210-5010</b>	0.465 (65.85)	0.25	80	123.3	0.074 (0.40)	0.37 (0.82)	48 (1.89)
<b>103H5210-5140</b>	<b>103H5210-5110</b>	0.49 (69.39)	0.5	20	35	0.074 (0.40)	0.37 (0.82)	48 (1.89)
<b>103H5210-5240</b>	<b>103H5210-5210</b>	0.51 (72.22)	1	4.8	9.5	0.074 (0.40)	0.37 (0.82)	48 (1.89)

## Characteristics diagram

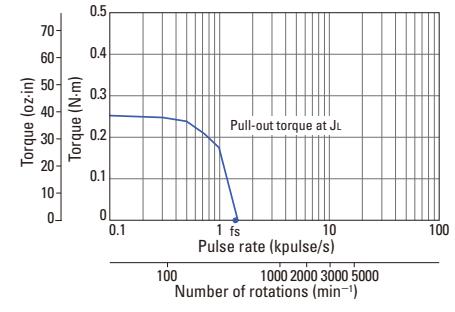
### 103H5205-5040 103H5205-5010

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



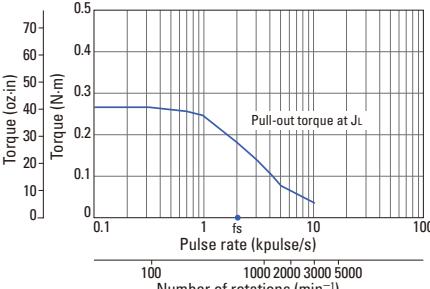
### 103H5205-5140 103H5205-5110

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



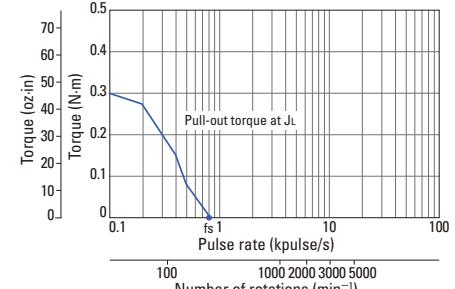
### 103H5205-5240 103H5205-5210

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



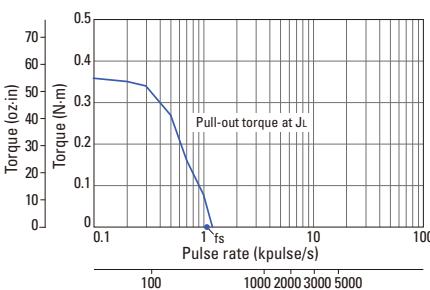
### 103H5208-5040 103H5208-5010

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



### 103H5208-5140 103H5208-5110

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



### 103H5208-5240 103H5208-5210

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

