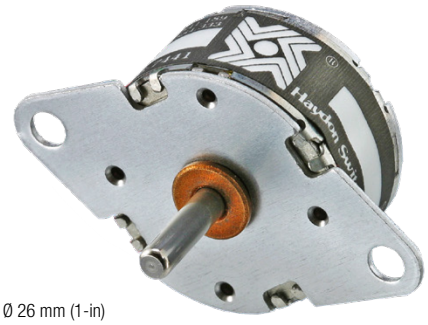
26000 Series
Can-Stack Rotary Motors

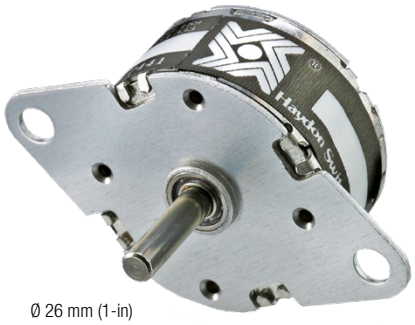
Provides exceptionally high torque to size ratios

Sleeve or Ball Bearing

A high temperature option is also available.



Ø 26 mm (1-in)
Sleeve Bearing



Ø 26 mm (1-in)
Ball Bearing

Specifications

Ø 26 mm (1 inch) Z Series Rotary Motors								
Wiring	Bipolar				Unipolar			
Part No. (Sleeve)	26440-05*	26440-12*	26540-05*	26540-12*	26460-05*	26460-12*	26560-05*	26560-12*
Step Angle	7.5°		15°		7.5°		15°	
Winding Voltage	5 VDC	12 VDC	5 VDC	12 VDC	5 VDC	12 VDC	5 VDC	12 VDC
Current (RMS)/phase	340 mA	140 mA	340 mA	140 mA	340 mA	140 mA	340 mA	140 mA
Resistance/phase	14.7 Ω	84 Ω	14.7 Ω	84 Ω	14.7 Ω	84 Ω	14.7 Ω	84 Ω
Inductance/phase	8.5 mH	55 mH	6.7 mH	44 mH	4.3 mH	24 mH	3.4 mH	19 mH
Hold Torque	1.6 oz-in. (1.13 Ncm)		1.3 oz-in. (.92 Ncm)		1.2 oz-in. (.85 Ncm)		.9 oz-in. (.64 Ncm)	
Detent Torque	.12 oz-in. (.09 Ncm)		.14 oz-in. (.10 Ncm)		.12 oz-in. (.09 Ncm)		.14 oz-in. (.10 Ncm)	
Power Consumption	3.4 W							
Rotor Inertia	1.2 gcm^2							
Weight	1 oz. (28 g)							
Insulation Resistance	20 MΩ							
Insulation Class	Class B							

*For Ball Bearings, add "-999" to the end of this number.

Identifying the Rotary Motor Number Codes when Ordering

	26	4	4	0	—	05	—	999
Prefix (include only when using the following) **T** = High Temperature **R** = Rare Earth Magnet	**Series Number Designation** **26 = 26000** (Series numbers represent approximate diameters of motor body)	**Style** **4** = 7.5° **5** = 15°	**Coils** **4** = Bipolar (4 wire) **6** = Unipolar (6 wire)	**Code ID Resolution Travel/Step** **0** = Rotary Motor		**Voltage** **05** = 5 VDC **12** = 12 VDC Custom V available		**Suffix** –999 = Ball bearings –000 = Sleeve bearings –XXX = Proprietary suffix assigned to a specific customer application. Identifier can apply to either a standard or custom part.

NOTE: Dashes must be included in Part Number (–) as shown above. For assistance call our Engineering Team at 203 756 7441.

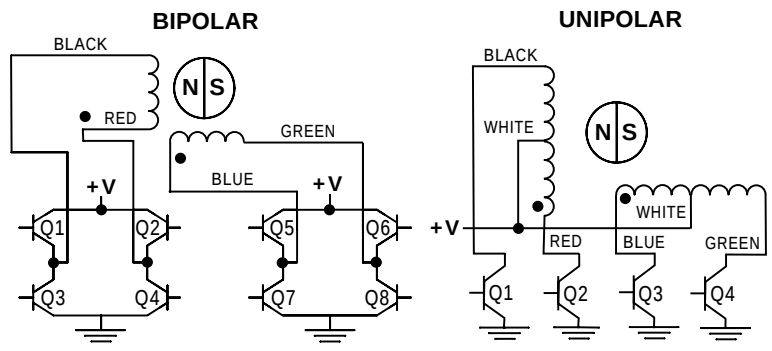
Rotary Motors: **Stepping Sequence**

Bipolar	Q2-Q3	Q1-Q4	Q6-Q7	Q5-Q8
Unipolar	Q1	Q2	Q3	Q4
Step				
1	ON	OFF	ON	OFF
2	OFF	ON	ON	OFF
3	OFF	ON	OFF	ON
4	ON	OFF	OFF	ON
1	ON	OFF	ON	OFF

CW ↓ ↑ CCW

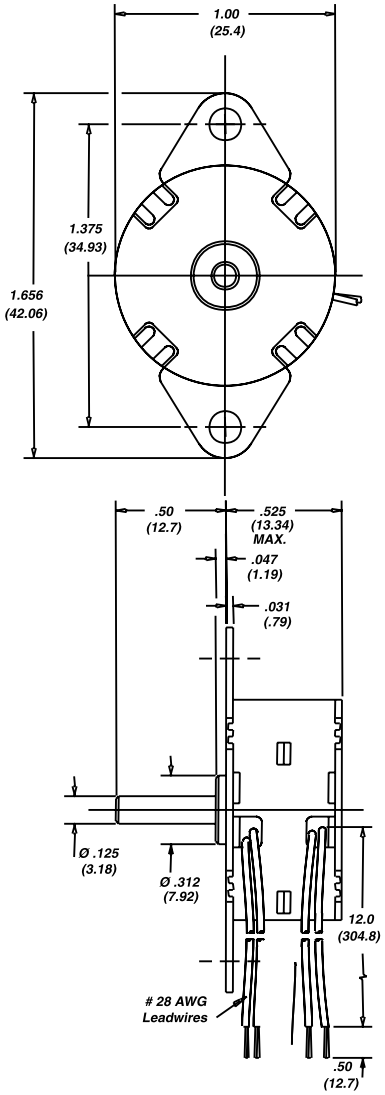
Note: Half stepping is accomplished by inserting an off state between transitioning phases. Shaft rotation as viewed from the output shaft.

Rotary Motors: **Wiring**

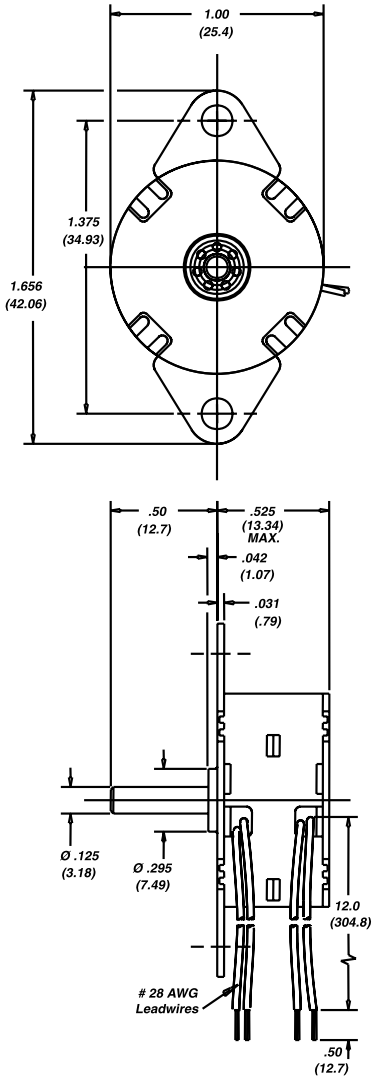


26000 Series Can-Stack Rotary Motors • Dimensional Drawings

Sleeve Bearing



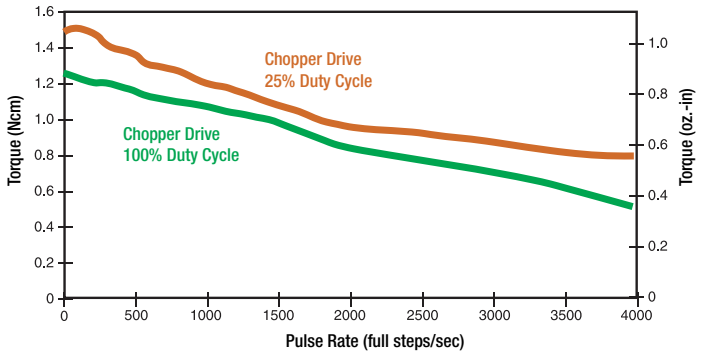
Ball Bearing



26000 Series Can-Stack Rotary Motors • Performance Curves

TORQUE vs. PULSE RATE

– Chopper Drive – Bipolar – 7.5% Step Angle

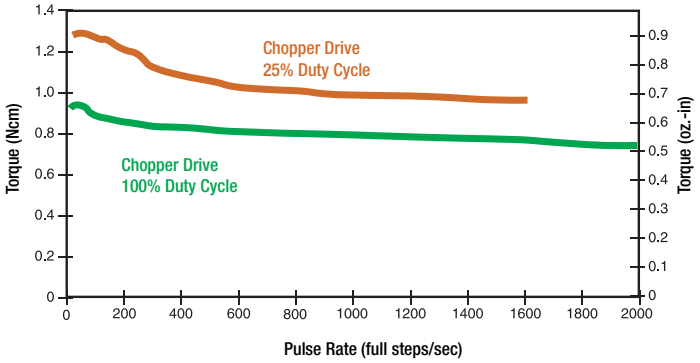


25% duty cycle is obtained by a special winding or running a standard motor at double the rated voltage.

NOTE: All chopper drive curves were created with a 5 volt motor and a 40 volt power supply.

TORQUE vs. PULSE RATE

– Chopper Drive – Bipolar – 15% Step Angle



Ramping can increase the performance of a motor either by increasing the top speed or getting a heavier load accelerated up to speed faster. Also, deceleration can be used to stop the motor without overshoot.

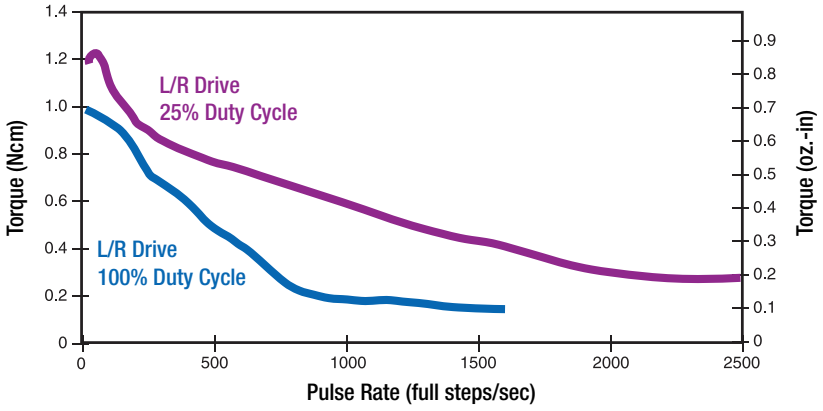
TORQUE vs. PULSE RATE

– L/R Drive

– Bipolar

– 7.5% Step Angle

25% duty cycle is obtained by a special winding or running a standard motor at double the rate voltage.

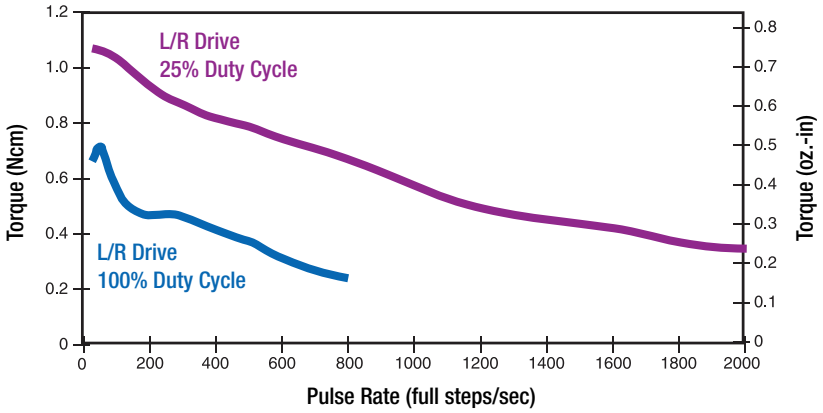


TORQUE vs. PULSE RATE

– L/R Drive

– Bipolar

– 15% Step Angle



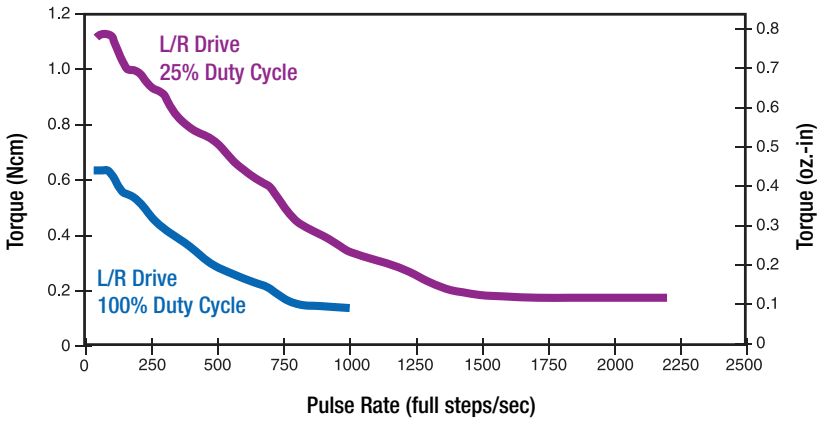
TORQUE vs. PULSE RATE

– L/R Drive

– Unipolar

– 7.5% Step Angle

25% duty cycle is obtained by a special winding or running a standard motor at double the rate voltage.



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