



AMETEK

PRECISION MOTION CONTROL

Chinese | German | Korean

SEARCH

GO

Admin

Home

About Us

News

Quote

Ask the Experts

Contact

FAQs

CHARACTERISTICS

TECHNICAL DIAGRAMS

PERFORMANCE CURVES

3D MODEL

- LINEAR ACTUATORS
- LEAD SCREWS & NUTS
- LINEAR RAILS, GUIDES & SPLINES
- DRIVES
- ROTARY MOTORS
- SEALED SWITCHES
- PITTMAN BRUSH AND BRUSHLESS DC MOTORS
- RESOURCES
- HAYDON KERK EXPRESS - [BUY NOW](#)

## PLANETARY GEAR TRAIN PANCAKE MOTOR

For a given size motor the larger the size motor, the larger the rotor the greater the torque.

Haydon provides an advanced, compact, low profile pancake stepper motor with a specially engineered, single-stage planetary gear train des.

- 0.75 inch height
- 3.15 inches square
- 100 oz- inch of torque



» [Technical Drawing](#)

[Download 2D/3D Model](#)

### SALIENT CHARACTERISTICS - PLANETARY PANCAKE MOTOR

PART NUMBER CONSTRUCTION

Please Select 

NEWSLETTER SIGN UP

Name

Email

Submit

Salient Characteristics			
Ø 80 mm (3.15-in.) Planetary Gear Train Pancake Stepper Motor			
Part Number	80GHX-V-Z		Code
Wiring (Part # code Z)	Bipolar		Z = 42
Gear Ratios/Step Angle (Part # code X)	4:1 = 0.9375°		X = 04
Operating Voltage (Part # code V)	5 VDC		V = 05
		12 VDC	V = 12
Current /Phase	1.4 A	.58 A	
Resistance/Phase *	3.6 Ω	20.6 Ω	
Step Angle	3.75		
Insulation Resistance	20 MΩ		
Power Consumption	14 W		
Weight	12 oz (343g)		
Temperature Rise	90°F Rise (50°C Rise)		
Travel Direction	Reversible		
Bearing	Radial ball		

\* +/- 10% at 25° C (77° F) ambient

### DIMENSIONAL DRAWING - PLANETARY PANCAKE MOTOR

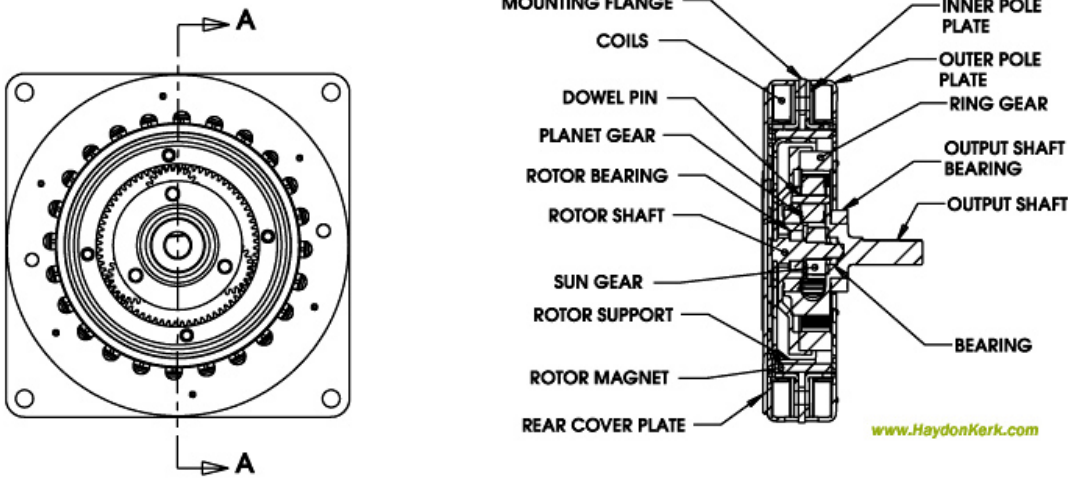
RELATED COMPANIES & BRANDS



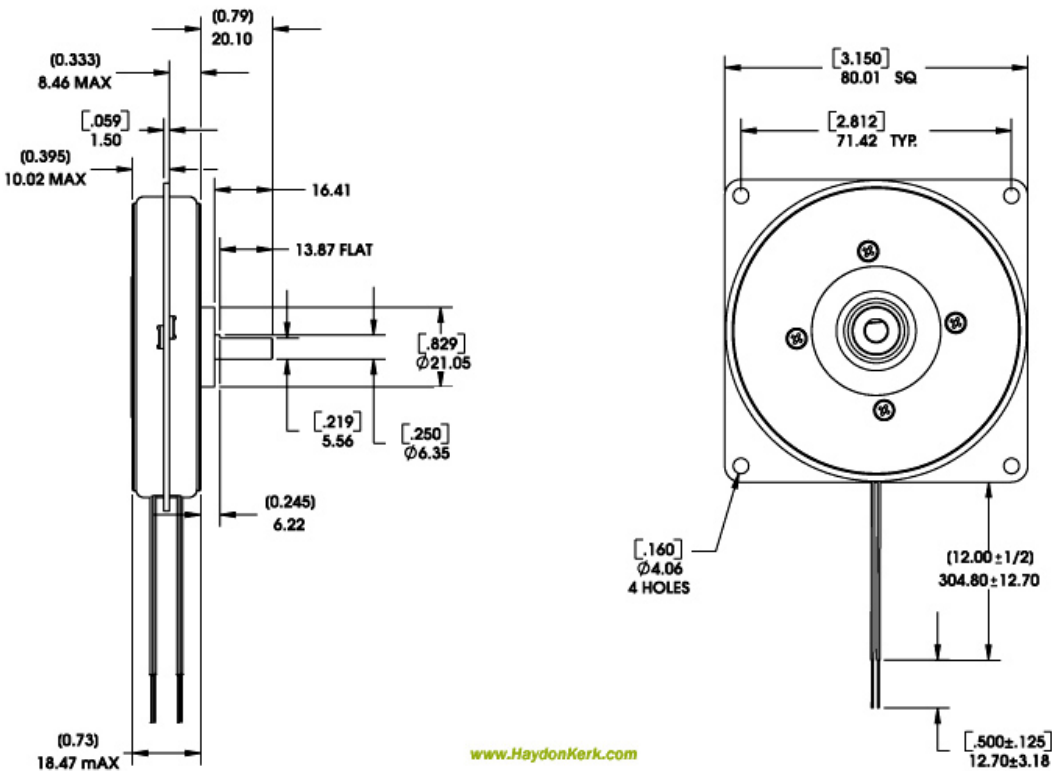
AMETEK

PRECISION MOTION CONTROL

AMETEK



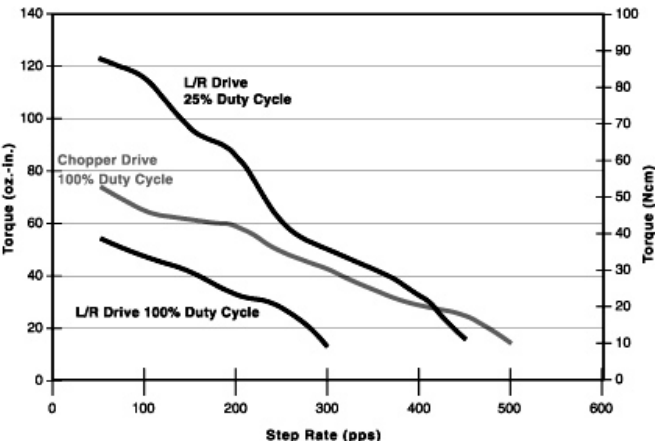
DIMENSIONAL DRAWING - PLANETARY PANCAKE MOTOR



PERFORMANCE CURVES - PLANETARY PANCAKE MOTOR

**4:1 Gear Train Ratio:  
Torque vs. Step Rate**

[www.HaydonKerk.com](http://www.HaydonKerk.com)



NOTE: 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.