

LPA-17

Low Profile Actuator

- Zero Backlash
- Compact Design



Harmonic Drive™ actuator
Precision Gearing & Motion Control

LPA-17 Precision Servo Actuator

Features

- Less than 1 arc minute positional accuracy
- Compact design
- Axial length of less than 2.6 inches
- Integral high performance brushless servo motor
- Double row angular contact output bearings
- High axial and moment loads
- Superior torque to weight ratio
- Adaptable to most controllers

The LPA 17 is the most axially compact precision servo actuator available. It combines the zero backlash and high ratio of Harmonic Drive™ gear with an integral high performance brushless servo motor and encoder in a single compact design that measures only 2.6 inches. The unit is capable of accuracies greater than 1 arc minute, repeatability of ± 5 arc seconds and rated output torques up to 350 lb in. Pre loaded double row angular contact output bearings allow the LPA to support high moment and axial loads. Standard reduction ratios are 50 and 100:1. The LPA is offered in a package with an amplifier or can be easily adapted to perform with many popular electronic systems.

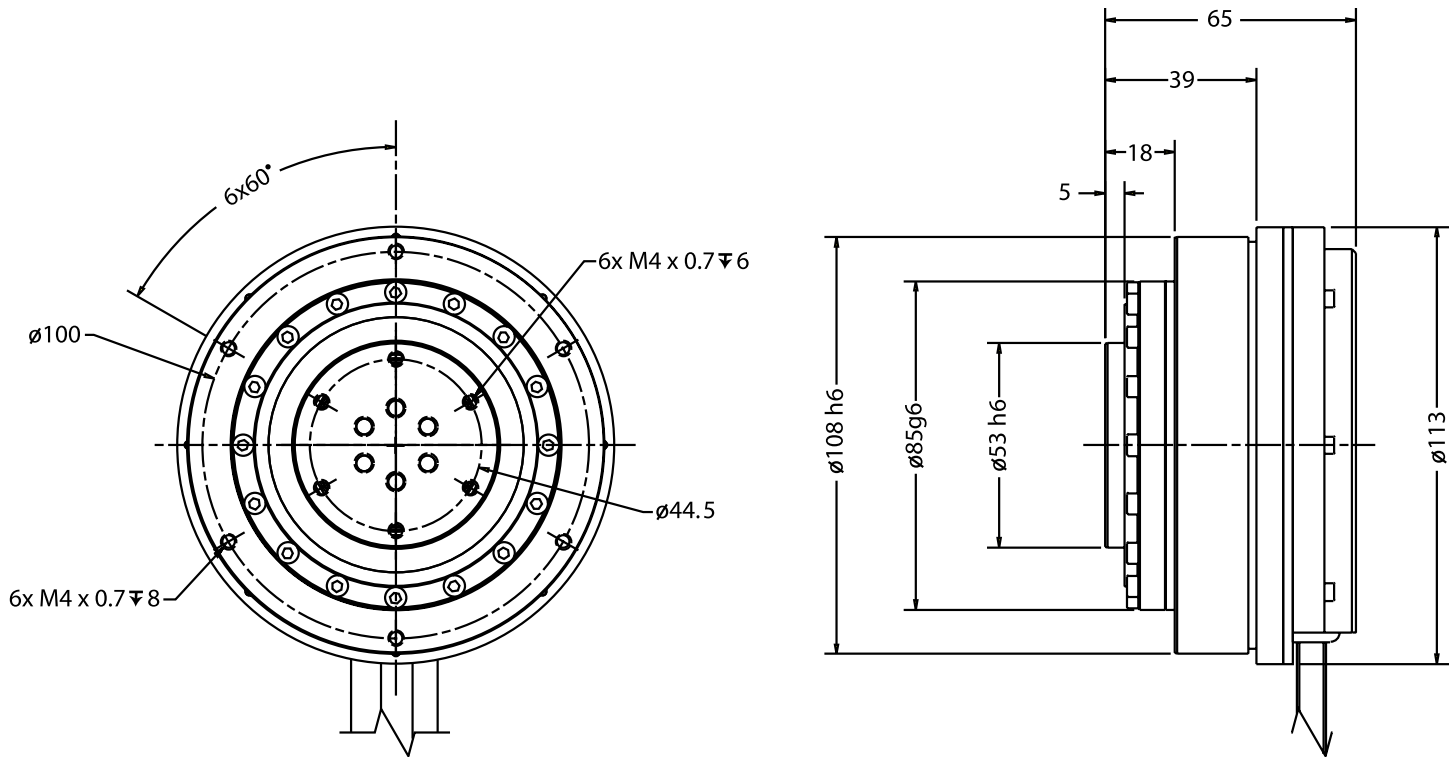


Actual width is <2.6"

Encoder Specifications

Frequency Response	100 KHz
Voltage	5 V
Current Draw	85ma Max
Lines	1000
Quad Counts	4000
Index	One Index

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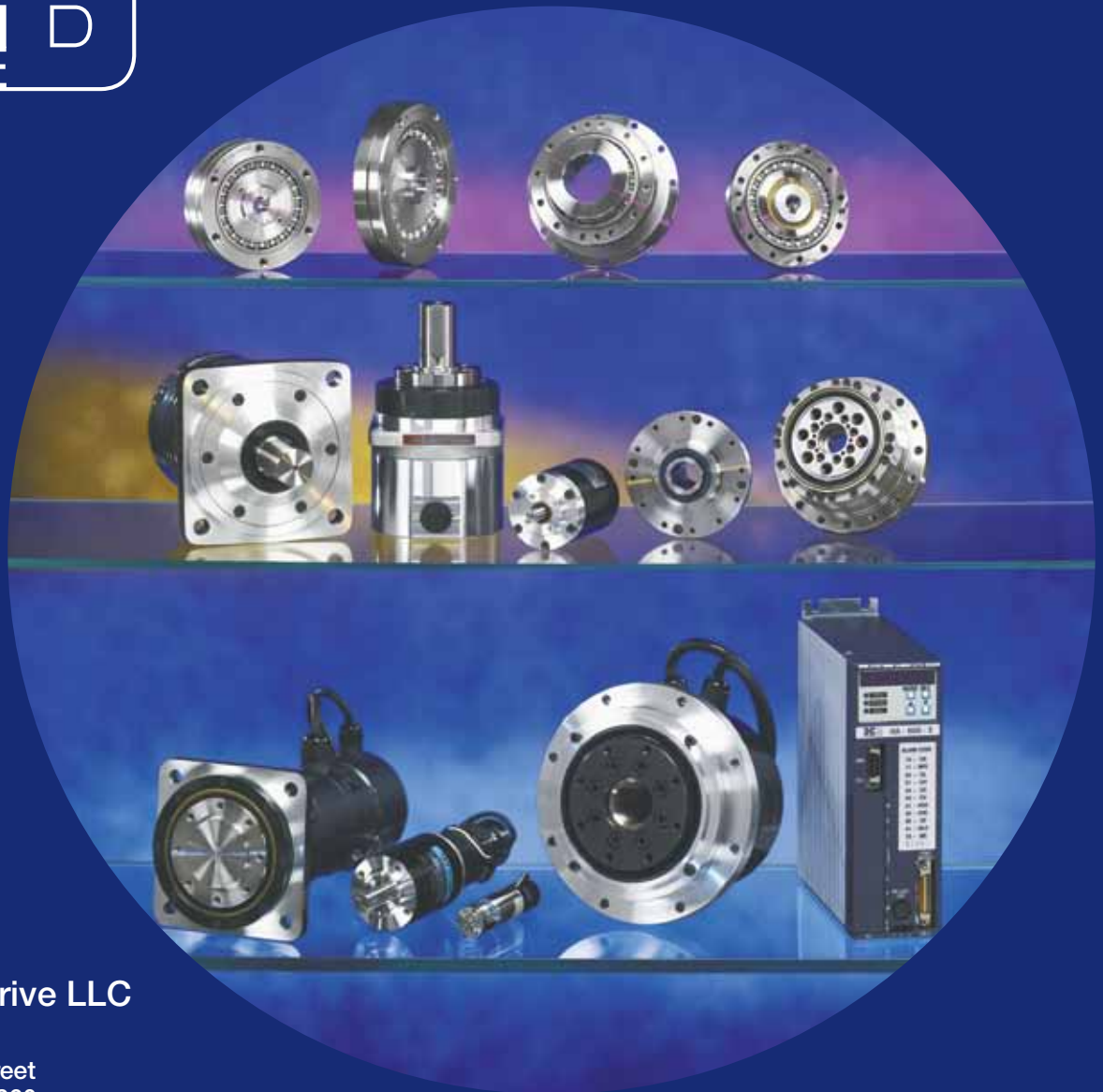


Configurations available for most amplifiers

Specifications of the LPA-17-100-SP Actuator

Gear Ratio	Units	100	50
Rated Torque at 2000 rpm (input)	NM	24	16
	Inlb	212	142
Repeated Peak Torque	NM	54	34
	Inlb	478	301
Max Speed of Rotation	Rpm	30	60
Torque Constant	NM/A	6	3
	Inlb/A	54	27
EMF Voltage Constant	V/rpm	0.8	0.4
Rated Current	A	4.5	4.5
Maximum Current	A	9.0	16.0
Number of Magnet Poles		16.0	16.0
Motor Encoder	Optical incremental with Index Encoder resolution, quad: 4,000 counts/rev. Encoder freq resp: 400,000 counts/sec. Encoder current draw: 85mA		
Weight	Lbs	4.3	4.3

*Please contact Harmonic Drive LLC for more information.



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