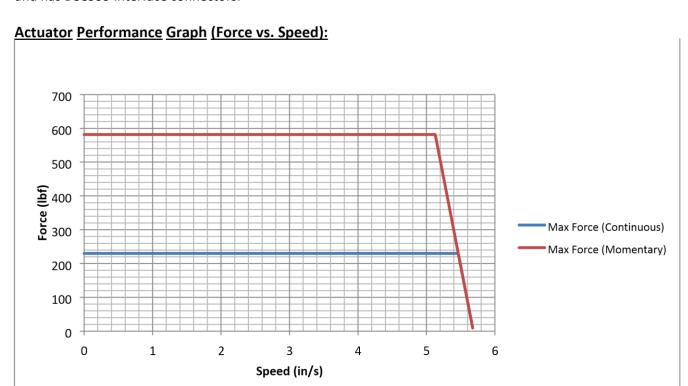


## **High Performance - Space Linear Actuator from Ultra Motion**

## **Product Description:**

This custom linear actuator is designed for use in vacuum or shallow underwater. The actuator has a 1.25 inch stroke length, a custom 200W brushless DC motor with a power-off brake, high-load ball bearing nut with a 0.125" pitch, and a total gear reduction of 6.24:1. This actuator also includes an integrated version of Ultra Motion's PHASE INDEX™ digital absolute position encoder with a 0-5V analog output. This encoder provides robust high-speed position feedback reliably and over a wide temperature range. An internal linear potentiometer is also included for redundant position feedback. The actuator is fully shielded against EMI, and has D38999 interface connectors.



## **Product Specifications:**

Stroke Length:	1.25 inches
Lead Screw:	Steel ball screw with recirculating ball bearing nut, 0.125 inch pitch per revolution, 98% efficient
Gear Drive Ratio:	4.8:1 (Planetary), 1.3:1 (Gear-train Reduction)
Rated Maximum No-Load Speed:	5.5 inches/second
Rated Continuous Force:	230 lbf



Rated Momentary Force (<60s):	580 lbf
Rated Momentary Force (<15s):	1150 lbf
Sealing:	Vacuum to + 20 psig
Temperature (Operational):	-15F to 165F
Connector Interface:	D38999 B Shell (x1), D38999 C Shell (x1)
Encoder Linear Resolution:	0.00012"

<u>Feedback 1:</u> 14-bit Ultra Motion PHASE INDEX™ Encoder with 0-5V analog output (10240 total counts over 1.25 inch stroke, resolution of 0.00012").

Feedback 2: Internal Linear Potentiometer (secondary redundant position).

