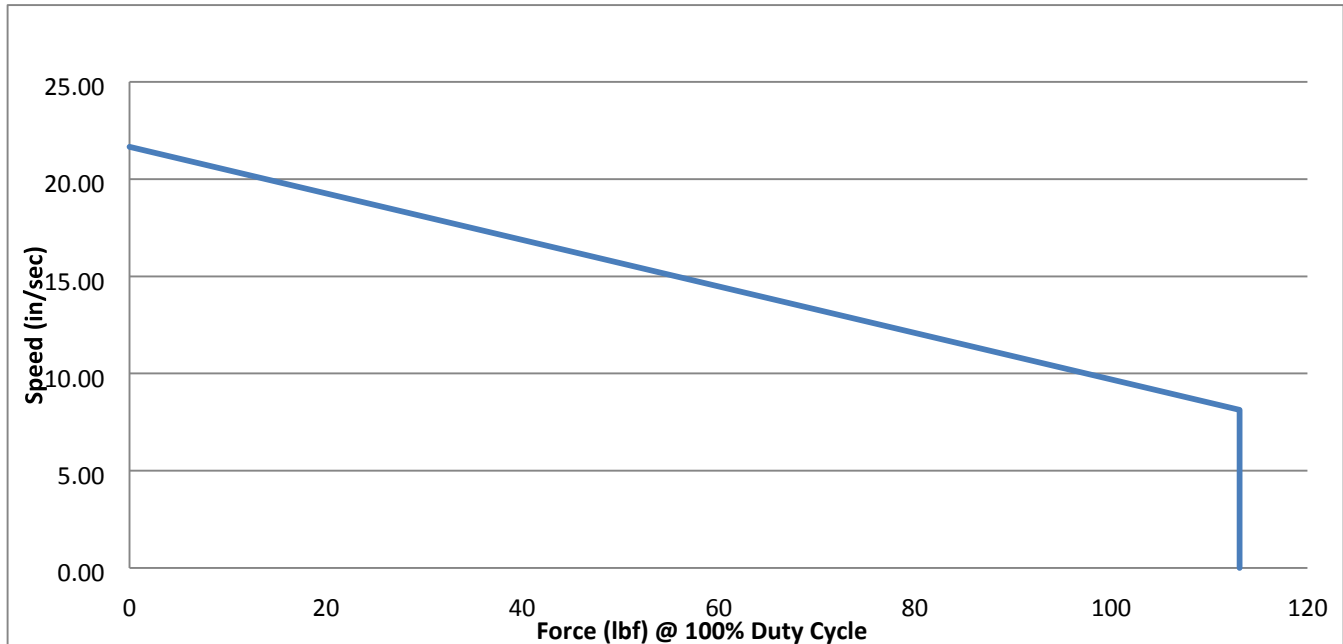




### **Product Description:**

Ultra Motion Series B3 Linear Actuator, 8 inch stroke, NEMA 23 frame brushless DC motor with integrated motion controller & optical encoder, ball bearing nut/lead screw- 0.125" pitch, 1:1 belt drive ratio, internal linear potentiometer, block tube mount fitting, ¼" spherical bearing rod end.

### **Actuator speed/force graph (100% duty cycle):**



### **Product Specifications:**

<b>Stroke Length:</b>	8 inches
<b>Lead Screw:</b>	Steel ball screw with recirculating ball bearing nut, 0.125 inch pitch per revolution, 98% efficient
<b>Belt Drive Ratio:</b>	1:1
<b>Rated Maximum No-Load Speed:</b>	21.67 inches/second
<b>Rated Continuous Force:</b>	113.1 lbf
<b>Rated Short Duration Force:</b>	180.9 lbf
<b>Rated Burst Force:</b>	271.4 lbf

**Feedback 1:** High Resolution Optical Encoder (250,000 total pulses per 8 inch stroke, used for high-speed PID loop input).

**Feedback 2:** Internal Linear Potentiometer (Used for homing & error checking).

**Inputs:** 4-Channel Analog or Digital, 0-5V position control (closed-loop, high bandwidth servo control) is standard in V6.3. Value is scalable.

**Outputs:** 3-Channel Analog or Digital (Not used in V6.3).

This actuator is based around a fully programmable motor with integrated controller that can function as an independent PLC.

**Tube Fitting:** Block Mount

**Nose Fitting:** ¼” spherical bearing rod end with jam nut

