



SERVONUT POWER MODULE

Zero backlash, driven-nut ball screw linear actuator.

- **Zero backlash.** ServoNut directly drives the nut along the screw with exact position feedback for backlash-free operation.
- **Standalone or Complete Actuator.** ServoNut Power Modules are available as a standalone drive element or as a complete precision linear actuator assembly with bearing carriage and linear or rotary encoder.
- **Inertia Matching Made Easy.** A wide range of direct-drive servo motors and screw leads allows for exact matching of your payload and motion requirements, eliminating the complications and inefficiencies of a driven-screw system's belt passes. ServoNut inertia is equivalent to or less than that of a driven-screw stage.
- **High-Force Applications.** Load capacity exceeds 1,500N continuous force. With options for pneumatic or electric fail-safe brakes, ServoNut Power Module is ideal for high-force vertical axis applications.
- **Fast and Precise.** ServoNut offers speeds in excess of 1 m/s and accelerations over 4 g. Bi-directional repeatability is ± 1 encoder count.
- **Built To Last.** ServoNut Power Module features lubed-for-life rotary bearings and an anodized aluminum and stainless steel construction.

DATA SHEET

TECHNICAL SPECIFICATIONS	ServoNut Power Module
Type	Rotating Nut Ballscrew Actuator
Bearing type	Internally preloaded ballscrew with preloaded spindle bearings
Length max (m)	1.8
Motor type	3-phase brushless servo
Lead	5 mm, 10 mm
Encoder	8000 CPR A quad B incremental or none
Accuracy (μm) <small>Linear accuracy at stage centerline, after two-point temperature scale correction.</small>	± 5
Speed (m/sec) <small>With 1000 mm screw.</small>	0.2, 0.4
Continuous linear force (N)	1560, 780
Moving mass (kg)	1.7
Rotary inertia ($\text{kg}\cdot\text{m}^2$)	0.00010

Configure and request a quote online at www.bell-everman.com/rfq.

