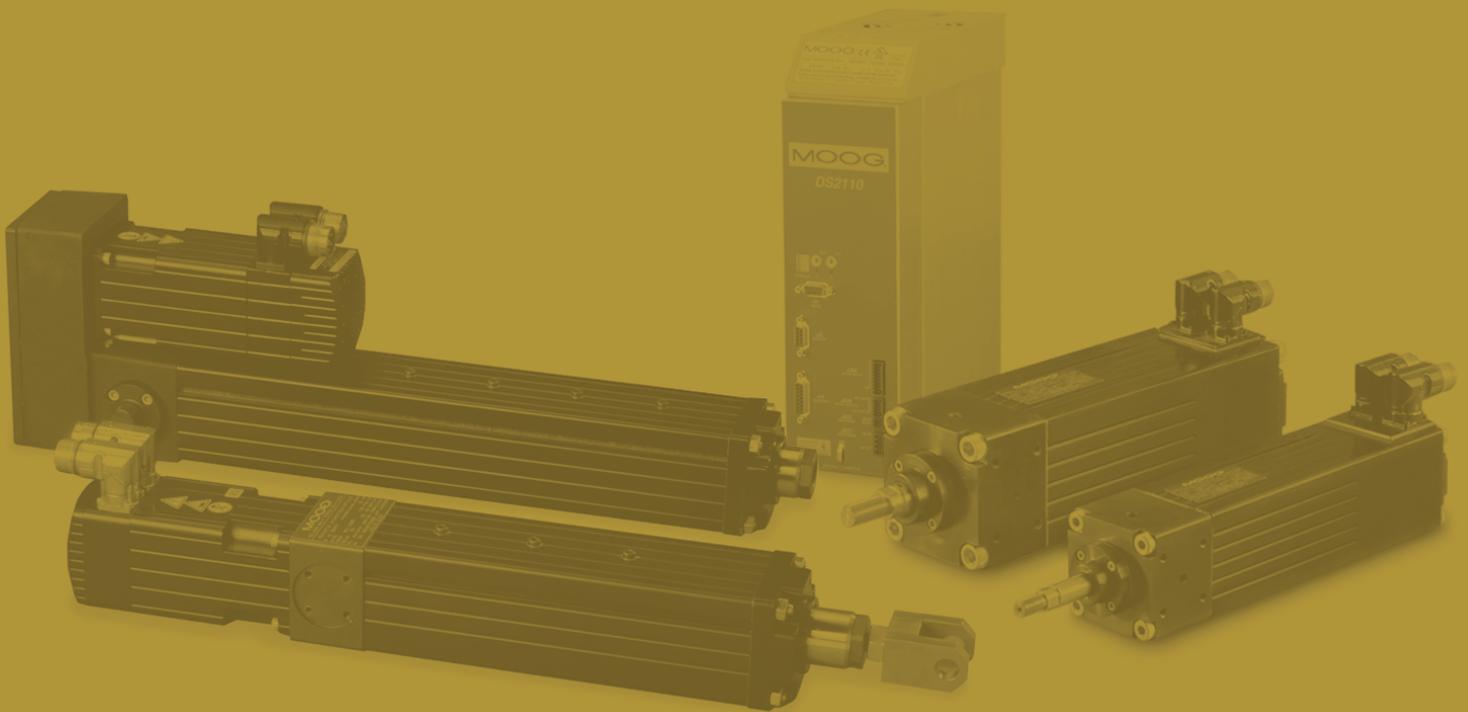


ELECTRIC LINEAR SERVOACTUATORS

STANDARD, FLEXIBLE AND
SERVOACTUATION PACKAGES



Rev. A 0709

HIGH PERFORMANCE DESIGN INCREASES
MACHINE PRODUCTIVITY

A HIGH PERFORMANCE ELECTRIC LINEAR ACTUATION SOLUTION

With rising utility costs and increasing exposure to environmental action, design engineers need a solution that will help them incorporate an electric solution without sacrificing precision, speed and productivity.

Moog has leveraged its rich history in electric technology to create this alternative to traditional hydraulic actuation. Our vast electric experience in servoactuation within Power Generation, Flight Simulation and Subsea equipment have positioned us perfectly for this. We have leveraged our motion control expertise to deliver a high performance and efficient product that provides:

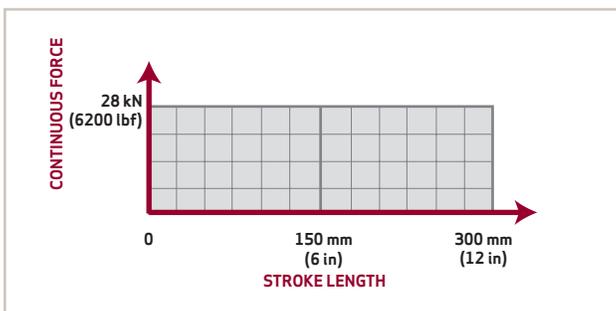
- Long-lasting performance and reliability that increases lifetime and return on investment
- Easier installation, creating less downtime so you are operating faster
- Higher efficiency, leading to lower energy costs



Applications include:

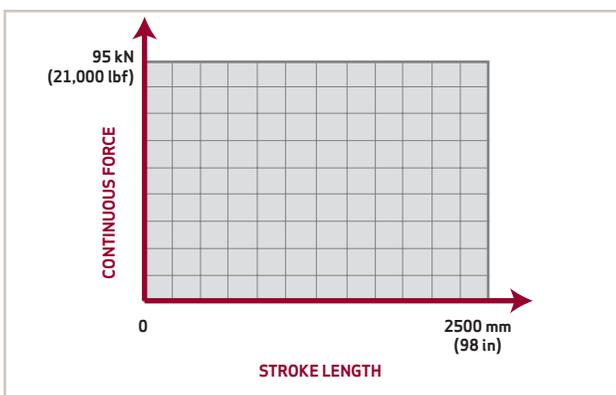
- Actuation for damper control
- Vehicle barriers
- Pick and place robotic applications
- Process industry valve control
- Edge guide system for web control
- Manufacturing press applications

STANDARD ELECTRIC LINEAR SERVOACTUATOR RANGES



- **Standard Servoactuator:** Ideal for most linear actuation applications
- **Standard Servoactuation Package:** Combines our Standard Servoactuator with a Moog state-of-the-art servodrive and user-friendly commissioning software

FLEXIBLE ELECTRIC LINEAR SERVOACTUATOR RANGES



- **Flexible Servoactuator:** For higher forces, rod speeds and longer strokes when our Standard Servoactuator does not meet your needs. Many options are available that can be tailored to your exact specifications
- **Flexible Servoactuation Package:** Combines our Flexible Servoactuator with a Moog state-of-the-art servodrive and user-friendly commissioning software

ELECTRIC LINEAR ACTUATION FOR MAXIMUM MACHINE PERFORMANCE

• Advanced Ball Screw Design

- Higher efficiency results in increased continuous force rating as well as reduced energy consumption
- Higher dynamic load capacity provides up to 2x the life of competing technologies

• Quick Start-Up

- Simple mounting means lower installation times
- Automatic configuration of actuator through intelligent drive



STANDARD ELECTRIC LINEAR SERVOACTUATOR

Frame	Lead mm (in)	Continuous Stall Force kN (lbf)	Peak Stall Force kN (lbf)	Brake Holding Force (optional) kN (lbf)	Maximum Speed mm/sec in/sec	Stroke Lengths mm (in)
Size 3	5 (0.20)	4.3 (970)	14.6 (3,282)	5.0 (1,122)	321 (12.6)	150 (6.0)
	10 (0.39)	2.2 (485)	7.3 (1,641)	2.5 (561)	641 (25.2)	300 (12.0)
Size 4	5 (0.20)	8.8 (1,971)	22.2 (4,985)	16.1 (3,614)	205 (8.1)	150 (6.0)
	10 (0.39)	4.4 (986)	11.1 (2,493)	8.1 (1,807)	410 (16.2)	300 (12.0)
Size 5	5 (0.20)	27.8 (6,242)	72.3 (16,243)	33.3 (7,478)	146 (5.7)	180 (7.0)
	10 (0.39)	13.9 (3,121)	36.1 (8,122)	16.6 (3,739)	291 (11.5)	300 (12.0)

Features

- Smaller footprint than Flexible actuator across all sizes
- 150 and 300 mm stroke lengths available
- Maximum force of 72.3 kN
- Absolute Encoder
- Rod speeds to 641 mm/sec

FLEXIBLE ELECTRIC LINEAR SERVOACTUATOR

Frame Inline and Foldback designs	Lead mm (in)	Continuous Stall Force kN (lbf)	Peak Stall Force kN (lbf)	Brake Holding Force (optional) kN (lbf)	Maximum Speed mm/sec in/sec	Stroke Lengths mm (in)
Size 3	5 (0.20)	1.0 to 4.1 (229 to 915)	3.6 to 11.9 (801 to 2,675)	1.3 to 6.9 (280 to 1,559)	318 to 1,600 (12.5 to 63.0)	Up to 1,500 (59.1)
		2.9 to 9.8 (657 to 2,193)	10.6 to 26.3 (2,390 to 5,912)	4.0 to 26.9 (904 to 6,036)	170 to 1,133 (6.7 to 44.6)	Up to 2,000 (78.7)
Size 5	20 (0.79)	6.8 to 48.9 (1,527 to 10,997)	13.0 to 70.6 (2,918 to 15,881)	8.3 to 59.9 (1,870 to 13,461)	181 to 800 (7.1 to 31.5)	Up to 2,500 (98.4)
		19.8 to 96.0 (4,451 to 21,581)	37.5 to 115.6 (8,432 to 25,987)	20.0 to 140.5 (4,487 to 31,588)	138 to 635 (5.5 to 25.0)	



Features

- Higher forces, rod speeds and longer strokes than Standard
- Inline and foldback design with internal anti-rotation
- Variety of motor windings for optimum performance
- Several screw leads for speed/force variations
- Maximum force of 115.6 kN
- Rod speeds to 1,600 mm/sec
- Roller screw option available
- Absolute encoder

STANDARD AND FLEXIBLE SERVOACTUATION PACKAGES

The Electric Linear Servoactuation Packages are solutions that employ Moog's innovative, state-of-the-art servodrive and user-friendly commissioning software tailored for our Servoactuators. All of the products are optimized to work together to provide the highest level of performance and accuracy.

Engineered in advance

Moog's depth of motion control expertise provides you with a solution unique to your machine needs. The majority of the work has been engineered in advance so that with minimal effort the system can be easily implemented in your application.



World-class components for high performance

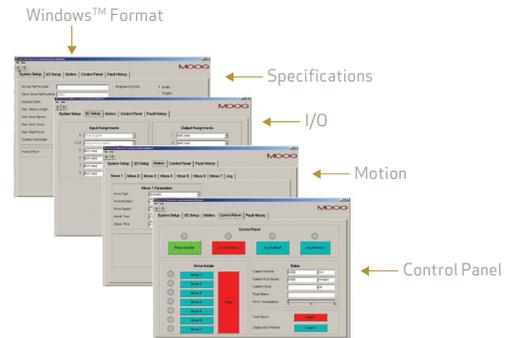
The Electric Linear Servoactuation Package solution features genuine Moog components so you can rest assured that you're getting the world-class performance today's design engineers have come to trust.

User-friendly software

Moog's intuitive commissioning software saves time at start up by automatically uploading preset system tuning parameters off the absolute encoder. The software reduces errors by implementing preset safety limits for speed, force and stroke length. In addition, the encoder file provides the drive with data on actuator speed, force, and position, eliminating the need for the user to convert, then program motor speed, motor current, and encoder counts into these values.

There is also a Control Panel function and Fault History which allows ease of setup and troubleshooting. Various levels of intelligence and communication options are available.

COMMISSIONING SOFTWARE



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Electric Linear Servoactuator
TJW/CDL 26400/Rev. A 0709

This technical data is based on current available information and is subject to change at any time by Moog. Specifications for specific systems or applications may vary.

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