

# **ELIMINATOR ST™**

## **Heavy Duty Stainless Steel Linear Actuators**



- **300 Series Stainless Exterior**
- **IP66 Rated**
- **Thrust from 2,000 to 25,000 Pounds**
- **Simultaneous High Thrust with High Speed**
- **Piston with Rugged Anti-Rotation Feature**
- **Sealed Chamber Design**



**Precision Mechanical Products**



**Precision Experience In Motion™**

The Heavy Duty Stainless Steel (ST) linear actuator series provides a strong, durable, and precise linear actuator for high end applications in areas which require frequent exposure to caustic cleaners. It offers all the performance advantages of our HD actuators with the additional benefit of a 300 series stainless steel exterior. As a better, cleaner alternative to hydraulic cylinders, it eliminates many concerns, such as noise, heat, leakage, controllability, and low stiffness, while handling high loads at high speeds and maintaining rugged, durable construction.

Designed for wash down, the exterior is contoured to prevent liquid from pooling and to eliminate pockets where contamination can occur. Options include rounded and/or peaked drive covers, front or rear round caps, and internal load cell. Hex head fasteners are used externally.

E•DRIVE has shown consistent success in the toughest applications, e.g. high loads, high speeds, high precision, and extreme durability. E•Drive actuators are tailored for maximum life, high load

and speed, and precise motion. The fully enclosed design eliminates contamination related failures. The long bronze nose bearing provides support for the extended piston. Rugged bronze keys in opposing steel slots provide anti-rotation and counter the tangential forces created during high speed, high frequency, and high load operation.

While other actuator designs force a particular motor decision, the ST is designed to suit virtually any motor, gear box, or gear-head the customer chooses to use. In-line as well as parallel-offset configurations are standard with 1:1 and 2:1 synchronous gear belt ratios available. Machine tool design principles and guidelines ensure robust sizing of all



components. Traditional front flange, bottom, foot, and trunnion mounting capabilities are available as standard designs.



### Options:

- Rounded and/or peaked drive covers
- Round front or rear caps
- Internal load cells
- Machined to suit any motor
- Limit switches

## Capabilities

Model Number	Thrust Load Rated (lb <sub>r</sub> )	Thrust Load Max. (lb <sub>r</sub> )	Linear Velocity Max. (in/s)	Travel Length Max. (in)	Frame Size (in)	Lead (mm)	Ball Screw Diameter (mm)	Ball Screw Speed Max. (RPM)	Torque @ Ball Screw Max. (in-lb)	Dynamic Capacity/ Million Revs (lb <sub>r</sub> )	Dynamic Capacity/ Million Inches (lb <sub>r</sub> )	Motor Gearhead Frame Supported Max. (in)
ST302	2,000	4,000	23.0	36	3	10	25	3,500	140	6,490	4,760	4.25
ST304	4,000	8,000	23.0	36	3	10	25	3,500	278	6,490	4,760	4.25
ST404	4,000	8,000	18.0	42	4	10	32	2,750	278	14,580	10,690	5.75
ST406	6,000	12,000	18.0	42	4	10	32	2,750	417	14,580	10,690	5.75
ST508	8,000	15,000	14.0	48	5	12	50	1,780	668	31,250	24,340	8
ST516	16,000	30,000	14.0	48	5	12	50	1,780	1337	31,250	24,340	8
ST618	18,000	30,000	9.8	48	6	12	63	1,450	1500	35,750	27,840	8
ST625	25,000	40,000	14.4	48	6	20	80	1,100	3481	52,150	48,160	8