

# Applications and Performance Features



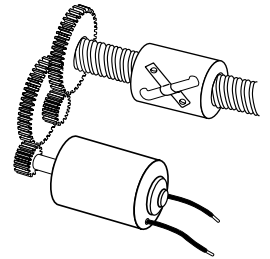
## Warner Linear Actuators are available for a wide variety of applications.

- Golf Cart Height Adjust
- Mower Blade Lift
- Solar Panel Adjust
- 55 Gallon Drum Lift
- Fire Engine Valve Adjust
- Automated Dumpster
- Scissor Lift Table
- Round Baler Cover Lift
- Walk Behind Floor Washer
- Bulldozer Engine Cover
- Air Foil Adjust
- Construction Sign Positioning
- Forage Harvester Spout Positioning
- Combine Spout Positioning
- Adjustable Height Work Table
- Conveyor Lateral Guide Positioning
- Street Sweeper Bristle Lift
- RV/Bus Compartment Extension

## Dependable Operation

### Compact design

A Warner Linear actuator with a two inch stroke can provide up to 2800 pounds (12455 N) of force capacity in a compact package.

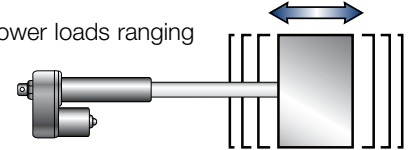


### Maintenance-free

Units are lubricated for life during assembly. There are no adjustments or maintenance required for units after they have left the factory. Consistent performance is provided for the entire life of the actuator.

### Equal capacity in both directions

Warner Linear actuators can push-and-pull or lift-and-lower loads ranging from one pound to over 2800 pounds (12455 N) up to 24 inches (600 millimeters) with equal capacity in both directions of travel.



### Efficient operation

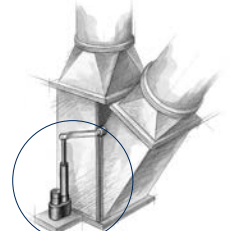
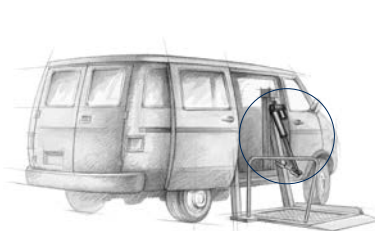
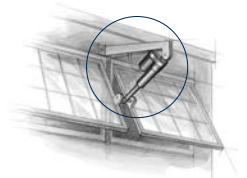
Warner Linear actuators consist of an electric motor combined with a high efficiency gear train and lead screw. This direct conversion of electrical to mechanical energy results in effective, economic linear movement. Units are completely self-contained and require minimal installation hardware or wiring.

### Superb load holding power

Warner Linear actuators operate loads in both tension and compression equally well. They will hold a load stationary without power in either direction. Static load holding capability will always exceed the dynamic load moving capability.

### Advantages

- No hydraulic pumps, hoses, valves, or leaks
- Holds load when power is off
- Overload clutches prevent damage due to excess weight
- Simple to install and use
- Easily adaptable for position control
- Integrated sensors provide electrical position signals



## Warner Linear Actuators are built for performance.

### Rugged and reliable

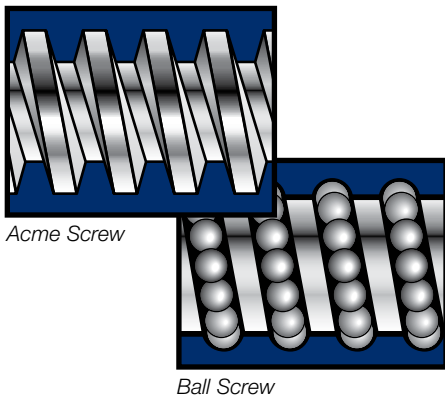
Warner Linear actuators incorporate high strength, high quality components and are designed to assure trouble-free service. Rugged spur gearing, industrial quality synthetic lubricants and high performance motors combine to provide maximum capability and value for the end user. Units are gasketed and sealed for operation in industrial and mobile outdoor applications. Thermal overload switches are included for motor protection; and high performance corrosion protection features are standard.

### Energy efficient

Electric control provides clean, smooth linear motion without fluids, plumbing or other expensive components. Warner Linear actuators require power only when in motion. No power is required to hold loads stationary.

### Lead screw drive systems

Warner Linear actuators use either acme, hybrid rolled, or highly efficient ball bearing screws. Models which use acme or hybrid rolled screws with bronze or plastic nuts will not backdrive when power is off. A bi-directional load holding brake is a standard feature on all ball bearing units and holds loads in position when power is off.



### Overload protection

Motors incorporate thermal switches in their windings to shut the actuator motor off in case of overheating or high overcurrent. Reset is automatic after the motor has cooled. A standard overload clutch detects if the load is excessive or reaches end of stroke.

*Note: Clutch is not incorporated in M-Track and S-Track due to size constraints.*

### Fuse Recommendation for All Systems:

The fuse should be sized to 135% of full-load steady-state current.

### Component Protection and DC Motors:

DC motors can produce large voltage and current spikes when powered on or off. Back-to-back Zener diodes across the motor are recommended to help suppress the large spike from affecting other sensitive components in the system. Use a 20V-30V back-to-back Zener for a 12VDC motor and a 30V-40V back-to-back Zener for a 24VDC motor. Consult the factory for further recommendations.

### Versatile

With their compact size, Warner Linear actuators can be located in confined areas, and move loads from 0 to 2800 pounds (12455 N). Their static load holding ability ensures that a load will remain in position when power is turned off. Gearing ratios create speeds that range from 0.3 to over 2 inches (7 to 50 millimeters) per second. Standard models are mounted using two parallel pins and require only simple wiring and switches. They are self-contained, lubricated for life, and designed for use where rugged and durable performance is required for almost any lift-and-lower or push-and-pull application.

## Available Customized Features

- Direct drive manual override
- Mounting and end fitting variations
- DC Motor voltage variations
- AC and DC motor options
- Motor lead wire connectors
- End of stroke limit switches – fixed or adjustable
- Position feedback outputs (0-10vdc scaled) – potentiometer and digital

### Also available

- Basic switch box controls
- Integrated electronic position controls

