

*Ram style actuators*

*Screw and belt driven rodless actuators*

*Screw jacks*

*Custom actuators*



**Ram Style Actuators**

- Hydraulic cylinder replacement
- Viscous fluid dispensing
- Diverter, gate control
- Flexible fixturing and clamping
- Injection mold toggles
- Web guidance
- Food processing
- Harsh environments (paper mills, lumber mills)

**Belt-Driven Rodless**

- Wrapping & packaging machines
- Painting gantries
- Print roll cleaning
- Woodworking machinery
- Package scanning
- Palletizing

**Screw-Driven Rodless**

- Large format printing
- Cut to length operations
- Plasma cutting
- Laser/Probe measuring systems
- Clamp tables

**Screw Jacks**

- Heavy table/object height adjustment
- Adjustment of large rolls
- Press retrofit
- High force clamping
- Scissor tables, mobile lifting platforms
- Conveyor and gate adjustments
- Maintenance lid lifts

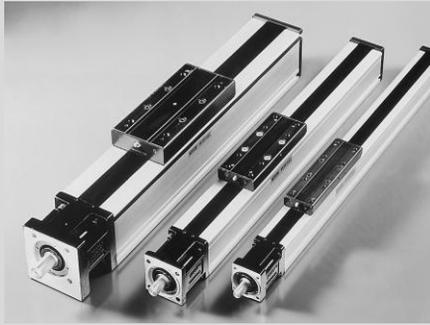
**Customizations For:**

- High Forces
- High Speeds
- Mechanical Modifications
- Food Grade
- Cleanroom
- Extreme Temperatures
- Shock and Vibration
- Sand and Dust
- Caustic Washdown
- Overspray



# Standard & Custom Actuators

## Screw-Driven Rodless

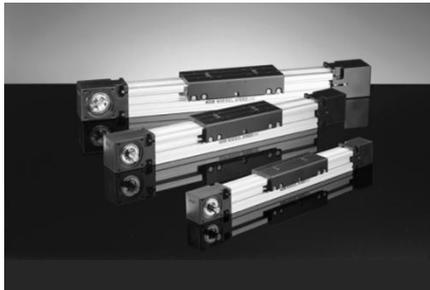


The superior design of our screw-driven Rodless Actuators is highlighted by three results:

- Our capability and willingness to do long stroke lengths (36 feet!).
- No reduction in ballscrew speeds as actuators grow longer, due to the unique screw support system.
- Better sealing than most competing products.

- Lengths to 36 ft , no screw whip
- Speeds to 8.2 ft/s (7.6 ft/s over 16 ft)
- Feed forces to 2,700 lb
- Accelerations to 2g
- Repeatability  $\pm 0.0004$  in
- Leads 5 to 50 mm/rev. (0.2 to 1.97 in/rev)
- Supports moments to 443 lb-ft
- Supports pay loads to 1,350 lb
- Standard dual carriage LH/RH screw models
- Easily configured into cartesian systems

## Belt-Driven Rodless



Our belt-driven Rodless Actuators have the following distinguishing features:

- Our capability and willingness to do long stroke lengths (36 feet!)
- Belts are replaceable without removing payload & carriage
- Easily reversible drive shaft
- Maximum guide bearing spacing for higher moment loads

- Lengths to 36 ft
- Speeds to 32.8 ft/s
- Feed forces up to 1124 lbs
- Repeatability  $\pm 0.002$  in.
- Central lubrication point
- Easy tension adjustment
- Easily configured into cartesian systems

## Ram-Style



We have the widest force range of any ram style actuator manufacturer. This is also our largest area of product development to serve industrial, commercial, and defense applications. We can address most harsh environments and airborne particulates.

### Standard Product Range:

- Ballscrew or trapezoidal screw driven
- Stroke lengths up to 6 ft.
- Dynamic load capacity up to 8.4 tons
- Inline, parallel belt, and right-angle gear motor mounting options
- Flexible mounting and rod end options

### Capabilities:

- To 250 tons of force

## Screw Jacks



Our worm gear Screw Jacks offer an unparalleled thrust-per-dollar solution wherever powerful lifting, lowering, tilting and feed movements are required. The cubic design provides two standard mounting surfaces. Multiple units are easily synchronized with drive shafts.

- Axially translating Screw
- Rotating Screw / Translating Nut
- Upright/Inverted
- Trap. Screw range: to 56 tons (500 kN)
- Ball Screw range: to 8.7 tons lb (78 kN)
- Slow to medium speeds
- Ideal for positioning
- A cost effective work horse
- Motor direct mount to all sizes

## Custom Actuators

We recognize that each application is unique, and welcome opportunities that require modifications to our standard products, or in some cases complete custom designs. Whether your application requires special environmental considerations, or there is just no standard product that adequately suits your needs, we look forward to reviewing the details.

From clean rooms to oil rigs, from packaging machines to steel mills, we have optimized actuator solutions for the most demanding challenges.

- **Fast Engineering Support**
- **Superior Performance, Quality, and Durability**
- **Fast Quotes**
- **Fast Turnaround**
- **Exactly What You Need**