

RSA-ST ROD-STYLE ACTUATOR

ENDURANCE TECHNOLOGYSM

A Tolomatic Design Principle

Endurance Technology features are designed for maximum durability to provide extended service life.

The RSA rod screw actuator is ideal for medium to high thrust applications of guided loads. The compact design and cylinder style operation make this solution ideal for applications that were historically solved with pneumatic or hydraulic power. Many mounting options are available allowing the actuator to be installed in numerous applications. Built-to-order in stroke lengths up to 60 in (1.5 m) with your choice of screw technology.

HIGH POSITIONAL ACCURACY

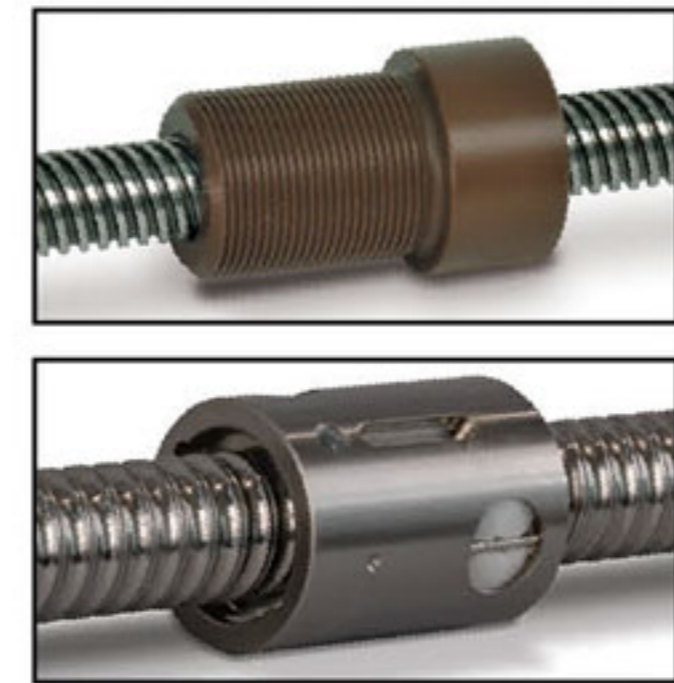
SCREW ACCURACY

Roller Nut ± 0.0004 "/ft. ± 0.0102 mm/300mm
Metric Ball Nut ± 0.002 "/ft. ± 0.051 mm/300mm

MULTIPLE SCREW TECHNOLOGIES

YOU CAN CHOOSE:

- Solid nuts of bronze or engineered resins offer quiet performance at the lowest cost; anti-backlash available
- Ball nuts offer efficiency at a cost effective price; low-backlash available



SCREW SUPPORT BEARING

Engineered resin bearing provides continuous support of screw

THRUST TUBE

- Steel thrust tube supports extremely high force capabilities
- Salt bath nitride treatment provides excellent corrosion resistance, surface hardness and is very resistant to adherence of potential contaminants

INTERNAL BUMPERS

Bumpers protect the screw and nut assembly from damage at both ends of stroke

ROD WIPER

Prevents contaminants from entering the housing for extended life of the actuator

NOSE BEARING

- Support the thrust tube and nut assembly through entire stroke length
- Unique nose bearing material allows for smooth operation and support of the thrust rod

INTERNAL NUT BEARINGS

- Engineered resin guide bearings provide anti-rotation of the thrust rod
- Support the thrust tube and nut assembly through entire stroke length

LIGHTWEIGHT ALUMINUM DESIGN

- Black anodized extrusion design is optimized for rigidity and strength
- External switch channels on all sides allow easy placement of position indicating switches

MOTOR ORIENTATION

YOU CAN CHOOSE:

- Inline option directly couples the driving shaft and is typically a one-piece housing construction for optimum alignment and support of the motor
- Reverse-parallel option minimizes the overall length, coupling motor and driving shaft via a belt with a 1:1 or 2:1 reduction ratio

HIGH THRUST BEARING

Unique high thrust bearing assembly design eliminates run-out and isolates the linear forces for the drive shaft

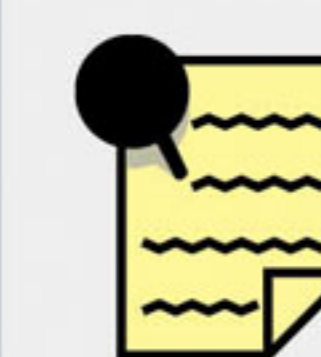
BREATHER/PURGE PORTS

- Standard feature on RSA 32,50,64 size actuators
- As seen in this view, located on both the bottom and the opposite side of the actuator

• Use as Breather Port: allows air flow into the interior of the actuator. Prevents additional load on the motor caused by air buildup due to fast cycling of the RSA.
Use as Purge Port: positive pressure with air lines and filters insure contaminants (which could potentially shorten the actuator life) do not enter the interior of the actuator.

THREADED ROD END

Provides a common interface to multiple rod end options



OPTIONS

See page 7 for a complete list of RSA options including the HT-high torque option

