

# ROD-STYLE ELECTRIC ACTUATOR RSA-ST

The RSA screw driven rod-style actuator is ideal for medium to high thrust applications of guided loads. The compact design and cylinder style operation make this an ideal solution for applications historically solved with pneumatic or hydraulic cylinders.

### HIGH POSITIONAL ACCURACY

#### SCREW ACCURACY

Metric Ball Nut  $\pm 0.051\text{mm}/300\text{mm}$

### MULTIPLE SCREW TECHNOLOGIES

#### YOU CAN CHOOSE:

- Solid nuts of engineered resins offer quiet performance at the lowest cost
- Ball nuts offer efficiency at a cost effective price



YOUR MOTOR  
HERE

### INTERNAL BUMPERS

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

### 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

### ANTI-ROTATE & SCREW SUPPORT

Screw support and anti-rotate for smooth operation throughout stroke

### BREATHER/PURGE PORTS

Standard feature on RSA 32,50,64 size actuators

### HIGH THRUST BEARING

Unique high thrust bearing assembly design eliminates runout and isolates the linear forces for the drive shaft

### Options:

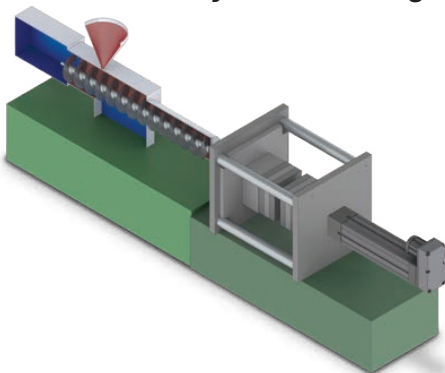
#### ROD END +

MET: External Threads  
 CLV: Clevis Rod End  
 SRE: Spherical Rod End  
 ALC: Alignment Coupler Rod End  
 XR: Rod Extension  
 IP67: IP67 Ingress Protection  
 LUB: Food Grade Grease

#### MOUNTING

MP2: 2 Mounting Plates  
 FFG: Front Flange  
 TRR: Trunnion Mount  
 FM2: 2 Foot Mounts  
 BFG: Rear Flange  
 PCD: Rear Clevis Mount  
 PCS: Rear Eye Mount

### Injection Molding

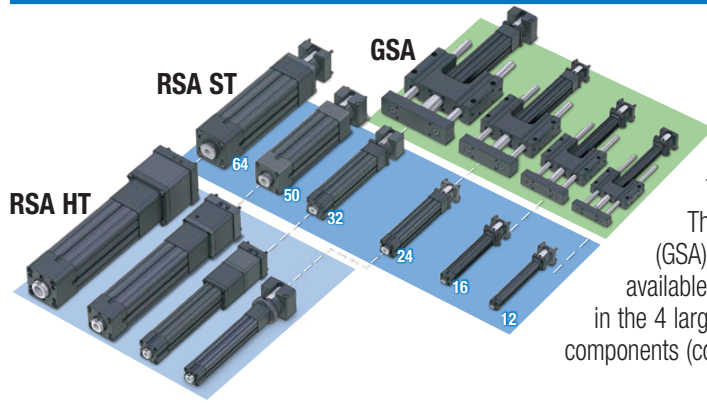


### Applications:

- Aligning
- Animation
- Assembly
- Automotive
- Conveyors
- Diverting
- Fillers
- Gating
- Material handling systems
- Medical equipment
- Open / close doors
- Packaging equipment
- Pick & place
- Plate positioning change
- Press fit
- Robot manipulator arms
- Sonic welding
- Sorting
- Volumetric pumps
- Web guidance
- Wire winding & more!

# ROD-STYLE ELECTRIC SCREW-DRIVE ACTUATOR

# RSA-ST



The RSA is a flexible electric screw driven rod-style actuator. The standard (ST) model comes in six sizes. The guided RSA (GSA) adds guidance and load support to the design and is available in the 4 smaller sizes. The high force (HT) model is available in the 4 larger sizes, it incorporates stronger torque transmission components (couplers, pulleys, belts) and higher thrust bearings.

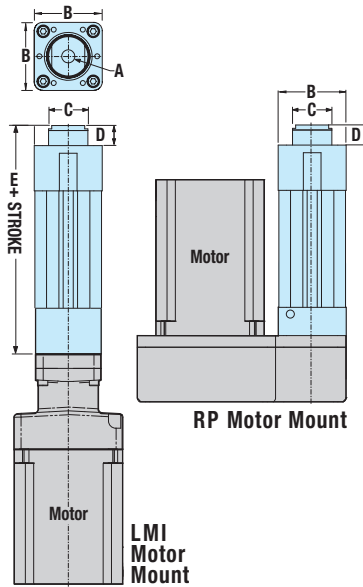
## Specifications

Size	12	16	24	32	50	64
<b>Max. Thrust (N)</b>	578	578	3781	4226	13496	17917
<b>Max. Stroke (mm)</b>	305	457	610	914	1219	1524

Size	12	16	24	32	50	64
<b>Max. Thrust (lbf)</b>	130	130	850	950	3034	4028
<b>Max. Stroke (in)</b>	12	18	24	36	48	60

NOTE: For higher forces refer to the RSX product line.

## Dimensions



## SIZE: 12, 16, 24, 32, 50, 64

Size	12	16	24	32	50	64
<b>A</b>	M6x1.0 ↓19.0	M8x1.25 ↓19.0	M10x1.25 ↓25.0	M16x1.5 ↓26.0	M20x1.5 ↓38.0	M27x2.0 ↓38.0
<b>B</b>	28.6	35.0	51.8	65.5	94.1	116.3
<b>C Ø</b>	14.2	17.5	30.0	31.8	44.5	57.2
<b>D</b>	7.8	10.9	10.9	12.7	17.8	17.3
<b>SOLID E</b>	88.4	94.2	133.5	173.7	217.6	314.4
<b>BALL E</b>	88.4	94.2	145.2	203.6	243.0	365.2
<b>ROLLER E</b>	NA	NA	166.4	NA	NA	NA

Dimensions in millimeters

Size	12	16	24	32	50	64
<b>A</b>	1/4-28 ↓0.75	5/16-24 ↓0.75	7/16-20 ↓1.00	7/16-20 ↓1.13	3/4-16 ↓1.50	3/4-16 ↓1.50
<b>B</b>	1.13	1.38	2.04	2.58	3.71	4.58
<b>C Ø</b>	0.56	0.69	1.18	1.25	1.75	2.25
<b>D</b>	0.31	0.43	0.43	0.50	0.70	0.68
<b>SOLID E</b>	3.48	3.71	5.26	6.84	8.57	12.38
<b>BALL E</b>	3.48	3.71	5.72	8.02	9.57	14.38
<b>ROLLER E</b>	NA	NA	6.55	NA	NA	NA

Dimensions in inches

NOTE: YMH (Your Motor Here) will determine motor size, motor mount size and reverse parallel housing size. Complete dimensions available in RSA/GSA brochure #3600-4166; Always use solid models available at [www.tolomatic.com](http://www.tolomatic.com) for critical dimensions

**ACTUATOR SIZING**

**COMPLETE INFORMATION, SIZING SOFTWARE AND SOLID MODELS AVAILABLE AT:**

[www.tolomatic.com](http://www.tolomatic.com)

**3D CAD LIBRARY**

**Tolomatic**<sup>TM</sup>  
EXCELLENCE IN MOTION

COMPANY WITH  
QUALITY SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001 =  
Certified site: Hamel, MN

All brand and product names are trademarks or registered trademarks of their respective owners. Information in this document is believed accurate at time of printing. However, Tolomatic assumes no responsibility for its use or for any errors

that may appear in this document. Tolomatic reserves the right to change the design or operation of the equipment described herein and any associated motion products without notice. Information in this document is subject to change without notice.