RSX
EXTREME FORCE, HYDRAULIC CLASS ELEcTRIC ACTUATORS

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LINEAR SOLUTIONS MADE EASY
RSX Extreme Force, Hydraulic Class Electric Actuator

WHAT IS THE RSX?
The RSX is an extreme force electric actuator designed for rugged service, long life and is an ideal choice for replacing hydraulic cylinders. The RSX utilizes roller screws for long lasting consistent performance. Additionally, the RSX uses Tolomatic’s popular Your Motor Here program which allows RSX to easily mount many servo motor and gearboxes on the market.

TOLOMATIC’S ELECTRIC ROD-STYLE ACTUATORS

<table>
<thead>
<tr>
<th></th>
<th>ERD</th>
<th>RSA</th>
<th>RSX</th>
<th>GSA</th>
<th>IMA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rod-Style Actuator</td>
<td>Rod-Style Actuator</td>
<td>Rod-Style Actuator</td>
<td>Guided Rod-Style Actuator</td>
<td>Integrated Servo Actuator</td>
</tr>
<tr>
<td>Force up to:</td>
<td>35 kN (7,868 lbf)</td>
<td>58 kN (13,039 lbf)</td>
<td>177.9 kN (40,000 lbf)</td>
<td>4.23 kN (950 lbf)</td>
<td>30.6 kN (6,875 lbf)</td>
</tr>
<tr>
<td>Speed up to:</td>
<td>1473 mm/sec (58 in/sec)</td>
<td>3,124 mm/sec (123 in/sec)</td>
<td>760 mm/sec (29.9 in/sec)</td>
<td>3,124 mm/sec (123 in/sec)</td>
<td>1,334 mm/sec (52.5 in/sec)</td>
</tr>
<tr>
<td>Stroke Length up to:</td>
<td>1000 mm (39.4 in)</td>
<td>1,524 mm (60 in)</td>
<td>890 mm (35 in)</td>
<td>914 mm (36 in)</td>
<td>457 mm (18 in)</td>
</tr>
<tr>
<td>Screw/Nut Type</td>
<td>Solid, Ball &amp; Roller</td>
<td>Solid, Ball &amp; Roller</td>
<td>Roller</td>
<td>Solid &amp; Ball</td>
<td>Ball &amp; Roller</td>
</tr>
</tbody>
</table>

For complete information see www.tolomatic.com or literature number:

- ERD: 2190-4000
- RSA: 3600-4166
- RSX: 2171-4001
- GSA: 3600-4166
- IMA: 2700-4000

(Not all models deliver maximum values listed, i.e.: Maximum thrust may not be available with maximum speed)
RSX Extreme Force, Hydraulic Class Electric Actuator

Applications

- Volumetric pumps
- Injection molding
- Pressing
- Punching
- Piercing
- Cut-Off & Other Timber Applications
- Motion simulators

Other Applications:
- Active Security Barrier
- Assembly machinery
- Automatic tool changers
- Automotive
- Clamping
- Converting
- Cycle testing
- Fillers
- Formers
- Hydraulic replacement
- Machine tools
- Open / close doors
- Parts clamping
- Piercing
- Precision grinders
- Product test simulations
- Pressing
- Punching
- Riveting / fastening / joining
- Sawmill equipment
- Stamping
- Tension control
- Test stands
- Tube bending
- Wave generation
- Web guidance
- Welding
- Wire winding
- and many more

www.tolomatic.com

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The RSX series high force electric actuators with planetary roller screws are designed for rugged service, long life and are an ideal choice for replacing hydraulic cylinders.
• Four ball bearings to support high axial loads & forces for long life

• Precision ground planetary roller screws provide the highest force and life ratings available

• Composite bearings prevent rotation of the thrust tube

• Standard feature on RSX actuators
• 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 RSX.
• Use as Purge Port: positive pressure with air lines and filters ensure contaminants do not enter the interior of the actuator.

• Carbon fiber tensile reinforced synchronous belt to ensure smooth transmission of high torques in a compact design.

• Four ball bearings to support high axial loads & forces for long life

• Inline option directly couples the driving shaft
• Reverse-parallel option minimizes the overall length and offers a belt reduction drive with a 1:1 or 2:1 ratio

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• Front Flange
• Trunnion
• Rear Clevis
• Rod Clevis
• Threaded Rod (standard)
• Extended Rod
• Solid state NPN, PNP or reed
• Tie Rod Clip

• Mounting Plates
• Extended Tie Rods
• Rod Clevis
• Threaded Rod (standard)
• Extended Rod

• Solid state NPN, PNP or reed
• Tie Rod Clip

• Maximum durability
• Standard feature on RSX actuators
• 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 RSX.
• Use as Purge Port: positive pressure with air lines and filters ensure contaminants do not enter the interior of the actuator.

• Fast Delivery
• Built-to-Order

www.tolomatic.com
The RSX096P press actuator expands the extend force capability to 40,000 lbf (178 kN) making it well suited for applications such as pressing, riveting, clinching and many others. The RSX096P press model has all the features of the standard RSX on pages 4 & 5 plus oversized tie rods, a bearing system optimized for high force extend, and a high strength steel front flange.
FOOD GRADE RSX

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

The food grade RSX has all the features of the RSX shown on the previous pages plus additional features that are suited to challenging environments: 316 Stainless steel thrust rod, rod end, tie rods, fasteners; food grade white paint; IP67 rating; and food grade grease. The food grade RSX is a great option for the food & beverage processing environment. Contact Tolomatic for lead time and application review.

- Static tested against ingress of dust and water for protection of internal components and long actuator life
- IP67: Ingress Protection: First Digit = Solids, 6 = Dust Tight (No ingress of dust; complete protection against contact)
- Second Digit = Liquids, 7 = Immersion up to 1 m (Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time up to 1 m of submersion)

Contact Tolomatic for lead time and application review of Food Grade RSX
## Specifications

<table>
<thead>
<tr>
<th>RSX SIZE</th>
<th>MIN. STROKE</th>
<th>MAX. STROKE</th>
<th>SCREW CODE</th>
<th>SCREW LEAD</th>
<th>LEAD ACCURACY</th>
<th>BACK-LASH</th>
<th>MAX. FORCE</th>
<th>MAX. SPEED</th>
<th>DYNAMIC LOAD RATING</th>
<th>DYNAMIC TORQUE TO OVERCOME FRICTION</th>
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<tbody>
<tr>
<td></td>
<td>mm</td>
<td>mm</td>
<td>TRR</td>
<td>mm/rev</td>
<td>mm/300mm</td>
<td>mm</td>
<td>kN</td>
<td>mm/sec</td>
<td>kN</td>
<td>N-m</td>
</tr>
<tr>
<td>080</td>
<td>75</td>
<td>890</td>
<td>RN10</td>
<td>10.00</td>
<td>0.01</td>
<td>0.030</td>
<td>80.07</td>
<td>701</td>
<td>173.1</td>
<td>6.21</td>
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<tr>
<td>096</td>
<td>75</td>
<td>800</td>
<td>RN12</td>
<td>12.00</td>
<td>0.01</td>
<td>0.030</td>
<td>133.45</td>
<td>759</td>
<td>269.3</td>
<td>6.21</td>
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<tr>
<td>096P</td>
<td>75</td>
<td>450</td>
<td>—</td>
<td>12.00</td>
<td>0.01</td>
<td>0.030</td>
<td>177.9</td>
<td>799</td>
<td>269.3</td>
<td>6.21</td>
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<tr>
<td>080</td>
<td>2.95</td>
<td>35.03</td>
<td>RN10</td>
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<td>0.0004</td>
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<td>0.0012</td>
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<tr>
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<td>2.117</td>
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<td>0.0012</td>
<td>40,000</td>
<td>29.9</td>
<td>60,541</td>
<td>55.0</td>
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</tbody>
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*Consult Tolomatic for longer strokes. TRR = Trunnion option.

### Inertia and Weight

<table>
<thead>
<tr>
<th>RSX SIZE</th>
<th>SCREW CODE</th>
<th>BASE ACTUATOR</th>
<th>INERTIA</th>
<th>PER UNIT</th>
<th>WEIGHT</th>
<th>PER UNIT</th>
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<tr>
<td></td>
<td></td>
<td></td>
<td>kg-m² x 10⁴</td>
<td>kg per mm</td>
<td>lb-in²</td>
<td>lb per in</td>
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<tr>
<td>080</td>
<td>RN10</td>
<td>LMI</td>
<td>19.44</td>
<td>0.154</td>
<td>14.36</td>
<td>0.330</td>
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<tr>
<td></td>
<td></td>
<td>RP1 ST</td>
<td>35.13</td>
<td>0.154</td>
<td>14.36</td>
<td>0.330</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RP1 HT</td>
<td>42.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>096</td>
<td>RN12</td>
<td>LMI</td>
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<td></td>
<td>165.86</td>
<td>2.31</td>
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<td></td>
<td></td>
<td>RP1 HT</td>
<td>68.85</td>
<td></td>
<td>165.86</td>
<td>2.31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RP2 ST</td>
<td>77.51</td>
<td></td>
<td>165.86</td>
<td>2.31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RP2 HT</td>
<td>89.96</td>
<td></td>
<td>165.86</td>
<td>2.31</td>
</tr>
<tr>
<td>096P</td>
<td>RN12</td>
<td>LMI</td>
<td>61.07</td>
<td></td>
<td>165.86</td>
<td>2.31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RP1 HT</td>
<td>77.51</td>
<td></td>
<td>165.86</td>
<td>2.31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RP2 ST</td>
<td>89.96</td>
<td></td>
<td>165.86</td>
<td>2.31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RP2 HT</td>
<td>89.96</td>
<td></td>
<td>165.86</td>
<td>2.31</td>
</tr>
</tbody>
</table>

### Temperature Range:
- Standard: 4° to 54°C (40° to 130°F)
- Extended: -40° to 60°C (40° to 140°F)

### Size: All Critical Speed Capacities

### Size: All Screw Buckling Load

*NOTE: When using Trunnion Mount (TRR), consider the stroke to be longer when determining Critical Speed and Buckling Load.

<table>
<thead>
<tr>
<th>RSX SIZE</th>
<th>STROKE (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>080</td>
<td>68.1</td>
</tr>
<tr>
<td>096(P)</td>
<td>72.4</td>
</tr>
</tbody>
</table>

**sizeit.tolomatic.com**

for fast, accurate actuator selection
RSX Extreme Force, Hydraulic Class Electric Actuator

ROLLER SCREW LIFE ESTIMATE PERFORMANCE

RSX Standard Screw Actuators Expected Life:

The underlying formula that defines this value is:

\[ L_{10} = \left( \frac{C}{P_e} \right)^{1/3} \cdot \ell \]

- \( L_{10} \) = Travel life in millions of units (in or mm),
- \( C \) = Dynamic load rating (lbf) or (N)
- \( P_e \) = Equivalent load (lbf) or (N)
- \( \ell \) = Screw lead (in/rev) (mm/rev)

Use the "Equivalent Load" calculation below, when the load is not constant throughout the entire stroke. In cases where there is only minor variation in loading, use greatest load for life calculations.

\[ P_e = \sqrt[3]{\frac{L_1 P_1^3 + L_2 P_2^3 + L_3 P_3^3 + \cdots + L_n P_n^3}{L}} \]

Where:
- \( P_e \) = Equivalent load (lbf) or (N)
- \( P_i \) = Each increment at different load (lbf) or (N)
- \( L \) = Total distance traveled per cycle (extend + retract stroke)
- \( L_i \) = Each increment of stroke at different load (in) or (mm)

RSX096P Press Model Expected Life:

The RSX096P (RSX Press Model) L10 expected life calculation is modified to consider only high force press (or similar) cycles. The calculation is modified because in applications such as pressing (or similar), repeated high force cycles on the same position of the roller screw will focus the stress in one area or location which may limit the life of the device. In the standard L10 calculation, the lower force motion segments may significantly lower the equivalent load leading to an inflated life estimation. This modified L10 expected life calculation for press (or similar) applications with the high force segment over a distance of one screw lead or less results in the following life estimation graph:

RE-LUBRICATION RECOMMENDATION:

Lubrication requirements for electric actuators depend on the motion cycle (velocity, force, duty cycle), type of application, ambient temperature, environmental surrounding and various other factors.

For many general purpose applications, Tolomatic ball screw actuators are typically considered lubricated for life unless otherwise specified, such as those actuator models outfitted with a re-lubrication feature. For roller screw or ball screw actuators outfitted with a re-lubrication feature, Tolomatic recommends to re-lubricate the actuator at least once per year or every 1,000,000 cycles, whichever comes first, to maximize service life. For more demanding applications such as pressing, high frequency or other highly stressed applications, the re-lubrication interval for these actuators will vary and will need to be more frequent. In these demanding applications, it is recommended to execute at least 5 full stroke moves every 5,000 cycles of operation (or more frequent if possible) to re-distribute the grease within the actuator.

Re-lubricate with Tolomatic Grease into the grease port located on the side of the actuator.

<table>
<thead>
<tr>
<th>Model</th>
<th>RSX080</th>
<th>RSX096P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity (g)</td>
<td>8.0 + (0.020 x Stroke&lt;sup&gt;mm&lt;/sup&gt;)</td>
<td>9.5 + (0.025 x Stroke&lt;sup&gt;mm&lt;/sup&gt;)</td>
</tr>
<tr>
<td>Quantity (oz)</td>
<td>0.28 + (0.018 x Stroke&lt;sup&gt;in&lt;/sup&gt;)</td>
<td>0.34 + (0.022 x Stroke&lt;sup&gt;in&lt;/sup&gt;)</td>
</tr>
</tbody>
</table>

Stroke<sup>mm</sup> = Stroke length in millimeters  
Stroke<sup>in</sup> = Stroke length in inches
RSX Extreme Force, Hydraulic Class Electric Actuator

3D CAD available at www.tolomatic.com

Always use configurated CAD solid model to determine critical dimensions

LMI & RP ACTUATOR DIMENSIONS

Dimensions in millimeters

Dimensions in inches

RSX 10 1-800-328-2174
RSX Extreme Force, Hydraulic Class Electric Actuator

SIZE: ALL

CLEVIS OPTION (CLV)

Front Flange Option (FFG)

Rear Clevis Option (PCD)

Extended Tie Rod Option (XT)

Imperial Thread Option (SRI)
RSX Extreme Force, Hydraulic Class Electric Actuator

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Always use configurated CAD solid model
to determine critical dimensions

DIMENSIONS

MOUNTING PLATE OPTION (MP2) DIMENSIONS

TRUNNION OPTION (TRR) DIMENSIONS

OPTIONAL ROD EXTENSION (XR)

The thrust rod length can be extended by specifying the rod extension option. This does not increase the working stroke, only the length of the thrust rod.

NOTE: Please consult Tolomatic if your application requires rod extension length greater than 100 mm (3.9 in).
RSX Extreme Force, Hydraulic Class Electric Actuator

SWITCHES

RSX actuators offer a wide range of sensing choices. There are 12 switch choices: reed, solid state PNP (sourcing) or solid state NPN (sinking); in normally open or normally closed; with flying leads or quick-disconnect.

Commonly used for end-of-stroke positioning, these switches allow installation anywhere along the entire actuator length. The internal magnet is a standard feature. Switches can be installed in the field at any time.

Switches are used to send digital signals to PLC (programmable logic controller), TTL, CMOS circuit or other controller device. Switches contain reverse polarity protection. Solid state QD cables are shielded; shield should be terminated at flying lead end.

All switches are CE rated and are RoHS compliant. Switches feature bright red or yellow LED signal indicators; solid state switches also have green LED power indicators.

<table>
<thead>
<tr>
<th>Order Code</th>
<th>Lead</th>
<th>Switching Logic</th>
<th>Power LED</th>
<th>Signal LED</th>
<th>Operating Voltage</th>
<th><strong>Power Rating (Watts)</strong></th>
<th>Switching Current (mA max.)</th>
<th>Current Consumption Drop</th>
<th>Voltage (V max.)</th>
<th>Leakage Current</th>
<th>Temp. Range</th>
<th>Shock / Vibration</th>
</tr>
</thead>
<tbody>
<tr>
<td>REED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>10.0</strong></td>
<td>100mA</td>
<td>3.0 V max.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>RK</td>
<td>5m</td>
<td>SPST Normally Open</td>
<td>--- Red</td>
<td>---</td>
<td>5 - 240 AC/DC</td>
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</tr>
<tr>
<td>NY</td>
<td>5m</td>
<td>SPST Normally Closed</td>
<td>--- Yellow</td>
<td>---</td>
<td>5 - 110 AC/DC</td>
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SOLID STATE

<table>
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<th>Power LED</th>
<th>Signal LED</th>
<th>Operating Voltage</th>
<th><strong>Power Rating (Watts)</strong></th>
<th>Switching Current (mA max.)</th>
<th>Current Consumption Drop</th>
<th>Voltage (V max.)</th>
<th>Leakage Current</th>
<th>Temp. Range</th>
<th>Shock / Vibration</th>
</tr>
</thead>
<tbody>
<tr>
<td>TY</td>
<td>5m</td>
<td>PNP (Sourcing) Normally Open</td>
<td>Green</td>
<td>Yellow</td>
<td>10 - 30 VDC</td>
<td><strong>3.0</strong></td>
<td>100mA</td>
<td>20 mA @ 24V</td>
<td>2.0 V max.</td>
<td>0.05 mA max.</td>
<td>14 to 158°F [-10 to 70°C]</td>
<td>50 G / 9 G</td>
</tr>
<tr>
<td>TK</td>
<td>QD*</td>
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<td></td>
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<tr>
<td>TY</td>
<td>5m</td>
<td>NPN (Sinking) Normally Open</td>
<td>Green</td>
<td>Red</td>
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<tr>
<td>PY</td>
<td>5m</td>
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<td>Green</td>
<td>Yellow</td>
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</table>

*KD = Quick-disconnect  Enclosure classification IEC 529 IP67 (NEMA 6)  CABLES: Robotic grade, oil resistant polyurethane jacket, PVC insulation

**WARNING: Do not exceed power rating (Watt = Voltage x Amperage). Permanent damage to sensor will occur.

SWITCH INSTALLATION

Place switch bracket onto any one of the four tie rods that run the length of the extruded tube. Insert the switch with set screw and the word “Tolomatic” facing up and slide into the mating slot on the bracket. Position the bracket with the switch to the exact location desired, with the bracket tight to the surface of the extrusion, then lock the bracket securely into place by tightening the set screw with the Allen wrench provided. Then tighten the switch into the bracket with a small slotted screwdriver.
RSX Extreme Force, Hydraulic Class Electric Actuator

WIRING DIAGRAMS

TY • TK  
SOLID STATE • NORMALLY OPEN • PNP

KY • KK  
SOLID STATE • NORMALLY OPEN • NPN

RY • RK  
REED • NORMALLY OPEN

NY • NK  
REED • NORMALLY CLOSED

PY • PK  
SOLID STATE • NORMALLY CLOSED • PNP

HY • HK  
SOLID STATE • NORMALLY CLOSED • NPN

SWITCH DIMENSIONS

QUICK DISCONNECT MALE PLUG PINOUT

QUICK DISCONNECT FEMALE SOCKET PINOUT

DETECTION POINT REED

DETECTION POINT SOLID STATE

MOUNTING DIMENSIONS

SWITCH MOUNTING

The switch bracket and switch does not extend beyond the profile of the RSX heads.

CAUTION: DO NOT OVERTIGHTEN SWITCH HARDWARE WHEN INSTALLING
APPLICATION DATA WORKSHEET

Fill in known data. Not all information is required for all applications.

ORIENTATION

[ ] RSX  [ ] Horizontal [ ] Vertical

[ ] Incline °

[ ] Load supported by actuator  OR  [ ] Load supported by other mechanism

STROKE LENGTH __________________

[ ] inch  [ ] millimeters

(US Standard)  (Metric)

PRECISION

Repeatability __________________

[ ] inch  [ ] millimeters

OPERATING ENVIRONMENT

Temperature, Contamination, Water, etc.

____________________________________

____________________________________

____________________________________

CONTACT INFORMATION

Name, Phone, Email
Co. Name, Etc.

MOTION PROFILE

Graph your most demanding cycle, including accel/decel, velocity and dwell times. You may also want to indicate load variations and I/O changes during the cycle. Label axes with proper scale and units.

EXTEND  RETRACT

LOAD___________  LOAD_________

[ ] lb.  [ ] kg.  [ ] lb.  [ ] kg.

(US Standard)  (Metric)  (US Standard)  (Metric)

FORCE___________  FORCE_________

[ ] lbf.  [ ] N  [ ] lbf.  [ ] N

(US Standard)  (Metric)  (US Standard)  (Metric)

NOTE: If load or force changes during cycle, use the highest numbers for calculations.

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Selection Guidelines

1. **ESTABLISH MOTION PROFILE**
   Using the application stroke length, desired cycle time, loads and forces, establish the motion profile details including linear velocity and force in each of its segments.

2. **SELECT ACTUATOR SIZE AND SCREW TYPE**
   Based on the required velocities and forces, select an actuator size including the lead of the roller screw assembly.

3. **VERIFY CRITICAL SPEED OF THE SCREW**
   Verify that the application’s peak linear velocity does not exceed the critical speed value for the size and lead of the screw selected.

4. **VERIFY AXIAL BUCKLING STRENGTH OF THE SCREW**
   Verify that the peak force does not exceed the critical buckling force for the size of the screw selected.

5. **COMPARE APPLICATION’S PEAK PARAMETERS TO PEAK CAPACITY (PEAK REGION) OF SELECTED ACTUATOR**
   Calculate the application’s required peak force and peak velocity and compare to the graphs. The selection must satisfy the application’s peak requirements.

6. **CONSIDER LUBRICATION INTERVAL**
   Evaluate the recommended lubrication interval with respect to the application motion profile. See page RSX_7 for complete lubrication information.

7. **TEMPERATURE CONSIDERATIONS**
   If the application’s ambient temperature lies outside of the standard range (see page RSX_8), contact Tolomatic.

8. **SELECT A MOTOR-ACTUATOR CONFIGURATION**
   Select an inline or a reverse-parallel motor configuration.

9. **ESTABLISH TOTAL TORQUE REQUIREMENTS**
   Calculate total system inertia, the peak and the RMS torque required from the motor to overcome internal friction, external forces and accelerate/decelerate the load.

10. **SELECT A MOTOR**
    Use the obtained total torque value to select a motor and a reduction device (if required). Verify that the peak torque value is below the motor’s peak torque curve, and that the continuous torque value is below the motor’s continuous torque curve. Verify the minimum torque margin (15%). Verify the inertia match.

11. **SELECT OPTIONAL POSITION SENSORS**
    12 sensor choices include: reed, solid state PNP or NPN, all in normally open or normally closed, with flying leads or quick-disconnect couplers.

12. **SELECT ACTUATOR MOUNTING**
    Mounting options include: TRN trunnion mount, FFG front flange mount, MP2 mounting plates, PCD clevis mount.

13. **SELECT ROD END OPTIONS**
    Rod end options include: CLV clevis rod end.

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The above guidelines are for reference only. Use Tolomatic online sizing software for best results.
RSX Extreme Force, Hydraulic Class Electric Actuator

Ordering

ACTUATOR
RSX 096 RN12 SM450 RP1 HT1 FFG CLV XR10 KK2 YM

MODEL & MOUNTING
RSX Rod-Style Actuator,

SIZE
080, 096
096P Press Model

NUT/SCREW
SIZE CODE LEAD (mm/rev)
080 RN 10
096 RN 12

STROKE LENGTH
SM _ _._ Enter desired stroke length in millimeters
Minimum Stroke: 75mm (2.95 in)

SIZE MAX. STROKE *TRR
mm mm
080 890 820
096 800 725
096P 450 —
in in
080 35.03 32.28
096 31.49 28.54
096P 17.71 —
TRR = Trunnion Option

MOTOR MOUNTING
LM1 In-line motor mount
RP1 1:1 ratio, reverse parallel motor mount
RP2 2:1 ratio, reverse parallel motor mount

STANDARD OR HIGH TORQUE
ST1 Standard Actuator
HT1 High Torque Option

ROD END
Externally threaded rod end is standard
CLV* Clevis Rod End
SR1* Imperial Thread
*Not available for RSX096P

ROD EXTENSION
XR _ _._ Enter desired rod extension in millimeters
NOTE: XR option does not increase the working stroke, only the length of the thrust rod.
NOTE: Please consult Tolomatic if your application requires rod extension length greater than 100 mm (3.9 in).

TRUNNION MOUNT
TRR* Trunnion mount
NOTE: Trunnion mount is not available for field retrofit, contact Tolomatic for details
*Not available for RSX096P

IP67
IP67 Ingress protection (Note: if not specified standard IP65 actuator will be built)

ACTUATOR MOUNTING
For all motor mounts:
FFG Front Flange Mount
MP2 Mounting Plates (2 required)
XT Extended Tie Rods (min. 50mm, max. 100mm)
For RP motor mounting only:
PCD* Clevis Mount
*Not available for RSX096P

SWITCHES
TYPE LOGIC NORMALLY QUICK-DISCONNECT CODE QUANTITY LEAD LENGTH
REED SPST Open yes RK
Closed yes NY
PNP Open yes TK
Close no KK
PNP Close yes PK
NP Close no HY

YOUR MOTOR HERE
YM _ _ _ _ Motor mount for non-Tolomatic motor.
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LIBRARY
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Pneumatic Products
Rodless Cylinders; Band Cylinders, Cable Cylinders, Magnetically Coupled Cylinders/Slides; Guided Rod Cylinder Slides
“Foldout” Brochure #9900-9075

Power Transmission Products
Gearboxes: Float-A-Shaft®, Slide-Rite®, Caliper Disc Brakes; Planetary Roller Screws “Foldout” Brochure #9900-9076

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