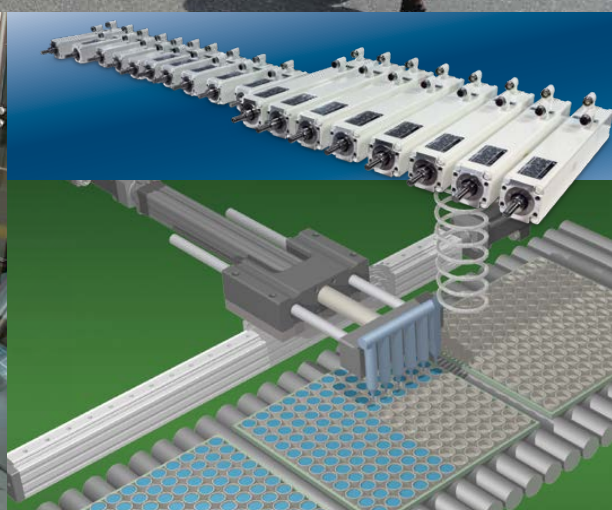
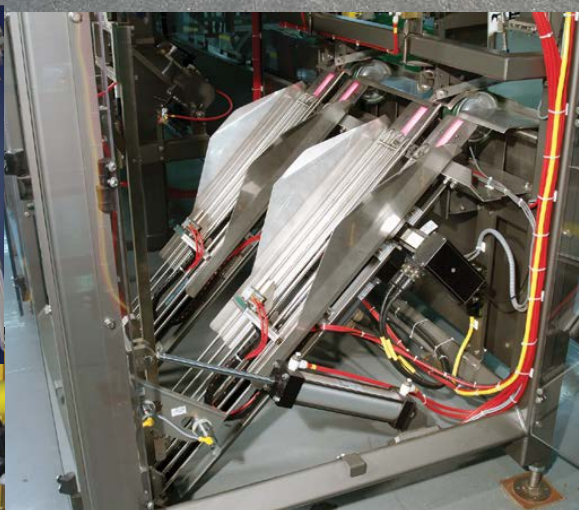
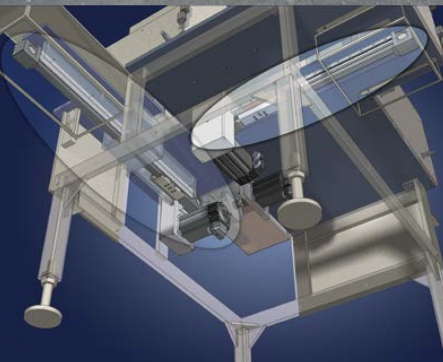


CORPORATE OVERVIEW



LINEAR MOTION SOLUTIONS

Tolomatic's growth has been powered by innovation and a commitment to exceed customer expectations.

Revolutionary products like the first rodless cylinder

Burton Toles started Tolomatic in 1954 by creating an automatic bagging machine for the flour industry in Minneapolis, MN. In the process of designing this machine, he invented two innovative automation components: the Float-A-Shaft right angle gearboxes and the Cable Cylinder – the world's first rodless pneumatic cylinder. These two components established Tolomatic as an innovator in the automation industry and are still popular products today.



Pneumatic product line is expanded with several innovative designs

Tolomatic's patented band cylinder provides space savings as well as load carrying capacities. The band cylinder was the first pneumatic rodless cylinder capable of supporting loads and providing more efficient control over the effects of moment loads. Tolomatic became the only manufacturer providing all four types of rodless actuators—cable, band, slides, and magnetically coupled.



Electric actuators improve manufacturing efficiencies

When customers began to request electric actuators for their accurate positioning, energy savings and reduced maintenance; Tolomatic developed a new line of electric actuators that included both rodless and rod-styles in screw and belt driven technologies. Tolomatic also built drives & controllers and supplies motors for easy-to-use, complete linear motion control. Our ACS drives integrate into cost effective complete motion control solutions.



Integrating servo motor technology into electric actuators for higher performance

Tolomatic's ServoWeld® actuators focus on the specific needs of robotic resistance spot welding in the auto industry—increasing manufacturing speed, quality and safety. Tolomatic combined servo motor, drive and controller technology into electric actuators for exceptional performance and smaller footprint.

Tolomatic constantly invests in resources to be competitive

Over the years, Tolomatic has invested in the processes, equipment and people to get the job done right and on time. Our current 9,000 m² facility houses operational processes and lean manufacturing practices that are ISO 9001:2015 certified.

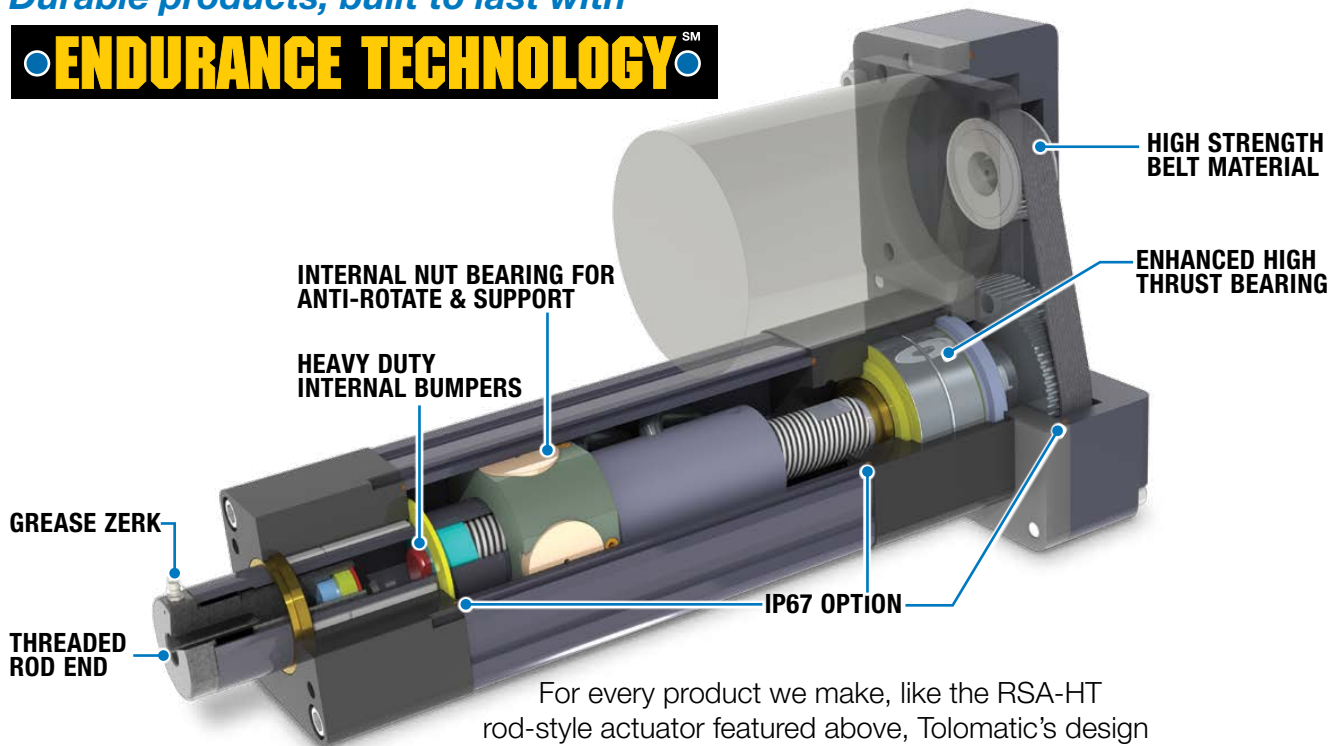


Trust in the innovative automation products, exceptional quality and service offered by Tolomatic.

in solving customer needs.

Durable products, built to last with

ENDURANCE TECHNOLOGYSM



For every product we make, like the RSA-HT rod-style actuator featured above, Tolomatic's design philosophy is the same: build the most durable and reliable linear actuator available for use in your industrial applications.

Every design decision is driven to make our products the best in every aspect: performance, value, and life. We call this design philosophy "Endurance Technology." Customers call it "assurance."

"Your products are built like a tank and run like a deer." – Actual customer quote

Tolomatic makes it easy to select the right product for your application

Engineering Tools on www.tolomatic.com



CONTACT AN ENGINEER

Have your technical questions answered quickly by one of our expert application engineers.



ACTUATOR SIZING

Size and select Tolomatic electric actuators with our easy-to-use online software.



CAD LIBRARY

Download 2D or 3D CAD files for Tolomatic products.



YOUR MOTOR HERE[®]

Select the motor of your choice and your actuator ships with the appropriate mounting plates and couplers for quick and easy install.



ELECTRIC ACTUATORS E-BOOK

Education and tips on how to best integrate electric actuators into your machine design.



TOLOMATIC IPAD APP

The Tolomatic iPad App provides quick and easy access to information on Tolomatic products.



ELECTRIC ACTUATORS, DRIVES & MOTORS

Electric Actuators

- *Rodless screw and Rodless belt designs* solve a wide range of moment load, precision, speed, and performance requirements.
- *A broad range of Rod-style actuators* offered with ball, roller or acme screws for the force, life and repeatability required. Guided actuator models are available.
- *Integrated actuators:* The IMA & Servoweld® integrates a servo motor into a powerful compact rod-style actuator. Automotive resistance spot welding has been revolutionized by Servoweld actuators.

Drives & Motors

- *Tolomatic integrated ACS/ and ACS Servo & Stepper drives* are easy to setup—controlled via EtherNet/IP, PROFINET, Modbus TCP, analog input or digital I/O.
- *Servo motors* are available in Nema 23 and 34 sizes to provide smooth, quiet operation and high performance.
- *Stepper motors* available in Nema sizes 11 through 34 are the most economical choice to achieve precise positioning.

Service & Technical Support



- *Fast service and full technical support.*
- *All catalog products are built-to-order with the fastest delivery in the industry.*



Built to last.



PNEUMATIC ACTUATORS

POWER TRANSMISSION

Customized Products



- Modifications to catalog products offered for specific application requirements.
- Custom (blank sheet of paper) designs and prototype services for high volume OEM applications.

Pneumatic Actuators

- Largest selection of rodless cylinders in band, cable, and magnetically coupled styles with a wide range of load capacities. We're the only company that offers all types of rodless cylinders.
- Our Power Block rod slides provide maximum force in short stroke packages, perfect for conveyor stops or load lifting applications.

Power Transmission

- Float-A-Shaft® and Slide-Rite® right-angle gearboxes turn power around any corner.
- Caliper disc brakes in mechanical, hydraulic, pneumatic and spring-applied models offer a wide variety of industrial stopping power.
- Disc cone clutches with high torque output and non-slip, dependable performance.

ERD PNEUMATIC REPLACEMENT ROD-STYLE ACTUATOR



APPLICATIONS:

- Low to medium thrust forces for externally guided and supported loads
- Pneumatic cylinder replacement

FEATURES:

- Stainless steel housing & thrust tube
- Compatible with many commercially available metric rod end accessories
- NEMA or metric motor mount
- Rugged bearing system

OPTIONS:

- Acme or ball screw assemblies
- Trunnion, foot or front flange mounts
- IP67 & IP69K ingress protection, stainless steel with protective motor enclosure
- Load guidance, tooling plate and anti-rotate
- Reed, solid state PNP or NPN switches

SPECIFICATIONS:

| SIZE | MAX. STROKE mm | MAX. THRUST kN | MAX. SPEED mm per sec |
|------|-------------------|-------------------|--------------------------|
| 06 | 203 | 0.09 | 1016 |
| 10 | 254 | 0.45 | 1016 |
| 15 | 609 | 0.89 | 1016 |
| 20 | 609 | 2.22 | 508 |

- Patented

ERD HYGIENIC ROD-STYLE ACTUATOR



APPLICATIONS:

- Low to medium thrust forces for externally guided and supported loads
- Pneumatic and hydraulic cylinder replacement

FEATURES:

- Stainless housing tube & thrust tube
- Compatible with many commercially available metric rod end accessories
- NEMA or metric motor mount
- Rugged bearing system

OPTIONS:

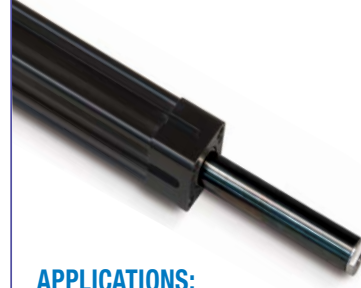
- Acme, ball or roller screw assemblies
- Trunnion, foot or front flange mounts
- IP67 & IP69K ingress protection, stainless steel with protective motor enclosure
- Load guidance, tooling plate and anti-rotate
- Reed, solid state PNP or NPN switches

SPECIFICATIONS:

| SIZE | MAX. STROKE mm | MAX. THRUST kN | MAX. SPEED mm per sec |
|------|-------------------|-------------------|--------------------------|
| 10 | 254 | 0.45 | 1016 |
| 15 | 609 | 0.89 | 1016 |
| 20 | 609 | 2.22 | 508 |
| 22 | 1000 | 7.56 | 1270 |
| 25 | 1000 | 14.68 | 1473 |
| 30 | 1000 | 35.00 | 1473 |

- Patented

RSA ROD-STYLE ACTUATOR



APPLICATIONS:

- Medium to high thrust forces for externally guided and supported loads
- Pneumatic and hydraulic cylinder replacement

FEATURES:

- Anodized aluminum design
- Standard internal anti-rotate
- Salt bath nitride treated thrust tube
- Internally threaded rod end

OPTIONS:

- HT option for high thrust applications
- IP67 option for ingress protection
- Acme, ball or roller screw assemblies
- Trunnion, clevis, eye, flange or foot mounts
- Clevis, eye, threaded rod or coupler rod mounts
- Inline or reverse-parallel motor mount
- Reed or solid state position sensors

SPECIFICATIONS:

| SIZE | MAX. STROKE mm | MAX. THRUST kN | MAX. SPEED mm per sec |
|------|-------------------|-------------------|--------------------------|
| 12 | 305 | 0.58 | 3124 |
| 16 | 457 | 0.58 | 3124 |
| 24 | 610 | 7.56 | 1270 |
| 32 | 914 | 18.50 | 1270 |
| 50 | 1219 | 35.00 | 1270 |
| 64 | 1524 | 58.00 | 1473 |

RSX EXTREME FORCE ACTUATOR*



APPLICATIONS:

- High thrust forces for externally guided and supported loads
- Hydraulic cylinder replacement

FEATURES:

- Tolomatic roller screw driven
- Steel tie rod / hard coat anodized aluminum design
- Standard internal anti-rotate
- Salt bath nitride treated thrust tube

OPTIONS:

- IP67 option for ingress protection
- Trunnion, front flange, rear clevis or mounting plates
- Rod clevis or threaded rod mounts
- Inline or reverse-parallel motor mount

SPECIFICATIONS:

| SIZE | 080 | 096 | P096 |
|--------------------------|-------|--------|------|
| MAX. STROKE mm | 660 | 660 | 450 |
| MAX. THRUST kN | 80.07 | 133.45 | 178 |
| MAX. SPEED mm per sec | 700 | 760 | 760 |

*RSX is a 4 week built-to-order product. (Not standard 3 week assembly)

MOTION PRODUCTS


3 WEEKS
BUILT-TO-ORDER

DRIVE ACTUATORS

GSA GUIDED SCREW ACTUATOR



APPLICATIONS:

- Medium to high thrust forces for loads requiring guidance and support

FEATURES:

- Hardened and ground steel guide rods
- Four bearing surfaces for smooth motion
- Wide tooling plate for end effector mounting
- Anodized aluminum design

OPTIONS:

- Acme or ball screw assemblies
- Composite or linear ball bearings
- Standard, oversized or stainless-steel guide rods
- Inline or reverse-parallel motor mount
- Reed or solid state position sensors
- Inch or metric mounting

SPECIFICATIONS:

| | SIZE | 12 | 16 | 24 | 32 |
|-------------|------------|------|------|------|------|
| MAX. STROKE | mm | 457 | 609 | 762 | 914 |
| MAX. THRUST | kN | 0.58 | 2.10 | 3.78 | 4.23 |
| MAX. LOAD | N | 1779 | 2224 | 4448 | 5338 |
| MAX. SPEED | mm per sec | 3124 | 3124 | 1270 | 1270 |

IMA LINEAR SERVO ACTUATOR



APPLICATIONS:

- High thrust forces for externally guided and supported loads
- Pneumatic and hydraulic cylinder style replacement in a compact design

FEATURES:

- Integral servo motor
- High resolution feedback device
- Salt bath nitride treated thrust tube
- Grease port (patented) for internal lubrication without disassembly

OPTIONS:

- Roller or ball screw assemblies
- Trunnion, clevis, eye, front flange or plate mounts
- Clevis, eye or external thread rod mounts
- Holding brake
- Connectors and feedback devices matched to all leading manufacturers' cables/drives

SPECIFICATIONS:

| SIZE | SCREW TYPE | MAX. STROKE | MAX. THRUST | MAX. SPEED |
|------|------------|-------------|-------------|------------|
| | | mm | kN | mm per sec |
| 22 | Ball | 305 | 1.45 | 711 |
| | Roller | 457 | 11.1 | 610 |
| 33 | Ball | 457 | 4.45 | 1219 |
| | Roller | 457 | 11.1 | 610 |
| 44 | Ball | 457 | 8.90 | 1334 |
| | Roller | 457 | 17.8 | 584 |
| 55 | Ball | 457 | 13.35 | 787 |
| | Roller | 457 | 30.59 | 399 |

GSWA INTEGRATED SERVO SPOT WELDING ACTUATOR*



APPLICATIONS:

- 7th axis resistance spot welding
- Pedestal welding

FEATURES:

- Integral servo motor
- High resolution feedback device
- Lightweight hard anodized aluminum design
- Roller screw driven

OPTIONS:

- Integral holding brake option
- Feedback device integration with all popular robot manufacturers

SPECIFICATIONS:

| SIZE | STROKE | MAX. THRUST | MAX. SPEED |
|------|--------|-------------|------------|
| | mm | kN | mm per sec |
| 33 | 152 | 9.35 | 610 |
| 44 | 152 | 14.68 | 584 |
| 55 | 152 | 24.48 | 399 |

*Contact Tolomatic for lead time

SWA/B INTEGRATED SERVO SPOT WELDING ACTUATOR*



APPLICATIONS:

- 7th axis resistance spot welding
- Pedestal welding

FEATURES:

- Integral hollow rotor servo motor
- Integral high resolution feedback device
- Lightweight aluminum design
- Roller screw driven

OPTIONS:

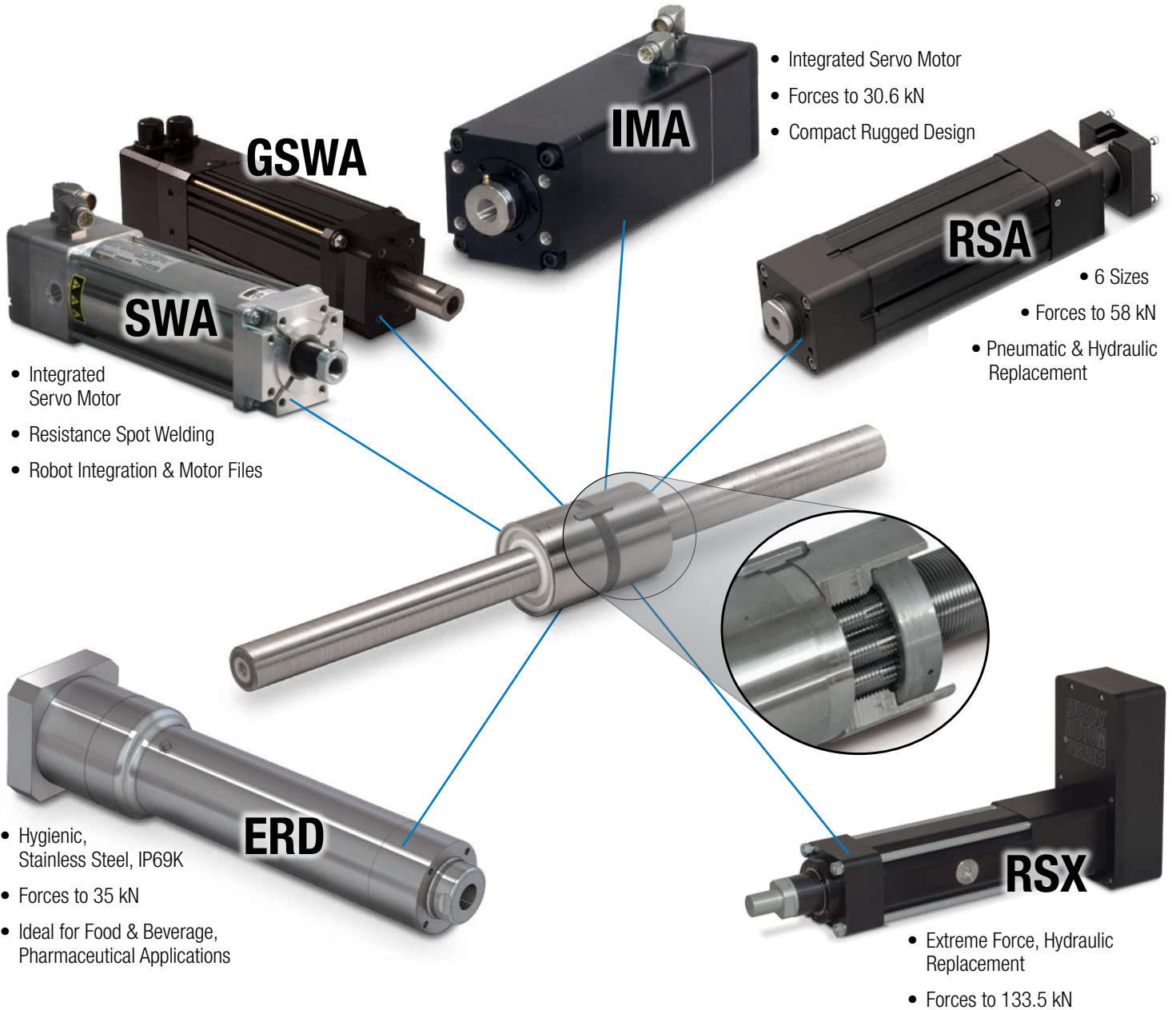
- Holding brake option
- Feedback device integration with all popular robot manufacturers

SPECIFICATIONS:

| SIZE | STROKE | MAX. THRUST | MAX. SPEED |
|------|--------|-------------|------------|
| | mm | kN | mm per sec |
| 3 | 152 | 11.1 | 584 |
| 4 | 152 | 22.0 | 584 |

*Contact Tolomatic for lead time

Long Lasting, Precision Roller Screw Electric Actuators



- SWA**
- Integrated Servo Motor
 - Resistance Spot Welding
 - Robot Integration & Motor Files
- GSWA**

- IMA**
- Integrated Servo Motor
 - Forces to 30.6 kN
 - Compact Rugged Design

- RSA**
- 6 Sizes
 - Forces to 58 kN
 - Pneumatic & Hydraulic Replacement

- ERD**
- Hygienic, Stainless Steel, IP69K
 - Forces to 35 kN
 - Ideal for Food & Beverage, Pharmaceutical Applications

- RSX**
- Extreme Force, Hydraulic Replacement
 - Forces to 133.5 kN

Broad Range of High Force Roller Screw Electric Actuators. Roller Screws Provide the Following Benefits:

- 30x Life of Same Size Ball Screw
- Higher Efficiency than Ball Screw Designs
- Compact Actuator Designs
- Quiet Operation
- Forces up to 133.5 kN
- Lead Accuracy of 0.01 mm/300 mm
- Elimination of Pneumatic & Hydraulic Cylinders

Roller Screws vs. Ball Screws

Roller Screw



Capable of handling heavy loads, planetary roller screws contain precision ground rollers engaged with a precision ground screw and a precision ground nut. When compared with a ball screw of the same size and lead the roller screw components are designed with a finer pitch, providing more points of contact and a larger contact radius. This results in less stress per point of contact.

- Higher DLR = longer life
- Higher loads per given size actuator
- Allows for smaller, lighter weight actuator

ROLLER AND BALL SCREW ACTUATOR PERFORMANCE COMPARISONS

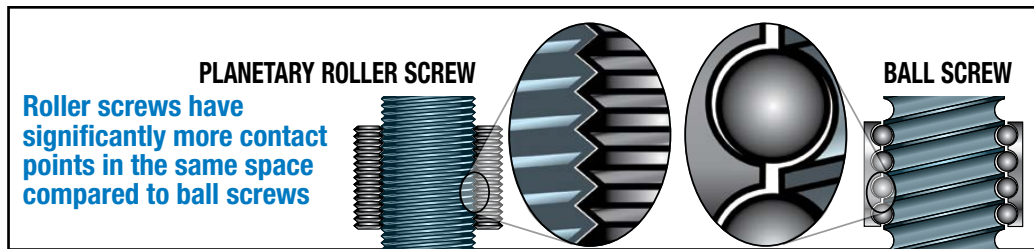
| | ROLLER SCREW | BALL SCREW |
|--------------------------------|---|------------|
| Dynamic load rating | Very High | Medium |
| Lifetime | Very long, many times greater than ball screw | Moderate |
| Shock Loads | Very high | Moderate |
| Relative Space Required | Minimal | Moderate |
| Maintenance | None to Minimal | Minimal |

Ball Screw



Capable of handling moderate loads, ball screw nut assemblies contain multiple ball bearings that cannot be made below a minimum size. When compared to a roller screw of similar size and lead, the ball bearings' radius requires a coarser pitch resulting in fewer points of contact. Combined with the smaller contact radius and a design that allows the bearings to contact each other this limits the ball screw's DLR leading to lower forces and shorter life.

DLR (Dynamic Load Rating) is an industry standard term that represents an applicable constant load (in direction and magnitude) where a ball bearing device (or power screw) will achieve 1,000,000 revolutions of rated life or L10 life estimation at 90% reliability.



Standard vs. Inverted Roller Screws

Standard Roller Screw



Standard roller screws are case (surface) hardened before precision grinding, resulting in a much deeper case hardness depth and much higher DLR. The deeper surface hardness and higher DLR give this design a large advantage in life (and managing lubrication) over the inverted design.

- Higher DLR = longer life
- 100x deeper hardening
- Easier to re-lubricate

STANDARD AND INVERTED ROLLER SCREW ACTUATOR PERFORMANCE COMPARISONS

| | | STANDARD | INVERTED |
|--------------------------------|---------------|------------------------------------|---|
| Manufacturing Method | | Precision Ground | Mixed |
| Case Hardness Depth | | ~1.0 mm (~100x greater) | ~0.01 mm |
| Screw DLR | Size 3 | 53.60 kN | ~25.80 kN |
| | Size 4 | 73.30 kN | ~36.92 kN |
| Lubrication Maintenance | | NO removal or disassembly required | Must remove and disassemble the front of actuator |

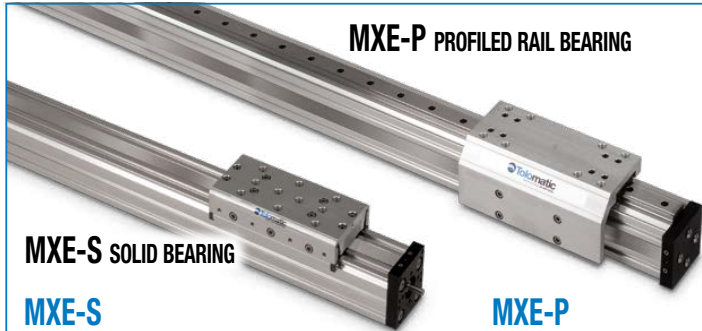
Standard roller screws have a 100x deeper case (surface) hardening depth and are easier to maintain lubrication

Inverted Roller Screw



Inverted roller screws use a process other than grinding to economically create threads along the internally threaded nut. Because of this, the hardening process is performed after the internally threaded nut is machined. The required hardening process results in a much shallower case hardness depth and softer threads than Standard roller screws. This leads to a significantly lower DLR (lower life) and more challenges with maintaining lubrication.

RODLESS SCREW DRIVE ACTUATORS



MXE-S SOLID BEARING

MXE-P PROFILED RAIL BEARING

MXE-S APPLICATIONS:

- Guidance of light to moderate loads and moments
- Side or impact loads

FEATURES:

- Load-bearing carrier design with large, flexible mounting pattern for load stability
- Self-lubricating, trapezoidal bearing design for smooth operation and long life

OPTIONS:

- Floating mount to compensate for non-parallelism with external guides

COMMON APPLICATIONS:

- Long strokes

COMMON FEATURES:

- Stainless steel dust band
- Anodized aluminum design

COMMON OPTIONS:

- Acme or ball screw assemblies in multiple leads
- Auxiliary carrier for higher Fz (load) and bending moment capacity
- In-line or reverse-parallel motor mounting
- Flush mount reed or solid state position sensors
- Inch or metric mounting

MXE-P APPLICATIONS:

- Stable and precision guidance for moderate to high loads and moments

- Unguided or overhung loads

FEATURES:

- Recirculating ball bearing technology for long life and smooth operation
- Low carrier height with large mounting pattern for high load stability

SPECIFICATIONS:

| | | 16 | 25 | 32 | 40 | 50 | 63 | | | | | | |
|--------------------|--------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| MAX. STROKE | mm | 787 | 3404 | 3378 | 3327 | 4521 | 3175 | | | | | | |
| MAX. THRUST | N | 200 | 756 | 756 | 3559 | 12010 | 19127 | | | | | | |
| MAX. SPEED | mm/sec | 1067 | 1524 | 1524 | 1524 | 1524 | 1270 | | | | | | |
| | | 16S | 16P | 25S | 25P | 32S | 32P | 40S | 40P | 50S | 50P | 63S | 63P |
| *MAX. LOAD | N | 156 | 966 | 311 | 1996 | 667 | 2531 | 1001 | 3274 | 1401 | 4510 | 2313 | 5745 |

*Auxiliary carrier doubles load capacities listed above and increases My and Mz bending moment capacity

B3S RE-CIRCULATING BALL BEARING



APPLICATIONS:

- Moderate to heavy load carrying for slow to moderate speed applications
- Long stroke lengths of unguided or overhung loads

FEATURES:

- Load-bearing carrier design with integral recirculating ball bearings
- Hardened steel rail guides for high performance and repeatable accuracy
- Stainless-steel sealing band
- Anodized aluminum design with integral mounting system

OPTIONS:

- Acme or ball screw assemblies in multiple leads
- Auxiliary carrier • Dual 180° carrier
- In-line or reverse-parallel motor mount
- Reed or solid state position sensors
- Inch or metric mounting

SPECIFICATIONS:

| | | B3S | 10 | 15 | 20 |
|--------------------|--------|------|------|-------|----|
| MAX. STROKE | mm | 3454 | 3378 | 3337 | |
| MAX. THRUST | N | 756 | 3559 | 12010 | |
| *MAX. LOAD | N | 2629 | 6468 | 8932 | |
| MAX. SPEED | mm/sec | 1524 | 1524 | 1524 | |

*Dual 180° carrier substantially increases load capacities listed above and increases Mx and Mz bending moment. Auxiliary carrier doubles load capacities listed above & increases My and Mz bending moment capacity

TKS PRECISION LINEAR STAGE



APPLICATIONS:

- Single and multi axis tables with high requirements for flatness, straightness and accuracy
- Moderate load carrying for slow to moderate speed applications

FEATURES:

- Load-bearing linear table design with ground profile linear guides
- Precision ball screw for repeatable and accurate positioning
- Anodized aluminum design with integral mounting holes and sensors

OPTIONS:

- Ball screw assemblies in multiple leads
- Auxiliary carrier
- Bellows for protection against contaminants in harsh environments
- In-line or reverse-parallel motor mount
- Reed or solid state position sensors

SPECIFICATIONS:

| | | TKS | 10 | 25 | 75 |
|--------------------|--------|------|------|-------|----|
| MAX. STROKE | mm | 2438 | 2438 | 2438 | |
| MAX. THRUST | N | 1023 | 7073 | 14501 | |
| *MAX. LOAD | N | 445 | 1112 | 3336 | |
| MAX. SPEED | mm/sec | 762 | 762 | 1016 | |

*Auxiliary carrier doubles load capacities listed above and increases My and Mz bending moment capacity

MOTION PRODUCTS

3 WEEKS
BUILT-TO-ORDER

RODLESS BELT DRIVE ACTUATORS



MXB-U NO BEARING

MXB-U APPLICATIONS:

- Loads that are externally guided and supported

FEATURES:

- High speed
- Low plate height

COMMON FEATURES:

- High power polyurethane HTD tooth profile belt with steel tensile members resist stretching.

SPECIFICATIONS:

| | 16 | 25 | 32 | 40 | 50 | 63 | | | | | | |
|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| MAX. STROKE mm | 5080 | 5080 | 5080 | 5080 | 4064 | 2540 | | | | | | |
| MAX. THRUST N | 169 | 672 | 930 | 1112 | 1446 | 1859 | | | | | | |
| | 16S | 16P | 25S | 25P | 32S | 32P | 40S | 40P | 50S | 50P | 63S | 63P |
| *MAX. LOAD N | 156 | 966 | 311 | 1996 | 667 | 2531 | 1001 | 3274 | 1401 | 4510 | 2313 | 5745 |

MAX. SPEED mm/sec. MXB-U = 5080 mm/Sec. • MXB-S = 2540 mm/Sec. • MXB-P = 3810 mm/Sec.

*Auxiliary carrier doubles load capacities listed above and increases My and Mz bending moment capacity

MXB-P PROFILED RAIL BEARING

MXB-S APPLICATIONS:

- Guidance of light to moderate loads and moments
- Side or impact loads

FEATURES:

- Load-bearing carrier design with large, flexible mounting pattern for load stability
- Self-lubricating, trapezoidal bearing design for smooth operation and long life

OPTIONS:

- Floating mount to compensate for non-parallelism

MXB-P APPLICATIONS:

- Stable and precision guidance for moderate to high loads and moments
- Unguided or overhung loads

FEATURES:

- Recirculating ball bearing technology for long life and smooth operation
- Low carrier height with large mounting pattern for high load stability

OPTIONS:

- Auxiliary carrier

- Open slot permits easy access to belt tensioning screw. No disassembly required.
- Anodized aluminum design
- External bumpers
- Long stroke

COMMON OPTIONS:

- In-line or reverse-parallel motor mounting
- Mounting plates and tube clamps
- Flush mount reed or solid state position sensors
- Inch or metric mounting

B3W RE-CIRCULATING BALL BEARING



APPLICATIONS:

- Moderate to heavy load carrying for moderate to high speed applications
- Long stroke lengths of unguided or overhung loads with high moments

FEATURES:

- Load-bearing carrier design with integral recirculating ball bearings
- Hardened steel rail guides for high performance and repeatable accuracy
- Stainless-steel sealing band
- Anodized aluminum design with integral mounting system
- Steel reinforced belts

OPTIONS:

- Inline or reduction drive motor mount
- Auxiliary carrier
- Dual 180° carrier
- Reed or solid state position sensors
- Inch or metric mounting

SPECIFICATIONS:

| | B3W | 10 | 15 | 20 |
|--------------------------|------|------|------|----|
| MAX. STROKE mm | 5258 | 5182 | 2743 | |
| MAX. THRUST N | 667 | 1112 | 1446 | |
| *MAX. LOAD N | 2629 | 6468 | 8932 | |
| MAX. SPEED mm/sec | 3988 | 5080 | 5080 | |

*Dual 180° carrier substantially increases load capacities listed above and increases Mx and Mz bending moment. Auxiliary carrier doubles load capacities listed above & increases My and Mz bending moment capacity

DRIVES & MOTORS

ACSI INTEGRATED MOTOR/DRIVE/CONTROLLER



EtherCAT, EtherNet/IP, ODVA, CANopen, PIV, Modbus

APPLICATIONS:

- One easy to configure component to replace a motor & drive & controller on any electric actuator

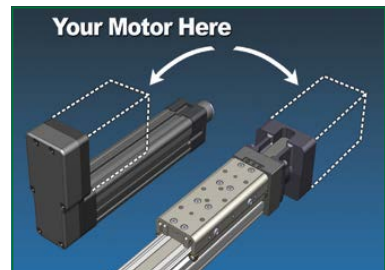
FEATURES:

- Integrated servo motor/drive
- Low voltage, 10 - 60 VDC
- NEMA 23 & 34 frame sizes

ACS SERVO & STEPPER DRIVES WITH ETHERNET



SELECT A COMPLETE SYSTEM FROM TOLOMATIC OR ADD ANY MOTION SYSTEM TO TOLOMATIC'S ACTUATORS



"YOUR MOTOR HERE" MADE-TO-ORDER MOTOR MOUNTS. 3 WEEKS.

- Select a high-performance electric actuator and Tolomatic will provide a motor-specific interface for your motor. With Tolomatic's online database, you can select from over 60 motor manufacturers and hundreds of models.

Visit www.tolomatic.com/yhm to find your motor/actuator match!

CUSTOM CAPABILITIES



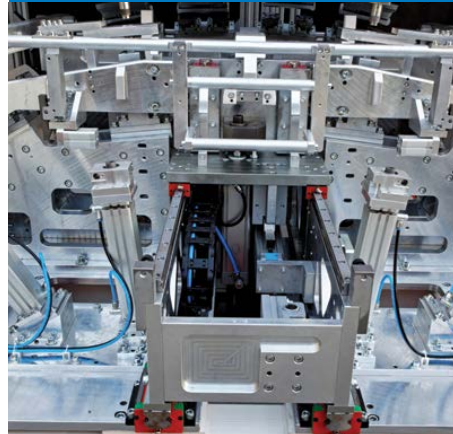
Tolomatic's custom model shop can create first-piece prototypes with the industry's fastest turnaround times.

Custom Solutions are Standard Business

Over a third of our total business is based on products not found in our standard catalog. Our staff of highly educated and experienced mechanical, electrical, and application design engineers create efficient, leading-edge solutions for customers in a wide array of industries.

Custom design and manufacturing has always been a key component in our business strategy. With an innovation mindset, years of solid industry experience, and fast response times, Tolomatic will get the job done. If you are looking for linear motion solutions—electromechanical, pneumatic or power transmission—and you cannot find a catalog product, contact Tolomatic. You will experience what we mean by **Excellence in Motion**.

MANUFACTURING



Parts assembly system relies on Tolomatic's unique electric belt-driven rod actuator to quickly and accurately position parts.

Customer Challenge:

Part placement at a downward angle required an actuator fast enough to out-pace gravity. The current pneumatic cylinder had problems with consistent part placement and energy efficiency. A linear motor solution was not economical.

Tolomatic Solution:

Tolomatic designed a custom electric belt-driven rod actuator (patent pending) that achieved the required high speed and consistent part placement within budget. Integrating the actuator was easy using a servo motor controlled using Add-On Instructions (AOI) over EtherNet/IP™.



CUSTOM VERY HIGH SPEED ELECTRIC ROD ACTUATOR

MEDICAL



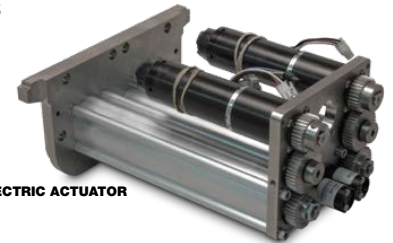
Angiographic-fluid-delivery system combines motion control technology with physician-interactive control.

Customer Challenge:

The power injector used in an angiography system to diagnose coronary disease did not offer the ability to vary the fluid flow rate during injection. A medical company was looking to improve this technology by giving the physician more control of the process and reduce the complexity of equipment setup.

Tolomatic Solution:

Tolomatic designed a customized rod screw actuator to provide the rigidity, precision and repeatability required for the injection system. Physicians are able to easily control and monitor the fluid delivery, keeping their focus on diagnosis and treatment.



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