

# ELECTRIC ACTUATORS

**ROD-STYLE & RODLESS ACTUATORS**

**MOTION CONTROL SOLUTIONS**



**Tolomatic**<sup>TM</sup>  
EXCELLENCE *IN MOTION*  
**ELECTRIC LINEAR MOTION PRODUCTS**

**LINEAR SOLUTIONS MADE EASY**

# ELECTRIC LINEAR MOTION PRODUCTS

## ROD STYLE SCREW DRIVE ACTUATORS



**SOLUTION FOR:**

- Pneumatic cylinder replacement
- General automation

**STANDARD FEATURES:**

- Stainless steel housing & thrust rod
- Ball or Acme screw driven
- Your Motor Here® flexible inline or reverse parallel motor mounting

**OPTIONS:**

- Stainless steel construction upgrade
- IP67 & IP69k ingress protection
- Internal anti-rotate
- External guided tooling plate
- Metric mounting and rod-end accessories
- Reed, solid state PNP or NPN switches, quick-connect available

**SPECIFICATIONS:**

	ERD	10	15	20
<b>MAX. STROKE</b>	in 10	24	24	24
	mm 254	609	609	609
<b>MAX. FORCE</b>	lbf 100	200	500	
	N 445	890	2224	
<b>MAX. SPEED</b>	in 40	40	20	
	per sec mm 1016	1016	508	

• Patented



**SOLUTION FOR:**

- Pneumatic & hydraulic replacement
- Food & beverage processing

**STANDARD FEATURES:**

- Full Stainless steel construction
- Roller, Ball or Acme screw driven
- Your Motor Here® flexible inline or reverse parallel motor mounting

**OPTIONS:**

- Stainless steel protective motor enclosure
- IP69k ingress protection
- Internal anti-rotate
- Metric mounting and rod-end accessories
- Reed, solid state PNP or NPN switches, quick-connect available

**SPECIFICATIONS:**

	ERD	10	15	20	22	25	30
<b>MAX. STROKE</b>	in 10	24	24	39.4	39.4	39.4	
	mm 254	609	609	1000	1000	1000	
<b>MAX. FORCE</b>	lbf 100	200	500	1700	4159	7868	
	N 445	890	2224	7562	18500	34999	
<b>MAX. SPEED</b>	in 40	40	20	50	58	58	
	per sec mm 1016	1016	508	1270	1473	1473	

• Patented



**SOLUTION FOR:**

- Pneumatic & hydraulic replacement
- General automation

**STANDARD FEATURES:**

- Anodized aluminum design
- Roller, Ball or Acme screw driven
- Internal anti-rotate

**OPTIONS:**

- Your Motor Here® flexible inline or reverse parallel motor mounting
- IP67 ingress protection
- Metric or US Standard mounting and rod-end accessories
- Reed, solid state PNP or NPN switches, quick-connect available

**SPECIFICATIONS:**

	RSA	12	16	24	32	50	64
<b>MAX. STROKE</b>	in 12	18	24	36	48	60	
	mm 305	457	610	914	1219	1524	
<b>MAX. FORCE</b>	lbf 130	130	1700	4159	7868	13039	
	N 578	578	7562	18500	34999	58001	
<b>MAX. SPEED</b>	in 123	123	50	50	50	58	
	per sec mm 3124	3124	1270	1270	1270	1473	



**SOLUTION FOR:**

- Hydraulic replacement
- Heavy duty applications

**STANDARD FEATURES:**

- Steel tie rods and hard coat anodized aluminum design
- Roller screw driven
- Internal anti-rotate

**OPTIONS:**

- Your Motor Here® flexible inline or reverse parallel motor mounting
- IP67 ingress protection
- Metric mounting and rod-end accessories
- Reed, solid state PNP or NPN switches, quick-connect available

**SPECIFICATIONS:**

	RSX	080	096	P096
<b>MAX. STROKE</b>	in 35.03	31.49	17.71	
	mm 890	800	450	
<b>MAX. FORCE</b>	lbf 18000	30000	40000	
	kN 80.1	133.5	178	
<b>MAX. SPEED</b>	in 27.6	29.9	29.9	
	per sec mm 700	760	760	



**SOLUTION FOR:**

- General automation
- Guided loads

**STANDARD FEATURES:**

- Anodized aluminum design
- Ball or Acme screw driven
- Hardened guide rods with four bearing surfaces

**OPTIONS:**

- Your Motor Here® flexible inline or reverse parallel motor mounting
- Composite or linear ball bearings
- Standard, oversized or stainless steel guide rods
- Metric or US Standard mounting
- Reed, solid state PNP or NPN switches, quick-connect available

**SPECIFICATIONS:**

	GSA	12	16	24	32
<b>MAX. STROKE</b>	in 18	24	30	36	
	mm 457	609	762	914	
<b>MAX. FORCE</b>	lbf 130	471	850	950	
	N 578	2095	3781	4226	
<b>MAX. LOAD</b>	lb 400	500	1000	1200	
	N 1779	2224	4448	5338	
<b>MAX. SPEED</b>	in 28	48	24	52.5	23
	per sec mm 711	1219	610	1334	584



**SOLUTION FOR:**

- Pneumatic & hydraulic replacement
- High performance applications

**STANDARD FEATURES:**

- Anodized aluminum design
- Roller or ball screw driven
- Integrated servo motor (230 or 460 Vac) with skewed winding

**OPTIONS:**

- Grease port (patented) for easy re-lubrication
- IP65 ingress protection
- Connector & feedback options for leading servo drive manufacturers
- White epoxy, food grade coating with stainless hardware
- IP67 ingress protection
- Holding brake
- Metric mounting & rod-end accessories

**SPECIFICATIONS:**

	IMA	22	33	44	55
<b>MAX. STROKE</b>	in 12	18	18	18	18
	mm 305	457	457	457	457
<b>MAX. FORCE</b>	lbf 325	1000	2500	2000	4000
	kN 1.45	4.45	11.1	8.90	17.8
<b>MAX. SPEED</b>	in 28	48	24	52.5	23
	per sec mm 711	1219	610	1334	584



**SOLUTION FOR:**

- Food & beverage processing

**STANDARD FEATURES:**

- 316 stainless steel construction
- Hygienic design
- Roller or ball screw driven
- Integrated servo motor (230 or 460 Vac) with skewed winding
- Food grade lubrication and grease port (patented) for easy re-lubrication
- IP69k ingress protection

**OPTIONS:**

- Cabling, connector & feedback options for leading servo drive / control manufacturers
- EHEDG fasteners
- Field replaceable front head & seal
- Internal anti-rotate (IMASA33)
- Holding brake
- Metric mounting & rod-end accessories

**SPECIFICATIONS:**

	IMA-ST	22	33	33SA
<b>MAX. STROKE</b>	in 12	18	18	12
	mm 305	457	457	305
<b>MAX. FORCE</b>	lbf 325	1000	2500	2500
	kN 1.45	4.45	11.1	11.1
<b>MAX. SPEED</b>	in 19.6	19.6	19.6	19.6
	per sec mm 500	500	500	500



**SOLUTION FOR:**

- 7th axis robotic resistance spot welding

**STANDARD FEATURES:**

- Anodized aluminum design
- Roller screw driven
- Integrated servo motor (230 or 460 Vac) with skewed winding
- IP65 ingress protection

**OPTIONS:**

- Feedback device & connector integration for leading robot manufacturers
- Metric mounting

**SPECIFICATIONS:**

	SWA/B	GSWA
<b>MAX. STROKE</b>	in 6	12
	mm 152	305
<b>MAX. FORCE</b>	lbf 2500	4950
	kN 11.1	22.0
<b>MAX. SPEED</b>	in 23	23
	per sec mm 584	584

\*Contact Tolomatic for price and lead time

## RODLESS SCREW DRIVE ACTUATORS



**SOLUTION FOR:**

- Light to moderate loads & moments
- Moderate to high loads & moments

**STANDARD FEATURES:**

- Self-lubricating solid bearing
- Floating mount
- Anodized aluminum design
- Stainless steel dust band
- Ball or Acme screw driven
- Large mounting pattern for high load stability
- Your Motor Here® flexible motor mounting
- Metric or US Standard mounting
- Reed, solid state PNP or NPN switches

**OPTIONS:**

- Floating mount
- Profiled rail ball bearing
- Anodized aluminum design
- Stainless steel dust band
- Ball or Acme screw driven
- Your Motor Here® flexible motor mounting
- Auxiliary carrier for higher load & moment capacity
- Metric or US Standard mounting
- Reed, solid state PNP or NPN switches

**SPECIFICATIONS:**

	16	25	32	40	50	63
<b>MAX. STROKE</b>	in 31	134	133	131	178	125
	mm 787	3404	3378	3327	4521	3175
<b>MAX. FORCE</b>	lbf 45	170	170	800	2700	4300
	N 200	756	756	3559	12010	19127
<b>MAX. SPEED</b>	in 42	60	60	60	60	50
	per sec mm 1067	1524	1524	1524	1524	1270
<b>*MAX. LOAD</b>	lb 591	1454	2008			
	N 2629	6468	8932			
<b>MAX. SPEED</b>	in 60	60	60			
	per sec mm 1524	1524	1524			

\*Auxiliary carrier option offers increased load and bending moment capacity



**SOLUTION FOR:**

- Moderate to high loads & moments
- Stable, precision load guidance

**STANDARD FEATURES:**

- Anodized aluminum design
- Load bearing carrier design with internal re-circulating ball bearings
- Hardened steel rail guides
- Stainless steel sealing band
- Ball or Acme screw driven
- Your Motor Here® flexible motor mounting
- Metric or US Standard mounting
- Reed, solid state PNP or NPN switches

**OPTIONS:**

- Anodized aluminum design
- Load bearing carrier design with internal re-circulating ball bearings
- Hardened steel rail guides
- Stainless steel sealing band
- Ball or Acme screw driven
- Your Motor Here® flexible motor mounting
- Metric or US Standard mounting
- Reed, solid state PNP or NPN switches

**SPECIFICATIONS:**

	B3S	10	15	20
<b>MAX. STROKE</b>	in 136	133	131	
	mm 3454	3378	3337	
<b>MAX. FORCE</b>	lbf 230	1590	3260	
	N 1023	7073	14501	
<b>*MAX. LOAD</b>	lb 100	250	750	
	N 445	1112	3336	
<b>MAX. SPEED</b>	in 30	30	40	
	per sec mm 762	762	1016	

\*Dual 180° & auxiliary carrier options offer increased load and bending moment capacity



**SOLUTION FOR:**

- High requirements for flatness, straightness & accuracy
- Moderate loads & moments

**STANDARD FEATURES:**

- Anodized aluminum design
- Dual profile rail linear table design
- Ball screw driven
- Inline or reverse-parallel motor mount
- Auxiliary carrier
- Reed, solid state PNP or NPN switches

**OPTIONS:**

- Anodized aluminum design
- Dual profile rail linear table design
- Ball screw driven
- Inline or reverse-parallel motor mount
- Auxiliary carrier
- Reed, solid state PNP or NPN switches

**SPECIFICATIONS:**

	TKS	10	25	75
<b>MAX. STROKE</b>	in 96	96	96	96
	mm 2438	2438	2438	2438
<b>MAX. FORCE</b>	lbf 230	1590	3260	
	N 1023	7073	14501	
<b>*MAX. LOAD</b>	lb 100	250	750	
	N 445	1112	3336	
<b>MAX. SPEED</b>	in 30	30	40	
	per sec mm 762	762	1016	

\*Auxiliary carrier option offers increased load and bending moment capacity

## RODLESS BELT DRIVE ACTUATORS



**SOLUTION FOR:**

- Loads that are externally guided and supported
- Light to moderate loads and moments
- Moderate to high loads and moments

**STANDARD FEATURES:**

- Low profile mounting plate
- Self-lubricating solid bearing
- Floating mount
- Auxiliary carrier for higher load & moment capacity
- Anodized aluminum design
- Metric or US Standard mounting
- Reed, solid state PNP or NPN switches

**OPTIONS:**

- Low profile mounting plate
- Self-lubricating solid bearing
- Floating mount
- Auxiliary carrier for higher load & moment capacity
- Anodized aluminum design
- Metric or US Standard mounting
- Reed, solid state PNP or NPN switches

**SPECIFICATIONS:**

	16S	16P	25S	25P	32S	32P	40S	40P	50S	50P	63S	63P
<b>MAX. STROKE</b>	in 200	200	200	200	200	160	100					
	mm 5080	5080	5080	5080	5080	4064	2540					
<b>MAX. FORCE</b>	lbf 38	151	209	250	325	418						
	N 169	672	930	1112	1446	1859						
<b>*MAX. LOAD</b>	lb 35	217	70	449	150	569	225	736	315	1014	520	1292
	N 156	966	311	1996	667	2531	1001	3274	1401	4510	2313	5745
<b>MAX. SPEED</b>	in/sec	200	200	100	100	150						
	mm/sec	5080	5080	2540	2540	3810						

\*Auxiliary carrier option offers increased load and bending moment capacity



**SOLUTION FOR:**

- Moderate to high loads & moments
- Stable, precision load guidance

**STANDARD FEATURES:**

- Anodized aluminum design
- Load bearing carrier design with internal re-circulating ball bearings
- Hardened steel rail guides
- Stainless steel sealing band
- Belt driven: steel reinforced belts
- Your Motor Here® flexible motor mounting
- Metric or US Standard mounting
- Reed, solid state PNP or NPN switches

**OPTIONS:**

- Anodized aluminum design
- Load bearing carrier design with internal re-circulating ball bearings
- Hardened steel rail guides
- Stainless steel sealing band
- Belt driven: steel reinforced belts
- Your Motor Here® flexible motor mounting
- Metric or US Standard mounting
- Reed, solid state PNP or NPN switches</

# THE Tolomatic™ DIFFERENCE

EXCELLENCE IN MOTION

## INNOVATIVE PRODUCTS

### STANDARD PRODUCTS



Tolomatic offers a complete product line of rodless electric/pneumatic actuators, rod-style electric actuators, controllers and complete motion systems.

- A broad array of electric, pneumatic and power transmission products.
- Actuators configured and built to specified stroke length with flexible mounting options.

### MODIFIED PRODUCTS



Modified products, like this actuator, featuring a screw with dual direction threads used in a clamping application, are a regular part of Tolomatic's daily activities.

- Modifications include user specified mounting features, materials, lubricants, coatings and more.

### CUSTOM PRODUCTS



This actuator, capable of extremely high speeds for nut placement in automobile projection welding is an example of a custom product designed and built by Tolomatic.

- Unique OEM requirements not solved by existing solutions.
- High volume OEM designs.

## EXPERT TECHNICAL SUPPORT

### EXTENSIVE MOTION CONTROL KNOWLEDGE



- Expect prompt, courteous replies to any application and product questions from Tolomatic's industry experts at 1-800-328-2174; help@tolomatic.com

## FAST DELIVERY

### INDUSTRY LEADING



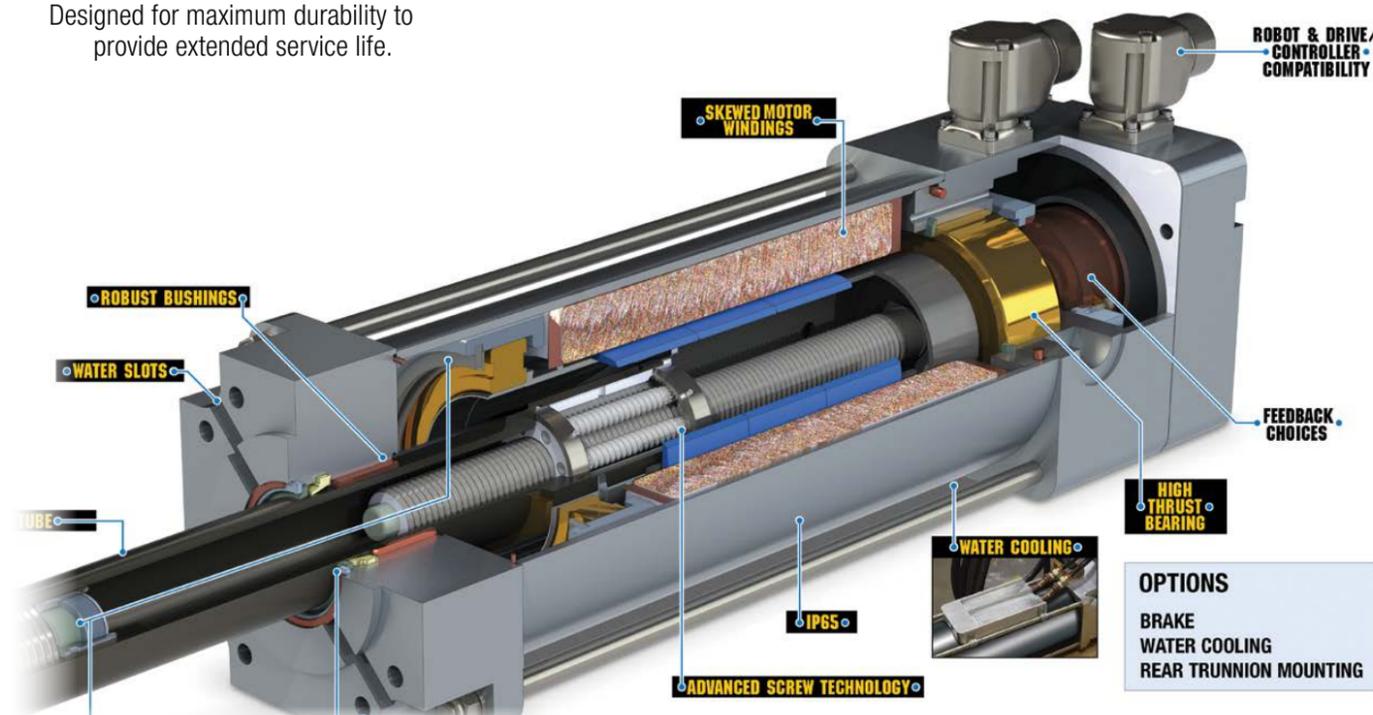
FAST DELIVERY  
BUILT-TO-ORDER

- Configurable stroke lengths and flexible mounting options.
- High quality, 100% factory tested

## ENDURANCE TECHNOLOGY™

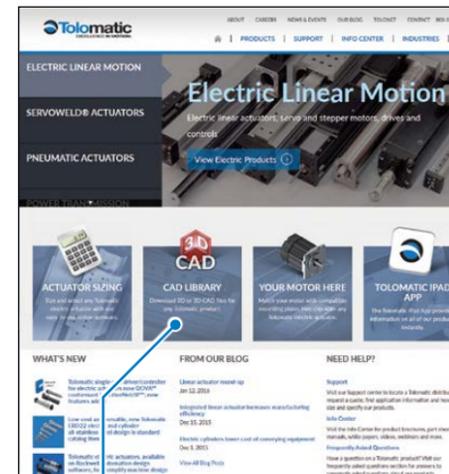
Designed for maximum durability to provide extended service life.

## TOLOMATIC'S DESIGN PHILOSOPHY



## 3D CAD LIBRARY

www.tolomatic.com

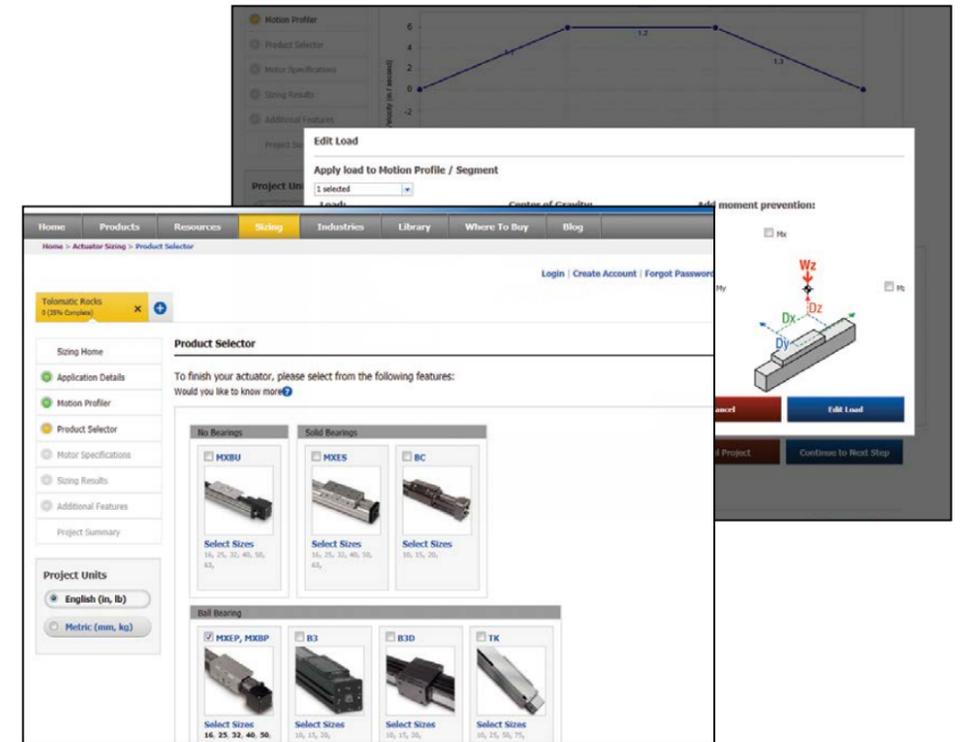


- 3D models and 2D drawings
- Available in all common formats.

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL  
= ISO 9001 =  
CERTIFIED SITE  
HAMEL, MN USA

## ACTUATOR SIZING

### ON-LINE SIZING & SELECTION SOFTWARE



- sizeit.tolomatic.com. Supply application information to size and select the proper actuator.

# ALSO CONSIDER THESE OTHER TOLOMATIC PRODUCTS:

## PNEUMATIC PRODUCTS



Rodless Cylinders: Band Cylinders, Cable Cylinders, Magnetically Coupled Cylinders/Slides;  
Guided Rod Cylinder Slides

BROCHURE #9900-9075    CATALOG #9900-4000



## POWER TRANSMISSION PRODUCTS



Gearboxes: Float-A-Shaft, Slide-Rite; Caliper Disc Brakes; Planetary Roller Screws

BROCHURE #9900-9076    CATALOG #9900-4009



# Tolomatic<sup>™</sup>

EXCELLENCE IN MOTION

COMPANY WITH  
QUALITY SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001 =  
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