

# ELECTRIC ACTUATORS

ROD-STYLE & RODLESS ACTUATORS

MOTION CONTROL SOLUTIONS



**LINEAR SOLUTIONS MADE EASY**

 **Tolomatic** ELECTRIC LINEAR MOTION PRODUCTS  
EXCELLENCE IN MOTION®

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 **ELECTROMATE**

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## RODLESS SCREW DRIVE ACTUATORS



- MXE-P PROFILED RAIL BEARING**
- MXE-S SOLID BEARING**
- 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:**
- Choose from 5 solid or 3 ball nut assembly 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
- 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



- 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 Gothic arch rail guides for high performance and repeatable accuracy
  - Stainless-steel sealing band
  - Anodized aluminum design with integral mounting system
- OPTIONS:**
- Solid or ball nut assemblies in multiple screw leads
  - Auxiliary carrier
  - In-line or reverse-parallel motor mount
  - Reed or solid state position sensors
  - Inch or metric mounting
- COMMON APPLICATIONS:**
- Long strokes
- COMMON FEATURES:**
- Anodized aluminum design
- COMMON OPTIONS:**
- Choose from 5 solid or 3 ball nut assembly 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



- TKS LINEAR RAIL BEARING**
- 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 and four ball bearings blocks
  - Precision ball screw for repeatable and accurate positioning
  - Anodized aluminum design with integral mounting holes and sensors
- OPTIONS:**
- Multiple screw leads
  - Auxiliary carrier
  - Bellows for protection against contaminants in harsh environments
  - In-line or reverse-parallel motor mount
  - Reed or solid state position sensors

## RODLESS BELT DRIVE ACTUATORS



- MXB-P PROFILED RAIL BEARING**
- MXB-U NO BEARING**
- APPLICATIONS:**
- Loads that are externally guided and supported
- FEATURES:**
- High speed
  - Low plate height
- COMMON APPLICATIONS:**
- Long strokes
- COMMON FEATURES:**
- Anodized aluminum design
  - High power polyurethane HTD tooth profile belt with steel tensile members resist stretching.
  - Open slot permits easy access to belt tensioning screw. No disassembly required.
  - External bumpers
- COMMON OPTIONS:**
- In-line or reverse-parallel motor mounting
  - Inch or metric mounting
  - Mounting plates and tube clamps
- 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 for higher Fz (load) and bending moment capacity
  - Flush mount reed or solid state position sensors



- 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 Gothic arch rail guides for high performance and repeatable accuracy
  - Stainless-steel sealing band
  - Anodized aluminum design with integral mounting system
- OPTIONS:**
- Steel reinforced belts
  - Direct in-line or reduction drive motor mount
  - Auxiliary carrier
  - Reed or solid state position sensors
  - Inch or metric mounting



- TKB LINEAR RAIL BEARING**
- APPLICATIONS:**
- Single and multi axis tables with high requirements for flatness, straightness and accuracy
  - Moderate load carrying for moderate to high speed applications
- FEATURES:**
- Load-bearing linear table design with ground profile linear guides
  - High thrust belt material capable of demanding acceleration rates
  - Anodized aluminum design with integral mounting holes and sensors
  - Steel reinforced belts
- OPTIONS:**
- Bellows for protection against contaminants in harsh environments
  - Auxiliary carrier
  - Direct in-line or reduction drive motor mount
  - Reed or solid state position sensors

## ROD STYLE SCREW DRIVE ACTUATORS



- ERD ROD-STYLE ACTUATOR**
- APPLICATIONS:**
- Low to medium thrust forces for externally guided and supported loads
  - Pneumatic and hydraulic cylinder style operation
- FEATURES:**
- Stainless steel main tube & thrust tube
  - Compatible with many commercially available metric rod end accessories
  - Solid or ball nut assemblies
  - NEMA or metric motor mount
  - Rugged nose and main bearings
  - Patent pending
- OPTIONS:**
- 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



- ICR INTEGRATED MOTOR/DRIVE/ACTUATOR**
- APPLICATIONS:**
- Low to medium thrust forces for externally guided and supported loads
  - Pneumatic and hydraulic cylinder style operation
- FEATURES:**
- All-in-one controller/drive/motor in a compact rod-style actuator
  - Programmable, multi-position capability
  - Internally threaded rod end
  - Anodized aluminum design
- OPTIONS:**
- Ball nut assemblies with 2 or 5 TPI
  - Trunnion, clevis, eye, flange or foot mounts
  - Clevis, eye, threaded rod or coupler rod mounts
  - In-line or reverse-parallel motor mount
  - Flush mount reed or solid state position sensors



- RSA ROD SCREW ACTUATOR**
- APPLICATIONS:**
- Medium to high thrust forces for externally guided and supported loads
  - Pneumatic and hydraulic cylinder style operation
- FEATURES:**
- Non-rotating, salt bath nitride treated thrust tube
  - Internally threaded rod end
  - Anodized aluminum design
  - NFPA and ISO mounting standards
- OPTIONS:**
- Ball, roller or solid nut assemblies
  - Trunnion, clevis, eye, flange or foot mounts
  - Clevis, eye, threaded rod or coupler rod mounts
  - In-line or reverse-parallel motor mount
  - Reed or solid state position sensors
  - Inch or metric mounting



- GSA GUIDED SCREW ACTUATOR**
- APPLICATIONS:**
- Medium to high thrust forces for loads requiring guidance and support
  - Pneumatic and hydraulic cylinder style operation
- FEATURES:**
- Hardened and ground steel guide rods
  - Four bearing surfaces for smooth motion
  - Wide tooling plate for end effector mounting
  - Anodized aluminum design
- OPTIONS:**
- Solid or ball nut assemblies
  - Composite or linear ball bearings
  - Standard, oversized or stainless-steel guide rods
  - In-line or reverse-parallel motor mount
  - Reed or solid state position sensors
  - Inch or metric mounting



- IMA INTEGRATED MOTOR ACTUATOR**
- APPLICATIONS:**
- High thrust forces for externally guided and supported loads
  - Pneumatic and hydraulic cylinder style operation in a compact design
- FEATURES:**
- Integral hollow rotor servo motor
  - Integral high resolution feedback device
  - Salt bath nitride treated thrust tube
  - Grease port (patented) for internal lubrication without disassembly
- OPTIONS:**
- Roller or ball nut assemblies
  - Trunnion, clevis, eye, front flange or plate mounts
  - Clevis, eye, or external thread rod mounts
  - Integral holding brake
  - Choose from popular motor manufacturers' connectors and feedback devices

**SPECIFICATIONS:**

	16	25	32	40	50	63
MAX. STROKE	31	134	133	131	178	125
MAX. THRUST	45	170	170	800	2700	4300
MAX. SPEED	42	60	60	60	60	50
MAX. LOAD	35	217	70	449	150	569

**SPECIFICATIONS:**

	10	15	20
MAX. STROKE	136	133	179
MAX. THRUST	170	800	2700
MAX. SPEED	60	60	60
MAX. LOAD	217	70	449

**SPECIFICATIONS:**

	10	25	50	75
MAX. STROKE	96	96	96	96
MAX. THRUST	230	1590	2830	3260
MAX. SPEED	30	30	60	40
MAX. LOAD	217	70	449	569

**SPECIFICATIONS:**

	16	25	32	40	50	63
MAX. STROKE	200	200	200	200	160	100
MAX. THRUST	38	151	209	250	325	418
MAX. SPEED	200	150	200	150	200	150
MAX. LOAD	217	70	449	569	736	1014

**SPECIFICATIONS:**

	10	15	20
MAX. STROKE	207	204	108
MAX. THRUST	150	250	325
MAX. SPEED	157	200	200
MAX. LOAD	217	70	449

**SPECIFICATIONS:**

	TKB	10	25	50	75
MAX. STROKE	96	96	96	96	96
MAX. THRUST	75	120	195	245	334
MAX. SPEED	100	100	100	100	100
MAX. LOAD	217	70	449	569	736

**SPECIFICATIONS:**

	ERD	06	10	15	20	25	30
MAX. STROKE	8	10	24	24	39.4	39.4	39.4
MAX. THRUST	20	100	200	500	3300	4500	4500
MAX. SPEED	40	40	40	20	58	58	58
MAX. LOAD	35	217	70	449	150	569	736

**SPECIFICATIONS:**

	ICR20	LMI	RP
MAX. STROKE	24	24	24
MAX. THRUST	400	720	720
MAX. SPEED	24	24	24
MAX. LOAD	217	70	449

**SPECIFICATIONS:**

	RSA or RSM	12	16	24	32	50	64
MAX. STROKE	18	18	24	36	48	60	60
MAX. THRUST	130	471	1700	3300	4109	7360	7360
MAX. SPEED	123	123	29	50	50	58	58
MAX. LOAD	217	70	449	569	736	1014	1292

**SPECIFICATIONS:**

	GSA or GSM	12	16	24	32
MAX. STROKE	18	24	30	36	36
MAX. THRUST	130	471	850	2670	2670
MAX. SPEED	123	123	29	50	50
MAX. LOAD	217	70	449	569	736

**SPECIFICATIONS:**

	IMA	22	33	44	55
MAX. STROKE	12	18	18	18	18
MAX. THRUST	325	1000	1700	2000	3300
MAX. SPEED	71	1219	610	1334	584
MAX. LOAD	217	70	449	569	736

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

\*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

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