

# **ELECTRIC ACTUATORS**



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ELECTROMATE

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# **ELECTRIC LINEAR MOTION PRODUCTS**

Toll Free Phone (877) SERV098 Toll Free Fax (877) SERV099

IMA INTEGRATED MOTOR ACTUATOR

# **RODLESS SCREW DRIVE ACTUATORS**



## 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

SPECIFICATIONS:

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

- Stable and precision quidance for moderate to

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

• In-line or reverse-parallel

Stainless steel dust band

Choose from 5 solid or 3 ball

Auxiliary carrier for highe

Fz (load) and bending

moment capacity

- Flush mount reed or solid state position sensors
- Inch or metric mounting

# APPLICATIONS:

- high loads and moments
- loads

Solid or ball nut assemblies in multiple

Load-bearing carrier design with integral

• Hardened steel Gothic arch rail guides for

Anodized aluminum design with integral

high performance and repeatable accuracy

recirculating ball bearings

Stainless-steel sealing band

- Reed or solid state position sensors
- Inch or metric mounting

## SPECIFICATIONS

		16		25		32		40		50		63	
MAX.	in	31		134		133		131		178	}	12	5
TROKE	m	787		340	4	337	8	332	7	452	1	317	75
MAX.	bf	45		170		170		800		270	0	430	0
HRUST	I	200		756		756		355	9	120	10	191.	27
MAX.	in	42		60		60		60		60		50	
SPEED - per sec	mm	106.	7	152	4	152	4	152	4	152	24	127	70
r 000		168	16P	258	25P	328	32P	408	40P	50S	50P	638	63P
*MAX.	b	35	217	70	449	150	569	225	736	315	1014	520	1292

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

156 966 311 1996 667 2531 1001 3274 1401 4510

# **B3S** re-circulating ball bearing



overhung loads

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

# Anodized aluminum design

mounting system

- Auxiliary carrier Dual 180° carrier • Inline or reverse-parallel motor mount

/	,,,,,,	Ullul		
B3S or	M3S	10	15	20
MAX.	in	136	133	179
STROKE	mm	3454	3378	4547
MAX.	bf	170	800	2700
THRUST	N	756	3559	12010
*MAX.	b	591	1454	2008
LOAD	I	2629	6468	8932
MAX.	in	60	60	60
SPEED - per sec	mm	1524	1524	1524

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

# 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

- 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
- Inline or reverse-parallel motor mount
- Reed or solid state position sensors

## SPECIFICATIONS:

	TKS	10	05	50	76
	11/9	IV	25	50	75
AX.	in	96	96	96	96
)KE	mm	2438	2438	2438	2438
AX.	lbf	230	1590	2830	3260
JST	N	1023	7073	12589	14501
AX.	b	100	250	500	750
AD	N	445	1112	2224	3336
AX.	in	30	30	60	40
ED Sec	mm	762	762	1524	1016

and increases My and Mz bending moment capacity



MMON APPLICATIONS:

externally quided and supported

FEATURES:

High speed

Low plate height

SPECIFICATIONS:

THRUST

• I oads that are

External bumpers

OMMON OPTIONS:

Inch or metric mounting

In-line or reverse-parallel motor

Mounting plates and tube clamps

MAX. in 200 200 200 200 160

209 250

16U 16P 25U 25P 32U 32P 40U 40P 50U 50P 63U

MAX. in 200 150 200 150 200 150 200 150 200 150 200 150

per sec. mm 5080 3810 5080 3810 5080 3810 5080 3810 5080 3810 5080 3810

\*MAX. 6 NA 217 NA 449 NA 569 NA 736 NA 1014 NA 1292

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

N NA 966 NA 1996 NA 2531 NA 3274 NA 4510 NA 5745

 Anodized aluminum design High power polyurethane HTD tooth

- profile belt with steel tensile members Open slot permits easy access to be
- tensioning screw. No disassembly

 Auxiliary carrier for higher Fz (load) and bending moment capacity

Stable and precision

quidance for moderate to

high loads and moments

Unquided or overhung loads

Recirculating ball bearing

smooth operation

high load stability

Low carrier height with

large mounting pattern for

technology for long life and

FEATURES:

 Flush mount reed or solid state position sensors

RODLESS BELT DRIVE ACTUATORS

**B3W** RE-CIRCULATING BALL BEARING

Moderate to heavy load carrying

• Long stroke lengths of unquided or

overhung loads with high moments

Load-bearing carrier design with integral

Hardened steel Gothic arch rail guides for

high performance and repeatable accuracy

Anodized aluminum design with integral

recirculating ball bearings

Stainless-steel sealing band

mounting system

Steel reinforced belts

for moderate to high speed applications

# CDECIFICATIONS

Inch or metric mounting

B3W or I	13W	10	15	20
MAX.	'n	207	204	108
STROKE	mm	5258	5182	2743
MAX.	bf	150	250	325
THRUST	11	667	1112	1446
*MAX.	b	591	1454	2008
LOAD	11	2629	6468	8932
MAX.	'n	157	200	200
SPEED - per sec	mm	3988	5080	5080

# listed above and increases Mx and Mz bending moment Auxiliary carrier doubles load capacities listed above. & increases My and Mz bending moment capacity

# TKB LINEAR RAIL BEARING



# **APPLICATIONS**

- and accuracy
- Moderate load carrying for moderate to high speed applications

- 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

• Auxiliary carrier • Dual 180° carrier

Reed or solid state position sensors

Direct inline or reduction drive motor mount

- Direct inline or reduction drive motor mount

1	TKB	10	25	50	78
MAX.	'n	96	96	96	96
STROKE	mm	2438	2438	2438	2438
MAX.	bf	75	120	195	245
THRUST	N	334	534	867	109
*MAX.	b	100	250	500	750
LOAD	N	445	1112	2224	333
MAX.	'n	100	100	100	100
SPEED per sec	mm	2540	2540	2540	254



- Single and multi axis tables with high requirements for flatness, straightness

- Bellows for protection against contaminants in harsh environments
- Auxiliary carrier
- Reed or solid state position sensors.

# SPECIFICATIONS:

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



• I ow to medium thrust forces for • Pneumatic and hydraulic cylinder style

- All-in-one controller/drive/motor in a compact rod-style actuator
- Programmable, multi-position capabilit
- Internally threaded rod end Anodized aluminum design

Ball nut assemblies with 2 or 5 TPI

Clevis, eve. threaded rod or coupler rod

• Inline or reverse-parallel motor mount

Flush mount reed or solid state position

• Trunnion, clevis, eve. flance or foot

sensors

SPECIFICATIONS:

ICR20 LMI RP

MAX. in 24 24 STROKE mm 609 609

MAX. lbf 400 720

MAX, in 24 24

SPEED per sec mm 609 609

N 1779 3202

• Trunnion, foot or front flange mounts • IP67 & IP69K ingress protection, stainless steel with protective motor enclosure

FRD ROD-STYLE ACTUATOR

• I ow to medium thrust forces for

externally guided and supported loads

• Pneumatic and hydraulic cylinder style

• Stainless steel main tube & thrust tube

• Compatible with many commercially

available metric rod end accessories

• Solid or ball nut assemblies

NFMA or metric motor mount

Rugged nose and main bearings

• Patent pending

- Load guidance, tooling plate and anti-
- Reed, solid state PNP or NPN switches

# SPECIFICATIONS:

E	ERD		10	15	20	25	30
MAX.	in	8	10	24	24	39.4	39
STROKE	mm	203	254	609	609	1000	100
MAX.	lbf	20	100	200	500	3300	450
THRUST	N	89	445	890	2224	14679	200
MAX.	in	40	40	40	20	58	ļ
SPEED ner sec	mm	1016	1016	1016	508	1473	14



externally guided and supported loads oneration

- Non-rotating, salt bath nitride treated thrust tube
  - Internally threaded rod end
    - Anodized aluminum design

APPLICATIONS:

oneration

Medium to high thrust forces for

externally quided and supported loads

Pneumatic and hydraulic cylinder style

NFPA and ISO mounting standards

**ROD STYLE SCREW DRIVE ACTUATORS** 

RSA ROD SCREW ACTUATOR

- Ball, roller or solid nut assemblies • Trunnion, clevis, eve. flange or foot
- Clevis, eve, threaded rod or coupler
- Inline or reverse-parallel motor mount
- Reed or solid state position sensors Inch or metric mounting

# SPECIFICATIONS:

IIUN VI	WIII	16	IV	- 44	UL	JU	VT
MAX.	'n	18	18	24	36	48	60
STROKE	mm	457	457	610	914	1219	1524
MAX.	bf	130	471	1700	3300	4109	7350
THRUST	I	578	2095	7562	14679	18278	32695
MAX.	'n	123	123	29	50	50	58
SPEED per sec	MM	3124	3124	737	1270	1270	1473

Medium to high thrust forces for loads

requiring guidance and support

Pneumatic and hydraulic cylinder

Hardened and ground steel guide rod

• Four bearing surfaces for smooth

• Wide tooling plate for end effecter

Anodized aluminum design

Solid or ball nut assemblies

• Composite or linear ball bearings

OPTIONS:

quide rods

style operation



- High thrust forces for externally guided and supported loads
- operation in a compact design
- Integral hollow rotor servo motor
- Integral high resolution feedback device
- Grease port (patented) for internal lubrication without disassembly

- plate mounts
- Standard, oversized or stainless-steel
- Inline or reverse-parallel motor mount Reed or solid state position sensors

# Inch or metric mounting SPECIFICATIONS:

ISA or (	SM	12	16	24	32
MAX.	in	18	24	30	36
TROKE	mm	457	609	762	914
MAX.	bf	130	471	850	2670
HRUST	II	578	2095	3781	11877
MAX.	lb	400	500	1000	1200
LOAD	II	1779	2224	4448	5338
MAX.	in	123	123	29	50
SPEED per sec	mm	3124	3124	737	1270



Pneumatic and hydraulic cylinder style

- Salt bath nitride treated thrust tube

- Roller or hall nut assemblies Trunnion, clevis, eye, front flange or
- Clevis, eve. or external thread rod mounts
- Integral holding brake
- Choose from popular motor manufacturers' connectors and feedback devices

# SPECIFICATIONS:

IMA		72	33		4	4	55		
		Ball	Ball	Roller	Ball	Roller	Ball	Rolle	
MAX.	in	12	18	18	18	18	18	1	
STROKE	mm	305	457	457	457	457	457	45	
MAX. Thrust	bf	325	1,000	1,700	2,000	3,300	3,000	6,87	
	II	1,446	4,448	7,562	8,896	14,679	13,350	30,59	
MAX. Spith	in	28	48	24	52.5	23	31.4	15.	

persec mm 711 1,219 610 1,334 584 787 39