



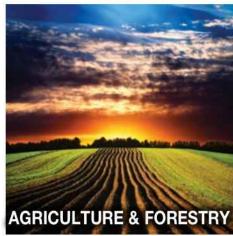
# **ELECTRIC ACTUATORS**



# **SERVING EVERY INDUSTRY & MARKET IMAGINABLE**















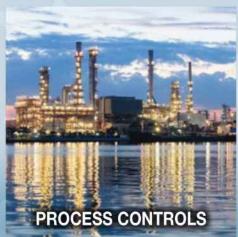












# ELECTRIC LINEAR MOTION PRODUCTS

# **RODLESS SCREW DRIVE ACTUATORS**



**APPLICATION** 

Auxiliary carrier for

higher Fz (load) and

bending moment

Long strokes

 Guidance of light to moderate loads and

 Side or impact loads Stainless steel dust ban

 Load-bearing carrier design with large, flexible Choose from 5 solid Self-lubricating, trapezoidal bearing

design for smooth

 Floating mount to compensate for non-parallelism with

<b>SPEUI</b>	IUA	HUN	<b>)</b> :										
		1	6	2	5	3	2	4	0	5	0	6	3
MAX.	in	3	1	13	34	13	33	13	1	17	'8	12	25
STROKE	mm	78	37	34	04	33	78	33.	27	45	21	31	75
MAX.	lbf	4	5	17	'0	17	70	80	0	27	00	43	00
THRUST	Ν	20	00	75	56	75	56	35	59	120	010	19	127
MAX. Speed -	in	4	2	6	0	6	0	6	0	6	0	5	0
per sec	mm	10	67	15.	24	15	24	15.	24	15	24	12	70
		<b>16S</b>	16P	<b>25S</b>	25P	32S	32P	40S	40P	<b>50S</b>	50P	63\$	63P
*MAX.	lb	35	217	70	449	150	569	225	736	315	1014	520	1292

**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



slow to moderate speed applications

Long stroke lengths of unguided or

Load-bearing carrier design with

Hardened steel Gothic arch rail

Stainless-steel sealing band

repeatable accuracy

guides for high performance and

integral recirculating ball bearings

overhung loads

### **APPLICATIONS:** Moderate to heavy load carrying for

 Stable and precision guidance for moderate to high loads and moments

Unguided or overhung

Recirculating ball

bearing technology fo long life and smooth or 3 ball nut assembly

 Low carrier heigh with large mounting pattern for high load stability

capacity In-line or reverse-

parallel motor mounting Flush mount reed or

solid state position sensors

# Inch or metric mounting

ECIF	ICA	<b>FIONS</b>	5:											SPECI	FICA	TIONS:	
		1	6	2	5	32	2	4	0	5	)	6	3	B3S or I	M3S	10	1
MAX.	in	3	1	13	14	13	3	13	1	17	8	12	25	MAX.	in	136	13
ROKE	mm	78	87	34	04	337	78	33	27	45.	21	31	75	STROKE	mm	3454	33
MAX.	lbf	4	5	17	0	17	0	80	0	270	00	43	00	MAX.	lbf	170	8(
RUST	N	20	10	75	56	75	56	35	59	120	110	191	127	THRUST	Ν	756	358
MAX.	in	42	2	6	)	60	)	6	0	60	)	5	0	*MAX.	lb	591	145
<b>PEED</b> - oer sec	mm	10	67	15.	24	152	24	15	24	15,	24	12	70	LOAD	N	2629	640
JEI 3EC		16S	16P	25S	25P	32\$	32P	408	40P	50S	50P	638	63P	MAX.	in	60	(
MAX.	lb	35	217	70	449	150	569	225	736		1014		1292	SPEED per sec	mm	1524	152
UVD.		450	200	011	4000					1.101				*Dual 180	o carri	er euhetan	tially in

oad capacities listed above and increases Mx and Mz bending moment. Auxiliary

### APPLICATIONS:

with high requirements for flatness, straightness and accuracy

moderate speed applications

 Load-bearing linear table design with ground profile linear guides and four ball bearings blocks

and accurate positioning

 Anodized aluminum design with integral mounting system

 Solid or ball nut assemblies in multiple screw leads

Reed or solid state position sensors

Inch or metric mounting

15	20		TKS	10	25	7
33	179	MAX.	in	96	96	Ö
78	4547	STROKE	mm	2438	2438	243
00	2700	MAX.	lbf	230	1590	326
59	12010	THRUST	N	1023	7073	1450
54	2008	*MAX.	lb	100	250	75
68	8932	LOAD	N	445	1112	333
60	60	MAX.	in	30	30	4
24	1524	SPEED per sec	mm	762	762	101

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

Moderate load carrying for slow to

Auxiliary carrier
Dual 180° carrier

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

# **RODLESS BELT DRIVE ACTUATORS**

# MXB-S SOLID BEARING

loads and moments

Side or impact loads

Floating mount to

compensate for non-

with large, flexible mounting

# Loads that are Guidance of light to moderate

externally guided

and supported

High speed

Anodized

aluminum design

SPECIFICATIONS

Single and multi axis tables

Precision ball screw for repeatable

 Anodized aluminum design with integral mounting holes and sensors

Auxiliary carrier

# Multiple screw leads

Inline or reverse-parallel motor mour

Reed or solid state position sensors

Inline or reverse-parallel motor

Bellows for protection against

contaminants in harsh environments

### SPECIFICATIONS:

	IKS	10	25	/5
MAX.	in	96	96	96
ROKE	mm	2438	2438	2438
MAX.	lbf	230	1590	3260
IRUST	N	1023	7073	14501
MAX.	lb	100	250	750
LOAD	N	445	1112	3336
MAX.	in	30	30	40
PEED ner sec	mm	762	762	1016

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

# **B3W** RE-CIRCULATING BALL BEARING

 Moderate to heavy load carrying for moderate to high speed applications Long stroke lengths of unguided or

overhung loads with high moments

# Unquided or overhung load Load-bearing carrier design FEATURES:

quidance for moderate to

high loads and moments

**APPLICATIONS** 

Stable and precision

 Recirculating ball bearing Load-bearing carrier design with technology for long life an integral recirculating ball bearings

bearing design for smooth Low carrier height with operation and long life large mounting pattern fo high load stability

Auxiliary carrier

parallelism polyurethane tensioning screw. • Mounting plates

HTD tooth profile No disassembly and tube clamps belt with steel tensile members or solid state position sensors

In-line or permits easy reverse-parallel access to belt

motor mounting

16 25 32 40 50

16S 16P 25S 25P 32S 32P 40S 40P 50S

**MAX.** in/sec MXB-U = 200 in/sec • MXB-S = 100 in/sec • MXB-P = 150 in/sec

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

**SPEED** mm/sec MXB-U = 5080 mm/sec • MXB-S = 2540 mm/sec • MXB-P = 3810 mm/sec

**MAX.** in 200 200 200 200 160

**STROKE** mm 5080 5080 5080 4064

**MAX.** lbf 38 151 209 250 325

\*MAX. Ib 35 217 70 449 150 569 225 736 315 101

LOAD N 156 966 311 1996 667 2531 1001 3274 1401 4

# Inch or metric

				00			•	
	6	3		B3W or N	13W	10	15	2
Ī	10	)0	'	MAX.	in	207	204	10
Ī	25	40		STROKE	mm	5258	5182	274
Ī	41	8		MAX.	lbf	150	250	32
	18	59		THRUST	N	667	1112	144
,	63S	63P		*MAX.	lb	591	1454	2008
1	520	1292		LOAD	N	2629	6468	893
<u>-</u>	2313	5745		MAX.	in	157	200	200
,	150 in/		•	SPEED per sec	mm	3988	5080	508

**SPECIFICATIONS** 

\*Dual 180° carrier substantially increases load capacities listed above and increases Mx and Mz bending moment. Auxiliary carrier doubles load capacities listed above 8 increases My and Mz bending moment capacity

high requirements for flatness, straightness and accuracy

### Moderate load carrying for moderate to high speed applications

 Load-bearing linear table design with ground profile linear guides

 Hardened steel Gothic arch rail guides for high performance and

Stainless-steel sealing band

 Anodized aluminum design with integral mounting system

# Steel reinforced belts

repeatable accuracy

Direct inline or reduction drive motor

 Auxiliary carrier
Dual 180° carrier Reed or solid state position sensors

# Inch or metric mounting

	SPEUI	16	411
20		TKB	
108	MAX.	in	
2743	STROKE	mm	
325	MAX.	lbf	
1446	THRUST	N	
2008	*MAX.	lb	
8932	LOAD	N	
200	MAX.	in	
5080	SPEED per sec	mm	

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

Single and multi axis tables with

 High thrust belt material capable of demanding acceleration rates

 Anodized aluminum design with integral mounting holes and sensor

 Bellows for protection against contaminants in harsh environments

Auxiliary carrier

 Direct inline or reduction drive motor Reed or solid state position sensors

	TKB	10	25	75
AX.	in	96	96	96
)KE	mm	2438	2438	2438
AX.	lbf	75	120	245
JST	N	334	534	1090
AX.	lb	100	250	750
)AD	N	445	1112	3336
AX.	in	100	100	100
<b>EED</b> r sec	mm	2540	2540	2540

per sec mm 1016 1016 1016 508

# **ERD** PNEUMATIC REPLACEMENT ROD-STYLE ACTUATOR

# **APPLICATIONS:**

 Low to medium thrust forces for Low to medium thrust forces for externally guided and supported loads externally guided and supported loads

 Stainless steel main tube & thrust tube Stainless steel main tube & thrust tube

Patented

replacement

available metric rod end accessories available metric rod end accessories

 Ball, roller or solid nut assemblies Ball, roller or solid nut assemblies NEMA or metric motor mount

 NEMA or metric motor mount Rugged nose and main bearings Rugged nose and main bearings

• Trunnion, foot or front flange mounts

 Load guidance, tooling plate and anti-rotate

Reed, solid state PNP or NPN switches

	RD	10	15	20	22	25	30
MAX.	in	10	24	24	39.4	39.4	39.4
STROKE	mm	254	609	609	1000	1000	1000
MAX.	lbf	100	200	500	1700	3300	7868
THRUST	N	445	890	2224	7562	14679	34999
MAX.	in	40	40	20	50	58	58
SPEED	mm	1016	1016	508	1270	1473	1473

# **APPLICATIONS:**

 Medium to high thrust forces for externally guided and supported loads

**RSA** ROD-STYLE ACTUATOR

 Pneumatic and hydraulic cylinder replacement

# Non-rotating, salt bath nitride

Anodized aluminum design

 HT option for high thrust applications

 IP67 option for ingress protection Ball, roller or solid nut assemblies

Clevis, eye, threaded rod or coupler

Inline or reverse-parallel motor mount

rod mounts

**ROD STYLE SCREW DRIVE ACTUATORS** 

### APPLICATIONS:

 High thrust forces for externally guided and supported loads

### replacement FEATURES:

Hvdraulic cylinder

 Non-rotating, salt bath nitride treated thrust tube

Externally threaded rod end

 Roller screw drive Steel tie rod/hard coat anodized aluminum design

Solid or ball nut assemblies

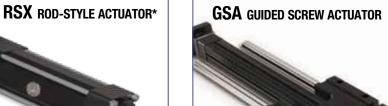
 Rod clevis or threaded rod Inline or reverse-parallel motor mour Reed or solid state position sensors

Inline or reverse-parallel

• IP69K option for ingress

	1SX	**080	096
MAX.	in	26	26
TROKE	mm	660	660
MAX.	lbf	18000	30000
HRUST	N	80068	133450

assembly) \*\*Coming soon



style operation

# Medium to high thrust forces for

loads requiring guidance and suppor

Pneumatic and hydraulic cylinder

Hardened and ground steel guide

Four bearing surfaces for smooth

Wide tooling plate for end effecter

Anodized aluminum design

Inch or metric mounting

**MAX.** in 18 24 30

MAX. lbf 130 471 850 950

MAX. Ib 400 500 1000 1200

**MAX.** in 123 123 50 50

mm 3124 3124 1270 127t

LOAD N 1779 2224 4448 5

**STROKE** mm 457 609 762

SPECIFICATIONS:

guided and supported loads

 Pneumatic and hydraulic cylinder style operation in a compact design

 Salt bath nitride treated thrust tube Lightweight hard anodized

Roller nut assemblies

 Trunnion, clevis, eye, front flange or Feedback device integration

for lead time

**MAX.** in 24 23 15.7

per sec *mm* 610 584 399

NOTE: Not a 15 day built-toorder product, call Tolomatic

 Integral holding brake Choose from popular motor

# feedback devices

OI L	.0	11 10	A	OIN	<b>)</b> .			
IM	Δ	22	3	3	4	4	5	5
		Ball	Ball	Roller	Ball	Roller	Ball	Roll
MAX.	in	12	18	18	18	18	18	1
STROKE	mm	305	457	457	457	457	457	45
MAX.	lbf	325	1000	1700	2000	3300	3000	68
THRUST	N	1446	4448	7562	8896	14679	13350	305

MAX. in 28 48 24 52.5 23 31.4 15.

ner sec. mm 711 1219 610 1334 584 787 399

SPECIFICATIONS

# MOTOR/ACTUATOR

**APPLICATIONS:** 

Integral hollow rotor servo



# 7th axis resistance spot

Pedestal welding

Integral hollow rotor servo

Integral high resolution

Lightweight aluminum

Roller nut assemblies

Integral holding brake option

Feedback device integration

NOTE: Not a 15 day built-to-

order product, call Tolomatic

with all popular robot

manufacturers

for lead time

SPECIFICATIONS:

SWA/B 3

STROKE mm 152 15

**THRUST** N 9345 1779?

SPEED

MAX. in 6

MAX. Ibf 2100 4000

**MAX.** in 23 23

per sec *mm* 584 584

feedback device

welding

**FEATURES:** 

motor

design

OPTIONS:

 Mounted, configured and tested at the factory

# **FEATURES:**

• Low voltage, 10 - 60 VDC

DLR compatible

TORQUE

SPEED

SPEED



### **APPLICATIONS:** Use on any electric actuato

Standard IP65

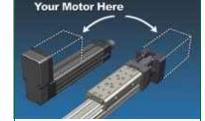
# EtherNet/IF

i l	23	34
S	5.4	13.6
m	0.61	1.53

# Motors Drives Gearboxes

Tolomatic offers digital servo or stepper drives with motors matched to provide optimal performance with Tolomatic actuators.

# **SELECT A COMPLETE SYSTEM** FROM TOLOMATIC OF ADD ANY MOTION SYSTEM TO OUR ACTUATORS



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> Visit www.tolomatic.com/ymh t find your motor/actuator match!



SIZING www.tolomatic.com



Pneumatic and hydraulic cylinder

Compatible with many commercially

Steel reinforced belts

Load guidance, tooling plate and

anti-rotate

Patented

replacement

OI LUI	IUAI	IUNU			
	ERD	06	10	15	20
MAX.	in	8	10	24	24
STROKE	mm	203	254	609	60
MAX.	lbf	20	100	200	500
THRUST	N	89	445	890	222
MAX.	in	40	40	40	20
SPEED :					

Reed, solid state PNP or NPN switches

# **APPLICATIONS:**

Pneumatic and hydraulic cylinder

Compatible with many commercially

# **FEATURES:**

treated thrust tube Internally threaded rod end

# Reed or solid state position sensors

SA or F	SM	12	16	24	32	50	64
MAX.	in	12	18	24	36	48	60
TROKE	mm	305	457	610	914	1219	1524
MAX.	lbf	130	130	1700	4159	7868	13039
HRUST	N	578	578	7562	18500	34999	58001
MAX.	in	123	123	50	50	50	58
SPEED per sec	mm	3124	3124	1270	1270	1270	1473

\*RSX is a 20 day built-to-order product. (Not standard 15 day

**IMA** INTEGRATED MOTOR/ACTUATOR

 High thrust forces for externally 7th axis resistance spot welding

 Integral hollow rotor servo motor Integral high resolution feedback

aluminum design Grease port (patented) for internal

 Roller or ball nut assemblies Integral holding brake option

> with all popular robot manufacturers

3	3	4	4	5	5	GS	WA	33	44/04	55
II	Roller	Ball	Roller	Ball	Roller	MAX.	in	6	6	6
18	18	18	18	18	18	STROKE	mm	152	152	152
57	457	457	457	457	457	MAX.	lbf	2100	3300	5500
00	1700	2000	3300	3000	6875	THRUST	N	9345	14679	24475





onfigure an actuator and a complete motion control system today using Tolomatic's easy-to-use on-line sizing & selection

 Trunnion, foot or front flange mounts plate mounts Composite or linear ball bearings Trunnion, clevis, eye, flange or foot • IP67 & IP69K ingress protection, Trunnion, front flange, rear Standard, oversized or stainlessstainless steel with protective motor stainless steel with protective motor clevis or mounting plates steel quide rods

# motor mount

MAX.	MAX.	in	2
(ROKE	STROKE	mm	660
MAX.	MAX.	lbf	18000
HRUST	THRUST	N	80068
MAX.	MAX.	in	27.6

# SPECIFICATIONS

# APPLICATIONS:

Pedestal welding

 Integral high resolution feedback device

# lubrication without disassembly

Clevis, eye, or external thread rod

# manufacturers' connectors and

# **APPLICATIONS:**

 Replace a motor & drive & controller with one easy to configure component



 Vibration tested **ETHERNET OPTIONS** 

# **YODYA** AOP & AOI

**PEAK** in-lbs 13.8 25.0 **TORQUE** N-m 1.56 2.8°

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Tolomatic offers a complete product line of rodless and slide actuators, rod-style electric actuators (shown), controllers and complete motion systems.

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Solutions like this actuator, capable of meeting extremely high force challenges in a process control valve application, can be created in quantities of one or one thousand.

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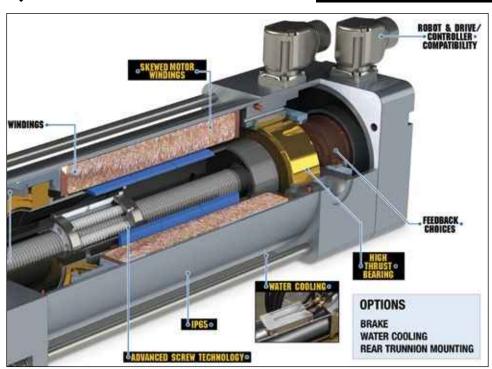
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