IMA INTEGRATED MOTOR ACTUATOR

ENDURANCE TECHNOLOGY

YOU CAN CHOOSE:

Ball screws offer efficiency

at a cost effective price

•Roller screws provide

ratings available

INTERNAL BUMPERS

•Bumpers protect the screw

and nut assembly from

damage at end of stroke

the highest force and life

A Tolomatic Design Principle

MULTIPLE SCREW TECHNOLOGIES

The IMA is a compact, durable, high force rod-style actuator with an IP65 rating. The IMA integrates a servo motor into a ball or roller screw-driven actuator to provide efficient high force in a compact lightweight design envelope. Our patented design allows for easy re-lubrication without disassembly for extremely long service life. Built-to-order in stroke lengths up to 450 mm (18") with your choice of screw technology.

HIGH POSITIONAL ACCURACY

SCREW ACCURACY

Roller Nut ± 0.0004 "/ft. ± 0.0102 mm/300mm Ball Nut ± 0.002 "/ft. ± 0.051 mm/300mm

REPLACEABLE ROD WIPER

•Prevents contaminants from entering the actuator for extended life

GREASE PORT

- •Screw re-lubrication system provides extended screw service life
- •Convenient lubrication without disassembly (IMA22 is lubed for life and does not include grease port)

INTEGRAL MOUNTING

•Four metric threaded holes on front face are available for direct mounting or addition of customized options

THREADED ROD END

- Zinc plated alloy steel construction for corrosion resistance
- Provides a common interface to multiple rod end options

THRUST TUBE

- •Steel thrust tube supports extremely high force capabilities
- •Salt bath nitride treatment provides excellent corrosion resistance, surface hardness and is very resistant to adherence of weld slag, water and other potential contaminant

Tolomatic...MAXIMUM DURABILITY

ROBOT & DRIVE/CONTROLLER COMPATIBILITY

- •Compatible feedback, connector(s) and wiring to match the following robot & drive/controller manufacturers:
- ABB Robot*
- Aerotech BM*
- Allen Bradlev MP & VP
- •B&R 8LS*
- Baldor BSM
- Beckhoff AM8*
- Bosch Rexroth MSK
- Nidec/Control Techniques FM & NT

Fanuc Robot*

Kuka Robot*

Lenze MCA

Robot*

Kawasaki Robot*

Kollmorgen AKM*

- Omron*
- Parker MPP*

Nachi Robot*

- Schneider Electric
- •SEW CMP*
- •Siemens 1F*
- Motoman / Yaskawa Stober*

 - *Consult Tolomatic for lead time
- Tolomatic standard connector, wiring and flying lead cable can be used to integrate with servo drive manufacturers such as: •AMC •Copley •Elmo •+ Others
- STAGGERED CONNECTORS for convenient installation

HIGH RESOLUTION FEEDBACK

YOU CAN CHOOSE:

- Incremental encoder
- •Multi-turn absolute encoder, Hiperface, Hiperface DSL, EnDat 2.2
- Resolver

HIGH FORCE ANGULAR CONTACT BEARINGS

• Provides complete support of screw and protects the feedback device from linear forces

MULTIPLE MOTOR WINDINGS

YOU CAN CHOOSE:

- •230V or 460V rated windings potted directly into actuator housing
- •Skewed motor windings provide minimal torque ripple for smooth linear motion
- •Integral thermal switch for over temperature protection
- •1 stack motor (MV21-230V & MV41-460V) available for the IMA22 & IMA33, allows strokes between 3 and 6" providing the force needed for many applications in a more compact, lighter weight packages

SMOOTH BODY DESIGN

 Eliminates potential contaminant collection points

Modifications:

LIGHTWEIGHT

ALUMINUM DESIGN

 Black anodized extrusion. design is optimized for rigidity

and strength

 Contact Tolomatic for stainless steel, manual override or food grade versions of the IMA (See the white paint IMA on the next page)

OPTIONS



- Front Face Standard Side Mounting Holes.
- 2 sides & bottom (no photo)



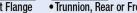












ROD END



BRAKE

Internal Thread - Standard













IP67 • For protection against water and dust ingress

electronically released

• 24V Spring held /



 Signal Cable (5 & 10 m) Power Cable (5 & 10 m)



