IMA INTEGRATED MOTOR ACTUATOR

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.

ENDURANCE TECHNOLOGY

A Tolomatic Design Principle

MULTIPLE SCREW TECHNOLOGIES

YOU CAN CHOOSE:

- Ball screws offer efficiency at a cost effective price
- Roller screws provide the highest force and life ratings available



 Bumpers protect the screw and nut assembly from

INTERNAL BUMPERS

damage at end of stroke

Tolomatic...MAXIMUM DURABILITY

Beckhoff AM8*

ROBOT & DRIVE/CONTROLLER COMPATIBILITY

- Compatible feedback, connector(s) and wiring to match the following robot & drive/controller manufacturers:
- ABB Robot*
- Techniques FM & NT
- Aerotech BM* Fanuc Robot*
- · Allen Bradley MP & VP Kawasaki Robot*
- B&R 8LS* Kollmorgen AKM* Baldor BSM
 - ●SEW CMP* Kuka Robot* Lenze MCA •Siemens 1F*
- Bosch Rexroth MSK Motoman / Yaskawa
 - Nidec/Control *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

Nachi Robot*

Parker MPP*

Schneider Electric SH*

•Omron*

Stober*

- 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

INTEGRAL MOUNTING

HIGH POSITIONAL ACCURACY

MAX. SCREW ACCURACY

Roller Nut ± 0.0004"/ft. ± 0.0102mm/300mm

Ball Nut ± 0.0009 "/ft. ± 0.023 mm/300mm

REPLACEABLE ROD WIPER

Prevents contaminants from entering the

GREASE PORT

Screw re-lubrication system provides extended screw service life

disassembly (IMA22 is lubed for life and does not

Convenient lubrication without

include grease port)

actuator for extended life

•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

LIGHTWEIGHT **ALUMINUM DESIGN**

 Black anodized extrusion and strength



SMOOTH BODY DESIGN

Eliminates potential contaminant

collection points

OPTIONS (SEE IMA EXTENDED CATALOG FOR MORE IMA OPTIONS) MOUNTING

- Front Face Standard
 - Mounting Plates









• Trunnion, Rear or Front Front Flange

design is optimized for rigidity

ROD END

CABLES

· Side Mounting Holes,

2 sides & bottom (no photo)





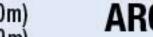






Alignment Coupler

IP67 • For protection against water and dust ingress

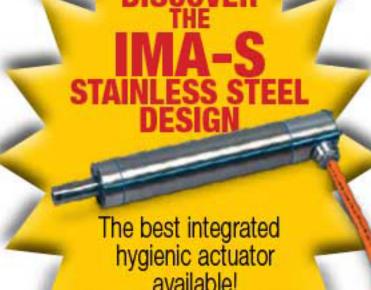




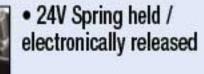


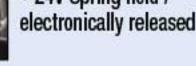


- Steel thrust tube supports extremely high force capabilities
- Salt bath nitride treatment provides excellent corrosion resistance, surface hardness and is very resistant to adherence of weld slag, water and other potential contaminant



• Internal Thread - Standard **BRAKE**





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