

IMA INTEGRATED MOTOR ACTUATOR

IMA

The IMA is a 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").

SMOOTH, LIGHTWEIGHT ALUMINUM DESIGN

- Black anodized extrusion design is optimized for rigidity and strength
- Smooth design eliminates potential contaminant collection points

MULTIPLE SCREW TECHNOLOGIES

YOU CAN CHOOSE:

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



GREASE PORT

- Screw re-lubrication system provides extended screw service life
- Convenient lubrication without disassembly

FEEDBACK OPTIONS

- Incremental encoder
- Multi-turn absolute encoder: Hiperface SinCos, Hiperface DSL, EnDat 2.2

HIGH THRUST BEARING

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

Available Options:

Mounting
Multiple options available

IP67
For protection against water and dust ingress

Rod End
Multiple options available

ARO
Anti-Rotate

Brake
24V Spring held / electronically released



Contact Tolomatic for stainless steel, manual override or food grade versions of the IMA

Robot Drive/Controller Options:

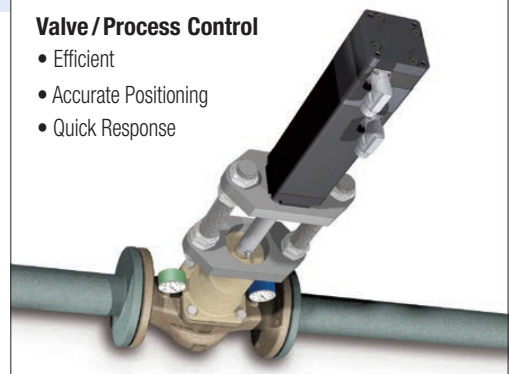
- See reverse side for details

Applications:

- Animation
- Automated assembly
- Automotive
- Clamping
- Cycle testing
- Fillers
- Fluid dispensing
- Formers
- Hydraulic replacement
- Material handling systems
- Military
- Molding
- Motion simulators
- Packaging equipment
- Parts clamping
- Pick & place
- Pneumatic replacement
- Press fitting systems
- Riveting / fastening / joining
- Robot manipulator arms
- Sawmill equipment
- Spot Welding
- Stamping
- Tension control
- Tube bending
- Volumetric pumps
- Web guidance
- Wire winding
- Many more

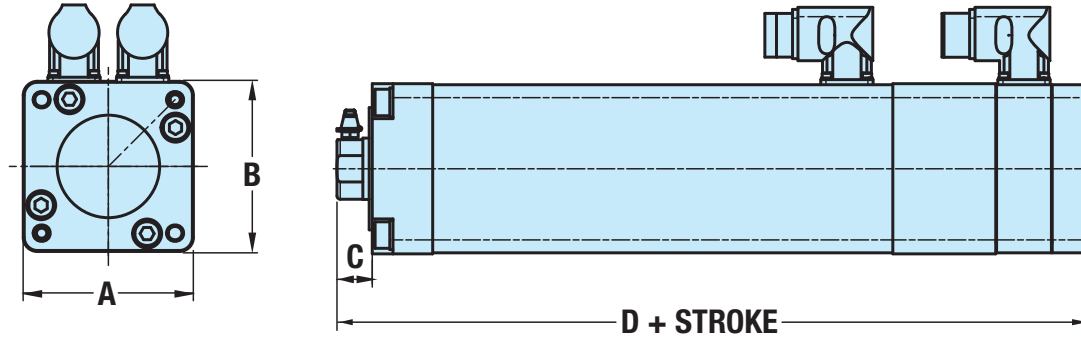
Valve / Process Control

- Efficient
- Accurate Positioning
- Quick Response



IMA INTEGRATED MOTOR ACTUATOR

Dimensions



	IMA22	IMA33	IMA44	IMA55
A	2.50	3.29	4.35	5.66
B	2.50	3.29	4.35	5.66
C	0.68	0.68	0.66	0.95
D _{MAX}	7.63	9.12	11.10	16.33
D _{MAX} WITH BRAKE	9.28	10.75	12.50	16.33

Dimensions in inches

	IMA22	IMA33	IMA44	IMA55
A	63.5	83.6	110.5	143.6
B	63.5	83.6	110.5	143.6
C	17.3	17.3	16.8	24.1
D _{MAX}	193.7	231.7	281.9	372.3
D _{MAX} WITH BRAKE	235.8	273.1	317.4	414.7

Dimensions in millimeters

Performance & Mechanical Specs:	IMA22		IMA33		IMA44	IMA55	
	(1 STACK, MV21/41)	(3 STACK, MV23/43)	(1 STACK, MV21/41)	(3 STACK, MV23/43)			
CONTINUOUS FORCE	kN	0.89	1.45	2.0	4.7	9.3	12.2
	lbf	200	325	450	1,050	2,100	2,750
PEAK FORCE	kN	1.45	1.45	6.0	11.1	17.8	30.6
	lbf	325	325	1,350	2,500	4,000	6,875
MAX. VELOCITY	mm/sec	711	711	1,219	1,168	1,334	797
	in/sec	28.0	28.0	48.0	46.0	52.5	31.4
STROKE	mm	76.2 to 304.8	152.4 to 304.8	76.2 to 457.2	152.4 to 457.2	152.4 to 457.2	152.4 to 457.2
	in	3.0 to 12.0	6.0 to 12.0	3.0 to 18.0	6.0 to 18.0	6.0 to 18.0	6.0 to 18.0
TEMP RANGE	°C	Standard: 10 to 40; Extended: -20 to 60 (Contact Tolomatic if operation in the Extended Range is required)					
	°F	Standard: 50 to 104; Extended: -4 to 140 (Contact Tolomatic if operation in the Extended Range is required)					
IP RATING	Standard IP65, Optional IP67 (Static)						

(Motor/screw selection determines performance. Not all models deliver maximum values listed, i.e.: Maximum thrust may not be available with maximum speed)

ROBOT & DRIVE/CONTROLLER COMPATIBILITY

Compatible feedback, connector(s) and wiring to match the following robot & drive/controller manufacturers:

- ABB Robot*
- B&R 8LS*
- Fanuc Robot*
- Motoman / Yaskawa Robot*
- Schneider Electric SH*
- Aerotech BM*
- Baldor BSM
- Kawasaki Robot*
- SEW CMP*
- Allen Bradley MP & VP*
- Beckhoff AM8*
- Kollmorgen AKM*
- Nachi Robot*
- Siemens 1F*
- Bosch Rexroth MSK
- Kuka Robot*
- Omron*
- Stober*
- Nidec FM & NT
- Lenze MCA
- Parker MPP*

*Consult Tolomatic for lead time

TolomaticTM
EXCELLENCE *IN* MOTION

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =
Certified site: Hamel, MN

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