

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").

Modifications:

- Contact Tolomatic for stainless steel, manual override or food grade versions of the IMA (See #2700-4008 or 2700-4000 for white paint IMA information)



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

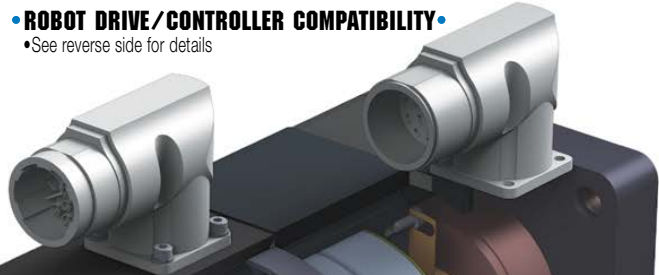


GREASE PORT

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

ROBOT DRIVE/CONTROLLER COMPATIBILITY

- See reverse side for details



HIGH RESOLUTION FEEDBACK YOU CAN CHOOSE:

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

HIGH THRUST BEARING

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

SMOOTH, LIGHTWEIGHT ALUMINUM DESIGN

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

Available Options:

Mounting

Multiple options available

IP67

For protection against water and dust ingress

Rod End

Multiple options available

ARO

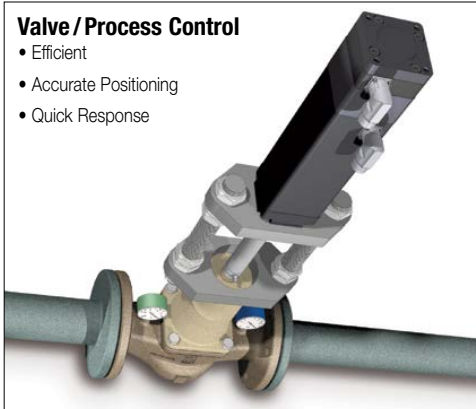
Anti-Rotate

Brake

24V Spring held / electronically released

Valve / Process Control

- Efficient
- Accurate Positioning
- Quick Response

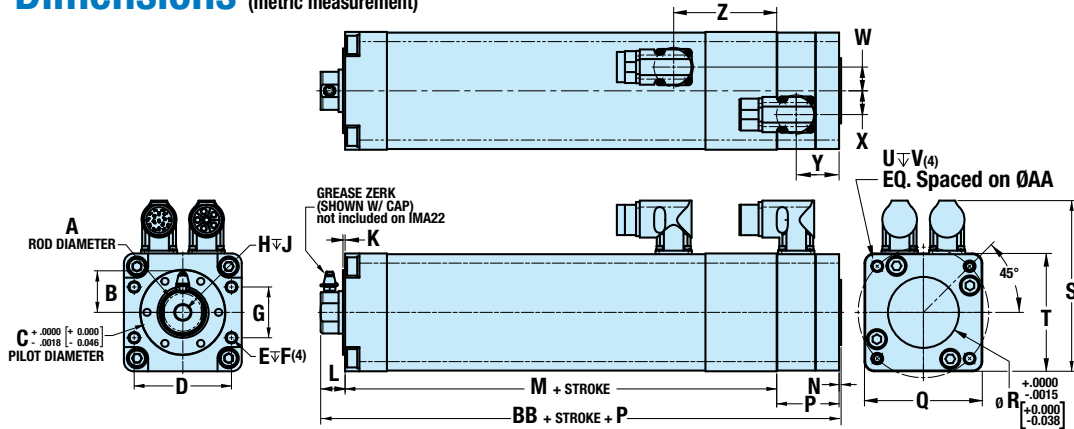


Applications:

- 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

IMA INTEGRATED MOTOR ACTUATOR

Dimensions (metric measurement)



IMA

ACTUATOR SIZING

COMPLETE INFORMATION, SIZING SOFTWARE AND SOLID MODELS AVAILABLE AT: www.tolomatic.com

CAD LIBRARY

	IMA22	IMA33	IMA44	IMA55
A	25.38	30.13	38.08	57.13
B	—	28.3	32.3	41.9
C	48.000	60.000	72.000	100.000
D	54.00	69.00	85.00	110.00
E	M6 x 1.0	M8 x 1.25	M8 x 1.25	M12 x 1.75
F	13.2	14.5	17.1	22.5
G	20.00	36.00	55.00	65.00
H	M8 x 1.25	M12 x 1.25	M20 x 1.5	M27 x 2.0
J	16.5	22.2	25.9	38.1

	IMA22	IMA33	IMA44	IMA55
K	1.5	1.5	1.5	1.5
L	17.3	17.3	16.8	24.1
M	109.8	153.7	200.0	266.2
N	1.5	1.5	1.5	1.5
P min.	41.2	44.2	44.2	48.2
P max.	96.3	100.6	99.1	111.5
Q	63.5	83.6	110.5	143.6
R	40.000	50.000	75.000	100.000
S min.	102.0	122.2	149.0	181.9
S max.	104.4	124.6	151.4	184.3

	IMA22	IMA33	IMA44	IMA55
T	63.5	83.6	110.5	143.6
U	M6 x 1.0	M8 x 1.25	M8 x 1.25	M12 x 1.75
V	13.5	16.5	16.5	20.5
W	9.5	16.8	22.2	22.2
X	9.5	16.8	22.2	22.2
Y	27.3	30.4	30.4	34.4
Z	60.6	73.1	77.9	86.9
AA	70.00	92.00	127.00	155.00
BB	128.6	172.5	218.3	291.8

Performance & Mechanical Specs:

		IMA22 (1 STACK, MV21/41)	IMA22 (3 STACK, MV23/43)	IMA33 (1 STACK, MV21/41)	IMA33 (3 STACK, MV23/43)	IMA44	IMA55
CONTINUOUS FORCE	kN	0.89	1.45	2.0	4.7	9.3	12.2
PEAK FORCE	kN	1.45	1.45	6.0	11.1	17.8	30.6
MAX. VELOCITY	mm/sec	356	356	1219	1168	1334	797
TEMP RANGE	°C	Standard: 10 to 40; Extended: -20 to 60 (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*
- Aerotech BM*
- Allen Bradley MP & VP*
- B&R 8LS*
- Baldor BSM
- Beckhoff AM8*
- Bosch Rexroth MSK
- Nidec FM & NT
- Fanuc Robot*
- Kawasaki Robot*
- Kollmorgen AKM*
- Kuka Robot*
- Lenze MCA
- Motoman / Yaskawa Robot*
- Nachi Robot*
- Omron*
- Parker MPP*
- Schneider Electric SH*
- SEW CMP*
- Siemens 1F*
- Stober*

*Consult Tolomatic for lead time



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