

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

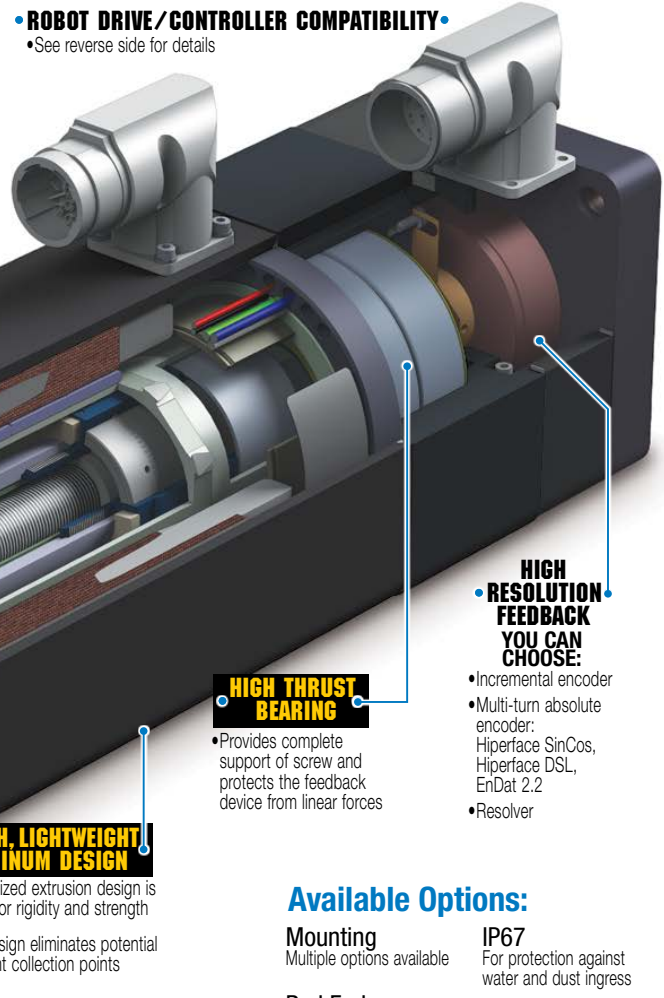


GREASE PORT

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

ROBOT DRIVE/CONTROLLER COMPATIBILITY

- See reverse side for details



SMOOTH, LIGHTWEIGHT ALUMINUM DESIGN

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

HIGH THRUST BEARING

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

HIGH RESOLUTION FEEDBACK YOU CAN CHOOSE:

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

Available Options:

Mounting
Multiple options available

IP67
For protection against water and dust ingress

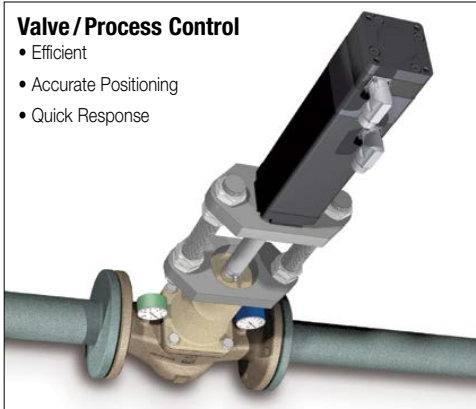
Rod End
Multiple options available

ARO
Anti-Rotate

Brake
24V Spring held / electronically released

Valve / Process Control

- Efficient
- Accurate Positioning
- Quick Response

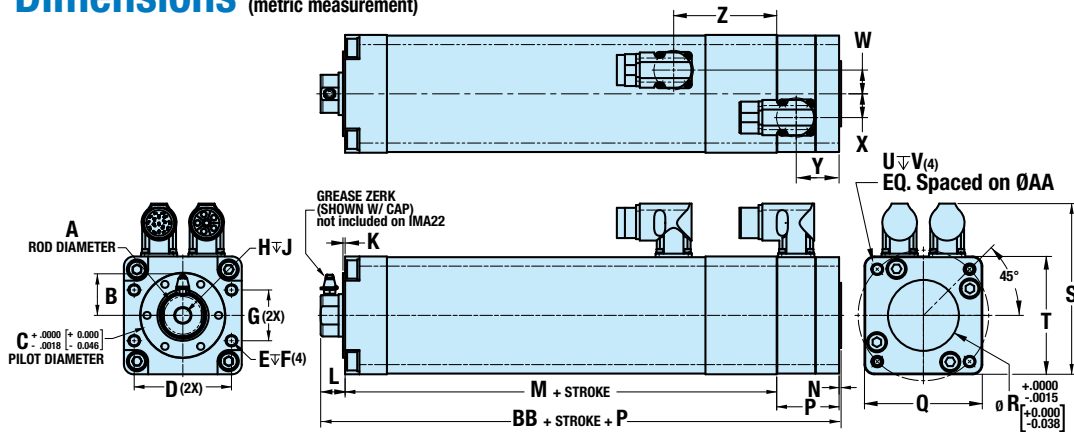


Applications:

- 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
CONT. THRUST	kN	up to 0.89	up to 1.45	up to 2.0	up to 4.7	up to 9.3	up to 12.2
PEAK THRUST	kN	up to 1.45	up to 1.45	up to 6.0	up to 11.1	up to 17.8	up to 30.6
MAX. VELOCITY	mm/sec	up to 356	up to 356	up to 1219	up to 1168	up to 1334	up to 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



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

USA
3800 County Road 116
Hamel, MN 55340, USA
Phone: (763) 478-8000
Fax: (763) 478-8080
Toll-Free: 1-800-328-2174
sales@tolomatic.com
www.tolomatic.com

CHINA
Tolomatic Automation Products
(Suzhou) Co. Ltd.
(ServoWeld® inquiries only)
No. 60 Chuangye Street, Building 2
Huqiu District, SND Suzhou
Jiangsu 215011 - P.R. China
Phone: +86 (512) 6750-8506
Fax: +86 (512) 6750-8507
ServoWeldChina@tolomatic.com

EUROPE
Tolomatic Europe GmbH
Zeilweg 42
60439 Frankfurt am Main
Germany
Phone: +49 69-2045-7837
EuropeSales@tolomatic.com

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