

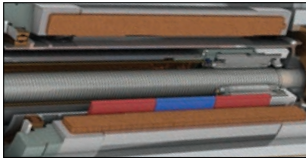
IMA-S STAINLESS STEEL INTEGRATED MOTOR ACTUATOR

IMA-S

The IMA-S is a hygienically designed integrated servo actuator for the food and beverage processing industry. The IMA-SA option incorporates an internal anti-rotate feature. Clean-in-place compatibility and the hygienic features of the IMA-S make it the perfect actuator for applications such as volumetric filling and pumping.

EFFICIENT INTEGRATED MOTOR DESIGN

- Skewed winding minimizes cogging torque for smooth, repeatable motion
- Low electric time constant motor for quick response
- Power dense



STAINLESS STEEL DESIGN

- 316 Stainless steel construction
- Superior corrosion resistance

GREASE PORT

- Integrated into rod end for hygienic design
- Screw re-lubrication system via needle zerk extends screw service life

WELDED JOINTS

Welded, polished joints create the most hygienic seam

BLUE GASKETS & O-RINGS

- Chemically inert
- Wear resistant
- FDA approved

FLEXIBLE FEEDBACK & CABLE OPTIONS



Single (DSL) and dual cable options

MULTIPLE SCREW TECHNOLOGIES

- Ball screws provide efficient motion at an economical price
- Roller screws provide the highest force and longest life

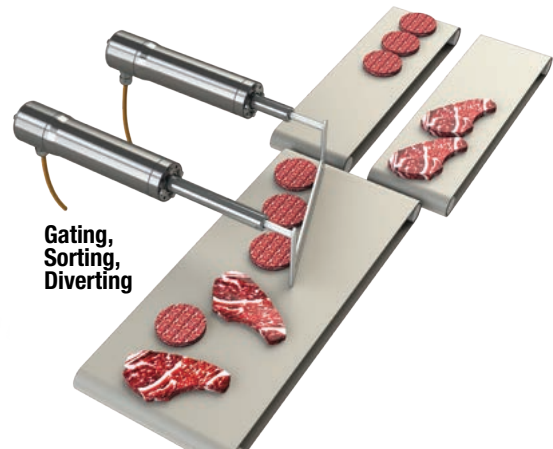
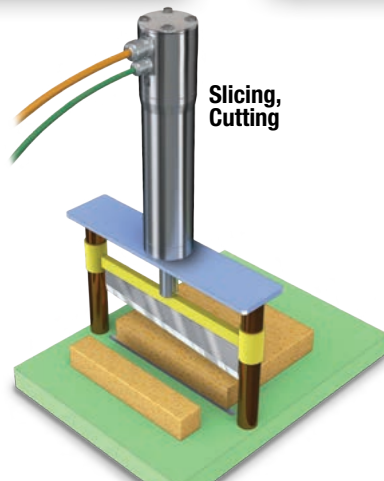


ADDITIONAL OPTIONS

- Brake
- Externally threaded rod end
- Front flange mount
- Rear clevis mount
- Hygienic fasteners
- FDA approved seal cartridge

FIELD REPLACEABLE SEAL CARTRIDGE

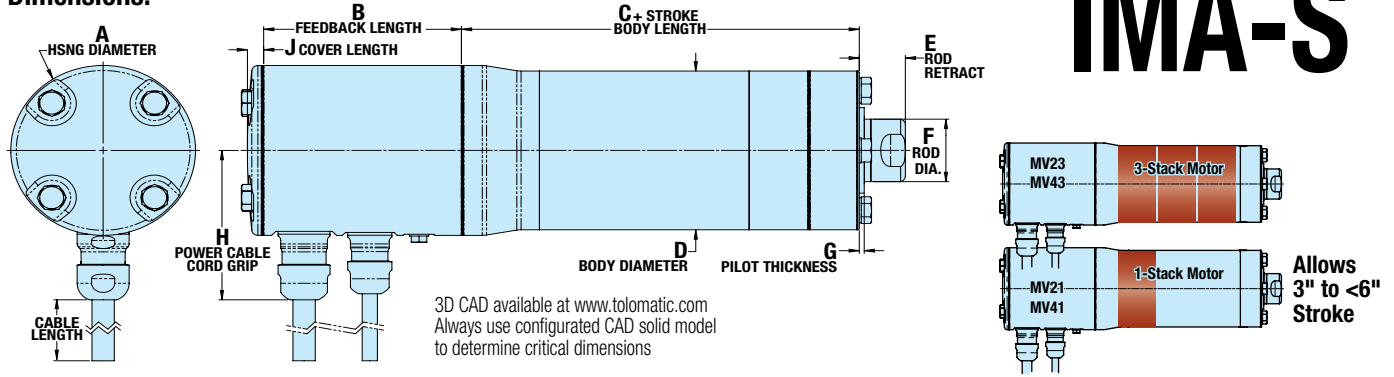
- IP69K rated, wash-down protection
- Clean-in-place compatible
- FDA approved seal cartridge option



RODLESS SCREW-DRIVE ELECTRIC ACTUATOR

IMA-S

Dimensions:



3D CAD available at www.tolomatic.com
Always use configured CAD solid model to determine critical dimensions

	ST22	ST33	SA33
A	3.00	3.75	3.75
B min.	3.45	3.15	3.15
B max.	5.62	5.51	5.51
C1 min.	4.87	6.25	15.02
C2 max.	4.97	6.35	15.12
D	2.52	3.50	3.50
E2 min.	0.62	0.83	0.83
E1 max.	0.72	0.93	0.93
F	0.999	1.378	1.378

Dimensions in inches

	ST22	ST33	SA33
G *	0.100	0.100	0.100
H †	2.90	3.30	3.30
J	0.32	0.33	0.33

B varies depending on feedback device chosen
C1(min.) for standard actuator; C2(max.) for actuator with PCD option
E2(min.) for actuator with PCD option; E1(max.) for standard actuator

* Not compatible with PCD option

† Only 1 cord grip required with Sick Hiperface DSL (no "S", separate feedback cable); 22 size (74.9 mm [2.99"]); 33 size (85.4 mm [3.36"])

	ST22	ST33	SA33
A	76.2	95.3	95.3
B min.	87.7	80.0	80.0
B max.	142.7	140.1	140.1

	ST22	ST33	SA33
C1 min.	123.7	158.8	381.6
C2 max.	126.2	161.4	384.1
D	64.0	89.0	89.0
E2 min.	15.9	21.2	21.2
E1 max.	18.4	23.7	23.7
F	25.38	35.00	35.00
G *	2.54	2.54	2.54
H †	73.6	83.8	83.8
J	8.1	8.4	8.4

Dimensions in millimeters

Performance & Mechanical Specs:

		IMA-ST22 (1 STACK, MV21/41)	IMA-ST22 (3 STACK, MV23/43)	IMA-ST33 (1 STACK, MV21/41)	IMA-ST33 (3 STACK, MV23/43)	IMA-SA33 (3 STACK, MV23/43)
CONTINUOUS FORCE	kN	up to 0.45	up to 1.15	up to 1.30	up to 3.77	up to 3.77
	lbf	up to 100	up to 258	up to 292	up to 847	up to 847
PEAK FORCE	kN	up to 1.45	up to 1.45	up to 6.30	up to 11.12	up to 11.12
	lbf	up to 325	up to 325	up to 1417	up to 2500	up to 2500
MAX. VELOCITY	mm/sec	up to 497	up to 497	up to 497	up to 497	up to 497
	in/sec	up to 19.6	up to 19.6	up to 19.6	up to 19.6	up to 19.6
STROKE	mm	76.2 to 304.8	152.4 to 304.8	76.2 to 457.2	152.4 to 457.2	0 to 304.8
	in	3.0 to 12.0	6.0 to 12.0	3.0 to 18.0	6.0 to 18.0	0 to 12.0
TEMP RANGE		-20° to +40° C; -4° to +104° F				
IP RATING		IP69K (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:

- Allen Bradley
- Bosch Rexroth
- Kollmorgen
- Siemens
- Beckhoff
- Nidec
- Lenze
- And More



ACTUATOR
SIZING

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