



IMA-S STAINLESS STEEL INTEGRATED MOTOR ACTUATOR

The IMA-S is a hygienically designed integrated servo actuator for the food and beverage processing industry. The IMA-SA option incorporates an internal antirotate 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.

IMA-S

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

FLEXIBLE FEEDBACK & CABLE OPTIONS



Single (DSL) and dual cable options



FIELD REPLACEABLE SEAL CARTRIDGE

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

MULTIPLE SCREW TECHNOLOGIES

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



BLUE GASKETS & O-RINGS

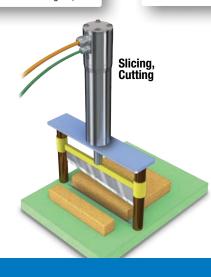
Chemically inertWear resistantFDA approved

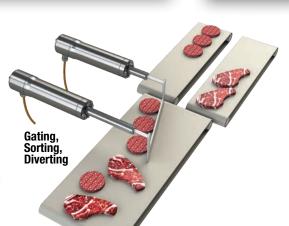


ADDITIONAL OPTIONS

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

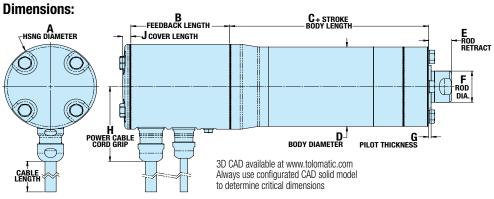


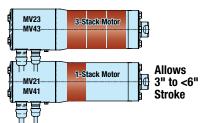






RODLESS SCREW-DRIVE ELECTRIC ACTUATOR





	ST22	ST33	SA33	
Α	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 [2.49"]); 33 size (85.4 mm [3.36"])

Α

B min.

B max.

76.2

87.7

142.7

	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				
	in/sec	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	IP69	9K (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:

- Alen Bradlev
- Bosch Rexroth
 Kollmorgen
- Siemens

- Beckhoff
- Nidec
- Lenze
- And More



COMPLETE INFORMATION, SIZING SOFTWARE AND SOLID MODELS AVAILABLE AT:

www.tolomatic.com



EXCELLENCE IN MOTION

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

COMPANY WITH

ST33

95.3

0.08

140.1

95.3

0.08 140.1

EUROPE

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