

by A.S. Thomas, Inc.

oneTouch changeover

Features

- 50mm and 100mm stroke
- 304 stainless steel stroke tube
- Optional 316L stainless steel stroke tube
- IP66/67 protection
- wireless operation
- replaceable nose adapter
- mix/match with linear actuators of different form factors
- mix/match with rotary actuators of different form factor

Applications

- conveyor guide rails
- top cover height adjustment
- diverter gates
- package labeler aligner

A. S. Thomas, Inc. introduces the micro linear actuator in it's line of conveyor automation products. Designed to be used in wash-down environments, the *Micro Linear Actuator* series also employs a 304 stainless steel stroke tube with an optional 316L stainless steel stroke tube to prevent deterioration from harsh chemical solvents often encountered in the food and dairy industries. The stroke tube is fitted with a replaceable nose adapter in case the user has non-standard connection points on his equipment.

The *Micro Linear Actuator* comes standard with ASTRRA wireless technology dramatically reducing deployment costs of the system. The wireless capability serves to simplify system changes and upgrades. System control is like-wise simplified because the operator interface may be placed anywhere on the facility floor.

As with the first generation actuators, the ASTRRA system provides the user with unmatched flexibility, control and reliability over pneumatic and mechanical adjustment systems. The actuators can be commanded to move to positions of 0.1mm resolution with repeatability of 0.25mm.



Up to 6 *Micro Linear Actuator* can be controlled by a single *SixPack-Actuator Control module* or 2 on a *Dual-Actuator Control module* and up to 120 *Actuator Control Modules* on each Segment Coordinator.

In the event of a power failure, the actuators do not need to be homed or oriented. In fact, if the power failure occurred in the midst of a move one only need to re-issue the move command after power is restored and the system will resume the move from it's last position. During power off, the actuators will hold their physical position with no creep or slippage.

The *Micro Linear Actuator* can be deployed alongside other ASTRRA products such as the *Linear Actuator-2G*, *Rotary InLine-2G*, and the *SpeedSync linear Actuator* and *HD Rotary InLine-2G* actuators. All can then be controlled by a common Segment Coordinator using ASTRRA Zone capability. As a result, all aspects of the packaging line – timing screws, rails, top-covers, labelers and cap air conveyors – can be changed over with a single push of a button from the users HMI, PLC or IPC.

Flexibility, reliability, extensibility and total system control are available to the user at prices competitive to alternative technologies. Contact an A. S. Thomas, Inc. representative to learn how ASTRRA can dramatically increase the productivity of your facility today

Specifications

Actuator Specifications

Stroke	50 mm (2 in.)	nom.
	100 mm (4 in.)	nom.
Positioning		
command resolution	0.1mm (0.004")	
repeatability	±0.05mm (0.002")	
Thrust	33n (25lbs.)	typ.
Drive	Acme	
Drive speed	12mm/S	typ.
Protection	IP66/67	

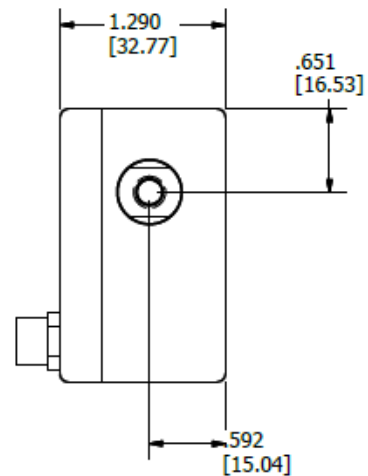
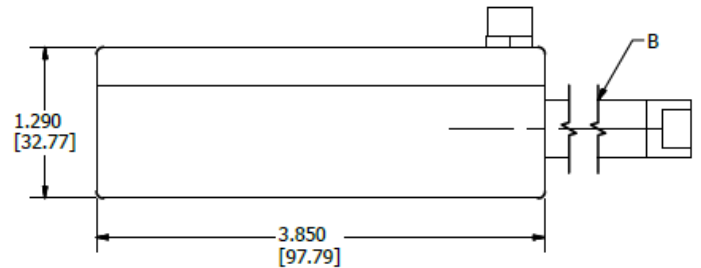
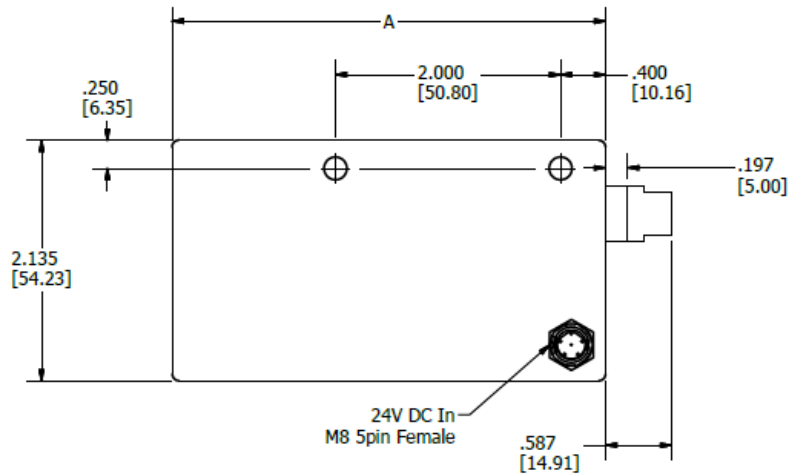
Power requirements:

Actuator		
quiescent	80mA@24VDC	typ.
actuating	180mA@24VDC	typ.
Power Supply:		
Input	85-264VAC	
	100-353VDC	
Output	24VDC ±2%	
	4.0Amps	
Conductor length	15M (50 ft.)max.	
number of actuators	Up to 6 per controller	
(power supply may be centered on a 30M (100 ft.) run)		

Optional Accessories 20mm nose adapter custom nose adapters

Network Specifications

No. of Lines (WPANs)	>1000	
No. of Segments/Line	31	
No. of AACMs/Segment	120	
Protocol:		
PHY & MAC	IEEE 802.15.4	
NWK	Modified MiWi	
(deterministic address allocation)		
APL	ASTRRAnet	
Transceiver		
Tx Power	17 dBm	typ.
Rx sensitivity	-100 dBm	typ.
Range	500m	typ.



Actuator Dimensions

Model	Length (A)	Stroke (B)	Tolerance
AA-050ML-2G	3.859" (97.79mm)	1.97" (50mm)	±0.079" (±2mm)
AA-100ML-2G	6.213" (157.81mm)	3.94" (100mm)	±0.079" (±2mm)



www.astrra.com

A. S. Thomas, Inc.
 44 Industrial Way
 Norwood, MA 02062
 Ph: 781.329.9200 | Fx: 781.461.8431
 www.asthomas.com