



by A.S. Thomas, Inc.

microRotaryInLine

Change the way you change **over** ●

Features

- small form factor for low torque applications
- 50 turn range
- 316L stainless steel shaft
- IP66/67 protection
- wireless operation
- mix/match with linear actuators
- mix/match with right angle rotary actuators
- actuator may be driven with:
 - any ASTRRA master actuator
 - dual Actuator Control Module
 - SixPack Actuator Control Module

Applications

- monoblock adjustments
- labeler X/Y/Z and pitch/roll adjustments
- retrofit existing adjustment systems

The *microRotaryInLine* series extends the ASTRRA product line and provides rapid changeover capability for many of the adjustments currently done manually. Not only is the adjustment automatic and fast, but the rotary actuators will repeatedly return to the commanded position more accurately than ever before. Because the positioning is so repeatable, post-changeover tweaking is eliminated, which dramatically reduces return-to-normal and increased OEE.

The *microRotaryInLine* presents a much smaller footprint to the adjusting mechanism allowing it to be installed in areas otherwise difficult to automate. When paired with the SixPack wireless control module, up to six units may be simultaneously managed. This is ideal for equipment with multiple adjustment points in a tight area.

Depending on the application, the *microRotaryInLine* may be set up as double-sided, opposed; single-sided, in-line; inverted, opposed or inverted, in-line. Each configuration will automatically compensate for the magnitude and direction of motion when given a move command.



The *microRotaryInLine* can be connected to any control module which 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 likewise simplified because the operator interface may be placed anywhere on the facility floor.

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 0.05 revolution resolution with repeatability of 0.025 revolution. Up to 120 control modules can be managed by a single Segment Coordinator. When the SixPack control module is used, up to 720 *microRotary* actuators can be installed per segment.

The *microRotaryInLine* can be deployed alongside other ASTRRA products such as the *linearActuator-2G*, the *rotaryInLine-2G* and the *SpeedSyncXP* explosion proof linear actuator. 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

Range	50 turns	nom.
Positioning		
command resolution	0.05 rev	
repeatability	+/-0.025 rev	
Torque	6 kg-cm (5 in-lbf) typ.	
Drive	6 mm SS shaft	
Drive speed	125 rpm	typ.
Protection	IP66/67	

Power requirements:

ASG current	75mA@24VDC	typ.
ASC current	75mA@24VDC	typ.
AACM:		
quiescent	80mA@24VDC	typ.
actuating	150mA@24VDC	typ.

Power Specifications

Power Supply:		
Input	85-264VAC	
	100-353VDC	
Output	24VDC +/-2%	
	3.8A	
conductor length	15M (50 ft.)max.	
(power supply may be centered on a 30M (100 ft.) run)		
number of actuator pairs	25max.	

Optional Accessories

- flexible shaft coupler (6mm-6mm)
- custom shaft couplers

Network Specifications

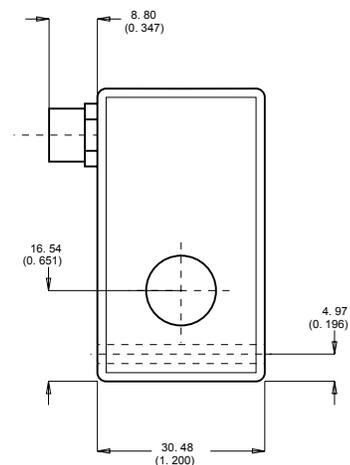
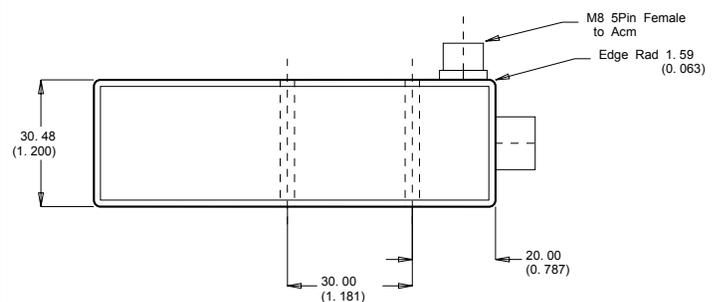
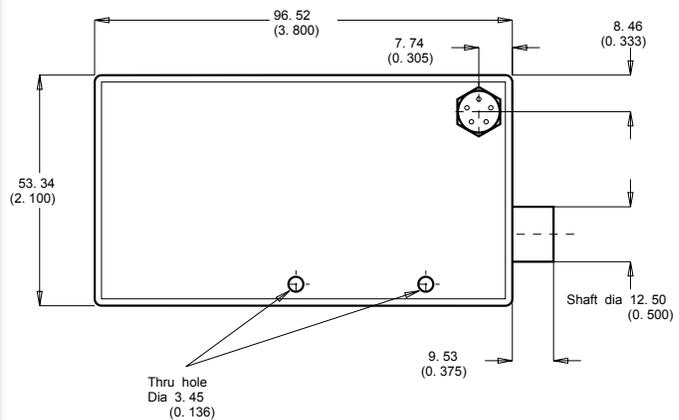
No. of Lines (WPANs)	> 1000
No. of Segments/Line	31
No. of AACMs/Segment	120

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.



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