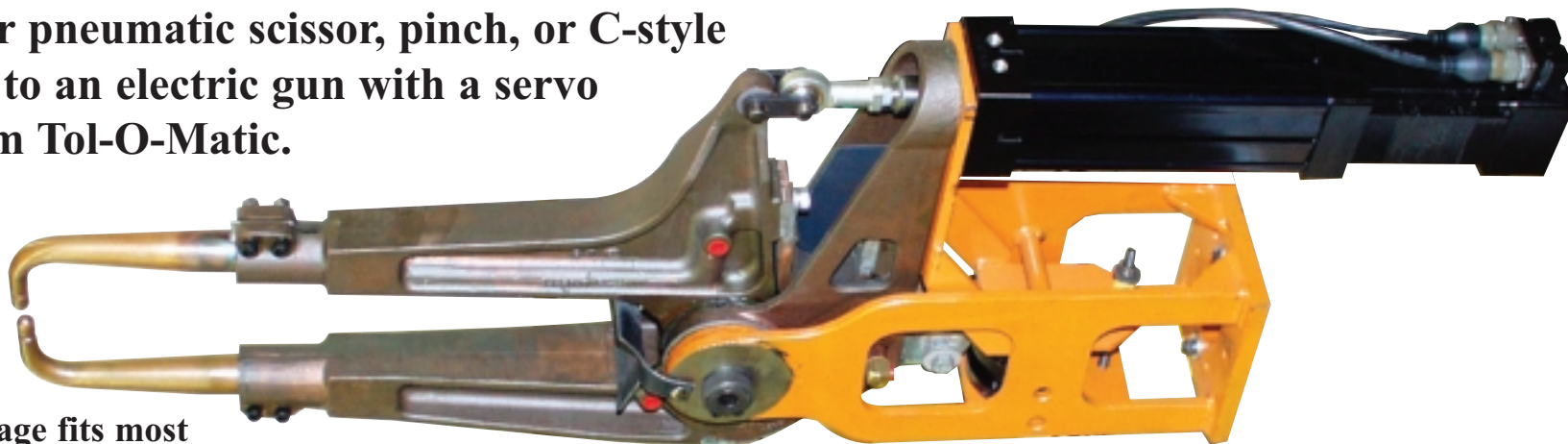




SERVO ACTUATORS FOR SPOT WELDING GUNS

MANUFACTURER OF INTEGRATED ROD SCREW ACTUATORS WITH BRUSHLESS SERVO MOTORS, MOTOR DRIVERS, AND MOTOR CONTROLLERS, TOL-O-MATIC IS THE PERFECT CHOICE FOR A QUICK, SIMPLE, RELIABLE, AND COST EFFECTIVE CONVERSION OF YOUR PNEUMATIC SPOT WELDING GUN TO A SERVO GUN.

Convert your pneumatic scissor, pinch, or C-style welding gun to an electric gun with a servo actuator from Tol-O-Matic.



RETROFIT PACKAGES

- Compact package fits most pneumatic cylinder footprints
- Perfect for fixture or robotic applications

SERVO GUN ADVANTAGES

- Soft touch programmable tip forces
- Programmable motion profiles
- Uniform weld consistency
- Increase electrode life
- Reduce utility costs due to elimination of air

FIXTURE APPLICATIONS

Fixture applications can be addressed using the existing master control or with a new controller from Tol-O-Matic. Our controllers range from the multi-axis SSC to the Axiom™ PV Series with integrated PLC, motion controller, and motor driver in one package.

ROBOT APPLICATIONS

For servo welding using the free axis of a robot controller, the integrated actuator/motor can be easily retrofit to accommodate the robot manufacturer's choice of feedback device. Tol-O-Matic will provide the necessary motor information for a simple integration with the robots control system.



SERVO ACTUATOR FOR SPOT WELDING

FEATURES

- Integrated actuator/motor/feedback
- Internal side load guide and anti-rotation bearing system.
- Dimensions and weight capacities comparable to pneumatic counterpart
- Factory lubricated for 6 million welds with no maintenance
- Rare earth magnet, 3-phase, brushless servo motor.
- Thermostat integral to windings.
- Rotatable MS style electrical connectors and rear housing for orientation within any gun configuration.
- Rear housing plug provides access to manual override.
- Standard with 1000 line incremental encoder. Easily adapted to most encoders or resolvers.
- Vector current control drive to provide maximum motor efficiency
 - Auto-phasing - no hall sensors required.
 - Short circuit, overcurrent, and overvoltage protected.
 - Pluggable screw terminals
- Controls
 - Up to four axes per controller
 - Integrated PLC option on single axis controller
 - Detects tip wear.
 - I/O for retrofit to existing devices or communication w/ master devices.
 - Torque change on the fly for soft touch.
 - Capable of closing loop around external force transducer or using calibrated motor current for force control.



SERVO ACTUATOR FOR SPOT WELDING

STANDARD SPECIFICATIONS

Stroke: 6-in.

Maximum Force for a minimum 6 million welds: 1200lbs.

Maximum Speed: 15-in./sec.

Weight with 6-in. Stroke: 24 lbs.

Length with 6-in. Stroke: 20-in.

Maintenance:

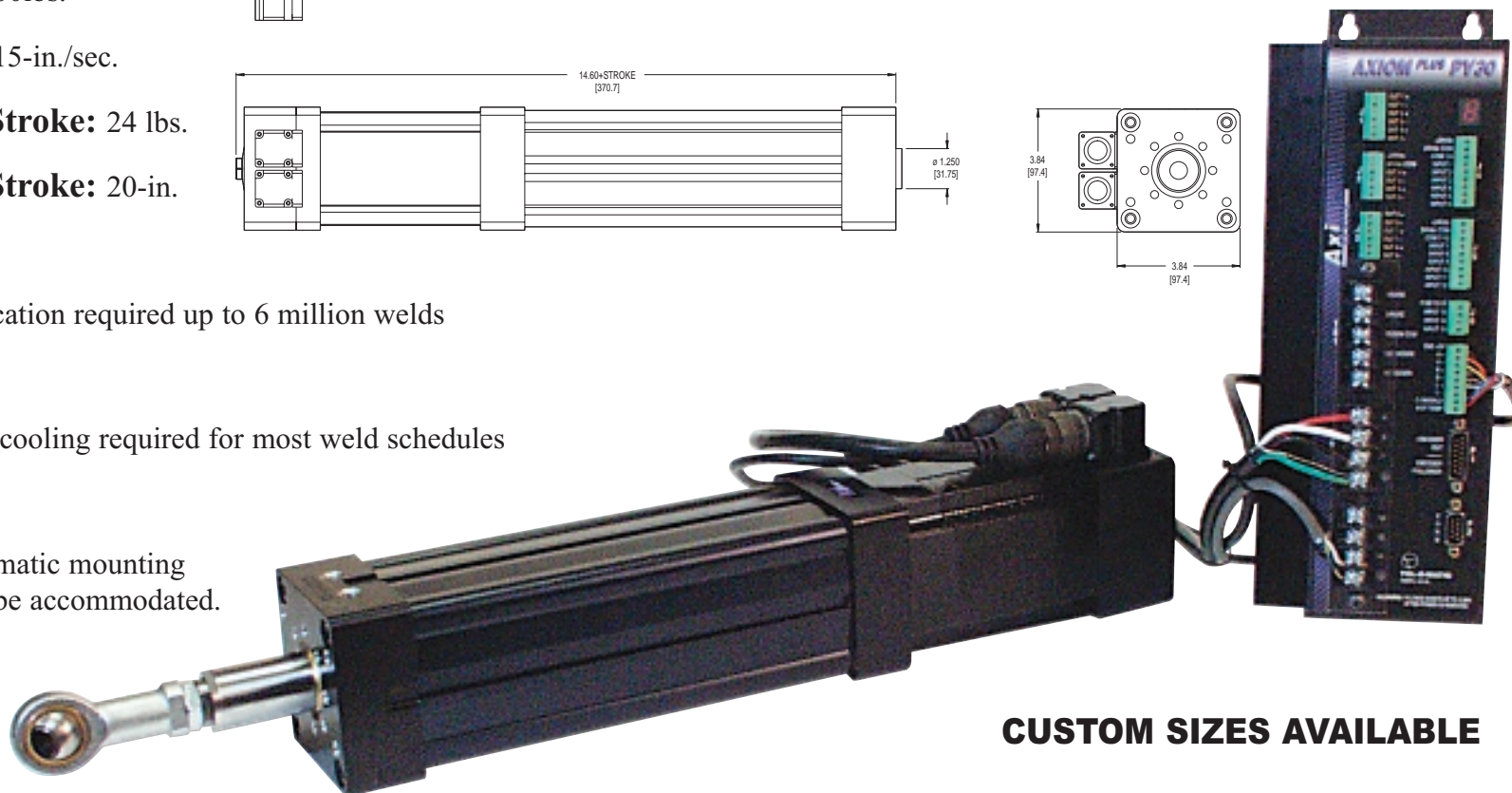
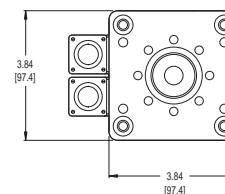
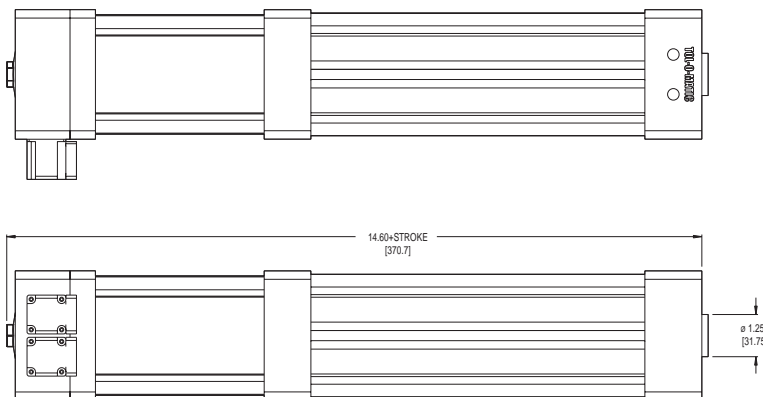
No additional lubrication required up to 6 million welds

Cooling:

No water or forced cooling required for most weld schedules

Mounting:

Most existing pneumatic mounting configurations can be accommodated.



CUSTOM SIZES AVAILABLE