ultrasonic spot welding systems

ACTUATORS

FEATURES

- Patented 90° Self-Orienting Keyed Horns and Tips
- Single Piece, Dual Nodal Mount Horn and Booster Stack
- Precision Micrometer Stack Up and Down Stops
- Independent Horn and Converter Air Cooling Flow Control
- Pre-Lubricated and Sealed Linear Bearings
- Pneumatic Actuation

Sonics’ 40 kHz ultrasonic metal welding systems consist of an actuator, available versions shown above, and a power supply, the MX or MSC series, shown below.

POWER SUPPLIES

MODELS

M XC Remote Impulse Actuation
M XT Time Based Weld Mode
MXE Time and Energy Based Weld Modes
MSC SmartControl with Time, Energy and Height-Based Weld Modes

POWER LEVELS

- 400 Watts Peak Power
- 800 Watts Peak Power

Sonics’ 40 kHz power supplies are available in 2 versions, the MX Series, with standard keypad operation, and the SmartControl MSC Series with full color touch screen controls. The features of the models are compared below.
system options

- **SmartControl** Electronic Pressure and Height Control
- **Foot Pedal Switch with Emergency Stop**
- **X-Y Adjustable Fixture Anvil**
- **SmartControl Bar Code Scanner**
- **Secondary Booster:** Aluminum or Titanium Secondary Booster
- **Smart Program:** SmartControl System PC Interface Program

MWB40 dimensional data

** Add Approximately 2.5" (63 mm) for Secondary Booster

** specifications**

**Actuator Data:**
- MWA40 Actuator Weight: 28 Lbs. (12.7 kg)
- MWP40 Actuator on Plate Weight: 40 Lbs. (18.1 kg)
- MWB40 Actuator on Integral Base Weight: 69 Lbs. (31.2 kg)
- Pneumatic Requirement: 80 PSI Clean and Dry Air Service

**Low Profile Power Supply Data:**
- Peak Output Power: 400 W or 800 W
- Power Supply Weight: 21 Lbs. (9.5 kg)
- Power Supply Dimensions: 15.2" (386 mm) Wide x 7.0" (178 mm) High x 18.7" (476 mm) Deep
- Power Requirement: 220 VAC @ 20A