

WH-L Series Servo Weld Heads

The WH-L series precision servo weld heads combine the latest ultra low friction, high speed actuation technology with cutting edge control electronics to deliver fully integrated programmable spot welding with real time displacement monitoring and process control.

WH-L Series weld heads easily integrate with AMADA WELD TECH welding power supplies to deliver a precision welding process suitable for both high end manual or automatic spot welding assembly.

WH-L Series heads provide true servo driven output control derived from precision calibrated sensors. Secondary sensors and feedback methods assure system integrity and accuracy on a weld by weld basis to meet and exceed the increasing demands from the automotive, medical and aerospace sectors.



WH-L weld head with DC-L600A welding power supply

KEY FEATURES

- 20 mm or 100 mm stroke length models available
- Fully programmable motion profiles
- 0.1 N force resolution, 1% accuracy
- Automatic or manual mode operation
- Control & programming via TCP/IP
- Integrated control with weld schedules
- Displacement monitoring – optional 1 μ m weld displacement encoder with real time trace and windowing capability

TYPICAL APPLICATIONS



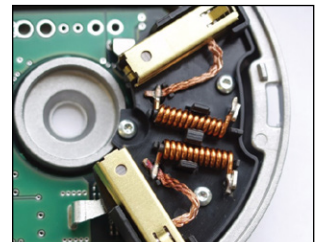
Welding orthodontic devices



Bonding gold ribbon to terminal



Welding components to leadframe



Welding stranded wire to terminal

TECHNICAL SPECIFICATIONS

Model	WH-L90A	WH-L180A
Minimum force	7 N	8 N
Maximum force	90 N	180 N
Maximum speed	400 mm/s	400 mm/s
Force accuracy	0.3 N	0.6 N
Force repeatability	0.3 N	0.6 N
Duty cycle	5% @ max. force	3% @ max. force
Current handling	max. 3000 A	max. 3000 A
Input requirements	88-264 VAC, 50/60 Hz, 10 A	88-264 VAC, 50/60 Hz, 10 A

MECHANICAL FEATURES

Stroke	0.79 in (20 mm), 3.94 in (100 mm)	0.79 in (20 mm), 3.94 in (100 mm)
Actuation	Auto or manual foot pedal	Auto or manual foot pedal
Positional accuracy	+/- 1 µm	+/- 1 µm

WEIGHT & DIMENSIONS

Part number	WH-L90A	WH-L180A
Head dimensions including stand (W x D x H)	10.25 in x 15.5 in x 20.5 in (260 mm x 394 mm x 521 mm)	10.25 in x 15.5 in x 20.5 in (260 mm x 394 mm x 521 mm)
Head weight	24.7 lb (11.2 kg)	24.7 lb (11.2 kg)
Controller dimensions (W x D x H)	12.5 in x 10.5 in x 5.75 in (318 mm x 267 mm x 146 mm)	12.5 in x 10.5 in x 5.75 in (318 mm x 267 mm x 146 mm)
Controller weight	5 lb (2.27 kg)	5 lb (2.27 kg)



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