



LTP-250MicroPress™ Miniature Press Specifications



Figure 1

LTP-250 MicroPress with LTT-203B Temperature Controller

DESCRIPTION

The LTP-250 Micro-Press™ is a miniature pneumatic press for general use in applying heat and pressure to materials. The LTP-250 Micro-Press™ may operate with or without a dual temperature controller. With the Lambient Technologies dual temperature controller, independent temperature control of each platen is possible. The heating temperature range is ambient to 350 °C (660 °F), and maximum applied force is 1500 pounds (680 Kg). Platen area is 3.0" x 3.0" (75 mm x 75 mm).

The LTP-250B Micro-Press™ is also useful for the curing of SMC, BMC, epoxies, polyesters, polystyrenes, polyurethanes, silicones, laminates and other polymeric materials. Providing a portable, easily operated platform to reproduce the time-temperature-pressure processing profiles of most polymers, the LTP-250B Micro-Press™ can be controlled manually or with the Lambient Technologies™ CureView™ software. When used with any of the Lambient Technologies™ dielectric sensors, the LTP-250B Micro-Press™ becomes a complete testing station for dielectric cure studies.

Specifications

Overall

Environmental conditions:

Temperature : 0 °C to 55 °C (32 °F to 131 °F)

Relative Humidity: 90% RH max, non-condensing

Press Unit

Cylinder diameter : 100 cm (4")

Maximum input air pressure: 8.25 bar (120 psi)

Maximum applied force : 680 Kg (1500 pounds)

Control: Pneumatic logic, no electrical power required

- Two "CLOSE" buttons requiring simultaneous continuous actuation to close press
- Press latches closed at end of stroke
- One "OPEN" button requiring momentary actuation to open press
- Pressure regulator to control air pressure and applied force

Pneumatic connection: Nylon or polyurethane tubing 10 mm O.D., 1.5 mm wall thickness, rated for 8.25 bar (120 psi)

Stroke (max. platen separation) : 11.4 cm (4.5") without Ceramiccomb™ sensor plate, approximately 8.9 cm (3.25") with sensor plate

Platen dimensions : 75 mm x 75 mm (3" x 3")

Press dimensions (H x W x D): 71.9 cm x 44.2 cm x 48.3 cm (28.3" x 17.4" x 19.0")

Press weight : 23 Kg (50 lbs)

LTT-203B Temperature Controller Option

Total heater power : 450 W (225 W/platen when used with temperature controllers)

Working temperature: ambient to 350 °C (ambient to 660 °F)

Thermocouples : Type J, one in each platen

For 110 VAC configuration (specify mains voltage when ordering):

Mains voltage : 110 VAC ± 10%

Mains frequency : 50-60 Hz

Max press current: 4.0 A

Fuses : 5 mm x 20 mm, 8A, 250 V

For 220 VAC configuration (specify mains voltage when ordering):

Mains voltage : 220 VAC ± 10%

Mains frequency : 50-60 Hz

Max press current: 4.0 A

Fuses : 5 mm x 20 mm, 8A, 250 V

Controller communications: RS-485, USB with adapter



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