

# Chatillon® LTCM-100 Series Motorized Force Tester

Specification Sheet

SS-LTCM-0210

February 2010

The CHATILLON® LTCM100 Series is an economical, motorized tester optimized for product floor operation. When combined with a Chatillon DF Series digital force gauge, it provides users with an easy-to-use testing system for tensile, compression, peel and flexural testing applications.

The LTCM100 Series features a large working area and 5-inch (130mm) throat ideal for large sample sizes. The base features pre-drilled holes for fitting fixtures and specialized testing jigs. Crosshead travel is controlled from a simple console or using an optional footswitch controller. Crosshead travel extends to 15 inches (380mm). Speed may be set from 0.2 to 20 in/min or 5 to 500 mm/min. A digital display indicates the travel speed during a test. The return speed may be configured to automatically return at maximum speed. Mechanical deflection limits, located on the column face can be used to set travel limit setpoints. The crosshead will stop when either the upper or lower deflection limit is contacted.

The LTCM100 Series is supplied with a hook and compression plate and certificate of conformance.

## Features

- Tensile, Compression, Peel & Flexural Testing
- Compact, Lightweight, Benchtop Design
- Simple Operation
  - Console Controls for Speed & Travel
  - Optional Footswitch Control
  - Independent Return Speed
- Mechanical Deflection Limits
- Digital Load Limits (with Chatillon DF Gauge)
- Large Working Area
- 2 Year Warranty

## Specifications

<b>Load Capacity:</b>	110 lbf, 500 N
<b>Crosshead Speed:</b>	0.2 to 20.0 in/min 5 to 500 mm/min
<b>Return Speed:</b>	20 in/min, 500mm/min
<b>Speed Accuracy:</b>	±3% Unloaded
<b>Travel Distance:</b>	15 inches (380mm)
<b>Power:</b>	110/230V Switchable
<b>Load Measurement:</b>	Chatillon DF Gauges
<b>Operating Temperature:</b>	40°F to 110°F 5°C to 45°C
<b>Instrument Weight:</b>	39 lbs (18 kg)
<b>Shipping Weight:</b>	50 lbs (23 kg)



Shown: LTCM100 Series with optional DFS Series force gauge.



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**AMETEK®** | **Chatillon®**  
Force Measurement

## Features

### Easy Operation

The LTCM-100 console controls are intuitive and easy to use. Users can specify speed in either inches per minute or millimeters per minute. The speed control knob is used to adjust speed from 0.2 to 20.0 in/min or 0.5 to 500 mm/min. Speed accuracy is better than 3%. The Up and Down key is used to control crosshead direction.

### Independent Return Speed

A separate return speed switch can be positioned so that the crosshead returns to zero at maximum speed or at the speed indicated by the display.

### Adjustable Deflection Limits

Deflection limit switches are supplied on the front of the column. The column contains increments in inches and millimeters for positioning the limit switches and for measuring sample deflection. Position and "lock-in" a High and Low deflection limit to protect your gauge from overload conditions or for ending your test at a distance traveled. The crosshead travels up to 15-inches (380mm).

### Ideal for Production or Lab

The LTCM-100's rugged construction and simple operation make it ideal for production environments, laboratory applications or for R&D applications. Its lightweight design (38 lbs, 17.7 kg) makes it portable yet rugged enough for testing up to 110 lbf (500 N). Combine with a Chatillon DFS Series force gauge and you have a force measurement system with a load accuracy of better than 0.1% full scale. The tester is ideal for tensile, compression, peel, shear, and flexural testing when used with the appropriate grips/fixtures.

### Large Working Area

The LTCM-100 features a large working area capable of securing samples up to 10-inches in diameter. The crosshead throat is greater than 5-inches (127mm).

### Flexible Fixturing

The crosshead has been optimized for use with Chatillon DF Series digital forces gauges. The DF Series mount directly to the crosshead without special adapters. The work surface features 13 individual mounting holes (#10-32) for installing grips or special fixtures.



*Shown: A large work area simplifies testing setups especially for large samples. Pre-drilled holes make fitting fixtures and specialized testing jigs easy.*

### Crosshead Travel Extension

The optional crosshead travel extension arm can be used when testing very elastic samples. This accessory adds an additional 15-inches (380mm) of travel for your sample.



*Shown: Control panel is designed to promote ease-of-use. All controls are located on the control panel and away from the work area, making the LTCM100 Series ideal for busy production environments.*

## Ordering

### LTCM100

Model	Capacity	
LTCM100	110 lbf, 500 N	US Plug
LTCM100-EU	110 lbf, 500 N	EU Plug
LTCM100-UK	110 lbf, 500 N	UK Plug

### Optional Accessories

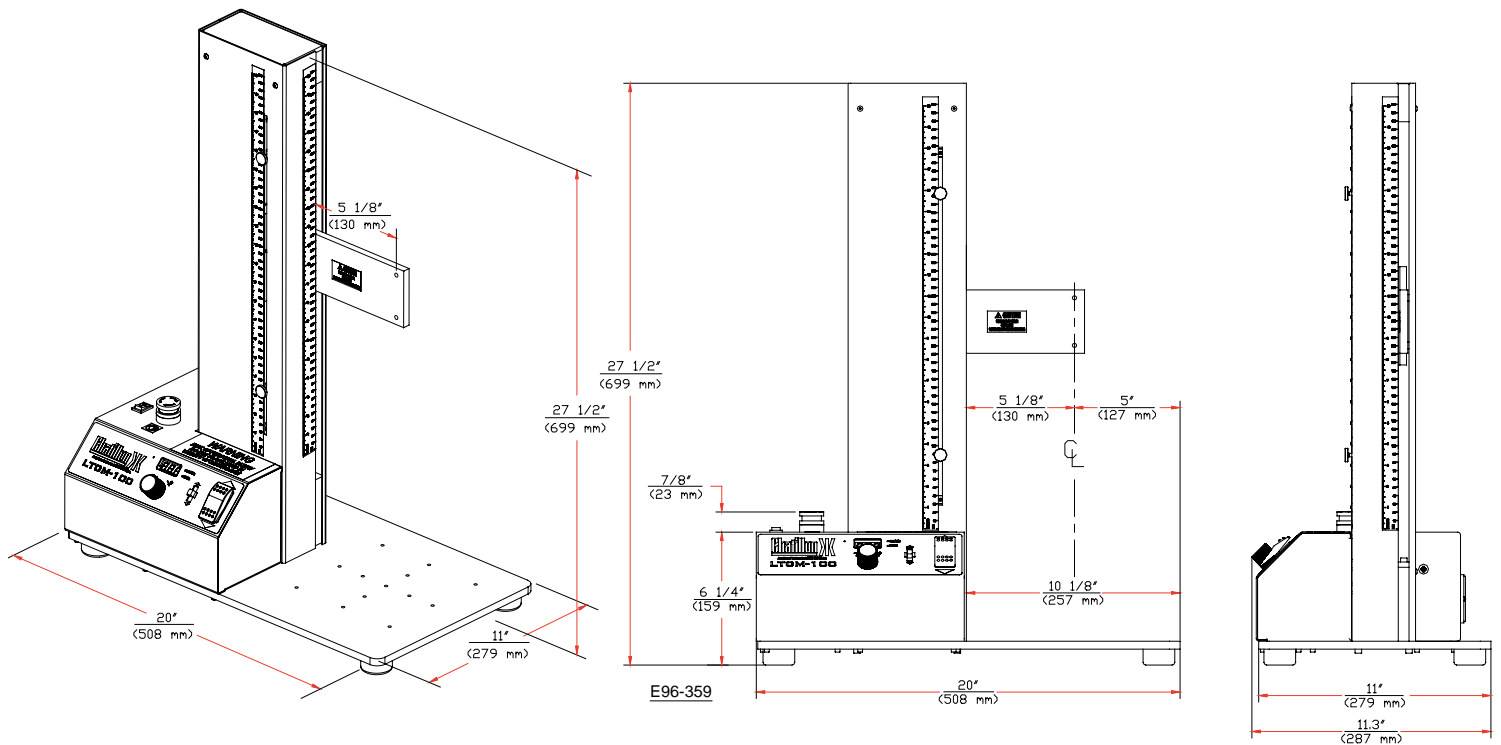
Part No.	Description
NC002910	Remote Control Footswitch
ENC0125	DF Gauge Interface Cable
SPK-LTCM100-EXT	Crosshead Travel Extension Arm



*Shown: Optional footswitch controller allows for hands-free operation for improved productivity.*

### Standard Accessories

Part No.	Description
SPK-FMG-012B	Hook
17109	Compression Plate, 2" Diameter
NC000846	Hex Key, 5/32"
1613	Set Screw, #10-32 x 3/4"
SPK-FM200-034	US Power Cord
SPK-FM200-022	EU Power Cord
SPK-LTCM-UK230	UK Power Cord



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