



3675 with ±0.15 inch measuring range.

For tests in environmental chambers where the entire extensometer must be exposed to the heat. Designed for transverse or diametral strain measurement at temperatures up to 540 °C (1000 °F) without any cooling. The 3675 extensometer may be used simultaneously with Epsilon's Model 3555 axial extensometer.

These high accuracy gages are designed for testing at elevated temperatures, much higher than strain gaged based extensometers. The Model 3675 uses a high temperature capacitive sensor and can operate without any cooling at the upper temperature limit of most environmental chambers used in materials testing.

Most often these extensometers are used simultaneously with the Model 3555 axial extensometer for measuring Poisson's ratio or materials characterization for anisotropic materials like many composites. These units clip easily onto test specimens. A high temperature nickel alloy spring is used to create the force to hold the self-supporting extensometer in place on the sample. It can be used on samples up to 1 inch (25 mm) in width or diameter.

These transverse units are supplied with the Model 3603 signal conditioning electronics. The extensometer and electronics are factory calibrated. The analog output voltage is typically calibrated for 0 to 10 VDC (other ranges are available on request). This can be used directly by data acquisition systems. It usually can be routed to a DC input channel on most test machine controllers as well.

Contact Epsilon for your special testing requirements.

**Features**

- May be left on through specimen failure.
- 3603 signal conditioner and power supply included. Provides high level DC voltage output with exceptionally low noise (typical 0.1 mV on 10VDC output). Easily interfaced to test controllers, data acquisition boards, and chart recorders.
- Shipped fully calibrated with electronics (traceable to NIST) with user specified voltage output.
- All models will measure both positive and negative displacements.
- All standard units meet existing ASTM class B-1 and ISO 9513, class 0,5 requirements for accuracy.
- Includes high quality foam lined case and spare set of tool steel knife edges.
- Rugged, dual flexure design for strength and improved performance. Much stronger than single flexure designs, this also allows cyclic testing at higher frequencies.
- Self-supporting on the specimen

**SPECIFICATIONS**

- Input:* Includes power supply for your country (specify)
- Output:* User specified, +/-5 VDC or +/-10VDC typical
- Linearity:* ≤0.10% of full scale measuring range
- Temperature Range:* Ambient to 540 °C (ambient to 1000 °F)
- Cable:* Triaxial ceramic fiber insulated cable 3 ft (1 m) plus 10 ft (2.5 m) extension cable
- Specimen Size:* Works with samples up to 1 inch (25 mm) width or diameter
- Environment:* Recommended for elevated temperature testing in air or some other gases

**OPTIONS**

Connectors to interface to nearly any brand test equipment  
Specialty knife edges (see page 97)

**Signal Conditioning Electronics.**  
Model 3603 included with all Model 3675 extensometers.



**ORDERING INFORMATION**

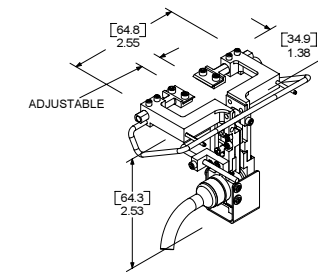
Model 3675 Available Versions: Special configurations are available.

Measuring Range	
DESIGNATION	
-010T	±0.010"
-020T	±0.020"
-040T	±0.040"
-080T	±0.080"
-025M	±0.25 mm
-050M	±0.50 mm
-100M	±1.00 mm
-200M	±2.00 mm

Model Number 3675- \_\_\_\_\_

Example: 3675-010T: ±0.010 inch measuring range

Model 3675 used simultaneously with a Model 3555 axial extensometer.



3675 EXTENSOMETER

DIMENSIONS: [mm] inches