

Designed for measuring plastic strain ratio (r-value) in sheet metal testing, this extensometer averages the lateral strain at two locations. This model may be used simultaneously with the Model 3542 axial extensometer.



Model 3575AVG extensometer

This extensometer is self-supporting on the sample. It has rounded contact edges which measure the sample at two locations. As the test sample is pulled, the contact edges follow the part of the sample they were mounted on, measuring lateral strain on the sample at the same location throughout the test. The extensometer has a single output, which is the average of the two lateral measurements.

These extensometers are used with a 2 inch or $50~\mathrm{mm}$ gauge length Model 3542 extensometer, which measures the

axial strain.

Model 3575AVG extensometers are strain gaged devices, making them compatible with any electronics designed for strain gaged transducers. Most often they are connected to a test machine controller with electronics for a strain channel, and Epsilon will equip the extensometer with a compatible connector that is wired to plug directly into the controller. For systems lacking the required electronics, Epsilon can provide a variety of signal conditioning solutions that enable connecting to data acquisition systems or other equipment.

See the electronics section of this catalog for available signal conditioners and strain meters.



Features

- May be left on through specimen failure.
- Applicable for testing to ISO 10113 and ASTM E517.
- Single clip-on unit directly measures lateral strain as an average of two locations.
- Greatly speeds up testing and allows digital data collection as compared to manual measurements.
- · Self-supporting on the specimen.
- Measuring range of 2.0 mm or 0.075 inches.
- All standard units have linearity readings of 0.15% or better.
- Includes the Epsilon Shunt Calibration System for on-site electrical calibration.
- Rugged, dual flexure design for strength and improved performance. Much stronger than single flexure designs.
- Full bridge, 350 ohm strain gaged design for compatibility with nearly any test system.
- Includes high quality foam lined case and spare set of tool steel knife edges.

SPECIFICATIONS

Excitation: 5 to 10 VDC recommended, 12 VDC or VAC max.

Output: 2 to 4 mV/V nominal, depending on model

Linearity: <0.15% of full scale measuring range

Temperature Range: Standard (-ST) is 1 °C to +100 °C (33 °F to 210 °F)

Optional (-HT2) is 1 °C to +200 °C (33 °F to 400 °F)

Cable: Integral, ultra-flexible cable, 2.5 m (8 ft) standard

Specimen Size: Works with samples 9.5 to 25 mm (0.375 to 1.0 inch) width

OPTIONS

Connectors to interface to nearly any brand of test equipment Specialty knife edges (see page 108)



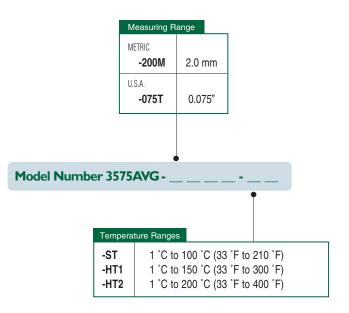


Models 3575AVG Transverse

Use with Model 3542 extensometer to measure Poisson's ratio.

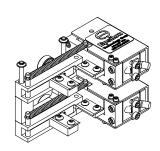
ORDERING INFORMATION

Model 3575AVG Available Versions: ANY combination of measuring range and temperature range listed below is available, except as noted.



Example: 3575AVG-200M-HT1: 2.0 mm measuring range, high temperature option (1 $^{\circ}C$ to 150 $^{\circ}C$)

Visit our website at www.epsilontech.com Contact us for your special testing requirements.



MODEL 3575AVG EXAMPLE

