[™] 3575AVG Sheet Metal r-Value Extensometers



Designed for measuring r-values 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.



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 mm

gauge length Model 3542 extensometer, which measures the axial strain.

The 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. The signal conditioning electronics for the extensometer is typically included with the test machine controller or may often be added. In this case the extensometer is shipped with the proper connector and wiring to plug directly into the electronics. For systems lacking the required electronics, Epsilon can provide a variety of solutions, allowing the extensometer output to be connected to data acquisition boards, chart recorders 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.
- Full bridge, 350 ohm strain gaged design for compatibility with nearly any test system.
- All standard units have linearity readings of 0.15% or better.
- · Includes high quality foam lined case and spare set of tool steel knife edge
- · Rugged, dual flexure design for strength and improved performance. Much stronger than single flexure designs.
- · Self-supporting on the specimen.
- Measuring range of 0.075 inches or 2 mm (specify).
- 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.

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 -40 °C to +100 °C (-40 °F to 210 °F) *Cable:* Integral, ultra-flexible cable, 8 ft (2.5 m) standard Specimen Size: Works with samples 0.375 to 1.0 inch (9.5 to 25 mm) width

OPTIONS

Connectors to interface to nearly any brand test equipment Shunt calibration module (see page 104) Specialty knife edges (see page 105)

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ORDERING INFORMATION

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

Example: 3575AVG-LT: 2 mm measuring range, low temperature option (-265 °C to 100 °C)

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



MODEL 3575AVG EXAMPLE