# Sheet Metal r-Value Extensometer Series 3575AVG

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. This unit is commonly used for measurement of Poisson's ratio, for transverse measurements with anisotropic materials like many composites and for sheet metal testing such as r-value determination.



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.

Model 3575AVG extensometers are applicable for testing to ISO 10113 and ASTM E517. They are used with a 50 mm or 2 inch gauge length Model 3542 extensometer, which measures the axial strain.

The Model 3575AVG extensometers are accurate strain gaged devices.

# w+b

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# **EXTENSOMETERS**

# *w*+*b* Materials Testing

### Features

- May be left on through specimen failure.
- Single clip-on unit directly measures lateral strain as an average of two locations.
- Greatly speeds up testing and allows digital data collection compared to manual measurements.
- Self-supporting on the specimen.
- Measuring range of 2 mm or 0.075 inches (specify when ordering).
- All standard units have linearity readings of 0.15% or better.
- 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.



## **Specification**:

Excitation: Output: Linearity: Temperature Range: Cable: Specimen Size: 5 to 10 VDC recommended, 12 VDC or VAC max. 2 to 4 mV/V, nominal, depending on model ≤0.15% of full scale measuring range Standard (-ST) is -40 °C to +100 °C (-40 °F to 210°F) Integral, ultra-flexible cable, 2.5 m (8 ft) standard Works with samples 9.5 to 25 mm (0.375 to 1.0 inch) width

#### Note

This unit is well suited to be used together with 3542 axial clip-on extensometers.



#### **Technical Data**

Model 3575AVG Available Versions: ANY combination of measuring range and temperature range listed below is available, except as noted. Other configurations may be available with special order; please contact us to discuss your requirements.

### Model Number 3575AVG – \_\_\_\_\_ –

Measuring Range:	
-200M	±2.0 mm

Also available in inches

Temperature Range	
-LT	-270 °C to 100 °C (-454 °F to 210 °F)
-ST	-40 °C to 100 °C (-40 °F to 210 °F)
-HT1	-40 °C to 150 °C (-40 °F to 300 °F)
-HT2	-40 °C to 200 °C (-40 °F to 400 °F)
-LHT	-270 °C to 200 °C (-454 °F to 400 °F)

Example: 3575AVG-200M-LT: 2.0 mm measuring range, low temperature option (-270 °C to 100 °C)

## Example: Model 3575AWG-200M-LT

Dimensions: [mm] inch



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