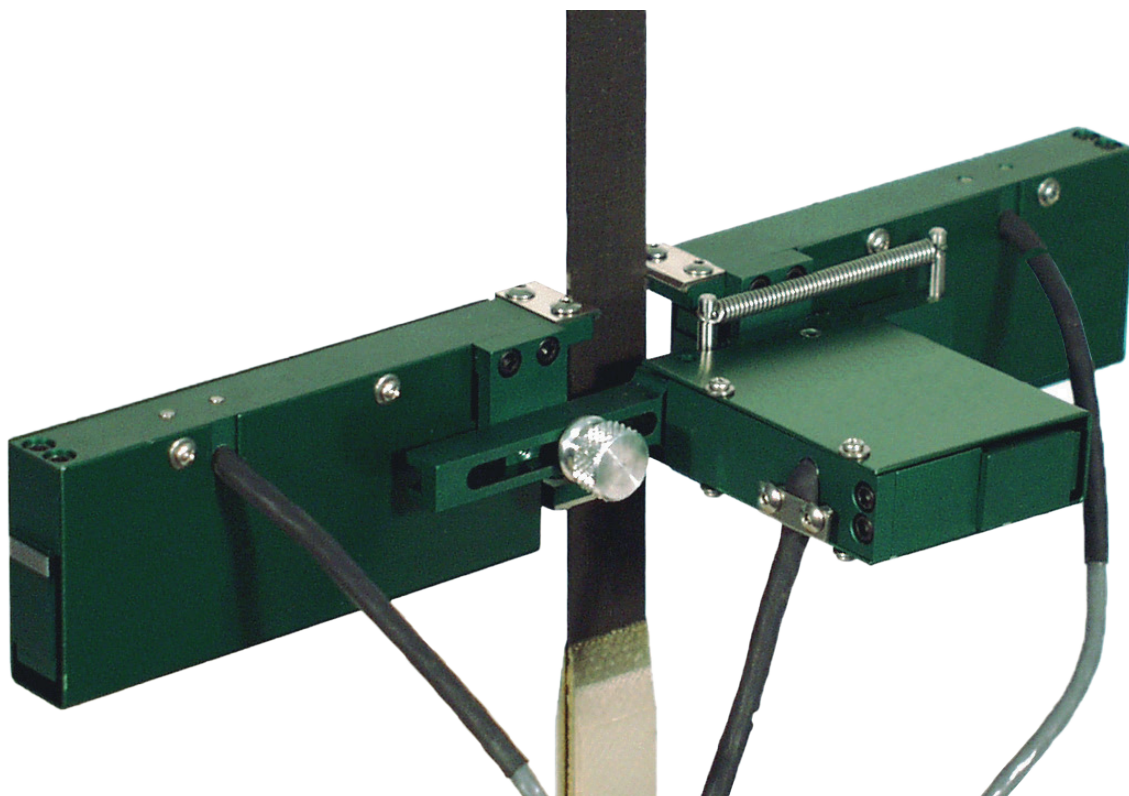


Bi-Axial or Axial Averaging Extensometer Series 3560

A single integral unit provides simultaneous lateral (transverse) strain and averaged axial strain measurement. The unit is also available as an averaged axial extensometer alone.



Version AVG: Average Axial Model
Version BIA: Biaxial Model (includes Transverse)

This extensometer is ideally suited for testing anisotropic materials such as advanced composites as well as for general purpose tests like determining Poisson's ratio.

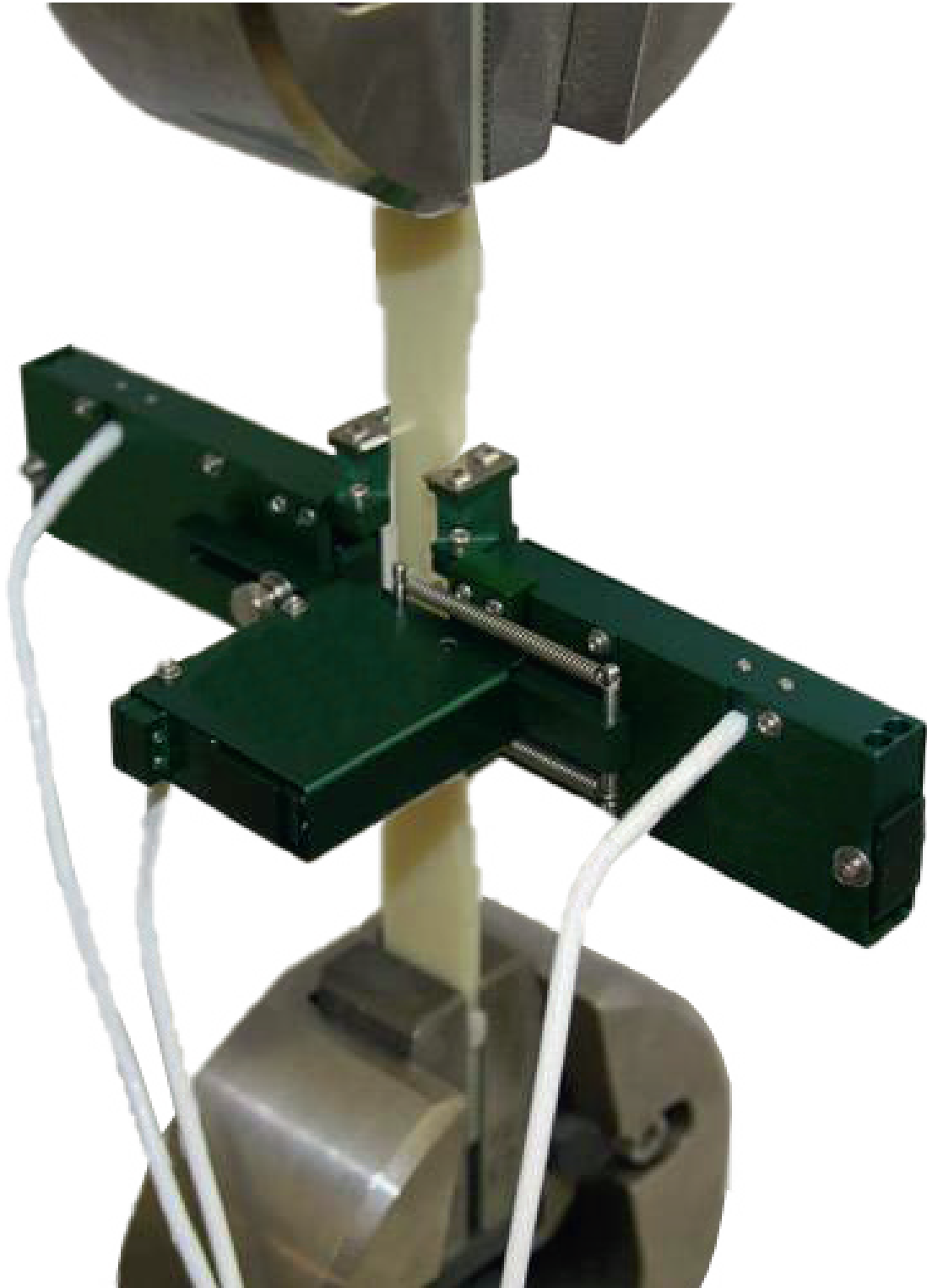
The Model 3560BIA uses a unique design, where the knife edges remain parallel during the displacement. This approach greatly reduces crosstalk between axes and allows use on round or flat specimens with equal ease. These extensometers are very easy to mount. Integral springs hold the unit on the test sample. The parallel multiple flexure design makes these units very durable.

The Model 3560AVG reads axial strain only as a single averaged output. It may also be supplied with two independent outputs, one measurement from each side of the specimen. This set-up is most commonly required when an indication of specimen bending is desired. The second version, the Model 3560BIA, includes both the averaged axial strain and the transverse strain. Again, this may also be configured as dual independent axial readings, which results in a three channel extensometer.

The Model 3560 extensometers are strain gaged devices.

Features

- Multiple sets of dual flexures and mechanical stops allow testing through failure and provide a rugged unit.
- Full bridge, 350 ohm strain gaged design for compatibility with nearly any test system.
- Rugged, dual flexure design for improved performance.
- Knife edge mounting and parallel displacement allows mounting on round or flat specimens. Much easier to mount than designs using conical points (especially on thin flat specimens and round ones).
- Self-supporting on the specimen.
- High accuracy and minimal crosstalk between channels.
- Includes high quality foam lined case and spare set of tool steel knife edges.



Specification:

Excitation:	5 to 10 VDC recommended, 12 VDC or VAC max.
Output:	2 to 4 mV/V, nominal, depending on model
Accuracy:	Standard configurations meet ASTM E83 class B-1 and ISO 9513 class 0,5 requirements for accuracy in the axial direction. A test certificate is included. All standard units have linearity of 0.15% full scale measuring range or better in the transverse direction.
Linearity:	≤0.15% of full scale measuring range, depending on model
Temperature Range:	Standard (-ST) is -40 °C to +100 °C (-40 °F to 210 °F)
Cable:	Integral, ultra-flexible cable, 2.5 m (8 feet) standard
Specimen Size:	Works with samples 2.5 to 25 mm (0.1 to 1 inch) width or up to 15 mm (0.6 inch) diameter
Operating Force:	30 to 50 g typical
Crosstalk:	Less than 0.5%

Technical Data

Model 3560 Available Versions: ANY combination of gauge length, measuring range and temperature range listed below is available.

Model Number 3560 – – – –

Gauge Lengh	
-010M ¹	10.0 mm
-025M	25.0 mm
-050M ²	50.0 mm

Measuring Range:		
	% Axial STRAIN	TRANSVERSE MEASURING RANGE
-005 ³	±5%	±0.5 mm
-010 ³	±10%	±1.0 mm

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)

Average Axial Model	-AVG
Biaxial Model (includes Transverse)	-BIA

¹ 10 mm and 0.5 inch gauge lengths are only available in 10% axial measuring ranges.
² 50 mm and 2.0 inch gauge lengths are only available in 5% axial measuring ranges.
³ If the gauge length is ordered in mm units, then the transverse measuring range will be in mm. If the gauge length is ordered in inch units, then the transverse measuring range will be in inches.
 Additional axial / transverse measuring range combinations are available, such as ±5% axial with ±1.0 mm transverse, and ±10% axial with ±0.5 mm transverse. Contact us for details

Example:

3560-BIA-010M-010-HT2: 10.0 mm gauge length, ±10% axial strain measuring range/ ±1.0 mm transverse measuring range, HT2 option (-40 °C to 200 °C)

