

Long Gauge Length Extensometer Series 3542L

w+b

The 3542L models are designed for long gauge length application that requires low-level strain measurements. These extensometers are available with gauge lengths from 100 mm to 600 mm.



The 3542L long gauge length axial extensometers feature a dual flexure design that makes them rugged and insensitive to vibrations. They are designed for testing a wide variety of materials including ceramics, metals, plastics, and composites.

The Model 3542L is equipped with quick attach kit that enables the extensometer to be mounted on the test specimen. The quick attach kit can be removed, enabling the extensometer to be mounted on the specimen with rubber bands and springs.

Features

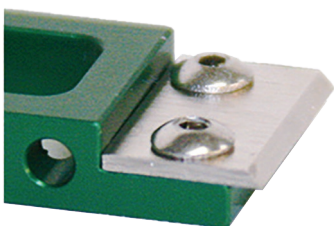
- May be left on through specimen failure.
- Full bridge, 350 ohm strain gaged design for compatibility with nearly any test system.
- All models can measure in both tension and compression and can be used for cyclic testing.
- Mechanical overtravel stops in both directions.
- Standard quick attach kit allows quick mounting to specimens.
- Hardened tool steel knife edges are easily replaced. A spare set comes with every extensometer.
- High and low temperature options extend operation from as low as -270 °C (-454 °F) to +200 °C (400 °F).
- Replaceable arms and spacers for ease of repair. This also allows changing the gauge length for different test requirements.
- Rugged, dual flexure design for strength and improved performance. Much stronger than single flexure designs, this also allows cyclic testing at higher frequencies.
- Includes high quality foam lined case.

**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. A test certificate is included.
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, 2.5 m (8 ft) standard
Standard Quick Attach Kit:	Wireforms are included for round samples up to 25 mm diameter (1.0 inch) and flats to 12 mm thick by 31 mm wide (0.5 inch by 1.25 inch); wireforms are available for many other specimen sizes – contact Epsilon
Operating Force:	Depends on model configuration, less than 30 g typically

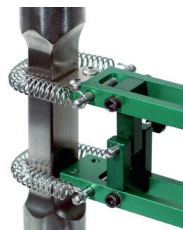
Options

- Quick attach kit wireforms for large specimens
- Adapter kits to change gauge lengths
- Special coatings and stainless steel knife edges available for biomedical tests
- Specialty Knife Edges

Standard Knife Edges

PART NO. 350210-01

Produced from hardened tool steel, these knife edges are used for a wide range of applications, and can be used on both round and rectangular shaped specimens. These are the standard knife edges supplied with 3542L extensometer.



Spring attachment options for 3542L

Technical Data

Model 3542L Available Versions: ANY combination of gauge length, 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 3560 - - -

Gauge Length	
-100M	100.0 mm
-150M	150.0 mm
-200M	200.0 mm
-250M	250.0 mm
-500M	500.0 mm
-600M	600.0 mm

Measuring Range:	
-002	±2.5 mm
-006	±6.0 mm
-012	+12.0 mm/-6.0 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)

Example: 3542L-200M-006M-ST: 200 mm gauge length, ±6.0 mm measuring range, standard temperature option (-40 °C to 100 °C)

Example 3542L:

