3543 with 100 mm gage length and 100 mm measuring range.

3543 with 50 mm gage length and 25 mm measuring range.

3543 foam lined storage case (included).

3543 with 12" gage length and 2" measuring range.

3543 with 600 mm gage length and 100 mm measuring range.

This model is available in gage lengths from 2 inches (50 mm) and larger, with measuring ranges up to 4 inches (100 mm). It is a uniquely designed unit that may be left on through specimen failure. These extensometers are widely used where long samples are required. They are ideal for testing steel re-bar, weld joints, and wire materials.

The unique pull-apart design protects the extensometer when the specimen fails. These are tension only units. During operation, the upper half of the extensometer pulls out of the main body. Tapered measuring beams activate strain gaged flexures within the unit. This unique design allows long measuring ranges, yet retains the compatibility with electronics for strain gaged transducers. These models offer high accuracy and are light weight but rugged, with low operating force.

The units have hardened tool steel knife edges. Standard quick attach wires provided with the extensometer work on flat specimens up to 0.5 x 1.25 inch (12 x 31 mm) and on rounds up to 1 inch (25 mm) diameter. Optional quick attach kit wire forms are available for use on larger samples. See Model 3542L for long gage lengths with smaller measuring ranges.

The Model 3543 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

- **Specifically designed to be left on through specimen failure.** The unit is designed so that the two halves of the extensometer come apart to prevent damage at specimen failure.
- Full bridge, 350 ohm strain gaged design for compatibility with nearly any test system.
- All standard units meet existing ASTM class B-2 and ISO 9513, class 0,5 requirements for accuracy.
- Hardened tool steel knife edges are easily replaced. A spare set comes with every extensometer.
- High temperature options extend operation to +150 °C (300 °F).
- Includes high quality foam lined case.
- Replaceable arms and spacers for ease of repair. The optional gage length spacers allow the gage length of the extensometer to be easily increased for different testing requirements.
- Rugged design for reliable testing.
- Standard quick attach kit for quick mounting to specimens.

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:	Ultra-flexible cable, 8 ft (2.5 m) standard
Standard Quick Attach Kit:	Fits round samples up to 1.0 inch diameter (25 mm) and flats to 0.5 inch thick by 1.25 inch wide (12 mm by 31 mm)
Operating Force:	125 g typical

Options

Quick attach kit wire forms for large specimens
Connectors to interface to nearly any brand test equipment
Shunt calibration module (see page 96)
Adapter kits to change gage lengths
Specialty knife edges (see page 97)

Contact Epsilon for your special testing requirements.

Ordering Information

Model 3543 Available Versions: ANY combination of gage length, measuring range and temperature range listed below is available, except as noted. *Longer gage lengths are easily attained by adding gage length extenders.*

Gage Length

U.S.A.	
-0200	2.000"
-0400	4.000"
-0600	6.000"
-0800	8.000"
-1000	10.000"
METRIC	
-050M	50.0 mm
-100M	100.0 mm
-150M	150.0 mm
-200M	200.0 mm
-250M	250.0 mm

Measuring Range

DESIGNATION	
-100T	+1.00"
-200T	+2.00"
-400T[1]	+4.00"
METRIC	
-025M	+25 mm
-050M	+50 mm
-100M[1]	+100 mm

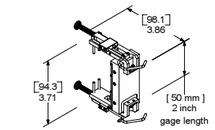
Model Number 3543- __ __ __ __ - __ __ __ - __ __

Temperature Range

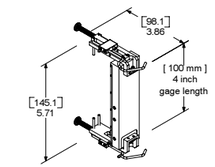
-ST	-40 ˚C to 100 ˚C (-40 ˚F to 210 ˚F)
-HT1	-40 ˚C to 150 ˚C (-40 ˚F to 300 ˚F)

1 *Not available in 50 mm or 2 inch models.*

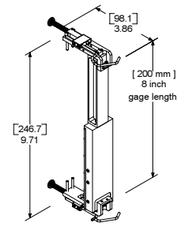
Example: *3543-0800-400T-ST: 8.0 inch gage length, +4 inch measuring range, standard temperature range (-40 ˚F to 210 ˚F)*



3543 WITH 2" OR 50 MM GAGE LENGTH



3543 WITH 4" OR 100 MM GAGE LENGTH



3543 WITH 8" OR 200 MM GAGE LENGTH

DIMENSIONS: [mm] inches