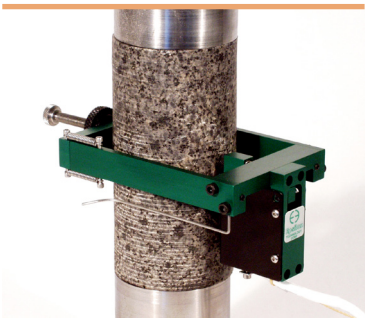
Designed for accurate measurement of small diametral strains such as those required to determine Poisson's ratio of rock, concrete and asphalt samples. The units are designed to be used in conjunction with the Model 3542RA axial averaging extensometer.



Model 3975 extensometer

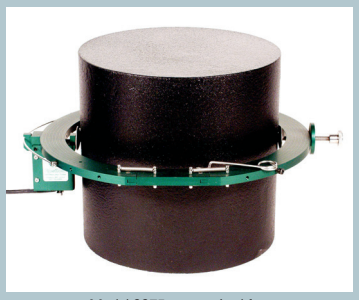
Self-supporting on the test sample, these extensometers will work on standard sized diameter samples, but special configurations are available upon request. They are designed for use in testing for Poisson's ratio and for applications where accurate diametral measurements with low strains are required.

The Model 3975 is the best choice for small diametral strains in large compression samples. Epsilon's circumferential extensometer, the Model 3544, is recommended for large strain measurements. These units are easily attached to the sample, and rounded contact edges maintain the position on the specimen.

The Model 3975 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 with electronics for a strain channel, and Epsilon will equip the extensometer with a compatible connector that is wired to plug directly into the controller. For systems lacking the required electronics, Epsilon can provide a variety of signal conditioning solutions that enable connecting to data acquisition systems or other equipment.

Model 3975, standard configuration, sized for a specimen with an extra-large diameter

Model 3975, customized for a space-limited application



Model 3975, customized for a space-limited application

Features

- Full bridge, 350 ohm strain gaged design for compatibility with nearly any test system.
- All standard units have linearity readings of 0.20% or better.
- Easy mounting, attaches with integral springs.
- Self-supporting on the specimen.
- Includes the Epsilon Shunt Calibration System for on-site electrical calibration.
- Rugged, dual flexure design for improved performance.
- Includes high quality foam lined case.

Specifications

Excitation:	5 to 10 VDC recommended, 12 VDC or VAC max.
Output:	2 to 4 mV/V nominal, depending on model
Linearity:	≤0.20% of full scale measuring range, depending on model
Temperature Range:	Standard (-ST) is -40 °C to +100 °C (-40 °F to +210 °F)
	Optional (-LHT) is -270 °C to +200 °C (-454°F to 400 °F)
Cable:	Integral, ultra-flexible cable, 2.5 m (8 ft) standard

Options

Additional frames for larger or smaller diameter samples
Connectors to interface to nearly any brand of test equipment

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Ordering Information

Model 3975 Available Versions: Consult factory for additional ranges. *Other configurations may be available with special order; please contact Epsilon to discuss your requirements.*

Measuring Range

METRIC	
-076M	+0.76 mm
-150M	+1.50 mm
-200M	+2.00 mm
U.S.A.	
-0003	+0.030"
-0006	+0.060"
-0008	+0.080"

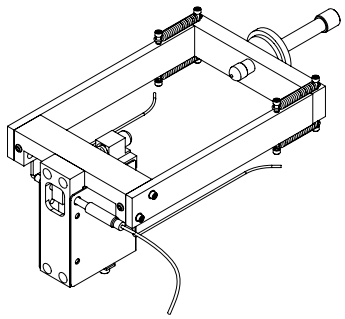
Model Number 3975- __ __ __ __ - __ __

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: 3975-0008-ST: +0.080 inches measuring range, standard temperature option (-40 °C to 100 °C)

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



MODEL 3975 EXAMPLE