

Two 3910 units mounted on asphalt test sample.

This model meets many of the needs for testing

asphalt core samples, in 4 and 6 inch diameters.

The unit meets test method requirements for strain

measurement developed under the U.S. Federal

Highways SHRP program.



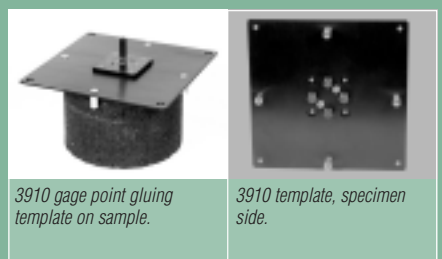
3910 on one side of test sample.

These extensometers are for creep compliance, tensile strength testing and dynamic resilient modulus testing. They are single integral, bi-axial units which measure both lateral and vertical deformations. They clip quickly onto gage points mounted per the test requirements. They mount much faster and easier than other types.

Two units are typically required, with one extensometer mounting to each side of the test specimen. They are changeable from the 1 inch centers used for 4 inch diameter specimens, to the 1.5 inch centers used for 6 inch diameter samples using optional gage length adapters. Magnets at each end of the extensometer snap instantly in place on the steel gage points glued to the test sample. The quick attachment is most advantageous when testing pre-conditioned samples that are heated or cooled, since the extensometers can be mounted before the sample changes temperature appreciably.

The standard Model 3910 has full scale measuring range of 0.020 inches (0.5 mm). Gage points are included with the extensometers and optional gluing templates are available. This model can be converted to the Model 3909 with optional gage length adapters.

The Model 3910 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.



3910 gage point gluing template on sample.

3910 template, specimen side.

Features

- Model 3910 for creep compliance, resilient modulus, and tensile strength for testing per AASHTO TP9 (from SHRP M-007).
- Full bridge, 350 ohm strain gaged design for compatibility with nearly any test system.
- All standard units meet existing ASTM class B-1 and ISO 9513, class 0,5 requirements for accuracy.
- Includes high quality foam lined case.
- Rugged, dual flexure design for improved performance.
- Easy mounting, attaches with magnets, which allows dynamic testing to 40 Hz.

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 is -40 °C to +100 °C (-40 °F to +210 °F)
- Cable:* Integral, flexible Teflon® cable, 8 ft. (2.5 m) standard
- Operating Force:* <30 g typical

OPTIONS

- Connectors to interface to nearly any brand test equipment
- Shunt calibration module (see page 96)
- Gage length adapters
- Gluing template for gage points

ORDERING INFORMATION

Model 3910 Available Versions: Custom gage lengths are available.

Gage Length	
DESIGNATION	GAGE LENGTH
-0100	1.000" (25 mm)
-0150	1.500" (38 mm)
-0200 ¹	2.000" (50 mm)
-0300 ¹	3.000" (76 mm)
-0400 ¹	4.000" (100 mm)

Model Number 3910- _____

¹ Special order only.

Example: 3910-0100: 1.000 inch (25.4 mm) gage length with a full scale measuring range of 0.020 inches (0.5 mm)

Contact Epsilon for your special testing requirements.

