

Dynamic Embedment Strain Gauge

Applications

Embedment Strain Gauges are used for measuring dynamic strains in...

- Concrete structures
- Earth fills
- Soils



• Model 3900 Dynamic Embedment Strain Gauge.

Operating Principle

The Model 3900 Dynamic Embedment Strain Gauge is designed for the measurement of dynamic strains in concrete structures, earth fills and soils. It comprises a full bridge strain gauged proving ring coupled, between two flanges, with a spring and shaft. When the flanges move relative to one another, the tension in the spring changes and hence the strain in the proving ring. A PVC tube serves as a protective housing and holds the gauge at the desired initial tension.

Technical Specifications

Standard Range	5000 $\mu\epsilon$
Resolution	0.125 mV/V nominal
Accuracy ¹	$\pm 0.25\%$ F.S.
Nonlinearity	$< 0.5\%$ F.S.
Temperature Range ²	$-20\text{ }^{\circ}\text{C}$ to $+80\text{ }^{\circ}\text{C}$
Active Gauge Length ³	203 mm

¹Accuracy established under laboratory conditions.

²Other ranges available on request.

³Other lengths available on request.

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