

## MODEL 3900



Model 3900 Dynamic Embedment Strain Gauge.

### APPLICATIONS

Embedment Strain Gauges are used for measuring dynamic strains in:

- Concrete structures
- Earth fills
- Soils

### 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	0.025% F.S.
Accuracy <sup>1</sup>	$\pm 0.25\%$ F.S.
Nonlinearity	<1.0% F.S.
Temperature Range <sup>2</sup>	-20 °C to +80 °C
Active Gauge Length <sup>3</sup>	203 mm

<sup>1</sup>Accuracy established under laboratory conditions.

<sup>2</sup>Other ranges available on request.

<sup>3</sup>Other lengths available on request.

### ORDERING INFORMATION

**3900:** Concrete Embedment Type Resistance Strain gauge, full bridge, 203 mm gauge length, 5000  $\mu\epsilon$  range.

**04-375V9:** Violet PVC Cable, 9.50 mm ( $\pm 0.38$  mm) [0.375"]  $\varnothing$ , 4 twisted pairs, for the above.

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