Concrete Strain Gauges

CTLGroup's Concrete Strain Gauges feature a field-proven design that uses durable materials to ensure accurate long-term data collection. Its full-bridge configuration reduces costs by eliminating the need for expensive data-acquisition and signal-conditioning systems to provide bridge completion. Shielded, twisted-pair design protects the lead wire from electrical noise. This all leads to longer sensor life and long-term savings, by reducing redundancy in your instrumentation plan.

General Specifications

Bridge Completion	Full bridge, no completion required
Gage Resistance	350 Ohm
Excitation	up to 10 Volts
Output	≈ 2 mV/V @ 1500 µstrain
Calibration Factor	Individually provide
Grid Area	0.133cm^2
Gage Area	1.22 cm^2 overall
Fatigue Life	<10^5 repetitions @ +/- 1500 µstrain
Cell Material	Steel 5/16-in. diameter with 5/16 in. x 18 threaded ends
Coating	Two-part polysulfide liquid polymer, encapsulate in silicone with butyl rubber outer core

Quality Assurance

Temperature	-34°C (-30°F) to 204°C (400°F)
Lead Wire	30 ft of 22 AWG braided shield, twisted-pair four wire