

Asphalt Strain Gages

CTLGroup's Asphalt Strain Gages (ASGs) are designed to withstand the high temperatures and compaction loads associated with asphalt pavement construction. The ASG 152 (1st photo) is used for measuring the horizontal strain in asphalt layers whereas ASG-V (third photo) is used for measuring vertical strain. Both types benefit from field-proven designs that use durable materials to ensure accurate long-term data collection. The full-bridge configuration used in our ASGs reduces costs by eliminating the need for expensive data acquisition hardware and signal-conditioning systems to provide bridge completion. Braided shielding protects the lead wire from electrical noise, while an Abrasion-resistant Teflon polymer coating withstands temperatures up to 205°C (400°F). This all leads to longer sensor life and long-term savings, by reducing redundancy in your instrumentation plan.

General Specifications

Bridge CompletionFull bridge, no completion required
 Gage Resistance350 Ohm
 Excitationup to 10 Volts
 Output $\approx 2 \text{ mV/V @ } 1500 \mu\text{strain}$
 Calibration FactorIndividually provided
 Grid Area0.133cm²
 Gage Area1.22 cm² overall
 Fatigue Life <10 repetitions @ +/- 1500 μstrain
 Modulus $\approx 2,340,000 \text{ psi}$
 Cell Material Black 6/6 nylon
 CoatingTwo-part polysulfide liquid polymer, encapsulated in silicone with butyl rubber outer core

Quality Assurance

Temperature..... -34°C (-30°F) to 204°C (400°F)
 Lead Wire30 ft of 22 AWG braided shield, four wire

