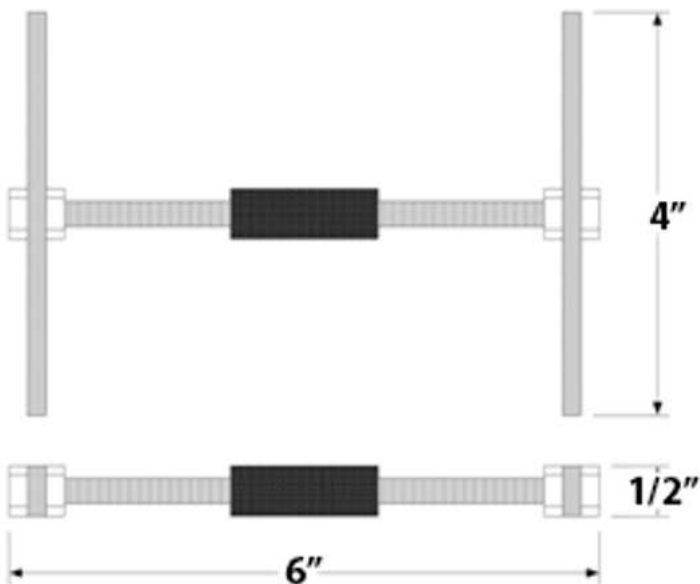


ASG-3000-HT

Dynamic Asphalt Strain Gauge

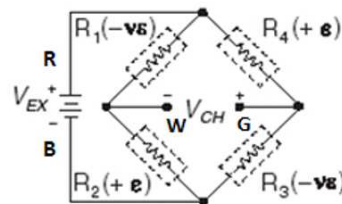
Dynamic asphalt strain gauges measure axial strain in flexible pavement under high frequency (dynamic) conditions. Utilizing four active elements of a Wheatstone bridge circuit, this gauge compensates for temperature, and rejects bending strain, providing a sensor that is easily adaptable to most data acquisition systems without requiring additional signal conditioning.

This low modulus, ruggedized sensor is built to withstand the high temperature and vibratory rolled compaction required for asphalt placement. Each sensor is individually calibrated and supplied with fabrication Quality-Control documentation.



Features

- RoHS Compliant
- Designed to measure both tension and compression loads
- Can measure axial displacement
- Uses an acrylic/Gilsonite emulsification, making the part moisture proof
- High-temp version uses threaded rod flexure made out of Ultem black
- Measures in microstrain, which is 10^{-6}
- Jewell can accommodate up to 250ft max of cable
- #22 or #30 AWG, 4-Conductor, Shielded, Teflon-Jacketed Cable available



PIN OUT:

RED	P+
BLACK	P-
GREEN	S+
WHITE	S-
2.0 to 5.0	Vdc



PERFORMANCE SPECIFICATIONS

PERFORMANCE

INPUT RESISTANCE	350 Ω Nominal
OUTPUT RESISTANCE	350 Ω Nominal
SENSITIVITY AT 1000 $\mu\epsilon$	~ 1.3 mV/V Nominal
EXCITATION	2 - 5 VDC
OPERATING TEMP RANGE	-34 °C to +200 °C
Cable	22 AWG High-Temp or 30AWG Teflon

Specifications are subject to change without notice due to continued product development

ORDERING INFORMATION

HOW TO ORDER

PART #	DESCRIPTION
813-00003-ROHS	ASG-3000-HT with 15 ft. cable (22AWG High-Temp cable)
813-00004-ROHS	ASG-3000-HT with 50 ft. cable (22AWG High-Temp cable)
813-00005-ROHS	ASG-3000-HT with 15 ft. cable (30AWG Teflon cable)

Purchase of Jewell Strain Gauge Includes:
Installation of customer specified length of lead wire based on above options
Gauge factor correction for lead wire desensitization
Tension load application and data collection in μ -strain/mV
Calibration and data collection. A copy of the calibration & test report will be provided with each unit