

## Applications

The Vibrating Wire Strain Gauge is designed for long-term strain measurements of steel structures including buildings, bridges, tunnel linings, arches, struts, sheet piling, piles, dams pipelines, etc.

## Description

The Vibrating Wire Strain Gauge measures strain in steel members. The gauge consists of a coil assembly, Vibrating Wire element and two weldable anchors.

The strain gauge incorporates O-ring seals to provide waterproofing, and allows the tube to remain unstressed. A factory fitted, four core screened cable connects the coil to the readout unit.

## Key Features

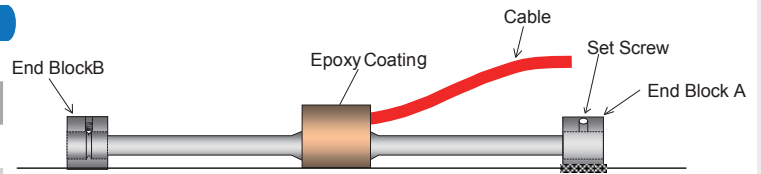
- ◆ Accurate, long-term stability
- ◆ Robust design and reliable
- ◆ O-ring seals provide waterproofing
- ◆ Fit for manual or remote reading
- ◆ Range is adjustable to suit compression or tension
- ◆ Integral thermistor
- ◆ Gauges and coils are re-usable



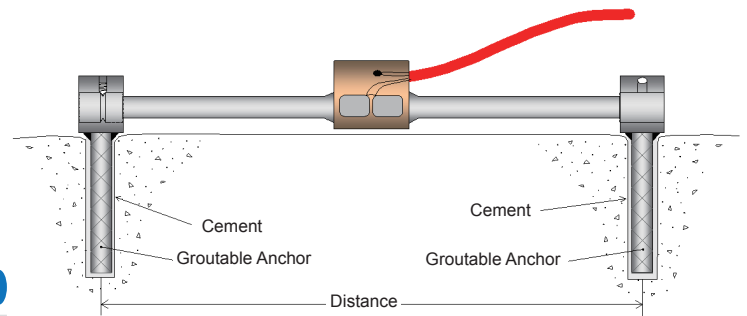
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If you would prefer to speak with someone directly, please call +852 2206 0092 or email [info@cgeo-instruments.com](mailto:info@cgeo-instruments.com)

## Main Specifications

Model	CGEO-SG2	CGEO-SG2X	CGEO-SG3
Range		3000 $\mu\epsilon$	
Accuracy		$\pm 0.1\%$ F.S.	
Resolution		1 $\mu\epsilon$	
Temperature Range		-20 to +80 °C	
Waterproof	Customized	0.5MPa	Customized
Gauge Length		150mm	



Model CGEO-SG2 Installation



Model CGEO-SG3 Installation

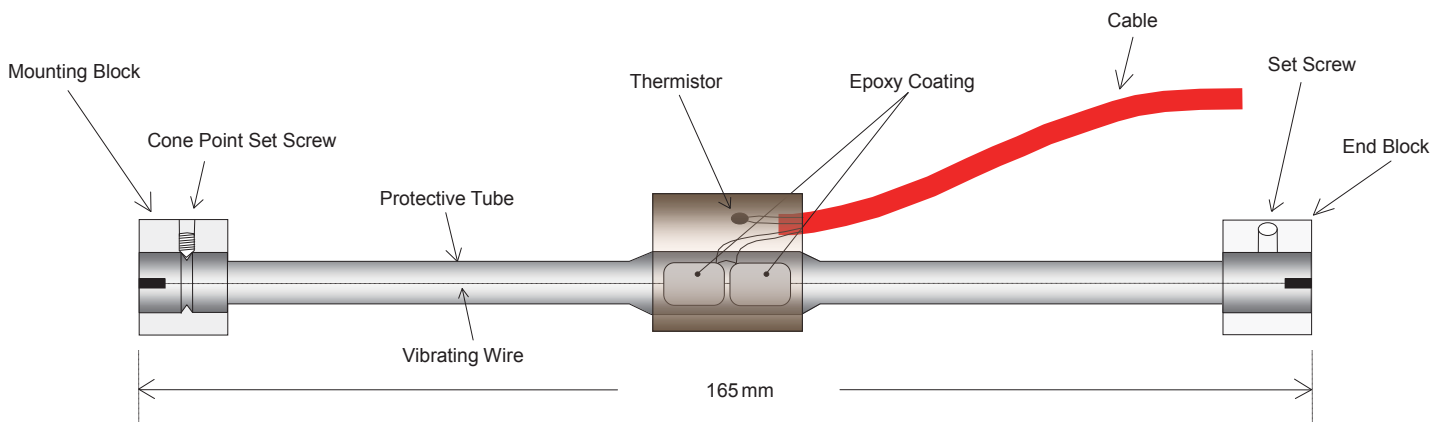
## Operation

Deformation of the structure under load produces relative movement between the two mounting blocks causing a change in the wire tension and a corresponding change in its frequency of vibration. Once installed, changes in strain are monitored by the coil assembly mounted on the gauge. The gauges can be read individually or remotely/automatically as part of a data collection system.

CGEO-SG2 Vibrating Wire Arc Weldable Strain Gauge basically consists of a length of steel wire tensioned between two mounting blocks that are arc welded to the surface of a structural steel member.

CGEO-SG2X Vibrating Wire Arc Weldable Strain Gauge is designed as a one-piece structure for measuring strains in steel members and incorporate the excellent waterproof performance (can be customized) and techniques to allow these gauges to work in hostile conditions.

CGEO-SG3 Vibrating Wire Strain Gauge contains two groutable anchors to be embed the unit in the materials such as wood, rock or concrete.



International Manufacturer of Geotechnical & Structural Instruments

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