

## Embedded Strain Gauge – SGBJ02-150

Vibrating Wire Embedment Strain Gauge is designed to be embedded in concrete to measure strain in the member. The main usage of this instrument is in dams, bridges, tunnels, concrete buildings etc. This product comes in different lengths with a thermistor built in. The sensor of the instrument is Vibrating Wire which has proved to be very sensitive and immune against electrical noises and wet environment. The body of the instrument is manufactured from stainless steel 316 to resist in harsh and corrosive environment. This instrument is a 1D instrument which measures strain in its longitudinal direction and can be read by any standard vibrating wire readout unit. The gauge can also be placed in a precast concrete member.

### Application

- Some of the applications of these instruments are:
- Measuring strain in tunnel concrete lining and shotcrete
  - Strain measurement in concrete beams and slabs
  - Strain measurement in tall concrete buildings and silos
  - Concrete dam construction monitoring
  - Monitoring of concrete pipes

### Operation and Installation

This gauge is usually installed in place prior to concrete pour. The gauge is usually fixed to existing rebars (along the axis of interest) to avoid movement and probable damage. Before the concrete is poured, the lead wires are guided to a safe place to be connected to a readout or a data acquisition system and then the concrete is poured. After the concrete has set, the initial reading is recorded. After the structure goes to service, readings continue to record the actual strain in the concrete member in the set direction.

Technical Spec	
Range	3000 microstrain
Resolution	1 microstrain
Accuracy	±0.5% full scale
Temperature range	-30 to +80°C
Active gauge length	150mm
Material	Stainless Steel 316
Weight	80 gr
Cable type	4 core, PU sheathed
NTC Thermistor	3kΩ
Thermistor Tolerance	1%



### Order information

Cable length