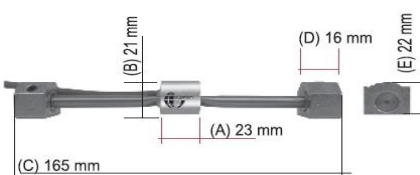


## TECHNICAL FEATURES

- ✓ Type of sensor: vibrating wire;
- ✓ Nominal measuring range:  $\pm 1500$   $\mu\epsilon$ ;
- ✓ Sensitivity:  $1 \mu\epsilon$ ;
- ✓ Accuracy:  $< 0.5\%$  F.S.;
- ✓ Non linearity: better than  $0,5\%$  F.S.;
- ✓ Operating temperature: from  $-20^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ ;
- ✓ Integrated temperature sensor: NTC  $3 \text{ K}\Omega$ ;
- ✓ Spool resistance:  $150 \Omega$ ;
- ✓ Typical frequency:  $800 \text{ Hz}$ ;
- ✓ Operating range: from  $500$  to  $1100 \text{ Hz}$ ;
- ✓ Thermal dilation coefficient:  $12.2 \mu\epsilon/^{\circ}\text{C}$ ;
- ✓ Output signal:  $\text{Hz}$ .

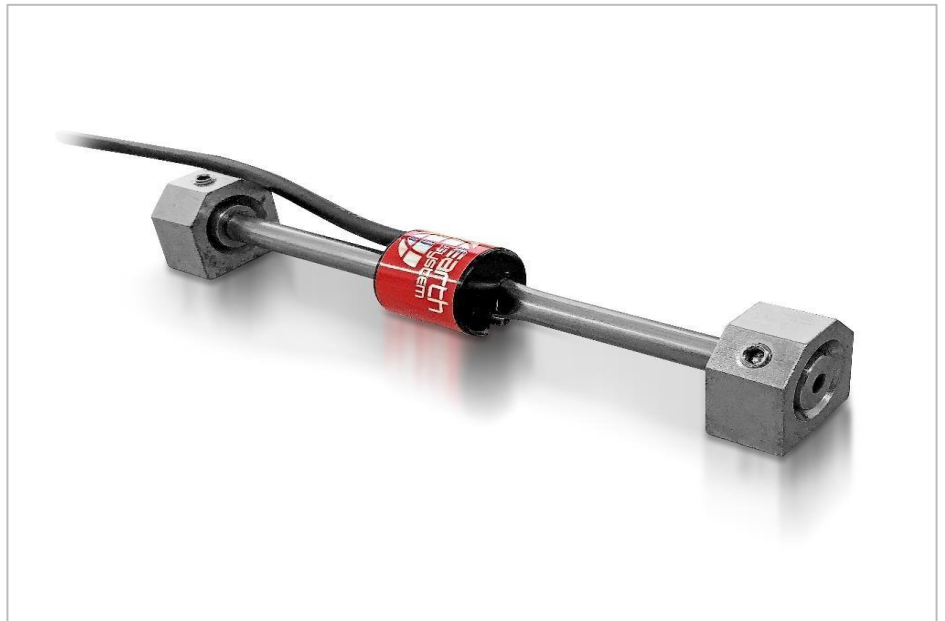


strain gauge dimension



strain gauge with anchoring end blocks for fixing on concrete walls

**CE** product compliant with European directives



The vibrating wire strain gauge is widely used to measure the deformation in metal structures onto which it is fixed.

The instrument is essentially made up of a steel wire tensioned between two ends welded onto the surface to be monitored. The deformation of the structure under load changes the distance between the two ends with consequent change in the wire tension. When that is energized with electrical input, it generates resonance frequency. Measured by an electromagnetic coil, the frequency is proportional to the length of the wire, thus to the tension applied, and this gauges the deformation of the material. These kind of instruments offer the advantage of excellent stability of

measurement over time and output signal in  $\text{Hz}$  suitable for transmission through very long cables. The sensor includes a thermistor for temperature change readings.

Used to measure strain in tunnel linings, steel uprights, and foundation pile rebars and partition structures.

## DIMENSIONS

DIMENSIONS	
body length (A)	23 mm
body length (B)	21 mm
total length of the sensor (C)	165 mm
anchoring blocks thickness (D)	16 mm
anchoring blocks length (E)	25 mm