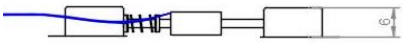
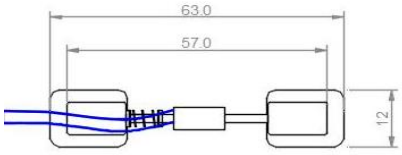
WELDABLE VIBRATING WIRE MICRO STRAIN GAUGE

TECHNICAL FEATURES

- ✓ Type of sensor: vibrating wire;
- ✓ Measuring range: +/1750 με;
- ✓ Resolution: 1 με;
- ✓ Accuracy: <0.5 % F.S.;
- ✓ Non Linearity: better than 0.5% F.S.;
- ✓ Length of wire: 51 mm;
- ✓ Temperature range: from -30 °C to +80°C;
- ✓ Integrated temperature sensor: NTC 3KΩ;
- ✓ Typical Frequency: 2500 Hz;
- ✓ Output signal: Hz;
- ✓ Thermal dilation coefficient: 12.2 με/°C.



Cross-section



View from above

CE product compliant with European directives

The vibrating wire micro strain gauge is designed to measure the deformation in metal structures and reinforcement bars in area where the space available for installation is very limited or where arc welding cannot be used.

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 is gauges the deformation of the material. These kind of instruments offer the advantage of excellent stability of measurement over time and output signal in Hz suitable for transmission through very long cables. The sensor includes a thermistor for temperature change readings.

DIMENSIONS	
Total length	63.0 mm
Body length	57.0 mm
Wire length	51,.0 mm
body diameter	6.0 mm

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company quality management system certified according to UNI EN ISO9001:2015