



Weldable Resistive/Embedded Type Strain Gauge

WRSG - ERSG



Overview

The Weldable Resistive/Embedded Type Strain Gauge has a structure consisting of a stainless steel body with a strain gauge embedded inside and two ears placed at the ends of the body. In embedded applications, the strain effects that occur in the cross-section after the mounting process, either on the steel surfaces or on the stress in mass concrete, are transmitted to the body and the strain gauge. The mechanical change, together with the instantaneous strain changes that occur, is reflected as a signal output to the measurement unit. Depending on the scaling factor, deformation or stress in the section can be easily calculated.

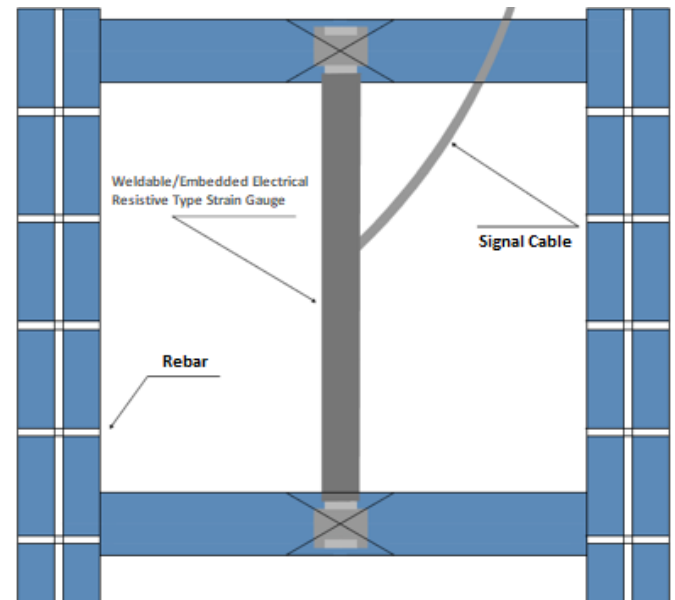
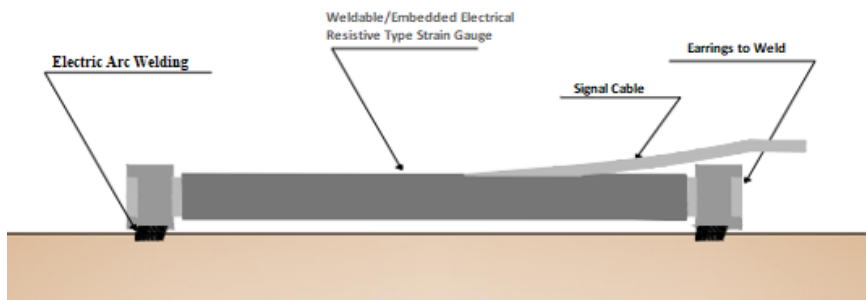
Features

- Impact resistant cable connection thanks to epoxy molding
- Stable measurement in harsh conditions
- Dynamic measurement possibility
- Waterproof
- Corrosion resistance
- Unaffected by voltage supply sourced temperature

Application Area

- Pile Load Testing
- Tunnel Linings
- Bridges and Railroad Bases
- Strut and reinforcement
- Steel structures
- Mass concrete structures

Product Detail



Cautions

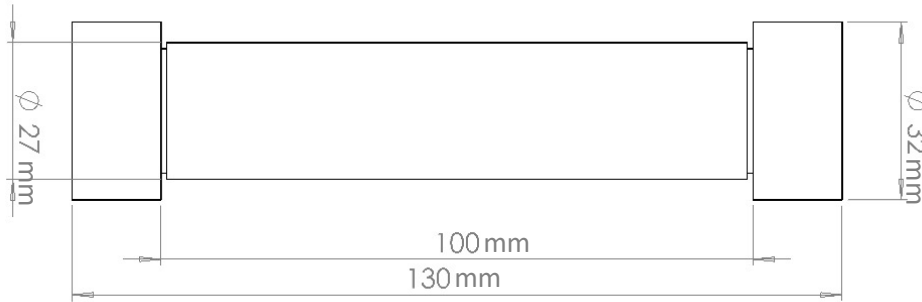
When measuring changes in prestressed concrete by laying it on mass concrete, there may be shrinkage or expansion during the curing process. To prevent damage to the signal cable, an expansion tube should be installed around it.

Technical Specifications

Sensor Type	Weldable/Embedded Electrical Resistive Type Strain Gauge	Recommended Excitation Voltage	(4-10) V
Measuring Range	3000 $\mu\epsilon$ (\pm 1500 $\mu\epsilon$)	Working Temperature	-25 °C - 80 °C
Output Rate	2 mV/V	Waterproof	IP68
Accuracy	\pm 0.8% F.S	Weight	800 g
Nonlinearity Rate	\pm 2.0% F.S	Material	ST37 Galvanized Steel
Length	130 mm (\pm 0.01 mm)	Resistance	350 Ω

*F.S: Full Scale

Dimensions



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