FSG inclinometer

Description

FSG(foil strain gage) inclinometer is composed of a form that pendulum shape of sensor mixture is suspended and moveable in the interior of cylinder housing. And the exterior is airtight with waterproof of stainless housing.
Sensor mixture is maintained by board spring and thin board gage strain, and in the sensor mixture FSG perceives the change of energy that happens by the gravity-centered rotation so the change of resistant value happens in proportion to the angle of inclination. This change of resistant value is transmitted through signal cable into exclusive use of output device and is displayed in mechanical unit
FSG inclinometer of our company has much confidence because it adjusts with high precision of angle division device. You can use model 4410 of FSG inclinometer by establishing the sensor bracket in the zone or building where inclination is expected and then attaching FSG inclinometer and confirm initial measurement. The difference between initial value and current value is angle variation. You can measure precisely by provided conversion factor.
FSG inclinometer is designed for waterproof, rustproof and shock absorption by precise process of stainless steel.

Features

- Stability and confidence with which it can operated in severe environment
- Selection of anticorrosive and rustproof material
- Selected materials to minimize thermal zero shift
- Built-in the temperature device with circuit of wheatstone bridge
- Dynamic measurement is possible
- Easy installation by circular level

Applications

Dynamic measurement is possible FSG inclinometer that it suits for study object or spot where needs real time measurement.

- Measurement of inclination followed by the effect of open cut or excavation
- Measurement of inclination of beam and abutment
- Measurement of deformation or inclination of retaining wall
- Measurement of movement or convergent of tunnel
- Measurement of inclination of a vessel The readout

The readout

It is electric resistance sensor that generates mV and can be used by connecting with strain meter or data logger that can read strain

- ACE-600A (FSG readout)
- ADL-200A (Smart logger)

Ordering information

- Cable length
- Application field
- Application of uniaxial and biaxial type
- Limit degree of measured data for structure
- Keeping readout unit

Ancillary equipments

- Universal terminal box (model 7012/7024)
- Protective cover

Specification

Model	4410
Sensor element	FSG (foil strain gage) sensor
Range	±3°, ±5°
Rating output	1 mV/V (1,000×10^{-6})
Accuracy	±0.1% FSR
Non-linearity	±0.5% FSR
Exciting voltage recommended	Less than 5 VDC
Exciting voltage allowable	Less than 10 VDC
Insulation resistance	More than 100 MΩ / 500V
Resistance	350Ω
Operating temperature	-30~80℃
Waterproof	105m H_2O
Materials	Stainless steel, fluorinate series O-ring, silicone oil
Weight	① Inclinometer 1.0kg ② Mounting bracket 0.2kg
Signal cable	Ø4.5㎜, 0.24㎟×4C shielded PVC sheath cable
Accessory	① Mounting bracket ② 3/8″ anchor bolt ③ Anchor plate

[Installation of foil strain gage inclinometer]

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