

FSG rebar stressmeters



Description

FSG rebar stressmeter is comprised of wheatstone bridge at the surface of reinforcing bars that foil strain gage is processed as round form. It was fixed by the exclusive bond and the outside was concluded by epoxy. FSG rebar stressmeter is attached by welding or binding between reinforcement cross bars.

FSG rebar stressmeter outputs the force strength and the change of the stress in electrical resistance signal. This electrical resistance signal is transferred to FSG readout unit. And it makes us to exactly and easily measure the data as applying the elasticity coefficient and conversion coefficient of the reinforcing bar.

FSG rebar stressmeter is designed and manufactured into 2 kinds of deformed bars of D25 and D32. Therefore, you can choose the suitable one from them.

FSG rebar stressmeter are designed for waterproof and insulation for enduring in severe environment, and for getting stable output for a long term.

Specification

Model	4260	4290
Sensor element	FSG (foil strain gage) sensor	
Range	±5,000 microstrain	
Rating output	2.5mV/V (2,500 × 10 ⁻⁶)	
Accuracy	±0.5% FSR	
Nonlinearity	±1.0% FSR	
Exciting voltage recommended	Less than 5 VDC	
Resistance	350 Ω	
Insulation resistance	More than 100 MΩ / 500 V	
Operating temperature	-30~80°C	
Yield point of the rebar	4,000kg/cm ² (SD40 grade)	
Elastic coefficient	2.04 × 10 ⁶ kg/cm ²	
Rebar diameter	Ø25.4mm	Ø31.8mm
Waterproof	105m H ₂ O	
Weight	8.4kg	11kg
Materials	Carbon steel, High grade epoxy potting	
Signal cable	Ø6.4mm, 0.37mm ² × 4C shielded PVC cable	

※ Rebar = Reinforcing bar

Dimensions

(Unit : mm)

Model	4260	4290
OD of sensor element	Ø35	Ø42
Overall length	1,000	1,000
Rebar spec.	D25 rebar	D32 rebar

Applications

The FSG rebar stressmeters are designed and used in monitoring a stress of the reinforcing bars on a diaphragm wall or reinforced concrete structures.

Features

- Stability and reliability in extreme environment
- Easy to use and installation
- Permanent anti rust material

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

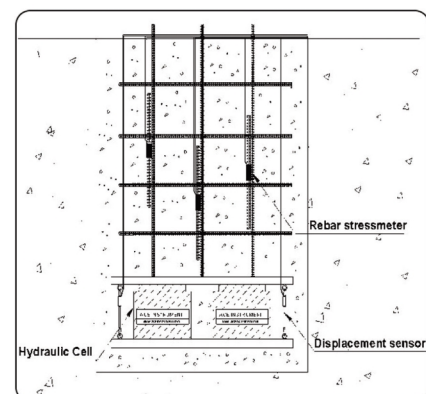
- ACE-600A (FSG readout)
- ADL-200A (Smart logger)

Ordering information

- Installation area(field) and application
- Dimension of the reinforcing bar
- Keeping FSG readout unit
- Cable length

Ancillary equipments

- Universal terminal box (model 7012/7024)
- Extension kit for rebar (reinforcing bar)
- Applicable rebar stressmeter is D10, D13, D16, D19, D22, D29, D35, D38, D41, D51



[Installation of FSG rebar stressmeter]