

FSG crackmeters



Description

FSG type crackmeter is composed of displacement sensor and anchor part for fixing. Anchor should be fixed by anchor bolt or grouting in the both ends of crack across the crack. After establishment, crack is transferred to sensor through contact rod, in the attached foil strain gage, distortion happens in proportion to the transferred displacement, resistance value also changes slightly, and this output is transmitted into output device and displayed in mechanical unit. And it is easily calculated by provided correction record in unit of meter.

Model 4330 FSG type crackmeter is provided with correction record by sensors, by digital displacement calibrator it calibrate electric resistance feature in proportion to displacement.

So confidence and reproducibility are guaranteed.

FSG type crackmeter is designed into waterproof and insulated structure so that it gets stable output for a long-term period and can overcome severe environment in construction site. And for all the material, special stainless steel is used, that long-term measurement is possible.

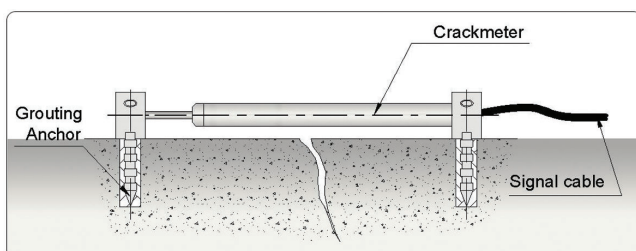
Applications

FSG type crackmeter is useful to measure change of crack size between external coupling parts of concrete structure or rock.

- Measurement of change of crack size of adjacent building or structure made by unexpected movement of structure.
- Confirm of crack condition of structure in the area of earthquake,
- In experimental construction, model construction, when dynamic measurement is needed, it is useful in real time.

Ancillary equipments

- Universal terminal box (model 7012/7024)



[Model 4331]

Specification

Model	4330	4331
Sensor element	FSG (foil strain gage) sensor	
Range	5mm	25mm
Rating output	6mV/V (6,000 × 10 ⁻⁶)	4mV/V (4,000 × 10 ⁻⁶)
Accuracy	±0.5% FSR	
Resistance	350 Ω	
Insulation resistance	Less than 100 M Ω / 500 V	
Exciting voltage recommended	Less than 5 VDC	
Exciting voltage allowable	Less than 10 VDC	
Operating temperature	-30~80°C	
Waterproof	10m H ₂ O	
Weight	0.3kg	
Materials	Stainless steel, High grade epoxy potting	
Signal cable	∅3~∅4.5mm, 0.24mm ² × 4C shielded PVC sheath cable	
Accessories	-	Grout anchor 2ea

Features

- Stability and reliability in extreme environment
- Easy to use and install
- Possible to dynamic measurement
- Permanent system, choice of rustproof material

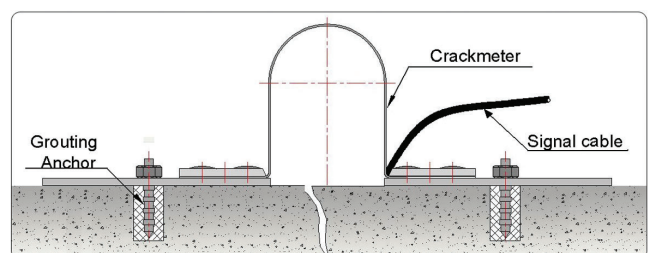
The readout

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-600 (FSG readout)
- ADL-200 / ARF-100 (Smart logger / Smart controller)

Ordering information

- Keeping readout unit
- Application field
- Cable length



[Model 4330]