

## Potentiometric crackmeter



### Description

Model 4335 Potentiometric crackmeter consists of a sensor part with a potentiometer built into a stainless steel body and a rod fixing part, and must be fixed across the crack gap using an anchor bolt or epoxy.

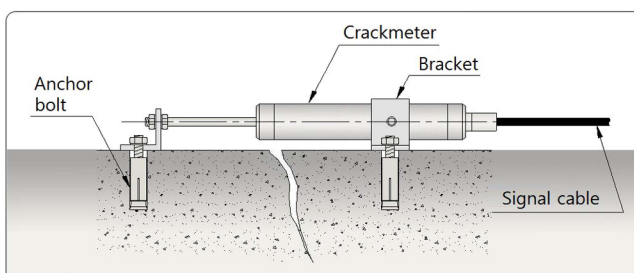
For precise measurement, a high-precision potentiometer is adopted as the sensor element, and a constant voltage is applied to output voltage(mV) according to displacement.

The Potentiometric crackmeter is manufactured with two measurement ranges of 20mm and 40mm, and the relationship between displacement and response signal is very precise, and can be easily adjusted and installed according to the expected gap size. It uses stainless steel and is waterproof and rustproof, so long-term measurement is possible.

When measuring cracks in adjacent buildings at sites requiring safety diagnosis or in urban excavation work, it is very useful for real-time measurement when linked with the Smart LoRa system.

### Features

- Stability and reliability in extreme environment
- Adjustable range
- Easy to install
- Possible to automatic measurement
- Possible to dynamic measurement



[Installation of crackmeter]

### Specification

Model	4335	
Sensor element	Potentiometer	
Range	20mm	40mm
Resolution	Infinite	
Accuracy	±0.3% FSR	
Resistance	2kΩ / 5kΩ	
Operating temperature	-30~80°C	
Materials	Stainless steel	
Waterproof	50m H <sub>2</sub> O	
Weight	∅22.3×127mm	∅22.3×159mm
Weight	0.2kg	0.3kg
Signal cable	∅4.5mm, 0.24mm <sup>2</sup> ×4C shielded PVC cable	
Accessories	Mounting bracket	

### Applications

The Potentiometer crackmeter is useful for measuring changes in the size of the surface connection and gap of rock or concrete structures.

- Measurement of changes in crack size in adjacent buildings or structures due to excavation work, etc.
- Measurement of changes in gap size in connecting joints of structures.

### Ordering information

- Application field
- Cable length
- Keeping readout unit
- Range
- Uniaxial or triaxial

### The readout

It is connected to the system such as the voltage readout units, or data logger as it is the electrical sensor that output mV.

- ACE-1500 (MEMS readout)
- ACE-900 series (MEMS mini logger)
- ADL-200A (Smart logger)
- AL Module (Smart LoRa system)

### Ancillary equipments

- Universal terminal box (model 7012/7024)