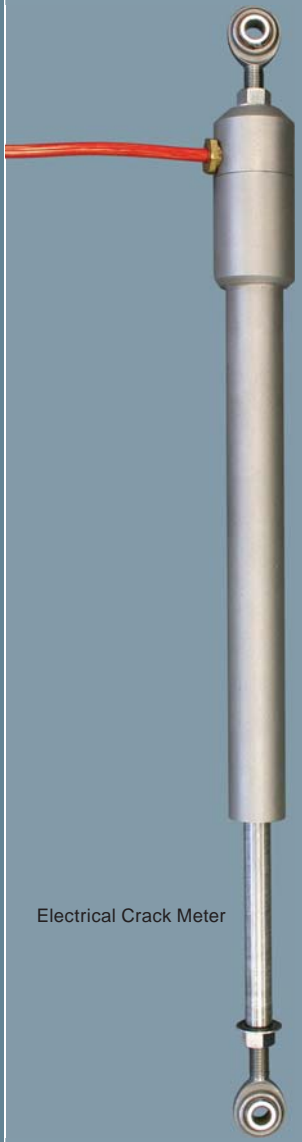




# Crack Meters



3-D Crack Meter



Electrical Crack Meter

RST's Crack Meters are designed to measure movement across surface cracks and joints. Crack Meters are available as Electrical, 3-D and Vibrating Wire.

The Electrical Crack Meter consists of a moveable slider that makes electrical contact along a fixed resistance strip. A regulated DC voltage is applied to the two ends of the resistance strip and the voltage is measured between the slider and one of the end points.

3-D Crack Meters may be read manually, or equipped with a vibrating wire transducer for automated monitoring.

Vibrating Wire Crack Meters are easily installed by grouting, bolting or bonding the two threaded anchors (with ball joints) on either side of the crack/joint, and then reattaching the anchors to the sensor.

Submersible (up to 200 m) versions are available for installation on the upstream perimeter joint of CFRD dams. 2-D and 3-D versions are available.



Vibrating Wire Crack Meter



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### applications

Monitor crack separation or convergence, in concrete structures.

Monitor joints for movement caused by nearby geotechnical activity.

Alarm triggering when separation or convergence, of two reference points, reach a preset critical rate or value.

### features

Rugged & reliable construction.

High accuracy and readability.

Full performance in hostile site conditions.

Versatile.

Low cost.

Long-term stability.



specifications + ordering info

# Crack Meters



## 3-D sensor specifications

### 3-D CRACK METERS WITH VW TRANSDUCER AND VIBRATING WIRE CRACK METERS

DESCRIPTION	SPECIFICATIONS
Range	12, 25, 50, 75, 100, 150, 200 mm
Standard Range	1" (2 & 4" options available)
Accuracy	0.2% F.S.

## electrical crack meter specifications

DESCRIPTION	SPECIFICATIONS
Weight	0.68 kg (1.5 lbs.)
Material	Mild steel
Diameter	37 mm (1.4 in.)
Length	350 mm (13.75 in.)
Height	114 mm (4.5 in.)

## electrical crack meter options

Linearity to  $\pm 0.1\%$   
 Extended Bar

## electrical crack meter sensor specifications

### ELECTRICAL LINEAR POSITION TRANSDUCER

DESCRIPTION	SPECIFICATIONS
Range (in 25 mm/1 in. increments)	12 to 152 mm (0.5 to 10 in.)
Linearity	1% F.S. (0.1% F.S. optional)
Resistance	1500 $\Omega$ /in. electrical travel
Operating Temperature	-40° to 212°F (-40°C to 100°C)
Resolution	Infinite
Insulation Resistance	500 M $\Omega$ @ 500 Vdc
Dielectric Strength	1000 V rms
Power Rating	0.20 Watt/in. electrical travel
Recommended Wiper Current	<1 $\mu$ A

## electrical crack meter ordering info

DESCRIPTION	PART #
50 mm (2 in.)	EXCM1050
100 mm (4 in.)	EXCM1100
150 mm (6 in.)	EXCM1150

## 3-D crack meter specifications

DESCRIPTION	SPECIFICATIONS
Weight	1.6 kg (3.5 lbs.)
Material	Stainless steel
Length	200 mm (7.8 in.)
Height	185 mm (7.3 in.)
Width	75 mm (3 in.)

## 3-D crack meter options

Vibrating Wire Transducer
Armoured cable
Readout

## 3-D crack meter ordering info

DESCRIPTION	VIBRATING WIRE	MECHANICAL
25 mm (1 in.)	VWCM025-3D	EXCM1000
50 mm (2 in.)	VWCM050-3D	N/A
100 mm (4 in.)	VWCM100-3D	N/A

## vibrating wire crack meter ordering info

RANGES	PART #	COLLAPSED LENGTH
12 mm (0.5 in.)	VWCM012	231 mm
25 mm (1.0 in.)	VWCM025	278 mm
50 mm (2.0 in.)	VWCM050	311 mm
75 mm ( 3.0 in.)	VWCM075	404 mm
100 mm (4.0 in.)	VWCM100	436 mm
150 mm (6.0 in.)	VWCM150	564 mm
200 mm (8.0 in.)	VWCM200	694 mm

## vibrating wire crack meter options

VW temp. sensor
Terminal boxes
Lightning protection
Junction boxes

GEOTECHNICAL . MINING . ENVIRONMENTAL . STRUCTURAL