



PRODUCT CATEGORY:  
EXTENSOMETERS

## Vibrating Wire Joint Meter

The RST Vibrating Wire Joint Meter is developed to monitor joints of mass concrete structures.

The instrument consists of two parts, a socket and the main body with a waterproof vibrating wire sensing gauge. During construction of the structure, the socket is secured to the form and embedded into a lift of the block to be constructed. After removal of the form and prior to concreting of adjacent block, the gauge is screwed into the socket, set at the desired range, and then embedded into concrete.

Opening and closing of the joint is then measured by the gauge, which is firmly anchored in both blocks. The instrument body includes universal joints, on which the sensing element is mounted, accommodating a small degree of shear movement that might occur.

The RST Vibrating Wire Joint Meter is a very robust and accurate instrument with excellent long term stability. It can be measured by RST vibrating wire portable readout units or a data logger if remote continuous monitoring of the joints is required. All measurements are compared to an initial datum reading, providing a history of magnitude and rate of movement at the joint.

In addition to vibrating wire joint meters, RST offers vibrating wire and electrical crack meters that can be used for monitoring joints of both new and existing concrete dams and structures. Access to the joint or crack to be monitored is required.

### > APPLICATIONS

Monitoring of joints of concrete arch, gravity and buttress dams; concrete-faced, rockfill dams; concrete retaining walls and slabs.

### > FEATURES

Long term stability in difficult environments.	Integral lightning protection.
High accuracy and resolution.	Not affected by cable length.
Suitable for data logging and remote monitoring.	Accommodates shear movement.

### > BENEFITS

✓ <b>Increase Safety</b>	✓ <b>High Accuracy</b>
✓ <b>Increase Productivity</b>	✓ <b>High Reliability</b>

### SPECIFICATIONS

ITEM	DESCRIPTION
Ranges	12.5, 25, 50, 100 mm (other ranges available)
Overrange	1.25 X range
Resolution	0.02% F.S.
Accuracy	0.2% F.S. (0.1% F.S. optional)
Operating temp.	-20 to +80°C
Cable	Two twisted pairs cable with polyurethane jacket
Diameter	51 mm
Lengths	12.5 mm range: 350 mm 25 mm range: 369.6 mm 50 mm range: 435.4 mm 100 mm range: 573.3 mm



A Vibrating Wire Joint Meter shown with its unscrewed socket (above).



### ORDERING INFO

ITEM	PART #
12.5 mm	VWJM012
25 mm	VWJM025
50 mm	VWJM050
100 mm	VWJM100
Signal cable	EL380004