

VW Joint Meter

The vibrating wire joint meter is a robust and accurate instrument with excellent long-term stability. It can be measured by vibrating wire portable readout units or a data logger if remote continuous monitoring of the joints is required



VW Joint Meter

Overview



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

The vibrating wire joint meter is a robust and accurate instrument with excellent long-term stability. It can be measured by 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.

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

Suitable for data logging and remote monitoring

Integral lightning protection

High accuracy and resolution

Accommodates shear movement

Not affected by cable length



VW Joint Meter

Specifications

GENERAL

Ranges	15, 25, 50 mm (other ranges available)
Over Range	1.25 X range
Resolution	0.025% FS
Accuracy	0.2% FS (0.1% FS optional)
Frequency Range	1650-2700 Hz
Nominal Zero Value	1850 Hz
Operating temp	-20 to +80°C
Cable	Two twisted pair with PUR sheath
Cable Type	Type 900 - VW Sensor with Foil Screen & Drain Wire
Diameter	51mm
Lengths	15 and 25mm range: 340mm; 50mm range: 430mm

ORDERING INFORMATION

Range	
Cable length	
Readout type	



Geosense Ltd, Nova House, Rougham Industrial Estate, Rougham, Bury St Edmunds, Suffolk IP30 9ND, England

www.geosense.co.uk e sales@geosense.co.uk t +44(0)1359 270457