
VW Displacement Gauge VWDT-6000

Spring-loaded vibrating wire displacement gauge which covers displacement ranges up to 75mm and are fully waterproof to a minimum of IP68 (16 bar external pressure)



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Overview



Geosense® VWDT-6000 series of spring-loaded vibrating wire displacement transducers which cover displacement ranges up to 75mm and are fully waterproof to a minimum of IP68 (16 bar external pressure). They can be incorporated into many displacement products such as crack and joint meters, convergence meters and displacement gauges.

VWDT-6000 transducers are particularly rugged, and are carefully constructed and thermally aged to minimise long term drift and changes in calibration. The gauges will withstand demanding environmental factors encountered in Civil Engineering construction sites such as tunnels and piling applications.

The data from the VWDT-6000 can be monitored by means of a portable read-out unit or connected to a data logger and distributed if required by telemetry.

Vibrating wire instruments output a frequency signal, and are therefore insensitive to resistance changes in connecting cables caused by contact resistance or leakage to ground. Cable may be readily and simply extended on site without special precautions. Gauges may be read up to 1000 metres away from their installed location, without change in calibration.

Instruments may be read by any commercially available Vibrating wire readout system operating on either the pluck pulse or swept frequency excitation principle, provided that these units operate over the frequency range of the instruments. In addition, these instruments can be data-logged by a variety of data-loggers equipped with vibrating wire excitation modules including Campbell Scientific and Datalogger units.

Units are supplied with a ball end to ensure minimum contact point to ensure accurate readings.

APPLICATIONS

- Crack-meters
- Joint-meters
- Convergence meters

FEATURES

- Reliable long term performance
- Spring-loaded
- Rugged, suitable for demanding environments
- High accuracy
- Insensitive to long cable lengths
- Waterproof to 16 bar

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Specifications

SPECIFICATION

Excitation	Pluck or swept frequency
Thermistor	3k Ohms at 25 °C
Over-range	Range + 20%
Resolution	0.025% FS
Accuracy	±0.1% FSO
Nonlinearity	<0.5% FS
Operating range	-20 °C +100 °C
Cable	2 pair PUR outer sheath
Cable Type	Type 900 - VW Sensor with Foil Screen & Drain Wire
Frequency range	1650- 2700Hz
Nominal zero value	1850 Hz
Waterproof rating	16 bar

DIMENSIONS

Model	Range (mm)	Diameter (mm)
VWDT-6002	12.5	13
VWDT-6003	25	13
VWDT-6004	50	13
VWDT-6005	75	13

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

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V1.6 06/2023