

VW Displacement Sensor – VDSJ02-XX

Displacement sensors are devices which translate linear displacements to an electrical signal. Vibrating Wire technology is a system which is used in many linear displacement sensors. A VW based sensor is attached to a spring and other peripheral units which go under tension as a function of displacement. The displacement is transferred to the spring and the resultant tension is applied to the wire. The whole system is encapsulated into a steel casing which acts as a protective shield too.

Vibrating Wire displacement sensors come in different length and sizes and can be custom designed for special applications too. All metallic parts of the sensor are manufactured from Stainless Steel 316 to resist in harsh and corrosive environment. This sensor is a 1D unit which measures displacement along its longitudinal direction. To read the sensor, any VW readout unit can be used.

Application

Some of the applications of this instrument are :

- Measuring displacement in any Geotechnical instrument.
- Recording displacement in laboratory devices.
- Utilized in the industry units to measure displacement.
- Using it in any crack meters.

Operation and Installation

This sensor is usually installed in a place where linear displacement is to be measured. To install it, the body of the sensor should be fixed and the moving central shaft should be attached to the moving part. The end of the shaft has a thread to facilitate easy attachment. The sensor is equipped with a system which does not allow for out of range displacements. To read the sensor, it should be attached to a VW readout unit or any other device which can excite and read a vibrating wire sensor.

Technical Spec	
Stroke range	30, 50, 75, 100 mm
Resolution	0.01 mm
Accuracy	±0.5% full scale
Temperature range	-30 to +80°C
Sensor length (for 30mm and 100mm stroke)	190 and 250 mm
Material	Stainless Steel 316
Weight (for 30mm and 100mm stroke)	120 and 160 gr
Cable type	4 core, PU sheathed
NTC Thermistor	3kΩ
Thermistor tolerance	1%



Order information

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XX: Stroke range in mm