



## Applications

CGEO-WP Vibrating Wire Series Vibrating Wire Piezometers provide accurate measurement of pore water pressures in fully or partially saturated soil. The transducer is made from Stainless Steel and designed to handle pressure ranges up to 5000 kPa. It incorporates an over voltage surge arrestor that offers protection from a lightning strike.

CGEO-WP Vibrating Wire Series Vibrating Wire Piezometers is mainly used for the measurement of ground water elevations, pore water pressures, tailings lagoons, pressures in dam foundations and water pressures behind tunnel linings.

## Description

The Model CGEO-WP Standard Vibrating Wire Piezometer ranges (0.35~5MPa) is fitted with either a low air entry sintered steel or high air entry ceramic filters. An integral thermistor for temperature monitoring is included.

The Model CGEO-WP Small Range Vibrating Wire Piezometer is designed for low-pressure ranges (70/170kPa). Thermistors are also included to measure temperatures.

The transducers have outstanding long-term stability and reliability, and low thermal zero shift. Cable lengths of several kilometers are no problem and the frequency output signal is not affected by changing cable resistances (caused by splicing, changes of length, terminal contact resistances, etc.), nor by penetration of moisture into the electronic circuitry.

## Key Features

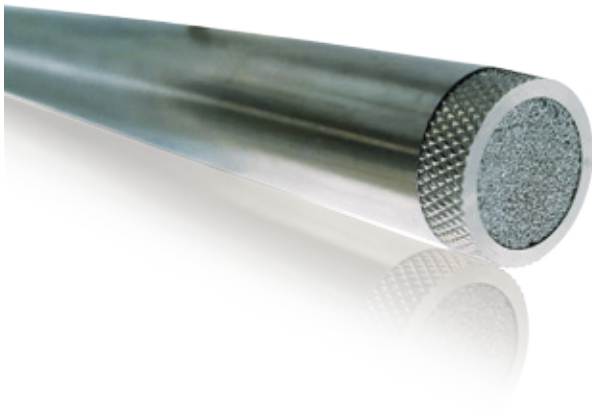
- ◆ Accurate, long-term stability
- ◆ Small diameter
- ◆ Robust design and reliable
- ◆ Fit for manual or remote reading
- ◆ Integral thermistor
- ◆ Over-voltage surge arrestor protects against electrical damage



Comprehensive information about this product and our full range is available at [www.cgeo-instruments.com](http://www.cgeo-instruments.com)  
If you would prefer to speak with someone directly, please call +852 2206 0092 or email [info@cgeo-instruments.com](mailto:info@cgeo-instruments.com)

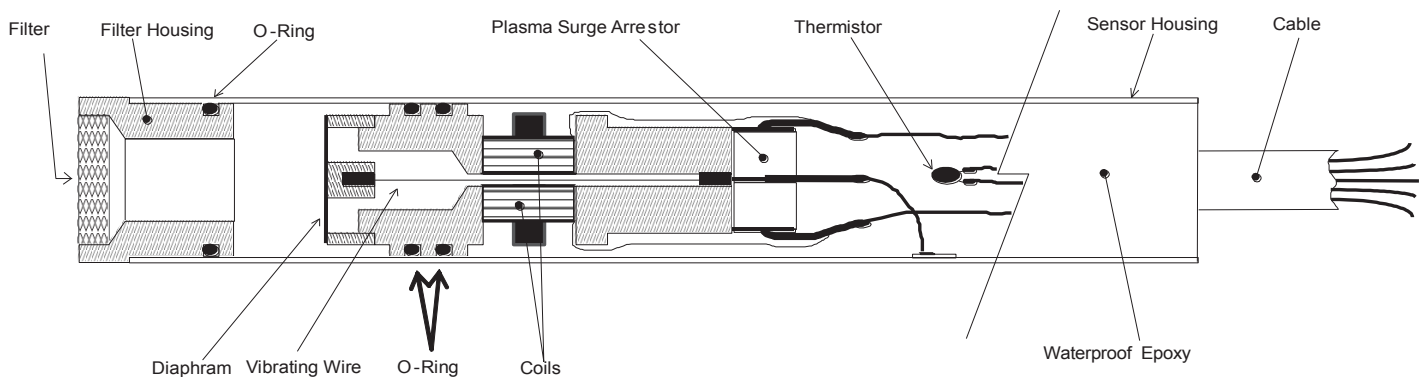
## Main Specifications

Model	CGEO-WP-XX-SS-T	CGEO-WP-XX-SS-T	CGEO-WP-XX-HT-T
Range (MPa)	0.07/0.17	0.35/0.5/0.7/1.0 /2.0/3.0/5.0	0.35/0.5/0.7/1.0 /2.0/3.0/5.0
Resolution		0.025% F.S.	
Accuracy		±0.1% F.S.	
Temperature range		-20 to +80°C	
Over-range capacity		150% F.S.	
Dimensions	Dia. 25mm	Dia. 19mm	Dia. 19mm



## Operation

The Vibrating Wire Piezometer is designed for the accurate measurement of pore water pressures in fully or partially saturated soil. The transducer uses a pressure sensitive diaphragm with a vibrating wire element attached to it. The diaphragm is welded to a capsule which is evacuated and hermetically sealed. Fluid pressures acting upon the outer face of the diaphragm cause deflections of the diaphragm and changes in tension and frequency of the vibrating wire. A cable connects the transducer to a read-out, terminal unit or data logger.



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