



Vibrating Wire Weir Monitor



DESCRIPTION

The Geomotion vibrating wire precision water level monitor utilises a vented vibrating wire force transducer in combination with a cylindrical weight suspended from it to monitor water levels.

The vibrating wire transducer is vented to atmosphere so that any atmospheric changes are automatically compensated.

The transducer and weight are contained within a PVC slotted pipe which can be located within the weir or tank as necessary and the vent tube is terminated within a moisture trap. Periodic change

of the desiccant is required.

The cylindrical weight is partially suspended in the water level being monitored and as the water level changes the force on the transducer by the cylinder alters which in turn alters the tension of the vibrating wire.

As with all vibrating wire sensors, the output is frequency and therefore not affected by changes of cable resistance and therefore extremely long cable lengths are possible.

FEATURES

- ✓ Accurate (0.1mm changes can be measured)
- ✓ High resolution
- ✓ Long-term stability
- ✓ Insensitive to long cable lengths
- ✓ High accuracy
- ✓ Integral thermistor
- ✓ Integral lightning protection
- ✓ Suitable for remote reading and data logging

APPLICATIONS

Precise water level measurement of:

- ✓ Weirs
- ✓ Streams
- ✓ Reservoirs
- ✓ Tanks

TECHNICAL SPECIFICATIONS

GENERAL

Operating temperature range	-20°C to +80°C
Standard ranges	150, 300, 500, 1500mm
Resolution	0.025% FS
Accuracy	±0.1% FS
Stability	±0.05% FS per annum
Cable	4 x 22 AWG (shielded with vent tube)
Cable Type	Type 920 - Vented multi-core with foil screen & drain wire; Type 900 - VW Sensor with Foil Screen & Drain Wire
Dimensions	110mm diameter x 650mm length

ORDERING INFORMATION

Range

Cable length

Special mounting brackets

READOUT

VW weir monitor may be read by the VWR-1 or any vibrating wire readout device and may be readily data logged using the GeoLogger G8 Plus or any other data logger with vibrating wire interface modules.

The vented cable can be terminated in a special junction box close to the weir monitor where it can be extended with Type 900 cable to a data logger or Remote Multiplexer.

