



VWP 3000

Standard construction with high & low air entry filters to measure groundwater elevations and pore pressures.

VWP 3100

Heavy duty body for direct burial in fills and dam embankments. Available with high & low air entry filters.

VWP 3200

Low pressure version to measure groundwater elevations and pore pressures. Available with high & low air entry filters.

VWP 3300

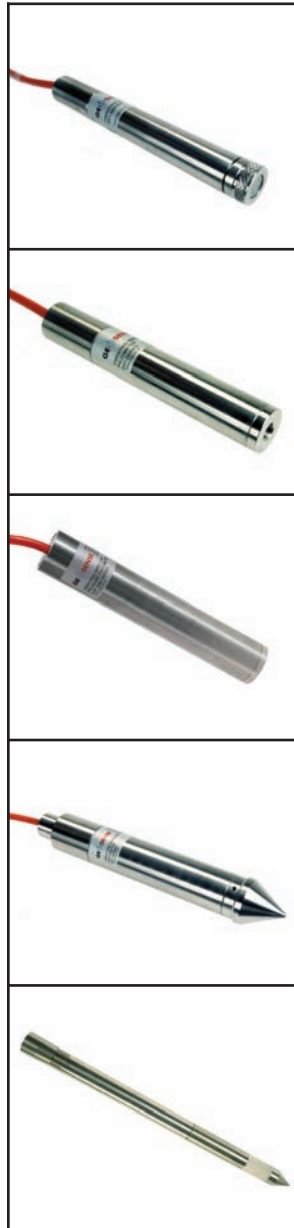
A low pressure vented version to compensate for barometric pressure changes. Available with high & low air entry filters.

VWP 3400

Heavy duty Drive-in Type 1 featuring inclined ports to minimise smearing affects.

VWP 3500

Slim line Drive-in Type 2 featuring large surface area porous filter.



GEOSENSE VWP- 3000 Series of Vibrating Wire piezometers use the well-proven method of converting fluid pressures on a sensitive diaphragm into a frequency signal.

Frequency signals are particularly suitable for the demanding environment of Civil Engineering applications, since the signals are capable of long transmission distances without degradation, tolerant of wet wiring conditions and resistant to external electrical noise.

Applications

- Pore pressure measurement in soils and rocks
- Fluid pressures in hydro-fracture and pump tests

Features

- Reliable long-term performance
- Rugged, suitable for demanding environments
- High accuracy
- Insensitive to long cable lengths.

Filter Options

- LAE (Low resistance to air entry)
50 μ 316 sintered stainless steel
- HAE (High resistance to air entry)
1 μ alumo silicate ceramic - 3 bar
2 μ alumo silicate ceramic - 1 bar



Electromagnetic compatibility according to EN 61326-1 and EN 61326-A1 directives for EMC emission and immunity

vw piezometers VWP-3000 series

Specifications

Type	Description	Pressure Range kPa	Over Range	Resolution	Accuracy	Non-Linearity	Temp Range	Thermal Effect	Diameter X Length	Weight
VWP-3000	Standard LAE	345, 518, 690, 1034, 2068, 3447, 5171, 6895 kPa	2 x rated pressure	0.025% FS	± 0.1% FS	<0.5% FS	-20 to + 80 °C	<0.05% FS/°C	20 x 140mm	210g
VWP-3001	Standard HAE	345, 518, 690, 1034, 2068, 3447, 5171, 6895 kPa	2 x rated pressure	0.025% FS	± 0.1% FS	<0.5% FS	-20 to + 80 °C	<0.05% FS/°C	20 x 140mm	210g
VWP-3100	Heavy Duty LAE	345, 518, 690, 1034, 2068, 3447, 5171, 6895 kPa	2 x rated pressure	0.025% FS	± 0.1% FS	<0.5% FS	-20 to + 80 °C	<0.05% FS/°C	25 x 151mm	450g
VWP-3101	Heavy Duty HAE	345, 518, 690, 1034, 2068, 3447, 5171, 6895 kPa	2 x rated pressure	0.025% FS	± 0.1% FS	<0.5% FS	-20 to + 80 °C	<0.05% FS/°C	25 x 151mm	450g
VWP-3200	Low Pressure LAE	70, 173 kPa	2 x rated pressure	0.025% FS	± 0.1% FS	<0.5% FS	-20 to + 80 °C	<0.05% FS/°C	25x 151mm	600g
VWP-3201	Low Pressure HAE	70, 173 kPa	2 x rated pressure	0.025% FS	± 0.1% FS	<0.5% FS	-20 to + 80 °C	<0.05% FS/°C	25x 151mm	600g
VWP-3300	Low Pressure Vented LAE	70, 173 kPa	2 x rated pressure	0.025% FS	± 0.1% FS	<0.5% FS	-20 to + 80 °C	<0.05% FS/°C	25 x 151mm	600g
VWP-3301	Low Pressure Vented HAE	70, 173 kPa	2 x rated pressure	0.025% FS	± 0.1% FS	<0.5% FS	-20 to + 80 °C	<0.05% FS/°C	25 x 151mm	600g
VWP-3400	Drive-in Type 1	345, 518, 690, 1034, 2068, 3447, 5171, 6895 kPa	2 x rated pressure	0.025% FS	± 0.1% FS	<0.5% FS	-20 to + 80 °C	<0.05% FS/°C	35x 218mm	1335g
VWP-3500	Drive-in Type 2	345, 518, 690, 1034, 2068, 3447, 5171, 6895 kPa	2 x rated pressure	0.025% FS	± 0.1% FS	<0.5% FS	-20 to + 80 °C	<0.05% FS/°C	33 x 470mm	2100g

Materials	Stainless Steel
Excitation	Pluck or swept frequency
Over voltage protection	90V gas plasma arrester
Thermistor	3k Ohms @ 25°C
Range	2200-3500 Hz
Nominal zero value	3130 Hz
Thermal effect	0.05% F.S./°C

Notes: * Non linearity - ± 0.1% FS option is available on request

Non-Linearity quoted is on the basis of a straight line relationship between applied pressure and frequency squared, calculated using least mean squares techniques.

Accuracy assumed relationship is normally acceptable for most purposes. In reality, however, the relationship is not strictly linear. We give precision calibration factors that allow for second order parameters inherent in the theory of operation of vibrating wire devices.

These additional calibration factors considerably enhance the stated accuracy.

Pressure Range: Other pressure ranges available on request. Specifications may be changed without prior notice.

GEOSENSE vibrating wire instruments can be read by RST Instruments' VW2106 vibrating wire readout device and may be readily data logged using Campbell Scientific data loggers with a vibrating wire interface module, or similar devices.

Ordering Information

Type
Pressure Range
Cable Length



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