DATASHEET

High Temperature Piezometer - VWPHT-3600 series

For extreme environments of temperature and pressure in geothermal heat and enhanced oil recovery systems including steam assisted gravity drainage (SAGD) and cyclic steam stimulation (CSS). Capable of monitoring temperatures up to 250°C and pressures up to 34.5 MPa.

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High Temperature Piezometer - VWPHT-3600 series

Overview

APPLICATIONS

- Geothermal heat recovery
- Enhanced oil recovery (EOR)
- In-situ heavy oil recovery systems
- Steam assisted gravity drainage (SAGD) systems

FEATURES

- Temperatures up to 250°C
- Pressures up to 34.5 MPa
- Internal high temperature thermistor
- Reliable long-term stability
- Suitable for the harshest of environments

The VWPHT-3600 series High Temperature Piezometers are suitable for the extreme environments of temperature and pressure found within applications such as geothermal heat and enhanced oil recovery systems including steam assisted gravity drainage (SAGD) and cyclic steam stimulation (CSS). They are capable of monitoring high temperatures up to 250°C and pressures up to 34.5 MPa.

They use the well-proven vibrating wire technology of converting fluid pressures onto a pressure sensitive diaphragm which when deflected causes a change in tension and the corresponding change of frequency of the wire. In addition, an internal high temperature thermistor allows the temperature at the piezometer location to be measured.

Manufactured from high temperature and corrosion-resistant materials throughout, together with a comprehensive temperature calibration, they provide high accuracy stable long-term data with no zero shift.

The specially-designed Tubular Encapsulated Cable (TEC) is both high temperature resistant and highly flexible for easy installation within boreholes or above ground.

Also available as a pressure transducer with a threaded connection in the base.

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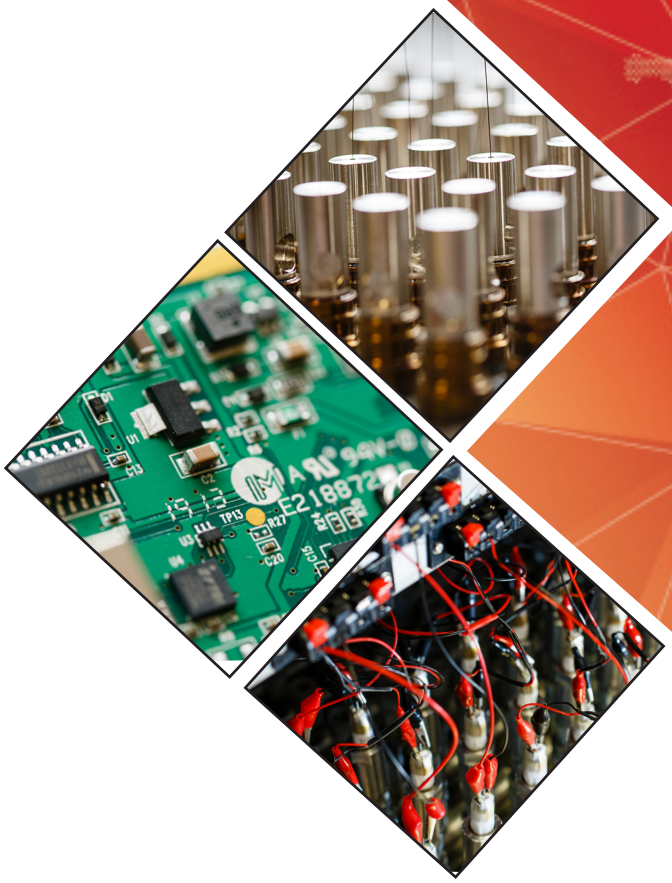
Specifications

SENSOR		
Pressure range MPa		2.1, 3.5, 5.2, 6.9, 10.4, 13.8, 20.7, 34.5
Calibration range	VWPHT -3600 VWPHT -3610	+20 to + 200°C +20 to + 250°C
Operating range	VWPHT -3600 VWPHT -3610	0 to + 200°C 0 to + 250°C
Thermistor Type	VWPHT -3600 VWPHT -3610	3K 10K
Pressure over range		1.5 x pressure
Accuracy		±0.1% FS[1]
Resolution		0.025% FS
Linearity		<0.5% FS
Thermal effect		0.02% FS/°C
Piezometer filter		LAE (Low resistance to air entry) 50µ 316 sintered stainless steel
Transducer connection		¼" BSPF
CABLE		
Jacket		Incoloy 825[2]
Conductors		4 x 24 AWG stranded, tinned copper
Insulation		PFA
Diameter		4mm

[1] Based on third order polynomial regression
[2] FEP jacket available on request



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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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