BAT®-system

Ideal for groundwater monitoring

With the BAT®-system you can measure accurately and efficiently the pore pressure in the soil. The measurement results are digitally stored in the internal memory of the BAT®-sensor and later on downloaded to a PC for further analysis. Thus you can keep an accurate track of the fluctuations in pore pressure. The BAT®-system also enables direct read-out of pore pressures. With an additional set the BAT®-system offers the possibility to determine the permeability of the soil and/or to collect accurate groundwater samples.

With the IS-field unit you can direct-read the current pore pressure, download the stored measurement results and set up the BAT®-sensor.

Retrievable

The BAT®-system consists of a filter tip and a sensor. The filter tip is pressed down to the desired depth using a standard gas pipe. Through the hollow gas pipe the BAT®-sensor can easily be lowered down. As soon as the BAT®-sensor has contacted the filter tip the pore pressure measurement will start. After finishing the measurement you can easily retrieve the sensor and use it again at another project.

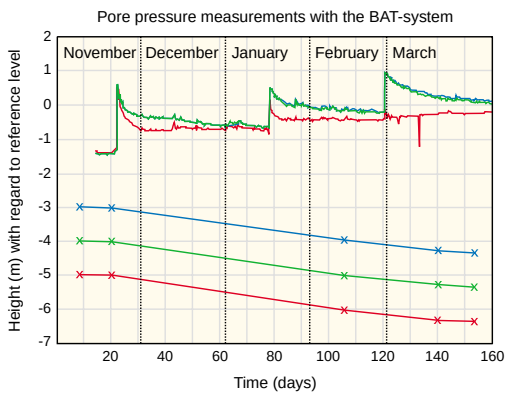
Compact and accurate

With its diameter of 24 mm the system is very compact. It is fully digital making use of the Profound IS-technology.
Consequently the BAT®-sensor with the integrated data logger can store the exact measurement values during a period of 8 months.
With the sensor you can also measure temperature.

Reliable

The BAT®-system measures the absolute pressure, which guarantees stability especially during long-term measurements.

Besides you can disconnect the sensor at any time to check its proper function. It is also possible to determine the exact depth of the filter tip at any time. This is of pre-eminent importance during the consolidation of cohesive soils.



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User-friendliness first

In the field the BAT®-system as a data logger can be read out and instructed to start measurements in various ways. You can either make use of a Windows laptop equipped with IS-software and an IS-RS232 converter or of an advanced hand-held computer: the IS-field unit.

Besides you can integrate the BAT®-system in a digital Profound IS-network, which enables you to follow the progress of your project at a distance. Through a GSM-link you can download the measurement results where and when you like, enabling you to analyse the measurement data on your own PC.

For further information:

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Technical specifications

BAT®-sensor

Pressure range	:	0...4 bar (absolute)
Burst pressure	:	16 bar
Memory	:	≈ 3,500 measurements
Material	:	Stainless steel 304
Weight and dimensions	:	224 gram, Ø 24 mm, length 150 mm
Standard cable length	:	10 m or 20 m
Measurement duration*	:	4 months (1x Alkaline D-size battery) 8 months (1x Lithium D-size battery)

(if connected to separate battery holder)*

BAT®-filter tip

Pressure range	:	0...16 bar (absolute) 0...160 m H_2O (absolute)
Penetration resistance	:	Max. ≈ 25 Mpa
Number of couplings	:	» 500
Max. load	:	» 20 kN
Correction height (BAT®-sensor)	:	215 mm
Material filter	:	Porous HDPE
Material tip	:	Thermoplastic material (POM)
Weight and dimensions	:	122 gram, Ø 31 mm, length 209 mm
Accessories	:	Starterskit (basic/advanced) BAT®-permeability set IS-battery holder IS-data logger software IS-process software IS-RS232 converter IS-field unit IS-network software IS-GSM module