



Typical Permeability Testing System

Permeability Testing System

Related Standards

British BS1377-6 ; EN ISO 17892-11*

American ASTM D5084-16**

The permeability characteristics of soil (Hydraulic Conductivity) are necessary for construction projects where drainage is an important feature. Permeability testing is carried out when designing suitable land-fill sites, designing earth dams and sheet-pile walls or feasibility studies for groundwater lowering (flooding).

VJ Tech manufactures permeability cells for non-contaminated samples up to 100 mm diameter. Different sample sizes can also be tested using a VJ Tech Triaxial cell or a Rowe Cell, with different APC capacities if required (see respective datasheets for other Cell sizes).

The Clisp Studio csPERM software enables easy test setup and control of Tests, with live tabular and graphical display of measured and calculated parameters.

Ordering Information

VJT-PERM-100A Permeability Cell (1 Mpa) (100 mm dia.)

VJT2266-P Pro Hydraulic Automatic Pressure Controller (1000 kPa) (x3)

VJT0250-G 10 bar Pressure Transducer

VJT0280 De-Airing block with valve for pressure transducer

VJT0540-DP APC water distribution panel (4-way)

VJT0280 SOL Automatic Solenoid Valve (x2)

VJT-csPERM Clisp Studio Permeability Software

Other Cells & APCs Available

Rowe, Triaxial Cells and other capacity APCs See separate datasheets for other Cell sizes & APC capacities

Features

- Ethernet or USB Interface for computer control
- Permeability cell
- 3 Hydraulic Automatic Pressure Controllers for Back, Cell and Drain Pressure control and measurement
- Back and Drain APCs also control and measure volume input
- Automatic Solenoid Valves (for automation of Back and Drain Valves - optional)
- Pore Water Pressure transducer for Drain Pressure measurement
- Clisp Studio csPERM software for easy test setup and control

csPERM Features

- Easy Test setup and control
- User defined Saturation cycles (ramp and check)
- User defined Consolidation cycles
- User defined permeability conditions and effective pressure sequences
- Live data Views, Graphs and Tables during test
- Saturation Results (Volume Change, B-value)
- Consolidation Results (Volume Change, PWP Dissipation, PWP Change)
- Permeability Results (Back Pressure Volume Change, Drain Pressure Volume Change, Head Loss Correction, Permeability)

* this system does not support the measurement of sample dimension changes during the test