



Your supplier of high pressure laboratory instruments

LP-700 STEADY STATE LIQUID PERMEAMETER

ISRM suggested method



Description

The LP-700 determines rock sample permeability using the steady-state method in accordance with Darcy's Law. The unit includes all components necessary to carry out a permeability test. It is equipped with two pressure transducers to measure upstream and downstream pressures, two differential pressure transducers to measure the pressure drop across the sample: a low-range sensor for high-permeability specimens and a high-range sensor for low-permeability specimens. A controlled flow of pore fluid is injected through the core using a pore-pressure pump to determine permeability. The sample is enclosed in a jacket, placed inside an overburden cell, and subjected to the required confining pressure. Fluid is introduced at the inlet face, while a back-pressure regulator maintains a constant outlet pressure to ensure stable test conditions. The BPR features its own pressure-setting system, allowing the pore pressure to be adjusted to the desired value.

Specifications

Permeability range	0.01 millidarcy to 1 darcy
Maximum confining pressure	70 Mpa (10,000psi)
Maximum pore pressure	70 Mpa (10,000psi)
Specimen diameter	1 inch, 1.5 inches (other upon request)
Specimen length	twice the diameter
Fluid	Water, oil
Air requirement	100 psi
Power	110-220 VAC , 50/60 Hz

Benefits

* **High accuracy:** Dual pressure transducers ensure precise measurements over a wide permeability range.

* **Robust design:** Enclosed cabinet provide durability and safe operation under high pressure.

* **Automated control:** Real-time data acquisition and automatic permeability calculation reduce operator error.