

## اندازه‌گیری تراوایی نمونه با استفاده از گاز Gas Permeameter (MP-04)



Apex technologies co., provides a modern instruction focused measuring instrument that allows the operator to go through the experimental process in structured transparent or dark steps respect to the permeability measurement equipment models selected. Samples are hand loaded and experimental operating conditions are established manually, thus re-enforcing the previously learned theory. The instrument is based on Darcy's law allowing the operator to make permeability measurements due to gas and even due to liquid for some models on cylindrical or disk shape samples. Using any type of this equipment construct by Apex technologies co., make it possible to measure the permeability of sample in wide range of 0.01 to 5000 mD based on the high accurate instruments and operating procedure including several essential steps. Besides, there is model including metering valves enabling the operator to

investigate the Klingenberg effect and measuring the permeability of sample due to liquid without injection of any liquid. The instrument is forgiving in its operation and requires neither mercury nor significantly elevated confining pressures to operate, enhancing user safety. The dual injection system allows for the unsteady state displacement of one fluid with another at pressures up to 1500 psi.

***Technical Specifications:***

- ✓ Flow meter  $\times 2$  (one of them measure flow rate up to 50 cc/min and the other measure the flow rate up to 500 cc/min)
- ✓ Wetted Parts Material: S.S.316L (Except for Automatic Valves)
- ✓ Sample Diameter: 1 or 1.5" (Others Available Upon Request)
- ✓ Automatic Data Acquisition System and software
- ✓ Sample length: based on the client order up to 4"
- ✓ Pressure Transmitters Accuracy: 0.05 % F.S.
- ✓ Permeability range: 0.01-3000 mD
- ✓ Inlet Pressure Gauge  $\times 1$  (10 bar)
- ✓ Main Cell: Easy Load Type
- ✓ Pressure Transmitters  $\times 1$
- ✓ Max. Pressure: 8 bar
- ✓ Solenoid valves
- ✓ P.C. Port: USB