

Low Permeability Measurement Apparatus

The Grace Instrument M9190 Nanodarcy Permeameter is designed to measure the low and ultra low permeability of tight plug sized core samples from shale and other tight gas reservoirs. It uses a pulse decay procedure and high pressure nitrogen to measure permeability. Confining pressure system is included for simulating overburden pressure at reservoir condition.

The M9190 Nanodarcy Permeameter can operate at pore pressure up to 2,500 psi and confining pressure up to 10,000 psi, pulse range between 5 to 200 psi. The convection oven is used to provide a constant temperature during testing.



Simple Operation and Dependable Measurement

The M9190 Nano-Darcy Permeameter measure the core permeability at a set pore pressure, then propagates a differential pressure pulse through the sample, M9190 software will record upstream pressure, downstream pressure, differential pressure across the sample, and time. The recorded data can then be exported in .CSV format into a spreadsheet file.

Operational Features

- *Mercury-free design*
- *Compatibility with Sour Gas*
- *Digital Display and Accurate Measurement of Gas Volume*
- *Three-volume Function Accomplished by Two-chamber Design*

Specifications:

Working Pressure:	2,500 psi
Confining Pressure:	10,000 psi
Temperature Range:	Amb. to 175 °C, ± 0.5 °C
Permeability Range:	10 nanodarcy to 0.5 millidarcy
Core Length:	0.125" to 3.0"
Core OD:	1", 1.5"
Pulse Range:	5 - 200 psi