

Quick-Cooling HPHT Filtration Measurement of Drilling Fluids

The M4091 is an alternate configuration of the M4090 that includes a fan that blows into the cell to quickly cool it down. The Grace Instrument M4091 Quick-Cooling HPHT Filter Press 175 mL measures filtration properties of a drilling fluid under high temperatures and pressures. The M4091 simulates various downhole conditions using independent or dual opening cells that allow for the use of filter paper, mesh screen, and ceramic discs. The M4091 units can be operated individually or jointly, and if one unit is inoperable, other units can still test without being affected. They are compact and can operate next to each other, saving desk space.

Simple Design with High-Quality Features

The M4091 HPHT Filter Press features primary and back regulators, a nitrogen pressure source, and a pressure test cell. Its height-adjustable heating jacket makes cell loading easy. The temperature controller allows for control of the temperature. The M4091 is equipped with heavy-duty components that are able to withstand high pressure and high temperature, preventing hazardous conditions for operators during testing operations. The Grace Instrument M4095 Filter Press Threaded Cell is meant to accompany the M4091 unit and can be purchased separately.



Features

- Includes a fan that blows into the cell to quickly cool it down.
- Compatible with the Grace Instrument M4095 Filter Press Threaded Cell.
- Adjustable height – you can lower the heat jacket for easy cell loading and removal.
- It can use a threaded or set screw cell that is single or double-ended. Cell sold separately.
- Safety mechanism enabled for pressurized cells.
- Double opening cells accept various filter media.
- Temperature controller for easy temperature control.
- Regulators and gauges are easy to replace.
- Easy to pressurize by avoiding heavy regulator manifold.
- Able to stack multiple units.

Specifications

Dimensions: 35" height x 9.5" width x 21" depth
Weight: 50 lbs
Cell Size Volume: 175 ml
Maximum Temperature: 500°F (260°C)
Rated Pressure: 2,000 PSI
Maximum Back Pressure: 250 PSI (standard) or 750 PSI (high pressure option)
Back Pressure Receiver Volume: 100 ml
Filtering Area: 3.5 in²
Pressure Source: Nitrogen
Power Requirement: 115V / 230 V
Heater: 800 W
Compatible Cell(s): regular set screw cell (Grace cell max rating is 1,800 PSI) and threaded cell (Grace cell max rating is 2,000 PSI)