



Core Lab

VCL Series of Visual Cells Datasheet

Fluid Characteristics



VCL Series of Visual Cells



The VCL series of visual cells are opposed windowed visual cells. The viewing dimensions are approximately 1/8" by 3-¾". These cells are generally used for PVT studies. The viewable volume will generally range from 20-200 cc. Cells are available with pressure ranges from 5,000 to 15,000 psi and temperatures to 400°F (200°C).

The cell is provided with two (2) heat treated windows which are approximately 1" thick. The windows are held in place by a high strength plate which has been machined flat to insure proper stress loading of the window. A light source can be located on the far side of the cell and then the phases within the cell can be easily observed through the ½" wide by nearly 4" long viewing slot.

To observe the phases, one can look directly into the cell, or indirectly with the use of a mirror. A camera system can also be utilized. Camera systems are available with direct storage of the image into the computer for data storage and recording.

The cell is provided with ports at the top and bottom of the cell. Additional ports can be added along the length of the cell as requested by the customer. Additional ports can be utilized for sampling or for the insertion of thermocouples. The cell is also provided with machined ports for mounting the cell to a test bench or stand. The machined ports can be provided for standard fitting connections from most fitting manufacturers, such as Autoclave, HIP, or Swagelok.