Accessories for POROLUX™

All our POROLUX™ equipments come standard equipped with all necessary hard- and software required for operation. They only need to be connected to compressed gas and power.

The POROLUX[™] has multiple sample holders, pressure and flow sensors for an optimum performance over its full pressure and pore size range. There will be no need to later on add extra pressure sensors and/or flow meters. Thus expensive upgrades are avoided. For the POROLUX™ there are additional accessories available giving the user access to some advanced porometry options.

Liquid permeability

The flow of liquid through a membrane of filter at a predefined pressure can be measured in order to know the liquid permeability. The test can be performed using the gas permeability mode of the POROLUX[™] with the liquid permeability option accessory.

A solvent tank is placed in between the pressure control and the sample. When the tank is pressurized to a certain pressure, the solvent that will flow through the sample can be related to the amount of gas flowing to the solvent tank. The amount of filtered liquid can be collected on a balance placed underneath the sample holder. Thus the filtered volume can also be monitored as a function of time. This feature permits using both aqueous ad organic solvents.



Hydrohead kit

The measurement is carried out by using the POROLUXTM 1000 unique bubble-point measuring mode. Water is added on top of the sample and the instrument performs a FBP test, in which the break-through pressure of a water column on the sample is measured.

CFP7

Once the sample is in the sample holder, a small volume of water is added above the sample. The pressure on the sample is slowly increased by a small, constant flow of gas and the amount of water is collected on a balance. At the moment the water is pushed through the sample there will be a change in the linear pressure increase. The hydrohead pressure is defined and the pressure at which a steady volume flow of water is obtained (ISO 811-1981).

Universal Sample holder

- Universal sample holder with inserts for samples of 40, 30, 20, 10, 5 mm.
- Compatible with samples of large thickness (up to 1 cm).
- Easy connection through the quick connector as for the standard sample holders.
- Easy cleaning: it stands aside the instrument. This facilitates the use of dirty water, highly viscous oils and such as wetting liquids for actual filter testing.
- Maximum pressure: 10 bar.
- Available on all systems.





Specially designed large sample holders

Samples with low pore densities can benefit from the increase in size of the sample holder in order to obtain stable and readable gas flows.

Besides the use standard sample holders with a diameter of 13, 25 and 47 mm, POROMETER can create costumer specific designs for special samples: large cylinders, assembled filter-setups, etc.

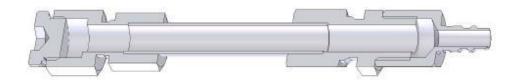


CFP8

Hollow fibre and tubes sample holder

The characterisation of the pore distribution of hollow fibres and tubes requires relatively high pressures and a limiting factor is often the burst pressure of the hollow fibre. Therefore, safety is often as concern. Our engineers have developed a stainless steel sample holder in which one or more hollow fibres can easily be glued. With this sample holder very reproducible results can be obtained.

- The pressure can be applied from the outside to the inside or vice versa
- Maximum pressure: 35 bar
- Includes replaceable O-rings
- Resistant to silicone and epoxy glues
- · Easy cleaning of the assembly



Compression porometry

Accessory to test the pore structure under compressive strength. The sample is placed in a special sample holder placed on a tensile/compressive bench top test frame. Applicable force range 0.05 to 5000 N. Displacement resolution $5\mu m$.

Extended temperature module

Accessory for measuring samples at elevated temperatures. The environmental chamber provides a means for performing tests within a temperature range from RT to 220 °C. An internal fan provides efficient air circulation which minimizes temperature gradients. A digital controller ensures accurate temperature control. Contact us for sub-zero temperature testing. Can be combined with compression porometry.

Comfort kit

- It includes a set of LED lights and a magnifying glass.
- Useful to check if the sample has been properly wetted and/or if the sample has not been damaged as a result of high pressure and/or high flow during the analysis.
- Available for the POROLUX[™] 1000.



CFP9