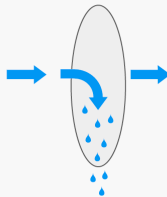


Membrane Applications

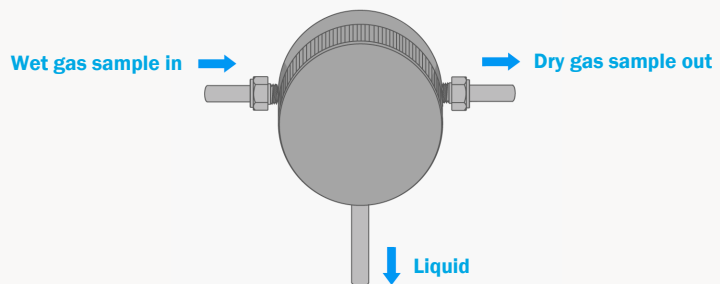
PTFE Membrane Housings

Membrane housings use a porous PTFE membrane which is supported by a sintered porous stainless steel disc on the outlet side. The wet sample gas enters through the inlet port and because the membrane will only allow molecules of gas or vapour to pass through to the outlet all liquid is stopped. Any liquid in the sample will flow to the drain port. This port can also be used as a bypass function for the main flow.



Microscopic pores in the membrane allow the gas to flow through easily, but even the smallest liquid aerosols are prevented from passing through. The high surface tension of the liquid molecules cause them to be formed tightly together making them too large to fit through the pores of the membrane.

Various housing styles are available and the housing designs allow a quick change of the membrane as all the line connections are arranged in the body of the housing. The threaded cap means no tools are required for access.



Combination housings have both a filter element and a PTFE membrane in a single unit. The filter element can be used to coalesce as a first stage to remove the bulk of the liquid prior to the membrane. It can also be used as a pre-filter to remove particulates and extend the service life of the membrane.

