Dew point sampling block

Dew point samplers are used to guard production lines which produce products worth a multiple of the dew point sensors themselves (think: millions of euros). Production processes that run with a faulty, inaccurate or polluted dew point sensor or with a malfunctioning dryer, run a high risk of costly production losses.

Sampling blocks are manufactured from a single, machined stainless steel block. This reduces the number of pipe joints required to get a sample to the sensor under test and also reduces internal volume and surface area. As a result, the sampling system has a faster response and higher integrity than similar systems built from discreet components. The integrated particulate filter (filter models only) provides further protection against solid contamination.

The Dew Point Sampling Block comprises the following key components:

- Connection Ports
- Filter
- Flow Control Valve

Connection Ports

The entry and exit pipe connections are of a quick connect, push fit type and can accept plastic (P.T.F.E., F.E.P.) 6 mm O/D pipe. A 0.5 metre length of P.T.F.E. is supplied which should be used as a pigtail from the outlet port when measuring in either atmospheric or pressure mode.

Filter

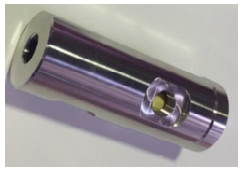
A 99.5 % 0.3 micron particulate filter cartridge is fitted downstream of the gas inlet port, accessible via a filter cap with O-ring seal. Other filter cartridge ratings can be supplied to customer order.

Flow Control Valve

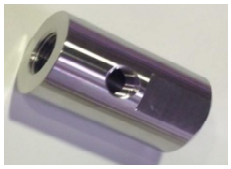
A flow control valve can be supplied (option), factory fitted to the outlet port. This valve is designed to set the optimum gas flow of between 1 and 5 litres per minute through the sensor sampling block.

Sample block with filter

Dew point sensor	Order code, sensor	Sampler with filter	Sampler without filter
-40..+60 °C, BSP	VPA.8000.1013	VPA.8000.1450	VPA.8000.1400
-60..+40 °C, BSP	VPA.8000.1014	VPA.8000.1450	VPA.8000.1400
-40..+60 °C, NPT	VPA.8000.1016	VPA.8000.1450	VPA.8000.1400
-60..+40 °C, NPT	VPA.8000.1017	VPA.8000.1450	VPA.8000.1400
-100..+20 °C, UNF	VPA.8000.1003	VPA.8000.1550	VPA.8000.1500



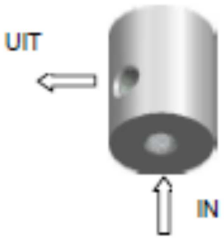
With filter



Without filter

How to connect

IN	=	Gas input port
OUT	=	gas output port



To regulate the flow at atmospheric pressure, use a needle valve between the process gas and the sample block.

Example set up dew point measurement under process pressure

To regulate the flow under process pressure, use a needle valve behind the sample block.