

Easidew Sampler (HP) Self-Contained Sampling System User's Manual



97109 Issue 3.1 October 2013 The Easidew Sampler is a modular low-cost, self-contained, filtration block and flow control arrangement which is suitable for any Michell impedance dew-point transmitter with 5/8" - 18 UNF process connection size, and is able to perform dew-point measurements at 200 barg (2900 psig).

Connection Ports

The INLET and OUTLET port connections are Swagelok® 6mm O/D tube fittings.

Filter

A 99.5% 0.3 μ m particulate filter cartridge is fitted as standard and is accessed via the filter cap. The condition of the filter should be checked at regular intervals to ensure optimum performance. To inspect or change the contaminated filter, remove the filter cap using the hexagonal nut (A/F=19mm). Replacement cartridges can be ordered from Michell Instruments (Part No. SSF-PF-10PK). The filter cap is sealed with an O-ring seated in the main body of the block. **NOTE: When inspecting or changing the filter, ensure the O-ring is correctly seated when re-tightening the filter cap.**

Flow Control Valve

A flow control valve is supplied factory-fitted to the OUTLET port. This valve is designed to set the optimum gas flow of between 1 to 5 NI/min (2.2 to 10.6 scfh) through the block.

NOTE: The flow control valve should not be used as a flow shut-off valve.

System Pressure Dew-Point Measurements

The Easidew Sampler system is factory-assembled to make pressure dew-point measurements. This is achieved by controlling the gas flow at the OUTLET port. The maximum operating pressure for the Easidew Sampler system is 200 barg (2900 psig).

Atmospheric Pressure Dew-Point Measurements

If required, the block can be easily reconfigured to make atmospheric dew-point measurements by installing the flow control valve in the INLET port. Simply swap positions of the flow control valve and the gas pipe connection coupling fitted at the inlet port. When reconfiguring the Easidew Sampler ensure that the system is leak tight before commencing measurements.

Mounting

The mounting of the Easidew Sampler system is not position critical. A mounting bracket is factory-fitted. This bracket is easily removed and repositioned to provide a number of mounting options.

Alternatively it is possible to mount the Easidew Sampler system without the bracket by using the 2, M6 x 5mm deep mounting fixings, pitch at 20mm, which are machined directly into the block.



System pressure: 200 barg (2900 psig)

Dew-Point Measurements

(Transmitter shown for illustration purpose only)



Maximum operating pressure 200 barg (2900 psig)

It is important that the gas fittings are correctly tightened before use.

Failure to do so will affect the pressure rating.



Liquid Contamination

The Easidew Sampler does not provide protection from liquid contamination. If there is a possibility of liquid in the gas sample, additional filtration should be fitted before the Easidew Sampler.

Technical Specifications

Operating Specifications	
Operating Temperature	As per transmitter installed
Operating Pressure	200 barg (2900 psig)
Flow Rate	1 to 5 NI/min (2.2 to 10.6 scfh)
Mechanical Specifications	
Housing Material	316 stainless steel
Dimensions	95 x 194 x 172mm (3.7 x 7.6 x 6.7") (w x d x h)
Filter (inside sampler)	Particulate - 99.5% removal of 0.3µm
Process Connection	Transmitter 5/8" - 18 UNF Gas inlet/outlet connections via 6mm stainless steel Swagelok® fittings
Weight	1.1kg (2.42lb) (1.3kg (2.9lb) when Easidew sensor fitted)
Interchangeability	Fully interchangeable components

Customer Service Contact Details

If, after reading this manual, there are any questions about the product or how to install and operate it, please contact a Michell representative.

Refer to www.michell.com for details of Michell Instruments' worldwide offices contact information.