



Easidew

Sampler

From the Impedance Range

A low cost self-contained sampling system, with filtration and flow control, for measurement of either pressure or atmospheric dew-points.



*Easidew
Sampler*

Features

- No configuration required
- Monolithic design improves response speed
- Integrated particulate filter
- Cost effective sampling
- No other sample conditioning components required
- Measurement at pressures up to 1MPa, 10 barg (high pressure option available)

Background

The Easidew Sampler is a general purpose sampling system that allows easy measurement of the dew point in many compressed air and industrial gas applications. The Easidew Sampler provides all the necessary components to allow a sample of gas under test to be conditioned for measurement either at atmospheric or full line pressure; the two most commonly demanded sampling conditions. Easidew Sampler provides flow and pressure regulation as well as an in-line particulate filter, as well as housing the sensor, all in a single monolithic block assembly. The system is provided with a multi-directional mounting bracket for easy mounting on a panel, post or pipe brace.

Fast Response and High Integrity

Easidew Sampler is 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 provides further protection against solid contamination.

System Description

Easidew Sampler comprises the following key components:

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.) 6mm O/D pipe. A 0.5 metre length of P.T.F.E. is supplied which should be used as a pig-tail from the OUTLET port, whether measuring in either the atmospheric or pressure mode.

Filter

A 99.5% 0.3micron 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 is supplied factory fitted to the OUTLET port. This valve is designed to set the optimum gas flow of between 1and 5 litres per minute through the sensor sampling block.



The Dew Point Specialists



Pressure Dew-point measurements

The Easidew Sampler is factory assembled to make dew point measurements at full line pressure. This is achieved by controlling the gas flow at the OUTLET port. The maximum operating pressure for the Easidew Sampler is 10 barg.

If desired the block can be easily reconfigured to make atmospheric dew-point measurements by transferring the flow control valve to the INLET port. Simply swap positions of the flow control valve and the gas pipe connection coupling fitted at the inlet port. In this configuration, the flow valve regulates the gas pressure down to atmospheric before it reaches the sensor.

Mounting

The mounting of the Easidew Sampler is non-positional critical. A mounting bracket is factory fitted. This bracket is easily removed and repositioned to provide a combination of mounting profiles. Alternatively the user may wish to directly mount the Easidew Sampler without the use of the bracket; for this purpose two M6 x 5mm deep mounting fixings, pitch at 20mm, are machined directly into the block.

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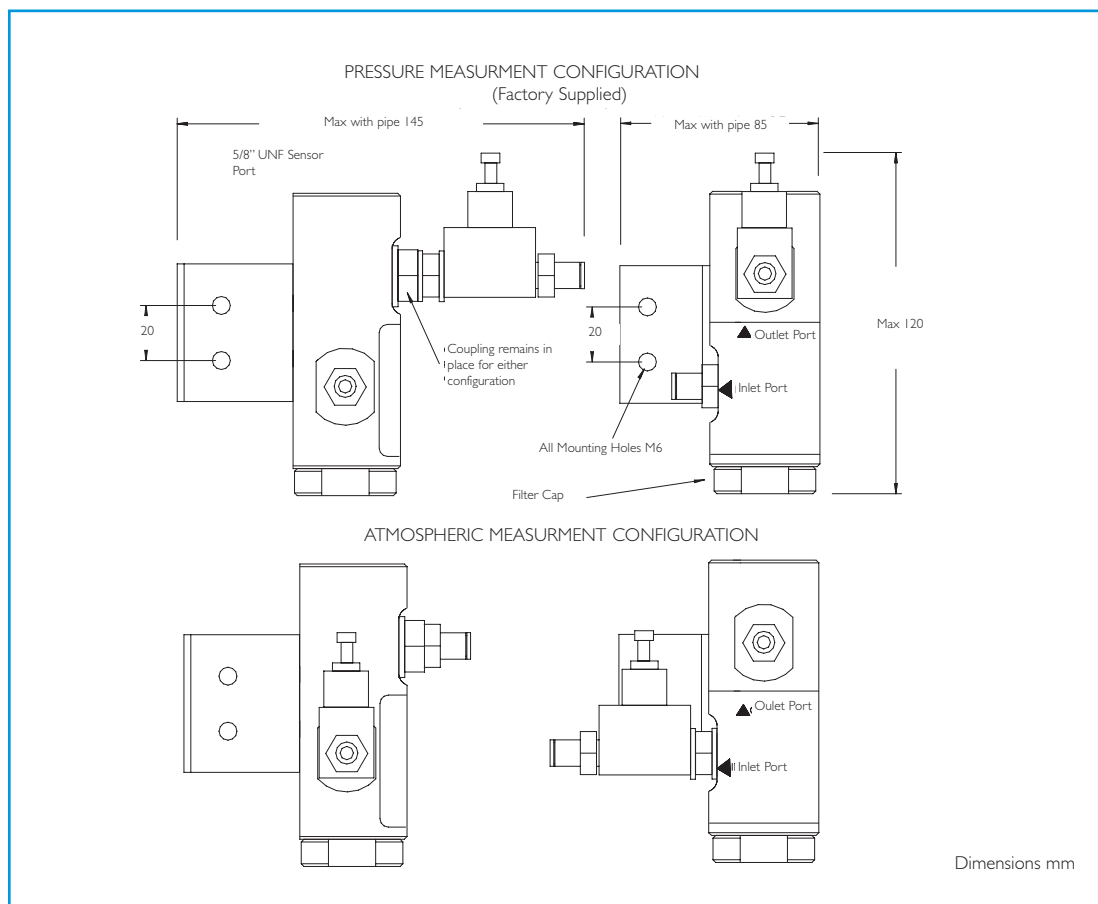
Technical Specifications

<i>Gas Flow rate</i>	1-5 N/min-1
<i>Operating Pressure</i>	1 MPa (145psi)
<i>Particulate Filter</i>	99.5% removal of 0.3 microns
<i>Environmental</i>	IP66 (NEMA 4X)
<i>Operating temperature</i>	-40°C to +60°C (or as determined by sensor specification).
<i>Storage temperature</i>	-40°C to +70°C, 0-95%RH Non-condensing
<i>Weight</i>	1.1Kg. (1.3 Kg when sensor fitted)
<i>Vacuum Rating</i>	Not Vacuum rated with standard push fitting
<i>Material</i>	Block & Cap :316 Stainless Steel Flow control block: Aluminium Couplings: Nickel plated Brass
<i>Gas Connections</i>	Quick Connect fittings for 6mm O/D plastic pipe (PTFE or FEP recommended)
<i>Sample tube</i>	Supplied with 0.5 metre pig-tail vent pipe, to eliminate back-diffusion
<i>Sensor Port</i>	5/8" UNF to support all Michell Impedance sensors

OPTIONS AND ACCESSORIES

<i>Sampling tube</i>	6mm O/D thick wall PTFE sampling tube is available to customer specific length
<i>Spare filter cartridges</i>	Available in packs of ten cartridges, 99.95% retention at 0.3 micron
<i>High pressure version</i>	A high pressure configuration with 6mm O/D compression fittings and high pressure rated flow valve is available to customer order
<i>Flow meter</i>	1 to 5 litre per minute at atmospheric pressure, to be fitted at system outlet

Dimensions



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Easidew Sampler - Ref: ES-05-01



Q6284 (UK)



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