

VE Analyzer Interface Module

VE AIM

DESCRIPTION

The VE AIM panel is designed to work in perfect harmony with the VE series of natural gas sampling probes and associated equipment – VE Technology®.

The function of the VE AIM panel is to precisely control the pressure of the gas sample and to monitor the pressure and flow of the gas sample local to the analyzer. It is designed to work with all VE Conditioning solutions.

The panel contains a full PED (and ASME for 3 Bar and above) approved safety relief valve to protect downstream equipment from over-pressurization and includes an integrated backflush port. All control, monitoring and safety functions “sit” outside the “live” sample pathway to the analyzer maintaining the precise and extremely fast response function of VE Technology. As with all VE Technology equipment, the sample pathway has electropolished internals to maintain the sample integrity and rapid response.

The VE AIM panel is to be mounted adjacent to the analyzer.



Typical AIM Panel Layout

NOTE: The VE AIM is also available as a ‘Mini AIM’; providing a much more compact solution, with only the essential functionality; precisely regulating the pressure and flow to the analyzer, as well as integrating a safety relief valve; the mini AIM omits the pressure transducer, optional high and low flow alarms and the redundant valve arrangement. Please enquire for more information.

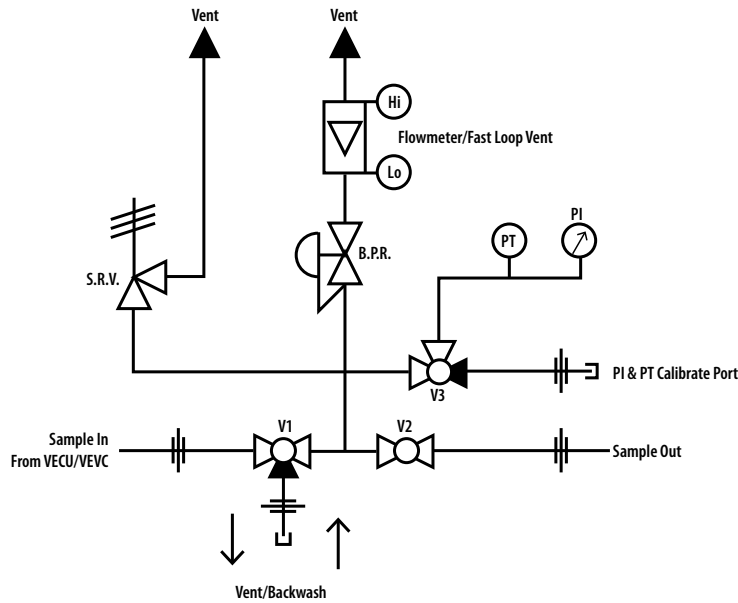
BENEFITS

- Simple and easy to use; allowing the customer to monitor and control the pressure and flow rate in their system with minimal training.
- The VE Analyzer Interface Module falls outside the parameter limits mentioned in the PED EU Directive 97/23/EC1 and therefore requires no further assessment or work, beyond Standard Engineering Practice, to demonstrate conformance to that standard. This can only be achieved by the use of small bore tubing.
- The AIM provides all the flow control needed. Accurately regulating and monitoring flow rates as small as <math><0.01\text{L}/\text{min}</math>. The accurate low flow rate, along with a fast response time, ensures that it integrates perfectly with VE Technology sampling.
- Designed to work with all available types of gas analyzers

VE Analyzer Interface Module

VE AIM

SCHEMATIC



SPECIFICATIONS

Dimensions	Typically: Height – 385mm Width x 355mm Depth x 165mm - subject to analyzer requirements
Weight	Typically 7 kg (16 lb) subject to analyzer requirements
Temperature Range	Suitable for use in 0 °C to + 50 °C (32 °F to +122 °F) – please note flowmeter is calibrated at 20 °C as standard. Other options are available
Connections	Flow rates – high/low flow alarm (optional), supplied with flying lead (volt free contacts). Pressure – pressure transducer, supplied with flying leads to suit (4-20mA). Inlet/outlet – 1/8" sample inlet/outlet
Materials	Wetted – 316L Stainless Steel (SilcoNert™ coated/NACE approved available) Panel – 316 Stainless Steel Sampling tube – 1/8" OD x 0.020" W.T. (Approximately 2mm ID) Stainless steel tube ASTM A269 316L, electropolished as standard (SilcoNert™ coated/NACE approved available)
Certification	CE II 3G b IIA T6 Material certificates for the pressure retaining parts are available to BS EN 10204.31B by request.
Safety	Testing – Assembly fully pressure tested prior to shipping S.R.V – PED approved safety relief valve (ASME approved 3 barg and above). Pressure transmitter – Intrinsically safe with angular connector (DIN 175301-803 A), alternatives available by request. Optional high/low flow alarm – Simple reed switch.
Installation and Mounting	User instructions - Please see IOM 002 for installation, operation, maintenance and removal instructions Installation – for mounting adjacent to customer analyzer as part of VE Technology sample system