VE Fixed Sampling Probe
Installation and Operation Instruction

Installation, Operation & Maintenance – Fixed Probe

General

All VE probes are individually marked with a serial number of format; **VE** ****, and this serial number is traceable to all relevant documentation. The serial number can be found on the connecting flange.

All ***"standard"*** probes are designed for a maximum pipeline pressure of 99.3 Barg (1440 PSIG) and a maximum pipeline gas velocity of 25 metres per second (80 fps) and for use on pipelines with a maximum diameter of 1200mm (48 inches). Do not attempt to use a standard probe on any application where any one of these values is exceeded (special versions of Fixed VE probes are available for conditions exceeding the values stated above). In general each probe is designed for each specific application, if you have any doubts as to the application the probe is to be used for consult your supplier giving the specific serial number of the probe to be used.

All probes are designed for vertical installation, ie the probe is to be connected to a branch tee that is in the vertical plane, and the probe should be connected vertically above this branch tee. **Do NOT** connect a Fixed VE probe to anything other than a vertical branch (special versions of Fixed VE probes are available for non-vertical branch connections).

The installation of each and every probe requires specific individual consideration and therefore a full risk assessment and method statement should be completed by the customer and be available for each and every installation taking into account all relevant site conditions and situations. Generally we recommend that the individual risk assessments and method statements cross references the installation site and pipeline identifier to the probe serial number.

Each probe is supplied factory pressure and leak tested and undergoes a tick box inspection/check list prior to dispatch.

All exposed components of Fixed VE probes are designed using highly corrosion resistant materials eg: 316 stainless steel for all main parts and A2 stainless steel for nuts, bolts, washers, etc. The probe therefore does not require painting.

Installation

Before commencing any installation work visually check probe for any signs of damage that may have occurred in transportation and handling and check to see that the correct factory pressure test certificate is available.

Any probe should only be installed by a trained and qualified person for such an operation.

Read the **whole** installation procedure/method statement and understand fully prior to starting.

1. Check probe serial number matches the method statement.
2. Check that the pressure test certificate is available and that the test pressure matches or is higher than that required for the application to which it is to be used. (Normally the test pressure is at least 1.5 X the maximum allowable working pressure)
3. Remove the packaging from the probe and make sure any/all protective caps are removed from the probe tip.
4. With the pipeline suitably isolated connect the probe to the mating flange using the correct gaskets, nuts, bolts and washers, and using the correct tightening torque. The probe must be suitably supported whilst it is being connected.

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Removal

Any probe should only be removed by a trained and qualified person for such an operation.

Read the **whole** installation procedure/method statement and understand fully prior to starting.

1. Check the probe serial number matches the method statement.
2. Fully isolate the pipeline and de-pressurise.
3. Close the probe outlet valve, depressurise the sample off-take line according to the site specific pipeline identifier method statement and disconnect the sample line from the probe isolation valve again according to the site specific pipeline identifier method statement.
4. Slowly open the probe isolation valve to vent down any small trapped volume of gas within the probe according to the site specific pipeline identifier method statement.
5. When fully vented and no further gas continues to escape from the fully open probe isolation valve, checked according to the site specific pipeline identifier method statement then the probe can either be removed or closed off according to the site specific pipeline identifier method statement.

Operation

Once the probe is installed/inserted there is little or no operation required apart from opening or closing the probe isolation valve.

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