

Analytical Sampling System Flow Monitor

Applications:

- Analytical Sampling System Flow Monitor
- Analytical Sampling System Flow Confirmation
- Analytical Sampling System Flow Switch

Application Background:

It is a common practice in any process industry to sample the product being produced and analyze it for quality assurance. Drawing a sample and taking it to an analytical lab for testing is normally the practice. Based upon the test results the process can be adjusted to keep the product within specifications. Many industries are now using on line sampling systems to monitor their product quality. Basically a sample of the product is redirected to an analytical testing cabinet where the sample is analyzed with say a gas chromatograph. It is necessary to monitor and assure a minimum flow of a liquid or a gas being sampled from a process flow stream to provide an accurate representation of the actual product.

Historically these sampling cabinets have used small diameter stainless tubing with fittings, valves, and flow switches which direct the sample flow to the analyzer and after testing, return the sample to the process. The current state of the art uses a modular manifold system based upon the NeSSI SP76 standard. The SP76 manifold uses a standard set of building block modules to replace all the SS tubing and fittings that can be a plumbing nightmare and prone to leaks. In either sampling scenario a flow switch is required to validate an acceptable flow to the analyzer.

Application Solution:

With a single process connection into the flow tube thru a TEE connection or through a mating module to the SP76 manifold, a flow switch can be installed to provide the monitoring needs. Any of the Delta M flow switch products (microtuf® or VersaSwitch®) can be configured with TEEs or the Mating SP76 interface module.

For full details go to our website, www.deltamcorp.com to the products tab and look for the SP76 Option data sheet for full details.