Swirl Flowmeter FS4000
(TRIO-WIRL S)

Unique solutions for everyday flow measurements

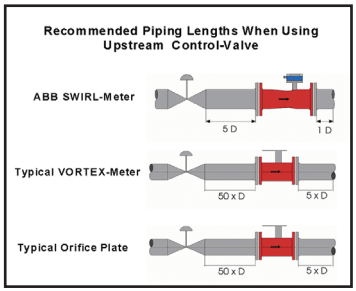
- Cost savings due to high accuracy
- Low investment cost through short straight inlet and outlet sections
- No wear, no maintenance – no moving parts
- Wide flow range of 30:1

Striking flexibility with improved accuracy

ABB is the only manufacturer offering high-performance Swirl flowmeters, which, as a result of their innovative DSP-Technology (Digital Signal Processing), are extremely reliable. The instruments are designed with 2-wire technology.

Reduced piping requirements

Vortex flow meters, orifice plates and other flow devices require minimum up and down stream piping to maintain performance (see below). ABB TrioWirl Swirl meters breakdown this barrier with requirements as little as three pipe diameters upstream and one downstream. Also most vortex meters are sized below the run pipe to maintain sufficient velocity, Swirl meters are almost always the same as the run pipe, removing need for reducing cones.



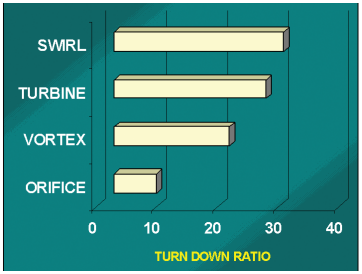
Technology that creates a whirl

Swirl Flowmeters

When a flowing fluid meets an obstruction, pressure variations are created in the fluid proportional to the stream velocity. ABB's unique Swirl flowmeters take advantage of this phenomenon and create a measurement solution that exceeds the capability of more conventional flow meters. Consider the benefits of reduced installation materials, increased performance and process integrity, and having the support of one of the largest flow measurement providers in the world. Now consider the benefits when selecting ABB Swirl flowmeters.

Wide Range Flow Capability

All flow meters have a defined flow range required to meet performance specifications. Vortex meters typically have a usable flow range of 20:1 based on process density. ABB TrioWirl Swirl meters extend this to over 30:1 relying on improved flow signals at flow rates lower than the capability of most vortex meters. And when it comes to fluid handling, TrioWirl Swirl meters measure fluids with viscosities to 30cp, while the average vortex meter is limited to 10cp max. All of this adds up being able to do more with less, no need to seek high cost devices to measure outside vortex metering capabilities.



Improved Accuracy

Accuracy claims for any flow metering device are conditional based on application and installation concerns. Orifice technology spans between 0.6 to 1.5%, Vortex meters typically denote specifications of +/-0.75-1.25% of rate across the measurement range. Relying on the improved sensing technology of swirl meters, accuracies on liquid, gas and steam applications are improved to +/- 0.5% of rate. This improves process stability while offering the end user a higher rate of return on investment.

Flexible, Friendly, Forgiving

As with all ABB products, TrioWirl Swirl Flowmeters offer features and options to meet most any process requirement. Firmware programming via handheld devices, Hart driven PC adaptors, or easy push button operation allow quick changes and confirmation of process variables. And when necessary, replacement electronics can be configured to the original meter settings via a simple three button push sequence at the meter face.

Contact Your Authorized ABB Swirl Flowmeter Representative:

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