



PROCESS INSTRUMENTATION

SITRANS FS230 Clamp-on hydrocarbon flow meter

Dynamic compensation for viscosity changes due to shifting liquid properties makes Siemens clamp-on ultrasonic flow meters the perfect choice for a wide array of storage and transmission installations within the hydrocarbon industry. For hydrocarbon applications requiring a flowmeter that does more than simply measure flow accurately, the SITRANS FS230 hydrocarbon clamp-on flowmeter is just right.

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SITRANS FS230 clamp-on ultrasonic hydrocarbon flowmeters provide numerous benefits:

- WideBeam transit-time technology ensures excellent accuracy
- Automatic zero adjustment makes installation and commissioning easy
- Standard Volume, Precision Volume and Interface Detector versions provide a solution for any application
- Multiple analog outputs enable interface and scraper distinction
- Accuracy tailored to application with single-, dual- and four-path options
- No need to stop the flow or cut the pipe

The SITRANS FS230 is for a very wide number of applications, including:

- Ship off-loading
- Pipeline transportation
- Line balance and allocation
- Transmix and check metering
- Liquid quality monitoring
- Process control metering
- Offshore production
- Water injection/recovery
- Storage tank inflow/outflow

As with any other clamp-on flow device from Siemens, it is not necessary to cut the pipe or shut down operations to install the flowmeter; the transducers are quickly and easily mounted on the outside of the pipe, minimizing maintenance expenses and preventing deposits from forming.

Automatic zero adjustment

A built-in auto zero function makes commissioning of the SITRANS FS230 particularly easy. After the meter is installed, it interrogates the ultrasonic signal in order to update the zero offset value under normal operation. By doing this, the flowmeter can dynamically compensate for changing conditions that would otherwise result in zero drift.

The WideBeam principle

All SITRANS FS230 clamp-on flowmeters employ WideBeam transit-time technology, in which the pipe wall is utilized as an amplifier to optimize the signal-to-noise ratio. This increases precision by reducing sensitivity to any change in the medium type or pressure. It also renders the flowmeter immune to most pressure-reducing valve noises.

Flexible product offering

There are three types of SITRANS FS230 flowmeters: Standard Volume, Precision Volume and Interface Detector. The Standard Volume version performs accurate volume and mass flow measurement and is appropriate for high-end applications carrying multiple liquids or liquids of varying viscosities, as well as for line balance installations requiring normalized volume or mass output. The Precision Volume version offers automatic Reynolds Number correction and is designed for applications that require greater precision than normal gross volume flowmeters without the need for standard volume measurement. The Interface Detector version offers extremely precise interface and multi-product identification, making it the best choice for density indication as well as scraper and pig detection.

Legal Manufacturer

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