

## FS10A Analyzer Flow Switch/Monitor Receives FM Div 1/Zone 1 Approval



San Marcos, CA — Analyzer and sampling system engineers in search of a flow switch/monitor that is approved for use in hazardous locations will be interested to learn that the [Model FS10A Analyzer Flow Switch/Monitor](#) from [Fluid Components International \(FCI\)](#) has received FM Div 1/Zone 1 Approval on all remote probe configurations.

The FM APPROVED mark assures FCI's customers that independent scientific research and testing have determined that the FS10A Analyzer Flow Switch/Monitor performs reliably and safely. FM Global certifies products to assure customers that they conform to the highest national and international safety standards for loss protection and risk management. The Div 1/Zone 1 Approval indicates that they have been certified for hazards that are present under normal operating conditions or present frequently under maintenance or repair operations.

The advanced Model FS10A Analyzer Flow Switch/Monitor represents the best-in-class solution for continuously verifying flows within liquid or gas process analyzer sampling systems. It is a small, lightweight instrument featuring superior low flow sensitivity, a relay alarm trip point, an analog output and an RS232 interface. The FS10A's advanced electronics and thermal dispersion flow sensing technology provide an accurate, repeatable overall solution for sampling system flow assurance.

The FS10A Analyzer Flow Switch/Monitor ensures continuous reliability and requires virtually no maintenance, featuring a precision flow sensor element with no moving parts to foul, clog or maintain. Unlike alternative technologies, such as magnetic floats, capillary bypass or rotameters, the FS10A has no cavities, orifices or dead-legs that can trap fluids and lead to contaminated samples, which preserves sample integrity and provides faster system sampling times. The instrument's wetted parts are corrosion-resistant 316L stainless steel with Hastelloy-C22 sensor tips.

The FS10A Analyzer Flow Switch/Monitor is ideal for use with nearly all types of process and emissions sampling systems, including gas chromatographs (GCs), mass spectrometers, optical spectrometers, photometers and others. Standard configurations will accommodate standard 1/8, 1/4, 3/8 and 1/2 inch tubing as well as an SP76 adapter (ANSI/ISA Standard

**-MORE-**

76.00.02-2002, *Modular Component Interfaces for Surface-Mount Fluid Distribution Components*). The SP76 adapter is a key element of the NeSSI™ platform (New Sampling/Sensor Initiative). The FS10A conforms to NeSSI Generation I and is prepped for Generation II and III compliance, requiring only a single 1.5-x-1.5-inch SP76 base.

Depending on the tube size, the FS10A Analyzer Flow Switch/Monitor operates over a wide flow range in air/gas; from 0.02 SCFH to 200 SCFH (10 cc/min to 100,000 cc/min), and in water/liquids; from 0.0.01 GPH to 12.00 GPH (0.70 cc/min to 750.00 cc/min). It accommodates wide turndowns with a ratio up to 100:1.

The FS10A Analyzer Flow Switch/Monitor's advanced electronics are packaged in a fully sealed aluminum housing, making it ideal for rugged plant environments. The electronics can be integral mounted with the sensor element in a uni-body configuration or remotely mounted for easy front panel display viewing. The FS10A features a top-mounted, ten LED array and two pressure-sensitive buttons. The LED display shows flow rate trend, alarm status and power on/off so operators have at-a-glance knowledge of operating conditions. The monitor's set-up (zero and span) and trip-point values can be changed via the two push-buttons or via its RS232C serial interface.

The FS10A Analyzer Flow Switch/Monitor outputs include a 1A relay settable for NO or NC operation and with user-settable for failsafe, hysteresis and/or time delay, and a 4-20mA analog output for trending.

In addition to FM compliance, agency approvals for the FS10A Analyzer Flow Switch/Monitor include FMc, SIL 1, ATEX and IECEx for hazardous location installations.

Fluid Components International is a global company committed to meeting the needs of its customers through innovative solutions to the most challenging requirements for sensing, measuring and controlling flow and level of air, gases and liquids.

Contact: FCI: 1755 La Costa Meadows Dr, San Marcos, CA 92078  
Web: [www.fluidcomponents.com](http://www.fluidcomponents.com) Tel: 800-854-1993 Tel: 760-744-6950 Fax: 760-736-6250  
Email: [FCImarcom@fluidcomponents.com](mailto:FCImarcom@fluidcomponents.com)