For Immediate Release

FS10i Flow Switch/Monitor Obtains Approvals For Flow Detection and Alarming In Hazardous Areas

Ideal in Chemical, Refining, Power Generation and More

San Marcos, CA — Designed for operation in rugged industrial processes, the compact FS10i Flow Switch/Monitor from Fluid Components International (FCI) now has obtained hazardous area approvals from multiple agencies for a wide range of liquid or gas monitoring applications that require accurate, reliable flow assurance and alarming.

FCI’s FS10i Flow Switch/Monitor has obtained agency approvals that include: FM and FMc for nonincendive, Class I, Division 2, Groups A,B, C, D; Class II, Division 2 Groups E, F, G; Class III, T4@Ta=71°C; ATEX, IECEx nonincendive for gas and dust, Zone 2; EAC (TRCU) Russia, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc III C T81°C Dc, IP64

Ingress protection meets IP65, IP66, IP67 in non-hazardous locations; CE Marking, CRN, complies with Canadian Electrical code requirements of ANSI/ISA 12.27.01-2011 as a single seal device. It is also the only product in its class to carry a SIL 2 compliance rating per IEC 61508 and has a superior 90% Safe Failure Fraction (SFF).

In air, gases, water or other liquids, the FS10i Flow Switch/Monitor is the solution wherever detection and user warning is required for a flow rate that is either too high, too low or a no-flow condition is present. Its SIL-2 compliance also ensures a highly reliable flow sensing instrument for repeatable and fast-responding flow trip point or alarm warning within seconds.

The FS10i Flow Switch/Monitor features an air/gas sensitivity and setpoint range from 0.25 to 400 SFPS [0.076 to 122 MPS] and for water or liquids from 0.01 to 0.5 FPS [0.003 to 0.15 MPS]. It is suitable for use in fluid temperatures from -40° to 250°F [-40° to 212°C] and at pressures up to 2000 psi [138 bar].

Different than other devices, the FS10i Flow/Switch Monitor comes standard with both an SPDT 1A relay output for alarm/trip point setting instead of an open collector, and a 4-20 mA -MORE-
analog output for trending and monitoring. Trip points can be set as high or low, and they can be adjusted with hysteresis and/or time delay settings and the 4-20mA output is rangeable by the user in the field installation.

Designed for application versatility, the FS10i Flow Switch/Monitor is ideal for monitoring cooling water and fluids, leak detection, lubricant flow assurance, ventilation verification, chemical injection assurance, nitrogen purge verifications and compressor leak detection. Its compact size allows it to be placed in crowded equipment locations.

Developed with FCI’s advanced no-moving parts thermal dispersion sensing technology, the FS10i Flow Switch/Monitor is temperature compensated for dynamic plant and process operating conditions. It is constructed of all wetted parts manufactured with 316L stainless steel and Hastelloy C22 thermowells for years of service with virtually no maintenance.

The insertion style FS10i Flow Switch/Monitor is easy to install with a few simple tools. Set-up is done in the field using either the two-button keypad, or with a PC connection to the FS10i’s serial I/O port. The PC software for configuration and set-up is included at no extra charge. The instrument features a 10-character LED array to indicate actual flow range and trip point setting, changing flash rate to provide an immediate visual alarm indication to the user.

For long service life, the FS10i Flow Switch/Monitor electronics are enclosed in a stainless steel body housing with aluminum end cap/top with polycarbonate overlay, which carries an IP66/IP67 rating. Input power is 24 Vdc (21.5 to 30 Vdc); 2.5 Watts maximum.

To ensure best performance and installation ease, the FS10i Flow Switch/Monitor is available in two probe lengths (insertion depth): a 2-inch [50 mm] length with a 0.25-inch NPT (M); and a 6 inch [150 mm] length, variable depth, with 0.5-inch NPT (M) compression fitting, with either a Teflon or metal ferrule. Electrical connections are to a standard M12 connector or, optionally, to 15 ft [3m] cable with pigtail terminations.

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.