High-Pressure ST100L Inline Air/Gas Flow Meter
With All-Welded, No-Thread Connection

San Marcos, CA — Now featuring an all-welded, no-thread flow element connection for superior reliability, the new Model ST100L Air/Gas In-Line Thermal Mass Flow Meter from Fluid Components International (FCI) provides accurate flow measurement in the most demanding high-pressure industrial operating environments.

The Model ST100L Flow Meter is an in-line spool piece mass flow instrument developed for precise air/gas measurement. With its all-welded flow element connection, the ST100L meter features a high pressure rating of up to 3000 psig [207 bar (g)]. It measures a wide range of gases: natural gas, hydrogen, helium, methane, ethane, propane, ethylene, nitrogen, carbon dioxide and many other specialty gases.

The dependable all-welded flow element connection incorporated into the design of the ST100L Flow Meter is inherently thread-less. The elimination of threaded connections removes a potential leak path from standard meter compression fittings, which are threaded and can be a hazardous gas leak source.

The ST100L Flow Meter is a sophisticated thermal dispersion technology air/gas flow meter. It combines feature- and function-rich electronics with advanced flow sensors for advanced air/gas flow measurement. Offering direct gas flow measurement, no additional sensors or flow calculating devices are required for measurement. Its no moving parts design also virtually eliminates wear, breakage and maintenance.

When selecting the ST100L Flow Meter, users have multiple communication options: 4-20 mA analog, frequency/pulse, or certified digital bus communications such as HART, Foundation Fieldbus, Profibus PA or Modbus RS485. Should a plant’s or process communication need change, the ST100L can be converted to any of these outputs with a simple card change in the field.

Developed with a graphical, multivariable backlit LCD display, the ST100L Flow

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Meter brings new meaning to the term “process information”. Its sophisticated readout continuously displays all process measurements and alarm status for easy on-site viewing by technicians, and it has the ability to query for service diagnostics.

The ST100L Flow Meter’s electronics include a user selectable and programmable data logger. Readings are stored in a removable, internal micro-SD card. The micro-SD card has a 2 GB capacity capable of storing approximately 21 million readings. Recording time base is user selectable with a maximum rate of 1 reading per second. The logging feature is selectable via the front panel menu or via the serial port and configuration software tools.

The feature-rich ST100L Flow Meter utilizes constant power thermal mass flow sensing technology that measure flow with 100:1 turndown in ranges from 0.006 SCFM to 1850 SCFM [0.01 NCMH to 3140 NCMH]. The transmitter/electronics can be integrally mounted with the flow body or may be remote mounted to 1000 feet [305 meters] away. The transmitter enclosure is NEMA4X/IP67 rated and available in painted aluminum or stainless steel.

ST100L Flow Meters are agency approved for hazardous environment installations. FCI products undergo rigorous agency testing and obtain their approvals on the entire instrument, not just the enclosure. Approvals available for the ST100L Flow Meter include: FM, FMc, ATEX, IECEx, EAC/TRCU, CPA, NEPSI, InMetro, and CE Approved.

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