

Counting Calories To Conserve Natural Gas Begins With Sleek Flow Meter Designed for Tight Equipment Areas

Enhances the Efficiency of Burners, Boilers, Dryers, Heaters, HVAC and More

San Marcos, CA—August 11, 2022— With the global tightening of natural gas supplies and prices on the rise, engineers responsible for the cost of plant energy systems and equipment will discover that the compact precision [FS10i Series Natural Gas Flow Meters](#) from [Fluid Components International \(FCI\)](#) helps them control their energy costs by measuring fuel gases more accurately to optimize heating equipment and minimize energy consumption.



Nearly all industrial processes and manufacturing operations rely on natural gas as a fuel, even if it is only for plant heating, ventilation and air conditioning (HVAC). Heavy duty industrial plant processes, such as those found in oil & gas, refining, chemical production and electric power generation, as well as those in the manufacturing industries, including steel, aluminum, glass and others, depend heavily on natural gas to fuel the processes used in their production.

The FS10i Flow Meter Series is a dependable, economical and easy to install solution to measure the flow rate of natural gas. The FS10i meter is accurate to $\pm 1.5\%$ of reading, $\pm 0.5\%$ of full scale, with repeatability of $\pm 0.5\%$ of reading and has a response time of 4 seconds (1 time constant). Its small size, plug-in wiring and inline or insertion style threaded connection into plant piping ensures quick and effective installation. In addition, they are SIL-2 rated for safety instrumented system (SIS) critical processes.

Designed with proven, highly stable direct mass flow sensors, the FS10i Flow Meters require no additional pressure or temperature sensors or other components to infer flow measurement. Their sealed and no-moving parts sensor does not foul or clog, and requires no routine maintenance that ensures years of trouble-free, continuous operation.

Relying on decades-long, applications-proven thermal dispersion flow sensing technology, the FS10i Flow Meters provide a fluid-matched, calibrated and linearized 4-20mA output of flow rate, and a user programmable high or low flow alarm/trip point with a 1A SPDT relay output. For visual indication, the FS10i Flow Meters include a 10-segment LED array. This display

illuminates proportionally to the flow rate and flashes if an alarm trip occurs.

Available in both in-line and insertion style configurations, the FS10i meters support installation in line sizes from 1 inch to 20 inches [DN25 to DN500]. They operate over a wide, 100:1 turndown from 1 to 400 SCFM (1,6 to 122 NCMH) depending on fluid media and line size.

Their 316L stainless steel construction ensures superior corrosion resistance in the pipe. An aluminum housing, and protective, rubber boot surrounding the display area make the FS10i suitable for IP64 installations. The FS10i also carries global approvals: FM, FMc, ATEX, IECEx, and EAC/TR CU (Div 2) and Zone 2/Zone 2 installations.

For line sizes of 1 or 2 inches (DN25 or DN50), the FS10i is built as an in-line solution with a stainless steel, female NPT pipe tee to ensure the instrument's accuracy and repeatability in the installation. For line sizes 2.5 inches (63,5 mm) or larger, users can select the insertion-style configuration in either a 6 or 12 inch (152 or 305 mm) length. The insertion-style configurations are outfitted with a 0.5-inch compression fitting, with either a Teflon or stainless steel ferrule to adjust the actual insertion depth to be compatible with a range of pipe diameters and achieve inserting the sensor element to the center-point of the pipe.

Set up is performed by users with a PC connection to the instrument's serial port, included computer interface dongle and using FCI's free software utility program. User set-up functions include scaling of the 4-20mA output to the desired flow range and engineering units, setting the relay trip point and adding hysteresis or time delay to the relay's action, etc.

The made-in-the-USA FS10i Flow Meters are manufactured at FCI's Southern California operations near San Diego. Each meter is precision calibrated on FCI's air and gas flow stands, which are outfitted with NIST and ISO/IEC 17025 traceable equipment to ensure their accuracy and measurement repeatability.

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.