Fluid Components International – Breaking News

ST Series Mass Flow Meters Combine Precision Accuracy and Economy

Air/Gas Measurement In Oil/Gas, Chem Processing, Electric Power, Water/Waste

San Marcos, CA

Designed with an innovative thermal dispersion mass flow sensing element and leading-edge transmitter electronics, the ST98, ST75 and ST50 Flow Meters from Fluid Components International provide highly accurate air and gas flow measurement in a versatile family of devices offering high performance, ease of installation, low maintenance, long life and a low life cycle cost.

The ST Series Flow Meters are designed for rugged environments typically found in the oil/gas, chemical, electric power, pulp/paper and wastewater treatment industries and applications. Their no-moving parts, non-clogging flow sensing element provides direct mass flow output and features built-in temperature compensation. They are ideal for use in a wide range of process and plant gas applications, including compressed air, hydrocarbon gases and inert gases.

ST98 Flow Meter The rugged ST98 Flow Meter sets the industry standard for performance and value with a reliable thermal mass flow sensor in a smart electronics package. The ST98 operates over a wide flow range from 0.21 to 172 NMPS in air with a standard flow accuracy of ±1 percent of reading, ±0.5 percent of full scale. It is ideal for a wide range air/gas flow measurement applications, including natural gas or methane monitoring, compressed air metering, industrial HVAC systems, nitrogen blanketing and combustion air.

With the addition of Profibus communications featuring Device Type Manager (DTM), the ST98 is easier than ever before to set-up, configure, trouble-shoot and maintain. The ST98's transmitter electronics accept universal AC (85 to 260 V) or 24 Vdc input power. It is housed in an IP66-rated enclosure with optional ATEX/FM/CSA/CENELEC system approved explosion-proof electrical enclosures.

ST75 Flow Meter The advanced ST75 Flow Meter is a highly accurate, direct mass flow meter for air or gas measurement applications in smaller line sizes from 6 to 51 mm. The ST75's flow range spans 0.07 to 1425 NCMH in air, with an accuracy of ±2 percent of reading, ±0.5 percent of full scale. It is suitable for service in a wide range of industrial processes, including burner and boiler fuel/air feed lines, industrial furnaces, heat treating gas controls, chiller air flow and dosing/gas injection rate controls.

With FCI's optional wireless IR link, any Palm-OS based PDA can communicate with the ST75, which simplifies configuration updates, calibration downloads and more. Standard "triple" analog outputs include both a fully scaleable 4-20mA and 0-10V, which are user assignable to flow rate and/or temperature, as well as a 0-1kHz pulse output of total flow. Input power can be specified as 24Vdc or 115/230VAC. Electronics are housed in a small, compact all-metal, IP66-rated enclosure (NEMA 4X). Agency approvals: FM, CSA and CRN; ATEX pending.

ST50 Flow Meter Small, compact and low cost, the ST50 is an insertion-style mass flow meter for air, compressed air or nitrogen flow measurements. Designed for line sizes from 51 to 610 mm, it installs easily through a single tap point and configuration set-up takes only minutes. The ST50 operates over a flow range of 0.23 to 122 MPS in air, with an accuracy of ±2 percent of reading, ±0.5 percent of full scale. With its highly reliable thermal dispersion mass flow sensing element, the ST50 is ideal for a wide range of applications, including wastewater treatment, aeration applications, energy audits and efficiency of compressed air systems, nitrogen flow, HVAC duct/damper control and more.

The ST50 also features FCI's optional wireless IR communications. It is designed with dual analog outputs, 4-20 mA and 0-10 Vdc, which are field assignable as flow rate or temperature. All models include a standard RS232C serial I/O link for data communication. Designed for challenging environments, the ST50's electronics are packaged in a rugged, yet compact, all metal IP66-rated enclosure (NEMA 4X). Agency approvals: FM, CSA and CRN; ATEX pending.

All ST Series Flow Meters feature an advanced thermal dispersion type mass flow sensing element, which uses two matched, precision platinum resistance temperature detectors (RTDs). One RTD is heated relative to the reference RTD, and the temperature difference between the two is linearized and conditioned to directly measure the gas' mass flow rate. The sensing elements have no moving parts and are non-clogging to achieve excellent long-term reliability with virtually no maintenance.

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 the flow and level of air, gases and liquids.