

Raise Gas Compressor Efficiencies and Reduce Costs with Precision ST75 Air/Gas Mass Flow Meter Point Measurement

<u>Ideal for Manufacturing Plants, Refineries & Natural Gas Pipelines, Refrigeration & Air</u>
<u>Conditioning, Welding Operations, Large Engine Turbochargers</u>



San Marcos, CA — Engineers and technicians who rely on point-of-use gas compressor measurement will find acost-effective air/gas mass flow monitoring solution with the rugged ST75 Flow Meter from Fluid Components International (FCI). The ST75 Air/Gas Mass Flow Meter delivers precision flow measurement while reducing the

consumption of energy fuel gases, specialty gases and pneumatic air.

Installing ST75 Flow Meters in large process industry facilities and assembly plants with multiple gas compressors allows the operators to compare compressor usage and adjust them for optimum efficiencies. In addition, the use of mass flow meters at the point of compressed gas output helps to ensure peak performance at agiven flow rate. Comparing the performance of multiple gas compressors is also useful in predictive maintenance applications where higher flow rates may indicate leaking valves or seals in one unit versus other units operating under similar conditions.

The ST75 Flow Meter is designed specifically for demanding process industry and manufacturing assembly plant environments with its rugged and highly reliable, proven performance. Offering an extensive set of standard features, the ST75 Flow Meter is designed for line sizes from 0.25 to 2.0 inches (6 to 51mm), which is ideal for compressor gas line measurement, and provides three unique outputs: the mass flow rate, totalized flow and media temperature.

To ensure reliable performance under variable process and plant temperature conditions, the ST75 Flow Meter's design includes media temperature compensation. It offers accuracy to 1% of reading and 0.5% repeatability. Its precision flow element has anomoving parts design that employs platinum RTD sensors embedded in equal mass thermowells with microprocessor electronics that can be calibrated to laboratory standards for CO₂ as well as many other gases.

Precision ST75 Air/Gas Mass Flow Meter

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The ST75 Flow Meter functions well in both low flow and high flow applications

because it operates over a wide flow range, from 0.01 to 559 SCFM (0.01 to 950 NCMH)

depending on line size. For variable process conditions, the ST75 is factory preset to a wide

turndown range at 10:1 to 100:1.

Based on FCl's proven thermal dispersion technology, the ST75 provides direct-flow

measurement for more accurate performance at a lower cost. This flow meter eliminates the

need for temperature sensors, flow computers, or other devices that are required with orifice

plates, Venturis, Vortex shedding, and other meters. Its no-moving parts design ensures

superior service life. There are no orifices or inlets to clog or foul, which significantly reduces

scheduled maintenance and unplanned shutdowns.

The ST75 Flow Meter provides fully scaleable 4-20mA and 0-10V outputs. They are

userassignable to flow rate and/or temperature and a 0-1kHz pulse output of total flow. The

instrument can be ordered for input power with either 18 to 36 Vdc or 85 to 265 Vac, with or

without a built-in LCD digital display.

To accommodate hazardous area installations, the ST75 is enclosed in a rugged, all-

metal, dust and water resistant NEMA Type 4X (IP66) rated package. The flow meter is

manufactured with a rugged sensing element utilizing all welded 316 stainless steel

construction and Hastelloy-C tips. Approvals include: Class 1, Div. I Groups B, C, D. Div. II

Groups A-D; ATEX/IECEx Zone I, II 2 G Ex d IIC T6.... T3; II 2 D Ex td A21, IP67 T90...T300

(pending); FM/CSA/CRN and CE Marked.

Fluid Components International is a global company committed to meeting the needs of

its customers throughinnovative solutions to the most challenging requirements for sensing,

measuring and controlling flow and level of air, gases and liquids.

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