

## Precise Chemical Injection Flow Switch Delivers Dependable Measurement for Best Results

*Versatile Process Solution for Specialty Chemicals, Electronics, Food/Beverage, Oil/Gas Refineries, Plastics, Pharmaceuticals, Water/Wastewater*

**San Marcos, CA** — Process engineers who require precise chemical injection or additive monitoring will find the [FLT93 Flow Switch Series](#) from [Fluid Components International \(FCI\)](#) offers them a dependable, rugged set-and-forget solution that is flexibly designed to give them multiple configuration and performance options to support a wide range of industries from specialty chemicals to electronic components, food/beverage, oil/gas refineries, plastics, pulp/paper, pharmaceuticals and water/wastewater treatment and more.



FCI's advanced FLT93 Flow Switch Series is suitable for flow detection of liquids or gases and is available in several wetted materials for compatibility with virtually any fluid. It is a dual-function instrument capable of monitoring and alarming on both flow and temperature in a single device. Dual 6A relay outputs are standard and are assignable to flow or temperature. The FLT93 Flow Switches can be specified in either insertion or inline styles for installation in pipe/tube diameters from 0.25 inch and larger.

In sensitive processes that require chemical and other additive injection flow in small line sizes, the Model FLT93L Switch is an ultra-sensitive, inline-type flow switch that can detect liquid flow rates as low as 0.015 cc/sec and gas flow rates down to 0.6 cc/sec. Models FLT93S and FLT93F are insertion types and are the solution for liquids and gases in larger diameter pipe sizes, respectively. And, for sanitary processes, the Model FLT93C provides 20Ra electro-polished 316L stainless steel wetted parts and tri-clamp sanitary flanges to meet the requirements in the food, beverage and pharmaceutical industries.

Relying on thermal dispersion technology, the FLT93 Flow Switch has no-moving parts to foul or clog and requires no routine maintenance to provide the longest service life at the lowest lifecycle cost. Its electronics are housed in a NEMA 4X/IP67 rated aluminum or stainless steel enclosures to deliver durability and reliability under the harshest process conditions. As further testament to this reliability, the FLT93 Series is SIL 2 compliant and carries a 3-year warranty. Its superior temperature compensation assures no false trips should fluid or ambient temperatures change. The FLT93 flow switches feature a universal 24Vdc/85V-265Vac power supply, temperature service up to 850°F [454°C] and a broad selection of process connections including compression fittings, flanges, packing glands.

FCI flow switches are electronic flow switches that apply thermal dispersion flow measurement

technology to provide highly accurate and repeatable flow rate to achieve highly reliable and repeatable setpoint detection. When the flow rate is above (high flow) or below (low flow) the user defined setpoint, electronic flow switches trigger an output signal, typically a relay or transistor, to change state.

FCI is the only thermal flow switch manufacturer providing sensor temperature compensation to ensure set point accuracy for process temperatures that vary up to  $\pm 100^{\circ}\text{F}$ . The FLT93S Flow Switch, for example, is easily field-configured or factory preset, providing unparalleled flexibility, accuracy and stability for all multiple process sensing and switching requirements.

The rugged FLT93S Switch is hydrostatically proof pressure tested to 3500 psig [240 bar (g)] at  $70^{\circ}\text{F}$  ( $21^{\circ}\text{C}$ ). De-rated with temperature, the maximum operation service recommended is 2350 psig [162 bar (g)] at  $500^{\circ}\text{F}$  ( $260^{\circ}\text{C}$ ). Higher ratings are available with special construction and test certification. Approvals available include: SIL2, FM, FMc, ATEX, IECEx, EAC/TR CU, EMSA EQM-Ex, CRN, CE/PED/LVD, and Inmetro.

Highly dependable, FCI's versatile FLT93S Switches are ideal for applications in many demanding hazardous process industries. They also used extensively with or without SIL2 certification in a wide variety of applications in the food/beverage, mining/milling, pulp/paper, pharmaceutical, water/wastewater treatment and more.

FCI solves flow and level measurement applications with advanced thermal dispersion technologies. With 60 years' experience and the largest installed base of thermal flow meters, flow switches and level switches, count on FCI to know your application and have the solutions.