

Highly Reliable Flow Switch Protects Pumps From Dry Running Conditions That Require Maintenance

*Ideal for Chemical Plants, Electric Power Generation,
Food/Beverage, Oil/Gas & Muni Water Systems*



San Marcos, CA — Engineers responsible for optimizing the up time of process flow networks in a wide range of demanding industries will find the [FLT93 Flow Switch](#) from [Fluid Components International \(FCI\)](#) provides a reliable early warning alert to the potential of dry running conditions, cavitation and other pump issues that can lead to emergency shutdowns, service interruptions and unplanned costly maintenance.

A wide variety of process industries depend on pumps to move process fluids and keep cooling systems up and running. Pumps are expensive to operate and costly to maintain--especially when dry running conditions suddenly occur due to system variable demand, leaks, clogs or other problems that could end up affecting a pump's seals or bearings. The resulting damage can require time-consuming pump repairs, overhauls or even full replacement.

FCI's dual alarm FLT93 Flow Switch reliably monitors the flow and temperature of liquids, gases, slurries and more. It is ideal for pump wet/dry detection, where sudden, unexpected reductions in media flow rates can leave pumps vulnerable to over-heating conditions that shutdown process lines and require trouble-shooting, fixes and more.

The FLT93 Flow Switch, with its no moving parts design, offers a highly robust scheme for pump protection with its dual alarm capability. With Alarm 1, the switch will detect a low flow situation anywhere between 0.01 FPS and 3 FPS [0.003 MPS to 0.9 MPS]. This low flow alarm can be regarded as a pre-warning signal for the control system or operator. The system or operator can then decide to keep the pump running or to shut it down.

If an Alarm 2 occurs because the feed line to the pump is running dry, this condition would be an emergency signal to shut down the pump immediately because the bearings now see gas instead of a liquid as a heat transfer media. In such situations, the temperature of the bearings may rise very fast. Using a flow switch prevents permanent damage to the pump's bearings that will require an overhaul of the pump before more damage occurs.

The advanced FLT93 Flow Switch is a dual-function instrument that indicates both flow and temperature, and/or level sensing in a single device. Dual 6A relay outputs are standard and are assignable to flow, level or temperature. The FLT93 Switch can be specified in either insertion or inline styles for pipe or tube installation.

The rugged FLT93 Switch is hydrostatically proof pressure tested to 3500 psig [240 bar(g)] at 70°F [21°C]. De-rated with temperature, the maximum operation service recommended is 2350 psig [162 bar(g)] at 500°F [260°C]. Higher ratings are available with special construction and test certification. Agency approvals include: FM, ATEX, CSA, CRN and CE.

Highly dependable, FCI's versatile FLT93 Switches are ideal for applications in many demanding hazardous process industries. They also used extensively with or without SIL 2 certification in a wide variety of applications in the food/beverage, mining/milling, pulp/paper, pharmaceutical, water/wastewater treatment and more.

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 flow, level and temperature of air, gases, and liquids.

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