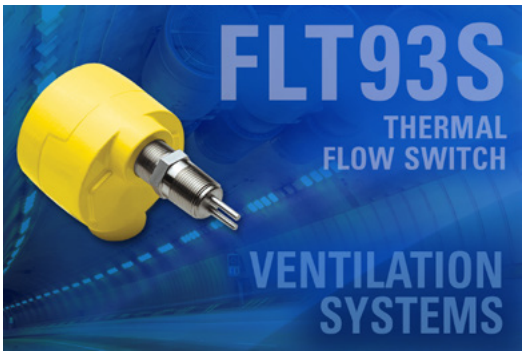
Heavily Traveled Tunnel Ventilation Systems Rely On Uni-Directional FLT93S Thermal Flow Switches

Unique Air Flow Sensor Head With Shroud Design Helps Provide Fan Air Control



San Marcos, CA — Engineers responsible for the design and operation of tunnel and other large facility fan ventilation systems will find the rugged, responsive and dependable FLT93S thermal flow switch from Fluid Components International (FCI) helps them assure a continuous quantity of quality air flow to protect people, vehicles and equipment.

Tunnel ventilation is essential to the life and safety of anyone traveling via passenger rail, subway or metro rail, industrial rail or freeway road tunnels. Fans are generally employed for the removal or control of air and gases and to control vehicle exhaust fumes to ensure proper ventilation.

The Model FLT93S is the ideal solution to help the manufacturers of powerful industrial fans and blowers used in the transportation industry to obtain accurate air flow control data under variable vehicle traffic conditions. Proper tunnel ventilation is critical to maintain tunnel temperatures within acceptable limits and to help control the flow of fresh air to prevent unhealthy toxic carbon monoxide (CO) exposure, as well as smoke or gas in the case of fire or other emergencies.

Depending upon a tunnel ventilation system's design, the air flow fans must operate in either a forward or reverse air flow configuration. For example, during emergencies requiring air, gas or smoke evacuation, a flow switch such as the FCI Model FLT93S needs to detect forward or reverse fan air flow to prove air is blown into or extracted from a tunnel where vehicle drivers and emergency responders can be either trapped or at work responding to crashed vehicles and/or fires.

The versatile FLT93S thermal flow switch can be configured with a uni-directional shroud to help verify the air flow direction of each tunnel fan. FCI developed this special shroud for the FLT93S switch, which allows the detection of air flow from a single direction. By installing two flow switches per fan, engineers and operating technicians are able to verify with confidence the direction of air flow for each fan in a tunnel.

The FLT93S thermal flow switch is suitable for placement in tunnel ducts or fan casings up to 8 feet [2,4 meters] in diameter. It can detect air flow ranges from 0.25 FPS to 120 FPS [0,08 NMPS to 37 NMPS]

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with flow accuracy as precise as ±2% of the setpoint velocity over a ±50°F [±28°C] temperature range; repeatability is ±0.5% reading. Flow elements are available for operation and survival (in the case of adverse conditions) for process temperatures up to either 500°F [260°C] or 850°F [454°C].

Based on FCI's thermal dispersion expertise, the unique sensor technology of the FLT93S switches, combined with FlexSwitch™ temperature-compensation circuitry, introduces unparalleled performance capabilities for a wide range of heavy-duty industrial applications.

Featuring an all-welded, no-moving parts design, the FLT93S Switches require virtually no maintenance. There is nothing to break, clog or foul that requires continuous maintenance technician attention. They are available with a choice of materials: 316L stainless steel, Hastelloy or exotic materials. In addition, these switches offer an exceptionally long life and a low lifecycle cost for superior value.

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.

Contact FCI: 1755 La Costa Meadows Dr, San Marcos, CA 92078
Web: www.FluidComponents.com Tel: 800-854-1993 Tel: 760-744-6950
Email: eflow@fluidcomponents.com