Fluid Components International – Breaking News

Flow/Level/Temperature Switch For Cooling and Lubricant Monitoring

Ideal in Metal or Material Processing, Forming, Finishing, Cutting, Welding

San Marcos, CA

Process, plant and manufacturing engineers and equipment designers involved in raw metals, fabricated metals or advanced materials production will find numerous applications for the FlexSwitch® FLT Series flow and level switches from Fluid Components International.

The FLT Series provides monitoring, controlling and alarming on flow rates or levels of critical fluids such as water, air, gases, coolants and lubricants used in metals and material processing and equipment. It's rugged, industrial design and housing provide superior reliability and long service life under the harshest plant environments. The FLT Series switch is a dual-function instrument that provides both flow & temperature, or level & temperature sensing in a single device. Available in both insertion and in-line styles for either pipe or tube installation, a single FLT measures and monitors flow or level and temperature simultaneously with excellent accuracy and reliability. Dual 6A relay outputs are standard and are assignable to flow, level or temperature. The FLT is a superior solution in applications such as coolants where low flow and/or high temperature alarms are needed to warn operators of equipment cooling system failure.

Typical FLT Switch applications include equipment involved in metals forming or fabricating, cooling, curing, molding, stamping and cutting. The FLT is suitable for use with water and a wide range of other coolants, fluids and gases employed in the metals and advanced materials industries. It is ideal for arc and robotic welding systems, laser or plasma cutting equipment, plating systems, punches, presses and much more.

The FLT Switch operates over a wide flow range in water from 0.01 to 3.0 FPS (0.003 to 0.9 MPS), making it suitable for water cooling and equipment lubricant applications. Switch point accuracy of +2 percent and measuring repeatability of +0.5 percent of reading ensures accurate, reliable operation. The standard configuration FLT withstands operating temperatures up to 350°F (177°C), and optional versions are available up to 850°F (454°C).

With its advanced thermal dispersion mass flow sensor, the FLT features built-in temperature compensation which ensures repeatable and reliable operation, even in extreme environments, such as those found in the high temperature steel, metalworking and advanced materials industries. This automatic compensation adjusts the instrument for changes in operating environment temperatures to ensure the trip points will remain accurate in metals and materials plant applications, and will prevent false alarms or alarm failures, improves end-product quality, maximizes operator safety and allows alarms to be set within a narrower set point range.

FCI's unique thermal dispersion sensing technology provides exceptionally accurate, highly reliable and dependably repeatable indications of flow rate, liquid level/interface and temperature operation. With the FLT Switch, there are no orifices, traps, pivots, paddles, gears, bearings or other mechanical elements to foul or fail—making it highly reliable and dependable in dirty environments, such as metal working plants. A sanitary configuration also is available for advanced materials produced in clean plant environments.

A wide selection of standard and custom process connections can be provided with the FLT Switch. The electronic control circuit can be integrally-mounted with the sensing element, or it can be located in a remote location. The standard enclosure is made from a coated aluminum alloy. It is suitable for use in ATEX locations and is rated for NEMA Type 4X (IP66) environments. Stainless steel or fiberglass enclosures also are available.

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.