

New FCI M180 Low Flow/High Temperature Switch For Gases Or Liquids To Less Than 1cc/min

Ideal For Monitoring Coolant System Flow In High Temperature Equipment or Machinery



San Marcos, CA

Developed for design-in OEM component installation within industrial equipment, the new M180 Series Low Flow/High Temperature Switch from Fluid Components International offers precision gas or liquid flow sensing with no drift down to less than 1 cc per minute in fluid temperatures up to 400°F (204°C).

Manufacturers of semiconductor laser and plasma etch equipment, as well as hot sampling systems, and industrial turbine or power generating equipment will find the M180 Low Flow Switch is ideally suited to monitor flows of glycol and other heat carrying solutions. Coolant flow in industrial equipment, machinery and engines must be monitored continuously to ensure proper equipment operation to avoid catastrophic damage to the machine or downtime in the process line. The M180 provides low/no flow sensing with a switch output for limit trips, warning lamps, alarm systems, secondary cooling controls or equipment shut-down.

With its proven thermal-dispersion mass flow sensing technology, design engineers can specify the M180 Low Flow Switch with confidence. The M180's precision platinum RTD sensors offer superior flow switch accuracy, highest repeatability over a wide range. By using RTD sensors, the M180 is useable in high temperature applications that cannot be met by lesser thermistor-based thermal flow sensor elements. It features a no-moving parts design, which means there are no mechanical parts to plug or clog and makes the M180 an excellent choice over failure-prone electro-mechanical switches.

The M180 is an excellent choice for use in equipment, machinery or engines where sensor survivability, low maintenance, long-life and the lowest total lifecycle cost are primary design objectives. With its highly responsive sensing/switching capability, the M180 provides preventative early warning notification that equipment maintenance is necessary to eliminate costly repairs or shutting down the entire process line. The M180 Switch features a rugged, sealed design, for long, dependable operation in the dirtiest of media and plant installation conditions.

The M180 Switches' miniature sensor design ensures both fast-response and superior repeatability under all process conditions. Hastelloy C22 sensor tips with CPVC and other wetted materials are available as options. Additionally, because there is minimal pressure drop, the M180 Switches will reduce costs and increase equipment efficiency by not having to boost line pressure to achieve needed flow rates.

The M180 is small at approximately 1"W x 4"H (25 mm W x 100mm H) and easy to install with no special tools required. Once installed, maintenance is virtually unnecessary. With a mean time between failure (MTBF) rating calculated to exceed 60,000 hours of service, the M180 Switch Series delivers unmatched reliability and long-life that will minimize maintenance costs and increase customer satisfaction.

. Over 10 different M180 Switch standard designs are available, and FCI can create custom designs to any OEM specifications. FCI will engineer custom flow or level sensors to meet requirements for all process media, line size, installation environment, temperature, pressure, calibration and output signals. Various sensor designs comply with industry standards, including UL, CE, FM, ATEX, CSA and more. FCI is a registered and certified ISO9001 manufacturer.

FCI maintains a world-class, NIST traceable flow calibration facility that provides total accuracy and performance assurance for its products. The laboratory supports design validation testing as well as calibration of production products for virtually all gas and liquid media in pipe sizes from 0.25 to 36 inches. The systems accommodate flow rates from 0.01 to 3700 SCFM (0.02 to 6300 NCMH) over various pressures from 0 to 1000 psig (0 to 69 bar) and temperature conditions from -50 to 1000°F (-46 to 538°C).

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 air, gas, liquid, flow, level and temperature.