

Instrument Specification For FLT93 Series Flow Switch

A. General

Thermal dispersion type that measures the varying differential temperature between two RTD's and provides a relay output. Flow and temperature sensing in gas, liquid and slurry applications.

B. Construction Features

- 1) Process Connection: Threaded Male NPT, 0.75 inch minimum.
- 2) Process Wetted Parts: All welded 316L stainless steel. Adjustable insertion length with teflon ferrule (rated to 150 psig and 200°F), or stainless steel ferrule (rated to 250 psig and 350°F) optional.
- 3) Dual SPDT or single DPDT field configurable 6 amps resistive at 115 Vac, 220 Vac or 24 Vdc.
- 4) Operating Temperature Range: -40° to +350° F [-40° to +177° C].
- 5) Operating Pressure: 2350 psig [162 bar(g)] at 500° F [260° C] maximum.
- 6) Control circuit temperature range: Ambient -40° to +140° F [-40° to +60° C]
- 7) Flow Element Enclosure: Hazardous locations, Class I, Groups B, C and D, Division 1 and 2, Groups B, C, D, E, F, G, Eex d IIC and Type 4X.
- 8) Unit shall have FM system approval and CE Mark (EMI and RFI immunity). Overheat protection with minimum rating of T4.
- 9) Remote mounting of electronics optional.

C. Performance Specifications

- 1) Accuracy: ± 5% of reading over an operating temperature range of ± 50° F [± 28° C]
- 2) Repeatability: ± 0.5% of reading.
- 3) Thermal type level/interface switches shall have automatic temperature compensation"
- 4) The following Field Selectable Features shall be integral to the level switch:
 - a) Input power selections: 115 Vac (±15), 230 Vac (±30, 50 to 60 Hz), 24 Vdc (+4, -3) or 24 Vac (+2, -6).
 - b) Application/Heater Power selection jumper for gas or air and liquids.
 - c) Field calibrations and set-point adjustments with the ability to log voltage settings and readings.
 - d) Independent dual SPDT or single DPDT field configurable 6 amps resistive at 115 Vac, 220 Vac or 24 Vdc.
 - e) Field selected fail-safe configuration.

D. Product and Manufacturer

FLT93 Series FlexSwitch manufactured by Fluid Components International LLC