

Thermal Dispersion Flow Switch

Thermal flow switches are based on heat transfer. One sensor is at the process temperature and the other is being heated by a constant power. As the flow rate increases, the temperature difference between the sensors decreases. A set point is established so when that specific temperature difference is reached the relay changes state. This can be on either increasing or decreasing flow or flow/no flow. When used in a level or interface application it is primarily the thermal conductivity of the fluid that will provide the difference in heat transfer.



FEATURES

- Simple to Install and Low Cost
- No Moving Parts-Maintenance Free Reliability
- Optimal Temperature Compensation — Unaffected by Temperature Gradient
- Can Operate in Temperatures up to 120°C (248°F) with Sanitary Option
- Have a Maximum Working Pressure of 4,300 PSI (300 bar)
- Chain of 8 LEDs- Integrated Flow Rate/Set point Indication
- Can Be Used as a Level Switch

SPECIFICATIONS

- Accuracy: $\pm 10\%$ of set point
- Repeatability: $\pm 1\%$ of set point
- Power Supply: 85 to 240 Vac (50/60 Hz), 24 Vdc $\pm 10\%$
- Temperature Range: Process: -20 to 80°C (-4 to 176°F) [sanitary option to 120°C (248°F)]
- Operating: -20 to 60°C (-4 to 140°F)
- Max Pressure: 300 bar
- Protection Class: IP65
- Wetted Materials: 316 SS
- Enclosure Material: SS 304, Aluminum die cast
- Process Connection: $\frac{1}{2}$ to $1\frac{1}{2}$ NPT or flange
- Output: 250 Vac SPDT 5 A relay
- Switch Point Adjustment: Potentiometer