

TDL series thermal conductivity flow switch

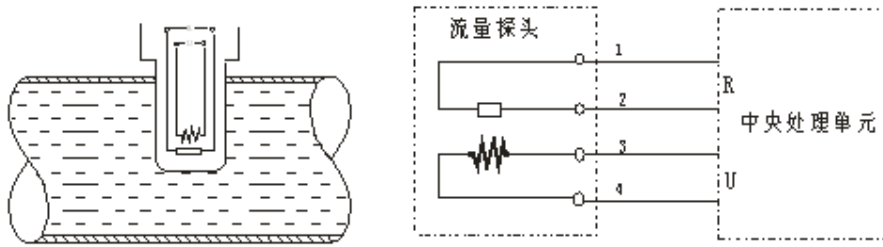


First, the introduction

TDL series heat-conducting flow switch adopts fully enclosed design, completely waterproof, and specially treated at the probe, which completely solves the problem of corrosion and scaling of probes in general water flow in poor water quality environment. After the flow switch set up action points, it obviates the need to adjust, without regular maintenance in actual use, so it will not affect the normal production, is a highly versatile flow switch can be widely Pan used in petroleum, chemical, power, water Pipeline flow detection in various industries such as processing, metallurgy, papermaking, shipbuilding and boilers.

Second, the working principle

The TDL series of thermally conductive flow switches are designed using the principle of thermal diffusion . Thermal diffusion technology is a technology with excellent performance and high reliability under severe conditions. Its typical sensing element consists of two thermal resistors. When the two thermal resistors are placed in a fluid, one of them is heated and the other is heated. Used to sense the temperature of the medium. The temperature difference between the two RTDs is related to the medium flow rate and the nature of the medium. When the heating power is constant, the temperature difference between the two RTDs is a function of mass flow. The circuit module can detect the fluid flow by detecting the temperature difference between the two thermal resistors, output a 4-20 mA signal or a relay signal, and use the LED light to indicate the current flow rate.



Third, the characteristics

- = alarm point is continuously adjustable, adjusted directly by the drive screw
- = Integrated design, small size, easy to install, completely waterproof
- = special treatment probe, anti-corrosion, anti-scaling
- = Indicate the flow status by LED light for easy observation

Fourth, the main technical parameters

- = Measurement range: water 0~5 m/s , oil 0~10 m/s , gas 0~20 m/s
- = working voltage: DC24V , AC/DC110V , AC/DC220V
- = Output mode: relay output, PNP output, NPN output, 4-20mA output
- = working current: less than 80mA
- = setting mode: drive the potentiometer to set by the drive screw
- = medium temperature change: $\leq 4\text{ }^{\circ}\text{C} / \text{S}$
- = response time: 1~10 S , typical value 2 S
- = initialization time: about 8 S
- = electrical protection: reverse phase, short circuit, overload protection
- = medium temperature: $-20 \sim 80\text{ }^{\circ}\text{C}$
- = Probe material: 316 stainless steel
- = interface size: default G1/2 " , other specifications are specified by the customer
- = degree of protection: IP67

Fifth, selection

TDL1-□-□-□

连接方式：G1/2 外螺纹；M20*1.5 外螺纹；根据用户定制；

工作电压：DC24V；DC220V；AC220V；

输出方式；K：继电器输出；M：4-20mA 输出；P：PNP 输出；N：NPN 输出；

热导式流量开关：L1：短探头；L2 长探头；