

Temperature Sensor NTC10K-NCTS4A

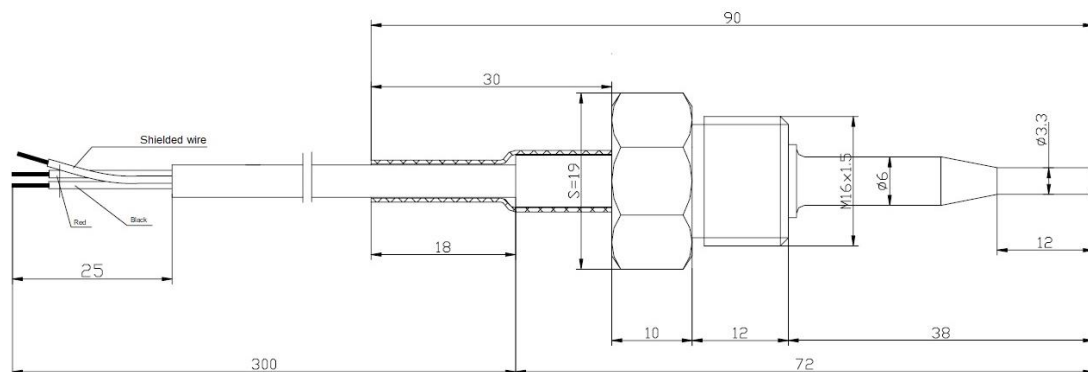
The NTC10K-NCTS4A utilizes a high-resistance NTC thermistor, which enhances immunity to lead resistance, improving overall accuracy and performance. This sensor offers excellent stability and reliability, making it ideal for a wide range of temperature measurement and control applications.

Parameters

Operating Parameters

- Nominal Resistance: $R(25)=10k\Omega$
- Material Constant: $B(25/50)=3934$
- Operating Temperature: $-50^{\circ}\text{C}\sim+150^{\circ}\text{C}$
- Accuracy: $R(25)=10k\Omega\pm 1\%$
 $B(25/50)=3934\pm 1\%$
- Insulation Resistance: $\geq 100M\Omega@500\text{VDC}$
- Dielectric Strength: 750VDC
- Protection Rate: IP67
- Cable Type: Low-smoke, halogen-free cable

Outline & Interface



- Wiring Configuration: 2-wire system; shielding wire is not connected to the housing

Notes

- The NTC10K-NCTS4A sensor should be installed onto a mounting plate following the specified installation dimensions. The rear of the sensor is secured using a mounting nut. To ensure stability and prevent the sensor from loosening over time, especially in environments with vibration, it is recommended to apply a small amount of thread-locking adhesive or include a serrated lock washer between the nut and the mounting surface.
- The choice of plate material is flexible and can be selected according to the specific application. For optimal installation, the plate thickness should be approximately 3mm and not exceed 4mm. The mounting hole diameter should be 16 mm, and the mounting thread of the sensor is M16x1.5. A thin nut (no thicker than 8mm) should be used for fastening, and the recommended tightening torque is 50N·m to ensure a secure fit without damaging the sensor or mounting components.