

Thermal Reed Switches (TRS) & Temperature/Humidity Sensors (TSPT / TSN / HT101)

Curie-Point Thermal Reed Switches, PT100/PT1000 RTD, NTC Thermistors & HT101 Humidity

Product Overview

Misensor TRS Series Thermal Reed Switches combine a hermetically sealed reed switch with a temperature-sensitive ferrite ring (Curie-point material) and permanent magnet. They provide snap-action thermal switching with high accuracy ($\pm 2.5^{\circ}\text{C}$) and zero drift over millions of cycles. We also offer PT100/PT1000 RTD, NTC temperature probes, and HT101 humidity sensors.

Key Features

- TRS Series: Hermetically sealed Curie-point magnet...
- Fixed operating temperatures from -10°C to $+130^{\circ}\text{C}$...
- Available in Form B (opens on temperature rise) an...
- TSPT100 / TSPT1000 Class A platinum RTD & TSN101/1...
- HT101 Digital/Analog Relative Humidity & Temperatu...

Typical Applications

- EV motor, inverter & battery pack over-temperature...
- Home appliances (rice cookers, coffee makers, wate...
- Automotive coolant, oil & cabin HVAC temperature m...

Technical Specifications & Model Selection

Model	Sensor Category	Temperature Range	Output / Contact	Accuracy / Differential	Housing / Thread
TRS-M / TRS-L	Thermal Reed Switch	-10°C to $+130^{\circ}\text{C}$ (Preset)	1B (NC) / 1A (NO), 10W..	$\pm 2.5^{\circ}\text{C}$, Reset $\leq 10^{\circ}\text{C}$	Axial Lead / Ring Lug ..
TSPT100-01	Platinum RTD Sensor	-50°C to $+200^{\circ}\text{C}$	PT100 (100Ohm @ 0°C)	Class A / Class B	SUS304 Probe / M12 Thr..
TSPT1000-01	Platinum RTD Sensor	-50°C to $+200^{\circ}\text{C}$	PT1000 (1000Ohm @ 0°C)	Class A ($\pm 0.15^{\circ}\text{C}$)	SUS304 Probe / Automot..
TSN101 / 102	NTC Temperature Sensor	-40°C to $+150^{\circ}\text{C}$	NTC 10kOhm / 50kOhm / ..	$\pm 1\%$ R25, $\pm 1\%$ B-value	Epoxy / Brass / Stainl..
VDO Temp	Automotive Temp Sender	$+40^{\circ}\text{C}$ to $+120^{\circ}\text{C}$	NTC + Warning Contact	$\pm 2^{\circ}\text{C}$	M14x1.5 / M16x1.5 / NP..
HT101 Series	Humidity & Temp Sensor	-40°C to $+85^{\circ}\text{C}$, 0-100%..	I2C / 0-5V / 4-20mA / ..	$\pm 2\%$ RH, $\pm 0.3^{\circ}\text{C}$	Wall / Duct / Probe Mo..