# RTD Tables

According to DIN EN 60751 for Class B and Class A

## Resistance vs Temperature Tables

According to DIN EN 60751 for Class B and Class A

$\alpha = 0.00385 \text{ per ITS-90}$

<table>
<thead>
<tr>
<th>$t \geq 0 \degree C$</th>
<th>$t &lt; 0 \degree C$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R(t) = R_0 \cdot (1 + A \cdot t + B \cdot t^2)$</td>
<td>$R(t) = R_0 \cdot [1 + A \cdot t + B \cdot t^2 + C \cdot (t - 100 \degree C) \cdot t^3]$</td>
</tr>
</tbody>
</table>

with

- $A = 3.9083 \cdot 10^{-3} \degree C^{-1}$
- $B = -5.775 \cdot 10^{-7} \degree C^{-2}$
- $R_0 = 100 \Omega$
- $C = -4.183 \cdot 10^{-12} \degree C^{-4}$
- $R_0 = 100 \Omega$

## Class B:

$dt = \pm(0.3 + 0.005 \cdot |t|)\degree C$

## Class A

$dt = \pm(0.15 + 0.002 \cdot |t|)\degree C$
- **Temperature**

- **Flow and Level**
  Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

- **pH and Conductivity**
  Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

- **Data Acquisition**

- **Pressure, Strain and Force**
  Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

- **Heaters**