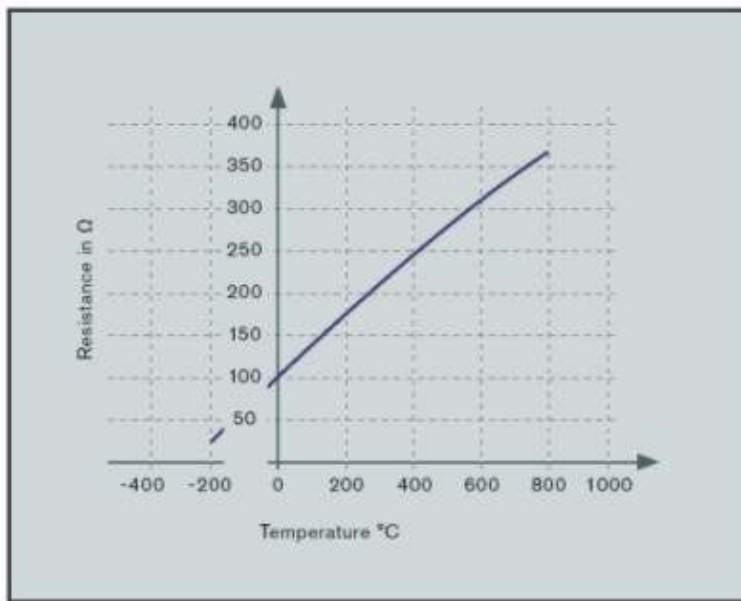


## Measuring principle of pt100 resistor element

The temperature dependence of the electrical resistance of metals is very frequently used for electrical temperature measurements. The electrical resistance of metals increases with increasing temperature. In this case, we refer to a PTC (Positive Temperature Coefficient). Platinum has proven successful as a metallic resistive material in industrial measuring technology, since the high chemical resistance, good reproducibility of the electrical properties and easy processing offer optimum preconditions for such applications. The DIN EN 60751 standard defines the electrical resistances and permitted deviations as a function of temperature. The nominal value of a PT100 sensor is 100  $\Omega$  at 0 °C.



PT100 resistance characteristic