

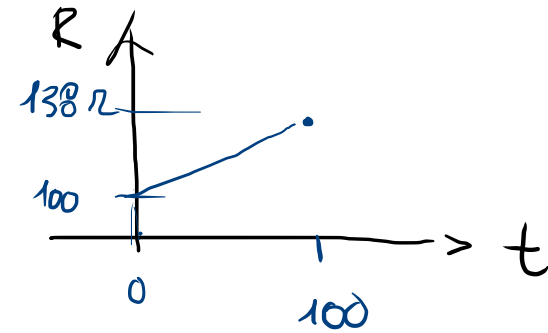
456. PT100

RTD

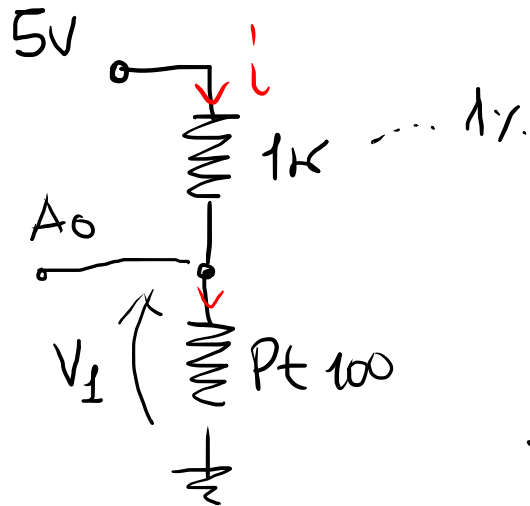


Pt $0^\circ \rightarrow 100 \Omega$

Pt 1000



906Ω $0,15^\circ C$



$$V_1 = i \cdot P_{T100} \quad i = \frac{5V}{P_{T100} + 1k\Omega}$$

$$V_1 = \left(\frac{5V}{P_T + 1k} \right) \cdot P_T \quad ; \quad V_1 \cdot (P_T + 1k) = 5V \cdot P_T$$

$$(P_T + 1k) = \frac{5 \cdot P_T}{V_1} \quad ; \quad P_T - \frac{5 P_T}{V_1} = -1k \quad ; \quad P_T \left(1 - \frac{5}{V_1} \right) = -1k$$

$$P_T = - \frac{1k}{\left(1 - \frac{5}{V_0}\right)} = \frac{1k}{\left(\frac{5}{V_0} - 1\right)}$$

