

Technical Information

Calculation of the heating resistance at 0 °C

$$R_{H0} = \frac{r}{1 + A \cdot t + B \cdot t^2}$$

Whereby:

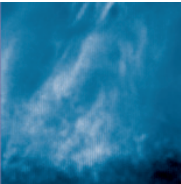
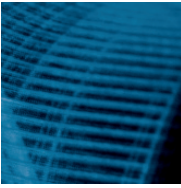
- R_{H0}... Heating resistance at 0 °C
- r... Heating resistance at ambient temperature t
- t... Ambient temperature
- A... Linear coefficient $A = 3.9083 \times 10^{-3} \text{ °C}^{-1}$
- B... Quadratic coefficient $B = -5.775 \times 10^{-7} \text{ °C}^{-2}$

Calculation of the operating temperature

$$T_H = - \left[\frac{A}{2 \cdot B} + \sqrt{\frac{A^2}{4 \cdot B^2} - \frac{R_{H0} - R_H}{R_{H0} \cdot B}} \right]$$

Whereby:

- T_H... Temperature
- R_{H0}... Heating resistance at 0 °C
- R_H... Heating resistance at temperature T_H
- A... Linear coefficient $A = 3.9083 \times 10^{-3} \text{ °C}^{-1}$
- B... Quadratic coefficient $B = -5.775 \times 10^{-7} \text{ °C}^{-2}$



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