



00:59

AutoOff: AutoOff is used to define an interval in minutes after which the instrument switches off automatically. The setting OFF (<1) deactivates the automatic switch off. Select with ▲ and ▼ ; confirm with ► .



20.0
°C

One point temperature calibration

CAL1: CAL1 (one point calibration) gives the user the possibility to define an offset for temperature 1. The offset is displayed in the lower part of the screen. Maximum offsets are:

PT100 channel: +/- 2.5°C/°F in 0.01°C/°F steps

TC channel: +/- 10°C/°F in 0.1°C/°F steps.

The offset will be valid over the complete measuring range.

Factory calibration can be obtained by setting the offset to 0.0.



0.0
°C

CAL 1



Important: Calibrations only make sense if they are carried out by specially skilled persons using appropriate calibration equipment.

CAL2: CAL2 (one point calibration) gives the user the possibility to set an offset for temperature 2. The offset is displayed on the upper part of the screen.

The maximum offset on the TC channel is +/- 10°C/°F in 0,1°C/°F step.

The offset is valid over the complete measuring range.

Factory calibration can be obtained by setting the offset to 0.0.



Important: the determination of the coefficients A,B,C and R0 must only be carried out by accredited laboratories.

Calibration of the PT100 channel by means of coefficients

CAL1 LH: Every characteristic curve of a PT100 sensor can be defined by a polynomial. Polynomials are used for minimizing errors and non-linear behaviour of a sensor element.

For temperatures -200°C...0°C (-328...32°F) the characteristic of a PT100 corresponds to the following polynomial:

$$R_t = R_0 [1 + At + Bt^2 + C(t-100^\circ\text{C}) t^3]$$

For temperatures > 0°C the polynomial is:

$$R_t = R_0 [1 + At + Bt^2]$$

R_t is the resistance at temperature t , R_0 resistance at temperature 0°C. A,B and C are coefficients of the polynomial equation.

In menu **CAL1 LH** these coefficients as well as the value R_0 can be set.

The following table contains the factory settings for the values A, B, C and R0.

Coefficient	Default Value
A	+ 3,9083 x 10 ⁻³
B	- 5,775 x 10 ⁻⁷
C	- 4,183 x 10 ⁻¹²
R0	100.0000

Select your coefficient first, using ▲ and ▼ ; then confirm with ► .

Due to display limitations the following settings are used:



Coefficient	Display
A	A
B	b
C	C
R0	r0

Changing coefficient A



1. Select sign with: ▲ and ▼ ; confirm with ► .
2. Change number by number with ▲ and ▼ , confirm with ► .

For cancelling the menu, leave the wheel unused for 20 seconds.

Coefficients B,C and R0 can be entered correspondingly.