

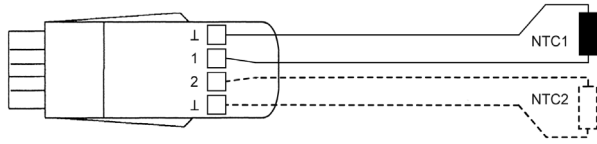
Digital ALMEMO® D6 measuring connector for temperature sensors NTC

High levels of precision and resolution 0.001 K across measuring range -20 to +65 °C

Linearization of the NTC characteristic - calculated error-free using Galway Steinhart coefficients

Increased measured value accuracy - thanks to multi-point adjustment of the NTC sensor during calibration

For all ALMEMO® V6 and V7 measuring instruments, including ALMEMO® 2490 and ALMEMO® 202.



Technical data and functions

- The digital ALMEMO® D6 measuring connector uses its own integrated A/D converter. Linearization of the NTC characteristic is calculated error-free using the Galway Steinhart coefficients (not an approximation). Across measuring range -20 to +65 °C this produces the very high resolution of 0.001 K.
- The digital temperature sensor reaches this high level of precision irrespective of any extension cables used and of any processing in the ALMEMO® display device / data logger. Overall accuracy is determined exclusively by the NTC sensor and the ALMEMO® D6 measuring connector. This increased measured value accuracy is achieved by subjecting the NTC sensor to multi-point adjustment during calibration.

Technical data

Sensor type	NTC type N
Measuring input	Electrically interconnected with the power supply (ALMEMO® device ground)
Measuring ranges	see variants
Resolution	see variants
Refresh rate	0.3 seconds for up to two channels
Linearization	Calculated error-free (not an approximation)

Accuracy	
Range DNtc / DNt2	±0.05 K at -50 to +100 °C
Range DNtc3	±0.02 K at -20 to +65 °C
Nominal temperature	23 °C ±2 K
Temperature drift	0.004 % / K (40 ppm)
Operative range	-10 to +60 °C, 10 to 90 % RH (non-condensing)
Supply voltage	from 6 V up, from ALMEMO® device (sensor supply voltage)
Current consumption	approx. 4 mA

Types:

Type / input	Measuring range	Range	Resolution	Order no.
NTC, 1 input	-50...+125 °C	DNtc	0.01 K	ZAD040FS
NTC, 2 inputs	-50...+125 °C	DNtc/DNt2	0.01 K	ZAD040FS2
NTC, 1 input	-20...+65 °C	DNt3	0.001 K	ZAD040FS3