

**Digital precision resistance sensor Pt100 up to 400 °C
with resolution of 0.001 K as reference sensor,
with ALMEMO® D7 connector for ALMEMO® V7 measuring devices / data logger**



Digital precision resistance sensor Pt100 FPD723L0250A3D
For immersion measurements in air, gases and liquids

Technical data and functions

Digital precision resistance sensor with highest accuracy and linearity for temperature measurements in a wide temperature range.

Highest resolution 0.001 K over the entire measuring range.

Application as reference probe for comparison measurements in research, development, quality assurance and production processes.

For all ALMEMO® V7 measuring instruments/data loggers, including ALMEMO® 710, 809, 500.

The digital ALMEMO® D7 measuring plug operates with its own built-in AD converter. The linearization of the Pt100 characteristic is calculated according to DIN IEC 751 (no approximation method).

The overall accuracy of the measurement is independent of the ALMEMO® V7 display unit/data logger. The complete measuring chain, consisting of the Pt100 - sensor and the connected ALMEMO® D7 measuring plug, can be calibrated.

Highest accuracy is achieved during calibration by a multi-point adjustment of the temperature sensor.

The digital sensor is supplied with a DAkkS calibration certificate incl. multi-point adjustment.

Technical data

Measuring element:	Pt100 wire wound	AD converter:	Delta-Sigma
Class:	1/10 B (DIN EN 60751) at 0°C	Conversion time	3.4 seconds
Measuring tip:	Application range: -50°C...+400°C	Measuring current:	approx. 1 mA
response time T90:	5 s	Linearization:	Calculation method (no approximation method)
Nominal length:	250 mm	Accuracy:	± 0.015K ± 2 digits
Sensor tube:	stainless steel, diameter 3 mm	Nominal temperature:	22°C ± 2 K
Connection cable:	2 m FEP/silicone	Temperature drift:	0.003 %/K (30ppm)
ALMEMO® D7 measuring connector		Supply voltage:	starting at 6 V from ALMEMO® device
Measuring range:	see sensor range	Current consumption:	approx. 9 mA
Resolution:	0.001 K		

Accessory

Aluminum profile case for 1 probe (up to 500 mm length)

Order no.

ZB9000TK1

Standard delivery

Digital precision resistance sensor Pt100 as reference sensor, with cable and ALMEMO® D7 connector.
Incl. DAkkS calibration certificate (2 temperature points at 0°C and 100°C incl. multi-point adjustment).

Order no.

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DAkkS or factory calibration KT90xx temperature for sensor or measuring chain (sensor + device), see chapter „Calibration certificates“.
DAkkS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.