Pt100 temperature sensors for special applications in humid conditions up to 150 / 250 °C

High-grade Pt100 resistance sensor
For measuring operations in very humid atmospheric conditions
Operative over a wide range of temperatures

Pt100 temperature sensors for applications in laboratories and medical engineering



Especially suitable for measuring temperatures in autoclaves, sterilizing units, high-temperature steam applications, vacuum applications, and freeze drying units

Technical data

Accuracy	Pt100 film resistor, class A*
Protective tube	Stainless steel, diameter 3 mm, length 20 mm
Operative range	-30 to +150 °C
Cable	PFA, length 5 m
Working pressure	maximum 3.0 bar
Protective class	IP69K
ALMEMO® plug	Pt100 with resolution 0.01 K.

Variants

Pt100 sensor, cable length = 5 m, ALMEMO® plug — **Order no. FPA30K20L0020**

Pt100 temperature sensors for industrial applications in air-conditioning / heat cabinets



Especially suitable for measuring temperatures in air-conditioning / heat cabinets with high atmospheric humidity
Operative over a wide range of temperatures

Technical data

Accuracy	Pt100 film resistor, class A*
Protective tube	Stainless steel, diameter 4 mm, length 50 mm
Operative range	-100 to +250 °C
Cable	PFA
Protective class	IP68
ALMEMO® plug	Pt100 with resolution 0.01 K.

Variants

Pt100 sensor, cable length = 5 m, ALMEMO® plug — **Order no. FPA40ST0050S01KL0050**
Pt100 sensor, cable length = 10 m, ALMEMO® plug — **Order no. FPA40ST0050S01KL0100**

Digital Pt100 temperature sensor with ALMEMO® D7 connector

ALMEMO® D7

- The digital ALMEMO® D7 measuring plug works with its own built-in AD converter. The linearization of the Pt100 - characteristic curve 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. Increased accuracy is achieved during calibration by a multi-point adjustment of the temperature sensor.
- For all ALMEMO® V7 measuring instruments / data loggers

Technical data for the sensor: see above
Technical data for the ALMEMO® D7 measuring plug: see chapter 2

Variants

Digital Pt100 sensor, cable length = 5 m, with ALMEMO® D7 connector — **Order no. FPD740ST0050S01KL0050**
Digital Pt100 sensor, cable length = 10 m, with ALMEMO® D7 connector — **Order no. FPD740ST0050S01KL0100**
Digital double Pt100 sensor: 2 digital Pt100 sensors, cable length 5 m each, mounted on 1 ALMEMO® D7 double connector — **Order no. FPD740ST0050S21KL0050**

Accessories:

PTFE tube (high emissivity), open on both sides, length approx. 70 mm, for probe diameter 4 mm. — **Order no. ZT9000TS41**

* Range of validity see beginning of chapter

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

11/2025 • We reserve the right to make technical changes.