Sense Anywhere
SIMPLY SMARTER

CALIBRATION RvA K 185

bsi
ISO 9001 Quality Management Systems CERTIFIED FM 698025
ISO 14001 Environmental Management CERTIFIED EMS 775860
ISO/IEC 27001 Information Security Management CERTIFIED IS 727158

DATASHEET

HERMETICALLY SEALED PT100
01-01-03 | 01-01-04

HERMETICALLY SEALED PT100 MODULE
TO MEASURE LIQUIDS AND IN SMALL SPACES!

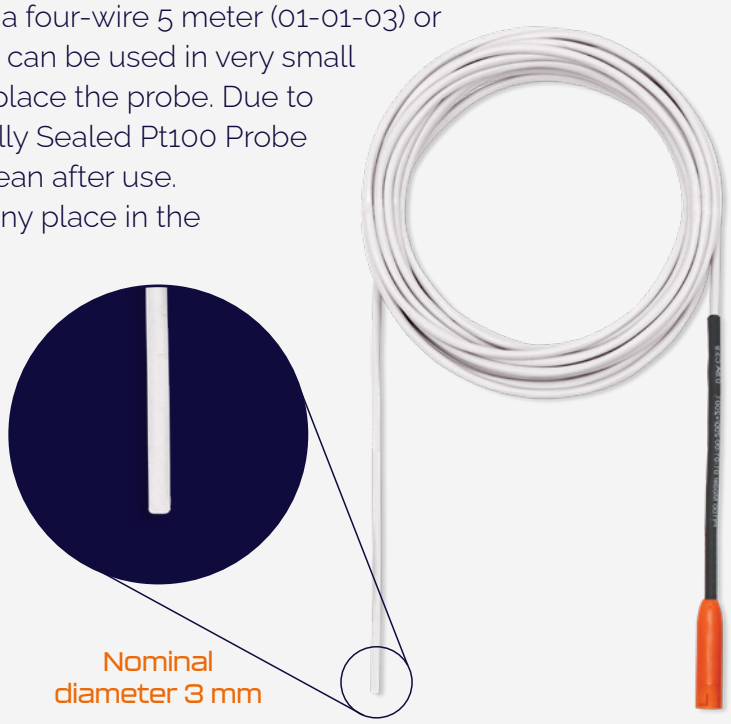
Product Description

This smart probe featuring a digital SenseAnywhere Bus interface has been especially designed for measuring extreme temperatures in liquid substances. Thanks to its hermetic seal made of PFA, better known as Teflon®, the Hermetically Sealed Pt100 Probe has a high level of chemical resistance. The probe is thanks to its PFA insulation waterproof and easy to clean. It can withstand aggressive substances, allowing it to take measurements in virtually all liquid fluids while being constantly submerged. The Pt100 element has a Class A accuracy; measurements are provided at a very high accuracy level.

The Hermetically Sealed Pt100 Probe offers a simple but very efficient monitoring solution for applications where the sensor needs to be protected from liquids and moisture. The probe measures temperatures between -90 °C to +250 °C making it the best choice for temperature measurements in hot, cold, wet and corrosive environments within the industrial and biological processes.

The Hermetically Sealed Pt100 Probe has a four-wire 5 meter (01-01-03) or 10 meter (01-01-04) long cable. This probe can be used in very small spaces, as only a 3 mm gap is needed to place the probe. Due to sealing with PFA insulation, the Hermetically Sealed Pt100 Probe has protection class IP68 and is easy to clean after use. Measurements are available at any time, any place in the SAClient Portal.

The Hermetically Sealed Pt100 Probe can be calibrated because the electronics in the connector is the instrument used to determine the measured value. This means that only the Hermetically Sealed Pt100 Probe needs to be calibrated, not the AiroSensor model 20-20-43 to which it is connected for reliable measurements.



DATASHEET

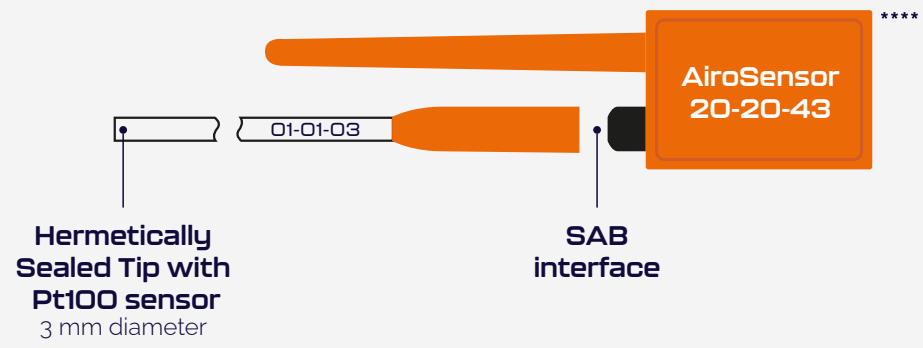
HERMETICALLY SEALED PT100
01-01-03 | 01-01-04

Sensor Type	Pt100 temperature sensor
Accuracy Class	Class A (0.15K + 0.002 x |t|)
Temperature Range Cable + Pt100	-90 °C to +250 °C
Temperature Range Connector	-40 °C to +70 °C *
Cable	Ø 3 mm PFA isolated cable, 4-wire (2 pairs), 5 m long (01-01-03) or 10 m long (01-01-04)
Connector Interface	4-pin SenseAnywhere Bus (SAB) interface
Casing Material Connector	PA (UL 94 V-0)
Diameter Connector	Ø 11.5 mm x 48 mm / 0.45 in x 1.89 in
Electrical insulation	3.5 kV
Response Time t_{90}	< 6 s (in water) < 30 s (in air)
Logging Interval	5 minutes
Protection Class Connector	IP67 **
Protection Class Cable	IP68 (permanently submerged in 1,5 m water)
User Instruction	• The Hermetically Sealed Pt100 Probe should not be bent or dropped • The cable must not be kinked
Accessory	Module Connector Clip *(EAN: 0096647495118)* ***

* Do not (dis)connect the connector at temperatures below -25 °C

** When connected to AiroSensor

Technical operation diagram





****AiroSensor with SAB interface is sold separately.