

AX 112-G3-OK



Precision Pt100 4-wire Gas-Probes



- Class A sensor
- For direct connection to instrument:
One-Hand-Operation
- Robust for many years of professional use
- Compact construction: Ø3 mm
- Fast

DESCRIPTION

AX 112-G3-OK are precision analog Pt100 gas temperature probes based on thin film sensor technology.

The probes are designed for use in clean gases, like ambient air.

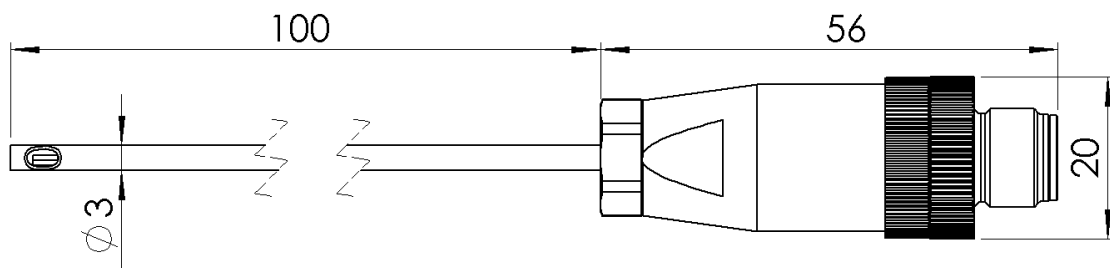
The open construction results in fastest possible response.

The sensors are plugged directly into the display units PRO 111 or PRO 115 to enable one-handed operation.

The compact design achieves the best possible response time and allows measurement even in inaccessible places.

The sensor tube is made of rustproof and temperature-resistant stainless steel.

The probes can be optionally supplied with a DAkkS-/ACCREDIA calibration certificates when combined to a suitable display instrument.



TECHNICAL SPECIFICATION

Measuring element	Pt100, thin film sensor
Construction	Ø3 mm stainless steel tube with gas openings, exposed sensor element inside
Accuracy	Tolerance class A *)
Measuring range	-50 ... +250 °C
Response time (T ₉₀)	gas 2 m/s approx. 15s
Output	Pt100 4-wire
Connection	M12 4-pole male A-coded
Cable	none, optionally use with connection cable CABLE-M12-L01
Dimensions	Stem: Ø3 mm, L = 230 mm (other lengths on request)
Weight	30 g approx.
Materials	Stem: AISI 316L (1.4404)
Application	Fast and accurate measurement in clean and dry gases

*) following **tolerance classes** of platinum resistors are standardized according/aligning to IEC 751 and EN 60751:

Tolerance class	Norm	limiting deviation in °Kelvin	wire wound	thin film
B	IEC 751 / EN 60751	$\pm (0,30 + 0,00500 \bullet \text{temperature})$	-196 to +600 °C	-50 to +500 °C
A	IEC 751 / EN 60751	$\pm (0,15 + 0,00200 \bullet \text{temperature})$	-100 to +450 °C	-30 to +300 °C
AA (= 1/3 B)	IEC 751 / EN 60751	$\pm (0,10 + 0,00167 \bullet \text{temperature})$	-50 to +250 °C	0 to +150 °C
1/10 B	none	$\pm (0,03 + 0,00050 \bullet \text{temperature})$	-50 to 100 °C	

Depending on the class, the limiting deviation is only valid within the named limited range.

Higher deviations are to be expected outside the limited range of validity.

Ageing and vibration can lead to drift, which further reduces accuracy.

The measuring range must not be exceeded under any circumstances, otherwise in the worst case the sensor may be destroyed or at least the accuracy reduced.

STANDARD ARTICLES

AX112-G3-OK-A-100 Pt100 air / gas probe Ø3 mm for clean media, class A 4 wire, M12 Connector probe stem Ø3 mm x 100 mm **Art no. 488965**

ACCESSORIES

CABLE-M12-L01 Connection cable M12 5 pole, 1m **Art no. 487020**

SUITABLE INSTRUMENTS

PRO 111 High precision thermometer for Pt100 4 wire probes, M12 socket 4-pole, graphic display. Supplied in carton box, with 4 x AA alkaline batteries, QuickStart, test-protocol **Art no. 486650**

PRO 115 High precision thermometer for Pt100 4 wire probes, M12 socket 4-pole, graphic display. Supplied with 4 x AA alkaline batteries, QuickStart, test-protocol, USB cable. Free Software ProXware downloadable from Senseca website **Art no. 486651**