

# Deutsche Akkreditierungsstelle GmbH

## Annex to the Accreditation Certificate D-K-18085-01-00 according to DIN EN ISO/IEC 17025:2018

**Valid from:** 29.11.2021

Date of issue 29.11.2021

Holder of certificate:

**Fluke Process Instruments GmbH  
Blankenburger Straße 135, 13127 Berlin**

Calibration in the fields:

**Thermodynamic quantities**

**Temperature quantities**

- Radiation thermometers
- Temperature indicators and simulators

*The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of calibration laboratories. Laboratories that conform to the requirements of this standard, operate generally in accordance with the principles of DIN EN ISO 9001.*

*The certificate together with the annex reflects the status as indicated by the date of issue.*

*The current status of any given scope of accreditation may be found respectively in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH <https://www.dakks.de/en/content/accredited-bodies-dakks>.*

Abbreviations used: see last page

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**This document is a translation. The definitive version is the original German annex to the accreditation certificate.**

**Annex to the accreditation certificate D-K-18085-01-00**
**Permanent Laboratory**
**Calibration and Measurement Capabilities (CMC)**

Measurement quantity / Calibration item	Range	Measurement conditions / procedure	Expanded uncertainty of measurement <sup>1)</sup>	Remarks
<b>Temperature</b> Radiation thermometers and radiation sources	-20 °C to 100 °C	VDI/VDE 3511 Part 4.4 July 2005 Calibration scheme IIa	0.30 K	Calibration against a cavity radiator using transfer standard radiation thermometers
	> 100 °C to 200 °C		0.40 K	
	> 200 °C to 300 °C		0.60 K	
	> 300 °C to 400 °C		0.80 K	
	> 400 °C to 500 °C		0.90 K	
	> 500 °C to 600 °C		1.3 K	
	> 600 °C to 700 °C		1.3 K	
	> 700 °C to 800 °C		1.4 K	
	> 800 °C to 900 °C		1.5 K	
	> 900 °C to 1100 °C		1.5 K	
	> 1100 °C to 1300 °C		1.6 K	
	> 1300 °C to 1500 °C		1.7 K	
	> 1500 °C to 1700 °C		4.1 K	
	> 1700 °C to 1900 °C		4.5 K	
	> 1900 °C to 2100 °C		4.9 K	
> 2100 °C to 2300 °C	5.4 K			
> 2300 °C to 2500 °C	5.8 K			
> 2500 °C to 2700 °C	6.3 K			
Temperature indicators for thermocouples	-180 °C to 1750 °C	DKD-R 5-5:2018	0.30 K	Electrical simulation of the sensor signal

**Abbreviations used:**

DKD-R	Calibration Guide of Deutscher Kalibrierdienst (DKD), published by the Physikalisch-Technischen Bundesanstalt
VDE	Association for Electrical, Electronic & Information Technologies
VDI	Association of German Engineers

<sup>1)</sup> The expanded uncertainties according to EA-4/02 M:2013 are part of CMC and are the best measurement uncertainties within accreditation. They have a coverage probability of approximately 95 % and have a coverage factor of  $k = 2$  unless stated otherwise. Uncertainties without unit are relative uncertainties referring to the measurement value unless stated otherwise.