

# Deutsche Akkreditierungsstelle

## Annex to the Accreditation Certificate D-K-20536-01-00 according to DIN EN ISO/IEC 17025:2018

**Valid from:** 15.03.2023

**Date of issue:** 19.06.2023

Holder of accreditation certificate:

**BD Sensors GmbH**  
**BD-Sensors-Straße 1, 95199 Thierstein**

The calibration laboratory meets the requirements of DIN EN ISO/IEC 17025:2018 to carry out the conformity assessment activities listed in this annex. The calibration laboratory meets additional legal and normative requirements, if applicable, including those in relevant sectoral schemes, provided that these are explicitly confirmed below.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of calibration laboratories and confirm generally with the principles of DIN EN ISO 9001.

### **Mechanical quantities**

- **Pressure**

*This certificate annex is only valid together with the written accreditation certificate and reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at <https://www.dakks.de>.*

Abbreviations used: see last page

**Page 1 of 2**

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

Annex to the Accreditation Certificate D-K-20536-01-00

Permanent Laboratory

Kalibrier- und Messmöglichkeiten (CMC)				
Measured quantity / Calibration item	Range	Measurement conditions / procedure	Best measurement capability	Remarks
<b>Pressure</b>  Absolut pressure $p_{abs}$	0,1 mbar to 70 mbar	DKD-R 6-1: 2014	35 $\mu$ bar	Pressure medium: Gas
	> 70 mbar to 3,8 bar		$2 \mu\text{bar} + 2,0 \cdot 10^{-5} \cdot p_{abs}$	From > 70 mbar on the uncertainty of the measured residual pressure has to be taken into account.
	> 3,8 bar to 19 bar		$6 \mu\text{bar} + 2,1 \cdot 10^{-5} \cdot p_{abs}$	
	> 19 bar to 76 bar		$20 \mu\text{bar} + 2,5 \cdot 10^{-5} \cdot p_{abs}$	
	> 76 bar to 201 bar		$0,12 \text{ mbar} + 3,3 \cdot 10^{-5} \cdot p_{abs}$	Pressure medium: Gas
	> 201 bar to 801 bar		$0,30 \text{ mbar} + 5,3 \cdot 10^{-5} \cdot p_{abs}$	The uncertainty of the barometer has to be taken into account.
Negative and positive gauge pressure $p_e$	-0,95 bar to -0,07 bar	DKD-R 6-1: 2014	$10 \mu\text{bar} + 2,1 \cdot 10^{-5} \cdot  p_e $	Pressure medium: Gas The uncertainty of the barometer has to be taken into account.
	> -70 mbar to 70 mbar		8 $\mu$ bar	Pressure medium: Gas
	> 70 mbar to 4 bar		$2 \mu\text{bar} + 1,5 \cdot 10^{-5} \cdot p_e$	
	> 4 bar to 20 bar		$5,2 \mu\text{bar} + 1,8 \cdot 10^{-5} \cdot p_e$	
	> 20 bar to 80 bar		$20 \mu\text{bar} + 2,2 \cdot 10^{-5} \cdot p_e$	
	> 80 bar to 200 bar		$0,10 \text{ mbar} + 3,2 \cdot 10^{-5} \cdot p_e$	
	> 200 bar to 800 bar		$0,30 \text{ mbar} + 5,3 \cdot 10^{-5} \cdot p_e$	

Abbreviations used:

CMC	Calibration and measurement capabilities (Kalibrier- und Messmöglichkeiten)
DKD-R	Guideline of Deutscher Kalibrierdienst (DKD), published by the Physikalisch-Technische Bundesanstalt

Valid from: 15.03.2023

Date of issue: 19.06.2023

Page 2 of 2

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