

## Accreditation



The Deutsche Akkreditierungsstelle attests with this **Accreditation Certificate** that the calibration laboratory

### Hydrotechnik GmbH Holzheimer Straße 94 - 96, 65549 Limburg a. d. Lahn

meets the minimum requirements according to DIN EN ISO/IEC 17025:2018 for the conformity assessment listed in the annex to this certificate. This includes additional existing legal and normative requirements, including those in relevant sectoral schemes.

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.

This accreditation was issued in accordance with Art. 5 Para. 1 Sentence 2 of Regulation (EC) 765/2008, after an accreditation procedure was carried out in compliance with the minimum requirements of DIN EN ISO/IEC 17011 and on the basis of a review and decision of the appointed accreditation committees.

This accreditation certificate only applies in connection with the notices of 04.10.2022 with accreditation number D-K-15045-01.

It consists of this cover sheet, the reverse side of the cover sheet and the following annex with a total of 2 pages.

Registration number of the accreditation certificate: D-K-15045-01-00

Translation issued:

Berlin, 04.10.2022 Dipl.-Wirtsch.-Ing. (BA) Tim Harnisch Head of Technical Unit 12.09.2022

Dipl.-Wirtsch.-Ing. (BA) Tim Harnisch Head of Technical Unit

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 can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH (www.dakks.de).

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

### Deutsche Akkreditierungsstelle GmbH

Office Berlin Spittelmarkt 10 10117 Berlin Office Frankfurt am Main Europa-Allee 52 60327 Frankfurt am Main Office Braunschweig Bundesallee 100 38116 Braunschweig

The Deutsche Akkreditierungsstelle GmbH (DAkkS) is the entrusted national accreditation body of the Federal Republic of Germany according to § 8 section 1 AkkStelleG in conjunction with § 1 section 1 AkkStelleGBV. DAkkS is designated as the national accreditation authority by Germany according to Art. 4 Para. 4 of Regulation (EC) 765/2008 and clause 4.7 of DIN EN ISO/IEC 17000.

Pursuant to Art. 11 section 2 of Regulation (EC) 765/2008, the accreditation certificate shall be recognised as equivalent by the national authorities within the scope of this Regulation as well as by the WTO member states that have committed themselves in bilateral or multilateral mutual agreements to recognise the certificates of accreditation bodies that are members of ILAC or IAF as equivalent.

DAkkS is a signatory to the multilateral agreements for mutual recognition of the European co-operation for Accreditation (EA), International Accreditation Forum (IAF) and International Laboratory Accreditation Co-operation (ILAC).

The up-to-date state of membership can be retrieved from the following websites:

EA: www.european-accreditation.org

ILAC: www.ilac.org IAF: www.iaf.nu



## Deutsche Akkreditierungsstelle

# Annex to the Accreditation Certificate D-K-15045-01-00 according to DIN EN ISO/IEC 17025:2018

**Valid from: 04.10.2022**Date of issue: 04.10.2022

Holder of accreditation certificate:

Hydrotechnik GmbH Holzheimer Straße 94 - 96, 65549 Limburg a. d. Lahn

The calibration laboratory meets the minimal requirements of DIN EN ISO/IEC 17025:2018 and, if applicable, additional legal and normative requirements, including those in relevant sectoral schemes, in order to carry out the conformity assessment activities listed 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.

Calibration in the fields:

Mechanical quantities

PressureFluid quantities

Liquid flow rate

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.



### Annex to the Accreditation Certificate D-K-15045-01-00

#### **Permanent Laboratory**

### Calibration and Measurement Capabilities (CMC)

Measurement quantity / Calibration item		Range		Measurement conditions / procedure	Expanded uncertainty of measurement	Remarks
Pressure	-1 bar	to	-0,015 bar	DKD-R 6-1:2014	$6.0 \cdot 10^{-5} \cdot p_{e}$	Pressure
Negative and positive gauge pressure $p_{\rm e}$	0.015 bar	to	1 bar	DIN EN 837: 1997	but not lower than 0.03 mbar	medium: Gas
	> 1 bar	to	7 bar		$8.0 \cdot 10^{-5} \cdot p_{\rm e}$	
Gauge pressure $ ho_{ m e}$	3 bar	to	60 bar		$8.0 \cdot 10^{-5} \cdot p_{e}$ , but not lower than 0.5 mbar	Pressure medium: Oil
	> 60 bar	to	300 bar		$8.0 \cdot 10^{-5} \cdot p_{e}$	
	> 300 bar	to	1200 bar		$1.2 \cdot 10^{-4} \cdot p_{\rm e}$	
<b>Liquid flow rate</b> Volume flow rate	0.005 L/min	to	600 L/min	VB-01:2022-02  Volumetric  measurement based  on piston-type  prover	0.2 %	Calibration liquids on basis of mineral oil
	1.5 L/min	to	1000 L/min	VB-02:2022-02 Comparative method with master	0.3 %	Calibration liquids on basis of mineral oil

### Abbreviations used:

CMC Calibration and measurement capabilities (Kalibrier- und Messmöglichkeiten)

DIN Deutsches Institut für Normung e.V.

DKD-R Calibration Guideline of Deutsche Kalibrierdienst (DKD), published by Physikalisch-

Technische Bundesanstalt (PTB)

VB In house method of Hydrotechnik Gesellschaft mit beschränkter Haftung

Valid from: 04.10.2022 Date of issue: 04.10.2022