

Deutsche Akkreditierungsstelle GmbH

Entrusted according to Section 8 subsection 1 AkkStelleG in connection with Section 1 subsection 1 AkkStelleGBV

Signatory to the Multilateral Agreements of EA, ILAC and IAF for Mutual Recognition

Accreditation



The Deutsche Akkreditierungsstelle GmbH attests that the calibration laboratory

Lorenz Messtechnik GmbH
Obere Schloßstraße 131, 73553 Alfdorf

is competent under the terms of DIN EN ISO/IEC 17025:2018 to carry out calibrations in the following fields:

Mechanical quantities

- Torque

The accreditation certificate shall only apply in connection with the notice of accreditation of 15.03.2022 with the accreditation number D-K-17603-01. It comprises the cover sheet, the reverse side of the cover sheet and the following annex with a total of 2 pages.

Registration number of the certificate: **D-K-17603-01-00**

Berlin,
15.03.2022

Dipl.-Wirtsch.-Ing. (BA) Tim
Harnisch
Head of technical unit

Translation issued:
28.03.2022

by proxy

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 at <https://www.dakks.de/en/accredited-bodies-search.html>.

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

See notes overleaf.

Deutsche Akkreditierungsstelle GmbH

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60327 Frankfurt am Main

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38116 Braunschweig

The publication of extracts of the accreditation certificate is subject to the prior written approval by Deutsche Akkreditierungsstelle GmbH (DAkKS). Exempted is the unchanged form of separate disseminations of the cover sheet by the conformity assessment body mentioned overleaf.

No impression shall be made that the accreditation also extends to fields beyond the scope of accreditation attested by DAkKS.

The accreditation was granted pursuant to the Act on the Accreditation Body (AkkStelleG) of 31 July 2009 (Federal Law Gazette I p. 2625) and the Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products (Official Journal of the European Union L 218 of 9 July 2008, p. 30). 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 Cooperation (ILAC). The signatories to these agreements recognise each other's accreditations.

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 GmbH

Annex to the Accreditation Certificate D-K-17603-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 15.03.2022

Date of issue 15.03.2022

Holder of certificate:

Lorenz Messtechnik GmbH
Obere Schloßstraße 131, 73553 Alfdorf

Calibration in the fields:

Mechanical quantities

– **Torque**

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.

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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-17603-01-00

Permanent Laboratory

Measurement quantity / Calibration item	Calibration and Measurement Capabilities (CMC)			Expanded uncertainty of measurement ¹⁾	Remarks
	Range	Measurement conditions / procedure			
Torque Torque measuring devices and torque measuring chains	0.2 N·m bis < 1 N·m	DIN 51309: 2005 EURAMET cg-14, Version 2.0		$4 \cdot 10^{-4}$	class $\geq 0,05$ clockwise torque anti-clockwise torque alternating torque
	1 N·m bis < 6 N·m			$2 \cdot 10^{-4}$	
	6 N·m bis 200 N·m	DKD-R 10-5:2020		$1 \cdot 10^{-4}$	

Abbreviations used:

CMC	Calibration and measurement capabilities (Kalibrier- und Messmöglichkeiten)
DIN	Deutsches Institut für Normung e.V.
DKD-R	Richtlinie des Deutschen Kalibrierdienstes (DKD), herausgegeben von der Physikalisch-Technischen Bundesanstalt
EURAMET	European Association of National Metrology Institutes

¹⁾ The expanded uncertainties according to EA-4/02 M:2021 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.

Date of issue: 15.03.2022

Valid from: 15.03.2022