

## 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

**DSM Messtechnik GmbH**  
**Dieselstraße 16, 73431 Aalen**

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

### Mechanical quantities

- Torque

### Electrical quantities

#### DC and low frequency quantities

- DC voltage
- DC current
- Voltage ratio

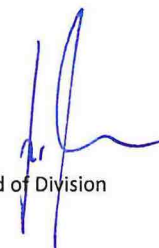
The accreditation certificate shall only apply in connection with the notice of accreditation of 03.06.2021 with the accreditation number D-K-15152-01. It comprises the cover sheet, the reverse side of the cover sheet and the following annex with a total of 2 pages.

Registration number of the certificate: **D-K-15152-01-00**

Berlin,  
03.06.2021

Dr Heike Manke  
Head of Division

Translation issued:  
03.06.2021

  
Head of Division

*The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH.*  
<https://www.dakks.de/en/content/accredited-bodies-dakks>

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

See notes overleaf.

# Deutsche Akkreditierungsstelle GmbH

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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](http://www.european-accreditation.org)

ILAC: [www.ilac.org](http://www.ilac.org)

IAF: [www.iaf.nu](http://www.iaf.nu)

# Deutsche Akkreditierungsstelle GmbH

## Annex to the Accreditation Certificate D-K-15152-01-00 according to DIN EN ISO/IEC 17025:2018

**Valid from:** 03.06.2021

Date of issue 03.06.2021

Holder of certificate:

**DSM Messtechnik GmbH**  
**Dieselstraße 16, 73431 Aalen**

Calibration in the fields:

**Mechanical quantities**

- Torque

**Electrical quantities**

**DC and low frequency quantities**

- DC voltage
- DC current
- Voltage ratio

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

*The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH.  
<https://www.dakks.de/en/content/accredited-bodies-dakks>*

**Annex to the accreditation certificate D-K-15152-01-00**

**Permanent Laboratory**

**Calibration and Measurement Capabilities (CMC)**

Measurement quantity / Calibration item	Range	Measurement conditions / procedure	Expanded uncertainty of measurement <sup>1)</sup>	Remarks
<b>Torque</b> Torque measuring systems Torque sensors	0,05 N·m bis < 1 N·m	DIN 51309: 2005	$2 \cdot 10^{-3}$	calibration of torque measuring chain of class $\geq 0,5$
	1 N·m bis 1000 N·m		$1 \cdot 10^{-3}$	
Torque wrench calibration devices	1 N·m bis 1200 N·m	DKD-R 10-8:2020	$2 \cdot 10^{-3}$	with torque transfer wrench
<b>Electrical quantities</b> DC voltage	1 mV bis 10 mV		$3,6 \cdot 10^{-3}$	
	> 0,01 V bis 250 V		$0,40 \cdot 10^{-3}$	
DC current	2 mA bis 20 mA		$1,5 \cdot 10^{-3}$	
Voltage ratio	0,1 mV/V bis 2 mV/V	input voltage: 10 V bis 15 V	$0,5 \mu\text{V}/\text{V}$	
	> 2 mV/V bis 10 mV/V		$1,4 \mu\text{V}/\text{V}$	

**Abbreviations used:**

CMC	Calibration and measurement capabilities
DIN	Deutsches Institut für Normung e.V.
DKD-R	Guideline of Deutscher Kalibrierdienst (DKD), published by Physikalisch-Technische Bundesanstalt

<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.