

Deutsche Akkreditierungsstelle

Annex to the Accreditation Certificate D-K-19120-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: **07.08.2023**

Date of issue: 07.08.2023

Holder of accreditation certificate:

Mettler-Toledo GmbH
Ockerweg 3, D-35396 Gießen

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.

Calibrations at the locations:

Ockerweg 3, D-35396 Gießen

Trebohosticka 2283/2, CZ-100 00 Prague 10

Ul. Poleczki 21, PL-02-822 Warszawa

Hattalova 12/A, SK-831 03 Bratislava

Pot heroja Trtnika 26, SI-1261 Ljubljana – Dobrunje

Jure Kaštelana 19, HR-10000 Zagreb

Im Langacher 44, CH-8606 Greifensee

Laxenburger Straße 252/2, A-1230 Wien

Késmárk utca 14/B, H-1158 Budapest

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 5

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

Annex to the Accreditation Certificate D-K-19120-01-00

Calibration in the fields:

Mechanical Quantities

- **Weighing instruments** ^{a)}

Chemical and medical quantities

Chemical analysis, reference materials

- **Volume of liquids** ^{b)}

^{a)} Only On-site calibrations

^{b)} Also On-site calibrations

Within the measurands / calibration items marked with *, the calibration laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, to use calibration standards or equivalent calibration procedures listed here with different issue dates. The calibration laboratory maintains a current list of all calibration standards / equivalent calibration procedures within the flexible scope of accreditation.

Valid from: 07.08.2023

Date of issue: 07.08.2023

Page 2 of 5

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

Annex to the Accreditation Certificate D-K-19120-01-00

Permanent Laboratory - location Gießen

Calibration and measurement capabilities (CMC)

Measurement quantity / Calibration item	Range	Measurement conditions / procedure	Expanded uncertainty of measurement	Remarks
Liquid volume* Single-channel piston-stroke-pipettes	1 µL to < 10 µL	DIN EN ISO 8655:2002 DKD-R 8-1:2011	2.33 % ^{a)} 1.75 % ^{b)} 1.17 % ^{c)}	The measurement uncertainty refers to the nominal volume V_N . (Specification of the measurement uncertainty at the smallest nominal volume of the respective interval). a) Upper test volume ($V_t = 1.0 \cdot V_N$) for measuring instruments with fixed and variable volume. b) Medium test volume (e.g. $V_t = 0.5 \cdot V_N$) for measuring instruments with variable volume. c) Lower test volume (e.g. $V_t = 0.1 \cdot V_N$) for measuring instruments with variable volume V_N Nominal volume V_t Test volume
	10 µL to < 100 µL		0.31 % ^{a)} 0.23 % ^{b)} 0.16 % ^{c)}	
	100 µL to < 1 mL		0.15 % ^{a)} 0.11 % ^{b)} 0.08 % ^{c)}	
	1 mL to < 100 mL		0.14 % ^{a)} 0.11 % ^{b)} 0.07 % ^{c)}	
Multi-channel piston-stroke-pipettes	1 µL to < 100 µL		0.34 % ^{a)} 0.26 % ^{b)} 0.17 % ^{c)}	
	100 µL to < 1.2 mL		0.16 % ^{a)} 0.12 % ^{b)} 0.08 % ^{c)}	
Multi-dispenser	1 µL to < 10 µL	DIN EN ISO 8655:2002 DKD-R 8-2:2017	1.60 %	
	10 µL to < 100 µL		0.25 %	
	100 µL to < 1 mL		0.08 %	
	1 mL to 200 mL		0.07 %	
Single stroke dispenser	100 µL to < 10 mL	DIN EN ISO 8655:2002 DKD-R 8-3:2020	0.10 %	
	10 mL to 50 mL		0.09 %	
Piston burettes	100 µL to 50 mL		0.030 %	

Valid from: 07.08.2023

Date of issue: 07.08.2023

Annex to the Accreditation Certificate D-K-19120-01-00

On-site calibration - location Gießen and Wien

Calibration and Measurement Capabilities (CMC)

Measurement quantity / Calibration item	Range	Measurement conditions / procedure	Expanded uncertainty of measurement	Remarks
Liquid volume* Single-channel piston-stroke-pipettes	1 µL to < 10 µL	DIN EN ISO 8655:2002 DKD-R 8-1:2011	2.33 % ^{a)} 1.75 % ^{b)} 1.17 % ^{c)}	The measurement uncertainty refers to the nominal volume V_N . (Specification of the measurement uncertainty at the smallest nominal volume of the respective interval). a) Upper test volume ($V_t = 1.0 \cdot V_N$) for measuring instruments with fixed and variable volume. b) Medium test volume (e.g. $V_t = 0.5 \cdot V_N$) for measuring instruments with variable volume. c) Lower test volume (e.g. $V_t = 0.1 \cdot V_N$) for measuring instruments with variable volume V_N Nominal volume V_t Test volume
	10 µL to < 100 µL		0.32 % ^{a)} 0.24 % ^{b)} 0.16 % ^{c)}	
	100 µL to < 1 mL		0.18 % ^{a)} 0.14 % ^{b)} 0.09 % ^{c)}	
	1 mL to < 100 mL		0.17 % ^{a)} 0.13 % ^{b)} 0.09 % ^{c)}	
Multi-channel piston-stroke-pipettes	1 µL to < 100 µL		0.35 % ^{a)} 0.26 % ^{b)} 0.18 % ^{c)}	
	100 µL to < 1.2 mL		0.19 % ^{a)} 0.14 % ^{b)} 0.10 % ^{c)}	
Multi-dispenser	1 µL to < 10 µL	DIN EN ISO 8655:2002 DKD-R 8-2:2017	1.60 %	
	10 µL to < 100 µL		0.25 %	
	100 µL to < 1 mL		0.08 %	
	1 mL to 200 mL		0.07 %	
Single stroke dispenser	100 µL to < 10 mL	DIN EN ISO 8655:2002 DKD-R 8-3:2020	0.10 %	
	10 mL to 50 mL		0.09 %	
Piston burettes	100 µL to 50 mL		0.032 %	

Valid from: 07.08.2023

Date of issue: 07.08.2023

Annex to the Accreditation Certificate D-K-19120-01-00

On-site calibration - location Gießen and Wien

Calibration and Measurement Capabilities (CMC)

Measurement quantity / Calibration item	Range	Measurement conditions / procedure	Expanded uncertainty of measurement	Remarks
Weighing instruments nonautomatic weighing instruments	500 kg to < 1000 kg	RapidCal Version 002 edited 01.06.2023	$2,9 \cdot 10^{-3}$	with reference load cells according to OIML R60 edition 2000 (E)
	1000 kg to < 4000 kg		$1,2 \cdot 10^{-3}$	
	4000 kg to 32000 kg		$7,2 \cdot 10^{-4}$	

On-site Calibration - for all Sites

Calibration and Measurement Capabilities (CMC)

Measurement quantity / Calibration item	Range	Measurement conditions / procedure	Expanded uncertainty of measurement	Remarks
Weighing instruments* nonautomatic weighing instruments	to 610 g	EURAMET Calibration Guide No. 18, Version 4.0 (11/2015)	$1 \cdot 10^{-6}$	With weights pieces according to OIML R 111-1:2004, class E ₂
	to 70 kg		$6 \cdot 10^{-6}$	With weights pieces according to OIML R 111-1:2004, class F ₁
	to 600 kg		$2 \cdot 10^{-5}$	With weights pieces according to OIML R 111-1:2004, class F ₂
	to 20000 kg		$6 \cdot 10^{-5}$	With weights pieces according to OIML R 111-1:2004, class M ₁
	to 20000 kg		$2 \cdot 10^{-4}$	With weights pieces according to OIML R 111-1:2004, class M ₂

Within the scope of accreditation Mettler-Toledo GmbH is permitted to use the electronic signature of the head of calibration laboratory and the use of green calibration marks.

Abbreviations used:

CMC	Calibration and measurement capabilities (Kalibrier- und Messmöglichkeiten)
DIN	Deutsches Institut für Normung e.V.
DKD-R	Guideline of Deutscher Kalibrierdienst
EN	european standard
EURAMET	European Association of National Metrology Institutes
ISO	International Organization for Standardization
RapidCal	In house calibration procedure of Mettler-Toledo GmbH

Valid from: 07.08.2023

Date of issue: 07.08.2023