

Von der Schweizerischen Akkreditierungsstelle akkreditierte Kalibrierstelle  
Laboratoire d'étalonnage accrédité par le Service d'Accréditation Suisse  
Calibration Laboratory accredited by the Swiss Accreditation Service

S Akkreditierungs-Nr.  
C No. d'accréditation **SCS 0002**  
S Accreditation No.

The Swiss Accreditation Service is one of the signatories to the EA  
Multilateral Agreement for the recognition of calibration certificates

Zertifikat Nr.  
No. du certificat **25069**  
Certificate No.

Seite Page 1 von de/of 3 Seiten pages  
Pagina di 3 pagine

## KALIBRIER – ZERTIFIKAT CERTIFICAT D'ÉTALONNAGE CERTIFICATE OF CALIBRATION

Instrument  
Instrument  
Instrument

Calibration Kit

Hersteller  
Fabricant  
Manufacturer

MT

Typ  
Type  
Model

ME-51302410

Serien- / Inventar-Nr.  
No. de série- / inventaire  
Serial- / Inv. No.

A309

Kunde  
Client  
Customer

Mettler-Toledo GmbH, 8606 Nänikon

Auftragsnummer  
No. de la commande  
Order No.

n/a

Bemerkungen  
Remarques  
Remarks

n/a

Datum der Kalibrierung  
Date de l'étalonnage  
Date of calibration

27. Mai 2019

Dieses Kalibrierzertifikat dokumentiert die Rückverfolgbarkeit auf nationale Normale zur Darstellung der physikalischen Einheiten (SI).  
Ce certificat d'étalonnage confirme le raccordement aux étalons nationaux qui matérialisent les grandeurs physiques (SI).  
This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).

Messresultate, Messunsicherheiten mit Vertrauensbereich und Messverfahren sind auf den folgenden Seiten aufgeführt und sind Teil des Zertifikats.  
Les résultats, les incertitudes avec le niveau de confiance et les méthodes de mesure sont donnés aux pages suivantes et font partie du certificat.  
The measurements, the uncertainties with confidence probability and calibration methods are given on the following pages and are part of the certificate.

Stempel und Datum  
Timbre et Date  
Stamp and date

**ELCAL**  
Messgeräte • Service • Kalibration

Dietikon, 27. Mai 2019

Leiter der Kalibrierstelle  
Chef du laboratoire d'étalonnage  
Head of the Calibration Laboratory

Christoph Stampfli

Testreport  
397383

Certificate : SCS 25069  
Unit under Test : MT ME-51302410 Calibration Kit  
Serial No : A309  
Customer : Mettler-Toledo GmbH, 8606 Nänikon  
Inventory No :  
Date : 27.05.2019  
Operator : M. Huerlemann

#### TRACEABILITY INFORMATION

Instruments used:	Serial No:	Inventory No:	Cal Due Date:
Fluke Hart 2626-S	B81544	LAB-436A	03.01.2020
Agilent 3458A/01/02/H01	MY45040974	LAB-199	17.07.2019

All listed result are direct traceable to the Swiss Federal Office of Metrology, as far as listed in the uncertainty table of the SCS Certificate. Measurements beyond the current accreditation are marked with \*.

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k=2$ , which for a normal distribution corresponds to a coverage probability of approx 95%.

#### SUMMARY OF LAST RECORDED CAL DATA

This certificate records the calibration status.  
Points where %Tol exceeds the adjustment threshold are marked with a "M".  
Points where %Tol exceeds the specification limit are marked with a "F".  
The calibration status is calculated neglecting the measurement uncertainty.

Number of Test Marginal: 0  
Number of Test Failed: 0

Testreport  
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TEST RANGE	UUT INDICATED	SYSTEM ACTUAL	MODIFIER	ERROR	ERROR (%TOL)	EXP. M	UNCERT F
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Actual Ambient Temp. 23.4 ±0.5°C / Humidity 28.5%

Marginal limit 80% of UUT Tol.

METTLER: ME-51302410 Meter Calibration Kit

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All Tests refer 0.3% of Nominal Resistor Value

Std. Resistors with Banana Connector Test:

1	1.00000kΩ	1.000026kΩ	0°C_Res	26.0 ppm	1	106mΩ
2	1.09735kΩ	1.097428kΩ	25°C_Res	71.1 ppm	2	106mΩ
3	1.19397kΩ	1.194099kΩ	50°C_Res	0.011 %	4	107mΩ
4	1.28987kΩ	1.290183kΩ	75°C_Res	0.024 %	8	110mΩ
5	1.38506kΩ	1.385134kΩ	100°C_Res	53.4 ppm	2	111mΩ

Std. Resistors with Cinch Connector Test:

6	94.980kΩ	94.9663kΩ	0°C_Res	-0.014 %	5	540mΩ
7	30.000kΩ	30.0088kΩ	25°C_Res	0.029 %	10	193mΩ
8	10.969kΩ	10.9771kΩ	50°C_Res	0.074 %	25	62mΩ
9	4.528kΩ	4.52553kΩ	75°C_Res	-0.055 %	18	27mΩ
10	2.070kΩ	2.07027kΩ	100°C_Res	0.013 %	4	14mΩ

End of METTLER: ME-51302410 Meter Calibration Kit