



EA MLA Signatory
Český institut pro akreditaci, o.p.s.
Olšanská 54/3, 130 00 Praha 3

issues

according to section 16 of Act No. 22/1997 Coll., on technical requirements for products, as amended

CERTIFICATE OF ACCREDITATION

No. 317/2024

M & B Calibr, spol. s r.o.
with registered office Krumlovská 1454/26, 664 91 Ivančice,
Company Registration No. 43389783

for the Calibration Laboratory No. 2301
Calibration Laboratory

Scope of accreditation:

Calibration of meters of length, plane angle, weight, speed, hardness, roughness, force, pressure, temperature, electrical quantities, time quantities and humidity to the extent as specified in the appendix to this Certificate.

This Certificate of Accreditation is a proof of Accreditation issued on the basis of assessment of fulfillment of the accreditation criteria in accordance with

ČSN EN ISO/IEC 17025:2018

In its activities performed within the scope and for the period of validity of this Certificate, the Conformity Assessment Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Accredited Body meets the specified accreditation requirements in accordance with the relevant regulations applicable to the activity of an accredited Conformity Assessment Body.

This Certificate of Accreditation replaces, to the full extent, Certificate No.: 64/2024 of 14. 2. 2024, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: 2. 7. 2029

Prague: 2. 7. 2024



Jan Velíšek
Director of the Department
of Testing and Calibration Laboratories
Czech Accreditation Institute

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

M & B Calibr, spol. s r.o.
CAB number 2301, Calibration Laboratory
Krumlovská 1454/26, 664 91 Ivančice

CMC for the field of measured quantity: Length

Ord. num-ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min.	unit	max.	unit					
1	Steel parallels	0.5 mm	to	1,000 mm		(2·L + 0.2) μm	Comparative measurement using steel parallels	KP D1		
2*	Steel length gauges	0 m	to	2 m		60 μm	Comparative measurement using steel parallels	KP D2		
		2 m	to	5 m		180 μm				
	Steel tape measures	0 m	to	2 m		0.14 mm	Comparative measurement on a reference track			
		2 m	to	3 m		0.28 mm				
		3 m	to	5 m		0.42 mm				
		5 m	to	8 m		0.70 mm				
8 m		to	10 m		0.98 mm					
3	Tape measures	0 m	to	10 m		0.4 mm	Comparative measurement on a reference track	KP D3		
		10 m	to	20 m		0.6 mm				
		20 m	to	50 m		1.0 mm				
		50 m	to	100 m		2.2 mm				
	Laser distance meters	0 m	to	5 m		0.2 mm				
		5 m	to	10 m		0,4 mm				
4	Limit and end measuring rings	1 mm	to	100 mm		(2·L + 0.5) μm	Direct and comparative measurement by a distance meter	KP D4		
		100 mm	to	500 mm		(2·L + 2.4) μm				
	Limit snap gauges	1 mm	to	100 mm		(2·L + 0.5) μm				
		100 mm	to	500 mm		(2·L + 2.4) μm				
	Feeler gauges	0.02 mm	to	100 mm		(2·L + 0.5) μm				
		Limit cylindrical gauges	100 mm	to	500 mm					

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Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min.	unit	max.	unit					
5*	Feeler gauges, Limit cylindrical gauges.	1 mm	to	125 mm			(2·L + 2.4) μm	Direct measurement by a micropasameter	KP D4	
6	Limit plug gauges	1 mm	to	200 mm			(3·L + 3) μm	Direct measurement by a distance meter	KP D5	
		1 mm	to	160 mm			(1·L + 4) μm	Direct measurement on MasterScanner XP 16060		
	Threaded rings	1 mm	to	3 mm			(3·L + 3) μm	Comparison by a wear pin gauge		
		2.5 mm	to	200 mm			(3·L + 3) μm	Indirect measurement by a distance meter		
		3 mm	to	160 mm			(1·L + 4) μm	Direct measurement on MasterScanner XP 16060		
7*	Limit plug gauges	1 mm	to	125 mm			(3·L + 3.5) μm	Direct measurement by a micropasameter	KP D5	
8*	Slide gauges: slide rules, depth gauges, height gauges	0 mm	to	1,000 mm			12 μm	Comparative measurement using steel parallels and ring	KP D6	
		1,000 mm	to	3,000 mm			20 μm			
9*	Micrometer gauges: micrometers, pasameters, micropasameters, micrometer heads, micrometer depth gauges	0 mm	to	25 mm			0.7 μm	Comparative measurement using steel parallels	KP D7	
		25 mm	to	100 mm			1.4 μm			
		100 mm	to	1,000 mm			2.5 μm			
		1,000 mm	to	1,500 mm			4.1 μm			
10*	Inside micrometers Three contact internal gauges	2 mm	to	100 mm			2.0 μm	Comparative measurement using setting rings	KP D8	
		100 mm	to	300 mm			4.0 μm			

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		min.	unit	max.	unit					
11	Inside micrometer gauges	10 mm	to	3,000 mm			$(3 \cdot L + 2.2) \mu\text{m}$	Direct measurement by a distance meter	KP D9	
12*	Electromagnetic, ultrasonic thickness gauges	0 mm	to	1.5 mm			$(1 \cdot L + 1.3) \mu\text{m}$	Comparative measurement by a thickness reference standard	KP D10	
		1.5 mm	to	500 mm			$(1 \cdot L + 2.3) \mu\text{m}$			
13	Direct and lever dial indicators	0 mm	to	100 mm			0.3 μm	Direct measurement by a special measuring device	KP D11	
	Two-contact internal gauges	2 mm	to	205 mm			0.3 μm			
14	Gauges, measuring jigs, templates, meters of plane and angle	0 mm	to	2,000 mm			$(4.5 \cdot L + 1.7) \mu\text{m}$	Measurement by a 3D CMM	KP D12	
15*	Profile projectors, measuring microscopes	0 mm	to	300 mm			$(1 \cdot L + 2.6) \mu\text{m}$	Comparative measurement using a rule	KP D13	
16*	Measurement of straightness, linear sensing, measurement flatness engineering gauges	0 m	to	20 m			$(1 \cdot L + 0.1) \mu\text{m}$	Direct measurement by a laser interferometer	KP D14	
		0 m	to	20 m			1.5 $\mu\text{m}/\text{m}^2$			
17	Gauges, measuring jigs, special meters	0 mm	to	600 mm			$(2.5 \cdot L + 1.2) \mu\text{m}$	Measurement by a linear height gauge	KP D15	
18*	Linear height gauges	0 mm	to	600 mm			$(0.8 \cdot L + 0.5) \mu\text{m}$	Comparative measurement by a calibration comb	KP D16	
		600 mm	to	1,000 mm			$(1 \cdot L + 3.0) \mu\text{m}$	Comparative measurement by a calibration comb and steel parallels		
19*	Contourographs	0 mm	to	100 mm			$(1 \cdot L + 2.6) \mu\text{m}$	Comparative measurement using end standards	KP D17	

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Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min.	unit	max.	unit					
20*	Length measuring instruments	0 mm	to	20,000 mm			(2·L + 0.2) μm	Direct measurement by a laser interferometer	KP D18	
21*	3D coordinate measuring machines	0 mm	to	600 mm			(2·L + 0.2) μm	Comparative measurement by a calibration comb	KP D19	
		600 mm	to	1,000 mm			(2·L + 0.2) μm	Comparative measurement by a calibration comb and steel parallels		
		0 mm	to	10,000 mm			(1·L + 0.1) μm	Direct measurement by a laser interferometer		
22	Gauges, special meters, measuring jigs, templates, rules	0 mm	to	330 mm			(2·L + 3.5) μm	Direct measurement by a 2D microscope	KP D20	
23	Blade and surface rules	0 mm	to	2,000 mm			(5·L + 2) μm	Direct measurement on a plate	KP D21	
		2,000 mm	to	3,000 mm			(5·L + 12) μm	Measurement on a bed		
24*	Roughness meters	0.01 μm	to	6,000 μm			5 %	Comparative measurement by a roughness reference standard	KP DR1	
25	Roughness standards	0.01 μm	to	6,000 μm			5 %	Direct measurement by a roughness meter	KP DR1	
26	Angles from 0° to 180°	0 mm	to	7 mm		Length of the arm up to 3 m	(4.5·L + 2) μm	Direct measurement by a 3D CMM	KP R2	

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³ If the document identifying the calibration procedure is dated, only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is used (including any changes).

Explanatory notes:

CMM – coordinate measuring machine

L – nominal length in metres



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CMC for the field of measured quantity: Plane angle

Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min.	unit	max.	unit					
1	Levels – builder's, liquid, machine	-52 mm/m		to	52 mm/m	Division sensitivity from 0.01 mm/m	0.005mm/m	Direct measurement by a small angle generator	KP R1	
	Clinometers	-180 °		to	180 °	Division from 0.01°	0.15°			
2	Angle gauges	0 °		to	360 °		5'	Direct measurement using angle gauges	KP R2	

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CMC for the field of measured quantity: Mass

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min.	unit	max.	unit					
1*	Non-automatic weighing instruments	0.001 g	to	2000 g		E2 class weight	$2.7 \cdot 10^{-6}$	Reference weight loading (according to OIML R111-1:2004)	KP VA1	
		2 kg	to	20 kg		F2 class weight	$1.4 \cdot 10^{-5}$			
		20 kg	to	1000 kg		M1 class weight	$5.0 \cdot 10^{-5}$			
2	Conventional weight of weights and objects			1 g			0.4 mg	Comparison with a reference weight (according to OIML R111-1:2004) on the standard scales	KP VA2	
		1 g	to	2 g			0.5 mg			
		2 g	to	5 g			0.6 mg			
		5 g	to	10 g			0.7 mg			
		10 g	to	20 g			0.9 mg			
		20 g	to	50 g			1.2 mg			
		50 g	to	100 g			1.9 mg			
		100 g	to	200 g			2.8 mg			
		200 g	to	500 g			5.1 mg			
		500 g	to	1 kg			10 mg			
		1 kg	to	2 kg			17 mg			
		2 kg	to	5 kg			31 mg			
		5 kg	to	10 kg			60 mg			
		10 kg	to	20 kg			90 mg			

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CMC for the field of measured quantity: Rotational speed

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min.	unit	max.	unit					
1*	Revolution meters	30 min ⁻¹		to	40,000 min ⁻¹		1.1 %	Direct measurement by a revolution generator	KP OT1	

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CMC for the field of measured quantity: Force, mechanical tests

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min	unit.	max	unit.					
1	Hardness / Rockwell hardness plates and samples	70 HRA	to	85 HRA			0.40 HRA	Direct measurement	KP TV1	
		60 HRB	to	100 HRB			0.40 HRB			
		20 HRC	to	70 HRC			0.40 HRC			
	Hardness / Hardness plates									
	Shore A	0 ShA	to	100 ShA			2.0 ShA			
	Shore D	0 ShD	to	100 ShD			2.0 ShD			
	Brinell	8 HBW	to	650 HBW			1.0 %			
	Vickers	10 HV	to	2,900 HV		HV2 to HV50	1.0 %			
2*	Hardness / Hardness meters for metals							Direct measurement using reference hardness plates	KP TV1	
	Rockwell	70 HRA	to	85 HRA			0.50 HRA			
		60 HRB	to	100 HRB			0.50 HRB			
		20 HRC	to	70 HRC			0.50 HRC			
	Vickers	10 HV	to	2,000 HV			0.50 %			
	Brinell	10 HBW	to	650 HBW			0.50 %			
	Hardness / Shore hardness meters, type A,D,E,C	1 Sh	to	100 Sh			0.50 Sh			
3*	Torque / Torque wrenches	0.1 Nm	to	1,100 Nm			0.65 %	Comparative measurement by a reference torque sensor	KP S1	
		1,100 Nm	to	3,000 Nm			0.90 %			
	Torque / Torque measuring devices, torque drivers, torque sensors	0.1 Nm	to	500 Nm			0.40 %			
		500 Nm	to	2,000 Nm			1.05 %			

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Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min	unit.	max	unit.					
4	Moment of force / Force meters and extensometric sensors	0.001 N	to	5 kN			0.20 % 0.30 %	Comparative measurement by a reference force sensor	KP S2	
5*	Moment of force / Force meters and extensometric sensors	5 kN	to	30 kN				Comparative measurement by a reference force sensor		
		0.001 N	to	5 kN			0.20 % 0.30 %			
		5 kN	to	20 kN						

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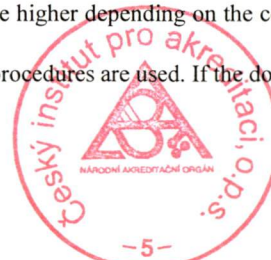
CMC for the field of measured quantity: Pressure

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min.	unit	max.	unit					
1*	Deformation manometers, tyre pressure gauges, electromechanical pressure gauges (digital pressure gauges, pressure transducers with digital output of the measured quantity)							Comparative measurement by a reference digital pressure gauge	KP T1, KP T2	
		kPa	to	7 MPa		Gas	Absolute pressure			
		-100 kPa	to	0 kPa		Gas	Overpressure			
		0 kPa	to	35 kPa						
		35 kPa	to	7 MPa						
		0 kPa	to	7 MPa		Liquids	Absolute pressure			
		7 MPa	to	70 MPa						
		70 MPa	to	140 MPa						
		0 MPa	to	1.4 MPa		Liquids	Overpressure			
		1.4 MPa	to	70 MPa						
		70 MPa	to	140 MPa						

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CMC for the field of measured quantity: Temperature

Ord. num-ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Loca-tion
		min.	unit	max.	un it					
1*	Direct-indicating thermometers	-30 °C	to	0 °C			0.14 °C	Comparison with a reference digital thermometer in a dry block calibrator	KP TE1	
		0 °C	to	100 °C			0.08 °C	Comparison with a reference digital thermometer in a liquid bath		
		100 °C	to	200 °C			0.22 °C	Comparison with a reference digital thermometer in a dry block calibrator		
		200 °C	to	300 °C			0.32 °C			
		300 °C	to	400 °C			0.42 °C			
		400 °C	to	500 °C			0.52 °C			
	500 °C	to	650 °C			0.67 °C				
	650 °C	to	1,100 °C			1.5 °C	Comparison with a reference digital thermometer in an air oven	KP TE4		
Contactless thermometers	-10 °C	to	200 °C			3.0 °C	Comparison with a reference pyrometer on target-type or cavity-type black body			
	200 °C	to	500 °C			6.0 °C				
	500 °C	to	800 °C			10.0 °C				
2*	Thermoelectric temperature sensors	-30 °C	to	0 °C			0.7 °C	Comparison with a reference digital thermometer in a dry block calibrator	KP TE2	
		0 °C	to	100 °C			0.7 °C	Comparison with a reference digital thermometer in a liquid bath		
		100 °C	to	550 °C			0.9 °C	Comparison with a reference digital thermometer in a dry block calibrator		
		550 °C	to	800 °C			2.3 °C	Comparison with a reference digital thermometer in an air oven		

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		min.	unit	max.	unit					
3*	Resistance temperature sensors	-30 °C	to	0 °C			0.15 °C	Comparison with a reference digital thermometer in a dry block calibrator	KP TE3	1
		0 °C	to	100 °C			0.13 °C	Comparison with a reference digital thermometer in a liquid bath		
		100 °C	to	400 °C			0.45 °C	Comparison with a reference digital thermometer in a dry block calibrator		

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CMC for the field of measured quantity: Electrical quantities

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min.	unit	max.	unit					
1*	DC voltage / DC voltage sources	0 mV	to	100 mV			0.0062 % + 6,1 μV 0.0047 % + 16 μV 0.0047 % + 0.14 mV 0.0079 % + 2.0 mV 0.0079 % + 20 mV	Direct measurement by a standard multimeter	KP EL2	
		0.1 V	to	1 V						
		1 V	to	10 V						
		10 V	to	100 V						
		100 V	to	1000 V						
2*	DC voltage / DC voltage meters	0 mV	to	200 mV			0.0053 % + 7.7 μV 0.0028 % + 15 μV 0.0028 % + 0.15 mV 0.0028 % + 1.5 mV 0.0035 % + 17 mV	Direct generation with a standard calibrator	KP EL1	
		0.2 V	to	2 V						
		2 V	to	20 V						
		20 V	to	200 V						
		200 V	to	1000 V						
3*	Direct current / Direct current sources	0 μA	to	10 μA			0.050 % + 6.1 nA 0.074 % + 17 nA 0.075 % + 0.16 μA 0.034 % + 1.2 μA 0.034 % + 12 μA 0.068 % + 0.15 mA 0.061 % + 1.1 mA	Direct measurement by a standard multimeter	KP EL2	
		10 μA	to	100 μA						
		0.1 mA	to	1 mA						
		1 mA	to	10 mA						
		10 mA	to	100 mA						
		100 mA	to	1 A						
		1 A	to	3 A						
4*	Direct current / Direct current meters	0 μA	to	200 μA			0.020 % + 73 nA 0.016 % + 0.13 μA 0.009 % + 0.94 μA 0.012 % + 9.7 μA 0.018 % + 0.13 mA	Direct generation with a standard calibrator	KP EL1	
		0.2 mA	to	2 mA						
		2 mA	to	20 mA						
		20 mA	to	200 mA						
		0.2 A	to	2 A						



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M & B Calibr, spol. s r.o.
CAB number 2301, Calibration Laboratory
Krumlovská 1454/26, 664 91 Ivančice

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min.	unit	max.	unit					
		2 A		to	30 A		0.069 % + 2.5 mA	Simulation using current coil		
		30 A		to	1500 A		0.42 % + 0.13 A			
5*	AC voltage / AC voltage sources	0.1 mV		to	100 mV	10 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	0.086 % + 36 µV 0.16 % + 59 µV 0.69 % + 93 µV	Direct measurement by a standard multimeter	KP EL2	
		0.1 V		to	1 V	10 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	0.076 % + 0.43 mV 0.14 % + 0.73 mV 0.71 % + 0.81 mV			
		1 V		to	10 V	10 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	0.076 % + 4.4 mV 0.14 % + 7.3 mV 0.71 % + 17 mV			
		10 V		to	100 V	10 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	0.076 % + 44 mV 0.14 % + 73 mV 0.71 % + 81 mV			
		100 V		to	750 V	10 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	0.07 % + 0.35 V 0.14 % + 0.59 V 0.61 % + 1.5 V			
6*	AC voltage / AC voltage meters	0.1 mV		to	200 mV	10 Hz to 45 Hz 45 Hz to 10 kHz 10 kHz to 20 kHz	0.16 % + 64 µV 0.049 % + 69 µV 0.12 % + 86 µV	Direct generation with a standard calibrator	KP EL1	
		0.2 V		to	2 V	20 kHz to 50 kHz 10 Hz to 45 Hz 45 Hz to 10 kHz	0.20 % + 98 µV 0.082 % + 0.38 mV 0.042 % + 0.29 mV			
						10 kHz to 20 kHz	0.12 % + 0.46 mV			

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Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min.	unit	max.	unit					
		2 V		to	20 V	20 kHz to 50 kHz 10 Hz to 45 Hz 45 Hz to 10 kHz 10 kHz to 20 kHz 20 kHz to 50 kHz	0.17 % + 0.73 mV 0.084 % + 3.8 mV 0.042 % + 2.7 mV 0.12 % + 4.7 mV 0.17 % + 5.6 mV			
		20 V		to	200 V	30 Hz to 45 Hz 45 Hz to 10 kHz 10 kHz to 20 kHz 20 kHz to 40 kHz	0.082 % + 31 mV 0.10 % + 43 mV 0.14 % + 56 mV 0.17 % + 61 mV			
		200 V		to	1000 V	30 Hz to 45 Hz 45 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz	0.082 % + 0.45 V 0.09 % + 0.28 V 0.14 % + 0.38 V 0.16 % + 0.49 V			
7*	Alternating current / Alternating current sources	0,1 µA		to	100 µA	10 Hz to 1 kHz	0.15 % + 7.3 nA	Direct measurement by a standard multimeter	KP EL2	
		0,1 mA		to	1 mA	10 Hz to 5 kHz	0.10 % + 0.51 µA			
		1 mA		to	10 mA	10 Hz to 5 kHz	0.10 % + 5.1 µA			
		10 mA		to	100 mA	10 Hz to 5 kHz	0.10 % + 51 µA			
		0,1 A		to	1 A	10 Hz to 5 kHz	0.10 % + 0.51 mA			
		1 A		to	3 A	10 Hz to 5 kHz	0.15 % + 3.4 mA			
8*	Alternating current / Alternating current meters	20 µA		to	200 µA	10 Hz to 45 Hz 45 Hz to 1 kHz	0.25 % + 0.40 µA 0.08 % + 0.30 µA	Direct generation with a standard calibrator	KP EL1	
		0,2 mA		to	2 mA	10 Hz to 45 Hz 45 Hz to 1 kHz	0.23 % + 0.40 µA 0.06 % + 0.30 µA			

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Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min.	unit	max.	unit					
		2 mA		20 mA		10 Hz to 45 Hz	0.23 % + 4.5 µA			
						45 Hz to 1 kHz	0.05 % + 3.0 µA			
		20 mA		200 mA		10 Hz to 45 Hz	0.23 % + 45 µA			
						45 Hz to 1 kHz	0.05 % + 30 µA			
		0.2 A		2 A		10 Hz to 45 Hz	0.23 % + 0.45 mA			
						45 Hz to 1 kHz	0.06 % + 0.30 mA			
		2 A		30 A		30 Hz to 45 Hz	0.23 % + 4.5 mA			
						45 Hz to 100 Hz	0.06 % + 3.0 mA			
						100 Hz to 1 kHz	0.60 % + 5.8 mA			
		30 A		1500 A		30 Hz to 60 Hz	0.42 % + 0.13 A	Simulation using current coil		
9*	DC resistance / DC resistance / DC resistance meters							Direct generation with a standard calibrator	KP EL 1	
							8.7 mΩ			
							8.9 mΩ			
							11 mΩ			
							20 mΩ			
							0.16 Ω			
							1.6 Ω			
							15 Ω			
							0.29 kΩ			
							8.0 kΩ			
							0.98 MΩ			
							22 MΩ			
		0 Ω		100 Ω			0.018 % + 88 m Ω			
		100 Ω		330 Ω			0.012 % + 0.11 Ω			
		330 Ω		1 kΩ			0.01 % + 0.19 Ω			

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Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min.	unit	max.	unit					
		1 kΩ		to	3.3 kΩ		0.012 % + 0.29 Ω			
		3,3 kΩ		to	10 kΩ		0.0082 % + 1.4 Ω			
		10 kΩ		to	33 kΩ		0.012 % + 2.2 Ω			
		33 kΩ		to	100 kΩ		0.0066 % + 18 Ω			
		100 kΩ		to	330 kΩ		0.011 % + 24 Ω			
		330 kΩ		to	1 MΩ		0.0066 % + 0.18 kΩ			
		1 MΩ		to	3.3 MΩ		0.013 % + 0.24 kΩ			
		3.3 MΩ		to	10 MΩ		0.0075 % + 1.8 kΩ			
		10 MΩ		to	33 MΩ		0.052 % + 6.4 kΩ			
		33 MΩ		to	100 MΩ		0.064 % + 0.21 MΩ			
		100 MΩ		to	330 MΩ		1.3 % + 1.9 MΩ			
		330 MΩ		to	1 GΩ		2.4 % + 13 MΩ			
10*	Capacitance / Electrical Capacitance Meters				1 nF	1 kHz	0.48 %	Direct generation with a standard calibrator	KP EL1	
					2 nF	1 kHz	0.73 %			
					5 nF	1 kHz	0.70 %			
					10 nF	1 kHz	0.54 %			
					100 nF	1 kHz	0.41 %			
					1 μF	1 kHz	0.65 %			
					10 μF	1 kHz	0.98 %			
		10 μF		to	100 μF		1.2 %	Comparison with a standard multimeter		

¹ Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

² The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02 M a part of CMC and it is the lowest value of the respective uncertainty. If not stated otherwise, its coverage probability is approx. 95 %. If not stated otherwise, the uncertainty values stated without a unit are relative to the measured value. The uncertainty value stated herein is based on the best conditions achievable by the laboratory; the uncertainty value of a specific calibration may be higher depending on the conditions of such a calibration. For identical extreme values of adjacent ranges, the lower uncertainty value always applies.

³ If the document identifying the calibration procedure is dated, only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is used (including any changes).

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CMC for the field of measured quantity: Time quantities and frequency

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Location
		min.	unit	max.	unit					
1	Time interval / time meters, stopwatches, timers	1 s		to	86,400 s		0.5 s	Comparison with a reference digital stopwatch	KP Č1	
2*	Frequency / low frequency and high frequency counters	1 Hz		to	100 kHz		1.7.10 ⁻⁶	Direct generation by reference calibrator	KP EL1	
		100 KHz		to	1,000 KHz		2.3.10 ⁻⁶			
					10 MHz		1.7.10 ⁻⁵			

¹ Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

² The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02 M a part of CMC and it is the lowest value of the respective uncertainty. If not stated otherwise, its coverage probability is approx. 95 %. If not stated otherwise, the uncertainty values stated without a unit are relative to the measured value. The uncertainty value stated herein is based on the best conditions achievable by the laboratory; the uncertainty value of a specific calibration may be higher depending on the conditions of such a calibration. For identical extreme values of adjacent ranges, the lower uncertainty value always applies.

³ If the document identifying the calibration procedure is dated, only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is used (including any changes).



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CMC for the field of measured quantity: Humidity

Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty ²	Calibration principle	Calibration procedure identification ³	Loca- tion
		min.	unit	max.	unit					
1*	Relative humidity meters except psychrometers	10 % RH		to		95 % RH	(20 to 40) °C	2.3% RH	Comparative measurement by a reference hygrometer in a humidity generator	KP VL1

¹ Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

² The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02 M, part of CMC, and it is the lowest value of the respective uncertainty. If not stated otherwise, its coverage probability is approx. 95 %. If not stated otherwise, the uncertainty values stated without a unit are relative to the value measured. If the calibration is carried out outside the laboratory premises, the measurement uncertainty may be affected.

³ If the document identifying the calibration procedure is dated, only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is used (including any changes).

"This document is an appendix to the certificate of accreditation. In case of any discrepancies between the English and Czech versions, the Czech version shall prevail, both for the certificate appendix and the certificate itself."

