Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

0807

Accredited to ISO/IEC 17025:2017

BSRIA Limited

Issue No: 031 **Issue date:** 22 August 2025

Old Bracknell Lane West
Bracknell
Berkshire
RG12 7AH

Contact: Mr M Trotter
Tel: +44 (0)1344 459314
Fax: +44 (0)1344 465556
E-Mail: martin.trotter@bsria.co.uk
Website: www.bsria.com/uk/instrument/

Calibration performed at the above address only

Calibration and Measurement Capability (CMC)

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (k = 2)	Remarks
TEMPERATURE			Unless otherwise stated calibration by comparison with reference standards in a liquid bath
Resistance thermometers	-80 °C to -38 °C -38 °C to -20 ° C -20 °C to +80 °C 80 °C to 250 °C	0.050 °C 0.030 °C 0.016 °C 0.020 °C	
Digital thermometers with Thermocouple sensors	-80 °C to +250 °C	0.15 °C	
Digital thermometers with PRT sensors	-80 °C to -20 °C -38 °C to -20 ° C -20 °C to +80 °C 80 °C to 250 °C	0.050 °C 0.030 °C 0.016 °C 0.020 °C	
Air Temperature data loggers Calibration performed in an air chamber	-20 to 0 °C 0 °C to 70 °C	0.20 °C 0.060 °C	Calibrations may be undertaken on devices with an electrical output and on data recorders suitable for calibration in a chamber.
PRESSURE			Methods consistent with EURAMET CG17.
<u>Gas pressure (absolute)</u>			
Calibration of pressure indicating instruments and gauges	80 kPa to 115 kPa	25 Pa	Direct comparison method
<u>Gas pressure (gauge)</u>			
Calibration of pressure indicating instruments and gauges	-7.5 kPa to -3 kPa -3 kPa to -2 kPa -2 kPa to 2 kPa 2 kPa to 3 kPa 3 kPa to 3.5 kPa 3.5 kPa to 100 kPa	0.045 % + 0.50 Pa 0.045 % + 0.18 Pa 0.045 % + 0.11 Pa 0.045 % + 0.18 Pa 0.045 % + 0.50 Pa 0.025 %	Calibration of pressure devices with an electrical output may be undertaken.

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Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (k = 2)	Remarks
AIR VELOCITY			
Calibration of Anemometers and Pitot Tubes against a laser Doppler anemometer	0.15 m/s to 0.3 m/s 0.3 m/s to 2 m/s 2 m/s to 5 m/s 5 m/s to 15 m/s 15 m/s to 30 m/s	0.54 % + 0.015 m/s 0.54 % + 0.020 m/s 0.54 % + 0.030 m/s 0.54 % + 0.040 m/s 0.62 % + 0.060 m/s	Open jet wind tunnel method
Calibration of Anemometers and Pitot Tubes against differential pressure systems	0.15 m/s to 0.3 m/s 0.3 m/s to 2 m/s 2 m/s to 5 m/s 5 m/s to 15 m/s 15 m/s to 30 m/s	0.71 % + 0.038 m/s 0.72 % + 0.068 m/s 0.80 % + 0.080 m/s 0.84 % + 0.20 m/s 0.90 % + 0.40 m/s	Calibration of anemometers up to 120 mm diameter can be undertaken
VOLUME FLOW - AIR			
Calibration of fans including blower doors and domestic air tightness fans BS EN ISO 5801:2008 method	7.6 l/s to 4000 l/s at fan pressures of 15 Pa to 1000Pa	0.50 l/s + 2.0% of flow and 1.0 Pa + 0.90 % of pressure	Calibrated in pressurising mode over the static pressure range of 0 to 60 Pa
	7.6 l/s to 4000 l/s at fan pressures of 15 Pa to 1000Pa	1.0 l/s + 2.0 % of flow and 1.0 Pa + 0.90 % of pressure	Calibrated in pressurising mode over the static pressure range of 60 Pa to 125 Pa
Calibration of Balometers (capture flow hoods) Supply and extract methods	12 l/s to 900 l/s	Q [1.5%, 0.75 l/s]	Calibration of Balometers with Back pressure disabled only
Calibration of low volume flow hoods and cones Supply and extract methods	3.5 l/s to 95 l/s	Q [4.3 %, 0.080 l/s]	Part F Building Regulations 2020
HUMIDITY			Calibration by comparison with a reference hygrometer and reference thermometers
Relative humidity	*For the range 0 °C to 20 °C* 10 %rh to 30 %rh 30 %rh to 95 %rh	 0.53 %rh 0.92 % of reading + 0.25 %rh	Calibrations may be undertaken on devices with an electrical output and on data recorders suitable for calibration in a chamber.
	For the range 20 °C to 30 °C 2 %rh to 30 %rh 30 %rh to 98 %rh	 0.35 %rh 0.90 % of reading + 0.080 %rh	
	For the range 30 °C to 50 °C 10 %rh to 30 %rh 30 %rh to 95 %rh	 0.29 %rh 0.83 % of reading + 0.040 %rh	
	For the range 50 °C to 70 °C 10 %rh to 30 %rh 30 %rh to 95 %rh	 0.25 %rh 0.71 % of reading + 0.040 %rh	
Frost point	-26 °C to -5 °C	0.14 °C	
Dew point	-8 °C to +69 °C	0.19 °C	

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Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (k = 2)	Remarks
ELECTRICAL			Electrical calibrations are performed as a comparison against a reference standard
DC Resistance			
Generation and measurement capability for the calibration of resistance instruments	0 Ω to 200 Ω 200 Ω to 2 kΩ 2 kΩ to 20 kΩ 20 kΩ to 200 kΩ	15 μΩ/Ω + 400 μΩ 15 μΩ/Ω + 2.4 mΩ 15 μΩ/Ω + 24 mΩ 15 μΩ/Ω + 250 mΩ	
DC Voltage			
	0 V to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200V 200 V to 1000 V	30 μV/V + 0.17 μV 30 μV/V + 1.7 μV 30 μV/V + 17 μV 30 μV/V + 170 μV 30 μV/V + 1.7 mV	
DC Current			
Generation and measurement capability for the calibration of current instruments	0 A to 200 μA 200 μA to 2 mA 2 mA to 20 mA 20 mA to 200 mA 200 mA to 2 A	60 μA/A + 1.7 nA 50 μA/A + 17 nA 50 μA/A + 170 nA 50 μA/A + 1.7 μA 60 μA/A + 17 μA	
Frequency measurement	40 Hz to 1.9 kHz 1.9 kHz to 19 kHz 19 kHz to 190 kHz 190 kHz to 400 kHz	17 μHz/Hz + 7 mHz 17 μHz/Hz + 10 mHz 17 μHz/Hz + 100 mHz 17 μHz/Hz + 1 Hz	Calibration by comparison
Tachometer Calibration			Calibration by comparison
Mechanical contact	6 RPM to 6,000 RPM	0.042 %	
Optical	6 RPM to 600,000 RPM	0.010 %	
Stroboscope calibration	6 RPM to 600,000 RPM	0.010 %	

END

Appendix - Calibration and Measurement Capabilities

Introduction

The definitive statement of the accreditation status of a calibration laboratory is the Accreditation Certificate and the associated Schedule of Accreditation. This Schedule of Accreditation is a critical document, as it defines the measurement capabilities, ranges and boundaries of the calibration activities for which the organisation holds accreditation.

Calibration and Measurement Capabilities (CMCs)

The capabilities provided by accredited calibration laboratories are described by the Calibration and Measurement Capability (CMC), which expresses the lowest measurement uncertainty that can be achieved during a calibration. If a particular device under calibration itself contributes significantly to the uncertainty (for example, if it has limited resolution or exhibits significant non-repeatability) then the uncertainty quoted on a calibration certificate will be increased to account for such factors.

The CMC is normally used to describe the uncertainty that appears in an accredited calibration laboratory's schedule of accreditation and is the uncertainty for which the laboratory has been accredited using the procedure that was the subject of assessment. The measurement uncertainty is calculated according to the procedures given in the GUM and is normally stated as an expanded uncertainty at a coverage probability of 95 %, which usually requires the use of a coverage factor of $k = 2$. An accredited laboratory is not permitted to quote an uncertainty that is smaller than the published measurement uncertainty in certificates issued under its accreditation.

Expression of CMCs - symbols and units

It should be noted that the percentage symbol (%) represents the number 0.01. In cases where the measurement uncertainty is stated as a percentage, this is to be interpreted as meaning percentage of the measurand.
Thus, for example, a measurement uncertainty of 1.5 % means $1.5 \times 0.01 \times q$, where q is the quantity value.

The notation Q[a, b] stands for the root-sum-square of the terms between brackets: $Q[a, b] = [a^2 + b^2]^{1/2}$