

Temperature

Type of the calibrated measuring instruments	Measuring range *	CMC *
Calibration in the calibration bath		
<ul style="list-style-type: none"> resistance temperature sensors temperature transmitters with temperature sensors electronic thermometers 	(- 40 ÷ 230) °C	0,008 °C 0,010 °C 0,010 °C
Calibration in the fixed points cells		
<ul style="list-style-type: none"> resistance temperature sensors 	-38,8344 °C in cell tpHg 0,01 °C in cell tpH2O 29,7646 °C in cell mpGa 156,5985 °C in cell fpIn 231,928 °C in cell fpSn	0,0030 °C 0,0025 °C 0,0030 °C 0,0040 °C 0,0050 °C
Calibration in the temperature chamber		
<ul style="list-style-type: none"> electronic thermometers resistance temperature sensors temperature transmitters with temperature sensors 	(-30 ÷ 80) °C	0,1 °C

Pressure

Possibility of calibration in the chamber, in the temperature range (-40 ÷ 180) °C

Type of the calibrated measuring instruments	Measuring range *	CMC *
<ul style="list-style-type: none"> digital pressure gauges, pressure calibrators pressure transmitters barometers mechanical pressure gauges 	gauge pressure (nitrogen, pure air, water)	
	(-100 ÷ 7000) kPa	(0,001 ÷ 0,25) kPa
	(7000 ÷ 10000) kPa	(1,4 ÷ 2,0) kPa
	(10000 ÷ 70000) kPa	(9,0 ÷ 18) kPa
	absolute pressure (nitrogen, pure air, water)	
	(1,4 ÷ 7000) kPa abs	(0,004 ÷ 0,25) kPa
(7000 ÷ 10000) kPa abs	(1,4 ÷ 2,0) kPa	
(10000 ÷ 70000) kPa abs	(9,0 ÷ 18) kPa	

DC/AC electrical quantities

Type of the calibrated measuring instruments	Measuring range *	CMC *
Digital multimeters		
<ul style="list-style-type: none"> DC voltage DC current resistance AC voltage (10 Hz ÷ 1 MHz) AC current (10 Hz ÷ 10 kHz) 	10 μV ÷ 1100 V 0,01 μA ÷ 20 A 0,001 Ω ÷ 20 GΩ 1 mV ÷ 1100 V 10 μA ÷ 20 A	≥ 0,0002 % ≥ 0,0015 % ≥ 0,00025 % ≥ 0,007 % ≥ 0,020 %
Multifunction calibrators, isolation meters, voltage sources, power supplies, standard resistors, decade resistance boxes		
<ul style="list-style-type: none"> DC voltage DC current resistance AC voltage (10 Hz ÷ 500 kHz) AC current (40 Hz ÷ 10 kHz) 	10 μV ÷ 4000 V 0,01 μA ÷ 20 A 0,001 Ω ÷ 1,999 GΩ 1 mV ÷ 5200 V 10 μA ÷ 19,99 A	≥ 0,00015 % ≥ 0,0015 % ≥ 0,0003 % ≥ 0,012 % ≥ 0,038 %
Temperature indicators (meters), temperature simulators		
<ul style="list-style-type: none"> indirect calibration with using standardized thermometric characteristics specified in PN-EN 60751:2009 	(-200 ÷ 200) °C (200 ÷ 500) °C (500 ÷ 850) °C	0,005 °C 0,010 °C 0,015 °C
Temperature indicators (meters)		
<ul style="list-style-type: none"> indirect calibration with using characteristics of temperature transmitters with analog electrical signal 	(-200 ÷ 1820) °C	(0,04 · Z + 0,5) 10 ⁻³ °C where Z = (t _{max} - t _{min}) °C

Temperature and Relative Humidity

Type of the calibrated measuring instruments	Measuring range *	CMC *
Devices for measuring the environmental conditions:		
<ul style="list-style-type: none"> hygrometers - performs measurement of relative humidity thermohygrometers - performs measurements of temperature and relative humidity temperature and relative humidity transmitters 	humidity measurement: (10 ÷ 95) % in the temperature range: (10 ÷ 60) °C	(0,9 ÷ 1,2) %

* Details of the measuring ranges and CMCs on the website www.plum.pl/laboratorium (zakres akredytacji AP 074)