



NATIONAL INSTITUTE FOR STANDARDIZATION AND QUALITY

(Instituto Nacional de Normalização e Qualidade)

MOZAMBIQUE

CALIBRATION MEASUREMENT CAPABILITY - INNOQ (Accredited)

Measuring Standard	Range	Calibration and Measuring Capability (Uncertainty)
MASS		
Mass Classes F1, F2, M1, M2, M3	10 mg	0.0080 mg
	100 mg	0.016 mg
	10 g	0.06 mg
	100 g	0.16 mg
	2 mg	0.0060 mg
	2 g	0.040 mg
	20 mg	0.010 mg
	20 g	0.080 mg
	200 mg	0.020 mg
	200 g	0.30 mg
	5 mg	0.0060 mg
	5 g	0.050 mg
	50 mg	0.012 mg
	50 g	0.10 mg
	500 mg	0.025 mg
	500 g	0.80 mg
	5 kg	8.0 mg
	10 kg	16 mg
	20 kg	0.3 g
	50 kg	
	100 kg	
	500 kg	
	1000 kg	
TEMPERATURE		
Digital and analog Thermometers	$-80\text{ }^{\circ}\text{C} \leq T < -40\text{ }^{\circ}\text{C}$	0.60 $^{\circ}\text{C}$
	$-40\text{ }^{\circ}\text{C} \leq T < 0\text{ }^{\circ}\text{C}$	0.24 $^{\circ}\text{C}$
	$0\text{ }^{\circ}\text{C} \leq T < 100\text{ }^{\circ}\text{C}$	0.07 $^{\circ}\text{C}$
	$100\text{ }^{\circ}\text{C} \leq T < 200\text{ }^{\circ}\text{C}$	0.13 $^{\circ}\text{C}$
	$200\text{ }^{\circ}\text{C} \leq T < 420\text{ }^{\circ}\text{C}$	0.48 $^{\circ}\text{C}$
	$420\text{ }^{\circ}\text{C} \leq T < 600\text{ }^{\circ}\text{C}$	0.59 $^{\circ}\text{C}$
Liquid-in glass Thermometers	$-40\text{ }^{\circ}\text{C} \leq T < 0\text{ }^{\circ}\text{C}$	0.24 $^{\circ}\text{C}$
	$0\text{ }^{\circ}\text{C} \leq T < 100\text{ }^{\circ}\text{C}$	0.07 $^{\circ}\text{C}$
	$100\text{ }^{\circ}\text{C} \leq T < 200\text{ }^{\circ}\text{C}$	0.13 $^{\circ}\text{C}$
VOLUME		
	$10\text{ }\mu\text{L} \leq V \leq 100\text{ }\mu\text{L}$	2 μL

Micropipettes	100 μL < V ≤ 200 μL	0.25 μL
	200 μL < V ≤ 500 μL	0.5 μL
	500 μL < V ≤ 1000 μL	1.0 μL
	1000 μL < V ≤ 2000 μL	2.0 μL
	2000 μL < V ≤ 5000 μL	5.0 μL
	5000 μL < V ≤ 10000 μL	10 μL
PRESSURE		
Relative pressure gauges	0.0001 bar ≤ p ≤ 35 bar	0.24 bar
	35 bar < P ≤ 70 bar	0.24 bar
	70 bar < P ≤ 135 bar	0.25 bar
	135 bar < ≤ 700 bar	
ELECTRICAL		
Multimeters	AC	0.59% x I + 300μA to 8.9% x I + 5.9 mA
	(0.33 A ≤ I < 1.1 A) to (33 mA ≤ I < 330	
	DC	0.012% x I + 0.060 μA to 0.024% x I + 48 μA
	(0.33 mA ≤ I 3.3 mA to 330 mA ≤ I < 1.1	
	RESISTANCE	71 ppm x R + 1.8 mΩto 50 ppm x R + 3.6 mΩ)
	(0.001Ω≤ R < 11 Ω) to (330Ω≤ R < 1.1 KΩ)	
	AV	0.079% x U + 250 μV to 0.10% x U + 25 mV
	(0.33 ≤ U< 3.30) to (333 ≤ U < 330 V)	
	DV	36 x 10^-6 x U + 1.8 μV to 320x010^-6 x U + 2.7 mV
(0.0 mV ≤ U < 330 mV) to (330 V ≤ U< 1000 V)		
MASS		
Scales	0.1 g < M ≤ 1 g	0.098 %x M + 0.015 mg
	0.1 kg < M ≤ 1 kg	0.00013%
	1 g < M ≤ 10 g	0.002 %x M + 0.030 mg
	10 mg < M ≤ 5 mg	0.0048 mg
	10 g < M ≤ 100 g	0.00095% x M + 0.045 mg
	10 kg < M ≤ 1.500 kg	0.004%
	5 mg < M ≤ 100 mg	0.062% x M + 0.0067 mg