

PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

Accurate Calibration, LLC

565 Washington Ave, Suite 6, North Haven, CT 06473

(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2017

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Calibration of Dimensional, Electrical, Mechanical, Mass and Time & Frequency Devices (As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szerszen President

Perry Johnson Laboratory Accreditation, Inc. (PJLA) 755 W. Big Beaver, Suite 1325 Troy, Michigan 48084 Initial Accreditation Date: March 02, 2016 Issue Date: June 06, 2024 *Expiration Date:* June 30, 2026

Accreditation No.: 75000 Certificate No.:

L24-419

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: <u>www.pjlabs.com</u>



Accurate Calibration, LLC

565 Washington Ave, Suite 6, North Haven, CT 06473 Contact Name: Salvatore La Monaca III Phone: 203-787-6682

Dimensional				
MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED
Calipers FO	0.05 in to 6 in	(290 + 4.5L) µin	Grade 0 Gage Blocks	T.O.33-K6-4-15-1
Outside Micrometer FO	0.05 in to 1 in	(58 µin + 0.6L) µin		
Cylindrical Outside FO	0.01 in to 1 in	54 µin	Laser Micrometer, Class Y, Z, ZZ	ACL-CP-Pingage

Electrical				
MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED
Equipment to Output	Up to 329.999 µA	0.015 % of reading + 20 nA	Fluke 5502A Calibrator	OEM and Euramet
DC Current FO	Up to 3.299 99 mA	0.01 % of reading + 50 nA		CG-15
	Up to 32.999 mA	0.01 % of reading + 250 nA		
	Up to 329.999 mA	0.01 % of reading + 2.5 µA		
	Up to 1.099 99 A	0.038 % of reading + 44 µA		
	1.1 A to 2.999 99 A	0.038 % of reading + 44 µA		
	Up to 10.999 9 A	0.06 % of reading + 500 µA		
	11 A to 20.5 A	0.1 % of reading + 750 μA		
Equipment to Output AC At the listed frequencies				
10 Hz to 45 Hz	0.33 mV to 33 mV	0.15 % of reading + 20 μ V		
45 Hz to 10 kHz	0.33 mV to 33 mV	0.1 % of reading + 20 μ V		
10 kHz to 20 kHz	0.33 mV to 33 mV	0.1 % of reading + 20 μ V		
20 kHz to 50 kHz	0.33 mV to 33 mV	0.2 % of reading + 20 μ V		
50 kHz to 100 kHz	0.33 mV to 33 mV	0.35 % of reading + 33 μ V		
100 kHz to 500 kHz	0.33 mV to 33 mV	1 % of reading + 60 μ V		
Equipment to Output AC At the listed frequencies				
10 Hz to 45 Hz	3.3 mV to 330 mV	0.05 % of reading + 20 μ V		
45 Hz to 10 kHz	3.3 mV to 330 mV	0.03 % of reading + 20 μ V		
10 kHz to 20 kHz	3.3 mV to 330 mV	0.07 % of reading + 20 μ V		
20 kHz to 50 kHz	3.3 mV to 330 mV	0.1 % of reading + 40 μ V]	
50 kHz to 100 kHz	3.3 mV to 330 mV	0.23 % of reading + 170 μ V]	
100 kHz to 500 kHz	3.3 mV to 330 mV	0.5 % of reading + 330 μ V		



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Equipment to Output A			Fluke 5502A	OEM
at the listed frequencie		0.05.0 $($ $1.00.1$ $($ 0.01 $)$	Calibrator	
10 Hz to 45 Hz	3.3 V to 33 V	0.05 % of reading + 60 μ V		
45 Hz to 10 kHz	3.3 V to 33 V	0.03 % of reading + 60 μ V		
10 kHz to 20 kHz	3.3 V to 33 V	0.07 % of reading + $60 \mu V$		
20 kHz to 50 kHz	3.3 V to 33 V	0.1 % of reading + 60 µV		
50 kHz to 100 kHz	3.3 V to 33 V	0.23 % of reading + 200 μ V		
Equipment to Output A at the listed frequencies	s ^{FO}			
45 kHz to 1 kHz	33 V to 330 V	0.05 % of reading + 3 mV		
1 kHz to 10 kHz	33 V to 330 V	0.08 % of reading + 9 mV		
10 kHz to 20 kHz	33 V to 330 V	0.09 % of reading + 9 mV		
20 kHz to 50 kHz	33 V to 330 V	0.12 % of reading + 9 mV		
50 kHz to 100 kHz	33 V to 330 V	0.24 % of reading + 80 mV		
Equipment to Output A at the listed frequencies				
45 kHz to 1 kHz	330 V to 1 020 V	0.05 % of reading + 20 mV	\wedge	
1 kHz to 5 kHz	330 V to 1 020 V	0.08 % of reading + 20 mV		
5 kHz to 10 kHz	330 V to 1 020 V	0.09 % of reading + 20 mV		
Equipment to Output A at the listed frequencies				
10 Hz to 20 Hz	29 µA to 330 µA	0.2 % of reading + 0.1 μ A		
20 Hz to 45 Hz	29 µA to 330 µA	0.15 % of reading + 0.1 μ A		
45 Hz to 1 kHz	29 µA to 330 µA	0.125 % of reading + 0.1 µA		
1 kHz to 5 kHz	29 µA to 330 µA	0.3 % of reading + 0.15 µA		
5 kHz to 10 kHz	29 µA to 330 µA	0.8 % of reading + 0.2 μ A		
10 kHz to 30 kHz	29 µA to 330 µA	1.6 % of reading + 0.4 µA		
Equipment to Output A at the listed frequencies				
10 Hz to 20 Hz	0.33 mA to 3.3 mA	0.2 % of reading + 0.15 µA		
20 Hz to 45 Hz	0.33 mA to 3.3 mA	0.125 % of reading + 0.15 μA		
45 Hz to 1 kHz	0.33 mA to 3.3 mA	0.1 % of reading + 0.15 µA		
1 kHz to 5 kHz	0.33 mA to 3.3 mA	0.2 % of reading + 0.2 μ A		
5 kHz to 10 kHz	0.33 mA to 3.3 mA	0.5 % of reading + 0.3 μ A		
10 kHz to 30 kHz	0.33 mA to 3.3 mA	1 % of reading $+$ 0.6 μ A		



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Accreditation is granted to the facility to perform the following testing:

Electrical				
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	Equipment to Output AC Current			OEM
at the listed frequencies			Calibrator	
10 Hz to 20 Hz	3.3 mA to 33 mA	0.18 % of reading + 2 μ A	-	
20 Hz to 45 Hz	3.3 mA to 33 mA	0.09 % of reading + 2 μ A		
45 Hz to 1 kHz	3.3 mA to 33 mA	0.04 % of reading + 2 μ A		
1 kHz to 5 kHz	3.3 mA to 33 mA	0.08 % of reading + 2 μ A		
5 kHz to 10 kHz	3.3 mA to 33 mA	0.2 % of reading + 3 μ A		
10 kHz to 30 kHz	3.3 mA to 33 mA	0.4 % of reading + 4 μ A		
Equipment to Output A at the listed frequencies				
10 Hz to 20 Hz	33 mA to 330 mA	0.18 % of reading + 20 μ A		
20 Hz to 45 Hz	33 mA to 330 mA	0.09 % of reading + 20 µA		
45 Hz to 1 kHz	33 mA to 330 mA	0.04 % of reading + $20 \mu A$	0	
1 kHz to 5 kHz	33 mA to 330 mA	0.1 % of reading + 50 μA		
5 kHz to 10 kHz	33 mA to 330 mA	0.2 % of reading + 100 µA		
10 kHz to 30 kHz	33 mA to 330 mA	0.4 % of reading + 200 μA	M.	
Equipment to Output A at the listed frequencies				
10 Hz to 45 Hz	0.33 A to 1.1 A	0.18 % of reading + 100 µA		
45 Hz to 1 kHz	0.33 A to 1.1 A	0.05 % of reading + 100 µA		
1 kHz to 5 kHz	0.33 A to 1.1 A	0.6 % of reading + 1 mA	-	
5 kHz to 10 kHz	0.33 A to 1.1 A	2.5 % of reading + 5 mA		
Equipment to Output A at the listed frequencie				
10 Hz to 45 Hz	1.1 A to 3 A	0.18 % of reading + 100 µA		
45 Hz to 1 kHz	1.1 A to 3 A	0.06 % of reading + 100 µA		
1 kHz to 5 kHz	1.1 A to 3 A	0.6 % of reading + 1 mA		
5 kHz to 10 kHz	1.1 A to 3 A	2.5 % of reading + 5 mA	-	
Equipment to Output A at the listed frequencies				
10 Hz to 45 Hz	3 A to 11 A	0.06 % of reading + 2 mA		
45 Hz to 1 kHz	3 A to 11 A	0.1 % of reading + 2 mA		
1 kHz to 5 kHz	3 A to 11 A	3 % of reading + 2 mA		
Equipment to Output A	C Current at the listed fre	_	1	
10 Hz to 45 Hz	11 A to 20.5 A	0.12 % of reading + 5 mA		
45 Hz to 1 kHz	11 A to 20.5 A	0.15 % of reading + 5 mA		
1 kHz to 5 kHz	11 A to 20.5 A	3 % of reading + 5 mA	1	

This supplement is in conjunction with certificate #L24-419



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Equipment to Output	0.01 mV to 330 mV	0.006 % of reading + 3 μ V	Fluke 5502A	OEM
DC Voltage FO	330 mV to 3.3 V	0.005 % of reading + 5 µV	Calibrator	
	3.3 V to 33 V	0.005 % of reading + 50 μ V		
	30 V to 330 V	0.005 5 % of reading + 500 µV		
	100 V to 1 020 V	0.005 5 % of reading + 1.5 mV		
Equipment to Output	Up to 399.9 pF	0.5 % of reading + 0.01 nF		
Capacitance FO	0.4 nF to 1.099 9 nF	0.5 % of reading + 0.01 nF		
	1.1 nF to 3.299 9 nF	0.5 % of reading + 0.01 nF		
	3.3 nF to 10.999 nF	0.25 % of reading + 0.01 nF		
	11 nF to 32.999 nF	0.25 % of reading + 0.1 nF		
	33 nF to 109.99 nF	0.25 % of reading + 0.1 nF		
	110 nF to 329.99 nF	0.25 % of reading + 0.3 nF		
	0.33 µF to 1.099 9 µF	0.25 % of reading + 1 nF		
	1.1 μF to 3.299 9 μF	0.25 % of reading + 3 nF		
	3.3 μF to 10.999 μF	0.25 % of reading + 10 nF		
	11 μF to 32.999 μF	0.4 % of reading + 30 nF		
	33 μF to 109.99 μF	0.45 % of reading + 100 nF		
	110 μF to 329.99 μF	0.45 % of reading + 300 nF		
	0.33 to 1.099 9 mF	0.45 % of reading + 1 μ F		
	1.1 mF to 3.299 9 mF	0.45 % of reading + 3 μ F		
	3.3 mF to 10.999 mF	0.45 % of reading + 10 µF		
	11 mF to 32.999 mF	0.75 % of reading + 30 µF		
	33 mF to 110 mF	1.1 % of reading + 100 µF		



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Equipment to Output	0.01 Ω to 11 Ω	0.012 % of reading + 1 m Ω	Fluke 5502A	OEM
Resistance ^{FO}	11 Ω to 33 Ω	0.012 % of reading + 1.5 m Ω	Calibrator	
	33 Ω to 110 Ω	0.009 % of reading + 1.5 m Ω		
	110 Ω to 330 Ω	0.009 % of reading + 2.0 m Ω		
	330 Ω to 1.1 k Ω	0.009 % of reading + 2.0 m Ω		
	1.1 k Ω to 3.3 k Ω	0.009% of reading + 20 m Ω		
	3.3 k Ω to 11 k Ω	0.009% of reading + 20 m Ω		
	11 k Ω to 33 k Ω	0.009% of reading + 200 m Ω		
	33 k Ω to 110 k Ω	0.011 % of reading + 200 m Ω		
	110 k Ω to 330 k Ω	0.012 % of reading + 2 Ω		
	330 k Ω to 1.1 M Ω	0.015 % of reading + 2 Ω		
	1.1 M Ω to 3.3 M Ω	0.015 % of reading + 30 Ω		
	3.3 M Ω to 11 M Ω	0.06 % of reading + 50 Ω		
	11 M Ω to 33 M Ω	0.1 % of reading + 2 500 Ω		
	33 M Ω to 110 M Ω	0.5 % of reading + 3 k Ω		
	110 M Ω to 330 M Ω	0.5% of reading + 100 k Ω		
	330 M Ω to 1 100 M Ω	1.5 % of reading + 500 k Ω		
Equipment to Measure	AC Current at the listed F	Forequencies FO	Fluke 8846A	
10 Hz to 5 kHz	0.1 μA to 100 μA	0.1 % of reading + 0.4 μ A		
5 kHz to 10 kHz	0.1 μA to 100 μA	0.2 % of reading + 2.5 μA		
Equipment to Measure	AC Current at the listed F	Grequencies FO		
10 Hz to 5 kHz	100 µA to 1 mA	0.15 % of reading + $6 \mu A$		
5 kHz to 10 kHz	100 µA to 1 mA	0.35 % of reading + 70 μ A		
Equipment to Measure	AC Current at the listed F	Trequencies ^{FO}		
10 Hz to 5 kHz	1 mA to 10 mA	0.1 % of reading + 40 μ A		
5 kHz to 10 kHz	1 mA to 10 mA	0.2 % of reading + 250 μ A		
Equipment to Measure	AC Current at the listed F	Forequencies FO		
10 Hz to 5 kHz	10 mA to 100 mA	0.1 % of reading + 0.4 mA		
5 kHz to 10 kHz	10 mA to 100 mA	0.2 % of reading + 2.8 mA		
	AC Current at the listed F			
10 Hz to 1 kHz	100 mA to 400 mA	0.1 % of reading + 0.4 μA		
1 kHz to 10 kHz	100 mA to 400 mA	0.2 % of reading + 2.5 µA		



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Equipment to Measure			Fluke 8846A	OEM
at the listed Frequencie 10 Hz to 5 kHz	0.4 A to 1 A	0.1 % of reading + 0.4 μ A		
5 kHz to 10 kHz	0.4 A to 1 A	0.35% of reading + 7 μ A		
Equipment to Measure		0.35% of reading + 7 μ A		
at the listed Frequencie				
10 Hz to 5 kHz	1 A to 3 A	0.15 % of reading + 6 mA		
5 kHz to 10 kHz	1 A to 3 A	0.35 % of reading + 70 mA		
Equipment to Measure at the listed Frequencie				
10 Hz to 5 kHz	3 A to 10 A	0.15 % of reading + 6 mA		
5 kHz to 10 kHz	3 A to 10 A	0.35 % of reading + 70 mA		
Equipment to	$1 \ \mu V$ to $100 \ mV$	0.003 7 % of reading + 3.5 μ V		
Measure DC Voltage ^{FO}	100 mV to 1 V	0.002 5 % of reading + 7 μ V		
DC Voltage	1 V to 10 V	0.002 4 % of reading + 0.05 mV		
	10 V to 100 V	0.003 8 % of reading + 0.6 mV		
	100 V to 1 000 V	0.004 1 % of reading + 10 mV	\wedge	
Equipment to	0.1 mV to 100 mV	0.06 % of reading + 0.04 mV		
Measure AC Voltage ^{FO}	100 mV to 1 V	0.06 % of reading + 0.3 mV		
10 Hz to 20 kHz	1 V to 10 V	0.06 % of reading + 3 mV		
	10 V to 100 V	0.06 % of reading + 30 mV		
	100 V to 1 000 V	0.06 % of reading + 225 mV		
Equipment to	0.1 nF to 1 nF	2 % of reading + 0.025 nF		
Measure Capacitance	1 nF to 10 nF	1 % of reading + 0.05 nF		
	10 nF to 100 nF	1 % of reading $+ 0.5 \text{ nF}$		
	0.1 μF to 1 μF	1 % of reading $+ 5 \text{ nF}$		
	1 μF to 10 μF	1 % of reading + 50 nF		
	10 μF to 100 μF	1 % of reading + 0.5 μ F		
	0.01 mF to 1 mF	1 % of reading + 0.005 mF		
	1 mF to 10 mF	1 % of reading + 0.05 mF		



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Equipment to Measure	0.1Ω to 10Ω	0.01 % of reading + 3 m Ω	Fluke 8846A	OEM
Resistance FO	10 Ω to 100 Ω	0.01 % of reading + 4 m Ω		
	100 Ω to 1 k Ω	0.01 % of reading + 10 m Ω		
	1 k Ω to 10 k Ω	0.01 % of reading + 100 m Ω		
	10 k Ω to 100 k Ω	0.01 % of reading + 1 Ω		
	$100 \text{ k}\Omega$ to $1 \text{ M}\Omega$	0.01 % of reading + 10 Ω		
	1 M Ω to 10 M Ω	0.04 % of reading + 100 Ω		
	$10 \text{ M}\Omega$ to $100 \text{ M}\Omega$	0.8 % of reading + 10 k Ω		
Equipment to Measure	0.01 µA to 100 µA	0.05 % of reading + 0.025 µA		
DC Current FO	100 µA to 1 mA	0.05 % of reading + 0.05 µA		
	1 mA to 10 mA	0.05 % of reading + 2 µA		
	10 mA to 100 mA	0.05 % of reading + 5 μ A	2	
	100 mA to 400 mA	0.05 % of reading + 20 µA		
	0.4 A to 1 A	0.05 % of reading + 0.2 mA		
	1 A to 3 A	0.1 % of reading + 2 mA		
	3 A to 10 A	0.15 % of reading + 0.8 mA		
Temperature	600 °C to 800 °C	0.51 °C	Electrical Simulation	OEM and Euramet
Calibration, Indication	800 °C to 1 000 °C	0.39 °C	of Thermocouple	CG-11
and Control Equipment used with	1 000 °C to 1 550 °C	0.35 °C	Output Fluke 5502A	
Thermocouple Type B FO	1 550 °C to 1 820 °C	0.38 °C		
Temperature	Up to 150 °C	0.35 °C		
Calibration, Indication and Control	150 °C to 650 °C	0.3 °C		
Equipment used with	650 °C to 1 000 °C	0.36 °C		
Thermocouple Type C FO	1 000 °C to 1 800 °C	0.58 °C		
	1 800 °C to 2 316 °C	0.97 °C		
Temperature Calibration, Indication	-250 °C to -100 °C	0.58 °C		
	-100 °C to -25 °C	0.2 °C		
and Control Equipment used with	-25 °C to 350 °C	0.18 °C		
Thermocouple Type E	350 °C to 650 °C	0.20 °C		
FO	650 °C to 1 000 °C	0.25 °C		



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Temperature Calibration,	-210 °C to -100 °C	0.32 °C	Electrical Simulation	OEM
Indication and Control Equipment used with	-100 °C to -30 °C	0.2 °C	of Thermocouple Output Fluke 5502A	
Thermocouple Type J ^{FO}	-30 °C to 150 °C	0.18 °C	Output Pluke 5502A	
	150 °C to 760 °C	0.21 °C		
	760 °C to 1 200 °C	0.27 °C		
Temperature Calibration,	-200 °C to -100 °C	0.39 °C		
Indication and Control	-100 °C to -25 °C	0.22 °C		
Equipment used with Thermocouple Type K ^{FO}	-25 °C to 120 °C	0.2 °C		
inernioeoupie Type II	120 °C to 1 000 °C	0.31 °C		
	1 000 °C to 1 372 °C	0.47 °C		
Temperature Calibration,	-200 to -100 C	0.43 °C		
Indication and Control	-100 C to 800 °C	0.31 °C		
Equipment used with Thermocouple Type L ^{FO}	800 °C to 900 °C	0.21 °C		
Temperature Calibration,	-200 to -100 °C	0.47 °C		
Indication and Control	-100 °C to -25 °C	0.26 °C		
Equipment used with Thermocouple Type N ^{FO}	-25 °C to 120 °C	0.23 °C		
	120 °C to 410 °C	0.22 °C		
	410 °C to 1 300 °C	0.32 °C		
Temperature Calibration,	0 °C to 250 °C	0.66 °C		
Indication and Control	250 °C to 400 °C	0.41 °C	1	
Equipment used with Thermocouple Type R ^{FO}	400 °C to 1 000 °C	0.39 °C		
	1 000 °C to 1 767 °C	0.47 °C		
Temperature Calibration,	0 °C to 250 °C	0.55 °C		
Indication and Control	250 °C to 1 000 °C	0.42 °C		
Equipment used with Thermocouple Type S ^{FO}	1 000 °C to 1 400 °C	0.43 °C	-	
inclinecouple Type b	1 400 °C to 1 767 °C	0.54 °C		
Temperature Calibration,	-250 to -150 °C	0.73 °C	1	
Indication and Control	-150 °C to 0 °C	0.29 °C	1	
Equipment used with Thermocouple Type T ^{FO}	0 °C to 120 °C	0.2 °C	1	
	120 °C to 400 °C	0.18 °C	1	
Temperature Calibration, Indication and Control Equipment used with Thermocouple Type U ^{FO}	-200 °C to 0 °C	0.65 °C		



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Mass, Force, and	Weighing Devices			
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Laboratory Balances FO	20 mg to 200 g	AS AN UNCERTAINTY (±) 0.63 mg	STANDARDS USED Class 1 Weights	PROCEDURES USED Euramet CG-18
	(Resolution: 0.1 mg)		_	

Mechanical				
MEASURED	RANGE	CALIBRATION AND	CALIBRATION	CALIBRATION
INSTRUMENT,	(AND SPECIFICATION	MEASUREMENT	EQUIPMENT AND	MEASUREMENT
QUANTITY OR GAUGE	WHERE APPROPRIATE)	CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	REFERENCE STANDARDS USED	METHOD OR PROCEDURES USED
Pressure Gages FO	-12 psi to 20 psi	0.145% of indicated value	Crystal – M1-100PSI	ASME B40.100
		+ 0.03 psig	•	
	20 psi to 100 psi	0.223 % of indicated		
		value $+$ 0.011 psig		
	100 psi to 500 psi	0.112 % of indicated	Crystal – 500PSIXP2I	
		value $+$ 0.021 psig		
	200 psi to 1 000 psi	0.103 % of indicated	Crystal – 1KPSIXP2I	
		value + 0.17 psig		
	1 000 psi to 5 000 psi	0.113 % of indicated	Crystal – 5KPSIXP2I	
		value + 0.31 psig		
	-12 psi to 20 psi	0.145% of indicated value	Crystal – M1-100PSI	
		+ 0.03 psig		
	20 psi to 100 psi	0.223 % of indicated		
		value + 0.011 psig		
	100 psi to 500 psi	0.112 % of indicated	Crystal – 500PSIXP2I	
		value + 0.021 psig		
Torque Wrenches FO	25 lbf·in to 250 lbf·in	0.51 % of indicated value	Mountz - LTT-2501	Euramet CG-14
		+ 0.17 lbf·in		
	25 lbf·ft to 250 lbf·ft	0.582 % of indicated	Mountz - BMX250F	
		value + 0.16 lbf·ft		

Time & Frequency						
MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED		
Stopwatch/ Timer ^{FO}	1 minute to 24 hr	0.61 s	Agilent 53131A, 5502A	NIST Totalizer Method/SP960-12 ACL-CP- Stopwatch/timers		



Accurate Calibration, LLC

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- 1. The CMC (Calibration and Measurement Capability) stated for calibrations included on this scope of accreditation represents the smallest measurement uncertainty attainable by the laboratory when performing a more or less routine calibration of a nearly ideal device under nearly ideal conditions. It is typically expressed at a confidence level of 95 % using a coverage factor k (usually equal to 2). The actual measurement uncertainty associated with a specific calibration performed by the laboratory will typically be larger than the CMC for the same calibration since capability and performance of the device being calibrated and the conditions related to the calibration may reasonably be expected to deviate from ideal to some degree.
- 2. The laboratories range of calibration capability for all disciplines for which they are accredited is the interval from the smallest calibrated standard to the largest calibrated standard used in performing the calibration. The low end of this range must be an attainable value for which the laboratory has or has access to the standard referenced. Verification of an indicated value of zero in the absence of a standard is common practice in the procedure for many calibrations but by its definition it does not constitute calibration of zero capacity.
- 3. The presence of a superscript F means that the laboratory performs calibration of the indicated parameter at its fixed location.
- 4. The presence of a superscript O means that the laboratory performs calibration of the indicated parameter onsite at customer locations.
- 5. Measurement uncertainties obtained for calibrations performed at customer sites can be expected to be larger than the measurement uncertainties obtained at the laboratories fixed location for similar calibrations. This is due to the effects of transportation of the standards and equipment and upon environmental conditions at the customer site which are typically not controlled as closely as at the laboratories fixed location.
- 6. The term L represents length in inches or millimeters as appropriate to the uncertainty statement.
- 7. The term R represents the numerical value of the resolution of the device in micro inches.