

**CERTIFICATE OF
 CALIBRATION**



Certificate No. ACT-1272

CERTIFICATION NUMBER	CP134-00244-840	IDENTIFICATION	HT-021A
FOR	Sample Manufacturing 3121 Medalist Drive Oshkosh, WI 54902	SERIAL NUMBER	244
TEST INSTRUMENT	Calibrator Extensometer Calibrator	PURCHASE ORDER #	
MAKE	Epsilon Technology corp	PROCEDURES FOLLOWED	HT-021A rev. 1
MODEL	3590VHR		
RANGE	(0 to 2) inch		
CUSTOMER LOCATION	Location1 Location2	STANDARDS USED	
CONDITION RECEIVED	In Tolerance	INSTRUMENT	SERIAL NUMBER
CONDITION RETURNED	In Tolerance	FVM-060B	16781927.29
CALIBRATED BY	Jacob Nachtrab	FVM-234	48XM90/4VNX66
REVIEWED/ISSUED	D.P. 07/29/2025	TRACE NUMBER	NEXT CAL
CALIBRATION LOCATION	FVM	C0190-17156-690	07/31/2025
ENVIRONMENT	69.0°F, 31.0%RH, 28.92inHg	C0220-29855-825	07/31/2025
CALIBRATION DATE	05/14/2025		
RECALIBRATION DUE	05/14/2026		



CALIBRATION RESULTS

* DENOTES "OUT OF TOLERANCE"

FEATURE	NOMINAL	LOWER LIMIT	UPPER LIMIT	AS FOUND	AS LEFT	UNCERTAINTY
Full Range, Tension	(in)	(in)	(in)	(in)	(in)	(in)
0 to 2 inch	0.000000	-0.000008	0.000008	0.000000	0.000000	3.4E-5
	0.199890	0.199850	0.199930	0.199869	0.199869	3.4E-5
	0.399633	0.399553	0.399713	0.399605	0.399605	3.4E-5
	0.600505	0.600385	0.600625	0.600466	0.600466	3.4E-5
	0.800258	0.800098	0.800418	0.800216	0.800216	3.4E-5
	1.000370	1.000173	1.000567	1.000339	1.000339	3.4E-5
	1.200082	1.199885	1.200279	1.200057	1.200057	3.4E-5
	1.400154	1.399957	1.400351	1.400124	1.400124	3.5E-5
	1.599992	1.599795	1.600189	1.599951	1.599951	3.5E-5
	1.802282	1.802085	1.802479	1.802232	1.802232	3.5E-5
	2.000011	1.999814	2.000208	2.000068	2.000068	3.5E-5
	1.000047	0.999850	1.000244	1.000036	1.000036	3.4E-5
	0.000078	0.000070	0.000086	0.000083	0.000083	3.4E-5
Full Range, Compression	(in)	(in)	(in)	(in)	(in)	(in)
0 to 2 inch	0.000000	-0.000008	0.000008	0.000000	0.000000	3.4E-5
	-0.200122	-0.200162	-0.200082	-0.200105	-0.200105	3.4E-5
	-0.399936	-0.400016	-0.399856	-0.399912	-0.399912	3.4E-5
	-0.600070	-0.600190	-0.599950	-0.600049	-0.600049	3.4E-5
	-0.800062	-0.800222	-0.799902	-0.800024	-0.800024	3.3E-5
	-1.000039	-1.000239	-0.999839	-0.999995	-0.999995	3.3E-5
	-1.200019	-1.200259	-1.199779	-1.199979	-1.199979	3.3E-5
	-1.399064	-1.399344	-1.398784	-1.399031	-1.399031	3.3E-5
	-1.599871	-1.600191	-1.599551	-1.599830	-1.599830	3.3E-5

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FEATURE	NOMINAL	LOWER LIMIT	UPPER LIMIT	AS FOUND	AS LEFT	UNCERTAINTY
	-1.800214	-1.800574	-1.799854	-1.800168	-1.800168	3.3E-5
	-1.999988	-2.000388	-1.999588	-1.999932	-1.999932	3.3E-5
	-0.999762	-0.999962	-0.999562	-0.999741	-0.999741	3.3E-5
	0.000014	0.000006	0.000022	0.000020	0.000020	3.4E-5
Small Increment	(in)	(in)	(in)	(in)	(in)	(in)
from 0 inch	0.000000	-0.000008	0.000008	0.000000	0.000000	3.4E-5
Tension	0.001017	0.001009	0.001025	0.001015	0.001015	3.4E-5
	0.002007	0.001999	0.002015	0.002004	0.002004	3.4E-5
	0.003011	0.003003	0.003019	0.003007	0.003007	3.4E-5
	0.004995	0.004987	0.005003	0.004991	0.004991	3.4E-5
	0.009979	0.009963	0.009995	0.009983	0.009983	3.4E-5
	0.015019	0.014995	0.015043	0.015023	0.015023	3.4E-5
	0.019987	0.019955	0.020019	0.019991	0.019991	3.4E-5
From 1 inch	(in)	(in)	(in)	(in)	(in)	(in)
Tension	0.000000	-0.000008	0.000008	0.000000	0.000000	3.4E-5
	0.001004	0.000996	0.001012	0.001002	0.001002	3.4E-5
	0.002033	0.002025	0.002041	0.002029	0.002029	3.4E-5
	0.003018	0.003010	0.003026	0.003015	0.003015	3.4E-5
	0.005007	0.004999	0.005015	0.005005	0.005005	3.4E-5
	0.010008	0.009992	0.010024	0.010002	0.010002	3.4E-5
	0.014993	0.014969	0.015017	0.014988	0.014988	3.4E-5
	0.019992	0.019960	0.020024	0.019990	0.019990	3.4E-5
From 2 inch	(in)	(in)	(in)	(in)	(in)	(in)
Compression	0.000000	-0.000008	0.000008	0.000000	0.000000	3.4E-5
	-0.000998	-0.001006	-0.000990	-0.000997	-0.000997	3.4E-5
	-0.002004	-0.002012	-0.001996	-0.002001	-0.002001	3.4E-5
	-0.002991	-0.002999	-0.002983	-0.002988	-0.002988	3.4E-5
	-0.004999	-0.005007	-0.004991	-0.004997	-0.004997	3.4E-5
	-0.010003	-0.010019	-0.009987	-0.009996	-0.009996	3.4E-5
	-0.015011	-0.015035	-0.014987	-0.015004	-0.015004	3.4E-5
	-0.019950	-0.019982	-0.019920	-0.019946	-0.019946	3.4E-5

COMMENTS

Example certificate, actual results and uncertainties will be reported at the time of calibration.
 Nominal and limits may vary based on actual make/model.

- This certificate shall not be altered in any form or reproduced, except in full, without prior written approval from originating lab. These results relate only to the item(s) calibrated. Form Revision 10: 06/04/2024
- Total expanded measurement uncertainties expressed are based on a confidence level of 95%; coverage factor of (k=2). The statement of compliance in this certificate was issued without taking the uncertainty of measurement into consideration. The customer shall assess the results and uncertainty when determining if the results meet their needs. (This is considered "shared responsibility.") Uncertainties expressed in nominal units.
- The calibrations within the certificate/report are traceable through NIST or another National Metrology Institute to the International System of Units (SI). Calibration was completed in accordance with ISO/IEC 17025:2017, ANSI/NCCL Z540-1-1994 and ANSI/NCCL Z540.3-2006. Other standards listed upon request.