SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017
& ANSI/NCSL Z540-1-1994

FUTEK ADVANCED SENSOR TECHNOLOGY, INC.
10 Thomas
Irvine, CA 92618
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CALIBRATION

Valid To: May 31, 2025 Certificate Number: 2412.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations[1, 4]:

I. Electrical – DC/Low Frequency

Parameter/Equipment	Range	CMC[2, 3, 5] (±)	Comments
DC Voltage – Measure	(0 to 100) mV (0.1 to 1) V (1 to 10) V (10 to 100) V	0.0034 % FS 0.0008 % FS 0.0005 % FS 0.0019 % FS	Fluke 8508A
DC Current – Measure	(0 to 10) mA (10 to 100) mA	0.0067 % FS 0.012 % FS	Fluke 8508A
Resistance – Measure	100 Ω to 10 kΩ	0.015 % FS	Fluke 8508A
DC Voltage Ratio – Measure	(0.05 to 10) mV/V	0.018 % FS	mV/V simulator, Vishay precision calibrator

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II. Mechanical

Parameter/Equipment	Range	CMC[2, 3, 5] (±)	Comments
Force – Measure	(490 to 5000) lbf (1000 to 50 000) lbf (2000 to 120 000) lbf	0.051 % FS 0.016 % FS 0.035 % FS	Load cells
Force – Measuring Equipment	(1 to 5) mgf (10 to 20) mgf (50 to 500) mgf (1 to 20) lbf (0.002 to 50) lbf (1 to 10) lbf (5 to 25) lbf (10 to 50) lbf (20 to 100) lbf (10 to 200) lbf (10 to 300) lbf (100 to 500) lbf (100 to 3000) lbf	0.68 % FS 0.044 % FS 0.020 % FS 0.015 % FS 0.015 % FS 0.016 % FS 0.010 % FS 0.012 % FS 0.022 % FS 0.010 % FS 0.013 % FS 0.011 % FS 0.009 % FS	ASTM Class 1 weights ASTM Class 3 weights ASTM Class 6 and NIST F weights ASTM Class 7 weights Dead weight machines
Torque – Measure	(0.10 to 25) lbf·in (530 to 2500) lbf·in (890 to 10 000) lbf·in	0.081 % FS 0.080 % FS 0.075 % FS	Torque cells
Torque – Measuring Equipment	0.0125 to 25 lbf·in (5 to 885) lbf·in (885 to 4000) lbf·in (4000 to 24 000) lbf·in	0.058 % FS 0.050 % FS 0.033 % FS 0.052 % FS	Torque arms and weights
Pressure – Measure	(0 to 1515) psia (300 to 10 000) psig	0.014 % FS 0.049 % FS	Reference pressure cells Mensor CPC6050 CPP 1000X
Rotational Speed, RPM – Measuring Equipment	Up to 12 000 rpm	0.057 % FS	Tachometer

[1] This laboratory offers commercial calibration service.

[2] Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

[3] In the statement of CMC, "% FS" means percentage of Full Scale unless otherwise noted.

[4] This scope meets A2LA's *P112 Flexible Scope Policy*.

[5] The type of instrument or material being calibrated is defined by the parameter. This indicates the laboratory is capable of calibrating instruments that measure or generate the values in the ranges indicated for the listed measurement parameter.

Accredited Laboratory

A2LA has accredited

FUTEK ADVANCED SENSOR TECHNOLOGY, INC.

Irvine, CA

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of ANSI/NCSL Z540-1-1994 and R205 – Specific Requirements: Calibration Laboratory Accreditation Program. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 25th day of July 2023.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2412.01
Valid to May 31, 2025

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.