

ACCELERATION CALIBRATION CERTIFICATE - X Axis

Type	8395A2D0ATTA00	Manufacturer	Kistler
Serial Number	2128441	Certificate ID #	41-2128441-130204T1054
Transverse Sensitivity	% 3.0	Mounted Resonant Frequency	kHz 1.3
Bias Voltage	V _{DC} -0.014		

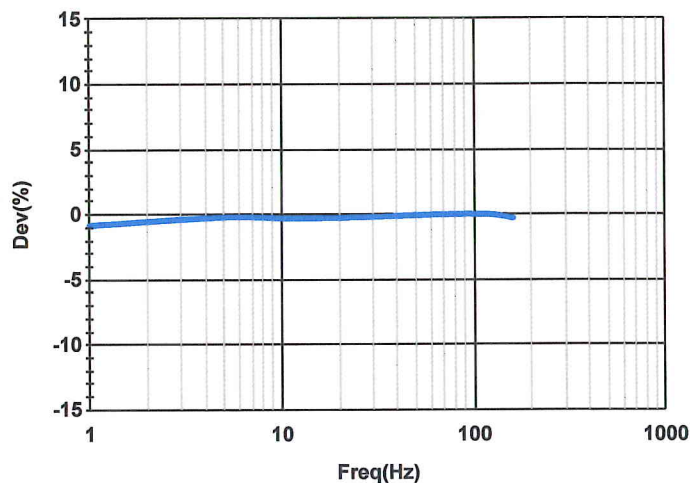
Reference Specifications

Range	g ± 2	Temp. Range, operating	°C -55 to 125
Max Range	g ± 20	Output Impedance	Ω ≤300

Measurements

Frequency Hz	Sensitivity mV/g	Deviation % (ref= 100 Hz)
1	1971	-0.8
5	1983	-0.2
10	1982	-0.3
20	1982	-0.3
100	1988	0.0
159	1982	-0.3

Frequency Response



Sensitivity at 100 Hz, 0.5 g rms	mV/g 1988		
Sensitivity at 159 Hz, 0.5 g rms	mV/g 1982		g = 9.807 m/s ² 159.2 Hz = 1000 rads/sec
Environmental Temperature	°C 22 ± 4	Condition	New
Relative Humidity	% 30 ± 30	NIST Test Report Number	Not Applicable
Calibration Date	2/4/2013	Calibration Technician:	Norton G. Kinsley

This sensor was calibrated per Kistler test procedure 060-2273-001 using a comparison technique against a Kistler working standard. Kistler working standards are periodically calibrated against a primary standard system, which in turn is periodically recertified to the National Institute of Standards and Technology (NIST) or another recognized national standard. Measurements are derived from accepted values of natural physical constants according to the International System of Units (SI). This calibration meets or exceeds the requirements of MIL-STD-45662A, ISO 9001, ANSI/NCSL Z540-1 and is accredited to ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/ACLASS. Refer to certificate and scope of accreditation AC-1117. Estimated uncertainty is ± 1.01% of reading with respect to the primary standard. Certificates are on file at Kistler and may be requested in writing. This certificate shall not be reproduced, except in full, without written approval of Kistler Instrument Corporation.

Reference Equipment	Manufacturer	Type	Serial Number	Reference Equipment	Manufacturer	Type	Serial Number
Accelerometer (Working Std.)	Honeywell	QA-700	43052	Spectrum Analyzer (Working Std)	HP	3562A	3005A05111
Accelerometer (Primary Std.)	Kistler	8002K	C197006	Charge Amplifier (Test)	Kistler	5010B	C73854
Charge Amplifier (Primary Std.)	Kistler	5020	C4870				

AS FOUND
NO ADJUSTMENTS MADE

ACCELERATION CALIBRATION CERTIFICATE - Y Axis

Type	8395A2D0ATTA00	Manufacturer	Kistler
Serial Number	2128441	Certificate ID #	41-2128441-130204T1054
Transverse Sensitivity	% 3.0	Mounted Resonant Frequency	kHz 1.3
Bias Voltage	V _{dc} 0.022		

Reference Specifications			
Range	g	± 2	Temp. Range, operating °C -55 to 125
Max Range	g	± 20	Output Impedance Ω ≤300

Measurements			Frequency Response	
Frequency Hz	Sensitivity mV/g	Deviation % (ref=100 Hz)		
1	1971	-0.8		
5	1986	0.0		
10	1987	0.0		
20	1986	-0.1		
100	1987	0.0		
159	1976	-0.6		

Sensitivity at 100 Hz, 0.5 g rms	mV/g 1987		
Sensitivity at 159 Hz, 0.5 g rms	mV/g 1976		g = 9.807 m/s ² 159.2 Hz = 1000 rads/sec
Environmental Temperature	°C 22 ± 4	Condition	New
Relative Humidity	% 30 ± 30	NIST Test Report Number	Not Applicable
Calibration Date	2/4/2013	Calibration Technician:	Norton G. Kinsley

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Accelerometer (Primary Std.)	Kistler	8002K	C197006	Charge Amplifier (Test)	Kistler	5010B	C73854
Charge Amplifier (Primary Std.)	Kistler	5020	C4870				

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ISO 9001 Certified Quality System
ISO 17025 Accredited Calibration Laboratory
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ACCELERATION CALIBRATION CERTIFICATE - Z Axis

Type	8395A2D0ATTA00	Manufacturer	Kistler
Serial Number	2128441	Certificate ID #	41-2128441-130204T1054
Transverse Sensitivity	% 3.0	Mounted Resonant Frequency	kHz 1.3
Bias Voltage	V _{dc} 0.004		

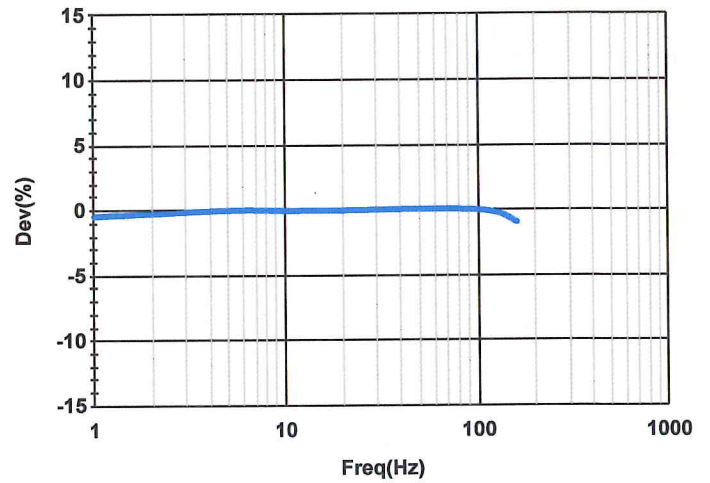
Reference Specifications

Range	g ± 2	Temp. Range, operating	°C -55 to 125
Max Range	g ± 20	Output Impedance	Ω ≤300

Measurements

Frequency Hz	Sensitivity mV/g	Deviation % (ref=100 Hz)
1	1996	-0.5
5	2005	0.0
10	2005	0.0
20	2005	0.0
100	2006	0.0
159	1987	-0.9

Frequency Response



Sensitivity at 100 Hz, 0.5 g rms	mV/g 2006	$g = 9.807 \text{ m/s}^2$ $159.2 \text{ Hz} = 1000 \text{ rads/sec}$
Sensitivity at 159 Hz, 0.5 g rms	mV/g 1987	
Environmental Temperature	°C 22 ± 4	Condition New
Relative Humidity	% 30 ± 30	NIST Test Report Number Not Applicable
Calibration Date	2/4/2013	Calibration Technician: Norton G. Kinsley

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