

MODEL 7132A & 7132B ACCELEROMETER

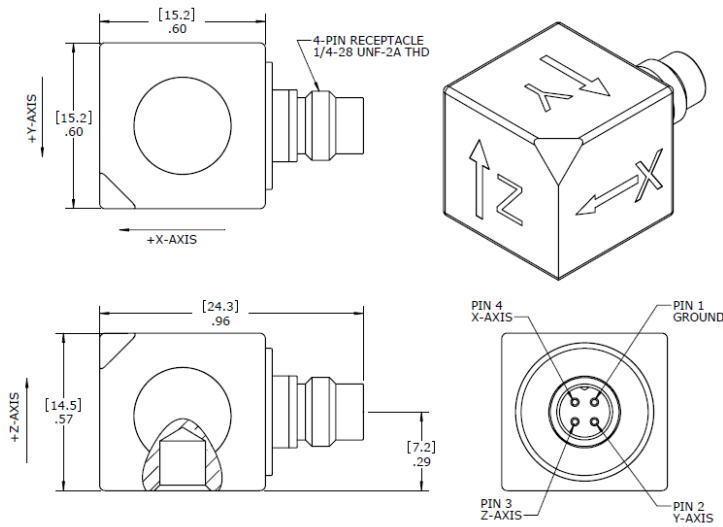


7132A Pictured

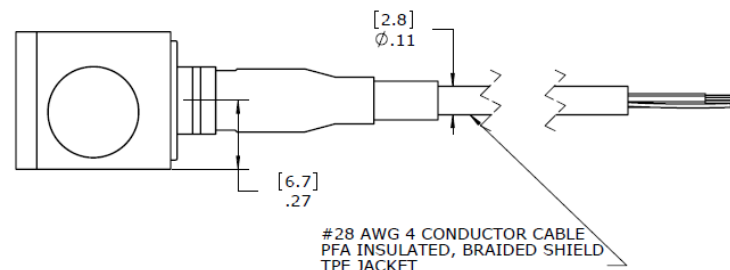


DIMENSIONS

7132A Dimensions



7132B Dimensions



SPECIFICATIONS

- ◆ Triaxial IEPE Accelerometer
- ◆ Miniature Cube
- ◆ Hermetically Sealed, Titanium
- ◆ $\pm 10g$ to $\pm 2000g$ Dynamic Ranges

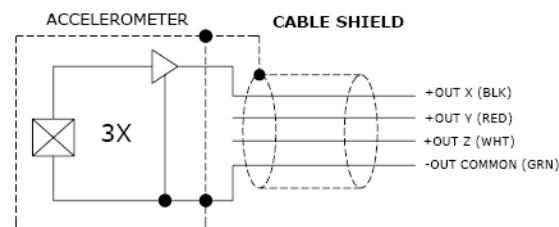
The Model 7132A is a miniature triaxial IEPE accelerometer available in $\pm 10g$ to $\pm 2000g$ dynamic ranges. The accelerometer features a hermetically sealed titanium construction with a 4-pin Microtech connector interface. The model 7132A incorporates stable piezo-ceramic crystals in annular shear mode which provide a flat frequency response up to $>12kHz$. The model 7132B offers identical performance with an integral cable option.

FEATURES

- ◆ $-55^{\circ}C$ to $+125^{\circ}C$ Operating Range
- ◆ Wide bandwidth up to 12kHz
- ◆ Adhesive Mounting
- ◆ Miniature Triaxial
- ◆ Annular Shear Mode Crystals
- ◆ Stable Temperature Response

APPLICATIONS

- ◆ Vibration & Shock Monitoring
- ◆ Laboratory Testing
- ◆ Modal Applications
- ◆ High Frequency Applications
- ◆ General Purpose Usage
- ◆ Stress Screening



PERFORMANCE SPECIFICATIONS

All values are typical at +24°C, 80Hz and 4mA excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters

DYNAMIC

	±10	±50	±100	±500	±2000	Notes
Range (g)	±10	±50	±100	±500	±2000	
Sensitivity (mV/g)	500	100	50	10	2.5	±10%
Frequency Response (Hz)	2-6000	1-7000	1-7000	1-8000	1-10000	±10%
Frequency Response (Hz)	1.5-8000	0.4-9000	0.4-9000	0.4-10000	0.4-12000	±2dB
Natural Frequency (Hz)	37000	37000	37000	37000	42000	
Non-Linearity (%FSO)	±1	±1	±1	±1	±1	
Transverse Sensitivity (%)	<5	<5	<5	<5	<5	
Shock Limit (g)	5000	5000	5000	5000	5000	
Residual Noise (g RMS)	0.0003	0.0005	0.0006	0.001	0.0025	Broadband 1Hz to 10kHz

ELECTRICAL

Compliance Voltage (Vdc)	18 to 30					
Excitation Current (mA)	2 to 10					
Bias Voltage (Vdc)	8 to 12					Room Temperature
Bias Voltage (Vdc)	6 to 13					-55 to +125°C
Output Impedance (Ω)	<100					
Full Scale Output Voltage (V)	±5					
Discharge Time Constant (sec)	0.8 to 1.2					
Ground Isolation	Case Grounded					

ENVIRONMENTAL

Temperature Response (%)	See Typical Temperature Response Curve
Operating Temperature (°C)	-55 to +125
Storage Temperature (°C)	-55 to +125
Humidity	Hermetically Sealed, IP67

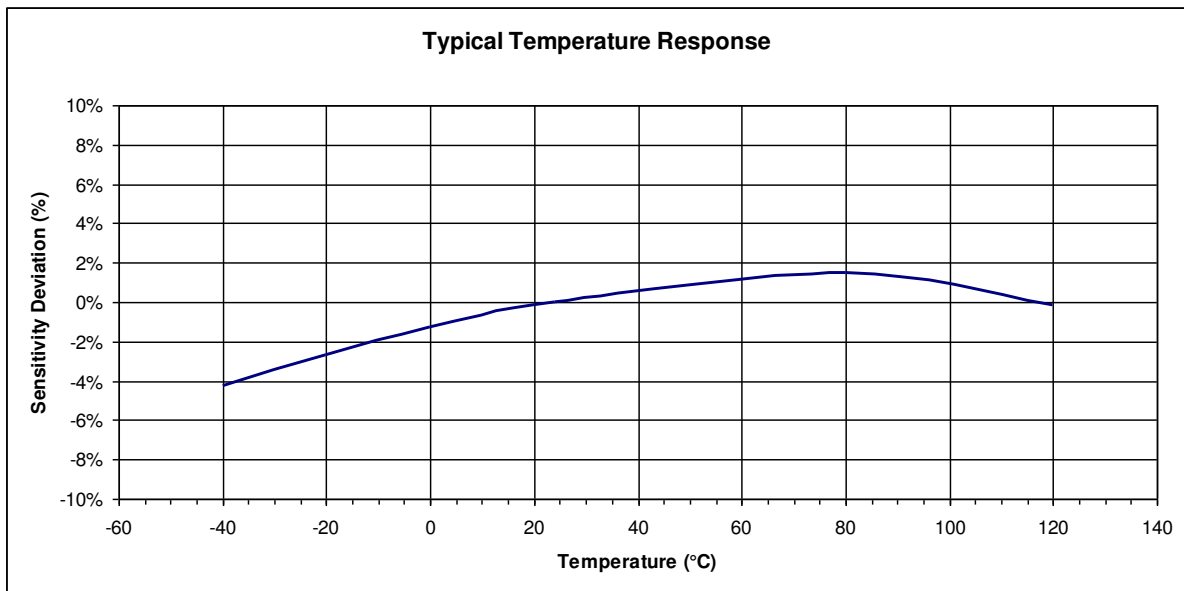
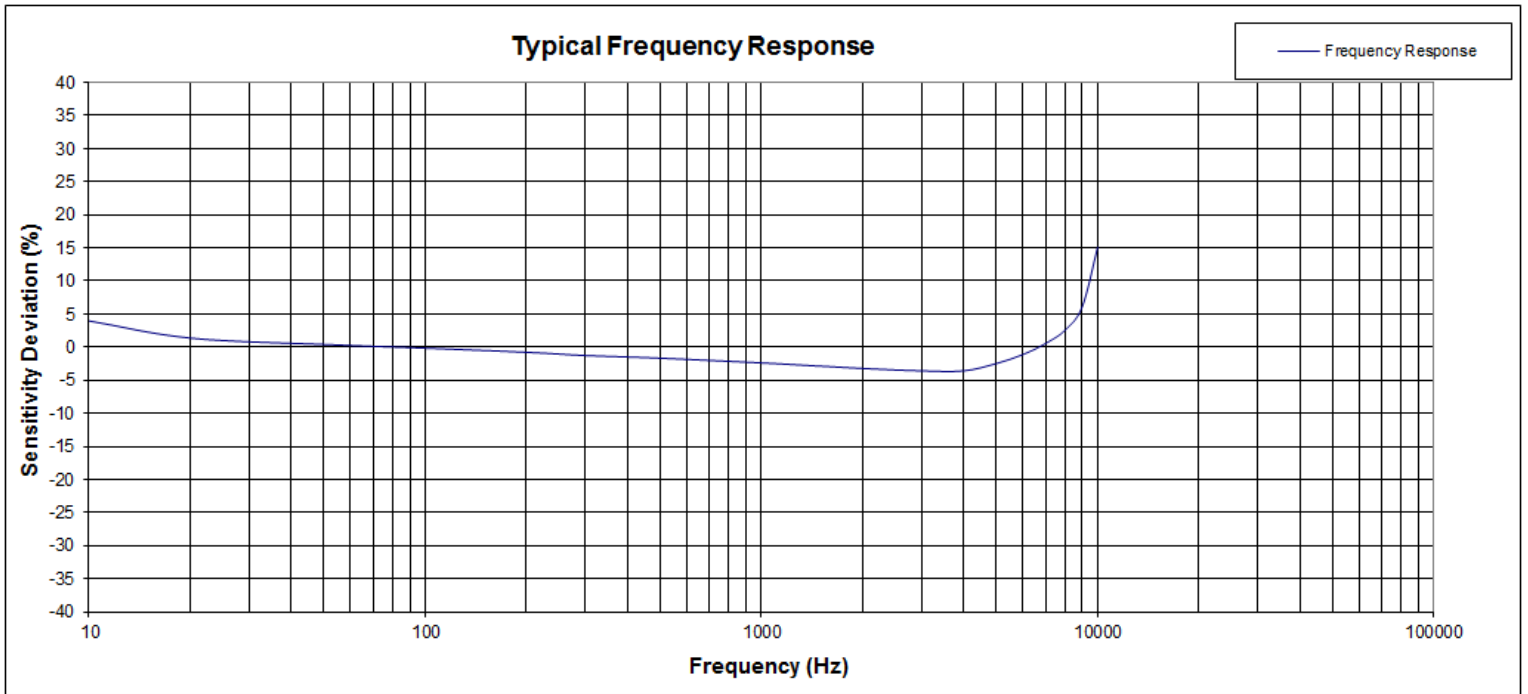
PHYSICAL

Sensing Element	Ceramic (shear mode)
Case Material	Titanium
Electrical Connector	7132A; 4-Pin Receptacle 7132B; 4x #28 AWG Conductors, Braided Shield, TPE Jacket
Weight	15grams (50g-2000g ranges), 20grams (10g range)
Mounting	Adhesive (stud mount option)

Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±2dB Frequency Response Limit

Optional accessories: 315-XXX Cable Assembly, 4-pin 1/4-28 to 3x BNC (XXX designates length in inches, 10ft standard)
161A 4-Channel PE & IEPE Signal Conditioner
AC-A03530 Magnetic Mounting Adaptor (for -02 thread option)

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ORDERING INFORMATION

PART NUMBERING Model Number+Range

7132A-GGGG-XX

| | | | Optional Thread Dash Number

| | Range (0050 is 50g)

| Connection Option (A for 4-pin Microtech, B for integral cable)

Dash Number

-01

-02

-03

Thread Options

M5 x 0.8 6g

#10-32 UNF-2B

Case Isolated

Example: 7132A-0050

Model 7132A, 4-Pin Microtech Connector, 50g Range

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