

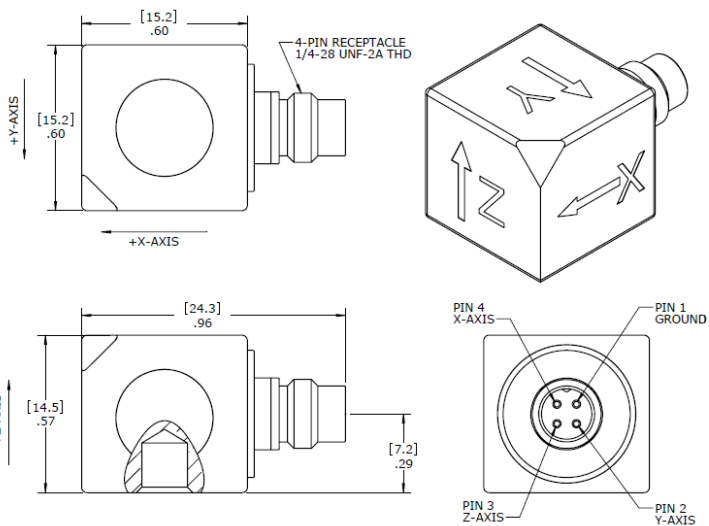


7132A Pictured

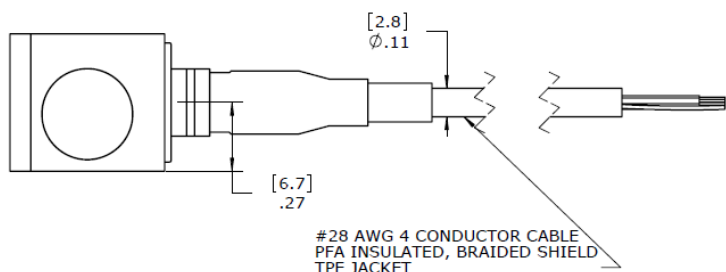


## DIMENSIONS

7132A Dimensions



7132B Dimensions



## MODEL 7132A & 7132B ACCELEROMETER

### SPECIFICATIONS

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

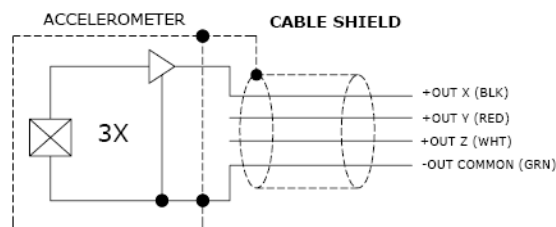
The Model 7132A is a miniature triaxial IEPE accelerometer available in  $\pm 10g$  to  $\pm 2000g$  dynamic ranges. The accelerometer features a hermetically sealed titanium construction with a 4-pin Microtech connector interface. The model 7132A incorporates stable piezo-ceramic crystals in annular 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     | <b>Notes</b>           |
|----------------------------|----------|----------|----------|-----------|-----------|------------------------|
| 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<br>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)

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.

