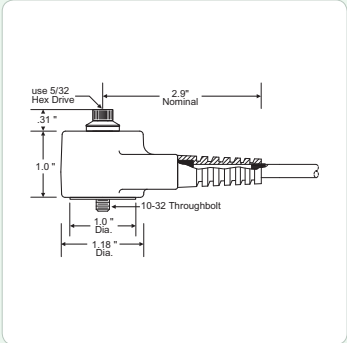


## Models 7002HG

### Standard High G Accelerometer



#### DESCRIPTION AND FEATURES

These rugged electron-beam welded sensors include a stainless steel housing and injection-molded composite construction. Their compact design permits mounting in tight spaces.

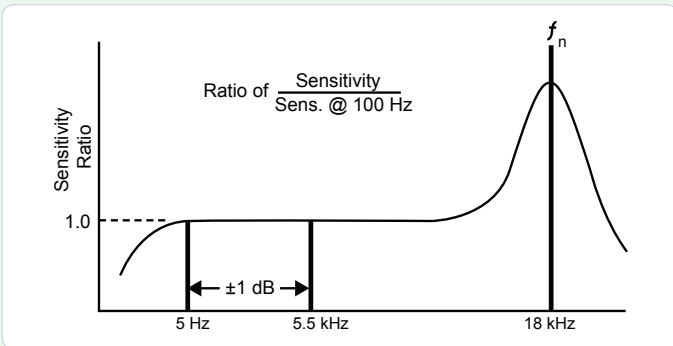
Perfect for general machinery, the 7002 includes a 10-32 center throughbolt for easy mounting.

All 7002 models include integral cable assemblies for excellent water and chemical resistance. The 7002 series sensors come with a full 2-Year Warranty.

- 100 mV/g for High Acceleration Measurements
- Integral Cable
- Exclusive Injection Molded Composite Body
- Unique Throughbolt Mounting Design
- Isolated Symmetrical Shear Mode Sensing

#### APPLICATIONS

- General Industrial
- Motors/Generators
- Pumps
- Gears/Bearings
- Rollers
- Experimental
- Fans/Cooling Towers
- Wayside (Railroad)
- Compressors
- Machining Centers



#### OPERATING SPECIFICATIONS

##### Dynamic

Sensitivity @ 100 Hz, ± 1db .....	10 mV/g - 1.0 mV/(m/s <sup>2</sup> )
Frequency Range ± 1 dB .....	5 Hz - 5.5 kHz
Turn-On Time (2% of Final Bias) .....	< 0.3 Seconds
Amplitude Range .....	± 500 g
Mounted Resonance .....	> 18 kHz
Transverse Sensitivity .....	< 5%
Amplitude Linearity .....	< 1%

##### Electrical

Noise Broadband 1 Hz to 10 kHz .....	3000 µg RMS
Noise Spectral 10 Hz .....	280 µg/√Hz
Noise Spectral 100 Hz .....	80 µg/√Hz
Noise Spectral 1000 Hz .....	40 µg/√Hz
Output Impedance (nominal) .....	100 Ω
Isolation .....	Isolated, > 100 Meg Ω
Noise Rejection (EMI/RFI) .....	> 52dB
Bias Volts (nominal) .....	12 VDC
Power Requirements .....	24-30 VDC
Current Regulating Diode .....	2-6 mA cc

##### Environmental

Temperature Range .....	-10 to 200°F / -20 to 95°C
Base Strain (NOM) .....	0.001 g peak/µstrain
Thermal Shock .....	< .0002 g Peak/°C
Shock Limit .....	5,000 g Peak

##### Physical

Dimensions .....	1.0" h x 1.2" Diameter (2.5 x 3 cm)
Weight .....	1.6 oz / 45 grams, plus cable
Case Material .....	Welded Stainless Steel Inner Housing w/ Composite Polymer Molded Jacket
Design .....	Isolated Shear Seal
Mounting .....	Injection Molded Encapsulant
Mounting Torque .....	10-32 Captive Throughbolt
Mounting Torque .....	20 in-lb. (2.2 N-m)
Cable/Connector .....	PVC to BNC or Pigtail
Cable Pull Strength .....	40 lbs.

#### ORDERING INFORMATION AND ACCESSORIES

Model 7002HGP (Pigtail), Mfr. Part No. 9356962  
 Model 7002HGB (BNC), Mfr. Part No. 9356961

##### Sensors include

- NIST Traceable Calibration
- Integral 15' Cable Assembly
- Mounting Throughbolt
- User Manual
- Full 2-Year Warranty

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