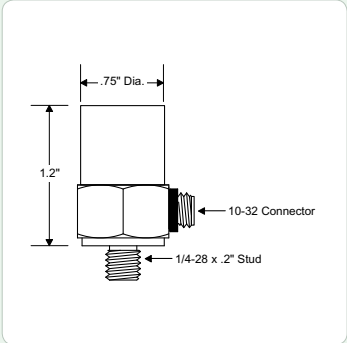


## Models 1020S

Premium 100 mV/g Industrial Accelerometer



### DESCRIPTION AND FEATURES

This model is ideal for applications which require high output, low noise and wide frequency range. Accommodates a variety of applications.

Includes 1/4-28 mounting stud.

- 100 mV/g
- Low Noise
- Broad Frequency Range

### APPLICATIONS

- General Industrial
- Motors/Generators
- Pumps
- Gearboxes
- Rollers
- Experimental
- Fans/Cooling Towers
- Bearing Housings
- Compressors

### OPERATING SPECIFICATIONS

#### Dynamic

Sensitivity @ 100 Hz,  $\pm 5\%$  ..... 100 mV/g - 10.2 mV/(m/s<sup>2</sup>)  
 Frequency Range  $\pm 5\%$  ..... 3 Hz - 10 kHz  
 Frequency Range  $\pm 10\%$  ..... 2 Hz - 11 kHz  
 Frequency Range  $\pm 3$  dB ..... 1 Hz - 12 kHz  
 Turn-On Time..... < 5 Seconds  
 Amplitude Range .....  $\pm 50$  g  
 Mounted Resonance ..... 25 kHz  
 Transverse Sensitivity ..... < 5%

#### Electrical

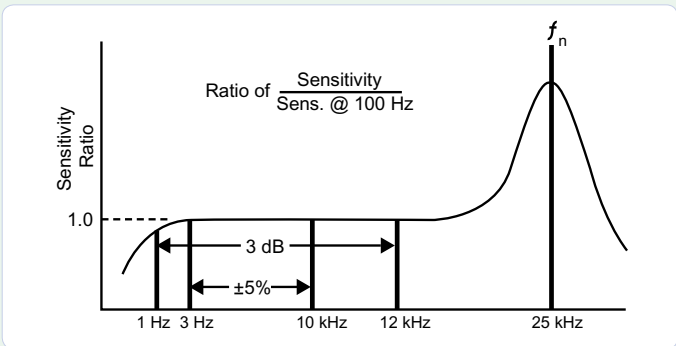
Noise Broadband 2.5 Hz to 25 kHz ..... 250  $\mu$ g (rms)  
 Noise Spectral 10 Hz..... 14  $\mu$ g/vHz  
 Noise Spectral 100 Hz..... 4  $\mu$ g/vHz  
 Noise Spectral 1000 Hz..... 3  $\mu$ g/vHz  
 Output Impedance (nominal)..... 1000  $\Omega$   
 Isolation..... Isolated, > 100 Meg  $\Omega$   
 Bias Volts (nominal)..... 7 VDC  
 Power Requirements ..... 15-30 VDC  
 Current Regulating Diode ..... 2-6 mA cc

#### Environmental

Temperature Range ..... -40 to 250°F / -40 to 121°C  
 Base Strain ..... 0.008 g peak/ $\mu$ strain  
 Thermal Shock ..... 0.5 g/°C  
 Shock Limit ..... 5,000 g

#### Physical

Dimensions..... 1.2" h x .75" hex (3 x 1.9 cm)  
 Weight ..... 1.2 oz / 35 grams  
 Case Material..... Titanium  
 Design..... Isolated Compression  
 Seal ..... Splashproof Epoxy  
 Mounting ..... 1/4-28 Stud  
 Mounting Torque..... 35 in-lb (3.9 N-m)  
 Connector ..... Side 10-32 Coaxial



### ORDERING INFORMATION AND ACCESSORIES

Model 1020S, Mfr. Part No. 9353205

#### Sensors include

- NIST Traceable Calibration
- Mounting Stud
- Thermal Boot
- User Manual
- 1-Year Warranty

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