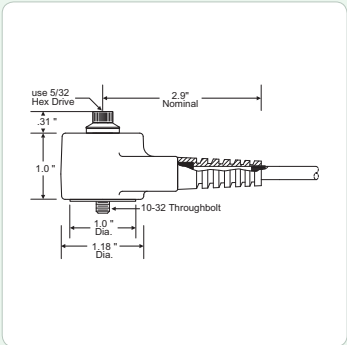


Model 8002

Premium Severe Duty Accelerometer



DESCRIPTION AND FEATURES

The 8002 Guardian accelerometers' internal microelectric components and durable encapsulation assure users of long-term stability and service.

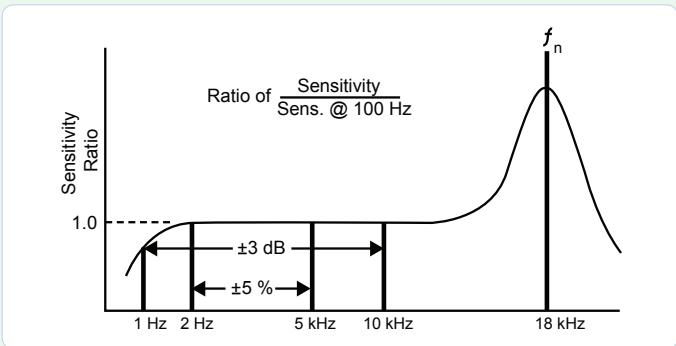
The 8002 features an external frequency range up to 300,000 CPM, capable of capturing all bearing and gear defects, excellent signal-to-noise ratio, plus isolated symmetrical shear mode sensing. All 8002 models include our patented TUFKEM integral cable assemblies for superior water and chemical resistance.

A 10-32 captive center throughbolt simplifies mounting. The 8002 series sensors come with a full 2-Year Warranty.

- 100 mV/g
- Excellent Signal-to-Noise Ratio
- Integral TUFKEM® Chemical Resistant Cable
- Exclusive Injection Molded Composite Body
- Unique Throughbolt Mounting Design
- Isolated Symmetrical Shear Mode Sensing

APPLICATIONS

- Severe Chemical Presence
- Heavy Industrial
- Cooling Towers
- Gears/Bearings
- Machining Centers



OPERATING SPECIFICATIONS

Dynamic

Sensitivity @ 100 Hz, ± 5%	100 mV/g - 10.2 mV/(m/s ²)
Frequency Range ± 5 %	2 Hz - 5 kHz
Frequency Range ± 10 %	1.7 Hz - 7 kHz
Frequency Range ± 3 dB	1 Hz - 10 kHz
Turn-On Time (2% of Final Bias)	< 0.3 Seconds
Amplitude Range	± 65 g
Mounted Resonance	> 18 kHz
Transverse Sensitivity	< 5%
Amplitude Linearity	< 1%

Electrical

Noise Broadband 2.5 Hz to 25 kHz	200 µg RMS
Noise Spectral 10 Hz	20 µg/√Hz
Noise Spectral 100 Hz	4 µg/√Hz
Noise Spectral 1000 Hz	2 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	-40 to 250°F / -40 to 121°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
Seal	Injection Molded Encapsulant
Mounting	10-32 Captive Throughbolt
Mounting Torque	20 in-lb. (2.2 N-m)
Cable/Connector	TUFKEM® Cable to BNC or Pigtail

ORDERING INFORMATION AND ACCESSORIES

Model 8002P (Pigtail), Mfr. Part No. 9356901
 Model 8002B (BNC), Mfr. Part No. 9356900

Sensors include

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

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