



High Sensitivity Premium Accelerometer

Features

- High Sensitivity of 500 mV/g
- Integral TUFKEM chemical resistant cable
- Exclusive injection molded composite body
- Unique throughbolt mounting design
- Isolated symmetrical shear mode sensing

Applications

- Low Amplitude Focus
- Severe Chemical Presence
- Heavy Industrial
- Rollers
- Gears/Bearings

Operating Specifications

Dynamic

Sensitivity @ 100 Hz, ±5%	500 mV/g	51 mV/(m/s ²)
Frequency Range	±5%	1.5 Hz – 5 kHz
	±10%	.7 Hz – 6 kHz
	±3 dB	.4 Hz – 7 kHz
Turn-on Time (2% of final bias)		≤0.3 seconds
Amplitude Range (at 72°F)		±10 g
Mounted Resonance		>18 kHz
Transverse Sensitivity		<5%
Amplitude Linearity		<1%

Electrical

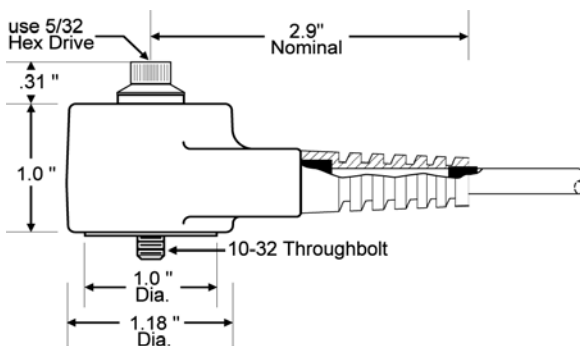
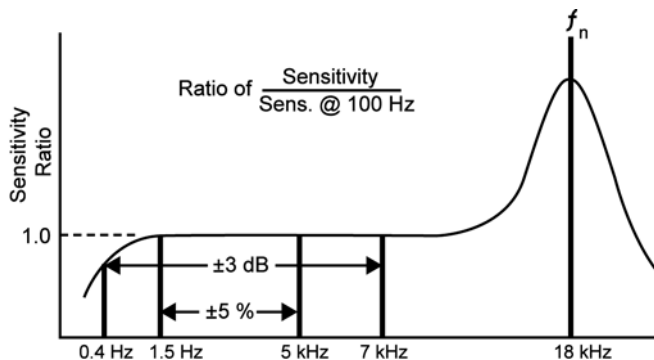
Noise (typical)		
Broadband	2.5 Hz to 25 kHz	60 µg rms
Spectral	10 Hz	1.0 µg/√Hz
	100 Hz	.4 µg/√Hz
	1000 Hz	.1 µg/√Hz
Output Impedance		2000 Ω
Isolation		Isolated, >100 Meg Ω
Noise Rejection (EMI/RFI)		>52 dB
Bias Volts (nominal)		12 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		1-6 mA cc

Environmental

Temperature Range	-40 to 250°F / -40 to 121°C
Base Strain	.001 g peak/µstrain
Thermal Shock	<.0002 g peak/°C
Shock Limit	5000 g

Physical

Physical Dimensions	1.0" h x 1.2" dia. (2.5 x 3 cm)
Weight	1.6 oz / 45 grams plus cable
Case Material	Welded stainless steel with composite polymer exterior
Design	Isolated Shear
Seal	Injection molded encapsulant
Mounting	10-32 captive throughbolt
Mounting Torque	20 in-lb (22 N-m)
Cable/Connector	TUFKEM® cable to BNC or Pigtail



Ordering Information:

Model 8002HSP (Pigtail)	9356934
Model 8002HSB (BNC)	9356933
Power Supplies, 2 mA output, BNC/BNC	
Model P1000B, battery, 15 VDC	9353528
Model LP24-1B, 110 VAC line input, 24 VDC	9356120
Model P5000, rechargeable battery, 24 VDC	9356559
Magnetic holder, 16 lb holding force, 10-32	9356816
Magnetic holder, 35 lb holding force, 10-32	9353449

Sensors include:

NIST Traceable Calibration, 15' Cable Assembly, Mounting Throughbolt, Adhesive Mounting Pad, User Manual and Lifetime Partnership Warranty

For more information about **Vibra-Metrics** accelerometers, call us today at **609-716-4130**, or visit us on-line at **www.vibrametrics.com**



195 Clarksville Road, Princeton Junction, NJ 08550 • Phone: 609-716-4130 • Fax: 609-716-0706
Email: sales@vibrametrics.com • Internet: www.vibrametrics.com

Due to continuing improvement, Vibra-Metrics reserves the right to amend specifications without notice.
Copyright © 2003 MISTRAS Holdings Group. All Rights Reserved. Rev. 11/03 VM#116803