



# Product Catalog

195 Clarksville Road, Princeton Junction, New Jersey 08550  
Tel: 609-716-4000 Fax: 609-716-0706  
Website: [www.mistrasgroup.com](http://www.mistrasgroup.com)  
Email: [sales.systems@mistrasgroup.com](mailto:sales.systems@mistrasgroup.com)



# Vibra-Metrics Accelerometer Application Matrix

## Industrial Monitor (pg. 4)

Model VM500

## Standard Industrial Accelerometers (pg. 5 - 12)

6050	6051	6051C	1020S
6060	6061	6061C	1018/1019

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1024-4

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Model P & LP Series

Model SB Series

## Model Number Prefix/Suffix Key

- LP** - Line Powered (power supply)
- P** - Battery Powered (power supply)
- SB** - Switch Box
- VM** - Vibration Monitor
- A** Adhesive Mount, or Armored cable
- B** High Shock Version or BNC termination
- C** Century series extended temperature capability
- CFM** Certified intrinsically safe and Century series extended temperature capability
- FM** Certified intrinsically safe
- HG** High g level
- HS** High sensitivity for low g levels
- P** Pigtail termination
- T** Top exit integral cable

## Custom Models

The products shown in this catalog represent our standard products. Vibra-Metrics also custom manufactures sensors based on your specific needs. V-M has designed specialty sensors for high temperatures, special high g filtered units, as well as ultra sensitive units for seismic monitoring applications. Contact our sales department for more information, 609-716-4130, or sales@vibrametrics.com.



# Model VM500



## General Purpose Industrial Monitor

### Features

- Versatile acceleration, velocity, displacement or temperature monitor
- Interface with accelerometer, proximity probe or "J" type thermocouple
- Two programmable alarm levels with delay on make/break relays
- 4-20 mA fully scalable output for interface with PLC, DCS, alarm and SCADA systems
- RMS (standard) or peak readings
- Small NEMA 4, 1/8 DIN package
- High/low pass filters available
- Adjustable sampling time
- Signal output: raw, filtered, rep. DC value

### Applications

- Any application where immediate display of machine PdM data or 4-20 mA output is required

### Operating Specifications

#### Dynamic

Accuracy	±5%
Standard Configuration for:	
Acceleration Limit	20 g
Velocity Limit	20 ips
Displacement Limit	200 mils
Thermocouple Temperature Limit	1400°F / 760°C
Frequency Range:	
Acceleration	3 Hz - 10 kHz
Velocity	3 Hz - 2 kHz
Displacement	6 Hz - 2 kHz
Optional Filtering	
High Pass: 3, 10, 50, 100, 500 kHz	
Low Pass: 50, 100, 500, 1k, 2k, 10k Hz	
Accelerometer Input: 100 (standard) 10 or 500 mV/g	
Proximity Probe Input: 200 mV/mil	

#### Electrical

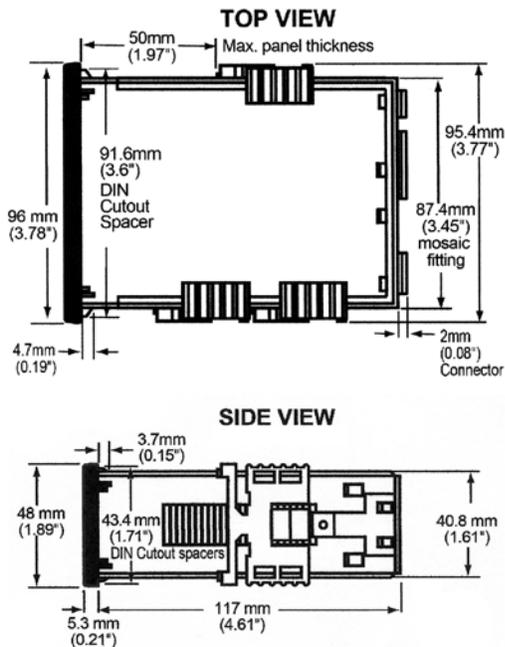
Power Requirements, Auto-sensing AC-DC	
85-265 VAC (50 - 60 Hz), 95-370 VDC (standard)	
15-48 VAC, 10-72 VDC	
Relays	(2) Form C

#### Environmental

Operating Temperature Range	32°F to 140°F / 0°C to 60°C
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#### Physical

Display	0.56 inch bright red LED
Weight	6.5 ounces / 184 grams
Front Panel	NEMA 4
Connectors	MSTB



### Ordering Information:

#### Vibra-Metrics Part Number:

**VM500 X-XXX-X-HPXXXX-LPXXXX-X**

<b>Type</b>	<b>Standard Configurations</b>
A - Acceleration (1)	(1) VM500A
V - Velocity (2)	(2) VM500V
D - Displacement (3)	(3) VM500D
F - Temperature, F	
C - Temperature, C	
<b>Accelerometer Input</b>	*standard configuration can be ordered with simply the one letter suffix and not the full part number
010 - 10 mV/g	**please consult factory before ordering non-standard configurations
100 - 100 mV/g (1)(2)(3)	
500 - 500 mV/g	
<b>Mode</b>	
R - RMS (1)(2)	
P - Peak (3)	
<b>High Pass Filtering</b>	<b>Low Pass Filtering</b>
0003 - 3 Hz (1)(2)(3)	0050 - 50 Hz
0010 - 10 Hz	0100 - 100 Hz
0050 - 50 Hz	0500 - 500 Hz
0100 - 100 Hz	1000 - 1 kHz
0500 - 500 Hz	2000 - 2 kHz (1)(2)(3)
	10K0 - 10 kHz
<b>Power Supply</b>	
1 - 85-265 VAC, 95-370 DCV (1)(2)(3)	
2 - 15-48 VAC, 10-72 VDC	

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## Economy General Purpose Industrial Accelerometer

### Features

- 100 mV/g
- Splashproof
- 2-Pin MIL style connector

### Applications

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

### Operating Specifications

#### Dynamic

Sensitivity @ 100Hz, ±10%	100 mV/g
Frequency Range	5 Hz – 10 kHz
±5%	4 Hz – 12 kHz
±10%	2 Hz – 20 kHz
±3dB	≤ 0.5 seconds
Turn-on Time	±75 g peak
Amplitude Range	>40 kHz
Mounted Resonance	≤5%
Transverse Sensitivity	<1%
Amplitude Linearity	

#### Electrical

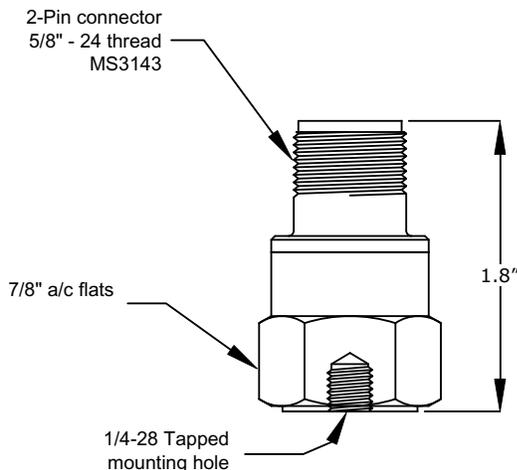
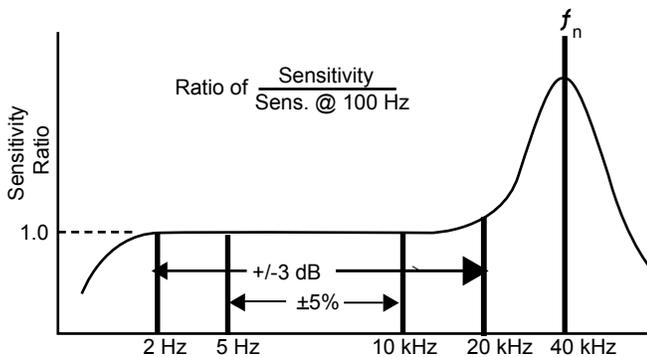
Noise (typical)		
Broadband	2.5 Hz to 20 kHz	350 µg
Spectral	10 Hz	30 µg/√Hz
	100 Hz	8 µg/√Hz
	1000 Hz	3 µg/√Hz
Output Impedance		100 Ω
Grounding		Isolated
Bias Volts		9 - 14 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-40 to 250°F / -40 to 121°C
Base Strain (NOM)	.001 g peak/µstrain
Shock Limit	5000 g peak

#### Physical

Physical Dimensions	1.515" h x .875" across flats
Weight	68 grams
Case Material	Type 316L stainless steel
Design	Piezoelectric – compression
Seal	Welded - Hermetic
Mounting	¼-28 stud
Mounting Torque	35 in - lb. (2.8 N-m)



### Ordering Information:

Model 6050 .....	9357242
Power Supplies, 2 mA output, BNC/BNC, 24 VDC	
Model P5000 (rechargeable battery).....	9356559
Model LP24-1B (110 VAC Line Input).....	9356120
Cable, 2-Pin MIL/BNC 6'/15' RG58 .....	9354092
Cable, 2-Pin MIL/Pigtail 6' high temperature.....	9354084
Cable, 2-Pin MIL/BNC 6' high temperature .....	9356381
Magnetic holder, 16 lb (for curved/flat surfaces) .....	9356809

#### Sensors include:

NIST Traceable Calibration, ¼-28 Mounting Stud, User Manual and 1-Year Warranty

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## Economy Side Exit General Purpose Industrial Accelerometer

### Features

- 100 mV/g
- Splashproof
- 2-Pin MIL style connector

### Applications

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

### Operating Specifications

#### Dynamic

Sensitivity @ 100Hz, ±10%	100 mV/g
Frequency Range	
±5%	5 Hz – 4 kHz
±10%	4 Hz – 7 kHz
±3dB	2 Hz – 12 kHz
Turn-on Time	≤ 0.5 seconds
Amplitude Range	±70 g peak
Mounted Resonance	> 18 kHz
Transverse Sensitivity	≤5%
Amplitude Linearity	<1%

#### Electrical

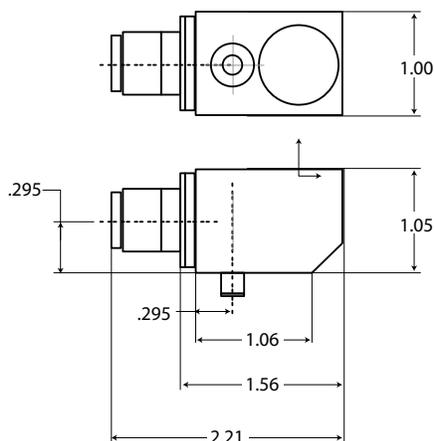
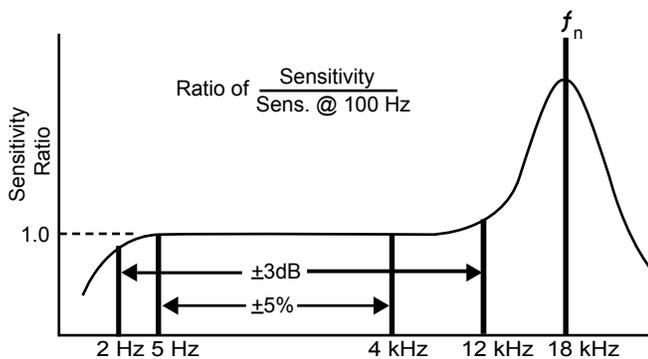
Noise (typical)		
Broadband	2.5 Hz to 20 kHz	350 µg
Spectral	10 Hz	30 µg/√Hz
	100 Hz	8 µg/√Hz
	1000 Hz	3 µg/√Hz
Output Impedance		100 Ω
Grounding		Isolated
Bias Volts		10 - 14 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		2-6 mA cc

#### Environmental

Temperature Range	-40 to 250°F / -40 to 121°C
Base Strain (NOM)	.005 g peak/µstrain
Shock Limit	5000 g peak

#### Physical

Physical Dimensions	1.05" h x 2.21" across flats
Weight	154.5 grams
Case Material	Type 304L stainless steel
Design	Piezoelectric - compression
Seal	Welded - Hermetic
Mounting	¼-28 stud
Mounting Torque	35 in - lb. (3.9 N-m)



### Ordering Information:

Model 6060 .....	9357260
Power Supplies, 2 mA output, BNC/BNC, 24 VDC	
Model P5000 (rechargeable battery).....	9356559
Model LP24-1B (110 VAC Line Input).....	9356120
Cable, 2-Pin MIL/BNC 6' /15' RG58 .....	9354092
Cable, 2-Pin MIL/Pigtail 6' high temperature.....	9354084
Cable, 2-Pin MIL/BNC 6' high temperature .....	9356381
Magnetic holder, 16 lb (for curved/flat surfaces) .....	9356809

#### Sensors include:

NIST Traceable Calibration, ¼-28 Mounting Stud, User Manual and 1-Year Warranty

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## Premium Industrial Accelerometer

### Features

- 100 mV/g
- Welded hermetic seal
- 2-Pin MIL style connector

### Applications

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

### Operating Specifications

#### Dynamic

Sensitivity @ 100Hz, ±5%	100 mV/g
Frequency Range	
±5%	5 Hz – 10 kHz
±10%	4 Hz – 12 kHz
±3dB	2 Hz – 20 kHz
Turn-on Time	≤ 0.5 seconds
Amplitude Range	±75 g peak
Mounted Resonance (Nom.)	40 kHz
Transverse Sensitivity (Nom.)	5%
Amplitude Linearity	<1%

#### Electrical

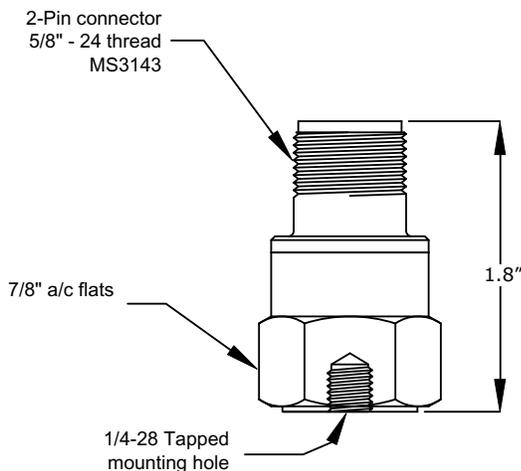
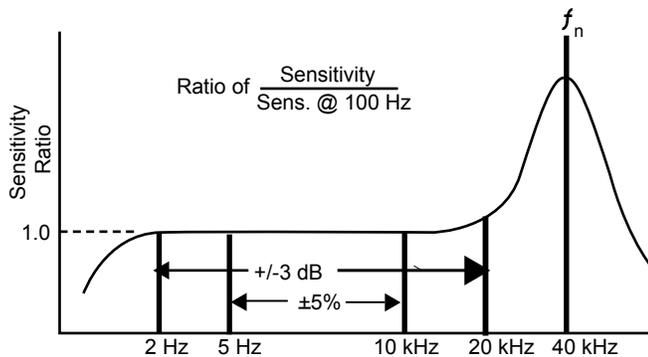
Noise (typical)		
Broadband	2.5 Hz to 20 kHz	350 µg
Spectral	10 Hz	30 µg/√Hz
	100 Hz	8 µg/√Hz
	1000 Hz	3 µg/√Hz
Output Impedance		100 Ω
Grounding		Isolated
Bias Volts		9 - 14 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-40 to 250°F / -40 to 121°C
Base Strain (NOM)	.001 g peak/µstrain
Shock Limit	5000 g peak

#### Physical

Physical Dimensions	1.515" h x .875" across flats
Weight	68 grams
Case Material	Type 316L stainless steel
Design	Piezoelectric – compression
Seal	Welded - Hermetic
Mounting	¼-28 stud
Mounting Torque (Nom.)	35 in - lb.



### Ordering Information:

Model 6051 .....	9357259
Power Supplies, 2 mA output, BNC/BNC, 24 VDC	
Model P5000 (rechargeable battery).....	9356559
Model LP24-1B (110 VAC Line Input).....	9356120
Cable, 2-Pin MIL/BNC 6'/15' RG58 .....	9354092
Cable, 2-Pin MIL/Pigtail 6' high temperature.....	9354084
Cable, 2-Pin MIL/BNC 6' high temperature .....	9356381
Magnetic holder, 16 lb (for curved/flat surfaces) .....	9356809

#### Sensors include:

NIST Traceable Calibration, ¼-28 Mounting Stud, User Manual and 1-Year Warranty

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## Premium Side Exit Industrial Accelerometer

### Features

- 100 mV/g
- Splashproof
- 2-Pin MIL style connector

### Applications

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

### Operating Specifications

#### Dynamic

Sensitivity @ 100Hz, ±5%	100 mV/g
Frequency Range	
±5%	5 Hz – 4 kHz
±10%	4 Hz – 7 kHz
±3dB	2 Hz – 12 kHz
Turn-on Time	≤ 0.5 seconds
Amplitude Range	±70 g peak
Mounted Resonance	>18 kHz
Transverse Sensitivity	≤5%
Amplitude Linearity	<1%

#### Electrical

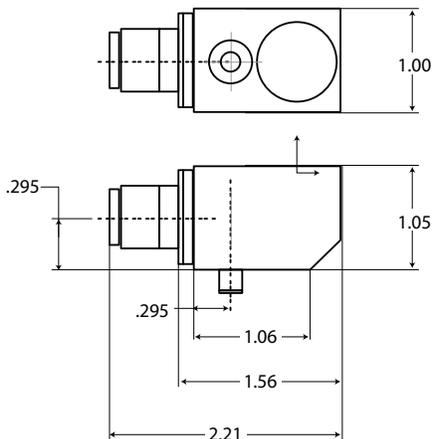
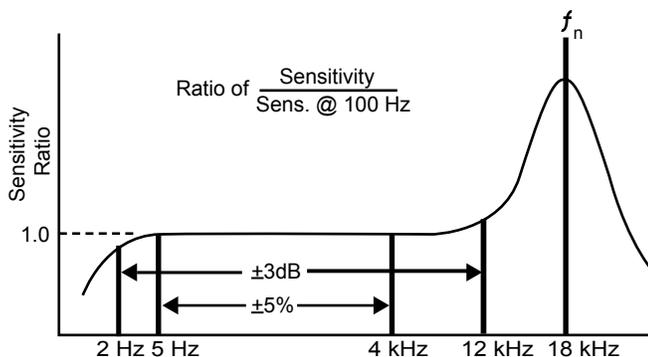
Noise (typical)		
Broadband	2.5Hz - 20kHz	350 µg
Spectral	10 Hz	30 µg/√Hz
	100 Hz	8 µg/√Hz
	1000 Hz	3 µg/√Hz
Output Impedance		100 Ω
Grounding		Isolated
Bias Volts		10 - 14 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		2-6 mA cc

#### Environmental

Temperature Range	-40 to 250°F / -40 to 121°C
Base Strain (NOM)	.005g peak/µstrain
Shock Limit	5000 g peak

#### Physical

Physical Dimensions	1.05" h x 2.21" across flats
Weight	154.5 grams
Case Material	Type 304L stainless steel
Design	Piezoelectric - compression
Seal	Welded - Hermetic
Mounting	¼-28 stud
Mounting Torque	35 in - lb. (3.92 N-m)



### Ordering Information:

Model 6061 .....	9357266
Power Supplies, 2 mA output, BNC/BNC, 24 VDC	
Model P5000 (rechargeable battery).....	9356559
Model LP24-1B (110 VAC Line Input).....	9356120
Cable, 2-Pin MIL/BNC 6'/15' RG58 .....	9354092
Cable, 2-Pin MIL/Pigtail 6' high temperature.....	9354084
Cable, 2-Pin MIL/BNC 6' high temperature .....	9356381
Magnetic holder, 16 lb (for curved/flat surfaces) .....	9356809

#### Sensors include:

NIST Traceable Calibration, ¼-28 Mounting Stud, User Manual and 1-Year Warranty

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## Industrial High Temp Accelerometer

### Features

- 100 mV/g
- Welded Hermetic Seal
- 2-Pin MIL style connector
- Extended to 350°F with thermal isolator

### Applications

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

### Operating Specifications

#### Dynamic

Sensitivity @ 100Hz, ±10%	100 mV/g
Frequency Range	5 Hz – 7 kHz
±5%	4 Hz – 10 kHz
±10%	2 Hz – 15 kHz
±3dB	≤ 0.5 seconds
Turn-on Time	±75 g peak
Amplitude Range	Above 250°F: ±40 g peak
Mounted Resonance (Nom.)	40 kHz
Transverse Sensitivity (Nom.)	5%
Amplitude Linearity	<1%

#### Electrical (@ RM Temp.)

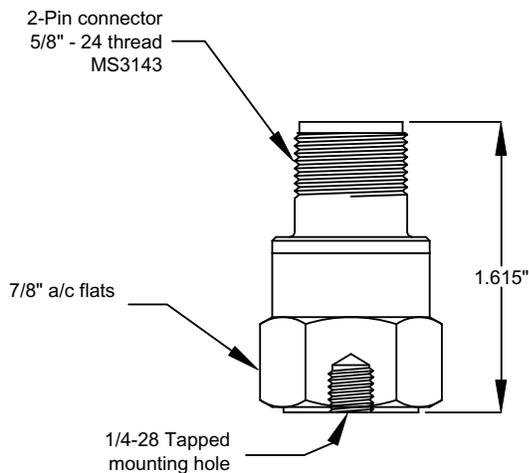
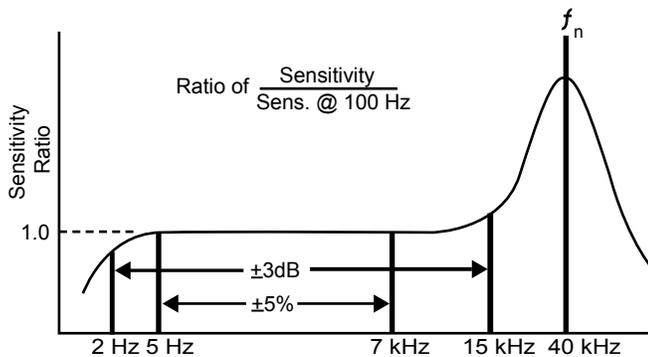
Noise (typical)		
Broadband	2.5 Hz to 20 kHz	350 µg
Spectral	10 Hz	30 µg/√Hz
	100 Hz	8 µg/√Hz
	1000 Hz	3 µg/√Hz
Output Impedance		100 Ω
Grounding		Isolated
Bias Volts		12 - 14 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-40 to 300°F / -40 to 150°C
Base Strain (NOM)	.001 g peak/µstrain
Shock Limit	5000 g peak

#### Physical

Physical Dimensions	1.515" h x .875" across flats
Weight	68 grams
Case Material	Type 316L stainless steel
Design	Piezoelectric – compression
Seal	Welded - Hermetic
Mounting	¼-28 stud
Mounting Torque (Nom.)	35 in - lb.



#### Ordering Information:

Model 6051C.....	9357258
Power Supplies, 2 mA output, BNC/BNC, 24 VDC	
Model P5000 (rechargeable battery).....	9356559
Model LP24-1B (110 VAC Line Input).....	9356120
Thermal Isolator .....	9356736-10, -14
Cable, 2-Pin MIL/Pigtail 6' high temperature.....	9354084
Cable, 2-Pin MIL/BNC 6' high temperature .....	9356381
Magnetic holder, 16 lb (for curved/flat surfaces) .....	9356809

#### Sensors include:

NIST Traceable Calibration, ¼-28 Mounting Stud, User Manual and 1-Year Warranty

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## Side Exit High-Temp Industrial Accelerometer

### Features

- 100 mV/g
- Welded Hermetic Seal
- 2-Pin MIL style connector
- Extended to 350°F with thermal isolator

### Applications

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

### Operating Specifications

#### Dynamic

Sensitivity @ 100Hz, ±10%	100 mV/g
Frequency Range	5 Hz – 4 kHz
±5%	4 Hz – 7 kHz
±10%	2 Hz – 12 kHz
±3dB	≤ 0.5 seconds
Turn-on Time	(Above 250°F: ±40g pk.)
Amplitude Range ±70 g peak	18 kHz
Mounted Resonance (Nom.)	5%
Transverse Sensitivity (Nom.)	<1%
Amplitude Linearity	

#### Electrical

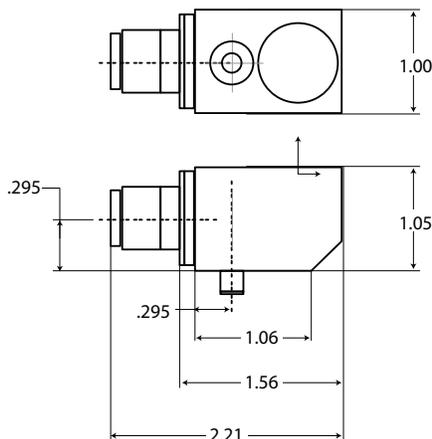
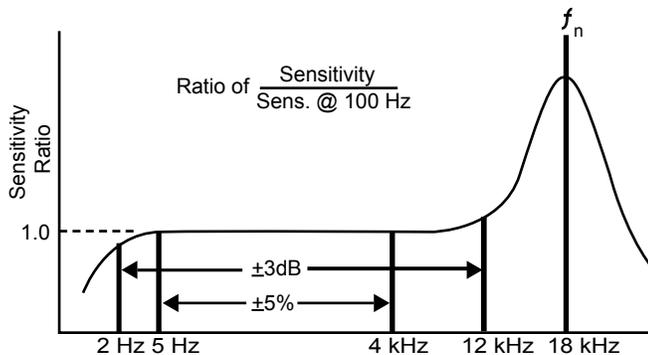
Noise (typical)		
Broadband	2.5Hz - 20kHz	350 µg
Spectral	10 Hz	30 µg/√Hz
	100 Hz	8 µg/√Hz
	1000 Hz	3 µg/√Hz
Output Impedance		100 Ω
Grounding		Isolated
Bias Volts		12 - 14 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		2-6 mA cc

#### Environmental

Temperature Range	-40 to 300°F / -40 to 150°C
Base Strain (NOM)	.005g peak/µstrain
Shock Limit	5000 g peak

#### Physical

Physical Dimensions	1.05" h x 2.21" across flats
Weight	154.5 grams
Case Material	Type 304L stainless steel
Design	Piezoelectric - Compression
Seal	Welded - Hermetic
Mounting	¼-28 stud
Mounting Torque	35 in - lb. (3.92 N-m)



### Ordering Information:

Model 6061C.....	9357269
Power Supplies, 2 mA output, BNC/BNC, 24 VDC	
Model P5000 (rechargeable battery).....	9356559
Model LP24-1B (110 VAC Line Input).....	9356120
Thermal Isolator.....	9356736-10, 14
Cable, 2-Pin MIL/Pigtail 6' high temperature.....	9354084
Cable, 2-Pin MIL/BNC 6' high temperature .....	9356381
Magnetic holder, 16 lb (for curved/flat surfaces) .....	9356809

#### Sensors include:

NIST Traceable Calibration, ¼-28 Mounting Stud, User Manual and 1-Year Warranty

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## Premium Industrial Accelerometer

### Features

- 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, ±5%	100 mV/g	10.2 mV/(m/s <sup>2</sup> )
Frequency Range	±5%	3 Hz - 10 kHz
	±10%	2 Hz - 11 kHz
	±3 dB	1 Hz - 12 kHz
Turn-on Time		<5 seconds
Amplitude Range		±50 g
Mounted Resonance		25 kHz
Transverse Sensitivity		<5%

#### Electrical

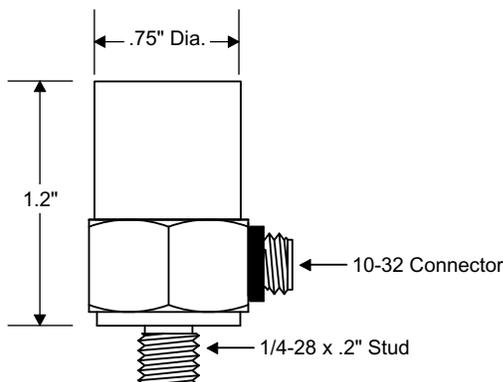
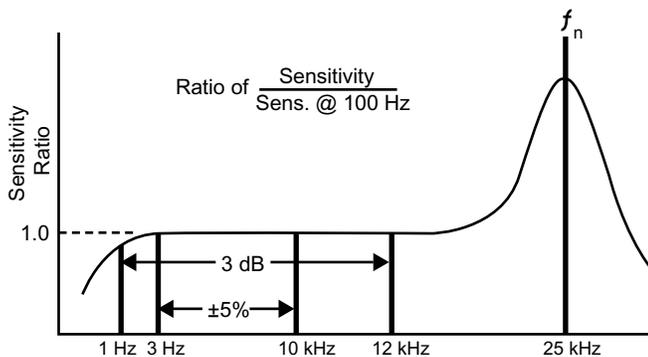
Noise (typical)		
Broadband	2.5 Hz to 25 kHz	250 µg rms
Spectral	10 Hz	14 µg/√Hz
	100 Hz	4 µg/√Hz
	1000 Hz	3 µg/√Hz
Output Impedance		1000 Ω
Isolation		Isolated, >100 Meg Ω
Bias Volts (nominal)		7 VDC
Power Requirements		15-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-40 to 250°F	-40 to 121°C
Base Strain		.008 g peak/µstrain
Thermal Shock		.5 g/°C
Shock Limit		5000 g

#### Physical

Physical Dimensions	1.2" h x .75" hex base (3 x 1.9. cm)
Weight	1.2 oz / 35 grams
Case Material	Titanium
Design	Isolated compression
Seal	Splashproof epoxy
Mounting	¼-28 stud
Mounting Torque	35 in-lb (3.9 N-m)
Connector	Side 10-32 coaxial



### Ordering Information:

Model 1020S.....	9353205
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
Cable, 10-32(M)/BNC(M), 6', 15' std. lengths.....	9353442
Magnetic holder, 16 lb holding force, 1/4-28.....	9356809
Magnetic holder, 35 lb holding force, 1/4-28.....	9353448

#### Sensors include:

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

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# Model 1018/1019



## Premium 10mV/g Industrial Accelerometer

### Features

- 10 mV/g
- Compact size
- Broad frequency range

### Applications

- Industrial
- Motors/Generators
- Lab Shakers
- Gears/Bearings
- Experimental
- Rollers
- Compressors

### Operating Specifications

#### Dynamic

Sensitivity @ 100 Hz, ±5%	10 mV/g	1.02 mV/(m/s <sup>2</sup> )
Frequency Range		
±5%	3 Hz – 10 kHz	
±10%	2 Hz – 12 kHz	
±3 dB	1 Hz – 30 kHz	
Turn-on Time	<5 seconds	
Amplitude Range	±500 g	
Mounted Resonance	>50 kHz	
Transverse Sensitivity	<5%	
Amplitude Linearity	<2%	

#### Electrical

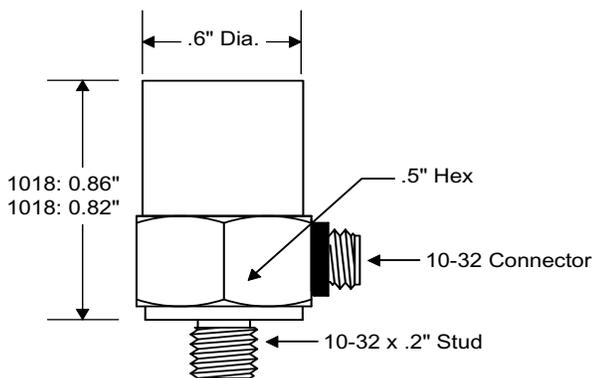
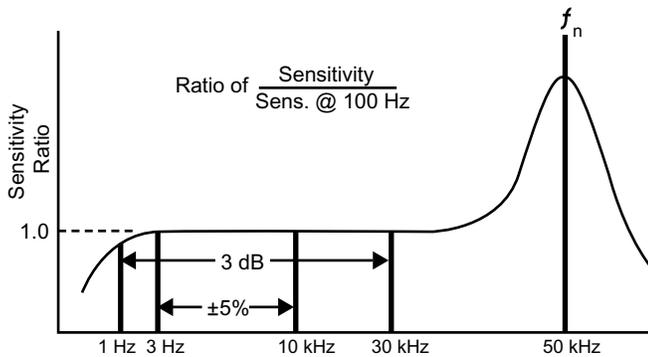
Noise (typical)		
Broadband	2.5 Hz to 25 kHz	1500 µg (rms)
Spectral	10 Hz	100 µg/√Hz
	100 Hz	25 µg/√Hz
	1000 Hz	10 µg/√Hz
Output Impedance		1000 Ω
Isolation	1018	Isolated, >100 Meg Ω
	1019	Case Grounded
Bias Volts (nominal)		7 VDC
Power Requirements		15-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-40 to 250°F	-40 to 121°C
Base Strain	.003 g peak/µstrain	
Thermal Shock	3 g/°C	
Shock Limit	5000 g	

#### Physical

Physical Dimensions		
1018		.86" h x .5" hex (2.2 x 1.3 cm)
1019		.82" h x .5" hex (2.1 x 1.3 cm)
Weight		.56 oz / 16 grams
Case Material		303 stainless steel
Design		Compression
Seal		Splashproof epoxy
Mounting	1018	10-32 integral stud
	1019	10-32 removable stud
Mounting Torque		20 in-lb (2.2 N-m)
Connector		side 10-32



Model 1018 has an integral stud and is isolated.  
 Model 1019 has a removable stud and is case grounded.

### Ordering Information:

Model 1018	.....9353173
Model 1019	.....9353174
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
Cable, 10-32(M)/BNC(M), 6', 15' std. lengths	.....9353442
Magnetic holder, 16 lb holding force, 10-32	.....9356816
Magnetic holder, 35 lb holding force, 10-32	.....9353449

### Sensors include:

NIST Traceable Calibration, Mounting Stud, User Manual,  
 1-Year Warranty

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## Standard Industrial Accelerometer

### Features

- 100 mV/g
- Integral cable
- Exclusive injection molded composite body
- Unique throughbolt mounting design
- Isolated symmetrical shear mode sensing

### Applications

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

### Operating Specifications

#### Dynamic

Sensitivity @ 100 Hz, ±10%	100 mV/g	10.2 mV/(m/s <sup>2</sup> )
Frequency Range	±5%	5 Hz – 5 kHz
	±10%	3.5 Hz – 7 kHz
	±3 dB	2 Hz – 8 kHz
Turn-on Time (2% of final bias)		<0.3 seconds
Amplitude Range (at 72°F)		±65 g
Mounted Resonance		18 kHz
Transverse Sensitivity		<5%
Amplitude Linearity		<1%

#### Electrical

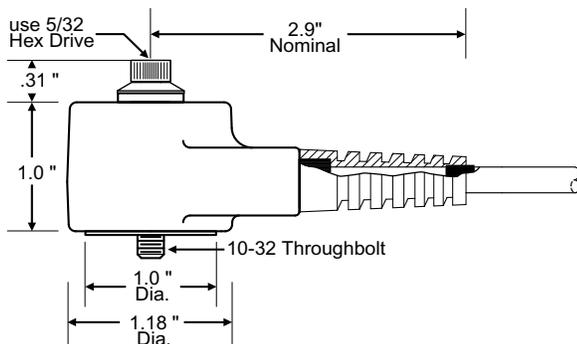
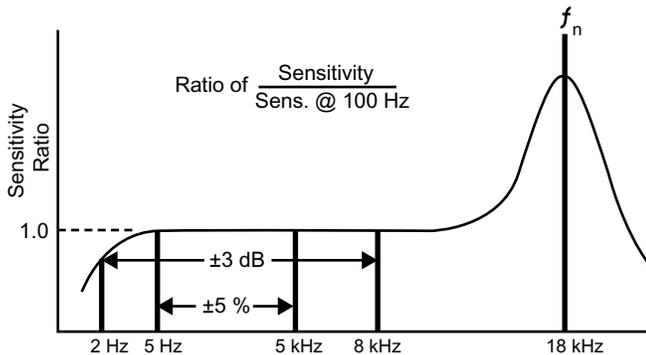
Noise (typical)		
Broadband	2.5 Hz to 25 kHz	300 µg rms
Spectral	10 Hz	28 µg/√Hz
	100 Hz	8 µg/√Hz
	1000 Hz	4 µg/√Hz
Output Impedance		100 Ω (nom.)
Isolation		Isolated, >100 Meg Ω
Noise Rejection (EMI/RFI)		>52 dB
Bias Volts (nominal)		12 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-10 to 200°F / -20 to 95°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
Design	Isolated shear
Seal	Injection molded encapsulant
Mounting	10-32 captive throughbolt
Mounting Torque	20 in-lb (2.2 N-m)
Cable/Connector	PVC to BNC or Pigtail



### Ordering Information:

Model 7002P (Pigtail) .....	9356888
Model 7002B (BNC) .....	9356887
Power Supplies, 2 mA output, BNC/BNC	
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 2-Year Warranty

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## Low Frequency Industrial Accelerometer

### Features

- 100 mV/g
- Extended low frequency range
- Integral cable
- Exclusive injection molded composite body
- Unique throughbolt mounting design
- Isolated symmetrical shear mode sensing

### Applications

- All low speed applications

### Operating Specifications

#### Dynamic

Sensitivity @ 100 Hz, ±10%	100 mV/g	10.2 mV/(m/s <sup>2</sup> )
Frequency Range		
±5%	1.2 Hz – 5 kHz	
±10%	0.8 Hz – 7 kHz	
±3 dB	0.4 Hz – 8 kHz	
Turn-on Time (2% of final bias)	<0.3 seconds	
Amplitude Range (at 72°F)	±65 g	
Mounted Resonance	18 kHz	
Transverse Sensitivity	<5%	
Amplitude Linearity	<1%	

#### Electrical

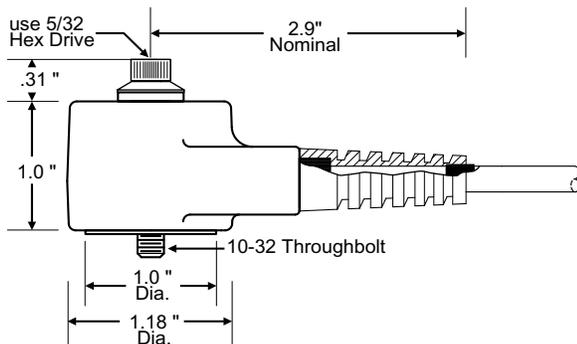
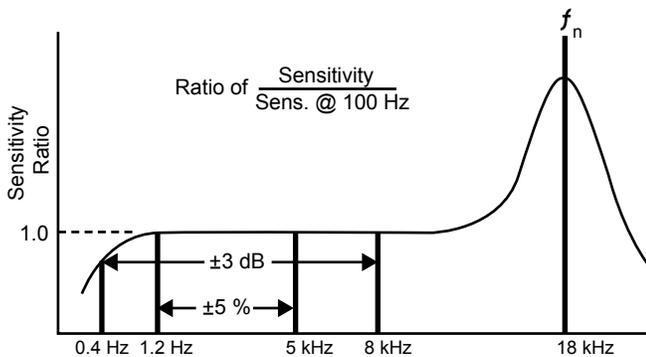
Noise (typical)		
Broadband	2.5 Hz to 25 kHz	300 µg rms
Spectral	10 Hz	28 µg/√Hz
	100 Hz	8 µg/√Hz
	1000 Hz	4 µg/√Hz
Output Impedance		100 Ω (nom.)
Isolation		Isolated, >100 Meg Ω
Noise Rejection (EMI/RFI)		>52 dB
Bias Volts (nominal)		12 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-10 to 200°F / -20 to 95°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
Design	Isolated shear
Seal	Injection molded encapsulant
Mounting	10-32 captive throughbolt
Mounting Torque	20 in-lb (2.2 N-m)
Cable/Connector	PVC to BNC or Pigtail



### Ordering Information:

Model 7002LFP (Pigtail) .....	9357113
Model 7002LFB (BNC) .....	9357112
Power Supplies, 2 mA output, BNC/BNC	
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 2-Year Warranty

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## Standard High g Accelerometer

### Features

- 10 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, ±1 dB	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

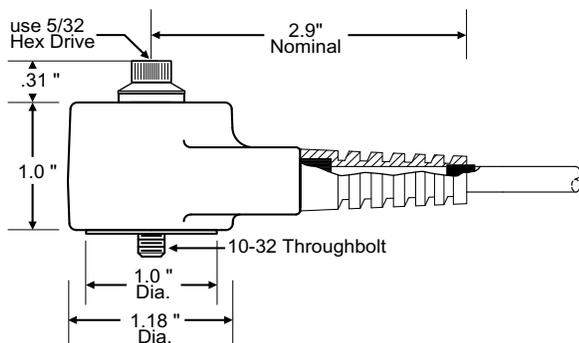
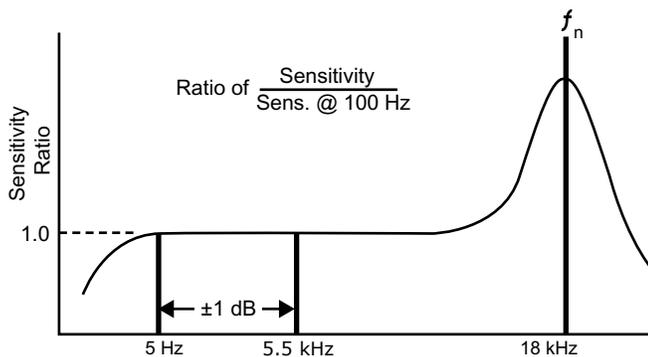
Noise (typical)		
Broadband	1 Hz to 10 kHz	3000 µg rms
Spectral	10 Hz	280 µg/√Hz
	100 Hz	80 µg/√Hz
	1000 Hz	40 µg/√Hz
Output Impedance		100 Ω (nom.)
Isolation		Isolated, >100 Meg Ω
Noise Rejection (EMI/RFI)		>52 dB
Bias Volts (nominal)		12 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		1-8 mA cc

#### Environmental

Temperature Range	-10 to 200°F / -20 to 95°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	Inner Housing: Stainless steel (welded) Molded Jacket: Composite polymer
Design	Isolated shear
Seal	Electron-beam welded plus injection molded encapsulant
Mounting	10-32 captive throughbolt
Mounting Torque	20 in-lb (2.2 N-m)
Cable/Connector	PVC to BNC or Pigtail
Cable Pull Strength	40 lb.



### Ordering Information:

Model 7002HGP (Pigtail).....	9356962
Model 7002HGB (BNC).....	9356961
Power Supplies, 2 mA output, BNC/BNC.....	
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 2-Year Warranty

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## Premium Severe Duty Accelerometer

### Features

- 100 mV/g
- Integral TUFKEM chemical resistant cable
- Exclusive injection molded composite body
- Unique throughbolt mounting design
- Excellent signal-to-noise ratio
- 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 <sup>2</sup> )
Frequency Range	±5%	2 Hz – 5 kHz
	±10%	1.7 Hz – 7 kHz
	±3 dB	1 Hz – 10 kHz
Turn-on Time (2% of final bias)		≤0.3 seconds
Amplitude Range (at 72°F)		±65 g
Mounted Resonance		18 kHz
Transverse Sensitivity		<5%
Amplitude Linearity		<1%

#### Electrical

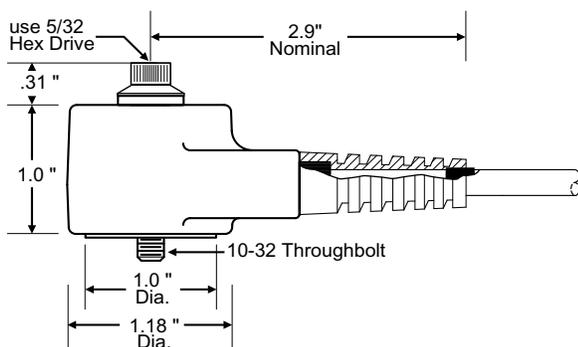
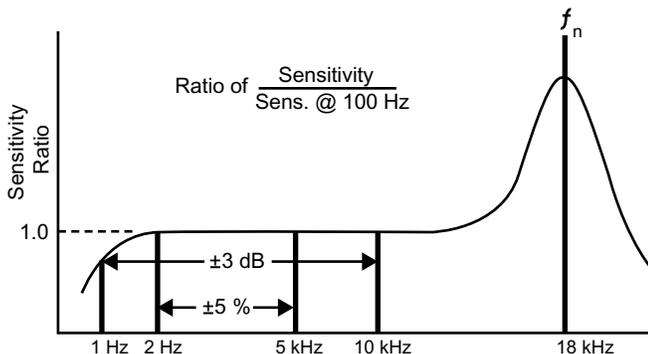
Noise (typical)		
Broadband	2.5 Hz to 25 kHz	200 µg rms
Spectral	10 Hz	20 µg/√Hz
	100 Hz	4 µg/√Hz
	1000 Hz	2 µg/√Hz
Output Impedance		100 Ω (nom.)
Isolation		Isolated, >100 Meg Ω
Noise Rejection (EMI/RFI)		>52 dB
Bias Volts (nominal)		12 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		1-6 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	45 grams plus cable
Case Material	Welded stainless steel with composite polymer
Design	Isolated shear
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:

Model 8002P (Pigtail) .....	9356901
Model 8002B (BNC) .....	9356900
Power Supplies, 2 mA output, BNC/BNC	
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 Life-time Partnership Warranty

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

#### Electrical

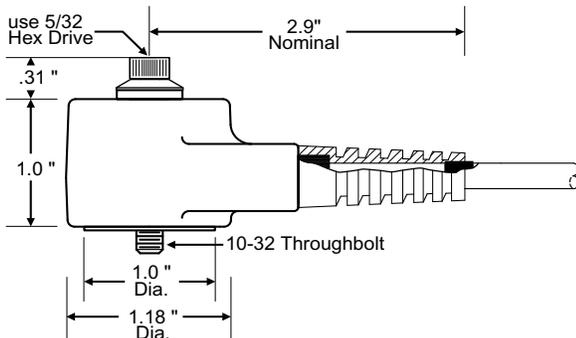
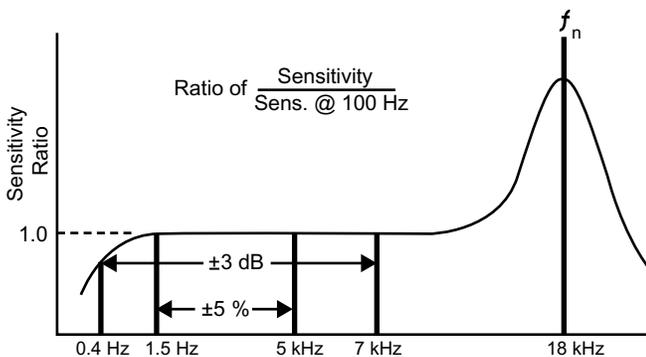
Noise (typical)		
Broadband	2.5 Hz to 25 kHz	60 µg rms
Spectral	10 Hz	1.0 µg/√Hz
	100 Hz	.4 µg/√Hz
	1000 Hz	.1 µg/√Hz
Output Impedance	2000 Ω	
Isolation	Isolated, >100 Meg Ω	
Noise Rejection (EMI/RFI)	>52 dB	
Bias Volts (nominal)	12 VDC	
Power Requirements	24-30 VDC	
Current Regulating Diode	1-6 mA cc	

#### 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 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 Life-time Partnership Warranty

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# Model 8002C/CFM



## Severe Duty High Temp/Intrinsically Safe Accelerometer

### Features

- 100 mV/g
- Integral TUFKEM chemical resistant cable
- Exclusive molded composite encapsulant
- Unique throughbolt mounting design
- Optional intrinsically safe FM certification
- Extended to 350°F with thermal isolator

### Applications

- Severe, High Temperature Chemical Presence
- Atomizers
- Gears/Bearings
- Heavy Industrial
- Cooling Towers

### Operating Specifications

#### Dynamic

Sensitivity @ 100 Hz, ±10%	100 mV/g	10.2 mV/ (m/s <sup>2</sup> )
Frequency Range	±5%	5 Hz – 5 kHz
	±10%	4 Hz – 6 kHz
	±3 dB	2 Hz – 8 kHz
Turn-on Time (2% of final bias)		≤0.3 seconds
Amplitude Range (at 72°F)		±65 g
Mounted Resonance		>18 kHz
Transverse Sensitivity		<5%
Amplitude Linearity		<1%

#### Electrical

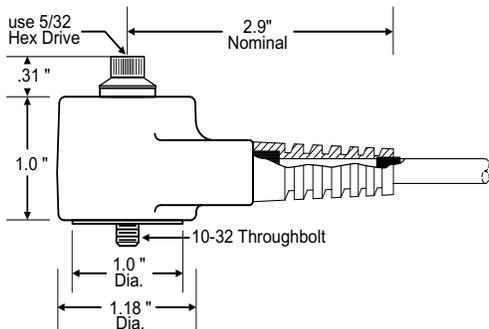
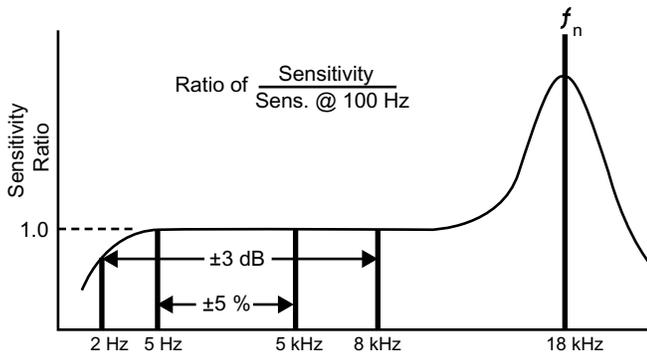
Noise (typical)		
Broadband	2.5 Hz to 25 kHz	380 µg rms
Spectral	10 Hz	32 µg/√Hz
	100 Hz	8 µg/√Hz
	1000 Hz	3.5 µg/√Hz
Output Impedance		<100 Ω
Isolation		Isolated, >100 Meg Ω
Noise Rejection (EMI/RFI)		>52 dB
Bias Volts (nominal)		12 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-40 to 300°F / -40 to 170°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
Design	Isolated shear
Seal	Welded Hermetic Seal
Mounting	10-32 captive throughbolt
Mounting Torque	25 in-lb
Cable/Connector	TUFKEM® cable to BNC or Pigtail
Cable Pull Strength	40 lb. typ.



### Ordering Information:

Model 8002CP (Pigtail) .....	9356999
Model 8002CB (BNC) .....	9356998
Model 8002CFMP (Pigtail) .....	9356931
Model 8002CFMB (BNC) .....	9356930
Power Supplies, 2 mA output, BNC/BNC	
Model LP24-1B, 110 VAC line input, 24 VDC .....	9356120
Model P5000, rechargeable battery, 24 VDC .....	9356559

Thermal isolator .....	9356736-10, -14
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

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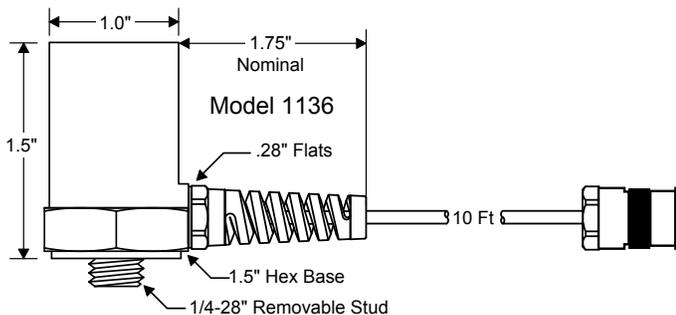
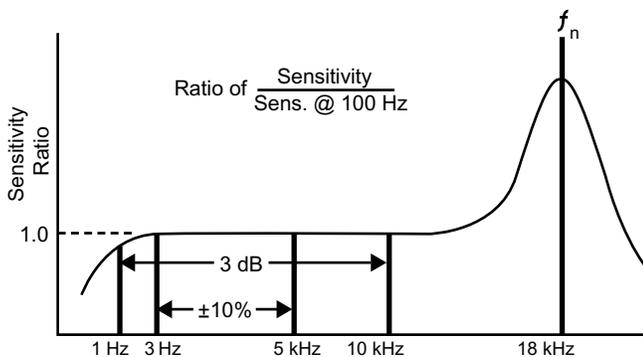
## Economy General Purpose Accelerometer

### Features

- Integral strain-relieved cable with top or side exit configuration
- Low profile design
- Thermal boot

### Applications

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



### Operating Specifications

#### Dynamic

Sensitivity	±12% @ 100 Hz	100 mV/g	10.2 mV/(m/s <sup>2</sup> )
Frequency Range	±10%	3 Hz – 5 kHz	
	±3 dB	1 Hz – 10 kHz	
Turn-on Time		<2 seconds	
Amplitude Range		±70 g	
Mounted Resonance		18 kHz	
Transverse Sensitivity		<5%	

#### Electrical

Noise (typical)			
Broadband	2.5 Hz to 25 kHz	250 µg rms	
Spectral	10 Hz	12 µg/√Hz	
	100 Hz	5 µg/√Hz	
	1000 Hz	2 µg/√Hz	
Output Impedance		100 Ω	
Noise Rejection		>52 dB	
Isolation		Isolated, >100 Meg Ω	
Bias Volts (nominal)		12 VDC	
Power Requirements		24-30 VDC	
Current Regulating Diode		1-6 mA cc	

#### Environmental

Temperature Range	-10 to 200°F	-20 to 95°C
Base Strain	.008 g peak/µstrain	
Shock Limit	5000 g	

#### Physical

Physical Dim.	1136	1.5" h x 1" hex (3.8 x 2.5 cm)
Weight	1136	1.7 oz / 50 grams plus cable
Case Material		6061 AL with AL-O <sub>2</sub> chemical resistant coating
Design		Isolated compression
Seal		Waterproof
Mounting		¼-28 removable stud
Mounting Torque		35 in-lb (3.9 N-m)

### Ordering Information:

Model 1136 (Pigtail, side)	9356378
Model 1136B (BNC, side)	9356528
Power Supplies, 2 mA output, BNC/BNC	
Model LP24-1B, 110 VAC line input, 24 VDC	9356120
Model P5000, rechargeable battery, 24 VDC	9356559
Magnetic holder, 16 lb holding force	9356809
Magnetic holder, 35 lb holding force	9353448

#### Sensors include:

NIST Traceable Calibration, 10' Integral Cable Assembly, Mounting Stud, Thermal Boot, User Manual, 1-Year Warranty

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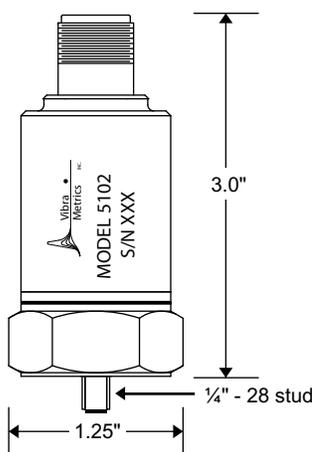
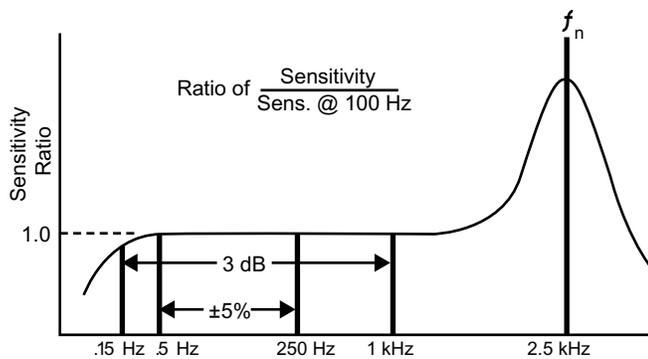
## High Output Shear Design Accelerometer

### Features

- 500 mV/g
- Splashproof
- 2-Pin MIL style connector
- Shear mode design
- ISOSHIELD Internal electrical isolation

### Applications

- Low RPM rollers/machinery
- Low amplitude vibration values
- Where low noise is desirable



### Operating Specifications

#### Dynamic

Sensitivity @ 100 Hz, ±5%	500 mV/g	51 mV (m/s <sup>2</sup> )
Frequency Range		
±5%	.5 Hz – 250 Hz	
±10%	.3 Hz – 400 Hz	
±3 dB	.15 Hz – 1 kHz	
Turn-on Time (2% of final bias)	<10 seconds	
Amplitude Range (at 72°F)	±10 g	
Mounted Resonance (nominal)	2.5 kHz	
Transverse Sensitivity	<5%	

#### Electrical

Noise (typical)		
Broadband	2.5 Hz to 25 kHz	40 µg rms
Spectral	10 Hz	1.0 µg/√Hz
	100 Hz	.35 µg/√Hz
	1000 Hz	.065 µg/√Hz
Output Impedance		1000 Ω
Grounding		Isolated, > 100 Meg Ω
Noise Rejection (EMI/RFI)		>52 dB
Bias Volts (nominal)		7 VDC
Power Requirements		15-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-40 to 250°F / -40 to 121°C
Base Strain	.005 g peak/µstrain
Shock Limit	500 g

#### Physical

Physical Dimensions	3" h x 1.25" diameter (7.6 x 3.2 cm)
Weight	10.7 oz / 303 grams
Case Material	303 stainless steel
Design	Isolated shear
Seal	Welded
Mounting	1/4-28 removable stud
Mounting Torque	35 in-lb (40 cm-kg)
Cable/Connector	Top 2-Pin MIL style

### Ordering Information:

Model 5102 .....	9356875
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
Cable, 2-Pin MIL/BNC 6'/15' RG58 .....	9354092
Cable, 2-Pin MIL/Pigtail 6' high temperature .....	9354084
Cable, 2-Pin MIL/BNC 6' high temperature .....	9356381
Magnetic holder, 16 lb holding force, 1/4-28 .....	9356809
Magnetic holder, 35 lb holding force, 1/4-28 .....	9353448

#### Sensors include:

NIST Traceable Calibration, Mounting Stud, User Manual and 1-Year Warranty

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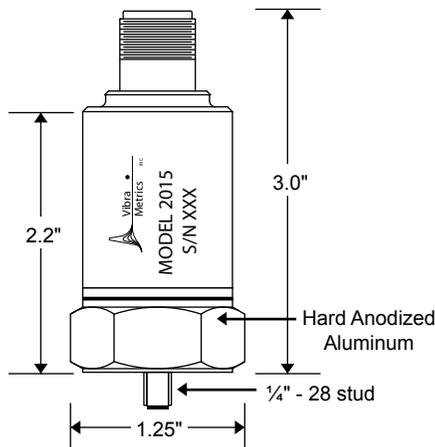
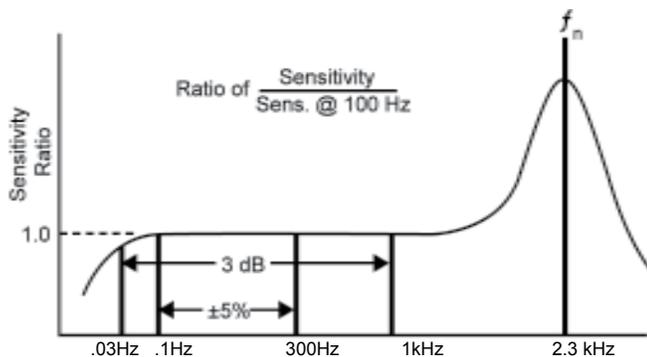
## High Output Shear Design Accelerometer

### Features

- 1500 mV/g
- Welded Hermetic Seal
- 2-Pin MIL 5015 connector
- Shear mode design
- Ultra-low frequency

### Applications

- Low RPM rollers/machinery
- Bridges
- Building / structure



### Operating Specifications

#### Dynamic

Sensitivity @ 100 Hz, ±10%	1500 mV/g
Frequency Range	
±5%	.1 Hz – 300 Hz
±10%	.07 Hz – 500 Hz
±3 dB	.03 Hz – 1000 Hz
Turn-on Time (2% of final bias)	<80 seconds
Amplitude Range (at 72°F)	±5 g
Mounted Resonance (nominal)	2.3 kHz
Transverse Sensitivity	5%

#### Electrical

Noise (typical)	
Broadband 2.5 Hz to 25 kHz	30 μ (Nom.)
Output Impedance	100 Ω
Grounding	Isolated, > 100 Meg Ω
Bias (Volt)	10 - 14 Volt 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	.001 g peak/μstrain
Shock Limit	500 g

#### Physical

Physical Dimensions	3" h x 1.25" dia (7.6 x 3.2 cm)
Weight	230 grams
Case Material**	304L stainless steel
Design	Piezoceramic shear
Seal	Welded Hermetic Seal
Mounting	1/4-28 removable stud
Mounting Torque	35 in-lb (40 cm-kg)
Cable/Connector	Top 2-Pin MIL style

### Ordering Information:

Model 2015 .....	2015-5015
Power Supplies, 2 mA output, BNC/BNC	
Model LP24-1B, 110 VAC line input, 24 VDC .....	9356120
Model P5000, rechargeable battery, 24 VDC .....	9356559
Cable, 2-Pin MIL/BNC 6'/RG58 cable .....	9354092
Cable, 2-Pin MIL/Pigtail 6' high temperature .....	9354084
Cable, 2-Pin MIL/BNC 6' high temperature .....	9356381
Magnetic holder, 16 lb holding force, 1/4-28 .....	9356809
Magnetic holder, 35 lb holding force, 1/4-28 .....	9353448

#### Sensors include:

NIST Traceable Calibration, Mounting Stud, User Manual and 1-Year Warranty

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## High Output Seismic Accelerometer

### Features

- 5000 mV/g minimum output
- Ultra-low noise
- Ultra-low frequency
- Removable ¼-28 mounting stud

### Applications

- Seismic/Mining
- Building/Structural
- Bridges
- Experimental
- Wafer Fabrication
- Precision Printing
- Microscopes

### Operating Specifications

#### Dynamic

Sensitivity, minimum @ 50 Hz	5,000 mV/g	510 mV/(m/s <sup>2</sup> )
Frequency Range	±5%	.1 Hz – 180 Hz
	±10%	.07 Hz – 200 Hz
	±3 dB	.03 Hz – 240 Hz
Turn-on Time		<120 seconds
Amplitude Range		±0.7 g
Mounted Resonance		600 Hz
Transverse Sensitivity		<5%

#### Electrical

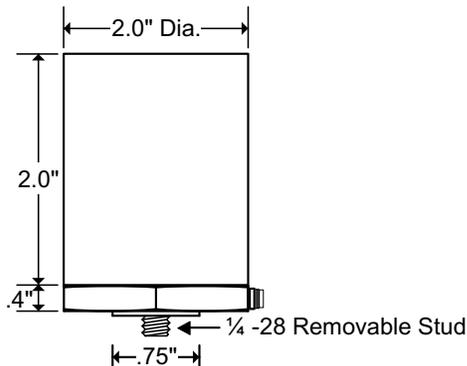
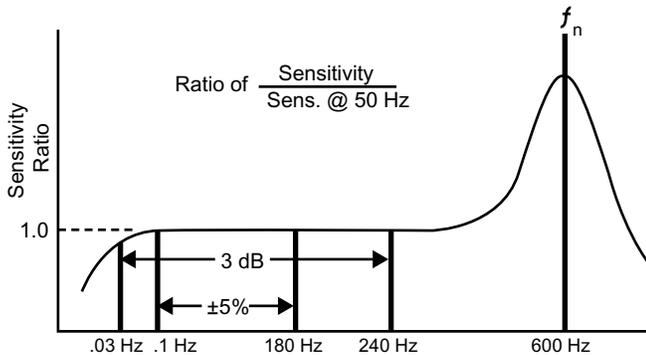
Noise		
Broadband	2.5 Hz to 25 kHz	2.8 µg (rms)
Spectral	10 Hz	.09 µg/√Hz
	100 Hz	.03 µg/√Hz
Output Impedance (nominal)		1000 Ω
Isolation		Isolated, >100 Meg Ω
Bias Volts (nominal)		7 VDC
Power Requirements		15-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-40 to 250°F	-40 to 121°C
Base Strain		.001 g peak/µstrain
Shock Limit		80 g

#### Physical

Physical Dimensions	2.5" h x 2" flats (6.4 x 5.1 cm)
Weight	430 grams
Case Material	Hard anodized aluminum
Design	Proprietary Mechanical
Seal	Epoxy
Mounting	¼-28 removable stud
Mounting Torque	35 in-lb (3.9 N-m)
Connector	Side coaxial (SMA)



#### Ordering Information:

Model 1030	9353370
Power Supplies, 2 mA output, BNC/BNC	
Model P1000B, battery powered, 15 VDC	9353528
Model LP24-1B, 110 VAC line input, 24 VDC	9356120
Model P5000, rechargeable battery, 24 VDC	9356559
Cable, SMA/BNC, 6'	9354049

#### Sensors include:

NIST Traceable Calibration, Mounting Stud, User Manual, 1-Year Warranty

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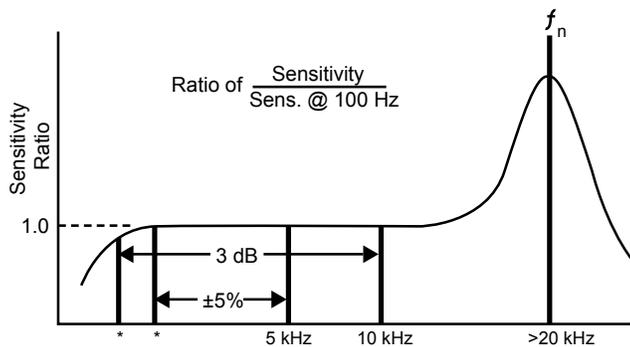
## High Temperature EEPE Charge-Type Accelerometer

### Features

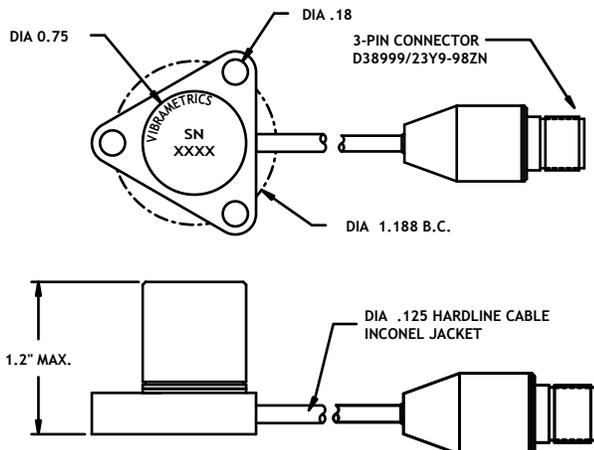
- 10 pC/g
- Compact size
- Broad frequency range
- Extended temperature operation

### Applications

- Turbines
- Engines
- Furnaces
- Experimental
- Flue Gas Atomizers



\* Low frequency response depends on charge amplifier used.



### Operating Specifications

#### Dynamic

Sensitivity @ 100 Hz, ±10%	10 pC/g	1.02 pC/(m/s <sup>2</sup> )
Frequency Range	±5%	up to 5 kHz*
	±3 dB	up to 10 kHz*
Amplitude Range	±500 g	
Mounted Resonance		>20 kHz typical
Transverse Sensitivity		<5%
Amplitude Linearity		<2%

#### Environmental

Operating Temperature Range:	-40 to 900°F	-40 to 482°C
Base Strain	.005 g peak/μstrain	
Shock Limit	2000 g	

#### Physical

Physical Dimensions	See Outline Drawing
Weight	70 grams including 6 foot hard-line cable
Case/Base Material	Inconel
Design	Compression
Mounting	Standard ARINC, 3-point mounting
Mounting Torque	20 in-lb (2.2 N-m)
Cable	6 foot hard-line cable (1" min bend radius)
*Connector	Hermetic 3-pin (MIL 5015)

\*Connector Maximum Operating Temperature: 500°F

### Ordering Information:

Model 4001 .....	4001-5015
Extension Cable .....	Contact Factory
Charge Amp.....	Contact Factory

#### Sensors include:

NIST Traceable Calibration, User Manual, 1-Year Warranty

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## High Temperature Charge Accelerometer

### Features

- 25 pC/g
- Broad frequency range
- High temperature operation
- 3 PIN MIL 5015 connector

### Applications

- Turbines
- Engines
- Experimental
- Flue Gas Atomizers
- Furnaces

### Operating Specifications

#### Dynamic

Sensitivity @ 100 Hz, ±10%	25 pC/g	2.55 pC/(m/s <sup>2</sup> )
Frequency Range	±5%	** Hz – 5 kHz
	±10%	** Hz – 7 kHz
	±3 dB	** Hz – 10 kHz
Amplitude Range	±500 g	
Mounted Resonance	>25 kHz	
Transverse Sensitivity	<5%	
Amplitude Linearity	<2%	

\*\* low frequency response depends on charge amplifier

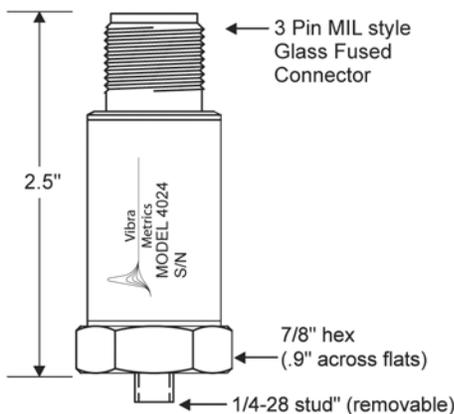
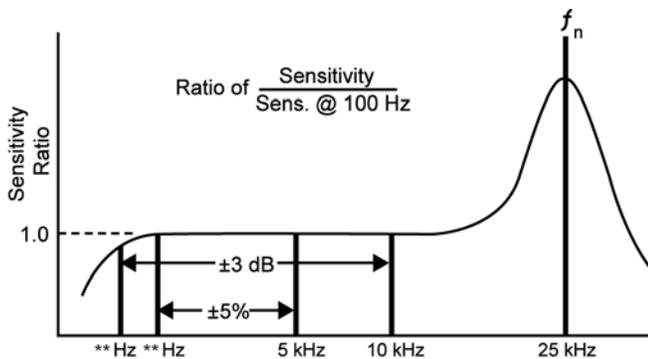
#### Environmental

Temperature Range	-40 to 500°F	-40 to 260°C
Base Strain	.003 g peak/μstrain	
Shock Limit	5000 g	

#### Physical

Physical Dimensions	2.5" h x .87" hex (5.8 x 2.2cm)
Weight	3.2 oz / 90 grams
Case Material	304 stainless steel
Design	Compression
Seal	Welded
Mounting	¼-28 removable stud
Mounting Torque	35 in-lb (3.9 N-m)
Connector	Top 3 PIN MIL 5015
Connector Pinout:	

PIN A	(+)
PIN B	(-)
PIN C	(Not Connected)



#### Ordering Information:

Model 4024 .....9357252  
 Charge Amplifier, Model CA-XX ..... Contact Factory  
 Cable, 3-Pin MIL/Pigtail, low noise cable ..... Contact Factory

#### Sensors include:

NIST Traceable Calibration, Mounting Stud, User Manual and 1-Year Warranty

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## General Purpose Tri-Axial Accelerometer

### Features

- 100 mV/g per axis
- Rugged aluminum construction
- Center throughbolt mounting

### Applications

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

### Operating Specifications

#### Dynamic

Sensitivity @ 100Hz, ±10%	100 mV/g
Frequency Range: Z Axis	
±5%	5 Hz - 4 kHz
±10%	4 Hz - 6.5 kHz
±3dB	2 Hz - 11 kHz
Frequency Range: X&Y Axis	
±5%	5 Hz - 3 kHz
±10%	4 Hz - 5 kHz
±3dB	2 Hz - 8 kHz
Turn-on Time	≤ 0.5 seconds
Amplitude Range	±75 g peak
Mounted Resonance	23 kHz (Nom.)
Transverse Sensitivity	5% (Nom.)
Amplitude Linearity	<1%

#### Electrical

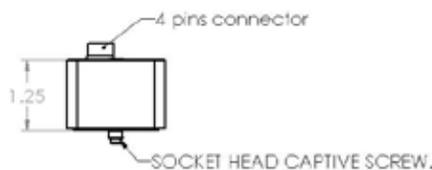
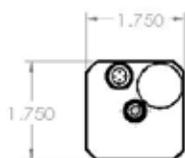
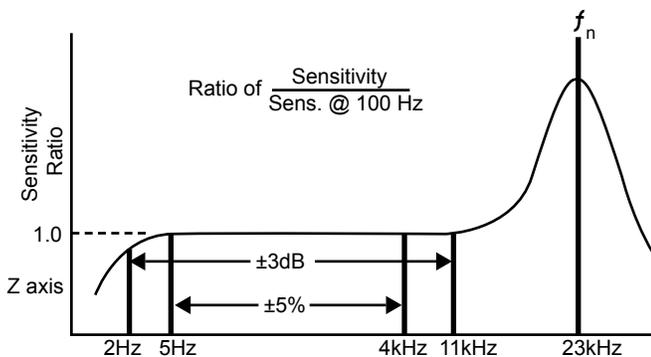
Noise (typical)	
Broadband	2.5 Hz - 20 kHz 350 µg
Spectral	10 Hz 30 µg/√Hz
	100 Hz 8 µg/√Hz
	1000 Hz 3 µg/√Hz
Output Impedance	100 Ω
Grounding	Case Isolated/ Internally Shielded
Bias Volts	10 - 14 VDC
Power Requirements	24-30 VDC
Current Regulating Diode	2-6 mA cc

#### Environmental

Temperature Range	5350/A: -14 - 140°F/-10 - 60°C 5350S/SA: -40 - 250°F/-40 - 121°C
Base Strain (NOM)	.005 g peak/µstrain
Shock Limit	5000 g peak

#### Physical

Physical Dimensions	1.25" h x 1.75" across flats
Weight	160 grams
Case Material	Hard anodized aluminum alloy
Design	Piezoelectric
Seal	Epoxy
Mounting	Socket head captive screw
	5350 & 5350S: ¼-28 UNF 5350A & 5350SA: 10-32 UNC
Mounting Torque	35 in - lb. (3.9 N-m)



### Ordering Information:

Model 5350	.....9353-5015
Model 5350A	.....9353-5025
Model 5350S	.....9353-5035
Model 5350SA	.....9353-5045
Power Supplies, 2 mA output, BNC/BNC, 24 VDC	
Model LP24-3B (3) BNC to (3) BNC, 110 VAC, 24 VDC	.....9353582
Model LP24-12 (12) BNC / (12) BNC, 110 VAC, 24 VDC	.....9253515
Cable, 4-Pin/(3) BNC	.....9354086

#### Sensors include:

NIST Traceable Calibration, ¼-28 Mounting Stud, 6-32 Alignment Screw, User Manual and 1-Year Warranty

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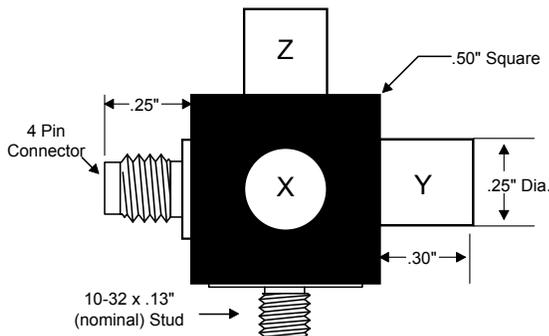
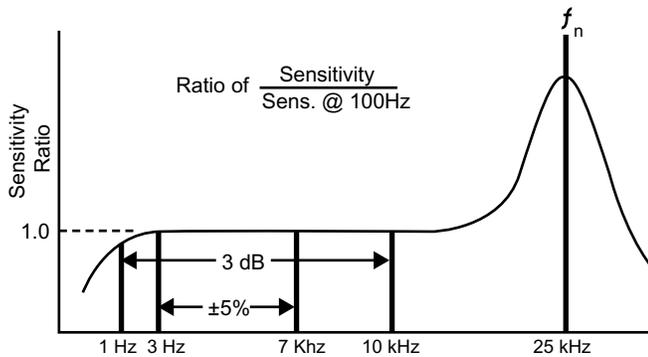
## Miniature Triaxial Accelerometer

### Features

- 10 mV/g per axis
- Exceptionally low 15 micro-volt noise floor
- .35 oz / 10 gram total weight
- Titanium construction

### Applications

- For single point monitoring in three axis
- Any location where small size and weight are important
- Aircraft, space vehicles, laboratories



### Operating Specifications (per axis)

#### Dynamic

Sensitivity @ 100 Hz, ±5%	10 mV/g	1.02 mV / (m/s <sup>2</sup> )
Frequency Range		
±5%	3 Hz – 7 kHz	
±10%	2 Hz – 8 kHz	
±3 dB	1 Hz – 10 kHz	
Turn-on Time (2% of final bias)	<5 seconds	
Amplitude Range (at 72°F)	±500 g	
Mounted Resonance	>25 kHz	
Transverse Sensitivity	<5%	

#### Electrical

Noise (typical)		
Broadband	2.5 Hz to 25 kHz	1500 µg (rms)
Spectral	10 Hz	100 µg/√Hz
	100 Hz	25 µg/√Hz
	1000 Hz	10 µg/√Hz
Output Impedance		1000 Ω
Isolation		Isolated, >100 Meg Ω
Noise Rejection (EMI/RFI)		>52 dB
Bias Volts (nominal)		7 VDC
Power Requirements		15-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-40 to 250°F / -40 to 121°C
Base Strain	<.005 g peak/µstrain
Shock Limit	5000 g

#### Physical

Physical Dimensions	.8" h x .8"w x 1.05"d 2 cm x 2 cm x 2.7 cm
Weight	.48 oz / 13.7 grams
Case Material	Titanium
Design	Isolated Compression
Seal	Splash-proof epoxy
Mounting	10-32 removable stud
Mounting Torque	20 in-lb (2.2 N-m)
Connector	Side 4-Pin

### Ordering Information:

Model 3000 .....	9353354
Power Supplies, 2 mA output	
Model LP24-3B (3) BNC to (3) BNC.....	9356640
Model LP24-12, 110VAC, 24VDC, (12)BNC/(12)BNC.....	9353515
Cable, 4-pin (F) to (3), 10-32 coaxial (std.) .....	9356232
Cable, Extension 4-pin (M) to 4-pin (F).....	9356692
Magnetic holder, 16 lb holding force, 10-32 .....	9356816

#### Sensors include:

NIST Traceable Calibration, Mounting Stud, User Manual and 1-Year Warranty

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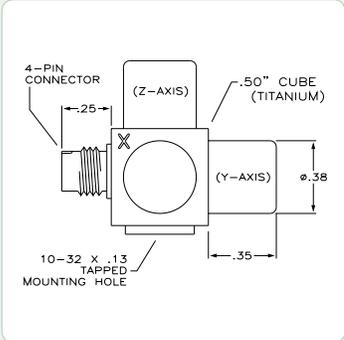


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# Model 3000A

## Miniature Triaxial Accelerometer



### FEATURES

- 10 mV/g Per Axis
- Exceptionally low 15 micro-volt noise floor
- .48 oz / 13.6 gram total weight
- Titanium construction

### APPLICATIONS

- For single Point Monitoring in three axis
- Any location where small size and weight are important
- Aircraft, space vehicles, laboratories

### OPERATING SPECIFICATIONS

#### Dynamic

Sensitivity @ 100 Hz, ± 5%	10 mV/g - 1.02 mV/(m/s <sup>2</sup> )
Frequency Range ± 5%	3 Hz - 7 kHz
Frequency Range ± 10%	2 Hz - 8 kHz
Frequency Range ± 3 dB	1 Hz - 10 kHz
Turn-On Time (2% of Final Bias)	< 5 Seconds
Amplitude Range (@ 72°F)	± 500 g
Mounted Resonance	> 25 kHz
Transverse Sensitivity	< 5%

#### Electrical

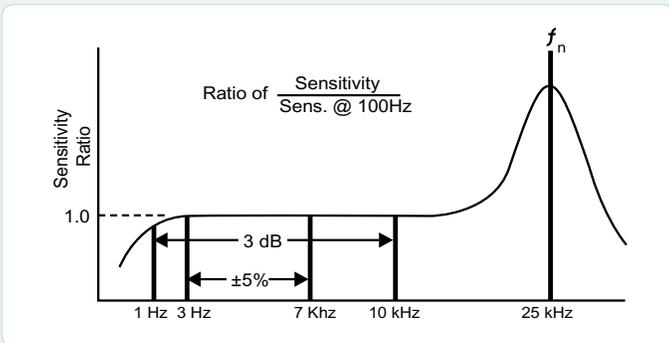
Noise Broadband 2.5 Hz to 25 kHz	1500 µg (rms)
Noise Spectral 10 Hz	100 µg/vHz
Noise Spectral 100 Hz	25 µg/vHz
Noise Spectral 1000 Hz	10 µg/vHz
Output Impedance	1000 Ω
Isolation	Isolated, > 100 Meg Ω
Noise Rejection (EMI/RFI)	> 52 dB
Bias Volts	7 VDC
Power Requirements	15-30 VDC
Current Regulating Diode	1-6 mA cc

#### Environmental

Temperature Range	-40 to 250°F / -40 to 121°C
Base Strain	0.005 g peak/µstrain
Shock Limit	5,000 g

#### Physical

Dimensions	.85" h x .85" w x 1.1" d (2.1 cm x 2.1 cm x 2.8 cm)
Weight	0.48 oz / 13.6 grams
Case Material	Titanium
Design	Isolated Compression
Seal	Splashproof Epoxy
Mounting	10-32 Removable Stud
Mounting Torque	20 in-lb (2.2 N-m)
Connector	Side 4-Pin



### ORDERING INFORMATION AND ACCESSORIES

Model 3000A, Mfr. Part No. 3000A-5015  
 Cable, 4-pin (F) to (3), 10-32 coaxial..... 9356232

#### Sensors include

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



**WORLDWIDE HEADQUARTERS:**  
 195 Clarksville Rd •  
 Princeton Jct, NJ 08550 • USA  
 T: +1.609.716.4000 • F: +1.609.716.0706  
 E-MAIL: sales.systems@mistrasgroup.com

**CANADA** T: +1.403.556.1350  
**CHINA** T: +86.10.5877.3672  
**FRANCE** T: +331.498.26040  
**GERMANY** T: +49.040.2000.4025  
**GREECE** T: +30.210.2846.801

**HOLLAND** T: +31.010.245.0325  
**INDIA** T: +91.22.2586.2444  
**JAPAN** T: +81.33.498.3570  
**MIDDLE EAST** T: +44(0)1954.231.612  
**RUSSIA** T: +7495.789.4549

**SCANDINAVIA** T: +46(0)31.252040  
**S. AMERICA** T: +55.11.3082.5111  
**UK** T: +44(0)1954.231.612



## Loop Powered 4-20 mA Velocity Output Sensor

### Features

- Output 4-20mA
- Welded Hermetic Seal
- 2-Pin MIL style connector
- 2 Ranges - 1.0 and 2.0 in/sec full scale

### Operating Specifications

#### Dynamic

Current Output	4-20 mA +/- 5%*
Frequency Range	10 Hz – 1000 Hz
±10%	6 Hz – 2500 Hz
±3dB	≤ 60 seconds
Turn-on Time	5%
Transverse Sensitivity (Nom.)	<2%
Amplitude Linearity	

#### Electrical

Max Load Resistance	500 Ω
Grounding	Isolated
Power Requirements	18-30 VDC

#### Environmental

Temperature Range	-40 to 185°F / -40 to 85°C
Base Strain (NOM)	.001 g peak/μstrain
Shock Limit	2000 g peak

#### Physical

Physical Dimensions	1.78" h x .875" across flats
Weight	75 grams
Case Material	Type 316L stainless steel
Design	Piezoelectric - Compression
Seal	Welded - Hermetic
Mounting	¼-28 stud
Mounting Torque	25 in - lb. (2.8 N-m)

\* An output of 4mA indicates a level of 0 in/sec or no vibration present. A full-scale reading of 20mA indicates that the maximum range (RMS) of vibration is present

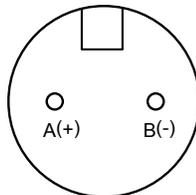
### Connector

PIN 'A'  
PIN 'B'  
Housing

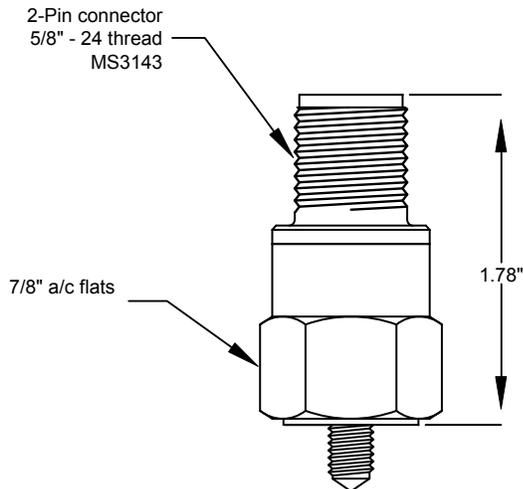
### Function

Loop Positive (+)  
Loop Negative (-)  
Ground

Connector view (top)



**Note:** Loop Negative (-) and Housing Ground should be isolated



### Ordering Information:

Model 6420V-10 (0-1.0 IPS RMS)	9357255-10
Model 6420V-20 (0-2.0 IPS RMS)	9357255-20
Cable, 2-Pin MIL/BNC 6'/15' RG58	9354092
Cable, 2-Pin MIL/Pigtail 6' high temperature	9354084
Cable, 2-Pin MIL/BNC 6' high temperature	9356381
Magnetic holder, 16 lb (for curved/flat surfaces)	9356809

### Sensors include:

Calibrated Current Output @ 61.5 Hz, ¼-28 Mounting Stud, 1-Year Warranty

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# Vibra•Metrics® Model 1000 Series



## Miniature Premium 10 or 1.5 mV/g Accelerometer

### Features

- 10 mV/g and high shock version 1.5 mV/g
- Small size/mass
- Integral coaxial strain-relieved cable
- Broad frequency range

### Applications

- Dry Industrial
- Motors/Generators
- Pumps
- Gears/Bearings
- Rollers
- Experimental
- Aerospace
- Military
- Machining Centers
- Impact Testing (1000B)

### Operating Specifications

#### Dynamic

Sensitivity @ 100 Hz, ±5%	1000, 1000A	10 mV/g	1.02 mV/(m/s <sup>2</sup> )
	1000B ±20%	1.5 mV/g	0.15 mV/(m/s <sup>2</sup> )
Frequency Range			
±5%		3 Hz - 15 kHz	
±10%		2 Hz - 18 kHz	
±3 dB		1 Hz - 40 kHz	
Turn-on Time		<5 seconds	
Amplitude Range			
1000, 1000A		±500 g	
1000B		±2500 g	
Mounted Resonance		>90 kHz	
Transverse Sensitivity		<5%	

#### Electrical

Noise (typical)			
Broadband	2.5 Hz to 25 kHz	1500 µg rms	
Spectral	10 Hz	100 µg/√Hz	
	100 Hz	25 µg/√Hz	
	1000 Hz	10 µg/√Hz	
Output Impedance		<1000 Ω	
Isolation		Isolated, >100 Meg Ω	

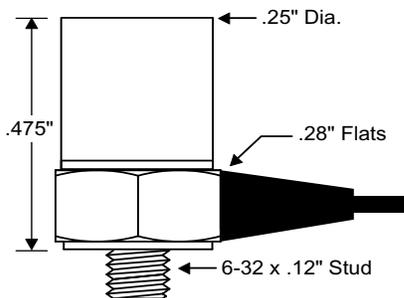
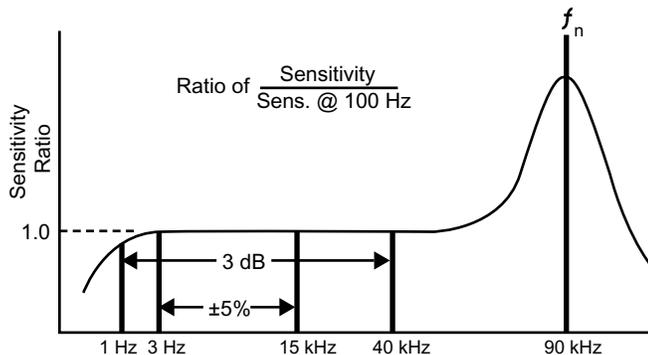
Bias Volts (nominal)	7 VDC
Power Requirements	15-30 VDC @ 2-10 mA cc

#### Environmental

Temperature Range	-40 to 250°F	-40 to 121°C
Base Strain	.005 g peak/µstrain	
Thermal Shock	4 g/°C	
Shock Limit	5,000 g	

#### Physical

Physical Dimensions	.45" h x .28" flats (1.1 x .7 cm)
Weight	2 grams
Case Material	Titanium
Design	Isolated Compression
Seal	Epoxy
Mounting	
1000, 1000B	6-32 integral stud
1000A	Adhesive
Mounting Torque	10 in-lb (1.1 N-m)
Cable/Connector	6' integral cable / 10-32



### Ordering Information:

Model 1000 (Isolated, 6-32 stud).....	9353018
Model 1000A (Isolated, no stud).....	9353026
Model 1000B (Shock, 1.5 m V/g).....	9353066
Power Supplies, 2 mA output, 10-32/BNC connectors	
Model P1000, battery, 15 VDC.....	9353527
Model LP24-1, 110 VAC line input, 24 VDC.....	9356451
Power Supplies, 2 mA output, BNC/BNC connectors	
Model P5000, rechargeable battery, 24 VDC.....	9356559
BNC/10-32 adapter.....	CN2-0006
Cable, Extension, 10-32(F)/10-32(M).....	9354054

#### Sensors include:

NIST Traceable Calibration, 6' Integral Cable Assembly, Thermal Boot, User Manual, 1-Year Warranty

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## Miniature Premium 8.5mV/g Accelerometer

### Features

- 8.5 mV/g
- Sub-miniature size / lightweight
- Integral signal conditioning
- Broad frequency range
- Integral coaxial strain-relieved cable

### Applications

- Dry Industrial
- Motors/Generators
- Pumps
- Gears/Bearings
- Rollers
- Experimental
- Aerospace
- Military
- Machining Centers

### Operating Specifications

#### Dynamic

Sensitivity @ 100 Hz, ±5%	8.5 mV/g	1.0 mV/(m/s <sup>2</sup> )
Frequency Range	±5%	3 Hz – 20 kHz
	±10%	2 Hz – 25 kHz
	±3 dB	1 Hz – 30 kHz
Turn-on Time		<5 seconds
Amplitude Range		±550 g
Mounted Resonance		>80 kHz
Transverse Sensitivity		<5%

#### Electrical

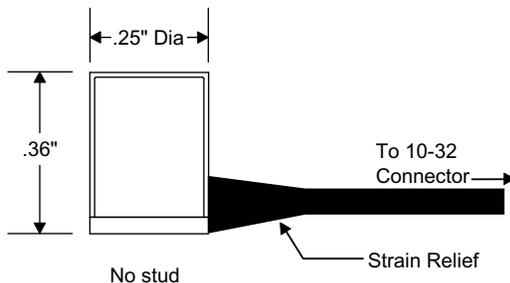
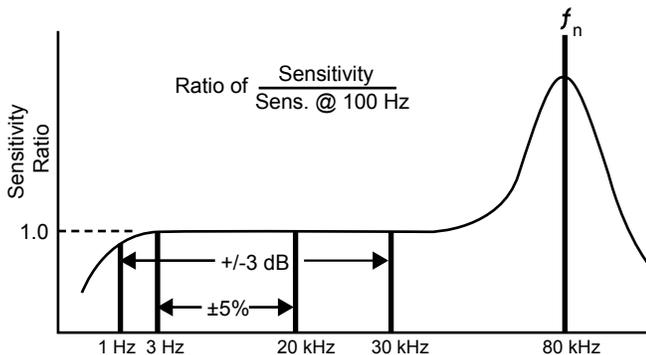
Noise (typical)		
Broadband	2.5 Hz to 25 kHz	1500 µg rms
Spectral	10 Hz	100 µg/√Hz
	100 Hz	25 µg/√Hz
	1000 Hz	10 µg/√Hz
Output Impedance		1000 Ω
Isolation		Case ground
Bias Volts (nominal)		7 VDC
Power Requirements		15-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-40 to 250°F / -40 to 121°C
Base Strain	.005 g peak/µstrain
Thermal Shock	9.7 g/°C
Shock Limit	5000 g

#### Physical

Physical Dimensions	.36" h x .25" dia. (.9 x 6 cm)
Weight	.027 oz / .75 grams
Case Material	Titanium
Design	Compression
Seal	Epoxy
Mounting	Adhesive (no stud)
Cable/Connector	Integral cable to 10-32



### Ordering Information:

Model 9001A.....	9353031
Power Supplies, 2 mA output, 10-32 BNC/BNC	
Model P1000, battery, 15 VDC.....	9353527
Model LP24-1, 110 VAC line input, 24 VDC.....	9356451
Power Supplies, 2mA output, BNC/BNC connectors	
Model P5000, rechargeable battery, 24 VDC .....	9356559
BNC/10-32 adapter .....	CN2-0006
Cable, Extension, 10-32(F)/10-32(M).....	9354054

#### Sensors include:

NIST Traceable Calibration, Integral 6' Cable Assembly, User Manual, 1-year Warranty

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## Miniature 100mV/g Accelerometer

### Features

- 100 mV/g
- Sub-miniature size / lightweight
- Internal signal conditioning
- Broad frequency range
- Integral coaxial strain-relieved cable

### Applications

- Dry Industrial
- Motors/Generators
- Pumps
- Gears/Bearings
- Rollers
- Experimental
- Aerospace
- Military
- Machining Centers

### Operating Specifications

#### Dynamic

Sensitivity @ 100 Hz, ±20%	100 mV/g	10.2 mV/(m/s <sup>2</sup> )
Frequency Range	±5%	10 Hz – 15 kHz
	±10%	8 Hz – 18 kHz
	±3 dB	4 Hz – 25 kHz
Turn-on Time		<5 seconds
Amplitude Range		±50 g
Mounted Resonance		>50 kHz
Transverse Sensitivity		<5%

#### Electrical

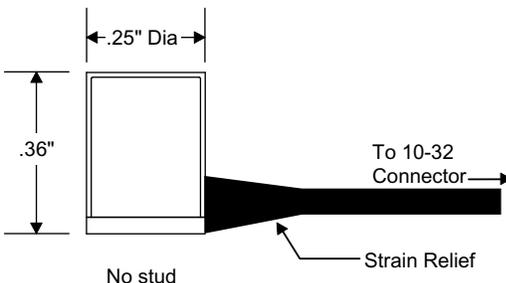
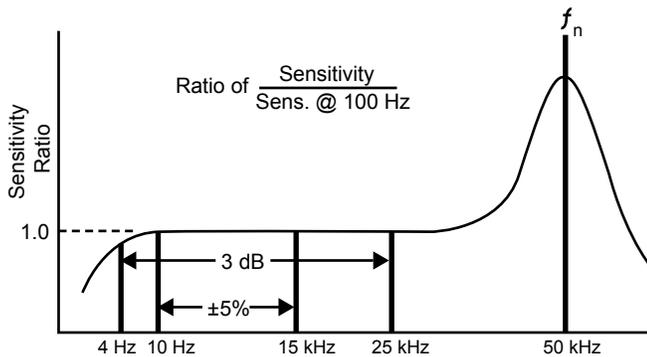
Noise (typical)		
Broadband	2.5 Hz to 25 kHz	550 µg rms
Spectral	10 Hz	130 µg/√Hz
	100 Hz	10 µg/√Hz
	1000 Hz	3 µg/√Hz
Output Impedance		1000 Ω
Isolation		Case ground
Bias Volts (nominal)		10 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-40 to 230°F / -40 to 110°C
Base Strain	.005 g peak/µstrain
Shock Limit	5000 g peak

#### Physical

Physical Dimensions	.36" h x .25" dia. (.91 x .64 cm)
Weight	.03 oz / .75 grams
Case Material	Titanium
Design	Compression
Seal	Epoxy
Mounting	Adhesive (no stud)
Cable	Integral cable to 10-32



### Ordering Information:

Model 9002A.....	9356748
Power Supplies, 2 mA output, 10-32 BNC/BNC	
Model LP24-1, 110 VAC line input, 24 VDC.....	9356451
Power Supplies, 2mA output, BNC/BNC connectors	
Model P5000, rechargeable battery, 24 VDC .....	9356559
BNC/10-32 adapter .....	CN2-0006
Cable, Extension, 10-32(F)/10-32(M).....	9354054

#### Sensors include:

NIST Traceable Calibration, Integral 6' Cable Assembly, User Manual, 1-year Warranty

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## Premium Underwater Accelerometer

### Features

- 100 mV/g
- Superior sealing for underwater operation
- Integral underwater rated cable
- Titanium construction resists galvanic corrosion
- ISOSHIELD internal electrical shielding

### Applications

- Seawater Exposure
- Underwater Motors
- Deep Draft Pumps
- Experimental

### Operating Specifications

#### Dynamic

Sensitivity @ 100 Hz, ±5%	100 mV/g	10.2 mV/(m/s <sup>2</sup> )
Frequency Range	±5%	3 Hz – 5 kHz
	±10%	2 Hz – 8 kHz
	±3 dB	1 Hz – 10 kHz
Turn-on Time		<1.5 seconds
Amplitude Range		±60 g
Mounted Resonance		>20 kHz
Transverse Sensitivity		<5%

#### Electrical

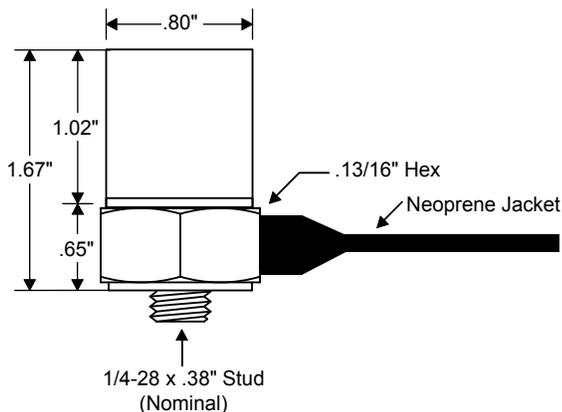
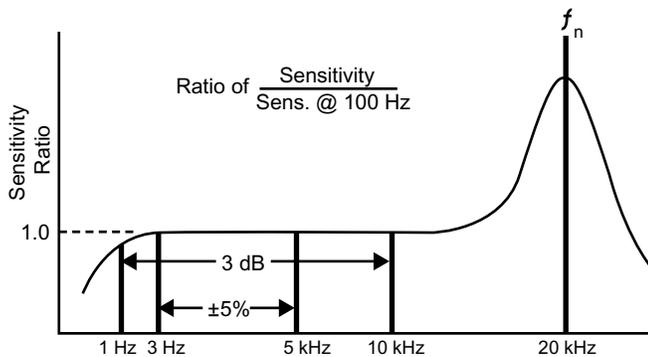
Noise (typical)		
Broadband	2.5 Hz to 25 kHz	250 µg rms
Spectral	10 Hz	12 µg/√Hz
	100 Hz	5 µg/√Hz
	1000 Hz	2 µg/√Hz
Output Impedance		<100 Ω
Isolation		Isolated, >100 Meg Ω
Noise Rejection (EMI/RFI)		>80dB, IsoShield™
Bias Volts (nominal)		10 VDC
Power Requirements		24-30 VDC
Current Regulating Diode		1-6 mA cc

#### Environmental

Temperature Range	-40 to 250°F	-40 to 121°C
Base Strain		.005 g peak/µstrain
Thermal Shock		.1 g/°C
Shock Limit		5000 g
Pressure Limit		1000 psi

#### Physical

Physical Dimensions	1.67" h x .82" hex base (4.2 x 2.1 cm)
Weight (without cable)	60 grams
Case Material	Titanium
Design	Compression
Seal	Welded
Mounting	1/4-28 removable stud
Mounting Torque	35 in-lb (40 cm-kg)
Cable/Connector	50' Integral Neoprene cable to pigtail



### Ordering Information:

Model 1024-4	9354291
Power Supplies, 2 mA output, BNC/BNC	
Model LP24-1B, 110 VAC line input, 24 VDC	9356120
Model P5000, rechargeable battery, 24 VDC	9356559
Magnetic holder, 16 lb holding force, 1/4-28	9356809
Magnetic holder, 35 lb holding force, 1/4-28	9353448

#### Sensors include:

NIST Traceable Calibration, 50' Integral Cable Assembly, Mounting Stud, User Manual, 1-Year Warranty

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## Accelerometer Power Supplies



### Features

#### P1000 Series

- Disposable battery
- Portable use
- Battery test light
- One/three channels
- BNC

#### P5000 Series

- Ni-Cad battery
- Charger
- 3 position gain
- LED indicators for low battery, clipping and fault

#### LP24 Series

- Line-powered
- One/three channels
- BNC

#### LP241 Series

- Rack mount
- Low profile
- Line-powered
- Twelve channels

Operating Specifications:	<b>P1000</b>	<b>P5000</b>	<b>LP24-1</b>	<b>LP24-3B</b>	<b>LP241-12</b>
<b>Number of Channels</b>	1	1	1	3	12
<b>Accel. Excitation, Vdc</b>	15	24	24	24	24
<b>Excitation Current, mA</b>	2	2	2	2	2
<b>Voltage Gain (+/- %2)</b>	Unity	x1, x10, x100	Unity	Unity	Unity
<b>Frequency Response, Hz</b>	.5-100 K	.5-100 K	.5-100 K	.5-100 K	.5-100 K
<b>Output Signal F.S., Pk., V</b>	10	10	10	10	10
<b>Noise(rms) (0-10Khz), mV</b>	.002	.002	.2	.2	.2
<b>Linearity</b>	1%	1%	1%	1%	1%
<b>Power Required</b>	(1) 15 V battery	(3) 9 V battery*	115 V ac or 220 V ac	115 V ac or 220 V ac	115 V ac or 220 V ac
<b>Accel. Connector</b>	10-32 or BNC	BNC <sup>A</sup>	10-32 or BNC	BNC	BNC <sup>A</sup>
<b>Output Connector</b>	BNC	BNC	BNC	BNC	BNC
<b>Dimensions(HxWxD) in.</b>	1.4x2.25x1.1	5.25 x 2.6 x 1.75	2.6 x 5.3 x 1.7	2.6 x 5.3 x 1.7	3.5 x 19 x 5.25
<b>Weight, oz.</b>	3	25	22	22	76

<sup>A</sup>A BNC - 10-32 adaptor is available \*Specify 110 or 220 V charger

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## General Purpose Industrial Switchboxes

### Features

- Nema 4 Enclosure
- Fully sealed rotary switch (internal on SB06)
- Capped BNC output connector (internal on SB06)
- Sealed electrical connections with door closed

### Operating Specifications

Enclosure	NEMA 4 <sup>A</sup>
Door Closure	Clamps (Latch on SB06)
Inputs	Terminal Block
Output	BNC Jack (and 2-Pin MIL on SB06)
Channels	6, 12, 24 or 48
Enclosure Material	Fiberglass/Steel/Stainless

### Applications

- Where reduced time for multiple point monitoring is required
- For permanently mounted accelerometers with multiple points of interest
- When more accurate/repeatable data is required
- In dangerous locations that present a hazard for manual monitoring
- In locations that are difficult or inconvenient to reach



SB06 Style



SB12-48 Style

### Ordering Information:

<b>Model Number</b>	<b>Part Number</b>	<b>Number of Channels</b>	<b>Output Connectors</b>	<b>Enclosure Material</b>	<b>Dimensions W x H x D</b>	<b>Weight (lbs.)</b>
SB06WP	9361037	6	(1) BNC, (1) 2 Pin Mil	Fiberglass	7.7" x 9.6" x 4.6"	6
SB12WP	9361030	12	(1) BNC	Steel	12" x 12" x 6"	25
SB12WPSS	9361030	12	(1) BNC	Stainless Steel	12" x 12" x 6"	25
SB24WP	9361025	24	(1) BNC	Steel	12" x 12" x 6"	25
SB24WPSS	9361025	24	(1) BNC	Stainless Steel	12" x 12" x 6"	25
SB48WP <sup>B</sup>	9361020	48	(2) BNC	Steel	12" x 12" x 6"	25
SB48WPSS <sup>B</sup>	9361020	48	(2) BNC	Stainless Steel	12" x 12" x 6"	25

<sup>A</sup> No knockouts on enclosure – Cable entry hole (3" max diameter) and connections to be supplied by customer

<sup>B</sup> Models SB48 have (2) twenty-four channel position select switches with separate BNC output for each switch

**For more information about *Vibra-Metrics* accelerometers, call us today at 609-716-4130, or visit us on-line at [www.mistrasgroup.com](http://www.mistrasgroup.com)**



**195 Clarksville Road, Princeton Junction, NJ 08550 • Phone: 609-716-4130 • Fax: 609-716-0706  
Email: [sales.systems@mistrasgroup.com](mailto:sales.systems@mistrasgroup.com) • Internet: [www.mistrasgroup.com](http://www.mistrasgroup.com)**

*Due to continuing improvement, Vibra-Metrics reserves the right to amend specifications without notice.  
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## **Designing and manufacturing quality vibration sensing instrumentation for over 30 years.**

### **The Highest Quality Products, Services and Support**

For over thirty years Vibra-Metrics has manufactured innovative and patented solutions for the predictive maintenance community, even in the most advanced or demanding applications. Since our inception, we have grown to offer hundreds of quality products including vibration accelerometers, data delivery systems and a comprehensive assortment of ancillary products. Additionally, we feature a broad array of engineering, design and support services for our customers. As always, these products and services are supported by the knowledge, experience and professional assistance that have kept Vibra-Metrics at the forefront of the vibration monitoring industry. No company understands better than Vibra-Metrics the value of predictive maintenance in improving uptime and throughput, and eliminating costly machinery downtime.

### **An Efficient and Cost-Effective Partnership**

Vibra-Metrics' products are designed to measure accurately and repeatably, providing the most consistent data possible for trending, prediction and prevention. We manufacture products designed to locate machinery deficiencies before they become problems. Our Conditions-Based Monitoring Systems (CBMS) automatically collect data, giving our customers more time to focus on maximizing productivity by helping them avert unscheduled or unnecessary downtime as a result of machinery failure.

Through our customer-centered philosophy of designing unique solutions to suit individual needs, Vibra-Metrics will optimize the effectiveness of any PdM program. A partnership with Vibra-Metrics provides our customers with the opportunity to increase uptime and maximize the total return on investment of a company's equipment and assets. Vibra-Metrics commits to proactive PdM solutions and supports that commitment with continuous innovations and knowledgeable people, while maintaining a steady hand on the pulse of the PdM community.

### **The Most Advanced Technology In The Industry**

Vibra-Metrics has introduced numerous innovations, several of which have been built into many accelerometer designs in use today, including:

- Isoshield™ internal electrical isolation and Faraday shielding providing the highest level of EMI/FRI noise rejection
- Integral cable, composite molded sensors that resist the effects of chemicals, and other severe conditions
- Ultra-sensitive technology for seismic and structural applications, space vehicles and avionics
- Subminiature, high output, and low noise circuitry As a direct result of these innovations, Vibra-Metrics' sensors perform better and last longer– even in the harshest, most demanding environments – than any other sensors available.

## Customer Service

Vibra-Metrics, a Member of MISTRAS Group Inc. ([www.mistrasgroup.com](http://www.mistrasgroup.com)) is dedicated to providing our customers with timely assistance with any questions or concerns that arise. Please refer to the list below, so that we can direct your inquiry to the right person.

For assistance with hardware systems, including troubleshooting, technical support, or to order additional components for your system, please contact a Vibra-Metrics Product Manager at **609-716-4130** or email [sales@vibrametrics.com](mailto:sales@vibrametrics.com).

To place, change, or cancel an order, or to check on the status of your order, please contact your authorized Vibra-Metrics sales representative at **609-716-4130**, or email [sales@vibrametrics.com](mailto:sales@vibrametrics.com).

Returns or RMA's Research Inquiries: For equipment to be returned for repair, calibration, modification, etc, contact the Customer Service Dept. at our sister company **609-716-4000 x4044** or email [customerservice@vibrametrics.com](mailto:customerservice@vibrametrics.com).

Other Questions or concerns: For any other questions or concerns, please contact a Vibra-Metrics sales representative **609-716-4130**, or email [sales@vibrametrics.com](mailto:sales@vibrametrics.com).

## Affiliate Companies

**PAC, Physical Acoustics Corporation** designs and manufactures acoustic emission sensors and acoustic emission measurement instruments. Visit their website at [www.pacndt.com](http://www.pacndt.com) or call 609-716-4000.

**NDT Automation** is a complete source for ultrasonic test and inspection products and systems. A truly unique company, NDT Automation designs, produces and integrates virtually every major and all critical components of its immersion, gantry, custom and automated UT systems. From individual UT boards (Pulser/Receiver, A/D and motion control) to scanners through complete, fully integrated systems, NDT Automation is a single-source supplier providing full responsibility for all aspects of our product's performance and quality. Visit their website at [www.ndtautomation.com](http://www.ndtautomation.com) or call 609-716-4123.

**QSL, Quality Services Laboratories** offers a wide variety of testing services for equipment and materials. Inspection techniques includes; Traditional Nondestructive Testing as GPR, PMI, MP, Radiography and Advance Testing such as Acoustic Emission, Automated UT, and ACFM. QSL also provides specialized solutions for Power Equipment Testing (power transformers, load tap changers, circuit breakers, cables), Transportation Vehicles (aerial lift, fire apparatus) and Pulp and Paper Industry; offering a broad range of services and support. Visit their website at [www.qslplus.com](http://www.qslplus.com).

**CONAM Inspection**; For over 40 years, CONAM has provided comprehensive quality control services to a broad range of industries. CONAM's Nondestructive Testing and Inspection group provides a complete range of inspection, training, QA/QC services and proprietary inspection software (PCMS). This expands CONAM's service range beyond any other quality services company. With nationwide laboratories employing over 500 technicians, our staff has experience with your industry's testing requirements; from nondestructive and mechanical testing through chemical, metallurgical and lubricant analysis.

## Partnership Warranty Policy

Limited Partnership Warranty: Vibra-Metrics warrants that for a period of twelve (12) months from date of shipment (or 90 days for repairs), it will repair or at its option replace, any new accelerometer or electronic equipment which proves defective in materials or workmanship, or which does not conform to applicable drawings and specifications approved by the manufacturer. Cables, connectors, magnets, adapters, and machined parts are similarly warranted for a period of 90 days from date of shipment. Series 7002 accelerometers are warranted for a period of twenty-four (24) months from date of shipment. All repairs and replacements shall be F.O.B. factory. All claims must be made in writing to the manufacturer. In no event and under no circumstance shall manufacturer be liable for (a) damages in shipment; (b) failures or damage due to misuse, abuse, improper installation or abnormal conditions of temperature, dirt, or corrosives; (c) failures due to operation, intentional or otherwise, beyond rated capacities, and (d) expenses for removal, inspection, transportation, repair or rework. Nor shall manufacturer ever be liable for consequential and incidental damages, or in any amount greater than the purchase price of this apparatus.

This Partnership Warranty is in LIEU OF OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING (BUT NOT LIMITED TO) ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE TERMS OF THIS PARTNERSHIP WARRANTY CONSTITUTE ANY BUYER'S AND/OR USER'S SOLE AND EXCLUSIVE REMEDY, AND ARE IN LIEU OF ANY RIGHT TO RECOVER FOR NEGLIGENCE, BREACH OF PARTNERSHIP WARRANTY, STRICT TORT LIABILITY OR UPON ANY OTHER THEORY. Any legal proceedings arising out of the sale or use of this apparatus must be commenced within eighteen (18) months of the date of shipment.

LIFETIME PARTNERSHIP WARRANTY: In addition to the provisions of the Limited Partnership Warranty as described above, Vibra-Metrics will repair or replace at no charge {except shipping and handling} any 8002 Series accelerometer purchased after October 1, 2001 for a period of two years from the date of shipment. For Years 3-5 Vibra-Metrics will repair or replace the accelerometer for half the current price of a new unit. For Year 6 and beyond, Vibra-Metrics will repair/replace for 70% of the current price of a new unit. Determination to repair/replace is at Vibra-Metrics option. Customer is responsible for obtaining return authorization number from Vibra-Metrics and shipping the non-operable unit to Vibra-Metrics prior to replacement. Chemical resistance for 8002 Series is warranted for chemicals, temperatures, & environmental conditions listed in AN130. For others, contact VMI in writing prior to installation.

Please read the Accelerometer Installation Guide or the appropriate Operators Manual thoroughly regarding equipment installation, operation, and maintenance. Should you require additional assistance in servicing this equipment, please contact the Vibra-Metrics factory directly. Returned products will not be accepted at the factory without a Return Authorization (RMA) number, obtainable from the factory (609) 716-4000.

