

AC140 Series

Low Cost Miniature Industrial Multipurpose Accelerometer, Top Exit
2 Pin Mini-MIL Connector, 100 mV/g, ±15%



VIBRATION ANALYSIS HARDWARE



Product Features

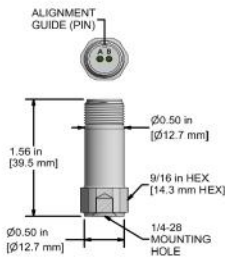
Mini Industrial Accelerometer, Great for Hard-to-Reach Locations

- ▶ ± 80 g, Dynamic Range
- ▶ 2 Pin Mini-MIL Connection

AC140-1D

2 Pin Mini Mil Connector

Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



Stock Product

AC140-2D

CB110 Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

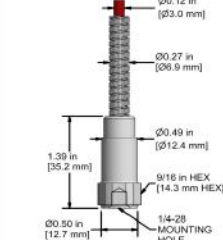


Built To Order

AC140-3D

CB206 Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

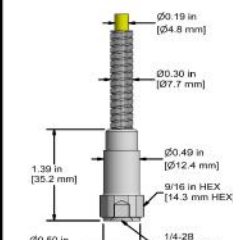


Built To Order

AC140-6D

CB611 Heavy Duty Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

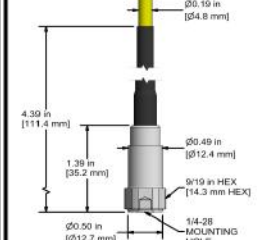


Built To Order

AC140-6N

CB111 Integral Cable

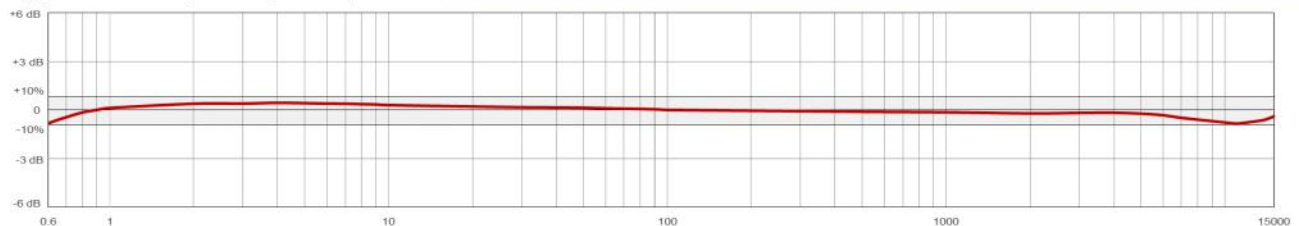
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC140	M/AC140	Environmental		
Sensitivity (±15%)		100 mV/g	Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	36-900,000 CPM	0,6-15000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	60-420,000 CPM	1,0-7000 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range		± 80 g, peak *Vsource ≥ 22V, 12Vbias	Sealing	Welded, Hermetic	
Electrical			Submersible Depth	200 ft.	60 m
Settling Time	<2.5 seconds		SIL Rating	SIL 2	
Voltage Source (IEPE)	18-30 VDC		Physical		
Constant Current Excitation	2-10 mA		Sensing Element	PZT Ceramic	
Spectral Noise @ 10 Hz	30 µg/√Hz		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	4 µg/√Hz		Weight	0.7 oz	20 grams
Spectral Noise @ 1000 Hz	2 µg/√Hz		Case Material	316L Stainless Steel	
Output Impedance	<100 ohm		Mounting Thread	1/4-28 Blind Tapped Hole	
Bias Output Voltage	10-14 VDC		Connector (Non-Integral)	2 Pin mini-MIL (J Series)	
Case Isolation	>10 ⁸ ohm		Resonant Frequency	2,040,000 CPM	34000 Hz
			Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
			Mounting Hardware Supplied	1/4-28 Stud	M6x1 Adapter Stud
			Calibration Certificate	CA10	

Typical Frequency Response



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AC144 Series



Low Cost Miniature Industrial Multipurpose Accelerometer, Side Exit
2 Pin Mini-MIL Connector, 100 mV/g, ±15%

VIBRATION ANALYSIS HARDWARE



Product Features

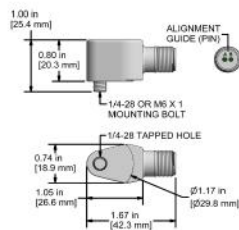
Low-Cost mini-MIL Industrial Accelerometer,
Great for Hard-to-Reach Locations

- ▶ ± 80 g, Dynamic Range
- ▶ 100 mV/g Frequency Response
- ▶ 2 pin Mini-MIL Side Connector

AC144-1D

2 Pin Mini Mil Connector

Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common

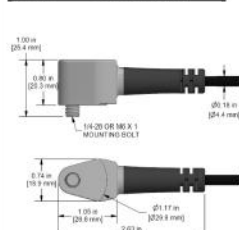


Stock Product

AC144-2D

CB110 Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

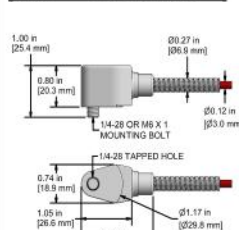


Built To Order

AC144-3D

CB206 Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

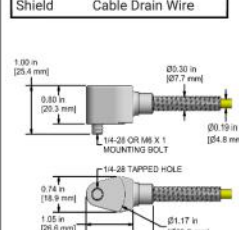


Built To Order

AC144-6D

CB611 Heavy Duty Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

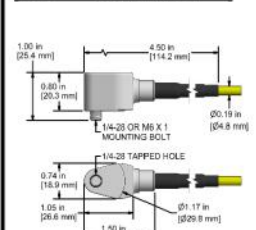


Built To Order

AC144-6N

CB111 Integral Cable

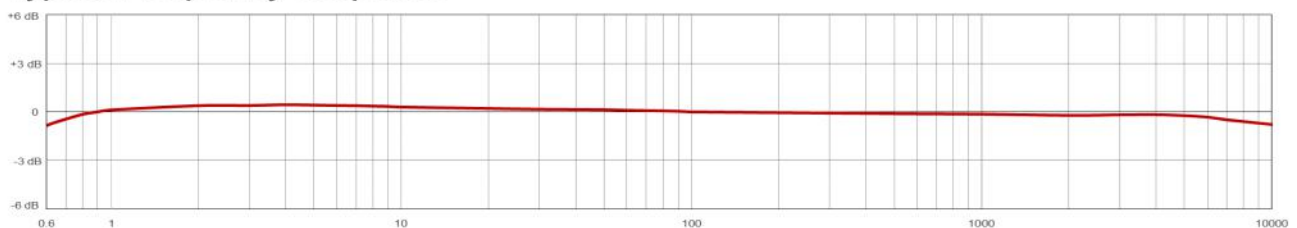
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC144	M/AC144	Environmental		
Sensitivity (±15%)		100 mV/g	Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	36-600,000 CPM		Maximum Shock Protection		5,000 g, peak
Dynamic Range		± 80 g, peak	Electromagnetic Sensitivity		CE
		*Vsource ≥ 22V, 12Vbias	Sealing		Welded, Hermetic
Electrical			Submersible Depth	200 ft.	60 m
Settling Time		<2.5 seconds	SIL Rating		SIL 2
Voltage Source (IEPE)		18-30 VDC	Physical		
Constant Current Excitation		2-10 mA	Sensing Element		PZT Ceramic
Spectral Noise @ 10 Hz		30 µg/√Hz	Sensing Structure		Shear Mode
Spectral Noise @ 100 Hz		4 µg/√Hz	Weight	2.1 oz	60 grams
Spectral Noise @ 1000 Hz		2 µg/√Hz	Case Material		316L Stainless Steel
Output Impedance		<100 ohm	Connector (Non-Integral)		2 Pin mini-MIL (J Series)
Bias Output Voltage		7-14 VDC	Resonant Frequency	1,920,000 CPM	26000 Hz
Case Isolation		>10 ⁸ ohm	Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
			Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
			Calibration Certificate		CA10

Typical Frequency Response



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AC146 Series

Miniature Industrial, Magnet Mount, Multipurpose Accelerometer,
Side Exit 2 Pin Mini-MIL Connector, 100 mV/g, ±10%



VIBRATION ANALYSIS HARDWARE



Product Features

Standard, Route-Based Sensor

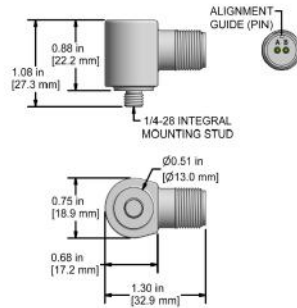
Excellent Sensor for Trending

- ▶ Specifically Designed to Use with MH128-1A Magnet
- ▶ Comfortable Ergonomic Design Makes Data Collection Easy

AC146-1D

2 Pin mini-MIL Connector

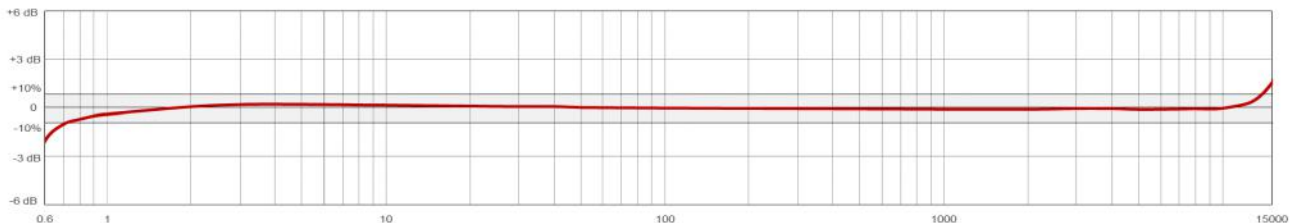
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



Stock Product

Specifications	Standard	Metric	Specifications	Standard	Metric
Sensitivity (±10%)		100 mV/g	Environmental		
Frequency Response (±3dB)	36-900,000 CPM	0,6-15000 Hz	Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±10%)	60-420,000 CPM	1,0-10000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range		± 80 g, peak *Vsource ≥ 22V, 12Vbias	Electromagnetic Sensitivity	CE	
Electrical			Sealing	Welded, Hermetic	
Settling Time	<2.5 seconds		SIL Rating	SIL 2	
Voltage Source (IEPE)	18-30 VDC		Physical		
Constant Current Excitation	2-10 mA		Sensing Element	PZT Ceramic	
Spectral Noise @ 10 Hz	30 µg/√Hz		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	4 µg/√Hz		Weight	1.6 oz	45.3 grams
Spectral Noise @ 1000 Hz	2 µg/√Hz		Case Material	316L Stainless Steel	
Output Impedance	<100 ohm		Mounting Thread	1/4-28 Integral Stud	
Bias Output Voltage	10-14 VDC		Connector (Non-Integral)	2 Pin mini-MIL	
Case Isolation	>10 ⁸ ohm		Resonant Frequency	2,040,000 CPM	34000 Hz
			Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
			Calibration Certificate	CA10	

Typical Frequency Response



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AC240 Series

Premium Miniature Industrial Accelerometer, High Frequency, Top Exit 2 Pin Mini-MIL Connector, 100 mV/g, ±5%



VIBRATION ANALYSIS HARDWARE



Product Features

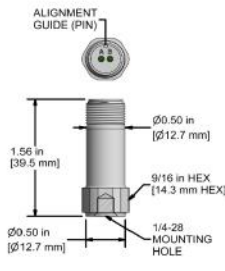
High Resonant Frequency with Excellent Frequency Response

- ▶ 1,500,000 CPM max frequency response
- ▶ 34 kHz Resonant Frequency
- ▶ 100 mV/g ± 5% Sensitivity

AC240-1D

2 Pin Mini Mil Connector

Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



Stock Product

AC240-2D

CB110 Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

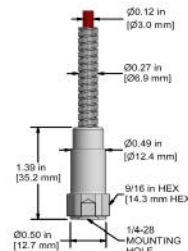


Built To Order

AC240-3D

CB206 Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

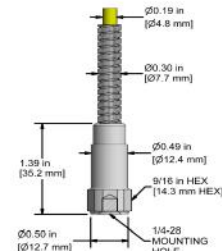


Built To Order

AC240-6D

CB611 Armored Integral Cable

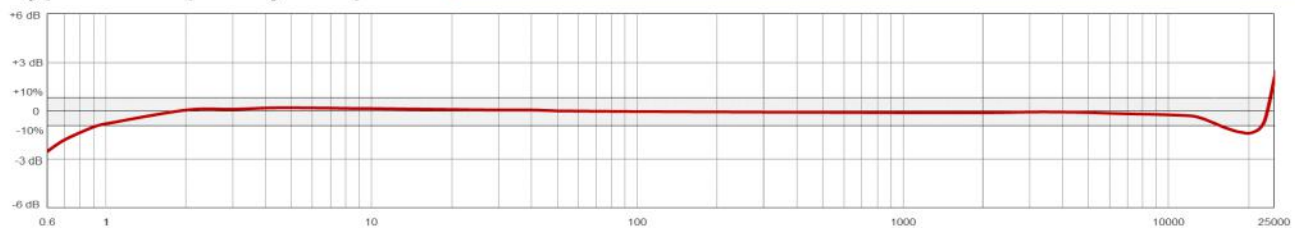
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC240	M/AC240	Environmental		
Sensitivity (±5%)		100 mV/g	Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	36-1,500,000 CPM		Maximum Shock Protection		5,000 g, peak
Frequency Response (±10%)	60-720,000 CPM	0.6-25000Hz	Electromagnetic Sensitivity		CE
Frequency Response (±5%)	120-480,000 CPM	2-8000 Hz	Sealing		Welded, Hermetic
Dynamic Range		± 80 g, peak *Vsource ≥ 22V, 12Vbias	Submersible Depth	200 ft.	60 m
Electrical			SIL Rating		SIL 2
Settling Time		<2.5 Seconds	Physical		
Voltage Source (IEPE)		18-30 VDC	Sensing Element		PZT Ceramic
Constant Current Excitation		2-10 mA	Sensing Structure		Shear Mode
Spectral Noise @ 10 Hz		30 µg/√Hz	Weight	0.7 oz	20 grams
Spectral Noise @ 100 Hz		4 µg/√Hz	Case Material		316L Stainless Steel
Spectral Noise @ 1000 Hz		2 µg/√Hz	Mounting Thread		1/4-28 Blind Tapped Hole
Output Impedance		<100 ohm	Connector (Non-Integral)		2 Pin mini-MIL (J Series)
Bias Output Voltage		7-14 VDC	Resonant Frequency	2,040,000 CPM	34000 Hz
Case Isolation		>10 ⁸ ohm	Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
			Mounting Hardware Supplied	1/4-28 Stud	M6x1 Adapter Stud
			Calibration Certificate		CA10

Typical Frequency Response



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AC244 Series

Premium Miniature Industrial Accelerometer, High Frequency, Side Exit 2 Pin Mini-MIL Connector, 100 mV/g, ±5%



VIBRATION ANALYSIS HARDWARE



Product Features

Premium mini mil, Low Profile Industrial Accelerometer

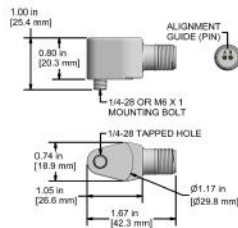
100 mV/g ± 5% Sensitivity

- ▶ 2 Pin Mini-MIL Connection or Integral Cable
- Note: Integral Cable Options are only for Permanent Monitoring Applications

AC244-1D

2 Pin Mini Mil Connector

Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common

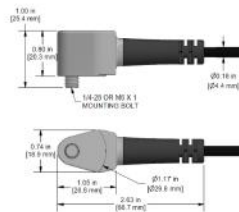


Stock Product

AC244-2D

CB110 Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

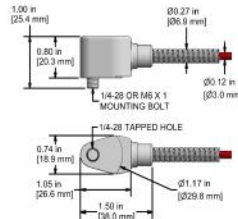


Built To Order

AC244-3D

CB206 Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

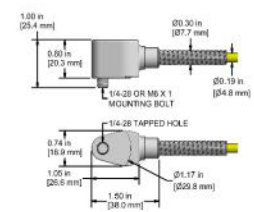


Built To Order

AC244-6D

CB611 Heavy Duty Armored Integral Cable

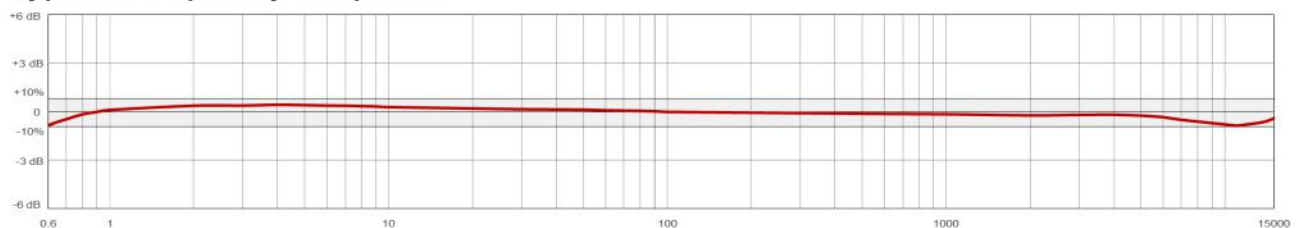
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC244	M/AC244	Environmental		
Sensitivity (±5%)		100 mV/g	Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	36-900,000 CPM		Maximum Shock Protection		5,000 g, peak
Frequency Response (±10%)	60-600,000 CPM		Electromagnetic Sensitivity		CE
Frequency Response (±5%)	120-420,000 CPM		Sealing		Welded, Hermetic
Dynamic Range		± 80 g, peak *Vsource ≥ 22V, 12Vbias	Submersible Depth	200 ft.	60 m
Electrical			SIL Rating		SIL 2
Settling Time		<2.5 seconds	Physical		
Voltage Source (IEPE)		18-30 VDC	Sensing Element		PZT Ceramic
Constant Current Excitation		2-10 mA	Sensing Structure		Shear Mode
Spectral Noise @ 10 Hz		30 µg/√Hz	Weight	2.1 oz	60 grams
Spectral Noise @ 100 Hz		4 µg/√Hz	Case Material		316L Stainless Steel
Spectral Noise @ 1000 Hz		2 µg/√Hz	Connector (Non-Integral)		2 Pin mini-MIL (J Series)
Output Impedance		<100 ohm	Resonant Frequency	1,192,600 CPM	26000 Hz
Bias Output Voltage		7-14 VDC	Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Case Isolation		>10 ⁸ ohm	Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
			Calibration Certificate		CA10

Typical Frequency Response



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AC246 Series

Premium, Miniature Industrial, Magnet Mount Accelerometer, Side Exit 2 Pin Mini-MIL Connector, 100 mV/g, ±5%



VIBRATION ANALYSIS HARDWARE



Product Features

Premium, Route-Based Sensor

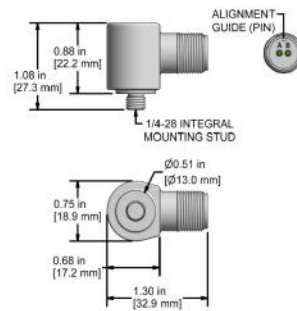
High Performance at a Reasonable Price

- ▶ Specifically Designed to Use with MH128-1A Magnet
- ▶ Comfortable Ergonomic Design Makes Data Collection Easy

AC246-1D

2 Pin mini-MIL Connector

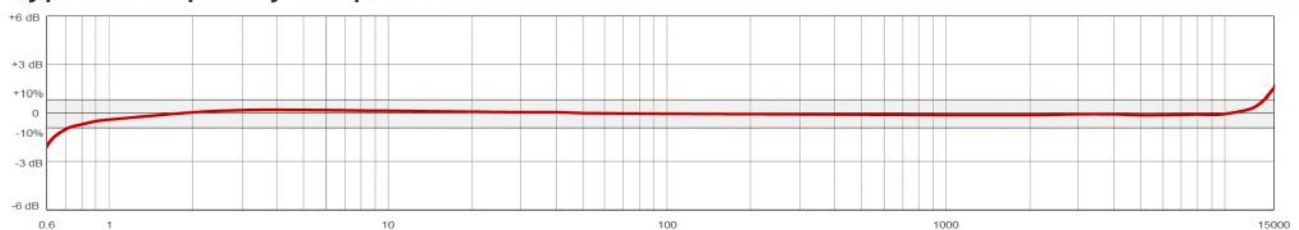
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



Stock Product

Specifications	Standard	Metric	Specifications	Standard	Metric
Sensitivity (±5%)		100 mV/g	Environmental		
Frequency Response (±3dB)	36-900,000 CPM	0,6-15000 Hz	Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±10%)	60-420,000 CPM	1,0-10000 Hz	Maximum Shock Protection		5,000 g, peak
Frequency Response (±5%)	120-420,000 CPM	2,0-7000 Hz	Electromagnetic Sensitivity		CE
Dynamic Range		± 80 g, peak *Vsource ≥ 22V, 12Vbias	Sealing		Welded, Hermetic
Electrical			SIL Rating		SIL 2
Settling Time	<2.5 seconds		Physical		
Voltage Source (IEPE)	18-30 VDC		Sensing Element		PZT Ceramic
Constant Current Excitation	2-10 mA		Sensing Structure		Shear Mode
Spectral Noise @ 10 Hz	30 µg/√Hz		Weight	1.6 oz	45.3 grams
Spectral Noise @ 100 Hz	4 µg/√Hz		Case Material		316L Stainless Steel
Spectral Noise @ 1000 Hz	2 µg/√Hz		Mounting Thread		1/4-28 Integral Stud
Output Impedance	<100 ohm		Connector (Non-Integral)		2 Pin mini-MIL
Bias Output Voltage	10-14 VDC		Resonant Frequency	2,040,000 CPM	34000 Hz
Case Isolation	>10 ⁸ ohm		Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
			Mounting Hardware Supplied	1/4-28 Integral Stud	
			Calibration Certificate		CA10

Typical Frequency Response



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