

UEA332 Series

Dynamic Vibration IEPE Ultrasound Sensor, 1/4-28 Mounting, Side Exit 2 Pin Mini-MIL Connector, 100 mV/g, $\pm 10\%$



VIBRATION ANALYSIS HARDWARE



Product Features

High Frequency Ultrasound Accelerometer with IEPE Amplifier Technology

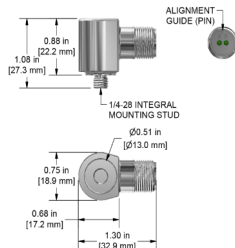
High Amplitude Resonance Peak for Stress Wave Measurement Techniques

- ▶ For Use with MH149-1A Magnet and MH130-4A Mounting Target
- ▶ For high-frequency fault detection, use with analyzers supporting ≥ 100 ks/s sample rate
- ▶ 2 Pin Mini-MIL Connection or Integral Cable
Note: Integral Cable Options are Only for Permanent Monitoring Applications

UEA332

2 Pin Connector

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

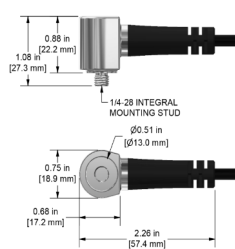


Stock Product

UEA432

Molded Integral Cable

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

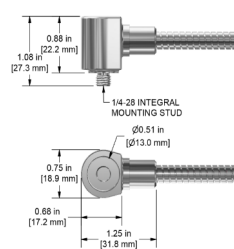


Built To Order

UEA532

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	UEA332		<u>Environmental</u>		
Sensitivity ($\pm 10\%$)		100 mV/g	Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response (± 3 dB)	60-1,020,000 CPM	1 Hz - 17 kHz	Maximum Shock Protection		10,000g, peak
Frequency Response ($\pm 10\%$)	120-450,000 CPM	2 Hz - 7.5 kHz	Electromagnetic Sensitivity		CE
Dynamic Range		± 80 g, peak	Sealing		Welded, Hermetic
Peak Sensitivity		*V _{source} ≥ 22 V, 12Vbias	Submersible Depth	200 ft.	60 m
Transverse Sensitivity		$\leq 5\%$	<u>Physical</u>		
<u>Electrical</u>			Sensing Element		PZT Ceramic
Settling Time	< 2 Seconds		Sensing Structure		Shear Mode
Voltage Source	18-30 VDC		Weight	1.5 oz	43 grams
Constant Current Excitation	2-10 mA		Case Material		316L Stainless Steel
Spectral Noise @ 10 Hz	30 μ g/ $\sqrt{\text{Hz}}$		Mounting Thread		1/4-28 Integral Stud
Spectral Noise @ 100 Hz	4 μ g/ $\sqrt{\text{Hz}}$		Connector (Non-Integral)		2 Pin mini-MIL, J Series Connector
Spectral Noise @ 1000 Hz	2 μ g/ $\sqrt{\text{Hz}}$		Resonant Frequency	520,000 CPM $\pm 12,000$ CPM	42 kHz ± 2 kHz
Output Impedance	< 100 ohm		Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Bias Output Voltage	10-14 VDC		Calibration Certificate		CA10
Case Isolation	> 10^8 ohm				

Typical Frequency Response

