

UEA360 Series

High Frequency, Low Profile Ultrasound Accelerometer with Integrated Rotating Locking Nut, Side Exit Molded Integral Cable, 100 mV/g, $\pm 10\%$



VIBRATION ANALYSIS HARDWARE



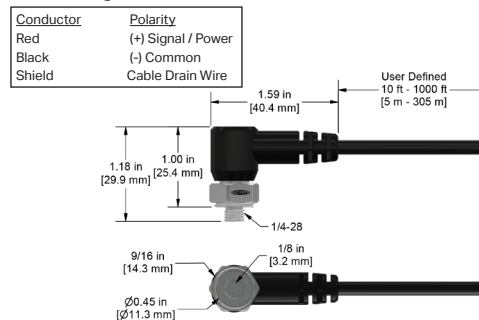
Product Features

High frequency ultrasound sensor features an integrated, rotating mounting base for easy sensor positioning

High amplitude resonance peak for stress wave measurement techniques

Designed for low-profile, permanent ultrasound monitoring applications

UEA360-2A CB110 Integral Cable



Stock Product

Specification	Standard	Metric
Part Number	UEA360	M/UEA360
Sensitivity (±10%)		100 mV/g
Frequency Response (-3 dB, +3.2 dB)	60 - 1,200,000 CPM	1 Hz - 20 kHz
Frequency Response (±10%)	120 - 570,000 CPM	2 Hz - 9.5 kHz
Dynamic Range	±80 g, peak *Vsource ≥ 22V, 12V bias	
Transverse Sensitivity	≤ 5%	
Electrical		
Settling Time	< 2 seconds	
Voltage Source	18 - 30 VDC	
Constant Current Excitation	2 - 10 mA	
Spectral Noise @10 Hz	30 µg/√Hz	
Spectral Noise @ 100 Hz	4 µg/√Hz	
Spectral Noise @ 1000 Hz	2 µg/√Hz	
Output Impedance	< 100 ohm	
Bias Output Voltage	10 - 14 VDC	
Case Isolation	> 10 ⁸ ohm	

Specification	Standard	Metric
Environmental		
Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Maximum Shock Protection		10,000 g, peak
Electromagnetic Sensitivity		CE
Sealing		IP68
Submersible Depth	200 ft.	61 m
SIL Rating		SIL 2
Physical		
Sensing Element		PZT ceramic
Sensing Structure		Shear mode
Weight	0.7 oz	20 grams
Case Material	Polyurethane molded with 316L stainless steel base	
Mounting Thread	1/4-28	
Cable Jacket Diameter	0.175 in.	4.5 mm
Cable Jacket Material	Polyurethane	
Cable Conductor	20 AWG twisted shielded pair	
Resonant Frequency	1,860,000 $\pm 12,000$ CPM	31 kHz ± 2 kHz
Mounting Torque	1.5 - 2.5 ft. lbs.	2.0 to 3.4 Nm
Mounting Hardware Supplied	1/4-28 stud	M6x1 adapter stud
Calibration Certificate		CA10

Typical Frequency Response

