

# UEB332 Series

Dynamic Vibration IEPE Ultrasound Sensor, 1/4-28 Mounting, Top Exit 2 Pin  
Mini-MIL Connector, 100 mV/g, ±10%



VIBRATION ANALYSIS HARDWARE



## Product Features

High Frequency Ultrasound Accelerometer

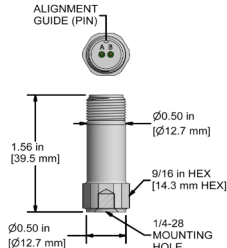
High Amplitude Resonance Peak for Stress Wave Measurement Techniques

- ▶ For high-frequency fault detection, use with analyzers supporting  $\geq 100$  ks/s sample rate
- ▶ IEPE Amplifier Technology
- ▶ Suggested Magnetic Mounting Bases: MH136-1A Flat Surface Magnet or MH137-1A Curved Surface Magnet

### UEB332

2 Pin Connector

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

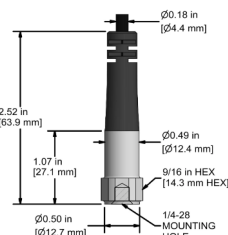


Stock Product

### UEB432

Integral Cable

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

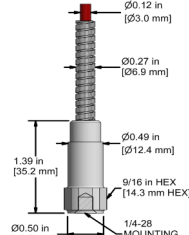


Built To Order

### UEB532

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                 | UEB332                                 | M/ or M8/UEB332 | <u>Environmental</u>        |                                    |                              |
| Sensitivity (±10%)          | 100 mV/g                               |                 | Operating Temperature Range | -58 to 250 °F                      | -50 to 121 °C                |
| Frequency Response (±3dB)   | 30-1,320,000 CPM                       | 0.5 Hz-22 kHz   | Maximum Shock Protection    | 10,000g, peak                      |                              |
| Frequency Response (±10%)   | 60-960,000 CPM                         | 1 Hz-16 kHz     | Electromagnetic Sensitivity | CE                                 |                              |
| Dynamic Range               | ± 80g, peak<br>*Vsource ≥ 22V, 12Vbias |                 | Sealing                     | Welded, Hermetic                   |                              |
| Peak Sensitivity            | +21 dB ± 2 dB                          |                 | Submersible Depth           | 200 ft.                            | 60 m                         |
| Saturation Time             | ≤5%                                    |                 | SIL Rating                  | SIL 2                              |                              |
| <u>Electrical</u>           |                                        |                 | <u>Physical</u>             |                                    |                              |
| Settling Time               | < 2 Seconds                            |                 | Sensing Element             | PZT Ceramic                        |                              |
| Voltage Source              | 18-30 VDC                              |                 | Sensing Structure           | Shear Mode                         |                              |
| Constant Current Excitation | 2-10 mA                                |                 | Weight                      | 0.7 oz                             | 20 g                         |
| Spectral Noise @ 10 Hz      | 30 µg/√Hz                              |                 | Case Material               | 316L Stainless Steel               |                              |
| Spectral Noise @ 100 Hz     | 4 µg/√Hz                               |                 | Mounting Thread             | 1/4-28 UNF                         |                              |
| Spectral Noise @ 1000 Hz    | 2 µg/√Hz                               |                 | Connector (Non-Integral)    | 2 Pin mini-MIL, J Series Connector |                              |
| Output Impedance            | < 100 ohm                              |                 | Resonant Frequency          | 2,520,000 CPM<br>±12,000 CPM       | 42 kHz ±2kHz                 |
| Bias Output Voltage         | 10-14 VDC                              |                 | Mounting Torque             | 2 to 5 ft. lbs.                    | 2.7 to 6.8 Nm                |
| Case Isolation              | > 10 <sup>8</sup> ohm                  |                 | Mounting Hardware Supplied  | 1/4-28 Stud                        | M6x1 or M8x1.25 Adapter Stud |
|                             |                                        |                 | Calibration Certificate     | CA10                               |                              |

## Typical Frequency Response

