ERBESSD INSTRUMENTS®

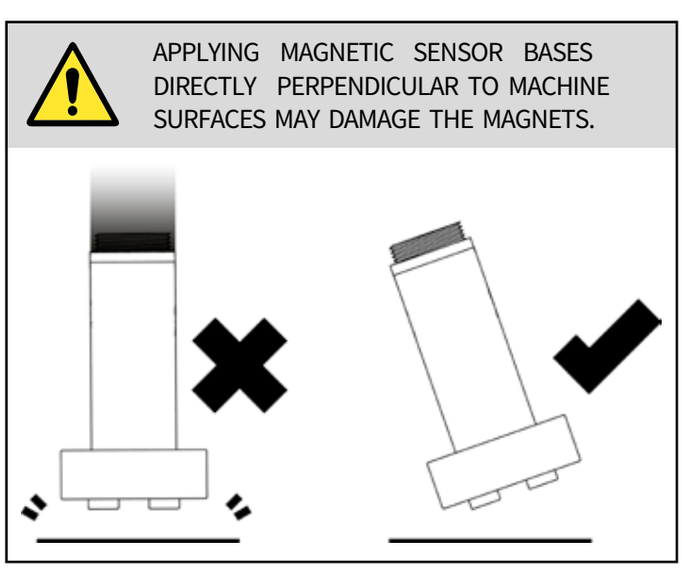
# Low Power Accelerometers 100mV/g

## AC500-3P Low Power Accelerometer

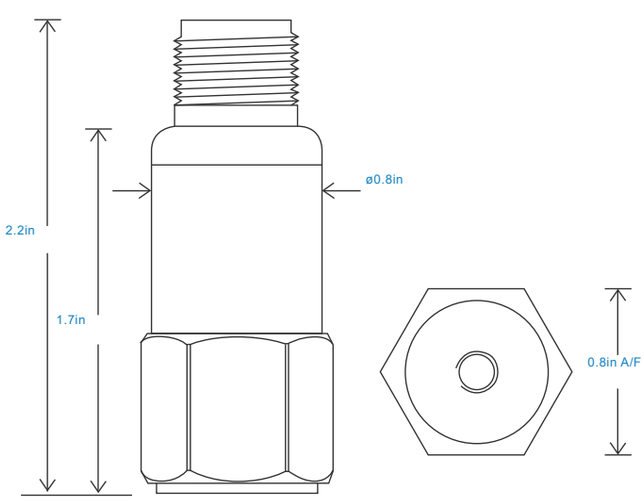
The AC500-3P is  a compact, multi-purpose accelerometer; top exit connector and cable with a sensitivity of 100 mV/g. Constructed of stainless-steel for indoor and outdoor environments. Perfectly suited for machine condition monitoring and/or offline applications with data collectors, vibration analyzers and balancing machines.

### Features:

- High-Performance
- Compact sensor
- Very Low Noise
- Superior RF Immunity
- ±80 G Peak Dynamic Range
- ± 10% Sensitivity
- Standard 2 Pin MIL Connection




**AC500-3P** Dimensions



# **Technical** Specs

## Technical Performance

| | |
|---|---|
| Mounted Base Resonance | 25kHz |
| Sensitivity | 100mv/g |
| | 18cpm (0.3Hz) to 600kcpm (10kHz) ± 10% |
| | Base isolated |
| Range | ± 20g |
| Transverse Sensitivity | Less than 5% |
| Amplitude Linearity | ±1% |

## Electrical

| | |
|---|---|
| Electrical Noise | < 500µg |
| Power Requirements | 5V nominal |
| Current Consumption | 100µA nominal at 5V supply (60µA at 1.8V) |
| Bias Voltage | 50% of supply voltage |
| Settling Time | 1 second |
| Output Impedance | 100 Ohms max. |
| Case Isolation | $>10^8$ Ohms at 500 Volts |

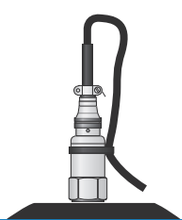
## Environmental

| | |
|---|---|
| Operating Temperature Range | -58 to 257°F |
| Sealing | IP68 |
| Maximum Shock | 5000g |
| EMC | EN61326-1:2013 |

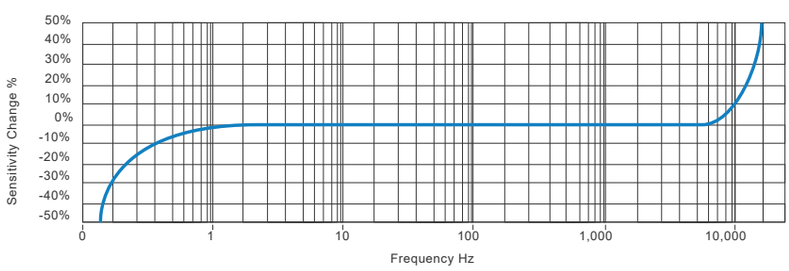
## Applications

Fans, Motors, Pumps, Compressors, Centrifuges, Conveyors, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, VAC, Spindles, Machine Tooling, Process Equipment

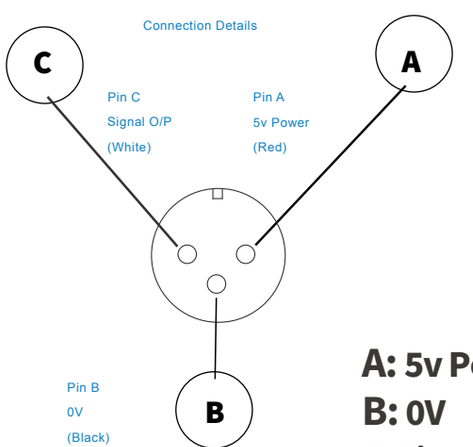
Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



# **Frequency** Response




# **Pin** Configuration




**A: 5v Power**
**B: 0V**
**C: Signal O/P**





SALES & ASSISTANCE

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**www.erbessd-instruments.com**

**www.eianalytic.com**